VisualAge Pacbase

IBM

VisualAge Pacbase 2.5 Detailed Specifications

TABLE OF CONTENTS

VisualAge Pacbase 2.5

ENHANCEMENTS

Installation and Procedures

IBM MVS/CICS JCL modifications *(C 16119).*
 - Installation :
   CICS: 3 parameters are required to define different 'GROUPs' for files, transactions and programs.
   Maps no longer exist.
 - Procedures: the 'VERIFY' of the AE file have been suppressed when they were not required.
 - PARM: AE and AP files with exclusive access (DISP=OLD)
 - REOR: controls are grouped in a new program (PTU2CL). The procedure has been modified consequently.

Batch System Development

Insertion of comments in the generated parts *(C 14067).*
  Addition of a new value in order to ignore comments in the structured code lines, at the generation.
  On the Library Definition screen, the 'Comments Insertion Option' field can have the 'S' value.
  In this case, comments inserted by the user with the '*' operator do not appear in the generated sources.
  Furthermore, this operator is ignored, which means that if the continuing lines do not contain any operator, they are considered as being a continuation of the last operator met.

Personalized SQL accesses: No lower/uppercase conversion of values between delimitors *(C 16415).*
  If option UPPER=NO in Segment's '-G' screen, values entered between two literal delimitors will not be converted (this delimitor is defined at the Library level).

Connection

Password request for reconnection after save of the conversation *(C 15045).*
  After a PF12 exit from VisualAge Pacbase, a reconnection displays the user code and the message "PLEASE ENTER YOUR PASSWORD FOR CONVERSATION RETRIEVAL".
  If the password is correct, the last accessed screen is displayed in its context.

Check of number of users connected *(C 15987).*
  The number of users connected to VisualAge Pacbase is now checked; if the maximum is reached, the connection of a new user is denied and the following message is displayed: 'CONNECTION DENIED: MAXIMUM NBR OF USERS IS REACHED'.
  The same check is performed when creating a new user via the PARM transaction. This creation is rejected if the maximum number of users specified in the key has been reached.

Client/Server System Development

Insertion of comments in the generated parts *(C 14067).*
  Addition of a new value in order to ignore comments in the structured code lines, at the generation.
  On the Library Definition screen, the 'Comments Insertion Option' field can have the 'S' value.
  In this case, comments inserted by the user with the '*' operator do not appear in the generated sources.
  Furthermore, this operator is ignored, which means that if the continuing lines do not contain any operator, they are considered as being a continuation of the last operator met.

Dialogue Definition: locking out Screen type modification *(C 15276).*
Currently, the modification of the Screen type is possible if 'Standard Screen' --> 'Client or Server Screen'. This transformation will no longer be possible.
If a user has a '4'-level authorization for updates, all modifications are possible (except Folder and Folder View), a warning message will be displayed.
For other users, only the modifications in the same family are authorized, e.g. all types corresponding to Servers (S-MS-SI-ST-E-FM) or those corresponding to Dialogue and C/S Screen (' '-C-MC-MW).

Proxy Folder generation: Names of Logical View, User Buffer, and of their Data Elements have been added *(C 15741).*

Unification of Logical View Proxy and Folder View Proxy *(C 15970).*
A FVP (instead of a LVP) can be generated from an elementary Business Component.
- The GVC command on an elementary Business Component will generate a Proxy whose structure conforms to the Folder mode if this Business Component contains one LOCATION Option at least.
- The Service Manager will be generated via the GGS command on an elementary Business Component (if this Component contains one LOCATION option at least). This program's external name is indicated in the 'Complement' field of the Definition. The Logical View called in this Component's Call of Segments (-CS) will then be the root node of this Folder.
This command will then generate two Cobol sources. The generation of one or the other can be inhibited by indicating '$$' in one of the 'CIF/CIB' (Card in Front/Back of the Program) field.

Unification of Tuxedo Business Components *(C 16069).*
Note: for more details, see the specifications Unification of Tuxedo Business Components for the C/S Facility TUXSERV.DOC of 8/12/97).
This specification will be conditioned by the new Tuxedo 'RC' variant.
For the communication monitors (type 'MV'), the setting of of parameters in TPCALL will use 'CARRAY' instead of 'VIEW'.
For servers, there will no longer be TPSVCSTART neither TPRETURN for the servers will be called by CALL in a 'Function' program.
This 'Function' program will perform the TPSVCSTART before the call of the servers and the TPRETURN after the call.

Logical View Proxy: Presentation values TOGGLE1 and TOGGLE2 have been added *(C 16370).*

Personalized SQL accesses: No lower/uppercase conversion of values between delimitors *(C 16415).*
If option UPPER=NO in Segment's '-G' screen, values entered between two literal delimitors will not be converted (this delimitor is defined at the Library level).

Proxy generation: QUOTE1/QUOTE2 values remplaced by a simple/double quote *(C 16729).*
The QUOTE1/QUOTE2 values which can be defined for a Data Element are replaced at generation time by the corresponding characters (simple or double Quote).

On-Line System Development

Insertion of comments in the generated parts *(C 14067).*
Addition of a new value in order to ignore comments in the structured code lines, at the generation.
On the Library Definition screen, the 'Comments Insertion Option' field can have the 'S' value.
In this case, comments inserted by the user with the '*' operator do not appear in the generated sources.
Furthermore, this operator is ignored, which means that if the continuing lines do not contain any operator, they are considered as being a continuation of the last operator met.

Dialogue Definition: locking out Screen type modification *(C 15276).*
Currently, the modification of the Screen type is possible if 'Standard Screen' --> 'Client or Server Screen',
This transformation will no longer be possible.
If a user has a '4'-level authorization for updates, all modifications are possible (except Folder and Folder View), a warning message will be displayed.
For other users, only the modifications in the same family are authorized, e.g. all types corresponding to Servers (S-MS-SI-ST-E-FM) or those corresponding to Dialogue and C/S Screen (' '-C-MC-MW).

WEB message: adaptation of the IMS variant to the reception of WEB messages *(C 15656).*

Personalized SQL accesses: No lower/uppercase conversion of values between delimitors *(C 16415).*
If option UPPER=NO in Segment's '-G' screen, values entered between two literal delimitors will not be converted (this delimitor is defined at the Library level).

Edition

Face page management in GPRT *(C 15029).*
  In order to easy the distribution, i.e paper cut by user (presence of a context identification line), at the banner page location, a
  blank page will be generated to ensure the printing of the following starting banner page on a face page.

On Line Help

When text titles are updated, the new titles must appear in the help screen *(C 15044).*
  After running PARM with NRCHAR or NRREST, labels entered on the PARM PT screen appear in the help screen of the text
  type data element and of the paragraph type data element.

Metamodel

Properties can be changes into data elements and vice-versa if the format is present *(C 3618).*
  It is now possible to change a property into a data element and a data element as a property.
  If the property is used in the meta-dictionary or if the data element is used in the dictionary, a message is displayed. It is
  necessary to validate again to make the update.

Pacbase Access Facility

Now, several line codes '*' are possible in PAF user extractors *(C 15047).*

Personalized Documentation Manager

Creation of the print options in order to be able to print the format of Data Elements of a segment or a screen *(C 11619).*
  Printing the format of Data Elements O......CE:
    OR   yes
    -OR (*)   no
  Printing the format of Data Elements S....CE:
    ST   printing the internal format of the Data Element
    -ST (*)   printing without internal format
    SU   printing the input format of the Data Element
    -SU (*)   printing without input format
    SV   printing the print format of the Data Element
    -SV (*)   printing without print format.

New choices possible for PDM: LNOtt LTVt *(C 12967).*
  - LNOtt   List of screens by tt type,
  - LTVt   List of reports by t type.
  To obtain these choices, the REOR procedure must be executed during upgrade to 2.5.

Parameterizing the VA Pac documentation frame *(C 15049).*
  On the Library Definition screen, addition of an option allowing the modification of the caracters used to build the frame of the
  documentation provided by the system.
  The user can enter any caracter for horizontal separators.

Batch Procedures

Journalize LOGON/LOGOFF by user/lterm/time *(C 1035).*
The connections to and deconnections from VisualAge Pacbase are now stored in the journal. The transaction includes the terminal code in addition to the user code and the time.
A connection transaction is created with each connection via the VisualAge Pacbase sign on screen.
A deconnection transaction is created at input of the 'FT' operation code, or using PF6 or PF12 functiun keys ("SignOff" and "Conversation Exit With Save" in standard).
On the 'JO' screen, these transactions can be identified by their line code: 'LN' for connections, 'LF' for deconnections.

PACX (EXTR) : it is now possible to extract thesaurus keywords by using the K............. Choice *(C 15058).*

REOR: Purge of generic entities *(C 15077).*
It is now possible to purge all the occurrences of an entity type in a library and its dependent libraries.
The user only has to enter '******' in the entity code on 'E'-type user input.
The purged entities are printed in a report.

REOR: group the checks on input in the first program *(C 15084).*
To avoid a very long execution time before input is checked, the checks on input are grouped in the first program of the sequence.
To get this specification, the REOR procedure must be modified or re-install it from the 2.5.

The return code is set to 4 in the archives if the journal date or the session are wrong *(C 15853).*

Procedure and Transaction PARM

When text titles are updated, the new titles must appear in the help screen *(C 15044).*
After running PARM with NRCHAR or NRREST, labels entered on the PARM PT screen appear in the help screen of the text type data element and of the paragraph type data element.

Relational DBD

Personalized SQL accesses: No lower/uppercase conversion of values between delimitors *(C 16415).*
If option UPPER=NO in Segment's '-G' screen, values entered between two literal delimitors will not be converted (this delimitor is defined at the Library level).

Pac/Impact

IGRA: new analysis procedure for group fields defined as input points *(C 15201).*
A new procedure analyses all the group fields defined as input points or impact search criteria, and restores in a new IPIA procedure report, the elementary fields for each of these group fields (an elementary field can be a group field).
This new procedure, taking the criteria as input (FH and FR files), applies to the issue of any IANA iteration.
If the FH file contains elementary fields as input they will not be processed. Therefore it is necessary to inhibit them on the TR file.
The restoration of this information in IPIA is done when "1" is in column 24 of the P-type request.
The processed field groups are outputted:
. the segment's -CE,
. the MSP's -W, from the screen or the program.

Internal formats of more than 10 characters are taken into account when declared in -W *(C 15839).*

To widen the impact analysis to money amounts, whose formats are larger than date formats, the storage of the processed format can be more than 10 characters.

Actually, if on the element definition, the format is automatically limited to 10 characters for internal and input formats, that is not the case for the fields that have been directly defined in a Program or Screen -W .

Note:

Any analysis started with a previous version must be completed before the change of version. The FQ file is no more compatible as regards the formatting of a criterion key that comes from -W.

The location of the internal format storage is also modified in the FO file.

IANA/IPIA: 2 entry points with the same code defined in the -CE lines of a Report and a Segment stay distinct *(C 15883).*

If ISEP procedure splits two entry points, one defined in the -CE line of a Report, the other one in the -CE line of a Segment, the IANA procedure gathered each usage of these two entry points under the same entry point (in this case, under the -CE line of a Report).

The usage of each of these two entry points are now linked to the right entry point.

Pac/Transfer

Recognition of incomplete Batch Transactions when compressing a journal *(C 15788).*

Compressing transactions : the TRJC procedure ignores archived 'Logon'/'Logoff' transactions *(C 15789).*

CD-ROM Documentation

VisualAge Pacbase 2.5 Documentation on CD-ROM *(C 16709).*

The VisualAge Pacbase 2.5 documentation is available on CD-ROM, in both English and French versions. Its PDF format (Portable Document Format) requires Adobe Acrobat Reader, included in the CD-ROM.

Miscellaneous

Length of a Genration-Print command *(C 11775).*

Up to 5 lines are now allowed in a GPRT command: the actual command line and four continuation lines (valid in both batch and on-line modes).

In batch mode, if more than 4 continuation lines are entered a WARNING message is printed: TOO MANY CONTINUATION LINES. In on-line mode, input of more than 4 lines is not possible.

Please note that GPRT commands files need be submitted to a retrieval procedure.

New X-Refs for Data Structures and Segments on macro-structures calls *(C 14129).*

Identically to Data Elements, for which the X-Ref is /E=corub/ in macro-structures call lines, Data Structures' and Segments' X-Refs now appear as /D=--/ and /S=----/, respectively.

CORRECTED BUGS

Ergonomics

Screen layout: Display option set to 'C' *(C 15420).*
   Screen layout (O-L, O-SIM, O-ADR, O-M) : the display option is set to 'C' to prevent libraries from interfering (for example, field overrinding).

Connection

It was impossible to change password if requested by the WorkStation *(C 16673).*
   When it was requested by the WorkStation, it was impossible to change the password.
   Corrected.

Installation and Procedures

Modification of the 2.5 JCL - IANA temporary file *(C 16699 for MVS/CICS and IMS).*
   In the IANA procedure, the KSDS FQ file is not temporary anymore.
   A new member of the SY library is created to execute the delete/define in the file.

Client/Server System Development

Folder: missing WHERE clause in the accesses of the WF00 temporary file *(C 16597).*
   The WHERE clause was missing in the generated accesses of the WF00 temporary file when this file has an SQL-table type.
   Corrected.

Documentation

Edition of PAF columns related to a methodology and association between method. choice and Pacbase *(C 15263).*
   Edition of methodology entities with PCM command of the GPRT procedure; the methodology code being in the entity.

Batch Procedures

REST: loss of function keys if the '*' card is bad eventhough the restoration was successful *(C 15661).*
   The PFkey assignment was lost if the '*' line was erroneous and the control on the authorization to procedures was not activated.
   Corrected.

PAC7EP-EXPJ report: the length of the selected records counter changes from 5 to 7 *(C 16662).*

Relational DBD

Parameters of Commands in front / in back: the values of these parameters have been harmonized between generators *(C 16214).*
  - X = User code; it is taken into account in the Batch Program generation stream.
  - Numeric parameters (1 to 5); in SQL stream, retrieval of the values entered on the Stream command (FLS and GSQ).

Procedure and Transaction PARM

Users created after NRCHAR card were rejected with error 9346E *(C 16629).*
  At the time of installation, users created after the NRCHAR card were rejected with a 9346E error and a 'not found' error message. Corrected.

Pac/Impact

ISOS: The DATGN and DATGNC dates was not recognized as being generated dates (D-type extraction lines) *(C 16324).*
  Corrected.

Journal Statistic Utility

ACTI: if a parameter relates to a UEO, only the first 6 characters (instead of 8) were taken into account *(C 16626).*
  Corrected.

Miscellaneous

Error message on PMS calls when occurrence is downloaded *(C 14131).*
  It was possible to update the macro-structures calls by Programs or Screens downloaded on the WorkStation.
  This update is now forbidden and the following message is displayed : "DESCRIPTION IN USE BY <user> IN <lib>"

The -ce of a segment is displayed with a wrong label after an empty use of the segment *(C 16149).*
  The -ce of a segment was displayed with a wrong label after displaying an empty use of the segment.
  Corrected.

New check (length) on a Segment call in a Segment -CE *(C 16590).*
  A Segment called in a Segment -CE cannot be more than 4-character long.

DSMS 2.5

ENHANCEMENTS

Site

New comments screen for sites *(C 15546).*
A new "COMMENTS" screen for sites can now be accessed via the choice S .... * ... G ___ (or S -G).
It is a full-page input screen with a line number on 3 characters and a text line on 60 characters (this is repeated 18 times).
In automatic screen branching, it is displayed between the -U (supplier contacts) screen and the definition screen.
There are neither controls nor cross-references (except on the site's code) on this screen.
These lines can be extracted via queries (they are present on the reports of sites and events) and via DAF (new SITCOM table).

DSMS Access Facility

DSMS update facility batch version *(C 13591).*
Creation of a new DSMS procedure: DUPD DSMS update facility batch version.
This updates the DSMS Database from the DAF extractions.

Miscellaneous

It is now possible to copy the DSMS control cards from a source user to a target user *(C 11060).*
The content of the LJQ screen can be copied from a user to an other one.

CORRECTED BUGS

Documentation

List of changes by entity (XS choice) : teh user displayed is the supervisor *(C 16445).*
The reference documentation must specify that the user displayed comes from the Definition ("Change Supervisor").
The column title on the screen must be changed for a more mnemonic title.

Batch Procedures

DPRT: ABEND (Status 42 on PACDW2) when too many lines (selected via queries) were to be printed *(C 16205).*
Corrected.

Batch update of Reports' layouts (-L): only columns 0 to 71 were taken into account *(C 16364).*
 The reports' layouts (-L) were not totally taken into account in the batch update (missing of columns 72 to 132).
 Corrected

Impossible selection and bad edition for the 'user' zone of the -S events in DPRT *(C 16483).*
 DPRT: selection (on the query) and edition (on the report) of the 'user' zone contained in the -S events (Story), now possible.

Tables Management

In some cases, deletion of one table item while used, was possible *(C 16535).*
 Corrected.

Pactables 2.5

ENHANCEMENTS

Connection

It is possible to modify one's password on the sign-on screen at the connection *(C 13365).*
 The password update option for xx90 parameters update is deleted.

 The TE error label file is to be reinstalled.

Pactables Update Facility

On-line TUF: Development of the data server module for TUF000 tables *(C 15410).*

On-line TUF: Development of the User Interface access data tables module (TUF900) *(C 16162).*
 Note on the On-line TUF module :
 This module enables you to run processes on an existing Pactables database. It concerns read-write access of the On-Line database, without using the standard Pactables transaction.
 1. The 'CLIENT' Part
  For each table to be processed with the On-Line TUF module, a VisualAge Pacbase dialogue screen specific to the table has to be written, forecasting thus different processing cases (like reading, updating...)
  Writing these screens is to the user's care (site and table customization)
  Concerning the access to the Pactables database, the dialogue screen runs predefined orders to the server module through a communication zone. The description of the communication zone is provided.
  Furthermore, in order to make easier the call of the server module, a set of VaPac macro-structures is provided. The set describes the communications zone needed.
 2. The 'SERVER' Part
  This part enables you to handle accesses to the Pactables database. The logical sequence of the processes asked by the CLIENT moduke is the following:
  . Connection
  . Data extraction from Pactables database and storage of the result on a working file. Lists (tables, history, sub-schemes, sub-systems) or tables (description and data) can be output.
  . Consultation with possibly output data update on the working file
  . Repercussion on the Pactables database of updates made on the working file
  . closing the session
 The server module is provided with the Pactables 2.5 version under 2 CICS programs format:

XXF000 : data server module (access to Pactables)
XXF900 : user access module (running of the CLIENT commands)

On-line TUF: Maintenance of the User Interface access data tables module (TUF900) *(C 16750).*

Miscellaneous

Definition of the user - database administrator *(C 16531).*
The autorization level of the database administrator is 3. It replaces the current administrator whose code is '**********'.
The administrator can update database parameters and user parameters and reorganize tables, unlike other users.

CORRECTED BUGS

Batch Procedures

PMTA: Rejection of the update if the database is under security system control *(C 16532).*
---> The TE error label file is to be reinstalled

Portings 2.5

ENHANCEMENTS

VA Pacbase Installation and Procedures

Deletion of a generation command *(C 12519 for UNIX).*
A generation command in waiting for execution can now be deleted in the batch server.

The installation is authorized on any directory *(C 13502 for OS/2, Windows NT).*
PACBASE can be installed on any directory, not only on the root of a disk.

Installation manual : addition of instructions to follow to delete a database *(C 14859 for UNIX).*

INSTALLATION: retrieval point of file allocations in case of error *(C 16598 for GCOS7).*
In case of an allocation error (insufficient space), catalog entries can be created without real files.
The file allocation JCLs now include the deletion of the catolog entry before the creation of the file.

New TP architecture: HVTIP instead of TIP, and MCB instead of DPS *(C 16658 for Unisys 2200 Series).*
Pacbase TP architecture adapts to conform to HVTIP instead of TIP, and manages screen messages in native mode (ZAR980 and MCB) instead of DPS.

VA Pacbase Documentation

Installation manual : addition of instructions to follow to delete a database *(C 14859 for UNIX).*

Pac/Impact

Impact Analysis: FQ and FP indexed users files are now generation files *(C 16431 for GCOS7).*

Server : On-line, Batch, PARM

The On-line Server of VisualAge Pacbase can be used as server of Dialog and WEB applications (*C 15985 for OS/2, Windows NT).*

CORRECTED BUGS

VA Pacbase Installation and Procedures

Allow installation on disks with a capacity higher than 2 gigabytes *(C 16518 for OS/2, Windows NT).*
   The program of installation allows to install the product on a disk with a capacity higher than 2 gigabytes.

Correction of EXZC procedure with an RDMS database *(C 16765 for Unisys 2200 Series).*
   When the EXZC procedure was run on an RDMS database, an error 'CURSOR NOT OPENED' was displayed.
   This has been corrected.

VA Pacbase Batch Procedures

PACX: user errors are taken into account in the procedure JCL *(C 16599 for GCOS7).*
   If a user error occurs (e.g. on the library name), the program sends an error which is tested in the JCL to prevent executing
   any further steps.

Server : On-line, Batch, PARM

Development of a graphical revamping for the on-line multi-application server *(C 15703 for OS/2, Windows NT).*
   Supplying of a graphical revamping for the on-line multi-application server.

VA Pacbase WorkStation 2.5

ENHANCEMENTS

Ergonomics

Modification of graphs menus *(C 10019).*
The 'File' menu now contains the choices of the former 'Print' menu which has been suppressed.
The 'Preferences' choice has been moved from the 'File' menu to the 'Style' menu.
The corresponding buttons of the toolbar have been moved.

Drag & Drop from a formatted description or a definition screen *(C 13900).*
It is now possible to "drag & drop" the code of an occurrence referenced in a definition screen or a formatted description.
The possible targets are the fields referencing an occurrence of the same entity in the definition screens and the formatted descriptions, or the icons of a graph.
In the case of the code of the main occurrence in a definition screen, the occurrence label is also taken into account (for graph feeding)

New ergonomics for selections in graphs *(C 15891).*
Reminder: To select items in the graph, you must click somewhere and drag the mouse. The items contained in the rectangle scanned by the pointer are automatically selected.

1 - The selection is no longer represented by the inversion of the selection rectangle, but by the color of the selected items.
One of the selected icon is the reference icon which will be used as "landmark" for alignments. It is drawn with "plain" handles, while the other icons have "hollow" handles
2 - To move the selection, you must click in the selection rectangle and drag the mouse. The selection is kept after the moving. Adjustements are thus easily feasable.
3 - The selection is also kept after a "Copy".
4 - After a "Paste", pasted items are automatically selected and can be directly moved.
5 - To abandon the current selection, you must click outside of the selection rectangle.

See also the changes 15294 (addition or withdrawal to a selection) and 16407 (alignments).

Installation and Procedures

WorkStation installation: deletion of previous installations *(C 15385).*
Deletion of the replaced WorkStation/Methodology directory is made when the real installation is launched. During the parameters input phase, the existing configuration is not modified.

The WorkStation is installed in any directory *(C 15714).*
The WorkStation can now be installed in any directory, no longer under the root directory only: "[drive]:\[path1]\...\[pathX]".

Installation parameters saving *(C 16269).*
When installing the WorkStation, it is possible to save the installation parameters on a file.
The name of this file is set by the installation procedure. The user has to indicate the directory where it will be stored.
If the installation does not start from CD-ROM the default save directory is the SETUP.EXE program's one.

To perform an installation from the save, just indicate the directory which contains the saving file.

This operation no longer automatically starts the installation. It is then possible to prepare an installation and leave ("Modify" and "Previous").

Connection

Display of the label "LICENSE GRANTED TO" *(C 16241).*
The label "LICENSE GRANTED TO ...." on the Host sign-on screen is read when connecting to the Host. This piece of information is displayed in the "Context" dialog box of each WorkStation application.

Definition Screens

Drag & Drop from a formatted description or a definition screen *(C 13900).*
It is now possible to "drag & drop" the code of an occurrence referenced in a definition screen or a formatted description.
The possible targets are the fields referencing an occurrence of the same entity in the definition screens and the formatted descriptions, or the icons of a graph.
In the case of the code of the main occurrence in a definition screen, the occurrence label is also taken into account (for graph feeding)

Formatted Description

Drag & Drop from a formatted description or a definition screen *(C 13900).*
It is now possible to "drag & drop" the code of an occurrence referenced in a definition screen or a formatted description.
The possible targets are the fields referencing an occurrence of the same entity in the definition screens and the formatted descriptions, or the icons of a graph.
In the case of the code of the main occurrence in a definition screen, the occurrence label is also taken into account (for graph feeding)

Folder -CS

New presentation for the structure tree of the Folder nodes *(C 15444).*
The icons which represent nodes have been modified to be consistent with VisualAge ones. The couple "Business Component + Logical View' associated to a node is now displayed next to the node code in the tree structure.
It is possible to access the Business Component associated with the node through hypernavigation.

'Characteristics of Node' box *(C 15529).*
You can hypernavigate from the 'Business Component' field of the 'Characteristics of Node' box. It is also possible to fill this field from a list of Business Components using the drag and drop technique.

The order of the choices in the 'Description' menu has been homogenized with standards in use *(C 15649).*
The choices now appear in the following order:
 Upload
 Exit
 Restore
 Printer
 Controls
The buttons in the toolbar have been moved to keep the same order.

Graph

Printing options for the links *(C 7842).*
In the "Print parameters" box, the user now has the possibility to set four new print options for links.
It is now possible to selectively activate the print of the followings:
 - link code (for the entity-bearing links)
 - link name
 - attributes associated with the link (for certain entity-bearing links)
 - free line label.
The drawing of the "Print parameters" box has been slightly modified.

Modification of menus *(C 10019).*
 The 'File' menu now contains the choices of the former 'Print' menu which has been suppressed.
 The 'Preferences' choice has been moved from the 'File' menu to the 'Style' menu.
 The corresponding buttons of the toolbar have been moved.

Persistence of the selection of an object after an action on this object *(C 12718).*
 After executing an action on the selected object (moving, extension, etc...), the object remains selected and available for a new action.

Selecting free lines to remove *(C 12765).*
 It is now possible to select free lines (alone or with other objects) by dragging the mouse.
 The standard actions (Cut, Copy, Paste, Move, Delete) are available for a selection consisting of free lines only.

Memorization of the graph orientation for printing *(C 14194).*
 The orientation set by the user to print a graph is now recorded in the description of the graph.
 When the graph opens, the printer is automatically oriented according to the graph orientation.

 Initialization: the old graphs, for which the orientation is still undetermined, orient themselves by default according to the orientation set for the printer at Windows level.

Link automatic deselection *(C 15003).*
When a link is selected, a click elsewhere in the diagram deselects the link.
Exception:
With a link being selected, a click on one of the icons associated to the link initiates the link redrawing. In this case, the link remains selected until the second icon is clicked or until the user escapes (mouse right button or Escape key).

Addition or withdrawal of objects to/from a selection *(C 15294).*
 It is now possible to modify an initial selection (get by dragging the pointer on the graph surface) by adding or with drawing objects.
 The manipulation is possible by pressing the Shift key and clicking on the object to be added or withdrawn to/from the current selection.

 1 - Icons
     The "Shift + click" action adds the icon to the current selection if the icon is not selected yet. It withdraws the icon if it is already selected.
     The added icon becomes automatically the reference icon of the selection. If the withdrawn icon was the reference icon, a new reference icon is set.
     The selection rectangle is re-computed at each selection/deselection action (click on the center of the selection area to visualize the rectangle).
 2 - Links
     A link can be added to a selection only when the related icons are already part of the selection. A link with no intermediate point will "follow" the icons it relates when the selection moves, whether selected or not.
     For links with intermediate points, the link must be selected to enable the intermediate points to participate to the moves.
     The selection rectangle is re-computed at each selection/deselection action on links.
 3 - Charts (in some graphs)
     The charts can be included in the initial selection but cannot be added or withdrawed afterwards.
 4 - Free lines
     The "Shift + Click" action on the free line name enables to add a free line to the selection, if not selected yet, or to withdraw it from the selection when already selected.

 See also changes 15891 (new ergonomics) and 16407 (alignments).

Printing icon attributes *(C 15664).*
 In the "Print parameters" box, it is now possible to set the print of the attributes of a type of icon independently of the print of the code.

New ergonomics for selections in graphs *(C 15891).*
   Reminder: To select items in the graph, you must click somewhere and drag the mouse. The items contained in the rectangle scanned by the pointer are automatically selected.

   1 - The selection is no longer represented by the inversion of the selection rectangle, but by the color of the selected items.
   One of the selected icon is the reference icon which will be used as "landmark" for alignments. It is drawn with "plain" handles, while the other icons have "hollow" handles
   2 - To move the selection, you must click in the selection rectangle and drag the mouse. The selection is kept after the moving. Adjustements are thus easily feasable.
   3 - The selection is also kept after a "Copy".
   4 - After a "Paste", pasted items are automatically selected and can be directly moved.
   5 - To abandon the current selection, you must click outside of the selection rectangle.

   See also the changes 15294 (addition or withdrawal to a selection) and 16407 (alignments).

Alignment of the icons of a selection *(C 16407).*
   In a selection, the reference icon is displayed with "plain" handles, while the others selected icons have "hollow" handles.

   It is possible to align the others icons of the selection on the reference icon, with the "Alignment" sub-menu of the "Display" menu or with one of the new buttons in the toolbar.
   The choices "Left", "Right", "Top" et "Bottom" align the icons on the selected side, keeping fixed the reference icon and moving the other ones.
   The choices "Vertical Center" et "Horizontal Center" align the icon centers moving them in the indicated direction.

   To change the reference icon, just clik on a selected icon while pressing the "Ctrl" key.

   A new icon added to the selection (by click + Shift) becomes automatically the new reference icon.

   See also changes 15294 (adding or withdrawal to a selection) and 15891 (new ergonomics)

On Line Help

New on line help *(C 16462).*
   For Version 2.5, the on line help has been revisited
   - The main documentation has been reorganized in order to mix the Pacdesign and Pacbench modules, and better integrate the Pacbase standard documentation.
   - The documentations of IFW and OMT have been set to be processed by the on line help creation process.
   - The on line help has been entirely regenerated.

Metamodel

New description on VisualAge entities *(C 16265).*
   A description has been added to each VisualAge entity ("Application", "Part", "Folder View Proxy", "Logical View Proxy" and "Elementary Proxy" entities) to contain its identifier in the client tool (Smalltalk, Java, ...)

OMT Methodology

New on line help *(C 16462).*
   For Version 2.5, the on line help has been revisited
   - The main documentation has been reorganized in order to mix the Pacdesign and Pacbench modules, and better integrate the Pacbase standard documentation.
   - The documentations of IFW and OMT have been set to be processed by the on line help creation process.
   - The on line help has been entirely regenerated.

Miscellaneous

MS Sans Serif font *(C 15309)*.
   All the WorkStation dialogboxes are now drawn with the "MS Sans Serif" font (size 8, Bold).

CORRECTED BUGS

Miscellaneous

EMPAC: random crashing when the screen is being printed *(C 16525)*.
   "Emulation" application of the WorkStation: it no longer crashes when the printing of the screen is requested.

Pacbench C/S Facilities 2.5

ENHANCEMENTS

Generation

Pacbench C/S generates Proxies for JAVA (multi-node or mono-node) *(C 15706)*.
   This generation requires the JDK 1.1 but generated applications may be executed with the JDK 1.0 or 1.1.
   The Pacbench C/S bridge adapted to JAVA allows to upload in the VA Pac Referential all references of classes which use the generated proxies.

Proxy Functionalities

Folder View Proxy : taking into account asynchronous actions type for VisualAge Smalltalk *(C 15730)*.
   From now on, the public interface of a Proxy is improved with elements allowing the handling of asynchronous conversations, when the communication protocol used bears it.
   The improvment of the public interface is available in Folder View Proxies or in unifided Logical View Proxies.

Addition of connect and disconnect actions in the public interface of the root proxy *(C 16398)*.
   Until now, the connection to the communications monitor was implicitly executed on the first message sent to the server. With the connect action, developpers can execute an explicite connection. For Instance, this connection can be used to check availability of communication before any functional request transmission.
   The disconnect action is used to explicitly release resources used by the middleware before leaving an application.

Retrieval of the system error message when a fatalError event is sent *(C 16399)*.
   The system error message on a communication problem is retrieved when a fataError event is sent.
   This message makes it possible to identify the type of the communication error.

CORRECTED BUGS

Proxy Functionalities

FVP: The File In works properly even when a Data Element includes a " in its label *(C 16458).*