Reference

!DB®/EXPLAIN for DB2

Version 500

Document Number TE53-5843-3

June 2000

Candle Corporation 201 North Douglas Street El Segundo, California 90245 **Registered trademarks and service marks of Candle Corporation:** AF/OPERATOR, AF/PERFORMER, AF/REMOTE, Availability Command Center, Candle Command Center, Candle Electronic Customer Support, Candle Logo, Candle Management Server, Candle Management Workstation, Candle Technologies, CL/CONFERENCE, CL/SUPERSESSION, CT, CT/Data Server, CT/DS, DB Logo, DB/QUICKCHANGE, DELTAMON, ETEWatch, IntelliWatch, MQSecure, MQView, OMEGACENTER, OMEGAMON, OMEGAMON/e, OMEGAMON II, OMEGAMON Monitoring Agent, OMEGAVIEW, OMEGAVIEW II, Solutions for Networked Businesses, and Transplex.

Trademarks and service marks of Candle Corporation: Alert Adapter, Alert Adapter Plus, Alert Emitter, AMS, Amsys, AUTOMATED FACILITIES, Availability Management Systems, Candle Business Partner Logo, Candle Direct Logo, CandleLight, CandleNet, CandleNet 2000, CandleNet Portal, CCC, CECS, CICAT, CL/ENGINE, CL/GATEWAY, CL/TECHNOLOGY, CMS, CMW, Command & Control, CommandWatch, Connect-Two, CSA ANALYZER, CT/ALS, CT/Application Logic Services, CT/DCS, CT/Distributed Computing Services, CT/Engine, CT/Implementation Services, CT/IX, CT/Workbench, CT/Workstation Server, CT/WS, DB/DASD, DB/EXPLAIN, DB/MIGRATOR, DB/QUICKCOMPARE, DB/SMU, DB/Tools, DB/WORKBENCH, Design Network, DEXAN, eBA*ServiceMonitor, End-to-End, Enterprise Candle Command Center, Enterprise Candle Management Workstation, EPILOG, ERPNet, ESRA, HostBridge, IntelliWatch Pinnacle, Lava Console, Messaging Mastered, MQADMIN, MQEdit, MQEXPERT, MQMON, NBX, OMA, OMC Gateway, OMC Status Manager, OMEGACENTER Bridge, OMEGACENTER Gateway, OMEGACENTER Status Manager, OMEGAMON Management Center, OSM, PC COMPANION, Performance Pac, PowerQ, PQConfiguration, PQEdit, PQScope, Response Time Network, Roma, Roma Broker, Roma BSP, Roma Connector, Roma Developer, Roma FS/A, Roma FS/Access, Roma Network, Roma Systems Manager, Roma Workflow Access, Roma WF/Access, RTA, RTN, SentinalManager, Solutions for Networked Applications, Status Monitor, Tracer, Unified Directory Services and Volcano.

Trademarks and registered trademarks of other companies: AIX, DB2, and MQSeries are registered trademarks of International Business Machines Corporation. SAP is a registered trademark and R/3 is a trademark of SAP AG. UNIX is a registered trademark in the U.S. and other countries, licensed exclusively through X/Open Company Ltd. HU-UX is a trademark of Hewlett-Packard Company. SunOS is a trademark of Sun Microsystems, Inc.

All other company and product names used herein are trademarks or registered trademarks of their respective companies.

ProtoView Development Corp. - May contain DataTable Version 3.0 Copyright 1989—1996 by ProtoView Development Corp. and distributed under license by Candle Corporation.

Copyright © 1991, 2000, Candle Corporation, a California corporation. All rights reserved. International rights secured.

Threaded Environment for AS/400, Patent No. 5,504,898; Data Server with Data Probes Employing Predicate Tests in Rule Statements (Event Driven Sampling), Patent No. 5,615,359; MVS/ESA Message Transport System Using the XCF Coupling Facility, Patent No. 5,754,856; Intelligent Remote Agent for Computer Performance Monitoring, Patent No. 5,781,703; Data Server with Event Driven Sampling, Patent No. 5,809,238; Threaded Environment for Computer Systems Without Native Threading Support, Patent No. 5,835,763; Object Procedure Messaging Facility, Patent No. 5,848,234; Communications on a Network, Patent Pending; End-to-End Response Time Measurement for Computer Programs, Patent No. 5,9991,705; Improved Message Queuing Based Network Computing Architecture, Patent Pending; User Interface for System Management Applications, Patent Pending.

NOTICE: This documentation is provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions set forth in the applicable license agreement and/or the applicable government rights clause.

This documentation contains confidential, proprietary information of Candle Corporation that is licensed for your internal use only. Any unauthorized use, duplication, or disclosure is unlawful.

Contents

Read [·]	This First
	Preface 7
	Contents of this Book
	Adobe Portable Document Format 99
	Documentation Conventions
	Documentation Set
What's	s New
	Version 500 Changes 15
!DB/EXPL	AIN Object Panels 17
	•
Chant	er 1. IDB/EXPLAIN Panels 19
onapt	Introduction 19
	Chapter contents
	Administration Menu 21
	BIND/REBIND Package
	BIND/REBIND Plan
	Collections
	Column Distribution Statistics 41
	Compare History 45
	Costs
	DBRMs
	Estimator 67
	Exceptions 93
	EXPLAIN
	EXPLAIN Compare 134
	EXPLAIN History 144
	Extract History
	Extract Update
	Index Keys
	Libraries
	Output Options 162
	Package Connections 164
	Packages 166
	Plan Connections
	Plan Package List 185
	Plans
	Primary Menu
	Sessions Menu 211
	Statements
	Table Columns 226
	Tables 240

Verification	243
Whatif	245
Housekeeping and Customization Panels	273
	215
Chapter 2. Housekeeping and Customization	275
Introduction	275
Chapter Contents	275
BIND Compare Options	277
Build Tuning Parameters	281
Compare Options	284
Data Formats	286
DB/EXPLAIN Configuration Information	288
DB/Tools DB2 Configuration Information	290
DB/Tools Global Configuration Information	293
!DB/Tools Global Information—DB2 Subsystem Name Table	295
DB/Tools Profile Dataset List	297
Exception Options	299
EXPLAIN Defaults	303
EXPLAIN Display Tuning Parameters	307
EXPLAIN/SQL Defaults	310
Extract Processing Defaults	312
Housekeeping	315
Library Search Order	319
Miscellaneous Defaults	322
Output Options Defaults	326
Package BIND Overrides	328
Panel Filters	335
Panel Formats	337
Panel Sorts	339
Plan BIND Overrides	341
Recommendations Menu	347
Recommendations Panel 0	348
Recommendations Panel 1	350
Recommendations Panel 2	352
Recommendations Panel 3	354
Recommendations Panel 4	356
Recommendations Panel 5	358
Recommendations Panel 6	360
Recommendations Panel 7	362
Recommendations Panel 8	364
Recommendations Panel 9	366
Selection Masking	369
Set Defaults	373
SQL Defaults	377
SQL Formats for KTEXPL	379
Tuning Parameters	382

appenaix A.	Commands Available from Object List Panels
Appendix B.	Dictionary of IDB/EXPLAIN Commands
Appendix C.	Selects Available from Object List Panels
Appendix D.	Dictionary of Selects
Appendix E.	IDB/EXPLAIN Sorts and Filters
Collec	tions
Costs	
DBRN	
Explai	
	n History
Host V	Variables
Librari	ies
Packag	ges
Packag	ge Connections
Plans	
Plan C	Connections
Plan P	Package List
Statem	
Tables	• • • • • • • • • • • • • • • • • • • •
Appendix F.	Candle Customer Support
	mer Support Phone Numbers

Preface

Efficient SQL is the foundation for optimal DB2 performance. !DB®/EXPLAIN for DB2 provides answers to SQL performance questions.

!DB/EXPLAIN provides developers with the means to more easily write efficient SQL code for high performance applications.

Using !DB/EXPLAIN, database administrators can perform the analysis needed to ensure that inefficient SQL does not degrade DB2 application or subsystem performance.

When used in conjunction with OMEGAMON II® for DB2, !DB/EXPLAIN provides a means for system programmers and DBAs to view access path data provided by !DB/EXPLAIN together with application trace and accounting data provided by OMEGAMON II for DB2 to quickly pinpoint poorly performing SQL and improve application performance.

This *!DB/EXPLAIN Reference* illustrates *!DB/EXPLAIN's major object list* panels and describes the fields each contains. It also describes the commands and selects available for use on each panel, and the formats in which each panel can be displayed. The panels that support Housekeeping and Customization are also described.

An associated publication, the *!DB/EXPLAIN User's Guide*, describes the features of *!DB/EXPLAIN* and guides you in performing common *!DB/EXPLAIN* tasks.

Overview

This unit describes the contents of each major section of this manual.

Content of major sections

Use the table to understand the organization and content of this reference.

Section name	Contents
Preface	The Preface describes the customer support available from Candle® Corporation, the documentation available with !DB/EXPLAIN, and the conventions used in the !DB/EXPLAIN publications.
!DB/EXPLAIN Object Panels	This section contains the object panels, with a description of the fields on the panels, as well as applicable formats, selects and commands.
Housekeeping and Customization Panels	This section contains the housekeeping and customization panels with a description of each field on each panel.
Appendixes	Use the appendixes to learn more about !DB/EXPLAIN commands, selects, and fields.

Adobe Portable Document Format

Introduction

Candle supplies documentation in the Adobe Portable Document Format (PDF). The Adobe Acrobat Reader prints PDF documents with the fonts, formatting, and graphics in the original document. To print a Candle document, do the following:

- Specify the print options for your system. From the Acrobat Reader Menu bar, select File > Print Setup... and make your selections. A setting of 300 dpi is highly recommended as is duplex printing if your printer supports it.
- 2. To start printing, select File > Print on the Acrobat Reader Menu bar.
- 3. On the Print popup, select one of the Print Range options for
 - a single page
 - a range of pages
 - all of the document
- 4. (Optional) To fit oversize pages to the paper size currently loaded on your printer, select the **Shrink to Fit** option.

Printing problems?

Your printer ultimately determines the print quality of your output. Sometimes printing problems can occur. If you experience printing problems, potential areas to check are:

- settings for your printer and printer driver. (The dpi settings for both your driver and printer should be the same. A setting of 300 dpi is recommended.)
- the printer driver you are using. (You may need a different printer driver or the Universal Printer driver from Adobe. This free printer driver is available at www.adobe.com.)
- the halftone/graphics color adjustment for printing color on black and white printers. (Check the printer properties under Start > Settings > Printer. For more information, see the online help for the Acrobat Reader.)
- the amount of available memory in your printer. (Insufficient memory can cause a document or graphics to fail to print.)

For additional information on printing problems, refer to the documentation for your printer or contact your printer manufacturer.

Documentation Conventions

Overview

This guide uses the conventions described in this unit.

Convention Description

Refer to the table for a description of the documentation conventions used in this guide.

Convention	Description						
Panels and figures	Panels and figures in this document are representations. Actual product panels may differ.						
Revision bars	Revision bars (I) appear in the left margin to identify new or updated material.						
Commands	DB2, TSO, ISPF, and !DB/EXPLAIN command names are in upper case.						
Percent sign	When executing a CLIST, you can optionally preceded the CLIST name with a percent sign (%) to achieve optimum performance. For example, to access !DB/EXPLAIN, you can invoke the CLIST KTE in the form KTE or %KTE .						
Square brackets	Square brackets [] denote optional arguments. Arguments enclosed in square brackets are not required. In the following example, use of XLV is optional: [XLV]						
Braces	Braces { } denote required arguments. In the following example, the <i>workload</i> keyword is required:						
	MONITOR {workload} [time] [SUMMARY]						

Convention Description (continued)

Convention		Description									
hilev	qualifiers. make the da	Lower-case italics in data set names denote variable qualifiers. Qualifiers are prefixes in a data set name tha make the data set name unique. Some qualifiers used in this document are:									
	hilev	A high-level qualifier; the first prefix or set or prefixes in the data set name.									
	db2id	The DB2 subsystem identifier; used as a mid-level qualifier for some !DB®/Tools for DB2 data sets. The mid-level qualifier is the prefix or set of prefixes between the high-level qualifier and the last part of the data set name.									
	extract_id	An extract ID; an identifier for the catalog data extracted from the DB2 catalog. It is used as a mid-level qualifier for some !DB/Tools data sets. The mid-level qualifier is the prefix or set of prefixes between the high-level qualifier and the last part of the data set name.									
	product_id	A product ID; an identifier for the !DB/Tools product or products you are installing. It is used as a mid-level qualifier for some !DB/Tools data sets. The mid-level qualifier is the prefix or set of prefixes between the high-level qualifier and the last part of the data set name.									
'tddoc3.booklib.prod'	Single quotes distinguish specific data set names from variable qualifiers. The data set name is shown in lowe case and in the same font as the rest of the text.										
Function keys	example, F3 definitions function ke	does not refer to specific function keys, for 3. Because you may use the function key provided by ISPF or choose to define your own ys, this guide instructs you to enter a command mand line or press the appropriate function key.									
		Fype END on the command line and press ess the appropriate function key.									

Terminology—panel versus display

In this document, the term "panel" is used to denote a facsimile of an actual screen you might see when logged onto !DB/EXPLAIN. The term "display" is used to denote the information that is contained on a panel or the equivalent information written to an output device such as a printer or output file.

This distinction is especially important in the chapters of this manual that discuss the use of !DB/EXPLAIN in batch. In these chapters, you are asked to construct batch jobs to perform processing equivalent to entering commands, filters, and sorts on the command line of an object panel. Thus:

- A discussion of the "EXPLAIN display" refers to the EXPLAIN information presented either as a series of panel images or as information contained in a file that can be output to a printer.
- A discussion of a batch job containing commands usable from the "Statements display" implies that you can use only those commands you might use in an online session from the Statements panel.

Documentation Set

Introduction

Candle provides a complete set of documentation for !DB/EXPLAIN. Each manual in this documentation set contains a specific type of information to help you use the product.

Candle welcomes your comments and suggestions for changes or additions to the documentation set. A user comment form, located at the back of each manual, provides simple instructions for communicating with Candle's Information Development department. You can also send email to UserDoc@candle.com. Please include the product name, version, and book title in the subject line. To order additional manuals, contact Candle Customer Support.

The documentation listed in the following table is available for !DB/EXPLAIN.

Table 1. !DB/	EXPLAIN Documentation	
Doc Number	Title	Description
TE54-5842	!DB/EXPLAIN User's Guide	Tells how to use !DB/EXPLAIN and its features
TE53-5843	!DB/EXPLAIN Reference	Provides a reference for major !DB/EXPLAIN functions and features
TI51-5840	<i>!DB/Tools Installation and Customization Guide</i>	Tells how to install !DB/EXPLAIN as well as the other !DB®/Tools for DB2 products. It also contains information about security and authorizations.

Online documentation for BookManager

In addition to the printed versions, !DB/EXPLAIN documentation is available in BookManager format. Both major !DB/EXPLAIN releases and maintenance releases between major releases contain updated BookManager documentation. See the !DB/Tools Installation and Customization Guide for information regarding these files.

For more information about using BookManager, see these IBM documents:

IF you want to	THEN see
put our book on a bookshelf,	IBM BookManager BUILD/MVS Preparing Online Books SC38-2036
display our book,	IBM BookManager READ/MVS Displaying Online Books SC38-2034

Version 500 Changes

Overview

I

T

Т

This section describes what is different between !DB/EXPLAIN and previous versions of !DB/EXPLAIN.

Differences in this release

Primarily, the Version 500 release of !DB/EXPLAIN provides full compatibility for DB2 Version 6. However, some DB2 enhancements are not exploited by !DB/EXPLAIN Version 500.

DB2 Version 6 contains enchancements for

- defining and manipulating data objects
- conducting e-business
- improving performance and availablity of database applications
- managing the database environment
- increasing database and query capacity

This release of !DB/EXPLAIN also continues to support fully earlier releases of DB2 and is also Y2K compliant.

!DB/EXPLAIN Object Panels

Chapter 1. DB/EXPLAIN Panels!

Introduction

This chapter provides reference information about major !DB/EXPLAIN functions and features. Information is referenced by major panel function and is mapped by sections.										
Description Describes and defines panel functions										
Format	For panels available in more than one format, describes the formats									
Access	Tells you how to access panels									
Panels	Shows you the major panel and its associated panels and panel formats									
Fields and Associated Sorts and Filters Gives information about the fields on a panel. Sorts and fi are listed if they are avaiable.										
Selects	Describes available selects									
Commands	Describes available commands									

Chapter contents

Administration Menu	21
BIND/REBIND Package	23
BIND/REBIND Plan	29
Collections	39
Column Distribution Statistics	41
Compare History	45
Costs	49
DBRMs	56
Estimator	67
Exceptions	93
EXPLAIN	95
EXPLAIN Compare	134
EXPLAIN History	144
Extract History	149
Extract Update	151
Index Keys	153
Libraries	155

Online Menu															10
Output Options															10
Package Connection	ons	3													10
Packages															10
Plan Connections															18
Plan Package List															18
Plans															18
Primary Menu					 										20
Sessions Menu															2
Statements					 										2
Table Columns															22
Tables															24
Verification															24
Whatif															24

Administration Menu

Overview

This unit describes the !DB/EXPLAIN Administration Menu.

Background about the Administration Menu

The Administration Menu (KTEPADMN) provides entry to !DB/EXPLAIN administration menu functions. You can find information about using !DB/EXPLAIN's Administration Menu and its functions in "Using the Administration Menu" in the *!DB/EXPLAIN User's Guide*.

Access

You access the !DB/EXPLAIN Administration Menu from !DB/EXPLAIN's Primary Menu or by typing ADMIN on the command line of an object list panel.

Panel

The following illustration shows the Administration Menu panel.

Cmd ===>	DB/EXPLAIN DB2=D42B	
Cmds: GLOBAL (ADMINISTRATION MENU Menu) 1	
2 3 4 5 6 7	Activity Log 2 Authorizations 3 Extract Ids 4 Extract History 5 Housekeeping 6 Refresh displays from extract 7 Display DB/Tools profile data sets 8 Set DB/Tools profile data sets 9	

Elements of the Administration Menu (continued)

- **1** Command entered from this menu to obtain a detailed global command menu.
- 2 Displays log of your activity; you can access the activity log from other !DB/EXPLAIN panels by entering the command ACTLOG on the command line.
- 3 If you have authorization, system displays a list of authorized users of !DB/EXPLAIN Without appropriate authority, you cannot view or alter the list.
- 4 Displays the !DB/Tools Global Information--DB2 Subsystem Name Table panel that contains the extract IDs of configured DB2 subsystems available to you mapped against their associated subsystems IDs and MVS IDs.
- 5 Displays extract history.
- 6 Takes you directly to the Houskeeping Main Menu.
- 7 Rebuilds the displays generated from the extract
- 8 Displays profile datasets information panel.
- 9 Lets you set and maintain profile datasets.

BIND/REBIND Package

Overview

This unit describes the BIND/REBIND Package panel.

Background about the BIND/REBIND Package panel

The BIND/REBIND Package panel (KTEPBIKA) generates the commands necessary to BIND/REBIND packages. The BIND Package panel displays when BIND or REBIND is invoked by entering a B select from the DBRMS panel or a B or R select from the Packages panel.

Steps to BIND or REBIND a package

Here are the steps to BIND or REBIND a package.

- If BINDing from a DBRM:
 - 1. Type a DBRM member name and library.

Only one DBRM can be bound into a package. There is a one-to-one correspondence between a package and a DBRM member.

- 2. If system connections are to be enabled or disabled type Y (Yes) in the Enable/Disable Connections field. The System Connection Names panel (KTEPBIKC) displays.
- If COPYing from Packages:
 - 1. Enter a collection ID and package ID.
 - 2. If system connections are to be enabled or disabled, type Y (Yes) in the Enable/Disable Connections field. The System Connection Names panel (KTEPBIKC) displays.

Copying packages and BINDing DBRMs are mutually exclusive.

If no previous errors have occurred, and if you have requested it on Housekeeping's Output Options Defaults panel, the Output Options panel appears to allow you to specify where the generated BIND/REBIND commands are stored.

Overriding BIND parameters

Housekeeping's Package BIND Overrides panel allows you to make global changes to BIND parameters for more than one package. It allows you to override attributes of an existing package when generating a BIND or REBIND command. Fields for which no overrides are shown on the Package BIND Overrides panel cannot be overridden. Refer to "Package BIND Overrides" on page 328 for more information.

Caution when executing BINDs or REBINDs

When executing the BIND commands generated by !DB/EXPLAIN, remember that your output can be limited by the amount of available storage.

Access

This panel is accessed from either the Packages panel using the B or R select, or the DBRMS panel using the B select.

Panels

The following illustration shows the BIND/REBIND Package panel.

```
----- DB/EXPLAIN DB2=D42B ------
Cmd ===>
                             PACKAGE BIND
BIND or REBIND : BIND
                                       Action : R (R Replace A Add)
                                       Flag
                                             : I
                                                      (I / W / E / C)
          : KTEEXDB3
                                       Isolation: S
                                                      (R RR T RS CS U UR)
Package
Location :
Collection : CANDLE_SYSTEM
                                       Release : C
                                                      (C Commit D Deallocate)
                                                      (R Run B Bind)
                                       Validate : B
Owner : MYUSER
Qualifier : SYSIBM
                                      Explain : N (YYes NNo)
                                       Sqlerror : N (N Nopackage C Continue)
Dynamicrules:(B / R / blank)Degree: 1(1 ANY)Keepdynamic :N ( Y Yes N No )Deferprep :(Y Yes NReopt(VARS) :N ( Y Yes N No )Currentdata:Y Yes N
                                                       (Y Yes N No blank )
                                    Currentdata: Y (Y Yes N No )
Version
           : V500
Enable/Disable Connections?: * (Y Yes N No * ALL)
                          : (Y Yes N No)
Remote ENABLE?
Source:
            : CANDLE.DBTOOLS.DBRM
                                                              DBRM: KTEEXDB3
Library
  - or -
Collection :
                                      Package :
Version
            :
ENTER to process END to cancel
```

From the System Connection Names panel, you can enable or disable system connections.

Fields and Associated Sorts and Filters

FIELD	ON PANEL	DESCRIPTION		
ACTION on Package	KTEPBIKA	Indicates whether to replace the application package:		
		R Replace A Add		
BIND or REBIND	KTEPBIKA	Type of command.		
COLLECTION	KTEPBIKA	Collection name where package is to reside.		
COLLECTION (SOURCE)	KTEPBIKA	Collection in which package to be copied resides.		
CONNECTION	KTEPBIKC	Connection ID.		
CURRENTDATA	KTEPBIKA	Indicates the data currency requirement of ambiguous cursors		
		Y Bind with CURRENTDATA (YES)N Bind with CURRENTDATA (NO)		
DEFERPREP	KTEPBIKA	Indicates whether PREPARE statement referring to a remote object is deferred until the first EXECUTE, OPEN, or DESCRIBE for the statement is issued. Valid values include:		
		Y Yes N No blank Inherit from PLAN		
DEGREE	KTEPBIKA	 Determines whether I/O Parallelism is enabled 1 Generated BIND/REBIND contains the DEGREE(1) clause—I/O parallelism disabled. ANY Generated BIND/REBIND contains the DEGREE(ANY) clause. I/O parallelism value set by DB2. blank No degree() clause generated so default of 1 is used. 		
DBRM Member	KTEPBIKA	DBRM member name.		
DYNAMICRULES	KTEPBIKA	 If non-blank, indicates the value to generate in the DYNAMICRULES() clause: R Generate DYNAMICRULES(RUN) to cause dynamic SQL to be handled like dynamic SQL at run time. B Generate DYNAMICRULES(BIND) to cause dynamic SQL to be handled like static SQL at run time. 		
ENABLE/DISABLE CONNECTIONS?	KTEPBIKA	time. Indicates whether to include system connections: Y Yes N No * All connections Takes you to KTEPBIKC.		

FIELD	ON PANEL	DESCRIPTION		
ENABLED?	KTEPBIKC	Indicates whether connection is enabled:		
		Y Yes N No		
EXPLAIN	KTEPBIKA	EXPLAIN at BIND?		
		Y Yes N No		
FLAG	KTEPBIKA	Indicates what levels of messages to display:		
		 Informational, Warning, Error, and Completion messages W Warning, Error, and Completion messages E Error and Completion messages C Completion messages only 		
ISOLATION	KTEPBIKA	Isolation Level:		
		 R RR Repeatable Read S CS Cursor Stability T RS Read Stability U UR Uncommitted Read blank Not specified and therefore at the level specified for the plan executing the package 		
KEEPDYNAMIC	KTEPBIKA	Indicates if prepared dynamic SQL should be purged at the end of a unit of work. Valid values include:Y Keep dynamic SOL past commit or rollback		
		YKeep dynamic SQL past commit or rollbackNDestroy dynamic SQL at commit or rollback		
LIBRARY	KTEPBIKA	Library that contains the DBRMs.		
LOCATION	KTEPBIKA	Location where the package is to be bound.		
		Location is required only if a remote unit of work is being used.		
MORE CONNECTIONS?	KTEPBIKC	Indicates whether to include more connections:		
		Y Yes N No		
OWNER of PACKAGE (AUTHID)	KTEPBIKA	Authorization ID of the owner of the package.		
PACKAGE	KTEPBIKA	Package ID.		
PACKAGE	KTEPBIKC	Package ID.		
PACKAGE (SOURCE)	KTEPBIKA	Package ID to be copied.		
QUALIFIER	KTEPBIKA	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the package.		
RELEASE	KTEPBIKA	Indicates when resources are released:		
		CAt commitDAt deallocationblankNot specified and therefore at the level specified for the plan executing the package.		

FIELD	ON PANEL	DESCRIPTION	
REOPT(VARS)	KTEPBIKA	 Indicates whether the access path is re-determined at execution time using input variables. Valid values includes Y Determines access path at execution time for SQL statements with variable values N Determines access path at bind time 	
SQLERROR	KTEPBIKA	Indicates whether to continue processing to produce a package after finding SQL errors: N No Package C Continue	
SYSTEM	KTEPBIKC	Environment for connection. Values are: BATCH TSO batch DB2CALL DB2 call attachment facility CICS Customer Information Control System DLIBATCH DLI batch support facility IMS IMS region IMSBMP IMP BMP region IMSMPP IMS MPP or IFP region REMOTE Remote application server	
VALIDATE	KTEPBIKA	Indicates how to handle "OBJECT NOT FOUND" and "NOT AUTHORIZED" errors that occur at bind time: R RUN B BIND	
VERSION	KTEPBIKA	Indicates whether to replace a specific version on an existing package.	
VERSION (SOURCE)	KTEPBIKA	Package version to be copied.	

BIND/REBIND Plan

Overview

This unit describes the BIND/REBIND Plan panel.

Background about the BIND/REBIND Plan panel

The BIND/REBIND Plan panel (KTEPBIPL) generates BIND or REBIND commands.

Steps to BIND or REBIND a plan

Here are the steps to BIND a plan.

- If DBRMs are to be bound into the plan:
 - 1. Type Y (Yes) in the Include DBRMs field. The DBRM Member Names panel (KTEPBIDB) appears.
 - 2. You are prompted for additional library names on the Library Names for BIND Plan panel.
- If system connections are to be enabled or disabled:

Type Y (Yes) in the Enable/Disable Connections field and the System Connection Types panel appears.

• If packages are to be bound into the plan:

Type Y (Yes) in the Include Package List field. You are then prompted for a list of packages.

If no previous errors have occurred, and if you have requested it on Housekeeping's Output Options Defaults panel, the Output Options panel appears to allow you to specify where to store the generated BIND commands.

Overriding BIND parameters

Housekeeping's Plan BIND Overrides panel allows you to make global changes to BIND parameters for more than one plan. Fields for which no overrides are shown on the Plan BIND Overrides panel cannot be overridden. Refer to "Plan BIND Overrides" on page 341 for more information.

Caution when executing BINDs or REBINDs

When executing the BIND commands generated by !DB/EXPLAIN, remember that your output can be limited by the amount of available storage.

Access

BIND/REBIND Plan can be accessed from the Plans panel by using the B or R select.

Panels

The following illustration shows the BIND/REBIND Plan panel.

Cmd ===>	PL <i>F</i>	N BIND	
BIND or REBIN Plan Owner Qualifier	: PLAN300 : MYUSER	Retain : Y Flag : I Isolation : S Acquire : U	<pre>(R Replace A Add) (Y Yes N No) (I / W / E / C) (R RR T RS S CS U UR (U Use A Allocate) (C Commit D Deallocate</pre>
Cache Size		Validate : R EXPLAIN : N	(RRun BBind) (YYes NNo)
Keepdynamic Reopt(VARS)	r: :Y (YYes NNo) :N (YYes NNo) :N (YYes NNo) : (blank/B)		· /
	?: : (Y Yes ge List?: : (Y Yes e Connections?: * (Y Yes	N NO)	

!DB/EXPLAIN displays the DBRM Member Names panel to permit you to include additional DBRMs in the plan.

CMD ===>	DB/EXPLAIN	DB2=D31A		LINE 1 OF 3 SCROLL ===> PAGE
Cmds: GLOBAL (Menu)	DBRM MEMBER	NAMES FOR	BIND PLAN	
Enter DBRM member names	to be inclu	ded in PLA DBRM	N DSCSAMP4	
Member	Member		Member	Member
DSCSAMP4				
More DBRMs?:	(YYes NI	No)		

Panels (continued)

!DB/EXPLAIN displays the Library Names panel to permit you to search additional DBRM libraries.

```
CMD ===> DB/EXPLAIN DB2=D31A ------ LINE 1 OF 3

CMD ===> CLIBRARY NAMES FOR BIND PLAN

Cmds: GLOBAL (Menu)

Enter DBRM Library names to be included in the DBRMLIB concatenation for

PLAN DBT925E

LIBRARY NAME

TDDB00.DBT925.CNTL

More Libraries?: (Y Yes N No)
```

The System Connection Types panel lets you enable/disable system connection types.

```
      ------ DB/EXPLAIN DB2=D42B
      LINE 1 OF 3
SCROLL ===> PAGE

      SYSTEM CONNECTION TYPES FOR BIND PLAN

      Cmds: GLOBAL (Menu)

      ------

      Enter system connect types to be Enabled/Disabled for Plan $PMRDEMO

      SYSTEM
      CONNECTION

      Enter system connect types to be Enabled/Disabled for Plan $PMRDEMO

      SYSTEM
      CONNECTION

      Enter System connect types to be Enabled/Disabled for Plan $PMRDEMO

      More Connections?: N (Y Yes N No)
```

Panels (continued)

Use the Package List panel to include additional packages in the plan.

DI CMD ===>	3/EXPLAIN DB2=D31A	LINE 1 OF 3 SCROLL ===> PAGE
Cmds: GLOBAL (Menu)	Package List for Bind	d Plan
Enter names to be included	d in list for Plan DSCS	SAMP4
Location	Collection	Package
 More Package L	ists?: N (Y Yes N No)	

Fields

The following table summarizes input needed for the BIND function. Information on the related panels BIND/REBIND Plan (KTEPBIPL), DBRM Member Names (KTEPBIDB), and Library Names (KTEPBILI) has been combined.

FIELD	ON PANEL	DESCRIPTION	TAKES YOU TO
ACQUIRE	KTEPBIPL	Indicates when resources are obtained: A At allocation U Use	
ACTION ON PLAN	KTEPBIPL	Indicates whether to replace the application plan: R Replace A Add	
BIND or REBIND	KTEPBIPL	Type of command.	
CACHE SIZE	KTEPBIPL	Size measured in bytes of the cache to be acquired for the plan.	
COLLECTION	KTEPBIPK	Collection name where package resides.	
CONNECTION	KTEPBIPC	Connection ID.	
CURRENTDATA	KTEPBIPL	 Indicates the data currency requirement of ambiguous cursors. Y Bind with CURRENTDATA (YES) N Bind with CURRENTDATA (NO) 	
CURRENTSERVER (Server)	KTEPBIPL	Location name specified with the CURRENTSERVER option when the plan was last bound. Blank if none was specified.	
DBRM MEMBER	KTEPBIDB	DBRM member name.	Library Names (KTEPBILI)
DEGREE	KTEPBIPL	 Determines whether I/O Parallelism is enabled 1 Generated BIND/REBIND contains the DEGREE(1) clause—I/O parallelism disabled. ANY Generated BIND/REBIND contains the DEGREE(ANY) clause. I/O parallelism value set by DB2. blank No degree() clause generated so default of 1 is used. 	

BIND/REBIND Plan

FIELD	ON PANEL	DESCRIPTION	TAKES YOU TO
DEFERPREP	KTEPBIKA	Indicates whether the PREPARE statement referring to a remote object is deferred until the first EXECUTE, OPEN, or DESCRIBE for the statement is issued. Valid values include: Y Yes	
DISCONNECT	KTEPBIPL	N No Determines whether disconnect is explicit, automatic, or conditional The values are: E E Generated BIND/REBIND command contains the clause DISCONNECT(EXPLICIT) A Generated BIND/REBIND command contains the clause DISCONNECT(AUTOMATIC) C Generated BIND/REBIND command contains the clause DISCONNECT(AUTOMATIC) C Generated BIND/REBIND command contains the clause DISCONNECT(CONDITIONAL)	
DYNAMICRULES	KTEPBIPL	Indicates whether run time or bind time rules will apply to a dynamic SQL statement at run time. If this field is non-blank, it specifies the value to be generated in the DYNAMICRULES() clause: R Generate DYNAMICRULES(RUN). B Generate DYNAMICRULES(BIND)	
ENABLE/DISABLE CONNECTIONS?	KTEPBIPL	Indicates whether to include system connections: Y Yes N No * All connections	If yes, System Connection Types (KTEPBIPC)
ENABLED?	KTEPBIPC	Indicates whether to enable the connection: Y Yes N No	
EXPLAIN	KTEPBIPL	Explain at BIND? Y Yes N No	

FIELD	ON PANEL	DESCRIPTION	TAKES YOU TO
FLAG	KTEPBIPL	Indicates what levels of messages to display:	
		 I Informational, Warning, Error, and Completion messages W Warning, Error, and Completion messages E Error and Completion messages C Completion messages only 	
INCLUDE DBRMS?	KTEPBIPL	Indicates whether to include DBRMs:	If yes,
		Y Yes N No	DBRM Member Names (KTEPBIDB)
INCLUDE PACKAGE LIST?	KTEPBIPL	Indicates whether to include packages:	If yes,
		Y Yes N No	Package List for Bind (KTEPBIPK)
ISOLATION	KTEPBIPL	Isolation Level:	
		 R RR Repeatable Read S CS Cursor Stability T RS Read Stability U UR Uncommitted Read 	
KEEPDYNAMIC	KTEPBIPL	Indicates if prepared dynamic SQL should be purged at the end of a unit of work. Valid values include:	
		 Y Keep dynamic SQL past commit or rollback. N Destroy dynamic SQL at commit or rollback. 	
LIBRARY NAME	KTEPBILI	Library name.	
LOCATION	KTEPBIPK	Location where package is to be bound.	
MORE CONNECTIONS?	KTEPBIPC	Indicates whether to include more connections:	
		Y Yes N No	
MORE DBRMs?	KTEPBIDB	Indicates whether to include more DBRMs:	
		Y Yes N No	
MORE LIBRARIES?	KTEPBILI	Indicates whether to include more libraries:	
		Y Yes N No	

FIELD	ON PANEL	DESCRIPTION	TAKES YOU TO
MORE PACKAGE LISTS?	KTEPBIPK	Indicates whether to include more packages: Y Yes N No	
OWNER of PLAN(AUTHID)	KTEPBIPL	Authorization ID of the owner of the application plan.	
PACKAGE	KTEPBIPK	Package ID.	
PLAN	KTEPBIPL	Name of the application plan.	
QUALIFIER	KTEPBIPL	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the plan.	
RELEASE	KTEPBIPL	Indicates when resources are released: C At commit D At deallocation	
REMOTE ENABLE?	KTEPBIPL	Indicates whether to enable the remote connection: Y Yes N No	
REOPT(VARS)	KTEPBIKA	Indicates whether the access path is re-determined at execution time using input variablesYKeep dynamic SQL past commit or rollbackNDestroy dynamic SQL at commit or rollback	
RETAIN	KTEPBIPL	Preserves EXECUTE authority when an application plan is replaced. It is applicable only if ACTION(REPLACE).	
SQLRULES	KTEPBIPL	 Values are: D Generated BIND/REBIND command contains the clause SQLRULES(DB2) S Generated BIND/REBIND command contains the clause SQLRULES(STD) blank Not specified; thus generated clause contains the default (=DB2). 	

FIELD	ON PANEL	DESCRIPTION	TAKES YOU TO
SYSTEM	KTEPBIPC	Environment for connection. Values are:	
		BATCHTSO batchDB2CALLDB2 call attachmentfacilityCICSCustomer Information Control SystemDLIBATCHDLI batch support facilityIMSIMS regionIMSBMPIMP BMP regionIMSMPPIMS MPP or IFP region	
VALIDATE	KTEPBIPL	Indicates when to handle OBJECT NOT FOUND and NOT AUTHORIZED errors that occur at bind time: R RUN B BIND	

Collections

Overview

This unit describes the Collections panel.

Background about the Collections panel

DB2 permits the grouping of packages into collections. Collections are not physical entities, and consequently no DB2 table exists for them.

The Collections panel (KTEPCLTN) in !DB/EXPLAIN lists collection IDs and locations for all packages within the DB2 catalog.

Access

The Collections panel can be accessed through the Primary or Sessions Menus, or through the Plans or Packages panels.

Panel

This is the Collections panel.

CMD ==	:=>		SCROLL ===> PAG
Cmds	: DO (Menu) GLOBAL (I	COLLECTIONS 4enu)	Selects: ? (Menu
SEL	COLLECTION	LOCATION	
_	DBTCL1	5024	
_	DBTCL1	D23A	
_	DESCOL01 DSNESPCS	D23A	
-	DSNESPCS		
-	DSNQCATV	D23A	
-	EXPCOL2	DZSR	
-	EXPCOL3		
-	GULCOL		
-	GULCOL1		
-	GULCOL11		
-	GULCOL12		
_	GULCOL13	D23A	
_	GULCOL14		
_	GULCOL15		
	GULCOL16		

Fields and Associated Sorts and Filters

FIELD	DE	SCRIPTION	SORTS/ FILTERS
COLLECTION	Name of the package of	collection.	QCOL
	Source: SYSIBM.SYSPA	CKLIST.COLLID	
LOCATION	Location of the packag	ge:	QLOC
	* blank nonblank Source: SYSIBM.SYSPA	Location to be determined at run time Local Location name	Note: Filtering for QLOC has been defined as a special filter where the wild card % is used instead of * for this field. The wild card * will not be recognized as a wild card for this field.

Selects

SELECT	DESCRIPTION	TAKES YOU TO
K	Display all packages associated with the selected collection.	Packages (KTEPKACK)
М	Display all package lists associated with the selected collection.	Plan Package List (KTEPPKPL)
Р	Display all plans associated with the selected collection.	Plans (KTEPPLAN)

Column Distribution Statistics

Overview

This unit describes the Column Distribution Statistics panel.

Background about the Column Distribution Statistics panel

The Column Distribution Statistics panel (KTEPCDIS) allows the user to view column distribution statistics. The user may update, delete, or insert data rows on this panel.

- To update row data, overtype the current information.
- To delete row data, enter the **D** select on the row.
- To insert row data, enter the **I** select or the **R** select to insert a blank line or repeat a row respectively.

The Column Distribution Statistics function is available only for DB2 Version 3 or later.

Access

Column Distribution Statistics is invoked whenever the user selects a column with S on the Table Columns Panel (KTEPTCOL).

Panels

The Column Distribution Statistics panel is available in two formats. This is format 1.

CMD Cm	===>		COI		DB2=D31A LINE 1 OF 4 SCROLL ===> CSR UTION STATISTICS Selects: ? (Menu
TABL	E=D23B	.PROD.C	OLUMNS		COLUMN=THE_VALUE
SEL	PART	FREQ%	NULL?	VALUE	
	0	1			
-	0 0	2 30	N N		
_	1	1	Ν	JJ	
_	1	2	N N	KK MJ	
X	2	40	N	FF444444 33000000	
_	2	20	Ν	44	

This is format 2.

CMD	===>		CO	- DB/EXPLAIN DB2=D31A LINE 1 OF 4 SCROLL ===> CSR LUMN DISTRIBUTION STATISTICS L (Menu) Selects: ? (Menu)
TABLE=D23B.PROD.COLUMNS				COLUMN=THE_VALUE
SEL	PART	FREQ%	NULL?	VALUE
_	0	1	N	JJ STATS TIMESTAMP : 1999/09/09 02:02:02
_	0	2	Ν	JK STATS TIMESTAMP : 1999/09/09 02:02:02
-	0	30	Ν	33 STATS TIMESTAMP : 1999/09/09 02:02:02
_	1	1	Ν	JJ STATS TIMESTAMP : 1999/09/09 02:02:02
_	1	2	Ν	KK STATS TIMESTAMP : 1999/09/09 02:02:02
x	1 2	2 40	N N	MJ FF444444
_	2	20	N	33000000 STATS TIMESTAMP : 1999/09/09 02:02:02 44
				STATS TIMESTAMP : 1999/09/09 02:02:02

Fields

FIELD	DESCRIPTION	NOTES
COLUMN=	The column name.	
FREQ% *	Percentage of rows that contain the specified VALUE.	Source: SYSIBM.SYSCOLDIST.FREQUENCY if the partition number is 0.
		Source: SYSIBM.SYSCOLDISTSTATS.FREQUENCY if the partition number is non-zero.
NULL? *	Indicates whether the column value is null.	Source: SYSIBM.SYSCOLVALUE
	The value in the field may be:	
	YThe column value is null.NThe column value is not null.	
	If the value in the field is Y, the VALUE field is ignored.	
PART *	The partition number.	Source: SYSIBM.SYSCOLDISTSTATS.PARTITION if the partition number is non-zero.
STATS TIMESTAMP	Format 2 only. The statistics timestamp value from the Catalog.	This field is set to the CURRENT TIMESTAMP for functions that update the catalog or output statistics.
		Source: SYSIBM.SYSCOLDIST.STATSTIME
		Source: SYSIBM.SYSCOLDISTSTATS.STATSTIME
TABLE=	Name of the table to which the listed column belongs.	
VALUE *	Value of the column. The field may span multiple lines. Its length is determined by	Source: SYSIBM.SYSCOLDIST.COLVALUE if the partition number is 0.
	the length of the column.	Source: SYSIBM.SYSCOLDISTSTATS.COLVALUE if the partition number is non-zero.

Fields marked with an asterisk are updateable.

Selects

SELECT	DESCRIPTION	
С	Display VALUE in character format. This select is only available for character or graphic data columns.	
D	Delete the current row unless this function was entered from the WHATIF function. If entered from WHATIF, you can only delete PART=0 rows.	
Ι	Insert a row following the current row unless this function was entered from the WHATIF function. If entered from WHATIF, you can only insert PART=0 rows.	
R	Repeat the current row	
X	Display VALUE in hexadecimal format. This select is only available for character or graphic data columns.	

Commands

COMMAND	DESCRIPTION
CHAR	Display all lines in character format. This command only applies to character or graphic data columns.
DELETE	Delete all lines unless this function was entered from the WHATIF function. If entered from WHATIF, you can only delete PART=0 rows.
HEX	Display all lines in hexadecimal format. This command only applies to character or graphic data columns.
NEWSET	Establish a new statistics set.
RESET	Reset column distribution statistics value to the last statistics set value. (A statistics set is established when you enter the Column Distribution Statistics panel or when you issue the NEWSET command.)

Compare History

Overview

This unit describes the Compare History panel.

Background about the Compare History panel

The Compare History (KTEPJHIS) panel shows all corresponding differences between two plans, DBRMs, or packages.

- When comparing two plans, corresponding data from SYSPLAN is compared.
- When comparing two DBRMs, corresponding data from SYSDBRM is compared.
- When comparing two packages, corresponding data from SYSPACKAGE is compared.

Access

To use this function, select two items to compare from either the Plans, DBRMs, or Packages panels using the **J** select or the IMPACT command.

When you exit the Compare History panel, you return to the invoking panel.

Panel

The Compare History panel is a text only panel. There are no associated filter or sort panels.

----- DB/EXPLAIN DB2=D31A -----CMD ===> SCROLL ===> PAGE COMPARE HISTORY Cmds: DO (Menu) GLOBAL (Menu) -----BOUND: 1999/11/30 05:46:51.840000 PLAN: CHGPLANX PLAN: DSDZPLAN BOUND: 1999/12/06 10:48:53.880000 PLAN: CHGPLANX PLAN: DSDZPLAN BIND DATE - TIME: 1999/11/30 05:46:51.840000 BIND DATE - TIME: 1999/12/06 10:48:53.880000 CREATOR: TDDB43 CREATOR: TDDB25 BOUNDBY: TDDB43 BOUNDBY: TDDB25 QUALIFIER: TDDB43 QUALIFIER TDDB25 PLSIZE: 2944 PLSIZE: 2928 AVGSIZE: 1450 AVGSIZE: 1233

Fields

The fields on the Compare History panel vary depending on the panel (DBRMS, Packages, or Plans) from which you accessed it. The value of the displayed fields corresponds to the value of fields of the same name on the accessing panel.

Commands

The following command is available for the Compare History function.

COMMAND	DESCRIPTION	TAKES YOU TO
CEXPL	Compare EXPLAIN data for two entities and display the results. The current object is compared to the historic object and differences in access path or other EXPLAIN information is presented.	EXPLAIN Compare (KTEPCMPR)

A note about compares

CEXPL adds another layer of information to your compare processing. Typically, when you are on the Plans, Packages, or DBRMS panel, you can issue the IMPACT command (or the J select) to obtain compare history information. The IMPACT command or J select compares such things as precompile options, owners, or qualifiers.

CEXPL is issued from the Compare History panel and compares EXPLAINs.

Considerations for using the CEXPL command in batch

When you issue a CEXPL command in batch, a PRNT command is implied. There is no need to issue a PRNT command following the CEXPL command. If you are using the default format for the EXPLAIN compares, that is, the format you set in Housekeeping, issuing CEXPL causes the comparison to be printed.

If you want to use a format other than the format you have set in Housekeeping, you need to create an override statement as input to your KTECNTL batch job. The override to set up the report format *must* precede issuing CEXPL. This example illustrates the correct coding to override default format 1.

<pre>//EXBATCH.KTECNTL EXP_CM_FORMAT=2 /*</pre>	DD *	(Start of KTECNTL batch program) (Input to set up EDIFF format)
//EXBATCH.SYSIN KA IMPACT PRNT CEXPL END /*	DD *	(Start of SYSIN program) (Selects Packages as object type to use) (Runs compare history) (Prints impact results) (Compares EXPLAINs and prints results) (Ends the program)

If your default format is format 2, then your override would take the form **EXP_CM_FORMAT=1**.

Costs

Overview

This unit describes the Costs panel.

Background about the Costs panel

The Costs panel (KTEPCOST) lists access path selection information which can affect statement cost.

Formats

Format	Displayed Fields
Format 1	Plan Name, Plan Table Access or Join with Degree greater than 1, Access Type, Sorts, Method, Lock, List, Sequential Prefetch
Format 2	Plan Name, Precompile Timestamp, Explain Timestamp, Statement Cost
Format 3	Plan Name, Maximum Statement Cost, Average Statement Cost, Total Statement Cost

Access

Costs can be accessed through the Primary Menu or the Plans, DBRMs, Packages, or Exceptions panels. The information you see depends on how you enter the panel.

- If Costs are entered from DBRMs, only costs for DBRMs display.
- If Costs are entered from Packages, only costs for packages display.

Panels

This is format 1 of the Costs panel.

	 ===> mds:									DB2 C O		-						ROLL			
-	PLAN ADG	JDG			-ACCES			-						-					LCK	LPF	SPF
-																					
-	CANPL 0	.an 0	1	59	1	0	0	0	0	0	0	0	11	0	11	0	0	0	92	40	2
_	CANPL	NX																			
	0	-	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0
_	CHGPL 0		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	Θ	7	0	0
	CHGPL	-	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
-		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
_	DSDPL																				
	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
_	DSDPL 0	ANX. 0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
		-	0	1	0	U	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0

This is format 2 of the Costs panel.

CMD ===> Cmds: DO (Menu)		S T S	L ===> PAGE ts: ? (Menu)
SEL PLAN	PRECOMPILE TIMESTAMP	EXPLAIN TIMESTAMP	STMT COST
- CANPLNX 0000 - CHGPLAN 0000 - CHGPLANX 0000 - DSDPLAN 0000 - DSDPLANX 0000 - DSDPLANZ 0000 - DSDPLANZ 0000 - DSNBVCRD 0000 - DSN8BP31 0000 - DSN8BP31 0000 - DSN8BH0 0000 - DSN8SC31	0/00/00 00:00:00.00000 0/00/00 00:00:00.000000 0/00/00 00:00:00.000000	1999/12/13 15:29:53.680000 1999/12/13 15:29:53.680000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/13 15:29:53.680000 1999/12/13 15:29:53.680000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/13 15:29:53.680000 1999/12/13 15:29:53.680000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/14 07:18:38.490000 1999/12/14 15:29:53.680000 1999/12/13 15:29:53.680000 1999/12/13 15:29:53.680000	$\begin{array}{r} 34,500.0\\ 8.8\\ 29.0\\ 0.0\\ 9.1\\ 8.8\\ 8.8\\ 9.1\\ 708.4\\ 47.0\\ 47.0\\ 14,298.1\\ 14,298.1\\ 14,298.1\\ 14,298.1\\ 14,298.1\\ 8.8\\ 34,500.0\\ 8.8 \end{array}$

Panels (continued)

This	is	format	3	of	the	Costs	panel.

Cmds: DO (Menu) G				Selects: ? (Menu)
		AVERAGE STMT COST	TOTAL STMT COST	
DSN8IH0 DSN8SC31	2,218.0 8.8 10.6 0.0 8.8 8.8 8.8 654.2 30.1 30.1 11,141.4 11,141.4 11,141.4 11,141.4 11,141.4 2,218.0 8.8	379.0 8.8 9.7 0.0 4.6 8.8 8.8 4.6 236.1 11.8 11.8 3,574.5 3,574.5 3,574.5 3,574.5 3,574.5 3,574.5 3,574.5 8.8 379.0 8.8	34,500.0 8.8 29.0 0.0 9.1 8.8 8.8 9.1 708.4 47.0 47.0 14,298.1 14,298.1 14,298.1 14,298.1 14,298.1 14,298.1 8.8 34,500.0 8.8	

Fields and Associated Sorts and Filters

FIELD	FORMAT	DESCRIPTION	SORTS/ FILTERS
ADG (Number of	1	Number of Access Degrees > 1	C#ADG
Access Degrees > 1)		Source: PLAN_TABLE.ACCESS_DEGREE	
AVERAGE STMT	3	Average statement cost.	CACST
COST		Source: Derived	
DBRM/PACKAGE/	1, 2, 3	Name of the DBRM, Package, or Plan.	CNAME
PLAN		Source: SYSIBM.SYSDBRM.NAME or SYSPACKAGE.NAME	
EXPLAIN	2	The date of EXPLAIN.	CEXDT
TIMESTAMP		Source: PLAN_TABLE.TIMESTAMP	
HBJ (Hybrid Join)	1	Number of METHOD=4 statements in the package or DBRM.	C#HBJ
		Indicates the join method is Hybrid Join.	
		Source: PLAN_TABLE.METHOD	
I1 (One-Fetch Index Scan)	1	Number of ACCESSTYPE='I1' statements in the package or DBRM.	C#I1S
		Method of accessing new table by one-fetch index scan.	
		Source: PLAN_TABLE.ACCESSTYPE	
JDG (Number of	1	Number of Join Degrees > 1	C#JDG
Join Degrees > 1)		Source: PLAN_TABLE.JOIN_DEGREE	
LCK (TSLOCKMODE)	1	Number of Locks used in the package or DBRM. Indicates the lock mode of the table space.	C#LCK
		# TSLOCKMODE=1X + # TSLOCKMODE =X.	
		Source: PLAN_TABLE.TSLOCKMODE	
LPF (List Prefetch)	1	Number of PREFETCH='L' statements in the package or DBRM.	C#LPF
		Source: PLAN_TABLE.PREFETCH	
MAXIMUM STMT	3	Maximum statement cost.	CMCST
COST		Source: Derived	
MI (Multiple Index Intersection)	1	Number of ACCESSTYPE='MI' statements in the package or DBRM.	C#MXI
		Method of accessing new table by an intersection of multiple indexes.	
		Source: PLAN_TABLE.ACCESSTYPE	
MIS (Matching Index Scan)	1	Number of Matching Index Scan statements in the package or DBRM.	C#MIS
		ACCESSTYPE is an index access and MATCHCOLS is greater than 0 in the PLAN_TABLE.	
		Source: Derived	

FIELD	FORMAT	DESCRIPTION	SORTS/ FILTERS
MSJ (Merge Scan Join)	1	Number of METHOD=2 statements in the package or DBRM.	C#MSJ
		Indicates the join method is Merge Scan Join.	
		Source: PLAN_TABLE.METHOD	
MU (Multiple Index Union)	1	Number of ACCESSTYPE='MU' statements in the package or DBRM.	C#MXU
		Method of accessing new table by a union of multiple indexes.	
		Source: PLAN_TABLE.ACCESSTYPE	
MX (Index Scans on Index)	1	Number of ACCESSTYPE='MX' statements in the package or DBRM.	C#MXS
		Method of accessing new table by an index scan on the index named in ACCESSNAME.	
		Source: PLAN_TABLE.ACCESSTYPE	
N (Index Scan for IN)	1	Number of ACCESSTYPE=N statements in the package or DBRM.	C#NS
		Method of accessing new table by index scan when predicate contains IN keyword.	
		Source: PLAN_TABLE.ACCESSTYPE	
(NAME heading) • DBRM	1, 2, 3	Variable field describing the type of data displayed in the column below it.	
 PACKAGE PLAN DBRM/PKG (if previous panel was Exceptions) 		Source: Derived	
NLJ (Nested Loop Join)	1	Number of METHOD=1 statements in the package or DBRM.	C#NLJ
		Indicates the join method is Nested Loop Join.	
		Source: PLAN_TABLE.METHOD	
NMIS (Non-Matching	1	Number of Non-Matching Index Scan statements in the package or DBRM.	C#NMI
Index Scan)		ACCESSTYPE is an index access and MATCHCOLS is 0 in the PLAN_TABLE.	
		Source: Derived	
PRECOMPILE TIMESTAMP	2	The precompile timestamp of the DBRM or package. If displaying Plan data, this field contains 0s.	CPCDT
		Source: SYSIBM.SYSDBRM.PRECOMPDATE	
		Source: SYSIBM.SYSDBRM.PRECOMPTIME	
		Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP	
SG (Sorts - Group	1	Number of Group By Sorts in the package or DBRM.	C#SRG
By)		Source: PLAN_TABLE.SORTN_GROUPBY + SORTC_GROUPBY	

FIELD	FORMAT	DESCRIPTION	SORTS/ FILTERS
SJ (Sorts - Join)	1	Number of Join Sorts in the package or DBRM.	C#SRJ
		Source: PLAN_TABLE.SORTN_JOIN + SORTC_JOIN	
SO (Sorts - Order	1	Number of Order By Sorts in the package or DBRM.	C#SRO
By)		Source: PLAN_TABLE.SORTN_ORDERBY + SORTC_ORDERBY	
SPF (Sequential 1 Prefetch)		Number of PREFETCH=S statements in the package or DBRM.	C#SPF
		Source: PLAN_TABLE.PREFETCH	
SRT (Sorts - Total)	1	Total number of Sorts in the package or DBRM.	C#SRT
		Source: Derived	
SU (Sorts - Unique)	1	Number of Unique Sorts in the package or DBRM.	C#SRU
		Source: PLAN_TABLE.SORTN_UNIQ + SORTC_UNIQ	
TOTAL STMT	2, 3	Total statement cost.	CTCST
COST		Source: Derived	
TS (Table Space Scan)	1	Number of ACCESSTYPE=R statements in the package or DBRM.	C#TSS
		Access by sequential scan of pages.	
		Source: PLAN_TABLE.ACCESSTYPE	
VERSION	2	Version identifier for the package.	CVER
		Source: PLAN_TABLE.VERSION	

Selects

Options available will depend on the type of data that is currently being displayed on the panel.

DATA TYPE	SELECT	DESCRIPTION	TAKES YOU TO
DBRM	D	Display DBRM panel.	DBRMs (KTEPDBRM)
Package	K	Display package panel.	Packages (KTEPKACK)
Plan	Р	Display plans panel.	Plans (KTEPPLAN)

Commands

You can customize the display by controlling the type of data. Three commands will be available *only* when the Costs panel is accessed from the Primary or Sessions Menu.

COMMAND	DESCRIPTION
CDBR	Display all DBRMs and their total DB2 statement cost.
СРКС	Display all packages and their total DB2 statement cost.
CPLN	Display all plans and their total DB2 statement cost.

DBRMs

Overview

This unit describes the DBRMS panel.

Background about the DBRMS panel

The DBRMs panel (KTEPDBRM) and its associated information panel (KTEPDBIN) list DBRMs bound into plans in the DB2 subsystem.

Using this panel, you can convert an existing DBRM, including those precompiled prior to DB2 2.3, to a package using the **Z** select or convert all listed DBRMs to packages using the **BINDCNV** command.

Note: DBRMs which were precompiled using a pre-DB2 V1R3 (1.3) precompiler *may* contain statements which !DB/EXPLAIN incorrectly interprets. EXPLAINs of such statements can result in -417 or -418 SQLCODES or an inaccurately reported access path. See "EXPLAIN/SQL Defaults" on page 310 for information on the options you have for avoiding -417 and -418s.

You can specify DMISS=YES to display all of the DBRMs from which a statement was discarded during an extract. The extract discards an SQL statement when the extract cannot process it (for example, a statement which has a statement number of 0 and spans multiple tables in SYSIBM.SYSSTMTS).

Formats

The DBRMs panel is available in five formats. You can also display the DBRM Information panel, which allows you to view *all* data related to DBRMs.

Format	Displayed Fields
Format 1	DBRMs, Status, Plan, Statements, Selects, Deletes, Updates, Inserts, Exclusive Locks, Shared Locks
Format 2	DBRMs, Precompile Timestamp, Library,
Format 3	DBRMs, Statements, Selects, Deletes, Updates, Inserts, Exclusive Locks, Shared Locks, Total Statement Cost
Format 4	DBRMs, EXPLAIN Timestamp, Maximum Cost, Average Cost, Total Cost
Format 5	DBRMs, Selects, Declared Cursors, Deletes, Updates, Inserts, Shared Locks, Exclusive Locks

Access

You can access the DBRMs panel from the Primary Menu or Sessions Menu or the Plans, Libraries, Costs, or Tables panels. Access the DBRM Information panel by using the **I** select or by typing **INFO** on the command line of the DBRMs panel.

Panels

The following illustration shows format 1 of the DBRMS panel.

CMD ===>		DB/EXP	LAIN	DB2=D31A			LINE 4 SCROLL =		
D B R M S Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)									
SEL DBRM	VQCCMDH LUOHXEL	PLAN	STMTS	SELECTS	DELETES	UPDATES	INSERTS	LCK XCL	
EXPSQL12	NNNAN B NNNAN B NNNAN B	NMVTESTA	8 3 6	0 2 0	0 0 0	4 0 0	0 0 0	0 0 0	0 0 0

The following illustration shows format 2 of the DBRMS panel.

CMD ===>		DB/EXPLAIN	DB2=D31A	SCROLL ===> PAGE
Cmds: DO (Menu) GLOBAL	(Menu)	DBRMS	Selects& colon. ? (Menu)
	PRECO	MPILE		
SEL DBRM	DATE	TIME L	IBRARY	
_ DSQIIPEL VERSION:	1999/06/12	11:37:44 P	P.QMF.V240.DSQDBRM	
<pre>_ DSQILD VERSION:</pre>	1999/06/12	11:37:25 P	P.QMF.V240.DSQDBRM	
<pre>_ DSQIOLST VERSION:</pre>	1999/09/05	08:22:08 P	P.QMF.V240.DSQDBRM	

Panels (continued)

The following illustration shows format 3 of the DBRMS panel.

CMD	===>		DB/I	EXPLAIN	DB2=D31/	۹			LINE 45 OF 172 SCROLL ===> PAGE
Сп	D B R M S Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)								
SEL	DBRM	STMTS	SELECTS	DELETES	UPDATES	INSERTS		LCK SHR	TOTAL STMT COST
_	EXPSQL05 EXPSQL12 EXPSQL13	8 3 6	0 2 0	0 0 0	4 0 0	0 0 0	0 0 0	0 0 0	62.7 24.3 11.6

The following illustration shows format 4 of the DBRMS panel.

CMD ===>	DI	B/EXPLAIN	DB2=D31A		LINE 45 OF 172 ROLL ===> PAGE	
D B R M S Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)						
SEL DBRM	EXPLAI	N TIME	STATE MAXIMUM	MENT COSTS AVERAGE	TOTAL	
EXPSQL05 EXPSQL12 EXPSQL13	1999/09/03 1	5:27:25	27.3 12.4 11.6	15.7 12.2 11.6	62.7 24.3 11.6	

The following illustration show format 5 of the DBRMS panel.

CMD	===>		DB/I		DB2=D31/			SCROLL	===> CSR
D B R M S Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)									
SEL	DBRM	STMTS	SELECTS	DECLARE CURSORS		UPDATES	INSERTS	LOCK SHR	LOCK XCL
- - -	#CDLABL1 #101NSRT #101SAVE	2 3 5	1 0 0	0 0 1	0 1 0	0 0 0	0 1 0	0 0 0	0 0 0

Panels (continued)

The DBRMs Information panel lets you to view all data related to DBRMs.

CMD ===>			AIN DB2=D				SCROL	L ===>	PAGE
Cmds: GLOBAL (Mer	nu)								
DBRM: ALTMPEX2 PLAN: D31ASRUN			PILE DATE/ TENCY TOKE					.130000	
		PLAN C	REATOR		: TDDB31A	-			
LIBRARY: TDDB31.V2 VERSION:	230.DE	BRM							
HOST LANGUAGE: B CHARACTER SET: A			QUOTE: N COMMA: N				XED: N C31:		
			SQL COUNT	·s					
	=	-	DROP		•	REV	OKE	=	0
ALTER	=	•	EXECUTE				LBACK		0
CALL CLOSE	=	0 0	EXPLAIN FETCH			SEL	ECT	=	1 0
COMMIT			GRANT		-		CONNECT		0
CONNECT		-	INSERT		-		DEGREE		0
CREATE	=	-	LOCK SHR		-	-	HOST	=	0
DECLARE CURSOR	=	-	LOCK XCL				PKGSET	=	õ
DECLARE STATEMENT	=		OPEN	=			RULES		Õ
DECLARE TABLE	=	-	PREPARE	=			SQLID		0
DELETE	=	0	RELEASE		0		ATÈ		1
DESCRIBE	=	0					NEVER	=	3
***************	*****	******	BOTTOM OF	LIST	*******	****	*******	******	*****

Fields and Associated Sorts and Filters

Below is an alphabetical listing of fields in all the DBRMs panel formats and the DBRM Information Panel. The letter "I" in the ON FORMAT column indicates the information panel.

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
ALTER	Ι	The total number of ALTER statements.	D#AL
		Source: SYSIBM.SYSSTMT	
AVG STMT COST	4	Average statement cost.	DACST
		Source: Derived	
CALL	Ι	Number of CALL statements	D#CA
		Source: SYSIBM.SYSSTMT	
CH (Charset)	1, I	Indicates whether the system CCSID for SBCS data was 290 (katakana) when the program was precompiled:	DCHRS
		K Yes A No	
		Source: SYSIBM.SYSDBRM.CHARSET	
CLOSE	Ι	The total number of CLOSE statements.	D#CL
		Source: SYSIBM.SYSSTMT	
CO (Comma)	1, I	Decimal point representation for SQL statements in the DBRM:	DCOMM
		N Period Y Comma	
		Source: SYSIBM.SYSDBRM.COMMA	
COMMIT	Ι	The total number of COMMIT statements.	D#CM
		Source: SYSIBM.SYSSTMT	
CONNECT	Ι	The total number of CONNECT statements.	D#CN
		Source: SYSIBM.SYSSTMT	
CONTOKEN	Ι	Consistency token for the DBRM.	D#CN
(Consistency Token)		Source: SYSIBM.SYSDBRM.TIMESTAMP	
CREATE	Ι	The total number of CREATE statements.	D#CR
		Source: SYSIBM.SYSSTMT	
D#TS	Filter panel	Total number of DECLARE CURSOR and SELECT statements.	D#TS
		Source: SYSIBM.SYSSTMT	
DBRM	All formats	Name of the DBRM. The list is in alphabetic order.	DBRM
		Source: SYSIBM.SYSDBRM.NAME	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DE (Dec31) 1, I		Indicates whether DEC31 was in effect when the program was precompiled:	DDC31
		blank No Y Yes	
		Source: SYSIBM.SYSDBRM.DEC31	
DECLARE CURSOR	5, I	The total number of DECLARE CURSOR statements. Source: SYSIBM.SYSSTMT	D#DC
DECLARE STATEMENT	Ι	The total number of DECLARE STATEMENT statements.	D#DM
	, r	Source: SYSIBM.SYSSTMT	
DECLARE TABLE	Ι	The total number of DECLARE TABLE statements. Source: SYSIBM.SYSSTMT	D#DT
DELETES	1, 3, 5, I	The number of DELETE statements in DBRMs.	D#DL
		Source: SYSIBM.SYSSTMT	
DESCRIBE	Ι	The total number of DESCRIBE statements.	D#DS
		Source: SYSIBM.SYSSTMT	
DROP	Ι	The total number of DROP statements.	D#DR
		Source: SYSIBM.SYSSTMT	
EXECUTE	Ι	The total number of EXECUTE statements.	D#EC
		Source: SYSIBM.SYSSTMT	
EXPLAIN	Ι	The total number of EXPLAIN statements.	D#EX
		Source: SYSIBM.SYSSTMT	
EXPLAIN DATE/TIME	4	EXPLAIN date. Source: PLAN_TABLE.TIMESTAMP	DEXDT
FETCH	I	The total number of FETCH statements.	D#FT
r li ch	1	Source: SYSIBM.SYSSTMT	
GRANT	Ι	The total number of GRANT statements.	D#GR
		Source: SYSIBM.SYSSTMT	
HL (Hostlang)	1, I	The host language used:	DHLNG
		 B Assembler Language C COBOL D C F FORTRAN P PL/I 2 VS COBOL II 3 OO-COBOL 4 C++ Source: SYSIBM.SYSDBRM.HOSTLANG 	
INSERTS	1, 3, 5, I	The number of INSERT statements in DBRMs.	D#IN
		Source: SYSIBM.SYSSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
LCK SHR	1, 3, 5, I	Number of LOCK SHR in DBRMs.	D#LS
		Source: SYSIBM.SYSSTMT	
LCK XCL	1, 3, 5, I	Number of LOCK XCL in DBRMs.	D#LX
		Source: SYSIBM.SYSSTMT	
LIBRARY	2, I	Name of the partitioned dataset of which the DBRM is a member.	DLIB
		Source: SYSIBM.SYSDBRM.PDSNAME	
MAX STMT COST	4	Maximum statement cost.	DMCST
		Source: Derived	
MX (Mixed)	1, I	Indicates if mixed data was in effect when the program was precompiled:	DMIXD
		N No Y Yes	
		Source: SYSIBM.SYSDBRM.MIXED	
OPEN	Ι	The total number of OPEN statements.	D#OP
		Source: SYSIBM.SYSSTMT	
PLAN CREATOR	Ι	Authorization ID of the owner of the application plan.	
		Source: SYSIBM.SYSPLAN.CREATOR	
(depends on DBRM is cont		If DUPS is specified, then the Plan name is used if the DBRM is contained in one plan.	DPLN D#PL
DUPS/NODUPS command)		If NODUPS is specified, the number of plans in which DBRM is a member is used.	Dire
		Source: SYSIBM.SYSDBRM.PLNAME	
PRECOMPILE	2, I	The date of precompilation.	DPCDT
DATE/TIME		Source: SYSIBM.SYSDBRM.PRECOMPDATE PRECOMPTIME	
PREPARE	I	The total number of PREPARE statements.	D#PR
		Source: SYSIBM.SYSSTMT	
QU (Quote)	1, I	SQL string delimiter for the SQL statements in the DBRM:	DQUOT
		N ApostropheY Quotation mark	
		Source: SYSIBM.SYSDBRM.QUOTE	
RELEASE	Ι	The number of RELEASE SQL statements.	
		Source: SYSIBM.SYSSTMT	
REVOKE	Ι	The total number of REVOKE statements.	D#RV
		Source: SYSIBM.SYSSTMT	
ROLLBACK	Ι	The total number of ROLLBACK statements.	D#RL
		Source: SYSIBM.SYSSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
SELECTS	1, 3, 5, I	The number of SELECT statements in DBRMs.	D#SE
		Source: SYSIBM.SYSSTMT	
SET	Ι	The total number of SET statements.	D#ST
		Source: SYSIBM.SYSSTMT	
SET CONNECT	Ι	The number of SET CONNECTION SQL statements.	D#SC
		Source: SYSIBM.SYSSTMT	
SET DEGREE	Ι	The number of SET CURRENT DEGREE SQL statements.	D#SD
		Source: SYSIBM.SYSSTMT	
SET HOST	Ι	The number of SET host variable SQL statements.	D#SH
		Source: SYSIBM.SYSSTMT	
SET PKGSET	Ι	The number of SET PACKAGESET SQL statements.	D#SP
		Source: SYSIBM.SYSSTMT	
SET RULES	Ι	Number of SET CURRENT RULES statements	D#SR
		Source: SYSIBM.SYSSTMT	
SET SQLID	Ι	The number of SET CURRENT SQLID SQL statements.	D#SS
		Source: SYSIBM.SYSSTMT	
STMTS	1, 3, 5, I	The total number of statements in DBRMs.	D#TL
		Source: SYSIBM.SYSSTMT	DMISS (filters on statements discarded by the extract)
TOTAL STMT	3, 4	Total statement cost.	DTCST
COST		Source: Derived	
UPDATES	1, 3, 5, I	The number of UPDATE statements in DBRMs.	D#UP
		Source: SYSIBM.SYSSTMT	
VERSION	2, I	Version identifier for the DBRM.	DVER
		Source: SYSIBM.SYSDBRM.VERSION	
VL (Verify)	1	Shows results of DBRM Verification. Possible values include:	DVRF
		 N DBRM has not been verified. Y DBRM was verified successfully E DBRM verification was unsuccessful T There is a timestamp mismatch 	
		Source: Derived	
WHENEVER	Ι	The total number of WHENEVER statements.	D#WH
		Source: SYSIBM.SYSSTMT	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
@	Remote EXPLAIN and gather statistics.	EXPLAIN (KTEPEXPL)
#	Remote EXPLAIN but do not gather statistics.	EXPLAIN (KTEPEXPL)
В	Generate a BIND package statement for the selected DBRM.	BIND Package (KTEPBIKA)
С	Compare the results of the latest EXPLAIN with the results of a BIND EXPLAIN(YES).	EXPLAIN Compare (KTEPCMPR)
Е	EXPLAIN statements and gather statistics.	EXPLAIN (KTEPEXPL)
G	Display cost details for the selected DBRM.	Costs (KTEPCOST)
Н	Display the EXPLAIN History for the selected DBRM.	EXPLAIN History (KTEPHIST)
Ι	Display detailed DBRM information.	DBRM Information (KTEPDBIN)
J	Select 2 DBRMs with J and compare DBRM attributes.	Compare History (KTEPJHIS)
L	Display the output from the latest EXPLAIN of selected DBRM.	EXPLAIN (KTEPEXPL)
Р	List all plans for the selected DBRM.	Plans (KTEPPLAN)
S	List all the SQL statements for the selected DBRM.	Statements (KTEPSTMT)
Т	Display tables for all DB2 tables, views, or aliases referenced by any SQL INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR statement in any DBRM or package.	Tables (KTEPTABL)
U	EXPLAIN (do not gather statistics).	EXPLAIN (KTEPEXPL)
V	Verify the DBRM.	DBRM Verification (KTEPPVER)
W	Perform Whatif analysis on the selected DBRM.	WHATIF (KTEPWHIF)
X	Display Exceptions that exist for each SQL statement in the selected DBRM.	Exceptions (KTEPXCPT)
Z	Generate BIND conversion statements.	
8	EXPLAIN and display only DBRMs that have not been EXPLAINed—gather catalog statistics.	EXPLAIN (KTEPEXPL)
9	EXPLAIN and display only DBRMs that have not been EXPLAINed—do not gather catalog statistics.	EXPLAIN (KTEPEXPL)

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
BIND	Generate BIND statements for all active DBRMs.	Overrides (KTEPBIKG)
BINDADD	BIND ACTION(ADD).	Overrides (KTEPBIKG)
BINDCNV	Generate conversion BIND for all DBRMs.	Overrides (KTEPBIKG)
BINDEXP	BIND EXPLAIN(YES).	Overrides (KTEPBIKG)
BINDREP	BIND ACTION(REPLACE).	Overrides (KTEPBIKG)
COMPARE	Perform a BIND COMPARE of each DBRM on the current display according to the options set on the Housekeeping BIND Compare Options Panel KTEPHOBC.	EXPLAIN Compare (KTEPCMPR)
COST	Display statement costs.	Costs (KTEPCOST)
DUPS	Show all DBRMs.	
EXPL	EXPLAIN all DBRMs that have not been EXPLAINed since they were last bound and display latest EXPLAIN for DBRMs that have been previously EXPLAINed.	EXPLAIN (KTEPEXPL)
EXPLA	EXPLAIN all regardless of BIND time.	EXPLAIN (KTEPEXPL)
EXPLAR	Remote EXPLAIN all regardless of BIND time.	EXPLAIN (KTEPEXPL)
EXPLO	EXPLAIN and display only DBRMs that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)
EXPLOR	Remote EXPLAIN and display only DBRMs that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)
EXPLR	Remote EXPLAIN all DBRMs that have not been EXPLAINed since they were last bound and display latest EXPLAIN for DBRMs that have been previously EXPLAINed.	EXPLAIN (KTEPEXPL)
GEXPL	EXPLAIN all DBRMs on the list that have not been EXPLAINed since they were last bound and gather statistics; and display latest EXPLAIN for DBRMs that have been previously EXPLAINed.	EXPLAIN (KTEPEXPL)
GEXPLA	EXPLAIN all DBRMs on the list and gather statistics regardless of BIND time.	EXPLAIN (KTEPEXPL)
GEXPLAR	Remote EXPLAIN all DBRMs on the list and gather statistics regardless of BIND time.	EXPLAIN (KTEPEXPL)
GEXPLO	EXPLAIN and display only DBRMs that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)
GEXPLOR	Remote EXPLAIN and display only DBRMs that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)

COMMAND	DESCRIPTION	TAKES YOU TO
GEXPLR	Remote EXPLAIN all DBRMs on the list that have not been EXPLAINed since they were last bound and gather statistics; and display latest EXPLAIN for DBRMs that have been previously EXPLAINed.	EXPLAIN (KTEPEXPL)
HIST	Display DBRM History.	
ІМРАСТ	Compare each nonhistorical DBRM with its most recent historical counterpart.	Compare History (KTEPJHIS)
INFO	Display DBRM Information.	DBRM Info (KTEPDBIN)
LEHIST	Display latest EXPLAIN History.	EXPLAIN History (KTEPHIST)
LEXPL	Display latest EXPLAIN.	EXPLAIN (KTEPEXPL)
NODUPS	Show unique DBRMs. Reset DUPS.	
NOHIST	Reset HIST.	
ХСРТ	Display Exceptions.	Exceptions (KTEPXCPT)

A note about compares

Typically, when you are on the Plans, Packages, or DBRMS panel, you can issue the IMPACT command (or the J select) to obtain compare history information. The IMPACT command or J select compares such things as precompile options, owners, or qualifiers.

CEXPL is issued from the Compare History panel and compares EXPLAINs.

Estimator

Overview

This unit describes the Estimator panel.

Background about the Estimator panel

The Estimator panel (KTEPESTM) shows what effect changing certain values in the catalog has on other values.

Estimator is affected by settings you specify on Housekeeping's Panel Formats panel:

- If you specify 0 in the Format # field of the Panel Formats panel, then the Estimator panel inherits its format from the Whatif panel.
- If you specify 0 in the Initial Command field of the Panel Formats panel, then the Estimator panel inherits the settings for NDX/NONDX from the Whatif panel.

Formats

The panel is available in two formats:

Format	Displayed Fields
Format 1	Data collected by RUNSTATS
Format 2	All data

Access

Estimator is invoked using the command ESTIM from Whatif.

Panels

The following illustration shows format 1 of the Estimator panel, the RUNSTATS format.

----- DB/EXPLAIN DB2=D31A ----- LINE 1 OF 14 CMD ===> SCROLL ===> PAGE ESTIMATOR Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu) The fields marked with * can be updated. -----TS= DSNDB06.SYSCOPY PARTITIONS= 0 LOCKRULE = A *NACTIVE= 9 TBL= SYSIBM.SYSCOPYLOCATION=*RECLEN= 1904*PCTPAGES= 100*PCTROWCOMP= 0*CARD = 300*NPAGES = 9 ----- USED INDEXES -----_ IX= SYSIBM.DSNUCH01 CLUSTERED = N

 *FULLKEY = -1
 *NLEVELS = -1
 *CLUSTRATIO = 0

 *FIRSTKEY = -1
 *NLEAF = -1
 *UNIQUE = D

 *KEYSIZE = 0
 *# TABLE ROWS/INDEX KEY = -1

 *INDEXTYPE =

Panels (continued)

Format 2 of the Estimator panel shows all data.

----- DB/EXPLAIN DB2=D31A ------ LINE 1 OF 31 CMD ===> SCROLL ===> PAGE ESTIMATOR Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu) The fields marked with * can be updated. -----------TS= DSNDB06.SYSCOPY PARTITIONS= 0 LOCKRULE = A *NACTIVE= 9 OBID= 7 CLOSERULE= N CREATOR = SYSIBM DBID= 6 IMPLICIT = N CREATEBY= SYSIBM NTABLES= 1 PSID= 16 SEGSIZE= 0 STATUS = A BPOOL= BPO SPACE = 0PGSIZE = 4ERASERULE= N DSETPASS= LOCKMAX= 0 STATSTS= 0000/00/00 00:00:00.000000 _ TBL= SYSIBM.SYSCOPY LOCATION= *RECLEN= 1904 TBCREATR= TYPE = T *CARD = 300 TBNAME = STATUS= *NPAGES= 9 CREATEBY= SYSIBM CKFLAG= *PCTPAGES = 100 VALPROC = AUDIT = $\begin{array}{l} \text{KEYOBID} &= 0\\ \text{OBID} &= 46 \end{array}$ EDPROC = CHILD = 0PARENT= 0 CKRID = COLCOUNT = 16RBA1 = 00000000000 RBA2 = 000000000000 DATAC = KEYCOLUMNS= 0 *PCTROWCOMP= 0 CREATETS= 1998/04/01 00:00:00.000000 CLUSTERTYPE= ALTERTS = 1998/04/01 00:00:00.000000 STATSTS = 0000/00/00 00:00:00.000000 CHECKS= 0 ----- USED INDEXES ------IX= SYSIBM.DSNUCH01 CREATEBY = SYSIBM *NLEVELS= -1 *FULLKEY = -1*CLUSTRATIO= 0 *FIRSTKEY= -1 *NLEAF = -1CLUSTERED = N SPACE = 0 PGSIZE = 4096 OBID = 91 COLCOUNT = 3CLUSTERING= Y BPOOL = BPO DSETPASS = ERASERULE= N CLOSERULE= N ISOBID = 114*UNIQUE = D INDEXSPACE= DSNUCH01 *KEYSIZE = 0 *# TABLE ROWS/INDEX KEY= -1 *INDEXTYPE = STATSTS = 0000/00/00 00:00:00.000000

Panels (continued)

You can control the amount of data retrieved from the DB2 catalog with the GSTATS (Gather Statistics) command. When this command is invoked, the Statistics Gathering panel is displayed. This panel also allows you to modify the location of the server. If not specified the default is "local."

----- DB/EXPLAIN(V235) DB2=DB2 ----- LINE 1 OF 20 Cmd ===> STATISTICS GATHERING Enter the server from which you wish to retrieve catalog statistics. If no value is entered the current server will be set to local. Server: TS Amount of data to gather: 1. - SYSTABLESPACE, SYSTABLES, SYSINDEXES 2. - Data specified in 1 plus SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS 3. - Data specified in 2 plus SYSKEYS 4. - Data specified in 2 plus SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, SYSINDEXSTATS 5. - Data specified in 3 plus SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, SYSINDEXSTATS ENTER to process request END to abort request

If you are using DB2 Version 2.3 or a later version and invoke the UPDT command, the Statistics Update panel is presented to permit you to enter the location of the server.

STATISTICS UPDATE

Please enter the following information:

SERVER ===>

Fields and Associated Sorts and Filters

FIELD	ON FORMAT	DESCRIPTION
ALTERTB (TBL)	2	Time when the latest ALTER TABLE statement was applied.
		Source: SYSIBM.SYSTABLES.ALTEREDTS
AMOUNT OF DATA TO GATHER	Statistics Gathering (KTEPSSSG)	 Type of data to retrieve from catalog: SYSTABLESPACE, SYSTABLES, SYSINDEXES SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, and SYSCOLDISTSTATS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, and SYSKEYS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, and SYSINDEXSTATS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSKEYS, SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, and SYSINDEXSTATS
AUDIT (TBL)	2	 Value of the audit option: A AUDIT All C AUDIT CHANGE blank AUDIT NONE, or the row describes a view or alias Source: SYSIBM.SYSTABLES.AUDITING
BPOOL (IX)	2	Name of the buffer pool used for index.
		Source: SYSIBM.SYSINDEXES.BPOOL
BPOOL (TS)	2	Name of the buffer pool used for the table space. Source: SYSIBM.SYSTABLESPACE.BPOOL
CARD (IXP)	1, 2	Number of rows referred to by the index or partition. Source: SYSIBM.SYSINDEXPART.CARD
CARD (TBL) *	1, 2	Number of rows in the table. You can update this field. Source: SYSIBM.SYSTABLES.CARD
CARD (TSTP)	1, 2	Number of rows in the table space or partition. Source: SYSIBM.SYSTABLEPART.CARD
CARDP (TSTP) *	1, 2	Total number of rows in the partition. You can update this field.
		Source: SYSIBM.SYSTABSTATS.CARD

The fields marked with an asterisk can be updated.

FIELD	ON FORMAT	DESCRIPTION
	2	Check for referential constraint violations.
CKFLAG (TBL)	2	Check for referential constraint violations.
		C There are rows in the table that can violate
		blank referential constraints. The table contains no rows that violate
		referential constraints, or the row describes a view or alias.
		view of allas.
		Source: SYSIBM.SYSTABLES.CHECKFLAG
CHECKFLAG (TSTP)	2	Check for referential constraint violations.
		C The table space partition is in CHECK
		PENDING mode and there are rows that can violate referential constraints.
		blank The table contains no rows that violate
		referential constraints, or the table space is not partitioned.
		Source: SYSIBM.SYSTABLEPART.CHECKFLAG
CHECKS (TBL)	2	Number of check constraints defined on a table. The value in this field is 0 if there are no constraints, or if the row
		describes a view or alias.
		Source: SYSIBM.SYSTABLES.CHECKS
CHILD (TBL)	2	Number of relationships in which the table is a parent; 0 means the row describes a view or alias.
		Source: SYSIBM.SYSTABLES.CHILDREN
CKRID (TBL)	2	RID RID of the first row of the table that can
		violate referential constraints. blank Table is not in a check pending state.
		blank Table is not in a check pending state.
		Source: SYSIBM.SYSTABLES.CHECKRID
CKRID (TSTP)	2	RID RID of the first row of the table that can
		violate referential constraints.blankTable or partition is not in a check pending
		state or the table space is not partitioned.
		Source: SYSIBM.SYSTABLEPART.CHECKRID
CLOSERULE (IX)	2	Indicates whether the datasets are candidates for being
		closed when the limit on the number of open datasets is reached:
		N No
		N No Y Yes
		Source: SYSIBM.SYSINDEXES.CLOSERULE
		SUULCE. SISIDM.SISIMUEAES.CLUSERULE

FIELD	ON FORMAT	DESCRIPTION
CLOSERULE (TS)	2	Indicates whether the datasets are candidates for being closed when the limit on the number of open datasets is reached:
		Y Yes N No
		Source: SYSIBM.SYSTABLESPACE.CLOSERULE
CLUSTERED (IX)	1, 2	Indicates whether the table is actually clustered by the index:
		 N No: 95% or fewer of the rows are in clustering order, or statistics were not gathered Y Yes: More than 95% of the rows are in clustering order
		Source: SYSIBM.SYSINDEXES.CLUSTERED
CLUSTERING (IX)	2	Indicates whether CLUSTER was specified when the index was created:
		N No Y Yes
		Source: SYSIBM.SYSINDEXES.CLUSTERING
CLUSTERTYPE (TBL)	2	Whether the table can be dropped (that is, whether the table is defined with RESTRICT ON DROP).
		blank The table can be dropped
		Y The table cannot be dropped and any table space or database containing this table also cannot be dropped.
		Source: SYSIBM.SYSTABLES.CLUSTERTYPE
CLUSTRATIO (IX) *	1, 2	Percentage of rows that are in clustering order. You can update this field.
		Source: SYSIBM.SYSINDEXES.CLUSTERRATIO
CLUSTRATIO (IXP) *	1, 2	For the index partition, percentage of rows that are in clustering order. You can update this field.
		Source: SYSIBM.SYSINDEXSTATS.CLUSTERRATIO
COLCOUNT (IX)	2	Number of columns in the key.
		Source: SYSIBM.SYSINDEXES.COLCOUNT
COLCOUNT (TBL)	2	Number of columns in the table or view.
		Source: SYSIBM.SYSTABLES.COLCOUNT

FIELD	ON FORMAT	DESCRIPTION	
COMPRESS (TSTP)	2	For a table space partition or nonpartitioned table space, indicates whether the COMPRESS attribute is YES. Values can be:	
		YCompression is defined.blankCompression is not defined.	
		Source: SYSIBM.SYSTABLEPART.COMPRESS	
CREATEBY (IX)	2	Primary authorization ID of the user who created the index.	
		Source: SYSIBM.SYSINDEXES.CREATEDBY	
CREATEBY (TBL)	2	Primary authorization ID of the user who created the table, view, or alias.	
		Source: SYSIBM.SYSTABLES.CREATEDBY	
CREATEBY (TS)	2	Primary authorization ID of the user who created the table space.	
		Source: SYSIBM.SYSTABLESPACE.CREATEDBY	
CREATETS (TBL)	2	Time when the CREATE statement was executed for the table, view, or alias.	
		Source: SYSIBM.SYSTABLES.CREATEDTS	
CREATOR (TS)	1, 2	Authorization ID of the owner of the table space.	
		Source: SYSIBM.SYSTABLESPACE.CREATOR	
DATAC (TBL)	2	Indicates the value of the DATACAPTURE option for a table.	
		YData capture is defined for the table.blankData capture is not defined.	
		Source: SYSIBM.SYSTABLES.DATACAPTURE	
DBID (TS)	2	Internal identifier of the database which contains the table space.	
		Source: SYSIBM.SYSTABLESPACE.DBID	
DSETPASS (IX)	2	Password for the datasets of the index.	
		Source: SYSIBM.SYSINDEXES.DSETPASS	
DSETPASS (TS)	2	Password for the datasets of the table space.	
		Source: SYSIBM.SYSTABLESPACE.DSETPASS	
EDPROC (TBL)	2	Name of the edit procedure.	
		Source: SYSIBM.SYSTABLES.EDPROC	
ERASERULE (IX)	2	Whether the datasets are to be erased when dropped (not applicable to partitioned indexes):	
		N No Y Yes	
		Source: SYSIBM.SYSINDEXES.ERASERULE	

FIELD	ON FORMAT	DESCRIPTION	
ERASERULE (TS)	2	Whether the datasets are to be erased when dropped (not applicable for partitioned table space):	
		Y Erase N No Erase	
		Source: SYSIBM.SYSTABLESPACE.ERASERULE	
FARINDREF (TSTP)	1, 2	Number of rows that have been relocated far from their original page.	
		Source: SYSIBM.SYSTABLEPART.FARINDREF	
FAROFFPOS (IXP)	1, 2	Number of referred to rows that are far from optimal position as the result of an insert into a full page.	
		Source: SYSIBM.SYSINDEXPART.FAROFFPOS	
FIRSTKEY (IX) *	1, 2	Number of distinct values of the first key column. You can update this field.	
		Source: SYSIBM.SYSINDEXES.FIRSTKEYCARD	
FIRSTKEY (IXP) *	1, 2	Number of distinct values of the first key column in the index partition. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.FIRSTKEYCARD	
FREEPAGE (TSTP) *	1, 2	Number of pages loaded before a page is left as free space. You can update this field.	
		Source: SYSIBM.SYSTABLEPART.FREEPAGE	
FREEPAGE (IXP) *	1, 2	Number of pages loaded before a page is left as free space. You can update this field.	
		Source: SYSIBM.SYSINDEXPART.PERCACTIVE	
		SYSIBM. SYSINDEXPART. FREEPAGE	
FULLKEY (IX) *	1, 2	Number of distinct values of all of the key columns. You can update this field.	
		Source: SYSIBM.SYSINDEXES.FULLKEYCARD	
FULLKEY (IXP) *	1, 2	Number of distinct values of the key column in the index partition. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.FULLKEYCARD	
GBPCACHE (IXP)	2	The group buffer pool cache option for the index or index space.	
		A Both changed and unchanged pages are cached in the group buffer pool	
		blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4.	
		Source: SYSIBM.SYSINDEXPART.GBPCACHE	

FIELD	ON FORMAT	DESCRIPTION
GBPCACHE (TSTP)	2	The group buffer pool cache option for the table or table space.
		A Both changed and unchanged pages are cached in the group buffer pool
		blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4.
		Source: SYSIBM.SYSTABLEPART.GBPCACHE
IMPLICIT (TS)	2	Whether the table space was created implicitly:
		Y Yes N No
		Source: SYSIBM.SYSTABLESPACE.IMPLICIT
INDEXSPACE (IX)	2	Name of the index space.
		Source: SYSIBM.SYSINDEXES.INDEXSPACE
INDEXTYPE (IX)	1, 2	The type of the index
		blank Index is type 1
		2 Index is type 2
		Source: SYSIBM.SYSINDEXES.INDEXTYPE
ISOBID (IX)	2	Internal identifier of the set descriptor for the index page.
		Source: SYSIBM.SYSINDEXES.ISOBID
IX	1, 2	Index name.
		Source: SYSIBM.SYSINDEXES.CREATOR
		Source: SYSIBM.SYSINDEXES.NAME
IXCREATOR (TSTP)	2	Authorization ID of the owner of the partitioned index.
		Source: SYSIBM.SYSTABLEPART.IXCREATOR
IXNAME (TSTP)	2	Name of the partitioned index.
		Source: SYSIBM.SYSTABLEPART.IXNAME
IXP	1, 2	Index name.
		Source: SYSIBM.SYSINDEXPART.CREATOR
		Source: SYSIBM.SYSINDEXPART.IXNAME
KEYCOLUMNS (TBL)	2	Number of columns in the table's primary key.
		Source: SYSIBM.SYSTABLES.KEYCOLUMNS
KEYCNT (IXP) *	1, 2	Total number of rows in the partition. The field is updateable.
		Source: SYSIBM.SYSINDEXSTATS.KEYCOUNT

FIELD	ON FORMAT	DESCRIPTION	
KEYOBID (TBL)	2	Internal DB2 identifier of the index that enforces uniqueness of the table's primary key.	
		Source: SYSIBM.SYSTABLES.KEYOBID	
KEYSIZE (IX)	1, 2	Length of keys.	
		Source: Derived	
LEAFDIST (IXP)	1, 2	100 times the average number of pages between successive leaf pages of the index.	
		Source: SYSIBM.SYSINDEXPART.LEAFDIST	
LOCATION (TBL)	1, 2	Location name of the table for an alias defined on a remote object.	
		Source: SYSIBM.SYSTABLES.LOCATION	
LOCKMAX (TS)	2	Maximum number of locks per user to acquire for the table or table space before escalating to the next locking level.	
		Source: SYSIBM.SYSTABLESPACE.LOCKMAX	
LOCKRULE (TS)	2	Lock size of the table space:	
		 A Any P Page S Table space T Table 	
		Source: SYSIBM.SYSTABLESPACE.LOCKRULE	
NACTIVE (TS) *	1, 2	Number of active pages in the table space. You can update this field.	
		Source: SYSIBM.SYSTABLESPACE.NACTIVE	
NACTIVE (TSTP) *	1, 2	Number of active pages in the table space partition. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.NACTIVE	
NEARINDREF (TSTP)	1, 2	Number of rows that have been relocated near their original page.	
		Source: SYSIBM.SYSTABLEPART.NEARINDREF	
NEAROFFPOS (IXP)	1, 2	Number of referred to rows near, but not at optimal position as the result of an insert into a full page.	
		Source: SYSIBM.SYSINDEXPART.NEAROFFPOS	
NLEAF (IX) *	1, 2	Number of active leaf pages in the index. You can update this field.	
		Source: SYSIBM.SYSINDEXES.NLEAF	
NLEAF (IXP) *	1, 2	Number of active leaf pages in the index partition. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.NLEAF	
NLEVELS (IX) *	1, 2	Number of levels in the index tree. You can update this field.	
		Source: SYSIBM.SYSINDEXES.NLEVELS	

FIELD	ON FORMAT	DESCRIPTION	
NLEVELS (IXP) *	1, 2	Number of levels in the partition index tree. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.NLEVELS	
NPAGES (TBL) *	1, 2	Total number of pages on which rows of the table appear. You can update this field.	
		Source: SYSIBM.SYSTABLES.NPAGES	
NPAGES (TSTP) *	1, 2	Total number of pages on which rows of the partition appear. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.NPAGES	
NTABLES (TS)	2	Number of tables defined in the table space.	
		Source: SYSIBM.SYSTABLESPACE.NTABLES	
OBID (IX)	2	Internal identifier of the index fan set descriptor.	
		Source: SYSIBM.SYSINDEXES.OBID	
OBID (TBL)	2	Internal identifier of the table.	
		Source: SYSIBM.SYSTABLES.OBID	
OBID (TS)	2	Internal identifier of the table space file descriptor.	
		Source: SYSIBM.SYSTABLESPACE.OBID	
PAGESAVE (TSTP)	2	Percentage of pages saved in a table space or partition as a result of using data compression.	
		Source: SYSIBM.SYSTABLEPART.OBID	
PARNT (TBL)	2	Number of relationships in which the table is a dependent; 0 means the row describes a view or alias.	
		Source: SYSIBM.SYSTABLES.PARENTS	
PARTITION (IXP)	1, 2	Partition number; 0 if index is not partitioned.	
		Source: SYSIBM.SYSINDEXPART.PARTITION	
PARTITION (TSTP)	1, 2	Partition number; 0 if table space is not partitioned.	
		Source: SYSIBM.SYSTABLEPART.PARTITION	
PARTITIONS (TS)	2	Number of partitions of the table space; 0 if the table space is not partitioned.	
		Source: SYSIBM.SYSTABLESPACE.PARTITIONS	
PCTFREE (IXP) *	1, 2	Percentage of each subpage or nonleaf page that is left as free space. You can update this field.	
		Source: SYSIBM.SYSINDEXPART.PCTFREE	
PCTFREE (TSTP) *	1, 2	Percentage of each page left as free space. You can update this field.	
		Source: SYSIBM.SYSTABLEPART.PCTFREE	
PCTPAGES (TBL) *	1, 2	Percentage of active table space pages that contain rows of the table. You can update this field.	
		Source: SYSIBM.SYSTABLES.PCTPAGES	

FIELD	ON FORMAT	DESCRIPTION	
PCTPAGES (TSTP) *	1, 2	Percentage of total active pages in the partition that contain rows of the table. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.PCTPAGES	
PCTROWCOMP (TBL) *	1, 2	Percentage of rows compressed within the total number of active rows in the table. You can update this field.	
		Source: SYSIBM.SYSTABLES.PCTROWCOMP	
PCTROWCOMP (TSTP) *	1, 2	Percentage of rows compressed within the total number of active rows in the partition. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.PCTROWCOMP	
PERCACT (TSTP)	1, 2	Percentage of space occupied by rows of data from active tables.	
		Source: SYSIBM.SYSTABLEPART.PERCACTIVE	
PERCDROP (TSTP)	1, 2	Percentage of space occupied by rows of dropped tables; 0 for segmented table spaces.	
		Source: SYSIBM.SYSTABLEPART.PERCDROP	
PGSIZE (IX)	2	Size of subpages in the index.	
		Source: SYSIBM.SYSINDEXES.PGSIZE	
PGSIZE (TS)	2	Size, in kilobytes, of pages in the table space.	
		Source: SYSIBM.SYSTABLESPACE.PGSIZE	
PQTY (IXP)	2	Primary space allocation in units of 4K storage blocks; 0 if storage group is not used.	
		Source: SYSIBM.SYSINDEXPART.PQTY	
PQTY (TSTP)	2	Primary space allocation in units of 4K storage blocks; 0 if a storage group is not used.	
		Source: SYSIBM.SYSTABLEPART.PQTY	
PSID (TS)	2	Internal identifier of the set descriptor for the table space page.	
		Source: SYSIBM.SYSTABLESPACE.PSID	
RBA1 (TBL)	2	Log RBA when the table was created.	
		Source: SYSIBM.SYSTABLES.RBA1	
RBA2 (TBL)	2	Log RBA when the table was last altered. If the table has not been altered RBA1=RBA2.	
		Source: SYSIBM.SYSTABLES.RBA2	
RECLEN (TBL) *	1, 2	Maximum length of any record in the table. You can update this field.	
		Source: SYSIBM.SYSTABLES.RECLENGTH	
SERVER	Statistics	Location.	
	Gathering (KTEPSSSG)	Only installations running DB2 Version 2.3 or a later version will be able to designate the location of the server.	
	Statistics Update (KTE3SSUP)		

FIELD	ON FORMAT	DESCRIPTION	
SEGSIZE (TS)	2	Number of pages in each segment of a segmented table space.	
		Source: SYSIBM.SYSTABLESPACE.SEGSIZE	
SPACE (IX)	2	Number of kilobytes of DASD storage allocated to the index, as determined by the last execution of STOSPACE utility.	
		Source: SYSIBM.SYSINDEXES.SPACE	
SPACE (IXP)	2	Number of kilobytes of DASD storage allocated to the index partition as determined by the last execution of STOSPACE utility.	
		Source: SYSIBM.SYSINDEXPART.SPACE	
SPACE (TS)	2	Number of kilobytes of DASD storage allocated to the table space as determined by the last execution of the STOSPACE utility.	
		Source: SYSIBM.SYSTABLESPACE.SPACE	
SQTY (IXP)	2	Secondary space allocation in units of 4K storage blocks; 0 if storage group is not used.	
		Source: SYSIBM.SYSINDEXPART.SQTY	
SQTY (TSTP)	2	Secondary space allocation in units of 4K storage blocks; 0 if a storage group is not used.	
		Source: SYSIBM.SYSTABLEPART.SQTY	
STATSTS (IX)	2	This field displays the timestamp value from the catalog except that when UPDT or OUT are specified, the catalog timestamp field is set to the current timestamp to indicate when the change was applied.	
		Source: SYSIBM.SYSINDEXES.STATSTIME	
STATSTS (IXP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSINDEXPART.STATSTIME	
STATSTS (TBL)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLES.STATSTIME	
STATSTS (TS)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLESPACE.STATSTIME	
STATSTS (TSTP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLEPART.STATSTIME	
STATSTSP (IXP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSINDEXSTATS.STATSTIME	
STATSTSP (TSTP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABSTATS.STATSTIME	

FIELD	ON FORMAT	DESCRIPTION
STATUS (TS)	2	Availability status of the table space:
		 A Available C Incomplete because no partitioned index has been created P Check Pending S Check Pending with the scope less than the entire table space T Incomplete because no table has been created Source: SYSIBM.SYSTABLESPACE.STATUS
STATUS (TBL)	2	Status of the table definition:
		 I The table's definition is incomplete because it lacks a primary index X The table has a primary index blank Table has no primary key, or is a catalog table, or the row describes a view or alias
		Source: SYSIBM.SYSTABLES.STATUS
STORNAME (IXP)	2	Name of storage group or ICF catalog used for space allocation.
		Source: SYSIBM.SYSINDEXPART.STORNAME
STORNAME (TSTP)	2	Name of storage group used for allocation; blank if STORTYPE = E.
		Source: SYSIBM.SYSTABLEPART.STORNAME
STORTYPE (IXP)	2	Type of storage allocation:
		 E Explicit storage type, and STORNAME names an ICF catalog I Implicit storage type, and STORNAME names a storage group
		Source: SYSIBM.SYSINDEXPART.STORTYPE
STORTYPE (TSTP)	2	Type of storage allocation:
		E Explicit (storage group is not used)I Implicit (storage group used)
		Source: SYSIBM.SYSTABLEPART.STORTYPE
TABLE ROWS/INDEXES *	1, 2	Number of nonunique index entries per key. You can update this field.
		Source: Derived
TBCREATR (TBL)	2	For an alias, the authorization ID of the owner of the referred table or view; blank otherwise.
		Source: SYSIBM.SYSTABLES.TBCREATOR
TBL	1, 2	Name of the table.
		Source: SYSIBM.SYSTABLES.CREATOR
		Source: SYSIBM.SYSTABLES.NAME

FIELD	ON FORMAT	DESCRIPTION	
TBNAME (TBL)	2	For an alias, the name of the referred table or view; blank otherwise.	
		Source: SYSIBM.SYSTABLES.TBNAME	
TS	1, 2	Name of the table space.	
		Source: SYSIBM.SYSTABLESPACE.DBNAME	
		SYSIBM.SYSTABLESPACE.NAME	
TSTP	1, 2	Name of the table space.	
		Source: SYSIBM.SYSTABLEPART.DBNAME	
		Source: SYSIBM.SYSTABLEPART.TSNAME	
ТҮРЕ	2	Type of object:	
		 A Alias T Table V View Source: SYSIBM.SYSTABLES.TYPE 	
UNIQUE *	1, 2		
	1, 2	 Whether the index is unique: D No (Duplicates are allowed) U Yes (Unique, but not primary) P Primary key (Unique) You can update this field. 	
		Source: SYSIBM.SYSINDEXES.UNIQUERULE	
VALPROC (TBL)	2	Name of the validation procedure; blank if the row describes a view, alias, or a table without a validation procedure.	
		Source: SYSIBM.SYSTABLES.VALPROC	
VCATNAME (IXP)	2	Name of ICF catalog used for space allocation.	
		Source: SYSIBM.SYSINDEXPART.VCATNAME	
VCATNAME (TSTP)	3	Name of ICF catalog used for space allocation.	
		Source: SYSIBM.SYSTABLEPART.VCATNAME	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
С	Display/Update Table columns.	Table Columns (KTEPTCOL)
D	Drop the selected index. Available for IX= rows.	
K	Display Index Keys.	Index Keys (KTEPCKEY)
N	Creates a new index having the DEFER option, unless you specifically indicate that you do not want it created with the DEFER option. When you exit from the Whatif panel, you will be given an opportunity to drop any indexes created using the N select. Available for TBL= rows and assists you in	
	testing the effect of adding new indexes to tables.	

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
CALC	Calculate statistics. When you issue a CALC, any fields affected by the results of the command change color on your display. Fields whose color had been white are now yellow. Fields whose color had been blue are now green.	
CHANGE	Change all of the specified values to the new value. Can be abbreviated as C or CHA. See "Format of the Change command" later in this unit for expanded information about the CHANGE command.	
FIND	Find a specific character string on the display. Can be abbreviated as F. See "Format of the FIND command" later in this unit for expanded information about the FIND command.	
GSTATS	Gather statistics from the catalog and refresh the Estimator display.	Statistics Gathering (KTEPSSSG)
LOCATE	Locate a specific value, or a specific value for a specific object type, in one of the fields on the display; or locate data changed by the last command (for example, CALC or UNIFORM) you issued or data you have modified. Can be abbreviated as L or LOC. See "Format of the LOCATE command" later in this unit for expanded information about the LOCATE command.	

COMMAND	DESCRIPTION	TAKES YOU TO
NDXS	Display all used and unused indexes.	
NEWSET	Establish a new statistics set. NEWSET does not affect column or column distribution statistics.	
NEWSETALL	Establish a new statistics set, including column and column distribution statistics.	
NONDXS	Reset used indexes.	
NOSTAT	Set statistics to RUNSTATS, not to run value. NOSTAT does not affect column or column distribution statistics. RUNSTATS can be either 0, blank, or -1.	
NOSTATALL	Set statistics, including column and column distribution statistics, to RUNSTATS, not to run value. RUNSTATS can be either 0, blank, or -1.	
OUT	Generate a REXX EXEC to update catalog statistics or create SQL statements to update catalog statistics depending on the value specified for "OUT statistics format" on housekeeping panel Miscellaneous Defaults (KTEPHOMI).	Output Options (KTEPOUTP)
RESET	Reset statistics values to the last statistics set. RESET does not affect column or column distribution statistics.	
	Note: A statistics set is established when you enter the Estimator panel and when you explicitly enter the NEWSET* command.	
RESETALL	Reset statistics, including column and column distribution statistics, to the last statistics set.	
	Note: A statistics set is established when you enter the Estimator panel and when you explicitly enter the NEWSET* command.	
RFIND	Reexeute the last FIND command. Can be abbreviated as RF.	
RLOCATE	Reexeute the last LOCATE command. Can be abbreviated as RL or RLOC.	
UNIFORM	Set partitioned statistics to uniform distribution. For example, if the value for CARD for tables is 90000 and there are 10 partitions, then set each table partition CARD field to 9000.	
UPDT	Update the local catalog with new statistics.	Statistics Update (KTE3SSUP)
UPDTL	Update the local catalog with new statistics.	Statistics Update (KTE3SSUP)
UPDTR	Update the remote catalog with new statistics.	Statistics Update (KTE3SSUP)

Format of the Change command

The Change command (CHANGE) can be abbreviated as CHA or C. The format for this command is

CHANGE [field_type] field_name operator value [%]

This table provides information about the parameters of the CHANGE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
field_type	Can be TS, TSTP, TBL, IX, or IXP. <i>field_type</i> is optional. If it is omitted, all fields having the specified field name are changed. If it is included, only those fields of the type specified and having the specified field name are changed.
field_name (required)	Name of the field to be changed
operator (required)	One of the following can be used in the operator field: = (equals) + (plus) - (minus)
value (required)	Value to which the specified fields are set
%	The % (percent) sign can be used with the + (plus) and - (minus) operators to indicate that the value represents a percentage by which the changed field is to be incremented or decremented.

Valid field types for the CHANGE command

Refer to the table for the fields than can be affected by the CHANGE command. A more complete list showing alternate field names (where applicable) for the field names in this table can be found in the online help for this panel.

Field Type	Field Name
TS	NACTIVE
TSTP	CARD NACTIVE NPAGES PCTPAGES PCTROWCOMP PCTFREE FREEPAGE
TBL	RECLEN CARD NPAGES PCTPAGES PCTROWCOMP
IX	FULLKEY FIRSTKEY KEYSIZE INDEXTYPE NLEVELS NLEAF UNIQUE CLUSTER ROWS
IXP	FULLKEY FIRSTKEY KEYCNT NLEVELS NLEAF CLUSTER FREEPAGE PCTFREE

Format of the FIND command

The FIND command can be abbreviated as \mathbf{F} . The format of the FIND command is as follows:

FIND string [FIRST|LAST|NEXT|PREV] [ASIS]

This table provides information about the parameters of the FIND command. All parameters are optional unless specifically declared as required.

Parameter	Meaning	
string (required)	One of:	
	• A quoted or unquoted string that is to be found; can take the form:	
	dirt 'dirt road' "dirt road" "Mary's road"	
	• * (asterisk)—meaning find an occurrence of the last value entered for <i>string</i> .	
FIRST	Find the first occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.	
LAST	Find the last occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.	
PREV	Find the previous occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.	
NEXT	Find the next occurrence of the string (the default) on the display. Ignore the case of any characters in the string when performing the FIND.	

Format of the FIND command (continued)

Parameter	Meaning
ASIS	Can be included with any of the above parameters and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

Format of the LOCATE command

The LOCATE command can be abbreviated as L or LOC. The format of the LOCATE command is as follows:

LOCATE [field_type] field_name operator value [ASIS]

or

LOCATE CHANGED

or

LOCATE MODIFIED

CHANGED can be abbreviated as CHA. MODIFIED can be abbreviated as MOD.

This table provides information about the parameters of the LOCATE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning	
field_type	Can be TS, TSTP, TBL, IX, or IXP. <i>field type</i> is optional. If specified, it designates the types of field in which !DB/EXPLAIN is to locate the designated value.	
field_name (required)	Name of the field in which the specified value is to be located	

Parameter	Meaning
operator (required)	One of the following can be used in the operator field:
	<pre>= (equals) > (greater than) < (less than) >= (greater than or equal to) <= (less than or equal to) <> (not equal to) -= (not equal to)</pre>
value (required)	A quoted or unquoted value that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	If the field in which a value is to be located is numeric, the format of <i>value</i> on the LOCATE command <i>must</i> match the format of the display field. Can take the form:
	999
	9,999 or 9.999
	1999/09/01 (will not match a value entered as 09/01/1999)
ASIS	Can be included with any of the above parameters and indicates that a character string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string. (ASIS is only valid for character data.)
CHANGED	Locates a value changed as the result of the last-issued command, for example, a CALC or UNIFORM command
MODIFIED	Locates a value changed by a user modification or a CHANGE command since the last statistics were gathered

Format of the LOCATE command (continued)

Valid field types for the LOCATE command

Refer to the table for the fields than can be affected by the LOCATE command. A more complete list showing alternate field names (where applicable) for the field names in this table can be found in the online help for this panel.

Field Type	Field Name
TS	BPOOL CLOSERULE CREATEBY CREATOR DBID DBNAME DSETPASS ERASERULE IMPLICIT LOCKMAX LOCKRULE NACTIVE NAME NTABLES OBID PARTITIONS PGSIZE PSID SEGSIZE SPACE STATSTS STATUS TSNAME

Valid field types for the LOCATE	command (continued)
----------------------------------	---------------------

Field Type	Field Name
TSTP	CARD
	CARDP
	CHECKFLAG
	CKRID
	COMPRESS DBNAME
	FARINDREF
	FREEPAGE
	GBPCACHE
	IXCREATOR
	IXNAME
	NACTIVE
	NEARINDREF
	NPAGES
	PAGESAVE
	PARTITION PCTFREE
	PCTPAGES
	PCTROWCOMP
	PERCACT
	PERCDROP
	PQTY
	SPACE
	SQTY
	STATSTS
	STATSTSP
	STORNAME
	STORTYPE TSNAME
	VCATNAME
TBL	ALTERTS AUDIT
	CARD
	CHECKS
	CHILD
	CKFLAG
	CKRID
	CLUSTERTYPE
	COLCOUNT
	CREATEBY
	CREATETS CREATOR
	DATAC
	EDPROC
	KEYCOLUMNS
	KEYOBID
	LOCATION
	NAME
	NPAGES
	OBID
	PARENT
	PCTPAGES PCTROWCOMP
	RBA1
	RBA2
	RECLEN
	STATSTS
	STATUS
	TBCREATR
	TBNAME
	TYPE
	VALPROC

Field Type	Field Name
IX	BPOOL CLOSERULE CLUSTER CLUSTERED CLUSTERING COLCOUNT CREATEBY CREATOR DSETPASS ERASERULE FIRSTKEY FULLKEY INDEXSPACE INDEXTYPE ISOBID KEYSIZE NAME NLEAF NLEVELS OBID PGSIZE ROWS SPACE STATSTS UNIQUE
IXP	CARD CLUSTER FAROFFPOS FIRSTKEY FREEPAGE FULLKEY GBPCACHE IXCREATOR IXNAME KEYCNT LEAFDIST NEAROFFPOS NLEAF NLEVELS PARTITION PCTFREE PQTY SPACE SQTY STATSTS STATSTS STORNAME STORNAME

Valid field types for the LOCATE command (continued)

Exceptions

Overview

This unit describes the Exceptions panel.

Background about the Exceptions panel

The Exceptions panel (KTEPXCPT) lists exceptions that exist for SQL statements. This panel shows statements that are in error and identifies statements that potentially can affect DB2 performance.

The exceptions that are displayed are affected by the values you have specified on the Exception Options Housekeeping panel and the Recommendations panels.

Access

Exceptions can be accessed from the Primary Menu or the Sessions Menu, or from the DBRMs, Plans, Packages, Tables and Statements panels.

Panel

The following illustration shows the Exceptions panel.

DB/EXPLAIN DB2=D31A CMD ===>	SCROLL ===> PAGE
EXCEPTIONS Cmds: DO (Menu) GLOBAL (Menu)	Selects: ? (Menu)
SEL COUNT EXCEPTION DESCRIPTION 117 TABLE SPACE SCAN 45 NON MATCHING INDEX SCAN 67 SORT FOR JOIN 25 SORT FOR ORDER BY 139 LIST PREFETCH 123 SEQUENTIAL PREFETCH 619 X / IX TABLESPACE LOCKS	

Fields

FIELD	ON PANEL	DESCRIPTION
COUNT	KTEPXCPT	Number of exceptions.
EXCEPTION DESCRIPTION	KTEPXCPT	Description of the exception. On recommendation exceptions, the first 8 characters of this field contain the recommendation identifier followed by the exception description.

Selects

SELECT	DESCRIPTION	TAKES YOU TO
G	Display statement costs. This select is valid for access path information only.	Statement Costs (KTEPCOST)
L	List exception details.	Latest EXPLAIN (KTEPEXPL)
S	List statements.	Statements (KTEPSTMT)

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
COST	Display cost for the exceptions for all access path types.	Costs (KTEPCOST)
LEXPL	Display latest EXPLAIN results for the tripped exceptions.	EXPLAIN (KTEPEXPL)
RFIND	Reexeute the last FIND command.	
STMTS	Display SQL statements that tripped the exceptions.	Statements (KTEPSTMT)
XERR	Display statements for the exceptions for all "SQL error" types.	Latest EXPLAIN (KTEPEXPL)

Storage considerations when displaying exceptions

When using one of the commands to display statements that triggered an exception condition, you need to ensure that you have sufficient storage to contain the display. Alternatively, you need to limit your request to a number that can be displayed within the existing capacity of your system.

EXPLAIN

Overview

This unit describes the EXPLAIN panel.

Background about the EXPLAIN panel

The EXPLAIN panel (KTEPEXPL) shows access path information of EXPLAINed SQL statements. This panel displays the message "EXTRACT DISCARDED STATEMENTs" when the extract has discarded a statement or statements from the associated DBRM.

If the statement displayed on format 2 or format 6 has been modified by the !DB/EXPLAIN parser to avoid -417 and -418 SQL errors, the panel displays a message indicating the statement has been modified.

Formats

You can display the panel in the formats given in the chart. Customizing format 0 to meet your needs is easily done using Housekeeping's Explain Display tuning Parameters panel.

Format	Displayed Fields
Format 0	User-defined format (defined on the EXPLAIN Display Tuning Parameters panel)
Format 1	Object, BIND, statement text, access path, and recommendation information
Format 2	Access path summary (EXPLAIN Plan Table Data)
Format 3	Object Information, Key Information
Format 4	BIND Data
Format 5	Statement Text
Format 6	Access Path Information
Format 7	Recommendations (text level is None/Terse/Verbose). See "Recommendations Panel 1" on page 350 for more information.
Format 8	Plan Table Data (two line format)
Format 9	Statement Cost Information

Access

Explain is accessed from the Plans, DBRMs, Packages, Statements, or Exceptions panels.

Panels

The following illustration shows format 1 of the EXPLAIN display.

Cmd ===> FORMAT1 DB/EXPLAIN DB2=D42B LINE 1 OF 222 Cmd ===> FORMAT1 SCROLL ===> PAGE E X P L A I N Cmds: D0 (Menu) GLOBAL (Menu)
PLAN=DSN8BD42 DBRM=DSN8BD3 CONTOKEN=15B3C90A0B7E75A0 PRECOMPILE=1999/10/14 16:41:17.260000 EXPLAINED=1999/12/09 11:46:04 DEGREE=1 +
EXPLAIN = N DEFERPREP = N SQLRULES= D DISCONNECT= E RELEASE= C EXPREDICATE= C DYNAMICRULES= KEEPDYN = N REOPT = N
 RECOMMENDATIONS FOR DBRM DSN8BE3 RECOMMENDATION B00004 The plan or package this statement belongs to was bound with the option VALIDATE(RUN). Generally the option VALIDATE(BIND) is preferred. When the option VALIDATE(RUN) is specified, DB2 does validity checking at BIND time and then rechecks any failures at run time. The validity checking at run time can cause catalog contention and degrated performance. If possible, ensure that all objects exist and all privileges are granted prior to binding a plan or package and then choose the VALIDATE(BIND) option.
+ STATEMENT NUMBER 286 TEXT+ DECLARE TELE1 CURSOR FOR SELECT * FROM VPHONE +
+STATEMENT NUMBER 286 ERROR+ DSNT4081 SQLCODE = -204, ERROR: DCYBU2.VPHONE IS AN UNDEFINED NAME DSNT4181 SQLSTATE = 42704 SQLSTATE RETURN CODE

This continues format 1 of the EXPLAIN display.

Cmds: D0 (M PLAN=DSN8B04 PRECOMPILE=1 EXPLAINED=19 +	DB/EXPLAIN DB2=D42B LINE 1 OF 222 T1 SCROLL ===> PAGE E X P L A I N nu) GLOBAL (Menu) DBRM=DSN8BD3 CONTOKEN=15B3C90A0B7E75A0 99/10/14 16:41:17.260000 9/12/09 11:46:04 DEGREE=1 DETAILED PLAN INFORMATION = DSN8BD42 CREATOR = DCYBU2 PLENTRIES = 0 = N QUALIFIER= DCYBU2 SYSENTRIES = 0 E= 3194 BOUND BY = DCYBU2 DBRMS = 1 = 2728 BIND DATE= 1999/10/14 PACKAGES = 0 = 1024 BIND TIME= 16:42:01 GROUP MEMBER= = 1 SERVER =
VALIDATE EXPLAIN EXPREDICAT	= 1 SERVER = = R ISOLATION = S VALID = Y OPERATIVE = Y ACQUIRE= U = N DEFERPREP = N SQLRULES= D DISCONNECT= E RELEASE= C = C DYNAMICRULES= KEEPDYN = N REOPT = N RECOMMENDATIONS FOR DBRM DSN8BE3
option preferr When th checkir The val and deg exist a	ALIDATE(RUN). Generally the option VALIDATE(BIND) is
DECLARE TE SELECT * FROM VPHON	
DSNT4081 S	STATEMENT NUMBER 286 ERROR- LCODE = -204, ERROR: DCYBU2.VPHONE IS AN UNDEFINED NAME LSTATE = 42704 SQLSTATE RETURN CODE

The following illustration shows format 2 of the EXPLAIN display—EXPLAIN Plan Table data.

		FOR	<i>u</i> (12						ΕX	ΡL	A	ΙN				50101] ===	. 1710
mds	s: D0	(Me	nu)	GL	OBAL	(Mei	nu)											
PRE	CKAGE ECOMPI PLAIN	ILE=	1999,	/02	/13 0	6:30	0:0	5.6	1000		(CONT	ГОКІ	EN=15	540	93E608555E	10	
+										PATI								
	STMT NO.				EMJP METR											SRN SRC UJOGUJOG	LCK	PFW FNO
	437 488	1	1	 0 0	Ε0 Ε0	I	N N	2	0 0	0	0 0	0 0	0 0	 0 0	0 0	NNNNNNN	IS	L
	543 1717		1		E0 E0		N N	_	0 0	0	0	0 0			-	NNNNNNN	IS	L
1	204	1			EØ	Ι	N	2		Õ		Õ	Õ	Õ	-	NNNNNNN	IS	

The following illustration shows format format 3 of the EXPLAIN display—object information.

----- DB/EXPLAIN DB2=D31A ----- LINE1 OF 92 CMD ===> FORMAT3 SCROLL ===> PAGE EXPLAIN Cmds: DO (Menu) GLOBAL (Menu) _____ PLAN=CRBDPLNR DBRM=DSDDB2UP CONTOKEN=1470006C10B79FB4 PRECOMPILE=1998/02/23 02:42:08.610000 EXPLAINED=1999/03/01 11:46:04 DEGREE=1 +----- DETAILED OBJECT INFORMATION FOR STATEMENT NUMBER 373 TS= DSNDB06.SYSDBASE PARTITIONS= 0 LOCKRULE = A NACTIVE= 540 NTABLES= 14 OBID= 1 CLOSERULE= N CREATOR = SYSIBM DBID= 6 IMPLICIT = N CREATEBY= SYSIBM SPACE = 0 PGSIZE = 4 STATUS = A BPOOL = BPO ERASERULE= N DSETPASS= PSID= 9 SEGSIZE= 0 STATSTS= 1999/11/02 15:28:07.744171 LOCKMAX= 0 TBL= SYSIBM.SYSTABLES LOCATION= RECLEN= 521 CARD = 211 NPAGES= 110 TBCRFATR= TYPE = T TBNAMF = STATUS= X CREATEBY= SYSIBM CKFLAG=
 NPAGES=
 110

 PCTPAGES
 20

 KEYOBID
 61

 OBID
 19

 COLCOUNT
 38

 KEYCOLUMNS=
 2
 VALPROC = AUDIT = EDPROC = CHILD = 7CKRID = PARNT = 1RBA1 RBA2 = 00000000 = 00000000 DATAC = PCTROWCOMP= 0 CREATETS= 1998/04/01 00:00:00.000000 = 0 ALTERTS = 1999/06/24 16:09:28.046861 CHECKS STATSTS = 1999/11/02 15:28:07.744171 CLUSTERTYPE = USED INDEXES ------IX= SYSIBM.DSNDTX01 CREATEBY = SYSIBM FULLKEY = 211 FIRSTKEY= 28 CLUSTRATIO= 62 CLUSTERED = N NLEVELS= 2 NLEAF= 28 COLCOUNT = 2SPACE = 0 PGSIZE= 4096 CLUSTERING= N ERASERULE= N INDEXTYPE = SUBPAG= 1 CLOSERULE= N DSETPASS OBID = 61INDEXSPACE= DSNDTX01 UNIQUE = P ISOBID= 93 STATSTS = 1999/11/02 15:28:07.744171 BPOOL = BPO0 N USE SQ KEY COLUMN NAME R L COLTYPE LENGTH SCALE COLCARD **> 1 CREATOR AR 8 A N CHAR 28 HIGH2KEY= TSL251 LOW2KEY= CLOVIS **> 2 NAME A N VARCHAR 18 118 HIGH2KEY= VSTAFAC1 LOW2KEY= ALTERCON ----- UNUSED INDEXES ------IX= SYSIBM.DSNDTX02 CREATEBY = SYSIBM FULLKEY = 211 FIRSTKEY= 25 NLEVELS= 2 CLUSTRATIO= 76 NLEAF= 25 CLUSTERED = NCOLCOUNT = 4SPACE = 0CLUSTERING= N PGSIZE= 4096 SUBPAG= 1 OBID = 163 ERASERULE= N INDEXTYPE = CLOSERULE N DSETPASS = UNIQUE = U INDEXSPACE =DSN STATSTS = 1999/11/02 15:28:07.744171 INDEXSPACE= DSNDTX02 ISOBID= 164 BPOOL = BPO-----

nd ===> FORMAT4 Cmds: DO (Menu) GLOBAL (Men	EXPLAIN nu)	SCROLL ===> PAG
PLAN=CRBDPLNR DBRM=DSN8BD3 PRECOMPILE=1999/10/14 02:42 XPLAINED=1999/12/09 11:46:0	:08.610000	75A0
DI	ETAILED PLAN INFORMATION	
PLAN NAME = DSN8BD42	CREATOR = DCYBU2	PLENTRIES = 0
PLAN FREED? = N		SYSENTRIES= 0
AVERAGE SIZE= 3194	1	DBRMS = 3
PLAN SIZE = 2728		
CACHE SIZE = 1024		
DEGREE = 1	SERVER =	
DEGREE	SERVER	
VALIDATE = R ISOLATION	= S VALTD = Y OPF	RATIVE = Y ACOUTRE= 11
EXPLAIN = N DEFERPREPA		CONNECT= E RELEASE= C
EXPREDICATE= C DYNAMICRU		
		11 – N

Format 5 of the EXPLAIN display shows statement text.

CMD ===> FORMAT5 DB/EXPLAIN DB2=D31A LINE1 OF 33 CMD ===> FORMAT5 SCROLL ===> PAGE E X P L A I N Cmds: DO (Memu) GLOBAL (Menu)
PLAN=CRBDPLNR DBRM=DSDDB2UP CONTOKEN=1470006C10B79FB4 PRECOMPILE=1998/02/23 02:42:08.610000 EXPLAINED=1999/03/01 11:46:04 DEGREE=1 +
<pre>+ STATEMENT NUMBER 458 TEXT+ +</pre>

Format 6 of the EXPLAIN display lists access path information.

```
----- DB/EXPLAIN DB2=D31A ----- LINE1 OF 78
CMD ===> FORMAT6
                                                      SCROLL ===> PAGE
                              EXPLAIN
 Cmds: DO (Menu) GLOBAL (Menu)
          -------
PLAN=CRBDPLNR DBRM=DSDDB2UP CONTOKEN=1470006C10B79FB4
PRECOMPILE=1999/02/23 02:42:08.610000
EXPLAINED=1999/03/01 11:46:04 DEGREE=1
 +----- ACCESS PATH STRATEGY FOR STATEMENT NUMBER 373 -----+
  Statement Cost: 7.6
    The cost (timerons) is a rough estimate of resources required to
    execute the SQL statement.
  Query Block No. 1
    Step 1
     Access Info:
        This is either a composite table or it is the first table accessed.
        This step accesses SYSIBM.SYSTABLES.
        Uses index SYSIBM.DSNDTX01.
        Matching on 2 index columns.
        Index access only, no table pages are accessed.
        Column functions are to be decided at run time.
     Lock Info:
        Intent Share. Lock holder has read-only access.
        Concurrent reads and updates are allowed.
PLAN=CRBDPLNR DBRM=DSDSQL01 CONTOKEN=145CF65D033BF130
PRECOMPILE=1998/10/24 23:12:43.950000
EXPLAINED=1999/03/01 11:46:04 DEGREE=1
  ------ ACCESS PATH STRATEGY FOR STATEMENT NUMBER 227 -----++
  Statement Cost: 0.3
    The cost (timerons) is a rough estimate of resources required to
    execute the SQL statement.
  Query Block No. 1
    Step 1
     Access Info:
        This is either a composite table or it is the first table accessed.
        This step accesses SYSIBM.SYSTABLESPACE.
        Uses index SYSIBM.DSNDSX01.
        Matching on 2 index columns.
        Index access only, no table pages are accessed.
        Column functions are to be decided at run time.
     Lock Info:
        Intent Share. Lock holder has read-only access.
        Concurrent reads and updates are allowed.
```

Format 7 of the EXPLAIN display provides recommendations in verbose text style.

----- DB/EXPLAIN D31A ----- LINE1 OF 86 CMD ===> SCROLL ===> PAGE EXPLAIN Cmds: DO (Menu) GLOBAL (Menu) _____ PACKAGE=I321899D COLLID=I321899B CONTOKEN=151E21441FDC79B2 PRECOMPILE=1999/03/07 09:49:35.616486 EXPLAINED=1999/08/26 07:12:19 DEGREE=1 ----- RECOMMENDATIONS FOR PACKAGE I321899D -----NO BIND TYPE RECOMMENDATIONS FOR PACKAGE _____ +----- RECOMMENDATIONS FOR STATEMENT NUMBER 156 -------RECOMMENDATION 000002 Tablespace DSNDB04.EMP has a LOCKSIZE of ANY. Lock escalation may occur. If concurrency is of utmost importance for applications referencing this tablespace then LOCKSIZE(PAGE) may be a better choice. When LOCKSIZE ANY is specified, the number of locks that any program can hold within a table space is limited by the value specified for LOCKS PER TABLE(SPACE) when DB2 was installed. When the number of page locks reaches the limit, a tablespace lock is acquired and all of the page locks are released. When LOCKSIZE PAGE is specified, lock escalation will not occur. RECOMMENDATION 000004 Tablespace DSNDB04.EMP has a LOCKSIZE of ANY. The !DB/EXPLAIN database shows no INSERT / UPDATE / DELETE statements referencing table TDDB44B.EMP. If this table is truly read only then a LOCKSIZE of TABLE or TABLESPACE may improve performance. EXCEPTION X00009 Sequential Prefetch ----- RECOMMENDATIONS FOR STATEMENT NUMBER 161 -----RECOMMENDATION 000002 Tablespace DSNDB04.EMP has a LOCKSIZE of ANY. Lock escalation may occur. If concurrency is of utmost importance for applications referencing this tablespace then LOCKSIZE(PAGE) may be a better choice. When LOCKSIZE ANY is specified, the number of locks that any program can hold within a table space is limited by the value specified for LOCKS PER TABLE(SPACE) when DB2 was installed. When the number of page locks reaches the limit, a tablespace lock is acquired and all of the page locks are released. When LOCKSIZE PAGE is specified, lock escalation will not occur. RECOMMENDATION 000004 Tablespace DSNDB04.EMP has a LOCKSIZE of ANY. The !DB/EXPLAIN database shows no INSERT / UPDATE / DELETE statements referencing table TDDB44B.EMP. If this table is truly read only then a LOCKSIZE of TABLE or TABLESPACE may improve performance. EXCEPTION X00009 Sequential Prefetch

Format 8 of the EXPLAIN display illustrates plan table data in two-line format.

----- DB/EXPLAIN DB2=D42B ----- LINE 1 OF 30(F) Cmd ===> FORMAT8 Scroll ===> PAGE EXPLAIN Cmds: DO (Menu) GLOBAL (Menu) -----------PACKAGE=DSNHYCRD COLLID=DSNHYCRD CONTOKEN=155403E608555E10 PRECOMPILE=1999/02/13 06:30:05.610000 EXPLAINED=1999/12/09 13:35:09 DEGREE=1 +-----+ ACCESS PATH SUMMARY ------STMT QB PLN MX EMJP AC I MT MJ P ACCESS JOIN SRNSRC SRN SRC PFW NO. NO. OP METR CS X CL CL M DG ID DG ID ID ID UJOGUJOG LCK FNO 1051 1 1 0 E0 I N 2 0 0 0 0 0 0 0 NNNNNNN IS L NDX=SYSIBM.DSNDSX01 TBL=SYSIBM.SYSTABLESPACE STMT COST= 1,419.5* TABNO= 1 QUERY TYPE=SELECT 1 2 0 E3 N 0 0 0 0 0 0 0 0 NNNNNNN 1051 QUERY TYPE=SELECT 0 0 0 0 0 0 NNNNNNN IS L 1056 1 1 0 E0 I N 2 0 TBL=SYSIBM.SYSCOLUMNS NDX=SYSIBM.DSNDCX01 TABNO= 1 STMT COST= 1,094.9* QUERY TYPE=SELECT 1056 1 2 0 EO N 0 0 0 0 0 0 0 0 NNNNNNN QUERY TYPE=SELECT 1 1 0 E0 I N 2 0 204 0 0 0 0 0 0 NNNNNNN IS TBL=SYSIBM.SYSTABLES NDX=SYSIBM.DSNDTX01 TABNO= 1 STMT COST= 52.8* QUERY TYPE=SELECT

Format 9 of the EXPLAIN display provides statement cost information. Fields on the Statement Cost Information panel are sorted by statement cost in descending order.

CMD ===> FORMAT9 DB/EXPLAIN DB2=D31A LINE1 OF 12 CMD ===> FORMAT9 SCROLL ===> PAGE E X P L A I N CMDS: DO (MENU) GLOBAL (MENU)
PLAN=CRBDPLNR DBRM=DSDDB2UP CONTOKEN=1470006C10B79FB4 PRECOMPILE=1999/02/23 02:42:08.610000 EXPLAINED=1999/03/01 11:46:04 DEGREE=1 +
STMT NO. STATEMENT TYPE STMT COST SQLCODE
373 SELECT 7.6 0
PLAN=CRBDPLNR DBRM=DSDSQL01 CONTOKEN=145CF65D033BF130 PRECOMPILE=1998/10/24 23:12:43.950000 EXPLAINED=1999/03/01 11:46:04 DEGREE=1 +
STMT NO. STATEMENT TYPE STMT COST SQLCODE
227 SELECT 0.3 0
+

Fields and Associated Sorts and Filters

FIELD	ON FORMAT	DESCRIPTION	FILTERS
ACC DEG	2	Number of parallel I/O streams activated by a query	EADG
		Source: PLAN_TABLE.ACCESS_DEGREE	
ACCESS INFO	1	 Method of accessing the new table: I By an index I1 One-fetch index scan N Index scan when predicate contains IN keyword R table space scan MX By a multiple index scan on the index named in ACCESSNAME MI By an intersection of multiple indexes MU By a union of multiple indexes Blank Not applicable to the current row 	EACCS
		Source: PLAN_TABLE.ACCESSTYPE	
ACCESS PATH	1, 6	Descriptive text on access path	
		Source: Derived	
ACC PID	2	Identifier of the parallel group	EAID
		Source: PLAN_TABLE.ACCESS_PGROUP_ID	
ACCS (ACCESS)	2	 Method of accessing the new table: I By an index II One-fetch index scan N Index scan when predicate contains IN keyword R table space scan MX By a multiple index scan on the index named in ACCESSNAME MI By an intersection of multiple indexes MU By a union of multiple indexes Blank Not applicable to the current row Source: PLAN_TABLE.ACCESSTYPE 	EACCS
ACQUIRE	1, 4	 When resources are acquired: A At allocation U At use Source: SYSIBM.SYSPLAN.ACQUIRE 	
ALTERED	1, 3	Time when the latest ALTER TABLE statement was applied Source: SYSIBM.SYSTABLES.ALTEREDTS	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
AUDIT	1, 3	Indicates status of the audit:	
		 A AUDIT All C AUDIT CHANGE blank AUDIT NONE, or the row describes a view or alias 	
		Source: SYSIBM.SYSTABLES.AUDITING	
AVERAGE SIZE	1, 4	Average size, measured in bytes, of the plan section processed at BIND time	
		Source: SYSIBM.SYSPLAN.AVGSIZE	
AVSIZE	1, 4	Average size, measured in bytes, of the package section processed at BIND time	
		Source: SYSIBM.SYSPACKAGE.AVGSIZE	
BIND DATE	1, 4	Date on which the plan was last bound, in the form YYYY/MM/DD	
		Source: SYSIBM.SYSPLAN.BINDDATE	
BIND TIME	1, 4	Time the plan was last bound, in the form HH:MM:SS	
		Source: SYSIBM.SYSPLAN.BINDTIME	
BOUND	1, 4	Timestamp indicating when the package was last bound	
		Source: SYSIBM.SYSPACKAGE.BINDTIME	
BOUND BY	1, 4	Primary authorization ID of the binder of the plan	
		Source: SYSIBM.SYSPLAN.BOUNDBY	
BPOOL (IX)	1, 3	Name of the buffer pool used for index	
		Source: SYSIBM.SYSINDEXES.BPOOL	
BPOOL (TS)	1, 3	Name of the buffer pool used for the table space	
		Source: SYSIBM.SYSTABLESPACE.BPOOL	
СН	9	Statement changed indicator	
		 N This is the original statement text Y The user modified this SQL statement text A The user added this SQL statement 	
		Source: derived	
CACHE SIZE	1, 4	Size, measured in bytes, of the cache to be acquired for the plan	
		Source: SYSIBM.SYSPLAN.CACHESIZE	
CARD (IXP)	1, 3	Number of rows referred to by the index or partition	
		Source: SYSIBM.SYSINDEXPART.CARD	
CARD (TBL)	1, 3	Number of rows in the table	
		Source: SYSIBM.SYSTABLES.CARD	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
CARD (TSTP)	1, 3	Number of rows in the table space or partition.	
		Source: SYSIBM.SYSTABLEPART.CARD	
CARDP (TSTP)	1, 3	Total number of rows in the partition	
		Source: SYSIBM.SYSTABSTATS.CARD	
Changed statement identifier	(Does not appear as field; however, can be filtered on.)	 A value that identifies whether a user has changed the SQL text of a statement. Y User has changed the SQL statement text N The text of the statement is the original text. A This is a new SQL statement added by the user. Source: derived 	ECHA
CHARSET	1, 4	Indicates whether the system CCSID for SBCS	
CHARSET	1, 4	data was 290 (Katakana) when the program was precompiled:K YesA No	
		Source: SYSIBM.SYSPACKAGE.CHARSET	
CHECKFLAG (TBL)	1, 3	 Flag indicating the following: C There are rows in the table that can violate referential constraints. blank The table contains no rows that violate referential constraints, or the row describes a view or alias. Source: SYSIBM.SYSTABLES.CHECKFLAG 	
CHECKFLAG (TSTP)	1, 3	Flag indicating the following:	
		 C The table space partition is in CHECK PENDING mode and there are rows that can violate referential constraints. blank The table contains no rows that violate referential constraints, or the table space is not a partition. 	
		Source: SYSIBM.SYSTABLEPART.CHECKFLAG	
CHECKS (TBL)	1, 3	Number of check constraints defined on a table. The value in this field is 0 if there are no constraints, or if the row describes a view or alias. Source: SYSIBM.SYSTABLES.CHECKS	
CHILD	1, 3	Number of relationships in which the table is a parent; 0 means the row describes a view or alias.	
		Source: SYSIBM.SYSTABLES.CHILDREN	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
CKRID (TBL)	1, 3	RID RID of the first row of the table that can violate referential constraints Table is not in a check pending state.	
		Source: SYSIBM.SYSTABLES.CHECKRID	
CKRID (TSTP)	1, 3	 RID RID of the first row of the table that can violate referential constraints. blank Table or partition is not in a check pending state or the table space is not partitioned. 	
		Source: SYSIBM.SYSTABLEPART.CHECKRID	
CLOSERULE (IX)	1, 3	Indicates whether the datasets are candidates for being closed when the limit on the number of open datasets is reached:	
		N No Y Yes Source: SYSIBM.SYSINDEXES.CLOSERULE	
CLOSERULE (TS)	1, 3	Indicates whether the datasets are candidates for being closed when the limit on the number of open datasets is reached:	
		Y Yes N No Source: Sysibm.SystableSpace.closerule	
CLUSTERED	1, 3	Indicates whether the table is actually clustered by the index:	
		 N No: 95% or fewer of the rows are in clustering order; or statistics were not gathered Y Yes: More than 95% of the rows are in clustering order 	
		Source: SYSIBM.SYSINDEXES.CLUSTERED	
CLUSTERING	1, 3	Indicates whether CLUSTER was specified when the index was created:	
		N No Y Yes	
		Source: SYSIBM.SYSINDEXES.CLUSTERING	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
CLUSTERTYPE (TBL)	1, 3	Indicates whether the table can be dropped (that is, whether the table is defined with RESTRICT ON DROP).	
		blank The table can be dropped	
		Y The table cannot be dropped and any table space or database containing this table also cannot be dropped.	
		Source: SYSIBM.SYSTABLES.CLUSTERTYPE	
CLUSTRATIO	1, 3	Percentage of rows that are in clustering order. This field is updateable.	
		Source: SYSIBM.SYSINDEXES.CLUSTERRATIO	
CLUSTRATIO (IXP)	1, 3	Percentage of rows that are in clustering order. The field is updateable.	
		Source: SYSIBM.SYSINDEXSTATS.CLUSTERRATIO	
COLCOUNT (TBL)	1, 3	Number of columns in the table or view	
		Source: SYSIBM.SYSTABLES.COLCOUNT	
COLCOUNT (IX)	1, 3	Number of columns in the key	
		Source: SYSIBM.SYSINDEXES.COLCOUNT	
COLLECTION	1, 4	Name of the package collection	ECOL
		Source: SYSIBM.SYSPACKAGE.COLLID	
COLLECTION ID	1, 2	Name of the collection in which the package resides	ECOL
		Source: SYSIBM.SYSPACKAGE.COLLID	
COMPRESS (TSTP)	1, 3	Indicates whether compression is defined for a table space or table space partition	
		blank Compression is not defined.Y Compression is defined.	
		Source: SYSIBM.SYSTABLEPART.COMPRESS	
СОММА	1, 4	Indicates the decimal point representation for SQL statements in the package:	
		N Period Y Comma	
		Source: SYSIBM.SYSPACKAGE.COMMA	
CONTOKEN	1, 3, 4, 5	Consistency token for the package	
		Source: SYSIBM.SYSPACKAGE.CONTOKEN	
CORR=	8	Correlation name of a table or view that is specified in the statement. If no correlation name is specified or if the DB2 subsystem is not at least Version 4, the field is blank.	ECORR
		Source: PLAN_TABLE.CORRELATION_NAME	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
<i>Cost field discrepancy identifier</i>	(Does not appear as field; however, can be filtered on.)	 A value that identifies whether the statement cost may be in error as the result of a column being compared to a host variable or literal of a different type or length. Value may be: Y Statement cost may be in error N Statement cost estimate is approximately equivalent to the cost that would have been determined if the statement were bound in a 	ETCMI
		plan or package.	
		Source: derived	
CREATEBY (IX)	1, 3	Primary authorization ID of the user who created the index	EICR
		Source: SYSIBM.SYSINDEXES.CREATEDBY	
CREATEBY (TBL)	1, 3	Primary authorization ID of the user who created the table, view, or alias	ETCR
		Source: SYSIBM.SYSTABLES.CREATEDBY	
CREATEBY (TS)	1, 3	Primary authorization ID of the user who created the table space	
		Source: SYSIBM.SYSTABLESPACE.CREATEDBY	
CREATED	1, 3	Time when the CREATE statement was executed for the table, view, or alias	
		Source: SYSIBM.SYSTABLES.CREATEDTS	
CREATOR (Packages)	1, 4	Authorization ID of the package creator	
		Source: SYSIBM.SYSPACKAGE.CREATOR	
CREATOR (Plans)	1, 4	Authorization ID of the owner of the application plan	
		Source: SYSIBM.SYSPLAN.CREATOR	
CREATOR (TS)	1, 3	Authorization ID of the owner of the table space	
		Source: SYSIBM.SYSTABLESPACE.CREATOR	
DATACAPTURE (TBL)	1, 3	Records the value of the DATACAPTURE option for the table	
		blank Data capture not specified.Y Data capture specified.	
		Source: SYSIBM.SYSTABLES.DATACAPTURE	
DBID	1, 3	Internal identifier of the database which contains the table space	
		Source: SYSIBM.SYSTABLESPACE.DBID	
DBRM/PACKAGE	1, 2, 3, 4, 5	Name of the package or DBRM	EDBRM
NAME		Source: SYSIBM.SYSSTMT or SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
DEC31	1, 4	Indicates whether DEC31 was in effect when the program was precompiled: blank No Y Yes Source: SYSIBM.SYSPACKAGE.DEC31	
DEGREE	1, 2, 3, 4, 5	DEGREE option used for the plan or package at bind time Source: SYSIBM.SYSPACKAGE.DEGREE SYSIBM.SYSPLAN.DEGREE	
DEGREE (on EXPLAIN header)	1, 2, 3, 4, 5	Value of CURRENT DEGREE at the time the plan, package, DBRM, or SQL statement was EXPLAINed Source: SYSIBM.SYSPACKAGE.DEGREE SYSIBM.SYSPLAN.DEGREE	
DISCONNECT	1, 4	DISCONNECT option used when the plan was bound Source: SYSIBM.SYSPLAN.DISCONNECT	
DEFERPREP	1, I	 Indicates the CURRENTDATA option when the package was bound or rebound: A Data currency required for all cursors. Inhibit blocking for all cursors. This value can only be generated by a non-DB2 application requestor. B Data currency is not required for ambiguous cursors. Allow blocking for ambiguous cursors. C Data currency is required for ambiguous cursors. blank Blocking protocol not recorded because the package was created before the CURRENTDATA option was available. Source: SYSIBM.SYSPACKAGE.DEFERPREP 	
DEFERPREPARE (Packages)	1, I	Indicates whether the package was bound with the DEFER(PREPARE) option. Valid values include: Y Yes N No Blank The option is inherited from the PLAN Source: SYSPACKAGE.DEFERPREPARE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
DEFERPREPARE(Plans)	1, I	Indicates whether the package was bound with the DEFER(PREPARE) option. Valid values include: Y Yes N No Source: SYSPLAN.DEFERPREPARE	
DSETPASS (IX)	1, 3	Password for the datasets of the index	
		Source: SYSIBM.SYSINDEXES.DSETPASS	
DSETPASS (TS)	1, 3	Password for the datasets of the table space	
		Source: SYSIBM.SYSTABLESPACE.DSETPASS	
DYNAMICRULES= (Packages)	1, 4	 Indicates whether run time or bind time rules will apply to a dynamic SQL statement at run time B Dynamic SQL statements are handled like static SQL statements at run time. R Dynamic SQL statements are handled like dynamic SQL statements are handled like 	
		dynamic SQL statements at run time. blank Handling for dynamic SQL statements is not specified if the DB2 subsystem is not at least Version 4. Source: SYSIBM.SYSPLAN.DYNAMICRULES	
DYNAMICRULES= (Plans)	1, 4	 Indicates whether run time or bind time rules will apply to a dynamic SQL statement at run time B Dynamic SQL statements are handled like static SQL statements at run time. R Dynamic SQL statements are handled like dynamic SQL statements at run time. blank Handling for dynamic SQL statements is not specified if the DB2 subsystem is not at least Version 4. Source: SYSIBM.SYSPLAN.DYNAMICRULES 	
ЕМ	2, 8	 EXPLAIN method E EXPLAIN results are from a !DB/EXPLAIN EXPLAIN P EXPLAIN results are from a PLAN_TABLE extract B EXPLAIN results are from a BIND COMPARE * An SQL error occurred during the EXPLAIN Source: derived 	EEXME
EDPROC	1, 3	Name of the edit procedure	
		Source: SYSIBM.SYSTABLES.EDPROC	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
ERASERULE (IX)	1, 3	Whether the datasets are to be erased when dropped (not applicable for partitioned indexes): Y Yes N No Source: SYSIBM.SYSINDEXES.ERASERULE	
ERASERULE (TS)	1, 3	Whether the datasets are to be erased when dropped (not applicable for partitioned table spaces): Y Erase N Source: System.SystableSpace.eraserule	
EXPLAIN (Packages)	1, 4	EXPLAIN at BIND? Y Yes N No Source: SYSIBM.SYSPACKAGE.EXPLAIN	
EXPLAIN (Plans)	1, 4	EXPLAIN at BIND? Y Yes N No Source: SYSIBM.SYSPLAN.EXPLAIN	
EXPLAIN TIMESTAMP	1, 2, 4	Time at which the EXPLAIN statement was processed Source: PLAN_TABLE.TIMESTAMP	
EXPREDICATE	I, 4	 Indicates the CURRENTDATA option when the plan was bound or rebound. B Data currency is not required for ambiguous cursors. Allow blocking for ambiguous cursors. C Data currency is required for ambiguous cursors. Inhibit blocking for ambiguous cursors. N Blocking is inhibited for ambiguous cursors but the plan was created before the CURRENTDATA option was available. 	
FARINDREF	1, 3	Source: SYSIBM.SYSPLAN.EXPREDICATE Number of rows that have been relocated far from their original page Source: SYSIBM.SYSTABLEPART.FARINDREF	
FAROFFPOS	1, 3	Number of referred to rows that are far from optimal position as the result of an insert into a full page Source: SYSIBM.SYSINDEXPART.FAROFFPOS	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
FIRSTKEY	1, 3	Number of distinct values of the first key column	
		Source: SYSIBM.SYSINDEXES.FIRSTKEYCARD	
FIRSTKEY (IXP)	1, 3	Number of distinct values of the first key column	
		Source: SYSIBM.SYSINDEXSTATS.FIRSTKEYCARD	
FN (Function)	1, 2	A character that indicates when an SQL column function was evaluated:	ECOLF
		 R At data retrieval time S At sort time Blank To be decided at run time 	
		Source: PLAN_TABLE.COLUMN_FN_EVAL	
FREEPAGE (IXP)	1, 3	Number of pages loaded before a page is left as free space	
		Source: SYSIBM.SYSINDEXPART.FREEPAGE	
FREEPAGE (TSTP)	1, 3	Number of pages loaded before a page is left as free space	
		Source: SYSIBM.SYSTABLEPART.FREEPAGE	
FROM clause table identifier	(Does not appear as	A number that identifies the FROM Clause table referred to for the row.	ETBNO
	field; however, can be filtered on.)	Source: PLAN_TABLE.TABNO	
FULLKEY	1, 3	Number of distinct values of the key column	
		Source: SYSIBM.SYSINDEXES.FULLKEYCARD	
FULLKEY (IXP)	1, 3	Number of distinct values of the key column	
		Source: SYSIBM.SYSINDEXSTATS.FULLKEYCARD	
GBPCACHE (IXP)	1, 3	The group buffer pool cache option for the index or index space	
		A Both changed and unchanged pages are cached in the group buffer pool	
		blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4.	
		Source: SYSIBM.SYSINDEXPART.GBPCACHE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
GBPCACHE (TSTP)	1, 3	The group buffer pool cache option for the table or table space	
		 A Both changed and unchanged pages are cached in the group buffer pool blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4. 	
		Source: SYSIBM.SYSTABLEPART.GBPCACHE	
HOSTLANG	1, 4	Indicates the host language:	
		 B Assembler Language C COBOL D C F FORTRAN P PL/I 2 VS COBOL II 	
		Source: SYSIBM.SYSPACKAGE.HOSTLANG	
GROUP MEMBER=	1, 4	DB2 data sharing member name of the DB2 subsystem that performed the last BIND	EGRP
		Source: SYSIBM.SYSPACKAGE.GROUP_MEMBER	
IMPLICIT	1, 3	Indicates whether the table space was created implicitly: Y Yes N No	
INDEXNAME	1, 8	Source: SYSIBM.SYSTABLESPACE.IMPLICIT For ACCESSTYPE I, I1, N, or MX, the name of	EIX
INDEANAME	1, 8	the index; otherwise blank	EIA
		Source: PLAN_TABLE.ACCESSNAME	
INDEXSPACE	1, 3	Name of index space	
		Source: SYSIBM.SYSINDEXES.INDEXSPACE	
INDEXTYPE	1, 3	The type of the index blank Index is type 1	
		2 Index is type 2	
		Source: SYSIBM.SYSINDEXES.INDEXTYPE	
ISOBID	1, 3	Internal identifier for the set descriptor of the index page	
		Source: SYSIBM.SYSINDEXES.ISOBID	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
ISOLATION (Packages)	1, 4	Isolation level:	
		 R RR (Repeatable Read) S CS (Cursor Stability) T RS (Read Stability) U UR (Uncommitted Read) 	
ISOLATION (Diama)	1 4	Source: SYSIBM.SYSPACKAGE.ISOLATION	
ISOLATION (Plans)	1, 4	Isolation Level: R RR (Repeatable Read) S CS (Cursor Stability) Source: SYSIBM.SYSPLAN.ISOLATION	
IX (EPTB, Plan Table	1, 2	Indicates whether access to an index alone is	ENDXO
Data)	1, 2	enough to satisfy the query: Y Yes N No	LINDAG
	1	Source: PLAN_TABLE.INDEXONLY	
IX (IX, Indexes)	1	Index name	
		Source: SYSIBM.SYSINDEXES.CREATOR	
IXCREATOR	1, 3	Source: SYSIBM.SYSINDEXES.NAME Authorization ID of the owner of the partitioned index	
		Source: SYSIBM.SYSTABLEPART.IXCREATOR	
IXNAME	1, 3	Name of the partitioned index	
		Source: SYSIBM.SYSTABLEPART.IXNAME	
IXP	1, 3	Index name	
		Source: SYSIBM.SYSINDEXPART.CREATOR	
		Source: SYSIBM.SYSINDEXPART.IXNAME	
J T=	1, 8	Join type	EJTYP
		Source: SYSIBM.PLAN_TABLE.JOIN_TYPE	
JOI DEG	2	Number of parallel I/O streams used to join tables	EJDG
		Source: PLAN_TABLE.JOIN_DEGREE	
JOI PID	2	Identifier of the parallel group used to join tables	EJID
		Source: PLAN_TABLE.JOIN_PGROUP_ID	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
KEEPDYNAMIC (Packages)	2	Indicates the KEEPDYNAMIC option when the package was bound or rebound. Valid values include:	
		 Y Keep dynamic SQL past commit or rollback N Destroy dynamic SQL at commit or rollback 	
		Source: SYSPACKAGE.KEEPDYNAMIC	
KEEPDYNAMIC (Plans)	2	Indicates the KEEPDYNAMIC option when the package was bound or rebound. Valid values include:	
		 Y Keep dynamic SQL past commit or rollback N Destroy dynamic SQL at commit or rollback 	
		Source: SYSPLAN.KEEPDYNAMIC	
KEYCOLUMNS	1, 3	Number of columns in the table's primary key	
		Source: SYSIBM.SYSTABLES.KEYCOLUMNS	
KEYCNT (IXP)	1, 3	Number of rows in the partition	
		Source: SYSIBM.SYSINDEXSTATS.KEYCOUNT	
KEYOBID	1, 3	Internal DB2 identifier of the index that enforces uniqueness of the table's primary key	
		Source: SYSIBM.SYSTABLES.KEYOBID	
LCK (LOCK INFO)	1, 2	Lock mode of the table space that contains the new table:	ELCKM
		 IS Intent Share IX Intent Exclusive S Share X Exclusive SIX Share with intent exclusive U Update 	
		Source: PLAN_TABLE.TSLOCKMODE	
LEAFDIST	1, 3	100 times the average number of pages between successive leaf pages of the index	
		Source: SYSIBM.SYSINDEXPART.LEAFDIST	
LIBRARY	1, 4	Name of the PDS in which the package's DBRM is a member or source of the package	
		Source: SYSIBM.SYSPACKAGE.PDSNAME	
LOCATION (Packages)	1, 2, 4	Location name	
		Source: SYSIBM.SYSPACKAGE.LOCATION	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
LOCATION (TBL)	1, 3	Location name of the table for an alias defined on a remote object or blank for local	
		Source: SYSIBM.SYSTABLES.LOCATION	
LOCKMAX (TS)	1, 3	Maximum number of locks per user to acquire for the table or table space before escalating to the next locking level	
		Source: SYSIBM.SYSTABLESPACE.LOCKMAX	
LOCKRULE	1, 3	Lock size of the table space: A Any P Page S table space T Table	
		Source: SYSIBM.SYSTABLESPACE.LOCKRULE	
ME (Method)	1, 2	Number indicating the join method used for the step described by the row:	EMETH EERR
		 0 First table accessed 1 Nested loop join 2 Merge scan join 3 Sorts 4 Hybrid join E SQL error occurred on an SQL statement Source: PLAN_TABLE.METHOD 	EERR=Y Display only statements with errors. EERR=N Display only statements with no errors.
MIXED	1, 4	Indicates if mixed data was in effect when the program was precompiled: N No Y Yes	
MJCL	1, 2, 8	Source: SYSIBM.SYSPACKAGE.MIXED The number of columns being joined during a merge scan join. If the join method is not a merge scan or if DB2 is not at least Version 4, the value of this field is 0.	ЕМЈСО
		Source: PLAN_TABLE.MERGE_JOIN_COLS	
MTCL	1, 2, 8	For ACCESSTYPE I, I1, N, or MX, the number of index keys used in an index scan; otherwise 0	EMATC
		Source: PLAN_TABLE.MATCHCOLS	
МХОР	1, 2	Number indicating the sequence of steps in a multiple index operation	EMXOP
		Source: PLAN_TABLE.MIXOPSEQ	
NACTIVE	1, 3	Number of active pages in the table space	
		Source: SYSIBM.SYSTABLESPACE.NACTIVE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
NACTIVE (TSTP)	1, 3	Number of active pages in the partition	
		Source: SYSIBM.SYSTABSTATS.NACTIVE	
NDX=	1, 8	Name of index. Displayed only if the source is nonblank	
		Source: PLAN_TABLE.ACCESSCREATOR	
		Source: PLAN_TABLE.ACCESSNAME	
NEARINDREF	1, 3	Number of rows that have been relocated near their original page	
		Source: SYSIBM.SYSTABLEPART.NEARINDREF	
NEAROFFPOS	1, 3	Number of referred to rows near, but not at, optimal position as the result of an insert into a full page	
		Source: SYSIBM.SYSINDEXPART.NEAROFFPOS	
NLEAF	1, 3	Number of active leaf pages in the index	
		Source: SYSIBM.SYSINDEXES.NLEAF	
NLEAF (IXP)	1, 3	Number of active leaf pages in the index partition	
		Source: SYSIBM.SYSINDEXSTATS.NLEAF	
NLEVELS (IXP)	1, 3	Number of active levels in the partition index tree	
		Source: SYSIBM.SYSINDEXSTATS.NLEVELS	
NPAGES	1, 3	Total number of pages on which rows of the table appear	
		Source: SYSIBM.SYSTABLES.NPAGES	
NPAGES (TSTP)	1, 3	Number of pages in the partition on which rows of the table appear	
		Source: SYSIBM.SYSTABSTATS.NPAGES	
NTABLES	1, 3	Number of tables defined in the table space	
		Source: SYSIBM.SYSTABLESPACE.NTABLES	
OBID (IX)	1, 3	Internal identifier of the set descriptor of the index fan	
		Source: SYSIBM.SYSINDEXES.OBID	
OBID (TBL)	1, 3	Internal identifier of the table	
		Source: SYSIBM.SYSTABLES.OBID	
OBID (TS)	1, 3	Internal identifier of the file descriptor for the table space	
		Source: SYSIBM.SYSTABLESPACE.OBID	
OPERATIVE (Packages)	1, 4	Indicates whether the package can be allocated:	
		 Y Yes N No. An explicit BIND or REBIND is required first 	
		Source: SYSIBM.SYSPACKAGE.OPERATIVE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
OPERATIVE (Plans)	1, 4	 Indicates whether the plan is operative: Y Yes N No. An explicit BIND or REBIND is required first Source: SYSIBM.SYSPLAN.OPERATIVE 	
OWNER	1, 4	Authorization ID of the package owner	
		Source: SYSIBM.SYSPACKAGE.OWNER	
РМ	1, 2, 8	The kind of parallelism that is used at bind time (if any). At execution time, I/O and CPU parallelism can be converted to sequential processing. However, I/O parallelism cannot be converted to CPU parallelism and vice versa. I Query I/O parallelism C Query CPU parallelism blank No parallelism	EPMOD
		Source: PLAN_TABLE.PARALLELISM_MODE	
P R=	1, 8	Page range	EPRAN
		Source: SYSIBM.PLAN_TABLE.PAGE_RANGE	
PACKAGE	1, 4	Package ID	
		Source: SYSIBM.SYSPACKAGE.NAME	
PAGESAVE (TSTP)	1, 3	Percentage of pages saved in the table space or partition as the result of using compression	
		Source: SYSIBM.SYSTABLEPART.PAGESAVE	
PARNT	1, 3	Number of relationships in which the table is a dependent; 0 means the row describes a view or alias.	
		Source: SYSIBM.SYSTABLES.PARENTS	
PARTITION (IXP)	1, 3	Partition number; 0 if index is not partitioned	
		Source: SYSIBM.SYSINDEXPART.PARTITION	
PARTITION (TSTP)	1, 3	Partition number; 0 if table space is not partitioned.	
		Source: SYSIBM.SYSTABLEPART.PARTITION	
PARTITIONS	1, 3	Number of parititions of the table space; 0 if the table space is not partitioned	
		Source: SYSIBM.SYSTABLESPACE.PARTITIONS	
PCTFREE (IXP)	1, 3	Percentage of each subpage or nonleaf page that is left as free space	
		Source: SYSIBM.SYSINDEXPART.PCTFREE	
PCTFREE (TSTP)	1, 3	Percentage of each page left as free space	
		Source: SYSIBM.SYSTABLEPART.PCTFREE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
PCTROWCOMP (TBL)	1, 3	Percentage of rows compressed within the total number of active rows of the table	
		Source: SYSIBM.SYSTABLES.PCTROWCOMP	
PCTROWCOMP (TSTP)	1, 3	Percentage of rows compressed within the total number of active rows of the partition	
		Source: SYSIBM.SYSTABSTATS.PCTROWCOMP	
PCTPAGES (TSTP)	1, 3	Percentage of total active pages in the partition that contain rows of the table	
		Source: SYSIBM.SYSTABSTATS.PCTPAGES	
PERCACT	1, 3	Percentage of space occupied by rows of data from active tables	
		Source: SYSIBM.SYSTABLEPART.PERCACTIVE	
PERCDROP	1, 3	Percentage of space occupied by rows of dropped tables; 0 for segmented table spaces	
		Source: SYSIBM.SYSTABLEPART.PERCDROP	
PF (Prefetch)	1, 2	Character indicating whether data pages were read in advance by PREFETCH:	EPREF
		 S pure sequential PREFETCH L PREFETCH through a page list blank unknown or no prefetch 	
		Source: PLAN_TABLE.PREFETCH	
PGSIZE (IX)	1, 3	Size of subpages in the index	
		Source: SYSIBM.SYSINDEXES.PGSIZE	
PGSIZE (TS)	1, 3	Size, in kilobytes, of pages in the table spaces	
		Source: SYSIBM.SYSTABLESPACE.PGSIZE	
PKSIZE	1, 4	Size, in bytes, of the base section of the package	
		Source: SYSIBM.SYSPACKAGE.PKSIZE	
PLAN	1, 2, 3, 4, 5	Name of the application plan. The list is in alphabetical order.	EPLN
		Source: SYSIBM.SYSPLAN.NAME	
PLAN FREED?	1, 4	Has plan been FREEd?	
		Y Yes N No	
		Source: Derived	
PLAN SIZE	1, 4	Size measured in bytes of the base section of the plan	
		Source: SYSIBM.SYSPLAN.PLSIZE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
PLENTRIES	1, 4	Number of package list entries for the plan. This number displays as a negative number if there are rows for the plan but the plan was bound in a prior release after fall back.	
		Source: SYSIBM.SYSPLAN.PLENTRIES	
PLN NO.	1, 2	Number identifying the step in which the query indicated in QBLOCKNO was processed	EPLNO
		Source: PLAN_TABLE.PLANNO	
PQTY (IXP)	1, 3	Primary space allocation in units of 4K storage blocks; 0 if storage group is not used	
		Source: SYSIBM.SYSINDEXPART.PQTY	
PQTY (TSTP)	1, 3	Primary space allocation in units of 4K storage blocks; 0 if a storage group is not used	
		Source: SYSIBM.SYSTABLEPART.PQTY	
PRECOMPILE TIME	1, 3, 4, 5	Date and time the application program was precompiled	
		Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP	
PSID	1, 3	Internal identifier of the set descriptor for the table space page	
		Source: SYSIBM.SYSTABLESPACE.PSID	
QBNO (Query Block Number)	1, 2	Number identifying the query or subquery for the row	EQBNO
		Source: PLAN_TABLE.QBLOCKNO	
QUALIFIER (Packages)	1, 4	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the package	
		Source: SYSIBM.SYSPACKAGE.QUALIFIER	
QUALIFIER (Plans)	1, 4	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the plan	
		Source: SYSIBM.SYSPLAN.QUALIFIER	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
QUERY TEXT	1, 4	For each SQL query block, identifies the type of SQL operation performed. For the outermost query, it identifies statement type Valid values include:	
		 SELECT Select operation INSERT Insert operation UPDATE Update operation SELUPD Select with FOR UPDATE OF operation DELCUR Delete WHERE CURRENT OF CURSOR operation UPDCUR Update WHERE CURRENT OF CURSOR operation CORSUB Correlated subquery operation NCOSUB Non-correlated subquery operation 	
		Source: PLAN_TABLE.QBLOCK_TYPE	
QUOTE	1, 4	SQL string delimiter for the SQL statements in the package:	
		Y Quotation mark	
		Source: SYSIBM.SYSPACKAGE.QUOTE	
RBA1 (TBL)	1, 3	Log RBA when the table was created	
		Source: SYSIBM.SYSTABLES.RBA2	
RBA2 (TBL)	1, 3	Log RBA when the table was last altered. If the table has not been altered, RBA1=RBA2.	
		Source: SYSIBM.SYSTABLES.RBA2	
RECLEN	1, 3	Maximum length of any record in the table	
		Source: SYSIBM.SYSTABLES.RECLENGTH	
RELEASE (Packages)	1, 4	Indicates when resources are released:	
		C At commit	
		D At deallocation	
		Source: SYSIBM.SYSPACKAGE.RELEASE	
RELEASE (Plans)	1, 4	Indicates when resources are released:	
		C At commitD At deallocation	
		Source: SYSIBM.SYSPLAN.RELEASE	
REMOTE	1, 4	Indicates the source of the package:	
		 C Package was created by BIND COPY N Package was locally bound by a DBRM Y Package was bound from a remote location 	
		Source: SYSIBM.SYSPACKAGE.REMOTE	
		SUULCE. SISIDII.SISFACKAUE.KEMUIE	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
REOPT(VAR)(Packages)	1, 4	 Indicates the REOPT option when the package was bound or rebound. Y Determines access path at execution time for SQL statements with variable values N Determines access path at bind time 	
		Source: SYSPACKAGE.REOPTVAR	
REOPT(VAR)(Plans)	1, 4	 Indicates the REOPT option when the package was bound or rebound. Y Determines access path at execution time for SQL statements with variable values N Determines access path at bind time 	
		Source: SYSPLAN.REOPTVAR	
SEGSIZE	1, 3	Number of pages in each segment of a segmented table space	
		Source: SYSIBM.SYSTABLESPACE.SEGSIZE	
SERVER	1, 4	Location name specified with the CURRENTSERVER option when the plan was last bound; blank if none was specified	
		Source: SYSIBM.SYSPLAN.CURRENTSERVER	
SPACE (IX)	1, 3	Number of kilobytes of DASD storage allocated to the index, as determined by the last execution of STOSPACE utility	
		Source: SYSIBM.SYSINDEXES.SPACE	
SPACE (IXP)	1, 3	Number of kilobytes of DASD storage allocated to the partitioned index as determined by the last execution of the STOSPACE utility	
		Source: SYSIBM.SYSINDEXPART.SPACE	
SPACE (TS)	1, 3	Number of kilobytes of DASD storage allocated to the table space as determined by the last execution of the STOSPACE utility	
		Source: SYSIBM.SYSTABLESPACE.SPACE	
SPACE (TSTP)	1, 3	Number of kilobytes of DASD storage allocated to the partitioned table space as determined by the last execution of the STOSPACE utility	
		Source: SYSIBM.SYSTABLEPART.SPACE	
SQL TEXT	5	SQL text of the statement	
		Source: SYSIBM.SYSSTMT.TEXT	
		Source: SYSIBM.SYSPACKSTMT.STMT	
SQLCODE/ SQLSTATE	9	Contains either the SQLCODE or the SQLSTATE depending on the value you have specified on the EXPLAIN/SQL Defaults Housekeeping panel (KTEPHOMI).	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
SQLERR	1, 4	Indicates the SQLERROR option on the most recent BIND:	
		C Option was CONTINUE N Option was NOPACKAGE	
		Source: SYSIBM.SYSPACKAGE.SQLERROR	
SQLRULES	2	The SQLRULES option used when the Plan was bound	
		Source: SYSIBM.SYSPLAN.SQLRULES	
SQTY (IXP)	1, 3	Secondary space allocation in units of 4K storage blocks; 0 if storage group is not used	
		Source: SYSIBM.SYSINDEXPART.SQTY	
SQTY (TSTP)	1, 3	Secondary space allocation in units of 4K storage blocks; 0 if a storage group is not used	
		Source: SYSIBM.SYSTABLEPART.SQTY	
SRC G (Sort Composite Table - Group by)	1, 2	Indicates whether a sort is performed due to a group by:	ESRCG
		Y Yes N No	
		Source: PLAN_TABLE.SORTC_GROUPBY	
SRC ID	1, 2, 8	Parallel group identifier for the parallel sort of the composite table; 0 if not applicable	ESCID
		Source: PLAN_TABLE.SORTC_PGROUP_ID	
SRC J (Sort Composite Table - Join)	1, 2	Indicates whether a sort is performed on the composite table to remove duplicate rows due to join method 2 or 4:	ESRCJ
		Y Yes N No	
		Source: PLAN_TABLE.SORTC_JOIN	
SRC O (Sort Composite Table - Order by)	1, 2	Indicates whether a sort is performed due to order by or quantified predicate:	ESRCO
		Y Yes N No	
		Source: PLAN_TABLE.SORTC_ORDERBY	
SRC U (Sort Composite Table - Unique)	1, 2	Indicates whether a sort is performed on the composite table to remove duplicate rows:	ESRCU
		Y Yes N No	
		Source: PLAN_TABLE.SORTC_UNIQ	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
SRN G (Sort New Table - Group by)	1, 2	Indicates whether a sort is performed due to a group by clause: Y Yes N No Source: PLAN_TABLE.SORTC_GROUPBY	ESRNG
SRN ID	1, 2, 8	Parallel group identifier for the parallel sort of a new table; 0 if not applicable Source: PLAN_TABLE.SORTN_PGROUP_ID	ESNID
SRN J (Sort New Table - Join)	1, 2	Indicates whether a sort is performed on the new table if join method is 2 or 4: Y Yes N No	ESRNJ
SRN O (Sort New Table - Order by)	1, 2	Source: PLAN_TABLE.SORTC_JOIN Indicates whether a sort is performed on a new table due to an order by clause: Y Yes N No Source: PLAN_TABLE.SORTC_ORDERBY	ESRNO
SRN U (Sort New Table - Unique)	1, 2	Indicates whether a sort is performed on the new table to remove duplicate rows: Y Yes N No Source: PLAN_TABLE.SORTC_UNIQ	ESRNU
STATEMENT COST	1, 6, 8, 9	Statement cost. If the statement cost field is suffixed with an asterisk, it indicates that the statement cost may be in error as the result of a column being compared to a host variable or literal of a different type of length. You can filter for this condition using filter ETCMI. For an explanation of filter ETCMI, see the information provided under <i>cost field discrepancy identifier</i> earlier in this list of fields.	ETCST
STATEMENT TYPE	9	Source: Derived Statement type Source: Derived	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
STATUS (TBL)	1, 3	Status of the table definition:	
		 I The table's definition is incomplete because it lacks a primary index X Table has a primary index blank Table has no primary key, or is a catalog table, or the row describes a view or alias 	
		Source: SYSIBM.SYSTABLES.STATUS	
STATUS (TS)	1, 3	 Availability status of the table space: A Available C Incomplete because no partitioned index has been created P Check Pending S Check Pending with the scope less than the entire table space T Incomplete because no table has been created 	
		Source: SYSIBM.SYSTABLESPACE.STATUS	
STATSTS (IX)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSINDEXES.STATSTIME	
STATSTS (IXP)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSINDEXPART.STATSTIME	
STATSTS (TBL)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSTABLES.STATSTIME	
STATSTS (TS)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSTABLESPACE.STATSTIME	
STATSTS (TSTP)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSTABLEPART.STATSTIME	
STATSTSP (IXP)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSINDEXSTATS.STATSTIME	
STATSTSP (TSTP)	1, 3	Date and time when the last invocation of RUNSTATS updated the statistics	
		Source: SYSIBM.SYSTABLESTATS.STATSTIME	
STMT COST	1, 6, 8, 9	Statement cost	ETCST
		Source: Derived	
STMT NO	2, 9	Statement number	EORNO
		Source: SYSIBM.SYSSTMT.STMTNO	EQYNO
		Source: SYSIBM.SYSPACKSTMT.STMTNO	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
STORNAME (IXP)	1, 3	Name of storage group or ICF catalog used for space allocation	
		Source: SYSIBM.SYSINDEXPART.STORNAME	
STORNAME (TSTP)	1, 3	Name of storage group used for allocation; blank if STORTYPE = E	
		Source: SYSIBM.SYSTABLEPART.STORNAME	
STORTYPE (IXP)	1, 3	Type of storage allocation:	
		 E Explicit and STORNAME names an ICF catalog I Implicit and STORNAME names a storage group 	
		Source: SYSIBM.SYSINDEXPART.STORTYPE	
STORTYPE (TSTP)	1, 3	Type of storage allocation:	
		E Explicit (storage group is not used)I Implicit (storage group used)	
		Source: SYSIBM.SYSTABLEPART.STORTYPE	
SUBPAG=	1, 3	Number of subpages in the index	
		Source: SYSIBM.SYSINDEXES.PGSIZE.	
SYSENTRIES (Packages)	1, 4	Number of enabled or disabled entries for this package in SYSIBM.SYSPKSYSTEM	
		Source: SYSIBM.SYSPACKAGE.SYSENTRIES	
SYSENTRIES (Plans)	1, 4	Number of connections (rows in SYSIBM.SYSPLSYSTEM)	
		Source: SYSIBM.SYSPLAN.SYSENTRIES	
TABNO=	8	Position of the FROM clause table referred to for the row.	
		Source: SYSIBM.PLAN_TABLE.TABNO	
TBCREATR	1, 3	For an alias, the authorization ID of the owner of the referred table or view; otherwise, blank	
		Source: SYSIBM.SYSTABLES.TBCREATOR	
TBL	1, 3	Name of table	ETBL
		Source: SYSIBM.SYSTABLES.CREATOR	
		Source: SYSIBM.SYSTABLES.NAME	
		Source: PLAN_TABLE.CREATOR	
		Source: PLAN_TABLE.TNAME	
TBL=	1, 8	Name of table; displayed only if the source is nonblank	
		Source: PLAN_TABLE.CREATOR	
		Source: PLAN_TABLE.TNAME	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
TBNAME	1, 3	For an alias, the name of the referred table or view; otherwise, blank	
		Source: SYSIBM.SYSTABLES.TBNAME	
TS	1, 3	Name of table space	
		Source: SYSIBM.SYSTABLESPACE.DBNAME	
		Source: SYSIBM.SYSTABLESPACE.NAME	
TSTP	1, 3	Partitioned table space name	
		Source: SYSIBM.SYSTABLEPART.DBNAME	
		Source: SYSIBM.SYSTABLEPART.TSNAME	
ТҮРЕ	1, 3	Type of object:	
		 A Alias T Table V View 	
		Source: SYSIBM.SYSTABLES.TYPE	
UNIQUE	1, 3	 Indicates whether the index is unique: D No (Duplicates are allowed) U Yes P Primary key (Unique) Source: SYSIBM.SYSINDEXES.UNIQUERULE 	
VALID (Packages)	1, 4	 Indicates whether the package is valid: Y Yes N No A table has been altered but package is still valid H A table has been altered, but package is still valid if using DB2 Version 5.1 or greater Source: SYSIBM.SYSPACKAGE.VALID 	
VALID (Plans)	1, 4	Indicates whether the plan is valid:	
		 Y Yes N No A Table or table space alteredno rebinding needed H A table has been altered, but plan is still valid if using DB2 Version 5.1 or greater Source: SYSIBM.SYSPLAN.VALID 	

FIELD	ON FORMAT	DESCRIPTION	FILTERS
VALIDATE (Packages)	1, 4	 Indicates whether validity checking can be deferred until run time B All checking must be done at BIND R Validation is done at run time for tables that do not exist at BIND time Source: SYSIBM.SYSPACKAGE.VALIDATE 	
VALIDATE (Plans)	1, 4	 Indicates whether validity checking can be deferred until run time B all checking must be done at BIND R checking is differred if tables, views or privileges do not exist at BIND time. Source: SYSIBM.SYSPLAN.VALIDATE 	
VALPROC	1, 3	Name of the validation procedure; blank if the row describes a view or alias, or a table without a validation procedure Source: SYSIBM.SYSTABLES.VALPROC	
VCATNAME (IXP)	1, 3	Name of ICF catalog used for space allocation Source: SYSIBM.SYSINDEXPART.VCATNAME	
VCATNAME (TSTP)	1, 3	Name of ICF catalog used for space allocation Source: SYSIBM.SYSTABLEPART.VCATNAME	
VERSION (DBRM or Packages)	1, 2, 4	Version identifier for the DBRM or package Source: SYSIBM.SYSDBRM.VERSION Source: SYSIBM.SYSPACKAGE.VERSION	
WO	1, 2, 4	Indicates when the access path was determined. Valid values include: R At run time Blank At bind time Source: PLAN_TABLE.WHEN_OPTIMIZE	

Commands

COMMAND	DESCRIPTION
EALL	Include EBIND, ECOST, EOBJ, EPATH, EPTBL, ERECM and ESTMT sections on the EXPLAIN Format 0 display.
EBIND	Include EBIND section on the EXPLAIN Format 0 display.
ECOST	Include ECOST section on the EXPLAIN Format 0 display.
EKEYS	Include index key information on the EXPLAIN Format 0 object information display.
EOBJ	Include EOBJ section on the EXPLAIN Format 0 display.
ЕРАТН	Include EPATH section on the EXPLAIN Format 0 display.
EPTBL	Include EPTBL section on the EXPLAIN Format 0 display.
EPTB2	Include EPTB2 section on the EXPLAIN Format 0 display.

The following commands are available on this panel:

Commands (continued)

COMMAND	DESCRIPTION
ERECM	Include ERECM section on the EXPLAIN Format 0 display.
ESTMT	Include ESTMT section on the EXPLAIN Format 0 display.
EXODS	Output EXPLAIN Display to a user PDS. The command may take the form EXODS member where member specifies the name of the member to which the EXPLAIN Display is output. If a member name is specified and that member already exists, it will be replaced unless you specify the MOD option (see "Controlling the Destination of !DB/EXPLAIN Output") in the <i>!DB/EXPLAIN User's Guide</i> .
	If no member name is specified and if you have specified on Housekeeping panel KTEPHOOD that the Output Options panel is to be displayed when an EXPLAIN Display is output, then panel KTEPOUTP (Output Options) is displayed.
FIND	Find a specific character string on the display. Can be abbreviated as F. See "Format of the FIND command" later in this unit for expanded information about the FIND command.
NOVERS	Do not display version.
OUT	Generate REXX program to update catalog statistics or create SQL statements to update catalog statistics depending on the value specified for OUT statistics format on the Housekeeping panel KTEPHOMI (EXPLAIN/SQL Defaults). The command may take the form OUT member where member specifies the name of the member to which statistics are output. If a member name is specified and that member already exists, it will be replaced unless you specify the MOD option (see "Controlling the Destination of !DB/EXPLAIN Output") in the <i>!DB/EXPLAIN User's</i> <i>Guide</i> . If no member name is specified and if you have specified on Housekeeping panel KTEPHOOD that the Output Options panel is to be displayed when statistics are output, then panel KTEPOUTP (Output Options) is displayed.
RESET	Reset all sections of the Format 0 display to "exclude".
RFIND	Reexeute the last FIND command. Can be abbreviated as RF.
VERS	Display version.

Format of the FIND command

The FIND command can be abbreviated as \mathbf{F} . The format of the FIND command is as follows:

FIND string [FIRST|LAST|NEXT|PREV] [ASIS]

This table provides information about the parameters of the FIND command. All parameters are optional unless specifically declared as required.

Format of the FIND command (continued)

Parameter	Meaning
string (required)	One of:
	• A quoted or unquoted string that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	• * (asterisk)—meaning find an occurrence of the last value entered for <i>string</i> .
FIRST	Find the first occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
LAST	Find the last occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
PREV	Find the previous occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
NEXT	Find the next occurrence of the string (the default) on the display. Ignore the case of any characters in the string when performing the FIND.
ASIS	Can be included with any of the above parameters and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

EXPLAIN Compare

Overview

This unit describes the EXPLAIN Compare panel.

Background about the EXPLAIN Compare panel

The EXPLAIN Compare panel (KTEPCMPR) performs either of the following actions:

- Compares the results from the latest EXPLAIN of a selected plan with results obtained from executing a BIND EXPLAIN(YES) on the plan. Housekeeping's BIND Compare panel (KTEPHOBC) controls how the compares are done.
- When invoked from the Explain History panel or as the result of compares of plans, packages, or DBRMs caused by issuing CEXPL on the Compare History panel, compares the two latest EXPLAINs. Housekeeping's Compare Options panel (KTEPHOCO) controls how the compares are done.

The EXPLAIN Compare panel (KTEPCMPR) shows all access path information.

The access path for a !DB/EXPLAIN EXPLAIN of a plan may differ from the access path obtained from a BIND EXPLAIN(YES) on the plan. The difference occurs because each works differently.

- When !DB/EXPLAIN performs an EXPLAIN, each host variable is replaced by a parameter marker. Parameter markers imply that the corresponding host variable will have the same data type and length as the associated column. In this way, the EXPLAIN returns the *optimal* access path for a statement.
- When a BIND EXPLAIN(YES) is performed, host variable type conversion may occur and be accounted for. Thus, the BIND EXPLAIN(YES) returns the *actual* access path for each statement.

You can view text describing the differences by entering the EDIFF command. The DIFF command resets the display.

Compare processing

The following summarizes the Compare processing that occurs

- If invoking Compare from plans, packages, or DBRMS (BIND COMPARE):
 - The EXPLAIN History is checked to verify that a latest EXPLAIN exists.
 - Libraries are validated.
 - If any condition exists that may affect the results of the pending BIND, the EXPLAIN Compare Warning panel display.
 - If no validation errors or warnings exist, the COMPARE Processing panel displays. This panel warns of possible delays resulting from executing a BIND statement.
 - A BIND EXPLAIN(YES) is performed. A dummy plan or package is created.
 - If the BIND is successful, the EXPLAIN Compare panel appears.
- If invoking Compare from EXPLAIN History:
 - Choose two EXPLAIN Histories with select C.
 - The EXPLAINs are compared.
 - The EXPLAIN Compare panel appears.
- If invoking Compare from Compare History as the result of the issuance of a CEXPL command, the current object is compared with the historical object and any differences in access path information are displayed on this EXPLAIN Compare panel.

Access

You can access this panel in three ways:

- Select an item to compare from the Plans, Packages, or DBRMs panels. A dummy plan is bound with EXPLAIN(YES) and the results are compared to the selected plan, package, or DBRM.
- Select two items to compare from the EXPLAIN History display. The differences between the two EXPLAINs are shown on the EXPLAIN Compare panel.
- Issue the command CEXPL from the Compare History panel. Differences in the EXPLAIN of the compared objects are displayed on this panel.

You are returned to the invoking panel when you exit EXPLAIN Compare.

Panels

The following illustration shows the EXPLAIN Compare panel.

C O M P A R E E X P L A I N S Cmds: DO (Menu) GLOBAL (Menu)		
STMT QB MX E J P AC I MT MJ P ACCESS JOIN SRN SRC SRN SRC NO. NO. OP M T R CS X CL CL M DG ID DG ID ID UJOGUJOG LCK		
PACKAGE: DSNHYCRD COLLID: DSNHYCRD EXPLAINED: 1999/12/09 VERSION: V500 PACKAGE: DSNHYCRD COLLID: DSNHYCRD EXPLAINED: 1999/12/03 VERSION: V500		
204 1 0 E 0 I N 2 0 0 0 NNNNNNN IS TBL=SYSIBM.SYSTABLES NDX=SYSIBM.DSNDTX01 STMT_COST= 52.8		
Query Type=SELECT 204 1 0 E 0 0 M 2 0 0 0 0 0 0 NNNNNNN IS TBL=SYSIBM.SYSTABLES NDX=SYSIBM.DSNDTX01 NDX=SYSIBM.DSNDTX01		
STMT COST= 52.8 Query Type=SELECT 1051 1 0 E 0 0 M 2 0 0 0 0 0 0 NNNNNNN IS L TBL=SYSIBM.SYSTABLES NDX=SYSIBM.DSNDTX01 NDX=SYSIBM.DSNVVX01		
STMT COST= 1,419.5 Query Type=SELECT		

Panels (continued)

The following illustration shows the EXPLAIN Compare Warning panel.

CMD ===>	DB/EXPLAIN DB2=D31A SCROLL ===> PAGE W A R N I N G S
Press ENTER to ter	re warnings and proceed with COMPARE processing. minate COMPARE processing. with an X are in effect
warnings denoted w	
Х	One or more DBRM libraries have been migrated.
X X	One or more DBRM libraries have been migrated and an HRECALL request has been issued.
X X X	The timestamp associated with the DBRM in the catalog extract does not match the timestamp in the DB2 DBRM.

The following illustration shows the EXPLAN Compare Processing panel.

```
COMPARE processing involves the execution of a BIND statement for the selected Plan or Package. The time required for this process is dependent on the size of your DB2 system, the number of DB2 users, and overall system load.
```

Fields

FIELDS	DESCRIPTION	
ACC DEG	Number of parallel I/O streams activated by a query.	
	Source: PLAN_TABLE.ACCESS_DEGREE	
ACC PID	Identifier of the parallel group.	
	Source: PLAN_TABLE.ACCESS_PGROUP_ID	
ACCS (Access)	Method of accessing the new table:	
	IBy an indexI1One-fetch index scanNIndex scan when predicate contains IN keywordRtable space scanMXBy a multiple index scan on the index named in ACCESSNAMEMIBy an intersection of multiple indexesMUBy a union of multiple indexesblankNot applicable to the current row	
	Source: PLAN_TABLE.ACCESSTYPE	
COLLECTION	Collection ID.	
	Source: PLAN_TABLE.COLLID	
CORR=	Correlation name of a table or view that is specified in the statement. If no correlation name is specified or if the DB2 subsystem is not at least Version 4, the field is blank.	
	Source: PLAN_TABLE.CORRELATION_NAME	
DBRM or PACKAGE NAME	DBRM or package name.	
	Source: PLAN_TABLE.PROGNAME	
EM (EXPLAIN METHOD)	Type of EXPLAIN performed:	
	WWhatifBBind CompareEEXPLAINPPLAN_TABLE extract*Error occurred during the EXPLAIN	
	Source: Derived	
EXPLAIN DATE/TIME	EXPLAIN timestamp.	
	Source: PLAN_TABLE.TIMESTAMP	
EXPLAIN DIFFERENCES	Text describing the differences in the EXPLAINs.	
	Source: Derived	
FN (Function)	A character that indicates when an SQL column function was evaluated.	
	R At data retrieval time S At sort time blank To be decided at run time Source: PLAN_TABLE.COLUMN_FN_EVAL	

FIELDS	DESCRIPTION	
INDEXNAME	For ACCESSTYPE I, I1, N, or MX, the name of the index; otherwise blank.	
	Source: PLAN_TABLE.ACCESSNAME	
IX (Index Only)	Indicates whether access to an index alone is enough to satisfy the query:	
	Y Yes N No	
	Source: PLAN_TABLE.INDEXONLY	
J T=	Join type	
-	Source: SYSIBM.PLAN_TABLE.JOIN_TYPE	
JOI DEG	The number of parallel I/O streams used to join tables.	
	Source: PLAN_TABLE.JOIN_DEGREE	
JOI PID	The identifier of the parallel group used to join tables.	
	Source: PLAN_TABLE.JOIN_PGROUP_ID	
LCK	Lock mode of the table space that contains the new table:	
	ISIntent ShareIXIntent ExclusiveSShareXExclusiveSIXShare with intent exclusiveUUpdate	
	Source: PLAN_TABLE.TSLOCKMODE	
ME (Method)	A number that indicates the join method used for the step described by the row:	
	0First table accessed1Nested loop join2Merge scan join3Sorts4Hybrid join	
	Source: PLAN_TABLE.METHOD	
MJCL	The number of columns being joined during a merge scan join. If the join method is not a merge scan or if DB2 is not at least Version 4, the value of this field is 0.	
	Source: PLAN_TABLE.MERGE_JOIN_COLS	
MTCL	For ACCESSTYPE I, I1, N, or MX, the number of index keys used in an index scan; otherwise 0.	
	Source: PLAN_TABLE.MATCHCOLS	
МХОР	Number indicating the sequence of steps in a multiple index operation.	
	Source: PLAN_TABLE.MIXOPSEQ	

FIELDS	DESCRIPTION	
(NAME heading)	Variable field that describes the type of data displayed in the column below it.	
	DBRM PACKAGE	
	Source: PLAN_TABLE.PROGNAME	
РМ	The kind of parallelism that is used at bind time (if any). At execution time, I/O and CPU parallelism can be converted to sequential processing. However, I/O parallelism cannot be converted to CPU parallelism and vice versa.	
	I Query I/O parallelism	
	C Query CPU parallelism	
	blank No parallelism	
	Source: PLAN_TABLE.PARALLELISM_MODE	
P R=	Page range	
	Source: SYSIBM.PLAN_TABLE.PAGE_RANGE	
PF (PREFETCH)	Character that indicates whether data pages were read in advance by PREFETCH:	
	S pure sequential PREFETCH	
	L PREFETCH through a page list	
	blank unknown or no PREFETCH	
	Source: PLAN_TABLE.PREFETCH	
PLAN NAME	Plan name.	
	Source: SYSIBM.SYSSTMT.PLNAME	
	Source: SYSIBM.SYSPACKSTMT.NAME	
QBNO (Query Block Number)	Number that identifies the query or subquery for the row.	
	Source: PLAN_TABLE.QBLOCKNO	
QUERYNO	Number that identifies the statement being EXPLAINed.	
	Source: PLAN_TABLE.QUERYNO	

FIELDS	DESCRIPTION
QUERY TYPE	For each SQL query block, identifies the type of SQL operation performed. Valid values include:
	SELECT Select operation
	INSERT Insert operation
	UPDATE Update operation
	DELETE Delete operation
	SELUPD Select with FOR UPDATE OF operation
	DELCUR Delete WHERE CURRENT OF CURSOR operation
	UPDCUR Update WHERE CURRENT OF CURSOR operation
	CORSUB Correlated subquery operation
	NCOSUB Non-correlated subquery operation
	Source: PLAN_TABLE.QBLOCK_TYPE
SRC G	Indicates whether a GROUP BY clause results in a sort on the composite
(Sorts - Group By, Composite	table:
Table)	Y Yes N No
	Source: PLAN_TABLE.SORTC_GROUPBY
SRC ID	Parallel group identifier for the parallel sort of the composite table; 0 if
	not applicable Source: PLAN_TABLE.SORTC_PGROUP_ID
SRC J	Whether a sort is performed on the composite table if METHOD is 2 or
(Sort - Join, Composite Table)	4.
	Y Yes N No
	Source: PLAN TABLE.SORTC JOIN
SRC O	Whether an ORDER BY clause or a quantified predicate results in a sort
(Sort - Order By, Composite	on the composite table.
Table)	Y Yes N No
	Source: PLAN_TABLE.SORTC_ORDERBY
SRC U	Whether a sort is performed on the composite table to remove duplicate
(Sort - Unique, Composite Table)	rows.
	Y Yes N No
	Source: PLAN_TABLE.SORTC_UNIQ

FIELDS	DESCRIPTION	
SRN G	Whether a GROUP BY clause results in a sort on the new table.	
(Sorts - Group By, New Table)	Source: PLAN_TABLE.SORTN_GROUPBY	
SRN ID	Parallel group identifier for the parallel sort of a new table; 0 if not applicable	
	Source: PLAN_TABLE.SORTN_PGROUP_ID	
SRN J	Whether a sort is performed on the new table if METHOD is 2 or 4.	
(Sort - Join, New Table)	Y Yes N No	
	Source: PLAN_TABLE.SORTN_JOIN	
SRN O (Sort - Order By, New	Whether an ORDER BY clause results in a sort on the new table.	
Table)	Source: PLAN_TABLE.SORTN_ORDERBY	
SRN U	Whether a sort is performed on the new table to remove duplicate rows.	
(Sort - Unique, New Table)	Y Yes N No	
	Source: PLAN_TABLE.SORTN_UNIQ	
STMT COST	Statement cost	
	Source: Derived	
STMT NO.	Statement number.	
	Source: SYSIBM.SYSSTMT.STMTNO	
	Source: SYSIBM.SYSPACKSTMT.STMTNO	
VERSION	Version identifier for the DBRM or package.	
	Source: PLAN_TABLE.VERSION	
WO	Indicates when the access path was determined. Valid values include:	
	R At run time (execution) Blank At bind time	
	Source: PLAN_TABLE.WHEN_OPTIMIZE	

Commands

The following commands are available on the EXPLAIN Compare panel:

COMMAND	DESCRIPTION
EDIFF	Describes all the differences in access path between the two EXPLAINs.
DIFF	Reset the effect of the EDIFF command.

EXPLAIN History

Overview

This unit describes the EXPLAIN History panel.

Background about the EXPLAIN History panel

The EXPLAIN History panel lists the historical EXPLAINs for a specific DBRM or all the DBRMs in a plan or package. The EXPLAIN History retains only those EXPLAINs that were performed with !DB/EXPLAIN's EXPLAIN plan, DBRMs, or packages, or with a PLAN_TABLE Extract.

EXPLAIN history is retained until you ask for it to be deleted on the panel or on an extract PLAN_TABLE purge. You must have extract PLAN_TABLE purge (EPP) authority to delete history online.

Formats

This panel is available in two formats.

Format	Displayed Fields
Format 1	Name, Precompile Date/Time, EXPLAIN Date/Time, Cost
Format 2	Name, EXPLAIN Date/Time, Error, Type, DB2VRM, Cost

Access

The panel is invoked by using the **H** (EXPLAIN History) select or issuing the **LEHIST** command from the Plans, DBRMs, or Packages panels.

Panels

This panel shows format 1 of the EXPLAIN History panel.

CMD ===>	-	B/EXPLAIN DE EXPLAIN			SCROL	L ===> PAGE
Cmds: DO			1 11 1 5 1	UKI	Selec	ts: ?
S DBRM/ L PACKAGE	PRECOM DATE	PILE TIME		EXPLAIN	TIME	TOTAL STMT COST
_ DSDDB2UP VERSION:	1999/02/23 04:	42:08.610000	1999/12/15	08:54:02.	590000	8.8
- DSDDB2UP VERSION:	1999/02/23 04:	42:08.610000	1999/12/13	15:29:53.	680000	8.8
VERSION:	1998/10/25 01:					0.3
VERSION:	1998/10/25 01: ****					0.3 ********

This panel shows format 2 of the EXPLAIN History panel.

	===>	_		AIN	HIS	 Т О R Y	SC	ROLL ===> PAGE
Cı 	mds: DO (M	enu) GLOBAL	(Menu)				Sel	ects: ? (Menu)
S L	DBRM/ PACKAGE	EXI DATE	PLAIN	TIME	ERROR	ТҮРЕ	DB2VRM	TOTAL STMT COST
- 		1999/12/15 1999/12/13 1999/12/15 1999/12/15 1999/12/13	15:29:53 08:54:02 15:29:53	.680000 .590000	Y Y N N LIST *	GEXPL GEXPL GEXPL EXPL	310 310 310 310 310	8.8 8.8 0.3 0.3

The Delete selection displays the History Delete Confirmation panel, shown below. This selection deletes all historical EXPLAINs currently displayed.

```
Cmd ===>

HISTORY DELETE CONFIRMATION

You have requested to delete EXPLAIN History. Once deleted, the EXPLAIN

History can not be retrieved.

Press ENTER to delete EXPLAIN History. Press END to cancel the request.
```

Fields and Associated Sorts and Filters

The following table is an alphabetical listing of fields in all the EXPLAIN History panel formats.

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DB2VRM	2	DB2 Version and Release under which the EXPLAIN occurred; if extracted the version and release of DB2 at the time of the extract.	HDVER
		Source: Derived	
ERROR	2	Indicates that an error (SQL error, parser error, etc.) occurred during EXPLAIN processing. Y Yes N No Source: Derived	HERR
EXPLAIN DATE/TIME	1, 2	Date this DBRM or package was last EXPLAINed. Source: PLAN_TABLE	HEXDT
 (NAME Heading) DBRM PACKAGE 	1, 2	Variable field describing the type of data displayed in the column below it.	HNAME HDBRM
PRECOMPILE DATE/TIME	1	Date the DBRM or package was precompiled. Source: SYSIBM.SYSDBRM.PRECOMPDATE PRECOMPTIME Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP	HPCDT
STMT COST	1, 2	Total statement cost.	HTCST
	-, -	Source: Derived	
ТҮРЕ	2	Type of EXPLAIN.EXPLEXPLAINGEXPLEXPLAIN and gather statisticsWHATWhatif AnalysisPTABLPLAN_TABLESource:Derived	НЕТҮР
VERSION	1	Version identifier for the DBRM or Package. Source: Derived	HVER

Selects

SELECT	DESCRIPTION	TAKES YOU TO
С	Compare two historical EXPLAINs.	EXPLAIN Compare (KTEPCMPR)
S	Display EXPLAIN.	EXPLAIN (KTEPEXPL)
Y	Delete historical EXPLAINs.	EXPLAIN History Delete Confirmation (KTEPHIDL)

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
DELETE	Delete historical EXPLAINs.	EXPLAIN History Delete Confirmation (KTEPHIDL)

Extract History

Overview

This unit describes the Extract History panel.

Background about the Extract History panel

The Extract History (KTEPXHST) panel lists historical extract information for the three extract datasets: Statements, DB2 catalog, and PLAN_TABLE.

Access

To review the historical extracts, select option 4 from the Administration Menu of !DB/EXPLAIN.

Panel

The following illustration shows the Extract History panel.

CMD ===> CMDS: GL	AENII)	E	X	(1	R	A C	т н	IST	0	RY		===> PAG S: ? (MEN
SEL DATE	CT TIME							OWNEF OWNEF		AN/PKG OPER	PLAN/PKG MASK#1	PLAN/PK MASK#2
	 13:16:55 13:22:08	- F	c	X	R	0	SYSI SYSI	ВМ	SUC	CESSFUL	TERMINATI	
	 13:16:55 13:17:01	S	С	Х	R	0	SYSI SYSI	ВМ	TNT	TILIZAT	TON	

Fields

FIELD	DESCRIPTION			
CAT OWNER	DB2 Catalog Owner.			
DESCRIPTION	Short description of success/failure of Extract.			
EXTRACT DATE/TIME	Date and time of Extract.			
ОК	Indicates if the Extract was successful:			
	Y Yes N No			
PG	Indicates action for the last Extract:			
	P Purge X Extract			
PKG MASK#1	Package or mask name for comparison.			
	The value must be a valid package name unless "LIKE" is specified as the operator, then must be a valid DB2 mask.			
PKG MASK#2	Package name for comparison.			
PKG OPER	Package mask operator.			
PLAN MASK#1	Plan or mask name for comparison.			
	The value must be a valid plan name unless "LIKE" is specified as the operator, then must be a valid DB2 mask.			
PLAN MASK#2	Plan name for comparison.			
PLAN OPER	Plan mask operator.			
PTBL OWNER	PLAN_TABLE Owner.			
SR	Source of the Extract:			
	CDB2 CatalogSSYSSTMT or SYSPACKSTMTPPLAN_TABLE			
TIMESTAMP	Extract timestamp used for purge.			
ТҮ	Type of Extract:			
	IIncrementalRReplacePPartial			
# GNRS	Number of Extract generations to keep.			

Selects

SELECT	DESCRIPTION					
J	Recreate the JCL used to generate this extract.					

Extract Update

Overview

This unit describes the Extract Update panel.

Background about the Extract Update panel

The Extract Update panel (KTEPXUAB) appears if you have requested to update the plan table extract file while someone else is updating the extract file. Panel options allow you to retry or cancel the update.

!DB/EXPLAIN saves all the updates to the plan table extract when you issue the XUPDT command. If you choose to cancel the update or exit !DB/EXPLAIN after making unsaved updates to the file, you will lose all updates. These updates include records generated when doing EXPL, EXPLA, GEXPL, and Whatif.

Access

The Extract Update panel is displayed automatically by !DB/EXPLAIN when you try to update the plan table extract while it is currently being updated by another user.

Panel

The following illustration shows the Extract Update panel.

Cmd ===> E X T R A C T U P D A T E The plan table extract file is currently not available for update. Press ENTER to try the update again. Press END to cancel the update. The changes you have made to plan table information since the last XUPDT will be permanently lost if you choose to cancel the plan table updates. (All EXPLAIN results and Statistics not committed to the plan table extract dataset will be lost if you cancel the Extract Update.) ENTER to retry plan table update END to cancel the plan table updates

Index Keys

Overview

This unit describes the Index Keys panel.

Background about the Index Keys panel

The Index Keys panel (KTEPCKEY) lists all key columns for indexes. Rows on the Index Keys panel are selectable. The Index Keys Selections panel (KTE3CKSE) allows you to display column statistics for the key columns.

Access

This panel can be accessed from the Whatif panel (KTEPWHIF) or the Estimator panel (KTEPESTM) using the K select.

Panels

The following illustration shows the Index Keys panel.

CMD ===>	- DB/EXPLAIN DB2=I	-	LINE 1 OF 4 SCROLL ===> CSR
CMDS: DO (Menu) GLOBA	INDEX L (Menu)	KEYS	SELECTS:? (Menu)
IXNAME=DSNDCX01	IXCREATOR:	=SYSIBM	
SEL COLUMN NAME	COLUMN NO	COLUMN SEQ	ORDERING
TBCREATOR TBNAME NAME	1 2 3	3 2 1	A A A
NAME ************************************	•	LIST ********	N ************************************

INDEX KEY SELECTIONS Select ===> S. Display Column Information

Fields

Filtering and sorting are not available for the Index Keys function.

FIELD	DESCRIPTION
COLUMN NAME	Name of the column of the key.
	Source: SYSIBM.SYSKEYS.COLNAME
COLUMN NO	Numeric position of the column in the table.
	Source: SYSIBM.SYSKEYS.COLNO
COLUMN SEQ	Numeric position of the column in the key.
	Source: SYSIBM.SYSKEYS.COLSEQ
IXCREATOR	Authorization ID of the owner of the index.
	Source: SYSIBM.SYSKEYS.IXCREATOR
IXNAME	Name of the index.
	Source: SYSIBM.SYSKEYS.IXNAME
ORDERING	Order of the column in the key:
	A Ascending
	D Descending
	Source: SYSIBM.SYSKEYS.ORDERING

Selects

SELECT	DESCRIPTION	TAKES YOU TO
S	Display column information.	Table Columns (KTEPTCOL)

Libraries

Overview

This unit describes the Libraries panel.

Background about the Libraries panel

The Libraries panel (KTEPLIBR) lists all DBRM libraries defined to the DB2 system.

Formats

This panel is available in three formats.

Format	Displayed Fields
Format 1	All Libraries
Format 2	DBRM Libraries
Format 3	Package Libraries

Access

Libraries can be accessed from the Primary Menu or the Sessions Menu.

Panels

The following illustration shows format 1 of the Libraries panel—all libraries.

CMD ===> DB/EXPLAIN L I Cmds: DO (Menu) GLOBAL (Menu)	SC B R A R I E S	IBRARY 1 of 19 ROLL ===> PAGE ects: ? (Menu)
S L DATASET NAME	STATUS	ALL
PP.CDB.RDB2DASD.DEMOCNTL TDDB.SCC.DBRM TDDB.SD2.DBRM TSDB08.DBT722.CNTL	NOT CATALOGED ON VOLUME OMON23 ON VOLUME OMON34 ON VOLUME OMON30	

The following illustration shows format 2 of the Libraries panel—DBRM libraries.

CMD ===>	DB2=D31ALIBRARY 1 SCROLL === B R A R I E S Selects: ?	=> PAGE
S L DATASET NAME	STATUS	DBRMS
PP.CDB.RDB2DASD.DEMOCNTL TDDB.SCC.DBRM TDDB.SD2.DBRM TSDB08.DBT722.CNTL	NOT CATALOGED ON VOLUME OMON23 ON VOLUME OMON34 ON VOLUME OMON30	

The following illustration shows format 3 of the Libraries panel—package libraries.

DB/EXPLAI CMD ===>	N DB2=D31A	LIBRARY 1 OF 19 SCROLL ===> PAGE
L Cmds: DO (Menu) GLOBAL (Menu)	IBRARIES	Selects: ? (Menu)
S L DATASET NAME	STATUS	PKGS
PP.CDB.RDB2DASD.DEMOCNTL PP.DB2.V23.DSNSAMP PP.QMF.V240.DSQDBRM TDDB.DBTOOLS.V103.D22A.CNTL	NOT CAT	ALOGED

The following illustration shows the Library Delete Confirmation panel.

```
Cmd ===> DB/EXPLAIN DB2=D31A ------

Cmd ===> LIBRARY DELETE CONFIRMATION
Press ENTER to delete (or HDELETE) the data set.
Press END to keep the data set.
Library Name TDDB.SCC.DBRM
Status ON VOLUME OMON23
```

Fields and Associated Sorts and Filters

FIELD	ON DESCRIPTION PANEL			
LERR (Library Error)	KTEPLIBR	Library Error values: Y Any error N None	LERR	
		Source: Derived		
LIBRARY NAME	KTEPLIBR	Name of either DBRM or package library. Source: SYSIBM.SYSDBRM.PDSNAME Source: SYSIBM.SYSPACKAGE.PDSNAME	LLIB	
ALL	KTEPLIBR	Number of DBRM and package members in library. Source: SYSIBM.SYSDBRM + SYSPACKAGE	L#ALL	
DBRMS	KTEPLIBR	Number of DBRM members in library. Source: SYSIBM.SYSDBRM	L#DBR	
PKGS	KTEPLIBR	Number of package members in library. Source: SYSIBM.SYSPACKAGE	L#PKG	
 (NAME heading) DBRM PACKAGE ALL 	KTEPLIBR	A variable field describing the type of data displayed in the column below it.		
 (No. of MEMBERS HEADING) DBRM PACKAGE ALL 	KTEPLIBR	This field is variable depending on what data will be displayed.		
STATUS	KTEPLIBR	Library Status values: Migrated Not Cataloged On Volume XXXXXX No Volumes in Catalog Not Verified (that is, the field is blank) Source: Derived	LSTAT	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
D	Display all DBRMs in the selected library.	DBRMs (KTEPDBRM)
K	Display packages in the selected library.	Packages (KTEPKACK)
R	Issue an HRECALL for the requested selection.	Redisplay KTEPLIBR with updated status information
V	Verify the selected library.	Redisplay KTEPLIBR with updated status information
Y	Delete the selected library.	Delete confirmation (KTEPLIDL)

Commands

After execution of each command, the Library panel reappears with the desired data.

COMMAND	DESCRIPTION
LALL	List all DBRM and package members.
LDBR	List all DBRM members.
LPKG	List all package members.

Online Menu

Overview

This unit describes the !DB/EXPLAIN Online Menu.

Background about the Online Menu

The Online Menu (KTEPMEON) provides entry to !DB/EXPLAIN. You can find more information about !DB/EXPLAIN's Online Menu and its functions in the chapter "Accessing !DB/EXPLAIN Functions" in the !DB/EXPLAIN User's Guide.

Access

You access the !DB/EXPLAIN Online Menu from the !DB/Tools Product Selection Menu.

Panel

The following illustration show the Online Menu panel.

------ DB/EXPLAIN DB2=D31A ------Cmd ===> ONLINE MENU Estae Flag ===> Y Extract ID ===> Create Batch JCL? ===> N (Y Yes N No) Specify Additional Data Sets? ===> N (Y Yes N No) Specify Member Lists? ===> N (Y Yes N No) Option ==> 11 SQL Statements Data Set Name : File Format : 2 BIND Commands Data Set Name Allocate DBRMLIB?: (Y Yes N No E Edit DBRMLIB concatenation) 3 DBRM Data Set Name : Owner/Qualifier : Plan: ------ (C) Copyright CANDLE Corp. 1993 - 1999 ------

Fields

FIELD	DESCRIPTION
CREATE BATCH JCL?	Determines whether the Generate JCL panel will be displayed to permit you to create the JCL to run the requested function in batch.
	YCreate batch JCLNDo not create batch JCL
ESTAE FLAG	Field set to Y unless informed otherwise by Candle Support Services.
EXTRACT ID	1-8 character ID that specifies the extract. Candle Corp. recommends using the DB2 Subsystem ID (SSID) as the first characters of the extract ID to allow for easy tracking of extracts
FUNCTION	Numeric field that represents the function to invoke.
SPECIFY ADDITIONAL DATASETS?	Determines whether a panel is displayed to permit you to provide a list of datasets to be used by the selected function.
	YPermit additional datasets to be enteredNDo not permit additional datasets to be entered
SPECIFY MEMBER LISTS?	Determines whether a list of partitioned data set members will be displayed from which you can select members to be processed.
	YDisplay list of partitioned data set membersNDo not display list of partitioned data set members

Output Options

Overview

This unit describes the Output Options panel.

Background about the Output Options panel

The Output Options panel allows you to specify where to store items.

Access

The Output Options panel appears before the Process Member Menu whenever SQL output is written to the User PDS.

Panel

The following illustration shows the Output Options panel.

```
Cmd ===>

OUTPUT OPTIONS

You have requested a function which will output data to a PDS member.

Specify the PDS, member name, and whether to modify onto member or not.

Library: TDDB.DE2.V235.TESTNG.USER

Member: BIND

Modify onto member: N

ENTER to accept values END to cancel request
```

Fields

Filtering and sorting are not available for the Index Keys function.

FIELD	DESCRIPTION		
LIBRARY NAME	Name of a PDS library		
MEMBER	Name of the member to which the output is written		
MODIFY ONTO MEMBER	Specifies whether to add output to the end of a member if that member exists, or whether to replace the member if it exists.		
	YAdd output to the end of a member if it existsNReplace the member if it exists		

Package Connections

Overview

This unit describes the Package Connections panel.

Background about the Package Connections panel

The Package Connections panel (KTEPKCON) lists all environments in which a particular package can be executed. Its source is the DB2 table SYSPKSYSTEM that contains zero or more rows for every local package. Each row represents a possible connection to an environment in which a package could be executed.

Access

The Package Connections panel can only be invoked by selecting option N (Connections) from the Packages panel (see "Packages" on page 166). From Package Connections, the user can only return to the Packages panel.

Panel

The following illustration shows the Package Connections panel.

CMD ===>	DB/EXPLAII	N DB2=D31A		SCROLL ===> PAG
	PACKAGI	ECONNEC	TIONS	
Cmds: GLOBAL	(Menu)			
	SYSTEM	CONNECTION	ENABLE	
	BATCH CICS		 Y N	
	DB2CALL DLIBATCH		N N	
	IMSBMP		N	

Fields and Related Sorts and Filters

CONNECT ENABLE	Connection name. Source: SYSIBM.SY Indicates whether to Y Enabled N Disabled		KCNN KENA
ENABLE	Indicates whether to Y Enabled		KENA
ENABLE	Y Enabled	he connections are enabled or disabled.	KENA
	Y Enabled		
SYSTEM	Source: System.System.ENABLE Environment. BATCH TSO Batch CICS Customer Information Control System DB2CALL DB2 Call Attachment Facility DLIBATCH DLI Batch Support Facility IMS IMS region IMSBMP IMSBMP region IMSMPP IMSMPP and IFP region REMOTE Remote Application Server		KSYS

Packages

Overview

This unit describes the Packages panel.

Background about the Packages panel

The Packages panel (KTEPKACK) and its associated information panel lists the packages defined in the DB2 catalog.

Formats

You can display the panel in seven formats.

Format	Displayed Fields
Format 1	Package, Value, SYSPACKAGE Indicators, Statements, Selects, Deletes, Updates, Inserts, Exclusive Locks, Shared Locks, Dynamicrules
Format 2	Package, Creator, Owner, Qualifier, Collection, Contoken
Format 3	Package, Creator, Timestamp, Package Size, Average Size, Statements, System Entries
Format 4	Package, Precompile Timestamp, Library
Format 5	Package, Precompile Timestamp, EXPLAIN Timestamp, Total DB2 Cost
Format 6	Package, EXPLAIN Timestamp, Maximum Cost, Average Cost, Total Cost
Format 7	Package, Statements, Selects, Declared Cursors, Deletes, Updates, Inserts, Shared Locks, Exclusive Locks
Format 8	Package Name, Collection ID, Group Member, Creator, Bind Timestamp

Access

Packages can be accessed from the Primary or Sessions Menus, or from the Plans, Collections, Tables, or Libraries panels.

Panels

The following illustration shows format 1 of the Packages panel.

DB/EXPLAIN DB2=D42B LINE1 OF 81 Cmd ===> SCROLL ===> CSR							
onia	PAC	KAGES	S				
Cmds: DO (Menu) GLOBAL (M	lenu)			Se	elects:	? (Me	enu)
VOVRIVDEQCCMDHR						LCK	-
SEL PACKAGE LPDESAPXUOHXELM	IEGR SIMIS	SELECTS	DELEIES	UPDATES	INSERIS	XCL	SHK
DSNESM68 NYY SRBNNNANNBN	N1 17	0	0	0	0	 0	
DSNESM68 NYY RRBNNNANNBN		0	0	0	0	0	0
DSNTEP2 NYY SRBNNNANNPN		0	0	0	0	0	0
DSN8CC0 NYY SRBNNNANNCN		1	0	Õ	0	Õ	0
DSN8CC1 NYY SRBNNNANNCN		-	1	1	ĩ	Õ	Õ
DSN8CC2 NYY SRBNNNANNCN			2	2	2	Õ	Õ
DSN8HC3 NYY SRBNNNANNCN	N1 113	2	2	3	3	Ō	Õ
DSN8IC1 NYY SRBNNNANNCN	N1 26	7	1	1	1	0	0
DSN8IC2 NYY SRBNNNANNCN	N1 58	14	2	2	2	0	0
EMQM1100 NYYCSBBNNNANNDN		0	0	0	0	0	0
EMQP1010 NYYCSRCNNNANN Y	N1 10	0	0	0	0	0	0
KO2SABP NYYCSRBNNNANNBN	N1 21	0	0	0	1	0	0
_ KO2SABP NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SABS NYYCSRBNNNANNBN		0	0	0	1	0	0
KO2SABS NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SACS NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SACS NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SADD NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SADD NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SADS NYYCSRBNNNANNBN		0	0	0	1	0	0
_ KO2SADS NYYCSRBNNNANNBN KO2SAU1 NYYCSRBNNNANNBN		0	0	0 0	1	0 0	0
_ KO2SAU1 NYYCSRBNNNANNBN KO2SAU1 NYYCSRBNNNANNBN		0 0	0 0	0	1	0	0 0
K02SAU1 NYYCSRBNNNANNBN		0	0	0	1	0	0
	10	0	0	0	1	0	U

The following illustration shows format 2 of the Packages panel.

CMD ===> DB/EXPLAIN DB2=D31A LINE15 OF 93 SCROLL ===> PAGE								
PACKAGES Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (M								
SEL PACKAGE	CREATOR	OWNER	QUALIFIER	COLLECTION	CONTOKEN			
DSNQVAUD DSNQVAUT DSNQVCAS	TD0209B TD0209B TD0209B TD0209B	TD0209B TD0209B TD0209B TD0209B	TD0209B TD0209B TD0209B TD0209B	DSNQCATV DSNQCATV DSNQCATV	14A420A612CD0104 14A420AA090A7A08 14A420B306EB5B5C			

The following illustration shows format 3 of the Packages panel.

DB/EXPLAIN DB2=D31A LINE15 OF 93 MD ===> SCROLL ===> PAGE									
PACKAGES Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)									
SEL PACKAGE CREATOR	DATE BIND TIME	PKSIZE	AVSIZE	STMTS	SYSENTRY				
 DSNQVAUD TD0209B DSNQVAUT TD0209B DSNQVCAS TD0209B 	0000/00/00 00:00:00.00000 0000/00/00 00:00:00.00000 0000/00/00 00:00:00.000000	2104	-	96 133 146	0 0 0				

The following illustration shows format 4 of the Packages panel.

CMD	===>		- DB/EXPL/	AIN DB2=D31A	SCROLL ===> PAGE
Cn	nds: DO (N	1enu) GLOBAI	_ (Menu)	PACKAGES	Selects: ? (Menu)
		PRECOM	PILE		
SEL	PACKAGE	DATE	TIME	LIBRARY	
	DSCSAMP4 VERSION:	1999/10/30	10:40:28	TSDB07.DBRMLIB.DATA	
_	DSCSAMP4 VERSION:	1999/10/30	10:40:28	TSDB07.DBRMLIB.DATA	
-		1999/10/30	10:40:28	TSDB07.DBRMLIB.DATA	

The following illustration shows format 5 of the Packages panel.

CMD		[)B/EXPLAIN	DB2=D31A ·			LINE1 OF 144 CROLL ===> PAGE
Cm	ds: DO (Me	nu) GLOBAL		АСКАСЕ	S	Se	lects: ? (Menu)
SEL	PACKAGE	PRECOME DATE		I DATE	EXPLAIN	TIME	TOTAL DB2 COST
_	ALTSQLMU VERSION:	1999/06/19	04:53:09	0000/00/00	00:00:00.	000000	0.0
-	ALTSQLMU VERSION:	1999/06/19	04:53:09	0000/00/00	00:00:00.	000000	0.0
-	ALTSQLMU VERSION:	1999/06/19	04:53:09	0000/00/00	00:00:00.	000000	0.0

The following illustration shows format 6 of the Packages panel.

	===>	DB,	/EXPLAIN	DB2=D31A		- LINE1 OF 144 ROLL ===> PAGE
Cm	ds: DO (Me	nu) GLOBAL (Me		СКАGES	Sele	ects: ? (Menu)
SEL	PACKAGE	EXPLAIN DATE	N TIME	STA MAXIMUM	TEMENT COSTS AVERAGE	TOTAL
- - -	ALTSQLMU ALTSQLMU ALTSQLMU	0000/00/00 00 0000/00/00 00 0000/00/00 00	0:00:00	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0

The following illustration shows format 7 of the Packages panel.

CMD ===>		DB/I		DB2=D31/			SCROLL	===> CSR	
PACKAGES Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)									
SEL PACKAGE	STMTS	SELECTS	DECLARE CURSORS		UPDATES	INSERTS	LOCK SHR	LOCK XCL	
DSNESM68 DSNESM68 DSNQVALI	17 17 2	0 0 1	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	

The following illustration shows format 8 of the Packages panel.

CMD ===>	DB/EXP Menu) GLOBAL (Menu)	РАСК	=D31A A G E S		LINE 1 OF 1,098 SCROLL ===> PAGE Selects: ? (Menu)
SEL PACKAGE		GROUP MEMBER		BIND TIMES	
 ALTSQLJR ALTSQLJR ALTSQLJR ALTSQLJR ALTSQLUM ASMDRV00 ASMFUBR ASMFUBR 	MLDEMO XDDB05 TSSC02 XDDB05 CANDLE_TE_SYSIBM CANDLE_TE_SYSIBM TSDB12 XDDB05 CANDLE_TE_SYSIBM CANDLE_TE_SYSIBM BRIANT KTEFUBAR KTEFUBAS			1999/04/20 1999/07/11 1999/07/11 1999/07/25 1999/07/25 1999/05/11 1999/05/11 1999/07/25 1999/07/25 1999/09/23 1999/10/21 1999/08/26 1999/08/26	19:49:07.226133 07:53:03.768070 20:33:41.613489 05:20:21.374542 20:33:59.458299 13:24:03.174351 19:03:16.786129 16:39:27.933250 09:45:42.293260 13:02:35.101652 08:42:38.227953 09:55:42.564846 18:20:38.990936 18:18:07.553504 14:43:13.321912

The Package Information panel shows all package information. This panel is scrollable.

----- DB/EXPLAIN DB2=D42B ------ LINE1 OF 24 Cmd ===> SCROLL ===> CSR PACKAGE INFORMATION Cmds: GLOBAL (Menu) -----UNITER : RGRAPH2 BOUND : 1999/10/16 18:19:51.766655 QUALIFIER : TDO214 CREATED : 1999/10/16 17:51:35.329147 1360 SYSENTRIES: 0 PRECOMPILE: 0001/01/01 00:00:00.000000 0 DEGREE : 1 GROUP MEMBER; T.TE500ACM.DBRM PACKAGE : DSNESM68 COLLECTION: DSNESPRR CONTOKEN: 14EDB8820C325F30 CREATOR : RGRAPH OWNER : RGRAPH2 BOUND FREED? : N PK SIZE : 136 AVG SIZE: LIBRARY : TDKT.TE500ACM.DBRM VERSION : V500 VALID: Y OPERATIVE: Y VALIDATE: R RELEASE: C EXPLAIN: N COMMA: N ISOLATION: S HOSTLANG: B CHARSET: A SQLERR : N QUOTE: N DEFERPREP: REMOTE : N DEC31 : N MIXED : N DYNAMICRULES: DEFERPRE: C KEEODYN: N REOPT : N SQL CCSTATEMENTS=17DROPALTER=0EXECUTCALL=0EXPLAICLOSE=1FETCHCOMMIT=1GRANTCONNECT=1INSERTCREATE=0LOCK SDECLARE CURSOR=1LOCK SDECLARE STATEMENT=0OPENDELETE=0RELEASDESCRIBE=4 ----- SQL COUNTS ------SQL COUNTSDROP=0REVOKE=EXECUTE=1ROLLBACK=EXPLAIN=0SELECT=FETCH=1SET=GRANT=0SET CONNECT=INSERT=0SET DEGREE=LOCK SHR=0SET HOST=LOCK XCL=0SET PKGSET=OPEN=1SET RULES=PREPARE=5SET SQLID=RELEASE=0UPDATE= 0 1 0 0 0 0 0 0 0 0 RELEASE = 0 UPDATE 1 DESCRIBE = 4 WHENEVER = 0

Fields and Associated Sorts and Filters

The following table is an alphabetical listing of fields in all the Packages panel formats and the Packages Information panel. Format I indicates the information panel.

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS	
ALTER	Ι	Total number of ALTER statements in the package.	K#AL	
		Source: SYSIBM.SYSPACKSTMT		
AVERAGE STMT COST	6	Average statement cost.	KACST	
		Source: Derived		
AVSIZE	3, I	Average size measured in bytes of the package sections processed at BIND time.	KAVS	
		Source: SYSIBM.SYSPACKAGE.AVGSIZE		
BIND DATE/TIME (Bound)	3, 8, I	Timestamp indicating when the package was last bound.	KBDT	
		Source: SYSIBM.SYSPACKAGE.BINDTIME		
CALL	Ι	Number of CALL statements in the package	К#СА	
		Source: SYSIBM.SYSPACKAGE.CALL		
CH (Charset)	1, I	Indicates whether the system CCSID for SBCS data was 290 (Katakana) when the program was precompiled.	KCHRS	
		K Yes A No		
		Source: SYSIBM.SYSPACKAGE.CHARSET		
CLOSE	I	Total number of CLOSE statements in the package.	K#CL	
		Source: SYSIBM.SYSPACKSTMT		
CO (Comma)	1, I	Indicates the decimal point representation for SQL statements in the package.	КСОММ	
		N Period Y Comma		
		Source: SYSIBM.SYSPACKAGE.COMMA		
COLLECTION	2, 8, I	Name of the package collection.	KCOL	
		Source: SYSIBM.SYSPACKAGE.COLLID		
COMMIT	Ι	Total number of COMMIT statements in the package.	К#СМ	
		Source: SYSIBM.SYSPACKSTMT		
CONNECT	Ι	Total number of CONNECT statements in the package.	K#CN	
		Source: SYSIBM.SYSPACKSTMT		

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
CONTOKEN	2, I	Consistency token for the package.	КТОК
		Source: SYSIBM.SYSPACKAGE.CONTOKEN	
CREATE	Ι	Total number of CREATE statements in the package.	K#CR
		Source: SYSIBM.SYSPACKSTMT	
CREATED	Ι	Timestamp indicated when the package was created.	KCRDT
		Source: SYSIBM.SYSPACKAGE.TIMESTAMP	
CREATOR	2, 3, 8, I	Authorization ID of the package creator.	KCR
		Source: SYSIBM.SYSPACKAGE.CREATOR	
DE (Dec31)	1	Indicates whether DEC31 was in effect when the package's program was precompiled.	KDC31
		N No Y Yes	
		Source: SYSIBM.SYSPACKAGE.DEC31	
DECLARE CURSOR	7, I	Total number of DECLARE CURSOR statements in the package.	K#DC
		Source: SYSIBM.SYSPACKSTMT	
DECLARE STATEMENT	Ι	Total number of DECLARE STATEMENT statements in the package.	K#DM
		Source: SYSIBM.SYSPACKSTMT	
DECLARE TABLE	Ι	Total number of DECLARE TABLE statements in the package.	K#DT
		Source: SYSIBM.SYSPACKSTMT	
DEFERPREP	1, I	Indicates whether the package was bound with the DEFER(PREPARE) option. Valid values include:	KDEFP
		 Y Yes N No Blank The option is inherited from the PLAN 	
		Source: SYSPACKAGE.DEFERPREPARE	
DEGREE	Ι	DEGREE option used when the panel was bound.	KDEGR
		Source: SYSIBM.SYSPACKAGE.DEGREE	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DG	1	 DEGREE option used when the panel was bound. Its value may be: Generated BIND/REBIND contains the DEGREE(1) clause—I/O parallelism disabled. ANY Generated BIND/REBIND contains the DEGREE(ANY) clause. I/O parallelism value set by DB2. blank Not specified; thus uses the default 1, I/O parallelism disabled. Source: SYSIBM.SYSPACKAGE.DEGREE 	KDEGR
DELETES	1, 7, I	Number of DELETE statements in the package. Source: SYSIBM.SYSPACKSTMT	K#DL
DESCRIBE	I	Total number of DESCRIBE statements in the package. Source: SYSIBM.SYSPACKSTMT	K#DS
DP (Deferpre)	1, I	 Indicates the CURRENTDATA option when the package was bound or rebound: A Data currency required for all cursors. Inhibit blocking for all cursors. This value can only be generated by a non-DB2 application requestor. B Data currency is not required for ambiguous cursors. Allow blocking for ambiguous cursors. C Data currency is required for ambiguous cursors. blank Blocking protocol not recorded because the package was created before the CURRENTDATA option was available. Source: SYSIBM.SYSPACKAGE.DEFERPREP 	KDFP
DR	1	 The DYNAMICRULES option used when the package was bound. B Dynamic SQL statements are handled like static SQL statements at run time. R Dynamic SQL statements are handled like dynamic SQL statements at run time. blank DYNAMICRULES is not specified for the package or the DB2 subsystem is not at least V4. Source: SYSIBM.SYSPACKAGE.DYNAMICRULES 	KDYNR
DROP	Ι	Total number of DROP statements in the package.	K#DR
		Source: SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DYNAMICRULES	1	 The DYNAMICRULES option used when the package was bound. B Dynamic SQL statements are handled like static SQL statements at run time. R Dynamic SQL statements are handled like dynamic SQL statements at run time. blank DYNAMICRULES is not specified for the package or the DB2 subsystem is not at least V4. Source: SYSIBM.SYSPACKAGE.DYNAMICRULES 	KDYNR
EX (EXPLAIN)	1, I	EXPLAIN at BIND? Y Yes N No Source: SYSIBM.SYSPACKAGE.EXPLAIN	KXPL
EXECUTE	Ι	Total number of EXECUTE statements in the package. Source: SYSIBM.SYSPACKSTMT	K#EC
EXPLAIN	Ι	Total number of EXPLAIN statements in the package. Source: SYSIBM.SYSPACKSTMT	K#EX
EXPLAIN DATE/TIME	4, 5	Date and time the package was EXPLAINed. Source: PLAN_TABLE.TIMESTAMP	KEXDT
FETCH	Ι	Total number of FETCH statements in the package. Source: SYSIBM.SYSPACKSTMT	K#FT
FREED?	Ι	Has package been FREEd? Source: Derived	KFRE
GRANT	Ι	Total number of GRANT statements in the package. Source: SYSIBM.SYSPACKSTMT	K#GR
GROUP MEMBER	8, I	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND. Source: SYSIBM.SYSPACKAGE.GROUP_MEMBER	KGRP

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS	
HL (Hostlang)	1, I	 Host language for the package DBRM: B Assembler C COBOL D C F FORTRAN P PL/I 2 VS COBOL II 3 OO-COBOL 4 C++ blank for remotely bound packages Source: SYSIBM.SYSPACKAGE.HOSTLANG 	KHLNG	
INSERTS	1	Number of INSERT statements in the package. Source: SYSIBM.SYSPACKSTMT	K#IN	
IS (Isolation)	1	Isolation Level: R RR (Repeatable Read) S CS (Cursor Stability) T RS (Read Stability) U UR (Uncommitted Read) Source: SYSIBM.SYSPACKAGE.ISOLATION	KISO	
K#TS	Filter panel	Total number of DECLARE CURSOR and SELECT statements. Source: SYSIBM.PACKSTMT	K#TS	
KEEPDYNAMIC	Filter panel	Indicates the KEEPDYNAMIC option when the package was bound or rebound. Valid values include: Y Keep dynamic SQL past commit or rollback N Destroy dynamic SQL at commit or rollback Source: SYSPACKAGE.KEEPDYNAMIC	KKEEP	
LCK SHR	1, 7, I	Number of LOCKS (SHR) in the package. Source: SYSIBM.SYSPACKSTMT	K#LS	
LCK XCL	1, 7, I	Number of LOCKS (XCL) in the package. Source: SYSIBM.SYSPACKSTMT	K#LX	
LIBRARY	4	Name of the PDS in which the package's DBRM is a member or source of the package. Source: SYSIBM.SYSPACKAGE.PDSNAME	KLIB	
MAXIMUM STMT COST	6	Maximum statement cost. Source: Derived	KMCST	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
MX (Mixed) 1, I		Indicates if mixed data was in effect when the package's program was precompiled.	KMIXD
		N No Y Yes	
		Source: SYSIBM.SYSPACKAGE.MIXED	
OP (Operative)	1, I	Indicates whether the package can be allocated.	KOPR
		 Y Yes N No. An explicit BIND or REBIND is required first. 	
		Source: SYSIBM.SYSPACKAGE.OPERATIVE	
OPEN	Ι	Total number of OPEN statements in the package.	K#OP
		Source: SYSIBM.SYSPACKSTMT	
OWNER	2, I	Authorization ID of the package owner.	KOWN
		Source: SYSIBM.SYSPACKAGE.OWNER	
PACKAGE	1, 2, 3, 4, 5,	Name of the package.	KPACK
	6, 7, 8, I	Source: SYSIBM.SYSPACKAGE.NAME	
PKSIZE	3, I	Size of the base section of the package, in bytes.	KKSZ
		Source: SYSIBM.SYSPACKAGE.PKSIZE	
PRECOMPILE DATE/TME	4, 5, I	Date and time the application program was precompiled.	KPCDT
		Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP	
PREPARE	Ι	Total number of PREPARE statements in the package.	K#PR
		Source: SYSIBM.SYSPACKSTMT	
QU (Quote)	1	SQL string delimiter for the SQL statements in the package:	KQUOT
		N ApostropheY Quotation mark	
		Source: SYSIBM.SYSPACKAGE.QUOTE	
QUALIFIER	2, I	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the package.	KQLF
		Source: SYSIBM.SYSPACKAGE.QUALIFIER	
RE (Release)	1, I	When resources are released:	KRLS
		 C At commit D At deallocation blank not specified; inherits from plan executing package. 	
		Source: SYSIBM.SYSPACKAGE.RELEASE	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
RELEASE	Ι	Number of RELEASE SQL statements.	K#RE
		Source: SYSIBM.SYSSTMT	
REOPT(VAR) I		Indicates the REOPT option when the package was bound or rebound. Valid values include:	KROPT
		Y Determines the access path at execution time for SQL statements with variable values	
		N Determines the access path at bind time	
		Source: SYSPACKAGE.REOPTVAR	
REVOKE	Ι	Total number of REVOKE statements in the package.	K#RV
		Source: SYSIBM.SYSPACKSTMT	
RM (Remote)	1, I	Indicates the source of the package:	KRMT
		 C Package was created by BIND COPY N Package was locally bound from a DBRM Y Package was bound from a remote location 	
		Source: SYSIBM.SYSPACKAGE.REMOTE	
ROLLBACK	Ι	Total number of ROLLBACK statements in the package.	K#RL
		Source: SYSIBM.SYSPACKSTMT	
SE (SQLERROR)	1, I	Indicates the SQLERROR option on the most recent subcommand that bound or rebound the package:	KSERR
		C Option was CONTINUE N Option was NOPACKAGE	
		Source: SYSIBM.SYSPACKAGE.SQLERROR	
SELECTS	1, 7, I	Number of SELECT statement in the package.	K#SE
		Source: SYSIBM.SYSPACKSTMT	
SET	Ι	Total number of SET statements in the package.	K#ST
		Source: SYSIBM.SYSPACKSTMT	
SET CONNECT	Ι	Number of SET CONNECTION SQL statements.	K#SC
		Source: SYSIBM.SYSPACKSTMT	
SET DEGREE	Ι	Number of SET CURRENT DEGREE SQL statements.	K#SD
		Source: SYSIBM.SYSPACKSTMT	
SET HOST	Ι	Number of SET host variable SQL statements.	K#SH
		Source: SYSIBM.SYSPACKSTMT	
SET PKGSET	Ι	Number of SET PACKAGESET SQL statements.	K#SP
		Source: SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
SET RULES	Ι	Number of SET CURRENT RULES statements in the package	K#SR
		Source: SYSIBM.SYSPACKSTMT	
SET SQLID I		Number of SET CURRENT SQLID SQL statements.	K#SS
		Source: SYSIBM.SYSPACKSTMT	
STMTS (Statements) 1, 3, I		Total number of statements in package.	K#TL
		Source: SYSIBM.SYSPACKSTMT	
SYSENTRY	3, I	Number of enabled or disabled entries for this package in SYSIBM.SYSPKSYSTEM.	KSYEN
		Source: SYSIBM.SYSPACKAGE.SYSENTRIES	
TOTAL STMT COST	4, 5	Total statement cost.	KPCDT
		Source: Derived	
UPDATES	1, 7, I	Number of UPDATE statements in the package.	K#UP
		Source: SYSIBM.SYSPACKSTMT	
VA (Validate)	1, I	Can validity checking be deferred until run time?	KVLT
		B All checking must be done at BINDR Validation is done at run time for tables that do not exist at BIND time	
		Source: SYSIBM.SYSPACKAGE.VALIDATE	
VD (Valid)	1, I	 Indicates whether the package is valid. Y Yes N No A A table has been altered but package is still valid H A table has been altered but package is still valid if using DB2 Version 5.3 or greater Source: SYSIBM.SYSPACKAGE.VALID 	KVLD
VERSION	4, I	Version identifier for the package.	KVER
		Source: SYSIBM.SYSPACKAGE.VERSION	
VL (Verification)	1	 Shows results of package verification. Possible values include: N DBRM has not been verified. Y DBRM was verified successfully E DBRM verification was unsuccessful T There is a timestamp mismatch Source: Derived 	KVRF
WHENEVER	I	Total number of WHENEVER statements in the package.	K#WH
		Source: SYSIBM.SYSPACKSTMT	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
@	Remote EXPLAIN and gather statistics.	EXPLAIN (KTEPEXPL)
#	Remote EXPLAIN but do not gather statistics.	EXPLAIN (KTEPEXPL)
В	Generate a BIND package statement for the selected package.	BIND Package (KTEPBIKA)
С	Compare the results of the latest !DB/EXPLAIN EXPLAIN for a selected package with the results of performing a BIND EXPLAIN (YES) on the package.	EXPLAIN Compare (KTEPCMPR)
Е	EXPLAIN the package and gather statistics.	EXPLAIN (KTEPEXPL)
F	Generate a FREE package.	Output Options (KTEPOUTP)
G	Display cost details for the selected package.	Costs (KTEPCOST)
Н	Display the EXPLAIN history for the selected package.	EXPLAIN History (KTEPHIST)
Ι	Display detailed package information including BIND options.	PACKAGE Information (KTEPKAIN)
J	Select 2 packages with J and compare package attributes.	Compare History (KTEPJHIS)
L	Display the output from the latest EXPLAIN of the package.	EXPLAIN (KTEPEXPL)
Ν	Display all connections for the selected package.	Package Connections (KTEPKCON)
Р	Display all plans associated with the selected package.	Plans (KTEPPLAN)
Q	Display all collections associated with the selected package.	Collections (KTEPCLTN)
R	Generate a REBIND statement for the package.	BIND/REBIND panel (KTEPBIKA)
S	List all the SQL statements for the package.	Statements (KTEPSTMT)
Т	Display tables for the selected package.	Tables (KTEPTABL)
U	EXPLAIN the package (do not gather statistics).	EXPLAIN (KTEPEXPL)
V	Verify the package.	Package Verification (KTEPPVER)
W	Perform Whatif analysis on the package.	Whatif (KTEPWHIF)
X	Display Exceptions that exist for each SQL statement in the selected Package.	Exceptions (KTEPXCPT)
8	EXPLAIN and display only DBRMs that have not been !DB/EXPLAINed—gather catalog statistics.	EXPLAIN (KTEPEXPL)
9	EXPLAIN and display only DBRMs that have not been !DB/EXPLAINed—do not gather catalog statistics.	EXPLAIN (KTEPEXPL)

Commands

COMMAND	DESCRIPTION	TAKES YOU TO		
BIND	Generate BIND statements for all active packages.	BIND Package (KTEPBIKG) or Output Options (KTEPOUTP)		
BINDADD	BIND ACTION(ADD).	BIND Package (KTEPBIKG) or Output Options (KTEPOUTP)		
BINDEXP	BIND EXPLAIN(YES).	BIND Package (KTEPBIKG) or Output Options (KTEPOUTP)		
BINDREP	BIND ACTION(REPLACE).	BIND Package (KTEPBIKG) or Output Options (KTEPOUTP)		
COMPARE	Perform a BIND COMPARE of each Package on the current display according to the options set on the Housekeeping Bind Compare Options Panel KTEPHOBC.	EXPLAIN Compare (KTEPCMPR)		
COST	Show statement costs for all packages on the list.	Costs (KTEPCOST)		
DROP	Generate FREE statements for all active packages.	Output Options (KTEPOUTP)		
EXPL	EXPLAIN (without gathering statistics) all packages that have not been EXPLAINed since they were last bound. Also display latest EXPLAIN for previously EXPLAINed entities.	EXPLAIN (KTEPEXPL)		
EXPLA	EXPLAIN (without gathering statistics) all packages.	EXPLAIN (KTEPEXPL)		
EXPLAR	Remote EXPLAIN (without gathering statistics) all packages.	EXPLAIN (KTEPEXPL)		
EXPLO	EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)		
EXPLOR	Remote EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)		
EXPLR	Remote EXPLAIN (without gathering statistics) all packages that have not been EXPLAINed since they were last bound. Also display latest EXPLAIN for previously EXPLAINed entities.	EXPLAIN (KTEPEXPL)		
GEXPL	EXPLAIN all packages that have not been EXPLAINed since they were last bound and gather statistics. Also display latest EXPLAIN for previously EXPLAINed entities.	EXPLAIN (KTEPEXPL)		
GEXPLA	EXPLAIN all packages and gather statistics.	EXPLAIN (KTEPEXPL)		
GEXPLAR	Remote EXPLAIN all packages and gather statistics.	EXPLAIN (KTEPEXPL)		
GEXPLO	EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)		

COMMAND	DESCRIPTION	TAKES YOU TO
GEXPLOR	Remote EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)
GEXPLR	Remote EXPLAIN all packages that have not been EXPLAINed since they were last bound and gather statistics. Also display latest EXPLAIN for previously EXPLAINed entities.	EXPLAIN (KTEPEXPL)
HIST	Display Package History.	
ІМРАСТ	Compare each nonhistorical package with its most recent historical counterpart.	Compare History (KTEPJHIS)
INFO	Show Package Information.	Package Info (KTEPKAIN)
LEXPL	Display latest EXPLAIN.	EXPLAIN (KTEPEXPL)
LEHIST	Display latest EXPLAIN History.	EXPLAIN History (KTEPHIST)
NOHIST	Reset History.	EXPLAIN History (KTEPHIST)
REBIND	Generate REBIND statements.	BIND/REBIND (KTEPBIKA)
REBINDEX	REBIND EXPLAIN(YES).	Output Option (KTEPOUTP)
ХСРТ	Display Exceptions.	Exceptions (KTEPXCPT)

A note about compares

Typically, when you are on the Plans, Packages, or DBRMS panel, you can issue the IMPACT command (or the J select) to obtain compare history information. The IMPACT command or J select compares such things as precompile options, owners, or qualifiers.

CEXPL is issued from the Compare History panel and compares EXPLAINs.

Plan Connections

Overview

This unit describes the Plan Connections panel.

Background about the Plan Connections panel

The Plan Connections panel (KTEPPCON) lists all environments that a particular plan can access. Its source is the DB2 table SYSPLSYSTEM. This table contains zero or more rows for every local plan. Each row represents a possible connection to an environment in which a plan could be executed.

Access

Plan Connections can only be invoked by selecting option N (Connections) from the Plans panel (see "Plans" on page 187). From Plan Connections, you can only return to Plans.

Panel

The following illustration shows the Plan Connections panel. Initially, the list is sorted according to how you have specified it to be sorted in the Housekeeping Panel sorts.

 CMD ===>	DB/EXPLAIN	DB2=D31A	SCRO)LL ===> CSR
Cmds: DO (Menu) GLOBAL		0 N N E C T I 0		cts: ? (Menu)
SY	STEM	CONNECTION	ENABLE	
	ГСН		N	
CIO		CICS0001 CICS0002	Y Y	
CI		CICS0003	Ŷ	
CI	CS	CICS0004	Ν	

Fields and Associated Sorts and Filters

CONNECT Connection name. PCNN Source: SySIBM.SYSPLSYSTEM.CNAME Id ENABLE Indicates whether the connections are enabled or disabled. PENA Y Enabled Y Source: SySIBM.SYSPLSYSTEM.ENABLE Id Source: SySIBM.SYSPLSYSTEM.ENABLE PSYS SYSTEM Environment. PSYS BATCH Customer Information Control System PSYS DB2CALL DB2 Call Attachment Facility Intervention Signame IMSBMP IMSSMPP and IFP region IMSMPP and IFP region	FIELD		DESCRIPTION	SORTS/ FILTERS				
ENABLE Indicates whether the connections are enabled or disabled. PENA Y Enabled Y N Disabled Source: SYSIBM.SYSPLSYSTEM.ENABLE PSYS SYSTEM Environment. PSYS BATCH TSO Batch. CliCS Customer Information Control System DB2CALL DB2 Call Attachment Facility DLIBATCH DLI Batch Support Facility IMS IMS region IMS region IMSBMP	CONNECT	Connection name.	Connection name.					
YEnabled NDisabledSource:SYSIBM.SYSPLSYSTEM.ENABLESYSTEMEnvironment.PSYSBATCH CICSTSO Batch. Customer Information Control 		Source: SYSIBM.SY	(SPLSYSTEM.CNAME					
N Disabled Source: SYSIBM.SYSPLSYSTEM.ENABLE SYSTEM Environment. BATCH TSO Batch. CICS Customer Information Control System DB2CALL DB2CALL DB2 Call Attachment Facility DLIBATCH DLI Batch Support Facility IMS IMS region IMSBMP IMSBMP region	ENABLE	Indicates whether	Indicates whether the connections are enabled or disabled.					
SYSTEM Environment. PSYS BATCH TSO Batch. CICS CICS Customer Information Control System DB2CALL DB2 Call Attachment Facility DLIBATCH DLI Batch Support Facility IMS IMS region IMSBMP IMSBMP region								
BATCH CICSTSO Batch. Customer Information Control SystemDB2CALLDB2 Call Attachment FacilityDLIBATCHDLI Batch Support FacilityIMSIMS regionIMSBMPIMSBMP region		Source: SYSIBM.SY	/SPLSYSTEM.ENABLE					
CICSCustomer Information Control SystemDB2CALLDB2 Call Attachment FacilityDLIBATCHDLI Batch Support FacilityIMSIMS regionIMSBMPIMSBMP region	SYSTEM	Environment.		PSYS				
Source: SYSIBM.SYSPLSYSTEM.SYSTEM		CICS DB2CALL DLIBATCH IMS IMSBMP IMSMPP	Customer Information Control System DB2 Call Attachment Facility DLI Batch Support Facility IMS region IMSBMP region IMSMPP and IFP region					

Plan Package List

Overview

This unit describes the Plan Package List panel.

Background about the Plan Package List panel

The Plan Package List panel (KTEPPKPL) lists every local application plan bound with a package list. Its source is the DB2 table SYSPACKLIST. This table contains zero or more rows for every local application plan bound with a package list. Each row represents a unique entry in the plan's package list.

Access

Plan Package List is invoked from either Plans or Collections.

Panel

The following illustration shows the Plan Package List panel.

CMD ===>	DB/EX	XPLAIN DB2=D31A			CROLL ===> PAGE
	P	РАСКАБЕ	LIST		
Cmds: GLOBAL	(Menu)				
LOCATION	COLLECTION I	ID PACKAGE	SEQNO	TIMESTAMP	
	 * *	GULCOL1 GULCOL2			15:26:42.60190 15:26:42.60190

Fields and Associated Sorts and Filters

FIELD	DESCRIPTION	SORTS/ FILTERS
COLLECTION ID	Collection name for the package.	PCOL
	Source: SYSIBM.SYSPACKLIST.COLLID	
LOCATION	Location of the package: * Location to be determined at run time. blank Local nonblank Location name	PLOC
	Source: SYSIBM.SYSPACKLIST.LOCATION	
PACKAGE	Name of the package. An asterisk (*) indicates an entire collection.	PPKG
	Source: SYSIBM.SYSPACKLIST.NAME	
SEQNO	Sequence number of the entry in the package list.	PSEQ
	Source: SYSIBM.SYSPACKLIST.SEQNO	
TIMESTAMP	Timestamp indicating when the row was created.	
	Source: SYSIBM.SYSPACKLIST.TIMESTAMP	

Plans

Overview

This unit describes the Plans panel.

Background about the Plans panel

The Plans panel (KTEPPLAN) and its associated information panel list all plans defined in the DB2 catalog. The primary function of the panel is to do EXPLAINs and review the resultant EXPLAIN, BIND, and access path information of a plan.

In addition, a special bridge allows OMEGAMON II for DB2 users to review a selected plan's performance trace information and thread-related information in OMEGAMON II's Application Trace Facility (**A** select) and Accounting Reports (**P** select).

Note: You must know the name of the data set containing this history information to use this facility. You can change the name of the Accounting History data set by using the OMEGAMON II for DB2 **OPTIONS** command. For more information, see "Historical Reporter Options" in the *OMEGAMON II for DB2 Historical Reporting Guide*.

Formats

The Plans panel is available in five different formats to allow access to all information in the DB2 Catalog on a plan. Additional fields can be reviewed on the associated Information panel using the I select.

Format	Displayed Fields
Format 1	All
Format 2	Packages
Format 3	DBRMs
Format 4	BIND Information
Format 5	Access Path Information
Format 6	Group Member Information

Panels

The following illustration shows format 1 of the Plans panel. It includes all information contained in the other formats.

CMD ===>		DB/E	EXPLAIN	-			SCROLL	===>	CSR
Cmds: DC	(Menu) GLO	BAL (Mer		PLAN :	> 		Selects	: ? (N	1enu)
SEL PLAN	COUNT			DCL CSR					LOCK SHR
#CDLAE #101NS #101SA	RT 1	2 3 5	1 0 0	0 0 1	0 1 0	0 0 0	0 1 0	0 0 0	0 0 0

The following illustration shows format 2 of the Plans panel containing packages information.

CMD ===>		DB/EX					SCROLL	===>	CSR
Cmds: DO (Me		`)	PLAN			Selects		
SEL PLAN	COUNT				CKAGES -				
#CDLABL1 #101NSRT #101SAVE	0 0 0	0 0 0	0 0 0	(0	0 0 0	0 0 0	0 0 0	0 0 0

The following illustration shows format 3 of the Plans panel containing DBRM information.

CMD ===>		DB/E		DB2= PLA	-			SCROLL	===>	CSR
Cmds: DO (Me		`	iu)					Selects		
SEL PLAN					-	D Ta lo		INSERTS		
_ #CDLABL1 _ #101NSRT _ #101SAVE	1 1 1	2 3 5	1 0 0		0 0 1	0 1 0	0 0 0	0 1 0	0 0 0	0 0 0

The following illustration shows format 4 of the Plans panel containing BIND information.

	===>		DB/EXF	PLAIN DB2=	=D31A		SCROLL ===> F	PAGE
Crr	nds: DO (N	1enu) GLOE	BAL (Menu)		A N S		Selects: ? (Me	enu)
SEL	PLAN	CREATOR	BOUND BY	QUALIFIER	BIND DATE	BIND TIME	E SERVER	
_	KTE KTEPLAN QMF240	TDDB16 TDDB19 TDO209B	TDDB16 TDDB19 TDO209B	TDDB16 TDDB16 TDO209B	1999/07/20 1999/08/25 1999/03/23	11:01:46		

The following illustration shows format 5 of the Plans panel containing access path information.

 Cmd	Cmd ===> DB/EXPLAIN DB2=D42B LINE1 OF 82 Cmd ===> SCROLL ===> CSR											
C	Cmds: DO (Menu) GLOBAL (Menu) Selects: ? (Menu)											
SEL	PLAN	VOVARIVDEDSDC LPDCESAPXIQGR		CACHESZ	PLSIZE	AVGSIZE	PLENTRIES	SYSENTRIES				
	CANPLAN	NYYUCSBNNED1	NN	1024	12320	2338	0	0				
-	CANPLNX	NYYUCSBNNED1	NN	1024	3320	1500	Θ	Θ				
_	CHGPLAN	NYYUCSBNNED1	NN	1024	3320	1682	Θ	Θ				
	CHGPLANX	NYYUCSBNNED1	NN	1024	2944	1450	Θ	Θ				
_	DSDPLAN	NYYUCSBNNED1	NN	1024	4712	1704	0	0				
	DSDPLANX	NYYUCSBNNED1	NN	1024	3320	1500	0	Θ				
_	DSNEDCL	NYYUCSRNNED1	NN	1024	2232	0	0	0				
_	DSNESPCS	NYYUCSRNNED1	NN	1024	2040	0	1	0				
_	DSNESPRR	NYYUCRRNNED1	NN	1024	2040	0	1	0				
_	DSNHYCRD	NYYUCSRNNED1	NN	1024	2432	2017	0	0				
_	DSNTEP2	NYYUCSRNNED1	NN	1024	2040	0	1	Θ				
_	DSNTEP31	NYYUCSRNNED1	NN	1024	2040) ()	1	Θ				
_	DSNTIAD	NYYUCSRNNED1	NN	1024	2232		0	Θ				
_	DSNTIAUL	NYYUCSRNNED1	NN	1024	2280		0	Θ				
_	DSNTIA31	NYYUCSRNNED1	NN	1024	2232	-	0	Θ				
_	DSNTIB31	NYYUCSRNNED1	NN	1024	2280		0	Θ				
_	DSN8BH31	NYYUCSRNNED1	NN	1024	2536		0	Θ				
_	DSN8BP31	NYYUCSRNNED1	NN	1024	2536		0	0				
_	DSN8CC0	NYYUCSRNNED1	NN	1024	2040		1	Θ				
_	DSN8CH0	NYYUCSRNNED1	NN	1024	2536		0	Θ				
_	DSN8CP0	NYYUCSRNNED1	NN	1024	4928		0	0				
-	DSN8CQ0	NYYUCSRNNED1	NN	1024	6088	3 2168	0	0				

The following illustration shows format 6 of the Plans panel containing group member information.

Cmd ===>	DB/EXPLA P L A N	IN DB2=D42B INFORMA	 T I O N	LINE1 OF 48 SCROLL ===> PAGE
Cmds: GLOBAL (Menu)				
PLAN NAME : BOSTONN PLAN FREED? : N AVERAGE SIZE: 0	CREAT	OR : GDEMI	PLENTRIES :	0
PLAN FREED? : N		FIER: KFURD	SYSENIRIES:	: Ü
AVERAGE SIZE: 0 PLAN SIZE : 3336 CACHE SIZE : 1024 DEGREE : 1	BIND BIND SERVE	DATE: 1999/11/26 TIME: 04:49:28 R :	PACKAGES : GROUP MEMBE	0 ER:
VALIDATE : B ISOLATI EXPLAIN : N DEFERPR EXPREDICATE: B DYNAMIC				
STATEMENTS = ALTER = CALL = CLOSE = COMMIT = CONNECT = CREATE = DECLARE CURSOR = DECLARE STATEMENT = DECLARE TABLE = DECLARE TABLE = DELETE = DESCRIBE =	SQL	COUNTS FOR ALL -		
SIAIEMENIS =	240	DROP =	0 REVOKE	
	0	EXECUTE - FXPLATN =		1 = 22
CLOSE =	18	FETCH =	17 SET	= 0
COMMIT =	0	GRANT =	0 SET CO	DNNECT = 0
CONNECT =	0	INSERT =	12 SET DE	EGREE = 0
CREATE =	0	LOCK SHR =	5 SET HO)ST = 0
DECLARE CURSOR =	1/	LOCK XCL =	0 SEL PK	GSEI = 0
DECLARE STATEMENT =	0	DEDADE -	1/ SEI RU 2 SET SC	JLES = 0
DECLARE TABLE =	40	RELEARE =		$\frac{1}{2} = 29$
DESCRIBE =	0 0		WHENE	/ER = 42
STATEMENTS = ALTER = CLOSE = COMMIT = CONNECT = CREATE = DECLARE CURSOR = DECLARE STATEMENT = DECLARE TABLE = DELETE = DESCRIBE =	501 0	OUNTS FOR DBRMS		
STATEMENTS =	240	DROP =	0 REVOKE	= 0
ALTER =	0	EXECUTE =	1 ROLLBA	ACK = 2
CLOSE =	18	EXPLAIN =	0 SELECT	= 22
COMMIT =	7	FETCH =	17 SET	= 0
CDEATE -	0	GRANI = INSEDT -	U SEI UU	INNELI = 0
DECLARE CURSOR =	17	LOCK SHR =	5 SFT H	ST = 0
DECLARE STATEMENT =	0	LOCK XCL =	0 SET PK	(GSET = 0
DECLARE TABLE =	46	OPEN =	17 SET SC)LID = 0
DELETE =	3	PREPARE =	2 UPDATE	= 29
DESCRIBE =	0	RELEASE =	U WHENEN	ER = 42
		INTS FOR PACKAGES		^
STATEMENTS = ALTER =	0 0	DROP = EXECUTE =	0 REVOKE 0 ROLLBA	
CLOSE =	0	EXPLAIN =	0 SELECT	
COMMIT =	0	FETCH =	0 SET	= 0
CONNECT =	0	GRANT =		ONNECT = 0
CREATE =	0	INSERT =	0 SET DE	
DECLARE CURSOR =	0	LOCK SHR =	0 SET HO	
DECLARE STATEMENT =	0	LOCK XCL =	0 SET PK	
DECLARE TABLE = DELETE =	0 0	OPEN = PREPARE =	0 SET SC 0 UPDATE	
DESCRIBE =	0	RELEASE =	0 WHENE	-

The Plan Information panel lists a summary of Plan information and presents BIND options currently in use for a specific plan. Statement totals are also provided. This panel is scrollable.

nd ===>	ΡI	AN	ΙN	F 0	RM	ΑT	101	N	SCROL	L ===>	PAG
Cmds: GLOBAL (Men	u)										
PLAN NAME : BOSTO PLAN FREED? : N AVERAGE SIZE: PLAN SIZE :	ONN	CREAT	OR :	GDEM	I		PLEN	[RIE	S :	Θ	
PLAN FREED? : N	0	QUALI	FIER:	KFOR	D		SYSE	TRI	ES:	0	
AVERAGE SIZE: DIAN SIZE	3336	BUUND	ВІ : ЛАТЕ:	1000	12 /11	126	DRKM		:	1 0	
CACHE SIZE :	1024	BIND	TIME:	04:4	9:28	8	GROUI	P MEI	MBER:	0	
DEGREE : 1		SERVE	R :								
VALIDATE : B ISO EXPLAIN : N DE	OLATION:	S V	ALID	: Y	(OPERA	TIVE	: Y	ACQUI	RE : U	
EXPREDICATE: B DYI	NAMICRULE	ES: K	EEPDYN	:		REOPT	-				
STATEMENTS ALTER CALL CLOSE COMMIT CONNECT CREATE DECLARE CURSOR DECLARE STATEMENT DECLARE STATEMENT DECLARE TABLE DELETE DESCRIBE		SQL	COUNTS	FOR	ALI	L					
STATEMENTS ALTER	= 24	ו שו ה	υκυΡ εχεριιτ	F	=		ป 1		UKE I RACK	=	0 2
CALL	=	0	EXPLAT	N	=		0	SEL	ECT	=	22
CLOSE	=]	8	FETCH		=	1	.7	SET		=	0
COMMIT	=	0 (GRANT		=		0	SET	CONNECT	=	0
CONNECT	=	0	INSERT		=	1	.2	SET	DEGREE	=	0
	- 1	0	LOCKS	HR	=		5	SEI	HUSI	=	0
DECLARE CORSOR		0 (DEEN A	UL	=	1	7	SET	RIILES	=	0
DECLARE TABLE	= 4	16 I	PREPAR	E	=		2	SET	SQLID	=	Ö
DELETE	=	3 1	RELEAS	E	=		0	UPD	ATÈ	=	29
DESCRIBE	=	0						WHE	NEVER	=	42
STATEMENTS ALTER CLOSE COMMIT CONNECT CREATE DECLARE CURSOR DECLARE STATEMENT DECLARE TABLE DELETE DESCRIBE											
ALTER	= -	0	EXECUT	E	=		1	ROL	LBACK	=	2
CLOSE	=]	8	EXPLAI	N	=		0	SEL	ЕСТ	=	22
COMMIT	=	7	FETCH		=	1	.7	SET	00000507	=	0
	-	0	JKAN I INSEDT		=	1	0	SEI		-	0
DECLARE CURSOR	- 1	7	INSERI	HR	-	1	5	SET	HOST	=	0
DECLARE STATEMENT	=	0	LOCK X	CL	=		0	SET	PKGSET	=	Ö
DECLARE TABLE	= 4	16 (OPEN		=	1	.7	SET	SQLID	=	0
DELETE	=	3	PREPAR	E	=		2	UPD	ATE	=	29
DESCRIBE	=	0	RELEAS	E	=		0	WHE	NEVER	=	42
STATEMENTS ALTER CLOSE COMMIT CONNECT CREATE DECLARE CURSOR DECLARE STATEMENT DECLARE TABLE DELETE DESCRIBE	S(=)L COUI 0 I	NTS FO DROP	R PA	CKA(=	GES -	 0	REV	 DKE	=	 0
ALTER	=	0	EXECUT	E	=		0	ROL	LBACK	=	Ö
CLOSE	=	0	EXPLAI	Ν	=		0	SEL	ECT	=	0
COMMIT	=	0	FETCH		=		0	SET	CONNECT	=	0
	=	0	JKAN I TNSEDT		=		0	SET		=	0
DECLARE CURSOR	=	0	TUSERI	HR	=		0	SFT	HOST	=	0
DECLARE STATEMENT	=	0	LOCK X	CL	=		õ	SET	PKGSET	=	0
DECLARE TABLE	=	0 (OPEN		=		0	SET	SQLID	=	0
DELETE	=	0	PREPAR	E	=		0	UPD	ATE	=	0
DESCRIBE	=	0 1	RELEAS	E	=		0	WHE	NEVER *******	=	0

Fields and Associated Sorts and Filters

The following table describes the fields, sorts, and filters on the Plans panel and its associated information panel. Format I designates the information panel.

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
AC (Acquire)	5, I	When resources are acquired:A At allocationU Use	PACQ
		Source: SYSIBM.SYSPLAN.ACQUIRE	
ALTER (All)	I	Total number of ALTER statements.	P#AL
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
ALTER (DBRMs)	I	Total number of ALTER statements from DBRMs.	PD#AL
		Source: SYSIBM.SYSSTMT	
ALTER (Packages)	Ι	Total number of ALTER statements from packages.	PK#AL
		Source: SYSIBM.SYSPACKSTMT	
AVGSIZE (Average Size)	5, I	Average size measured in bytes of the plan section processed at BIND time.	PAVS
		Source: SYSIBM.SYSPLAN.AVGSIZE	
BIND DATE	4, 6, I	Date on which the plan was last bound.	PBDT
		Source: SYSIBM.SYSPLAN.BINDDATE	
BIND TIME	4, 6, I	Time the plan was last bound.	PBDT
		Source: SYSIBM.SYSPLAN.BINDTIME	
BOUND BY	4, 6, I	Primary authorization ID of the binder of the plan.	PBBY
		Source: SYSIBM.SYSPLAN.BOUNDBY	
CACHESZ (Cache Size)	5, I	Size measured in bytes of the cache to be acquired for the plan.	PCHSZ
		Source: SYSIBM.SYSPLAN.CACHESIZE	
CALL (All)	I	Number of CALL statements in the plan	P#CA
		Source: SYSIBM.SYSPACKAGE.CALL	
CALL (DBRMs)	Ι	Number of CALL statements for DBRMs in the plan	PDCA
		Source: SYSIBM.SYSPACKAGE.CALL	
CALL (Packages)	Ι	Number of CALL statements for packages in the plan	РКСА
		Source: SYSIBM.SYSPACKAGE.CALL	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
CD	5, I	Indicates the current data option when this plan was either bound or rebound.	PEXPR
		Source: SYSIBM.SYSPLAN.EXPREDICATE	
		B Data currency not required for ambiguous cursors. Allow blocking on ambiguous cursors.	
		C Data currency required for ambiguous cursors. Inhibit blocking for ambiguous cursors.	
		N Blocking is inhibited for ambiguous cursors, but the plan was created before the CURRENTDATA option was available.	
		blank The value was not extracted. Reextract the plan to obtain the value.	
CLOSE (All)	Ι	Total number of CLOSE statements.	P#CL
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
CLOSE (DBRMs)	Ι	Total number of CLOSE statements from DBRMs.	PD#CL
		Source: SYSIBM.SYSSTMT	
CLOSE (Packages)	Ι	Total number of CLOSE statements from packages.	PK#CL
		Source: SYSIBM.SYSPACKSTMT	
COMMIT (All)	Ι	Total number of COMMIT statements.	P#CM
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
COMMIT (DBRMs)	Ι	Total number of COMMIT statements from DBRMs.	PD#CM
		Source: SYSIBM.SYSSTMT	
COMMIT (Packages)	Ι	Total number of COMMIT statements from packages.	PK#CM
		Source: SYSIBM.SYSPACKSTMT	
CONNECT (All)	Ι	Total number of CONNECT statements.	P#CN
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
CONNECT (DBRMs)	Ι	Total number of CONNECT statements from DBRMs.	PD#CN
		Source: SYSIBM.SYSSTMT	
CONNECT (Packages)	Ι	Total number of CONNECT statements from packages.	PK#CN
		Source: SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
COUNT (All)	1	Number of DBRMs and packages used as input for this plan.	P#DP
		Source: SYSIBM.SYSDBRM	
		Source: SYSIBM.SYSPACKAGE	
COUNT (DBRMs)	3	Number of DBRMs used as input for this plan.	P#DB
		Source: SYSIBM.SYSDBRM	
COUNT (Packages)	2	Number of packages used as input for this plan.	P#KA
		Source: SYSIBM.SYSPACKAGE	
CREATE (All)	Ι	Total number of CREATE statements.	P#CR
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
CREATE (DBRMs)	Ι	Total number of CREATE statements from DBRMs.	PD#CR
		Source: SYSIBM.SYSSTMT	
CREATE (Packages)	Ι	Total number of CREATE statements from packages.	PK#CR
		Source: SYSIBM.SYSPACKSTMT	
CREATOR	4, I	Authorization ID of the owner of the application plan.	PCR
		Source: SYSIBM.SYSPLAN.CREATOR	
DBRMs	Ι	Number of DBRMs bound into the plan.	P#DB
		Source: SYSIBM.SYSDBRM	
DCL CSR (Declare	1, 2, 3	Total number of DECLARE CURSOR statements.	P#DC
Cursor)		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DECLARE CURSOR	Ι	Total number of DECLARE CURSOR statements.	P#DC
(All)		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DECLARE CURSOR (DBRMs)	Ι	Total number of DECLARE CURSOR statements from DBRMs.	PD#DC
		Source: SYSIBM.SYSSTMT	
DECLARE CURSOR (Packages)	Ι	Total number of DECLARE CURSOR statements from packages.	PK#DC
		Source: SYSIBM.SYSPACKSTMT	
DECLARE STATEMENT (All)	Ι	Total number of DECLARE STATEMENT statements.	P#DM
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DECLARE STATEMENT (DBRMs)	Ι	Total number of DECLARE STATEMENT statements from DBRMs.	PD#DM
		Source: SYSIBM.SYSSTMT	
DECLARE STATEMENT (Packages)	Ι	Total number of DECLARE STATEMENT statements from packages.	PK#DM
		Source: SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DECLARE TABLE (All)	Ι	Total number of DECLARE TABLE statements.	P#DT
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DECLARE TABLE (DBRMs)	Ι	Total number of DECLARE TABLE statements from DBRMs.	PD#DT
		Source: SYSIBM.SYSSTMT	
DECLARE TABLE (Packages)	Ι	Total number of DECLARE TABLE statements from packages.	PK#DT
		Source: SYSIBM.SYSPACKSTMT	
DEGREE	Ι	The DEGREE option used when the plan was bound.	PDEGR
		Source: SYSIBM.SYSPLAN.DEGREE	
DELETES (All)	1, I	Total number of DELETE statements.	P#DL
		Source: SYSIBM.SYSSTMT	
		Source: SYSIBM.SYSPACKSTMT	
DELETES (DBRMs)	3, I	Total number of DELETE statements from DBRMs.	PD#DL
		Source: SYSIBM.SYSSTMT	
DELETES (Packages)	2, I	Total number of DELETE statements from packages.	PK#DL
		Source: SYSIBM.SYSPACKSTMT	
DESCRIBE (All)	Ι	Total number of DESCRIBE statements.	P#DS
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DESCRIBE (DBRMs)	Ι	Total number of DESCRIBE statements from DBRMs.	PD#DS
		Source: SYSIBM.SYSSTMT	
DESCRIBE (Packages)	Ι	Total number of DESCRIBE statements from packages.	PK#DS
		Source: SYSIBM.SYSPACKSTMT	
DG	5	DEGREE option used when the panel was bound. Its value may be:	PDEGR
		 I/O parallelism is disabled. A Any. I/O parallelism value is set by underlying DB2 subsystem. blank The default 1, I/O parallelism is disabled, is used. 	
		Source: SYSIBM.SYSPACKAGE.DEGREE	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
DI	5	DISCONNECT option used when the plan was bound. Its value may be: E Explicit—Disconnect must be explicitly	PDISC
		specified. A Disconnect is automatic. C Disconnect is conditional. blank The default, E, is used.	
		Source: SYSIBM.SYSPLAN.DISCONNECT	
DISCONNECT	I	DISCONNECT option used when the Plan was bound.	PDISC
		Source: SYSIBM.SYSPLAN.DISCONNECT	
DP (Deferpre)	1, I	Determines whether preparation is to be deferred.YPreparation is deferred.NPreparation is not deferred.	PDFP
		Source: SYSIBM.SYSPLANS.DEFERPREP	
DR	5	The DYNAMICRULES option used when the plan was bound.	PDYNR
		B Dynamic SQL statements are handled like static SQL statements at run time.	
		blank Dynamic SQL statements are handled like dynamic SQL statements at run time or the DB2 subsystem is not at least V4.	
		Source: SYSIBM.SYSPLAN.DYNAMICRULES	
DROP (All)	Ι	Total number of DROP statements.	P#DR
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
DROP (DBRMs)	Ι	Total number of DROP statements from DBRMs.	PD#DR
	T	Source: SYSIBM.SYSSTMT	
DROP (Packages)	I	Total number of DROP statements from packages. Source: SYSIBM.SYSPACKSTMT	PK#DR
DYNAMICRULES	Ι	The DYNAMICRULES option used when the plan was bound.	PDYNR
		B Dynamic SQL statements are handled like static SQL statements at run time.	
		blank Dynamic SQL statements are handled like dynamic SQL statements at run time or the DB2 subsystem is not at least V4.	
		Source: SYSIBM.SYSPLAN.DYNAMICRULES	
EXECUTE (All)	Ι	Total number of EXECUTE statements.	P#EC
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
EXECUTE (DBRMs)	Ι	Total number of EXECUTE statements from DBRMs.	PD#EC
		Source: SYSIBM.SYSSTMT	
EXECUTE (Packages)	Ι	Total number of EXECUTE statements from packages.	PK#EC
		Source: SYSIBM.SYSPACKSTMT	
EX (EXPLAIN)	5, I	EXPLAIN at BIND? Y Yes N No	PXPL
		Source: SYSIBM.SYSPLANS.EXPLAN	
EXPLAIN (All)	Ι	Total number of EXPLAIN statements.	P#EX
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
EXPLAIN (DBRMs)	Ι	Total number of EXPLAIN statements from DBRMs.	PD#EX
		Source: SYSIBM.SYSSTMT	
EXPLAIN (Packages)	Ι	Total number of EXPLAIN statements from packages.	PK#EX
		Source: SYSIBM.SYSPACKSTMT	
EXPREDICATE	I	 Indicates the CURRENTDATA option when the Plan was bound or rebound. B Data currency is not required for ambiguous cursors. Allow blocking for ambiguous cursors. C Data currency is required for ambiguous cursors. Inhibit blocking for ambiguous cursors. N Blocking is inhibited for ambiguous cursors but the Plan was created before the CURRENTDATA option was available. Source: SYSIBM.SYSPLAN.EXPREDICATE 	PEXPR
FETCH (All)	Ι	Total number of FETCH statements. Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	P#FT
FETCH (DBRMs)	Ι	Total number of FETCH statements from DBRMs. Source: SYSIBM.SYSSTMT	PD#FT
FETCH (Packages)	Ι	Total number of FETCH statements from packages. Source: SYSIBM.SYSPACKSTMT	PK#FT
FREED?	Ι	Has plan been FREEd? Y Yes N No Source: Derived	PFRE

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
GRANT (All)	Ι	Total number of GRANT statements.	P#GR
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
GRANT (DBRMs)	Ι	Total number of GRANT statements from DBRMs.	PD#GR
		Source: SYSIBM.SYSSTMT	
GRANT (Packages)	Ι	Total number of GRANT statements from packages.	PK#GR
		Source: SYSIBM.SYSPACKSTMT	
GROUP MEMBER	6, I	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND.	PGRP
		Source: SYSIBM.SYSPLAN.GROUP_MEMBER	
INSERTS (All)	1, I	Total number of INSERT statements.	P#IN
		Source: SYSIBM.SYSSTMT	
		Source: SYSIBM.SYSPACKSTMT	
INSERTS (DBRMs)	3, I	Total number of INSERT statements from DBRMs.	PD#IN
		Source: SYSIBM.SYSSTMT	
INSERTS (Packages)	2, I	Total number of INSERT statements from packages.	PK#IN
		Source: SYSIBM.SYSPACKSTMT	
IS (Isolation)	5, I	Isolation Level:	PISO
		 R RR (Repeatable Read). S CS (Cursor Stability). T RS (Read Stability). U UR (Uncommitted Read). 	
		Source: SYSIBM.SYSPLAN.ISOLATION	
KD (KEEPDYNAMIC)	2, I	Indicates the KEEPDYNAMIC option when the plan was bound or or rebound.	PKEEP
		Source: SYSPLAN.KEEPDYNAMIC	
LOCK SHR (All)	1, I	Total number of LOCK SHR statements.	P#LS
		Source: SYSIBM.SYSSTMT	
		Source: SYSIBM.SYSPACKSTMT	
LOCK SHR (DBRMs)	3, I	Total number of LOCK SHR statements from DBRMs.	PD#LS
		Source: SYSIBM.SYSSTMT	
LCK SHR (Packages)	2, I	Total number of LOCK SHR statements from packages.	PK#LS
		Source: SYSIBM.SYSPACKSTMT	
LOCK XCL (ALL)	1, I	Total number of LOCK XCL statements.	P#LX
		Source: SYSIBM.SYSSTMT	
		Source: SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
LOCK XCL (DBRMs)	3, I	Total number of LOCK XCL statements from DBRMs.	PD#LX
		Source: SYSIBM.SYSSTMT	
LOCK XCL (Packages)	2, I	Total number of LOCK XCL statements from packages.	PK#LX
		Source: SYSIBM.SYSPACKSTMT	
OPEN (All)	Ι	Total number of OPEN statements.	P#OP
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
OPEN (DBRMs)	Ι	Total number of OPEN statements from DBRMs.	PD#OP
		Source: SYSIBM.SYSSTMT	
OPEN (Packages)	Ι	Total number of OPEN statements from packages.	PK#OP
		Source: SYSIBM.SYSPACKSTMT	
OP (Operative)	5, I	Indicates whether the plan is operative.	POPR
		 Y Yes N No. An explicit BIND or REBIND is required first. 	
		Source: SYSIBM.SYSPLAN.OPERATIVE	
P#TS	Filter panel	Total number of DECLARE CURSOR and SELECT statements in plans.	P#TS
		Source: SYSIBM.SYSSTMT	
PD#TS	Filter panel	Total number of DECLARE CURSOR and SELECT statements in DBRMs.	PD#TS
		Source: SYSIBM.SYSSTMT	
PK#TS	Filter panel	Total number of DECLARE CURSOR and SELECT statements in packages.	PK#TS
		Source: SYSIBM.SYSSTMT	
PACKAGES	Ι	Number of packages bound into the plan.	P#KA
		Source: SYSIBM.SYSPACKAGE	
PLAN	1, 2, 3, 4, 5, 6, I	Name of the application plan. The list is in alphabetic order.	PLAN
		Source: SYSIBM.SYSPLAN.NAME	
PLAN FREED?	Ι	Has plan been FREEd?	PFRE
		Y Yes N No	
		Source: Derived	
PLENTRIES	5, I	Number of package list entries for the plan. This number will be a negative value if there are rows for the plan but the plan was bound in a prior release after fall back.	PPLEN
		Source: SYSIBM.SYSPLAN.PLENTRIES	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
PLSIZE (Plan Size)	5, I	Size measured in bytes of the base section of the plan.	PPSZ
		Source: SYSIBM.SYSPLAN.PLSIZE	
PREPARE (All)	Ι	Total number of PREPARE statements.	P#PR
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
PREPARE (DBRMs)	Ι	Total number of PREPARE statements from DBRMs.	PD#PR
		Source: SYSIBM.SYSSTMT	
PREPARE (Packages)	Ι	Total number of PREPARE statements from packages.	PK#PR
		Source: SYSIBM.SYSPACKSTMT	
QUALIFIER	4, I	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the plan.	PQLF
		Source: SYSIBM.SYSPLAN.QUALIFIER	
RE (Release)	5, I	When resources are released:	PRLS
		C At commitD At deallocation	
		Source: SYSIBM.SYSPLAN.RELEASE	
RELEASE (All)	Ι	Total number of RELEASE SQL statements in the Plan.	P#RE
		Source: SYSIBM.SYSSTMT	
RELEASE (DBRMs)	Ι	Number of RELEASE SQL statements from DBRMs.	PD#RE
		Source: SYSIBM.SYSSTMT	
RELEASE (Packages)	Ι	Number of RELEASE SQL statements from Packages.	PK#RE
		Source: SYSIBM.SYSSTMT	
REVOKE (All)	Ι	Total number of REVOKE statements.	P#RV
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
REVOKE (DBRMs)	Ι	Total number of REVOKE statements from DBRMs.	PD#RV
		Source: SYSIBM.SYSSTMT	
REVOKE (Packages)	Ι	Total number of REVOKE statements from packages.	PK#RV
		Source: SYSIBM.SYSPACKSTMT	
RO(REOPTVAR)	Ι	Indicates the REOPT option when the plan was bound or rebound.	PROPT
		Source: SYSPLAN.REOPTVAR	
ROLLBACK (All)	Ι	Total number of ROLLBACK statements.	P#RL
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
ROLLBACK (DBRMs)	Ι	Total number of ROLLBACK statements from DBRMs.	PD#RL
		Source: SYSIBM.SYSSTMT	
ROLLBACK (Packages)	Ι	Total number of ROLLBACK statements from packages.	PK#RL
		Source: SYSIBM.SYSPACKSTMT	
SELECTS (All)	1, I	Total number of SELECT statements.	P#SE
		Source: SYSIBM.SYSSTMT	
		Source: SYSIBM.SYSPACKSTMT	
SELECTS (DBRMs)	3, I	Total number of SELECT statements from DBRMs.	PD#SE
		Source: SYSIBM.SYSSTMT	
SELECTS (Packages)	2, I	Total number of SELECT statements from packages.	PK#SE
		Source: SYSIBM.SYSPACKSTMT	
SERVER	4, 6, I	Location name specified with the CURRENTSERVER option when the plan was last bound. Blank if none was specified.	PSRV
		Source: SYSIBM.SYSPLAN.CURRENTSERVER	
SET (All)	Ι	Total number of SET statements.	P#ST
		Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	
SET (DBRMs)	Ι	Total number of SET statements from DBRMs.	PD#ST
		Source: SYSIBM.SYSSTMT	
SET (Packages)	Ι	Total number of SET statements from packages.	PK#ST
		Source: SYSIBM.SYSPACKSTMT	
SET CONNECT (All)	Ι	Number of SET CONNECTION SQL statements in the Plan.	P#SC
		Source: SYSIBM.SYSSTMT	
SET CONNECT (DBRMs)	Ι	Number of SET CONNECTION SQL statements from DBRMs.	PD#SC
		Source: SYSIBM.SYSSTMT	
SET CONNECT (Packages)	Ι	The number of SET CONNECTION SQL statements from Packages.	PK#SC
		Source: SYSIBM.SYSSTMT	
SET DEGREE (All)	Ι	Total number of SET CURRENT DEGREE statements in the Plan.	P#SD
		Source: SYSIBM.SYSSTMT	
SET DEGREE (DBRMs)	Ι	Number of SET CURRENT DEGREE statements from DBRMs.	PD#SD
		Source: SYSIBM.SYSSTMT	

FIELD	FIELD ON DESCRIPTION FORMAT		SORTS/ FILTERS	
SET DEGREE (Packages)	Ι	The number of SET CURRENT DEGREE statements from Packages.	PK#SD	
		Source: SYSIBM.SYSSTMT		
SET HOST (All)	Ι	Total number of SET host variable SQL statements in the Plan.	P#SH	
		Source: SYSIBM.SYSSTMT		
SET HOST (DBRMs)	Ι	Number of SET host variable SQL statements from DBRMs.	PD#SH	
		Source: SYSIBM.SYSSTMT		
SET HOST (Packages)	I	The number of SET host variable SQL statements from Packages.	PK#SH	
		Source: SYSIBM.SYSSTMT		
SET PKGSET (All)	Ι	Total number of SET CURRENT PACKAGESET SQL statements in the Plan.	P#SP	
		Source: SYSIBM.SYSSTMT		
SET PKGSET (DBRMs)	ET (DBRMs) I Number of SET CURRENT PACKAGESET SQL statements from DBRMs.		PD#SP	
		Source: SYSIBM.SYSSTMT		
SET PKGSET (Packages)	Ι	The number of SET CURRENT PACKAGESET SQL statements from Packages.	PK#SP	
		Source: SYSIBM.SYSSTMT		
SET RULES (All) I		Number of SET CURRENT RULES statements in the plan	P#SR	
		Source: SYSIBM.SYSSTMT, or		
		Source: SYSIBM.SYSPACKSTMT		
SET RULES (DBRMs) I		Number of SET CURRENT RULES statements for DBRMs in the plan	PD#SR	
		Source: SYSIBM.SYSSTMT, or		
		Source: SYSIBM.SYSPACKSTMT		
SET RULES (Packages) I		Number of SET CURRENT RULES statements for packages in the plan	PK#SR	
		Source: SYSIBM.SYSSTMT, or		
		Source: SYSIBM.SYSPACKSTMT		
SET SQLID (All)	Ι	Total number of SET CURRENT SQLID SQL statements in the Plan.		
		Source: SYSIBM.SYSSTMT		
SET SQLID (DBRMs)	I	Number of SET CURRENT SQLID SQL statements From DBRMs.	PD#SS	
		Source: SYSIBM.SYSSTMT		
SET SQLID (Packages)	Ι	The number of SET CURRENT SQLID SQL statements from Packages.	PK#SS	
		Source: SYSIBM.SYSSTMT		

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS	
SQ	5	 SQLRULES option used when the plan was bound. Its value may be: D Use DB2 SQL rules. S Use standard SQL rules. blank The default, D is used. Source: SYSIBM.SYSPLAN.SQLRULES 	PSQLR	
SQLRULES	Ι	SQLRULES option used when the Plan was bound. Source: SYSIBM.SYSPLAN.SQLRULES	PSQLR	
STMTS (All)	1, I	Total number of statements. Source: SYSIBM.SYSSTMT Source: SYSIBM.SYSPACKSTMT	P#TL	
STMTS (DBRMs)	3, I	Total number of statements from DBRMs. Source: SYSIBM.SYSSTMT	PD#TL	
STMTS (Packages)	2, I	Total number of statements from packages. Source: SYSIBM.SYSPACKSTMT	PK#TL	
SYSENTRIES	5, I	Total number of connections (rows in SYSIBM.SYSPLSYSTEM). Source: SYSIBM.SYSPLAN.SYSENTRIES	PSYEN	
UPDATES (All)	1, I	Total number of UPDATE statements. Source: SYSIBM.SYSSTMT Source: SYSIBM.SYSPACKSTMT	P#UP	
UPDATES (DBRMs)	3, I	Total number of UPDATE statements from DBRMs. Source: SYSIBM.SYSSTMT	PD#UP	
UPDATES (Packages)	2, I	Total number of UPDATE statements from packages. Source: SYSIBM.SYSPACKSTMT	PK#UP	
VA (Validate)	5, I	 Can validity checking be deferred until run time? B All checking must be done at BIND R Checking is deferred if tables, views or privileges do not exist at BIND time Source: SYSIBM.SYSPLAN.VALIDATE 	PVLT	

FIELD	ON FORMAT	DESCRIPTION	SORTS/ FILTERS
VD (Valid)	5, I	 Indicates whether the plan is valid. Y Yes N No A Table or table space altered; no rebinding needed H Table has been altered, but plan is still valid if using DB2 Version 5.1 or greater Source: SYSIBM.SYSPLAN.VALID 	PVLD
VL (Verification)	5, I	 Results of plan verification. Possible values include: N The Plan was not verified. Y The Plan was verified successfully. E Plan verification was unsuccessful. Source: Derived 	PVRF
WHENEVER (All)	Ι	Total number of WHENEVER statements. Source: SYSIBM.SYSSTMT + SYSIBM.SYSPACKSTMT	P#WH
WHENEVER (DBRMs)	Ι	Total number of WHENEVER statements from DBRMs. Source: SYSIBM.SYSSTMT	PD#WH
WHENEVER (Packages)	Ι	Total number of WHENEVER statements from packages. Source: SYSIBM.SYSPACKSTMT	PK#WH

Selects

SELECT	DESCRIPTION	TAKES YOU TO
@	Remote EXPLAIN and gather statistics.	EXPLAIN (KTEPEXPL)
#	Remote EXPLAIN but do not gather statistics.	EXPLAIN (KTEPEXPL)
Α	Display OMEGAMON II for DB2 Application Trace Facility.	OMEGAMON II for DB2 ATF
	Note: You must know the name of the data set containing this history information to use this facility. For more information, see "Historical Reporter Options" in the OMEGAMON II for DB2 Historical Reporting Guide.	
В	Generate a BIND statement for the selected plan.	BIND Plan (KTEPBIPL)
C	Compare the results of the latest !DB/EXPLAIN EXPLAIN for a selected plan with the results of performing a BIND EXPLAIN (YES).	EXPLAIN Compare (KTEPCMPR)
D	List all DBRMs for the selected plan.	DBRMs (KTEPDBRM)

SELECT	DESCRIPTION	TAKES YOU TO	
Е	EXPLAIN a plan and gather statistics.	EXPLAIN (KTEPEXPL)	
F	Generate FREE plan.	Output Options (KTEPOUTP)	
G	Display Cost details for the selected plan.	Cost (KTEPCOST)	
Н	Display the EXPLAIN history for the selected plan.	EXPLAIN History (KTEPHIST)	
Ι	Display detailed plan information including BIND options.	Plan Information (KTEPPLIN)	
J	Select 2 plans with J and compare plan attributes.	Compare History (KTEPJHIS)	
K	Display the packages associated with a selected plan.	Packages (KTEPKACK)	
L	Display the EXPLAIN output from the latest EXPLAIN of a selected plan.	EXPLAIN (KTEPEXPL)	
Μ	Display the selected plan's package list.	Package List (KTEPPLPK)	
Ν	Display all connections for the selected plan.	Plan Connections (KTEPPCON)	
Р	Display OMEGAMON II for DB2 Accounting Reports.	OMEGAMON II for DB2 Accounting Reports	
	Note: You must know the name of the data set containing this history information to use this facility. You can change the name of the data set by using the OMEGAMON II for DB2 OPTIONS command. For more information, see "Historical Reporter Options" in the OMEGAMON II for DB2 Historical Reporting Guide.		
Q	Display all collections associated with the selected plan.	Collections (KTEPCLTN)	
R	Generate a REBIND statement for the selected plan.	BIND/REBIND panel (KTEPBIPL)	
S	List all the SQL statements for each DBRM and package in the plan.	Statements (KTEPSTMT)	
Т	Display tables for all DB2 tables, views, or aliases referenced by any SQL INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR statement in any DBRM or package.	Tables (KTEPTABL)	
U	EXPLAIN a plan (do not gather statistics).	EXPLAIN (KTEPEXPL)	
V	Verify the plan.	Plan Verification (KTEPPVER)	
W	Perform Whatif analysis on the selected plan.	Whatif (KTEPWHIF)	
X	Display Exceptions that exist for each SQL statement Exceptions (KTEPXCPT) in the selected Plan.		
Z	Generate the BIND conversion statements required to convert the DBRM to a Package and include the Package in the Plan.	Exceptions (KTEPXCPT)	
8	Explain and display only DBRMs that have not been EXPLAINed—gather catalog statistics.	EXPLAIN (KTEPEXPL)	
9	Explain and display only DBRMs that have not been EXPLAINed—do not gather catalog statistics.	EXPLAIN (KTEPEXPL)	

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
BIND	Generate BIND statements for all active plans.	BIND Plan (KTEPBIPL)
BINDADD	BIND ACTION(ADD).	BIND Plan (KTEPBIPL)
BINDCNV	Generate the BIND commands needed to convert all the DBRMs bound into the Plan to Packages and include the Packages in the Plan.	BIND Plan (KTEPBIPL)
BINDEXP	BIND EXPLAIN(YES).	BIND Plan (KTEPBIPL)
BINDREP	BIND ACTION(REPLACE).	BIND Plan (KTEPBIPL)
COMPARE	Perform a BIND COMPARE of each Plan on the current display according to the options set on the Bind Compare Options Housekeeping Panel KTEPHOBC.	EXPLAIN Compare (KTEPCMPR)
COST	Display statement costs.	Costs (KTEPCOST)
DROP	Generate FREE statements.	Output Options (KTEPOUTP)
EXPL	EXPLAIN all items that have not been EXPLAINed since they were last bound.	EXPLAIN (KTEPEXPL)
EXPLA	EXPLAIN all regardless of BIND time and do not gather statistics. Also display latest EXPLAIN for previously EXPLAINed plans.	EXPLAIN (KTEPEXPL)
EXPLAR	Remote EXPLAIN all items regardless of BIND time, and do not gather statistics.	EXPLAIN (KTEPEXPL)
EXPLO	EXPLAIN and display only Plans that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)
EXPLOR	Remote EXPLAIN and display only Plans that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.	EXPLAIN (KTEPEXPL)
EXPLR	Remote EXPLAIN all items that have not been EXPLAINED since they were last bound. Also display latest EXPLAIN for previously EXPLAINed plans.	EXPLAIN (KTEPEXPL)
GEXPL	EXPLAIN all items on the list that have not been EXPLAINed since they were last bound and gather statistics. Also display latest EXPLAIN for previously EXPLAINed plans.	EXPLAIN (KTEPEXPL)
GEXPLA	EXPLAIN all items on the list and gather statistics regardless of BIND time.	EXPLAIN (KTEPEXPL)
GEXPLAR	Remote EXPLAIN all items on the list and gather statistics regardless of BIND time.	EXPLAIN (KTEPEXPL)
GEXPLO	EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)
GEXPLOR	Remote EXPLAIN and display only packages that have not been EXPLAINed since they were last bound. Gather catalog statistics.	EXPLAIN (KTEPEXPL)

COMMAND	DESCRIPTION	TAKES YOU TO
GEXPLR	Remote EXPLAIN all items on the list that have not been EXPLAINed since they were last bound and gather statistics. Also display latest EXPLAIN for previously EXPLAINed plans.	EXPLAIN (KTEPEXPL)
HIST	Display Plan History.	
ІМРАСТ	Compare each nonhistorical plan with its most recent historical counterpart.	Compare History (KTEPJHIS)
INFO	Display Plan Information.	Plan Information (I)
LEXPL	Display latest EXPLAIN.	EXPLAIN (KTEPEXPL)
LEHIST	Display latest EXPLAIN History.	EXPLAIN History (KTEPHIST)
NOHIST	Reset History.	EXPLAIN History (KTEPHIST)
REBIND	Generate REBIND statements.	BIND/REBIND (KTEPBIPL)
REBINDEX	On a REBIND, forces EXPLAIN(YES).	Output Options (KTEPOUTP)
ХСРТ	Display Exceptions.	Exceptions (KTEPXCPT)

A note about compares

In V235, another layer of information has been added to your compare processing. Typically, when you are on the Plans, Packages, or DBRMS panel, you can issue the IMPACT command (or the J select) to obtain compare history information. The IMPACT command or J select compares such things as precompile options, owners, or qualifiers.

CEXPL is issued from the Compare History panel and compares EXPLAINs.

Primary Menu

Overview

This unit describes the !DB/EXPLAIN Primary Menu.

Background about the Primary Menu

The Primary Menu (KTEPMENU) provides entry to !DB/EXPLAIN. You can find more information about !DB/EXPLAIN's Primary Menu and its functions in the chapter "Accessing !DB/EXPLAIN Functions" in the !DB/EXPLAIN User's Guide.

Access

You access the !DB/EXPLAIN Primary Menu from the !DB/Tools Product Selection Menu or when entering the product from TSO by means of a CLIST.

Panel

The following illustration shows the Primary Menu panel.

DB, Cmd ===>	/EXPLAIN DB2=DB31	
PR	IMARY MENU	
Option ===>		
1 Plans 2 DBRMs	Extract ID	===> DB31
3 Packages 4 Collections 5 Tables 6 Libraries 7 Costs 8 Exceptions	Display Masks? Masking in effect?	
9 JCL Generation 10 Dynamic SQL 11 Administration Menu		
(C) Copyright	Version: 500 Main ⁻ CANDLE Corp. 1993 - 19	t. Level: 9503 PSP: 0 999

Fields

FIELD	DESCRIPTION	
DISPLAY MASKS?	Indicates whether or not the Selection Masking panel (KTEPHOMK) will be displayed. Y Yes N No	
EXTRACT ID	1-8 character ID that specifies the extract. Candle Corp. recommends using the DB2 Subsystem ID (SSID) as the first characters of the extract ID to allow for easy tracking of extracts	
FUNCTION	This numeric field represents which function or command to invoke:1Plans (KTEPLAN)2DBRMs (KTEPDBRM)3Packages (KTEPKACK)4Collections (KTEPCLTN)5Tables (KTEPTABL)6Libraries (KTEPLIBR)7DB2 Costs (KTEPCOST)8Exceptions (KTEPZCPT)9JCL Generation (KTEPJCLE)10Dynamic SQL (SFXPSQLI)11Administration Menu (KTEPADMN)	
MASKING IN EFFECT?	Indicates whether or not there are masks specified on the Selection Masking panel (KTEPHOMK). Y Yes N No	

Sessions Menu

Overview

This unit describes the Sessions Menu.

Background about the Sessions Menu

The Sessions Menu (KTEPSWCH) shows a list of available !DB/EXPLAIN functions. The functions are the same as those on the !DB/EXPLAIN Primary Menu; however, by using the Sessions Menu you can have several !DB/EXPLAIN functions active at the same time and move between them.

The session you are currently in is denoted by a "C" on the line next to it; other active sessions are denoted by an "A". You can find out more about the Sessions Menu in the unit "Access from the Sessions Menu" in the *!DB/EXPLAIN User's Guide.*

Access

The Sessions Menu is accessed by entering "/" on the command line of most panels.

Panel

The following illustration shows the Sessions Menu panel.

```
SESSIONS
Select ===> 7
  1. // A Main Session
  2. /P
            Plans
  3. /D
            DBRMs
  4. /K
            Packages
  5. /Q
            Collections
  6. /T C Tables
  7./L
            Libraries
  8. /C
            Costs
  9. /X
            Exceptions
```

Statements

Overview

This unit describes the Statements panel.

Background about the Statements panel

The Statements panel (KTEPSTMT) lists SQL statements.

Formats

This panel is available in three formats:

Format	Displayed fields	
Format 1	First line of SQL text	
Format 2	Expanded SQL text for all statements	
Format 3	Expanded SQL text for EXPLAINable statements only	

Access

You can access this panel through the DBRMs, Packages, Plans, or Tables panels, or through macros, execs, and CLISTs such as KTEXPL (ISPF edit) and KTEQMF (QMF Bridge). See "Accessing and Exiting !DB/EXPLAIN" in the *!DB/EXPLAIN User's Guide* for more information.

Panels

The following illustration shows the Statements panel.

Cmd ===>	DB/EXPLAIN DB2=D42B	SCROLL ===> CSR
Cmds: D	STATEMENTS O (Menu) GLOBAL (Menu)	Selects: ? (Menu)
• · · · ·	S I C T S H SQL TEXT	
	E=DSNHYCRD COLLID=DSNHYCRD CONTOKEN=1554	03E6085555E10
PRECOM	PILE=1999/02/13 07:38:37.843832	
- 1051	N DECLARE CURSOR1 CURSOR FOR	
- 1056	N DECLARE CURSOR2 CURSOR FOR	
- 204	N SELECT TYPE , COLCOUNT	
- 277	N OPEN CURSOR1	
- 278	N FETCH CURSOR1	
- 360	N FETCH CURSOR1	
- 375	N CLOSE CURSOR1	
- 420	N OPEN CURSOR2	
- 421	N FETCH CURSOR2	
- 637	N FETCH CURSOR2	
- 652	N CLOSE CURSOR2	
*******	**************************************	*****

If the extract has discarded a statement or statements from the associated DBRM, the Statements panel displays the message: **Extract Discarded Statements**.

You can enter various selects on the Statements panel. Entering R causes !DB/EXPLAIN to display this Recommendations panel.

Statements

```
----- DB/EXPLAIN DB2=D31A -----
CMD ===>
                                                       SCROLL ===> PAGE
                       R E C O M M E N D A T I O N S
 Cmds: GLOBAL (Menu)
   -----
                   _____
PLAN=DBT925E DBRM=DSDDB2UP CONTOKEN=1470006C10B79FB4
 PRECOMPILE=1999/02/23 11:42:08.610000
 VERSION=
STATEMENT NUMBER
                  373
  RECOMMENDATION 000002
     Tablespace SYSDBASE has a LOCKSIZE of ANY. Lock escalation may
     occur. If concurrency is of utmost importance for applications
     referencing this tablespace then LOCKSIZE(PAGE) may be a better
     choice.
     When LOCKSIZE ANY is specified, the number of locks that any
     program can hold within a table space is limited by the value
     specified for LOCKS PER TABLE(SPACE) when DB2 was installed.
     When the number of page locks reaches the limit, a tablepace
     lock is acquired and all of the page locks are released. When
     LOCKSIZE PAGE is specified, lock escalation will not occur.
```

On the Statements panel, if you select a statement with the H select, !DB/EXPLAIN displays the Host Variables panel.

If you select a statement with the **Z** select and the statement contains host variables, !DB/EXPLAIN displays the Host Variables panel. If there are no host variables in the statement you selected, the Host Variables panel is not displayed.

You can enter values for the host variables before executing the statement. If you accessed the Host Variables panel using the H select, the panel lists all of the host variables referenced by the SQL statement you selected. If you accessed the Host Variables panel using the Z select, the panel lists only those host variables needed to execute the statement you selected.

You can save the host variable values, types, and lengths permanently or temporarily depending on your specification in the Save Values Permanently? field on the Host Variables panel.

-	ST VARIABL		011 ===> PAG
mds: DO (Menu) GLOBAL (Menu) Enter values for host variable	s as you would in a	dynamic SQL sta	
Save values permanently? ===>	Y (Y Yes N No) (Will be saved i	n USER.PDS(HOSTS	;))
Statement Number 458 of DBRM D	SDDB2UP		
HOST VARIABLE NAME / VALUE	DATA TYPE	LENGTH	SCALE
TMP#EXTS	SMALLINT	2	
TMPASSGN	INTEGER	4	
TMPDBNAM	CHARACTER	8	
TMPDSTYP	CHARACTER	1	
TMPPART#	SMALLINT	2	

After you have executed a statement, you can use the Y select to show the Statement Execution Summary panel.

CMD ===> DB/EXPLAIN DB2=D31A SCROLL ===> CSR STATEMENT EXECUTION SUMMARY Cmds: GLOBAL (Menu) DB2 SUBSYSTEM - D31A COST - 6.3 TIMERONS DEFAULT CREATOR - SYSIBM ELAPSED TIME - 0.75 SECS SET CURRENT SQLID - CPU TIME - 0.10 SECS CURRENT DEGREE - ANY SERVICE UNITS - 2,842.00 SQLERRD(3) - 0 ROWS RETURNED - 1 (ROWS UPDATED) SELECT NAME , CREATOR , TYPE , DBNAME , TSNAME , DBID , OBID , COLCOUNT , EDPROC , VALPROC , CARD , NPAGES , PCTPAGES , PARENTS , CHILDREN , KEYCOLUMNS , RECLENGTH , STATUS , KEYOBID , CHECKFLAG , CHECKRID , AUDITING , CREATEDBY , LOCATION , TBCRATOR , TBNAME , CREATEDTS , ALTEREDTS , DATACAPTURE , RBA1 , RBA2 FROM SYSIBM.SYSTABLES WHERE CRATOR = 'SYSIBM' AND NAME = 'SYSTABLES'

Fields

FIELD	ON PANEL	DESCRIPTION	FILTERS
СН	KTEPSTMT	A value that identifies whether a user has changed the SQL text of a statement.	SCHA SORNO
		 Y User has changed the SQL statement text N The text of the statement is the original text. A New SQL statement added by the user. 	
		The SORNO filter filters on the statement number. If the value of the C H field is either Y or N, then the statement number is that number appearing on the panel. If the value of the C H field is A, then the statement number used is the statement number of the original statement (that is, the true source statement).	
		Source: derived	
CURRENT DEGREE	KTEPSTSU	DEGREE at the time the SQL statement was executed.	
		Source: Derived on overrides	
		Source: SYSIBM.SYSPLAN.DEGREE	
		Source: SYSIBM.SYSPACKAGE.DEGREE	
DATA TYPE	KTEPHSVU	Host variable data type.	HTYPE
		If the SQL statement is typed in by the user and the host variable is not found in the host variable table, the data type will initially be blank.	
		Source: SYSIBM.SYSSTMT.TEXT	
		Source: SYSIBM.SYSPACKSTMT.STMT	
		Source: A DBRM	
		Source: User-entered	
DBRM/PACKAGE/	KTEPSTMT	DBRM, package, plan, or table name	SDBRM
PLAN/TABLE NAME		This field may be blank if the Statements panel was not accessed through the !DB/EXPLAIN menus.	
		Source: SYSIBM.SYSDBRM.NAME	
		Source: SYSIBM.SYSPACKAGE.NAME	
		Source: SYSIBM.SYSPLAN.NAME	
		Source: SYSIBM.SYSTABLE.NAME	
HOST VARIABLE	KTEPHSVU	Host variable name.	HOST
NAME		Source: SYSIBM.SYSSTMT.TEXT	
		Source: SYSIBM.SYSPACKSTMT.STMT	
		Source: Incoming SQL text	
		Source: A DBRM	

FIELD	ON PANEL	DESCRIPTION	FILTERS
HOST VARIABLE VALUE	KTEPHSVU	Value of host variable. Enter values as you would in a dynamic SQL statement. If no value is specified, the default value for the data type is used. If the data type of the host variable is known, this field will be long enough to hold the longest value for that data type or the longest special register applicable to the data type of the host variable. If the data type is not known, the length of this field is controlled by the Max Length for Host Var field on the SQL Defaults Housekeeping panel. The maximum input length is 256 characters. Source: User-entered	
IS (Isolation Level)	KTEPSTMT	Isolation level of the statement	SISO
		 R RR (Repeatable Read) S CS (Cursor Stability) T RS (Read Stability) U UR (Uncommitted Read) 	
		Source: SYSIBM.SYSPACKSTMT.ISOLATION, or	
		Source: SYSIBM.SYSSTMT.ISOLATION	
LENGTH	KTEPHSVU	Length of host variable. If the SQL statement is typed in by the user and the host variable is not found in the host variable table, then the length will default to the value specified in the Max Length for Host Var field of the SQL Defaults Housekeeping panel.	HLENG
		Source: SYSIBM.SYSSTMT.TEXT	
		Source: SYSIBM.SYSPACKSTMT.STMT	
		Source: A DBRM	
 (NAME heading) DBRM PLAN PACKAGE TABLE 	KTEPSTMT	T A variable field describing the type of data displayed in the column below it.	
(Plan Information)	KTEPSTMT	This field consists of Plan Name, Plan Owner, and Bound by.	
		This field may be blank if the Statements panel was not accessed through the !DB/EXPLAIN menus.	
		Source: SYSIBM.SYSPLAN.NAME	
		Source: SYSIBM.SYSPLAN.CREATOR	
		Source: SYSIBM.SYSPLAN.BOUNDBY	

FIELD	ON PANEL	DESCRIPTION	FILTERS
PRECOMPILE DATE	KTEPSTMT	Date the DBRM or Package was precompiled. This field may be blank if the Statements panel was not accessed through the !DB/EXPLAIN menus. Source: SYSIBM.SYSDBRM.PRECOMPDATE PRECOMPTIME Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP	
RECOMMENDATION TEXT	KTEPRECM	Recommendations. Source: Derived	
SAVE VALUES PERMANENTLY?	KTEPHSVU	 Determines whether host variable values are saved Y Save the host variable values permanently. They are then available to !DB/EXPLAIN until you request them to be deleted. N Do not permanently save any host variable values. In nonextracted mode (using KTEXPL or KTEON): The host variable table is scanned for a match on the variable name only. The attributes and value for the first host variable matching the name are used. The host variable attributes (data type, length, or scale) can be entered or changed. If attributes are changed, the host variable table is rescanned to find a value matching the new attributes. 	
SCALE	KTEPHSVU	Scale of host variable. If the SQL statement is typed in by the user and the host variable is not found in the host variable table, then the scale is blank. The scale will also be blank if it is not applicable for the data type. Source: SYSIBM.SYSTMT.TEXT Source: SYSIBM.SYSPACKSTMT.STMT Source: A DBRM	HSCAL

FIELD	ON PANEL	DESCRIPTION	FILTERS
SQL TEXT	KTEPSTMT	Full SQL statement text expanded. Valid values include:	SSTTY SCURS
		<i>Note:</i> Filter SEXPL can take the following values when used with	SEXPL
		SQL TEXT:	STEXT
		 SEXPL=Y The SQL statement is EXPLAINable. SEXPL=N The SQL statement is not EXPLAINable. SEXPL=W WHERE CURRENT OF clause is present. 	
		Filter STEXT takes the form STEXT= <i>statement text</i> . For example:	
		• STEXT=CURSOR WITH HOLD displays all statements with a cursor with hold clause	
		• STEXT=UNION displays all statements with a UNION clause	
		Source: SYSIBM.SYSSTMT.TEXT	
		Source: SYSIBM.SYSPACKSTMT.STMT	
ST(STATUS)	KTEHSTMT	The bind status of the statement. Valid values include:	SSTAT
		 C Compiled statement was bound successfully P Parsed statement did not bind successfully; VALIDATE RUN was used I Statement will be interpreted at execution time E Explain statement D Distributed statement that uses system-directed access R Reoptimized compiled statement; the statement bound successfully, but the access path will re-optimize at execution time using input variable values X Reoptimized parsed statement; the statement bind failed and VALIDATE RUN was used Blank DB2 version is not at least Version 5 or greater 	
		Source: SYSPACKSTMT.STATUS or SYSSTMT.STATUS	ļ
STMTNO	KTEPSTMT	Statement number of SQL statement causing the exception.	SSTNO
		Source: SYSIBM.SYSSTMT.STMTNO	
		Source: SYSIBM.SYSPACKSTMT.STMTNO	

FIELD	ON PANEL	DESCRIPTION	FILTERS
VERSION	KTEPSTMT	Version identifier for the DBRM or package.	
		This field may be blank if the product panel was not accessed through the Primary Menu.	
		Source: SYSIBM.SYSDBRM.VERSION	
		Source: SYSIBM.SYSPACKSTMT.VERSION	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
@	Remote EXPLAIN and gather statistics.	EXPLAIN (KTEPEXPL)
#	Remote EXPLAIN but do not gather statistics.	EXPLAIN (KTEPEXPL)
С	Reset SHOW and SHOWE.	
Е	EXPLAIN and gather statistics.	EXPLAIN (KTEPEXPL)
Н	Show host variables.	Host Variables (KTEPHSVU)
L	Show latest EXPLAIN.	EXPLAIN (KTEPEXPL)
0	Output to a dataset.	Output Options (KTEPOUTP)
R	Display recommendations.	Recommendations (KTEPSTRC)
S	Show statements.	
U	EXPLAIN but do not gather statistics.	EXPLAIN (KTEPEXPL)
V	Statement execution.	Execution Results (SFXPSQLX)
W	Perform Whatif analysis on the selected statement.	Whatif (KTEPWHIF)
X	Display Exceptions	Exceptions (KTEPXCPT)
Y	Display Statement Execution Summary.	Statement Execution Summary (KTEPSTSU)
Z	Execute the statement.	Execution Results (SFXPSQLX) or Host Variables (KTEPHSVU) if there are host variables available.
2	Permit an ISPF edit against the SQL statement.	Blank

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
CAPS ON	(From Host Variables Panel) Translate entered input data to upper case.	
CAPS OFF	(From Host Variables Panel) Do not translate entered input data to upper case.	
DELETE	(From Host Variables Panel) Delete all saved host variable values and attributes.	
EXPLA	EXPLAIN all statements.	EXPLAIN (KTEPEXPL)
EXPLAR	Remote EXPLAIN all statements.	EXPLAIN (KTEPEXPL)
FIND	Find a specific character string on the display. Can be abbreviated as F. See "Format of the FIND command" later in this unit for information about the format of the FIND command.	
GEXPLA	EXPLAIN all statements and gather statistics.	EXPLAIN (KTEPEXPL)
GEXPLAR	Remote EXPLAIN all statements and gather statistics.	EXPLAIN (KTEPEXPL)
LEXPL	Display latest EXPLAIN	EXPLAIN (KTEPEXPL)
LOCATE	Locate a specific character string or a specific character string for a specific object type in one of the fields on the display. Can be abbreviated as L or LOC. See "Format of the LOCATE command" later in this unit for information about the format of the LOCATE command.	
NOVERS	Do not display version	EXPLAIN (KTEPEXPL)
OUT	Output statements	EXPLAIN (KTEPEXPL)
RESET	(From Statements Panel) Reset SHOW and SHOWE.	
RESET	(From Host Variables Panel) Reset host variable values and attributes.	
RESETALL	(From Host Variables Panel when in non-extracted mode) Reset host variable values and attributes.	
RFIND	Reexeute the last FIND command. Can be abbreviated as RF.	
RLOCATE	Reexeute the last LOCATE command. Can be abbreviated as RL or RLOC.	
SHOW	Expand all SQL statements.	
SHOWE	Expand all EXPLAINable SQL statements.	
VERS	Display version	
ХСРТ	Display exceptions.	Exceptions (KTEPXCPT)

Format of the FIND command

The FIND command can be abbreviated as \mathbf{F} . The format of the FIND command is as follows:

FIND string [FIRST|LAST|NEXT|PREV] [ASIS]

This table provides information about the parameters of the FIND command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
string (required)	One of:
	• A quoted or unquoted string that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	• * (asterisk)—meaning find an occurrence of the last value entered for <i>string</i>
FIRST	Find the first occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
LAST	Find the last occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
PREV	Find the previous occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
NEXT	Find the next occurrence of the string (the default) on the display. Ignore the case of any characters in the string when performing the FIND.

Format of the FIND command	(continued)
----------------------------	-------------

Parameter	Meaning
ASIS	Can be included with any of the above parameters and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

Format of the LOCATE command

The LOCATE command can be abbreviated as **L** or **LOC**. The format of the LOCATE command is as follows:

LOCATE *field_name* operator *string* [ASIS]

This table provides information about the parameters of the LOCATE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
field_name (required)	One of the following values:
	 STMTNO—Locate the string in the Statement Number field ST—Locate the string in the STATUS field IS—Locate the string in the Isolation Level field CH—Locate the string in the Statement Changed Indicator field TEXT—Locate the string in the SQL Text field

Parameter	Meaning
operator (required)	The following can be used with any field listed above under <i>field_name</i> :
	= (equals)
	These operators can only be used with the STMTNO field:
	<pre>> (greater than) < (less than) >= (greater than or equal to) <= (less than or equal to) <> (not equal to) ¬= (not equal to)</pre>
value (required)	A quoted or unquoted value that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	If the field in which a value is to be located is numeric, the format of <i>value</i> on the LOCATE command <i>must</i> match the format of the display field. Can take the form:
	999
	9,999 or 9.999
ASIS	Can be included when <i>field_name</i> =TEXT and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

Table Columns

Overview

This unit describes the Table Columns panel.

Background about the Table Columns panel

The Table Columns panel (KTEPTCOL) allows you to view and update table column information. Two formats are available. Highlighted values on the panel may be updated. The values for HIGHKEY, HIGH2KEY, LOWKEY, and LOW2KEY can be entered in character or hexadecimal format if the column is of character or graphic type. Rows on panel KTEPTCOL are selectable. When a row is selected, the Column Distribution Statistics panel is displayed.

When you EXPLAIN an entity and save the results, the amount of statistics gathered are based on the value you have specified for the Amount of Statistics to Gather field on Housekeeping's EXPLAIN Defaults panel. If you want to see table column statistics, you must specify a value of 2 or greater for this field.

When you perform a what-if analysis on an entity, the statistics that were gathered at the time the entity was EXPLAINed are used in generating the Whatif and ancillary (Table Columns/Index Keys) displays. If you need to override the value specified in the Amount of Statistics to Gather field, issue a GSTATS command to reacquire statistics from the catalog and refresh the What-if display, and then proceed with the what-if analysis.

Formats

The panel KTEPTCOL is available in two formats:

Format	Displayed fields
Format 1	Partitioned data is not displayed.
Format 2	Partitioned data is displayed.

Access

Table Columns is invoked whenever a user selects:

- A table using **C** on the Whatif panel KTEPWHIF
- A table using **C** on the Estimator panel KTEPESTM
- A key column using **S** on the Index Keys panel KTEPCKEY.

Panels

The following illustration shows format 1 of the Table Columns panel.

DB/EXPLAIN DB2=D31A LINE 1 CMD ===> SCROLL == T A B L E C O L U M N S	
Cmds: DO (Menu) GLOBAL (Menu) Selects: ? The fields marked with * can be u	
TABLE=SYSIBM.SYSTABLES	
<pre>COLUMN NAME = ALTEREDTS NULLS = N COLNO = 33 COLTYPE = TIMESTMP UPDATES = N KEYSEQ = 0 FOREIGNKEY = DEFAULT = Y LENGTH = 10 *COLCARD = -1 FLDPROC = N SCALE = 0 HIGH2KEY NULL = N *VALUE = LOW2KEY NULL = N *VALUE = STATS TIMESTAMP= 1999/05/19 01:45:40.150000</pre>	
<pre>_ COLUMN NAME = AUDITING NULLS = N COLNO = 27 COLTYPE = CHAR UPDATES = N KEYSEQ = 0 *COLCARD = -1 FLDPROC = N SCALE = 0 HIGH2KEY NULL = N *VALUE = LOW2KEY NULL = N *VALUE = STATS TIMESTAMP= 1999/05/19 01:45:40.150000 .</pre>	
************************************	*****

The following illustration shows format 2 of the Table Columns panel.

------ DB/EXPLAIN DB2=D31A ------ LINE 1 OF 618 CMD ===> SCROLL ===> CSR TABLE COLUMNS Selects: ? (Menu) Cmds: DO (Menu) GLOBAL (Menu) The fields marked with * can be updated. _____ TABLE=TDDB36A.KTETT11E ABLE=IDDUS... _ COLUMN NAME = LOC_ID COLTYPE = CHAR *FORFIGNKEY = S *COLCARD = 0HIGH2KEY NULL = N *VALUE = LOW2KEY NULL = N *VALUE = _ _ STATS TIMESTAMP= 1999/08/23 08:56:24.130000 PARTITION 1 COLCARD = 0 ST HIGHKEY NULL = N VALUE = STATS TIMESTAMP= 1999/08/19 09:17:25.657188 HIGH2KEY NULL = N VALUE = LOWKEY NULL = N VALUE = LOW2KEY NULL = N VALUE = PARTITION 2 COLCARD = 0 HIGHKEY NULL STATS TIMESTAMP= 1999/08/19 09:17:25.657188 NULL = N VALUE = HIGH2KEY NULL = N VALUE = _ LOWKEY NULL = N VALUE = LOW2KEY NULL = N VALUE = _ PARTITION 10 - COLUMN NAME = ORDER_DE COLTYPE = VARCHAR NULLS = N COLNO = 7UPDATES = YKEYSEQ = 0DEFAULT = Y LENGTH = 40*FOREIGNKEY = S *COLCARD = 0FLDPROC = NSCALE = 0HIGH2KEY NULL = N *VALUE = LOW2KEY NULL = N *VALUE = STATS TIMESTAMP= 1999/08/23 08:56:24.130000 PARTITION 1 COLCARD = 0 ST HIGHKEY NULL = N VALUE = STATS TIMESTAMP= 1999/08/19 09:17:25.657188 HIGH2KEY NULL = N VALUE = LOWKEY NULL = N VALUE = _ LOW2KEY NULL = N VALUE = PARTITION 2 COLCARD = 0 HIGHKFY NULL STATS TIMESTAMP= 1999/08/19 09:17:25.657188 NULL = N VALUE = HIGHKEY HIGH2KEY NULL = N VALUE = LOWKEY NULL = N VALUE = LOW2KEY NULL = N VALUE = _ _

This is the continuation of format 2.

```
PARTITION 10
     .
     •
                                         NULLS = N
UPDATES = Y
_ COLUMN NAME = ORDER_INCREASE_PCT
                                                         COLNO = 8
    COLTYPE
               = FLOAT
                                                        KEYSEQ = 0
                                          FLDPROC = N
                                                         SCALE = 0
    *COLCARD
                = 0
 - HIGH2KEY NULL = N *VALUE =
    LOW2KEY
                NULL = N *VALUE =
 _
    STATS TIMESTAMP= 1999/08/23 08:56:24.130000
     PARTITION 1
       COLCARD = 0
                                 STATS TIMESTAMP= 1999/08/19 09:17:25.657188
    HIGHEEY NULL = N VALUE =
HIGHEEY NULL = N VALUE =
LOWKEY NULL = N VALUE =
     _ LOWKEY
       LOW2KEY
                 NULL = N VALUE =
     PARTITION 2
        COLCARD = 0
                                  STATS TIMESTAMP= 1999/08/19 09:17:25.657188
                  NULL = N VALUE =
       HIGHKEY
    HIGH2KEY NULL = N VALUE =
    _ LOWKEY
                  NULL = N VALUE =
       LOW2KEY NULL = N VALUE =
     _
_ COLUMN NAME = ORDER_QUANTITY
                                         NULLS = N
                                                         COLNO = 6
                                          UPDATES = Y \quad KEYSEQ = 0
    COLTYPE
               = DECIMAL
                = 0
                                          FLDPROC = N SCALE = 2
    *COLCARD
    HIGH2KEY NULL = N *VALUE =
LOW2KEY NULL = N *VALUE =
 _
     STATS TIMESTAMP= 1999/08/23 08:56:24.130000
     PARTITION 1
        COLCARD = 0
                                  STATS TIMESTAMP= 1999/08/19 09:17:25.657188
        HIGHKEY NULL = N VALUE =
       HIGH2KEY NULL = N VALUE =
     _
       LOWKEY NULL = N VALUE =
LOW2KEY NULL = N VALUE =
     _
     _
     .
     .
```

Fields

	You can	update the	fields	indicated	by a	n asterisk (*).
--	---------	------------	--------	-----------	------	-----------------

FIELD	DESCRIPTION	NOTES
COLCARD (non-partition) *	Estimated number of distinct values in the column	Source: SYSIBM.SYSCOLUMNS.COLCARD
COLCARD (partition)	Column cardinality for the partition.	Source: SYSIBM.SYSCOLSTATS.COLCARD
COLNO	Numeric position of the column in the table	Source: SYSIBM.SYSCOLUMNS.COLNO
COLTYPE	Column type as specified in the definition of the column.	Source: SYSIBM.SYSCOLUMNS.COLTYPE
DEFAULT	Whether the column has a default value.YThe column has a default value.NThe column does not have a default value.	Source: SYSIBM.SYSCOLUMNS.DEFAULT
FLDPROC	Indicates whether column has a field procedure.	Source: SYSIBM.SYSCOLUMNS.FLDPROC
FOREIGNKEY *	Applies to character columns only and indicates the subtype of the data. Data type may be bit data, single byte character string data, or mixed data.	This field can be updated if the column is character-type. Source: SYSIBM.SYSCOLUMNS.FOREIGNKEY
HIGHKEY NULL (partition) *	Null indicator for the highest value of the column within the partition. The value in the field may be: Y The column can contain nulls and the HIGHKEY value is null. N The column cannot contain nulls or the column can contain nulls or the column can contain nulls but the HIGHKEY value is not null. If the cubus in the field is X the	This field is updateable if the column can contain nulls. Source: Derived from SYSIBM.SYSCOLSTATS.HIGHKEY
HIGHKEY VALUE (partition)	If the value in the field is Y, the HIGHKEY VALUE is ignored.Highest value of the column within the partition.	Source: SYSIBM.SYSCOLSTATS.HIGHKEY

FIELD	DESCRIPTION	NOTES
HIGH2KEY NULL (non-partition) *	Null indicator for the second highest value of the column.	This field is updateable if the column can contain nulls.
	The value in the field may be:YThe column can contain nulls and the HIGH2KEY	Source: Derived from SYSIBM.SYSCOLUMNS.HIGH2KEY
	N The column cannot contain nulls or the column can contain nulls but the HIGH2KEY value is not null.	
	If the value in the field is Y , the HIGH2KEY VALUE is ignored.	
HIGH2KEY NULL (partition) *	Null indicator for the second highest value of the column within the partition.	This field is updateable if the column can contain nulls.
	The value in the field may be:	Source: Derived from SYSIBM.SYSCOLSTATS.HIGH2KEY
	 Y The column can contain nulls and the HIGH2KEY value is null. N The column cannot contain nulls or the column can contain nulls but the HIGH2KEY value is not null. 	
	If the value in the field is Y, the HIGH2KEY VALUE is ignored.	
HIGH2KEY VALUE (non-partition) *	Second highest value of the column.	This field is updateable. Source: SYSIBM.SYSCOLUMNS.HIGH2KEY
HIGH2KEY VALUE (partition) *	Second highest value of the column within the partition.	Source: SYSIBM.SYSCOLSTATS.HIGH2KEY
KEYSEQ	Numeric position of the column in the table's primary key.	Source: SYSIBM.SYSCOLUMNS.KEYSEQ
LENGTH	The length attribute of the column or, for a decimal column, its precision.	Source: SYSIBM.SYSCOLUMNS.LENGTH

FIELD	DESCRIPTION	NOTES
LOWKEY NULL (partition) *	Null indicator for the lowest value of the column within the partition. The value in the field may be: Y The column can contain nulls and the LOWKEY value is null. N The column cannot contain nulls or the column can contain nulls but the LOWKEY value is not null. Image: Note that the field is the fiel	This field is updateable if the column can contain nulls. Source: Derived from SYSIBM.SYSCOLSTATS.LOWKEY
LOWKEY VALUE (partition)	If the value in the field is Y, the LOWKEY VALUE is ignored. Second lowest value of the column	Source:
	within the partition.	SYSIBM.SYSCOLSTATS.LOWKEY
LOW2KEY NULL (non-partition) *	Null indicator for the second lowest value of the column. The value in the field may be: Y The column can contain nulls and the LOW2KEY value is null. N The column cannot contain nulls or the column can contain nulls or the column can contain nulls but the LOW2KEY value is not null.	This field is updateable if the column can contain nulls. Source: Derived from SYSIBM.SYSCOLUMNS.LOW2KEY
	If the value in the field is Y, the LOW2KEY VALUE is ignored.	
LOW2KEY NULL (partition) * LOW2KEY VALUE (non-partition) *	Null indicator for the second lowest value of the column within the partition.The value in the field may be:YThe column can contain nulls and the LOW2KEY value is null.NThe column cannot contain nulls or the column can contain nulls but the LOW2KEY value is not null.If the value in the field is Y, the LOW2KEY VALUE is ignored.Second lowest value of the column.	This field is updateable if the column can contain nulls. Source: Derived from SYSIBM.SYSCOLSTATS.LOW2KEY This field is updateable.
LOW2KEY VALUE (partition) *	Second lowest value of the column within the partition.	Source: SYSIBM.SYSCOLUMNS.LOW2KEY Source: SYSIBM.SYSCOLSTATS.LOW2KEY

FIELD	DESCRIPTION	NOTES
NULLS	Whether the column can contain a null value.	Source: SYSIBM.SYSCOLUMNS.NULLS
	YThe column can contain null values.NThe column cannot contain null values.	
PART	Partition number.	Source: SYSIBM.SYSCOLSTATS.PARTITION
SCALE	Scale of the column.	Source: SYSIBM.SYSCOLUMNS.SCALE
STATS TIMESTAMP	Statistics timestamp.	This field is set to the CURRENT TIMESTAMP for functions that update the catalog or output statistics.
		Source: SYSIBM.SYSCOLSTATS.STATSTIME (partition)
		Source: SYSIBM.SYSCOLUMNS.STATSTIME (nonpartition)
TABLE=	Name of the table to which the listed columns belong.	
UPDATES	Whether the column can be updated.YThe column can be updatedNThe column cannot be updated.	Source: SYSIBM.SYSCOLUMNS.UPDATES

Selects

SELECT	DESCRIPTION	TAKES YOU TO
С	Display Column Distribution Statistics for the table column in character format. The C select is only available for the HIGH*KEY and LOW*KEY fields and the column contains either character or graphic data.	
S	Display Column Distribution Statistics	Column Distribution Statistics (KTEPCDIS)
X	Display Column Distribution Statistics for the table column in hexadecimal format. The X select is only available for the HIGH*KEY and LOW*KEY fields and the column contains either character or graphic data.	

Commands

COMMAND	DESCRIPTION
CHANGE	Change all of the specified values to the new value. Can be abbreviated as C or CHA. See "Format of the CHANGE command" later in this unit for expanded information about the CHANGE command.
CHAR	Display all lines in character format. This command only applies to character or graphic data columns.
FIND	Find a specific character string on the display. Can be abbreviated as F. See "Format of the FIND command" later in this unit for expanded information about the FIND command.
HEX	Display all lines in hexadecimal format. This command only applies to character or graphic data columns.
LOCATE	Locate a specific value, or a specific value for a specific object type, in one of the fields on the display; or find data changed by the last command (for example, RESET, CHANGE, UNIFORM) you issued or data you have modified. Can be abbreviated as L or LOC. See "Format of the LOCATE command" later in this unit for expanded information about the LOCATE command.
NEWSET	Establish a new column statistics set.
NEWSETALL	Establish a new statistics set for column statistics and column distribution statistics.
NOSTAT	Set column statistics to RUNSTATS, not to run value. RUNSTATS can be 0, blank, or -1.
NOSTATALL	Set column statistics and column distribution statistics to RUNSTATS, not to run value. RUNSTATS can be 0, blank, or -1.
RESET	Reset column statistics values to the last statistics set.
	Note: A statistics set is established when you enter the Table Columns panel and when you explicitly enter the NEWSET* command.
RFIND	Reexeute the last FIND command. Can be abbreviated RF.
RLOCATE	Reexeute the last LOCATE command. Can be abbreviated RL or RLOC.
RESETALL	Reset column statistics and column distribution statistics to the last statistics set.
	Note: A statistics set is established when you enter the Table Columns panel and when you explicitly enter the NEWSET* command.
UNIFORM	Set partitioned statistics to uniform distribution. For example, if the value for CARD for tables is 90000 and there are 10 partitions, then set each table partition CARD field to 9000.

Format of the CHANGE command

The CHANGE command can be abbreviated as CHA or C. It operates only on the COLCARD field. The format for this command is:

CHANGE COLCARD operator value [%]

This table provides information about the parameters of the CHANGE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
operator (required)	One of the following can be used in the operator field:
	= (equals) + (plus) - (minus)
value (required)	Value to set for all column COLCARDs. Partition COLCARDS are not changed.
%	The % (percent) sign can be used with the + (plus) and - (minus) operators to indicate that the value represents a percentage by which the changed field is to be incremented or decremented.

Format of the FIND command

The FIND command can be abbreviated as \mathbf{F} . The format of the FIND command is as follows:

FIND string [FIRST|LAST|NEXT|PREV] [ASIS]

This table provides information about the parameters of the FIND command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
string (required)	One of:
	• A quoted or unquoted string that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	• * (asterisk)—meaning find an occurrence of the last value entered for <i>string</i> .
FIRST	Find the first occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
LAST	Find the last occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
PREV	Find the previous occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
NEXT	Find the next occurrence of the string (the default) on the display. Ignore the case of any characters in the string when performing the FIND.
ASIS	Can be included with any of the above parameters and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

Format of the LOCATE command

The LOCATE command can be abbreviated as L or LOC. The format of the LOCATE command is as follows:

```
LOCATE [field_type] field_name operator value [ASIS]
```

or

LOCATE CHANGED

or

LOCATE MODIFIED

CHANGED can be abbreviated as CHA. MODIFIED can be abbreviated as MOD.

This table provides information about the parameters of the LOCATE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
field_type	Can be CO or CP. <i>field type</i> is optional. If specified, it designates the type of field in which !DB/EXPLAIN is to find the designated value.
field_name (required)	Name of the field in which the specified value is to be located

Parameter	Meaning
operator	One of the following can be used in the operator field:
	<pre>= (equals) > (greater than) < (less than) >= (greater than or equal to) <= (less than or equal to) <> (equal to) ¬= (not equal to)</pre>
value (required)	A quoted or unquoted value that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	If the field in which a value is to be located is numeric, the format of <i>value</i> on the LOCATE command <i>must</i> match the format of the display field. Can take the form:
	999
	9,999 or 9.999
	1999/09/01 (will not match a value entered as 09/01/1999)
ASIS	Can be included with any of the above parameters and indicates that the string is to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.
CHANGED	Locates a value changed as the result of the last-issued command, for example, a CALC or UNIFORM command
MODIFIED	Locates a value changed by a user modification or a CHANGE command since the last statistics were gathered

Format of the LOCATE command (continued)

Valid field types for the LOCATE command

Refer to the table for the fields that can be affected by the LOCATE command. A more complete list showing alternate field names (where applicable) for the field names in the table can be found in the online help for the Table Columns panel.

Field Type	Field Name
СО	COLCARD COLNO COLTYPE DEFAULT FLDPROC FOREIGNKEY HIGH2KEY KEYSEQ LENGTH LOW2KEY NAME NULLS SCALE STATSTS
СР	COLCARD HIGHKEY HIGH2KEY LOWKEY LOW2KEY STATSTS

Tables

Overview

This unit describes the Tables panel.

Background about the Tables panel

The Tables panel (KTEPTABL) lists all DB2 tables, views, or aliases referenced by any INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR SQL statement in any DBRM or package.

Access

Tables can be accessed from the Primary Menu, or the Sessions, Plans, Packages, or DBRMs panels.

Panel

The Tables panel appears below. If you specified that alias processing was to take place during your extract, the table names appearing on this panel are the actual table names. If you specified that alias processing was not to occur during your extract, the table's alias, if the alias was coded in the SQL statement, rather than the actual table name, will appear on this panel.

 CMD ===>	- DB/EXPLAI	N DB2=D31A		SCDOL	 L ===> PAGE
טייט		TABLES		SCRUL	L> PAGE
Cmds: GLOBAL (Menu)					
CREATOR/NAME					
SEL SELECTS DELETES	INSERTS	UPDATES LOC	K XCLS LOCK	SHRS TO	TAL STMTS
AA14C00. HOLIDAYS		LOCATION=			
1 0	Θ	Θ	Θ	00	0
SYSIBM. SYSINDEXPAR		LOCATION=			
1 0	0	0	0	00	0
_ SYSIBM. SYSTABLEPA		LOCATION=			
1 0	0	0	Θ	00	0
_ TSDB07. VPHONE		LOCATION=			
1 0	0	Θ	Θ	00	0
* TOTALS *					
4 0	0	0	Θ	00	0

Fields and Associated Sorts and Filters

FIELD	DESCRIPTION	SORTS/ FILTERS
CREATOR	Authorization ID of the owner of the table, view, or alias.	TCR
	Source: SYSIBM.SYSTABLES.CREATOR	
DELETES	Number of DELETEs that reference this table.	T#DL
	Source: Derived	
INSERTS	Number of INSERTs that reference this table.	T#IN
	Source: Derived	
LOCATION	Location name of the object.	TLOC
	Source: SYSIBM.SYSTABLES.LOCATION	
LOCK SHRS	Number of LOCKs shared on this table.	T#LS
	Source: Derived	
LOCK XCLS	Number of LOCKs XCL on this table.	T#LX
	Source: Derived	
NAME	Name of the table, view, or alias.	TTBL
	Source: SYSIBM.SYSTABLES.NAME	
SELECTS	Number of SELECTs that reference this table.	T#SE
	Source: Derived	
TOTAL STMT	Total number of statements that reference this table.	T#TL
	Source: Derived	
UPDATES	Number of UPDATEs that reference this table.	T#UP
	Source: Derived	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
D	Display all DBRMs referencing the selected table.	DBRMs (KTEPDBRM)
K	Displays all packages referencing the selected table.	Packages (KTEPKACK)
Р	Display all plans referencing the selected table.	Plans (KTEPPLAN)
S	List all statements that access the selected table.	Statements (KTEPSTMT)
X	Display exceptions for all statements that reference a given table.	Exceptions (KTEPXCPT)

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
ХСРТ	Display exceptions.	Exceptions (KTEPXCPT)

Verification

Overview

This unit describes the Verification panel.

Background about the Verification panel

If you enter the verification function from the Plans panel, !DB/EXPLAIN finds the DBRMs used by the Plan, determines the library in which each DBRM resides and whether or not that library is available on DASD, and checks for a timestamp mismatch.

If you enter the Verification function from a Packages or DBRMs panel, !DB/EXPLAIN determines the library in which each DBRM resides and whether or not that library is available on DASD, and checks for a timestamp mismatch.

Access

Verification can be accessed from the Plans, DBRMs, or Packages panel by selecting the Verify (V) option. After verification, you are returned to the panel from which you initiated the Verify function.

Panel

The following illustration shows the Verification panel.

CMD ===>		IN(V235) DB2=D31A R I F I C A T I O N	SCROLL ===> PAGE Selects: ? (Menu)
	PRECOMPILE DATE TIME	LIBRARY NAME	
AS07HDG	1999/02/03 11:55:59	TDDB.DE2.V230.TEST.DBRMLIB STATUS: ON VOLUME OMON34	

Fields

FIELD	DESCRIPTION
COLLID/PLAN NAME	Name of the package collection or plan
	Source: SYSIBM.SYSPACKAGE.COLLID
	Source: SYSIBM.SYSPLAN.NAME
DBRM/PACKAGE/ PLAN NAME	DBRM or package name
	Source: SYSIBM.SYSDBRM.NAME
	Source: SYSIBM.SYSPACKAGE.NAME
LIBRARY NAME	Name of the DBRM or package library.
	Source: SYSIBM.SYSDBRM.PDSNAME or SYSPACKAGE.PDSNAME
LOCATION	Location name of the package.
	Source: SYSIBM.SYSPACKAGE.LOCATION
(NAME heading)DBRM	A variable field describing the type of data displayed in the column below it.
PACKAGE	Source: SYSIBM.SYSDBRM.NAME
• PLAN	Source: SYSIBM.SYSPACKAGE.NAME
	Source: SYSIBM.SYSPLAN.NAME
PRECOMPILE DATE/TIME	Date and time the DBRM or package was precompiled.
	Source: SYSIBM.SYSDBRM.PRECOMPDATE PRECOMPTIME
	Source: SYSIBM.SYSPACKAGE.PCTIMESTAMP
STATUS	Library Status values:
	Migrated Not Cataloged On Volume XXXXXX. No Volumes in Catalog Not Verified Open Error (Not Auth)
	Source: Derived
VERSION	Version of the DBRM or package.
	Source: SYSIBM.SYSDBRM.VERSION
	Source: SYSIBM.SYSPACKAGE.VERSION

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
DISPLAY Display all statements in a DBRM or package.		Statements (KTEPSTMT)

Whatif

Overview

This unit describes the Whatif panel.

Background about the Whatif panel

The Whatif panel (KTEPWHIF) provides statistical information about tables and indexes used by an SQL statement. Use the Whatif panel to temporarily or permanently modify the DB2 catalog and observe the effect on DB2 access path selection. Fields that can be updated are marked with an asterisk.

Procedure for update when using a shadow catalog

If you are using a shadow catalog, but you want the actual DB2 catalog updated either temporarily or permanently as a result of using the Whatif function, review this information.

If the value you have specified in the Catalog Prefix field on the !DB/Tools DB2-Specific Information panel is not the catalog prefix of the actual catalog tables (that is, it is the qualifier of the shadow catalog tables instead), then specify the following to have the actual DB2 catalog tables updated:

- On the Miscellaneous Defaults Housekeeping Panel, specify Y in the Use Real Catalog Prefix field.
- On the !DB/Tools DB2-Specific Information panel, specify the qualifier of the actual catalog tables in the Real Catalog Prefix field.

Formats

This panel is available in two formats.

Format	Displayed fields
Format 1	Data related to access path.
Format 2	Data in SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSTABLEPART, SYSINDEXPART, SYSTABSTATS, and SYSINDEXSTATS

Access

This panel is accessed by selecting the Whatif (W) option from Plans, DBRMs, Packages, or Statements.

Panels

The following illustration shows format 1 of the Whatif panel—access path information.

CMD ===> Cmds: DO (Menu) GLOBAL	DB/EXPLAIN DB2=D31A LINE 1 OF 12 SCROLL ===> PAGE W H A T I F A N A L Y S I S (Menu) Selects: ? (Menu) The fields marked with * can be updated.
TS= DSNDB06.SYSCOPY *NACTIVE= 9	CREATOR= SYSIBM
<pre>_ TBL= SYSIBM.SYSCOPY *NPAGES= 9 *CARD = 300</pre>	LOCATION= *PCTROWCOMP = 0
IX= SYSIBM.DSNUCH01*FULLKEY = -1*FIRSTKEY= -1*NLEVELS= -1*FIRSTKEY= -1*NLEAF = -1***********************************	

This is format 2 of the Whatif panel—all information.

CMD ===>	DB/EXPLAIN DB2=D31A LINE 1 OF 30 SCROLL ===> PAGE W H A T I F A N A L Y S I S (Menu) Selects: ? (Menu) The fields marked with * can be updated.
*NACTIVE= 9 NTABLES= 1 SPACE = 0 PGSIZE = 4	PARTITIONS= 0 LOCKRULE = A OBID= 7 CLOSERULE= N CREATOR = SYSIBM DBID= 6 IMPLICIT = N CREATEBY= SYSIBM PSID= 16 STATUS = A BPOOL= BP0 SEGSIZE= 0 ERASERULE= N DSETPASS= STATSTS= 0000/00/00 00:00:00.000000
*NPAGES= 9 PCTPAGES = 100 KEYOBID = 0	LOCATION= TBCREATR= TYPE = T TBNAME = STATUS= CREATEBY= SYSIBM CKFLAG= VALPROC = AUDIT = EDPROC = CHILD = 0 CKRID = PARENT= 0 RBA1 = 000000000000 RBA2 = 00000000000 CREATETS= 1998/04/01 00:00:00.000000 ALTERTS = 1998/04/01 00:00:00.000000 STATSTS = 0000/00/00 00:00:00.000000
_ IX= SYSIBM.DSNUCH01 *FULLKEY = -1 *FIRSTKEY= -1 SPACE = 0 PGSIZE = 4096 OBID = 91 ISOBID = 114 INDEXTYPE =	USED INDEXES CREATEBY = SYSIBM *NLEVELS= -1 *CLUSTRATIO= 0 *NLEAF = -1 CLUSTERED = N COLCOUNT = 3 CLUSTERING= Y ERASERULE= N BPOOL = BPO CLOSERULE= N DSETPASS = UNIQUE = D INDEXSPACE= DSNUCHO1 STATSTS = 0000/00/00 00:00:00.000000 ******** BOTTOM OF LIST ********************************

You can control the amount of data retrieved from the DB2 catalog with the GSTATS (Gather Statistics) command. When this command is invoked, the Statistics Gathering panel appears. You can use this panel to modify the location of the server. The server defaults to "local."

----- DB/EXPLAIN(V235) DB2=DB2 ----- LINE 1 OF 20 Cmd ===> STATISTICS GATHERING Enter the server from which you wish to retrieve catalog statistics. If no value is entered the current server will be set to local. Server: TS Amount of data to gather: 1. - SYSTABLESPACE, SYSTABLES, SYSINDEXES 2. - Data specified in 1 plus SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS 3. - Data specified in 2 plus SYSKEYS 4. - Data specified in 2 plus SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, SYSINDEXSTATS 5. - Data specified in 3 plus SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, SYSINDEXSTATS ENTER to process request END to abort request

After the UPDT command is invoked and if you are running DB2 Version 2.3 or later, the Statistics Update panel appears and allows you to enter the location of the server. The default is "local."

STATISTICS UPDATE

Please enter the following information:

SERVER ===>

When the WIF command is invoked, the Statistics for Whatif panel displays to allow you to specify the location of the server and to make statistics permanent if you are using DB2 Version 2.3 or greater.

STATISTICS for WHATIF

You have requested Whatif Analysis. Please specify Server:

SERVER ===>

MAKE STATISTICS PERMANENT? ===> n (Y YES N NO)

Fields

You can update fields that are marked with an asterisk (*).

FIELD	ON FORMAT	DESCRIPTION
ALTERTS (TBL)	2	Time when the latest ALTER TABLE statement was applied.
		Source: SYSIBM.SYSTABLES.ALTEREDTS
AMOUNT OF DATA TO GATHER	KTEPSSSG	 Type of data to retrieve from catalog: SYSTABLESPACE, SYSTABLES, SYSINDEXES SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, and SYSCOLDISTSTATS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, and SYSKEYS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDISTSTATS, SYSTABLEPART, SYSTABSTATS, SYSINDEXPART, and SYSINDEXSTATS SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSINDEXES, SYSCOLDISTSTATS, SYSINDEXPART, and SYSINDEXSTATS, SYSINDEXPART, and SYSINDEXSTATS
AUDIT (TBL)	2	 Value of the audit option: A AUDIT All C AUDIT CHANGE blank AUDIT NONE, or the row describes a view or alias Source: SYSIBM.SYSTABLES.AUDITING
BPOOL (IX)	2	Name of the buffer pool used for the index.
		Source: SYSIBM.SYSINDEXES.BP00L
BPOOL (TS)	2	Name of the buffer pool used for the table space. Source: SYSIBM.SYSTABLESPACE.BPOOL
CARD (IXP)	2	Number of rows referred to by the index or partition. Source: SYSIBM.SYSINDEXPART.CARD
CARD (TBL) *	1, 2	Number of rows in the table. You can update this field. Source: SYSIBM.SYSTABLES.CARD
CARD (TSTP)	2	Number of rows in table space or partition. Source: SYSIBM.SYSTABLEPART.CARD
CARDP (TSTP) *	2	Number of rows in table space partition. You can update this field Source: SYSIBM.SYSTABSTATS.CARD

FIELD	ON FORMAT	DESCRIPTION
CHECKFLAG (TSTP)	2	 C The table space partition is in CHECK PENDING mode and there are rows that can violate referential constraints. blank The table contains no rows that violate referential constraints, or the table space is not partitioned.
		Source: SYSIBM.SYSTABLEPART.CHECKFLAG
CHECKS (TBL)	2	Number of check constraints defined on a table. The value in this field is 0 if there are no constraints, or if the row describes a view or alias.
		Source: SYSIBM.SYSTABLES.CHECKS
CHILD (TBL)	2	Number of relationships in which the table is a parent; 0 means the row describes a view or alias.
		Source: SYSIBM.SYSTABLES.CHILDREN
CKFLAG (TBL)	2	 C There are rows in the table that can violate referential constraints. blank The table contains no rows that violate referential constraints, or the row describes a view or alias.
		Source: SYSIBM.SYSTABLES.CHECKFLAG
CKRID (TBL)	2	RIDRID of the first row of the table that can violate referential constraints.blankTable is not in a check pending state.Source:SYSIBM.SYSTABLES.CHECKRID
CKRID (TSTP)	2	 RID RID of the first row of the table that can violate referential constraints. blank Table or partition is not in a check pending state or the table space is not partitioned. Source: SYSIBM.SYSTABLEPART.CHECKRID
CLOSERULE (IX)	2	 Whether the datasets are candidates for being closed when the limit on the number of open datasets is reached. Y Yes N No Source: SYSIBM.SYSINDEXES.CLOSERULE
CLOSERULE (TS)	2	 Whether the datasets are candidates for being closed when the limit on the number of open datasets is reached. Y Yes N No Source: SYSIBM.SYSTABLESPACE.CLOSERULE

FIELD	ON FORMAT	DESCRIPTION
CLUSTERED (IX)	2	Whether the table is actually clustered by the index:
		 Y Yes: More than 95% of the rows are in clustering order. N No: 95% or fewer of the rows are in clustering order; or statistics were not gathered.
		Source: SYSIBM.SYSINDEXES.CLUSTERED
CLUSTERING (IX)	2	Whether CLUSTER was specified when the index was created: Y Yes N No Source: SYSIBM.SYSINDEXES.CLUSTERING
CLUSTERTYPE (TBL)	2	Whether the table can be dropped (that is, whether the
		table is defined with RESTRICT ON DROP).
		blank The table can be dropped
		Y The table cannot be dropped and any table space or database containing this table also cannot be dropped.
		Source: SYSIBM.SYSTABLES.CLUSTERTYPE
CLUSTRATIO (IX) *	1, 2	Percentage of rows that are in clustering order. You can update this field.
		Source: SYSIBM.SYSINDEXES.CLUSTERRATIO
CLUSTRATIO (IXP) *	2	Percentage of rows in the index partition that are in clustering order. You can update this field.
		Source: SYSIBM.SYSINDEXESTATS.CLUSTERRATIO
COLCOUNT (TBL)	2	Number of columns in the table or view.
		Source: SYSIBM.SYSTABLES.COLCOUNT
COLCOUNT (IX)	2	Number of columns in the key.
		Source: SYSIBM.SYSINDEXES.COLCOUNT
COMPRESS (TSTP)	2	For a table space partition or nonpartitioned table space, indicates whether the COMPRESS attribute is YES. Values may be:
		YCompression is defined.blankCompression is not defined.
		Source: SYSIBM.SYSTABLEPART.COMPRESS
CREATEBY (IX)	2	Primary authorization ID of the user who created the index.
		Source: SYSIBM.SYSINDEXES.CREATEDBY

FIELD	ON FORMAT	DESCRIPTION	
CREATEBY (TBL)	2	Primary authorization ID of the user who created the table, view, or alias.	
		Source: SYSIBM.SYSTABLES.CREATEDBY	
CREATEBY (TS)	2	Primary authorization ID of the user who created the table space.	
		Source: SYSIBM.SYSTABLESPACE.CREATEDBY	
CREATETS (TBL)	2	Time when the CREATE statement was executed for the table, view, or alias.	
		Source: SYSIBM.SYSTABLES.CREATEDTS	
CREATOR (TS)	1, 2	Authorization ID of the owner of the table space.	
		Source: SYSIBM.SYSTABLESPACE.CREATOR	
DATAC (TBL)	2	Indicates the value of the DATACAPTURE option for a table.	
		YData capture is defined for the table.blankData capture is not defined.	
		Source: SYSIBM.SYSTABLES.DATACAPTURE	
DBID (TS)	2	Internal identifier of the database which contains the table space.	
		Source: SYSIBM.SYSTABLESPACE.DBID	
DSETPASS (IX)	2	The password for the datasets of the index.	
		Source: SYSIBM.SYSINDEXES.DSETPASS	
DSETPASS (TS)	2	The password for the datasets of the table space.	
		Source: SYSIBM.SYSTABLESPACE.DSETPASS	
EDPROC (TBL)	2	Name of the edit procedure.	
		Source: SYSIBM.SYSTABLES.EDPROC	
ERASERULE (IX)	2	Whether the datasets are to be erased when dropped. Not applicable to partitioned indexes.	
		Y Yes N No	
		Source: SYSIBM.SYSINDEXES.ERASERULE	
ERASERULE (TS)	2	Whether the datasets are to be erased when dropped. Not applicable for partitioned table spaces.	
		Y Erase N No Erase	
		Source: SYSIBM.SYSTABLESPACE.ERASERULE	
FARINDREF (TSTP)	2	Number of rows that have been relocated far from their original page.	
		Source: SYSIBM.SYSTABLEPART.FARINDREF	

FIELD	ON FORMAT	DESCRIPTION
FAROFFPOS (IXP)	2	Number of referred to rows far from optimal position as the result of an insert into a full page.
		Source: SYSIBM.SYSINDEXPART.FAROFFPOS
FIRSTKEY (IX) *	1, 2	Number of distinct values of the first key column. You can update this field.
		Source: SYSIBM.SYSINDEXES.FIRSTKEYCARD
FIRSTKEY (IXP) *	2	Number of distinct values of the first key column in the index partition. You can update this field.
		Source: SYSIBM.SYSINDEXSTATS.FIRSTKEYCARD
FREEPAGE (IXP)	2	Number of pages loaded before a page is left as free space.
		Source: SYSIBM.SYSINDEXPART.FREEPAGE
FREEPAGE (TSTP)	2	Number of pages loaded before a page is left as free space.
		Source: SYSIBM.SYSTABLEPART.FREEPAGE
FULLKEY (IX) *	1, 2	Number of distinct values of the key column. You can update this field.
		Source: SYSIBM.SYSINDEXES.FULLKEYCARD
FULLKEY (IXP) *	2	Number of distinct values of the key column in the index partition. You can update this field.
		Source: SYSIBM.SYSINDEXSTATS.FULLKEYCARD
GBPCACHE (IXP)	2	The group buffer pool cache option for the index or index space.
		A Both changed and unchanged pages are cached in the group buffer pool
		blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4.
		Source: SYSIBM.SYSINDEXPART.GBPCACHE
GBPCACHE (TSTP)	2	The group buffer pool cache option for the table or table space.
		A Both changed and unchanged pages are cached in the group buffer pool
		blank Only changed pages are cached in the group buffer pool, or the DB2 subsystem is not at least Version 4.
		Source: SYSIBM.SYSTABLEPART.GBPCACHE
IMPLICIT (TS)	2	Whether the table space was created implicitly.
		Y Yes N No
		Source: SYSIBM.SYSTABLESPACE.IMPLICIT

FIELD	ON FORMAT	DESCRIPTION
INDEXSPACE (IX)	2	Name of the index space.
		Source: SYSIBM.SYSINDEXES.INDEXSPACE
INDEXTYPE (IX)	2	The type of the index
		blank Index is type 1
		2 Index is type 2
		Source: SYSIBM.SYSINDEXES.INDEXTYPE
ISOBID (IX)	2	Internal identifier of the index page set descriptor.
		Source: SYSIBM.SYSINDEXES.ISOBID
IX	1, 2	Index name.
		Source: SYSIBM.SYSINDEXES.CREATOR
		SYSIBM.SYSINDEXES.NAME
IXCREATOR (TSTP)	2	Authorization ID of the owner of the partitioned index.
		Source: SYSIBM.SYSTABLEPART.IXCREATOR
IXNAME (TSTP)	2	Name of the partitioned index.
		Source: SYSIBM.SYSTABLEPART.IXNAME
IXP	2	Index name.
		Source: SYSIBM.SYSINDEXPART.CREATOR
		Source: SYSIBM.SYSINDEXPART.IXNAME
KEYCOLUMNS (TBL)	2	Number of columns in the table's primary key.
		Source: SYSIBM.SYSTABLES.KEYCOLUMNS
KEYCNT (IXP)	2	Total number of rows in the partition.
		Source: SYSIBM.SYSINDEXSTATS.KEYCOUNT
KEYOBID (TBL)	2	Internal DB2 identifier of the index that enforces uniqueness of the table's primary key.
		Source: SYSIBM.SYSTABLES.KEYOBID
LEAFDIST (IXP)	2	100 times the average number of pages between successive leaf pages of the index.
		Source: SYSIBM.SYSINDEXPART.LEAFDIST
LOCATION (TBL)	1, 2	Location name of the table for an alias defined on a remote object or blank for local.
		Source: SYSIBM.SYSTABLES.LOCATION
LOCKMAX (TS)	2	Maximum number of locks per user to acquire for the table or table space before escalating to the next locking level.
		Source: SYSIBM.SYSTABLESPACE.LOCKMAX

FIELD	ON FORMAT	DESCRIPTION	
LOCKRULE (TS)	2	Lock size of the table space.	
		 A Any P Page S Table space T Table 	
		Source: SYSIBM.SYSTABLESPACE.LOCKRULE	
MAKE STATISTICS PERMANENT?	KTE3SSWH	Indicator to permanently update the catalog. Y Yes N No	
NACTIVE (TS) *	1, 2	Number of active pages in the table space. You can update this field.	
		Source: SYSIBM.SYSTABLESPACE.NACTIVE	
NACTIVE (TSTP) *	2	Number of active pages in the table space partition. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.NACTIVE	
NEARINDREF (TS)	2	Number of rows that have been relocated near their original page.	
		Source: SYSIBM.SYSTABLEPART.NEARINDREF	
NEAROFFPOS (IXP)	2	Number of referred to rows near, but not at optimal position, because of an insert into a full page.	
		Source: SYSIBM.SYSINDEXPART.NEAROFFPOS	
NLEAF (IX) *	1, 2	Number of active leaf pages in the index. You can update this field.	
		Source: SYSIBM.SYSINDEXES.NLEAF	
NLEAF (IXP) *	2	Number of active leaf pages in the index partition. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.NLEAF	
NLEVELS (IX) *	1, 2	Number of levels in the partition index tree.	
		Source: SYSIBM.SYSINDEXES.NLEVELS	
NLEVELS (IXP) *	2	Number of levels in the partition index tree. You can update this field.	
		Source: SYSIBM.SYSINDEXSTATS.NLEVELS	
NPAGES (TBL) *	1, 2	Total number of pages on which rows of the table appear. You can update this field.	
		Source: SYSIBM.SYSTABLES.NPAGES	
NPAGES (TSTP) *	2	Total number of pages in the table space partition on which rows of the table appear. You can update this field.	
		Source: SYSIBM.SYSTABSTATS.NPAGES	
NTABLES (TS)	2	Number of tables defined in the table space.	
		Source: SYSIBM.SYSTABLESPACE.NTABLES	

FIELD	ON FORMAT	DESCRIPTION
OBID (IX)	2	Internal identifier of the index fan set descriptor.
		Source: SYSIBM.SYSINDEXES.OBID
OBID (TS)	2	Internal identifier of the table space file descriptor.
		Source: SYSIBM.SYSTABLESPACE.OBID
OBID (TBL)	2	Internal identifier of the table.
		Source: SYSIBM.SYSTABLES.OBID
PAGESAVE (TSTP)	2	The percentage of pages saved in a table space or partition as a result of using data compression.
		Source: SYSIBM.SYSTABLEPART.OBID
PARNT (TBL)	2	Number of relationships in which the table is a dependent. 0 means the row describes a view or alias.
		Source: SYSIBM.SYSTABLES.PARENTS
PARTITION (IXP)	2	Partition number; 0 if the index is not partitioned.
		Source: SYSIBM.SYSINDEXPART.PARTITION
PARTITION (TSTP)	2	Partition number; 0 if the table space is not partitioned.
		Source: SYSIBM.SYSTABLEPART.PARTITION
PARTITIONS (TS)	2	Number of partitions of the table space; 0 if the table space is not partitioned.
		Source: SYSIBM.SYSTABLESPACE.PARTITIONS
PCTFREE (IXP)	2	Percentage of each subpage or nonleaf page that is left as free space.
		Source: SYSIBM.SYSINDEXPART.PCTFREE
PCTFREE (TSTP)	2	Percentage of each page left as free space.
		Source: SYSIBM.SYSTABLEPART.PCTFREE
PCTPAGES (TBL)	2	Percentage of active table space pages that contain rows of the table.
		Source: SYSIBM.SYSTABLES.PCTPAGES
PCTPAGES (TSTP)	2	Percentage of active table space pages that contain rows of the table.
		Source: SYSIBM.SYSTABSTATS.PCTPAGES
PCTROWCOMP (TBL) *	2	Percentage of rows compressed within the total number of active rows in the table. You can update this field.
		Source: SYSIBM.SYSTABLES.PCTROWCOMP
PCTROWCOMP (TSTP) *	2	Percentage of rows compressed within the total number of active rows in the partition. You can update this field.
		Source: SYSIBM.SYSTABSTATS.PCTROWCOMP
PERCACT (TSTP)	2	Percentage of space occupied by rows of data from active tables.
		Source: SYSIBM.SYSTABLEPART.PERCACTIVE

FIELD	ON FORMAT	DESCRIPTION
PERCDROP (TSTP)	2	Percentage of space occupied by rows of dropped tables; 0 for segmented table spaces.
		Source: SYSIBM.SYSTABLEPART.PERCDROP
PGSIZE (IX)	2	Size of subpages in the index.
		Source: SYSIBM.SYSINDEXES.PGSIZE
PGSIZE (TS)	2	Size of pages in the table spaces in kilobytes.
		Source: SYSIBM.SYSTABLESPACE.PGSIZE
PQTY (IXP)	2	Primary space allocation in units 4K storage blocks; 0 if storage group is not used.
		Source: SYSIBM.SYSINDEXPART.PQTY
PQTY (TSTP)	2	Primary space allocation in units of 4K storage blocks; 0 if a storage group is not used.
		Source: SYSIBM.SYSTABLEPART.PQTY
PSID (TS)	2	Internal identifier of the table space page set descriptor.
		Source: SYSIBM.SYSTABLESPACE.PSID
RBA1 (TBL)	2	The log RBA when the table was created.
		Source: SYSIBM.SYSTABLES.RBA1
RBA2 (TBL)	2	The log RBA when the table was altered. If RBA1=RBA2, the table has not been altered.
		Source: SYSIBM.SYSTABLES.RBA2
RECLEN (TBL)	1, 2	The maximum length of any record in the table.
		Source: SYSIBM.SYSTABLES.RECLENGTH
SEGSIZE (TS)	2	Number of pages in each segment of a segmented table space.
		Source: SYSIBM.SYSTABLESPACE.SEGSIZE
SERVER	KTEPSSSG,	Location name.
	KTE3SSSU, KTE3SSWH	Only installations running DB2 Version 2.3 or greater will be able to designate a server.
SPACE (IX)	2	Number of kilobytes of DASD storage allocated to the index, as determined by the last execution of STOSPACE utility.
		Source: SYSIBM.SYSINDEXES.SPACE
SPACE (IXP)	2	Number of kilobytes of DASD storage allocated to the index partition as determined by the last execution of STOSPACE utility.
		Source: SYSIBM.SYSINDEXPART.SPACE
SPACE (TS)	2	Number of kilobytes of DASD storage allocated to the table space as determined by the last execution of the STOSPACE utility.
		Source: SYSIBM.SYSTABLESPACE.SPACE

FIELD	ON FORMAT	DESCRIPTION	
SPACE (TSTP)	2	Number of kilobytes of DASD storage allocated to the table space partition as determined by the last execution of STOSPACE utility.	
		Source: SYSIBM.SYSTABLEPART.SPACE	
SQTY (IXP)	2	Secondary space allocation in units of 4K storage blocks; 0 if a storage group is not used.	
		Source: SYSIBM.SYSINDEXPART.SQTY	
SQTY (TSTP)	2	Secondary space allocation in units of 4K storage blocks; 0 if a storage group is not used.	
		Source: SYSIBM.SYSTABLEPART.SQTY	
STATSTS (IX)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSINDEXES.STATSTIME	
STATSTS (IXP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSINDEXPART.STATSTIME	
STATSTS (TBL)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLES.STATSTIME	
STATSTS (TS)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLESPACE.STATSTIME	
STATSTS (TSTP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABLEPART.STATSTIME	
STATSTSP (IXP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSINDEXSTATS.STATSTIME	
STATSTSP (TSTP)	2	This field will be set to CURRENT TIMESTAMP for functions that update the catalog or output statistics.	
		Source: SYSIBM.SYSTABSTATS.STATSTIME	
STATUS (TBL)	2	Status of the table definition:	
		 I The table's definition is incomplete because it lacks a primary index. X Table has a primary index. blank Table has no primary key, or is a catalog table, or the row describes a view or alias. 	
		Source: SYSIBM.SYSTABLES.STATUS	

FIELD	ON FORMAT	DESCRIPTION
STATUS (TS)	2	Availability status of the table space:
		 A Available C Incomplete because no partitioned index has been created P Check Pending S Check Pending with the scope less than the entire table space T Incomplete because no table has been created
		Source: SYSIBM.SYSTABLESPACE.STATUS
STORNAME (IXP)	2	Name of storage group or ICF catalog used for space allocation.
		Source: SYSIBM.SYSINDEXPART.STORNAME
STORNAME (TSTP)	2	Name of storage group used for allocation. Blank if STORTYPE = E.
		Source: SYSIBM.SYSTABLEPART.STORNAME
STORTYPE (IXP)	2	Type of storage allocation:
		E Explicit and STORNAME names an ICF catalogI Implicit and STORNAME names a storage group
		Source: SYSIBM.SYSINDEXPART.STORTYPE
STORTYPE (TSTP)	2	Type of storage allocation:
		E Explicit (storage group is not used)I Implicit (storage group used)
		Source: SYSIBM.SYSTABLEPART.STORTYPE
TBCREATR (TBL)	2	For an alias, the authorization ID of the owner of the referred table or view; blank otherwise.
		Source: SYSIBM.SYSTABLES.TBCREATOR
TBL	1, 2	Name of table.
		Source: SYSIBM.SYSTABLES.CREATOR
		SYSIBM.SYSTABLES.NAME
TBNAME (TBL)	2	For an alias, the name of the referred table or view; blank otherwise
		Source: SYSIBM.SYSTABLES.TBNAME
TS	1, 2	Name of table space.
		Source: SYSIBM.SYSTABLESPACE.DBNAME
		SYSIBM.SYSTABLESPACE.NAME
TSTP	2	Partitioned table space name.
		Source: SYSIBM.SYSTABLEPART.DBNAME
		Source: SYSIBM.SYSTABLEPART.TSNAME

FIELD	ON FORMAT	DESCRIPTION	
TYPE (TBL)	2	Type of object.	
		 A Alias T Table V View Source: SYSIBM.SYSTABLES.TYPE 	
UNIQUE (IX)	2	Whether the index is unique:	
		 D No (Duplicates are allowed) U Yes P Primary key (Unique) Source: SYSIBM.SYSINDEXES.UNIQUERULE 	
VALPROC (TBL)	2	Name of the validation procedure; blank if the row describes a view or alias or a table without a validation procedure.	
		Source: SYSIBM.SYSTABLES.VALPROC	
VCATNAME (IXP)	2	Name of ICF catalog used for space allocation.	
		Source: SYSIBM.SYSINDEXPART.VCATNAME	
VCATNAME (TSTP)	3	Name of ICF catalog used for space allocation.	
		Source: SYSIBM.SYSTABLEPART.VCATNAME	

Selects

SELECT	DESCRIPTION	TAKES YOU TO
С	Display/Update Table columns.	Table Columns (KTEPTCOL)
D	Drop the selected index. Available for IX= rows.	
K	Display Index Keys.	Index Keys (KTEPCKEY)
N	Creates a new index having the DEFER option, unless you specifically indicate that you do not want it created with the DEFER option. When you exit from the Whatif panel, you will be given an opportunity to drop any indexes created using the N select. Available for TBL= rows and assists you in	
	testing the effect of adding new indexes to tables.	

Commands

COMMAND	DESCRIPTION	TAKES YOU TO
CHANGE	Change all of the specified values to the new value. Can be abbreviated as C or CHA. See "Format of the Change command" following this table for expanded information about the CHANGE command.	
ESTIM	Access the Estimator function. The Estimator function allows you to modify catalog fields and see the effect the modifications have on related catalog fields.	Estimator (KTEPESTM)
FIND	Find a specific character string on the display. Can be abbreviated as F. See "Format of the FIND command" following this table for expanded information about the FIND command.	
GSTATS	Gather statistics from the Catalog and refresh the Whatif display.	Statistics Gathering (KTEPSSSG)
	Note: If you wish to use Whatif to display columns, you must also specify a value of at least 2 in the Amount of Statistics to Gather field. If you wish to use Whatif to display keys, you must also specify a value of at least 3 in the Amount of Statistics to Gather field.	

Commands (continued)

COMMAND	DESCRIPTION	TAKES YOU TO
LOCATE	Locate a specific value, or a specific value for a specific object type, in one of the fields on the display; or find data changed by the last command (for example, CALC or UNIFORM) you issued or data you have modified. Can be abbreviated as L or LOC. See "Format of the LOCATE command" following this table for expanded information about the LOCATE command.	
NDXS	Display all used and unused indexes.	
NEWSET	Establish a new statistics set. NEWSET does not affect column or column distribution statistics.	
NEWSETALL	Establish a new statistics set, including column and column distribution statistics.	
NONDXS	Reset used indexes.	
NOSTAT	Set statistics to RUNSTATS, not to run value. RUNSTATS can be 0, blank, or -1. NOSTAT does not affect column or column distribution statistics.	
NOSTATALL	Set statistics, including column and column distribution statistics, to RUNSTATS, not to run value. RUNSTATS can be 0, blank, or -1.	
OUT	Create a REXX EXEC to update catalog statistics, or create SQL statements to update catalog statistics, depending upon the value specified for "OUT statistics format" on housekeeping panel Miscellaneous Defaults (KTEPHOMI).	Output Options (KTEPOUTP)
RESET	Reset statistics values to the last statistics set. RESET does not affect column or column distribution statistics.	
	Note: A statistics set is established when you enter the Whatif panel and when you explicitly enter the NEWSET* command.	
RESETALL	Reset statistics, including column and column distribution statistics, to the last statistics set.	
	Note: A statistics set is established when you enter the Whatif panel and when you explicitly enter the NEWSET* command.	

Commands (continued)

COMMAND	DESCRIPTION	TAKES YOU TO
RFIND	Reexeute the last FIND command. Can be abbreviated as RF.	
RLOCATE	Reexeute the last LOCATE command. Can be abbreviated as RL or RLOC.	
UNIFORM	Set partitioned statistics to uniform distribution. For example, if the value for CARD for tables is 90000 and there are 10 partitions, then set each table partition CARD field to 9000.	
UPDT	Update the local catalog with new statistics.	
UPDTL	Update the local catalog with new statistics.	
UPDTR	Update the remote catalog with new statistics.	
WIF	Temporarily update the local catalog and EXPLAIN with new statistics with the option to make changes permanent.	EXPLAIN (KTEPEXPL)
WIFL	Temporarily update the local catalog and EXPLAIN with new statistics.	EXPLAIN (KTEPEXPL)
WIFR	Temporarily update the remote catalog and EXPLAIN with new statistics.	EXPLAIN (KTEPEXPL)
WIFU	Permanently update the local catalog and EXPLAIN with new statistics.	EXPLAIN (KTEPEXPL)
WIFUL	Permanently update the local catalog and EXPLAIN with new statistics.	EXPLAIN (KTEPEXPL)
WIFUR	Permanently update the remote catalog and EXPLAIN with new statistics.	EXPLAIN (KTEPEXPL)

Format of the Change command

The format for this command is

CHANGE [field_type] *field_name* operator *value* [%]

This table provides information about the parameters of the CHANGE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
field_type	Can be TS, TSTP, TBL, IX, or IXP. <i>field_type</i> is optional. If it is omitted, all fields having the specified field name are changed. If it is included, only those fields of the type specified and having the specified field name are changed.
field_name (required)	Name of the field to be changed
operator (required)	One of the following can be used in the operator field: = (equals) + (plus) - (minus)
value (required)	Value to which the specified fields are set
%	The % (percent) sign can be used with the + (plus) and - (minus) operators to indicate that the value represents a percentage by which the changed field is to be incremented or decremented.

Valid field types for the CHANGE command

Refer to the table for the fields than can be affected by the Change command. A more complete list showing alternate field names (where applicable) for the field names in this table can be found in the online help for this panel.

Field Type	Field Name
TS	NACTIVE
TSTP	CARD NACTIVE NPAGES PCTPAGES PCTROWCOMP PCTFREE FREEPAGE
TBL	RECLEN CARD NPAGES PCTPAGES PCTROWCOMP
IX	FULLKEY FIRSTKEY KEYSIZE INDEXTYPE NLEVELS NLEAF UNIQUE CLUSTER ROWS
IXP	FULLKEY FIRSTKEY KEYCNT NLEVELS NLEAF CLUSTER FREEPAGE PCTFREE

Format of the FIND command

The FIND command can be abbreviated as \mathbf{F} . The format of the FIND command is as follows:

FIND string [FIRST|LAST|NEXT|PREV] [ASIS]

This table provides information about the parameters of the FIND command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
string (required)	One of:
	• A quoted or unquoted string that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	• * (asterisk)—meaning find an occurrence of the last value entered for <i>string</i> .
FIRST	Find the first occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
LAST	Find the last occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
PREV	Find the previous occurrence of the string on the display. Ignore the case of any characters in the string when performing the FIND.
NEXT	Find the next occurrence of the string (the default) on the display. Ignore the case of any characters in the string when performing the FIND.

Format of the FIND command (continued)

Parameter	Meaning
ASIS	Can be included with any of the above parameters and indicates that the string IS to be found as entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string.

Format of the LOCATE command

The LOCATE command can be abbreviated as **L** or **LOC**. The format of the LOCATE command is as follows:

LOCATE [field_type] field_name operator value [ASIS]

or

LOCATE CHANGED

or

LOCATE MODIFIED

CHANGED can be abbreviated as CHA. MODIFIED can be abbreviated as MOD.

This table provides information about the parameters of the LOCATE command. All parameters are optional unless specifically declared as required.

Parameter	Meaning
field_type	Valid field types for the LOCATE command are TS, TSTP, TBL, IX, and IXP. This optional parameter specifies the type of field in which !DB/EXPLAIN is to find the designated value.
field_name (required)	Name of the field in which the specified value is to be located

Parameter	Meaning
operator (required)	One of the following can be used in the operator field:
	<pre>= (equals) > (greater than) < (less than) >= (greater than or equal to) <= (less than or equal to) <> (not equal to) ¬= (not equal to)</pre>
<i>value</i> (required)	A quoted or unquoted value that is to be found; can take the form:
	dirt 'dirt road' "dirt road" "Mary's road"
	If the field in which a value is to be located is numeric, the format of <i>value</i> on the LOCATE command <i>must</i> match the format of the display field. Can take the form:
	999
	9,999 or 9.999
	1999/09/01 (will not match a value entered as 09/01/1999)
ASIS	Can be included with any of the above parameters and indicates that a character string IS to be found a/s entered; that is, the case of the characters in the string should match the case of the characters in the 'found' string. (ASIS is only valid for character data.)
CHANGED	Locates a value changed as the result of the last-issued command, for example, a CALC or UNIFORM command.
MODIFIED	Locates a value changed by a user modification or a CHANGE command since the last statistics were gathered

Format of the LOCATE command (continued)

Valid field types for the LOCATE command

Refer to the table for the fields than can be affected by the LOCATE command. A more complete list showing alternate field names (where applicable) for the field names in this table can be found in the online help for this panel.

Field Type	Field Name
TS	BPOOL CLOSERULE CREATEBY CREATOR DBID DBNAME DSETPASS ERASERULE IMPLICIT LOCKMAX LOCKRULE NACTIVE NAME NTABLES OBID PARTITIONS PGSIZE PSID SEGSIZE SPACE STATSTS STATUS

Field Type	Field Name
TSTP	CARD
	CARDP
	CHECKFLAG
	CKRID
	COMPRESS DBNAME
	FARINDREF
	FREEPAGE
	GBPCACHE
	IXCREATOR
	IXNAME
	NACTIVE
	NEARINDREF
	NPAGES
	PAGESAVE
	PARTITION PCTFREE
	PCTPAGES
	PCTROWCOMP
	PERCACT
	PERCDROP
	PQTY
	SPACE
	SQTY
	STATSTS
	STATSTSP
	STORNAME
	STORTYPE TSNAME
	VCATNAME
TBL	ALTERTS AUDIT
	CARD
	CHECKS
	CHILD
	CKFLAG
	CKRID
	CLUSTERTYPE
	COLCOUNT
	CREATEBY
	CREATETS CREATOR
	DATAC
	EDPROC
	KEYCOLUMNS
	KEYOBID
	LOCATION
	NAME
	NPAGES
	OBID
	PARENT
	PCTPAGES PCTROWCOMP
	RBA1
	RBA2
	RECLEN
	STATSTS
	STATUS
	TBCREATR
	TBNAME
	TYPE
	VALPROC

Field Type	Field Name
IX	BPOOL CLOSERULE CLUSTER CLUSTERED CLUSTERING COLCOUNT CREATEBY CREATOR DSETPASS ERASERULE FIRSTKEY FULLKEY INDEXSPACE INDEXTYPE ISOBID KEYSIZE NAME NLEAF NLEAF NLEVELS OBID PGSIZE ROWS SPACE STATSTS UNIQUE
IXP	CARD CLUSTER FAROFFPOS FIRSTKEY FREEPAGE FULLKEY GBPCACHE IXCREATOR IXNAME KEYCNT LEAFDIST NEAROFFPOS NLEAF NLEVELS PARTITION PCTFREE PQTY SPACE SQTY STATSTS STATSTSP STORNAME STORTYPE VCATNAME

Valid field types for the LOCATE command (continued)

Housekeeping and Customization Panels

Chapter 2. Housekeeping and Customization

Introduction

!DB/EXPLAIN simplifies housekeeping and customization tasks. All housekeeping options are accessed from the Housekeeping panel. There are no commands, selects, or filters on the !DB/EXPLAIN housekeeping and customization panels. However, you can change data field values by typing over existing ones.

Chapter Contents

BIND Compare Options 27
Build Tuning Parameters
Compare Options 284
Data Formats
!DB/EXPLAIN Configuration Information 283
!DB/Tools DB2 Configuration Information 290
!DB/Tools Global Configuration Information 293
!DB/Tools Global Information—DB2 Subsystem Name Table 293
!DB/Tools Profile Dataset List
Exception Options 299
EXPLAIN Defaults
EXPLAIN Display Tuning Parameters
EXPLAIN/SQL Defaults
Extract Processing Defaults
Housekeeping
Library Search Order
Miscellaneous Defaults
Output Options Defaults
Package BIND Overrides
Panel Filters
Panel Formats
Panel Sorts
Plan BIND Overrides
Recommendations Menu
Recommendations Panel 0
Recommendations Panel 1
Recommendations Panel 2
Recommendations Panel 3 354
Recommendations Panel 4
Recommendations Panel 5
Recommendations Panel 6
Recommendations Panel 7
Recommendations Panel 8 364

Recommendations Panel 9	36
Selection Masking	36
Set Defaults	37
SQL Defaults	37
SQL Formats for KTEXPL	37
Tuning Parameters	38

BIND Compare Options

Overview

This unit describes the BIND Compare Options panel.

Background about the BIND Compare Options panel

Fields on the BIND Compare Options panel were previously on the Compare Options panel (KTEPHOCO). The BIND Compare Options panel (KTEPHOBC) allows you to override BIND Compare Options in the profile dataset during the current !DB/EXPLAIN session. You can specify that changes are permanent or are for the current session only.

Access

You can access the BIND Compare Options panel from the Housekeeping panel.

Panel

The following illustration shows the BIND Compare Options panel.

DB2=D31A
E OPTIONS
<pre>===> Y (Y Yes N No) ===> (Y Yes N No) ===> (A Add R Replace) ===> ?===> (Y Yes N No) ===> (N No Y Yes C Cmd S Sel) ===> (N No B BINDS R REBINDS L List) ===> (N No B BINDS R REBINDS L List) ===> (N No B BINDS R REBINDS L List) ===> (Y Yes N No) ===> (Y Yes N No) ===> (Y Yes N No)</pre>
===> (P Plan K Package)
Ģ

Fields

FIELD	DESCRIPTION
BIND OPTIONS FOR COMPARE	Indicates whether to compare Plan/Package with BIND ADD or BIND REPLACE A Add R Replace
BIND COMPARE ALL PACKAGES INCLUDED IN PLAN?	Indicates whether to BIND Compare each Package that is bound into a Plan when a BIND Compare Command or Select is issued.YYes NNNo
COLLECTION TO USE FOR PACKAGE BIND COMPARE	Collection to be used to create a dummy package for package BIND compare.
COMPARE DBRM NAMES	Indicates whether to compare DBRM names. Y Yes N No
COMPARE STATEMENT NUMBERS	Indicates whether to compare statement numbers.YYesNNo
DISPLAY BIND COMPARE CONFIRMATION PANEL?	Whether to display confirmation panel for BIND compare.YYesNNo
EXECUTE BIND COMPARE GENERATE OPTION?	 Indicates when to execute the BIND command generation option of the BIND Compare command. You can cause BIND/REBIND commands to be generated for entities (Plans/Packages/DBRMs) that are BIND Compared: When an entity's access path has changed When an entity's access path has not changed You use the options on this panel to control the execution of Bind Compare command generation. Valid values for this field are: N BIND/REBIND commands are not generated when a BIND Compare command or select is executed. C BIND/REBIND commands are to be generated only when a BIND Compare command is executed. S BIND/REBIND commands are to be generated only when a BIND Compare select is executed.
EXECUTE BIND/REBIND FOR DIFFERENT PATHS?	Indicates whether to execute BIND or REBIND commands generated for entities whose access paths have changed or whether to generate a list of the packages or plans for which commands would have been generated. This option is applicable to batch processing only. Valid values for this field are:NDo not execute commands. YYExecute commands.

FIELD	DESCRIPTION
EXECUTE BIND/REBIND FOR SAME PATHS?	Indicates whether to execute BIND or REBIND commands generated for entities whose access paths have not changed or whether to generate a list of the packages or plans for which commands would have been generated. This option is applicable to batch processing only. Valid values are:
	NExecute commands.YDo not execute commands.
GENERATE BIND/REBIND FOR DIFFERENT PATHS?	Indicates whether to generate BIND or REBIND commands when the entities being BIND Compared have different access paths. The generated BIND or REBIND commands are stored in the User PDS having the member name you have specified in the field USER PDS MEMBER TO SAVE DIFFERENCES IN. The BIND/REBIND commands will be generated according to how the entity is currently bound unless you have specified that the Plan/Package BIND Overrides should be used when generating BINDS for BIND Compare. See "Plan BIND Overrides" on page 341 and "Package BIND Overrides" on page 328 for information on Plan and Package Bind Overrides respectively. Valid values for this field are:
	N No commands are to be generated. B BIND commands are to be generated. R REBIND commands are to be generated. L Do not generate commands. Instead generate a list of packages or plans for which commands would have been generated.
GENERATE BIND/REBIND FOR SAME PATHS?	Indicates whether to generate BIND or REBIND commands when the entities being BIND Compared have no access path differences. The generated BIND or REBIND commands are stored in the User PDS having the member name you have specified in the field USER PDS MEMBER TO SAVE DIFFERENCES IN. The BIND/REBIND commands will be generated according to how the entity is currently bound unless you have specified that the Plan/Package BIND Overrides should be used when generating BINDS for BIND Compare. See "Plan BIND Overrides" on page 341 and "Package BIND Overrides" on page 328 for information on Plan BIND Overrides and Package BIND Overrides respectively.
	Valid values for this field are:
	NNo commands are to be generated.BBIND commands are to be generated.RREBIND commands are to be generated.LDo not generate commands. Instead generate a list of packages or plans for which commands would have been generated.
GENERATE PLAN OR PACKAGE BINDS FOR DBRMS?	If you have specified Yes to the generate options on this panel, determines whether the BIND or REBIND commands generated when comparing DBRMs will be plan BINDs or package BINDs. Valid values for this field are:
	PGenerate plan BINDs.KGenerate package BINDs.
MODIFY ONTO USER PDS MEMBERS?	Determines whether output created by BIND/REBIND is appended to output already in an existing PDS member or whether the output overwrites the existing output. Valid values for this field are:
	YAppend the output to the information in the member.NOverwrite the information in the existing member with this output.

FIELD	DESCRIPTION
PERMANENT?	Indicates if changes are permanent (Y) or are for the current session of !DB/EXPLAIN only (N).
SUFFIX TO USE FOR PLAN BIND COMPARE	Character to append to the userid when forming a dummy plan for Plan BIND compare.
USER PDS MEMBER TO SAVE DIFFERENCES IN	Names the User PDS member in which to save the commands generated for entities whose access paths have changed. The member name field will accept the variable &USER to indicate that the member name should be the TSO User ID. The member Name may also be specified as &USER S to indicate that the member name is the TSO User ID concatenated with the character S . The concatenation character must be the same as that specified on the EXPLAIN/SQL Defaults panel KTEPHOMI.
USER PDS MEMBER TO SAVE SAMES IN	Names the User PDS member in which to save the commands generated for entities whose access paths have not changed. The member name field will accept the variable &USER to indicate that the member name should be the TSO User ID. The member Name may also be specified as &USER S to indicate that the member name is the TSO User ID concatenated with the character S . The concatenation character must be the same as that specified on the EXPLAIN/SQL Defaults panel KTEPHOMI.
USER PDS MEMBER TO SAVE ERRORS IN	Names the User PDS member in which to save the commands generated for entities for which an error was encountered during the BIND process. (An example is the case where the BIND Compare fails due to missing dependent objects of the Plan or Package being BIND Compared.) The member name you enter in this field can be the variable &USER to indicate that the member name should be the TSO User ID. The member name can also be specified as &USER S to indicate that the member name is the TSO User ID concatenated with the character S. The concatenation character must be the same as that specified on the EXPLAIN/SQL Defaults panel KTEPHOMI.
	Note: Commands are saved in this member only if the value of the fields EXECUTE BIND/REBIND FOR SAME or DIFFERENT PATHS is B or R .

Build Tuning Parameters

Overview

This unit describes the Build Tuning Parameters panel.

Background about the Build Tuning Parameters panel

The Build Tuning Parameters panel (KTEPHOVC) allows you to describe the parameters of the data about to be processed. Underestimating these parameters can result in elongated processing time. Overestimating these parameters can result in acquiring more storage space than necessary.

Access

You can access the Build Tuning Parameters panel from the Housekeeping panel.

Panel

The following information shows the Build Tuning Parameters panel.

DB/EXPLAIN DB2=D31A LINE 1 OF 946 BUILD TUNING PARAMETERS
PERMANENT? ===> N (Y Yes N No)
Enter estimated number of the following: Plans===> 50 Connections per Plan===> 0Packages===> 100 Dirique DBRMsConnections per Package===> 0Unique DBRMs===> 500
Estimate Adjustor $==>0$ When to consider two DBRMs to be the same DBRM $==>2$ (0/1/2)
Specify which of following should be used in determining when two packages are the same: Collid Y Contoken Y Version N PDSNAME N
Use package BIND or CREATE timestamp in determining relative ages > B
ENTER to process END to cancel

Fields

FIELD	DESCRIPTION
ESTIMATE ADJUSTER	Value to divide estimates by.
NUMBER OF COLLECTIONS	Estimated total number of collections.
NUMBER OF CONNECTIONS PER PACKAGE	Estimated average number of connections per package.
NUMBER OF CONNECTIONS PER PLAN	Estimated average number of connections per plan.
NUMBER OF DBRMS PER PLAN	Estimated average number of DBRMs per plan.
NUMBER OF EXPLAINABLE STATEMENTS PER DBRM/PACKAGE	Estimated average number of (SELECTS + DELETES + UPDATES + INSERTS + DECLARE CURSORs) per DBRM/package.
NUMBER OF PACKAGES	Estimated total number of packages.
NUMBER OF PACKAGES PER PLAN	Estimated average number of packages per plan.
NUMBER OF PLANS	Estimated total number of plans.
NUMBER OF TABLES	Estimated total number of tables referenced.
NUMBER OF TABLES REFERENCED BY AN EXPLAINABLE STATEMENT	Estimated average number of tables referenced by an explainable statement.
NUMBER OF UNIQUE DBRMS	Estimated total number of unique DBRMs.

FIELD	DESCRIPTION
SPECIFY WHICH OF THE FOLLOWING TO USE TO DETERMINE WHEN TWO PACKAGES ARE THE SAME	 Specifies which of the following parameters should be used to determine when two packages are the same. If you change any of these options after you have performed a BUILD, you must perform a REFRESH in order to make your new options effective. COLLID CONTOKEN Version PDSNAME Valid values for each of these parameters can be: Y Yes N No
USE PACKAGE BIND OR CREATE TIMESTAMP IN DETERMINING RELATIVE AGES	N No Specifies whether the BIND or CREATE timestamp should be used to determine the relative ages of packages. B Use BIND timestamp C Use CREATE timestamp
WHEN TO CONSIDER TWO DBRMS TO BE THE SAME DBRM	Specifies when to consider two DBRMs to be the same DBRM. 0 All DBRMs are unique. 1 DBRMs are the same if they have the same name, contoken, version, and pdsname. 2 DBRMs are the same if they have the same name, contoken, and version. Note: This is the default value.
	 Note: If you specify a value of 1 or 2, and you are performing one of the following types operations with the DBRMs, the DBRM displays will be inaccurate. Editing DBRMs precompile DBRM X then bind plan X including DBRM X. Edit DBRM X changing the name of the table owners, then bind plan Y including DBRM X. Note: From a DB2 standpoint, the DBRM name is the same, the contoken is the same, and the pdsname can possibly be the same, but the DBRMs are NOT the same. Using levels and/or versioning at precompile time and not ensuring that the DBRM is unchanged at each level/version. Precompile DBRM X at level AAAA version BBBB and bind plan X including DBRM X. Modify program X's SQL calls, precompile DBRM X at level AAAA version BBBB, and bind plan Y including DBRM X. Note: From a DB2 standpoint, the DBRM name is the same, the contoken name is the same, the version name is the same, and the pdsname is the same, but the DBRM X at level AAAA version BBBB, and bind plan Y including DBRM X.

Compare Options

Overview

This unit describes the Compare Options panel.

Background about the Compare Options panel

The Compare Options panel (KTEPHOCO) has been split in two in Version 235s with most fields moved to the BIND Compare Options panel (KTEPHOBC). The Compare Options panel allows you to override compare options in the profile dataset for use during the current !DB/EXPLAIN session to compare EXPLAINs. You can specify whether the changes are permanent or are for the current session only.

Access

You can access the Compare Options panel from the Housekeeping panel.

Panel

The following illustration shows the Compare Options panel.

```
COMPARE OPTIONS
PERMANENT? ===> (YYes NNO UUser)
Compare statement numbers? ===> Y (YYes NNO)
Compare DBRM names? ===> Y (YYes NNO)
ENTER to process END to cancel
```

Fields

FIELD	DESCRIPTION
COMPARE DBRM NAMES	Indicates whether to compare DBRM names.
	Y Yes
	N No
COMPARE STATEMENT	Indicates whether to compare statement numbers.
NUMBERS	Y Yes
	N No

Data Formats

Overview

This unit describes the Data Formats panel.

Background about the Data Formats panel

The Data Formats panel (KTEPHOMF) allows you to control the format of several data fields used throughout !DB/EXPLAIN. You can specify whether the changes you make are effective permanently or only for the current session of !DB/EXPLAIN.

Access

You can access the Data Formats panel from the Housekeeping panel.

Panel

This is the Data Formats panel.

DB/EXPLAIN DB2=D31A Cmd ===>
DATA FORMATS
PERMANENT? ===> (Y Yes N No)
TIME ===> 11HH:MM:SS 2HH.MM.SSDATE ===> 41YYYY/MM/DD2YYYY-MM-DD3MM/DD/YYY4MM-DD-YYYY5DD.MM.YYYY6DD.MM.YYYY7YY/MM/DD8YY-MM-DD9MM/DD/YY10MM-DD-YY11DD.MM.YY12DD/MM/YY
TIMESTAMP ===> 4 1 YYYY/MM/DD HH:MM:SS.TTTTTT 2 YYYY-MM-DD HH:MM:SS.TTTTTT 3 MM/DD/YYYY HH:MM:SS.TTTTTT 4 MM-DD-YYYY HH:MM:SS.TTTTTT 5 DD.MM.YYYY HH:MM:SS.TTTTTT 6 DD/MM/YYYY HH:MM:SS.TTTTTT 7 YYYY/MM/DD HH:MM:SS 8 YYYY-MM-DD HH:MM:SS 9 MM/DD/YYYY HH:MM:SS 10 MM-DD-YYYY HH:MM:SS 11 DD.MM.YYYY HH:MM:SS 12 DD/MM/YYYY HH:MM:SS
COUNT ===> 31999999929.999.99939,999,999COSTS1 ===> 31999999929.999.999,9939,999,999.99COSTS2 ===> 21/10002ASIS3/1004/100005/1000006/4096
ENTER to process END to cancel

Fields

DATA FIELD	DESCRIPTION
COSTS1	Format for displaying costs.
COSTS2	Scaling for displaying cost.
COUNT	Format for displaying numeric data.
DATE	Format for displaying dates.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).
TIME	Format for displaying time.
TIMESTAMP	Format for displaying timestamps.

!DB/EXPLAIN Configuration Information

Overview

This unit describes the !DB/EXPLAIN Configuration Information panel.

Background about the !DB/EXPLAIN Configuration Information panel

The !DB/EXPLAIN Configuration Information panel (KTEHOAD) allows you to specify the plan names, data set names, and output characteristics of !DB/EXPLAIN as configured for the current Extract ID. This information is not shared across multiple Extract IDs. Each Extract ID has its own member stored in the profile data set. You can enter new values by typing over the existing ones. The new values are written to the profile data set that is specified on the Housekeeping panels.

Access

You can access the !DB/EXPLAIN Configuration Information panel from the Housekeeping panel.

```
----- DB/EXPLAIN DB2=D42B ------
Cmd ===>
                    !DB/EXPLAIN CONFIGURATION INFORMATION
PERMANENT? === Y (YYes N No 0
PLAN Names:
            RG301R
                      Extract
                                 RG301X
                                           For SQL Execution
                                                                RG301Q
  Primary
Extract Data Sets: CATALOG
                             RGRAH.V301.SYSCAT
                   PLANS
                             RGRAH2.V301.PLANTABL
                  STATEMENTS RGRAH2.V301.SYSSTMT
Product Data Sets: System PDS RGRAH2.TE301.EXP.SYSTEM
                   User PDS RGRAH2.TE301.EXP.USER
                   Log PDS
                             RGRAH2.TE301.EXP.LOG
Extract Sort Parameters:
```

DATA FIELD	DESCRIPTION	
CATALOG	Name of the CATALOG extract data set.	
EXTRACT	Name of plan used for running the extract.	
EXTRACT SORT PARAMETERS	Sort parameters needed by the sort product used at your site (for example, DFSORT parameters). Separate multiple parameters with commas.	
	The extract will pass these parameters to the sort product. Refer to your sort product's documentation for valid parameters.	
FOR SQL EXECUTION	Name of plan used for SQL execution.	
LOG PDS	Name of the product log PDS.	
PLANS	Name of the PLANS extract data set.	
PRIMARY	Name of plan used for running !DB/EXPLAIN.	
STATEMENTS	Name of the STATEMENTS extract data set.	
SYSTEM PDS	Name of the product system PDS.	
USER PDS	Name of the product user PDS.	

!DB/Tools DB2 Configuration Information

Overview

This unit describes the !DB/Tools DB2 Configuration Information panel.

Background about the !DB/Tools DB2 Configuration Information panel

The !DB/Tools DB2 Configuration Information panel (KTBPHODB) displays the !DB/Tools information for the extract ID. The extract ID is the basic unit of configuration for !DB/EXPLAIN. With Candle's new Extract technology, several extracts can be stored in the same dataset. An extract ID identifies a particular extract or set of extracts performed on a DB2 subsystem. You may define an extract ID to identify all data extracted from a DB2 subsystem, or a particular range or set of data extracted from a DB2 subsystem.

You can enter new values by typing over the existing ones. The new values are written to the profile dataset that is specified on the Housekeeping panels.

Note: DBRMs which were precompiled using a pre-DB2 V1R3 (1.3) precompiler *may* contain statements which !DB/EXPLAIN incorrectly interprets. EXPLAINs of such statements can result in -417 or -418 SQLCODES or an inaccurately reported access path.

See "EXPLAIN/SQL Defaults" on page 310 for information on the options you have for avoiding -417 and -418s.

Access

You can access the !DB/Tools DB2 Configuration Information panel by selecting option 1 from the Housekeeping panel.

The following illustration shows the !DB/Tools DB2 Configuration Information panel.

Cmd ===>			
DB/Tools DB2 Configuration Information			
1 Extract ID ===> D42B 2 MVS ID 3 Extract Description ===> DB2 V4.2 Subsystem	===> SYSG		
4 DB2 Subsystem ID ===> D42B 5 DB2 Version	===> 420		
6 DB2 Location Name ===> DB31 7 DSNTIAUL Plan Name 8 Real Catalog Prefix ===> SYSIBM 9 DSNTIAD Plan Name	===> DSNtAU42		
10 Catalog Prefix ===> SYSIBM 11 DSNZPARM Member Name			
<pre>12 DB/Tools Database ===> KTCDBD 14 DB/Tools Qualifier</pre>	===> CDB		
13 Collection Id Prefix ===> RG301			
15 DB2 DSNLOAD Data Set ===> PP.DB2.V420.S26.SDSNLOAD			
16 DB2 DSNEXIT Data Set ===> PP.DB2.V420.S26.SDSNEXIT			
17 DB2 RUNLIB Data Set ===> PP.DB2.V420.S26.RUNLIB.LOAD			
<pre>18 Data Set Containing DSNHDECP ===> PP.DB2.V420.S26.SDSNLOAD</pre>			
<pre>19 Data Set Containing DSN1COPY ===> PP.DB2.V420.S26.SDSNLOAD</pre>			
<pre>20 Data Set Containing DSNTIAUL ===> PP.DB2.V420.S26.RUNLIB.LOAD</pre>			
<pre>21 Data Set Containing DSNTIAD ===> PP.DB2.V420.S26.RUNLIB.LOAD</pre>			
<pre>22 Data Set Containing DSNZPARM ===> PP.DB2.V420.S26.SDSNEXIT</pre>			

DATA FIELD	DESCRIPTION		
CATALOG PREFIX	DB2 catalog prefix.		
DB/Tools Database	Name of the database that contains the DB/Tools objects.		
COLLECTION ID	Prefix for constructing called ID for packages.		
PREFIX	DB/EXPLAIN concatenates the CATALOG PREFIX and the COLLECTION ID PREFIX to equal the COLLECTION.		
dataset CONTAINING DSN1COPY	Name of the dataset which contains DSN1COPY.		
dataset CONTAINING DSNHDECP	Name of the dataset which contains DSNHDECP.		
dataset CONTAINING DSNTIAUL	Name of the dataset which contains DSNTIAUL.		
dataset CONTAINING DSNTIAD	Name of the dataset which contains DSNTIAD.		

DATA FIELD	DESCRIPTION		
dataset CONTAINING DSNZPARM	Name of the dataset which contains the DSNZPARM LOAD module.		
!DB/Tools DATABASE	Name of the DB2 database which contains the !DB/Tools objects.		
DB2 DSNEXIT dataset	Name of the dataset which contains DSNEXIT.		
DB2 DSNLOAD dataset	Name of the dataset which contains DSNLOAD. The !DB/Tools assume that the DB2 LOADLIB (DSNLOAD) is in your system LINKLIST. See the <i>!DB/Tools Installation and Customization Guide</i> chapter entitled "Before You Begin" for additional information.		
DB2 LOCATION NAME	Location name of the local DB2 subsystem. Used for DB2 V2.3 or higher.		
DB2 RUNLIB dataset	Name of the DB2 RUNLIB dataset.		
DB2 SUBSYSTEM ID	ID of the current DB2 subsystem.		
DB2 VERSION	DB2 Version for the current DB2 subsystem.		
DSNTIAUL PLAN NAME	Name of the DSNTIAUL plan.		
DSNTIAD PLAN NAME	Name of the DSNTIAD plan.		
DSNZPARM MEMBER NAME	Name of member which contains DSNZPARMs.		
EXTRACT ID	Extract ID is the basic unit of configuration for !DB/EXPLAIN. This eight character field identifies a particular extract or set of extracts on a DB2 subsystem. There may be many extract IDs per DB2 subsystem.		
EXTRACT DESCRIPTION	This optional field contains a description of the extract. You can enter any text of up to 45 characters into this field.		
MVS ID	ID of the current MVS system. This ID is for local documentation only.		
REAL CATALOG PREFIX	The prefix of the actual DB2 catalog tables if the prefix specified for Catalog Prefix is for a shadow catalog.		

!DB/Tools Global Configuration Information

Overview

This unit describes the !DB/Tools Global Configuration Information panel.

Background about the !DB/Tools Global Configuration Information panel

The !DB/Tools Global Configuration Information panel (KTBPHOGL) displays the global !DB/Tools information for the current MVS system. You can enter new values by typing over the existing ones. The new values are written to the profile dataset that is specified on the Housekeeping panels.

Access

You can access the !DB/Tools Global Configuration Information panel by selecting option 0 from the Housekeeping panel.

Panel

The following illustration shows the !DB/Tools Global Configuration Information panel.

 Cmd ===>	DB/Tool	s
DB/To	ools Global Configura	ation Information
PERMANENT?	===> Y	(YYes NNo)
VIO Symbolic Name Temp Disk Symbolic Name Max BLKSIZE for VIO SYSOUT Hold Class Enable Edit Recovery? RETURN = EXIT?	===> VIO ===> SYSDA ===> 6160 ===> X ===> N ===> N	(Y Yes N No) (Y Return exits N Return goes to Primary Menu)

The following illustration shows the !DB/Tools Global Data Set Information panel.

----- DB/Tools -----Cmd ===> DB/Tools Global Data Set Information CAUTION: These are the names of your production DB/Tools data sets. Please be careful when changing them. CLIST Data Set ===> RGRAH2.TE301.CLISTFB Data Set ===> RGRAH2.TE301.CNTL CNTL LOAD Data Set ===> RGRAH2.TE301.LOAD DBRM Data Set ===> TDKT.TE301REL.DBRM MSGS Data Set ===> RGRAH2.TE301.MSGS PANELS Data Set ===> RGRAH2.TE301.PANELS TABLES Data Set ===> RGRAH2.TE201.CNTL SKELS Data Set ===> RGRAH2.TE301.SKELS UTIL Data Set ===>

Fields

Descriptions for fields found on the preceding panels are listed below.

DATA FIELD	DESCRIPTION		
CLIST LIBRARY	Name of the library containing the product CLISTs.		
CNTL dataset	Name of the library containing the product JCL.		
DBRM LIBRARY	Name of the library containing the DBRMs required to BIND the product plans.		
LOAD LIBRARY	Name of the library containing the !DB/Tools LOAD modules.		
MAX BLKSIZE FOR VIO	Maximum block size to use when allocating VIO datasets. Specify 0 to use the system-determined block size.		
MSGS dataset	Name of the dataset containing the product messages.		
PANELS dataset	Name of the dataset containing the product panels.		
SKELS dataset	Name of the dataset containing the product skeletons. This field is not used by !DB/EXPLAIN.		
SYSOUT HOLD CLASS	Your installation's hold class. If not specified, class X is assumed.		
TABLES dataset	Name of the dataset containing the product command and data tables.		
TEMP DISK SYMBOLIC NAME	Symbolic name for temporary disk files; specific to a given MVS system.		
UTIL dataset	Contains the product utility profiles.		
VIO SYMBOLIC NAME	Symbolic name for virtual I/O. It is specific for the current MVS system.		

!DB/Tools Global Information—DB2 Subsystem Name Table

Overview

This unit describes the !DB/Tools Global Information—DB2 Subsystem Name Table panel.

Background about the !DB/Tools Global Information—DB2 Subsystem Name Table panel

The !DB/Tools Global Information—DB2 Subsystem Name Table panel (KTCPDBDS) displays all of the Extract IDs defined on the MVS system. You may select an Extract ID by entering a character next to the Extract ID you want. !DB/EXPLAIN runs on the Extract ID you select.

Access

You can access the !DB/Tools Global Information—DB2 Subsystem Name Table panel by selecting DB2 IDS from the Administration Menu (KTEPADMN).

The following illustration shows the !DB/Tools Global Information —DB2 Subsystem Name Table panel.

------ !DB/Tools Profile Information -- Global ------Cmd ===> DB2 Subsystem Name Table These are the DB2 subsystem names or extract ids for which !DB/Tools are configured, with their corresponding DB2 subsystem ids and MVS system ids. To select an extract id simply type a character in the selection column and press Enter. Extract DB2 SSID MVS ID Description SEL ID ---------------------D22A D22A CACOWLAG Production DB2 Extract D22ATST1 D22A CACOWLAG Stress DB2 Extract D22ATST2 D22A CACOWLAG D23A D23A CACOWLAG D23ATST1 D23A CACOWLAG Test DB2 Extract D23A CACOWLAG D23ATST2 D23B D23B CACOWLAG

DATA FIELD	DESCRIPTION	
DB2 SSID	The DB2 subsystem IDs for each Extract ID. Each SSID may have many Extract IDs associated with it.	
DESCRIPTION	Optional field into which you an enter a description or purpose of a particular extract.	
EXTRACT ID	Names of the Extract IDs configured on the MVS system. Each Extract ID identifies a particular Extract or set of Extracts performed on a DB2 subsystem.	
MVS ID	The MVS ID for each DB2 SSID.	

!DB/Tools Profile Dataset List

Overview

This unit describes the !DB/Tools Profile Dataset List panel.

Background about the !DB/Tools Profile Dataset List panel

The !DB/Tools Profile Dataset List panel (KTCPPRF0) displays the user and auxiliary profile datasets that will be in effect the next time you enter !DB/EXPLAIN. You can enter new values by typing over the existing ones and pressing Enter. If you specify that user and auxiliary profile datasets are not to be used, !DB/EXPLAIN uses the default profile datasets specified in the KTCSETUP JCL.

Access

You may access the !DB/Tools Profile Dataset List panel by running the KTCPRFST CLIST.

Panel

This is the !DB/Tools Profile Dataset List panel.

!DB/Tools Profile Information Profile Data Set List Cmd ===>				
	!	DB/TOOLS PROFILE DATA SET LIST		
to determin in this lis recommended profile dat a data set	These data sets are used, in conjunction with your System profile data set, to determine the exact configuration for !DB/Tools products. The data sets in this list are optional, but use of a User profile data set is very highly recommended. If you make use of an Auxiliary profile data set, use of a User profile data set is again very highly recommended. You must either specify a data set name for each of these, or mark the field indicating that you do not want a data set to be used for this purpose.			
Profile data set type: =======	Use this data set? =======	Data Set name:		
User	Y	TDTD00.E500.XXXX.PROFILE		
Auxiliary	Ν			

DATA FIELD	DESCRIPTION	
DATASET NAME	The names of the user and auxiliary profile datasets that you want to be in effect the next time you access !DB/EXPLAIN. These datasets take effect only if you specify Y in the "Use this dataset?" field. Otherwise, !DB/EXPLAIN uses the default profile datasets for your user ID. The defaults usually are set up by the installer or the !DB/Tools administrator at your site.	
PROFILE DATASET TYPE	Identifies the User and Auxiliary profile dataset rows.	
USE THIS DATAsET?	Specifies whether you want to use the dataset named at the right as the user or auxiliary dataset. If you specify Y, the profile dataset takes effect the next time you enter !DB/EXPLAIN. If you specify N, !DB/EXPLAIN uses the default profile datasets for your user ID.	

Exception Options

Overview

This unit describes the Exception Options panel.

Background about the Exception Options panel

The Exception Options panel (KTEPHOXO) allows you to control the amount of exception information that will be produced when you access the Exceptions panel. You can specify whether you want the Exception Options panel to be displayed before every access of the Exceptions panel so that you can alter the amount of exception information !DB/EXPLAIN produces. You can also specify whether or not the changes are to be made permanent or to be in effect for the current session only.

Access

You can access the Exception Options panel from the Housekeeping Menu panel (KTEPHOUS).

Panel

The following illustration shows the Exception Options panel.

DB/EX Cmd ===>	PLAIN DB2	=D31A	
ЕХСЕРТ	I 0 N 0	PTIONS	
PERMANENT? ===> (Y Yes N No)			
	Ac	cessing Except	ions from:
		Statements Panel	-
Display EXCEPTION OPTIONS Panel? Process XCPT Type Exceptions? Process BIND Type Exceptions? Process OBJECT Type Exceptions? Process SQL Type Exceptions? Process SQL ERROR Type Exceptions?			
ENTER to process END to cancel			

FIELD	DESCRIPTION		
DISPLAY EXCEPTION OPTIONS	Determines whether to display the Exception Options panel prior to producing exceptions. The values you can enter vary with the panel from which you are producing exceptions.		
PANEL?	From the Primary Menu, the valid values are:		
	Y Display the Exception Options panel.		
	N Do not display the Exception Options panel.		
	From the Statements, DBRMs, Plans, Packages, or Tables panels, the valid values are:		
	Y Display the Exception Options panel.		
	N Do not display the Exception Options panel.		
	S Display the Exception Options panel only after a Select.		
	C Display the Exception Options panel only after a Command.		
PERMANENT	Indicates whether to update the profile data set with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).		
PROCESS BIND TYPE	Indicates whether to process BIND exceptions. The values you can enter vary with the panel from which you are producing exceptions.		
EXCEPTIONS?	From the Primary Menu, the valid values are:		
	Y Process BIND exceptions.		
	N Do not process BIND exceptions.		
	From the Statements, DBRMs, Plans, Packages, or Tables panels, the valid values are:		
	Y Process BIND exceptions.		
	N Do not process BIND exceptions.		
	S Process BIND exceptions only after a Select.		
	C Process BIND exceptions only after a Command.		

FIELD	DESCRIPTION		
PROCESS OBJECT TYPE		ether to process object type exceptions. The values you can enter vary with om which you are producing exceptions.	
EXCEPTIONS?	From the Pri	imary Menu, the valid values are:	
	Y	Process object type exceptions.	
	Ν	Do not process object type exceptions.	
	From the Sta	atements, DBRMs, Plans, Packages, or Tables panels, the valid values are:	
	Y	Process object type exceptions.	
	Ν	Do not process object type exceptions.	
	S	Process object type exceptions only after a Select.	
	С	Process object type exceptions only after a Command.	
PROCESS SQL TYPE		ether to process SQL type exceptions. The values you can enter vary with om which you are producing exceptions.	
EXCEPTIONS?	From the Pri	imary Menu, the valid values are:	
	Y	Process SQL type exceptions.	
	Ν	Do not process SQL type exceptions.	
	From the Sta	atements, DBRMs, Plans, Packages, or Tables panels, the valid values are:	
	Y	Process SQL type exceptions.	
	Ν	Do not process SQL type exceptions.	
	S	Process SQL type exceptions only after a Select.	
	С	Process SQL type exceptions only after a Command.	
PROCESS SQL ERROR TYPE		ether to process SQL error type exceptions. The values you can enter vary el from which you are producing exceptions.	
EXCEPTIONS?	From the Pri	imary Menu, the valid values are:	
	Y	Process SQL error type exceptions.	
	Ν	Do not process SQL error type exceptions.	
	From the Statements, DBRMs, Plans, Packages, or Tables panels, the valid values		
	Y	Process SQL error type exceptions.	
	Ν	Do not process SQL error type exceptions.	
	S	Process SQL error type exceptions only after a Select.	
	С	Process SQL error type exceptions only after a Command.	

FIELD	DESCRIPTION		
PROCESS XCPT TYPE	Indicates whether to process XCPT exceptions. The values you can enter vary with the panel from which you are producing exceptions.		
EXCEPTIONS?	From the Primary Menu, the valid values are:		
	Y	Y Process XCPT exceptions.	
	N Do not process XCPT exceptions.		
	From the Statements, DBRMs, Plans, Packages, or Tables panels, the valid values are:		
	Y Process XCPT exceptions.		
	N	Do not process XCPT exceptions.	
	S	Process XCPT exceptions only after a Select.	
	С	C Process XCPT exceptions only after a Command.	

EXPLAIN Defaults

Overview

This unit describes the EXPLAIN Defaults panel.

Background about the EXPLAIN Defaults panel

The EXPLAIN Defaults panel KTEPHOEX allows you to override the profile data set during the current !DB/EXPLAIN session. You can specify whether you want the changes to be permanent or for the current session of !DB/EXPLAIN only.

Panel

The following illustration shows the EXPLAIN Defaults panel.

----- DB/EXPLAIN DB2=D31A -----Cmd ===> EXPLAIN DEFAULTS PERMANENT? ===> (YYes NNo) ===> A (Y Yes N No A Save EXPLAIN and Stats) Save Explain results? Save Whatif results? ===> N (Y Yes N No) Save EXPLAIN if Owner changed? ===> Y (Y Yes N No) Read EXPLAIN if Owner changed? ===> Y (Y Yes N No) Amount of statistics to gather ===> 2 (1 - 5) ===> Y Retain statistics for reuse? (Y Yes N No) ÌΥ Yes Alter SQL to avoid -417 / -418? ==> NN No) ===> 0 (Y Yes N No Alter SQL to avoid -117? 0 Only for KTEXPL) ===> N (Y Yes N No) Retain Explain display? N No) JOIN of catalog tables for stats==> N (Y Yes Research views and aliases? ===> Y (Y Yes N No) Merge Single statement EXPLAINs?===> N (Y Yes N No) Require all DBRMs for a plan? ===> N (Y Yes N No) Require all packages for a plan?===> N (Y Yes N No) Show all plan table rows? ===> N (Y Yes N No) Interleave packages in report? ===> N (Y Yes N No) ENTER to process END to cancel

FIELD	DESCRIPTION	
AMOUNT OF STATISTICS TO GATHER	 Type of data to retrieve from catalog: 1. SYSTABLESPACE, SYSTABLES, SYSINDEXES 2. SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, and SYSCOLDISTSTATS 3. SYSTABLESPACE, SYSTABLES, SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDIST, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDIST, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSINDEXPART, and SYSINDEXES, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLDIST, SYSCOLDIST, SYSCOLUMNS, SYSCOLSTATS, SYSCOLDIST, SYSCOLSTATS, SYSTABLEPART, SYSTABLEPART, SYSTABLEPART, SYSTABLEPART, SYSTABLEPART, SYSTABLEPART, SYSTABLEPART, SYSTABLES, SYSINDEXPART, AND SYSINDEXSTATS 	
ALTER SQL TO AVOID -117	Indicates whether the !DB/EXPLAIN parser modifies SQL statements to avoid -117 errors on PREPARES.An indication that the statement was altered to avoid a -117 will appear in the EXPLAIN results on panel KTEPEXPL. Valid values are:OThe parser should modify only non-extracted SQL statements.YThe parser should modify all SQL statements.	
ALTER SQL TO AVOID -417/-418?	 Notes: Not all -417 and -418 errors can be avoided The Issue SQL Calls in Parser Exit field has an effect on avoiding -417/-418 errors. If you receive a -417 or -418 after having specified Y in the Alter SQL to Avoid -417/-418 field, do one of the following: If you have specified N in the Issue SQL Calls in Parser Exit field, specify Y and re-EXPLAIN the statement If you have specified Y in the Issue SQL Calls in Parser Exit field, specify A and re-EXPLAIN the statement 	
DISPLAY	 If you have specified A in the Issue SQL Calls in Parser Exit field, check the version of DB2 the DBRM was precompiled with. If the DB2 version used for precompile was prior to V130 (1.3), re-precompile, if possible. If the DB2 version used for precompile was V130 (1.3) or later, call Candle Customer Support. Y Yes, modify the SQL statements. The reported access path on an EXPLAIN for a modified statement may be inaccurate. The KTEPEXPL panel warns of the modifications and potential inaccuracies. No, do not modify the SQL statements 	
DISPLAY PARTIAL PLAN EXPLAIN?	Determines whether to display a Plan EXPLAIN when not all of the Packages or DBRMs constituting the Plan have been EXPLAINed.YDisplay partial Plan EXPLAIN NDo not display partial Plan EXPLAIN	

FIELD	DESCRIPTION		
FORCE XUPDT WHEN EXPLAINING?	Determines whether XUPDT should be forced when explaining multiple entities (that is, should the specification for EXP_XUPDT_AFTER be overridden).		
	NDo not override specification for EXP_XUPDT_AFTERYOverride the specification		
INTERLEAVE PACKAGES IN REPORT?	When displaying a plan EXPLAIN report (generated by an EXPL* or GEXPL* command), indicates whether the EXPLAIN results for packages included in a plan should be placed after the EXPLAIN results of each plan in which the package is bound or whether all package EXPLAIN results should be placed at the bottom of the report.		
	 Y Display EXPLAIN results for package immediately after the EXPLAIN results for the plan in which the package is bound. This option can cause a package's EXPLAIN to appear multiple times in the EXPLAIN report. N Place all package EXPLAIN results at the bottom of the EXPLAIN report. This is the most efficient setting. 		
JOIN OF CATALOG TABLES FOR	Indicates whether catalog tables should be joined when retrieving catalog statistics. (Some DB2 installations will obtain a better access path when joining the catalog tables.)		
STATS	YJoin catalog tablesNDo not join catalog tables		
MERGE SINGLE STATEMENT EXPLAINS?	Indicates whether to merge the EXPLAIN results of a single statement EXPLAIN with the cost and EXPLAIN results.		
	Y Yes N No		
PERMANENT	Indicates whether to update the profile data set with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).		
READ EXPLAIN IF OWNER CHANGED	Indicates whether to read EXPLAIN results from the PLAN_TABLE extract if the owner at EXPLAIN time is different from the qualifier with which the entity was bound.		
	Y Yes N No		
REQUIRE ALL DBRMS FOR A PLAN?	Indicates whether all DBRMs included in a plan must be EXPLAINed before cost and EXPLAIN results are displayed.		
	YEXPLAIN all DBRMs before display.NIt is not necessary to EXPLAIN all DBRMs before display.		
REQUIRE ALL PACKAGES FOR A PLAN?	Indicates whether all PACKAGES included in a plan must be EXPLAINed before cost and EXPLAIN results are displayed.		
A I LAN;	YEXPLAIN all PACKAGES before display.NIt is not necessary to EXPLAIN all DBRMs before display.		
RESEARCH VIEWS AND ALIASES?	Indicates whether to query SYSTABLES to resolve views and aliases for creating EXPLAIN recommendations.		
	YResearch views and aliases by querying SYSTABLESNDo not research views and aliases by querying SYSTABLES. This can cause some recommendations to be erroneously displayed.		

FIELD	DESCRIPTION	
RETAIN EXPLAIN DISPLAY?	Indicates whether to retain catalog the results of an EXPLAIN for subsequent display or printing.	
	YRetain EXPLAIN results for display/print.NDo not retain EXPLAIN results for display/print.	
RETAIN STATISTICS FOR REUSE?	Indicates whether to retain catalog statistics read from the DB2 catalog during an EXPLAIN and make them available for reuse.	
	 Y Read catalog statistics for a table/index once for an EXPLAIN command and retain the information in storage for reuse. N Free catalog statistics storage at each commit point. 	
SAVE EXPLAIN IF OWNER CHANGED	Indicates whether to save EXPLAIN results if the owner was changed and is now different from the qualifier with which the entity was bound.	
	Y Yes N No	
SAVE EXPLAIN RESULTS?	Indicates whether to save EXPLAIN results:	
	YYesNNoASave EXPLAIN and Statistics	
SAVE WHATIF RESULTS?	Indicates whether to save Whatif results:	
KESUL15.	Y Yes N No	
SHOW ALL PLAN_TABLE ROWS?	Indicates whether, when one PLAN_TABLE row of a statements passes EXPLAIN filtering, all PLAN_TABLE rows should be displayed in the EPTBL or EPTBL2 section of the EXPLAIN display.	
	YShow all PLAN_TABLE rows if one passes filtering.NShow only those PLAN_TABLE rows that pass filtering.	

EXPLAIN Display Tuning Parameters

Overview

This unit describes the EXPLAIN Display Tuning Parameters panel.

Background about the EXPLAIN Display Tuning Parameters panel

The EXPLAIN Display Tuning Parameters panel permits you to:

• Use the Generate? column to control the amount of storage required to generate EXPLAIN displays by specifying which EXPLAIN display lines are generated. Only the display lines that are generated can be displayed.

If you decide to view display lines that were not generated for the EXPLAIN display, you can enter Housekeeping and indicate on this EXPLAIN Display Tuning Parameters panel (KTEPHOVD) which lines should be generated. You then reexecute EXPLAIN or, to save resources, execute a Latest EXPLAIN.

- Use the Format0 Display? column to specify whether information of a given type is included on your Format 0 EXPLAIN display.
- Use the Order column to specify the order in which information appears on your Format 0 display.

For expanded information on customizing the EXPLAIN display, see "Controlling the Format of the EXPLAIN Display" in the *!DB/EXPLAIN User's Guide*.

The following illustration shows the EXPLAIN Display Tuning Parameters panel.

----- DB/EXPLAIN DB2=D31A -----Cmd ===> EXPLAIN DISPLAY TUNING PARAMETERS PERMANENT? ===> (Y Yes N No) Format0 Generate? Order Display? EBIND information Y Ň 1 ERECM (Bind Specific) 3 ECOST information Y 2 Ν N N N Y 5 EOBJ information EKEYS information Y 6 EPATH information Y 3 EPTBL information Y 2 EPTB2 information Y Ν Y ERECM information Ν 4 ESTMT information Y Ν 1 ENTER to process END to cancel

The fields on the panel apply to the parameters listed down the left side of the panel. The top chart shows the type of information each parameter represents. The second chart lists the fields and their possible values.

Parameter	Generates:
EBIND	Plan bind or package bind information
ECOST	Cost information
EKEYS	Index key information
EOBJ	Detailed object information
EPATH	Access path summary information in textual form
ERECM	Recommendations. This parameter appears twice on the panel, the first time related to BIND statements, the second time related to statements in general. Additional information on limiting the specification of ERECM appears below.
ESTMT	Statement text and SQL error text (if !DB/EXPLAIN encounters an SQL error when preparing the statement to be EXPLAINed)
EPTBL and EPTB2	PLAN_TABLE information in a one-line or two-line format, respectively.

FIELD	DESCRIPTION	
FORMAT0 DISPLAY?	Determines whether information about this entity will appear on your Format 0 display.	
	Y Display information about this entity on Format 0.	
	N Do not display information about this entity on Format 0.	
GENERATE?	Determines whether EXPLAIN display lines are generated for this entity.	
	YGenerate display lines for EXPLAIN or latest EXPLAIN.NDo not generate display lines for EXPLAIN or latest EXPLAIN. If display lines for a given entity are not generated, corresponding information will not be available on panel KTEPEXPL.	
ORDER	Determines the order in which information about a given entity will appear in your Format 0 display. There are two sections of the Format 0 display. Each is ordered separately. For expanded information on using the ORDER field, see "Controlling the Format of the EXPLAIN Display" on page 303.	

EXPLAIN/SQL Defaults

Overview

This unit describes the EXPLAIN/SQL Defaults panel.

Background about the EXPLAIN/SQL Defaults panel

The EXPLAIN/SQL Defaults panel KTEPHOMI allows you to override the profile dataset during the current !DB/EXPLAIN session. You can specify whether you want the changes to be permanent or for the current session of !DB/EXPLAIN only.

Panel

The following illustration shows the EXPLAIN/SQL Defaults panel.

DB/EXPLAIN DB2=D31A Cmd ===>
EXPLAIN / SQL DEFAULTS
PERMANENT? ===> (Y Yes N No)
Type of SQL to issue ===> S (S Static D Dynamic) Prepare stmts to obtain cost? ===> Y (Y Yes N No) Display SQLCODE or SQLSTATE? ===> C (C SQLCODE S SQLSTATE) Disconnect from DB2? ===> N (Y Yes N No) Concatenation Character ===> Not Sign Character ===> ¬ Convert Quotes? ===> N (Y Yes N No) Issue SQL calls in parser exit? ===> N (Y Yes N No A Always)
ENTER to process END to cancel

FIELD	DESCRIPTION	
CONCAT- ENATION CHARACTER	The character to use for the concatenation symbol in SQL statements (typically the vertical bar). This character is also used for library specifications.	
CONVERT QUOTES	Indicates whether to convert SQL string delimiters from quotes to apostrophes when DECPSDL=DECPDFLT (SQL string delimiter = DEFAULT)	
	YYes (Convert all " to ')NNo (Internal check)	
DISCONNECT FROM DB2?	Indicates whether !DB/EXPLAIN should disconnect from DB2 between functions. Valid values are:	
	YDisconnect from DB2.NDo not disconnect from DB2.	
DISPLAY	Determines which of these values is displayed:	
SQLCODE or SQLSTATE	CSQLCODE is displayed.SSQLSTATE is displayed.	
ISSUE SQL CALLS IN PARSER EXIT	Indicates whether to issue SQL calls in the parser exit. The default value is No. Specify Yes if you are using synonyms or if you are not using colons in front of host variables.	
	Y Yes. Considerable overhead is added. Queries SYSSYNONYMS for every unqualified table in a statement and SYSCOLUMNS for every column in a statement.	
	NNo (The default). May not be able to correctly parse all statements.AAlways. Queries SYSSYNONYMS for every unqualified table. Queries SYSCOLUMNS for every word that may be a column.	
NOT SIGN CHARACTER	The character to use for the not sign symbol in SQL statements.	
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).	
PREPARE STMTS	Indicates whether to prepare SQL statements to obtain cost.	
TO OBTAIN COST	YShow costNCost field will be zero; this saves resources	
TYPE OF SQL TO ISSUE	Identifies the type of SQL to execute:	
10 1550E	SStaticDDynamic	

Extract Processing Defaults

Overview

This unit describes the Extract Processing Defaults panel.

Background about the Extract Processing Defaults panel

The Extract Processing Defaults panel KTEPHOEP allows you to override the profile dataset during the current !DB/EXPLAIN session. You can specify whether you want the changes to be permanent or for the current session of !DB/EXPLAIN only.

Panel

The following illustration shows the Extract Processing Defaults panel.

----- DB/EXPLAIN DB2=D31A ------Cmd ===> EXTRACT PROCESSING DEFAULTS PERMANENT? ===> (Y Yes N No) Display Build status panels? ===> Y (Y Yes N No 0 Online Only) Generations of catalog history ===> 1 (0=all) Generations of Explain history ===> 10 (0=all) Plan Table variance Plan Pre ===> 60 Post 0 Pkg Pre 10 Post 5 Plan Table variance fuzzy match ===> Y (Y Yes N No) Plan Table associate new ones? ===> N (Y Yes N No) Max number of XUPDT VSAM errors ===> 10 ===> Y (Y Yes N No) Update profile dataset? ENTER to process END to cancel

FIELD	DESCRIPTION	
DISPLAY BUILD STATUS PANELS	Indicates whether to display build status panels during product initialization.	
	Y Yes	
	N No	
GENERATIONS OF CATALOG	Indicates the number of generations of catalog history to display.	
HISTORY	$ \begin{array}{ccc} 0 & \text{All} \\ n & n \text{ generations} \end{array} $	
GENERATIONS OF EXPLAIN HISTORY	Indicates the number of generations of EXPLAIN history to retrieve from the PLAN_TABLE extract dataset for the EXPLAIN History display.	
	0 All historical versions of EXPLAIN history are retrieved.	
	If 1 is specified, only the most recent EXPLAIN history is retrieved. (In effect, this means that no history is retrieved, since this is the latest EXPLAIN.)nn generations	
	If a value other than 0 is specified, all of the available historical information may not be retrieved. Candle Corp. recommends you specify 0 for this parameter.	
MAX NUMBER OF XUPDT VSAM ERRORS	Specifies the maximum number of VSAM errors permitted on XUPDT before termination.	
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).	
PKG POST	This value is added to the Package Bind Timestamp to establish the youngest PLAN_TABLE TIMESTAMP to be associated with a package.	
PKG PRE	This value is subtracted from the Package Bind Timestamp to establish the oldest PLAN_TABLE TIMESTAMP to be associated with a package.	
	Valid values 0 - 1440	
PLAN POST	This value is added to the Plan Bind Timestamp to establish the youngest PLAN_TABLE TIMESTAMP to be associated with a plan.	
	Valid values 0 - 1440	
PLAN PRE	This value is subtracted from the Plan Bind Timestamp to establish the oldest PLAN_TABLE TIMESTAMP to be associated with a plan.	
	Valid values 0 - 1440	

FIELD	DESCRIPTION	
PLAN TABLE ASSOCIATE NEW ONES?	Determines whether Plan Table extract records should be associated with catalog extract records having older timestamps.	
	Y Associate Plan Table extract records with catalog extract records having older timestamps.	
	N Do not associate Plan Table extract records with catalog extract records having older timestamps.	
	No is recommended since specifying Yes can create incorrect access path information.	
PLAN TABLE VARIANCE	The number of minutes to specify as the potential variance in the timestamps recorded for the bind and the PLAN_TABLE. For example, when a plan or package is bound with EXPLAIN(YES), the timestamps recorded in the PLAN_TABLE are earlier than the bind timestamp recorded in SYSPACKAGE or SYSPLAN. This value specifies the typical variance (in minutes) that the bind timestamps are permitted to be earlier than the PLAN_TABLE timestamp. In your environment, if plans and packages typically take a maximum of 15 minutes to bind, specify the variance as 15 minutes.	
UPDATE PROFILE DATASET?	Determines whether the profile dataset should be updated with build information. Specifying Yes allows subsequent builds to "learn" from the current build.	
	YYes, update profile datasetNNo, do not update profile dataset	

Housekeeping

Overview

This unit describes the Housekeeping panel.

Background about the Housekeeping panel

The Housekeeping panel (KTEPHOUS) provides access to system and product options. You can change your default masks, output options, SQL creator ID, data field formats, panel formats, panel sorts and filters, library search order, and other information.

You also can change Global !DB/Tools information for the MVS subsystem, DB2 subsystem information for the !DB/Tools products on the DB2 subsystem, and !DB/EXPLAIN configuration information. For security reasons, all changes made in Housekeeping are written to the profile dataset that corresponds with the current user ID.

Access

You can access the Housekeeping Menu panel in the following ways:

- Select the Housekeeping Option on the !DB/EXPLAIN Administration Menu.
- Type and enter the command HOUSE or HOUSE? on the Command line of any !DB/EXPLAIN panel.

You can access any individual Housekeeping panel directly in the following ways:

- Type and enter the command HOUSEn on the Command line of any !DB/EXPLAIN panel. n is the number of a given panel on the Housekeeping Menu panel. For example, entering HOUSE2 accesses the !DB/EXPLAIN Configuration panel.
- Type and enter the command **HOUSE***mm* on the Command line of any !DB/EXPLAIN panel. *mmm* is a mnemonic identifier that represents a specific Housekeeping panel. For example, the command **HOUSE MAS** accesses the Selection Masking panel. A list of the mnemonic codes for the Housekeeping panels follows.

Access (continued)

The following illustration shows the Houskeeping Menud the mnemonic abbreviation for each housekeeping option.

	Mnemonic	Mnemonic
Housekeeping Panel	Identifier	Abbreviation
0 - Global Information	GLOBAL	GL0
1 - DB2 Subsystem Information	DB2	DB2
2 - !DB/EXPLAIN Configuration	PRODUCT	PRO
3 - Library Search Order	LIBRARY	LIB
4 - Selection Masking	MASKING	MAS
5 - SET Defaults	SET	SET
6 - Output Options	OUTPUT	OUT
7 - Miscellaneous Defaults	MISCELLANEOUS	MIS
8 - Explain / SQL Defaults	DEFAULTS	DEF
9 - Explain Defaults	EXPLAIN	EXP
10 - SQL Defaults	SQL	SQL
11 - Compare Options	COMPARE	COM
12 - Extract Processing Defaults	EXTRACT	EXT
13 - Tuning Parameters	TUNING	TUN
14 - Build Tuning Parameters	BUILDTUNING	BUI
15 - Explain Display Tuning Parameters	XTUNING	XTU
16 - Data Formats	DATAFORMATS	DAT
17 - Panel Formats	FORMATS	FOR
18 - Panel Sorts	SORTS	SOR
19 - Panel Filters	FILTERS	FIL
20 - SQL Parameters for KTEXPL	KTEXPL	KTE
21 - Exception Options	XCPTOPTIONS	XCP
22 - Plan BIND Overides	PLANBIND	PLA
23 - Package BIND Overrides	PACKAGEBIND	PAC
24 - BIND Compare Options	BINDCOMPARE	BIN
25 - Recommendations	RECOMMENDATIONS	REC

The following illustration shows the Housekeeping panel.

DB/EXPLAIN	DB2=D42B
Cmd ===>	
!DB/EXPLAIN HOUSEK	EEPING MENU
Option ===>	
0 - Global Data Set Information	14 - Extract Processing Defaults
1 - Global Configuration Information	15 - Tuning Parameters
2 - Global Print Options	16 - Build Tuning Parameters
3 - DB2 Subsystem Information	17 - Explain Display Tuning Parameters
4 - DB/EXPLAIN Configuration	18 - Data Formats
5 - Library Search Order	19 - Panel Formats
6 - Selection Masking	20 - Panel Sorts
7 - SET Defaults	21 - Panel Filters
8 - Output Options	22 - SQL Parameters for KTEXPL
9 - Miscellaneous Defaults	23 - Exception Options
10 - Explain / SQL Defaults	24 - Plan BIND Overrides
11 - Explain Defaults	25 - Package BIND Overrides
12 - SQL Defaults	26 - BIND Compare Options
13 - Compare Options	27 - Recommendations
Press ENTER to process. Press END to canc	el.

DATA FIELD	DESCRIPTION
OPTION	Numeric field that represents the function to be invoked:
	 Global Information - (KTCPAD0) Common panel used throughout !DB/Tools DB2 Subsystem Information (KTCPAD1) Common panel used throughout !DB/Tools !DB/EXPLAIN Configuration (KTEPHOAD) contains !DB/EXPLAIN
	 product information Library Search Order (KTEPHOLS) Selection Masking (KTEPHOMK) SET Defaults (KTEPHOSE) Output Options (KTEPHOOD) Miscellaneous Defaults (KTEPHOMJ)
	 8 EXPLAIN / SQL Defaults (KTEPHOMI) 9 EXPLAIN Defaults (KTEPHOEX) 10 SQL Defaults (KTEPHODS) 11 Compare Options (KTEPHOCO) 12 Extract Processing Defaults (KTEPHOEP)
	 13 Tuning Parameters (KTEPHOVB) 14 Build Tuning Parameters (KTEPHOVC) 15 EXPLAIN Display Tuning Parameters (KTEPHOVD) 16 Data Formats (KTEPHOMF) 17 Panel Formats (KTEPHOPF)
	 18 Panel Sorts (KTEPHOPS) 19 Panel Filters (KTEPHODF) 20 SQL Parameters for KTEXPL (KTEPHOSQ) 21 Exception Options (KTEPHOXO) 22 Plan BIND Overrides (KTEPHOBP)
	23Package BIND Overrides (KTEPHOBK)24BIND Compare Options (KTEPHOBC)25Recommendations Menu (KTEPRECM)
PROFILE dataset LIST	USER Current user profile dataset, if applicable.AUXILIARY Current auxiliary profile dataset, if applicable. If there are multiple auxiliary profile datasets in the concatenation, the lowest level auxiliary profile is displayed here.
	SYSTEM Current system profile dataset.
	If only the SYSTEM dataset is displayed in the Profile Data Set List, then all permanent changes made in the Housekeeping panels are written to this dataset. If a USER and a SYSTEM dataset are displayed, then all permanent changes are written to the USER dataset. If a USER, an AUXILIARY, and a SYSTEM dataset are displayed, then all permanent changes are made to the USER dataset.

Library Search Order

Overview

This unit describes the Library Search Order panel.

Background about the Library Search Order panel

The Library Search Order panel (KTEPHOLS) allows you to specify the order in which DBRM and package libraries will be searched for BIND, REBIND, Compare, and Validate functions. The libraries you indicate here will be searched in order from one through five.

Two variables are provided by the product: **&DBRM** (DBRM or package name) and **&SSID** (DB2 subsystem name). The SUBSTR function and concatenation operator (II) are available to form meaningful library names. For example:

"T"||SUBSTR(1,4,&DBRM) = TXXXX or 'T'||SUBSTR(1,4,&DBRM) = TXXXX

Where XXXX refers to the first 4 characters of the DBRM or package name.

You can specify whether you want these changes to be permanent or temporary. Temporary changes remain in effect for the current session of !DB/EXPLAIN only.

Access

You can access the Library Search Order panel from the Housekeeping panel.

This is the Library Search Order panel.

```
----- DB/EXPLAIN DB2=D31A -----
Cmd ===>
                  LIBRARY SEARCH ORDER
 PERMANENT? ===> (YYes NNo)
 SEARCH ORDER ===> 0 ( Search library specified in DB2 catalog.
                       O=Only N=Never F=First L=Last)
HIGH LEVEL QUALIFIER#1 ===> "DB2"||SUBSTR(1,4,&DBRM)
MID LEVEL QUALIFIER#1 ===> "TEST"
LOW LEVEL QUALIFIER#1 ===> "DBRMLIB"
HIGH LEVEL QUALIFIER#2 ===> "DB2"||SUBSTR(1,4,&DBRM)
MID LEVEL QUALIFIER#2 ===> "SEMIPROD"
LOW LEVEL QUALIFIER#2 ===> "DBRMLIB"
HIGH LEVEL QUALIFIER#3 ===> "DB2"||SUBSTR(1,4,&DBRM)
MID LEVEL QUALIFIER#3 ===> "PROD"
LOW LEVEL QUALIFIER#3 ===> "DBRMLIB"
HIGH LEVEL QUALIFIER#4 ===> "DB2"||SUBSTR(1,4,&DBRM)
MID LEVEL QUALIFIER#4 ===> "BACKUP"
LOW LEVEL QUALIFIER#4 ===> "DBRMLIB"
ENTER to process END to cancel
```

DATA FIELD	DESCRIPTION
PERMANENT	Indicates whether to update the profile data set with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).
SEARCH ORDER	Indicates library search order for PDS:
	 F FirstSearch DB2LIB first, and then search specified libraries L LastSearch DB2LIB last, after searching specified libraries O OnlySearch DB2LIB only; do not search specified libraries N Do Not SearchDo not search DB2LIB; search only specified libraries
HIGH LEVEL QUALIFIER#1	High-Level Qualifier for the data set which will be searched first. For example,
QUALITIER	T SUBSTR(1,4,&DBRM) = TXXXX
	Where XXXX refers to the first 4 characters of the DBRM or package name.
	Where is concatenation operator.
MID LEVEL QUALIFIER#1	Mid-Level Qualifier for the data set which will be searched first.
LOW LEVEL QUALIFIER#1	Low-Level Qualifier for the data set which will be searched first.
HIGH LEVEL QUALIFIER#2	High-Level Qualifier for the data set which will be searched second.
MID LEVEL QUALIFIER#2	Mid-Level Qualifier for the data set which will be searched second.
LOW LEVEL QUALIFIER#2	Low-Level Qualifier for the data set which will be searched second.
HIGH LEVEL QUALIFIER#3	High-Level Qualifier for the data set which will be searched third.
MID LEVEL QUALIFIER#3	Mid-Level Qualifier for the data set which will be searched third.
LOW LEVEL QUALIFIER#3	Low-Level Qualifier for the data set which will be searched third.
HIGH LEVEL QUALIFIER#4	High-Level Qualifier for the data set which will be searched fourth.
MID LEVEL QUALIFIER#4	Mid-Level Qualifier for the data set which will be searched fourth.
LOW LEVEL QUALIFIER#4	Low-Level Qualifier for the data set which will be searched fourth.

Miscellaneous Defaults

Overview

This unit describes the Miscellaneous Defaults panel.

Background about the Miscellaneous Defaults panel

The Miscellaneous Defaults panel KTEPHOMJ allows you to override the profile dataset during the current !DB/EXPLAIN session. You can specify whether you want the changes to be permanent or for the current session of !DB/EXPLAIN only.

Panel

The following illustration shows the Miscellaneous Defaults panel.

```
----- DB/EXPLAIN DB2=D31A ------
Cmd ===>
                MISCELLANEOUS DEFAULTS
PERMANENT? ===> N ( Y Yes N No )
Character to use for BOX sides ===> | BOX corners ===> = BOX tops ===> -
                             ===> Ė (Y Yes N No E After Expanded)
Blank line after statement?
OUT statistics format
                             ===> Y (Y SQL UPDATE Statements N REXX Exec)
Generate Update if no statistic? ===> N (Y Yes N No)
Use Real Catalog Tables for UPDT ===> Y (Y Yes N No)
Consider packages same when ===> 1
                                     (1 / 2)
                             ===> 0
Package Collection Selection
                                     (0 One A All)
Set Exception RC for XCPT?
                            ===> N (Y Yes N No)
Set Exception RC for Explain?
                             ===> N (Y Yes N No)
Set Exception RC for Recommend? ===> N (Y Yes N No)
Warning message for no EPX auth? ===> Y
                                     (Y Yes
                                            N No)
Suppress info messages in batch? ===> N (Y Yes N No)
                             ===> Y (Y Yes N No)
Use Dataspace?
Batch Error Return Code
                             ===> 12
                                        (0 - 32000)
Maintain Key ratio in Estimator ===> N (Y Yes N No)
Log Batch BIND, REBIND and FREE? ===> N (Y Yes N No)
ENTER to process END to cancel
```

FIELD	DESCRIPTION
BATCH WARNING RETURN CODE	The return code to set whenever !DB/EXPLAIN encounters a <i>no data</i> condition during a batch execution (such as, for example, when filtering is so restrictive as to eliminate any plans or packages from consideration. The default value is 4.
BLANK LINE AFTER STATEMENTS?	Indicates whether a blank line should be displayed after a statement on the Statements panel (KTEPSTMT) Valid values are:
	Y Display a blank line after each statement.
	E Display a blank line after each expanded statement.
	N Do not display any blank lines.
CHARACTER TO USE FOR BOX CORNERS	Allows you to define the character to be used for box corners when generating boxes for display (for example, when displaying EXPLAIN results. These values are used as panel attributes. Any value <i>except</i> the following can be used:
	x'01' x'02' x'03' x'04' x'05' x'06' x'07' x'D0' (right curly brace) x'4A' (cent sign) x'7C' (at sign)
CHARACTER TO USE FOR BOX SIDES	Allows you to define the character to be used for box vertical sides when generating boxes for display (for example, when displaying EXPLAIN results. These values are used as panel attributes. Any value <i>except</i> the following can be used:
	x'01' x'02' x'03' x'04' x'05' x'06' x'07' x'D0' (right curly brace) x'4A' (cent sign) x'7C' (at sign)
CHARACTER TO USE FOR BOX TOPS	Allows you to define the character to be used for box horizontal tops (and bottoms) when generating boxes for display (for example, when displaying EXPLAIN results. These values are used as panel attributes. Any value <i>except</i> the following can be used:
	x'01' x'02' x'03' x'04' x'05' x'06' x'07' x'D0' (right curly brace) x'4A' (cent sign) x'7C' (at sign)
CONSIDER PACKAGES SAME WHEN	Allows you to define when packages should be considered the same for purposes of package collection selection. Valid values are:
	1 Consider packages the same only when they have the same NAME, CONTOKEN, VERSION, and PDSNAME.
	2 Consider packages the same only when they have the same NAME, CONTOKEN, and VERSION.

FIELD	DESCRIPTION
GENERATE UPDATE IF NO	When executing an OUT command, allows you to specify whether !DB/EXPLAIN should generate an update for columns without statistics. Valid values are:
STATISTICS?	Y Generate update.
	N Do not generate update.
LOG BATCH BIND, REBIND, AND FREE?	Determines whether to log BIND, REBIND, and FREE functions issued during a batch run to the log PDS. Valid values are:
AND FREE:	Y Update log PDS when one of these functions occurs
	N Do not update log PDS when one of these functions occurs
MAINTAIN KEY RATIO IN ESTIMATOR?	When issuing a CALC command, determines whether to maintain the ratio of the FIRSTKEYCARD on the Estimator panel to the FULLKEYCARD. Valid values are:
ESTIMATOR:	Y Maintain ratios.
	N Do not maintain ratios.
OUT STATISTICS FORMAT	Indicates whether a REXX exec or SQL statements are generated when you output statistics from Whatif (KTEPWHIF) or Estimator (KTEPESTM).
PACKAGE COLLECTION SELECTION	Determines the set of data that will be displayed when option Q (Collection Selection) is entered on panel KTEPKACK. Valid values are:
	 Display only the collection the package resides in. Display all the collections that like packages reside in. Like packages are defined to be packages which you consider to be the same by so defining them via the option Consider packages same when.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).
SET EXCEPTION RC FOR EXPLAIN	Indicates whether to set the batch return code for an exception if it is tripped while performing an EXPLAIN or latest EXPLAIN.
	YSet return codeNDo not set return code
SET EXCEPTION RC FOR RECOMMEND	Indicates whether to set the batch return code for an exception if it is tripped while processing a recommendation selection.
	YSet return codeNDo not set return code
SET EXCEPTION RC FOR XCPT	Indicates whether to set the batch return code for an exception if it is tripped while performing an XCPT function.
	YSet return codeNDo not set return code
SUPPRESS INFO	Indicates whether to suppress the output of informational messages during a batch run.
MESSAGES IN BATCH?	YSuppress informational messages.NDo not suppress informational messages.

FIELD	DESCRIPTION		
USE DATASPACE?	Determines whether a dataspace should be used to house items such as SQL statements, EXPLAIN results, catalog statistics, and catalog extract data.		
	 Y Yes, use a dataspace. (This parameter is only effective if you are running on a level of MVS that supports dataspaces, and parameters are set to allow their creation and use.) N No, do not use a dataspace. Rather, use storage within the user's address space. 		
USE REAL CATALOG TABLES FOR UPDT	Indicates whether to execute Whatif, UPDT, and OUT commands against the actual DB2 catalog tables. Y Use real catalog tables. N Do not use real catalog tables.		
WARNING MESSAGE FOR NO EPX AUTH?	N Do not use real catalog tables. Determines whether to issue a warning message when the user does not have EPX authority (that is, authority to update the Plan_Table extract dataset) and an XUPDT command has been explicitly or. implicitly issued. Y Yes, issue a warning message.		
	N No, do not issue a warning.		

Output Options Defaults

Overview

This unit describes the Output Options Defaults panel.

Background about the Output Options Defaults panel

The Output Options Defaults panel (KTEPHOOD) allows you to specify the circumstances under which the Output Options panel appears. For example, the Output Options panel could be displayed each time a BIND, REBIND, or DROP is issued (EXODS field); the JCL? command is issued (JCL); SQL is output (OUT field); or statistics are output from the Whatif or Estimator panels (STATS field). You also can change the default member names that receive the output.

You can specify whether you want the changes made on this panel to be permanent or for the current session of !DB/EXPLAIN only.

Access

You can access the Output Options Defaults panel from the Housekeeping panel.

Panel

The following illustration shows the Output Options Defaults panel.

Cmd ===>	DB/EXF	PLAIN DB2=D42	В	
0 U T	PUT OPT	IONS D	EFAULTS	
PERMANENT? ===> N (Y Yes N No)			
	DISPLAY PANEL?	MEMBER NAME	MOD ONTO MEMBERS?	
BIND DROP EXPLAIN JCL OUT REBIND STATS	Y Y Y Y Y Y	BIND FREE EXPLAIN JCL SQL REBIND STATS	N N N N N N N	
STATS BIND COMPARE HOST VARIABL	ES	STATS COMPARE HOSTS	IN	
ENTER to process END	to cancel			

FIELD	DESCRIPTION		
DISPLAY PANEL?	Indicates whether to display the Output Options panel (KTEPOUTP) when the user executes the relevant command.		
	Y Yes N No		
MEMBER NAME	The default member name for each function that can cause an output to occur. The member name can also be specified as $\&USER x $ where $\&USER$ represents the TSO userid and x represents a letter which is used as a suffix. For example, $\&USER S $ indicates that the member name is to be the TSO userid suffixed with the character S . The concatenation character, in this case , must be the same character as you have specified on the Explain/SQL Defaults Panel as the concatenation character.		
	You can also append a variable &CNT to the member name. In this case, the member name must be four characters or less. For information about using &CNT, see the unit "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide		
MOD ONTO MEMBERS?	For each function that can cause output, indicates whether to replace the selected member with the current output, or to append the output to the end of the member if the member exists.		
	Y Add the command results to the end of an existing member.		
	N Replace the specified existing member.		
	For additional information on the use of MOD, see the unit "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide.		
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).		
	Y Make the changes permanent.		
	N Make the changes for this session only.		

Package BIND Overrides

Overview

This unit describes the Package BIND Overrides panel.

Background about the Package BIND Overrides panel

The Package BIND Overrides panel (KTEPHOBK) allows you to make global changes to BIND parameters for more than one Package. It allows you to override attributes of an existing Package when generating a BIND or REBIND command. Fields for which no override options are shown on the panel cannot be overridden.

Access

The Package BIND Overrides panel is accessed first from the Housekeeping Panel KTEPHOUS. Filling in the Display Override Panel fields on this panel determine when this panel will be subsequently displayed. From Package BIND Overrides, you can only go to the Process Member panel (KTEPOUOP).

The following illustration shows the Package BIND Overrides panel.

Cmd ===> P A C K	- DB/EXPLAIN DB2=D42B
PERMANENT? ===> N (Y Yes N	No)
Use Overrides for Display Override Panel for Use Library Search Order for	
BIND COPY : (YYes N Deferprep : (YYes N Keepdynamic : (YYes N Reopt(VARS) : (YYes N Collection	Action : (R Replace A Add) Flag : (I / W / E / C) Isolation : (R RR T RS S CS U UR) Release : (C Commit D Deallocate) No) Validate : (R Run B Bind) No) Explain : (Y Yes N No) No) Sqlerror : (N Nopackage C Continue) No) Degree : (1 / ANY) No) Currentdata : (Y Yes N No) Dynamicrules: (B / R / blank) &DBRM ss END to cancel.

FIELD	DESCRIPTION		
ACTION	If non-blank, this value is the value to generate in the ACTION() clause. The non-blank value can be: A Generate ACTION(ADD). R Generate ACTION(REPLACE).		
BIND COPY	Indicates whether to BIND the entity from the DBRM member or copy it from another package.		
	Y Copy the entity from another package. Include the COPY() and COPYVER() clauses on the generated BIND command.		
	N or blank BIND the entity from the DBRM member. Include the LIBRARY() and MEMBER() clauses on the generated BIND command.		
COLLECTION	Collection name where package is to reside.		
COLLECTION SPECIFICATION	Specification for the collection to be used when converting a DBRM to a package. Values can be specified as:		
	A literal string with no variables and with or without delimiters. Delimiters can be single or double quotes. Use the literal provided as the collection ID (for example, coll, 'coll', or "coll").		
	The variable &DBRM. Use the DBRM name as the collection ID.		
	The variable &PLAN. Use the Plan name as the collection ID.		
	The variable &OWNER. Use the Owner as the collection ID.		
	The variable &CREATOR. Use the Creator as the collection ID.		
	The variable &QUALIFIER. Use the Qualifier as the collection ID.		
	The variable &USER. Use the TSO User ID as the collection ID.		
	A literal string with variables or substringed variables. The literal must be enclosed in delimiters. Use the generated string as the collection ID. For example, 'T' SUBSTR(1,4&DBRM) would result in TABCD if the DBRM name were ABCDEFGH. "T" SUBSTR(1,4&OWNER) would result in TMITY if the Owner name were MITYMITE.		
	The concatenation characters must be those specified on the EXPLAIN/SQL Defaults panel KTEPHOMI.		

FIELD	DESCRIPTION		
CURRENTDATA (Current Data)	If non-blank, indicates whether data currency is required for ambiguous cursors.		
	 Y Generate CURRENTDATA(YES); data currency is required. N Generate CURENTDATA(NO); data currency is not required. 		
DEGREE	Determines whether I/O parallelism is enabled when generating the DEGREE() clause.		
	1I/O parallelism is disabledAnyI/O parallelism is set to the value set by DB2.BlankThe default, 1 is used		
DEFERPREP	Indicates whether the PREPARE for a statement referring to a remote object is deferred until the first EXECUTE, OPEN, or DESCRIBE of the statement. Valid values include:		
	Y Yes DeferN No Defer		
DISPLAY OVERRIDE PANEL FOR COMMAND?	Determines whether to display this panel when executing a BIND, BINDREP, BINDADD, BINDEXP, REBIND, or REBINDEX command		
	Y Display this panel for BIND and REBIND commands.N Do not display this panel for BIND and REBIND commands.		
DISPLAY OVERRIDE PANEL FOR COMPARE?	Determines whether to display this panel when executing a C (BIND COMPARE) Select or the COMPARE command. Valid values for this field are:		
	Y Display this panel for BIND Compare functions.N Do not display this panel for BIND Compare functions.		
DISPLAY OVERRIDE PANEL FOR CONVERT?	Determines whether to display this panel when executing a Z (Bind Convert) Select or a BINDCNV command. Valid values are:		
	 Y Display this panel for the Z Select and BINDCNV command. N Do not display this panel for the Z Select and the BINDCNV command. 		
DISPLAY OVERRIDE PANEL FOR SELECT?	Determines whether to display this panel when executing a B (BIND) or R (REBIND) Select. Valid values are:		
	Y Display this panel for B or R Selects.N Do not display this panel for B or R Selects.		
DYNAMICRULES	Indicates whether run time or bind time rules will apply to a dynamic SQL statement at run time. If this field is non-blank, it specifies the value to be generated in the DYNAMICRULES() clause:		
	R Generate DYNAMICRULES(RUN).B Generate DYNAMICRULES(BIND)		
EXPLAIN	Determines whether to perform an EXPLAIN. If non-blank, this value is the value to generate in the EXPLAIN() clause. The non-blank value can be:		
	Y Generate EXPLAIN(YES); perform an EXPLAIN.N Generate EXPLAIN(NO); do not EXPLAIN.		

FIELD	DESCRIPTION		
FLAG	Indicates what levels of messages to display:		
	 I Informational, Warning, Error, and Completion messages W Warning, Error, and Completion messages E Error and Completion messages C Completion messages only 		
ISOLATION	Isolation level to be generated in the ISOLATION () clause:		
	RRR Repeatable ReadSCS Cursor StabilityTRS Read StabilityUUR Uncommitted ReadblankNot specified and therefore at the level specified for the plan executing the package.		
KEEPDYNAMIC	Indicates if prepared dynamic SQL should be purged at the end of a unit of work. Valid values include:		
	Y Keep dynamic SQL past commit or rollback N Destroy dynamic SQL at commit or rollback		
LOCATION	Location where Package is to be bound.		
OWNER	Authorization ID of the Package owner.		
QUALIFIER	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the package.		
RELEASE	Indicates when resources are released:		
	C At commit D At deallocation		
REMOTE ENABLE	This value indicates whether to generate ENABLE/DISABLE lists for BIND Package commands that are not for the local DB2 subsystem. If no value is specified, the ENABLE/DISABLE list will be generated for remote packages.Y or blankGenerate ENABLE/DISABLE lists for remote Packages.NDo not generate ENABLE/DISABLE lists for remote 		
REOPT(VARS)	Indicates whether the access path is re-determined at execution time using input variables. Valid values include:		
	 Y Determine access path at execution time for SQL statements with variable values N Determine access path at bind time 		
SQLERROR	Indicates the SQLERROR option on the most recent subcommand that bound or rebound the package:		
	C Option was CONTINUE N Option was NOPACKAGE		

FIELD	DESCRIPTION
USE LIBRARY SEARCH ORDER FOR COMMAND	Determines whether to use the Library Search Order specified on panel KTEPHOLS for BIND/REBIND commands.
	 Y Use the library search order specified on KTEPHOLS for BIND and REBIND commands. N Do not use the library search order specified on KTEPHOLS for BIND and REBIND commands.
USE LIBRARY SEARCH ORDER FOR COMPARE?	Use the library search order specified on KTEPHOLS for BIND COMPARE functions. Valid values for this field are:
	 Y Use the library search order specified on KTEPHOLS for BIND Compare functions. N Do not use the library search order specified on KTEPHOLS for BIND Compare functions. P Use the library search order specified on KTEPHOLS for BIND Compare functions unless panel KTEPBIKA was displayed. If panel KTEPBIKA was displayed, use the library on that panel as the "DB2 Library."
USE LIBRARY SEARCH ORDER FOR CONVERT?	Determines whether to use the Library Search Order specified on panel KTEPHOLS for BIND Convert functions. Valid values are:
	 Y Use the library search order specified on KTEPHOLS for BIND Convert functions. N Do not use the library search order specified on KTEPHOLS for BIND Convert functions. P Use the library search order specified on KTEPHOLS for BIND Convert functions unless panel KTEPBIKA was displayed. If panel KTEPBIKA was displayed, use the library on that panel as the "DB2 Library."
USE LIBRARY SEARCH ORDER FOR SELECT?	Determines whether to use the Library Search Order specified on the panel KTEPHOLS when executing a B (BIND) or R (REBIND) Select. Valid values are:
	 Y Use the library search order specified on KTEPHOLS for BIND/REBIND Select functions. N Do not use the library search order specified on KTEPHOLS for BIND/REBIND Select functions. P Use the library search order specified on KTEPHOLS for BIND/REBIND Select functions unless panel KTEPBIKA was displayed. If panel KTEPBIKA was displayed, use the library on that panel as the "DB2 Library."
USE OVERRIDES FOR COMMAND?	Determines whether to use the overrides on this panel when executing a BIND, BINDREP, BINDADD, BINDEXP, REBIND, or REBINDEX command
	If the command issued was BINDREP or BINDADD, the value in the ACTION field on this panel is ignored.
	If the command issued was BINDEXP or REBINDEX, the value in the EXPLAIN field on this panel is ignored. Valid values for the USE OVERRIDES FOR COMMAND? field are:
	 Y Use the overrides on this panel for BIND and REBIND commands. N Do not use the overrides on this panel for BIND and REBIND commands.

FIELD	DESCRIPTION		
USE OVERRIDES FOR COMPARE?	 Determines whether to use the overrides on this panel when generating a B (BIND) or R (REBIND) command for the BIND Command Generation option of the C (BIND COMPARE) Select or the COMPARE command. Valid values for this field are: Y Use the overrides on this panel to generate BIND/REBIND 		
	 commands. N Do not use the overrides on this panel to generate BIND/REBIND commands. 		
USE OVERRIDES FOR CONVERT?	Determines whether to use the overrides on this panel when executing a Z (Bind Convert) Select or a BINDCNV command. Valid values are:		
	 Y Use the overrides on this panel for the Z Select and BINDCNV command. N Do not use the overrides on this panel for the Z Select and the BINDCNV command. O Only the value in the field GEN PKLIST on this panel should be used for the Z Select and the BINDCNV command. 		
USE OVERRIDES FOR SELECT?	Determines whether to use the overrides on this panel when executing a B (BIND) or R (REBIND) Select. Valid values are:		
	Y Use the overrides on this panel for B or R Selects.N Do not use the overrides on this panel for B or R Selects.		
VALIDATE	Indicates when to handle OBJECT NOT FOUND and NOT AUTHORIZED errors that occur at bind time.		
	RAt RUN timeBAt BIND time		

Panel Filters

Overview

This unit describes the Panel Filters panel.

Background about the Panel Filters panel

The Panel Filters panel (KTEPHODF) allows you to control the default type of Boolean logic used for filtering within !DB/EXPLAIN. You can specify whether you want the changes you make here to be permanent or temporary. Temporary changes take effect for the current session of !DB/EXPLAIN only.

Access

You can access the Panel Filters panel from the Housekeeping panel.

The following illustration shows the Panel Filters panel.

```
----- DB/EXPLAIN DB2=D31A -----
Cmd ===>
                     PANEL FILTERS
 PERMANENT? ===> ( Y Yes N No )
                          FILTER
                          TYPE
                               ( A AND R OR O OFF )
                          -----
         COLLECTIONS
                           0
         COSTS
                           0
         DBRMS
                           0
         EXPLAIN
                           0
         EXPLAIN HISTORY
                           0
         LIBRARIES
                           0
         PACKAGES
                           0
         PLANS
                           0
         STATEMENTS
                           0
         TABLES
                           0
ENTER to process END to cancel
```

FIELD	DESCRIPTION
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).
FILTER TYPE	Indicates the type of Boolean logic to use for filtering for each panel listed. A And R Or O Off

Panel Formats

Overview

This unit describes the Panel Formats panel.

Background about the Panel Formats panel

Many !DB/EXPLAIN panels require several formats in order to display all required data. The Panel Formats panel (KTEPHOPF) allows you to specify the default panel format for each !DB/EXPLAIN panel that has multiple formats.

You can specify whether you want the changes you make here to be permanent or for the current session of !DB/EXPLAIN only.

Access

You can access the Panel Formats panel from the Housekeeping panel.

Panel

The following illustration shows the Panel Formats panel.

 Cmd ===>	- DB/EXPLAIN	DB2=D31A	
•	ANEL F	ОКМАТЅ	
PERMANENT? ===> (Y Yes	N No) FORMAT #	INITIAL CMD	
COLUMN DISTRIBUTION	1		
COLLECTIONS	1		
COMPARE EXPLAIN	1		
COSTS	1	1	
DBRMS	1	1	
ESTIMATOR	1	1	
EXPLAIN	1		
HISTORY	1		
LIBRARIES	1		
PACKAGES	1		
PLAN	1		
STATEMENTS	1	1	
TABLE COLUMNS	1		
VERIFICATION	1		
WHATIF	1	1	
ENTER to process END to ca	ncei		

FIELD	DESCRIPTION
FORMAT #	Indicates the default format you want to use when !DB/EXPLAIN displays the corresponding function. (An exception is that if you specify 0 for the Estimator format, the format !DB/EXPLAIN displays will be that inherited from the calling Whatif panel.) For all functions, format #1 is the default initially (see the Format menu for each panel for valid values).
INITIAL CMD	 Default command when initially entering panel. This command is issued automatically when you access the panel. This field is valid only for the Cost, DBRMs, Estimator, Statements, and Whatif panels. Possible values for the Cost panel: CPKG - Display plans CPKG - Display packages CDBR - Display DBRMs If entering from Main menu, then CPLN is the default command If entering from DBRMs, then only CDBR command is allowed If entering from Packages, then only CPKG command is allowed If entering from Packages, then only CPKG command is allowed Possible values for the DBRMs panel: DUPS - Display DBRMs DUPS - Display DBRMs DUPS is the default command Possible values for the Statements panel: VERS - Display version NOVERS - Do not display version Possible values for the Whatif panel: NONDXS - Basic display NDXS - Full display Possible values for the Estimator panel: NONDXS - Basic display NONDXS - Basic display NONDXS - Basic display
PERMANENT INDICATOR	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).

Note: The toggle switch that you used in !DB/EXPLAIN Version 230 and below to define the format of the EXPLAIN Format 0 display has been eliminated. You now define the format of the EXPLAIN Format 0 display using the EXPLAIN Display Tuning Parameters Format0 column.

Panel Sorts

Overview

This unit describes the Panel Sorts panel.

Background about the Panel Sorts panel

The Panel Sorts panel (KTEPHOPS) allows you to specify the default sort sequence for the data displayed on each !DB/EXPLAIN panel. This feature is required because !DB/EXPLAIN provides extensive sorting of data on each panel.

You can specify whether you want the changes you make to be permanent or for the current session of !DB/EXPLAIN only.

Access

You can access the Panel Sorts panel from the Housekeeping panel.

Panel

The following illustration shows the Panel Sorts panel.

 Cmd ===>	DB/EXPLAIN	DB2=D31A
	PANEL	SORTS
PERMANENT? ===> (Y Ye	s N No)	
	SORT COMMAND	SORT TYPE (A Asc or D Desc)
COLLECTIONS COSTS DBRMS EXPLAIN HISTORY DBRMS HOST VARIABLES LIBRARIES PACKAGES PLANS PACKAGE LISTS PLAN CONNECTIONS PACKAGE CONNECTIONS TABLES	QCOL CNAME DBRM HNAME DBRM HOST LLIB KPACK PLAN PLOC PSYS KSYS TTBL	A A A A A A A A A A A A A A A
ENTER to process END to c	ancel	

DATA FIELD	DESCRIPTION	
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).	
SORT COMMAND	Valid sort field for corresponding function (see the Sort Menu for each function for all valid fields).	
SORT TYPE	T TYPE Sort sequence indicator:	
	AAscendingDDescending	

Plan BIND Overrides

Overview

This unit describes the Plan BIND Overrides panel.

Background about the Plan BIND Overrides panel

The Plan BIND Overrides panel (KTEPHOBP) allows you to make global changes to BIND parameters for more than one plan.

Access

The Plan BIND Overrides panel appears if more than one plan has been selected to be bound on the Plans panel. It is first displayed when selected from the Housekeeping Panel KTEPHOUS. Subsequent displays appear according to the value entered on the fields Display Override Panel. From Plan BIND Overrides, the user can only go to the Process Member panel (KTEPOUOP).

Panel

The following illustration shows the Plan BIND Overrides panel.

 Cmd ===>	DB/EX	PLAIN DB2=D42B	
	PLAN BIN	D OVERRI	DES
Use Overrides Display Overri	=> N (Y Yes N No) for Command ide Panel for Command earch Order for Command	? Y Select? N ? Y Select? Y	Convert? O Compare? N Convert? N Compare? N Convert? Y Compare? Y (R Replace A Add)
Qualifier	•		(YYes NNo)
quarrent	•	Flag :	(I/W/E/C)
Cache Size	:	Isolation :	(RRR RRS SCS UUR)
Current Server	r:	Acquire :	(UUse A Allocate)
REOPT(VARS) Dynamicrules Gen PKLIST	: (D DB2 S STD) : (Y Yes N No) : (Y Yes N No) : (B / blank) : (N No Y Yes C Convert Only	Release : Validate : Explain : Deferprep : Degree : Disconnect:	<pre>(C Commit D Deallocate) (R Run B Bind) (Y Yes N No) (Y Yes N No) (1 / ANY) (E Explicit A Automatic C Conditional)</pre>
Collection Spe	ecification:		
Press ENTER to	o process. Press END t	o cancel.	

FIELD	DESCRIPTION
ACQUIRE	Indicates when resources are obtained:
	A At allocationU Use (when used)
ACTION	If non-blank, this value is the value to generate in the ACTION() clause. The non-blank value can be:
	A Generate ACTION(ADD).R Generate ACTION(REPLACE).
CACHE SIZE	Size measured in bytes of the cache to be acquired for the plan.
COLLECTION SPECIFICATION	Specification of the collection to be used when GEN PKLIST is Y Values can be specified as:
	A literal string with no variables and with or without delimiters. Delimiters can be single or double quotes. Use the literal provided as the collection ID (for example, coll, 'coll', or "coll").
	The variable &PACKAGE. Use the Package name as the collection ID.
	The variable &PLAN. Use the Plan name as the collection ID.
	The variable &OWNER. Use the Owner as the collection ID.
	The variable &CREATOR. Use the Creator as the collection ID.
	The variable &QUALIFIER. Use the Qualifier as the collection ID.
	The variable &USER. Use the TSO User ID as the collection ID.
	A literal string with variables or substringed variables. The literal must be enclosed in delimiters. Use the generated string as the collection ID. For example, 'T' SUBSTR(1,4&PACKAGE) would result in TABCD if the Package name were ABCDEFGH. "T" SUBSTR(1,4&OWNER) would result in TMITY if the Owner name were MITYMITE.
	The concatenation characters must be those specified on the EXPLAIN/SQL Defaults panel KTEPHOMI.
CURRENTDATA	Indicates the CURRENTDATA option when the Plan was bound or rebound
	 Y Data currency is required for ambiguous cursors. N Data currency is not required for ambiguous cursors.

FIELD	DESCRIPTION		
CURRENTSERVER	Location name specified with the CURRENTSERVER option when the plan was last bound. Blank if none was specified.		
DEFERPREP	If non-blank, the value for the DEFER() or NODEFER() clause will be set to PREPARE.		
	Y Generate DEFER(PREPARE).A Generate NODEFER(PREPARE).		
DEGREE	Determines whether I/O parallelism is enabled:		
	1I/O parallelism is disabled.AnyI/O parallelism is set to the value set by DB2.BlankThe default, 1 is used.		
DISCONNECT	The DISCONNECT option used when the plan was bound. Its value can be:		
	 E Explicit—Disconnect must be explicitly specified. A Disconnect is automatic. C Disconnect is conditional. blank The default, E is used. 		
DISPLAY OVERRIDE PANEL FOR COMMAND?	Determines whether to display this panel when executing a BIND, BINDREP, BINDADD, BINDEXP, REBIND, or REBINDEX command		
	 Y Display this panel for BIND and REBIND commands. N Do not display this panel for BIND and REBIND commands. 		
DISPLAY OVERRIDE PANEL FOR COMPARE?	Determines whether to display this panel when executing a C (BIND COMPARE) Select or the COMPARE command. Valid values for this field are:		
	 Y Display this panel for BIND Compare functions. N Do not display this panel for BIND Compare functions. 		
DISPLAY OVERRIDE PANEL FOR CONVERT?	Determines whether to display this panel when executing a Z (Bind Convert) Select or a BINDCNV command. Valid values are:		
	 Y Display this panel for the Z Select and BINDCNV command. N Do not display this panel for the Z Select and the BINDCNV command. 		
DISPLAY OVERRIDE PANEL FOR SELECT?	Determines whether to display this panel when executing a B (BIND) or R (REBIND) Select. Valid values are:		
	Y Display this panel for B or R Selects.N Do not display this panel for B or R Selects.		
DYNAMICRULES	Indicates whether run time or bind time rules will apply to a dynamic SQL statement at run time. If this field is non-blank, it specifies the value to be generated in the DYNAMICRULES() clause:		
	R Generate DYNAMICRULES(RUN).B Generate DYNAMICRULES(BIND)		
EXPLAIN	Determines whether to perform an EXPLAIN. If non-blank, this is the value to generate in the EXPLAIN() clause.		
	 Y Generate EXPLAIN(YES); perform an EXPLAIN. N Generat EXPLAIN(NO); do not perform an EXPLAIN. 		

FIELD	DESCRIPTION
FLAG	Indicates what levels of messages to display:
	 Informational, Warning, Error, and Completion messages Warning, Error, and Completion messages Error and Completion messages Completion messages only
GEN PKLIST	Determines whether a PKLIST(collid.*) should be generated. Valid values are:
	 N Retain the original PKLIST for BIND/REBIND functions. Y Indicates that a PKLIST(collid.*) should be generated rather than individually including each package. The collid would be the value specified for the Collection Specification for Convert on the Package Bind Overrides (KTEPHOBK) panel if the command issued was Bind Convert (BINDCNV). If the command issued was not BINDCNV, the collid would be the value specified for Collection Specification on this panel (KTEPHOBP). C Indicates, for Bind Convert (BINDCNV) commands only, that a PKLIST(collid.*) should be generated rather than individually including each package. The collid would be the value specified for the Collection Specification for Convert on the Package Bind Overrides (KTEPHOBK) panel.
ISOLATION	Isolation level to be generated in the ISOLATION() clause:
	 R RR (Repeatable Read) S CS (Cursor Stability) T RS (Read Stability) U UR (Uncommitted Read)
KEEPDYNAMIC	Indicates if prepared dynamic SQL should be purged at the end of a unit of work. Valid values include:
	 Y Keep dynamic SQL past commit or rollback N Destroy dynamic SQL at commit or rollback
OWNER	Authorization ID of the Plan owner.
QUALIFIER	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the plan.
RELEASE	Indicates when resources are released:
	C At commit D At deallocation
REMOTE ENABLE	This value indicates whether to generate ENABLE/DISABLE lists for BIND Plan commands that are not for the local system.
	Y or blankGenerate ENABLE/DISABLE lists for remote Plans.NDo not generate ENABLE/DISABLE lists for remote Plans.
REOPT(VARS)	Indicates whether the access path is re-determined at execution time using input variables. Valid values include:
	Y Determines access path at execution time for SQL statements with variable values
	N Determines access path at bind time

FIELD	DESCRIPTION		
RETAIN	Retain authority list granted to plan?		
	Y Yes N No		
SQLRULES	The SQLRULES option used when the Plan was bound. Its value can be:		
	DUse DB2 SQL rules.SUse standard SQL rules.blankThe default, D is used.		
USE LIBRARY SEARCH ORDER FOR COMMAND	Determines whether to use the Library Search Order specified on panel KTEPHOLS for BIND/REBIND commands.		
	 Y Use the library search order specified on KTEPHOLS for BIND and REBIND commands. N Do not use the library search order specified on KTEPHOLS for BIND and REBIND commands. 		
USE LIBRARY SEARCH ORDER FOR COMPARE?	Determines whether to use the Library Search Order specified on panel KTEPHOLS for BIND Compare functions. Valid values for this field are:		
	 Y Use the library search order specified on KTEPHOLS for BIND Compare functions. N Do not use the library search order specified on KTEPHOLS for BIND Compare functions. 		
USE LIBRARY SEARCH ORDER FOR CONVERT?	Determines whether to use the Library Search Order specified on panel KTEPHOLS for BIND Convert functions. Valid values are:		
	 Y Use the library search order specified on KTEPHOLS for BIND Convert functions. N Do not use the library search order specified on KTEPHOLS for BIND Convert functions. 		
USE LIBRARY SEARCH ORDER FOR SELECT?	Determines whether to use the Library Search Order specified on the panel KTEPHOLS when executing a B (BIND) or R (REBIND) Select. Valid values are:		
	 Y Use the library search order specified on KTEPHOLS for BIND/REBIND Select functions. N Do not use the library search order specified on KTEPHOLS for BIND/REBIND Select functions. 		
USE OVERRIDES FOR COMMAND?	Determines whether to use the overrides on this panel when executing a BIND, BINDREP, BINDADD, BINDEXP, REBIND, or REBINDEX command		
	If the command issued was BINDREP or BINDADD, the value in the ACTION field on this panel is ignored.		
	If the command issued was BINDEXP or REBINDEX, the value in the EXPLAIN field on this panel is ignored. Valid values for the USE OVERRIDES FOR COMMAND? field are:		
	 Y Use the overrides on this panel for BIND and REBIND commands. N Do not use the overrides on this panel for BIND and REBIND commands. 		

FIELD	DESCRIPTION
USE OVERRIDES FOR COMPARE?	Determines whether to use the overrides on this panel when generating a B (BIND) or R (REBIND) command for the BIND Command Generation option of the C (BIND COMPARE) Select or the COMPARE command. Valid values for this field are:
	 Y Use the overrides on this panel to generate BIND/REBIND commands. N Do not use the overrides on this panel to generate BIND/REBIND commands.
USE OVERRIDES FOR CONVERT?	Determines whether to use the overrides on this panel when executing a Z (Bind Convert) Select or a BINDCNV command. Valid values are:
	 Y Use the overrides on this panel for the Z Select and BINDCNV command. N Do not use the overrides on this panel for the Z Select and the BINDCNV command. O Only the value in the field GEN PKLIST on this panel should be used for the Z Select and the BINDCNV command.
USE OVERRIDES FOR SELECT?	Determines whether to use the overrides on this panel when executing a B (BIND) or R (REBIND) Select. Valid values are:
	Y Use the overrides on this panel for B or R Selects.N Do not use the overrides on this panel for B or R Selects.
VALIDATE	Indicates when to handle OBJECT NOT FOUND and NOT AUTHORIZED errors that occur at bind time.
	R Validate at RUN timeB Validate at BIND time

Recommendations Menu

Overview

This unit describes the Recommendations Menu.

Background about the Recommendations Menu

The Recommendations Menu (KTEPRECM) permits you to select which of the recommendations selection panels you want to use.

Access

You can access the Recommendations Menu from the Housekeeping panel.

Panel

This is the Recommendations Menu panel.

DB/EXPLAI	/EXPLAIN DB2=D31A
 7 - Statement Recommendations 8 - Statement Recommendations 9 - Statement Recommendations 	B00001 - B00009 000000 - 000012 000013 - 000025 000026 - 000036
ENTER to process END to cancel	

FIELD	DESCRIPTION
OPTION	Permits you to select a value from 0-9 and A. The selection takes you to the associated Recommendations panel.

Overview

This unit describes Recommendations Panel 0.

Background about Recommendations Panel 0

Recommendations Panel 0 (KTEPHOR0) allows you to specify whether to display BIND type, object type, SQL statement type, and exception type recommendations, as well as when to display partitioned recommendations.

Access

You can access Recommendations Panel 0 from the Housekeeping panel.

Panel

The following illustration shows Recommendations panel 0.

----- DB/EXPLAIN DB2=D31A ------Cmd ===> RECOMMENDATIONS PANEL 0 PERMANENT? ===> N (Y Yes N No) Display BIND type Recommendations ===> Y (Y Yes N No) Display Object type Recommendations ===> Y (Y Yes N No) Display SQL Statement type Recommendations ===> Y (Y Yes N No) Display Exception type Recommendations ===> Y (Y Yes N No) When to display partitioned Recommendations ==> 0 (0 One A Aggregate) ENTER to process END to cancel NEXT for next panel

FIELD	DESCRIPTION		
DISPLAY BIND TYPE RECOMMENDATIONS	Indicates whether to display BIND type recommendations (recommendations beginning with \mathbf{B}).		
	YDisplay applicable BIND type recommendations.NDo not display BIND type recommendations.		
DISPLAY EXCEPTION TYPE RECOMMENDATIONS	Indicates whether to display EXCEPTION type recommendations (recommendations beginning with X).		
	YDisplay applicable EXCEPTION type recommendations.NDo not display EXCEPTION type recommendations.		
DISPLAY OBJECT TYPE RECOMMENDATIONS	Indicates whether to display OBJECT type recommendations (recommendations beginning with 0).		
	YDisplay applicable OBJECT type recommendations.NDo not display OBJECT type recommendations.		
DISPLAY SQL STATEMENT TYPE RECOMMENDATIONS	Indicates whether to display SQL statement type recommendations (recommendations beginning with \$).		
	YDisplay applicable SQL statement type recommendations.NDo not display SQL statement type recommendations.		
PERMANENT	Indicates whether to update the profile dataset with these changes permanently or update for current !DB/EXPLAIN session only.		
	YMake these changes permanent.NDo not make these changes permanent.		
WHEN TO DISPLAY PARTITIONED RECOMMENDATIONS	Indicates when to display recommendations that are based on a field whose source is SYSINDEXPART or SYSTABLEPART.		
RECOMMENDATIONS	O Display the recommendation when any single partition of the entity meets or exceeds he threshold specified in Housekeeping.		
	A Display the recommendation only when the aggregate field meets or exceeds the threshold specified in Housekeeping. For example, if A were specified, recommendation O0000007 would be displayed only if the sum of FAROFFPOS for all partitions divided by the number of partitions meets or exceeds the specified value.		

Overview

This unit describes Recommendations Panel 1

Background about Recommendations Panel 1

Recommendations Panel 1 (KTEPHOR1) displays BIND type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose, and more than verbose. You also can specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You can access Recommendations Panel 1 from the Housekeeping panel.

The following illustration shows Recommendations panel 1.

Cmd ===> R E C O M M E N D A T I O N S P A N	EL 1		
PERMANENT? ===> N (Y Yes N No)	Level	ХСРТ	RC
B00001 -ISOLATION(RR) B00002 -ACQUIRE(ALLOCATE) RELEASE(DEALLOCATE) B00003 -ACQUIRE(USE) RELEASE(DEALLOCATE) B00004 -VALIDATE(RUN) B00005 -Enable/Disable list entries >= 20 B00006 -Cachesize >= 1280 B00007 -Plan / Package Invalid or Inoperative B00008 -# DBRMs bound into Plan >= 50 B00009 -Plan Size >= 10 times EDMPOOL size	V V V V V V V V V V V V	Y Y Y Y Y Y Y Y	0 0 0 0 0 0 0 0 0 0 0 0
ENTER to process END to cancel NEXT for next panel	PREV for	previo	us panel

FIELD	DESCRIPTION			
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.			
LEVEL	Indicates the level of text for each recommendation. N None T Terse V Verbose M More than verbose			
	Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.			
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).YMake the changes permanent.			
	N Do not make the changes permanent.			
ХСРТ	Indicates whether to treat this recommendation is an exception.YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.			

Overview

This unit describes Recommendations Panel 2.

Background about Recommendations Panel 2

Recommendations Panel 2 (KTEPHOR2) displays object type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify Y for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose and more than verbose. You also can specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You can access the Recommendations Panel 2 from the Housekeeping panel.

The following illustration shows Recommendations panel 2.

Cmd ===> RECOMMENDATIONS PANEL	. 2		
PERMANENT? ===> N (Y Yes N No)	Level	XCPT RC	
)00000 -Runstats not run (tablespace / table)	 V	 Y	0
00001 -Runstats not run (index)	V	Y	0
100002 -LOCKSIZE ANY	V	Y	0
00003 -LOCKSIZE TABLESPACE / TABLE	V	Y	0
000004 -LOCKSIZE ANY / PAGE for read only	V	Y	0
000005 -Varying length columns in index key	V	Y	0
00006 -Varying length columns not at row end	V	Y	0
00007 -FAROFFPOS / CARD % >= 10	V	Y	0
)00008 -FAROFFPOS >= 200	V	Y	0
1000009 -PERCDROP >= 10	V	Y	0
000010 -(NEARINDREF+FARINDEF)/CARD % >= 10	V	Y	0
000011 -LEAFDIST >= 200	V	Y	0
000012 -NLEVELS >= 4	V	Y	0
ENTER to process END to cancel NEXT for next panel PF	EV for	previous	pan

FIELD	DESCRIPTION
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.
LEVEL	Indicates the level of text for each recommendation.NNoneTTerseVVerboseMMore than verbose
	Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily). Y Make the changes permanent. N Do not make the changes permanent.
ХСРТ	Indicates whether this recommendation is an exception.YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.

Overview

This unit describes Recommendations Panel 3.

Background about Recommendations Panel 3

Recommendations Panel 3 (KTEPHOR3) displays object type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose and more than verbose. You also can specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You can access Recommendations Panel 3 from the Housekeeping panel.

The following illustration shows Recommendations panel 3.

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cmd ===>			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	RECOMMENDATIONS PANEI	L 3		
000013 -# Columns in Index >= 5VY0000014 -Length of Columns in Index >= 30VY0000015 -Subpages for index on R/O Table: 1 to 1VY0000016 -Subpages for index on non R/O Table: 2 to 4VY0000017 -# pages in R/O table before indexVY0000018 -# pages in non R/O table before indexVY0000019 -# indexes on Read-Only table >= 5VY0000020 -# indexes on Non-Read-Only table >= 3VY0000022 -No index used when indexes exist (SELECTs)VY0000023 -% distinct values for index < 30	PERMANENT? ===> N (Y Yes N No)			
000014-Length of Columns in Index >= 30VYO000015-Subpages for index on R/O Table:1 to 1VYO000016-Subpages for index on non R/O Table:2 to 4VYO000017-# pages in R/O table before indexVYO000018-# pages in non R/O table before indexVYO000019-# indexes on Read-Only table >= 5VYO000020-# indexes on Non-Read-Only table >= 3VYO000021-No clustering index definedVYO000022-No index used when indexes exist (SELECTs)VYO000023-% distinct values for index < 30		Level	XCPT RC	
000015-Subpages for index on R/O Table:1 to 1VY0000016-Subpages for index on non R/O Table:2 to 4VY0000017-# pages in R/O table before indexVY0NPAGES >=15VY0000018-# pages in non R/O table before indexVY0NPAGES >=30VY0000019-# indexes on Read-Only table >=5VY0000020-# indexes on Non-Read-Only table >=3VY0000021-No clustering index definedVY00000022-No index used when indexes exist (SELECTs)VY0000023-% distinct values for index d column < 30)00013 -# Columns in Index >= 5	 V	 Y	0
000016-Subpages for index on non R/O Table:2 to 4VYO000017-# pages in R/O table before indexVYONPAGES >=1515000018-# pages in non R/O table before indexVYONPAGES >=300YO000019-# indexes on Read-Only table >=5VYO000020-# indexes on Non-Read-Only table >=3VYO000021-No clustering index definedVYO000022-No index used when indexes exist (SELECTs)VYO000023-% distinct values for indexed column < 30)00014 -Length of Columns in Index >= 30	۷	Y	0
D00017 -# pages in R/O table before indexVYONPAGES >=1515D00018 -# pages in non R/O table before indexVYONPAGES >=30VYOD00019 -# indexes on Read-Only table >=5VYOD00020 -# indexes on Non-Read-Only table >=3VYOD00021 -No clustering index definedVYOD00022 -No index used when indexes exist (SELECTs)VYOD00023 -% distinct values for indexed column < 30	100015 -Subpages for index on R/O Table: 1 to 1	۷		0
NPAGES >=15D00018 -# pages in non R/O table before indexVYNPAGES >=30D00019 -# indexes on Read-Only table >=5VYD00020 -# indexes on Non-Read-Only table >=3VYD00021 -No clustering index definedVY0D00022 -No index used when indexes exist (SELECTs)VY0D00023 -% distinct values for indexed column < 30	100016 -Subpages for index on non R/O Table: 2 to 4	۷	Y	0
NPAGES >=30000019 -# indexes on Read-Only table >=5VY0000020 -# indexes on Non-Read-Only table >=3VY0000021 -No clustering index definedVY0000022 -No index used when indexes exist (SELECTs)VY0000023 -% distinct values for indexed column < 30		V	Y	0
D00020 -# indexes on Non-Read-Only table >= 3VY0D00021 -No clustering index definedVY0D00022 -No index used when indexes exist (SELECTs)VY0D00023 -% distinct values for indexed column < 30		۷	Y	0
000021 -No clustering index definedVY0000022 -No index used when indexes exist (SELECTs)VY0000023 -% distinct values for indexed column < 30)00019 -# indexes on Read-Only table >= 5	٧	Y	0
000022 -No index used when indexes exist (SELECTs) V Y 0 000023 -% distinct values for indexed column < 30 V Y 0 000024 -% of unique values for index < 30 V Y 0)00020 -# indexes on Non-Read-Only table >= 3	٧	Y	0
000023 -% distinct values for indexed column < 30 V Y 0 000024 -% of unique values for index < 30 V Y 0	000021 -No clustering index defined	٧	Y	0
000024 -% of unique values for index < 30 V Y O	000022 -No index used when indexes exist (SELECTs)	٧	Y	0
	000023 -% distinct values for indexed column < 30	٧	Y	0
00025 - Unique Index not defined as UNIOUE V Y 0)00024 -% of unique values for index < 30	٧	Y	0
	000025 -Unique Index not defined as UNIQUE	٧	Y	0

FIELD	DESCRIPTION			
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.			
LEVEL	Indicates the level of text for each recommendation.			
	NNoneTTerseVVerboseMMore than verbose			
	Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.			
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).			
	YMake the changes permanent.NDo not make the changes permanent.			
ХСРТ	Indicates whether this recommendation is an exception.			
	YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.			

Overview

This unit describes Recommendations Panel 4.

Background about Recommendations Panel 4

Recommendations Panel 4 (KTEPHOR4) displays object type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose, and more than verbose. You also can specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You may access Recommendations Panel 4 from the Housekeeping panel.

The following illustration shows Recommendations panel 4.

Cmd ===> RECOMMENDATIONS PANEL			
PERMANENT? ===> N (Y Yes N No)	Level	XCPT RC	
000026 -FREEPAGE <> 0 or PCTFREE <> 0 on R/O Index	 V	 Y	0
000027 -FREEPAGE <> 0 or PCTFREE <> 0 on R/O Table	V	Y	0
000028 -# Pages in non-partitioned tspace >= 5000	٧	Y	0
000029 -# Pages in partition >= 5000	٧	Y	0
000030 -# Columns in table >= 50	٧	Y	0
000031 -RECLENGTH of table >= 1000	V	Y	0
000032 -Wasted space in table page % >= 15	V	Y	0
000033 -(100-PAGESAVE) >= 25	۷	Y	0
000034 -Table (100-PCTROWCOMP) >= 25	V	Y	0
000035 -Tablespace (100-PCTROWCOMP) >= 25	۷	Y	0
000036 -No index used when indexes exist (Non-SELECTs)	V	Y	0
ENTER to process END to cancel NEXT for next panel PR	EV for	previous	panel

FIELD	DESCRIPTION
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.
LEVEL	Indicates the level of text for each recommendation.
	N None T Terse V Verbose M More than verbose Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily). Y Make the changes permanent. N Do not make the changes permanent.
ХСРТ	Indicates whether this recommendation is an exception.
	YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.

Overview

This unit describes Recommendations Panel 5.

Background about Recommendations Panel 5

Recommendations Panel 5 (KTEPHOR5) displays SQL statement type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose, and more than verbose. You also may specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You may access Recommendations Panel 5 from the Housekeeping panel.

The following illustrations show Recommendations panel 5.

Cmd ===> RECOMMENDATIONS PANEL	5		
PERMANENT? ===> N (Y Yes N No)	Level	ХСРТ	RC
S00000 -Tablespace Scan NPAGES > = 1000		 Y	0
S00001 -Mass Delete (nonseg ts) Rows >= 100	٧	Y	Θ
S00002 -Segsize for Sequential Prefetch	V	Y	0
S00003 -View Materialization	V	Y	0
S00004 -OPTIMIZE FOR n ROWS may be ignored	V	Y	0
S00005 -Referential Constraints	V V	Y Y	0
S00006 -Host var - column mismatch (char) S00007 -Host var - column mismatch (numeric / data type)	V	Y	0 0
S00007 - Host var - corumn mismatch (Humerre / data type) S00008 - SELECT *	v	Ŷ	0
S00009 -Sort for uniqueness	v	Ý	0
ENTER to process END to cancel NEXT for next panel PRE	V for	previ	ous panel

FIELD	DESCRIPTION
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.
LEVEL	Indicates the level of text for each recommendation.NNoneTTerseVVerboseMMore than verbose
	Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily). Y Make the changes permanent. N Do not make the changes permanent.
ХСРТ	Indicates whether this recommendation is an exception.YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.

Overview

This unit describes Recommendations Panel 6.

Background about Recommendations Panel 6

Recommendations Panel 6 (KTEPHOR6) displays SQL statement type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify Y for the recommendation in the XCPT column of the Recommendations panel

You can specify one of four levels of recommendation text: none, terse, verbose, and more than verbose. You also may specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You may access Recommendations Panel 6 from the Housekeeping panel.

Panel

The following illustration shows Recommendations panel 6.

Cmd ===> RECOMMENDATIONS PANEL	. 6		
PERMANENT? ===> N (Y Yes N No)	Level	XCPT RC	
S00010 -Nested Loop inner table, tspace scan NPAGES >= 100	V	Υ	0
S00011 -Nested Loop join composite table sort	V	Y	0
S00012 -Merge Scan join inner table sort Rows >= 500	V	Y	0
S00013 -Merge Scan join outer table sort Rows >= 500	V	Y	0
S00014 -Sort for ordering Rows >= 500	V	Y	0
S00015 -Multiple index access Rows >= 1000	V	Y	0
S00016 -COLUMN IN (subguery)	V	Y	0
S00017 -COLUMN NOT IN (subquery)	V	Y	0
S00018 -COLUMN = ALL (subquery) (or ¬= ALL)	V	Y	0
S00019 -COLUMN = ANY (subquery) (or ¬= ANY)	V	Y	0
ENTER to process END to cancel NEXT for next panel PR	FV for	nrevious	nane

FIELD	DESCRIPTION			
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.			
LEVEL	Indicates the level of text for each recommendation.NNoneTTerseVVerboseMMore than verbose			
	reshold fields and values appear to the right of the recommendation level for those ommendations which have thresholds.			
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).YMake the changes permanent.NDo not make the changes permanent.			
ХСРТ	Indicates whether this recommendation is an exception.YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.			

Recommendations Panel 7

Overview

This unit describes Recommendations Panel 7.

Background about Recommendations Panel 7

Recommendations Panel 7 (KTEPHOR7) displays SQL statement type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of three levels of recommendation text: none, terse, verbose, and more than verbose. You also may specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You may access Recommendations Panel 7 from the Housekeeping panel.

Panel

The following illustration shows Recommendations panel 7.

Cmd ===> RECOMMENDATIONS PANEL			
PERMANENT? ===> N (Y Yes N No)	Level	ХСРТ	RC
S00020 -COLUMN LIKE '%char' (or '_char') S00021 -COLUMN NOT LIKE 'char' S00022 -COLUMN NOT IN (list) S00023 -COLUMN IS NOT NULL S00024 -COLUMN NOT BETWEEN val1 and val2 S00025 -COLUMN ¬= value S00026 -COLUMN LIKE host variable S00027 -COLUMN = expression	V V V V V V V V V	Y Y Y Y Y Y Y	
ENTER to process END to cancel NEXT for next panel PR	EV for	previc	ous panel

FIELD	DESCRIPTION		
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.		
LEVEL	Indicates the level of text for each recommendation.		
	N None T Terse V Verbose M More than verbose Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.		
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily). Y Make the changes permanent. N Do not make the changes permanent.		
ХСРТ	Indicates whether this recommendation is an exception.		
	YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.		

Recommendations Panel 8

Overview

This unit describes Recommendations Panel 8.

Background about Recommendations Panel 8

Recommendations Panel 8 (KTEPHOR8) displays SQL statement type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You can specify one of three levels of recommendation text: none, terse, verbose, and more than verbose. You also may specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You may access Recommendations Panel 8 from the Housekeeping panel.

Panel

The following illustration shows Recommendations panel 8.

Cmd ===> RECOMMENDATIONS PAN	EL 8		
PERMANENT? ===> N (Y Yes N No)	Level	XCPT RC	
500043 -CREATE SQL statement 500044 -DROP SQL statement 500045 -ALTER SQL statement 500046 -GRANT SQL statement 500047 -REVOKE SQL statement 500048 -LOCK SQL statement 500049 -COST >= 5000 500050 -Nonmatching Index Scan NLEAF >= 500 500050 -Nonmatching Index Scan NLEAF >= 500 500051 -DISCONNECT(AUTO) for CURSOR with HOLD 500052 -Statement Isolation Less Restructive 500053 -Statement Isolation More Restructive	V V V V V V V V V V V V V V V	Y Y Y Y Y Y Y Y Y	0 0 0 0 0 0 0 0 0 0 0 0 0
ENTER to process END to cancel NEXT for next panel	PREV for	previous	pane

FIELD	DESCRIPTION			
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.			
LEVEL	Indicates the level of text for each recommendation.NNoneTTerseVVerboseMMore than verbose			
	Threshold fields and values appear to the right of the recommendation level for those recommendations which have thresholds.			
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).YMake the changes permanent.NDo not make the changes permanent.			
ХСРТ	Indicates whether this recommendation is an exception.YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.			

Recommendations Panel 9

Overview

This unit describes Recommendations Panel 9.

Background about Recommendations Panel 9

The Recommendations Panel 9 (KTEPHOXC) displays exception type recommendations and allows you to control the amount of text you see for each recommendation listed, whether to treat the recommendation as an exception, and the return code to set if the recommendation is tripped during a batch session. The recommendations listed here appear:

- On the EXPLAIN panel in format 1 and format 7
- On the Statements panel when you select a statement using the R select
- On the Exceptions panel when you specify **Y** for the recommendation in the XCPT column of the Recommendations panel

You may specify one of three levels of recommendation text: none, terse, verbose, and more than verbose. You also may specify the threshold value for recommendations which appear only when a threshold is met or exceeded.

Access

You can access Recommendations Panel 9 from the Housekeeping panel. (Recommendations Panel 9 was formerly the Set Exceptions Housekeeping Panel).

Panel

The following illustration shows Recommendations panel 9.

Cmd ===>			
RECOMMENDATIONS PANEL	9		
PERMANENT? ===> N (Y Yes N No)			
	Leve1	ХСРТ	RC
X00001 SQL Error	T	Ŷ	0
X00002 Hybrid Join	Т	Y	0
X00003 List Prefetch	Т		Θ
X00004 Multiple Index Intersection	Т		0
X00005 Multiple Index Union	Т		0
X00006 Multiple Index Scan	Т		0
X00007 Merge Scan Join	T		0
X00008 Nested Loop Join	Ţ		0
X00009 Sequential Prefetch	T		0
X00010 Sort for Group By	T T	Y Y	0
X00011 Sort for Join X00012 IX / X Locks	T T	Y Y	0 0
ENTER to process END to cancel PREV for previous panel	I	I	U

FIELD	DESCRIPTION		
BATCH RC	Indicates the return code to set if the recommendation is tripped while in a batch session. The fields SET EXCEPTION RC FOR XCPT?, SET EXCEPTION RC FOR EXPLAIN?, AND SET EXCEPTION RC FOR RECOMMEND? on the Miscellaneous Defaults panel KTEPHOMJ determine the cases in which the batch return code is actually set.		
LEVEL	Indicates the level of text for each recommendation. N None T Terse V Verbose M More than verbose Threshold fields and values appear to the right of the recommendation level for those		
	recommendations which have thresholds.		
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).		
	YMake the changes permanent.NDo not make the changes permanent.		

FIELD	DESCRIPTION		
ХСРТ	ndicates whether this recommendation is an exception.		
	YTreat this recommendation as an exception.NDo not treat this recommendation as an exception.		

Selection Masking

Overview

This unit describes the Selection Masking panel.

Background about the Selection Masking panel

The Selection Masking panel (KTEPHOMK) allows you to change the default masks. All the changes you make on this panel can be permanently saved in the profile dataset if you so specify and are authorized to do so. However, the changes you make will not take effect until you refresh !DB/EXPLAIN or rebuild your object list. If you have multiple open sessions, you must ensure that all sessions are closed prior to performing the refresh.

Access

You can access the Selection Masking panel from the Housekeeping panel.

Panel

The following illustrates the Selection Masking panel.

Cmd	===>	S F L F C T T O	Ν ΜΑΣΚΤΝΟ		
And/O (PLAN		N MASKING D Mask2	isplay Mask Panel? Paren	
AND AND	BINDSTAMP QUALIFIER				
AND AND	OWNER CREATOR)
(PACKAGE				,
AND AND	COLLECTION VERSION				
AND	BINDSTAMP				
AND AND	QUALIFIER OWNER				
AND	CREATOR)
(AND	LOCATION COLLECTION				
AND	PACKAGE)
	out any packages R to process END		ied set of PLANs?	Y (Y/N)	

FIELD	DESCRIPTION
AND/OR	Specifies if the conditions of the masking parameters as AND or OR.
	Note: The AND/OR field must be used in conjuction with the PARENS field.
	AND And OR Or
DISPLAY MASK PANEL?	Specifies whether the current Selection Masking panel is to be displayed when requested off the Primary Menu panel (KTEPMENU).
	Y Yes N No
MASK OUT ANY PACKAGES NOT IN THE	Specifies whether only packages that are bound into the set of plans specified are displayed.
SPECIFIED SET OF PLANS?	 Y Package masks are applied to those packages which are further filtered by eliminating any packages not bound into the set of plans the user has specified. N The package masks are applied to all packages.
OPERATOR	Indicates mask operator: • LIKE • BETWEEN • = (Equal to) • > (Greater than) • >= (Greater than or Equal) • < (Less than) • <= (Less than or Equal) • > (Greater than)
PACKAGE BINDSTAMP MASK 1	 Package Bind Timestamp or mask name for comparison. The "LIKE" operator is not valid for BINDSTAMP fields. Timestamp fields can be specified as YYYYMMDDHHMMSS. Timestamp fields can also be specified as NOW +/- NNNN or NOW, where NOW represents the present time. The timestamp default is NOW-3 (Anything which has occurred in the last three days).
PACKAGE BINDSTAMP MASK 2	 Package Bind Timestamp for comparison. The "LIKE" operator is not valid for BINDSTAMP fields. Timestamp fields can be specified as YYYYMMDDHHMMSS. Timestamp fields can also be specified as NOW +/- NNNN or NOW, where NOW represents the present time. The timestamp default is NOW-3 (Anything which has occurred in the last three days).
PACKAGE COLLECTION MASK 1	Package Collection ID or mask name for comparison.
PACKAGE COLLECTION MASK 2	Package Collection ID for comparison.
PACKAGE CREATOR MASK 1	Package Creator or mask name for comparison.

FIELD	DESCRIPTION
PACKAGE CREATOR MASK 2	Package Creator for comparison.
PACKAGE MASK1	Package or mask name for comparison. The value must be a valid package name unless "LIKE" is specified as the operator; otherwise, the value must be a valid DB2 mask.
PACKAGE MASK2	Package name for comparison.
PACKAGE OWNER MASK 1	Package Owner or mask name for comparison.
PACKAGE OWNER MASK 2	Package Owner for comparison.
PACKAGE QUALIFIER MASK 1	Package Qualifier or mask name for comparison.
PACKAGE QUALIFIER MASK 2	Package Qualifier for comparison.
PACKAGE VERSION MASK 1	Package Version or mask name for comparison.
PACKAGE VERSION MASK 2	Package Version for comparison.
PACKLIST COLLECTION MASK 1	Packlist collection or mask name for comparison.
PACKLIST COLLECTION MASK 2	Packlist collection for comparison.
PACKLIST LOCATION MASK 1	Packlist location or mask name for comparison.
PACKLIST LOCATION MASK 2	Packlist location for comparison.
PACKLIST PACKAGE MASK 1	Packlist package or mask name for comparison.
PACKLIST PACKAGE MASK 2	Packlist package for comparison.
PARENS	Used in conjuction with the AND/OR field to set conditional masking.
PERMANENT	Specifies if changes are permanent. Y Yes N No

FIELD	DESCRIPTION								
PLAN	Plan Bind Timestamp or mask name for comparison.								
BINDSTAMP MASK 1	 The "LIKE" operator is not valid for BINDSTAMP fields. Timestamp fields can be specified as YYYYMMDDHHMMSS. Timestamp fields can also be specified as NOW +/- NNNN or NOW, where NOW represents the present time. The timestamp default is NOW-3 (Anything which has occurred in the last three days). 								
PLAN	Plan Bind Timestamp for comparison.								
BINDSTAMP MASK 2	 The "LIKE" operator is not valid for BINDSTAMP fields. Timestamp fields can be specified as YYYYMMDDHHMMSS. Timestamp fields can also be specified as NOW +/- NNNN or NOW, where NOW represents the present time. The timestamp default is NOW-3 (Anything which has occurred in the last three days). 								
PLAN CREATOR MASK 1	Plan Creator or mask name for comparison.								
PLAN CREATOR MASK 2	Plan Creator for comparison.								
PLAN MASK1	Plan or mask name for comparison.								
	The value must be a valid plan name unless "LIKE" is specified as the operator, otherwise the value must be a valid DB2 mask.								
PLAN MASK2	Plan name for comparison.								
PLAN OWNER MASK 1	Plan Owner ID or mask name for comparison.								
PLAN OWNER MASK 2	Plan Owner ID for comparison.								
PLAN QUALIFIER MASK 1	Plan Qualifier or mask name for comparison.								
PLAN QUALIFIER MASK 2	Plan Qualifier for comparison.								

Set Defaults

Overview

This unit describes the Set Defaults panel.

Background about the Set Defaults panel

The Set Defaults panel (KTEPHOSE) gives you the opportunity to resolve unqualified table names prior to EXPLAINing an SQL statement. The creator ID can be set to the plan owner, the current TSO user ID, or a user specified name. These changes can be permanent or temporary.

However, you can also set the creator ID from anywhere in !DB/EXPLAIN by entering the appropriate set global commands. These commands are summarized here although they are not part of the Set Defaults panel.

- **SET?** Displays a panel of available Set commands.
- **SETC** Prefixes unqualified table names with Creator ID specified in the Other field.
- SETD Sets Current Degree
- **SETL** Sets default remote location.
- **SETN** Sets SET option to #N.
- **SETO** Prefixes unqualified table names with the Plan owner.
- **SETP** Sets the Plan Table owner.

Sets the Plan Table owner unless the creator option is set to #4 SQLID (SETS).

If SETP is specified *and SETS is not*, then a SET CURRENT SQLID command uses the value specified for SETP prior to EXPLAINing SQL statements.

If *both* SETP and SETS are specified, then a SET CURRENT SQLID command uses the value specified for SETS prior to EXPLAINing SQL statements.

Background about the Set Defaults panel (continued

SETU Prefixes unqualified table names with TSO user ID.

SETS Sets the SQLID ID to a specified value.

The format of the SETC and SETS is as follows:

SETX AAAAAAAA

where X = C or S and AAAAAAAA is the user supplied name.

Access

You can access this panel by selecting option 6 from the Housekeeping panel.

Panel

This is the Set Defaults panel.

----- DB/EXPLAIN DB2=D31A -----Cmd ===> SET DEFAULTS PERMANENT? ===> (Y Yes N No) extracted non-extracted entity entity Creator Option > 1 > 2 1. Use Qualifier / Owner (SETO) 2. Use TSO Userid (SETU) 3. Use this Creator id (SETC) > > 4. Authid for (SETS) > > SET CURRENT SQLID Plan Table Owner (SETP) > Default Remote Location (SETL) > > CURRENT DEGREE (SETD) Do SETO if Qualifier Specified for KTEXPLD? ===> N (Y / N) KTEXPL owner for synonyms ===> Qualify synonyms with plan / package qualifier ===> Y (Y / N) ENTER to process END to cancel

Fields

In the table below, some fields are described as containing values for both extracted and non-extracted entities. Extracted entities are plans, packages, or DBRMs (or statements from one of these) that reside in the !DB/EXPLAIN extract datasets. You would have entered !DB/EXPLAIN via the CLISTs KTE, or KTC, or the batch job *DB2id*UTIL.

Non-extracted entities are QMF queries, SQL statements you have typed in, or DBRMs (PDS members). You would have entered !DB/EXPLAIN via the edit macros KTEXPL or KTEXPLB, the CLISTs KTEXPLA, KTEXPLBA, KTEXPLD or KTEON, or the batch jobs KTEBSQLS, KTEBDBRM, or KTEBDBR2.

FIELD	DESCRIPTION									
CREATOR	Numeric field representing how to qualify unqualified tables in SQL statements.									
OPTION	 Plan Owner TSO User ID Other - A name supplied by the user SQLID - Authid for the SET CURRENT SQLID command 									
	This field contains values for both extracted and non-extracted entities.									
DEFAULT	Indicates the default location to use for remote operations such as remote EXPLAINs.									
REMOTE LOCATION	This field contains values for both extracted and non-extracted entities.									
KTEXPL OWNER FOR SYNONYMS	Authid to use as owner of synonyms in KTEXPL. Specify blank to use the current SET value.									
PLAN TABLE	Indicates the PLAN_TABLE owner.									
OWNER	Note: A SET CURRENT SQL ID will be done for this ID if the CREATOR option is not equal to 4 and is doing a static SQL.									
	This field contains values for both extracted and non-extracted entities.									
PERMANENT INDICATOR	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).									
QUALIFY SYNONYMS WITH	Determines whether synonyms in extracted statements are qualified by the addition of the plan or package qualifier.									
PLAN/PACKAGE QUALIFIER	YResolve synonyms using the plan/package qualifier.NResolve synonyms using the current SET value.									
	This field contains values for both extracted and non-extracted entities.									
SET CURRENT DEGREE	Value to which CURRENT DEGREE is to be set when EXPLAINing statements. The field value can be:									
	 Current Degree is set to 1 Any Current Degree is set by underlying DB2 subsystem. blank Indicates the degree set at bind time should be used for extracted entities. For non-extracted entities, the field's value is set to 1 									
	This field contains values for both extracted and non-extracted entities.									

FIELD	DESCRIPTION
SETO (Set Owner)	Determines whether !DB/EXPLAIN should set the creator option to 1 when entering from CLIST KTEXPLD, batch job KTEBDBR2, or option 3 on panel KTEPMEON. Setting the creator option to 1 causes unqualified table names to be prefixed with the ID of the plan owner.
	This field contains values for both extracted and non-extracted entities.

SQL Defaults

Overview

This unit describes the SQL Defaults panel.

Background about the SQL Defaults panel

The SQL Defaults panel KTEPHODS allows you to override the profile dataset during the current !DB/EXPLAIN session. You can specify whether you want the changes to be permanent or for the current session of !DB/EXPLAIN only.

Panel

The following illustration shows the SQL Defaults panel.

Cmd ===>	DB/EXPLAIN DB2=D31A
	SQL DEFAULTS
PERMANENT? ===> (Y Yes	N No)
SQL string delimiter for KT Max Length for Host Var in Commit executed SQL stateme Work size for SQL results Storage amount for KTEXPL s	ents? ===> N (Y Commit N Rollback) ===> 1 (Megabytes) stmts ===> 81920 (4096 - 4194304 bytes) ===> N (N No E Yes,EXPLA G Yes,GEXPLA)
ENTER to process END to a	cancel

FIELD	DESCRIPTION
BYPASS STATEMENTS DISPLAY?	Determines whether to bypass display of the Statements panel KTEPSTMT. Valid values are:
	 N Display the Statements panel. E Do not display the Statements panel. Issue the EXPLA command and display the EXPLAIN panel. G Do not display the Statements panel. Issue the GEXPLA command and display the EXPLAIN panel.
COMMIT EXECUTED SQL STATEMENTS	Indicates whether to commit or rollback after executing a SQL statement: Y Commit N Rollback
DECIMAL POINT OPTION FOR KTEXPL	Indicates what the decimal point will be in SQL statements you type in (using KTEXPL). blank Use the DB2 subsystem's default decimal point option . Use a period , Use a comma
DISPLAY KTEXPL SOURCE IN HEADER	Determines whether to display the KTEXPL source library in the header text of the Statements or EXPLAIN panel. Valid values are:YDisplay the KTEXPL source library. Do not display the KTEXPL source library.NDo not display the KTEXPL source library.
MAX LENGTH FOR HOST VAR INPUT	This field is valid for non-extracted variables only. It indicates the amount of space to allow for host variable input, for example, KTEXPL or KTEQMF, on panel KTEPHSVU. Valid values range from 3 through 256.
PERMANENT	Indicates whether to update the profile dataset with these changes (permanently) or update for current !DB/EXPLAIN session only (temporarily).
SQL STRING DELIMITER FOR KTEXPL	 The value used as the SQL string delimiter in SQL statements typed in using KTEXPL. Specify one of the following: blank If DEFAULT is specified for DECPSDL then the SQL string delimiter is assumed to be the apostrophe. Q If Q is specified for DECPSDL then the SQL string delimiter is assumed to be the quote. ' If the SQL string delimiter is an apostrophe. " If the SQL string delimiter is a quote.
STORAGE AMOUNT FOR KTEXPL	The amount of storage to be obtained for SQL statements entered via KTEXPL. The amount must be at least as large as the longest SQL statement in the input file.
WORK SIZE FOR SQL RESULTS	The amount of virtual storage reserved to execute statement processing. Specify from 1 to 9 megabytes of storage. Default is 1MB.

SQL Formats for KTEXPL

Overview

This unit describes the SQL Formats for KTEXPL panel.

Background about the SQL Formats for KTEXPL panel

The SQL Formats for KTEXPL panel (KTEPHOSQ) allows you to set up the defaults for parsing SQL text through the edit macro KTEXPL, the CLIST KTEXPLA, or the batch job KTEBSQLS. There are seven predefined formats and six undefined formats. You can change any of the formats.

Access

You can access the SQL Formats for KTEXPL panel from the Housekeeping panel.

Panel

The following illustration shows the SQL Formats for KTEXPL panel.

	SQL	F) R M	ATS	F	0 R	K	TEXPL			
PERMANENT? ===>	(YY)	es I	N No)	Host	-	ommer		Format		Dash	
Format of the Input File	LHS	RHS	Cont. Col				End Del	SQL Delimiter	A11 SQL	in Host?	Lan Typ
A – ASSEMBLER	1	71	72	:	1	*	NA	NA	N	 N	
3 – C	1	72	0	:	0	/*	*/	;	Ν	Ν	D
C - COBOL	8	72	0	:	7	*	NA	END-EXEC	N	Y	
F – FORTRAN P – PLI	7 2	72 72	6 0	:	1		NA */	NA	N N	N	
) – QMF	2	72 79	0	: &	0 0	/*	*/ NA	•	Y	N N	
S – SPUFI	1	71	0	:	0		NA	,	Ŷ	N	
– UNDEFINED	Ō	0	õ	•	õ		10/1	,			
J - UNDEFINED	Õ	0	Õ		0						
- UNDEFINED	0	0	0		0						
/ - UNDEFINED	0	0	0		0						
<pre>C - UNDEFINED</pre>	0	0	0		0						

FIELD	DESCRIPTION
ALL SQL	Indicates if there is program text between SQL statements:
	Y Yes N No
COMMENT BEG DEL	Delimiter that signifies the beginning of a comment.
COMMENT COLUMN	If the language specifies a comment with a delimiter in a specific column, this is the column in which the delimiter appears.
COMMENT END DEL	Delimiter that signifies the end of a comment (if applicable).
CONT. COLUMN	If the language uses a flag in a specific column to signify the continuation of a statement, this is the column where the continuation flag appears.
DASH IN HOST	Indicates if host variables can contain embedded dashes.
	Y Yes N No
FORMAT	Indicates which SQL format to use.
	Note: If an SQL format is invalid or unavailable, an error message is displayed and the KTEPHOSQ panel is redisplayed.
FORMAT OF THE INPUT FILE HOST VARIABLE	 Provides the name of the input file format. The text in this field is modifiable. You can change any of the formats and define undefined formats to suit your needs. Formats that remain undefined are not usable. A Assembler source code B C source code C COBOL source code F FORTRAN source code P PLI source code Q QMF queries S SPUFI queries T - X Undefined (user defined) Note: Certain of these fields have specific formats associated with them. These are: SAS A SAS-type format is used. FORTRAN format is used. HPS An HPS format is used. EZTRIEVE An EasyTrieve format is used.
FLAG	 One-character flag that indicates a host variable follows. Valid values are: :
	• &

FIELD		DESCRIPTION										
LANG TYPE		dicates whether an asterisk can be used as the indirect unary operator, as, for example, the C Language format. Valid values are:										
	D Any other value	Asterisk can be used as a unary operator for indirection in the incoming text file Asterisk can not be used as a unary operator for indirection in the incoming text file										
LHS	Indicates the leftmo	Indicates the leftmost column of SQL text.										
PERMANENT	Y Yes											
RHS	Indicates the rightn	nost column of SQL text.										
SQL DELIMITER	Delimiter that indic strings.	cates the end of an SQL statement. Valid values are any non-blank										

Tuning Parameters

Overview

This unit describes the VSAM Tuning Parameters panel.

Background about the VSAM Tuning Parameters panel

The VSAM Tuning Parameters panel (KTEPHOVB) allows you to specify the number of data and index buffers used to process the extract dataset when using !DB/EXPLAIN. These values are not used when running the !DB/EXPLAIN Extract.

Access

You can access the VSAM Tuning Parameters panel from the Housekeeping panel.

Panel

The following illustration shows the VSAM Tuning Parameters panel.

FIELD	DESCRIPTION
CATALOG EXTRACT dataset BUFFERS	Number of data buffers to use when reading the catalog extract dataset.
CATALOG EXTRACT dataset INDEX BUFFERS	Number of index buffers to use when reading the catalog extract dataset.
DEALLOCATE PLAN_TABLE EXTRACT DATASET AFTER EACH USE?	Indicates whether to close and deallocate the plan table extract dataset after each request.
DEALLOCATE STATEMENTS EXTRACT DATASET AFTER EACH USE?	Indicates whether to close and deallocate the statements extract dataset after each request.
ENQUEUE ON EXTRACT DATASETS	Specifies whether or not to enqueue on extract DATASETS.YYesNNo
ISSUE XUPDT COMMAND AFTER FREEING INTERMEDIATE STORAGE	Specifies whether or not to issue an XUPDT command after freeing intermediate storage.YYesNNo
ISSUE WTOR IF ENCOUNTER CONTENTION ON XUPDT IN BATCH?	Determines whether or not to issue WTOR prior to cancelling extract update when contention is encountered on batch XUPDT. Y Yes N No
KEEP PLAN_TABLE EXTRACT DATASET OPEN FOR UPDATE?	Specifies whether or not to keep the Plan Table Dataset open for update. Y Yes N No F Once the dataset is opened for update, it is to remain open for the duration of the function.
NUMBER OF DBRMS TO PROCESS BEFORE FREEING INTERMEDIATE STORAGE	Number of DBRMs to process when performing an EXPLAIN or latest EXPLAIN before freeing intermediate storage. Value ranges from 0 to 32000.

FIELD	DESCRIPTION
NUMBER OF DBRMS TO PROCESS BEFORE FREEING INTERMEDIATE STORAGE (XCPT)	Number of DBRMs to process when performing an EXPLAIN or latest EXPLAIN before freeing intermediate storage during exception processing. Value ranges from 0 to 32000.
NUMBER OF STATEMENTS TO PROCESS BEFORE FREEING INTERMEDIATE STORAGE	Number of statements to process when performing an EXPLAIN or latest EXPLAIN before freeing intermediate storage. Value ranges from 0 to 32000.
PERMANENT?	Indicates if changes are permanent (Y) or for the current session of !DB/EXPLAIN only (N).
PLAN_TABLE EXTRACT DATASET DATA BUFFERS	Number of data buffers to use when reading the plan table extract dataset.
PLAN_TABLE EXTRACT DATASET DATA BUFFERS (FOR OUTPUT)	Number of data buffers to use when writing to the plan table extract dataset.
PLAN_TABLE EXTRACT DATASET INDEX BUFFERS	Number of data buffers to use when reading the plan table extract dataset.
PLAN_TABLE EXTRACT DATASET INDEX BUFFERS (FOR OUTPUT)	Number of data buffers to use when writing to the plan table extract dataset.
STATEMENTS EXTRACT DATASET DATA BUFFERS	Number of data buffers to use when reading the statements extract dataset.
STATEMENTS EXTRACT DATASET INDEX BUFFERS	Number of data buffers to use when reading the statements extract dataset.

Appendixes

Appendix A. Commands Available from Object List Panels

	Collection	 Compare Formats 	Compare History	Column Dist Stats	Costs	DBRMs	Estimator	Exceptions	EXPLAIN	EXPLAIN Compare	EXPLAIN History	 Host Variables 	Libraries	< Package Connections	 Packages 	< Plan Connections	Plan Pkglist	Plan Verification	Plans	- Primary Menu	Statements	Table Columns	Tables	Verification	Whatif
ACTLOG					√ ∕		\checkmark			\checkmark			\checkmark				\checkmark		V	\checkmark			\checkmark	√	\checkmark
ADMIN	\checkmark	V	\checkmark	V	V		V	V	V	V		√ ∕		\checkmark		\checkmark		\checkmark	√ ∕	V	V	V		V	\checkmark
ASORT	√				V	\checkmark					V	V	V	V	\checkmark	\checkmark	V		√ ∕				V	┝──┦	
BIND															V				V					┝──┦	
BINDADD						√ ∕									V				√ ∕						
BINDCNV						\checkmark													V					┝──┦	
BINDEXP						V									\checkmark				V						
BINDREP						V									V				V						
CALC							\checkmark																		
CAN	√	V	\checkmark		V	V	V	V	V	V	√	V	V	√	V	V	V	V	V	V	\checkmark	√	V	V	\checkmark
CAPS OFF												\checkmark													
CAPS ON					/							V												 	
CDBR					V																				
CEXPL			V																					┝──┦	
CHANGE	√		√		√	V	√ √			\checkmark		V	V	V	V	V	V				V		\checkmark		
CHANGES	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	v √	V	V	v
CHAR				v		V									\checkmark							v			
COMPARE COST						v √		\checkmark							v √				v √					┝──┦	
						V		V							v				v						
CPKG CPLN																								$\left - \right $	
	√	-/	V		v √	./	\checkmark		√	\checkmark	√		\checkmark	√	-/	√		\checkmark	\checkmark	./		\checkmark		√	
DEBUG DEBUGOFF	v √		v √		v √		v √		v √	v √	v √	v √	v √	v √		v √		v √	v √			v √		v √	
DEBUGOFF	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	v √	
DELETE	v	v	v	v √	v	V	v	v	v	v	v √		v	v	v	v	v	v	v	v	V	v	v		v
				V						\checkmark	V	V												$\left - \right $	
DIFF										v															
DISPLAY																								\checkmark	

										e				su											
		ats	Ŋ	ats						par	ory			ctio		su		u							
		Compare Formats	Compare History	Column Dist Stats						EXPLAIN Compare	EXPLAIN History	bles		Package Connections		Plan Connections	t.	Plan Verification		enu		Table Columns			
	on	re F	re H	Di		~	tor	ons	Ę	Z	Ę	Host Variables	es	C C	s	onne	Plan Pkglist	erifi		Primary Menu	ents	Colu		Verification	
	Collection	npa	npa	Imn	sts	DBRMs	Estimator	Exceptions	EXPLAIN	PLA	PLA	st V.	Libraries	kag	Packages	U U U	n Pț	D A	us	mar	Statements	ole (Tables	ifica	Whatif
	C0	Co	Ū	[]	Costs	DB	Est	EX	EX	EX	EX	Ho	Lib	Pac	Pac	Pla	Pla	Pla	Plans	Pri	Sta	Tal	Tal	Vei	W
DO			\checkmark	V	V	\checkmark	\checkmark	V	\checkmark	\checkmark	√		\checkmark		V			√	\checkmark		√	\checkmark	\checkmark		\checkmark
DOP	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark
DOS	\checkmark				\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark				\checkmark		
DROP															\checkmark				\checkmark						
DSORT	\checkmark				\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark				\checkmark		
DUPS						\checkmark																			
EALL									\checkmark																
EBIND									\checkmark																
ECOST									\checkmark																
EDIFF										\checkmark															
EKEYS									\checkmark																
EOBJ									\checkmark																
EPATH									\checkmark																
EPTBL									\checkmark																
EPTB2									\checkmark																
ERECM									\checkmark																
ESTIM																									\checkmark
ESTMT									\checkmark																
EXODS									\checkmark																
EXPL						\checkmark									\checkmark				\checkmark						
EXPLA						\checkmark									V				\checkmark		\checkmark				
EXPLAR						\checkmark									V				\checkmark		V				
EXPLO						\checkmark									V				\checkmark						
EXPLOR						\checkmark									V				\checkmark						
EXPLR						\checkmark									V				\checkmark						
FILTA	\checkmark				\checkmark	\checkmark			\checkmark		V		\checkmark		\checkmark				\checkmark		V		\checkmark		
FILTO	\checkmark				V	\checkmark			\checkmark		V		\checkmark		\checkmark				\checkmark		V		\checkmark		
FILTR	√				V	\checkmark			\checkmark		√		V		V				\checkmark		√		\checkmark		
FILT?	√	İ			√	\checkmark			\checkmark		√		\checkmark		√		1		\checkmark		√		\checkmark		
FIND							\checkmark		\checkmark												√	\checkmark			\checkmark
FORMATn		\checkmark		√	√	\checkmark	\checkmark		\checkmark		√		\checkmark		V			√	\checkmark		√	\checkmark			\checkmark
FORMAT?	1	\checkmark	İ	\checkmark	V	\checkmark	\checkmark		\checkmark		V	İ	\checkmark		\checkmark	İ		V	\checkmark		√	\checkmark		İ	\checkmark
FREE	√		\checkmark			\checkmark	V	√		\checkmark		\checkmark	V	√		\checkmark	\checkmark			\checkmark			\checkmark	√	\checkmark
GEXPL	1					\checkmark																			
GEXPLA						V									V				V		√				

	u	Compare Formats	Compare History	Column Dist Stats			tor	SUO	NI	EXPLAIN Compare	EXPLAIN History	Host Variables	es	Package Connections	es	Plan Connections	¢glist	Plan Verification		Primary Menu	ents	Table Columns		ation	
	Collection	Compa	Compa	Colum	Costs	DBRMs	Estimator	Exceptions	EXPLAIN	EXPLA	EXPLA	Host V	Libraries	Packag	Packages	Plan C	Plan Pkglist	Plan V	Plans	Primar	Statements	Table (Tables	Verification	Whatif
GEXPLAR						√													√		√				
GEXPLO						\checkmark													\checkmark						
GEXPLOR						V									\checkmark				\checkmark						
GEXPLR	1					√									\checkmark				√						
GLOBAL	√	\checkmark	\checkmark	√	√	\checkmark	\checkmark	√	√	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	√	\checkmark
GSTATS	1	1				\checkmark			1							1			1			1			\checkmark
HEADERn	√	\checkmark	\checkmark	√	√	\checkmark	\checkmark	√	√	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	√	\checkmark
HEX				\checkmark																		\checkmark			
HIST						\checkmark									\checkmark				\checkmark						
HOUSE	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark
HOUSEn	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	V	V	\checkmark	\checkmark	\checkmark
IMPACT	1					\checkmark			1						\checkmark				\checkmark						
INFO						V									\checkmark				V						
JCL	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	V	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark
LALL													\checkmark												
LDBR													\checkmark												
LEHIST						\checkmark									\checkmark				\checkmark						
LEXPL						V		\checkmark							\checkmark				V		√				
LOCATE							\checkmark														√	V			\checkmark
LPKG													V												
MAINT	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MAINT?	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
MSGHELP	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
NDXS							\checkmark																		\checkmark
NEWSET				\checkmark			\checkmark															\checkmark			\checkmark
NEWSETALL							\checkmark															\checkmark			\checkmark
NODUPS						\checkmark																			
NOFILT	\checkmark				\checkmark	\checkmark			\checkmark		\checkmark		\checkmark		\checkmark				\checkmark		\checkmark		\checkmark		
NOHIST						\checkmark									\checkmark				\checkmark						
NONDXS							\checkmark																		\checkmark
NOSTAT							\checkmark															\checkmark			\checkmark
NOSTATALL							\checkmark															\checkmark			\checkmark
NOVERS									\checkmark												\checkmark				

	Collection	Compare Formats	Compare History	Column Dist Stats	Costs	DBRMs	Estimator	Exceptions	EXPLAIN	EXPLAIN Compare	EXPLAIN History	Host Variables	Libraries	Package Connections	Packages	Plan Connections	Plan Pkglist	Plan Verification	Plans	Primary Menu	Statements	Table Columns	Tables	Verification	Whatif
OUT							\checkmark		\checkmark												\checkmark				\checkmark
PDEBUGON	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	\checkmark	√	\checkmark	V	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark
PDEBUGOFF	\checkmark	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	V	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	V	\checkmark
PRNT	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	√	√	\checkmark	V	V	V	√	\checkmark	V	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark
PROFOUT	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	√	\checkmark	\checkmark	V	\checkmark	\checkmark	√	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark
PROFOUTE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	√	√	\checkmark	√	\checkmark	V	\checkmark	\checkmark	\checkmark	V	√	\checkmark	V	√	\checkmark
PROFVAR	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	√	V	V	V	\checkmark	\checkmark	√	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	√	\checkmark	√	√	\checkmark
REBIND															√				√						
REBINDEX															V				\checkmark						
REFRESH																				V					
RESET				V			V		V			V									V	V			\checkmark
RESETALL							V					V									· ·	V			V
RFIND							\checkmark		√													V			\checkmark
RLOCATE							\checkmark														V	V			\checkmark
SETC	\checkmark	\checkmark	\checkmark	\checkmark	√	√	\checkmark	√	V	\checkmark	V	√	V	√	√	V	V	V	√	V		V	V	√	\checkmark
SETD	\checkmark		\checkmark	\checkmark	√	√	V	√	√	\checkmark	V	√	V	√	√	V	√	V	√	V		√	V	√	\checkmark
SETL	\checkmark			V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	\checkmark
SETn	\checkmark			V	V	\checkmark	√	V		\checkmark	V	V	V	V	√	V	√	\checkmark		V			√	√	V
SETO	\checkmark			V	V	\checkmark	\checkmark	V	V	\checkmark	√	V	V	V	V	V	√	\checkmark		V	V		V	V	\checkmark
SETP		V		V	V	\checkmark	V	V	V	V	V	V	V	V	V	V	V	V	\checkmark	V	V	V	V	V	
SETS		V		V	V		V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	
SETU		V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	\checkmark
SET?		V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	
SHOW																				-	√				
SHOWE																					√				
SNAPALL	\checkmark	\checkmark	\checkmark	\checkmark	√	√	√	√	√	√	√	√	\checkmark	√	\checkmark	\checkmark	√	\checkmark	√	\checkmark	√	\checkmark	√	√	\checkmark
SNAPALLS	√	√	√	√	√	√	√	√	√	√	√	√	, √	√	√	√	√	√	√	√	√	√	√	√	, √
SNAPDS	√	√	√	√	√	√	√	√	√	√	√	√	, √	√	√	√	√	√	√	√	√	√	√	√	, √
SNAPEX	, √	, √	, √	, √	, √	, √	, √	, √	, √	, √	, √	, √	v √	√	, √	, √	, √	, √	, √	, √	, √	, √	, √	, √	, √
SORT	, √				, √	, √					, √	, √	v √	√	, √	, √	, √		, √		Ļ,		, √		ŕ
SORT?	, √				, √	, √					, √	, √	v √	, √	, √	, √	, √		, √				, √		
L	, √	\checkmark	\checkmark		, √	, √	\checkmark	√	V	√	, √	, √	v √	, √	, √	, √	, √	\checkmark	, √	\checkmark	√	\checkmark	, √	√	\checkmark

	Collection	Compare Formats	Compare History	Column Dist Stats	Costs	DBRMs	Estimator	Exceptions	EXPLAIN	EXPLAIN Compare	EXPLAIN History	Host Variables	Libraries	Package Connections	Packages	Plan Connections	Plan Pkglist	Plan Verification	Plans	Primary Menu	Statements	Table Columns	Tables	Verification	Whatif
STMTS								V																	
TIPS	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	\checkmark
TRACEALL	V	V	\checkmark	V	V	V	V	V	V	V	V	V	V	V	\checkmark	V	V	√	V	V	V	V	V	V	\checkmark
TRACED	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	V	V	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	V	V	\checkmark	V	V	\checkmark	V	V	\checkmark
TRACEG	\checkmark	V	\checkmark	\checkmark	\checkmark	V	\checkmark	V	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	V	\checkmark	V	V	\checkmark	V	V	\checkmark	V	\checkmark	\checkmark
TRACEL	V	V	V	\checkmark	V	V	V	V	V	V	\checkmark	\checkmark	V	V	\checkmark	V	V	\checkmark	V	V	V	\checkmark	V	\checkmark	\checkmark
TRACEOFF	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	V	V	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	V	\checkmark	V	\checkmark	\checkmark
UBROWSE	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
UEDIT	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
UNIFORM							\checkmark															\checkmark			\checkmark
UPDT							\checkmark																		\checkmark
UPDTL							\checkmark																		\checkmark
UPDTR							\checkmark																		\checkmark
VERS									\checkmark												\checkmark				
WIF																									\checkmark
WIFL																									\checkmark
WIFR																									\checkmark
WIFU																									\checkmark
WIFUL																									\checkmark
WIFUR																									\checkmark
XCPT						\checkmark									\checkmark				\checkmark		\checkmark		\checkmark		
XERR								\checkmark																	
XUPDT	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Commands Available from Object List Panels

COMMAND	DESCRIPTION
ACTLOG	Access the activity log.
ADMIN	Display the Administration Menu panel.
ASORT	Sort in ascending sequence.
BIND	Generate bind statements. Can take the form BIND <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the <i>!DB/EXPLAIN User's Guide</i>). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.
BINDADD	BIND ACTION(YES). Can take the form BINDADD <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.
BINDCNV	For DBRMs and Plans, convert DBRMs for the displayed object list to Packages and generate the commands required to BIND the relevant Plans. Can take the form BINDCNV <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.

Dictionary of !DB/EXPLAIN commands (continued)

COMMAND	DESCRIPTION
BINDEXP	BIND EXPLAIN(YES). Can take the form BINDEXP member, where member specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.
BINDREP	BIND ACTION(REPLACE). Can take the form BINDREP <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.
CALC	Calculate statistics.
CAN	Cancel all selects.
CAPS OFF	Set mode of any data entry fields to accept mixed-case input
CAPS ON	Set mode of any data entry fields to fold all data entered to upper case
CDBR	Display DBRM costs.
CEXPL	Compare EXPLAIN data.
	For batch restrictions on the use of CEXPL, see "Compare History" on page 45.

Dictionary of !DB/EXPLAIN commands (continued)

COMMAND	DESCRIPTION
CHANGE	Change all of the values for the specified field to the specified value.
CHANGES	Display !DB/EXPLAIN product changes.
CHAR	Display all lines of character or graphic data in character format.
COMPARE	Perform bind compare of each DBRM, plan, or package in the current display according to the options set on the Bind Compare Options Housekeeping Panel.
COST	Display statement costs.
СРКС	Display package costs.
CPLN	Display plan costs.
DEBUG	Display only parser and DB2 errors to ensure minimal impact
DEBUGOFF	Turn the Automated Trace Facility off or turn DEBUG off.
DEBUGON	Turn the Automated Trace Facility on.
DELETE	Delete all lines (Column Distribution or Table Columns function).
DELETE	Delete historical EXPLAINs (EXPLAIN Function).
DELETE	Delete all saved host variable values and attributes (Host Variables Function).
DIFF	Reset EDIFF.
DISPLAY	Display statements from DBRM.

Dictionary of !DB/EXPLAIN commands (continued)

COMMAND	DESCRIPTION
DO	Access menu of available commands.
DOP	Access Print Options.
DOS	Access menu of available sorts.
DROP	Generate FREE statements for each item on the list.
DSORT	Sort in descending sequence.
DUPS	Display all DBRMs.
EALL	Display all sections of the EXPLAIN display.
EBIND	Display plan bind or package bind information on the EXPLAIN display.
ECOST	Display cost information on the EXPLAIN display.
EDIFF	Display all the differences in access path between the two EXPLAINs in plain English.
EKEYS	Include index key information with the EOBJ section of the EXPLAIN Format 0 display.
EOBJ	Display detailed object information on the EXPLAIN display.

COMMAND	MMAND DESCRIPTION									
ЕРАТН	Display access path summary information in textual form on the EXPLAIN display.									
EPTBL	Display plan table information on the EXPLAIN display in a one-line format.									
EPTB2	Display plan table information on the EXPLAIN display in a two-line format.									
ERECM	Display recommendations information on the EXPLAIN display.									
ESTIM	Access the Estimator function.									
ESTMT	Display statement text and SQL error text (for any SQL errors encountered) on the EXPLAIN display.									
EXODS	Write EXPLAIN output to a dataset. Can take the form EXODS <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the <i>!DB/EXPLAIN User's Guide</i>). This member name is used to override the name specified on the Housekeeping Output Options Defaults panel.									

COMMAND	DESCRIPTION						
EXPL	EXPLAIN all items that have not been EXPLAINed since they were last bound and display latest EXPLAIN for previously EXPLAINed entities.						
EXPLA	EXPLAIN all items regardless of bind time.						
EXPLAR	Remote EXPLAIN all items regardless of bind time.						
EXPLO	EXPLAIN and display all items that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.						
EXPLOR	Remote EXPLAIN and display all items that have not been EXPLAINed since they were last bound. Do not gather catalog statistics.						
EXPLR	Remote EXPLAIN all items that have not been EXPLAINed since they were last bound and display latest EXPLAIN for previously EXPLAINED entities.						
FILTA	Filter display using AND logic.						
FILTO	Turn off filtering for the current display.						
FILTR	Filter display using OR logic.						
FILT?	Display the Filter panel.						
FIND	Find a specific character string on the display.						
FORMATn	Display the current list using Format $#n$ (where $n =$ the format number).						
FORMAT?	Access menu of available formats.						

COMMAND	DESCRIPTION
FREE	Generate FREE statements for all items on the list. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the <i>!DB/EXPLAIN User's Guide</i>).
GEXPL	EXPLAIN all items on the list that have not been EXPLAINed since they were last bound, gather statistics, and display latest EXPLAIN for previously EXPLAINed entities.
GEXPLA	EXPLAIN all and gather statistics regardless of bind time.
GEXPLAR	Remote EXPLAIN all and gather statistics regardless of bind time.
GEXPLO	EXPLAIN and display all items that have not been EXPLAINed since they were last bound. Gather catalog statistics.
GEXPLOR	Remote EXPLAIN and display all items that have not been EXPLAINed since they were last bound. Gather catalog statistics.
GEXPLR	Remote EXPLAIN all items that have not been EXPLAINed since they were last bound and gather statistics.

COMMAND	DESCRIPTION
GLOBAL	Display the first page of the global command menu.
GLOMORE	Display the second page of the global command menu.
GSTATS	Gather statistics from the catalog and refresh the appropriate display.
HEADERn	n may be a value from 1 through 6. When used with the PRNT command, HEADER prints the text you specify on each page of the printed output. For example,
	HEADER1=INVENTORY REPORT HEADER2=The Manufacturing Company
	places two lines of header output on your printout.
HEX	Display all lines of character or graphic data in hexadecimal format.
HIST	Display PLAN/PACKAGE/DBRM History.
HOUSE	Display the Housekeeping Menu.
HOUSEmmm	Display the Housekeeping panel represented by the mnemonic mmm. A list of mnemonics is found in the online Help for the Housekeeping Menu and in "Housekeeping" on page 315.
HOUSEn	Access Housekeeping panel #n where n is the panel's number on the Housekeeping Menu.

COMMAND	DESCRIPTION
IMPACT	Compare each nonhistorical item with its most recent historical counterpart.
INFO	Display the Information panel for a selected DBRM, plan, or package.
JCL	Display the JCL panel associated with the function you want to perform. If !DB/EXPLAIN is unable to determine what function you want, it displays the JCL Generation panel.
JCL?	Display the JCL Generation panel to start the JCL generate function.
KTEMODEL	(Previously MODEL.) Used on the secondary panels used when creating batch JCL to copy sample SYSIN statements into your batch job.
KTESYSIS	Used on the secondary panels used when creating batch JCL to browse sample SYSIN statements.
LALL	Display all DBRM and package members in Library.
LDBR	Display all DBRM members in Library.
LEHIST	Display Latest EXPLAIN History.
LEXPL	Display Latest EXPLAIN.
LOCATE	Reposition the list starting with a specific object.
LPKG	Display all package members in Library.
MAINT	Display the maintenance level of the current !DB/EXPLAIN system

COMMAND	DESCRIPTION				
MAINT?	Display the maintenance level of all installed !DB/Tools.				
MSGHELP	Display extended Help for the message whose Message Identifier is entered.				
NDXS	Display all Indexes.				
NEWSET	 !DB/Tools. Display extended Help for the message whose Message Identifier is entered. Display all Indexes. Establish a new statistics set. Establish a new statistics set (including column distribution statistics. Reset DUPS. Reset all filters. Reset History. Reset NDXS. Set statistics to RUNSTATS, not run value. Set statistics, including column distribution statistics, to RUNSTATS, not run value. Reset VERS. Generate REXX program to update catalog statistics. Can take the form 0UT member, where member specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of IDB/EXPLAIN Output" in the <i>!DB/EXPLAIN User's Guide</i>). This member name is used to override the name specified on the 				
NEWSETALL					
NODUPS	Reset DUPS.				
NOFILT	Reset all filters.				
NOHIST	Reset History.				
NONDXS	Reset NDXS.				
NOSTAT	Set statistics to RUNSTATS, not run value.				
NOSTATALL					
NOVERS	Reset VERS.				
OUT	statistics. Can take the form OUT <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to				
OUT	(On Statements panel.) Output SQL statements.				

COMMAND	DESCRIPTION					
PDEBUGOFF	Turn parser debugging off.					
PDEBUGON	Turn parser debugging on.					
PRNT	 Turn parser debugging off. Turn parser debugging on. Print the current active object list. Write current setting of user profile variables to user PDS in internal format. Write current setting of user profile variables to user PDS in external format usable as input to KTECNTL to override current profile variable settings. Display profile variable description Generate REBIND statements. Can take the form REBIND member, where member specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the <i>!DB/EXPLAIN User's Guide</i>). This member name is used to override the name specified o the Housekeeping Output Options Defaults panel. REBIND EXPLAIN(YES). Can take the form REBINDEX member, where member specifies a member name is used to override the name specified o the Housekeeping Output Options Defaults panel. REBIND EXPLAIN User's Guide). This member name is used to override the name specified o the Housekeeping Output Options Defaults panel. REBINDEX member, where member specifies a member name is used to override the name specified o the Housekeeping Output Options Defaults panel. REBINDEXPLAIN User's Guide). This member name is used to override the name specified o the Housekeeping Output Options Defaults panel. Rebuild all data in memory that !DB/EXPLAIN uses. Use this command to 					
PROFOUT						
PROFOUTE	to user PDS in external format usable as input to KTECNTL to override current profile					
PROFVAR	Display profile variable description					
REBIND	form REBIND <i>member</i> , where <i>member</i> specifies a member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults					
REBINDEX	member name in your user PDS. Can also take the MOD option (see p. "Controlling the Destination of !DB/EXPLAIN Output" in the !DB/EXPLAIN User's Guide). This member name is used to override the name specified on the Housekeeping Output Options Defaults					
REFRESH						

COMMAND	DESCRIPTION
RESET	(On EXPLAIN display.) Reset the EXPLAIN display parameters to include no sections. This prepares your session so you can add back the sections of the display you want to include.
RESET	(On Host Variables display.) Reset host variable values and attributes.
RESET	(On Table Columns, Estimator, and Whatif display.) Reset statistics to the values established by the last statistics set.
RESETALL	(On Estimator, Table Columns, and Whatif display.) Reset statistics, including column distribution statistics, to the values established by the last statistics set.
RESETALL	(On Host Variables display.) Reset host variable values and attributeswhen in nonextracted mode.
RFIND	Reexecute the last FIND command.
RLOCATE	Reexecute the last LOCATE command.
SETC	Prefix unqualified tables with Creator ID. Specified in the "other" slot on set panel.
SETD	SET CURRENT DEGREE. Allows I/O parallelism to be disabled or enabled. Effective for DB2 Version 3 and later.
SETL	Set default remote location.
SETn	Set SET option to #n
SETO	Prefix unqualified tables with Plan Owner.

COMMAND	DESCRIPTION							
SETP	Set Plan Table owner unless the creator option on the Set Defaults panel (KTEPHOSE) is set to #4 SQLID (SETS).							
SETS	Set SQLID to a specifed value.							
SETU	Prefix unqualified tables with TSO Userid.							
SET?	Display a panel of available Set commands.							
SHOW	Expand all statements.							
SHOWE	Expand all EXPLAINable statements.							
SNAPALL	Write all problem program information plus SNAPEX plus SNAPDS to KTESNAP.							
SNAPALLS	Write all system control information plus SNAPALL to KTESNAP.							
SNAPDS	Write the content of EXPLAIN data spaces and EXPLAIN control blocks (if any data spaces) to KTESNAP.							
SNAPEX	Write EXPLAIN control blocks to KTESNAP.							
SORT	Reorder the current object list. Same as ASORT.							
SORT?	Access menu of available sorts.							

COMMAND	DESCRIPTION
SQL	Display a panel so that you can enter and execute SQL statements.
STMTS	Display the SQL statements that triggered the exceptions.
TIPS	Display tips.
TRACEALL	Trace getmains and freemains, data space functions, and list functions.
TRACED	Trace data space functions.
TRACEG	Trace getmains and freemains.
TRACEL	Trace list functions.
TRACEOFF	Turn tracing off.
UBROWSE	Browse specified user PDS members.
UEDIT	Edit specified user PDS members.
UNIFORM	Set partitioned statistics to a uniform distribution.
UPDT	Update catalog with new statistics for specified server (local).
UPDTL	Update catalog with new statistics (local).
UPDTR	Update catalog with new statistics (remote).
VERS	Show version.
WIF	EXPLAIN with no statistics (local).

COMMAND	DESCRIPTION
WIFL	EXPLAIN with no statistics (local).
WIFR	EXPLAIN with new statistics and temporarily update the remote catalog with option to make statistics permanent.
WIFU	EXPLAIN with statistics and update local catalog.
WIFUL	EXPLAIN with statistics and update local catalog.
WIFUR	EXPLAIN with new statistics and permanently update the remote catalog with option to make statistics permanent.
ХСРТ	Display exceptions.
XERR	Display statements with SQL Error Exceptions.
XUPDT	Update Extract VSAM PLAN_TABLE dataset with all changes made online. This is <i>only</i> for PLAN_TABLE data.

Appendix C. Selects Available from Object List Panels

	Collections	Column Dist Stats	Costs	DBRMS	Estimator	Exceptions	EXPLAIN History	Extract History	Index Keys	Libraries	Packages	Plans	Statements	Table Columns	Tables	Whatif
	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
@				\checkmark							\checkmark	\checkmark	\checkmark			
#				\checkmark							\checkmark	\checkmark	\checkmark			
А												\checkmark				
В				\checkmark							\checkmark	\checkmark				
С		\checkmark		\checkmark	\checkmark		\checkmark				\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
D		\checkmark	\checkmark		\checkmark					\checkmark		\checkmark			\checkmark	\checkmark
Е				\checkmark							\checkmark	\checkmark	\checkmark			
F											\checkmark	\checkmark				
G				\checkmark		\checkmark					\checkmark	\checkmark				
Н				\checkmark							\checkmark	\checkmark	\checkmark			
Ι		\checkmark		\checkmark							\checkmark	\checkmark				
J				\checkmark				\checkmark			\checkmark	\checkmark				
K	\checkmark		\checkmark		\checkmark					\checkmark		\checkmark			\checkmark	\checkmark
L				\checkmark		\checkmark					\checkmark	\checkmark	\checkmark			
М	\checkmark											\checkmark				
N					\checkmark						\checkmark	\checkmark				\checkmark
0													\checkmark			
Р	\checkmark		\checkmark	\checkmark							\checkmark	\checkmark			\checkmark	
Q											\checkmark	\checkmark				
R		\checkmark								\checkmark	\checkmark	\checkmark	\checkmark			
S				\checkmark		\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Т				\checkmark							\checkmark	\checkmark				
U				\checkmark							\checkmark	\checkmark	\checkmark			

Selects available from object list panels (continued)

	Collections	Column Dist Stats	Costs	DBRMS	Estimator	Exceptions	EXPLAIN History	Extract History	Index Keys	Libraries	Packages	Plans	Statements	Table Columns	Tables	Whatif
V				\checkmark						\checkmark	\checkmark	\checkmark	\checkmark			
W				\checkmark							\checkmark	\checkmark	\checkmark			
X				\checkmark							\checkmark	\checkmark			\checkmark	
Y							\checkmark			\checkmark			\checkmark			
Ζ				\checkmark								\checkmark	\checkmark			
2													\checkmark			
8				\checkmark							\checkmark	\checkmark				
9				\checkmark							\checkmark	\checkmark				

Appendix D. Dictionary of Selects

Select	Definition
?	All object list panels: Display list of selects available on this panel.
@	DBRMs: Remote EXPLAIN and gather statistics.
	Packages: Remote EXPLAIN and gather statistics.
	Plans: Remote EXPLAIN and gather statistics.
	Statements: Remote EXPLAIN and gather statistics.
#	DBRMs: Remote EXPLAIN and do not gather statistics.
	Packages: Remote EXPLAIN and do not gather statistics.
	Plans: Remote EXPLAIN and do not gather statistics.
	Statements: Remote EXPLAIN and do not gather statistics.
Α	Plans: Display OMEGAMON II for DB2 Application Trace Facility.

Select	Definition
В	DBRMs: Generate a bind package statement for the selected DBRM.
	Packages: Generate a bind package statement for the selected package.
	Plans: Generate a bind plan statement for the selected plan.
С	Column Distribution Statistics: Display VALUE in character format. This selection is only available for character or graphic data.
	DBRMs: Compare the results of the latest EXPLAIN with the results of a BIND EXPLAIN(YES).
	Estimator: Display and update table columns.
	EXPLAIN History: Compare two historical EXPLAINs.
	Packages: Compare the results of the latest EXPLAIN for the selected package with the results of a BIND EXPLAIN(YES) on that package.
	Plans: Compare the results of the latest EXPLAIN with the results of a BIND EXPLAIN(YES) on that plan.
	Statements: Reset SHOW and SHOWE.
	Table Columns: Display column distribution statistics in hexadecimal format. (Available only for the HIGH*KEY and LOW*KEY fields for columns that contain character or graphic data.)
	Whatif: Display and update table columns.

Select	Definition
D	Column Distribution Statistics: Delete the current row unless this function was entered from Whatif. If entered from Whatif, you can delete only PART=0 rows.
	Costs: Display DBRMs panel.
	Estimator: Drop selected index.
	Libraries: Display all DBRMs in the selected library.
	Plans: Display all DBRMs for the selected plan.
	Tables: Display all DBRMs referencing the selected table.
	Whatif: Drop selected index.
Ε	DBRMs: EXPLAIN statements and gather statistics.
	Packages: EXPLAIN package and gather statistics.
	Plans: EXPLAIN plan and gather statistics.
	Statements: EXPLAIN statement and gather statistics.
F	Packages: Generate a FREE PACKAGE.
	Plans: Generate a FREE PLAN.

Select	Definition
G	DBRMs: Display cost details for the selected DBRM.
	Exceptions: Display cost for the exceptions for all access path types.
	Packages: Display cost details for the selected package.
	Plans: Display cost details for the selected plan.
Н	DBRMs: Display EXPLAIN history for the selected DBRM.
	Packages: Display EXPLAIN history for the selected package.
	Plans: Display EXPLAIN history for the selected plan.
	Statements: Show host variables.
Ι	Column Distribution Statistics: Insert a row following the current row unless this function was entered from Whatif. If entered from Whatif, you can insert only PART=0 rows.
	DBRMs: Display detailed DBRM information.
	Packages: Display detailed package information including BIND options.
	Plans: Display detailed plan information including BIND options.

Select	Definition
J	DBRMs: Compare DBRM attributes for the two selected DBRMs.
	Extract History: Recreate the JCL used to generate the selected extract.
	Packages: Compare package attributes for the two selected packages.
	Plans: Compare plan attributes for the two selected plans.
K	Collections: Display all packages associated with the selected collection.
	Costs: Display Packages panel.
	Estimator: Display index keys.
	Libraries: Display packages in the selected library.
	Plans: Display packages associated with the selected plan.
	Tables: Display all packages referencing the selected table.
	Whatif: Display index keys.

Select	Definition
L	DBRMs: Display the output of the latest EXPLAIN for the selected DBRM.
	Exceptions Display the latest EXPLAIN for the exception.
	Packages: Display the output of the latest EXPLAIN for the selected package.
	Plans: Display the output of the latest EXPLAIN for the selected plan.
	Statements: Show latest EXPLAIN.
Μ	Collections: Display all package lists associated with the selected collection.
	Plans: Display the selected plan's collection list.
Ν	Estimator: Create new index.
	Packages: Display all connections for the selected package.
	Plans: Display all connections for the selected plan.
	Whatif: Create new index.
0	Statements: Output to a dataset.

Select	Definition
Р	Collections: Display all plans associated with the selected collection.
	Costs: Display Plans panel.
	DBRMs: Display all plans associated with the selected DBRM.
	Packages: Display all plans associated with the selected package.
	Plans: Display OMEGAMON II for DB2 Accounting Reports.
	Tables: Display all plans referencing the selected table.
Q	Packages: Display all collections associated with the selected package.
	Plans: Display all collections associated with the selected plan.
R	Column Distribution Statistics: Repeat the current row.
	Libraries: Issue HRECALL for the requested selection.
	Packages: Generate a REBIND statement for the package.
	Plans: Generate a REBIND statement for the plan.
	Statements: Display recommendations.

Select	Definition
 S	DBRMs: Display the SQL statements for the selected DBRM.
	Exceptions: Display statements.
	EXPLAIN History: Display EXPLAIN.
	Index Keys: Display column information.
	Packages: Display the SQL statements for the selected package.
	Plans: Display the SQL statements for each DBRM and package in the plan.
	Statements: Show statements.
	Table Columns: Display column distribution statistics.
	Tables: Display all statements that access the selected table.
Т	DBRMs: Display tables for all DB2 tables, views, or aliases referenced by any SQL INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR statement in any DBRM or package.
	Packages: Display tables for all DB2 tables, views, or aliases referenced by any SQL INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR statement in any DBRM or package.
	Plans: Display tables for all DB2 tables, views, or aliases referenced by any SQL INSERT, SELECT, UPDATE, DELETE, LOCK, or DECLARE CURSOR statement in any DBRM or package.

Select	Definition
U	DBRMs: EXPLAIN and do not gather statistics.
	Plans: EXPLAIN the plan and do not gather statistics.
	Packages: EXPLAIN the package and do not gather statistics.
	Statements: EXPLAIN the statement and do not gather statistics.
V	DBRMs : Verify the DBRM.
	Libraries: Verify the selected library.
	Packages: Verify the package.
	Plans: Verify the Plan.
	Statements: Execute the statement.
W	DBRMs: Perform what-if analysis on the selected DBRM.
	Packages: Perform what-if analysis on the selected package.
	Plans: Perform what-if analysis on the selected plan.
	Statements: Perform what-if analysis on the selected statement.

Select	Definition
X	Column Distribution Statistics: Display VALUE in hexadecimal format. This selection is only available for character or graphic data.
	DBRMs: Display exceptions that exist for each SQL statement in the selected DBRM.
	Packages: Display exceptions that exist for each SQL statement in the selected package.
	Plans: Display exceptions that exist for each SQL statement in the selected plan.
	Statements: Display exceptions.
	Table Columns: Display column distribution statistics in hexadecimal format. (Available only for the HIGH*KEY and LOW*KEY fields for columns that contain character or graphic data.)
	Tables: Display exceptions for all statements that reference the selected table.
Y	EXPLAIN History: Delete historical EXPLAINs.
	Libraries: Delete the selected library.
	Statements: Display SQL summary.
Z	DBRMs: Generate BIND conversion statements to convert the DBRM to a package.
	Plans: Generate BIND conversion statements to convert the DBRM to a package and include the package in the plan.
	Statements: Execute the statement.

Select	Definition
2	Statements: Permit ISPF edit against statement.
8	DBRMs: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Gather catalog statistics.
	Packages: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Gather catalog statistics.
	Plans: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Gather catalog statistics.
9	DBRMs: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Do not gather catalog statistics.
	Packages: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Do not gather catalog statistics.
	Plans: EXPLAIN and display only DBRMs that have not been previously EXPLAINed. Do not gather catalog statistics.

Dictionary of Selects

Appendix E. DB/EXPLAIN Sorts and Filters!

Introduction

This appendix provides charts that identify the sorts and filters available from specific object list panels. In each chart:

- Column 1 contains the sort or filter keyword
- Column 2 contains the field name of the field that is acted on by the sort or filter. If column 2 is blank, it indicates that the sort or filter is acting on a composite value rather than on a specific field value.
- Column 3 contains the definition of the field whose name is contained in column 2.

Collections

Collections sorts

Sort	Field	Sort by
QCOL	COLLECTION	Collection name
QLOC	LOCATION	Location, collection name

Collections filters

Filter	Field	Filter on
QCOL	COLLECTION	Collection name
QLOC	LOCATION	Location

Costs

Costs sorts

Sort	Field	Sort by
C#ADG	ADG	Number of access degrees > 1
C#HBJ	HBJ	Number of hybrid joins
C#JDG	JDG	Number of join degrees > 1
C#I1S	I1	Number of one-fetch index scans
C#LCK	LCK	Number of locks
C#LPF	LPF	Number of list prefetches
C#MIS	MIS	Number of matching index scans
C#MSJ	MSJ	Number of merge scan joins
C#MX		Number of multiple indexes
C#MXI	MI	Number of multiple index intersections
C#MXS	MX	Number of multiple index scans
C#MXU	MU	Number of multiple index unions
C#NLJ	NLJ	Number of nested loop joins
C#NMI	NMIS	Number of non-matching index scans
C#NS	N	Number of index scans for IN keyword
C#SPF	SPF	Number of sequential prefetches
C#SRG	SG	Number of sorts for group by
C#SRJ	SJ	Number of sorts for joins
C#SRO	SO	Number of sorts for order by
C#SRT	SRT	Number of sorts (no new table access)
C#SRU	SU	Number of sorts for unions

Costs sorts (continued)

Sort	Field	Sort by
C#TSS	TS	Number of table space scans
CACST	AVERAGE STMT COST	Average statement cost
CEXDT	EXPLAIN TIMESTAMP	EXPLAIN date/time, name
CMCST	MAXIMUM STMT COST	Maximum statement cost
CNAME	DBRM/PACKAGE/ PLAN	Name
CPCDT	PRECOMPILE TIMESTAMP	Precompile date/time, name
CTCST	TOTAL STMT COST	Total statement cost

Costs filters

Filter	Field	Filter on
C#ADG	ADG	Number of access degrees > 1
C#HBJ	HBJ	Number of hybrid joins
C#JDG	JDG	Number of join degrees > 1
C#I1S	11	Number of one-fetch index scans
C#LCK	LCK	Number of locks
C#LPF	LPF	Number of list prefetches
C#MIS	MIS	Number of matching index scans
C#MSJ	MSJ	Number of merge scan joins
C#MXI	MI	Number of multiple index intersections
C#MXS	MX	Number of index scans on index
C#MXU	MU	Number of multiple index unions
C#NLJ	NLJ	Number of nested loop joins
C#NMI	NMIS	Number of non-matching index scans
C#NS	N	Number of index scans for IN keyword
C#SPF	SPF	Number of sequential prefetches

Costs filters (continued)

Sort	Field	Sort by
C#SRG	SG	Number of group by sorts
C#SRJ	SJ	Number of join sorts
C#SRO	SO	Number order by sorts
C#SRT	SRT	Total number sorts
C#SRU	SU	Number of unique sorts
C#TSS	TS	Number of table space scans
CACST	AVERAGE STMT COST	Average statement cost
CEXDT	EXPLAIN TIMESTAMP	EXPLAIN date/time
CMCST	MAXIMUM STMT COST	Maximum statement cost
CNAME	DBRM/PACKAGE/ PLAN	DBRM or Package name
CPCDT	PRECOMPILE TIMESTAMP	Precompile date/time
CTCST	TOTAL STMT COST	Total statement cost
CVER	VERSION	Version identifier

DBRMs

DBRMs sorts

Sort	Field	Sort by
D#DC	DECLARE CURSOR	Number of declare cursors
D#DL	DELETES	Number of deletes
D#IN	INSERTS	Number of inserts
D#LS	LCK SHR	Number of locks shared
D#LX	LCK XCL	Number of locks excluded
D#PL	PLAN HEADING	Number of plans using
D#SE	SELECTS	Number of selects
D#TL	STMTS	Number of total statements
D#TS		Total number of selects + declare cursors
D#UP	UPDATES	Number of updates
DACST	AVG STMT COST	Average statement cost
DBRM	DBRM	DBRM name
DMCST	MAX STMT COST	Maximum statement cost
DPCDT	PRECOMPILE DATE/TIME	Precompile date/time, name
DPLN	PLAN HEADING	Plan name, DBRM name
DTCST	TOTAL STMT COST	Total statement cost

DBRMs filters

Filter	Field	Filter on
D#AL	ALTER	Total number of alters
D#CA	CALL	Total number of CALL statements
D#CL	CLOSE	Total number of closes
D#CM	COMMIT	Total number of commits
D#CN	CONNECT	Total number of connects
D#CR	CREATE	Total number of creates
D#DC	DECLARE CURSOR	Total number of declare cursors
D#DL	DELETES	Total number of deletes
D#DM	DECLARE STATEMENT	Total number of declare statements
D#DS	DESCRIBE	Total number of describes
D#DT	DECLARE TABLE	Total number of declare tables

DBRMs filters (continued)

D#DRDROPTotal number of dropsD#SRSET RULESTotal number of SET CURRENT RULES statementsD#ECEXECUTETotal number of executesD#EXEXPLAINTotal number of executesD#FXFETCHTotal number of grantsD#GRGRANTTotal number of insertsD#ININSERTSTotal number of locks sharedD#LSLCK SHRTotal number of locks sharedD#DPOPENTotal number of pensD#PRPLAN HEADINGNumber of plans with DBRM as a memberD#RRRELEASETotal number of releasesD#RVREVOKETotal number of releasesD#RVSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set ecclosedD#SPSET DEGREETotal number of set ecclosesD#SPSET DEGREETotal number of set ecclosesD#SPSET PKGSETTotal number of set ecclosesD#SPSET SQLIDTotal number of set ecclosesD#SPUPDATESTotal number of set ecclosesD#SPSET SQLIDTotal numbe	Filter	Field	Filter on
Image: constraint of the section of the sectin the section of the section of the	D#DR	DROP	Total number of drops
D#EXEXPLAINTotal number of EXPLAINSD#FTFETCHTotal number of fetchesD#GRGRANTTotal number of grantsD#ININSERTSTotal number of insertsD#LSLCK SHRTotal number of locks sharedD#DPOPENTotal number of plans with DBRM as a memberD#PLPLAN HEADINGNumber of plans with DBRM as a memberD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of set connectionsD#RESET CONNECTTotal number of set connectionsD#SESET PEGREETotal number of set degreesD#SFSET PKGSETTotal number of set degreesD#SPSET SQLIDTotal number of set setsD#SPSET SQLIDTotal number of set connectionsD#SPSET SQLIDTotal number of set setsD#STSET SQLIDTotal number of set setsD#TLSTMTSTotal number of set setsD#TLSTMTSTotal number of setsD#TLSTMTSTotal number of setsD#TLSTMTSTotal number of setsD#TLSTMTSTotal number of setsD#WHWHENEVERTotal number of setectsD#WHWHENEVERTotal number of setects	D#SR	SET RULES	CURRENT RULES
Image: constraint of the section of	D#EC	EXECUTE	Total number of executes
D#GRGRANTTotal number of grantsD#GRGRANTTotal number of grantsD#ININSERTSTotal number of locks sharedD#LSLCK SHRTotal number of locks sharedD#LXLCK XCLTotal number of locks excludedD#OPOPENTotal number of opensD#PLPLAN HEADINGNumber of plans with DBRM as a memberD#PRPREPARETotal number of reparesD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of releasesD#SCSET CONNECTTotal number of set connectionsD#SBSET DEGREETotal number of set degreesD#SPSET PKGSETTotal number of set set setsD#SPSET SQLIDTotal number of set set connectionsD#SPSET SQLIDTotal number of set set connectionsD#SPSET SQLIDTotal number of set set setsD#SPSET SQLIDTotal number of set set setsD#SPSET WGSETTotal number of set set setsD#SPSET NUTSTotal number of set set setsD#SPSET SQLIDTotal number of set set setsD#TLSTMTSTotal number of set setsD#TLVPDATESTotal number of set setsD#WHWHENEVERTotal number of whenevers	D#EX	EXPLAIN	
D#ININSERTSTotal number of insertsD#LSLCK SHRTotal number of locks sharedD#LXLCK XCLTotal number of locks excludedD#OPOPENTotal number of opensD#PLPLAN HEADINGNumber of plans with DBRM as a memberD#PRPREPARETotal number of reparesD#RERELEASETotal number of releasesD#RVREVOKETotal number of reloasesD#SCSET CONNECTTotal number of set connectionsD#SBSET DEGREETotal number of set degreesD#SFSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set setsD#STSETTotal number of set setsD#STSETTotal number of set setsD#TLSTMTSTotal number of set setsD#TSJETTotal number of set setsD#TSSHWHWHENEVERTotal number of set setesD#WHWHENEVERTotal number of set setes	D#FT	FETCH	Total number of fetches
D#LSLCK SHRTotal number of locks sharedD#LXLCK XCLTotal number of locks excludedD#OPOPENTotal number of opensD#PLPLAN HEADINGNumber of plans with DBRM as a memberD#PRPREPARETotal number of preparesD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of rolbacksD#RVREVOKETotal number of revokesD#SDSET CONNECTTotal number of set connectionsD#SBSET DEGREETotal number of set degreesD#SHSET NGSETTotal number of set package setsD#SSSET PKGSETTotal number of set packageD#SSSET SQLIDTotal number of set setsD#SSSET SQLIDTotal number of set setsD#STSETTotal number of set setsD#TLSTMTSTotal number of set setsD#TSUPDATESTotal number of set setsD#WHWHENEVERTotal number of setects	D#GR	GRANT	Total number of grants
Image: set of the	D#IN	INSERTS	Total number of inserts
BarteringBarteringexcludedD#OPOPENTotal number of opensD#PLPLAN HEADINGNumber of plans with DBRM as a memberD#PRPREPARETotal number of preparesD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of rolbacksD#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set degreesD#SESET DEGREETotal number of set degreesD#SHSET HOSTTotal number of set host variablesD#SSSET SQLIDTotal number of set SQL IDsD#STSET SQLIDTotal number of sets connectionsD#TSSTMTSTotal number of setectsD#WHWHENEVERTotal number of setects	D#LS	LCK SHR	
D#PLPLAN HEADINGNumber of plans with DBRM as a memberD#PRPREPARETotal number of preparesD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of rollbacksD#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set connectionsD#SESELECTSTotal number of set degreesD#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set sQL IDsD#SSSET SQLIDTotal number of set SQL IDsD#TLSTMTSTotal number of setsD#TSUPDATESTotal number of selectsD#WHWHENEVERTotal number of selects	D#LX	LCK XCL	
D#PRPREPARETotal number of preparesD#RERELEASETotal number of releasesD#RLROLLBACKTotal number of rollbacksD#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDSD#STSET SMTSTotal number of setsD#TLSTMTSTotal number of setectsD#WHWHENEVERTotal number of setects	D#OP	OPEN	Total number of opens
D#RERELEASETotal number of releasesD#RLROLLBACKTotal number of rollbacksD#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of set electsD#SHSET PKGSETTotal number of set package setsD#SPSET SQLIDTotal number of set SQL IDsD#STSETSTMTSTotal number of setsD#TLSTMTSTotal number of setectsD#WHWHENEVERTotal number of setects	D#PL	PLAN HEADING	
D#RLROLLBACKTotal number of rollbacksD#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of set degreesD#SHSET HOSTTotal number of set package setsD#SPSET SQLIDTotal number of set SQL IDsD#STSETSTMTSTotal number of setsD#TLSTMTSTotal number of setsD#WHWHENEVERTotal number of whenevers	D#PR	PREPARE	Total number of prepares
D#RVREVOKETotal number of revokesD#SCSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of selectsD#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETSTMTSD#TSSTMTSTotal number of setesD#WHWHENEVERTotal number of whenevers	D#RE	RELEASE	Total number of releases
D#SCSET CONNECTTotal number of set connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of selectsD#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETSETD#TLSTMTSTotal number of setesD#UPUPDATESTotal number of selectsD#WHWHENEVERTotal number of whenevers	D#RL	ROLLBACK	Total number of rollbacks
Image: connectionsD#SDSET DEGREETotal number of set degreesD#SESELECTSTotal number of selectsD#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETSETD#TLSTMTSTotal number of seters in DBRMD#UPUPDATESTotal number of selectsD#WHWHENEVERTotal number of updates	D#RV	REVOKE	Total number of revokes
D#SESELECTSTotal number of selectsD#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETTotal number of setsD#TLSTMTSTotal number of statements in DBRMD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of updates	D#SC	SET CONNECT	
D#SHSET HOSTTotal number of set host variablesD#SPSET PKGSETTotal number of set package setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETTotal number of setsD#TLSTMTSTotal number of statements in DBRMD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#SD	SET DEGREE	Total number of set degrees
Image: definition of the sector of the sec	D#SE	SELECTS	Total number of selects
Image: setsD#SSSET SQLIDTotal number of set SQL IDsD#STSETTotal number of setsD#TLSTMTSTotal number of statements in DBRMD#TSImage: setsTotal number of selectsD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#SH	SET HOST	
IDsD#STSETTotal number of setsD#TLSTMTSTotal number of statements in DBRMD#TSIDTotal number of selectsD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#SP	SET PKGSET	1 0
D#TLSTMTSTotal number of statements in DBRMD#TSTotal number of selectsD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#SS	SET SQLID	
in DBRMD#TSTotal number of selectsD#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#ST	SET	Total number of sets
D#UPUPDATESTotal number of updatesD#WHWHENEVERTotal number of whenevers	D#TL	STMTS	
D#WH WHENEVER Total number of whenevers	D#TS		Total number of selects
	D#UP	UPDATES	Total number of updates
DACST AVG STMT COST Average statement cost	D#WH	WHENEVER	Total number of whenevers
	DACST	AVG STMT COST	Average statement cost

DBRMs filters (continued)

Sort	Field	Sort by
DBRM	DBRM	DBRM name
DCHRS	СН	Whether or not CCS ID for SBCS data = 290
DCOMM	СО	Decimal point representation
DDC31	DE	Whether or not DEC31 was in effect
DEXDT	EXPLAIN DATE/TIME	EXPLAIN date and time
DHLNG	HL	Host language used
DLIB	LIBRARY	DBRM library
DMCST	MAX STMT COST	Maximum statement cost
DMISS	STMTS	Whether or not the extract discarded any statements
DMIXD	MX	Whether or not mixed data is in effect
DPCDT	PRECOMPILE DATE/TIME	Precompile date/time
DPLN	PLAN HEADING	Plan name
DQUOT	QU	SQL string delimiter
DTCST	TOTAL STMT COST	Total statement cost
DVER	VERSION	DBRM version identifier
DVRF	VL	Whether or not DBRMs have been verified

Explain

Explain filters

Filter	Field	Filter on
EACCS	ACCS	Access type
EACCS	ACCESS INFO	Access type
EADG	ACC DEG	Access degree
EAID	ACC PID	Access parallel group ID
ЕСНА	(Changed statements identifier)	Has statement text been modified by the user?
ECOL	COLLECTION	Collection ID
ECOL	COLLECTION ID	Collection ID
ECOLF	FN	Column function evaluation
ECORR	CORR=	Plan table correlation name
EDBRM	DBRM/PACKAGE/ NAME	Program name
EERR	ME	Error occurred
EEXME	EM	EXPLAIN method
EGRP	GROUP MEMBER	Group member name
EICR	CREATEBY	Access creator
EIX	INDEX NAME	Access name
EJDG	JOI DEG	Join degree
EJID	JOI PID	Join parallel group ID
EJTYP	J T =	Join type
ELCKM	LCK	Table space lock mode
EMATC	MTCL	Match columns
EMETH	ME	Method
ЕМЈСО	MJ CL	Plan table merge join
EMXOP	МХОР	MIX operation sequence
ENDXO	IX	Index only
EORNO	STMT NO.	Actual original statement number
EPLN	PLAN	Application plan name
EPLNO	PLN NO.	Plan number

Explain filters (continued)

Filter	Field	Filter on
EPMOD	РМ	Plan table parallelism mode
EPRAN	P R =	Page range
EPREF	PF	Prefetch
EQBNO	QBNO	Query block number
EQYNO	STMT NO.	Query number
ESCID	SRC ID	Plan table sortc parallel group ID
ESNID	SRN ID	Plan table sortn parallel group ID
ESRCG	SRTC G	Sort C group
ESRCJ	SRTC J	Sort C join
ESRCO	SRTC O	Sort C order
ESRCU	SRTC U	Sort C unique
ESRNG	SRTN G	Sort N group
ESRNJ	SRTN J	Sort N join
ESRNO	SRTN O	Sort N order
ESRNU	SRTN U	Sort N unique
ETBL	TBL	Table name
ETBNO	(FROM clause table identifier)	Table number
ETCMI	(Statement cost discrepancy identifier)	Statement costs
ETCR	CREATEBY	Creator
ETCST	STATEMENT COST	Total statement cost

Explain History

Explain History filters

Filter	Field	Filter on
HDVER	VERSION	Version identifier of DBRM or package
HERR	ERROR	Type of error occurring during EXPLAIN
НЕТҮР	ТҮРЕ	EXPLAIN type
HEXDT	EXPLAIN DATE/TIME	EXPLAIN timestamp
HNAME, HDBRM	NAME	DBRM or package name
HPCDT	PRECOMPILE DATE/TIME	Precompile timestamp
HTCST	STMT COST	Total statement cost
HVER	VERSION	Version of DBRM or package

EXPLAIN History sorts

Sort	Field	Sort on
HDBRM	NAME	DBRM or package name (in the same EXPLAIN timestamp order as NAME)
HEXDT	EXPLAIN DATE/TIME	EXPLAIN timestamp
HNAME	NAME	DBRM or package name (in the opposite EXPLAIN timestamp order to NAME)
HPCDT	PRECOMPILE TIMESTAMP	Precompile timestamp
HTCST	STMT COST	Total statement cost

Host Variables

Host Variable filters

Filter	Field	Filter on
HLENG	LENGTH	Length of host variable
HOST	HOST VARIABLE NAME	Name of host variable
HSCAL	SCALE	Sale of host variable
НТҮРЕ	DATA TYPE	Data Type of host variable

Libraries

Libraries sorts

Sort	Field	Sort by
L#ALL	ALL	Number of DBRM and package members
L#DBR	DBRM	Number of DBRM members
L#PKG	РКС	Number of package members
LLIB	LIBRARY NAME	Library name
LSTAT	STATUS	Status, library name

Libraries filters

Filter	Field	Filter on
L#ALL	ALL	Number of DBRM and package members in library
L#DBR	DBRM	Number of DBRM members in library
L#PKG	РКС	Number of package members in library
LERR	LERR	Error status
LLIB	LIBRARY NAME	Library name
LSTAT	STATUS	Library status

Packages

Packages sorts

Sort	Field	Sort by
K#DC	DECLARE CURSOR	Number of declare cursors
K#DL	DELETES	Number of deletes
K#IN	INSERTS	Number of inserts
K#LS	LCK SHR	Number of locks shared
K#LX	LCK XCL	Number of locks excluded
K#SE	SELECTS	Number of selects
K#TL	STMTS	Number of total statements
K#TS		Number of selects + declare statements
K#UP	UPDATES	Number of updates
KACST	AVERAGE STMT COST	Average statement cost
KAVS	AVSIZE	Average size
KBDT	BIND DATE/TIME	Bind date/time, package
KCOL	COLLECTION	Collection ID, package
KCR	CREATOR	Package creator, package
KCRDT	CREATED	Created date/time, package
KGRP	GROUP MEMBER	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND.
KKSZ	PKSIZE	Package size
KMCST	MAXIMUM STMT COST	Maximum statement cost
KOWN	OWNER	Owner, package
КРАСК	PACKAGE	Package name
KPCDT	PRECOMPILE DATE/TIME	Precompile date/time, package
KQLF	QUALIFIER	Qualifier, package
KTCST	TOTAL STMT COST	Total statement cost

Packages filters

Filter	Field	Filter on
K#AL	ALTER	Total number of alters
K#CA	CALL	Total number of CALL statements
K#CL	CLOSE	Total number of closes
K#CM	COMMIT	Total number of commits
K#CN	CONNECT	Total number of connects
K#CR	CREATE	Total number of creates
K#DC	DECLARE CURSOR	Total number of declare cursors
K#DL	DELETES	Total number of deletes
K#DM	DECLARE STATEMENTS	Total number of declare statements
K#DR	DROP	Total number of drops
K#DS	DESCRIBE	Total number of describes
K#DT	DECLARE TABLE	Total number of declare tables
K#EC	EXECUTE	Total number of executes
K#EX	EX	Total number of EXPLAINS
K#FT	FETCH	Total number of fetches
K#GR	GRANT	Total number of grants
K#IN	INSERTS	Total number of inserts
K#LS	LCK SHR	Total number of locks shared
K#LX	LCK XCL	Total number of locks excluded
K#OP	OPEN	Total number of opens
K#PR	PREPARE	Total number of prepares
K#RE	RELEASE	Total number of releases
K#RL	ROLLBACK	Total number of rollbacks
K#RV	REVOKE	Total number of revokes
K#SC	SET CONNECT	Total number of set connections
K#SD	SET DEGREE	Total number of set degrees
K#SE	SELECTS	Total number of selects
K#SH	SET HOST	Total number of set host variables
K#SP	SET PKGSET	Total number of set package sets

Packages filters (continued)

Filter	Field	Filter on
K#SR	SET RULES	Total number of SET CURRENT RULES SQL statements
K#SS	SET SQLID	Total number of set SQL IDs
K#ST	SET	Total number of sets
K#TL	STMTS	Total number of statements
K#TS		Total number of selects
K#UP	UPDATES	Total number of updates
K#WH	WHENEVER	Total number of whenevers
KASCT	AVERAGE STMT COST	Average statement cost
KAVS	AVSIZE	Average size
KBDT	BIND DATE/TIME	Bind date/time
KCOL	COLLECTION	Collection
КСОММ	СО	Whether or not a comma is used for decimal in SQL
KCR	CREATOR	Creator
KCRDT	CREATED	Created by date/time
KDC31	DE	Whether or not DC31 was in effect at precompile
KDEGR	DG	Degree option
KDEGR	DEGREE	Degree option
KDFP	DP	Current data option
KDYNR	DYNAMICRULES	DYNAMICRULES option used when the package was bound
KEXDT	EXPLAIN DATE/TIME	EXPLAIN date/time
KFRE	FREED?	Whether or not package has been freed
KGRP	GROUP MEMBER	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND.
KHLNG	HL	Host language
KISO	IS	Isolation level
KKSZ	PKSIZE	Package size
KLIB	LIBRARY	Library
KMCST	MAXIMUM STMT COST	Maximum statement cost
KMIXD	MX	Whether or not mixed data was present at precompile

Packages filters (continued)

Filter	Field	Filter on
KOPR	OP	Whether or not package can be allocated
KOWN	OWNER	Owner
КРАСК	PACKAGE	Package name
KPCDT	PRECOMPILE DATE/TIME	Precompile date/time
KQLF	Qualifier	Implicit qualifier
KQUOT	QU	SQL string delimiter
KRLS	RE	Value used for release
KRMT	RM	Source of the package
KSERR	SE	SQL error option
KSYEN	SYSENTRY	System entries
KTCST	TOTAL STMT COST	Total statement cost
КТОК	CONTOKEN	Consistency token
KVER	VERSION	Version
KVLD	VD	Whether or not package is valid
KVRF	VL	Whether or not package has been verified
KVLT	VA	Whether or not validity checking can be deferred
KXPL	EX	Whether or not to EXPLAIN at bind

Package Connections

Package Connections sorts

Sort	Field	Sort by
KCNN	CONNECT	Connection, system name
KENA	ENABLE	Enabled indicator, system name
KSYS	SYSTEM	System name

Plans

Plans sorts

Sort	Field	Sort by
P#DB	COUNT	Number of DBRMs in plan
D#DB	DBRMs	Number of DBRMs in plan
P#DC	DCL CSR	Number of declare cursors
P#DC	DECLARE CURSOR	Number of declare cursors
P#DL	DELETES	Number of deletes
P#DP	COUNT	Number of DBRMs/packages in plan
P#IN	INSERTS	Number of inserts
Р#КА	PACKAGES	Number of packages in plan
P#LS	LOCK SHR	Number of locks shared
P#LX	LOCK XCL	Number of locks excluded
P#SE	SELECTS	Number of selects
P#TL	STMTS	Number of total statements
P#TS		Number of selects + declare cursors
P#UP	UPDATES	Number of updates
PAVS	AVG SIZE	Average size
PBBY	BOUND BY	Bound by, plan number
PBDT	BIND DATE	Bind date/time, plan name
PCHSZ	CACHESZ	Cache size
PCR	CREATOR	Creator, plan name
PGRP	GROUP MEMBER	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND.
PLAN	PLAN	Plan name
PPSZ	PLSIZE	Base size, plan name
PQLF	QUALIFIER	Qualifier, plan name

Plans filters

Filter	Field	Filter on
P#AL	ALTER	Total number of alters
Р#СА	CALL	Total number of CALL statements
P#CL	CLOSE	Total number of closes
Р#СМ	COMMIT	Total number of commits
P#CN	CONNECT	Total number of connects
P#CR	CREATE	Total number of creates
P#DB	COUNT	Number of DBRMs
P#DB	DBRMs	Number of DBRMs
P#DC	DCL CSR	Total number of declare cursors
P#DC	DECLARE CURSOR	Total number of declare cursors
P#DL	DELETES	Total number of deletes
P#DM	DECLARE STATEMENT	Total number of declare statements
P#DP	COUNT	Number of DBRMs and packages
P#DR	DROP	Total number of drops
P#DS	DESCRIBE	Total number of describes
P#DT	DECLARE TABLE	Total number of declare tables
P#EC	EXECUTE	Total number of executes
P#EX	EXPLAIN	Total number of EXPLAINS
P#FT	FETCH	Total number of fetches
P#GR	GRANT	Total number of grants
P#IN	INSERTS	Total number of inserts
Р#КА	PACKAGES	Number of packages
P#LS	LOCK SHR	Total number of locks shared
P#LX	LOCK XCL	Total number of locks excluded
P#OP	OPEN	Total number of opens
P#PR	PREPARE	Total number of prepares
P#RE	RELEASE	Total number of releases
P#RL	ROLLBACK	Total number of rollbacks
P#RV	REVOKE	Total number of revokes

Filter	Field	Filter on
P#SC	SET CONNECT	Total number oF set connections
P#SD	SET DEGREE	Total number of set degrees
P#SE	SELECTS	Total number of selects
P#SH	SET HOST	Total number of set host variables
P#SP	SET PKGSET	Total number of set package sets
P#SR	SET RULES	Total number of SET CURRENT RULES SQL statements
P#SS	SET SQLID	Total number of set SQL IDs
P#ST	SET	Total number of sets
P#TL	STMTS	Total number of statements
P#TS		Total number of selects
P#UP	UPDATES	Total number of updates
P#WH	WHENEVER	Total number of whenevers
PACQ	AC	When resources are acquired
PAVS	AVGSIZE	Average size of plan selection processed at bind time
PBBY	BOUND BY	Bound by ID
PBDT	BIND DATE	Bind time
PBDT	BIND TIME	Bind time
PCHSZ	CACHESZ	Cache size in bytes
PCR	CREATOR	Creator ID
PD#AL	ALTER	Total number of alters
PD#CA	CALL	Total number of CALL statements in the DBRMs included in the plan
PD#CL	CLOSE	Total number of closes
PD#CM	COMMIT	Total number of commits
PD#CN	CONNECT	Total number of connects
PD#CR	CREATE	Creates
PD#DC	DECLARE CURSOR	Total number of declare cursors

Filter	Field	Filter on
PD#DL	DELETES	Total number of deletes
PD#DM	DECLARE STATEMENT	Total number of declare statements
PD#DR	DROP	Total number of drops
PD#DS	DESCRIBE	Total number of describes
PD#DT	DECLARE TABLE	Total number of declare tables
PD#EC	EXECUTE	Total number of executes
PD#EX	EXPLAIN	Total number of EXPLAINS
PD#FT	FETCH	Total number of fetches
PD#GR	GRANT	Total number of grants
PD#IN	INSERTS	Total number of inserts
PD#LS	LOCK SHR	Total number of locks shared
PD#LX	LOCK XCL	Total number of locks excluded
PD#OP	OPEN	Total number of opens
PD#PR	PREPARE	Total number of prepares
PD#RE	RELEASE	Total number of releases
PD#RL	ROLLBACK	Total number of rollbacks
PD#RV	REVOKE	Total number of revokes
PD#SC	SET CONNECT	Total number of set connections
PD#SD	SET DEGREE	Total number of set degrees
PD#SE	SELECTS	Total number of selects
PD#SH	SET HOST	Total number of set host variables
PD#SP	SET PKGSET	Total number of set package sets
PD#SR	SET RULES	Total number of SET CURRENT RULES SQL statements in the DBRMs included in the plan
PD#SS	SET SQLID	Total number of set SQL IDs
PD#ST	SET	Total number of sets

Filter	Field	Filter on
PD#TL	STMTS	Total number of statements from DBRMs
PD#TS		Total number of statements
PD#UP	UPDATES	Total number of updates
PD#WH	WHENEVER	Total number of whenevers
PDEGR	DG	Degree
PDEGR	DEGREE	Degree
PDFP	DP	Whether or not plan bound with preparation deferred
PDISC	DI	Whether or not disconnect option used when plan bound
PDISC	DISCONNECT	Whether or not disconnect option used when plan bound
PDYNR	DYNAMICRULES	DYNAMICRULES option used when the plan was bound
PEXPR	CD	Data currency requirement
PEXPR	EXPREDICATE	Data currency requirement
PFRE	PLAN FREED?	Whether or not plan was freed
PGRP	GROUP MEMBER	The DB2 data sharing member name of the DB2 subsystem that performed the most recent BIND.
PISO	IS	Isolation level
PK#AL	ALTER	Total number of alters
PK#CA	CALL	Total number of CALL statements in the packages included in the plan
PK#CL	CLOSE	Total number of closes
РК#СМ	COMMIT	Total number of commits
PK#CN	CONNECT	Total number of connects
PK#CR	CREATE	Total number of creates
	•	

Filter	Field	Filter on
PK#DC	DECLARE CURSORS	Total number of declare cursors
PK#DL	DELETES	Total number of deletes
PK#DM	DECLARE STATEMENT	Total number of declare statements
PK#DR	DROP	Total number of drops
PK#DS	DESCRIBE	Total number of describes
PK#DT	DECLARE TABLE	Total number of declare tables
PK#EC	EXECUTE	Total number of executes
PK#EX	EXPLAIN	Total number of EXPLAINS
PK#FT	FETCH	Total number of fetches
PK#GR	GRANT	Total number of grants
PK#IN	INSERTS	Total number of inserts
PK#LS	LCK SHR	Total number of locks shared
PK#LX	LOCK XCL	Total number of lock excluded
PK#OP	OPEN	Total number of opens
PK#PR	PREPARE	Total number of prepares
PK#RE	RELEASE	Total number of releases
PK#RL	ROLLBACK	Total number of rollbacks
PK#RV	REVOKE	Total number of revokes
PK#SC	SET CONNECT	Total number of set connections
PK#SD	SET DEGREE	Total number of set degrees
PK#SE	SELECTS	Total number of selects
PK#SH	SET HOST	Total number of set host vars
PK#SP	SET PKG SET	Total number of set package sets
PK#SR	SET RULES	Total number of SET CURRENT RULES statements in the packages included in the plan
PK#SS	SET SQLID	Total number of set sqlids
PK#ST	SET	Total number of sets

Plan Connections

Plan Connections sorts

Sort	Field	Sort by
PK#TL	STMTS	Total statements from packages
PK#TS		Total number of selects
PK#UP	UPDATES	Total number of updates
PK#WH	WHENEVER	Total number of whenevers
PLAN	PLAN	Plan name
POPR	OP	Whether or not plan is operative
PPLEN	PLENTRIES	Number of package list entries
PPSZ	PL SIZE	Plan size in bytes
PQLF	QUALIFIER	Qualifier
PRLS	RE	When resources are released
PSQLR	SQ	Plan SQL rules option
PSRV	SERVER	Server
PSYEN	SYSENTRIES	Number of connections
PVLD	VD	Whether or not plan is valid
PVLT	VA	Whether or not validity is deferred until run time
PVRF	VL	Whether or not plan has been verified
PXPL	EX	Whether or not to EXPLAIN at bind
PENA	ENABLE	Enabled indicator
PCNN	CONNECT	Connection, system name
PSYS	SYSTEM	System name

Plan Package List

Plan Package List sorts

Sort	Field	Sort by
PCOL	COLLECTION ID	Location name
PLOC	LOCATION	Location name
PPKG	PACKAGE	Package ID, location name
PSEQ	SEQNO	Sequence number, package ID

Statements

Statements filters

Filter	Field	Filter on
SCHA	СН	Has the statement text been modified by the user?
SCURS	SQL TEXT	Statement cursor name
SDBRM	DBRM/PACKAGE/ PLAN/TABLE NAME	DBRM, package or PDS member name
SEXPL	SQL TEXT	Whether or not the statement is EXPLAINable
SISO	ISOLATION	Isolation level of the statement
SORNO	СН	Original statement number
STEXT	SQL TEXT	Text contained in statement
SSTNO	STMTNO	Statement number
SSTTY	SQL TEXT	Statement type

Tables

Tables sorts

Sort	Field	Sort by
T#DL	DELETES	Number of deletes
T#IN	INSERTS	Number of inserts
T#LS	LOCK SHRS	Number of shared locks
T#LX	LOCK XCLS	Number of excluded locks
T#SE	SELECTS	Number of selects
T#TL	TOTAL STMT	Number of total statements
T#UP	UPDATES	Number of updates
TCR	CREATOR	Table creator, table name
TLOC	LOCATION	Table location, table name
TTBL	NAME	Table name

Tables filters

Filter	Field	Filter on
T#DL	DELETES	Total number of deletes
T#IN	INSERTS	Total number of inserts
T#LS	LOCK SHRS	Total number of locks shared
T#LX	LOCK XCLS	Total number of locks excluded
T#SE	SELECTS	Total number of selects
T#TL	TOTAL STMT	Total number of statements
T#UP	UPDATES	Total number of updates
TCR	CREATOR	Table creator ID
TLOC	LOCATION	Table location
TTBL	NAME	Table name

Introduction

Candle Corporation offers a comprehensive maintenance and support plan to ensure you realize the greatest value possible from your Candle software investments. We have more than 200 technicians worldwide, committed to providing you with prompt resolutions to your support requests.

Customer Support hours of operation are from 5:30 A.M. to 5:00 P.M., Pacific Time. In the event of an after-hours or weekend emergency, Candle's computerized call management system ensures that a technician will return your call within one hour. For customers located outside of North America, after-hours and weekend support is provided by Candle Customer Support locations in the United States.

Electronic Support

Candle provides information and support services using

- Candle's home page at www.candle.com. You can use the Candle Web site to
 - open problem records
 - access maintenance information
 - order products or maintenance
 - access IBM compatibility information
 - download fix packs for distributed products
 - read news and alerts
 - scan a list of scheduled Candle education classes
- Candle Electronic Customer Support (CECS), an electronic customer support facility. You can access this facility through the IBM Global Network. You can use CECS to
 - open problem records
 - search our database for solutions to known problems
 - look for answers to commonly asked questions
 - read news and alerts
 - scan a list of scheduled Candle education classes

Both CECS and the Candle Web site are available 24 hours a day, 7 days per week.

Telephone Support

Our support network consists of product specialists who work with you to solve your problem.

Candle uses an online problem management system to log and track all support requests. Your request is immediately routed to the appropriate technical resource.

When you call to report a problem, please have the following information:

- your Candle personal ID (PID) number
- the release level of the Candle product
- the release level of IBM or other vendor software
- identifying information and dates of recently applied maintenance to your Candle product or IBM product
- a detailed description of the problem (including the error message) and the events preceding the problem
- a description of any unusual events that occurred before the problem

Customer Support Phone Numbers

	Telephone	Fax
North America	(800) 328-1811	
	(310) 535-3636	(310) 727-4204
Europe		· · ·
Belgium/Luxembourg	+32 (0) 3 270 95 60	+32 (0) 3 270 95 41
France	+33 (0) 1 53 61 60 60	+33 (0) 1 53 61 06 16
Germany/Switzerland/ Austria	+49 (0) 89 54 554 333	+49 (0) 89 54 554 170
Italy - Freephone	800 780992	
Netherlands	+31 (0) 30 600 35 50	+31 (0) 30 600 35 10
Scandinavia	+46 (0)8 444 5940	+46 (0)8 623 1855
U.K.	+44 (0)161 437 5224	+44 (0)161 437 5225
(Southern Europe, Middle E	ast and South Africa Agents call U.	K.)
Asia Pacific - English Hub		+61 2 9954 1818
Australia	+61 2 8912 9898	
Hong Kong	800 908 457	
India	+61 2 8912 9898	
Indonesia	0018 03061 2061	
Malaysia	1800 803 459	
New Zealand	0800 449 596	
Philippines	1800 1612 0096	
Singapore	800 616 2075	
Thailand	0018 00612 1045	
Asia Pacific - Japanese Hub	+81 3 3595 7150	+81 3 3595 7110
Asia Pacific - Korean Hub	+82 2 552 8744	+82 2 552 8746
Asia Pacific - Mandarin Hub	+88 62 2739 3223	+88 62 2378 5993
Asia Pacific e-mail address	: ap_support@candle.com	· · ·

When your local support office is unavailable, you can contact Candle's North America support center. If USADirect® service is available in your country, use the 800 telephone number. If USADirect service is not available, ask your international operator for assistance in calling Candle's local (310) number.

Incident Documentation

You may be asked to send incident documentation to the Candle Customer Support Center. On the outside of all packages you send, please write the incident number given to you by the Customer Support representative.

Send tapes containing the incident information to the following address, unless directed otherwise by your Customer Support representative:

Candle Customer Support Candle Support Center, *Incident number* 201 North Douglas Street El Segundo, CA 90245

Send all other relevant documentation, such as diskettes or paper documentation, to the address provided by your Customer Support representative.

Ensuring Your Satisfaction with Customer Support

Candle Customer Support is committed to achieving high customer satisfaction ratings in all areas. These include

- connecting you to a support representative promptly
- providing you with the appropriate fixes
- answering support questions
- filling your shipping orders
- supplying documentation

If you have a concern that has not been resolved to your satisfaction, you can open a complaint ticket. All tickets are logged and tracked to ensure responsiveness and closure. Using the ticket information, a manager will contact you promptly to resolve your problem.

Index

Special Characters

!DB/EXPLAIN Configuration Information
!DB/Tools DB2 Configuration Information panel
!DB/Tools Global Configuration Information
panel
!DB/Tools Profile Dataset List panel
[]
 documentation conventions 12
{ }
 documentation conventions 12
GNRS field
 on the Extract History panel 150
%
 documentation conventions 11

Α

AC (Acquire) field on the Plans panel 193 ACC DEG field on the EXPLAIN Compare panel 105 on the EXPLAIN panel 138 ACC PID field on the EXPLAIN Compare panel 105 on the EXPLAIN panel 138 ACCESS (Access) field on the EXPLAIN Compare panel 138 ACCESS field on the EXPLAIN panel 105 access path inaccurate 56, 290 ACCESS PATH field on the EXPLAIN panel 105 access path information 95 access path summary data 95 Accounting Reports (OMEGAMON II for DB2) 187 ACCS (Access) field on the EXPLAIN Compare panel 138 ACOUIRE field 34 on the BIND/REBIND Plan panel 34 on the EXPLAIN panel 105 on the Plan BIND Overrides panel 342

ACQUIRE field (continued) on the Plans panel 193 ACTION field on the Package Bind Overrides panel 330 on the Plan Bind Overrides panel 342 ACTION on Package field on the BIND/REBIND Package panel 26 ACTION ON PLAN field 34 on the BIND/REBIND Plan panel 34 ADDITIONAL datasets? field on the Online Menu panel 161 ADG (Number of Access Degrees) field on the Statement Costs panel 52 Administration Menu 21 Adobe portable document format 9 ALL field on the Libraries panel 158 ALL SOL field on the SQL Formats for KTEXPL panel 380 ALTER field from DBRMs 193 from packages 193 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 193 ALTER SQL TO AVOID -117 field on the EXPLAIN Defaults panel 304 ALTER SQL TO AVOID -417/-418 field on the EXPLAIN Defaults panel 304 ALTERED field on the EXPLAIN panel 105 ALTERTS field on the Estimator panel 71 on the Whatif panel 250 AMOUNT OF DATA TO GATHER field on the Estimator panel 71 on the Whatif panel 250 AMOUNT OF STATISTICS TO GATHER field on the EXPLAIN Defaults panel 304 AND/OR on the Selection Masking panel 370 appendixes 385 application plans on the PLANS panel 200

Application Trace Facility (OMEGAMON II for DB2) 187 AUDIT field on the Estimator panel 71 on the EXPLAIN panel 106 on the Whatif panel 250 AVERAGE SIZE field on the EXPLAIN panel 106 on the Packages panel 172 AVERAGE STMT COST field on the Packages panel 172 on the Statement Costs panel 52 AVG STMT COST field on the DBRMs panel 60 AVGSIZE field on the Plans panel 193 AVSIZE field on the EXPLAIN panel 106 on the Packages panel 172

В

batch processing caution when using CEXPL 48 CEXPL, caution when using 48 comparing explains using CEXPL 48 use of the CEXPL command print implied in batch 48 BATCH RC field on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 BATCH WARNING RETURN CODE on the Miscellaneous Defaults panel 323 BIND COMPARE ALL PACKAGES **INCLUDED IN PLAN?** field on the BIND Compare Options panel 278 BIND Compare Options 277 BIND COPY field on the Package BIND Overrides panel 330 BIND data 95

BIND DATE field on the EXPLAIN panel 106 on the Plans panel 193 **BIND DATE/TIME field** on the Packages panel 172 BIND OPTIONS FOR COMPARE field on the BIND Compare Options panel 278 BIND or REBIND field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 BIND TIME field on the EXPLAIN panel 106 on the Plans panel 193 BIND/REBIND Package panel 23 BIND/REBIND Plan panel 29 BLANK LINE AFTER STATEMENTS field on the Miscellaneous Defaults panel 323 BookManager 14 BOUND BY field on the EXPLAIN panel 106 on the Plans panel 193 BOUND field on the EXPLAIN panel 106 **BPOOL** field on the Estimator panel 71 on the EXPLAIN panel 106 on the Whatif panel 250 Build Tuning Parameters panel 281 **BYPASS STATEMENTS DISPLAY?** field on the SQL Defaults panel 378 bytes, cache 193 bytes, plan section See AVGSIZE field

С

C H field on the EXPLAIN panel 106 Cache Size field 34 on the BIND/REBIND Plan panel 34 on the EXPLAIN panel 106 on the Plan BIND Overrides panel 342 on the Plans panel 193 CACHESZ (CACHE SIZE) field 34, 342 on the Plans panel 193 CALL field on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 193 Candle Electronic Customer Support (CECS) 451 CARD field on the Estimator panel 71 on the EXPLAIN panel 106, 107 on the Whatif panel 250 CARDP field on the Estimator panel 71 on the Whatif panel 250 CARDP field (TSTP) on the EXPLAIN panel 107 catalog catalog prefix field 245 prefix of real catalog 325 procedure for update when using shadow 245 CATALOG EXTRACT dataset BUFFERS field on the VSAM Tuning Parameters panel 383 CATALOG EXTRACT dataset INDEX **BUFFERS** field on the VSAM Tuning Parameters panel 383 CATALOG field on the **!DB/EXPLAIN** Configuration Information panel 289 CATALOG OWNER field on the Extract History panel 150 catalog prefix of real catalog 325 catalog prefix field of real catalog 245 on the !DB/Tools DB2 Configuration Information panel 291 catalog, real prefix 292 catalog, shadow vs. real catalog 245, 325 vs. real catalog prefix 292 CD field on the Plans panel 194 CEXPL compared to IMPACT 47 **CEXPL** command print implied in batch 48 use in batch 48 CH (Charset) field on the DBRMs panel 60 on the Packages panel 172 Changed statement identifier on the EXPLAIN panel 107 on the Statements panel 217

CHARACTER TO USE FOR BOX CORNERS field on the Miscellaneous Defaults panel 323 CHARACTER TO USE FOR BOX SIDES field on the Miscellaneous Defaults panel 323 CHARACTER TO USE FOR BOX TOPS field on the Miscellaneous Defaults panel 323 Charset field on the DBRMs panel 60 on the EXPLAIN panel 107 on the Packages panel 172 CHECKFLAG field on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CHECKS field on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CHILD field on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CKFLAG field on the Estimator panel 72 on the Whatif panel 251 CKRID field on the Estimator panel 72 on the EXPLAIN panel 108 on the Whatif panel 251 CLIST Library on the **!DB/Tools** Global Configuration Information panel 294 **CLOSE** field from DBRMs 194 from packages 194 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 194 **CLOSERULE** field on the Estimator panel 72, 73 on the EXPLAIN panel 108 on the Whatif panel 251 **CLUSTERED** field on the Estimator panel 73 on the EXPLAIN panel 108 on the Whatif panel 252 **CLUSTERING** field on the Estimator panel 73 on the EXPLAIN panel 108

CLUSTERING field (continued) on the Whatif panel 252 CLUSTERTYPE field on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 CLUSTRATIO field on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 CLUSTRATIO (IXP) field on the EXPLAIN panel 109 CNTL dataset field on the !DB/Tools Global Configuration Information panel 294 CO (Comma) field on the DBRMs panel 60 on the Packages panel 172 COLCARD on the Table Columns panel 230 COLCOUNT field on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 COLLECTION field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the Collections panel 40 on the EXPLAIN Compare panel 138 on the EXPLAIN panel 109 on the Package BIND Overrides panel 330 on the Packages panel 172 COLLECTION ID field 186 on the BIND/REBIND Package panel 26 on the EXPLAIN panel 109 on the Plan Package List panel 186 COLLECTION ID PREFIX field on the **!DB/Tools DB2** Configuration Information panel 291 **COLLECTION SPECIFICATION field** on the Package Bind Overrides panel 330 on the Plan Bind Overrides panel 342 COLLECTION TO USE FOR PACKAGE BIND COMPARE field on the BIND Compare Options panel 278 Collections panel 39 COLLID field on the Verification panel 244

COLNO field on the Table Columns panel 230 colons in host variables 311 COLTYPE on the Table Columns panel 230 Column Distribution Statistics 42 Column Distribution Statistics panel 42 **Column Distribution Statistics panels** KTE3CDSE 41 KTEPCDIS 41 COLUMN= on the Column Distribution Statistics panel 43 COLUMNN NAME field on the Keys panel 154 COLUMNN NO field on the Keys panel 154 COLUMNN SEQ field on the Keys panel 154 Comma field on the DBRMs panel 60 on the EXPLAIN panel 109 on the Packages panel 172 commands CEXPL vs. IMPACT 47 documentation conventions 11 matrix showing availability 387 COMMENT BEG DEL field on the SQL Formats for KTEXPL panel 380 COMMENT COLUMN field on the SQL Formats for KTEXPL panel 380 COMMENT END DEL field on the SQL Formats for KTEXPL panel 380 COMMIT EXECUTED SQL STATEMENTS field on the SQL Defaults panel 378 COMMIT field from DBRMs 194 from Packages 194 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 194 COMPARE DBRM NAMES field on the BIND Compare Options panel 278 on the Compare Options panel 285 compare history and use of CEXPL in batch 48 print implied in batch 48

Compare History panel 45 Compare Options 284 COMPARE STATEMENT NUMBERS field on the BIND Compare Options panel 278 on the Compare Options panel 285 **COMPRESS** field on the Estimator panel 74 on the Whatif panel 252 COMPRESS field (TSTP) on the EXPLAIN panel 109 CONCATENATION CHARACTER field on the EXPLAIN/SQL Defaults panel 311 CONNECT field 165 from DBRMs 194 from Packages 194 on the DBRMs panel 60 on the Package Connections panel 165 on the Packages panel 172 on the Plan Connections panel 184 on the Plans panel 194 CONNECTION field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 CONSIDER PACKAGES SAME WHEN field on the Miscellaneous Defaults panel 323 CONT. COLUMN field on the SQL Formats for EXPL panel 380 CONTOKEN field on the DBRMs panel 60 on the EXPLAIN panel 109 on the Packages panel 173 conventions, documentation 10 braces 11 brackets 11 data set names 11 identifiers 11 italics 11 qualifiers 11 related to figures 11 related to panels 11 **CONVERT QUOTES field** on the EXPLAIN/SQL Defaults panel 311 converting a DBRM to a packages 56 CORR= field on the EXPLAIN Compare panel 138 on the EXPLAIN panel 109 Cost field discrepancy identifier on the EXPLAIN panel 110

Costs panel 49 COSTS1 field on the Data Formats panel 287 COSTS2 field on the Data Formats panel 287 COUNT field on the Data Formats panel 287 on the Exceptions panel 94 on the Plans panel 195 **CREATE BATCH JCL?** field on the Online Menu panel 161 **CREATE** field from DBRMs 195 from Packages 195 on the DBRMs panel 60 on the Packages panel 173 on the Plans panel 195 **CREATEBY** field on the Estimator panel 74 on the EXPLAIN panel 110 on the Whatif panel 252, 253 CREATED field on the EXPLAIN panel 110 on the Packages panel 173 **CREATETS** field on the Estimator panel 74 on the Whatif panel 253 CREATOR field 241 from packages 110 from plans 110 on the Estimator panel 74 on the EXPLAIN panel 110 on the Packages panel 173 on the Plans panel 195 on the Tables panel 241 on the Whatif panel 253 CREATOR OPTION field on the Set Defaults panel 375 CURRENT DEGREE field on the Statement Summary panel 217 CURRENTDATA field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the Package BIND Overrides panel 331 on the Plan BIND Overrides panel 342 **CURRENTSERVER** on the Plan BIND Overrides panel 343 CURRENTSERVER field 34 on the BIND/REBIND Plan panel 34

Index

customer support 451 customization 275 customization and housekeeping panels 273

D

D#TS field on the DBRMs panel 60 DASH IN HOST field on the SQL Formats for KTEXPL panel 380 Data Formats panel 286 DATA TYPE field on the Host Variables panel 217 DATAC field on the Estimator panel 74 on the Whatif panel 253 DATACAPTURE (TBL) field on the EXPLAIN panel 110 dataset CONTAINING DSN1COPY field on the !DB/Tools DB2 Configuration Information panel 291 dataset CONTAINING DSNHDECP field on the !DB/Tools DB2 Configuration Information panel 291 dataset CONTAINING DSNTIAD field on the **!DB/Tools DB2** Configuration Information panel 291 dataset CONTAINING DSNTIAUL field on the !DB/Tools DB2 Configuration Information panel 291 dataset CONTAINING DSNZPARM field on the **!DB/Tools DB2** Configuration Information panel 292 Dataset Name field on the **!DB/Tools** Profile Dataset List panel 298 DATE field on the Data Formats panel 287 DB2 DSNEXIT dataset field on the !DB/Tools DB2 Configuration Information panel 292 DB2 DSNLOAD dataset field on the !DB/Tools DB2 Configuration Information panel 292 DB2 exits using host variables in 311 using synonyms in 311

DB2 Extract ID on the Online Menu panel 161 DB2 LOCATION NAME field on the **!DB/Tools DB2** Configuration Information panel 292 DB2 RUNLIB dataset field on the **!DB/Tools DB2** Configuration Information panel 292 DB2 SSID field 296 on the !DB/Tools Global Information-DB2 Subsystem Name Table panel 296 DB2 SUBSYSTEM ID field on the !DB/Tools DB2 Configuration Information panel 292 DB2 VERSION field on the !DB/Tools DB2 Configuration Information panel 292 DB2VRM field on the EXPLAIN History panel 147 **!DB/EXPLAIN** Configuration Information panel 288 **!DB/EXPLAIN** Configuration Information 288 KTEPHOAD 288 DBID field on the Estimator panel 74 on the EXPLAIN panel 110 on the Whatif panel 253 DBRM field on the DBRMs panel 60 on the EXPLAIN Compare panel 138 on the Verification panel 244 DBRM Information panel 59 DBRM Libary field on the **!DB/Tools** Global Configuration Information panel 294 DBRM Member field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 DBRM Member Names panel 31 DBRM NAME field on the Statements panel 217 DBRM/PACKAGE field on the Statement Costs panel 52 DBRM/PACKAGE NAME field on the EXPLAIN panel 110 DBRMs number in plan 195 number of ALTERs in 193 number of CLOSE statements in 194

DBRMs (continued) number of COMMITs in 194 number of CONNECTs in 194 number of CREATEs in 195 number of DECLARE CURSORs in 195 number of DECLARE STATEMENTs in 195 number of DECLARE TABLEs in 196 number of DELETEs in 196 number of DESCRIBEs in 196 number of DROPs in 197 number of EXECUTEs in 198 number of EXPLAINs in 198 number of FETCHes in 198 number of GRANTs in 199 number of INSERTS in 199 number of LCK SHRs in 199 number of LCK XCLs in 200 number of OPENs in 200 number of PREPAREs in 201 number of RELEASEs in 201 number of REVOKEs in 201 number of ROLLBACKs in 202 number of SELECTS in 202 number of SETs in 202 number of STMTS in 204 number of UPDATES in 204 number of WHENEVERs in 205problems with pre-V130 (1.3) precompiler 56, 290 DBRMS field on the Libraries panel 158 DBRMs panel 56 DBRMs, converting to package 56 DB/Tools Database field on the **!DB/Tools DB2** Configuration Information panel 291, 292 **!DB/Tools DB2 Configuration Information** panel 290 **!DB/Tools DB2 Configuration** Information 290 KTBPHODB 290 **!DB/Tools Global Configuration Information** panel 293 **!DB/Tools Global Configuration** Information 293 KTBPHOGL 293 **!DB/Tools Global Information—DB2 Subsystem** Name Table 295 **!DB/Tools Global Information—DB2** Subsystem Name Table 295

1DB/Tools Global Information—DB2 Subsystem Name Table (continued) KTCPDBDS 295 !DB/Tools Global Information—DB2 Subsystem Name Table panel 295 DB/Tools Profil e Dataset List panel 297 !DB/Tools Profile Dataset List 297 KTCPPRF0 297 IDB/Tools Profile Dataset List panel 297 DCL CSR field on the Plans panel 195 DE (Dec31) field on the DBRMs panel 61 on the Packages panel 173 DEALLOCATE PLAN TABLE EXTRACT DATASET AFTER EACH USE field on the VSAM Tuning Parameters panel 383 DEALLOCATE STATEMENTS EXTRACT DATASET AFTER EACH USE field on the VSAM Tuning Parameters panel 383 Dec31 field on the DBRMs panel 61 on the EXPLAIN panel 111 on the Packages panel 173 DECIMAL POINT OPTION FOR KTEXPL field on the SQL Defaults panel 378 DECLARE CURSOR field from DBRMs 195 from Packages 195 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 195 DECLARE STATEMENT field from DBRMs 195 from Packages 195 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 195 DECLARE TABLE field from DBRMs 196 from Packages 196 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 196 DEFAULT on the Table Columns panel 230 DEFAULT REMOTE LOCATION field on the Set Defaults panel 375

DEFERPREP field 35 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 35 on the EXPLAIN panel 111, 173 on the Package BIND Overrides panel 331 on the Plan Bind Overrides panel 343 **DEFERPREPARE** field on the EXPLAIN panel 111 DEFER(PREPARE) field on the Packages panel 174 on the Plans panel 197 DEFERPREPARE(Plans) field on the EXPLAIN panel 112 DEGREE field 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the EXPLAIN header 111 on the EXPLAIN panel 111 on the Package BIND Overrides panel 331 on the Packages panel 173 on the Plan BIND Overrides panel 343 on the Plans panel 196 DELETES field 241 from DBRMs 196 from Packages 196 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 196 on the Tables panel 241 **DESCRIBE** field from DBRMs 196 from Packages 196 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 196 DESCRIPTION field 296 on the !DB/Tools Global Information-DB2 Subsystem Name Table panel 296 on the Extract History panel 150 DG field on the Packages panel 174 on the Plans panel 196 DI field on the Plans panel 197 DISCONNECT field 35 on the BIND/REBIND Plan panel 35 on the EXPLAIN panel 111 on the Plan BIND Overrides Panel 343 on the Plans panel 197

DISCONNECT FROM DB2 field on the EXPLAIN/SOL Defaults panel 311 display terminology: vs. panel 12 DISPLAY BIND COMPARE **CONFIRMATAION PANEL?** on the BIND Compare Options panel 278 DISPLAY BIND TYPE RECOMMENDATIONS field on the Recommendations Panel 0 349 DISPLAY BUILD STATUS PANELS field on the Extract Processing Defaults panel 313 DISPLAY EXCEPTION OPTIONS PANEL? field on the Exception Options panel 300 DISPLAY EXCEPTION TYPE **RECOMMENDATIONS field** 349 on the Recommendations Panel 0 349 DISPLAY KTEXPL SOURCE IN HEADER field on the SQL Defaults panel 378 **DISPLAY MASK PANEL?** field on the Selection Masking panel 370 **DISPLAY MASKS?** field on the Primary Menu panel 210 DISPLAY OBJECT TYPE **RECOMMENDATIONS field** 349 on the Recommendations Panel 0 349 DISPLAY OVERRIDE PANEL FOR COMMAND? field on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR COMPARE? field on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR CONVERT? field on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR SELECT? field on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 **DISPLAY PANEL field** on the Output Options Defaults panel 327 DISPLAY PARTIAL PLAN EXPLAIN field on the EXPLAIN Defaults panel 304 DISPLAY SOL STATEMENT TYPE **RECOMMENDATIONS** field on the Recommendations Panel 0 349

DISPLAY SQLCODE or SQLSTATE field on the EXPLAIN/SQL Defaults panel 311 documentation conventions 10 % 11 braces 11 brackets 11 data set names 11 for commands 11 function keys 11 identifiers 11 italics 11 panel vs. display 12 qualifiers 11 related to figures 11 related to panels 11 revision bars 11 terminology 12 documentation set 13 documentation, online 14 DP (DeferPrep) field on the Packages panel 174 on the Plans panel 197 DR field on the Packages panel 174, 197 DROP field from DBRMs 197

from Packages 197 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 197 **DSETPASS** field on the Estimator panel 74 on the EXPLAIN panel 112 on the Whatif panel 253 DSNTIAD PLAN NAME field on the !DB/Tools DB2 Configuration Information panel 292 DSNTIAUL PLAN NAME field on the !DB/Tools DB2 Configuration Information panel 292 DSNZPARM MEMBER NAME field on the !DB/Tools DB2 Configuration Information panel 292

DYNAMICRULES on the BIND/REBIND Plan panel 35 on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DYNAMICRULES field on the BIND/REBIND Package panel 26 on the Packages panel 175 DYNAMICRULES field (continued) on the Plans panel 197 DYNAMICRULES= field on the EXPLAIN panel 112

Ε

E M field on the EXPLAIN panel 112 EDPROC field on the Estimator panel 74 on the EXPLAIN panel 112 on the Whatif panel 253 electronic customer support 451 EM (EXPLAIN METHOD) field on the EXPLAIN Compare panel 138 ENABLE field 165 on the Package Connections panel 165 on the Plan Connections panel 184 ENABLED? field 35 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 35 ENABLE/DISABLE CONNECTIONS? field 35 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 35 ENQUEUE ON EXTRACT DATASETS field on the VSAM Tuning Parameters panel 383 ERASERULE field on the Estimator panel 74, 75 on the EXPLAIN panel 113 on the Whatif panel 253 ERROR field on the EXPLAIN History panel 147 ESTAE FLAG field on the Online Menu panel 161 ESTIMATE ADJUSTER field on the Build Tuning Parameters panel 282 Estimator panel 67 EX (EXPLAIN) field on the Packages panel 175 on the Plans panel 198 EXCEPTION DESCRIPTION field on the Exceptions panel 94 Exception Options panel 299 Exceptions panel 93 EXECUTE BIND COMPARE GENERATE **OPTION?** field on the BIND Compare Options panel 278

EXECUTE BIND/REBIND FOR DIFFERENT PATHS? field on the BIND Compare Options panel 278 EXECUTE BIND/REBIND FOR SAME PATHS? field on the BIND Compare Options panel 279 **EXECUTE** field from DBRMs 198 from Packages 198 on the DBRMs panel 61 on the Packages panel 175 on the Plans panel 197, 198 exit to DB2 using host variables in 311 using synonyms in 311 **EXPLAIN** Format 0 definition 95 EXPLAIN Compare panel 134 **EXPLAIN DATE/TIME field** on the DBRMs panel 61 on the EXPLAIN Compare panel 138 on the EXPLAIN History panel 147 on the Packages panel 175 EXPLAIN Defaults panel 303 **EXPLAIN DIFFERENCES field** on the EXPLAIN Compare panel 138 **EXPLAIN** Display Tuning Parameters KTEPHOVD 307 EXPLAIN field 35 from DBRMs 198 from packages 113, 198 from plans 113 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 35 on the DBRMs panel 61 on the EXPLAIN panel 113 on the Package Bind Overrides panel 331 on the Packages panel 175 on the Plan Bind Overrides panel 343 on the Plans panel 198 **EXPLAIN History Delete Confirmation** panel 146 EXPLAIN History panel 144 EXPLAIN METHOD field on the EXPLAIN Compare panel 138 EXPLAIN panel 95 EXPLAIN plan table data 95 EXPLAIN TIMESTAMP field on the EXPLAIN panel 113 on the Statement Costs panel 52

EXPLAIN/SQL Defaults panel 310 EXPREDICATE field on the EXPLAIN panel 113 on the Plans panel 198 EXTRACT DATE/TIME field on the Extract History panel 150 EXTRACT DESCRIPTION field on the !DB/Tools DB2 Configuration Information panel 292 EXTRACT field on the **!DB/EXPLAIN** Configuration Information panel 289 Extract History panel 149 Extract ID on the Primary Menu panel 210 EXTRACT ID field 296 on the !DB/Tools DB2 Configuration Information panel 292 on the !DB/Tools Global Information-DB2 Subsystem Name Table panel 296 Extract Processing Defaults panel 312 EXTRACT SORT PARAMETERS field on the **!DB/EXPLAIN** Configuration Information panel 289 Extract Update panel 151

F

FARINDREF field on the Estimator panel 75 on the EXPLAIN panel 113 on the Whatif panel 253 FAROFFPOS field on the Estimator panel 75 on the EXPLAIN panel 113 on the Whatif panel 254 features changes 15 new 15 FETCH field from DBRMs 198 from Packages 198 on the DBRMs panel 61 on the Packages panel 175 on the Plans panel 198 fields # GNRS on the Extract History panel 150 AC (Acquire) on the Plans panel 193

fields (continued) ACC DEG 138 on the EXPLAIN Compare panel 105 on the EXPLAIN panel 138 ACC PID 138 on the EXPLAIN Compare panel 105 on the EXPLAIN panel 138 ACCESS on the EXPLAIN panel 105 ACCESS (Access) 138 on the EXPLAIN Compare panel 138 ACCESS PATH on the EXPLAIN panel 105 ACCS (Access) 138 on the EXPLAIN Compare panel 138 ACQUIRE 34 on the BIND/REBIND Plan panel 34 on the EXPLAIN panel 105 on the Plan BIND Overrides panel 342 on the Plans panel 193 ACTION on the Package Bind Overrides panel 330 on the Plan Bind Overrides panel 342 ACTION on Package on the BIND/REBIND Package panel 26 ACTION ON PLAN 34 on the BIND/REBIND Plan panel - 34 ADDITIONAL datasets? on the Online Menu panel 161 ADG (Number of Access Degrees) on the Statement Costs panel 52 ALL on the Libraries panel 158 ALL SQL on the SQL Formats for KTEXPL panel 380 ALTER 193 from DBRMs 193 from packages 193 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 193 ALTER SQL TO AVOID -117 on the EXPLAIN Defaults panel 304 ALTER SOL TO AVOID -417/-418 on the EXPLAIN Defaults panel 304 ALTERED on the EXPLAIN panel 105 ALTERTS on the Estimator panel 71 on the Whatif panel 250

fields (continued) AMOUNT OF DATA TO GATHER on the Estimator panel 71 on the Whatif panel 250 AMOUNT OF STATISTICS TO GATHER on the EXPLAIN Defaults panel 304 AND/OR on the Selection Masking panel 370 AUDIT on the Estimator panel 71 on the EXPLAIN panel 106 on the Whatif panel 250 AVERAGE SIZE on the EXPLAIN panel 106 on the Packages panel 172 AVERAGE STATEMENT COST on the Packages panel 172 AVERAGE STMT COST on the Packages panel 172 on the Statement Costs panel 52 AVG STMT COST on the DBRMs panel 60 AVGSIZE on the Plans panel 193 AVSIZE on the EXPLAIN panel 106 on the Packages panel 172 BATCH RC 351 on the Recommendations Panel 1 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 359 on the Recommendations Panel 5 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 BATCH WARNING RETURN CODE on the Miscellaneous Defaults panel 323 BIND COMPARE ALL PACKAGES **INCLUDED IN PLAN?** on the BIND Compare Options panel 278 BIND COPY on the Package BIND Overrides panel 330 BIND DATE on the EXPLAIN panel 106 on the Plans panel 193 BIND DATE/TIME 172 BIND OPTIONS FOR COMPARE on the BIND Compare Options panel 278

fields (continued) BIND or REBIND 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 BIND TIME on the EXPLAIN panel 106 on the Plans panel 193 **BLANK LINE AFTER STATEMENTS** on the Miscellaneous Defaults panel 323 BOUND on the EXPLAIN panel 106 on the Packages panel 172 BOUND BY on the EXPLAIN panel 106 on the Plans panel 193 **BPOOL** on the Estimator panel 71 on the EXPLAIN panel 106 on the Whatif panel 250 BYPASS STATEMENTS DISPLAY? on the SQL Defaults panel 378 СН on the EXPLAIN panel 106 Cache Size 34 on the BIND/REBIND Plan panel 34 on the EXPLAIN panel 106 on the Plan BIND Overrides panel 342 on the Plans panel 193 CACHESZ (Cache Size) 34 on the BIND/REBIND Plan panel 34 on the Plans panel 193 CALL on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 193 CARD on the Estimator panel 71 on the EXPLAIN panel 106, 107 on the Whatif panel 250 CARDP on the Estimator panel 71 on the Whatif panel 250 CARDP (TSTP) on the EXPLAIN panel 107 CATALOG on the **!DB/EXPLAIN** Configuration Information panel 289 CATALOG EXTRACT dataset BUFFERS on the VSAM Tuning Parameters panel 383

fields (continued) CATALOG EXTRACT dataset INDEX BUFFERS on the VSAM Tuning Parameters panel 383 CATALOG OWNER on the Extract History panel 150 CATALOG PREFIX on the **!DB/Tools DB2** Configuration Information panel 291 CD on the Plans panel 194 CH (Charset) on the DBRMs panel 60 on the Packages panel 172 Changed statement identifier on the EXPLAIN panel 107 on the Statements panel 217 CHARACTER TO USE FOR BOX CORNERS on the Miscellaneous Defaults panel 323 CHARACTER TO USE FOR BOX SIDES on the Miscellaneous Defaults panel 323 CHARACTER TO USE FOR BOX TOPS on the Miscellaneous Defaults panel 323 Charset on the DBRMs panel 60 on the EXPLAIN panel 107 on the Packages panel 172 CHECKFLAG on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CHECKS on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CHILD on the Estimator panel 72 on the EXPLAIN panel 107 on the Whatif panel 251 CKFLAG on the Estimator panel 72 on the Whatif panel 251 CKRID on the Estimator panel 72 on the EXPLAIN panel 108 on the Whatif panel 251 CLIST Library 294 on the **!DB/Tools** Global Configuration Information panel 294

fields (continued) CLOSE from DBRMs 194 from packages 194 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 194 **CLOSERULE** on the Estimator panel 72, 73 on the EXPLAIN panel 108 on the Whatif panel 251 **CLUSTERED** on the Estimator panel 73 on the EXPLAIN panel 108 on the Whatif panel 252 **CLUSTERING** on the Estimator panel 73 on the EXPLAIN panel 108 on the Whatif panel 252 **CLUSTERTYPE** on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 **CLUSTRATIO** on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 CLUSTRATIO (IPX) on the EXPLAIN panel 109 CNTL dataset 294 on the !DB/Tools Global Configuration Information panel 294 CO (Comma) on the DBRMs panel 60 on the Packages panel 172 COLCARD on the Table Columns panel 230 COLCOUNT on the Estimator panel 73 on the EXPLAIN panel 109 on the Whatif panel 252 COLLECTION 34, 40, 138 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the Collections panel 40 on the EXPLAIN Compare panel 138 on the EXPLAIN panel 109 on the Package BIND Overrides panel 330 on the Packages panel 172 COLLECTION ID 26 on the BIND/REBIND Package panel 26

fields (continued) **COLLECTION ID** (continued) on the EXPLAIN panel 109 on the Plan Package List panel 186 COLLECTION ID PREFIX on the **!DB/Tools DB2** Configuration Information panel 291 COLLECTION SPECIFICATION on the Package Bind Overrides panel 330 on the Plan Bind Overrides panel 342 COLLECTION TO USE FOR PACKAGE **BIND COMPARE** on the BIND Compare Options panel 278 COLLID 244 on the Verification panel 244 COLNO on the Table Columns panel 230 COLTYPE on the Table Columns panel 230 COLUMN NAME 154 on the Keys panel 154 COLUMN NO 154 on the Keys panel 154 COLUMN SEQ 154 on the Keys panel 154 COLUMN= on the Column Distribution Statistics panel 43 Comma on the DBRMs panel 60 on the EXPLAIN panel 109 on the Packages panel 172 COMMENT BEG DEL on the SOL Formats for KTEXPL panel 380 COMMENT COLUMN on the SQL Formats for KTEXPL panel 380 COMMENT END DEL on the SQL Formats for KTEXPL panel 380 COMMIT from DBRMs 194 from Packages 194 on the DBRMs panel 60 on the Packages panel 172 on the Plans panel 194 COMMIT EXECUTED SQL STATEMENTS on the SQL Defaults panel 378 COMPARE DBRM NAMES on the BIND Compare Options panel 278 fields (continued) COMPARE DBRM NAMES (continued) on the Compare Options panel 285 COMPARE STATEMENT NUMBERS on the BIND Compare Options panel 278 on the Compare Options panel 285 COMPRESS on the Estimator panel 74 on the Whatif panel 252 COMPRESS (TSTP) on the EXPLAIN panel 109 CONCATENATION CHARACTER on the EXPLAIN/SQL Defaults panel 311 CONNECT from DBRMs 194 from Packages 194 on the DBRMs panel 60 on the Package Connections panel 165 on the Packages panel 172 on the Plan Connections panel 184 on the Plans panel 194 CONNECTION 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 CONSIDER PACKAGES SAME WHEN on the Miscellaneous Defaults panel 323 CONT. COLUMN on the SQL Formats for EXPL panel 380 CONTOKEN on the DBRMs panel 60 on the EXPLAIN panel 109 on the Packages panel 173 CONVERT QUOTES on the EXPLAIN/SQL Defaults panel 311 CORR= on the EXPLAIN Compare panel 138 on the EXPLAIN panel 109 Cost field discrepancy identifier on the EXPLAIN panel 110 COSTS1 on the Data Formats panel 287 COSTS2 on the Data Formats panel 287 COUNT on the Data Formats panel 287 on the Exceptions panel 94 on the Plans panel 195 CREATE from DBRMs 195 from Packages 195 on the DBRMs panel 60

fields (continued) CREATE (continued) on the Packages panel 173 on the Plans panel 195 CREATE BATCH JCL? on the Online Menu panel 161 CREATEBY on the Estimator panel 74 on the EXPLAIN panel 110 on the Whatif panel 252, 253 CREATED on the EXPLAIN panel 110 on the Packages panel 173 CREATETS on the Estimator panel 74 on the Whatif panel 253 CREATOR from packages 110 from plans 110 on the Estimator panel 74 on the EXPLAIN panel 110 on the Packages panel 173 on the Plans panel 195 on the Tables panel 241 on the Whatif panel 253 CREATOR OPTION on the Set Defaults panel 375 CURRENT DEGREE 217 on the Statement Summary panel 217 CURRENTDATA 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the Package BIND Overrides panel 331 on the Plan BIND Overrides panel 342 CURRENTSERVER 34 on the BIND/REBIND Plan panel 34 on the Plan BIND Overrides panel 343 D#TS on the DBRMs panel 60 DASH IN HOST on the SQL Formats for KTEXPL panel 380 DATA TYPE 217 on the Host Variables panel 217 DATAC on the Estimator panel 74 DATACAPTURE on the Whatif panel 253 dataset CONTAINING DSN1COPY on the !DB/Tools DB2 Configuration Information panel 291

fields (continued) dataset CONTAINING DSNHDECP on the !DB/Tools DB2 Configuration Information panel 291 dataset CONTAINING DSNTIAD on the **!DB/Tools DB2** Configuration Information panel 291 dataset CONTAINING DSNTIAUL on the **!DB/Tools DB2** Configuration Information panel 291 dataset CONTAINING DSNZPARM on the !DB/Tools DB2 Configuration Information panel 292 Dataset Name 298 on the **!DB/Tools** Profile Dataset List panel 298 DATE on the Data Formats panel 287 DB@ DSNEXIT dataset on the !DB/Tools DB2 Configuration Information panel 292 DB2 DSNLOAD dataset on the **!DB/Tools DB2** Configuration Information panel 292 DB2 Extract ID on the Online Menu panel 161 DB2 LOCATION NAME on the !DB/Tools DB2 Configuration Information panel 292 DB2 RUNLIB dataset on the **!DB/Tools DB2** Configuration Information panel 292 DB2 SSID 296 on the !DB/Tools Global Information-DB2 Subsystem Name Table panel 296 DB2 SUBSYSTEM ID on the **!DB/Tools DB2** Configuration Information panel 292 **DB2 VERSION** on the **!DB/Tools DB2** Configuration Information panel 292 DB2VRM on the EXPLAIN History panel 147 DBID on the Estimator panel 74 on the EXPLAIN panel 110 on the Whatif panel 253 DBRM 138, 244 on the DBRMs panel 60 on the EXPLAIN Compare panel 138 on the Verification panel 244

fields (continued) 294 DBRM Library on the **!DB/Tools** Global Configuration Information panel 294 DBRM Member 26, 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 DBRM NAME 217 on the Statements panel 217 DBRM/PACKAGE on the Statement Costs panel 52 DBRM/PACKAGE NAME on the EXPLAIN panel 110 DBRMS on the Libraries panel 158 **DB/Tools** Database on the **!DB/Tools DB2** Configuration Information panel 291, 292 DCL CSR on the Plans panel 195 DE (Dec31)on the DBRMs panel 61 on the Packages panel 173 DEALLOCATE PLAN TABLE EXTRACT DATASET AFTER EACH USE on the VSAM Tuning Parameters panel 383 DEALLOCATE STATEMENTS EXTRACT DATASET AFTER EACH USE? on the VSAM Tuning Parameters panel 383 Dec31 on the DBRMs panel 61 on the EXPLAIN panel 111 on the Packages panel 173 DECIMAL POINT OPTION FOR KTEXPL on the SQL Defaults panel 378 DECLARE CURSOR from DBRMs 195 from Packages 195 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 195 DECLARE STATEMENT from DBRMs 195 from Packages 195 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 195 DECLARE TABLE from DBRMs 196

fields (continued) DECLARE TABLE (continued) from Packages 196 on the DBRMs panel 61 on the Packages panel 173 on the Plans panel 196 DEFAULT on the Table Columns panel 230 DEFAULT REMOTE LOCATION on the Set Defaults panel 375 DEFERPREP 35 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 35 on the EXPLAIN panel 111, 173 on the Package BIND Overrides panel 331 on the Plan Bind Overrides panel 343 DEFERPREPARE on the EXPLAIN panel 111 **DEFER(PREPARE)** on the Packages panel 174 on the Plans panel 197 DEFERPREPARE(Plans) on the EXPLAIN panel 112 DEGREE 34 on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 34 on the EXPLAIN header 111 on the EXPLAIN panel 111 on the Package BIND Overrides panel 331 on the Packages panel 173 on the Plan BIND Overrides panel 343 on the Plans panel 196 DELETES from DBRMs 196 from Packages 196 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 196 on the Tables panel 241 DESCRIBE from DBRMs 196 from Packages 196 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 196 DESCRIPTION 296 on the !DB/Tools Global Information—DB2 Subsystem Name Table panel 296 on the Extract History panel 150 DG on the Packages panel 174

fields (continued) DG (continued) on the Plans panel 196 DI on the Plans panel 197 DISCONNECT 35 on the BIND/REBIND Plan panel 35 on the EXPLAIN panel 111 on the Plan BIND Overrides Panel 343 on the Plans panel 197 **DISCONNECT FROM DB2?** on the EXPLAIN/SQL Defaults panel 311 DISPLAY BIND COMPARE **CONFIRMATION PANEL?** on the BIND Compare Options panel 278 DISPLAY BIND TYPE RECOMMENDATIONS on the Recommendations Panel 0 349 DISPLAY BUILD STATUS PANELS on the Extract Processing Defaults panel 313 DISPLAY EXCEPTION OPTIONS PANEL? on the Exception Options panel 300 DISPLAY EXCEPTION TYPE RECOMMENDATIONS on the Recommendations Panel 0 349 DISPLAY KTEXPL SOURCE IN HEADER on the SQL Defaults panel 378 **DISPLAY MASK PANEL?** on the Selection Masking panel 370 **DISPLAY MASKS?** on the Primary Menu panel 210 DISPLAY OBJECT TYPE RECOMMENDATIONS on the Recommendations Panel 0 349 DISPLAY OVERRIDE PANEL FOR COMMAND? on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR COMPARE? on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR CONVERT? on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343 DISPLAY OVERRIDE PANEL FOR SELECT? on the Package Bind Overrides panel 331 on the Plan Bind Overrides panel 343

fields (continued) DISPLAY PANEL on the Output Options Defaults panel 327 DISPLAY PARTIAL PLAN EXPLAIN on the EXPLAIN Defaults panel 304 DISPLAY SQL STATEMENT TYPE RECOMMENDATIONS on the Recommendations Panel 0 349 DISPLAY SQLCODE or SQLSTATE on the EXPLAIN/SQL Defaults panel 311 DP (DeferPrep) 197 on the Packages panel 174 on the Plans panel DR on the Packages panel 174, 197 DROP from DBRMs 197 from Packages 197 on the DBRMs panel 61 on the Packages panel 174 on the Plans panel 197 DSETPASS on the Estimator panel 74 on the EXPLAIN panel 112 on the Whatif panel 253 DSNTIAD PLAN NAME on the !DB/Tools DB2 Configuration Information panel 292 DSNTIAUL PLAN NAME on the **!DB/Tools DB2** Configuration Information panel 292 DSNZPARM MEMBER NAME on the **!DB/Tools DB2** Configuration Information panel 292 DYNAMICRULES on the BIND/REBIND Package panel 26 on the BIND/REBIND Plan panel 35 on the Package Bind Overrides panel 331 on the Packages panel 175 on the Plan Bind Overrides panel 343 on the Plans panel 197 DYNAMICRULES= on the EXPLAIN panel 112 ΕM on the EXPLAIN panel 112 EDPROC on the Estimator panel 74 on the EXPLAIN panel 112 on the Whatif panel 253 EM (EXPLAIN METHOD) 138 on the EXPLAIN Compare panel 138

fields (continued) ENABLE on the Package Connections panel 165 on the Plan Connections panel 184 ENABLED? 35 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 35 ENABLE/DISABLE CONNECTIONS? 35 on the BIND/REBIND Package panel -26 on the BIND/REBIND Plan panel 35 ENQUEUE ON EXTRACT DATASETS on the VSAM Tuning Parameters panel 383 **ERASERULE** on the Estimator panel 74, 75 on the EXPLAIN panel 113 on the Whatif panel 253 ERROR on the EXPLAIN History panel 147 ESTAE FLAG on the Online Menu panel 161 ESTIMATE ADJUSTER on the Build Tuning Parameters panel 282 EX (EXPLAIN) on the Packages panel 175 on the Plans panel 198 EXCEPTION DESCRIPTION on the Exceptions panel 94 EXECUTE from DBRMs 198 from Packages 198 on the DBRMs panel 61 on the Packages panel 175 on the Plans panel 197, 198 EXECUTE BIND COMPARE GENERATE **OPTION?** on the BIND Compare Options panel 278 EXECUTE BIND/REBIND FOR DIFFERENT PATHS? on the BIND Compare Options panel 278 EXECUTE BIND/REBIND FOR SAME PATHS? on the BIND Compare Options panel 279 EXPLAIN 35 from DBRMs 198 from packages 113, 198 from plans 113 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel - 35 on the DBRMs panel 61 on the EXPLAIN panel 113

fields (continued) EXPLAIN (continued) on the Package Bind Overrides panel 331 on the Packages panel 175 on the Plan Bind Overrides panel 343 on the Plans panel 198 EXPLAIN DATE/TIME 138, 147 on the DBRMs panel 61 on the EXPLAIN Compare panel 138 on the EXPLAIN History panel 147 on the Packages panel 175 **EXPLAIN DIFFERENCES** 138 on the EXPLAIN Compare panel 138 EXPLAIN METHOD 138 on the EXPLAIN Compare panel 138 EXPLAIN TIMESTAMP on the EXPLAIN panel 113 on the Statement Costs panel 52 **EXPREDICATE** on the EXPLAIN panel 113 on the Plans panel 198 EXTRACT on the **!DB/EXPLAIN** Configuration Information panel 289 EXTRACT DATE/TIME on the Extract History panel 150 EXTRACT DESCRIPTION on the **!DB/Tools DB2** Configuration Information panel 292 Extract ID 296 on the !DB/Tools DB2 Configuration Information panel 292 on the !DB/Tools Global Information—DB2 Subsystem Name Table panel 296 on the Primary Menu panel 210 EXTRACT SORT PARAMETERS on the **!DB/EXPLAIN** Configuration Information panel 289 FARINDREF on the Estimator panel 75 on the EXPLAIN panel 113 on the Whatif panel 253 FAROFFPOS on the Estimator panel 75 on the EXPLAIN panel 113 on the Whatif panel 254 FETCH from DBRMs 198 from Packages 198 on the DBRMs panel 61 on the Packages panel 175

fields (continued) FETCH (continued) on the Plans panel 198 FILTER TYPE on the Panel Filters panel 336 FIRSTKEY on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FIRSTKEY (IXP) on the EXPLAIN panel 114 FLAG 36, 332 on the BIND Plan Overrides panel 344 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 on the Package BIND Overrides panel 332 FLDPROC on the Table Columns panel 230 FN (Function) 138 on the EXPLAIN Compare panel 138 on the EXPLAIN panel 114 FOR SQL EXECUTION on the **!DB/EXPLAIN** Configuration Information panel 289 FORCE XUPDT WHEN EXPLAINING? on the EXPLAIN Defaults panel 305 FOREIGNKEY on the Table Columns panel 230 FORMAT on the SQL Formats for KTEXPL panel 380 FORMAT # on the Panel Formats panel 338 FORMAT OF THE INPUT FILE on the SQL Formats for KTEXPL panel 380 FORMAT0 DISPLAY? on the EXPLAIN Display Tuning Parameters panel 309 FREED? on the Packages panel 175 on the Plans panel 198 FREEPAGE on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FREQ% on the Column Distribution Statistics panel 43 FROM TABLE identifier on the EXPLAIN panel 114

fields (continued) FULLKEY on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FULLKEY (IXP) on the EXPLAIN panel 114 **FUNCTION** on the Administration Menu panel 22 on the EXPLAIN panel 114 on the Online Menu panel 161 on the Primary Menu panel 210 Function) 138 on the EXPLAIN Compare panel 138 **GBPCACHE** (IXP) on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 **GBPCACHE** (TSTP) on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 254 GEN PKLIST on the Plan Bind Overrides panel 344 GENERATE BIND/REBIND FOR **DIFFERENT PATHS?** on the BIND Compare Options panel 279 GENERATE BIND/REBIND FOR SAME PATHS? on the BIND Compare Options panel 279 GENERATE PLAN OR PACKAGE BINDS FOR DBRMS? on the BIND Compare Options panel 279 GENERATE UPDATE IF NO STATISTICS? on the Miscellaneous Defaults panel 324 **GENERATE**? on the EXPLAIN Display Tuning Parameters panel 309 GENERATIONS OF CATALOG HISTORY on the Extract Processing Defaults panel 313 GENERATIONS OF EXPLAIN HISTORY on the Extract Processing Defaults panel 313 GNRS, Number of on the Extract History panel 150 GRANT from DBRMs 199 from Packages 199 on the DBRMs panel 61 on the Packages panel 175

fields (continued) **GRANT** (continued) on the Plans panel 199 **GROUP MEMBER** on the Packages panel 175 on the Plans panel 199 GROUP MEMBER= on the EXPLAIN panel 115 HBJ (Hybrid Join) on the Statement Costs panel 52 HIGH LEVEL OUALIFIER#1 on the Library Search Order panel 321 HIGH LEVEL QUALIFIER#2 294 on the **!DB/Tools** Global Configuration Information panel 294 on the Library Search Order panel 321 HIGH LEVEL QUALIFIER#3 on the Library Search Order panel 321 HIGH LEVEL QUALIFIER#4 on the Library Search Order panel 321 HIGH2KEY NULL on the Table Columns panel 231 HIGH2KEY VALUE on the Table Columns panel 231 HIGHKEY NULL on the Table Columns panel 230 HIGHKEY VALUE on the Table Columns panel 230 HL (Hostlang) on the DBRMs panel 61 on the Packages panel 176 HOST VARIABLE FLAG on the SQL Formats for KTEXPL panel 380 HOST VARIABLE NAME 217 on the Host Variables panel 217 Hostlang on the DBRMs panel 61 on the EXPLAIN panel 115 on the Packages panel 176 Hvbrid Join on the Statement Costs panel 52 I1 (One-Fetch Index Scan) on the Statement Costs panel 52 IMPLICIT on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 254 INCLUDE DBRM? 36 on the BIND/REBIND Plan panel - 36

fields (continued) INCLUDE PACKAGE LIST? 36 on the BIND/REBIND Plan panel 36 Index Only 139 on the EXPLAIN Compare panel 139 Index Scan for IN on the Statement Costs panel 53 Index Scans on Index on the Statement Costs panel 53 **INDEXNAME** 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 115 INDEXSPACE on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 INDEXTYPE on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 INITIAL CMD on the Panel Formats panel 338 **INSERTS** from DBRMs 199 from Packages 199 on the DBRMs panel 61 on the Packages panel 176 on the Plans panel 199 on the Tables panel 241 INTERLEAVE PACKAGES IN REPORT? on the EXPLAIN Defaults panel 305 IS 218 on the Statements panel 218 IS (Isolation) on the Packages panel 176 on the Plans panel 199 ISOBID on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 **ISOLATION** 36 from packages 116 from plans 116 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel - 36 on the EXPLAIN panel 116 on the Package BIND Overrides panel 332 on the Packages panel 176 on the Plan BIND Overrides panel 344 on the Plans panel 199

fields (continued) ISSUE SQL CALLS IN PARSER EXIT on the EXPLAIN/SQL Defaults panel 311 ISSUE WTOR on the VSAM Tuning Parameters panel 383 ISSUE XUPDT AFTER FREEING INTERMEDIATE STORAGE on the VSAM Tuning Parameters panel 383 IX on the Estimator panel 76 on the EXPLAIN panel 116 on the Whatif panel 255 IX (Index Only) 139 on the EXPLAIN Compare panel 139 **IXCREATOR** 154 on the Estimator panel 76 on the EXPLAIN panel 116 on the Keys panel 154 on the Whatif panel 255 IXNAME 154 on the EXPLAIN panel 116 on the Keys panel 154 on the Whatif panel 255 IXP on the Estimator panel 76 on the EXPLAIN panel 116 on the Whatif panel 255 J T= on the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JDG (Number of Join Degrees) on the Statement Costs panel 52 JOI DEG 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JOI PID 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JOIN OF CATALOG TABLES FOR STATS on the EXPLAIN Defaults panel 305 K#TS on the Packages panel 176 **KD(KEEPDYNAMICS)** from Packages 199 on the Plans panel 199 KEEP PLAN_TABLE EXTRACT DATASET OPEN FOR UPDATE on the VSAM Tuning Parameters panel 383

fields (continued) **KEEPDYNAMIC** 36 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel - 36 on the Package BIND Overrides panel 332 on the Plan BIND Overrides panel 344 **KEEPDYNAMIC** (Packages) on the EXPLAIN panel 117 **KEEPDYNAMIC** (Plans) on the EXPLAIN panel 117 KEYCNT on the Estimator panel 76 on the Whatif panel 255 **KEYCNT (IXP)** on the EXPLAIN panel 117 **KEYCOLUMNS** on the Estimator panel 76 on the EXPLAIN panel 117 on the Whatif panel 255 KEYOBID on the Estimator panel 77 on the EXPLAIN panel 117 on the Whatif panel 255 **KEYSEQ** on the Table Columns panel 231 KEYSIZE on the Estimator panel 77 KKEEP on the Packages panel 176 **KTEXPL OWNER FOR SYNONYMS** on the Set Defaults panel 375 LANG TYPE on the SQL Formats for KTEXPL panel 381 LCK 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 117 LCK SHR from DBRMs 199 from Packages 199 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199 LCK (TSLOCKMODE) on the Statement Costs panel 52 LCK XCL from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199, 200

fields (continued) LEAFDIST on the Estimator panel 77 on the EXPLAIN panel 117 on the Whatif panel 255 LENGTH 218 on the Host Variables panel 218on the Table Columns panel 231 LERR (Library Error) on the Libraries panel 158 LEVEL on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 LHS on the SQL Formats for KTEXPL panel 381 LIBRARY on the BIND/REBIND Package panel 27 on the DBRMs panel 62 on the EXPLAIN panel 117 on the Packages panel 176 Library Error on the Libraries panel 158 LIBRARY NAME 36, 163, 244 on the BIND/REBIND Plan panel 36 on the Output Options panel 163 on the Verification panel 244 List Prefetch on the Statement Costs panel 52 LOAD Library 294 on the **!DB/Tools** Global Configuration Information panel 294 LOCATION 36, 40, 244 from packages 117 on the BIND/REBIND Plan panel 36 on the Collections panel 40 on the Estimator panel 77 on the EXPLAIN panel 117, 118 on the Package BIND Overrides panel 332 on the Plan Package List panel 186 on the Tables panel 241 on the Verification panel 244 on the Whatif panel 255

fields (continued) LOCATION NAME on the BIND/REBIND Package panel 27 LOCK SHRS on the Tables panel 241 LOCK XCLS on the Tables panel 241 LOCKMAX on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 255 LOCKRULE on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 256 LOCKS (SHR) from DBRMs 199 from Packages 199 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199 on the Tables panel 241 LOCKS (XCL) from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199, 200 on the Tables panel 241 LOG BATCH BIND, REBIND AND FREE? on the Miscellaneous Defaults panel 324 LOG PDS on the **!DB/EXPLAIN** Configuration Information panel 289 LOW LEVEL QUALIFIER#1 on the Library Search Order panel 321 LOW LEVEL QUALIFIER#2 on the Library Search Order panel 321 LOW LEVEL QUALIFIER#3 on the Library Search Order panel 321 LOW LEVEL QUALIFIER#4 on the Library Search Order panel 321 LOW2KEY NULL on the Table Columns panel 232 LOW2KEY VALUE on the Table Columns panel 232 LOWKEY NULL on the Table Columns panel 232 LOWKEY VALUE on the Table Columns panel 232

fields (continued) LPF (List Prefetch) on the Statement Costs panel 52 MAINTAIN KEY RATIO IN ESTIMATOR? on the Miscellaneous Defaults panel 324 MAKE STATISTICS PERMANENT? on the Whatif panel 256 MASK OUT ANY PACKAGES NOT IN THE SPECIFIED SET OF PLANS? on the Selection Masking panel 370 MASKING IN EFFECT? on the Primary Menu panel 210 Matching Index Scan on the Statement Costs panel 52 MAX BLKSIZE for VIO 294 on the !DB/Tools Global Configuration Information panel 294 MAX LENGTH FOR HOST VAR INPUT on the SQL Defaults panel 378 MAX NUMBER OF XUPDT VSAM ERRORS on the Extract Processing Defaults panel 313 MAX STMT COST on the DBRMs panel 62 MAXIMUM STATEMENT COST on the DBRMs panel 62 on the Packages panel 176 on the Statement Costs panel 52 MAXIMUM STMT COST on the Packages panel 176 on the Statement Costs panel 52 ME (Method) 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MEMBER 163 on the Output Options panel 163 MEMBER NAME on the Output Options Defaults panel 327 **MEMBERS HEADING Number** on the Libraries panel 158 Merge Scan Join on the Statement Costs panel 53 MERGE SINGLE STATEMENT EXPLAINS? on the EXPLAIN Defaults panel 305 Method 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MI (Multiple Index Intersection) on the Statement Costs panel 52

fields (continued) MID LEVEL QUALIFIER#1 on the Library Search Order panel 321 MID LEVEL QUALIFIER#2 321 on the Library Search Order panel MID LEVEL QUALIFIER#3 on the Library Search Order panel 321 MID LEVEL QUALIFIER#4 on the Library Search Order panel 321 MIS (Matching Index Scan) on the Statement Costs panel 52 Mixed on the DBRMs panel 62 on the EXPLAIN panel 118 on the Packages panel 177 MJCL on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MOD ONTO MEMBERS? on the Output Options Defaults panel 327 MODIFY ONTO MEMBER 163 on the Output Options panel 163 MODIFY ONTO USER PDS MEMBERS? on the BIND Compare Options panel 279 MORE CONNECTIONS? 36 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 MORE DBRMs? 36 on the BIND/REBIND Plan panel 36 MORE LIBRARIES 36 on the BIND/REBIND Plan panel 36 MORE PACKAGE LISTS? 37 on the BIND/REBIND Plan panel 37 MSGS dataset 294 on the !DB/Tools Global Configuration Information panel 294 MSJ (Merge Scan Join) on the Statement Costs panel 53 MTCL 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MU (Multiple Index Union) on the Statement Costs panel 53 Multiple Index Intersection on the Statement Costs panel 52 Multiple Index Union on the Statement Costs panel 53 MVS ID 296 on the **!DB/Tools DB2** Configuration Information panel 292 on the !DB/Tools Global Information—DB2 Subsystem Name Table panel 296

fields (continued) MX (Index Scans on Index) on the Statement Costs panel 53 MX (Mixed) on the DBRMs panel 62 on the Packages panel 177 MXOP 139 on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 N (Index Scan for IN) on the Statement Costs panel 53 NACTIVE 256 on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 256 NACTIVE (TSTP) on the EXPLAIN panel 119 NAME on the Tables panel 241 NAME heading 140, 218 on the EXPLAIN Compare panel 140 on the EXPLAIN History panel 147 on the Libraries panel 158 on the Statement Costs panel 53 on the Statements panel 218 NDX= on the EXPLAIN panel 119 NEARINDREF 256 on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256 **NEAROFFPOS** on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256 Nested Loop Join on the Statement Costs panel 53 NLEAF 256 on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256 NLEAF (IXP) on the EXPLAIN panel 119 NLEVELS on the Estimator panel 77, 78 on the Whatif panel 256 NLEVELS (IXP) on the EXPLAIN panel 119 NLJ (Nested Loop Join) on the Statement Costs panel 53

fields (continued) NMIS (Non-Matching Index Scan) on the Statement Costs panel 53 No. of MEMBERS HEADING on the Libraries panel 158 Non-Matching Index Scan on the Statement Costs panel 53 NOT SIGN CHARACTER on the EXPLAIN/SQL Defaults panel 311 NPAGES on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 256 NPAGES (TSTP) on the EXPLAIN panel 119 **NTABLES** on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 256 NULL on the Column Distribution Statistics panel 43 NULLS on the Table Columns panel 233 Number of Access Degrees on the Statement Costs panel 52 NUMBER OF COLLECTIONS on the Build Tuning Parameters panel 282 NUMBER OF CONNECTIONS PER PACKAGE on the Build Tuning Parameters panel 282 NUMBER OF CONNECTIONS PER PLAN on the Build Tuning Parameters panel 282 NUMBER OF DBRMS PER PLAN on the Build Tuning Parameters panel 282 NUMBER OF DBRMS TO PROCESS on the VSAM Tuning Parameters panel 383 NUMBER OF DBRMS TO PROCESS (XCPT) on the VSAM Tuning Parameters panel 384 NUMBER OF EXPLAINABLE STATEMENTS PER DBRM/PACKAGE on the Build Tuning Parameters panel 282 Number of Join Degrees on the Statement Costs panel 52 NUMBER OF PACKAGES on the Build Tuning Parameters panel 282 NUMBER OF PACKAGES PER PLAN on the Build Tuning Parameters panel 282

fields (continued) NUMBER OF PLANS on the Build Tuning Parameters panel 282 NUMBER OF STATEMENTS TO PROCESS on the VSAM Tuning Parameters panel 384 NUMBER OF TABLES on the Build Tuning Parameters panel 282 NUMBER OF TABLES REFERENCED BY AN EXPLAINABLE STATEMENT on the Build Tuning Parameters panel 282 NUMBER OF UNIQUE DBRMS on the Build Tuning Parameters panel 282 OBID 257 on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 257 OK on the Extract History panel 150 **One-Fetch Index Scan** on the Statement Costs panel 52 OP (Operative) on the Packages panel 177 on the Plans panel 200 OPEN from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 177 on the Plans panel 200 OPERATIVE from packages 119 from plans 120 on the EXPLAIN panel 119, 120 on the Packages panel 177 on the Plans panel 200 **OPERATOR** on the Selection Masking panel 370 **OPTION** on the Housekeeping panel 318 on the Recommendations Menu 347 ORDER on the EXPLAIN Display Tuning Parameters panel 309 ORDERING 154 on the Keys panel 154 OUT STATISTICS FORMAT on the Miscellaneous Defaults panel 324 OWNER on the EXPLAIN panel 120 on the Package BIND Overrides panel 332 fields (continued) **OWNER** (continued) on the Packages panel 177 on the Plan BIND Overrides panel 344 OWNER of PACKAGE(AUTHID) on the BIND/REBIND Package panel 27 OWNER of PLAN(AUTHID) 37 on the BIND/REBIND Plan panel - 37 ΡM on the EXPLAIN Compare panel 140 on the EXPLAIN panel 120 PR =on the EXPLAIN Compare panel 140 on the EXPLAIN panel 120 P#TS on the PLANS panel 200 PACKAGE 37, 244 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel - 37 on the EXPLAIN panel 120 on the Packages panel 177 on the Plan Package List panel 186 on the Verification panel 244 PACKAGE BINDSTAMP MASK 1 on the Selection Masking panel 370 PACKAGE BINDSTAMP MASK 2 on the Selection Masking panel 370 PACKAGE COLLECTION MASK 1 on the Selection Masking panel 370 PACKAGE COLLECTION MASK 2 on the Selection Masking panel 370 PACKAGE COLLECTION SELECTION on the Miscellaneous Defaults panel 324 PACKAGE CREATOR MASK 1 on the Selection Masking panel 370 PACKAGE CREATOR MASK 2 on the Selection Masking panel 371 PACKAGE ID on the BIND/REBIND Package panel 27 PACKAGE MASK1 on the Selection Masking panel 371 PACKAGE MASK2 on the Selection Masking panel 371 PACKAGE NAME 138, 217 on the EXPLAIN Compare panel 138 on the Statements panel 217 PACKAGE OWNER MASK 1 on the Selection Masking panel 371 PACKAGE OWNER MASK 2 on the Selection Masking panel 371

fields (continued) PACKAGE QUALIFIER MASK 1 on the Selection Masking panel 371 PACKAGE QUALIFIER MASK 2 on the Selection Masking panel 371 PACKAGE VERSION MASK 1 on the Selection Masking panel 371 PACKAGE VERSION MASK 2 on the Selection Masking panel 371 PACKAGE/DBRM on the Statement Costs panel 52 PACKAGE/DBRM NAME on the EXPLAIN panel 110 PACKLIST COLLECTION MASK 1 on the Selection Masking panel 371 PACKLIST COLLECTION MASK 2 on the Selection Masking panel 371 PACKLIST LOCATION MASK 1 on the Selection Masking panel 371 PACKLIST LOCATION MASK 2 on the Selection Masking panel 371 PACKLIST PACKAGE MASK 1 on the Selection Masking panel 371 PACKLIST PACKAGE MASK 2 on the Selection Masking panel 371 PAGESAVE on the Estimator panel 78 on the Whatif panel 257 PAGESAVE (TSTP) on the EXPLAIN panel 120 PARENS on the Selection Masking panel 371 PARNT on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 PART 43 on the Column Distribution Statistics panel 43 on the Table Columns panel 233 PARTITION on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 PARTITIONS 257 on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 PCTFREE on the Estimator panel 78 on the EXPLAIN panel 120

fields (continued) PCTFREE (continued) on the Whatif panel 257 PCTPAGES on the Estimator panel 78, 79 on the Whatif panel 257 PCTPAGES (TSTP) on the EXPLAIN panel 121 PCTROWCOMP 257 on the Estimator panel - 79 on the Whatif panel 257 PCTROWCOMP (TBL) on the EXPLAIN panel 121 PCTROWCOMP (TSTP) on the EXPLAIN panel 121 PD#TS on the PLANS panel 200 PERCACT on the Estimator panel 79 on the EXPLAIN panel 121 on the Whatif panel 257 PERCDROP on the Estimator panel 79 on the EXPLAIN panel 121 on the Whatif panel 258 PERMANENT on the BIND Compare Options panel 280on the Data Formats panel 287 on the Exception Options panel 300 on the EXPLAIN Defaults panel 305 on the EXPLAIN/SQL Defaults panel 311 on the Extract Processing Defaults panel 313 on the Library Search Order panel 321 on the Miscellaneous Defaults panel 324 on the Output Options Defaults panel 327 on the Panel Filters panel 336 on the Panel Sorts panel 340 on the Recommendations Panel 0 349 on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 on the Selection Masking panel 371 on the SQL Defaults panel 378 on the VSAM Tuning Parameters panel 384

fields (continued) PERMANENT INDICATOR on the Panel Formats panel 338 on the Set Defaults panel 375 PF (Prefetch) 140 on the EXPLAIN Compare panel 140 on the EXPLAIN panel 121 PG on the Extract History panel 150 PGSIZE on the Estimator panel 79 on the EXPLAIN panel 121 on the Whatif panel 258 PK#TS on the PLANS panel 200 PKG MASK#1 on the Extract History panel 150 PKG MASK#2 on the Extract History panel 150 PKG OPER 150 on the Extract History panel PKG POST on the Extract Processing Defaults panel 313 PKG PRE on the Extract Processing Defaults panel 313 PKGS on the Libraries panel 158 **PKSIZE** on the EXPLAIN panel 121 on the Packages panel 177 PLAN 37, 244 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 121 on the PLANS panel 200 on the Verification panel 244 PLAN BINDSTAMP MASK 1 on the Selection Masking panel 372 PLAN BINDSTAMP MASK 2 on the Selection Masking panel 372 PLAN CREATOR on the DBRMs panel 62 PLAN Creator MASK 1 on the Selection Masking panel 372 PLAN CREATOR MASK 2 on the Selection Masking panel 372 PLAN FREED? on the EXPLAIN panel 121 on the Plans panel 200

fields (continued) PLAN HEADING on the DBRMs panel 62 PLAN INFORMATION 218 on the Statements panel 218 PLAN MASK#1 on the Extract History panel 150 PLAN MASK#2 on the Extract History panel 150 PLAN MASK1 on the Selection Masking panel 372 PLAN MASK2 on the Selection Masking panel 372 PLAN NAME 140, 217 on the EXPLAIN Compare panel 140 on the Statements panel 217 PLAN OPER on the Extract History panel 150 PLAN OWNER MASK 1 on the Selection Masking panel 372 PLAN OWNER MASK 2 on the Selection Masking panel 372 PLAN POST on the Extract Processing Defaults panel 313 PLAN PRE on the Extract Processing Defaults panel 313 PLAN QUALIFIER MASK 1 on the Selection Masking panel 372 PLAN QUALIFIER MASK 2 on the Selection Masking panel 372 PLAN SIZE on the EXPLAIN panel 121 PLAN TABLE ASSOCIATE NEW ONES? on the Extract Processing Defaults panel 314 PLAN TABLE OWNER on the Set Defaults panel 375 PLAN TABLE VARIANCE on the Extract Processing Defaults panel 314 PLAN_TABLE EXTRACT DATASET DATA BUFFERS on the VSAM Tuning Parameters panel 384 PLAN_TABLE EXTRACT DATASET DATA **BUFFERS (FOR OUTPUT)** on the VSAM Tuning Parameters panel 384

fields (continued) PLAN_TABLE EXTRACT DATASET INDEX BUFFERS on the VSAM Tuning Parameters panel 384 PLAN TABLE EXTRACT DATASET INDEX **BUFFERS (FOR OUTPUT)** on the VSAM Tuning Parameters panel 384 PLANS on the **!DB/EXPLAIN** Configuration Information panel 289 PLANTABL OWNER on the Extract History panel 150 PLENTRIES on the EXPLAIN panel 122 on the Plans panel 200 PLN NO. on the EXPLAIN panel 122 PLSIZE on the Plans panel 201 PQTY on the Estimator panel 79 on the EXPLAIN panel 122 on the Whatif panel 258 PRECOMPILE DATE 219 on the Statements panel 219 PRECOMPILE DATE/TIME 147, 244 on the DBRMs panel 62 on the EXPLAIN History panel 147 on the Verification panel 244 PRECOMPILE DATE/TME on the Packages panel 177 PRECOMPILE TIME on the EXPLAIN panel 122 PRECOMPILE TIMESTAMP on the Statement Costs panel 53 Prefetch 140 on the EXPLAIN Compare panel 140 on the EXPLAIN panel 121 PREPARE from DBRMs 201 from Packages 201 on the DBRMs panel 62 on the Packages panel 177 on the Plans panel 201 PREPARE STMTS TO OBTAIN COST on the EXPLAIN/SQL Defaults panel 311 PRIMARY on the **!DB/EXPLAIN** Configuration Information panel 289

fields (continued) PROCESS BIND TYPE OPTIONS? on the Exception Options panel 300 PROCESS OBJECT TYPE OPTIONS? on the Exception Options panel 301 PROCESS SQL ERROR TYPE OPTIONS? on the Exception Options panel 301 PROCESS SQL TYPE OPTIONS? on the Exception Options panel 301 PROCESS XCPT TYPE OPTIONS? on the Exception Options panel 302 PROFILE dataset LIST on the Housekeeping panel 318 Profile Dataset Type 298 on the **!DB/Tools** Profile Dataset List panel 298 **PSID** 258 on the Estimator panel 79 on the EXPLAIN panel 122 on the Whatif panel 258 OBNO on the EXPLAIN panel 122 QBNO (Query Block Number) 140 on the EXPLAIN Compare panel 140 OU (Ouote) on the DBRMs panel 62 on the Packages panel 177 QUALIFIER 37 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 122 on the Package BIND Overrides panel 332 on the Packages panel 177 on the Plan BIND Overrides panel 344 on the Plans panel 201 QUALIFY SYNONYMS WITH PLAN/PACKAGE QUALIFIER 375 on the Set Defaults panel 375 Query Block Number 140 on the EXPLAIN Compare panel 140 QUERY TEXT on the EXPLAIN panel 123 QUERY TYPE on the EXPLAIN panel 141 QUERYNO 140 on the EXPLAIN Compare panel 140 Quote on the DBRMs panel 62 on the EXPLAIN panel 123 on the Packages panel 177

fields (continued) RBA1 on the Estimator panel 79 on the Whatif panel 258 RBA1 (TBL) on the EXPLAIN panel 123 RBA2 on the Estimator panel 79 on the Whatif panel 258 RBA2 (TBL) on the EXPLAIN panel 123 **RDATACAPTURE** (TBL) on the EXPLAIN panel 110 RE (Release) on the Packages panel 177 on the Plans panel 201 READ EXPLAIN IF OWNER CHANGED on the EXPLAIN Defaults panel 305 **REAL CATALOG PREFIX** on the !DB/Tools DB2 Configuration Information panel 292 RECLEN on the Estimator panel 79 on the EXPLAIN panel 123 on the Whatif panel 258 **RECOMMENDATION TEXT** 219 on the Statements panel 219 RELEASE 37 from DBRMs 201 from Packages 201 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 37 on the DBRMs panel 62 on the EXPLAIN panel 123 on the Package BIND Overrides panel 332 on the Packages panel 177, 178 on the Plan BIND Overrides panel 344 on the Plans panel 201 RELEASE (All) on the Plans panel 201 **RELEASE VERSION** on the BIND/REBIND Package panel 28 REMOTE on the EXPLAIN panel 123 on the Packages panel 178 **REMOTE ENABLE** on the Package Bind Overrides panel 332 on the Plan Bind Overrides panel 344 REMOTE ENABLE? 37 on the BIND/REBIND Plan panel 37

fields (continued) REOPT(VAR) on the Packages panel 178 REOPT(VAR)(Packages) on the EXPLAIN panel 124 REOPT(VAR)(Plans) on the EXPLAIN panel 124 REOPT(VARS) 37 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel 37 on the Package BIND Overrides panel 332 on the Plan BIND Overrides panel 344 **REQUIRE ALL DBRMS FOR A PLAN?** on the EXPLAIN Defaults panel 305 **REQUIRE ALL PACKAGES FOR A PLAN?** on the EXPLAIN Defaults panel 305 **RESEARCH VIEWS AND ALIASES** on the EXPLAIN Defaults panel 305 RETAIN - 37 on the BIND/REBIND Plan panel 37 on the Plan BIND Overrides panel 345 **RETAIN EXPLAIN DISPLAY?** on the EXPLAIN Defaults panel 306 **RETAIN STATISTICS FOR REUSE?** on the EXPLAIN Defaults panel 306 REVOKE from DBRMs 201 from Packages 201 on the DBRMs panel 62 on the Packages panel 178 on the Plans panel 201 RHS on the SQL Formats for KTEXPL panel 381 RM (Remote) on the Packages panel 178 ROLLBACK from DBRMs 202 from Packages 202 on the DBRMs panel 62 on the Packages panel 178 on the Plans panel 201, 202 **RO(REOPTVAR)** from Packages 201 on the Plans panel 201 SAVE EXPLAIN IF OWNER CHANGED on the EXPLAIN Defaults panel 306 SAVE EXPLAIN RESULTS? on the EXPLAIN Defaults panel 306 SAVE VALUES PERMANENTLY? 219 on the Host Variables panel 219

fields (continued) SAVE WHATIF RESULTS? on the EXPLAIN Defaults panel 306 SCALE 219 on the Host Variables panel 219 on the Table Columns panel 233 SE (SQLERROR) on the Packages panel 178 SEARCH ORDER on the Library Search Order panel 321 SEGSIZE on the Estimator panel 80 on the EXPLAIN panel 124 on the Whatif panel 258 SELECTS from DBRMs 202 from Packages 202 on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 on the Tables panel 241 SEONO on the Plan Package List panel 186 Sequential Prefetch on the Statement Costs panel 54 SERVER 258 on the Estimator panel 79 on the EXPLAIN panel 124 on the Plans panel 202 on the Whatif panel 258 SET from DBRMs 202 from Packages 202 on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 SET CONNECT on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 SET CURRENT DEGREE 375 on the Set Defaults panel 375 SET DEGREE on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202, 203 SET EXCEPTION RC FOR EXPLAIN on the Miscellaneous Defaults panel 324 SET EXCEPTION RC FOR RECOMMEND on the Miscellaneous Defaults panel 324

fields (continued) SET EXCEPTION RC FOR XCPT on the Miscellaneous Defaults panel 324 SET HOST on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 203 SET O on the Set Defaults panel 376 SET PKGSET on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 203 SET RULES on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 203 SET SOLID on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 203 SG (Sorts - Group By) on the Statement Costs panel 53 SHOW ALL PLAN TABLE ROWS? on the EXPLAIN Defaults panel 306 SJ (Sorts - Join) on the Statement Costs panel 54 SKELS dataset 294 on the **!DB/Tools** Global Configuration Information panel 294 SO (Sorts - Order By) on the Statement Costs panel 54 SORT COMMAND on the Panel Sorts panel 340 SORT TYPE on the Panel Sorts panel 340 Sorts - Group By on the Statement Costs panel 53 Sorts - Join on the Statement Costs panel 54 Sorts - Order By on the Statement Costs panel 54 Sorts - Total on the Statement Costs panel 54 Sorts - Unique on the Statement Costs panel 54 SPACE 258, 259 on the Estimator panel 80 on the EXPLAIN panel 124 on the Whatif panel 258, 259

fields (continued) SPACE (IXP) on the EXPLAIN panel 124 SPACE (TSTP) on the EXPLAIN panel 124 SPECIFY...TO DETERMINE WHEN TWO PACKAGES ARE THE SAME on the Build Tuning Parameters panel 283 SPF (Sequential Prefetch) on the Statement Costs panel 54 SO on the Plans panel 204 SQL DELIMITER on the SQL Formats for KTEXPL panel 381 SQL STRING DELIMITER FOR KTEXPL on the SQL Defaults panel 378 SOL TEXT 220 on the EXPLAIN panel 124 on the Statements panel 220 SQLCODE on the EXPLAIN panel 124 SQLERR on the EXPLAIN panel 125 SOLERROR 332 on the BIND/REBIND Package panel 28 on the EXPLAIN panel 125 on the Package BIND Overrides panel 332 on the Packages panel 178 SQLRULES 37 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 125 on the Plan BIND Overrides panel 345 on the Plans panel 204 SQLSTATE on the EXPLAIN panel 124 SQTY on the Estimator panel 80 on the EXPLAIN panel 125 on the Whatif panel 259 SR on the Extract History panel 150 SRC G on the EXPLAIN panel 125 SRC G (Sorts - Group By) 141 on the composite table 141 on the EXPLAIN Compare panel 141 SRC ID on the EXPLAIN Compare panel 141 on the EXPLAIN panel 125

fields (continued) SRC J on the EXPLAIN panel 125 SRC J (Sort - Join) 141 on the composite table 141 on the EXPLAIN Compare panel 141 SRC O on the EXPLAIN panel 125 SRC O(Sort - Order By) 141 on the composite table 141 on the EXPLAIN Compare panel 141 SRC U on the EXPLAIN panel 125 SRC U (Sort - Unique) 141 on the composite table 141 on the EXPLAIN Compare panel 141 SRN G on the EXPLAIN panel 126 SRN G (Sorts - Group By) 142 on the EXPLAIN Compare panel 142 on the new table 142 SRN ID on the EXPLAIN Compare panel 142 on the EXPLAIN panel 126 SRN J on the EXPLAIN panel 126 SRN J (Sort - Join) 142 on the EXPLAIN Compare panel 142 on the new table 142 SRN O on the EXPLAIN panel 126 SRN O (Sort - Order By) 142 on the EXPLAIN Compare panel 142 on the new table 142 SRN U on the EXPLAIN panel 126 SRN U (Sort - Unique) 142 on the EXPLAIN Compare panel 142 on the new table 142 SRT (Sorts - Total) on the Statement Costs panel 54 STATEMENT COST on the EXPLAIN panel 126 STATEMENT TYPE on the EXPLAIN panel 126 **STATEMENTS** on the **!DB/EXPLAIN** Configuration Information panel 289 on the Packages panel 179 STATEMENTS EXTRACT DATASET DATA BUFFERS

fields (continued) STATEMENTS EXTRACT DATASET DATA **BUFFERS** (continued) on the VSAM Tuning Parameters panel 384 STATEMENTS EXTRACT DATASET **INDEX BUFFERS** on the VSAM Tuning Parameters panel 384 STATS TIMESTAMP on the Column Distribution Statistics panel 43 on the Table Columns panel 233 STATSTS 259 on the Estimator panel 80 on the Whatif panel 259 STATSTS (IX) on the EXPLAIN panel 127 STATSTS (IXP) on the EXPLAIN panel 127 STATSTS (TBL) on the EXPLAIN panel 127 STATSTS (TS) on the EXPLAIN panel 127 STATSTS (TSTP) on the EXPLAIN panel 127 STATSTSP on the Estimator panel 80 on the Whatif panel 259 STATSTSP (IXP) on the EXPLAIN panel 127 STATSTSP (TSTP) on the EXPLAIN panel 127 STATUS 244 on the Estimator panel 81 on the EXPLAIN panel 127 on the Libraries panel 158 on the Verification panel 244 on the Whatif panel 259, 260 STMT COST on the EXPLAIN Compare panel 142 on the EXPLAIN History panel 147 on the EXPLAIN panel 127 STMT NO. 142 on the EXPLAIN Compare panel 142 STMTNO 220 on the EXPLAIN panel 127 on the Statements panel 220 STMTS on the DBRMs panel 63 on the Packages panel 179

fields (continued) STMTS (continued) on the PLANS panel 204 STORAGE AMOUNT FOR KTEXPL on the SQL Defaults panel 378 STORNAME 260 on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 STORTYPE on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 ST(STATUS) 220 on the Statements panel 220 SU (Sorts - Unique) on the Statement Costs panel 54 SUBPAG= on the EXPLAIN panel 128 SUFFIX TO USE FOR PLAN BIND COMPARE on the BIND Compare Options panel 280 SUPPRESS INFO MESSAGES IN BATCH? on the Miscellaneous Defaults panel 324 **SYSENTRIES** from packages 128 from plans 128 on the EXPLAIN panel 128 on the Plans panel 204 SYSENTRY on the Packages panel 179 SYSOUT HOLD CLASS 294 on the **!DB/Tools** Global Configuration Information panel 294 SYSTEM 38 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel 38 on the Package Connections panel 165 on the Plan Connections panel 184 SYSTEM PDS on the **!DB/EXPLAIN** Configuration Information panel 289 TABLE NAME 217 on the Statements panel 217 TABLE ROW/INDEX on the Estimator panel 81 Table Space Scan on the Statement Costs panel 54 TABLE= on the Column Distribution Statistics panel 43

fields (continued) TABLE= (continued) on the Table Columns panel 233 TABLES dataset 294 on the !DB/Tools Global Configuration Information panel 294 **TBCREATR** on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 TBL 260 on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 TBL= on the EXPLAIN panel 128 TBNAME 260 on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 260 TEMP DISK SYMBOLIC NAME 294 on the **!DB/Tools** Global Configuration Information panel 294 TIME on the Data Formats panel 287 TIMESTAMP on the Data Formats panel 287 on the Extract History panel 150 on the Plan Package List panel 186 TOTAL STATEMENT on the Tables panel 241 TOTAL STATEMENT COST on the DBRMs panel 63 on the Packages panel 179 on the Statement Costs panel 54 TOTAL STMT on the Tables panel 241 TOTAL STMT COST on the DBRMs panel 63 on the Packages panel 179 on the Statement Costs panel 54 TS on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 260 TS (Table Space Scan) on the Statement Costs panel 54 **TSLOCKMODE** on the Statement Costs panel 52 TSTP 260 on the Estimator panel 82

fields (continued) TSTP (continued) on the EXPLAIN panel 129 on the Whatif panel 260 TY on the Extract History panel 150 **TYPE 261** on the Estimator panel 82 on the EXPLAIN History panel 147 on the EXPLAIN panel 129 on the Whatif panel 261 TYPE OF SQL TO ISSUE on the EXPLAIN/SQL Defaults panel 311 UNIQUE on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 261 UPDATE PROFILE DATASET? on the Extract Processing Defaults panel 314 UPDATES from DBRMs 204 from Packages 204 on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 204 on the Tables panel 241 **USE DATASPACE?** on the Miscellaneous Defaults panel 325 USE LIBRARY SEARCH ORDER FOR COMMAND? on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR COMPARE? on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR CONVERT? on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR SELECT? on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 **USE MEMBER LISTS?** on the Online Menu panel 161 **USE OVERRIDES FOR COMMAND?** on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345

fields (continued) **USE OVERRIDES FOR COMPARE?** on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 **USE OVERRIDES FOR CONVERT?** on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 **USE OVERRIDES FOR SELECT?** on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 USE PACKAGE BIND OR CREATE TIMESTAMP IN DETERMINING **RELATIVE AGES** on the Build Tuning Parameters panel 283 USE REAL CATALOG TABLES FOR UPDT on the Miscellaneous Defaults panel 325 Use This Dataset? 298 on the **!DB**/Tools Profile Dataset List panel 298 USER PDS on the **!DB/EXPLAIN** Configuration Information panel 289 USER PDS TO SAVE DIFFERENCES IN on the BIND Compare Options panel 280 USER PDS TO SAVE ERRORS IN on the BIND Compare Options panel 280 USER PDS TO SAVE SAMES IN on the BIND Compare Options panel 280UTIL dataset 294 on the !DB/Tools Global Configuration Information panel 294 VA (Validate) on the Packages panel 179 on the Plans panel 204 VALID from packages 129 from plans 129 on the EXPLAIN panel 129 on the Packages panel 179 on the Plans panel 205 VALIDATE 38 from packages 130 from plans 130 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel 38 on the EXPLAIN panel 130 on the Package BIND Overrides panel 334 on the Packages panel 179 on the Plan BIND Overrides panel 346 on the Plans panel 204

fields (continued) VALPROC on the Estimator panel 82 on the EXPLAIN panel 130 on the Whatif panel 261 VALUE 218 on the Column Distribution Statistics panel 43 on the DBRM panel 63 on the Host Variables panel 218 VCATNAME on the Estimator panel 82 on the EXPLAIN panel 130 on the Whatif panel 261 VD (Valid) on the Packages panel 179 on the Plans panel 205 Verification on the Packages panel 179 on the Plans panel 205 VERSION 142, 221, 244 of the DBRM or Package 130 on the BIND/REBIND Package panel 28 on the DBRMs panel 63 on the EXPLAIN Compare panel 142 on the EXPLAIN History panel 147 on the EXPLAIN panel 130 on the Packages panel 179 on the Statement Costs panel 54 on the Statements panel 221 on the Verification panel 244 VIO SYSMBOLIC NAME 294 on the **!DB/Tools** Global Configuration Information panel 294 VL (Value) on the DBRM panel 63 VL (Verification) on the Packages panel 179 on the Plans panel 205 WARNING MESSAGE FOR NO EPX AUTH? on the Miscellaneous Defaults panel 325 WHEN TO CONSIDER TWO DBRMS TO BE THE SAME DBRM on the Build Tuning Parameters panel 283 **WHENEVER** from DBRMs 205 from Packages 205 on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 205

fields (continued) WO on the EXPLAIN panel 130, 142 WORK SIZE FOR SQL RESULTS on the SQL Defaults panel 378 **XCPT** on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 368 FILTER TYPE field on the Panel Filters panel 336 FIRSTKEY field on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FIRSTKEY (IXP) field on the EXPLAIN panel 114 FLAG field 36 on the BIND Plan Overrides panel 344 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 on the Package BIND Overrides panel 332 FLDPROC field on the Table Columns panel 230 FN (Function) field on the EXPLAIN Compare panel 138 on the EXPLAIN panel FOR SOL EXECUTION field on the **!DB/EXPLAIN** Configuration Information panel 289 FORCE XUPDT WHEN EXPLAINING? field on the EXPLAIN Defaults panel 305 FOREIGNKEY field on the Table Columns panel 230 FORMAT on the SQL Formats for KTEXPL panel 380 FORMAT # field on the Panel Formats panel 338 FORMAT OF THE INPUT FILE field on the SQL Formats for KTEXPL panel 380 FORMAT0 DISPLAY? field on the EXPLAIN Display Tuning Parameters

panel 309

FREED? field on the Packages panel 175 on the Plans panel 198 FREEPAGE field on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FREO% field on the Column Distribution Statistics panel 43 FROM TABLE identifier on the EXPLAIN panel 114 FULLKEY field on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 FULLKEY (IXP) field on the EXPLAIN panel 114 FUNCTION field on the Administration Menu panel 22 on the EXPLAIN Compare panel 138 on the EXPLAIN panel 114 on the Online Menu panel 161 on the Primary Menu panel 210 function keys documentation conventions 11

G

GBPCACHE (IXP) field on the Estimator panel 75 on the EXPLAIN panel 114 on the Whatif panel 254 GBPCACHE (TSTP) field on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 254 GEN PKLIST on the Plan Bind Overrides panel 344 GENERATE BIND/REBIND FOR DIFFERENT PATHS? field on the BIND Compare Options panel 279 GENERATE BIND/REBIND FOR SAME PATHS? field on the BIND Compare Options panel 279 GENERATE PLAN OR PACKAGE BINDS FOR DBRMS? field on the BIND Compare Options panel 279

GENERATE UPDATE IF NO STATISTICS? field on the Miscellaneous Defaults panel 324 **GENERATE**? field on the EXPLAIN Display Tuning Parameters panel 309 **GENERATIONS OF CATALOG HISTORY field** on the Extract Processing Defaults panel 313 **GENERATIONS OF EXPLAIN HISTORY field** on the Extract Processing Defaults panel 313 GNRS, Number of field on the Extract History panel 150 GRANT field from DBRMs 199 from Packages 199 on the DBRMs panel 61 on the Packages panel 175 on the Plans panel 199 Group By sorts on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 on the Statement Costs panel 53 **GROUP MEMBER field** on the Packages panel 175 on the Plans panel 199 GROUP MEMBER= field on the EXPLAIN panel 115

Η

HBJ (Hybrid Join) field on the Statement Costs panel 52 HIGH LEVEL QUALIFIER#1 field on the Library Search Order panel 321 HIGH LEVEL QUALIFIER#2 field on the **!DB/Tools** Global Configuration Information panel 294 on the Library Search Order panel 321 HIGH LEVEL OUALIFIER#3 field on the Library Search Order panel 321 HIGH LEVEL QUALIFIER#4 field on the Library Search Order panel 321 HIGH2KEY NULL field on the Table Columns panel 231 HIGH2KEY VALUE field on the Table Columns panel 231

Index

HIGHKEY NULL field on the Table Columns panel 230 HIGHKEY VALUE field on the Table Columns panel 230 history 149 Compare History panel 45 EXPLAIN History panel 144 Extract History panel 149 HL (Hostlang) field on the DBRMs panel 61 on the Packages panel 176 HOST VARIABLE FLAG field on the SQL Formats for KTEXPL panel 380 HOST VARIABLE NAME field on the Host Variables panel 217 host variables 311 Hostlang field on the DBRMs panel 61 on the EXPLAIN panel 115 on the Packages panel 176 housekeeping 275 housekeeping and customization panels 273 Housekeeping panel 315 Hybrid Join field on the Statement Costs panel 52

I

I 187, 188 I1 (One-Fetch Index Scan) field on the Statement Costs panel 52 IMPACT compared to CEXPL 47 IMPLICIT field on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 254 IN keyword on the Statement Costs panel 53 INCLUDE DRRM? field 36 on the BIND/REBIND Plan panel 36 INCLUDE PACKAGE LIST? field 36 on the BIND/REBIND Plan panel 36 Index keys panels 153 KTE3CKSE 153 KTEPCKEY 153 Index Only field on the EXPLAIN Compare panel 139 Index Scan for IN field on the Statement Costs panel 53 Index Scans on Index field on the Statement Costs panel 53 **INDEXNAME** field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 115 **INDEXSPACE** field on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 **INDEXTYPE** field on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 INITIAL CMD field on the Panel Formats panel 338 **INSERTS** field from DBRMs 199 from Packages 199 on the DBRMs panel 61 on the Packages panel 176 on the Plans panel 199 on the Tables panel 241 **INTERLEAVE PACKAGES IN REPORT?** field on the EXPLAIN Defaults panel 305 IS field on the Statements panel 218 IS (Isolation) field on the Packages panel 176 on the Plans panel 199 **ISOBID** field on the Estimator panel 76 on the EXPLAIN panel 115 on the Whatif panel 255 ISOLATION field 36 from packages 116 from plans 116 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 on the EXPLAIN panel 116 on the Package BIND Overrides panel 332 on the Packages panel 176 on the Plan BIND Overrides panel 344 on the Plans panel 199 ISSUE SQL CALLS IN PARSER EXIT field on the EXPLAIN/SQL Defaults panel 311 **ISSUE WTOR** on the VSAM Tuning Parameters panel 383

ISSUE XUPDT AFTER FREEING INTERMEDIATE STORAGE field on the VSAM Tuning Parameters panel 383 IX field on the Estimator panel 76 on the EXPLAIN panel 116 on the Whatif panel 255 IX (Index Only) field on the EXPLAIN Compare panel 139 **IXCREATOR** field on the Estimator panel 76 on the EXPLAIN panel 116 on the Keys panel 154 on the Whatif panel 255 **IXNAME** field on the Estimator panel 76 on the EXPLAIN panel 116 on the Keys panel 154 on the Whatif panel 255 IXP field on the Estimator panel 76 on the EXPLAIN panel 116 on the Whatif panel 255

J

J T = fieldon the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JDG (Number of Join Degrees) field on the Statement Costs panel 52 JOI DEG field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JOI PID field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 116 JOIN OF CATALOG TABLES FOR STATS field on the EXPLAIN Defaults panel 305 Join sorts on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 on the Statement Costs panel 54

Κ

K#TS field on the Packages panel 176 KD(KEEPDYNAMICS) field from Packages 199 on the Plans panel 199 KEEP PLAN TABLE EXTRACT DATASET **OPEN FOR UPDATE field** on the VSAM Tuning Parameters panel 383 KEEPDYNAMIC field 36 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 on the Package BIND Overrides panel 332 on the Packages panel 176 on the Plan BIND Overrides panel 344 **KEEPDYNAMIC** (Packages) field on the EXPLAIN panel 117 **KEEPDYNAMIC** (Plans) field on the EXPLAIN panel 117 KEYCNT field on the Estimator panel 76 on the Whatif panel 255 KEYCNT (IXP) field on the EXPLAIN panel 117 **KEYCOLUMNS** field on the Estimator panel 76 on the EXPLAIN panel 117 on the Whatif panel 255 **KEYOBID** field on the Estimator panel 77 on the EXPLAIN panel 117 on the Whatif panel 255 Keys panels 153 **KEYSEO** field on the Table Columns panel 231 KEYSIZE field on the Estimator panel 77 KTBPHODB - 290 KTBPHOGL 293 KTCPDBDS 295 KTCPPRF0 297 KTE3CKSE 153 KTE3SSUP 70 KTE3TCFR 226 KTE3TCSE 226 164 KTEKCON KTEPADMN 21

KTEPBIDB 31 KTEPBIKA 23
On the BIND/REBIND Package panel 25
KTEPBIKC 25
KTEPBILI 32
KTEPBIPC 32
KTEPBIPK 33
KTEPBIPL 29
KTEPCDI2 42
KTEPCDIS 42
KTEPCKEY 153
KTEPCLTN 39
KTEPCMPR 134
KTEPCOST 49
KTEPDBIN 59
KTEPDBRM 56
KTEPESTM 67
KTEPEXPL 95
KTEPHIDL 146
KTEPHIST 144
KTEPHOAD 288
KTEPHOBC 277
KTEPHOBK 328
KTEPHOBP 341
KTEPHOCO 284
KTEPHODF 335
KTEPHODS 377
KTEPHOEP 312
KTEPHOEX 303
KTEPHOLS 319
KTEPHOMF 286
KTEPHOMI 310
KTEPHOMJ 322
KTEPHOMK 369
KTEPHOOD 326
KTEPHOPF 337
KTEPHOPS 339
KTEPHORO 348
KTEPHORI 350
KTEPHOR2 352
KTEPHOR3 354
KTEPHOR4 356, 358, 360, 362
KTEPHOR4 550, 558, 500, 502 KTEPHOR8 364
KTEPHOSE 373
KTEPHOSQ 379 KTEPHOUS 215
KTEPHOUS 315
KTEPHOVB 382

KTEPHOVC 281 **KTEPHOXC** 366 KTEPHOXO 299 KTEPJHIS 45 KTEPKAIN 171 KTEPLIBR 155 KTEPMENU 209 **KTEPMEON** 160 KTEPOUTP 162 KTEPPACK 166 **KTEPPCON** 183 KTEPPKPL 185 KTEPPLAN 187 KTEPPVER 243 KTEPSSSG 70 KTEPSTMT 212 KTEPSWCH 211 KTEPTABL 240 KTEPTCOL 226, 227, 229 245 KTEPWHIF KTEPXAUB 151 KTEPXCPT 93 KTEPXHST 149 **KTEXPL OWNER FOR SYNONYMS field** on the Set Defaults panel 375

L

LANG TYPE field on the SQL Formats for KTEXPL panel 381 LCK field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 117 LCK SHR field from DBRMs 199 from Packages 199 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199 LCK (TSLOCKMODE) field on the Statement Costs panel 52 LCK XCL field from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199, 200

LEAFDIST field on the Estimator panel 77 on the EXPLAIN panel 117 on the Whatif panel 255 LENGTH field on the Host Variables panel 218 on the Table Columns panel 231 LERR (Library Error) field on the Libraries panel 158 LEVEL field on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 LHS field on the SQL Formats for KTEXPL panel 381 Libraries panel 155 Library Error field on the Libraries panel 158 LIBRARY field on the BIND/REBIND Package panel 27 on the DBRMs panel 62 on the EXPLAIN panel 117 on the Packages panel 176 LIBRARY NAME field 36 on the BIND/REBIND Plan panel 36 on the Output Options panel 163 on the Verification panel 244 Library Names panel 32 Library Search Order panel 319 List Prefetch field on the Statement Costs panel 52 LOAD Library field on the **!DB/Tools** Global Configuration Information panel 294 LOCATION field 36, 186 from packages 117 on the BIND/REBIND Plan panel 36 on the Collections panel 40 on the Estimator panel 77 on the EXPLAIN panel 117, 118 on the Package BIND Overrides panel 332 on the Plan Package List panel 186 on the Tables panel 241 on the Verification panel 244

LOCATION field (continued) on the Whatif panel 255 LOCATION NAME field on the BIND/REBIND Package panel 27 LOCK SHRS field on the Tables panel 241 LOCK XCLS field on the Tables panel 241 LOCKMAX field on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 255 LOCKRULE field on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 256 LOCKS (SHR) field from DBRMs 199 from Packages 199 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199 on the Tables panel 241 LOCKS (XCL) field from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 176 on the Plans panel 199, 200 on the Tables panel 241 LOG BATCH BIND, REBIND AND FREE? field on the Miscellaneous Defaults panel 324 LOG PDS field on the **!DB/EXPLAIN** Configuration Information panel 289 LOW LEVEL QUALIFIER#1 field on the Library Search Order panel 321 LOW LEVEL QUALIFIER#2 field on the Library Search Order panel 321 LOW LEVEL QUALIFIER#3 field on the Library Search Order panel 321 LOW LEVEL QUALIFIER#4 field on the Library Search Order panel 321 LOW2KEY NULL field on the Table Columns panel 232 LOW2KEY VALUE field on the Table Columns panel 232

Index

LOWKEY NULL field		
on the Table Columns panel	232	
LOWKEY VALUE field		
on the Table Columns panel	232	
LPF (List Prefetch) field		
on the Statement Costs panel	52	

Μ

MAINTAIN KEY RATIO IN ESTIMATOR? field on the Miscellaneous Defaults panel 324 MAKE STATISTICS PERMANENT? field on the Whatif panel 256 MASK OUT ANY PACKAGES NOT IN THE SPECIFIED SET OF PLANS? on the Selection Masking panel 370 MASKING IN EFFECT? field on the Primary Menu panel 210 Matching Index Scan field on the Statement Costs panel 52 MAX BLKSIZE for VIO on the **!DB/Tools** Global Configuration Information panel 294 MAX LENGTH FOR HOST VAR INPUT field on the SQL Defaults panel 378 MAX NUMBER OF XUPDT VSAM ERRORS field on the Extract Processing Defaults panel 313 MAX STMT COST field on the DBRMs panel 62 MAXIMUM STATEMENT COST field on the DBRMs panel 62 on the Packages panel 176 on the Statement Costs panel 52 MAXIMUM STMT COST field on the Packages panel 176 on the Statement Costs panel 52 ME (Method) field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MEMBER field on the Output Options panel 163 MEMBER NAME field on the Output Options Defaults panel 327 MEMBERS HEADING Number field on the Libraries panel 158

Merge Scan Join field on the Statement Costs panel 53 MERGE SINGLE STATEMENT EXPLAINS field on the EXPLAIN Defaults panel 305 Method field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MI (Multiple Index Intersection) field on the Statement Costs panel 52 MID LEVEL QUALIFIER#1 field on the Library Search Order panel 321 MID LEVEL QUALIFIER#2 field on the Library Search Order panel 321 MID LEVEL QUALIFIER#3 field on the Library Search Order panel 321 MID LEVEL QUALIFIER#4 field on the Library Search Order panel 321 MIS (Matching Index Scan) field on the Statement Costs panel 52 Miscellaneous Defaults panel 322 Mixed field on the DBRMs panel 62 on the EXPLAIN panel 118 on the Packages panel 177 MJCL field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MOD ONTO MEMBERS? field on the Output Options Defaults panel 327 MODIFY ONTO MEMBER field on the Output Options panel 163 MODIFY ONTO USER PDS MEMBERS? field on the BIND Compare Options panel 279 MORE CONNECTIONS? field 36 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 36 MORE DRRMs? field 36 on the BIND/REBIND Plan panel 36 MORE LIBRARIES field 36 on the BIND/REBIND Plan panel 36 MORE PACKAGE LISTS? field 37 on the BIND/REBIND Plan panel 37 MSGS dataset field on the **!DB/Tools** Global Configuration Information panel 294 MSJ (Merge Scan Join) field on the Statement Costs panel 53

MTCL field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118 MU (Multiple Index Union) field on the Statement Costs panel 53 Multiple Index Intersection field on the Statement Costs panel 52 Multiple Index Union field on the Statement Costs panel 53 MVS ID field 296 on the !DB/Tools DB2 Configuration Information panel 292 on the !DB/Tools Global Information—DB2 Subsystem Name Table panel 296 MX (Index Scans on Index) field on the Statement Costs panel 53 MX (Mixed) field on the DBRMs panel 62 on the Packages panel 177 MXOP field on the EXPLAIN Compare panel 139 on the EXPLAIN panel 118

Ν

N (Index Scan for IN) field on the Statement Costs panel 53 NACTIVE field on the Estimator panel 77 on the EXPLAIN panel 118 on the Whatif panel 256 NACTIVE (TSTP) field on the EXPLAIN panel 119 NAME field on the Tables panel 241 NAME heading field 218 on the EXPLAIN Compare panel 140 on the EXPLAIN History panel 147 on the Libraries panel 158 on the Statement Costs panel 53 on the Statements panel 218 NDX= field on the EXPLAIN panel 119 NEARINDREF field on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256

NEAROFFPOS field on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256 Nested Loop Join field on the Statement Costs panel 53 NLEAF field on the Estimator panel 77 on the EXPLAIN panel 119 on the Whatif panel 256 NLEAF (IXP) field on the EXPLAIN panel 119 NLEVELS field on the Estimator panel 77, 78 on the Whatif panel 256 NLEVELS (IXP) field on the EXPLAIN panel 119 NLJ (Nested Loop Join) field on the Statement Costs panel 53 NMIS (Non-Matching Index Scan) field on the Statement Costs panel 53 No. of MEMBERS HEADING field on the Libraries panel 158 Non-Matching Index Scan field on the Statement Costs panel 53 NOT SIGN CHARACTER field on the EXPLAIN/SQL Defaults panel 311 NPAGES field on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 256 NPAGES (TSTP) field on the EXPLAIN panel 119 NTABLES field on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 256 NULL field on the Column Distribution Statistics panel 43 NULLS field on the Table Columns panel 233 Number of Access Degrees field on the Statement Costs panel 52 NUMBER OF COLLECTIONS field on the Build Tuning Parameters panel 282 NUMBER OF CONNECTIONS PER PACKAGE field on the Build Tuning Parameters panel 282

NUMBER OF CONNECTIONS PER PLAN field on the Build Tuning Parameters panel 282 NUMBER OF DBRMS PER PLAN field on the Build Tuning Parameters panel 282 NUMBER OF DBRMS TO PROCESS field on the VSAM Tuning Parameters panel 383 NUMBER OF DBRMS TO PROCESS (XCPT) field on the VSAM Tuning Parameters panel 384 NUMBER OF EXPLAINABLE STATEMENTS PER DBRM/PACKAGE field on the Build Tuning Parameters panel 282 Number of Join Degrees field on the Statement Costs panel 52 NUMBER OF PACKAGES field on the Build Tuning Parameters panel 282 NUMBER OF PACKAGES PER PLAN field on the Build Tuning Parameters panel 282 NUMBER OF PLANS field on the Build Tuning Parameters panel 282 NUMBER OF STATEMENTS TO PROCESS field on the VSAM Tuning Parameters panel 384 NUMBER OF TABLES field on the Build Tuning Parameters panel 282 NUMBER OF TABLES REFERENCED BY AN EXPLAINABLE STATEMENT field on the Build Tuning Parameters panel 282 NUMBER OF UNIQUE DBRMS field

0

OBID field on the Estimator panel 78 on the EXPLAIN panel 119 on the Whatif panel 257 object information 95 object list panels matrix showing commands 387 matrix showing selects 409 object panels 17 OK field on the Extract History panel 150 OMEGAMON II for DB2 Accounting Reports 187 Application Trace Facility 187 **One-Fetch Index Scan field** on the Statement Costs panel 52

online documentation 14 Online Menu 160 OP (Operative) field on the Packages panel 177 on the Plans panel 200 OPEN field from DBRMs 200 from Packages 200 on the DBRMs panel 62 on the Packages panel 177 on the Plans panel 200 **OPERATIVE** field from packages 119 from plans 120 on the EXPLAIN panel 119, 120 on the Packages panel 177 on the Plans panel 200 **OPERATOR** field on the Selection Masking panel 370 OPTION field on the Housekeeping panel 318 on the Recommendations Menu 347 Order By sorts on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 on the Statement Costs panel 54 **ORDER** field on the EXPLAIN Display Tuning Parameters panel 309 ORDERING field on the Keys panel 154 **OUT STATISTICS FORMAT field** on the Miscellaneous Defaults panel 324 Output Options 162 Output Options Defaults panel 326 **OWNER** field on the EXPLAIN panel 120 on the Package BIND Overrides panel 332 on the Packages panel 177 on the Plan BIND Overrides panel 344 OWNER of PACKAGE(AUTHID) field on the BIND/REBIND Package panel 27 OWNER of PLAN(AUTHID) field 37 on the BIND/REBIND Plan panel 37

Ρ

P M field on the EXPLAIN Compare panel 140 on the EXPLAIN panel 120 P R = fieldon the EXPLAIN Compare panel 140 on the EXPLAIN panel 120 P#TS field on the PLANS panel 200 Package BIND Overrides 328 PACKAGE BINDSTAMP MASK 1 field on the Selection Masking panel 370 PACKAGE BINDSTAMP MASK 2 field on the Selection Masking panel 370 PACKAGE COLLECTION MASK 1 field on the Selection Masking panel 370 PACKAGE COLLECTION MASK 2 field on the Selection Masking panel 370 PACKAGE COLLECTION SELECTION field on the Miscellaneous Defaults panel 324 Package Connections 164 PACKAGE CREATOR MASK 1 field on the Selection Masking panel 370 PACKAGE CREATOR MASK 2 field on the Selection Masking panel 371 PACKAGE field 37, 186 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 120 on the Packages panel 177 on the Plan Package List panel 186 on the Verification panel 244 PACKAGE ID field on the BIND/REBIND Package panel 27 Package Information panel 171 Package List panel 33 PACKAGE MASK1 field on the Selection Masking panel 371 PACKAGE MASK2 field on the Selection Masking panel 371 PACKAGE NAME field on the EXPLAIN Compare panel 138 on the Statements panel 217 PACKAGE OWNER MASK 1 field on the Selection Masking panel 371 PACKAGE OWNER MASK 2 field on the Selection Masking panel 371

PACKAGE QUALIFIER MASK 1 field on the Selection Masking panel 371 PACKAGE QUALIFIER MASK 2 field on the Selection Masking panel 371 PACKAGE VERSION MASK 1 field on the Selection Masking panel 371 PACKAGE VERSION MASK 2 field on the Selection Masking panel 371 package, from existing DBRM 56 PACKAGE/DBRM field on the Statement Costs panel 52 PACKAGE/DBRM NAME field on the EXPLAIN panel 110 packages in plan 204 number in plan 195 number of ALTERs in 193 number of CLOSE statements in 194 number of COMMITs in 194 number of CONNECTs in 194 number of CREATEs in 195 number of DECLARE CURSORs in 195 number of DECLARE STATEMENTs in 195 number of DECLARE TABLEs in 196 number of DELETEs in 196 number of DESCRIBEs in 196 number of DROPs in 197 number of EXECUTEs in 198 number of EXPLAINs in 198 number of FETCHes in 198 number of GRANTs in 199 number of INSERTS in 199 number of LCK SHRs in 199 number of LCK XCLs in 200number of OPENs in 200 number of PREPAREs in 201 number of RELEASEs in 201 number of REVOKEs in 201 number of ROLLBACKs in 202 number of RO(REOPTVAR)s in 201 number of SELECTS in 202 number of SETs in 202 number of STMTS in 204 number of UPDATES in 204 number of WHENEVERs in 205 Packages panel 166 PACKLIST COLLECTION MASK 1 on the Selection Masking panel 371

PACKLIST COLLECTION MASK 2 on the Selection Masking panel 371 PACKLIST LOCATION MASK 1 on the Selection Masking panel 371 PACKLIST LOCATION MASK 2 on the Selection Masking panel 371 PACKLIST PACKAGE MASK 1 on the Selection Masking panel 371 PACKLIST PACKAGE MASK 2 371 on the Selection Masking panel PAGESAVE field on the Estimator panel 78 on the Whatif panel 257 PAGESAVE (TSTP) field on the EXPLAIN panel 120 panel terminology: vs. display 12 Panel Filters panel 335 Panel Formats panel 337 Panel Sorts panel 339 panels 288 Administration Menu 21 BIND Compare Options 277 BIND/REBIND Package 23 BIND/REBIND Plan 29 Build Tuning Parameters 281 Collections 39 Column Distribution Statistics 41, 42 Column Distribution Statistics panel 42 Compare History 45 Compare Options 284 Costs 49 customization and housekeeping 273 Data Formats 286 DBRM Information 59 DBRM Member Names 31 DBRMs 56 **!DB/Tools DB2 Configuration** Information 290 **!DB/Tools Global Configuration** Information 293 !DB/Tools Global Information—DB2 Subsystem Name Table 295 !DB/Tools Profile Dataset List 297 Estimator 67 Exception Options 299 Exceptions 93 EXPLAIN 95 EXPLAIN Compare 134 EXPLAIN Defaults 303

panels (continued) EXPLAIN Display Tuning Parameters 307 EXPLAIN History 144 EXPLAIN History Delete Confirmation 146 EXPLAIN/SQL Defaults 310 Extract History 149 Extract Processing Defaults 312 Extract Update 151 Housekeeping 315 housekeeping and customization 273 I 187, 188 Index keys 153 Keys 153 KTBPHODB 290 KTBPHOGL 293 KTCPDBDS 295 KTCPPRF0 297 KTE3CDSE 41 **KTE3CKSE** 153 KTE3SSUP 70. 248 KTE3TCFR 226 KTE3TCSE 226 KTEPADMN 21 KTEPBIDB 31 KTEPBIKA 23 On the BIND/REBIND Package panel 25 KTEPBIKC 25 KTEPBILI 32 **KTEPBIPC** 32 **KTEPBIPK** 33 29 KTEPBIPL KTEPCDI2 42 KTEPCDIS 41, 42 KTEPCKEY 153 39 KTEPCLTN KTEPCMPR 134 **KTEPCOST** 49 59 KTEPDBIN KTEPDBRM 56 KTEPESTM 67 KTEPEXPL 95 KTEPHIDL 146 KTEPHIST 144 KTEPHOBC 277 **KTEPHOBK** 328 **KTEPHOBP** 341 KTEPHOCO 284 KTEPHODF 335 KTEPHODS 377 KTEPHOEP 312

panels (continued	d)	
KTEPHOEX	303	
KTEPHOLS	319	
KTEPHOMF	286	
KTEPHOMI	310	
KTEPHOMJ	322	
KTEPHOMK	369	
KTEPHOOD	326	
KTEPHOPF	337	
KTEPHOPS	339	
KTEPHOR0	348	
KTEPHOR1	350	
KTEPHOR2	352	
KTEPHOR3	354	
KTEPHOR4	356, 358, 360, 362	
KTEPHOR8	364	
KTEPHORM	347	
KTEPHOSE	373	
KTEPHOSQ	379	
KTEPHOUS	315	
KTEPHOVB	382	
KTEPHOVC	281	
KTEPHOVD	307	
KTEPHOXC	366	
KTEPHOXO	299	
	45	
KTEPKACK	166	
KTEPKAIN	171	
KTEPKCON	164	
KTEPLIBR	155	
KTEPLIDL	157	
KTEPMENU	209	
KTEPMEON	160	
KTEPOUTP	162	
KTEPPCON	183	
KTEPPKPL	185	
KTEPPLAN	187	
KTEPPVER	243	
KTEPSSSG	70, 248	
KTEPSTMT	-	
KTEPSWCH	211	
KTEPTABL	240	
KTEPTCOL	226, 227, 229	
KTEPWHIF	245	
KTEPXAUB	151	
KTEPXCPT	93	
KTEPXHST	149	
Libraries 15	5	
Library Delete	e Confirmation 157	
Library Delete	e Confirmation panel	157
	_	

panels (continued) 32 Library Names Library Search Order 319 Miscellaneous Defaults 322 object 17 Online Menu 160 Output Options 162 Output Options Defaults 326 Package BIND Overrides 328 Package Connections 164 Package Information 171 Package List 33 Packages 166 Panel Filters 335 Panel Formats 337 Panel Sorts 339 Plan BIND Overrides 341 Plan Connections 183 Plan Package List 185 Plans 187 Plans Info 187 Primary Menu 209 REBIND Package 23 REBIND Plan 29 Recommendations Menu 347 Recommendations Panel 0 348 350 Recommendations Panel 1 **Recommendations Panel 2** 352 **Recommendations Panel 3** 354 **Recommendations Panel 4** 356 **Recommendations Panel 5** 358 **Recommendations Panel 6** 360 **Recommendations Panel 7** 362 **Recommendations Panel 8** 364 **Recommendations Panel 9** 366 Selection Masking 369 Sessions Menu 211 Set Defaults 373 SQL Defaults 377 SQL Formats for KTEXPL 379 Statements 212 Statistics Gathering 248 Statistics Gathering panel 70 Statistics Update 248 Statistics Update panel 70 System Connection Names panel 25 System Connection Types 32 Table Columns 226 Table Columns panel 227, 229 Tables 240

panels (continued) Tuning Parameters 382 Verification 243 Whatif 245 PARENS field on the Selection Masking panel 371 PARNT field on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 parser exit to DB2 using host variables in 311 using synonyms in 311 PART field on the Column Distribution Statistics panel 43 on the Table Columns panel 233 **PARTITION** field on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 PARTITIONS field on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel PCTFREE field on the Estimator panel 78 on the EXPLAIN panel 120 on the Whatif panel 257 **PCTPAGES** field on the Estimator panel 78, 79 on the Whatif panel 257 PCTPAGES (TSTP) field on the EXPLAIN panel 121 PCTROWCOMP field on the Estimator panel 79 on the Whatif panel 257 PCTROWCOMP (TBL) field on the EXPLAIN panel 121 PCTROWCOMP (TSTP) field on the EXPLAIN panel 121 PD#TS field on the PLANS panel 200 PERCACT field on the Estimator panel 79 on the EXPLAIN panel 121 on the Whatif panel 257 PERCDROP field on the Estimator panel 79 on the EXPLAIN panel 121

PERCDROP field (continued) on the Whatif panel 258 PERMANENT field on the BIND Compare Options panel 280 on the Data Formats panel 287 on the Exception Options panel 300 on the EXPLAIN Defaults panel 305 on the EXPLAIN/SQL Defaults panel 311 on the Extract Processing Defaults panel 313 on the Library Search Order panel 321 on the Miscellaneous Defaults panel 324 on the Output Options Defaults panel 327 on the Panel Filters panel 336 on the Panel Sorts panel 340 on the Recommendations Panel 0 349 on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363 on the Recommendations Panel 8 365 on the Recommendations Panel 9 367 on the Selection Masking panel 371 on the SQL Defaults panel 378 on the VSAM Tuning Parameters panel 384 PERMANENT INDICATOR field on the Panel Formats panel 338 on the Set Defaults panel 375 PF (Prefetch) field on the EXPLAIN Compare panel 140 on the EXPLAIN panel 121 PG field on the Extract History panel 150 PGSIZE field on the Estimator panel 79 on the EXPLAIN panel 121 on the Whatif panel 258 PK#TS field on the PLANS panel 200 PKG MASK#1 field on the Extract History panel 150 PKG MASK#2 field on the Extract History panel 150 PKG OPER field on the Extract History panel 150 PKG POST field on the Extract Processing Defaults panel 313 PKG PRE field on the Extract Processing Defaults panel 313 PKGS field on the Libraries panel 158 PKSIZE field on the EXPLAIN panel 121 on the Packages panel 177 Plan BIND Overrides 341 PLAN BINDSTAMP MASK 1 field on the Selection Masking panel 372 PLAN BINDSTAMP MASK 2 field on the Selection Masking panel 372 Plan Connections panel 183 PLAN CREATOR field on the DBRMs panel 62 PLAN Creator MASK 1 field on the Selection Masking panel 372 PLAN CREATOR MASK 2 field on the Selection Masking panel 372 PLAN field 37 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 121 on the PLANS panel 200 on the Verification panel 244 PLAN FREED? field on the EXPLAIN panel 121 on the Plans panel 200 PLAN HEADING field on the DBRMs panel 62 PLAN INFORMATION field 218 on the Statements panel 218 PLAN MASK#1 field on the Extract History panel 150 PLAN MASK#2 field on the Extract History panel 150 PLAN MASK1 field on the Selection Masking panel 372 PLAN MASK2 field on the Selection Masking panel 372 PLAN NAME field on the EXPLAIN Compare panel 140 on the Statements panel 217 PLAN OPER field on the Extract History panel 150 PLAN OWNER MASK 1 field on the Selection Masking panel 372 PLAN OWNER MASK 2 field on the Selection Masking panel 372

Plan Package List panel 185 PLAN POST field on the Extract Processing Defaults panel 313 PLAN PRE field on the Extract Processing Defaults panel 313 PLAN QUALIFIER MASK 1 field on the Selection Masking panel 372 PLAN QUALIFIER MASK 2 field on the Selection Masking panel 372 plan section bytes 193 PLAN SIZE field on the EXPLAIN panel 121 PLAN TABLE ASSOCIATE NEW ONES? field on the Extract Processing Defaults panel 314 plan table data (2-line format) 95 PLAN TABLE OWNER field on the Set Defaults panel 375 PLAN TABLE VARIANCE field on the Extract Processing Defaults panel 314 PLAN TABLE EXPLAIN DATE/TIME field 147 PLAN_TABLE data 95 PLAN_TABLE DATASET DATA BUFFERS (FOR OUTPUT) field on the VSAM Tuning Parameters panel 384 PLAN TABLE EXTRACT DATASET DATA **BUFFERS** field on the VSAM Tuning Parameters panel 384 PLAN TABLE EXTRACT DATASET INDEX **BUFFERS** field on the VSAM Tuning Parameters panel 384 PLAN TABLE EXTRACT DATASET INDEX BUFFERS (FOR OUTPUT) field on the VSAM Tuning Parameters panel 384 PLAN_TABLE.ACCESS_DEGREE ACC DEG field 105, 138 ADG (Number of Access Degrees) field 52 PLAN TABLE.ACCESS PGROUP ID ACC PID field 105, 138 PLAN_TABLE.ACCESSCREATOR NDX= field 119PLAN TABLE.ACCESSNAME INDEXNAME field 115, 139 NDX= field 119 PLAN TABLE.ACCESSTYPE ACCESS field 105 ACCS (Access) field 138 I1 (One-Fetch Index Scan) field 52 MI (Multiple Index Intersection) field 52 MU (Multiple Index Union) field 53

PLAN_TABLE.ACCESSTYPE (continued) MX (Index Scans on Index) field 53 N (Index Scan for IN) field 53 TS (Table Space Scan) field 54 PLAN_TABLE.COLLID COLLECTION field 138 PLAN_TABLE.COLUMN_FN_EVAL FN (Function) field 114, 138 WO field 130 PLAN_TABLE.CORRELATION_NAME CORR= field 109, 138 PLAN_TABLE.CREATOR TBL= field 128PLAN_TABLE.INDEX ONLY IX (Index Only) field 139 PLAN_TABLE.INDEXONLY IX field 116 PLAN TABLE.JOIN DEGREE JDG (Number of Join Degrees) field 52 JOI DEG field 116, 139 PLAN_TABLE.JOIN_PGROUP_ID JOI PID field 116, 139 PLAN TABLE.MATCHCOLS MTCL field 118, 139 PLAN_TABLE.MERGE_JOIN_COLS MJCL field 118, 139 PLAN TABLE.METHOD HBJ (Hybrid Join) field 52 ME (Method) field 118, 139 MSJ (Merge Scan Join) field 53 NLJ (Nested Loop Join) field 53 PLAN TABLE.MIXOPSEQ MXOP field 118, 139 PLAN_TABLE.PARALLELISM_MODE P M field 120, 140 PLAN TABLE.PLANNO PLN NO. field 122 PLAN TABLE.PREFETCH FROM TABLE identifier 114 LPF (List Prefetch) field 52 PF (Prefetch) field 121, 140 SPF (Sequential Prefetch) field 54 PLAN_TABLE.PROGNAME DBRM field 138 NAME heading field 140 PACKAGE NAME field 138 PLAN_TABLE.QBLOCK_TYPE QUERY TEXT field 123 QUERY TYPE field 141

PLAN_TABLE.QBLOCKNO QBNO field 122 QBNO (Query Block Number) field 140 PLAN TABLE.QUERYNO OUERYNO field 140 PLAN TABLE.SORTC GROUPBY SG (Sorts - Group By) field 53 SRC G (Sorts - Group By) field 141 PLAN TABLE.SORTC JOIN SJ (Sorts - Join) field 54 SRC J (Sort - Join) field 141 PLAN_TABLE.SORTC_ORDERBY SO (Sorts - Order By) field 54 SRC O (Sort - Order By) field 141 PLAN_TABLE.SORTC_UNIQ SRC U (Sort - Unique) field 141 SU (Sorts - Unique) field 54 PLAN TABLE.SORTN GROUPBY SG (Sorts - Group By) field 53 SRN G (Sorts-Group By) field 142 PLAN_TABLE.SORTN_JOIN SJ (Sorts - Join) field 54 SRN J (Sort - Join) field 142 PLAN TABLE.SORTN ORDERBY SO (Sorts - Order By) field 54 SRN O (Sort - Order By) field 142 PLAN_TABLE.SORTN_UNIQ SRN U (Sort - Unique) field 142 SU (Sorts - Unique) field 54 PLAN_TABLE.TIMESTAMP EXPLAIN DATE/TIME field 61, 138, 175 EXPLAIN TIMESTAMP field 52, 113 PLAN_TABLE.TNAME TBL= field 128PLAN TABLE.TSLOCKMODE LCK field 117, 139 LCK (TSLOCKMODE) field 52 PLAN TABLE.VERSION VERSION field 54, 142 PLAN TABLE. WHEN OPTIMIZE WO field 142 PLANS field on the **!DB/EXPLAIN** Configuration Information panel 289 Plans Info panel 187 Plans panel 187 PLANTABL OWNER field on the Extract History panel 150

PLENTRIES field on the EXPLAIN panel 122 on the Plans panel 200 PLN NO. field on the EXPLAIN panel 122 PLSIZE field on the Plans panel 201 portable document format, Adobe 9 PQTY field on the Estimator panel 79 on the EXPLAIN panel 122 on the Whatif panel 258 PRECOMPILE DATE field on the Statements panel 219 PRECOMPILE DATE/TIME field on the DBRMs panel 62 on the EXPLAIN History panel 147 on the Verification panel 244 PRECOMPILE DATE/TME field on the Packages panel 177 PRECOMPILE TIME field on the EXPLAIN panel 122 PRECOMPILE TIMESTAMP field on the Statement Costs panel 53 Prefetch field on the EXPLAIN Compare panel 140 on the EXPLAIN panel 121 **PREPARE** field from DBRMs 201 from Packages 201 on the DBRMs panel 62 on the Packages panel 177 on the Plans panel 201 PREPARE STMTS TO OBTAIN COST field on the EXPLAIN/SQL Defaults panel 311 pre-V130 (1.3) precompiler problems with DBRMs 56, 290 PRIMARY field on the **!DB/EXPLAIN** Configuration Information panel 289 Primary Menu 209 PROCESS BIND TYPE OPTIONS? field on the Exception Options panel 300 PROCESS OBJECT TYPE OPTIONS? field on the Exception Options panel 301 PROCESS SQL ERROR TYPE OPTIONS? field on the Exception Options panel 301 PROCESS SQL TYPE OPTIONS? field on the Exception Options panel 301

PROCESS XCPT TYPE OPTIONS? field on the Exception Options panel 302
PROFILE dataset LIST field on the Housekeeping panel 318
Profile Dataset Type field on the !DB/Tools Profile Dataset List panel 298
PSID field on the Estimator panel 79 on the EXPLAIN panel 122 on the Whatif panel 258

Q

QBNO field on the EXPLAIN panel 122 **OBNO** (Ouery Block Number) field on the EXPLAIN Compare panel 140 QU (Quote) field on the DBRMs panel 62 on the Packages panel 177 OUALIFIER field 37 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 122 on the Library Search Order panel 321 on the Library Search Order panel 321 on the Package BIND Overrides panel 332 on the Packages panel 177 on the Plan BIND Overrides panel 344 on the Plans panel 201 **QUALIFY SYNONYMS WITH** PLAN/PACKAGE OUALIFIER field on the Set Defaults panel 375 Query Block Number field on the EXPLAIN Compare panel 140 QUERY TEXT field on the EXPLAIN panel 123 QUERY TYPE field on the EXPLAIN panel 141 QUERYNO field on the EXPLAIN Compare panel 140 Quote field on the DBRMs panel 62 on the EXPLAIN panel 123 on the Packages panel 177

R

RBA1 field on the Estimator panel 79 on the Whatif panel 258 RBA1 (TBL) field on the EXPLAIN panel 123 RBA2 field on the Estimator panel 79 on the Whatif panel 258 RBA2 (TBL) field on the EXPLAIN panel 123 RE (Release) field on the Packages panel 177 on the Plans panel 201 READ EXPLAIN IF OWNER CHANGED field on the EXPLAIN Defaults panel 305 REAL CATALOG PREFIX field on the **!DB/Tools DB2** Configuration Information panel 292 REBIND Package panel 23 REBIND Plan panel 29 **RECLEN** field on the Estimator panel 79 on the EXPLAIN panel 123 on the Whatif panel 258 RECOMMENDATION TEXT field 219 on the Statements panel 219 recommendations 95 Recommendations Menu 347 Recommendations Panel 0 348 **Recommendations Panel 1** 350 **Recommendations Panel 2** 352 **Recommendations Panel 3** 354 **Recommendations Panel 4** 356 **Recommendations Panel 5** 358 **Recommendations Panel 6** 360 **Recommendations Panel 7** 362 **Recommendations Panel 8** 364 **Recommendations Panel 9** 366 **RELEASE** (All) field on the Plans panel 201 RELEASE field 37 from DBRMs 201 from Packages 201 on the BIND/REBIND Package panel 27 on the BIND/REBIND Plan panel 37 on the DBRMs panel 62 on the EXPLAIN panel 123 on the Package BIND Overrides panel 332

RELEASE field (continued) on the Packages panel 177, 178 on the Plan BIND Overrides panel 344 on the Plans panel 201 **RELEASE VERSION field** on the BIND/REBIND Package panel 28 **REMOTE ENABLE field** on the Package Bind Overrides panel 332 on the Plan Bind Overrides panel 344 REMOTE ENABLE? field 37 on the BIND/REBIND Plan panel 37 **REMOTE** field on the EXPLAIN panel 123 on the Packages panel 178 REOPT(VAR) field on the Packages panel 178 REOPT(VAR)(Packages) field on the EXPLAIN panel 124 REOPT(VAR)(Plans) field on the EXPLAIN panel 124 REOPT(VARS) field 37 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel 37 on the Package BIND Overrides panel 332 on the Plan BIND Overrides panel 344 **REQUIRE ALL DBRMS FOR A PLAN? field** on the EXPLAIN Defaults panel 305 REQUIRE ALL PACKAGES FOR A PLAN? field on the EXPLAIN Defaults panel 305 **RESEARCH VIEWS AND ALIASES field** on the EXPLAIN Defaults panel 305 restriction using CEXPL in batch 48 **RETAIN EXECUTION AUTHORITY field** 37 on the BIND/REBIND Plan panel 37 on the Plan BIND Overrides panel 345 **RETAIN EXPLAIN DISPLAY?** field on the EXPLAIN Defaults panel 306 **RETAIN STATISTICS FOR REUSE?** field on the EXPLAIN Defaults panel 306 revision bars 11 **REVOKE** field from DBRMs 201 from Packages 201 on the DBRMs panel 62 on the Packages panel 178 on the Plans panel 201

RHS field on the SQL Formats for KTEXPL panel 381 RM (Remote) field on the Packages panel 178 ROLLBACK field from DBRMs 202 from Packages 202 on the DBRMs panel 62 on the Packages panel 178 on the Plans panel 201, 202 RO(REOPTVAR) field from Packages 201 on the Plans panel 201

S

SAVE EXPLAIN IF OWNER CHANGED field on the EXPLAIN Defaults panel 306 SAVE EXPLAIN RESULTS? field on the EXPLAIN Defaults panel 306 SAVE VALUES PERMANENTLY? field 219 on the Host Variables panel 219 SAVE WHATIF RESULTS? field on the EXPLAIN Defaults panel 306 SCALE field 219 on the Host Variables panel 219 on the Table Columns panel 233 SE (SQLERROR) field on the Packages panel 178 SEARCH ORDER field on the Library Search Order panel 321 SEGSIZE field on the Estimator panel 80 on the EXPLAIN panel 124 on the Whatif panel 258 Selection Masking panel 369 selects matrix showing availability 409 SELECTS field from DBRMs 202 from Packages 202 on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 on the Tables panel 241 SEQNO field 186 on the Plan Package List panel 186

Sequential Prefetch field on the Statement Costs panel 54 SERVER field on the Estimator panel 79 on the EXPLAIN panel 124 on the Plans panel 202 on the Whatif panel 258 Sessions Menu panel 211 SET CONNECT field on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 SET CURRENT DEGREE field on the Set Defaults panel 375 Set Defaults using global commands 373 Set Defaults panel 373 SET DEGREE field on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202, 203 SET EXCEPTION RC FOR EXPLAIN field on the Miscellaneous Defaults panel 324 SET EXCEPTION RC FOR RECOMMEND field on the Miscellaneous Defaults panel 324 SET EXCEPTION RC FOR XCPT field on the Miscellaneous Defaults panel - 324 SET field from DBRMs 202 from Packages 202 on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 202 SET HOST field on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 203 SET O field on the Set Defaults panel 376 SET PKGSET field on the DBRMs panel 63 on the Packages panel 178 on the Plans panel 203 SET RULES field on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 203 SET SQLID field on the DBRMs panel 63 on the Packages panel 179

SET SQLID field (continued) on the Plans panel 203 SG (Sorts - Group By) field on the Statement Costs panel 53 shadow catalog vs. real catalog 245, 325 vs. real catalog previx 292 SHOW ALL PLAN_TABLE ROWS? field on the EXPLAIN Defaults panel 306 SJ (Sorts - Join) field on the Statement Costs panel 54 SKELS dataset field on the !DB/Tools Global Configuration Information panel 294 SO (Sorts - Order By) field on the Statement Costs panel 54 Sort - Join field on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 Sort - Order By field on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 Sort - Unique field on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 SORT COMMAND field on the Panel Sorts panel 340 SORT TYPE field on the Panel Sorts panel 340 Sorts - Group By field on the composite table 141 on the EXPLAIN Compare panel 141, 142 on the new table 142 on the Statement Costs panel 53 Sorts - Join field on the Statement Costs panel 54 Sorts - Order By field on the Statement Costs panel 54 Sorts - Total field on the Statement Costs panel 54 Sorts - Unique field on the Statement Costs panel 54 source SYSIBM.SYSTABLES STATUS field 127

sources PLAN_TABLE EXPLAIN DATE/TIME field 147 PLAN TABLE.ACCESS DEGREE ACC DEG field 105, 138 ADG (Number of Access Degrees) field 52 PLAN_TABLE.ACCESS_PGROUP_ID ACC PID field 105, 138 PLAN_TABLE.ACCESSCREATOR NXL= field 119 PLAN TABLE.ACCESSNAME INDEXNAME field 115, 139 NDX= field 119 PLAN TABLE.ACCESSTYPE ACCESS field 105 ACCS (Access) field 138 I1 (One-Fetch Index Scan) field 52 MI (Multiple Index Intersection) field 52 MU (Multiple Index Union) field 53 MX (Index Scans on Index) field -53 N (Index Scan for IN) field 53 TS (Table Space Scan) field 54 PLAN TABLE.COLLID COLLECTION field 138 PLAN TABLE.COLUMN FN EVAL FN (Function) field 114, 138 WO field 130 PLAN TABLE.CORRELATION NAME CORR= field 109, 138 PLAN_TABLE.CREATOR TBL= field 128 PLAN_TABLE.INDEX ONLY IX (Index Only) field 139 PLAN TABLE.INDEXONLY IX field 116 PLAN_TABLE.JOIN_DEGREE JDG (Number of Join Degrees) field 52 JOI DEG field 116, 139 PLAN TABLE.JOIN PGROUP ID JOI PID field 116, 139 PLAN_TABLE.MATCHCOLS MTCL field 118, 139 PLAN_TABLE.MERGE_JOIN_COLS MJCL field 118, 139 PLAN_TABLE.METHOD HBJ (Hybrid Join) field 52 ME (Method) field 118, 139 MSJ (Merge Scan Join) field 53 NLJ (Nested Loop Join) field 53

sources (continued) PLAN TABLE.MIXOPSEO MXOP field 118, 139 PLAN TABLE.PARALLELISM MODE P M field 120, 140 PLAN TABLE.PLANNO PLN NO. field 122 PLAN_TABLE.PREFETCH LPF (List Prefetch) field 52 PF (Prefetch) field 121, 140 SPF (Sequential Prefetch) field 54 PLAN_TABLE.PROGNAME DBRM field 138 NAME heading field 140 PACKAGE NAME field 138 PLAN_TABLE.QBLOCK_TYPE QUERY TEXT field 123 OUERY TYPE field 141 PLAN_TABLE.QBLOCKNO **QBNO** field 122 QBNO (Query Block Number) field 140 PLAN_TABLE.QUERYNO QUERYNO field 140 PLAN TABLE.SORTC GROUPBY SG (Sorts - Group By) field 53 SRC G (Sorts - Group By) field 141 PLAN TABLE.SORTC JOIN SJ (Sorts - Join) field 54 SRC J (Sort - Join) field 141 PLAN_TABLE.SORTC_ORDERBY SO (Sorts - Order By) field 54 SRC O (Sort - Order By) field 141 PLAN_TABLE.SORTC_UNIQ SRC U (Sort - Unique) field 141 SU (Sorts - Unique) field 54 PLAN_TABLE.SORTN_GROUPBY SG (Sorts - Group By) field 53 SRN G (Sorts-Group By) field 142 PLAN_TABLE.SORTN_JOIN SJ (Sorts - Join) field 54 SRN J (Sort - Join) field 142 PLAN_TABLE.SORTN_ORDERBY SO (Sorts - Order By) field 54 SRN O (Sort - Order By) field 142 PLAN_TABLE.SORTN_UNIQ SRN U (Sort - Unique) field 142 SU (Sorts - Unique) field 54 PLAN_TABLE.TABNO FROM TABLE identifier 114 PLAN_TABLE.TIMESTAMP EXPLAIN DATE/TIME field 61, 138, 175

sources (continued) PLAN_TABLE.TIMESTAMP (continued) EXPLAIN TIMESTAMP field 52, 113 PLAN TABLE.TNAME TBL= field 128PLAN TABLE.TSLOCKMODE LCK field 117, 139 LCK (TSLOCKMODE) field 52 PLAN TABLE.VERSION VERSION field 54, 142 PLAN TABLE.WHEN OPTIMIZE WO field 142 SYSIBM.PACKSTMT SQL TEXT field 124 SYSIBM.PLAN_TABLE J T= field 116, 139 P R= field 120, 140 SYSIBM.STSSTNT CALL field 60 SYSIBM.SYSCOLDIST FREQ% field 43 STATS TIMESTAMP field 43 VALUE field 43 SYSIBM.SYSCOLDISTSTATS PART field 43 STATS TIMESTAMP field 43 SYSIBM.SYSCOLSTATS COLCARD field 230 HIGH2KEY NULL field 231 HIGH2KEY VALUE field 231 HIGHKEY NULL field 230 HIGHKEY VALUE field 230 LOW2KEY NULL field 232 LOW2KEY VALUE field 232 LOWKEY NULL field 232 LOWKEY VALUE field 232 PART field 233 STATS TIMESTAMP field 233 SYSIBM.SYSCOLUMNS COLCARD field 230 COLNO field 230 COLTYPE field 230 DEFAULT field 230 FLDPROC field 230 HIGH2KEY NULL field 231 HIGH2KEY VALUE field 231 KEYSEQ field 231 LENGTH field 231 LOW2KEY NULL field 232 LOW2KEY VALUE field 232 NULLS field 233

sources (continued) SYSIBM.SYSCOLUMNS (continued) SCALE field 233 STATS TIMESTAMP field 233 SYSIBM.SYSCOLVALUE NULL field 43 SYSIBM.SYSDBRM 217, 219, 221, 244 ALL field 158 CH (Charset) field 60 CO (Comma) field 60 COUNT (All) field 195 COUNT (DBRM) field 195 CREATOR field 195 DBRM field 60, 244 DBRM NAME field 217 DBRM/PACKAGE field 52 DBRMS field 158 DE (Dec31) field 61 HL (Hostlang) field 61 LIBRARY field 62 LIBRARY NAME field 244 MX (Mixed) field 62 PLAN HEADING field 62 PRECOMPILE DATE field 219 PRECOMPILE DATE/TIME field 62, 147, 244 PRECOMPILE TIMESTAMP field 53 QU (Quote) field 62 VERSION field 63, 130, 221, 244 SYSIBM.SYSINDEXES BPOOL field 71, 106, 250 CLOSERULE field 72, 108, 251 CLUSTERED field 73, 108, 252 CLUSTERING field 73, 108, 252 CLUSTRATIO field 73, 109, 252 COLCOUNT field 73, 109, 252 CREATEBY field 74, 110, 252 DSETPASS field 74, 112, 253 ERASERULE field 74, 113, 253 FIRSTKEY field 75, 114, 254 FULLKEY field 75, 114, 254 INDEXSPACE field 115, 255 INDEXTYPE field 76, 115, 255 ISOBID field 76, 115, 255 IX field 76, 116, 255 NLEAF field 77, 119, 256 NLEVELS field 77, 256 OBID field 78, 119, 257 PGSIZE field 79, 121, 258 SPACE field 80, 124, 258 STATSTS field 80, 259

sources (continued) SYSIBM.SYSINDEXES (continued) UNIQUE field 82, 129, 261 SYSIBM.SYSINDEXES.STATSTIME STATSTS (IX) field 127 SYSIBM.SYSINDEXESTATS CLUSTRATIO field 252 SYSIBM.SYSINDEXPART CARD field 71, 106, 250 FAROFFPOS field 75, 113, 254 FREEPAGE field 75, 114, 254 IXP field 76, 116, 255 LEAFDIST field 77, 117, 255 NEAROFFPOS field 77, 119, 256 PARTITION field 78, 120, 257 PCTFREE field 78, 120, 257 POTY field 79, 122, 258 SPACE field 80. 258 SQTY field 80, 125, 259 STATSTS field 80, 259 STORNAME field 81, 128, 260 STORTYPE field 81, 128, 260 VCATNAME field 82, 130, 261 SYSIBM.SYSINDEXPART.GBPCACHE GBPCACHE (IXP) field 75, 114, 254 SYSIBM.SYSINDEXPART.SPACE SPACE (IXP) field 124 SYSIBM.SYSINDEXPART.STATSTIME STATSTS (IXP) field 127 SYSIBM.SYSINDEXSPACE INDEXSPACE field 76 SYSIBM.SYSINDEXSTATS CLUSTRATIO field 73 CLUSTRATIO (IXP) field 109 FIRSTKEY field 75, 254 FULLKEY field 75, 254 KEYCNT field 76, 255 NLEAF field 77, 256 NLEVELS field 78, 256 STATSTSP field 80, 259 SYSIBM.SYSINDEXSTATS.FIRSTKEYCARD FIRSTKEY (IXP) field 114 SYSIBM.SYSINDEXSTATS.FULLKEYCARD FULLKEY (IXP) field 114 SYSIBM.SYSINDEXSTATS.KEYCOUNT KEYCNT (IPX) field 117 SYSIBM.SYSINDEXSTATS.NLEAF NLEAF (IXP) field 119 SYSIBM.SYSINDEXSTATS.NLEVELS NLEVELS (IPX) field 119

sources (continued) SYSIBM.SYSINDEXSTATS.STATSTIME STATSTSP (IXP) field 127 SYSIBM.SYSKEYCOLUMNS KEYCOLUMNS field 117 SYSIBM.SYSKEYS.COLNAME COLUMN NAME field 154 SYSIBM.SYSKEYS.COLNO COLUMN NO field 154 SYSIBM.SYSKEYS.COLSEQ COLUMN SEO field 154 SYSIBM.SYSKEYS.IXCREATOR IXCREATOR field 154 SYSIBM.SYSKEYS.IXNAME IXNAME field 154 SYSIBM.SYSKEYS.ORDERING ORDERING field 154 SYSIBM.SYSPACKAGE 147, 177, 217, 219, 244 ALL field 158 AVSIZE field 106, 172 BIND DATE/TIME field 172 BOUND field 106, 172 CALL 172 CH (Charset) field 172 CHARSET field 107 CO (Comma) field 172 COLLECTION field 172 COLLECTION ID field 109 COLLID field 244 COMMA field 109 CONTOKEN field 109, 173 COUNT (All) field 195 COUNT (Packages) field 195 CREATE field 173 CREATOR field 173 CREATOR (Packages) field 110 DBRM field 244 DBRM/PACKAGE field 52 DE (Dec31) field 173 DEC31 field 111 DP (DeferPrep) field 174 DR 174, 197 DYNAMICRULES 175 EX (EXPLAIN) field 175 EXPLAIN (Packages) field 113 GROUP MEMBER 175 GROUP MEMBER= field 115 HL (Hostlang) field 176 HOSTLANG field 115 IS (Isolation) field 176

sources (continued) SYSIBM.SYSPACKAGE (continued) ISOLATION (Packages) field 116 LIBRARY field 117, 176 LIBRARY NAME field 244 LOCATION field 244 LOCATION (Packages) field 117 MIXED field 118 MX (Mixed) field 177 on the EXPLAIN panel 109 OP (Operative) field 177 OPERATIVE (Packages) field 119 OWNER field 120, 177 PACKAGE field 120, 177, 244 PACKAGE NAME field 217 PKGS field 158 PKSIZE field 121, 177 PRECOMPILE DATE field 219 PRECOMPILE DATE/TIME field 147, 244 PRECOMPILE DATE/TME field 177 PRECOMPILE TIME field 122 PRECOMPILE TIMESTAMP field 53 QU (Quote) field 177 OUALIFIER field 177 QUALIFIER (Packages) field 122 OUOTE field 123 RE (Release) field 177 RELEASE (Packages) field 123 REMOTE field 123 RM (Remote) field 178 SE (SQLERROR) field 178 SOLERR field 125 SYSENTRIES (Packages) field 128 SYSENTRY field 179 VA (Validate) field 179 VALID (Packages) field 129 VALIDATE (Packages) field 130 VD (Valid) field 179 VERSION field 130, 179, 244 SYSIBM.SYSPACKAGE.CONTOKEN CONTOKEN field 60 SYSIBM.SYSPACKAGE.DEGREE DEGREE field 111, 173 DG field 174 SYSIBM.SYSPACKLIST COLLECTION field 40 COLLECTION ID field 186 LOCATION field 40. 186 PACKAGE field 186 SEQNO field 186

sources (continued) SYSIBM.SYSPACKLIST (continued) TIMESTAMP field 186 SYSIBM.SYSPACKSTMT 196, 220, 221 ALTER (All) field 193 ALTER field 172 ALTER (Packages) field 193 CLOSE field 172, 194 CLOSE (Packages) field 194 COMMIT (All) field 194 COMMIT field 172 COMMIT (Packages) field 194 CONNECT (All) field 194 CONNECT field 172 CONNECT (Packages) field 194 CREATE (All) field 195 CREATE field 173 CREATE (Packages) field 195 DBRM/PACKAGE NAME field 110 DCL CSR 195 DECLARE CURSOR (All) field 195 DECLARE CURSOR field 173 DECLARE CURSOR (Packages) field 195 DECLARE STATEMENT (All) field 195 DECLARE STATEMENT field 173 DECLARE STATEMENT (Packages) field 195 DECLARE TABLE (All) field 196 DECLARE TABLE field 173 DECLARE TABLE (Packages) field 196 DELETES (All) field 196 DELETES field 174 DELETES (Packages) field 196 DESCRIBE (All) field 196 DESCRIBE field 174 DESCRIBE (Packages) field 196 DROP (All) field 197 DROP field 174 DROP (Packages) field 197 EXECUTE (All) field 197 EXECUTE field 175 EXECUTE (Packages) field 198 EXPLAIN (All) field 198 EXPLAIN field 175 EXPLAIN (Packages) field 198 FETCH (All) field 198 FETCH field 175 FETCH (Packages) field 198 GRANT (All) field 199 GRANT field 175 GRANT (Packages) field 199

sources (continued) SYSIBM.SYSPACKSTMT (continued) INSERTS (All) field 199 INSERTS field 176 INSERTS (Packages) field 199 IS field 218 K#TS field 176 LCK SHR (All) field 199 LCK SHR field 176 LCK SHR (Packages) field 199 LCK XCL (All) field - 199 LCK XCL field 176 LCK XCL (Packages) field 200 OPEN (All) field 200 OPEN field 177 OPEN (Packages) field 200 PLAN NAME field 140 PREPARE (All) field 201 PREPARE field 177 PREPARE (Packages) field 201 REVOKE (All) field 201 **REVOKE** field 178 REVOKE (Packages) field 201 ROLLBACK (All) field 201 ROLLBACK field 178 ROLLBACK (Packages) field 202 SELECTS (All) field 202 SELECTS field 178 SELECTS (Packages) field 202 SET (All) field 202 SET CONNECT (All) field 202 SET CONNECT (DBRMs) field 202 SET CONNECT field 178 SET CONNECT (Packages) field 202 SET DEGREE (All) field 202 SET DEGREE (DBRMs) field 202 SET DEGREE field 178 SET DEGREE (Packages) field 203 SET field 178 SET HOST (All) field 203 SET HOST (DBRMs) field 203 SET HOST field 178 SET HOST (Packages) field 203 SET (Packages) field 202 SET PKGSET (All) field 203 SET PKGSET (DBRMs) field 203 SET PKGSET field 178 SET PKGSET (Packages) field 203 SET RULES 179, 203 SET SQLID (All) field 203 SET SQLID (DBRMs) field 203

sources (continued) SYSIBM.SYSPACKSTMT (continued) SET SQLID field 179 SET SQLID (Packages) field 203 SOL TEXT field 220 STMTNO field 127, 220 STMTS (All) field 204 STMTS field 179 STMTS (Packages) field 204 UPDATES (All) field 204 UPDATES field 179 UPDATES (Packages) field 204 VERSION field 221 WHENEVER (All) field 205 WHENEVER field 179 WHENEVER (Packages) field 205 SYSIBM.SYSPACKSTMT.STMTNO STMT NO. field 142 SYSIBM.SYSPKSYSTEM CONNECT field 165 ENABLE field 165 SYSTEM field 165 SYSIBM.SYSPLAN 217, 244 AC (Acquire) field 193 ACOUIRE field 105 AVERAGE SIZE field 106 AVGSIZE field 193 BIND DATE field 106, 193 BIND TIME field 106, 193 BOUND BY field 106, 193 CACHE SIZE field 106 CACHESZ (Cache Size) field 193 CALL 193 CD field 194 CREATOR field 195 CREATOR (Plan) field 110 DYNAMICRULES 197 DYNAMICRULES= field 112 EXPLAIN (Plans) field 113 GROUP MEMBER 199 IS (Isolation) field 199 ISOLATION (Plans) field 116 OP (Operative) field 200 OPERATIVE (Plan) field 120 PLAN CREATOR field 62 PLAN field 121, 200, 244 PLAN INFORMATION field 218 PLAN NAME field 217 PLAN SIZE field 121 PLENTRIES field 122, 200 PLSIZE field 201

sources (continued) SYSIBM.SYSPLAN (continued) OUALIFIER field 201 QUALIFIER (Plan) field 122 RE (Release) field 201 RELEASE (Plans) field 123 SERVER field 124, 202 SYSENTRIES field 204 SYSENTRIES (Plans) field 128 VA (Validate) field 204 VALID (Plans) field 129 VALIDATE (Plans) field 130 VD (Valid) field 205 SYSIBM.SYSPLAN.DEFERPREP DEFERPREP field 35 SYSIBM.SYSPLAN.DEGREE DEGREE field 111, 196 DG field 196 SYSIBM.SYSPLAN.DISCONNECT DI field 197 DISCONNECT field 111, 197 SYSIBM.SYSPLAN.PREDICATE SYSIBM.SYSPLANS DP (DeferPrep) field 197 EXPREDICATE field 113, 198 SYSIBM.SYSPLAN.SQLRULES SO field 204 SQLRULES field 125, 204 SYSIBM.SYSPLSYSTEM CONNECT field 184 ENABLE field 184 SYSTEM field 184 SYSIBM.SYSSTMT 193, 220 ALTER (All) field 193 ALTER (DBRM) field 193 ALTER field 60 CLOSE (DBRMs) field 194 CLOSE field 60, 194 COMMIT (All) field 194 COMMIT (DBRM) field 194 COMMIT field 60 CONNECT (All) field 194 CONNECT (DBRM) field 194 CONNECT field 60 CREATE (All) field 195 CREATE (DBRM) field 195 CREATE field 60 D#TS field 60 DBRM/PACKAGE NAME field 110 DCLARE CSR 195 DECLARE CURSOR (All) field 195 sources (continued) SYSIBM.SYSSTMT (continued) DECLARE CURSOR (DBRM) field 195 DECLARE CURSOR field 61 DECLARE STATEMENT (All) field 195 DECLARE STATEMENT (DBRM) field 195 DECLARE STATEMENT field 61 DECLARE TABLE (All) field 196 DECLARE TABLE (DBRM) field 196 DECLARE TABLE field 61 DELETES (All) field 196 DELETES (DBRM) field 196 DELETES field 61 DESCRIBE (All) field 196 DESCRIBE (DBRM) field 196 DESCRIBE field 61 DROP (All) field 197 DROP (DBRM) field 197 DROP field 61 EXECUTE (All) field 197 EXECUTE (DBRM) field 198 EXECUTE field 61 EXPLAIN (All) field 198 EXPLAIN (DBRM) field 198 EXPLAIN field 61 FETCH (All) field 198 FETCH (DBRM) field 198 FETCH field 61 GRANT (All) field 199 GRANT (DBRM) field 199 GRANT field 61 INSERTS (All) field 199 INSERTS (DBRM) field 199 INSERTS field 61 IS field 218 LCK SHR (All) field 199 LCK SHR (DBRM) field 199 LCK SHR field 62 LCK XCL (All) field 199 LCK XCL (DBRM) field 200 LCK XCL field 62 OPEN (All) field 200 OPEN (DBRM) field 200 OPEN field 62 PLAN field 200 PLAN NAME field 140 PREPARE (All) field 201 PREPARE (DBRM) field 201 PREPARE field 62 RELEASE (All) field 201

sources (continued) SYSIBM.SYSSTMT (continued) RELEASE (DBRM) field 201 RELEASE field 62, 178 RELEASE (Package) field 201 REVOKE (All) field 201 REVOKE (DBRM) field 201 REVOKE field 62 ROLLBACK (All) field 201 ROLLBACK (DBRM) field 202 ROLLBACK field 62 SELECTS (All) field 202 SELECTS (DBRM) field 202 SELECTS field 63 SET (All) field 202 SET CONNECT (All) field 202 SET CONNECT (DBRMs) field 202 SET CONNECT field 63 SET CONNECT (Packages) field 202 SET (DBRM) field 202 SET DEGREE (All) field 202 SET DEGREE (DBRMs) field 202 SET DEGREE field 63 SET DEGREE (Packages) field 203 SET field 63 SET HOST (All) field 203 SET HOST (DBRMs) field 203 SET HOST field 63 SET HOST (Packages) field 203 SET PKGSET (All) field 203 SET PKGSET (DBRMs) field 203 SET PKGSET field 63 SET PKGSET (Packages) field 203 SET RULES 203 SET RULES field 63 SET SOLID (All) field 203 SET SQLID (DBRMs) field 203 SET SQLID field 63 SET SQLID (Packages) field 203 SQL TEXT field 124, 220 STMTNO field 220 STMTS (All) field 204 STMTS (DBRM) field 204 STMTS field 63 UPDATES (All) field 204 UPDATES (DBRM) field 204 UPDATES field 63 WHENEVER (All) field 205 WHENEVER (DBRM) field 205 WHENEVER field 63

sources (continued) SYSIBM.SYSSTMT.STMTNO STMT NO. field 142 SYSIBM.SYSTABLE 217 TABLE NAME field 217 SYSIBM.SYSTABLEPART CARD field 71, 107, 250 CHECKFLAG field 72, 107, 251 CKRID field 72, 108, 251 COMPRESS field 74, 252 FARINDREF field 75, 113, 253 FREEPAGE field 75, 114, 254 IXCREATOR field 76, 116, 255 IXNAME field 76, 116, 255 NEARINDREF field 77, 119, 256 PAGESAVE field 78, 257 PARTITION field 78, 120, 257 PCTFREE field 78, 120, 257 PERCACT field 79, 121, 257 PERCDROP field 79, 121, 258 PQTY field 79, 122, 258 SPACE field 259 SQTY field 80, 259 STATSTS field 80, 259 STORNAME field 81, 128, 260 STORTYPE field 81, 128, 260 SUBPAG= field 128 TSTP field 129, 260 VCATNAME field 82, 130, 261 SYSIBM.SYSTABLEPART.COMPRESS.CARD COMPRESS (TSTP) field 109 SYSIBM.SYSTABLEPART.GBPCACHE GBPCACHE (TSTP) field 76, 115, 254 SYSIBM.SYSTABLEPART.PAGESAVE PAGESAVE (TSTP) field 120 SYSIBM.SYSTABLEPART.SPACE SPACE (TSTP) field 124 SYSIBM.SYSTABLEPART.STATSTIME STATSTS (TSTP) field 127 SYSIBM.SYSTABLES ALTERED field 105 ALTERTS field 71, 250 AUDIT field 71, 106, 250 CARD field 71, 106, 250 CHECKFLAG field 107 CHECKS field 72, 107, 251 CHILD field 72, 107, 251 CKFLAG field 72, 251 CKRID field 72, 108, 251 CLUSTERTYPE field 73, 109, 252 COLCOUNT field 73, 109, 252

sources (continued) SYSIBM.SYSTABLES (continued) CREATEBY field 74, 110, 253 CREATED field 110 CREATETS field 74, 253 CREATOR field 241 DATAC field 74, 253 EDPROC field 74, 112, 253 KEYCOLUMNS field 76, 255 KEYOBID field 77, 117, 255 LOCATION field 77, 118, 241, 255 NAME field 241 NPAGES field 78, 119, 256 OBID field 78, 119 PARNT field 78, 120, 257 PCTPAGES field 78, 257 PCTROWCOMP field 79, 257 RBA1 field 79, 258 RBA2 field 79, 258 RECLEN field 79, 123, 258 STATSTS field 80, 259 STATUS field 81, 259 TBCREATR field 81, 128, 260 TBL field 81, 128, 260 TBNAME field 82, 129, 260 TYPE field 82, 129, 261 VALPROC field 82, 130, 261 SYSIBM.SYSTABLES.DATACAPTURE DATACAPTURE (TBL) field 110 SYSIBM.SYSTABLESPACE BPOOL field 71, 106, 250 CLOSERULE field 73, 108, 251 CREATEBY field 74, 110, 253 CREATOR field 74, 110, 253 DBID field 74, 110, 253 DSETPASS field 74, 112, 253 ERASERULE field 75, 113, 253 IMPLICIT field 76, 115, 254 LOCKMAX field 77, 118, 255 LOCKRULE field 77, 118, 256 NACTIVE field 77, 118, 256 NTABLES field 78, 119, 256 OBID field 78, 119, 257 PARTITIONS field 78, 120, 257 PGSIZE field 79, 121, 258 PSID field 79, 122, 258 SEGSIZE field 80, 124, 258 SPACE field 80, 124, 258 STATSTS field 80, 259 STATUS field 81, 127, 260 TS field 82, 129, 260

sources (continued) SYSIBM.SYSTABLESPACE (continued) TSTP field 82 SYSIBM.SYSTABLESPACE.STATSTIME STATSTS (TS) field 127 SYSIBM.SYSTABLES.PCTROWCOMP PCTROWCOMP (TBL) field 121 SYSIBM.SYSTABLES.RBA1 RBA1 (TBL) field 123 SYSIBM.SYSTABLES.RBA2 RBA2 (TBL) field 123 SYSIBM.SYSTABLES.STATSTIME STATSTS (TBL) field 127 SYSIBM.SYSTABLESTATS.STATSTIME STATSTSP (TSTP) field 127 SYSIBM.SYSTABSTATS CARDP field 71, 250 NACTIVE field 77. 256 NPAGES field 78, 256 PCTPAGES field 79, 257 PCTROWCOMP field 79, 257 STATSTSP field 80, 259 SYSIBM.SYSTABSTATS.CARD CARDP (TSTP) field 107 SYSIBM.SYSTABSTATS.NACTIVE NACTIVE (TSTP) field 119 SYSIBM.SYSTABSTATS.NPAGES NPAGES (TSTP) field 119 SYSIBM.SYSTABSTATS.PCTPAGES PCTROWCOMP (TSTP) field 121 SYSIBM.SYSTABSTATS.PCTROWCOMP PCTROWCOMP (TSTP) field 121 SYSPACKAGE.KEEPDYNAMIC KEEPDYNAMIC field 176 KEEPDYNAMIC (Packages) field 117 SYSPACKAGE.REOPTVAR REOPT(VAR) field 178 REOPT(VAR)(Packages) field 124 REOPT(VAR)(Plans) field 124 SYSPLAN.KEEPDYNAMIC KD(KEEPDYNAMIC) field 199 KEEPDYNAMIC (Plans) field 117 SYSPLAN.REOPTVAR RO(REOPTVAR) field 201 SPACE field on the Estimator panel 80 on the EXPLAIN panel 124 on the Whatif panel 258, 259

SPACE (IXP) field on the EXPLAIN panel 124 SPACE (TSTP) field on the EXPLAIN panel 124 SPECIFY...TO DETERMINE WHEN TWO PACKAGES ARE THE SAME on the Build Tuning Parameters panel 283 SPF (Sequential Prefetch) field on the Statement Costs panel 54 SO field on the Plans panel 204 SQL See fields, statements SQL Defaults panel 377 SQL DELIMITER field on the SQL Formats for KTEXPL panel 381 SQL Formats for KTEXPL 379 SOL STRING DELIMITER FOR KTEXPL field on the SQL Defaults panel 378 SQL TEXT field on the EXPLAIN panel 124 on the Statements panel 220 SQLCODE field on the EXPLAIN panel 124 SOLCODEs -417 56, 290 -418 56, 290 SQLERR field on the EXPLAIN panel 125 SQLERROR field on the BIND/REBIND Package panel 28 on the EXPLAIN panel 125 on the Packages panel 178 SOLRULES field 37 on the BIND/REBIND Plan panel 37 on the EXPLAIN panel 125 on the Plan BIND Overrides panel 345 on the Plans panel 204 SQLSTATE field on the EXPLAIN panel 124 SQTY field on the Estimator panel 80 on the EXPLAIN panel 125 on the Whatif panel 259 SR field on the Extract History panel 150 SRC G field on the EXPLAIN panel 125

SRC G (Sorts - Group By) field on the composite table 141 on the EXPLAIN Compare panel 141 SRC ID field on the EXPLAIN Compare panel 141 on the EXPLAIN panel 125 SRC J field on the EXPLAIN panel 125 SRC J (Sort - Join) field on the composite table 141 on the EXPLAIN Compare panel 141 SRC O field on the EXPLAIN panel 125 SRC O (Sort - Order By) field on the composite table 141 on the EXPLAIN Compare panel 141 SRC U field on the EXPLAIN panel 125 SRC U (Sort - Unique) field on the composite table 141 on the EXPLAIN Compare panel 141 SRN G field on the EXPLAIN panel 126 SRN G (Sorts - Group By) field on the EXPLAIN Compare panel 142 on the new table 142 SRN ID field on the EXPLAIN Compare panel 142 on the EXPLAIN panel 126 SRN J field on the EXPLAIN panel 126 SRN J (Sort - Join) field on the EXPLAIN Compare panel 142 on the new table 142 SRN O field on the EXPLAIN panel 126 SRN O (Sort - Order By) field on the EXPLAIN Compare panel 142 on the new table 142 SRN U field on the EXPLAIN panel 126 SRN U (Sort - Unique) field on the EXPLAIN Compare panel 142 on the new table 142 SRT (Sorts - Total) field on the Statement Costs panel 54 STATEMENT COST field on the EXPLAIN panel 126

statement cost information 95 statement text 95 STATEMENT TYPE on the EXPLAIN panel 126 statements in plan 204 STATEMENTS EXTRACT DATASET DATA **BUFFERS** field on the VSAM Tuning Parameters panel 384 STATEMENTS EXTRACT DATASET INDEX **BUFFERS** field on the VSAM Tuning Parameters panel 384 STATEMENTS field on the **!DB/EXPLAIN** Configuration Information panel 289 on the Packages panel 179 Statements panel 212 Statistics Gathering panel 70 Statistics Update panel 70 STATS TIMESTAMP field on the Column Distribution Statistics panel 43 on the Table Columns panel 233 STATSTS field on the Estimator panel 80 on the Whatif panel 259 STATSTS (IX) field on the EXPLAIN panel 127 STATSTS (IXP) field on the EXPLAIN panel 127 STATSTS (TBL) field on the EXPLAIN panel 127 STATSTS (TS) field on the EXPLAIN panel 127 STATSTS (TSTP) field on the EXPLAIN panel 127 STATSTSP field on the Estimator panel 80 on the Whatif panel 259 STATSTSP (IXP) field on the EXPLAIN panel 127 STATSTSP (TSTP) field on the EXPLAIN panel 127 STATUS field on the Estimator panel 81 on the EXPLAIN panel 127 on the Libraries panel 158 on the Verification panel 244 on the Whatif panel 259, 260

STMT COST on the EXPLAIN Compare panel 142 on the EXPLAIN panel 127 STMT COST field on the EXPLAIN History panel 147 STMT NO. field on the EXPLAIN Compare panel 142 STMTNO field on the EXPLAIN panel 127 on the Statements panel 220 STMTS field on the DBRMs panel 63 on the Packages panel 179 on the PLANS panel 204 STORAGE AMOUNT FOR KTEXPL field on the SQL Defaults panel 378 STORNAME field on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 STORTYPE field on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 ST(STATUS) field on the Statements panel 220 SYSPACKSTMT.STATUS 220 ST(STATUS) field 220 SYSSTMT.STATUS 220 SU (Sorts - Unique) field on the Statement Costs panel 54 SUBPAG= field on the EXPLAIN panel 128 SUFFIX TO USE FOR PLAN BIND COMPARE field on the BIND Compare Options panel 280 SUPPRESS INFORMATIONAL MESSAGES IN BATCH? field on the Miscellaneous Defaults panel 324 synonyms in parser exit to DB2 311 SYSENTRIES field from packages 128 from plans 128 on the EXPLAIN panel 128 on the Plans panel 204 SYSENTRY field on the Packages panel 179

SYSIBM.PACKSTMT SOL TEXT field 124 SYSIBM.PLAN_TABLE J T= field 116, 139 P R= field 120, 140 SYSIBM.SYSCOLDIST PART field 43 STATS TIMESTAMP field 43 SYSIBM.SYSCOLDISTSTATS FREQ% field 43 STATS TIMESTAMP field 43 VALUE field 43 SYSIBM.SYSCOLSTATS COLCARD field 230 HIGH2KEY NULL field 231 HIGH2KEY VALUE field 231 HIGHKEY NULL field 230 HIGHKEY VALUE field 230 LOW2KEY NULL field 232 LOW2KEY VALUE field 232 LOWKEY NULL field 232 LOWKEY VALUE field 232 PART field 233 STATS TIMESTAMP field 233 SYSIBM.SYSCOLUMNS COLCARD field 230 COLNO field 230 COLTYPE field 230 DEFAULT field 230 FLDPROC field 230 HIGH2KEY NULL field 231 HIGH2KEY VALUE field 231 KEYSEQ field 231 LENGTH field 231 LOW2KEY NULL field 232 LOW2KEY VALUE field 232 NULLS field 233 SCALE field 233 STATS TIMESTAMP field 233 SYSIBM.SYSCOLVALUE NULL field 43 SYSIBM.SYSDBRM ALL field 158 CH (Charset) field 60 CO (Comma) field 60 COUNT (All) field 195 COUNT (DBRM) field 195 CREATOR field 195 DBRM field 60. 244 DBRM NAME field 217

SYSIBM.SYSDBRM (continued) DBRM/PACKAGE field 52 DBRMS field 158 DE (Dec31) field 61 HL (Hostlang) field 61 LIBRARY field 62 LIBRARY NAME field 244 MX (Mixed) field 62 PLAN HEADING field 62 PRECOMPILE DATE field 219 PRECOMPILE DATE/TIME field 62, 147, 244 PRECOMPILE TIMESTAMP field 53 QU (Quote) field 62 VERSION field 63, 130, 221, 244 SYSIBM.SYSINDEXES BPOOL field 71, 106, 250 CLOSERULE field 72, 108, 251 CLUSTERED field 73, 108, 252 CLUSTERING field 73, 108, 252 CLUSTRATIO field 73, 109, 252 CLUSTRATIO (IXP) field 109 COLCOUNT field 73, 109, 252 CREATEBY field 74, 110, 252 DSETPASS field 74, 112, 253 ERASERULE field 74, 113, 253 FIRSTKEY field 75, 114, 254 FULLKEY field 75, 114, 254 INDEXSPACE field 115, 255 INDEXTYPE field 76, 115, 255 ISOBID field 76, 115, 255 IX field 76, 116, 255 NLEAF field 77, 119, 256 NLEVELS field 77, 256 OBID field 78, 119, 257 PGSIZE field 79, 121, 258 SPACE field 80, 124, 258 STATSTS field 259 STATUS field 80 UNIQUE field 82, 129, 261 SYSIBM.SYSINDEXES.STATSTIME STATSTS (IX) field 127 SYSIBM.SYSINDEXESTATS CLUSTRATIO field 252 SYSIBM.SYSINDEXPART CARD field 71, 106, 250 FAROFFPOS field 75, 113, 254 FREEPAGE field 75, 114, 254 IXP field 76, 116, 255 LEAFDIST field 77, 117, 255

SYSIBM.SYSINDEXPART (continued) NEAROFFPOS field 77, 119, 256 PARTITION field 78, 120, 257 PCTFREE field 78, 120, 257 POTY field 79, 122, 258 SPACE field 80, 258 SQTY field 80, 125, 259 STATSTS field 80, 259 STORNAME field 81, 128, 260 STORTYPE field 81, 128, 260 VCATNAME field 82, 130, 261 SYSIBM.SYSINDEXPART.GBPCACHE GBPCACHE (IXP) field 75, 114, 254 SYSIBM.SYSINDEXPART.SPACE SPACE (IXP) field 124 SYSIBM.SYSINDEXPART.STATSTIME STATSTS (IXP) field 127 SYSIBM.SYSINDEXSPACE INDEXSPACE field 76 SYSIBM.SYSINDEXSTATS CLUSTRATIO field 73 FIRSTKEY field 75, 254 FULLKEY field 75, 254 KEYCNT field 76, 255 NLEAF field 77, 256 NLEVELS field 78, 256 STATSTSP field 80, 259 SYSIBM.SYSINDEXSTATS.FIRSTKEYCARD FIRSTKEY (IXP) field 114 SYSIBM.SYSINDEXSTATS.FULLKEYCARD FULLKEY (IXP) field 114 SYSIBM.SYSINDEXSTATS.KEYCOUNT KEYCNT (IXP) field 117 SYSIBM.SYSINDEXSTATS.NLEAF NLEAF (IXP) field 119 SYSIBM.SYSINDEXSTATS.NLEVELS NLEVELS (IXP) field 119 SYSIBM.SYSINDEXSTATS.STATSTIME STATSTSP (IXP) field 127 SYSIBM.SYSKEYCOLUMNS KEYCOLUMNS field 117 SYSIBM.SYSKEYS.COLNAME COLUMN NAME field 154 SYSIBM.SYSKEYS.COLNO COLUMN NO field 154 SYSIBM.SYSKEYS.COLSEQ COLUMN SEQ field 154 SYSIBM.SYSKEYS.IXCREATOR IXCREATOR field 154

SYSIBM.SYSKEYS.IXNAME IXNAME field 154 SYSIBM.SYSKEYS.ORDERING ORDERING field 154 SYSIBM.SYSPACKAGE ALL field 158 AVSIZE field 106, 172 BIND DATE/TIME field 172 BOUND field 106, 172 CH (Charset) field 172 CHARSET field 107 CO (Comma) field 172 COLLECTION field 172 COLLECTION ID field 109 COLLID field 244 COMMA field 109 CONTOKEN field 109, 173 COUNT (All) field 195 COUNT (Packages) field 195 CREATED field 173 CREATOR field 173 CREATOR (Packages) field 110 DBRM/PACKAGE field 52 DE (Dec31) field 173 DEC31 field 111 DEFERPREP field 111 DP (DeferPrep) field 174 EX (EXPLAIN) field 175 EXPLAIN (Packages) field 113 GROUP MEMBER= field 115 HL (Hostlang) field 176 HOSTLANG field 115 IS (Isolation) field 176 ISOLATION (Packages) field 116 LIBRARY field 117, 176 LIBRARY NAME field 244 LOCATION field 244 LOCATION (Packages) field 117 MIXED field 118 MX (Mixed) field 177 on the EXPLAIN panel 109 OP (Operative) field 177 OPERATIVE (Packages) field 119 OWNER field 120, 177 PACKAGE field 120, 177, 244 PACKAGE NAME field 217 PKGS field 158 PKSIZE field 121, 177 PRECOMPILE DATE field 219 PRECOMPILE DATE/TIME field 147, 244 SYSIBM.SYSPACKAGE (continued) PRECOMPILE DATE/TME field 177 PRECOMPILE TIME field 122 PRECOMPILE TIMESTAMP field 53 QU (Quote) field 177 QUALIFIER field 177 QUALIFIER (Packages) field 122 QUOTE field 123 RE (Release) field 177 RELEASE (Packages) field 123 REMOTE field 123 REOPT(VAR)(Packages) field 124 RM (Remote) field 178 SE (SQLERROR) field 178 SQLERR field 125 SYSENTRIES (Packages) field 128 SYSENTRY field 179 VA (Validate) field 179 VALID (Packages) field 129 VALIDATE (Packages) field 130 VD (Valid) field 179 VERSION field 130, 179, 244 SYSIBM.SYSPACKAGE.CONTOKEN CONTOKEN field 60 SYSIBM.SYSPACKAGE.DEGREE DEGREE field 111, 173 DG field 174 SYSIBM.SYSPACKLIST COLLECTION ID field 186 LOCATION field 40, 186 PACKAGE field 186 SEQNO field 186 TIMESTAMP field 186 SYSIBM.SYSPACKSTMT ALTER (All) field 193 ALTER field 172 ALTER (Packages) field 193 CLOSE field 172, 194 CLOSE (Packages) field 194 COMMIT (All) field 194 COMMIT field 172 COMMIT (Packages) field 194 CONNECT (All) field 194 CONNECT field CONNECT (Packages) field 194 CREATE (All) field 195 CREATE field 173 CREATE (Packages) field 195 DBRM/PACKAGE NAME field 110 DCL CSR 195

SYSIBM.SYSPACKSTMT (continued) DECLARE CURSOR (All) field 195 DECLARE CURSOR field 173 DECLARE CURSOR (Packages) field 195 DECLARE STATEMENT (All) field 195 DECLARE STATEMENT field 173 DECLARE STATEMENT (Packages) field 195 DECLARE TABLE (All) field 196 DECLARE TABLE field 173 DECLARE TABLE (Packages) field 196 DELETES (All) field 196 DELETES field 174 DELETES (Packages) field 196 DESCRIBE (All) field 196 DESCRIBE field 174 DESCRIBE (Packages) field 196 DROP (All) field 197 DROP field 174 DROP (Packages) field 197 EXECUTE (All) field 197 EXECUTE field 175 EXECUTE (Packages) field 198 EXPLAIN (All) field 198 EXPLAIN field 175 EXPLAIN (Packages) field 198 FETCH (All) field 198 FETCH field 175 FETCH (Packages) field 198 GRANT (All) field 199 GRANT field 175 GRANT (Packages) field 199 INSERTS (All) field 199 INSERTS field 176 INSERTS (Packages) field 199 K#TS field 176 LCK SHR (All) field 199 LCK SHR field 176 LCK SHR (Packages) field 199 LCK XCL (All) field 199 LCK XCL field 176 LCK XCL (Packages) field 200 OPEN (All) field 200 OPEN field 177 OPEN (Packages) field 200 PLAN NAME field 140 PREPARE (All) field 201 PREPARE field 177 PREPARE (Packages) field 201 REVOKE (All) field 201

SYSIBM.SYSPACKSTMT (continued) **REVOKE** field 178 REVOKE (Packages) field 201 ROLLBACK (All) field 201 ROLLBACK field 178 ROLLBACK (Packages) field 202 SELECTS (All) field 202 SELECTS field 178 SELECTS (Packages) field 202 SET (All) field 202 SET CONNECT (All) field 202 SET CONNECT (DBRMs) field 202 SET CONNECT field 178 SET CONNECT (Packages) field 202 SET DEGREE (All) field 202 SET DEGREE (DBRMs) field 202 SET DEGREE field 178 SET DEGREE (Packages) field 203 SET field 178 SET HOST (All) field 203 SET HOST (DBRMs) field 203 SET HOST field 178 SET HOST (Packages) field 203 SET (Packages) field 202 SET PKGSET (All) field 203 SET PKGSET (DBRMs) field 203 SET PKGSET field 178 SET PKGSET (Packages) field 203 SET RULES field 179 SET SQLID (All) field 203 SET SQLID (DBRMs) field 203 SET SQLID field 179 SET SQLID (Packages) field 203 SQL TEXT field 220 STMTNO field 220 STMTS (All) field 204 STMTS field 179 STMTS (Packages) field 204 UPDATES (All) field 204 UPDATES field 179 UPDATES (Packages) field 204 VERSION field 221 WHENEVER (All) field 205 WHENEVER field 179 WHENEVER (Packages) field 205 SYSIBM.SYSPACKSTMT.STMTNO STMT NO. field 142 SYSIBM.SYSPKSYSTEM CONNECT field 165 ENABLE field 165

SYSIBM.SYSPKSYSTEM (continued) SYSTEM field 165 SYSIBM.SYSPLAN AC (Acquire) field 193 ACQUIRE field 105 AVERAGE SIZE field 106 AVGSIZE field 193 BIND DATE field 106, 193 BIND TIME field 106, 193 BOUND BY field 106, 193 CACHE SIZE field 106 CACHESZ (Cache Size) field 193 CD field 194 COLLECTION field 40 CREATOR field 195 DYNAMICRULES= field 112 EXPLAIN (Plans) field 113 IS (Isolation) field 199 ISOLATION (Plans) field 116 OP (Operative) field 200 OPERATIVE (Plan) field 120 PLAN CREATOR field 62 PLAN field 121, 200, 244 PLAN INFORMATION field 218 PLAN NAME field 217 PLAN SIZE field 121 PLENTRIES field 122, 200 PLSIZE field 201 QUALIFIER field 201 QUALIFIER (Plan) field 122 RE (Release) field 201 RELEASE (Plans) field 123 REOPT(VAR)(Plans) field 124 SERVER field 124, 202 SYSENTRIES field 204 VA (Validate) field 204 VALID (Plans) field 129 VALIDATE (Plans) field 130 VD (Valid) field 205 SYSIBM.SYSPLAN.CREATOR CREATOR (Plan) field 110 SYSIBM.SYSPLAN.DEGREE DEGREE field 111, 196 DG field 196 SYSIBM.SYSPLAN.DISCONNECT DI field 197 DISCONNECT field 111, 197 SYSIBM.SYSPLANS DP (DeferPrep) field 197 EXPREDICATE field 113, 198

SYSIBM.SYSPLAN.SQLRULES SQ field 204 SQLRULES field 125, 204 SYSIBM.SYSPLAN.SYSENTRIES SYSENTRIES (Plans) field 128 SYSIBM.SYSPLSYSTEM CONNECT field 184 ENABLE field 184 SYSTEM field 184 SYSIBM.SYSSTMT ALTER (All) field 193 ALTER (DBRM) field 193 ALTER field 60 CALL field 60 CLOSE (DBRMs) field 194 CLOSE field 60, 194 COMMIT (All) field 194 COMMIT (DBRM) field 194 COMMIT field 60 CONNECT (All) field 194 CONNECT (DBRM) field 194 CONNECT field 60 CREATE (All) field 195 CREATE (DBRM) field 195 CREATE field 60 D#TS field 60 DBRM/PACKAGE NAME field 110 DCL CSR 195 DECLARE CURSOR (All) field 195 DECLARE CURSOR (DBRM) field 195 DECLARE CURSOR field 61 DECLARE STATEMENT (All) field 195 DECLARE STATEMENT (DBRM) field 195 DECLARE STATEMENT field 61 DECLARE TABLE (All) field 196 DECLARE TABLE (DBRM) field 196 DECLARE TABLE field 61 DELETES (All) field 196 DELETES (DBRM) field 196 DELETES field 61 DESCRIBE (All) field 196 DESCRIBE (DBRM) field 196 DESCRIBE field 61 DROP (All) field 197 DROP (DBRM) field 197 DROP field 61 EXECUTE (All) field 197 EXECUTE (DBRM) field 198 EXECUTE field 61 EXPLAIN (All) field 198

SYSIBM.SYSSTMT (continued) EXPLAIN (DBRM) field 198 EXPLAIN field 61 FETCH (All) field 198 FETCH (DBRM) field 198 FETCH field 61 GRANT (All) field 199 GRANT (DBRM) field 199 GRANT field 61 INSERTS (All) field 199 INSERTS (DBRM) field 199 **INSERTS** field 61 LCK SHR (All) field 199 LCK SHR (DBRM) field 199 LCK SHR field 62 LCK XCL (All) field 199 LCK XCL (DBRM) field 200 LCK XCL field 62 OPEN (All) field 200 OPEN (DBRM) field 200 OPEN field 62 PLAN field 200 PLAN NAME field 140 PREPARE (All) field 201 PREPARE (DBRM) field 201 PREPARE field 62 RELEASE (All) field 201 RELEASE (DBRM) field 201 RELEASE field 62, 178 RELEASE (Package) field 201 REVOKE (All) field 201 REVOKE (DBRM) field 201 REVOKE field 62 ROLLBACK (All) field 201 ROLLBACK (DBRM) field 202 ROLLBACK field 62 SELECTS (All) field 202 SELECTS (DBRM) field 202 SELECTS field 63 SET (All) field 202 SET CONNECT (All) field 202 SET CONNECT (DBRMs) field 202 SET CONNECT field 63 SET CONNECT (Packages) field 202 SET (DBRM) field 202 SET DEGREE (All) field 202 SET DEGREE (DBRMs) field 202 SET DEGREE field 63 SET DEGREE (Packages) field 203 SET field 63

SYSIBM.SYSSTMT (continued) SET HOST (All) field 203 SET HOST (DBRMs) field 203 SET HOST field 63 SET HOST (Packages) field 203 SET PKGSET (All) field 203 SET PKGSET (DBRMs) field 203 SET PKGSET field 63 SET PKGSET (Packages) field 203 SET RULES field 63 SET SOLID (All) field 203 SET SQLID (DBRMs) field 203 SET SQLID field 63 SET SQLID (Packages) field 203 SQL TEXT field 124, 220 STMTNO field 127, 220 STMTS (All) field 204 STMTS (DBRM) field 204 STMTS field 63 UPDATES (All) field 204 UPDATES (DBRM) field 204 UPDATES field 63 WHENEVER (All) field 205 WHENEVER (DBRM) field 205 WHENEVER field 63 SYSIBM.SYSSTMT.STMTNO STMT NO. field 142 SYSIBM.SYSTABLE TABLE NAME field 217 SYSIBM.SYSTABLEOART.COMPRESS.CARD COMPRESS (TSTP) field 109 SYSIBM.SYSTABLEPART CARD field 71, 107, 250 CHECKFLAG field 72, 107, 251 CKRID field 72, 108, 251 COMPRESS field 74, 252 FARINDREF field 75, 113, 253 FREEPAGE field 75, 114, 254 IXCREATOR field 76, 116, 255 IXNAME on the Estimator panel 76 IXNAME field 76, 116, 255 NEARINDREF field 77, 119, 256 PAGESAVE field 78, 257 PARTITION field 78, 120, 257 PCTFREE field 78, 120 PERCACT field 79, 121, 257 PERCDROP field 79, 121, 258 POTY field 79, 122, 258 SPACE field 259

SYSIBM.SYSTABLEPART (continued) SQTY field 80, 259 STATSTS field 80, 259 STORNAME field 81, 128, 260 STORTYPE field 81, 128, 260 SUBPAG= field 128 TSTP field 260 VCATNAME field 82, 130, 261 SYSIBM.SYSTABLEPART.DBNAME TSTP field 129 SYSIBM.SYSTABLEPART.GBPCACHE GBPCACHE (TSTP) field 76, 115, 254 SYSIBM.SYSTABLEPART.PAGESAVE PAGESAVE (TSTP) field 120 SYSIBM.SYSTABLEPART.SPACE SPACE (TSTP) field 124 SYSIBM.SYSTABLEPART.STATSTIME STATSTS (TSTP) field 127 SYSIBM.SYSTABLEPART.TSNAME TSTP field 129 SYSIBM.SYSTABLES ALTERED field 105 ALTERTS field 71, 250 AUDIT field 71, 106, 250 CARD field 71, 106, 250 CHECKFLAG field 107 CHECKS field 72, 107, 251 CHILD field 72, 107, 251 CKFLAG field 72, 251 CKRID field 72, 108, 251 CLUSTERTYPE field 73, 109, 252 COLCOUNT field 73, 109, 252 CREATEBY field 74, 110, 253 CREATED field 110 CREATETS field 74, 253 CREATOR field 241 DATAC field 74, 253 EDPROC field 74, 112, 253 KEYCOLUMNS field 76, 255 KEYOBID field 77, 117, 255 LOCATION field 77, 118, 241, 255 NAME field 241 NPAGES field 78, 119, 256 OBID field 78, 119 PARNT field 78, 120, 257 PCTPAGES field 78, 257 PCTROWCOMP field 79, 257 RBA1 field 79, 258 RBA2 field 79, 258 RECLEN field 79, 123, 258

SYSIBM.SYSTABLES (continued) STATSTS field 80, 259 STATUS field 81, 127, 259 TBCREATR field 81, 128, 260 TBL field 81, 128, 260 TBNAME field 82, 129, 260 TYPE field 82, 129, 261 VALPROC field 82, 130, 261 SYSIBM.SYSTABLES.DATACAPTURE DATACAPTURE (TBL) field 110 SYSIBM.SYSTABLESPACE BPOOL field 71, 106, 250 CLOSERULE field 73, 108, 251 CREATEBY field 74, 110, 253 CREATOR field 74, 110, 253 DBID field 74, 110, 253 DSETPASS field 74, 112, 253 ERASERULE field 75, 113, 253 IMPLICIT field 76, 115, 254 LOCKMAX field 77, 118, 255 LOCKRULE field 77, 118, 256 NACTIVE field 77, 118, 256 NTABLES field 78, 119, 256 OBID field 78, 119, 257 PARTITIONS field 78, 120, 257 PGSIZE field 79, 121, 258 PSID field 79, 122, 258 SEGSIZE field 80, 124, 258 SPACE field 80, 124, 258 STATSTS field 80, 259 STATUS field 81, 127, 260 TS field 82, 129, 260 TSTP field 82 SYSIBM.SYSTABLESPACE.STATSTIME STATSTS (TS) field 127 SYSIBM.SYSTABLES.PCTROWCOMP PCTROWCOMP (TBL) field 121 SYSIBM.SYSTABLES.RBA1 RBA1 (TBL) field 123 SYSIBM.SYSTABLES.RBA2 RBA2 (TBL) field 123 SYSIBM.SYSTABLES.STATSTIME STATSTS (TBL) field 127 SYSIBM.SYSTABLESTATS.STATSTIME STATSTSP (TSTP) field 127 SYSIBM.SYSTABSTATS CARDP field 71, 250 NACTIVE field 77, 256 NPAGES field 78, 256 PCTPAGES field 79, 257

SYSIBM.SYSTABSTATS (continued) PCTROWCOMP field 79, 257 STATSTSP field 80, 259 SYSIBM.SYSTABSTATS.CARD CARDP (TSTP) field 107 SYSIBM.SYSTABSTATS.NACTIVE NACTIVE (TSTP) field 119 SYSIBM.SYSTABSTATS.NPAGES NPAGES (TSTP) field 119 SYSIBM.SYSTABSTATS.PCTPAGES PCTROWCOMP (TSTP) field 121 SYSIBM.SYSTABSTATS.PCTROWCOMP PCTROWCOMP (TSTP) field 121 SYSOUT HOLD CLASS field on the **!DB/Tools** Global Configuration Information panel 294 SYSPACKAGE.DEFERPREPARE DEFERPREP field 173 DEFERPREPARE field 111 SYSPACKAGE.KEEPDYNAMIC KEEPDYNAMIC (Packages) field 117 SYSPLAN.DEFERPREPARE DEFERPREPARE(Plans) field 112 SYSPLAN.KEEPDYNAMIC KD(KEEPDYNAMIC) field 199 KEEPDYNAMIC (Plans) field 117 SYSPLAN.REOPTVAR RO(REOPTVAR) (Packages) field 201 System Connection Names panel 25 System Connection Types panel 32 SYSTEM field 38, 165 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel -38 on the Package Connections panel 165 on the Plan Connections panel 184 SYSTEM PDS field on the **!DB/EXPLAIN** Configuration Information panel 289

Т

Table Columns panel227, 229Table Columns panels226TABLE NAME field217on the Statements panel217TABLE ROW/INDEX field00on the Estimator panel81

Table Space Scan field on the Statement Costs panel 54 TABLE= field on the Column Distribution Statistics panel 43 on the Table Columns panel 233 TABLES dataset field on the !DB/Tools Global Configuration Information panel 294 Tables panel 240 **TBCREATR** field on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 TBL field on the Estimator panel 81 on the EXPLAIN panel 128 on the Whatif panel 260 TBL= field on the EXPLAIN panel 128 TBNAME field on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 260 telephone support 452 TEMP DISK SYMBOLIC NAME field on the **!DB/Tools** Global Configuration Information panel 294 terminology [] 12 { } 12 documentation conventions 12 panel vs. display 12 TIME field on the Data Formats panel 287 TIMESTAMP field 186 on the Data Formats panel 287 on the Extract History panel 150 on the Plan Package List panel 186 TOTAL STATEMENT COST on the Packages panel 179 TOTAL STATEMENT COST field on the DBRMs panel 63 on the Statement Costs panel 54 TOTAL STATEMENT field on the Tables panel 241 TOTAL STMT COST field on the DBRMs panel 63 on the Packages panel 179 on the Statement Costs panel 54

TOTAL STMT field on the Tables panel 241 TS field on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 260 TS (Table Space Scan) field on the Statement Costs panel 54 TSLOCKMODE field on the Statement Costs panel 52 TSTP field on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 260 Tuning Parameters 382 ΤY on the Extract History panel 150 TYPE field on the Estimator panel 82 on the EXPLAIN History panel 147 on the EXPLAIN panel 129 on the Whatif panel 261 TYPE OF SQL TO ISSUE field on the EXPLAIN/SQL Defaults panel 311

U

UNIOUE field on the Estimator panel 82 on the EXPLAIN panel 129 on the Whatif panel 261 Unique sort on the EXPLAIN Compare panel 142 on the new table 142 Unique sorts on the composite table 141 on the EXPLAIN Compare panel 141 UPDATE PROFILE DATASET field on the Extract Processing Defaults panel 314 **UPDATES** field from DBRMs 204 from Packages 204 on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 204 on the Tables panel 241 **USE DATASPACE field** on the Miscellaneous Defaults panel 325

USE LIBRARY SEARCH ORDER FOR COMMAND? field on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR COMPARE? field on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR CONVERT? field on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE LIBRARY SEARCH ORDER FOR SELECT? field on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE MEMBER LISTS? field on the Online Menu panel 161 USE OVERRIDES FOR COMMAND? field on the Package Bind Overrides panel 333 on the Plan Bind Overrides panel 345 USE OVERRIDES FOR COMPARE? field on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 USE OVERRIDES FOR CONVERT? field on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 USE OVERRIDES FOR SELECT? field on the Package Bind Overrides panel 334 on the Plan Bind Overrides panel 346 USE PACKAGE BIND OR CREATE TIMESTAMP IN DETERMINING RELATIVE AGES on the Build Tuning Parameters panel 283 USE REAL CATALOG TABLES FOR UPDT field on the Miscellaneous Defaults panel 325 Use This Dataset? field on the !DB/Tools Profile Dataset List panel 298 USER PDS field on the **!DB/EXPLAIN** Configuration Information panel 289 USER PDS TO SAVE DIFFERENCES IN field on the BIND Compare Options panel 280 USER PDS TO SAVE ERRORS IN field on the BIND Compare Options panel 280 USER PDS TO SAVE SAMES IN field on the BIND Compare Options panel 280

UTIL dataset on the !DB/Tools Global Configuration Information panel 294

V

VA (Validate) field on the Packages panel 179 on the Plans panel 204 VALID field from packages 129 from plans 129 on the EXPLAIN panel 129 on the Packages panel 179 on the Plans panel 205 VALIDATE field 38 from packages 130 from plans 130 on the BIND/REBIND Package panel 28 on the BIND/REBIND Plan panel 38 on the EXPLAIN panel 130 on the Package BIND Overrides panel 334 on the Packages panel 179 on the Plan BIND Overrides panel 346 on the Plans panel 204 VALPROC field on the Estimator panel 82 on the EXPLAIN panel 130 on the Whatif panel 261 VALUE field on the Column Distribution Statistics panel 43 on the DBRM panel 63 on the Host Variables panel 218 variables, host 311 VCATNAME field on the Estimator panel 82 on the EXPLAIN panel 130 on the Whatif panel 261 VD (Valid) field on the Packages panel 179 on the Plans panel 205 Verification field on the Packages panel 179 on the Plans panel 205 Verification panel 243 **VERSION** field of the DBRM or Package 130 on the BIND/REBIND Package panel 28

VERSION field (continued) on the DBRMs panel 63 on the EXPLAIN Compare panel 142 on the EXPLAIN History panel 147 on the EXPLAIN panel 130 on the Packages panel 179 on the Statement Costs panel 54 on the Statements panel 221 on the Verification panel 244 VIO SYMBOLIC NAME field on the **!DB/Tools** Global Configuration Information panel 294 VL (Value) field on the DBRM panel 63 VL (Verification) field on the Packages panel 179 on the Plans panel 205

W

WARNING MESSAGE FOR NO EPX AUTH? field on the Miscellaneous Defaults panel 325 Whatif panel 245 WHEN TO CONSIDER TWO DBRMS TO BE THE SAME DBRM field on the Build Tuning Parameters panel 283 WHENEVER field from DBRMs 205 from Packages 205 on the DBRMs panel 63 on the Packages panel 179 on the Plans panel 205 WO field on the EXPLAIN panel 130, 142 WORK SIZE FOR SQL RESULTS field on the SQL Defaults panel 378

Х

XCPT field on the Recommendations Panel 1 351 on the Recommendations Panel 2 353 on the Recommendations Panel 3 355 on the Recommendations Panel 4 357 on the Recommendations Panel 5 359 on the Recommendations Panel 6 361 on the Recommendations Panel 7 363

XCPT field (continued)	
on the Recommendations Panel 8	365
on the Recommendations Panel 9	368

!DB®/EXPLAIN for DB2 Reference Version 500

TE53-5843-3

Please take a moment to share your comments and suggestions regarding Candle's documentation. Be as specific as possible.

	Page #	Comment
1		
2		
3		
4		
5		
6		
7		

Please provide the following information. Thank you for your time and assistance.

Name	
Job Function	
Company	Site ID
Address	

You may return your comments to us at your convenience. Upon receipt, we will respond to you within five business days.

FAX (310) 727-4131	Fold, tape, and mail (postage paid) Please do not staple.
May we call to discuss your comments?	

YES	Phone number:	Best time to call:	

□ NO



