IBM Session Manager for z/OS V3.1 delivers passphrase and IBM CICS Explorer support

At a glance

New functions in Session Manager V3.1 include:

- New Eclipse-based GUI delivered as a plug-in extension to the IBM® CICS Explorer™
- Support for passphrases of up to 100 characters
- Improvements to processing of users that are defined to RACF® with the SPECIAL attribute
- New command to refresh the global MVS™ system variables
- Improvements to modified data tag (MDT) handling by scripts

For ordering, contact your IBM representative or an IBM Business Partner. For more information contact the Americas Call Centers at 800-IBM-CALL (426-2255).
Reference: LE001

Overview

Session Manager V3.1 is a terminal session manager for VTAM® and TCP/IP that provides a highly available, secure, and user-friendly method of accessing multiple z/OS® systems from a single 3270 terminal. The latest version extends security with new support for password phrases (passphrases) up to 100 characters. Passphrases are much harder to guess or to attack than regular passwords and are only available when supported by the sub-systems to which they are connected.

Also new in this release is a Session Manager plug-in for CICS Explorer and compatible Eclipse environments, providing a GUI for the IT operations team who use Session Manager on a daily basis. The new Session Manager plug-in provides a range of views, including system information, links, and connected users and their sessions. Control operations are also available, for example to view user problems and broadcast messages.

Scripting enhancements also feature in the new release, to remove previous restrictions, or simplify the processing of terminal control tags. This new version also includes ease-of-use, security, installation, configuration, and operational enhancements, including requirements raised by individual customers and user communities, working together to make Session Manager V3.1 even easier to deploy, manage, and use.
Key prerequisites

z/OS V1.9, or later

Planned availability date

March 11, 2011

Description

Session Manager for z/OS is a VTAM or TCP/IP session manager, providing highly available, secure, and user-friendly access to multiple z/OS systems from a single 3270 terminal. Many users in the course of their work need to switch between applications. Session Manager acts as an intermediary between users and the applications by giving them a single secure signon, and then allowing access to all their applications from multiple concurrent virtual sessions. Users can switch between sessions with ease. From the menu they can point and click to create a new session to another VTAM or TCP/IP application. By using the System z® coupling facility, active sessions can be recovered after a planned or unplanned outage providing much greater resilience and flexibility.

Session Manager includes all the tools and facilities required to provide administration, security, systems and performance management, and also problem determination. It delivers many features and facilities that enable users to improve their productivity.

Session Manager V3.1 helps businesses to comply with regulatory and corporate governance requirements with pass-phrase support, making it easier for them to comply with security requirements, for example, by enabling the use of pass-phrases, which are harder to attack.

Session Manager V3.1 also includes a new GUI for operational use, based on the Eclipse platform. This interface is delivered as a plug-in to the CICS Explorer, which already provides improved ease-of-use and increased productivity to users of CICS® Transaction Server and key members of IBM CICS tools and Problem Determination tools families.

These, and other security, installation, configuration, and operational enhancements detailed below, work together to make Session Manager V3.1 even easier to deploy, manage, and use.

Key enhancements

Passphrase support

Users can now sign on to Session Manager using a 100 character passphrase as opposed to the standard password. This is consistent with other IBM z/OS software offerings. Session Manager for z/OS V3.1 requires IBM z/OS V1.9, or later.

From Version 1.8, RACF supports the use of passwords longer than eight characters, called password phrases. A password phrase is a character string that can comprise mixed-case letters, numbers, and certain special characters from 14 to 100 characters in length.

Password phrases allow for an exponentially greater number of possible combinations of characters than do passwords. A user ID can have both a password and a password phrase. The same user ID can be used both for existing applications that accept an eight-character password and those that take advantage of the new
password phrase infrastructure. This support is intended to help to improve system security and usability.

CICS Explorer

A Session Manager plug-in is now available for the CICS Explorer (and other suitable Eclipse environments), providing some of the operational capabilities previously only available using the ISPF/TSO interface, including:

- Broadcast facility
- Operational level agreement (OLA) member update (member editing not yet implemented)
- Configuration update
- User Exit update
- Security Refresh
- Administration commands: DUMP and SHUTDOWN
- User menu commands: Display Current® Sessions, Send Message, Cancel and Trace

The Session Manager plug-in also includes an integrated User Guide and context-sensitive help.

Customers with a Session Manager V3 license are entitled to download and use CICS Explorer without needing to have a license for CICS Transaction Server.

Other enhancements

ADDSESS and ADDAPPL

The new ADDSESS and ADDAPPL commands added in the earlier release only worked when the APPLID was configured through RACF. This enhancement removes this restriction.

Scripting improvements

ACF2 requests additional input at signon and the modified data tags were not being processed correctly. Also, data entered (such as an escape sequence) in these fields was not being processed correctly.

New command to REFRESH GC_MVS variables

All z/OS system variables are made available at start-up as IBM Session Manager global variables. These can now be refreshed without recycling the address space.

New fields on the ISZVARS panel

New fields are added to the ISZVARS panel. This displays the variables in effect for the user.

OLA parser additional conflict checks

The OLA parser no longer allows conflicting parameters to be entered. These were previously only reported as errors during start-up.

Override PROFILE parm in USER definition

A blank parameter can be defined in the USER definition to override the PROFILE parameters, for example, a LOGMODE can be obtained directly from VTAM.

Group administration

Authority can be added to users at a group level. All users in the same department can have the same authority.
**Consistent APPLID and Session numbers** All messages that contain the APPLID now have the session number displayed as well.

**"When effective" OLA indicator field**

When a field is changed in OLA, there is no direction as to when that change becomes effective, whether at signoff, logoff or recycle of the address space.

**Customer and User group requirements satisfied in Session Manager V3.1**

- MR1201096814 - Missing MDT tags not propagated
- MR1022095048 - New command to REFRESH GC_MVS variables
- MR1202095335 - Pass Phrase Support
- MR1021094254 - New fields for ISZVARS screen
- MR0114104034 - SPECIAL attribute user in RACF
- MR0625074149 - Improve DUMP performance
- MR0718071351 - OLA parser to check for conflicts
- MR0609091323 - Improvements to scripting
- MR0903083452 - Switch with PFKEY and CommandAction key
- MR0312071916 - Blank parameters on USER definition
- MR1222062524 - Group administration
- MR0121083756 - Consistent APPLID/Session number messages
- MR052608282 - OLA "when effective" indicator
- MR0715083217 - Enhancement of IP messages
- MR031410524 - ADDSESS and ADDAPPL only working with RACF

**Accessibility by people with disabilities**

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


The following features support use by people with disabilities:

- Operation by keyboard alone
- Optional font enlargement and high-contrast display settings
- Suitability for use by people with hearing impairment
- Capability to use with screen readers and magnifiers for those with visual impairment

Softcopy documentation for the product is provided in PDF format. This documentation supports optional font enlargement and high-contrast display settings, and may be operated by the keyboard alone. Fully accessible softcopy documentation, with alternative text for diagrams, will be made available on request.
Section 508 of the U.S. Rehabilitation Act

Session Manager for z/OS V3.1 is capable as of March 11, 2011, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

Value Unit-based pricing

Value Unit pricing for eligible IBM System z IBM International Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each System z IPLA product with Value Unit pricing has a single price per Value Unit and a conversion matrix, called Value Unit Exhibit, for converting from some designated measurement to Value Units. Most commonly, Millions of Service Units (MSUs) is the measurement designated by IBM to be converted to Value Units. Some other measurements are engines or messages. Since MSUs are the most common measurement, that measurement will be used for the remainder of this description.

Value Unit pricing offers price benefits for you. For each System z IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the required license capacity. Each of the various Value Unit Exhibits stipulate that the larger your required license capacity, the fewer Value Units per MSU you will need. Value Unit Exhibits are uniquely identified by a three digit code and referred to using the nomenclature VUExxx, where xxx is the three digit code.

Subsequent acquisitions of Value Unit priced programs offer additional price benefits. The quantity of each System z IPLA program that you have acquired is referred to as entitled license capacity. If you wish to grow your entitled license capacity for a System z IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each System z IPLA program with Value Unit pricing, you should:

- Determine the required license capacity, in MSUs
- Aggregate the MSUs across the enterprise
- Convert the total MSUs to Value Units, using the applicable Value Unit Exhibit
- Multiply the price per Value Unit by the total number of Value Units to determine the total cost

To simplify conversion from the designated measurement to Value Units or vice-versa, use the Value Unit Converter Tool. For additional information or to obtain a copy of the Value Unit Converter Tool, visit the Value Unit Converter Tool website

http://ibm.com/zseries/swprice/vuctool

Note that Value Units of a given product cannot be exchanged, interchanged, or aggregated with Value Units of another product.

To determine the required license capacity for the System z IPLA program you selected, refer to the Terms and conditions section.

Product positioning

Session Manager for z/OS V3.1 is intended for enterprise or medium-sized businesses running a range of applications on mainframe systems, with users accessing these applications at 3270 terminals or workstations running 3270 emulators. The users will probably be running CICS, IMS\textsuperscript{TM}, TSO, or other 3270-oriented systems using VTAM, typically with 3270 connections, or TCP/IP. The product provides the end-users with a highly available, secure, simple, and effective
way of accessing these applications seamlessly, together with a wide range of other valuable facilities.

Session Manager is a member of the CICS tools family and part of the System z Enterprise tools portfolio supporting the CICS environment.

For more details of the CICS tools family, visit

http://ibm.com/cics/tools

Integration with CICS Explorer

Session Manager now includes a plug-in to CICS Explorer, which provides an integration point for development, management, and operational capabilities delivered by the CICS runtime and add-on tools listed below:

- CICS Transaction Server
- CICS Interdependency Analyzer
- CICS Performance Analyzer
- CICS Deployment Assistant
- CICS Configuration Manager
- CICS Transaction Gateway
- Application Performance Analyzer
- Debug Tool
- Fault Analyzer
- Rational® Developer for System z

Program number

<table>
<thead>
<tr>
<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U98</td>
<td>3.1.0</td>
<td>Session Manager for z/OS</td>
</tr>
<tr>
<td>5655-J98</td>
<td>1.1.0</td>
<td>Session Manager for z/OS - Software Subscription and Support</td>
</tr>
</tbody>
</table>

Product identification number

<table>
<thead>
<tr>
<th>Subscription and Support PID number</th>
</tr>
</thead>
</table>

Offering Information

Product information is available via the Offering Information website

http://www.ibm.com/common/ssi
The following publications are available for Session Manager for z/OS V3.1:

<table>
<thead>
<tr>
<th>Title</th>
<th>Order Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Manager for z/OS V3.1 - Program Directory</td>
<td>GI13-0564-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Installation and Customization</td>
<td>GC34-7146-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Technical Reference</td>
<td>SC34-7147-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Panels, Scripts and Variables</td>
<td>SC34-7148-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Technical Reference</td>
<td>SC34-7147-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Online and Batch Administration</td>
<td>SC34-7149-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - User and Administrator Guide</td>
<td>SC34-7150-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Quick Reference</td>
<td>SC34-7151-00</td>
</tr>
<tr>
<td>Session Manager for z/OS V3.1 - Messages and Codes</td>
<td>GC34-7152-00</td>
</tr>
</tbody>
</table>

All publications are available only in softcopy, in PDF format, by download from the IBM Publications Center at

http://www.ibm.com/shop/publications/order

**Note:** These form numbers are new with this release. Customers should check when downloading that they have the right publication for the level of product they are using.

---

**Technical information**

**Specified operating environment**

**Hardware requirements**

Session Manager runs on any S/390® or z/Architecture® machine on which the applicable operating system and software will run.

**Software requirements**

Session Manager for z/OS requires z/OS V1.9, or later

The product functions in the VTAM environment of the operating system.

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a README file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

**Planning information**

**Packaging**

The following items are delivered:

- IBM International Program License Agreement (IPLA), in multilanguage booklet (Z125-3301)
- License Information (GC34-7157), in multiple languages
- 3590 1/2-inch tape cartridge
Electronic delivery

After general availability of IBM Session Manager V3.1, customers can download the CICS Explorer along with the plug-in for Session Manager from

http://www.ibm.com/cics/explorer/download

Security, auditability, and control

Session Manager for z/OS V3.1 uses the security and auditability features of the base operating system under which it is operating. It also produces its own audit logs, providing a full audit trail for all users. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

http://www.ibm.com/software/sw-services/

Ordering information

Charge metric

<table>
<thead>
<tr>
<th>Program name</th>
<th>PID number</th>
<th>Charge metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session Manager for z/OS V3.1</td>
<td>5655-U98</td>
<td>per Value Unit</td>
</tr>
<tr>
<td>Session Manager for z/OS</td>
<td>5655-J98</td>
<td>per Value Unit</td>
</tr>
<tr>
<td>- Software Subscription and Support</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The programs in this announcement all have Value Unit-based pricing.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Value Unit exhibit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U98</td>
<td>Session Manager for z/OS V3.1</td>
<td>VUE007</td>
</tr>
</tbody>
</table>

For each System z IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the required license capacity. Your required license capacity is based upon the following factors:

- The System z IPLA program you select
- The applicable Value Unit Exhibit
- The applicable terms
- Whether your current mainframes are full capacity or sub-capacity
### Value Unit exhibit VUE007

<table>
<thead>
<tr>
<th>MSUs</th>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Tier A</td>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td>Tier B</td>
<td>46</td>
<td>175</td>
</tr>
<tr>
<td>Tier C</td>
<td>176</td>
<td>315</td>
</tr>
<tr>
<td>Tier D</td>
<td>316</td>
<td>+</td>
</tr>
</tbody>
</table>

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Value Units/machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>6</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>8</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>12</td>
</tr>
<tr>
<td>ESL models</td>
<td>2</td>
</tr>
</tbody>
</table>

**Ordering example**

The total number of Value Units is calculated according to the following example.

If your required license capacity is 1,500 MSUs for your selected System z IPLA product, the applicable Value Units would be:

**Translation from MSUs to Value Units**

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>.45</td>
</tr>
<tr>
<td>Tier B</td>
<td>130</td>
<td>.36</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>.27</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185</td>
<td>.20</td>
</tr>
</tbody>
</table>

Total 1,500 343.50

When calculating the total number of Value Units, the sum is to be rounded up to the next integer.

**Ordering z/OS through the Internet**

ShopzSeries provides an easy way to plan and order your z/OS ServerPac or CBPDO. It will analyze your current installation, determine the correct product migration, and present your new configuration based on z/OS. Additional products can also be added to your order (including determination of whether all product requisites are satisfied). ShopzSeries is available in the U.S. and several countries in Europe. In countries where ShopzSeries is not available yet, contact your IBM representative (or IBM Business Partner) to handle your order via the traditional IBM ordering process. For more details and availability, visit the ShopzSeries website at


**5655-U98**  Session Manager for z/OS V3.1
**5655-J98**  Session Manager for z/OS - Software Subscription and Support

Basic license, one-time charge
**Basic license**

**On/Off CoD**

Session Manager for z/OS V3.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

**Program name** Session Manager for z/OS V3.1  
**Program PID** 5655-U98

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S016MPD</td>
<td>Session Manager for z/OS V3.1</td>
<td>Basic OTC, Per MSU-day TUC</td>
</tr>
</tbody>
</table>

**Translation from MSUs to Value Units**

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>1-3</td>
</tr>
<tr>
<td>Tier A</td>
<td>4-45</td>
</tr>
<tr>
<td>Tier B</td>
<td>46-175</td>
</tr>
<tr>
<td>Tier C</td>
<td>176-315</td>
</tr>
<tr>
<td>Tier D</td>
<td>316+</td>
</tr>
</tbody>
</table>

To order, specify the program product number and the appropriate license or charge option. Also, specify the desired distribution medium. To suppress shipment of media, select the license-only option in CFSW.

**Program name:** Session Manager for z/OS V3.1  
**Program PID:** 5655-U98

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S016MPD</td>
<td>Session Manager for z/OS V3.1</td>
<td>Basic OTC, Value Units</td>
</tr>
</tbody>
</table>

**Orderable supply ID** Language            Distribution medium  
S016MPF                US English          3590 tape cartridge uncomp

Note: additional media type selections (3480 compressed, 3490E, 3590, 3592) are offered during Custom Build Offering ordering.

**Subscription and Support PID:** 5655-J98

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
</table>
| S00XMK9                | Session Manager for z/OS - Subscription and Support | Basic ALC, per Value Unit Sw S&S  
|                        |                           | No charge, decline Sw S&S Per MSU Sw S&S Registration |

**Orderable supply ID** Language            Distribution medium  
S00XMK5                US English          Paper

**Subscription and Support**

To receive voice technical support via telephone and future releases and versions at no additional charge, Subscription and Support must be ordered. The capacity of Subscription and Support (Value Units) must be the same as the capacity ordered for the product licenses.
To order, specify the Subscription and Support program number (PID) referenced above and the appropriate license or charge option.

IBM is also providing Subscription and Support for these products via a separately purchased offering under the terms of the IBM International Agreement for Acquisition of Software Maintenance (IAASM). This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone.
- Entitles you to future releases and versions, at no additional charge. Note that you are not entitled to new products.

When Subscription and Support is ordered, the charges will automatically renew annually unless cancelled by you.

The combined effect of the IPLA license and the Agreement for Acquisition of Software Maintenance gives you rights and support services comparable to those under the traditional ICA S/390 and System z license or its equivalent. To ensure that you continue to enjoy the level of support you are used to in the ICA business model, you must order both the license for the program and the support for the selected programs at the same Value Unit quantities.

**Single version charging**

To elect single version charging, you must notify and identify to IBM the prior program and replacement program, and the machine the programs are operating on.

**Customized Offerings**

Product deliverables are shipped only via CBPDO, ServerPac, SystemPac®.

CBPDO and ServerPac are offered for Internet delivery in countries where ShopzSeries product ordering is available. Internet delivery reduces software delivery time and allows you to install software without the need to handle tapes. For more details on Internet delivery, refer to the ShopzSeries help information at http://www.software.ibm.com/ShopzSeries

You choose the delivery method when you order the software. IBM recommends Internet delivery. In addition to Internet and DVD, the supported tape delivery options for CBPDO, ServerPac, and SystemPac, include:

- 3590
- 3592

Most products can be ordered in ServerPac and SystemPac the month following their availability on CBPDO. z/OS can be ordered via all three offerings at general availability. Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin two weeks after general availability
- SystemPac shipments will begin four weeks after general availability due to additional customization, and data input verification.

**Terms and conditions**

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM
IBM International Program License Agreement, IBM International Passport Advantage® Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

**Licensing**

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

**Agreement for Acquisition of Software Maintenance**

The IBM Agreement for Acquisition of Software Maintenance (Z125-6011) applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures.

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

IBM System z Operational Support Services - SoftwareXcel is an option if you desire added services.

**License Information form number**

Session Manager for z/OS V3.1

- License L-APIG-8A8F8R
- Form number GC34-7157-00

The program’s License Information will be available for review on the IBM Software License Agreement website


**Limited warranty applies**

Yes

**Limited warranty**

IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the IBM Software Support Handbook found at

http://www.ibm.com/support/handbook

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

**Program support**

Enhanced support, called Subscription and Support, includes telephone assistance, as well as access to updates, releases, and versions of the program as long as
support is in effect. You will be notified of discontinuance of support with 12 months' notice.

**Money-back guarantee**

If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

**Volume orders (IVO)**

No

**Passport Advantage applies**

No

**Software Subscription and Support (Software Maintenance) applies**

No. For operating system software, the revised IBM Operational Support Services - SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the Software Subscription and Support (Software Maintenance) offering.

This will ensure total support coverage for your enterprise needs, including IBM and selected non-IBM products. For complete lists of products supported under both the current and revised offering, visit

http://www.ibm.com/services/sl/products

**IBM Operational Support Services - SoftwareXcel**

Yes

**System i Software Maintenance applies**

No

**Variable charges apply**

No

**Educational allowance available**

Yes. A 15% education allowance applies to qualified education institution customers.

**Sub-capacity terms and conditions**

For each System z IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the required license capacity. Your required license capacity is based upon the following factors:

- The System z IPLA program you select
- The applicable Value Unit Exhibit
- The applicable terms
- Whether your current mainframes are full capacity or sub-capacity
For more information on the Value Unit Exhibit for the System z IPLA program you selected, refer to the Ordering information section.

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
<th>Terms</th>
<th>Parent, if applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-U98</td>
<td>Session Manager for z/OS V3.1</td>
<td>z/OS-based</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Full-capacity mainframes**

In cases where full capacity is applicable, the following terms apply.

Execution-based, z/OS-based, full-machine-based: The required capacity of a System z IPLA program with these terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, visit


Reference-based: The required license capacity of a System z IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the parent program.

**Sub-capacity mainframes**

In cases where sub-capacity is applicable, the following terms apply.

Execution-based: The required capacity of a System z IPLA sub-capacity program with these terms equals the capacity of the LPARs where the System z IPLA program executes.

z/OS-based: The required license capacity of a System z IPLA program with these terms equals the license capacity of z/OS on the machines where the System z IPLA program executes.

Reference-based: The required license capacity of a System z IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the parent program.

Full-machine-based: The required license capacity of a System z IPLA program with full-machine-based terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, refer to The IBM System z Machines Exhibit, Z125-3901, or visit the Mainframes section of the System z Exhibits website

http://ibm.com/zseries/library/swpriceinfo/

For more information on sub-capacity System z IPLA terms and conditions, refer to Software Announcement 204-184, dated August 10, 2004.

For additional information for products with reference-based terms, System z IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in the environment the System z IPLA program executes.

An environment is defined as either a single or stand-alone machine or a qualified Parallel Sysplex®. You may have one or more different environments across the enterprise. To determine the required license capacity for each System z IPLA program with referenced-based terms, each environment should be assessed separately.
When a System z IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the System z IPLA program must equal with the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one:

- That meets the criteria defined in Hardware Announcement 198-001, dated January 13, 1998
- Where MLC pricing is aggregated across the sysplex

**Sub-capacity eligibility**

To be eligible for sub-capacity charging on select System z IPLA programs, you must first implement and comply with all terms of either sub-capacity Workload License Charges (WLC) or sub-capacity Entry Workload License Charges (EWLC). To implement sub-capacity WLC or EWLC, a machine must be System z (or equivalent). On that machine:

- All instances of the OS/390® operating system must be migrated to the z/OS operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating systems must be running in z/Architecture (64-bit) mode

For that machine, you must create and submit a Sub-Capacity Report to IBM each month. Sub-Capacity Reports must be generated using the Sub-Capacity Reporting Tool (SCRT). For additional information or to obtain a copy of SCRT, visit the System z Software Pricing website

http://ibm.com/zseries/swprice

You must comply with all of the terms of the WLC or EWLC offering, whichever is applicable:

- The complete terms and conditions of sub-capacity WLC are defined in the IBM Customer Agreement - Attachment for System z Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement - Attachment for IBM System z 890 and 800 License Charges (Z125-6587).

Additionally, you must sign and comply with the terms and conditions specified in the amendment to the IPLA contract - Amendment for IBM System z9® and System z Programs Sub-Capacity Pricing (Z125-6929). Once the amendment is signed, the terms in the amendment replace any and all previous System z IPLA sub-capacity terms and conditions.

IBM Getting Started Sub-capacity Pricing for z/OS IPLA Software applies.

**Sub-capacity utilization determination**

Sub-capacity utilization is determined based on the utilization of an eligible operating system and machine (for example, z/OS running in z/Architecture (64 bit) mode on a System z ((or equivalent) server).

**On/Off Capacity on Demand (CoD)**

To be eligible for On/Off CoD pricing, you must be enabled for temporary capacity on the corresponding hardware, and the required contract, Attachment for IBM System z On/Off Capacity on Demand (Z125-7883) must be signed prior to use.
Prices

Information on charges is available at

http://www.ibm.com/support

Choose the option entitled Purchase/upgrade tools. For additional information and current prices, contact your local IBM representative.

Program name: Session Manager for z/OS V3.1
Program PID:  5655-U98

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S016MPD</td>
<td>Session Manager</td>
<td>Basic OTC, Value Units</td>
</tr>
<tr>
<td></td>
<td>for z/OS V3.1</td>
<td></td>
</tr>
<tr>
<td>S016MPD</td>
<td>Session Manager</td>
<td>Basic OTC, per MSU-day TUC</td>
</tr>
<tr>
<td></td>
<td>for z/OS V3.1</td>
<td></td>
</tr>
</tbody>
</table>

Subscription and Support PID:  5655-398

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S00XMK9</td>
<td>Session Manager for z/OS</td>
<td>Basic ALC, Value Units SW S&amp;S</td>
</tr>
<tr>
<td></td>
<td>Subscription and Support</td>
<td>No charge, decline SW S&amp;S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Per MSU SW S&amp;S Registration</td>
</tr>
</tbody>
</table>

IBM Global Financing

IBM Global Financing offers competitive financing to credit-qualified customers to assist them in acquiring IT solutions. Offerings include financing for IT acquisition, including hardware, software, and services, from both IBM and other manufacturers or vendors. Offerings (for all customer segments: small, medium, and large enterprise), rates, terms, and availability can vary by country. Contact your local IBM Global Financing organization or visit

http://www.ibm.com/financing

IBM Global Financing offerings are provided through IBM Credit LLC in the United States, and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Rates are based on a customer's credit rating, financing terms, offering type, equipment type, and options, and may vary by country. Other restrictions may apply. Rates and offerings are subject to change, extension, or withdrawal without notice.

Financing from IBM Global Financing helps you preserve cash and credit lines, enables more technology acquisition within current budget limits, permits accelerated implementation of economically attractive new technologies, offers payment and term flexibility, and can help match project costs to projected benefits. Financing is available worldwide for credit-qualified customers.

For more financing information, visit

http://www.ibm.com/financing
To order, contact the Americas Call Centers or your local IBM representative, or your IBM Business Partner.

To identify your local IBM representative or IBM Business Partner, call 800-IBM-4YOU (426-4968).

Phone: 800-IBM-CALL (426-2255)
Fax: 800-2IBM-FAX (242-6329)
Internet: callserv@ca.ibm.com
Mail: IBM Teleweb Customer Support
ibm.com® Sales Execution Center, Americas North
3500 Steeles Ave. East, Tower 3/4
Markham, Ontario
Canada
L3R 2Z1

Reference: LE001

The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

**Trademarks**

CICS Explorer, MVS and IMS are trademarks of IBM Corporation in the United States, other countries, or both.

IBM, RACF, VTAM, z/OS, System z, CICS, Current, Rational, S/390, z/Architecture, SystemPac, Passport Advantage, Parallel Sysplex, OS/390, System z9 and ibm.com are registered trademarks of IBM Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

**Terms of use**

IBM products and services which are announced and available in your country can be ordered under the applicable standard agreements, terms, conditions, and prices in effect at the time. IBM reserves the right to modify or withdraw this announcement at any time without notice. This announcement is provided for your information only. Additional terms of use are located at:


For the most current information regarding IBM products, consult your IBM representative or reseller, or visit the IBM worldwide contacts page