IBM Problem Determination Solution Packs help modernize applications and optimize IT resources

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At a glance

• Problem Determination Solution Pack for z/OS®, V1.1, is an all-in-one package that addresses and enhances your problem analysis needs.
• Problem Determination Testing Solution Pack for z/OS, V1.1 is an all-in-one testing package, that contains tools to address your testing needs.

Overview

The Problem Determination Solution Packs offer a convenient and more affordable way to purchase key products in the Problem Determination Tools family, at a reduced, inclusive price while benefiting from investments in previously purchased products.

Problem Determination Solution Pack for z/OS, V1.1 provides robust tooling, which allows you to utilize problem analysis capabilities for z/OS subsystems and languages in a cost-effective manner by using your choice of GUI or 3270 interface. It addresses and enhances your problem analysis needs. This is an offering of tools that assists with reducing IT costs by decreasing overall application development time, improving application reliability, and decreasing diagnosis time. Included are the following:

• IBM® Debug Tool for z/OS, V13.1 (5655-Q10)
• IBM Fault Analyzer for z/OS, V13.1 (5655-Q11)
• IBM File Manager for z/OS, V13.1 (5655-Q12)
• IBM Workload Simulator for z/OS and OS/390®, V1.1 (5655-I39)
• IBM HourGlass V7.1 (5655-U59)
• IBM Data Set Commander for z/OS, V8.1 (5635-ISP)

Problem Determination Testing Solution Pack for z/OS, V1.1 provides support for debugging, code coverage, simulating time changes, and generating and executing simulated workloads - all important aspects of a robust z/OS-based testing environment. This set of test tools will assist you with reducing overall test time, by improving application reliability and diagnosis capabilities, and improving your ability to regulate and monitor testing activities. Included are the following:

• Debug Tool for z/OS, V13.1 (5655-Q10)
• Workload Simulator for z/OS and OS/390, V1.1 (5655-I39)
• Hourglass V7.1 (5655-U59)
Being able to purchase multiple products under a single solution pack program number can help to simplify client procurement processes. The solution pack price represents a reduction in the aggregate price of the individual component products. If you have an active Subscription and Support (S&S) contract for a previously purchased product that is part of one of these solution packs, then you are eligible to receive Value Unit credit when trading up to a solution pack. For situations where a trade-up path for a given product version or program number is not expressly stated, contact your IBM representative.

For more details on the Problem Determination Tools family, visit

http://www.ibm.com/software/awdtools/deployment/

Key prerequisites

Problem Determination Solution Pack for z/OS, and Problem Determination Testing Solution Pack for z/OS run on any hardware configuration supported by the specified licensed z/OS programs.

For details, refer to the Hardware requirements and Software requirements sections.

Planned availability date

December 6, 2013

Refer to the Availability of national languages section for national language availability.

Description

The Problem Determination Solution Packs are a convenient and affordable way to purchase key products in the Problem Determination Tools family:

- Convenient. Being able to purchase multiple products under a single program number can help to simplify client procurement processes.
- Affordable. The Solution Pack price represents a reduction in the aggregate price of the individual component products. When trading up, customers with active Subscription and Support (S&S) contracts for a previously purchased product that is part of one of these Solution Packs can receive Value Unit credit for prior purchases.

Problem Determination Solution Pack for z/OS, V1.1 is composed of the following tools:

- Debug Tool for z/OS, V13.1 is the IBM interactive, source-level debugging tool for compiled applications. It is a program testing and analysis aid that helps you examine, monitor, and control the execution of application programs written in C, C++, COBOL, PL/I, or Assembler on a z/OS system. It provides debugging capability for applications running in a variety of environments, such as batch, TSO, CICS®, IMS™, DB2®, DB2 Stored Procedures, and UNIX™ System Services.
  - Provides multiple conditional and unconditional breakpoints, step mode debugging, and the ability to monitor and update variables and storage.
  - Includes features to help you identify old OS/VS and VS COBOL II source code and to upgrade the code to Enterprise COBOL.
  - Supplies tools to help you determine how thoroughly your code was tested.
• Fault Analyzer for z/OS, V13.1 assists in analyzing and fixing application and system failures. It offers information required to help determine the cause of failure and provides assistance in how to resolve the problem. Integrated support for Java™ and WebSphere® Application Server for z/OS gives Fault Analyzer expanded application coverage and related business value beyond traditional applications. You can use one tool to assist in composite, application-abend analysis.
  - Delivers a detailed report about program failures to help you resolve them quickly.
  - Includes a fault history file that lets you track and manage application failures and fault reports.
  - Lets you control which users can access history files by allowing you to store application failure information in separate files.
  - Offers a view of storage contents, trace tables, and terminal screen images at the time of failure to help speed corrective action.
  - Lets you customize message descriptions to be used in application failure reports.
  - Helps maximize flexibility through support for CICS, DB2, IMS, Enterprise PL/I, Enterprise COBOL, and Java for z/OS systems.

• File Manager for z/OS, V13.1 offers comprehensive, user-friendly tools for working with z/OS data sets, or DB2, or IMS data. You can also access CICS resources under control of a CICS transaction. Create, browse, copy, edit, print, and format or reformat data files in the most popular z/OS file formats. Manipulate data using COBOL and PL/I record layouts interactively or in batch.
  - Supports development and production through extensive editing, browsing, and batch and interactive utility capabilities.
  - Finds, copies, edits, prints, compares, and displays data quickly and easily.
  - Defines data-set records efficiently by using COBOL and PL/I copybooks stored in partitioned data sets or library-management systems.
  - Enhances usability by letting you customize which fields to display, copy, or print.

• Workload Simulator for z/OS and OS/390, V1.1 lets you simulate terminals and the associated messages. You can alter message loads during a run. Workload Simulator can be used to generate large volumes of messages to evaluate the reliability and to approximate performance characteristics of a network under expected operating conditions.
  - Delivers native support of multiple client applications that run on top of TCP/IP.
  - Includes System Network Architecture (SNA) logical units that can be simulated while executing as an IBM VTAM® application program
  - Includes Workload Simulator Test Manager that helps you develop and manage test cases, the automation of test runs, and the analysis of results.
  - Includes flexible script-generating utilities, extensive run-time utilities, and powerful, post-test, analysis utilities.

• HourGlass V7.1 is a z/OS clock-simulator application for altering the date and time returned to a z/OS application when a time request is made. HourGlass enables automation of the date and time testing process to help companies deliver reliable applications without requiring changes to application code, re-IPLing the CPU or LPAR, or making runtime JCL changes. HourGlass features and flexibility help enable easy, accurate, and comprehensive application testing.

The testing of time-sensitive applications is less disruptive with HourGlass where you may set as many altered date and time values as needed and eliminate multiple system Power-On-Reset (POR) procedures. Altered values affect only the applications you specify. HourGlass intercepts all system time-of-day requests that internally issue an SVC 11 or requests to the PC Time system service.

HourGlass handles time requests originating from the MVS™ STCKSYNC system service, which is important for sysplex-wide applications impacted by time and date. You can alter the date-time by specifying patterns or specific applications, transactions, users, and address space names.
The HourGlass Repository provides the capability to save and manage HourGlass date and time settings in a permanent storage facility. Date and time settings are preserved across executions of the product. You can manage the contents of the repository with the HourGlass Control Center.

- **IBM Data Set Commander for z/OS**, V8.1, the new product name for IBM ISPF Productivity Tool for z/OS, enhances and extends the IBM interactive and batch capabilities for working with partitioned data sets (PDSs) and PDS extendeds (PDSEs) and their members. It delivers new batch and online functions, as well as enhancements to existing functions, for performing critical operations on PDS and PDSE members. Data Set Commander for z/OS has three components:
  - The interactive component of Data Set Commander for z/OS is an integrated front end to ISPF. It enhances most major ISPF functions, which includes browse, edit, TSO shell, and DSLIST, and provides many additional capabilities. Data Set Commander for z/OS can make any ISPF user more productive with functions such as automatic PDS compression and directory expansion, and search capabilities for volumes, data sets, members, and text within members.
  - The batch component of Data Set Commander for z/OS consists of a fully compatible utility replacement for IEBGENER, with significantly enhanced functionality for managing and manipulating PDS and PDSE datasets.
  - The monitor component of Data Set Commander for z/OS provides a fully automated facility for managing the caching of PDS and PDSE members in the LLA and VLF regions of selected system nodes in a sysplex.

Data Set Commander for z/OS can boost productivity for ISPF users across the spectrum from those who have worked with ISPF for many years and know their way around the panels quickly, to those who are new to the IBM z/OS environment and were trained in workstation tools and interfaces. Both types of users need tools that offer time-saving advantages, and both will find them in Data Set Commander for z/OS.

**Problem Determination Testing Solution Pack for z/OS**, V1.1 is composed of the following tools:

- **Debug Tool for z/OS**, V13.1 is the IBM interactive, source-level debugging tool for compiled applications. It is a program testing and analysis aid that helps you examine, monitor, and control the execution of application programs written in C, C++, COBOL, PL/I, or Assembler on a z/OS system. It provides debugging capability for applications running in a variety of environments, such as batch, TSO, CICS, IMS, DB2, DB2 Stored Procedures, and UNIX System Services. Debug Tool also includes features to help you identify old OS/VS and VS COBOL II source code and to upgrade the code to Enterprise COBOL.
  - Delivers a single debugging tool for batch, TSO, CICS, DB2, DB2 stored procedures, and IMS applications written in COBOL, PL/I, C/C++, and Assembler.
  - Includes tools to quickly identify and convert OS/VS COBOL code to ANSI 85 standard.
  - Supplies tools to help you determine how thoroughly your code was tested.

- **Workload Simulator for z/OS and OS/390**, V1.1 lets you simulate terminals and the associated messages. You can alter message loads during a run. Workload Simulator can be used to generate large volumes of messages to evaluate the reliability and to approximate performance characteristics of a network under expected operating conditions.
  - Delivers native support of multiple client applications that run on top of TCP/IP.
  - Includes System Network Architecture (SNA) logical units that can be simulated while executing as an IBM VTAM application program.
  - Includes Workload Simulator Test Manager that helps you develop and manage test cases, the automation of test runs, and the analysis of results.
  - Includes flexible script-generating utilities, extensive run-time utilities, and powerful, post-test, analysis utilities.

- **HourGlass V7.1** is a z/OS clock-simulator application for altering the date and time returned to a z/OS application when a time request is made. HourGlass
enables automation of the date and time testing process to help companies deliver reliable applications without requiring changes to application code, re-IPLing the CPU or LPAR, or making runtime JCL changes. HourGlass features and flexibility help enable easy, accurate, and comprehensive application testing.

The testing of time-sensitive applications is less disruptive with HourGlass where you may set as many altered date and time values as needed and eliminate multiple system Power-On-Reset (POR) procedures. Altered values affect only the applications you specify. HourGlass intercepts all system time-of-day requests that internally issue an SVC 11 or requests to the PC Time system service.

HourGlass handles time requests originating from the MVS STCKSYNC system service, which is important for sysplex-wide applications impacted by time and date. You can alter the date-time by specifying patterns or specific applications, transactions, users, and address space names.

The HourGlass Repository provides the capability to save and manage HourGlass date and time settings in a permanent storage facility. Date and time settings are preserved across executions of the product. You can manage the contents of the repository with the HourGlass Control Center.

### 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 the **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.

Reference information

For information on CICS Solution Packs, refer to Software Announcement ZP13-0615, dated October 22, 2013.

Availability of national languages

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<th>Program number</th>
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<td>IBM Problem Determination Solution Pack for z/OS, V1.1</td>
<td>5655-PDS</td>
<td>December 6, 2013</td>
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<td>IBM Problem Determination Testing Solution Pack for z/OS, V1.1</td>
<td>5655-DTS</td>
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Note: These solution packs are only partially translated into Japanese and Korean. For more information, refer to the Technical information section, specifically the Limitations section.

Program number

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<td>V1.1</td>
<td>IBM Problem Determination Solution Pack S&amp;S</td>
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<td>5655-DTS</td>
<td>V1.1</td>
<td>IBM Problem Determination Testing Solution Pack for z/OS</td>
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Product identification number

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<td>5655-TSS</td>
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</tbody>
</table>

Education support

For information on Web-based training, classroom-based training, on-site workshops and other educational resources available for the problem determination tools, refer to the IBM Education Assistant website

http://publib.boulder.ibm.com/infocenter/ieduasst/stgv1r0/index.jsp

Offering Information

Product information is available via the Offering Information website

http://www.ibm.com/common/ssi
Publications

For Problem Determination Solution Pack for z/OS, V1.1 (5655-PDS), the program directories (GI13-2933, GI13-3004, GI10-8969, GI10-5080, GI10-8967, GI10-8968, GI10-8987, GI10-3234, and GI11-7890) and agreements and License Information (LC27-4559) are supplied automatically with the basic machine-readable material. For the Japanese version, the CCCA Japanese Program Directory (GI10-6976) is also supplied automatically with the basic machine-readable material. No other hardcopy publications are shipped with the product.

The following optional publications will be available at product availability:

- Debug Tool for z/OS User’s Guide (SC14-7600)
- Debug Tool for z/OS Coverage Utility User’s Guide and Messages (SC27-4651)
- Debug Tool for z/OS Reference and Messages (SC27-4652)
- Debug Tool for z/OS Reference Summary (SC14-7602)
- Debug Tool for z/OS Customization Guide (SC14-7601)
- Debug Tool for z/OS API User’s Guide and Reference (SC27-4654)
- CCCA User’s Guide (SC26-9400)
- Fault Analyzer for z/OS User’s Guide and Reference (SC19-4116)
- File Manager for z/OS Customization Guide (SC19-4118)
- File Manager for z/OS User’s Guide and Reference (SC19-4119)
- File Manager for z/OS User’s Guide and Reference for DB2 Data (SC19-4120)
- File Manager for z/OS User’s Guide and Reference for IMS Data (SC19-4121)
- File Manager for z/OS User’s Guide and Reference for CICS (SC19-4122)
- Data Set Commander User’s Guide (SC19-4182)
- Data Set Commander Installation and Customization Guide (GC18-4181)
- Hourglass Usage and Installation Guide (SC23-8561)
- Workload Simulator User’s Guide (SC31-8948)
- Workload Simulator Utilities Guide (SC31-8947)
- Workload Simulator User Exits (SC31-8950)
- Workload Simulator Messages and Codes (SC31-8951)
- Workload Simulator Creating Scripts (SC31-8945)
- Workload Simulator Script Guide and Reference (SC31-8946)
- Workload Simulator Test Manager User’s Guide and Reference (SC31-8949)

For Problem Determination Testing Solution Pack for z/OS, V1.1 (5655-DTS), the Program Directories (GI113-2930, GI113-3004, GI10-8969, GI10-5080, GI10-3234, and GI11-7890) and Agreements and License Information (LC27-4558) are supplied automatically with the basic machine-readable material. For the Japanese version, the CCCA Japanese Program Directory (GI10-6976) is also supplied automatically with the basic machine-readable material. No other hardcopy publications are shipped with the product.

The following optional publications will be available at product availability:

- Debug Tool for z/OS User’s Guide (SC14-7600)
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• Workload Simulator Script Guide and Reference (SC31-8946)
• Workload Simulator Test Manager User's Guide and Reference (SC31-8949)

The IBM Publications Center

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

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the US) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

**Technical information**

**Specified operating environment**

**Hardware requirements**

Problem Determination Solution Pack for z/OS, and, Problem Determination Testing Solution Pack for z/OS run on any hardware configuration supported by the following specified licensed z/OS programs.

The following minimum hardware levels are required to run the optional Problem Determination Tools Studio or product plug-ins:

- CPU: Intel® Pentium® 4 or equivalent
- RAM: At least 768 MB in addition to the operating system requirements
- Hard disk: At least 500 MB available space

**Software requirements**

Problem Determination Solution Pack for z/OS and Problem Determination Testing Solution Pack for z/OS run under the control of, or in conjunction with, the following programs.

**Required software**

One of the following:

- z/OS V2.1, or later (5650-ZOS)
- z/OS V1.12 or V1.13 (5694-A01)

**Optional software**

Depending on the functions used, one or more of the following programs may be required:

- AD/Cycle C/370™ V1.2 (5688-216)
• C/C++ for MVS/ESA V3 (5655-121)
• C/C++ Element in z/OS V1.13, or later (5694-A01)
• C/C++ Element in z/OS V2.1, or later (5650-ZOS)
• CICS TS for z/OS , V3 (5655-M15)
• CICS TS for z/OS , V4 (5655-S97)
• CICS TS for z/OS , V5.1 (5655-Y04)
• CICS TS for z/OS Value Unit Edition V5.1 (5722-DFJ)
• DB2 V9 for z/OS (5635-DB2)
• DB2 10 for z/OS (5605-DB2)
• DB2 11 for z/OS (5615-DB2)
• DB2 9 for z/OS Value Unit Edition (5697-P12)
• DB2 10 for z/OS Value Unit Edition (5697-P31)
• DB2 11 for z/OS Value Unit Edition (5697-P43)
• Enterprise COBOL for z/OS , V3.4 (5655-G53)
• Enterprise COBOL for z/OS , V4 (5655-S71)
• Enterprise COBOL for z/OS , V5.1 (5655-W32)
• Enterprise PL/I for z/OS , V3.9 (5655-H31)
• Enterprise PL/I for z/OS , V4.1 through V4.4 (5655-W67)
• High Level Assembler/MVS & VM & VSE V1.6 (5696-234)
• IBM 31-bit SDK for z/OS , Java 2 Technology Edition V6 with SR6, or later (5655-R31)
• IMS V11 (5635-A02)
• IMS V12 (5635-A03)
• IMS V13 (5635-A04)
• IMS Database Value Unit Edition, V12 (5655-DSQ)
• IMS Database Value Unit Edition, V13 (5655-DSM)
• Rational® Developer for System z V8.5.x or V9.0.x (5724-T07)
• WebSphere Application Server for z/OS , V6.1 (5655-N01)
• WebSphere Application Server for z/OS , V7.0 (5655-N02)
• WebSphere Application Server for z/OS , V8.0 or V8.5 (5655-W65)
• WebSphere MQ for z/OS , V7.0.x or V7.1.x (5655-R36)

The problem determination tools in this announcement are tested and supported for use only with the announced and currently supported levels of IBM software and hardware listed above. IBM knows of no reason the problem determination tools in this announcement will not work with certain earlier, unsupported IBM software products, specifically:

• z/OS V1.11 (5694-A01)
• C/C++ Element in OS/390 V2.10 (5647-A01)
• C/C++ Element in z/OS V1.11 or V1.12 (5694-A01)
• CICS TS for OS/390 , V1.3 (5655-147)
• CICS TS for z/OS , V2.2 or V2.3 (5697-E93)
• OS/VS COBOL V1.2.4 (5740-CB1), with limitations
  – Not supported by File Manager for z/OS
• VS COBOL II V1.3.1, V1.3.2, or V1.4 (5668-958, 5688-023), with limitations
  – Not supported by File Manager for z/OS
• COBOL for MVS and VM V1 (5688-197)
  – Not supported by File Manager for z/OS
• COBOL for OS/390 and VM V2.2 (5648-A25)
IBM will undertake to fix problems found running the problem determination tools in this announcement with the above mentioned earlier, unsupported product levels. IBM must be able to reproduce the problem using a supported level of the same product. If the problem can be reproduced and fixed, the fix will be developed and tested using supported levels of IBM software. If a fix is made available, it is likely to work on the unsupported product level, however, IBM can not guarantee that the fix will work with the unsupported product.

**Required software for the optional Problem Determination Tools Studio or plug-ins**

The following software is required to run the optional Problem Determination Tools Studio V13 or product plug-ins:

- One of the following levels of the Microsoft® Windows® operating system:
  - Microsoft Windows XP (Professional), 32-bit
  - Microsoft Windows Vista (Business or Enterprise), 32-bit or 64-bit
  - Microsoft Windows 7 (Professional, Enterprise, or Ultimate), 32-bit or 64-bit
  - Microsoft Windows Server 2008 (Standard, Web, Enterprise, or DataCenter), 32-bit or 64-bit
  - Microsoft Windows Server 2008 R2 (Standard, Web, Enterprise, or DataCenter), 64-bit
- One of the following Eclipse-based platforms:
  - IBM Explorer for z/OS, V2.1, or later
  - CICS Explorer® (for Windows) V5.1, or later
  - IMS Enterprise Suite Explorer (for Windows) V2.2.0.2, or later
  - Rational Developer for System z, V9.0 (5724-T07)

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.

**Limitations**

For the Problem Determination Solution Pack for z/OS, only the Debug Tool, Fault Analyzer, and File Manager components of the offering are translated into Japanese and Korean. The Workload Simulator, Data Set Commander, and Hourglass components of the offering are available only in English.
For the Problem Determination Testing Solution Pack for z/OS, only the Debug Tool component of the offering is translated into Japanese and Korean. The Workload Simulator and Hourglass components of the offering are available only in English.

Planning information

Packaging
The Problem Determination Solution Pack for z/OS, V1.1 (5655-PDS) package includes:

- Basic machine-readable material on the customer-selected distribution medium
- Problem Determination Solution Pack Program Directory (GI13-2933)
- Debug Tool Program Directory (GI13-3004)
- Fault Analyzer Program Directory (GI10-8967)
- File Manager Program Directory (GI10-8968)
- Problem Determination Tools Common Component Program Directory (GI10-8969)
- CCCA Program Directory (GI10-5080)
- The CCCA Japanese Program Directory (GI10-6976), that is also included in the Japanese version
- Workload Simulator Program Directory (GI10-3234)
- Data Set Commander Program Directory (GI10-8987)
- Hourglass Program Directory (GI11-7890)
- Agreements and License Information (LC27-4559)

The Problem Determination Testing Solution Pack for z/OS, V1.1 (5655-DTS) package includes:

- Basic machine-readable material on the customer-selected distribution medium
- Problem Determination Testing Solution Pack Program Directory (GI13-2930)
- Debug Tool Program Directory (GI13-3004)
- Problem Determination Tools Common Component Program Directory (GI10-8969)
- CCCA Program Directory (GI10-5080)
- The CCCA Japanese Program Directory (GI10-6976), that is also included in the Japanese version
- Workload Simulator Program Directory (GI10-3234)
- Hourglass Program Directory (GI11-7890)
- Agreements and License Information (LC27-4558)

Global Technology Services®

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings for the efficient installation, implementation, or integration of this product.

Ordering information

Consult your IBM representative.

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 US 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 http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp

The products in this announcement have one charge unit - Value Units.

**Charge metric**

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<th>Program name</th>
<th>Program number</th>
<th>Charge metric</th>
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</thead>
<tbody>
<tr>
<td>IBM Problem Determination Solution Pack for z/OS, V1</td>
<td>5655-PDS</td>
<td>Value Units</td>
</tr>
<tr>
<td>IBM Problem Determination Solution Pack for z/OS, Subscription &amp; Support</td>
<td>5655-PSS</td>
<td>Value Units</td>
</tr>
<tr>
<td>IBM Problem Determination Testing Solution Pack for z/OS, V1</td>
<td>5655-DTS</td>
<td>Value Units</td>
</tr>
<tr>
<td>IBM Problem Determination Testing Solution Pack for z/OS, Subscription &amp; Support</td>
<td>5655-TSS</td>
<td>Value Units</td>
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</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-PDS</td>
<td>IBM Problem Determination Solution Pack for z/OS, V1</td>
<td>VUE007</td>
</tr>
<tr>
<td>5655-PSS</td>
<td>IBM Problem Determination Solution Pack for z/OS, Subscription &amp; Support</td>
<td>VUE007</td>
</tr>
<tr>
<td>5655-DTS</td>
<td>IBM Problem Determination Testing Solution Pack for z/OS, V1</td>
<td>VUE007</td>
</tr>
<tr>
<td>5655-TSS</td>
<td>IBM Problem Determination Testing Solution Pack for z/OS, Subscription &amp; Support</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 VUE001

| Value |
|---|---|---|
| Level | Minimum | Maximum | Units/MSU |
| Base | 1 | 3 | 5.25 |
| Tier A | 4 | 45 | 0.83 |
| Tier B | 46 | 175 | 0.35 |
| Tier C | 176 | 315 | 0.26 |
| Tier D | 316 | + | 0.20 |

Value Units for mainframes without MSU ratings:

| Value |
|---|---|---|
| Hardware | Units/machine |
| MP3000 H30 | 21 |
| MP3000 H50 | 22 |
| MP3000 H70 | 26 |
| ESL models | 9 |

#### VUE001 Ordering example

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

If your required license capacity is 1,000 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>*</th>
<th>Value Units/MSU</th>
<th>=</th>
<th>Value Units</th>
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</thead>
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<tr>
<td>Base</td>
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<td>Tier A</td>
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<td>34.86</td>
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<td>Tier B</td>
<td>130</td>
<td>0.35</td>
<td>=</td>
<td>45.50</td>
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<td>Tier C</td>
<td>140</td>
<td>0.26</td>
<td>=</td>
<td>36.40</td>
</tr>
<tr>
<td>Tier D</td>
<td>685</td>
<td>0.20</td>
<td>=</td>
<td>137.00</td>
</tr>
</tbody>
</table>

Total | 1,000 | 269.51 |

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

### Value Unit exhibit VUE007

| Value |
|---|---|---|
| MSUs | minimum | MSUs | maximum | Value Units/MSU |
| Base | 1 | 3 | 1 |
| Tier A | 4 | 45 | 0.45 |
| Tier B | 46 | 175 | 0.36 |
| Tier C | 176 | 315 | 0.27 |
| Tier D | 316 | + | 0.2 |

Value Units for mainframes without MSU ratings:

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Value Units/machine</th>
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<tbody>
<tr>
<td>MP3000 H30</td>
<td>6</td>
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<tr>
<td>MP3000 H50</td>
<td>8</td>
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<tr>
<td>MP3000 H70</td>
<td>12</td>
</tr>
<tr>
<td>ESL models</td>
<td>2</td>
</tr>
</tbody>
</table>
VUE007 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>
<tr>
<td>Total</td>
<td>1,500</td>
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</tr>
</tbody>
</table>

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

Basic license

On/Off Capacity on Demand

Problem Determination Solution Pack for z/OS, V1.1, and Problem Determination Testing Solution Pack for z/OS, V1.1 are eligible for On/Off Capacity on Demand (On/Off CoD) with a Temporary Use Charge calculated based on MSUs-per day usage.

Program Name  IBM Problem Determination Solution Pack z/OS, V1.1  
Program PID   5655-PDS

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S017CGK</td>
<td>IBM Problem Determination Solution Pack for z/OS, V1</td>
<td>Basic OTC, Per MSU-day TUC</td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-Q10 (Debug Tool)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-Q11 (Fault Analyzer)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-Q12 (File Manager)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-I39 (Workload Simulator)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-U59 (HourGlass)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5635-ISP (Data Set Commander)</td>
<td></td>
</tr>
</tbody>
</table>

Program Name  IBM Problem Determination Testing Solution Pack z/OS, V1.1  
Program PID   5655-DTS

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/Pricing metric</th>
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</thead>
<tbody>
<tr>
<td>S017CGR</td>
<td>IBM Problem Determination Testing Solution Pack for z/OS, V1</td>
<td>Basic OTC, Per MSU-day TUC</td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-Q10 (Debug Tool)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-I39 (Workload Simulator)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trade-up from 5655-U59 (HourGlass)</td>
<td></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  IBM Problem Determination Solution Pack for z/OS, V1.1
Program PID   5655-PDS

Entitlement identifier Description License option/Pricing metric

S017CGK IBM Problem Determination Solution Pack for z/OS, V1 Basic OTC, Per Value Unit
Trade-up from 5655-Q10 (Debug Tool)
Trade-up from 5655-Q11 (Fault Analyzer)
Trade-up from 5655-Q12 (File Manager)
Trade-up from 5655-I39 (Workload Simulator)
Trade-up from 5655-U59 (HourGlass)
Trade-up from 5635-ISP (Data Set Commander)

Orderable supply ID: Language Distribution medium

S017CGL English 3590 Tape
S017D9M Japanese 3590 Tape
S017D9L Korean 3590 Tape

Note: Additional media type selections are offered during Custom Build Offering ordering.

Subscription and Support PID  5655-PSS

Entitlement identifier Description License option/Pricing metric

S017D8L IBM Problem Determination Solution Pack for z/OS S&S Basic MSC, per Value Unit
No Charge, decline SW S&S
Per MSU SW S&S Registration

Orderable supply ID: Language Distribution medium

S017D8K English Hardcopy publication
S017D9S Japanese Hardcopy publication
S017D9R Korean Hardcopy publication

Program name  IBM Problem Determination Testing Solution Pack for z/OS, V1.1
Program PID   5655-DTS

Entitlement identifier Description License option/Pricing metric

S017CGR IBM Problem Determination Testing Solution Pack for z/OS, V1 Basic OTC, Per Value Unit
Trade-up from 5655-Q10 (Debug Tool)
Trade-up from 5655-I39 (Workload Simulator)
Trade-up from 5655-U59 (HourGlass)
Orderable

supply ID: Language Distribution medium
S017CGP English 3590 Tape
S017D9P Japanese 3590 Tape
S017D9N Korean 3590 Tape

Note: Additional media type selections are offered during Custom Build Offering ordering.

Subscription and Support PID 5655-TSS

Entitlement identifier Description License option/Pricing metric
S017D8P IBM Problem Determination Testing Solution Pack for z/OS S&S
Basic MSC, per Value Unit SW S&S
No Charge, decline SW S&S
Per MSU SW S&S Registration

Orderable

supply ID: Language Distribution medium
S017D8N English Hardcopy publication
S017D9T Japanese Hardcopy publication
S017D9V Korean Hardcopy publication

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. 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, FunctionPac, and ProductPac®.
All of these customized offerings are offered for Internet delivery in countries where Shopz 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 Shopz 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 include:

- 3590
- 3592

Most products can be ordered in ServerPac, SystemPac, FunctionPac, and ProductPac the month following their availability in CBPDO. z/OS can be ordered via CBPDO, ServerPac, and SystemPac at general availability. Many products will also be orderable in a Product ServerPac without also having to order the z/OS operating system or subsystem. Shopz and CFS W will determine the eligibility based on product requisite checking. For more details on the Product ServerPac, visit the Help section on the Shopz web site at


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, FunctionPac and ProductPac 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 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**

Following are the License Information documents for the Problem Determination Tools:

- GI13-2932: Problem Determination Solution Pack for z/OS (5655-PDS)
- GI13-2931: Problem Determination Testing Solution Pack for z/OS (5655-DTS)

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


**Trade-in terms for Problem Determination Solution Packs**

IBM may offer trade-in terms for customers who have separately licensed one or more of the individual products that are included in a solution pack and who wish to trade in the licenses to one or more such individual products when licensing a solution pack. If IBM offers such trade-in terms, then as part of any such trade in, all entitlements to the products being traded in will be terminated. In some cases, the entitlements to the solution packs being licensed by the customer as part of the trade-in arrangement may not be equal to the entitlements being terminated. For example, if the customer holds entitlement to 100 Value Units of product A which has been included in a solution pack, and is trading in its license to product A in return for 90 Value Units of the Solution Pack, then, in keeping with the specific trade-in terms, the customer agrees to terminate all its entitlements to product A (100 VUs).

**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 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

**System i® Software Maintenance applies**

No

**Variable charges apply**

No

**Educational allowance available**

Yes. When ordering through the program number process, a 15% education allowance applies to qualified education institution customers.

Education Software Allowance Program applies when ordering through the program number process.

**ESAP available**

Yes, to qualified customers.

**Products eligible for single version charging**

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<thead>
<tr>
<th>Replaced program number</th>
<th>Replaced program name</th>
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<td>5734-CB4</td>
<td>COBOL Interactive Debug</td>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
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<td>5658-995</td>
<td>Inspect for C/370 and PL/I V1</td>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
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<td>5688-194</td>
<td>CODE/370 V1</td>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
</tr>
<tr>
<td>5688-194</td>
<td>IBM Debug Tool for z/OS and OS/390, V1</td>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
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<td>5655-H32</td>
<td>IBM Debug Tool for z/OS and OS/390, V3</td>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
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<td>Problem Determination Solution Pack for z/OS, V1</td>
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<td>5655-PDS</td>
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<td>5734-CB4</td>
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<tr>
<td>5658-995</td>
<td>Inspect for C/370 and PL/I V1</td>
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<td>IBM Debug Tool for z/OS and OS/390, V1</td>
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<tr>
<td>5655-H32</td>
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<td>5655-DTS</td>
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<td>5655-L24</td>
<td>IBM Debug Tool for z/OS, V4</td>
<td>5655-DTS</td>
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<td>IBM Debug Tool for z/OS, V7</td>
<td>5655-DTS</td>
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<td>5655-S17</td>
<td>IBM Debug Tool for z/OS, V8</td>
<td>5655-DTS</td>
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</tbody>
</table>

**Note:** Only certain function in DITTO is replaced by File Manager. This should not imply that all of the function in other programs is replaced completely by their replacement programs.

**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>
</tr>
</thead>
<tbody>
<tr>
<td>5655-PDS</td>
<td>Problem Determination Solution Pack for z/OS, V1</td>
<td>Execution-based</td>
</tr>
<tr>
<td>5655-DTS</td>
<td>Problem Determination Testing Solution Pack for z/OS, V1</td>
<td>Execution-based</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 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 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.

**Sub-capacity utilization determination**

Sub-capacity utilization is determined based on the product’s own execution as reported to IBM in accordance with the requirements for reporting sub-capacity utilization for products.

**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.
Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

Prices

Contact your IBM representative for the applicable charges.

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For Passport Advantage information and charges, contact your IBM representative or authorized IBM Business Partner for Software Value Plus. Additional information is also available at

http://www.ibm.com/software/passportadvantage

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