



IBM Session Manager for z/OS

Quick Reference

Version 3 Release 2



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Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 99.

This edition applies to Version 3 Release 2 of IBM Session Manager for z/OS, program number 5655-U98, and to all subsequent versions, releases, and modifications until otherwise indicated in new editions.

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About this manual

This is the *Quick Reference* for IBM® Session Manager for z/OS® (hereafter mostly referred to as Session Manager). It contains prototypes of many of the most commonly used commands and statements in Session Manager. It is intended to be used by Technical Programmers who have gained some familiarity with Session Manager and who no longer need detailed explanations of each command or statement.

A complete list of commands, control statements and parameters, along with full descriptions of their use can be found in the *Technical Reference*.

Full descriptions of each variable can be found in the *Panels, Scripts and Variables* manual.

Note Any references in this manual to “Session Manager version 1.3.15” and to “1.3 Functional Enhancement PTF 3” are synonymous.

Online and Batch Administration

Online Administration: Instead of supplying product configuration statements directly, Online Administration (hereafter “OLA”) enables administrators and end-users of Session Manager to tailor the product using a series of menus, lists and attribute display panels.

Batch Administration: If many changes are required to a large number of configuration definitions, this capability enables administrators and end-users of Session Manager to tailor the product using a batch job.

For more information, see the *Online and Batch Administration* manual.

External Security Managers

External Security Managers (hereafter “ESMs”), such as RACF®, can be used with Session Manager to authenticate users, set their authorization level and OLA security class, and determine which applications a user can access.

For details, see the ‘Defining security and implementing dynamic menus’ chapter in the *Installation and Customization* manual.

Session Manager documentation

The following documentation accompanies Session Manager:

Manual	Purpose
<i>Installation and Customization</i>	Goes through the steps required to install the Session Manager software, and provides general information on the methods and options available to configure and operate your system.
<i>User and Administrator</i>	Describes in detail the features and facilities provided by Session Manager.
<i>Online and Batch Administration</i>	Explains the set-up and configuration of OLA, how to use the interface, and how to utilize both OLA and Batch Administration to modify the Session Manager configuration.
<i>Technical Reference</i>	Provides a detailed reference for Session Manager commands and configuration statements, along with problem diagnosis assistance.
<i>Quick Reference</i>	Provides a quick way to find the correct syntax for commands, configuration statements, and variables, without detailed explanations.
<i>Panels, Scripts and Variables</i>	Gives a detailed technical account of defining panels, using scripts and variables, and the product's Panel and Script Language (TPSL).
<i>Messages and Codes</i>	Contains explanations of all messages issued by Session Manager, and the actions that should be taken.

Additionally, the *Program Directory* contains information for systems programmers about the program material and procedures for installing IBM Session Manager under z/OS.

New users should review the *User and Administrator* manual to gain an understanding of Session Manager concepts, and Technical Programmers should review the *Installation and Customization* manual in order to tailor the product to the Installation's requirements.

In general, the extreme flexibility of the configuration statements is found to cater for most user requirements. Panel and script definitions may be provided with conditional logic using the Session Manager Panel and Script Language and numerous variables are provided to view and modify a wide variety of data. If any particular needs cannot be met, a user exit is available, containing several exit points and access to certain variables, enabling user code to be executed. Full details of the User Exit are supplied in the *Installation and Customization* manual.

Conventions

The following typographic conventions are used:

boldface	Indicates a command or keyword that you should type, exactly as shown. When mixed case is used, the element in upper case represents the shortest acceptable form. For example, MSGsuffix can be abbreviated as far as MSG.
<i>italics</i>	Indicates a variable for which you should substitute an appropriate value.

monotype	Indicates literal input and output.
Ctrl+D	Indicates two or more keys pressed simultaneously.
[]	Brackets surround an optional value.
	Vertical bars separate alternative values from which you must make a selection.
...	Ellipsis indicates that the preceding element may be repeated.
@	Some commands or key sequences make use of the 0x7C (that is, x'7C') character. When using the English language code page, this character is displayed as the @ sign, but may be displayed as a different character in some other code pages. In this document, the 0x7C character is always presented as the @ sign. You should enter the appropriate 0x7C character symbol for the code page you are using.

Summary of new features

For a summary of changes made to the product in its most recent releases, please refer to the manual.

CHAPTER 1

Session Manager commands

This chapter contains prototypes of many of the most commonly used commands in IBM Session Manager for z/OS. A complete list of commands, along with full descriptions of their use, can be found in the *Technical Reference*.

The chapter is divided into these sections:

- General user commands
 - Basic – the most universal end user commands (see page 14).
 - User – commands that are usually available to end-users (see page 14).
- Privileged user commands
 - Operator – additional commands that are usually available to system operators (see page 18).
 - Administrator – further commands that are only normally available to system administrators (see page 18).

General user commands

See

- ‘Basic commands’ below
- ‘User commands’ below

Basic commands

A full description of the following commands is provided in the *Technical Reference*. All basic commands have a default security level of 1.

Backward [nn]
Bwd [nn]
Down [nnn]
Forward [nn]
Fwd [nn]
Help [help-topic-name]
QUIT [Exit|Logon|Signon]
Retrieve
RETURN
TOP
Up [nnn]

User commands

A full description of the following commands is provided in the *Technical Reference*. All user commands have a default security level of 1.

ADDSess applname [sessionnumber] [S]
BREceive [WAITinp|BELL|Queue|Yes|No|ON|OFF]
CONCEAL PFkey|session_number|this_applid
CONFIRM
CUTEnd
CUTStart
DELETE MSG msg-number
DELSESS [sessionnumber|ALL]
DISconnect [Exit|Logon|Signon]
END seln-id|*
FILTER applid
FIND applid
HALTscript seln-id|*

```

HARdcopy seln-id [Profile hcprofile Option hcoption]
HCOption [option-number]
INITSC Yes|No|ON|OFF seln-id/★
LEFT [nn]
LOCK [Yes|No|ON|OFF]
LOCKTERM
LOGoff [Exit|Logon|Signon]
MSG message-text
    Applid applid |
    Group group-name |
    Lu luname |
    Profile profile-name |
    User user-id
    [ [Hold hh:mm ]
      [FOR hh:mm|days|days hh:mm ] ]
    [URGent ]
MSGID [Yes|No|ON|OFF]
NW
OK
PASTESstart
NLOG VTAM®-applid
PANELID [Yes|No|ON|OFF]
PCTransFER [Yes|No|ON|OFF] [seln-id]
PULL index-number [RETurn Yes | No | ON | OFF]
QACTuser

```

```

Query ACb acb-pattern |
ALL |
Applid appl-pattern |
BRDVAR id-pattern |
Broadcast |
Group group-name |
Ident |
ISZsmgr |
LAstmsg |
LU lu-pattern |
    [RTM [RESET]|RTMALL [RESET] ] |
Net ALLSESSions |
    LInk linkname |
    NETMan N0de nodename |
    N0de node-pattern |
    NUMbers |
    SESSion |
        N0de nodename|LInk linkname |
        TAsk taskname |
        CORelator name-pattern |
PROFile profile-pattern |
REMOTE node-pattern |
SIGNON |
SPY |
STAts |
STOruse [Pool] |
SUSpend |
TERMinAl term-pattern |
    [RTM [RESET]|RTMALL [RESET] ] |
TN3[270] tcpclient-pattern |
    [RTM [RESET]|RTMALL [RESET] ] |
User userid-pattern |
    [user_qualifier RTM [RESET] | RTMALL [RESET]]

QQuit [Exit|Logon|Signon]
QUSER userid [LU lu_name]
RESet seln-id*
RIGHT [nn]
SE
REVEAL PFkey|session_number|this_applid|ALL
SEND nodename command
SME
SPYOFF
STARTSC Yes|No|ON|OFF seln-id*
TOP
TRANSFER [Override]

```



```
VIEW demonstrator-id  
    [PASS password]  
    [Override]  
Windows [script-name]
```

Privileged user commands

See

- ‘Operator commands’ below
- ‘Administrator commands’ below

Operator commands

A full description of the following commands is provided in the *Technical Reference*. All operator commands have a default security level of 5.

```
Block applid [ON|Yes|OFF|No]
      [EXclude group-name]

DEMO [PASS password|NOPASS ]
      [AUTocopy [Yes|No|ON|OFF] ]
      [INTernal [Yes|No|ON|OFF] ]
      [DISplay [Yes|No|ON|OFF] ]
      [STOP]

DLog

Flash message-text
      [Applid applid|Variable global-variable]

PLAYDs index-number

PLAYHex index-number

PLAYImage index-number

RECOrd [ON|YES|TERM|APPL|CLEAR|Ø|OFF|No]

REPLAY

SEND nodename command

SPY User userid |
      LU luname
      [NOAUTO] [Override]
```

Administrator commands

A full description of the following commands is provided in the *Technical Reference*. All administrator commands have a default security level of 9.

```
BROadcast message-text
      ALL |
      Applid appl-pattern |
      BRDVAR id-pattern |
      Group group-pattern |
      Lu lu-pattern |
      Profile profile-pattern |
      User user-pattern |
      [ [Hold hh:mm ] |
        [FOR hh:mm|days|days hh:mm ] ]
      [URGent ]

CLOsedown [FORce|END]

DELETE BROadcast msg-number
```

```

DELETE MSG msg-number
DStore [sub-command]
DTERM ['LU luname']
DUMP
FORCE task-name|LINK linkname
GFS STATS|USAGE|STOR
INQUIRE
ISZtest [Yes|No|ON|OFF]
PASSFREE LU luname
PUPdate ddname member-name
QTask [Task task-name |
       User userid-pattern |
       LU lu-pattern
       [Selection seln-id ] ]
REMOVEUSER userid
SECFRESH
SPIN AUdit|Trace|AUDITGDG|OLALOG
STARTCp
STARTLink linkname
STOP User userid|ALLDISC [user_qualifier] |
      LU luname
      [Sel seln-id] [ALL]
STOPAcb appl_name acb_name
STOPLink linkname
STOPTcp
SWITCHplx
TERMINATE [FORce|END]
TRace Data|MISER|Vtam|NETDATA
      [Yes|No|ON|OFF|SPIN]
      [User userid |
      LU luname ]
      [Selection seln-id ] ]
TRace LINK link-name
      [NETCTL]
      [Yes|No|ON|OFF|SPIN]
TRace Internal [Yes|No|ON|OFF] [DUMP|NODUMP]
      [Task task-name |
      User userid |
      LU luname
      [Selection seln-id ] ]
TTpsl [[Yes|No|ON|OFF|Display]
      Task task-name|[Selection seln-id
      [User userid|LU luname]]
      [PAnel|ScripT]
      [PRint|NOPrint [DUmp|NODump]]
      [Internal|NOInternal]
      [All|TRaceverb]
      [Size nn]]
UPDate GCMVS

```

```

UPDate Exit exit-name |0      |
      E05 S|E      |
      E06 S|E      |
      E08 S|E      |
      E11 S|E      |
      E21 S|E      |
      E22 S|E      |
      E26 S |
      E29 S|E      |
      E31 S|E      |
      E33 S|E      |
      E36 S |
      E39 S|E      |
      E79 S|E      |
      E99 S|E
UPDate Print [Yes|No|ON|OFF]
      Config suffix      |
      Member member-name|
      ALL

```

CHAPTER 2

Session Manager Control statements

Control statements are used to configure the product. They can be separated into a number of groups:

- General and User configuration (see page 22)
- Initialization options (see page 34)
- Support statements (see page 35)
- Technical configuration (see page 36)
- Messaging (see page 38)
- Printing (see page 39)
- Panels and Scripts (see page 40)

The statements, and parameters that can be used with them, are listed in separate sections by group. A full description of the configuration control statements appears in the *Technical Reference*.

The PANEL and SCRIPT statements differ from the other control statements in that they may contain logic statements for loops and conditional processing. These logic statements are referred to as TPSL, the Panel and Script Language. The prototypes for these are given in this manual but the full description appears in the *Panels, Scripts and Variables* manual.

General and User Configuration

The statements in this section control the general configuration of the system and the settings applicable to individual users, terminals, and sessions. The statements available are:

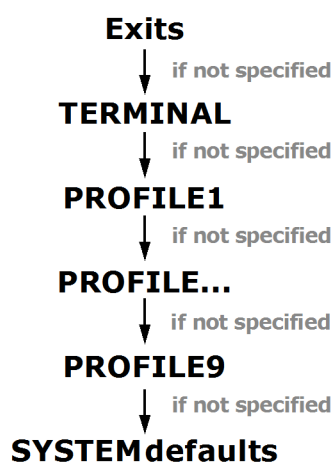
SYSTEM
 PROFILE
 USER
 TERMINAL
 APPL
 LU

As well as individual parameters that apply to the statements separately, some parameters apply to more than one of the statements. As parameters may sometimes be set to different values in different places, the following diagrams show the logic that is used by Session Manager when deciding which setting to use.

Common enduser parameters

Before signon, or if signon not enabled

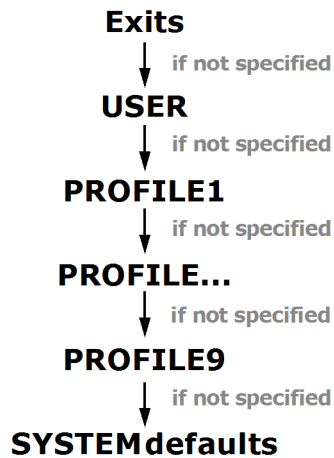
Before a signon has taken place, or if the SYSTEM parameter SIGNON has been set to NO (in which case no signon will take place), the settings to be used will be determined as follows,



For more information on using Exit Points, refer to the *Installation and Customization* manual.

After signon

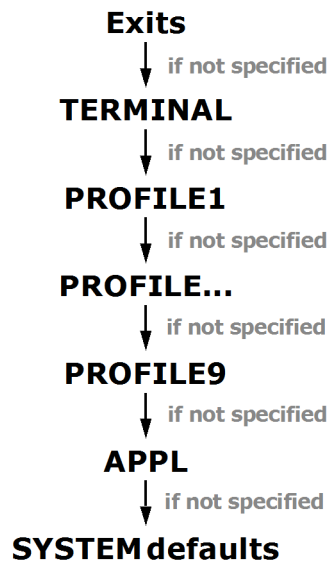
After a signon has taken place the settings to be used will be determined as follows,



For more information on using Exit Points, refer to the *Installation and Customization* manual.

Common session parameters**If signon not enabled**

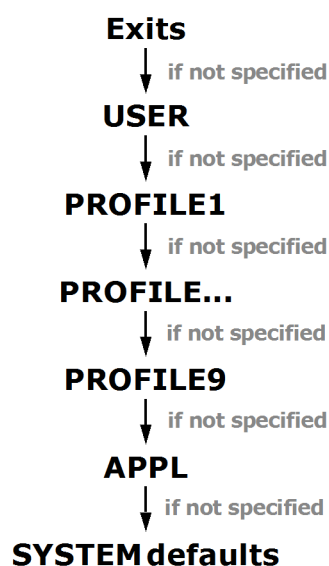
If the SYSTEM parameter SIGNON has been set to NO (in which case no signon will take place), then the settings to be used will be determined as follows,



For more information on using Exit Points, refer to the *Installation and Customization* manual.

After signon

After a signon has taken place the settings to be used will be determined as follows,

**Determining Profile order**

Profiles associated with a user are read in the order they appear on the **USER** statement or, if you have configured your system to allow the External Security Manager to determine a user's Profiles, as dictated by the External Security Manager and the **ESMLEVEL** parameter. This is the same order in which they appear when viewed using **OLA**. The first profile in the list will be Profile1, the second Profile2, and so on.

Common enduser parameters

The following parameters can be used with the SYSTEM, PROFILE, USER, TERMINAL and LU statements. For an explanation of the logic used when deciding which setting to use, refer to ‘General and User Configuration’ on page 22.

Full descriptions of these parameters are provided in the *Technical Reference*.

```
[ACTivesessions active-session-limit]
[AFFINITY affinity-acbname]
[AUTH auth-level]
[AUTOSELECT session-number|applname]
[AUTOSEQ escape [A|I|E|N script-name]]
[BACKWARD escape]
[BRECEIVE [Yes|No|ON|OFF|WAIT|np|BELL|QUEUED]]
[CMDACTionkey aidkey]
[COMMANDPrfxval character]
[CURESC [Yes|No|ON|OFF]]
[CUT escape [NFILLC [Yes|No|ON|OFF]]]
[DAPPLCheck [Yes|No|ON|OFF]]
[DAPPLESMAUTH [Yes|No|ON|OFF]]
[DEMO [DEMOKEY escape]
      [AUTocopy [Yes|No|ON|OFF]]
      [INTerna1 [Yes|No|ON|OFF]]
      [DISplay [Yes|No|ON|OFF]]]
[DOUBLESC interval]
[DSESSRange FROM fromsessionnumber TO tosessionnumber]
[ERTIMEOUT seconds]
[ESCAPE escape [CURSOR row col]]
[ESMOLAGROUP [Yes|No|ON|OFF]]
[EUTIMEOUT minutes]
[FORWARD escape]
[HCPROF hcprofile-name]
[HCREQUEST escape [CURSOR row col]]
[IDLEDisc minutes [DIRECTION [IN|INOUT]] [WARN [Yes|No|ON|OFF]]]
[IDLELOCK minutes [DIRECTION [IN|INOUT]]]
[IDLELogoff minutes [AFTERDISC] [DIRECTION [IN|INOUT]] [WARN
[Yes|No|ON|OFF]]]
[LANGuage language-id]
[LOGDISC EXIT|SIGNON]
```

```
[MENU panel-name]  
[MOBILE [Yes|No|ON|OFF] [LOCK [Yes|No|ON|OFF]]]  
[MSGID [Yes|No|ON|OFF]]  
[NCSESC Yes|No|ON|OFF]  
[OLACCLASS ola-class]  
[PASTE escape  
    [NFILLP [Yes|No|ON|OFF]]  
    [SPILLW [Yes|No|ON|OFF]]]  
[PREVIOUS escape]  
[PULL escape]  
[PUSH escape]  
[PUSHLimit push-limit]  
[REBIND [Yes|No|ON|OFF]]  
[RECORDLimit record-limit]  
[RECOVERYLevel High|Intermediate|None]  
[REPLAY ASRECORD|FMTopts]  
[SENDCDonsrd [Yes|No|ON|OFF]  
[SESSAUTOSApp1 [Yes|No|ON|OFF]  
[SESSPRIApp1 [Yes|No|ON|OFF]  
[SHARE [Yes|No|ON|OFF]]  
[SHAREDISC [Yes|No|ON|OFF]]  
[SHARESESS [Yes|No|ON|OFF|MAXUSRlogin nnnn]]  
[SIMRecon [Yes|No|ON|OFF]]  
[SPYABLE [TELL|Yes|No|ON|OFF]]  
[SPYGROUP group-name|*]  
[TERMERROR EXIT|SIGNON [DISC|LOGOFF|SIGNOFF]]  
[TRANSTab transtable-name]  
[USERDATA1 data|variable]  
[USERDATA2 data|variable]  
[USERDATA3 data|variable]  
[USERDATA4 data|variable]  
[USERDATA5 data|variable]  
[WINDSCRIPT script-name]
```

Common session parameters

The following parameters can be used with the SYSTEM, PROFILE, USER, TERMINAL, APPL and LU statements. For an explanation of the logic used when deciding which setting to use, refer to ‘General and User Configuration’ on page 22.

Full descriptions of these parameters are provided in the *Technical Reference*.

```
[ACB override-acbname]
[ADDSID test|variable
  AT row col
  [COND text AT row col]
  [MODEL model-number]]
[ALARM [Yes|No|ON|OFF]]
[ALLOWEscape [Yes|No|ON|OFF]]
[APPLSEL search-text]
[AUTOSCRIPt script-name]
[AUTOSTART [Yes|No|ON|OFF]]
[BLANKSCript scriptname]
[BRDVAR text]
[COMPress [Yes|No|ON|OFF]]
[CONCEAL [Yes|No|ON|OFF]]
[CONDLOGOFF [Yes|No|ON|OFF]]
[DATA logon-data]
[DESCRIPTION description]
[DISCActive [Yes|No|ON|OFF]]
[DROP_SESSION [Yes|No|ON|OFF]]
[ENDSCript script-name]
[ENVIRONSCript script-name]
[HIDE [Yes|No|ON|OFF]]
[ILU [Yes|No|ON|OFF]]
[IMSConvert Yes|No|ON|OFF]
[IMSCONVERTC Yes|No|ON|OFF]
[INITSCript script-name]
[INTERNALSess Yes|No|ON|OFF]
[LOGMODE logmode-entry-name]
[LOGOFF END|RESET]
[MISER [Yes|No|ON|OFF] | [INput] [OUTput] REA] [ERB]]
[NETID network-id]
[ONESCape CONTInue|END|RESET]
```

```
[ONREAD IGNore|SElect|DISPMenu]
[ONWRITE IGNore|SElect|DISPMenu]
[OUTPUTWarn nnnn [Minutes mmm]]
[PASSTIMEOUT DISPMenu|LOGAPPL]
[PASSTRAnsId [Yes|No|ON|OFF]]
[PCTTRANSFER [Yes|No|ON|OFF]]
[PSTKApp1 passticketapplname]
[PSTKUser alternativeuserid]
[QUITActive [Yes|No|ON|OFF]]
[REJBB [Yes|No|ON|OFF]]
[REMOTE nodename]
[RMISER [Yes|No|ON|OFF] | [INPut] [OUTput]]
[SAUTOSEQ escape
  [A|C ismcommand|I|J|E|N script-name]
  [PASS]
  [NOCURESC]
  [REMESC]
  [ACTIONKEY aidkey]
  [COMMANDPRFX Y|N|ON|OFF]
  [PARM Y|N]
]
[SEQUENCE nnnn]
[SESSDATA1 data|variable]
[SESSDATA2 data|variable]
[SESSDATA3 data|variable]
[SESSDATA4 data|variable]
[SESSDATA5 data|variable]
[SESSPROGMSG [Yes|No|ON|OFF]]
[SESTYPE nnnn]
[SIDLTime minutes [DIRECTION [IN|INOUT]]]
[SNABUSY [Yes|No|ON|OFF]]
[STARTSCript script-name]
[STATs [Yes|No|ON|OFF]]
[TERMSCript script-name]
[UNBIND [IMMEDiate|WAIT]]
[UNBINDAPPL VTAM-applid]
[UNDERISZSMGR|CLOSEDISC|CLOSELOGOFF] ]
```

SYSTEM statement

The following parameters can be used with the SYSTEM statement. Full descriptions are provided in the *Technical Reference*.

```
[ACB system-acbname|0]
[ALLUSERS [Yes|No|ON|OFF]]
[ATTR attr-char] OFF|field-attribute-parameters ]
[AUDITOGDG [Yes|No|ON|OFF]
  [ATGBASE atgbasename]
  [ATGUNIT unitdevicetype]
  [ATGSMSCCLASS smsclassname]
  [ATGPSPACE nnn]]
[BINDTIMEOUT seconds]
[CLOSEACBInact [Yes|No|ON|OFF]]
[CV64 [Yes|No|ON|OFF]]
[DEFAPPL applname]
[DEFMENU menu-name]
[DEFPROFILE profile-name]
[DLOGlimit dlog-message-limit]
[Domax domax-limit]
[DUMPGDG [Yes|No|ON|OFF]
  [DUMPBASE gdgbasename]
  [DUMPUNIT unitdevicetype]
  [DUMPSMSCLS smsdataclass]
  [DUMPPSPACE numberofcylinders]
  [DUMPSSPACE numberofcylinders]]
[EXITWALen nnnnn]
[GENERICACB generic-acbname]
[GENRESName ismgenericresourcenname]
[HARDENUser Yes|No|ON|OFF]
[INITIAL_CMD initial_cmd]
[INPUTEXit exitname]
[INQINTERval minutes]
[LOCALnode nodename]
[LOGCmdauth command-auth-level]
[LOGMnnx logmode-entryname]
[MDY|DMY|YMD|YDM]
```

```

[MSGsuffix I|E|W|*
  [AUDIT [Yes|No|ON|OFF]]
  [CONTent [Yes|No|ON|OFF|CODE|TEXT]]
  [DESCRiptor descriptor-code-list]
  [INFORM users-inform-list]
  [LOG [Yes|No|ON|OFF]]
  [ROUTE route-code-list]]

[MULTUser [TERML4|COUNT RECONAnyterm [Yes|No|ON|OFF]
  PORTNumber [Yes|No|ON|OFF]]

[OLA_DEFER_USERS [Yes|No|ON|OFF]]

[OLALOG [Yes|No|ON|OFF] [OLALOGVERBOSE [Yes|No|ON|OFF]]]

[OPEROLAClass olaclassname]

[OUTPUTEXit exitname]

[PANELID Yes|No|ON|OFF]

[PASSTry passtry-limit]

[PREFLANGuage language-id]

[RCMDTimeout n]

[RETRCMDS nn]

[RFUNTIMEOUT seconds]

[RTMT1 nnnnn]

[RTMT2 nnnnn]

[SCREENMODE Normal|Alternate]

[SECURITY
  [AUTHRESname authresname]
  [OLARESname olaresname]
  [AUTHCLASsname authclassname]
  [DYNMResnm dynamicmenuresourcenam]
  [DYNMClass dynamicmenuclassname]
  [DYNMDROPSESSION Yes|No|ON|OFF]
  [DYNMLog Yes|No|ON|OFF]
  [DYNMAutsthid Yes|No|ON|OFF]
  [DYNMTYPE Appl|Vtamappl]
  [DYNMHide Yes|No|ON|OFF]
  [DYNMLogmax nnnn]
  [ESMPRFCLNM esmprofileclass]
  [ESMPRFRSNM esmprofileresname]
  [ESMPRFACC Yes|No|ON|OFF]
  [PASSPHRASE Yes|No|ON|OFF [PASSWORDREQ Yes|No|ON|OFF]]
  [SIGNONClass signonclass]
  [SIGNONAccess Yes|No|ON|OFF]
  [SIGNONResname signonresname]
  [TERMINALClass terminalclass]
  [TERMINALResname terminalresname]
  [TERMINALAccess Yes|No|ON|OFF]
  [TYPECLASSGLOBAL Yes|No|ON|OFF]]

```

```

[SESACB default-acbname]
[SHAREAPPL appl-statement-name]
[SIGNon [Yes|No|ON|OFF]]
[SIGNONPANEL panel-name]
[SRBUFsize buffer-size]
[STANDBY N|nodename]
[SYSDUMP [NODUMP|DUMP|BYPASS|RTMDUMP]]
[SYSPLEXGroup xxxx
  [GLOBALMessages Yes|No|ON|OFF]
  [LINKTRace Yes|No|ON|OFF]
  [LINKNEtct1 Yes|No|ON|OFF]
  [LOGSTREAMName logstreamname]
  [PSTIMER 1 to 32767]
  [STANDBYTAKETIME [0 to 32767]]
  [USERStructure Yes|No|ON|OFF]
  [WAITFORCNTLTIME [0 to 32767]]]
[SYSPLEXTYPE C|S|I|N]
[TCP [Yes|No|ON|OFF]
  [DISPLAY [Yes|No|ON|OFF]]
  [ECLIPSEServer portnumber
    [DIAGS [Yes|No|ON|OFF]]]
  [STN3270 port-no
    [TN3270_MSG4049 [Yes|No|ON|OFF]]
    [TN3270E [Yes|No|ON|OFF]]
    [TN3270E_CONNECT [Yes|No|ON|OFF]]]
  [IBM [IUCVname resource-name]]
  [TRACE [Yes|No|ON|OFF]]]
[TRBUFsize buffer-size]
[TRNUMBER buffer-number]
[VERBOSE Yes|No|ON|OFF]
[WORKQUE workque-limit]
[XLATECP textstring]

```

PROFILE statement

The following parameters can be used with the PROFILE statement. Full descriptions are provided in the *Technical Reference*.

```
PROFILE profile-name
  [ESMLEVEL esmlevel-value]
  [PASSTry passtry-limit]
  [RETAIN [Yes|No|ON|OFF]]
  [SIGNon [Yes|No|ON|OFF]]
  [SIGNONPANEL signon-panel]
  SESSION DEFAULTS |
    SESSION nnnn [ selection-commands ] |
    KEY PFnn
  APPLID VTAM-applid|appl-statement-name |
  [REFApp1 [Yes|No|ON|OFF]]]
  [CMD command] (any valid Session Manager command)
  [TRANSID transid-list]
```

USER statement

The following parameters can be used with the USER statement. Full descriptions are provided in the *Technical Reference*.

```
[USER username
  [PASSWORD password]
  [PROF profile-name]
  [RENUMDUP nnnn]
  [SESSAUTOS Yes|No|ON|OFF T|N|A|C
    sestype|session_number|application|command]
  [SESSPRI T|N|A|C sestype|session_number|application|command]
  [TRACE Internal|Data|MISER|Vtam|NETDATA]
```

TERMINAL statement

The following parameters can be used with the TERMINAL statement. Full descriptions are provided in the *Technical Reference*.

```
[TERMINAL termid|termid-pattern
  [PASSTry passtry-limit]
  [PROF profile-name]
  [RETAIN [Yes|No|ON|OFF]]
  [SIGNon [Yes|No|ON|OFF]]
  [SIGNONPANEL signon-panel]
  [TRACE Internal|Data|MISER|Vtam|NETDATA]
```

LU statement

The following parameters can be used with the LU statement. Full descriptions are provided in the *Technical Reference*.

```
[LU luname | lu-pattern options ]
```

options are the same as for the TERMINAL statement.

APPL statement

The following parameters can be used with the APPL statement. Full descriptions are provided in the *Technical Reference*.

```
APPL appl-name  
    [APPLID applid]  
    [INDRANGE appl_name]  
    [INQUIRE [Yes|No|ON|OFF]]  
    [RECOVERYLevel [High|Intermediate|None]]  
    [TERMLogmode logmode-name]* [ACBRANGE rangename]]
```

Initialization Options

The statements in this section control the settings used by Session Manager when the system first starts up. The statements available are summarized below; full descriptions are provided in the *Technical Reference*.

COPY statement

The following parameter can be used with the COPY statement.

COPY *member-name*

OPTION statement

The following parameters can be used with the OPTION statement.

```
[OPTION [Config xx]
      [EXit exit-name]
      [E05 E|S]
      [E06 E|S]
      [E08 E|S]
      [E11 E|S]
      [E21 E|S]
      [E22 E|S]
      [E26 S]
      [E29 E|S]
      [E31 E|S]
      [E33 E|S]
      [E36 S]
      [E39 E|S]
      [E79 E|S]
      [E99 E|S]
      [GFS Yes|No|ON|OFF]
      [STORLim nnnnnnnnnn|nnnnnnnnnK|nnnnM]
      [CUSHion nnnnnnnnnn|nnnnnnnnnK|nnnnM]
      [THREShold Yes|No|LOG]
      [WARNing nnn]
      [SEVEre nnn]
      [CRITical nnn]
      [MAXstor Yes|No|ON|OFF]
      [MDPROF [L|M]]
      [MSGupper [Yes|No|ON|OFF]]
      [Print [Yes|No|ON|OFF]]
      [Security [Yes|No|ON|OFF]]
      [Start [Yes|No|ON|OFF]]
      [Test [Yes|No|ON|OFF]] ]
```

PCOPY statement

The following parameter can be used with the PCOPY statement.

PCOPY *ddname* [*member-name*]

Support statements

Support statements are used by Technical Support representatives to configure and update the Session Manager system. They should not be used by others except at the request of a local Support Representative. The statements available are:

APPLYSU

DELETE

INSTALLSU

PATCH

PATCHSU

REMOVESU

Full descriptions of these statements are provided in the *Technical Reference*.

Technical configuration

Technical Configuration statements enable you to control fundamental settings affecting how Session Manager runs. The statements available are:

COMMAND
LINK
RANGE
RUSER
TRANSTABLE
AUDITROUTE
TRACEROUTE
OLAROUTE

Full descriptions are provided in the *Technical Reference*.

COMMAND statement

The following parameters can be used with the COMMAND statement.

```
[COMMAND cmd-name
  [AUTH auth-level]
  [ACTKEY Yes|No]
  [KEYWORD cmd-parm-1 KAUTH auth-level1]
  [KEYWORD cmd-parm-2 KAUTH auth-level2]
  ...
  [KEYWORD cmd-parm-n KAUTH auth-leveln]
  [CMDSCRIPT Yes|No|ON|OFF [SNAME script-name] ] ]
```

LINK statement

The following parameters can be used with the LINK statement.

```
[LINK link-name
  Vtam local-acb To remote-acb
  [LOGMode logmode]
  [RECVany n]
  [OPENRETRYLIM nnn]
  [OPENRETRYINT seconds]
  [RECONIntvl seconds]
  [BUFsize buffersize]
  [STARTLink [Yes|No|ON|OFF]]
  [TRace [Yes|No|ON|OFF] [NETCTL]]
  [ISZ]
  [ACTIVATE [Yes|No|ON|OFF]] ]
```

RANGE statement

The following parameters can be used with the RANGE statement.

```
[RANGE acb-rangename
  FROM start-acbname [TO stop-acbnumber]
  [HEX|DEC]
  [RRA Yes|No|ON|OFF]]
```

RUSER statement

The following parameter can be used with the RUSER statement.

```
[RUSER name-pattern
  NDe node-name Auth auth-level OLAClass ola-class ]
```

TRANSTABLE statement

The following parameters can be used with the TRANSTABLE statement.

```
[TRANSTABLE table-name
  [INPUT|OUTPUT]
  [SET offset list-of-hex-chars]
  [SET offset list-of-hex-chars ]... ]
```

Common print routing parameters

The following parameters can be used with the AUDITROUTE, TRACEROUTE, OLAROUTE, and HCROUTE statements.

```
[CLASS class-code]
[COPIES copies]
[DESTINATION destination-code]
[EXTWTR name]
[FCB fcf-name]
[FLASH overlay [count]]
[FORM forms-name]
[HIGHLIGHT [Yes|No|ON|OFF]]
[HOLD [Yes|No|ON|OFF]]
[NAME override-name]
[NODE node-name]
[OUTPUT output-JCL-statement-name]
```

AUDITROUTE statement

The common print routing parameters, shown on above, can be used with the AUDITROUTE statement.

```
[AUDITROUTE print-routing-parameters]
```

TRACEROUTE statement

The common print routing parameters, shown on above, can be used with the TRACEROUTE statement.

```
[TRACEROUTE print-routing-parameters]
```

OLAROUTE statement

The common print routing parameters, shown on above, can be used with the OLAROUTE statement.

```
[OLAROUTE print-routing-parameters]
```

Messaging

These statements enable the configuration of messages and the setting up of groups who receive them. The statements available are:

GROUP

MESSAGE

Full descriptions are provided in the *Technical Reference*.

GROUP statement

The following parameters can be used with the GROUP statement.

```
[GROUP group-name
  [LUNAMES list-of-lunames]
  [PROFILES list-of-profilenames]
  [TERMINALS list-of-terminals]
  [USERS list-of-usernames] ]
```

MESSAGE statement

The following parameters can be used with the MESSAGE statement.

```
[MESSAGE msg-number
  [SUFFix I|E|W]
  [AUDit [Yes|No|ON|OFF]]
  [INFORM users-inform-list]
  [LOG [YES|No|ON|OFF]]
  [DESCRiptor descriptor-code-list]
  [ROUTE route-code-list]
  [TEXT message-text [LANGuage language-id]] ]
```

Printing

The printing statements configure how hardcopies produced by the system are formatted and routed. The statements available are:

HCFORMAT

HCPROFILE

HCRROUTE

Full descriptions are provided in the *Technical Reference*.

HCFORMAT statement

The following parameters can be used with the HCFORMAT statement.

```
[HCFORMAT formatname
  [HEADER header-text]
  [TRAILER trailer-text] ]
```

HCPROFILE statement

The following parameters can be used with the HCPROFILE statement.

```
[HCPROFILE profile-name
  HCOPTION description
  [FORMAT hardcopy-formatname]
  [ROUTE hardcopy-routename] ]
```

HCRROUTE statement

The following parameters can be used with the HCRROUTE statement.

```
[HCRROUTE routename print-routing-parameters ]
```

The common print routing parameters are listed on page 37.

Panels and Scripts

Panel and Script statements provide facilities for customized panels and scripts to be used with Session Manager. They differ from the other control statements in that they may contain logic statements for loops and conditional processing. These logic statements are referred to as TPSL, the Panel and Script Language. The prototypes for these are given in this manual but the full description appears in the *Panels, Scripts and Variables* manual.

PANEL statement

The following parameters can be used with the PANEL statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

```
[PANEL panel-name
  [BRANCH label name ]
  [LAB label name ]
  [DEFINE
    [LANGUage languageid]
    [WIDTH 80|132]
    [MODE NORMa1|ALTernate]
    [DOMAX domax-limit]
    [CURSOR field-name]
    attr-definitions [...]

    attr-definitions (one or more, as desired):

    [ATTR attr-char OFF|field-attribute-parameters ] ]

    field-attribute-parameters:

    Protection, content:

    [ASKIP|SKIP]
    [DETect|NODETect]
    [UNProtected|PROTected]
    [NUMeric|ALPHanumeric]
    [NODisp|NONdisp]

    Color, effects:

    [RED|YELlow|WHItE|GREEN|BLUe|PINK|TURquoise]
    [HIGh|NORMa1]
    [REVerse|BLInking|UNDErscore|USC0re]

    Special attributes:

    [ETMODE|DBCS]
    [ICursor]
    [BLANK|NOBLANK]
    [IN|OUT|LITera1]

  [HEADER
    [LINES line-number attr-definitions] ]

    attribute-definitions (one or more, as required).
    Note that these may not be defined within TPSL structures:
```


[ATTR *attribute-character* OFF|*field-attribute-parameters*]

For *field-attributes*, see PANEL DEFINE.

The following PANEL operations may be embedded within TPSL structures and interspersed with TPSL LETs and RETURNS.

[CALL *panel-sub-definition*]

[COLUMN *col*]

[FIELD *variable*[(*nn*)]|*literal*

[*field-attributes*

REFATTR *attribute-character*]|

character-variable]

[FORMATMSG (*nnnn* 'SEND'|'SENDNO' 'MSGID'|'ID'|'NOID' P1 P2...P9)]

For *field-attributes*, see PANEL DEFINE.

[ICDISP *cursor-displacement*]

[NLIN *lines*]

[TEXTSTART *panel-image-definition* TEXTEND]

[TRACEON]

[TRACEOFF]

[CONTENT *parameters*]

The *parameters* are the same as the HEADER subparameters (except LINES).

[TRAILER [LINES *line-number*] *parameters*]

The *parameters* are the same as the HEADER subparameters.

[PROCESS [CALL *process-sub-definition*] [TRACEON] [TRACEOFF]]]

The rest is defined using TPSL structures and operations.

PHEADER statement

The following parameters can be used with the PHEADER statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

[PHEADER *sub-header-name*]

The PHEADER statement is used to define a common panel HEADER which can be CALLED from another HEADER section. The PHEADER definition is defined in the same way as the HEADER parameter, but with these exceptions:

- The LINES parameter on the HEADER parameter *cannot* be specified on the PHEADER definition.
- The LANGUAGE parameter on the PHEADER definition *cannot* be specified on the HEADER parameter.

PCONTENT statement

The following parameters can be used with the PCONTENT statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

[PCONTENT *sub-content-name*]

The PCONTENT statement is used to define a common panel CONTENT which can be CALLED from another CONTENT section. The PCONTENT definition is defined in the same way as the CONTENT parameter, but with this exception:

The LANGUAGE parameter on the PCONTENT definition *cannot* be specified on the CONTENT parameter.

PTRAILER statement

The following parameters can be used with the PTRAILER statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

[PTRAILER *sub-trailer-name*]

The PTRAILER statement is used to define a common panel TRAILER which can be CALLED from another TRAILER section. The PTRAILER definition is defined in the same way as the TRAILER parameter, but with these exceptions:

- The LINES parameter on the TRAILER parameter *cannot* be specified on the PTRAILER definition.

The LANGUAGE parameter on the PTRAILER definition *cannot* be specified on the TRAILER parameter.

PPROCESS statement

The following parameters can be used with the PPROCESS statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

[PPROCESS *sub-process-name*]

The PPROCESS statement is used to define a common panel PROCESS which can be CALLED from another PROCESS section. The PPROCESS definition is defined in the same way as the PROCESS parameter, but with this exception:

- The LANGUAGE parameter on the PPROCESS definition *cannot* be specified on the PROCESS parameter.

SCRIPT statement

The following parameters can be used with the SCRIPT statement. Full descriptions are provided in the *Panels, Scripts and Variables* manual.

[SCRIPT *script-name*
[APPLTIME *application-timeout-limit*]
[DOMAX *domax-limit*]
[MDTHON [YES|NO]]
[RPQLSCRIPTAUTO [YES|NO]]
[SIMRPQ [Yes|No]]

The following SCRIPT operations may be embedded within TPSL structures and interspersed with TPSL LETs and RETURNS.

```

[AUDITMSG message-text]
[BRANCH label name ]
    [LAB label name ]
[CALL script-name]
[CALLEXIT [DATA user-data] [RSN exit-reason-code]]
[DISPAPPL [FLUSH]]
[ERASE [Eof|A1]]]
[EXTRACT DATA variable-name
    [FROM row|variable-name
    [TO [col|variable-name]] col|variable-name ] ]
[HOME]
[INPUT [PASS | [CURSOR row col]
    [KEY key|NO|NOAID]
    [SBA [row|variable-name col|variable-name]| [No|OFF] ]
    [TEXT text] ] ]
[INSCAN inscan-string
    [FROM row|row-variable col|col-variable
    [TO row|row-variable [col|col-variable] ]|
    AT row|row-variable [col|col-variable] ] ]
[ISZCMD command] (any valid Session Manager command)
[OUTSCAN outscan-string
    [FROM row|row-variable [col|col-variable]
    [TO row|row-variable [col|col-variable] ]|
    AT row|row-variable [col|col-variable] ] ]
[PAUSE seconds|variable-name]
[TDEQ enqueue-value ]
[TENQ enqueue-value ]
[TAB [Forward|Backward]]
[TRACEON]
[TRACEOFF]
[USERMSG PANEL panel-name|TEXT usermsg-text]
[VCALL variable-name | 'script-name']
[WAITAPPL [DISPLAY [Yes|No|ON|OFF]]
    [TIMEOUT timeout-value ] [KEEP] ]
[WAITTERM [PASS]]

```

Verbs – Scripts, Application Builder scripts, and Windows

Script verbs are parameters that cause actions to take place. When using Application Builder scripts, these verbs can be used with other ordinary session script parameters to define scripts that enable you to build a new application. A Window script displays one or more windows which can be used to run sessions.

General descriptions of the Application Builder feature and the Session Manager Windows feature can be found in the *Installation and Customization* manual and *User and Administrator* manual respectively.

Script and Application Builder script verbs

```
[ENDSESS [SESSION session-id] ]
[WAITDATA [PASS] [TIMEOUT timeout-value] [KEEP] ]
```

Application Builder script verbs

```
[HALTSCRIPT session-id]
[READSESS variable-name
  [FROM row|row-variable [ col|col-variable ] ]
  [TO col|col-variable] ]
[RUNSCRIPT session-id script-name]
[SENDATA/SENDVAL variable-name|literal
  SESSION session-id|RPARTNER]
[STARTSESS session-id]
```

Windows script verbs

```
WACTIVATE [WINDOW window-identifier|window-name]
WAITEVENT ESCAPE|MSG|SESSEND|SWITCH
WALTER [WINDOW window-identifier|window-name]
  [ORIGIN ROW row COLUMN col|OFFSET offset]
  [ENDPOS ROW row COLUMN col|OFFSET offset]
  [SIZE DEPTH depth WIDTH width]
  [NAME window-name]
  [BORDER border-set-name|NONE]
  [OWNER window-identifier|window-name|NONE]
  [REMATTr [Yes|No|ON|OFF]]
    [SESSION session-number|session-pfkey
      [OUTPUT [Yes|No|ON|OFF]]
    or WINPANEL panel-name
    or WINTEXT message-text ]
WBACKGROUND [CHAR background-character]
  [attr-list|REFATTR attr-char|variable-name]]
```

```

WBORDER NAME border-set-name
  [TOP [CHAR character]
    [attr-list|REFATTR attr-char|variable-name]
    [TEXT [COLumn col]
      [FIELD variable[(nnn)]]|literal
      [attr-list|REFATTR attr-char |
        character-variable]]]
  [NONE]]
  [BOTTOM (see TOP parameter) ]
  [LEFT (see TOP parameter) ]
  [RIGHT (see TOP parameter) ]
  [DEFAULT (see TOP parameter) ]
  [CORNER CHAR character]
  [BOX]

WCLOSE [WINDOW window-identifier|window-name]

WHIDE [WINDOW window-identifier|window-name]

WIDENTIFY [CURSOR]
  [LOCATION ROW row COLumn col|OFFSET offset]
  [WINDOW window-identifier|window-name]

WNORM [WINDOW window-identifier|window-name]

WOPEN [ORIGIN ROW row COLumn col|OFFSET offset]
  [ENDPOS ROW row COLumn col|OFFSET offset]
  [SIZE DEPTH depth WIDTH width]
  [NAME window-name]
  [BORDER border-set-name|NONE]
  [OWNER window-identifier|window-name|NONE]
  [REMATTr [Yes|No|ON|OFF]]
    [SESSION session-number|session-pfkey
    [OUTPUT [Yes|No|ON|OFF]]]
  or WINPANEL panel-name
  or WINTEXT message-text ]

[WCA [Yes|No|ON|OFF]]

WPOP [WINDOW window-identifier|window-name]

WSCROLL [WINDOW window-identifier|window-name]
  [VERTICAL vertical-scroll-value]
  [HORIZONTAL horizontal-scroll-value]

WZOOM [WINDOW window-identifier|window-name]

```

TPSL syntax

The Panel and Script Language consists of seven logic statements. DO, IF, and SELECT statements may be used to build TPSL structures, and LET, ITERATE, LEAVE, and RETURN statements are used for TPSL operations.

TPSL structures and operations may be used in combination with specialized PANEL and SCRIPT keywords, within the PANEL and SCRIPT statements, to control logic and to alter or define data for output on screens, or input for Session Manager and applications. A subset of these logic statements can also be used anywhere in the configuration file to control definition of the Session Manager system. The full definition can be found in the *Panels, Scripts and Variables* manual.

Testing – simple condition

```
IF [NOT] conditional-expression
    [AND|OR [NOT] conditional-expression]
    [THEN]
        one or more operations
[ELSE one or more operations]
END
```

Testing – multiple choice

```
SELECT|CASE
    WHEN [NOT] conditional-expression-1
        [AND|OR [NOT] conditional-expression-2]
        [THEN]
            one or more operations
    WHEN [NOT] conditional-expression-3
        [AND|OR [NOT] conditional-expression-4]
        [THEN]
            one or more operations
    ...
    WHEN [NOT] conditional-expression-n
        [AND|OR [NOT] conditional-expression-n]
        [THEN]
            one or more operations
[ ELSE
    one or more operations]
END
```

Looping

```
DO
    WHILE conditional-expression |
    UNTIL conditional-expression |
    FOREVER |
    FOR nnn|variable-name
        one or more operations
END
```

For a full description of *conditional-expression* as used in the previous three statements, refer to ‘The IF Statement’ in the *Panels, Scripts and Variables* manual.

Assignment

```
LET variable-name | &variable-name =
    variable|literal|string|arithmetic-expression |function
```

where *function* can be one of:

ABBREV (*string input length*)
ABS (*number*)
ADDOUT (*string row col attr*)
APPLINF (*stem*)
BCASTINF (*stem*)
BLKICNV (*character-block-id*)
BLKOCNV (*hex-block-id*)
CENTRE (*string length pad*)
CHANGESTR (*string1 string2 new*)
COMPARE (*string1 string2 pad*)
COPIES (*string n*)
COUNTSTR (*string1 string2*)
CURRYEAR ()
DELSTR (*string n length*)
DELWORD (*string n length*)
DLOGINF (*stem,start,max*)
D2X (*variable*)
ENTDATA (*fieldnum extdata row-col-prefix*)
ENTRY_IO (*'operation' ddname other_parms*)
ESMAUTHOLA (*username*)
ESMAUTHUSER (*newpassword/newpassphrase*)
ESMCHKUSERGROUP (*username*)
ESMGROUP ()
ESMPROF (*stem*)
ESMSIGNON ()
ESMVERIFYUSER(*password/passphrase*)
EXTRAUTH (*command_variable keyword_variable*)
FORMATMSG (*nnnn 'SEND'|'SENDNO' 'MSGID'|'ID'|'NOID' P1 P2...P9*)
GFSACTIV ()
GFSSTATS (*subscript*)
GFSSTOR (*subscript*)
GFSUSAGE (*subscript*)
GROUPINF (*stem*)
INQUIRE()
INSERT (*new string n length pad*)
KEYPOS (*string words n*)
LASTPOS (*string1 string2 n*)
LEFT (*string length pad*)
LENGTH (*string*)
LOCKINF (*termid*)
MAX (*n1 ... nx*)
MIN (*n1 ... nx*)
OVERLAY (*new string n length pad*)
PASSIN (*session*)
PASSOUT (*session*)
POS (*string1 string2 n*)
REVERSE (*string*)
RIGHT (*string length pad*)
SESSINF (*userid,qualifier,sessionid*)
SIGN (*number*)
SMDESC (*profilename*)
SMHPROF (*profilename*)
SMSTATUS (*profilename*)
SPACE (*string n pad*)

SPLXLOCUSER ('U' | 'T', *object*, *stem* <,'ALL'>)
SPLXLOG (*stem*)
SPLXNODES (*stem*)
STRIP (*string* 'B' | 'L' | 'T' *char*)
SUBSTR (*string* *n* *length* *pad*)
SUBWORD (*string* *n* *length*)
TMSG (*variable*)
UPPER (*string*)
USERINF (*userid*,*qualifier*,*eclipseflag*)
VERIFY (*string* *chars* 'N'|'M' *n*)
WORD (*variable*)
WORDINDEX (*string* *n*)
WORDLENGTH (*string* *n*)
WORDPOS (*string1* *string2* *n*)
WORDS (*variable*)
XMLTRANS (*string*)
X2D (*variable*)

**Altering the flow
within a DO loop**

ITERATE

**Exiting –
immediately
from a DO loop**

LEAVE

**Exiting – early
termination of
logic processing**

RETURN

CHAPTER 3**Session Manager variables**

Many variables are available within IBM Session Manager for z/OS. These can be used in a range of situations and provide for powerful product customization. They can be separated into a number of groups:

- Session Manager supplied variables (see page 51)
- Panel variables (see page 54)
- Terminal variables (see page 56)
- User variables (see page 58)
- Session variables (see page 60)
- Session statistics and response time monitor variables (see page 63)
- Facility-related variables (see page 65)
- TPSL and SCRIPT processing variables (see page 68)
- Session Manager user definable variables (see page 74)

Using the tables

In the following tables the column headed Modifiable contains either R/O for read-only variables or R/W for read-write variables which are modifiable. Certain are indicated as Y/N, which signifies that the variable is modifiable, but only from certain screens.

The column headed Format indicates the format of the information held by the variable, where 'x' is an alphanumeric character and 'n' is a numeric character.

The column headed Parm, where it is included, indicates the address in the parameter list at which the variable can be found. A full description is given in the 'Session Manager user exit processing' chapter in the *Installation and Customization* manual.

Session Manager supplied variables

Global variables

Global variables may be used on any parameter that accepts variable substitution, although on certain parameters their use would be nonsensical.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
smax	R/W	nnnn
t_applid	R/O	xxxxxxxx
t_authclass	R/O	xxxxxxxx
t_authcln_global	R/O	x
t_authresn	R/O	xxx ... xxx
t_company	R/O	xxx ... xxx
t_config_suf	R/O	xx
t_copyr	R/O	xxx ... xxx
t_dapplcheck	R/O	x
t_date	R/O	dd/mm/yy or mm/dd/yy
t_date_l	R/O	dd/mm/yyyy or mm/dd/yyyy
t_day	R/O	xxx ... xxx
t_dynmalog	R/O	Y or N
t_dynmautsthid	R/O	Y or N
t_dynmclass	R/O	xxxxxxxx
t_dynmcln_global	R/O	x
t_dynmdropsess	R/O	Y or N
t_dynmhide	R/O	Y or N
t_dynmlogmax	R/O	nnnn
t_dynmresnm	R/O	xxx ... xxx
t_dynmtype	R/O	APPL or VTAMAPPL
t_e21_script	R/O	x
t_esmpcln_global	R/O	x
t_esmprfacc	R/O	x
t_esmprfclnm	R/O	xxxxxxxx
t_esmprfrsnm	R/O	xxx ... xxx

Variable name	Modifiable	Format	
t_feature	R/O	nnnnnnnnnnnnnnnnnnnn	
t_genresname	R/O	xxxxxxxx	
t_global_msg	R/W	x	
t_global_msgdef	R/O	x	
t_hardenu	R/O	Y or N	
t_month	R/O	xxx ... xxx	
t_mxcpass	R/O	x	
t_n	R/O	xxxxx	Session Manager (program name)
t_ola	R/O	x	
t_olalog	R/O	x	
t_olalog_verbose	R/O	x	
t_olaresn	R/O	xxx ... xxx	
t_opsys	R/O	z/OS	
t_p	R/O	xxx	ISZ (program prefix)
t_passphrase	R/O	x	
t_passwordreq	R/O	x	
t_pgmname	R/O	5697-N61 IBM Session Manager for z/OS <i>v.rmmX</i>	
t_security	R/O	x	
t_signcln_global	R/O	x	
t_signonaccess	R/O	x	
t_signonclass	R/O	xxxxxxxx	
t_signonresname	R/O	xxx ... xxx	
t_sos_msg	R/O	xxx ... xxx	
t_sysname	R/O	xxxxxxxx	
t_tcp_stack	R/O	xxx ... xxx	
t_termcln_global	R/O	x	
t_terminalaccess	R/O	x	
t_terminalclass	R/O	xxxxxxxx	
t_terminalresnam	R/O	xxx ... xxx	
t_time	R/O	hh.mm.ss	

Variable name	Modifiable	Format
t_tss_emsgr	R/O	x
t_tvnode	R/O	xxxxxxxx

Panel variables

Common panel variables

Common panel variables may be used on any panel definition, and some of them must be defined for certain panels.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_aid	R/W	x
t_aid_c	R/O	xxxx
t_cmd_ok	R/O	x
t_command	R/W	xxx ... xxx
t_cursor_name	R/W	xxxxxxxx
t_cursfld	R/O	xxxxxxxx
t_curssub	R/O	x
t_lastsess	R/O	nnnn
t_menuntop	R/W	nnnn
t_menutop	R/W	nnnn
t_message	R/W	xxx ... xxx
t_more_lines	R/O	x
t_panel	R/W	xxxxxxxx
t_recnt	R/O	nnn
t_repdof	R/W	nnn
t_rephdr	R/O	xxx ... xxx
t_replen	R/O	nnnn

Note t_menutop only applies to the menu panel.

Signon panel variables

These variables are available for definition on signon panels. The values are also made available to the E21 exit point of the User exit.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_affinity	R/W	xxxxxxxx
t_npass	R/W	xxxxxxxx
t_nphrase	R/O	xxxxxxxx

Variable name	Modifiable	Format
t_nprof	R/W	xxxxxxxx
t_olagroup	R/O	xxxxxxxx

Special Session Manager displays

Special displays are those which display Session Manager preformatted data, such as those used for QUERY command replies, displaying the audit file, and displaying broadcasts. Note that panels containing the `t_data` variable are not pageable in the same way that an Application Selection panel or Help panel is pageable. With most panels, the paging commands cause the format of the panel to be moved. With panels containing a set of `t_data` variables, for example the supplied DATA panel, the paging commands scroll the values of the `t_data` variable, the format does not alter.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_data	R/O	xxx ... xxx
t_tskid	R/O	xxx ... xxx

Terminal variables

Terminal description variables

Terminal description variables contain values pertaining to the terminal, and may not be updated.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_apl	R/O	x
t_ccsid	R/O	xxxx
t_colour	R/O	x
t_dbcs	R/O	x
t_depth_alt_part	R/O	nnn
t_depth_def_part	R/O	nnn
t_esm_rc	R/O	xxx
t_exthi	R/O	x
t_ge	R/O	x
t_ipaddr	R/O	xxx.xxx.xxx.xxx
t_ipport	R/O	xxxxxx
t_logm	R/O	xxxxxxxxx
t_logm_bf	R/O	xxxxxxxxx
t_luname	R/O	xxxxxxxxx
t_model	R/O	x
t_mts_modl	R/O	xxxxxxxxx
t_mts_prt1	R/O	xxxxxxxxx
t_mts_prt2	R/O	xxxxxxxxx
t_netid	R/O	xxxxxxxxx
t_pss	R/O	x
t_rtermcls	R/O	xxxx
t_rtermid	R/O	xxxx
t_saf_rc	R/O	xx
t_sna	R/O	x
t_ssl	R/O	x
t_termcls	R/O	xxxx
t_termid	R/O	xxxxxxxxx

Variable name	Modifiable	Format
t_termtyp	R/O	xxxx
t_width_alt_part	R/O	nnn
t_width_def_part	R/O	nnn
t_wsfrpq	R/O	x

Terminal cursor variables

Terminal cursor variables provide the current position of the cursor on screen. Their main use is in the panel processing section of Session Manager panels.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_csr_row	R/O	nnn
t_csr_col	R/O	nnn
t_csr_ofs	R/O	nnnn

User variables

User associated variables

User associated variables contain user related information, much of which is taken from the configuration data. Some of the variables may be updated.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
t_actcmd	R/W	PF1-PF24, or NONE
t_actprf	R/W	x
t_appcdata	R/O	xxx ... xxx
t_auth	Y/N	n
t_deauthmsg	Y/N	n
t_dsrng_from	R/O	nnnn
t_dsrng_to	R/O	nnnn
t_fmtopt	R/O	x
t_hcprof	R/W	xxxxxxxxx
t_lang	R/W	xx
t_maxusrlogin	R/O	xxxx
t_menu	R/O	xxxxxxxxx
t_msgid	R/O	x
t_node	R/O	xxxxxxxxx
t_pass	Y/N	xxxxxxxxx
t_phrase	R/O	xxxxxxxxx
t_prof	R/O	xxxxxxxxx
t_record	R/O	xxxx
t_saf_rc		
t_script	R/W	xx
t_security_class	Y/N	xxxxxxxxx
t_share	R/O	x
t_shareacb	R/O	xxxxxxxxx
t_signed_on	R/O	x
t_signonpanel	R/O	x
t_submenus	R/O	x
t_tn3270e	R/O	x

Variable name	Modifiable	Format
t_tn3270e_name	R/O	xxxxxxxx
t_user	Y/N	xxxxxxxx
t_user_acb	R/W	xxxxxxxx
t_user_appl	R/O	xxxxxxxx
t_user_qual	R/O	xxxxxxxx
t_userdata1 - t_userdata5	R/O	xxx ... xxx
ucsautoparm	R/O	xxxxxxxx
ucrestescn	R/O	xxxxxxxx
unrestescrown	R/O	xxx
unrestesccoln	R/O	xxx

User escape command variables

For all escape commands, the case is significant for input. Thus, if t_esc is defined as 'HH', then if 'hh' is keyed as input, it will not be recognized as the menu escape command.

For descriptions of the column headings, see 'Using the tables' on page 50.

Variable name	Modifiable	Format
t_auto	R/W	xxxxxxxx
t_bwd	R/W	xxxxxxxx
t_cut	R/W	xxxxxxxx
t_esc	R/W	xxxxxxxx
t_fwd	R/W	xxxxxxxx
t_hcmd	R/W	xxxxxxxx
t_paste	R/W	xxxxxxxx
t_prev	R/W	xxxxxxxx
t_pull	R/W	xxxxxxxx
t_push	R/W	xxxxxxxx

Session variables

Session detail variables

These variables relate to details of the session definition.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format	
s_a	R/O	nnn	
s_aa	R/O	xxx	
s_acb	Y/N	xxxxxxxx	
s_acb_x	Y/N	xxx ... xxx	
s_allowesc	R/W	x	
s_appl	Y/N	xxxxxxxx	
s_applid	Y/N	xxxxxxxx	
s_auto_seq	R/W	xxxxxxxx	
s_auto_script	R/W	xxxxxxxx	
s_blnkscript	R/O	xxxxxxxx	
s_brdvar	R/W	xxx ... xxx	
s_cmd	Y/N	xxx ... xxx	
s_cmdret	R/W	x	
s_cols	R/O	nnn	
s_colsa	R/O	nnn	
s_conceal	R/W	x	
s_desc	R/W	xxx ... xxx	
s_desc_d	R/O	xxx ... xxx	
s_dropsess	R/O	x	
s_escape	R/W	x	
s_flash	Y/N	xxx ... xxx	
s_hidden	R/O (see Note)	x	Note Can be updated by E22 exit
s_imsconvertc	Y/N	x	
s_logd	Y/N	xxx ... xxx	
s_logd_x	Y/N	xxx ... xxx	
s_logm	Y/N	xxxxxxxx	
s_miser	R/O	n	

Variable name	Modifiable	Format
s_model	R/O	x
s_mts_modl	R/W	xxxxxxxxx
s_mts_prt1	R/W	xxxxxxxxx
s_mts_prt2	Y/N	xxxxxxxxx
s_netid	R/W	xxxxxxxxx
s_node	Y/N	xxxxxxxxx
s_n	R/O	nnn
s_passticket	R/O	x
s_pstkappl	R/O	xxxxxxxxx
s_pstkuser	R/O	xxxxxxxxx
s_pstkval	R/O	xxxxxxxxx
s_ref	Y/N	x
s_rejbb	Y/N	x
s_rows	R/O	nnn
s_rowsa	R/O	nnn
s_runinitsc	R/O	x
s_runstartsc	R/O	x
s_s	R/O	nnn
s_sel	R/W	xxxxxxxxx
s_sequence	R/O	nnnn
s_sescount	R/O	nnnnn
s_sessdata1 - s_sessdata5	R/O	xxx ... xxx
s_sestype	R/O	nnnn
s_script_cmds	R/W	x
s_shareterm	R/O	xxxxxxxxx
s_size	R/O	nnnnn
s_sizea	R/O	nnnnn
s_sm_prof	NO	x
s_sna	R/O	x
s_start	Y/N	x
s_status_updates	Y/N	x
s_tran	R/W	xxxxxxxxx
s_standby	R/O	x

TCP/IP variables

TELNET panel variables

The following variables are used to provide TCP/IP TELNET support in Session Manager.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Variable name	Modifiable	Format
s_tcp_url	R/O	nnn
s_telnet_hidec	R/O	x

TCP/IP session variables

Variable name	Modifiable	Format
s_telnet_port	R/O	nnnn
s_telnet_user	R/O	nnnn
s_telnet_pswd	R/O	nnnn
s_telnet_host	R/O	xxxxxx
s_tcp_stype	R/O	xxxxxx
s_telnet_output	R/O	xxx ... xxx
s_telnet_lupd	R/O	x
s_telnet_lmore	R/O	x
s_telnet_more	R/O	nnn
s_tn3270e	R/O	x
s_tn3270e_dev	R/O	xxxxxxxx

Session statistics and response time monitor variables

The following variables are available only if the session has STATS R/W specified. They can be used by panels, scripts and exit scripts. The E39 exit script is the place where the totals for a session should be recorded.

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Session statistics variables

Variable name	Modifiable	Format
s_stat_sict	R/O	nnnn
s_stat_siby	R/O	nnnnnnnnn
s_stat_soct	R/O	nnnn
s_stat_soby	R/O	nnnnnnnnn
s_stat_ioct	R/O	nnnn
s_stat_oin	R/O	nnnnnnnnn
s_stat_oon	R/O	nnnnnnnnn
s_stat_iict	R/O	nnnn
s_stat_iiin	R/O	nnnnnnnnn
s_stat_ion	R/O	nnnnnnnnn
s_stat_ifct	R/O	nnnn
s_stat_ifon	R/O	nnnnnnnnn
s_stat_ifct	R/O	nnnn
s_stat_ibon	R/O	nnnnnnnnn
s_stat_cmct	R/O	nnnn
s_stat_cmin	R/O	nnnnnnnnn
s_stat_cmon	R/O	nnnnnnnnn

Response time monitor variables

Variable name	Modifiable	Format
s_rtm_rtmt1	R/O	nn.nn
s_rtm_rtmt2	R/O	nn.nn
s_rtm_strtt	R/O	nnnnnnnnn
s_rtm_strtd	R/O	nnnnnnnnn
s_rtm_restt	R/O	nnnnnnnnn

Variable name	Modifiable	Format
s_rtm_restd	R/O	nnnnnnnnn
s_rtm_restu	R/O	nnnnnnnnn
s_rtm_restm	R/O	nnnnnnnnn
s_rtm_restp	R/O	nnnnnnnnn
s_rtm_tot1	R/O	nnnn
s_rtm_tot2	R/O	nnnn
s_rtm_tot3	R/O	nnnn
s_rtm_totav	R/O	nn.nn
s_rtm_totlg	R/O	nn.nn
s_rtm_totlt	R/O	nnnnnnnnn
s_rtm_totld	R/O	nnnnnnnnn
s_rtm_net1	R/O	nnnn
s_rtm_net2	R/O	nnnn
s_rtm_net3	R/O	nnnn
s_rtm_netav	R/O	nn.nn
s_rtm_netlg	R/O	nn.nn
s_rtm_netlt	R/O	nnnnnnnnn
s_rtm_netld	R/O	nnnnnnnnn
s_rtm_app1	R/O	nnnn
s_rtm_app2	R/O	nnnn
s_rtm_app3	R/O	nnnn
s_rtm_appav	R/O	nn.nn
s_rtm_applg	R/O	nn.nn
s_rtm_applt	R/O	nnnnnnnnn
s_rtm_appld	R/O	nnnnnnnnn

Facility-related variables

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Hardcopy option variables

The various values are obtained from the HCOPTION parameters of the HCPROFILE configured for the user. The HCPROFILE name is contained in the User Associated variable, t_hcprof.

Variable name	Modifiable	Format
t_hcop	R/O	xxx ... xxx
t_hcop_n	R/O	nn
t_hcformat	R/O	xxxxxxxxx
t_hcroute	R/O	xxxxxxxxx
hmax	R/O	nnn

Demonstration and viewer variables

Demo/View variables contain values pertaining to the use of the Demonstration and View feature.

Variable name	Modifiable	Format
t_daut	R/O	x
t_dint	R/O	x
t_dkey	R/W	xxxxxxxxx
t_dnview	R/O	nnn
t_dtermid	R/O	xxxxxxxxx
t_duserid	R/O	xxxxxxxxx
t_inview	R/W	nnn
t_inview_n	R/W	xxxxxxxxx
t_unview	R/W	nnn
t_unview_n	R/W	xxxxxxxxx

Application Builder variables

The following variables pertain to the Application Builder.

Variable name	Modifiable	Format
t_sendval.n	R/O	xxxxxxxxx
t_sendvals	R/O	xxx

Window variables – user level

The following variables give general information regarding the status of windowing for a user. All variables except `t_w_status` contain a default value:

Zero For numeric-type variables

Blanks For character-type variables, when windowing is inactive.

Variable name	Modifiable	Format
<code>t_w_curses</code>	R/O	nnn
<code>t_w_esc</code>	R/W	xxxxxxxxx
<code>t_w_event</code>	R/O	x
<code>t_w_id</code>	R/O	nnn
<code>t_w_input</code>	R/O	xxxxxxxxx
<code>t_w_msg</code>	R/O	xxxxxxxxx
<code>t_w_mstime</code>	R/O	xxxxxxxxx
<code>t_w_msuser</code>	R/O	xxxxxxxxx
<code>t_w_name</code>	R/O	xxxxxxxxx
<code>t_w_status</code>	R/O	x
<code>t_w_zoom</code>	R/O	nnn
<code>t_windows</code>	R/O	nnn

Window variables – window level

The following variables are subscripted, with one copy of each per window. The subscript for each window is its window identifier; for the currently active window this value is held in the variable `t_w_id`. When no subscript is specified, the currently active window is assumed.

All the following variables contain a default value:

Zero For numeric-type variables.

Blanks For character-type variables when windowing is inactive, or the subscript does not refer to an open window.

Variable name	Modifiable	Format
<code>w_active</code>	R/O	x
<code>w_aid</code>	R/O	x
<code>w_border</code>	R/O	xxxxxxxxx
<code>w_cdepth</code>	R/O	nnn
<code>w_csr_col</code>	R/O	nnn
<code>w_csr_ofs</code>	R/O	nnnn
<code>w_csr_row</code>	R/O	nnn

Variable name	Modifiable	Format
w_cwidth	R/O	nnn
w_depth	R/O	nnn
w_end_col	R/O	nnn
w_end_ofs	R/O	nnnn
w_end_row	R/O	nnn
w_name	R/O	xxxxxxxx
w_org_col	R/O	nnn
w_org_ofs	R/O	nnnn
w_org_row	R/O	nnn
w_output	R/O	x
w_owned	R/O	nnn
w_owner	R/O	nnn
w_scrollh	R/O	nnn
w_scrollv	R/O	nnn
w_session	R/O	nnn
w_visible	R/O	x
w_wca	R/O	x
w_width	R/O	nnn
w_zoom	R/O	x

Window variables – session level

The following variables are subscripted, with a copy of each one per window session.

Variable name	Modifiable	Format
s_w_id	R/O	nnn
s_w_name	R/O	xxxxxxxx

TPSL and SCRIPT processing variables

For descriptions of the column headings, see ‘Using the tables’ on page 50.

Return code variables

These variables are set by the execution of most script statements and TPSL statements. They indicate the success or failure of the execution of that statement.

Variable name	Modifiable	Format
t_rc	R/W	nnnnn
t_result	R/W	nnnnn

Script verb variables

The following variables are set by the execution of ‘script verbs’, for example OUTSCAN.

Variable name	Modifiable	Format
s_inscan_col	R/O	nnn
s_inscan_row	R/O	nn
s_outscan_col	R/O	nnn
s_outscan_row	R/O	nn
t_inplen	R/O	nnnn
t_recur_script	R/W	x
t_scparms	R/W	xxx ... xxx
t_waitdata	R/O	x

Exit script variables

The following variables are used by exit scripts to access the exit parameters of the User exit.

Variable name	Modifiable	Parm	Format
ec_rcode	R/O	1	nnn
ec_reason	R/O	1	xxxxxxxxx
ec_julian	R/O	1	xxxxxxxxx
ec05_name	R/O	4	xxx ... xxx
ec05_keywd	R/O	4	xxx ... xxx
ec05_record	R/O	5	xxx ... xxx

Variable name	Modifiable	Parm	Format
ec06_appl	R/O	4	xxxxxxxx
ec06_nstatus	R/O	4	x
ec06_ostatus	R/O	4	x
ec11_ttype	R/O	4	xxxx
ec11_term	R/O	4	xxxxxxxx
ec11_logm	R/O	4	xxxxxxxx
ec11_bind	R/O	4	xxx ... xxx
ec11_prof	R/O	5	xxxxxxxx
ec11_sign	R/O	5	x
ec11_user	R/W	6	xxxxxxxx
ec11_pass	R/W	6	xxxxxxxx
ec11_npass	R/W	6	xxxxxxxx
ec11_nprof	R/W	6	xxxxxxxx
ec11_nsign	R/W	6	x
ec21_ttype	R/O	4	xxxx
ec21_term	R/O	4	xxxxxxxx
ec21_logm	R/O	4	xxxxxxxx
ec21_bind	R/O	4	xxx ... xxx
ec21_euser	R/O	5	xxxxxxxx
ec21_epass	R/O	5	xxxxxxxx
ec21_enpass	R/O	5	xxxxxxxx
ec21_eprof	R/O	5	xxxxxxxx
ec21_enode	R/O	5	xxxxxxxx
ec21_config	R/O	6	x
ec21_cauth	R/O	6	xx
ec21_cpass	R/O	6	xxxxxxxx
ec21_cprof	R/O	6	xxxxxxxx
ec21_cnode	R/O	6	xxxxxxxx
ec21_npass	R/W	7	xxxxxxxx
ec21_nprof	R/W	7	xxxxxxxx
en21_nauth	R/W	7	xx

Variable name	Modifiable	Parm	Format
ec21_ruser	R/W	7	x
ec21_rpass	R/W	7	x
ec21_rnpass	R/W	7	x
ec21_rnprof	R/W	7	x
ec21_nnode	R/W	7	xxxxxxxxxx
ec21_ndata	R/W	7	xxx ... xxx
ec22_ttype	R/O	4	xxxx
ec22_term	R/O	4	xxxxxxxxxx
ec22_logm	R/O	4	xxxxxxxxxx
ec22_bind	R/O	4	xxx ... xxx
ec22_user	R/O	5	xxxxxxxxxx
ec22_pass	R/O	5	xxxxxxxxxx
ec22_prof	R/O	5	xxxxxxxxxx
en22_auth	R/W	5	xx
en22_autos	R/W	6	nn
ec26_ttype	R/O	4	xxxx
ec26_term	R/O	4	xxxxxxxxxx
ec26_logm	R/O	4	xxxxxxxxxx
ec26_bind	R/O	4	xxx ... xxx
ec26_user	R/O	5	xxxxxxxxxx
ec26_prof	R/O	5	xxxxxxxxxx
ec29_ttype	R/O	4	xxxx
ec29_term	R/O	4	xxxxxxxxxx
ec29_logm	R/O	4	xxxxxxxxxx
ec29_bind	R/O	4	xxx ... xxx
ec29_user	R/O	5	xxxxxxxxxx
ec29_pass	R/O	5	xxxxxxxxxx
ec29_prof	R/O	5	xxxxxxxxxx
en29_auth	R/O	5	xx

Variable name	Modifiable	Parm	Format
ec31_ttype	R/O	4	xxxx
ec31_term	R/O	4	xxxxxxxxxx
ec31_logm	R/O	4	xxxxxxxxxx
ec31_bind	R/O	4	xxx ... xxx
ec31_user	R/O	5	xxxxxxxxxx
ec31_pass	R/O	5	xxxxxxxxxx
ec31_prof	R/O	5	xxxxxxxxxx
en31_auth	R/O	5	xx
ec31_taskida	R/O	6	SAAnnnnnn
ec31_taskidb	R/O	6	xxxxxxxxxx
ec31_appl	R/W	6	xxxxxxxxxx
ec31_acb	R/W	6	xxxxxxxxxx
ec31_slogm	R/W	6	xxxxxxxxxx
ec31_script	R/W	6	xxxxxxxxxx
ec31_data	R/W	6	xxx ... xxx
ec33_ttype	R/O	4	xxxx
ec33_term	R/O	4	xxxxxxxxxx
ec33_logm	R/O	4	xxxxxxxxxx
ec33_bind	R/O	4	xxx ... xxx
ec33_user	R/O	5	xxxxxxxxxx
ec33_pass	R/O	5	xxxxxxxxxx
ec33_prof	R/O	5	xxxxxxxxxx
en33_auth	R/O	5	xx
ec33_taskida	R/O	6	SAAnnnnnn
ec33_taskidb	R/O	6	xxxxxxxxxx
ec33_applid	R/O	6	xxxxxxxxxx
ec33_acb	R/O	6	xxxxxxxxxx
ec33_appl	R/O	6	xxxxxxxxxx
ec33_dstream	R/W	7	xxx ... xxx
ec36_ttype	R/O	4	xxxx
ec36_term	R/O	4	xxxxxxxxxx

Variable name	Modifiable	Parm	Format
ec36_logm	R/O	4	xxxxxxxxxx
ec36_bind	R/O	4	xxx ... xxx
ec36_user	R/O	5	xxxxxxxxxx
ec36_prof	R/O	5	xxxxxxxxxx
ec36_taskida	R/O	6	SAAnnnnnn
ec36_taskidb	R/O	6	xxxxxxxxxx
ec36_applid	R/O	6	xxxxxxxxxx
ec36_acb	R/O	6	xxxxxxxxxx
ec36_slogm	R/O	6	xxxxxxxxxx
ec39_ttype	R/O	4	xxxx
ec39_term	R/O	4	xxxxxxxxxx
ec39_logm	R/O	4	xxxxxxxxxx
ec39_bind	R/O	4	xxx ... xxx
ec39_user	R/O	5	xxxxxxxxxx
ec39_pass	R/O	5	xxxxxxxxxx
ec39_prof	R/O	5	xxxxxxxxxx
en39_auth	R/O	5	xx
ec39_taskida	R/O	6	SAAnnnnnn
ec39_taskidb	R/O	6	xxxxxxxxxx
ec39_applid	R/O	6	xxxxxxxxxx
ec39_acb	R/O	6	xxxxxxxxxx
ec39_slogm	R/O	6	xxxxxxxxxx
ec79_ttype	R/O	4	xxxx
ec79_term	R/O	4	xxxxxxxxxx
ec79_logm	R/O	4	xxxxxxxxxx
ec79_bind	R/O	4	xxx ... xxx
ec79_user	R/O	5	xxxxxxxxxx
ec79_pass	R/O	5	xxxxxxxxxx
ec79_prof	R/O	5	xxxxxxxxxx
en79_auth	R/O	5	xx
ec79_taskida	R/O	6	xxxxnnnnn

Variable name	Modifiable	Parm	Format
ec79_taskidb	R/O	6	xxxxxxxx
ec79_applid	R/O	6	xxxxxxxx
ec79_acb	R/O	6	xxxxxxxx
ec79_appl	R/O	6	xxxxxxxx
ec79_oapplid	R/O	6	xxxxxxxx
ec79_napplid	R/O	6	xxxxxxxx
ec79_dstream	R/W	7	xxx ... xxx

Session Manager user definable variables

Any number of user definable variables may be used. A user definable variable is defined when it first has data assigned to it. They are distinguished from Session Manager supplied variables by the variable name prefix, the first character of which indicates the scope of the variable as follows:

Prefix	Scope	Description
G	Global	The variable takes the same value throughout the system and is available until system shutdown.
U	User	The variable has a different value for each user and is available while a user is active.
L	Local	The variable is temporary, it is only applicable within the current PANEL or SCRIPT definition and any called sub-definitions or scripts.

The second character of the prefix defines the data type, that is, C for 'character', or N for 'numeric'. The rest of the name, which may be up to 14 more characters, may be any alphanumeric character or an underscore character (_).

Subscripting user definable variables

User definable variables may be subscripted to form one-dimensional arrays. The special variables sub1 to sub9 may be used for subscripting, or any element may be referenced by an absolute value. The user definable variable name is restricted to 11 characters so that the subscript name can be accommodated in the maximum total length of 16 characters.

Variable name	Format
sub1,sub2, ...,sub9	nnn

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Bibliography

IBM Session Manager library

The following publications contain information about IBM Session Manager.

<i>Installation and Customization</i>	GC34-2804-00
<i>Technical Reference</i>	SC34-2805-00
<i>User and Administrator</i>	SC34-2808-00
<i>Panels, Scripts and Variables</i>	SC34-2806-00
<i>Messages and Codes</i>	GC34-2810-00
<i>Quick Reference</i>	SC34-2809-00
<i>Online and Batch Administration</i>	SC34-2807-00
<i>Program Directory</i>	GI13-0585-00

Accessibility

Accessibility for people with disabilities

The following features make it easier for disabled people to use Session Manager:

- Operation by keyboard alone
- Optional font enlargement
- High-contrast display settings
- Can be used with screen readers
- Absence of audio prompts.

Changing font, color and display settings

Session Manager can be controlled using a 3270 emulator such as IBM Personal Communications or Hummingbird HostExplorer. Refer to the emulator documentation for guidance on adjusting font and color settings.

Using Session Manager with a screen reader

Screen readers can be used to provide accessible output for blind users. Session Manager has been tested with the following screen readers:

- Jaws version 4.5, using Hummingbird HostExplorer and the script file for Hummingbird HostExplorer
- WindowEyes 4.2, using Hummingbird HostExplorer and the set file for Hummingbird HostExplorer.

Contact the screen reader manufacturer for information about the availability of set and script files.

Documentation

Softcopy PDF documentation is shipped with Session Manager. The documentation supports optional font enlargement, high-contrast display settings, and may be operated by the keyboard alone.

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