IBM Operational Decision Manager for z/OS, V8.5.1 provides enhanced capabilities for using decision management with IBM CICS, IBM IMS, and IBM z/OS batch applications written in Java, IBM COBOL, and IBM PL/I

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At a glance

IBM® Operational Decision Manager (ODM) V8.5.1 delivers new and enhanced capabilities:

- Enable access to and tracking of actual decision server usage in terms of the number of decisions made via the z/OS® Systems Management Facilities (SMF).
- Enhance support for reusing Java™ based rulesets with COBOL applications.
- Broaden the decision data structures supported for PL/I applications.
- Provide a new IBM Decision Center incremental migration tool to help migrate Decision Center content from one version to the other on a per project basis.

Overview

IBM ODM for z/OS, V8.5.1, the next generation of business rules, provides an elegant development environment, along with a dedicated business user interface, for automating and governing frequently occurring, repeatable business decisions.

The offering provides end-to-end, lifecycle support for business decisions invoked from Java, COBOL, and PL/I applications. This includes capabilities for decision testing and simulation within either the Rule Execution Server (RES) in the WebSphere® Application Server for z/OS or the zRule Execution Server (zRES) for z/OS environments, as well as the ability to trace the execution of how a business decision is made in the zRule Execution Server using the Decision Warehouse feature.

IBM ODM for z/OS provides multiple, business-rule execution choices for z/OS customers who have Java, Enterprise COBOL, and PL/I applications, running as Batch, IMS™ Batch, IMS Message Processing Programs or hosted within CICS® V4.2 or CICS V5.1 regions.

IBM ODM for z/OS, V8.5.1 is designed to provide a smoother transition than the tool used in previous releases, whether it is reusing rules across applications, operating in different language environments, expanding decision management into PL/I applications, or even moving from version to version. Also new with Version
8.5.1 is the ability to keep track of how the software is being used, on a decision basis.

IBM ODM for z/OS and IBM Business Rules for z/OS, available as a separate product, help enable organizations in virtually every industry to improve the quality of transaction, batch, and process-related decisions that are made repeatedly within mainframe applications and to determine the appropriate courses of action for customers, partners, and internal interactions by:

- Automating and governing operational decision making across business processes and applications to help improve business outcomes.
- Helping detect opportunities and risks in real time
- Easily and consistently implementing changes to help meet new market demands or policy requirements.
- Supporting incremental modernization of existing CICS, IMS, and batch applications written in Java, COBOL, or PL/I without a complete re-write.
- Facilitating consistent decision evaluation across platforms, projects, and processes by allowing the reuse of business models between rule projects in z/OS and distributed applications.
- Detecting events and event patterns in real time to enable situational awareness and response of actionable situations.
- Automating the response of highly variable decisions based on the specific context of a process, transaction, or interaction.
- Managing and governing rules-based decision logic separately from application code in order to provide better visibility, understanding, and maintainability compared to traditional application development.
- Providing visibility to business users on how business decisions are made.
- Integrating with a number of other z/OS technologies to create comprehensive decision management solutions written in Java, COBOL, or PL/I, using CICS, IMS, or z/OS batch execution environments.

**Key prerequisites**

IBM System z® processor, which includes z10™, zEnterprise®, or an equivalent hardware server capable of running z/OS V2.1 or z/OS 1.12, or later.

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

**Planned availability date**

December 13, 2013

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

**Description**

The ability to effectively automate decision making within and across business systems helps maximize organizational efficiency. This efficiency can be accomplished by helping to increase employee productivity, and improve the quality of actions that are made repeatedly in the course of the business day. In many cases, to make the best decision at a given moment requires an understanding of a number of different factors, which include:

- Business policies and regulations
- Internal and external requirements
- Organizational best practices
- Interactions taking place over time and across the enterprise
IBM ODM for z/OS, V8.5.1 helps address decision-automation challenges by enabling organizations to build highly flexible, adaptable solutions that can detect and react to data patterns as they occur within a specified time period. Additionally, it is designed to provide the appropriate decision response to transactional and process-oriented business systems.

New in IBM ODM for z/OS, V8.5.1 is the ability to capture the actual usage of the Rule Execution Servers in z/OS (zRES), within CICS regions (also zRES) and on WebSphere Application Server for z/OS (RES) in the form of SMF Type 120 records. These records log the number of decisions made along with additional related information from the perspective of the Rule Execution Server.

This information has a variety of helpful uses. Being able to track actual zRES/RES usage over time enables effective client charge-back processes. The information also can be used to map zRES/RES usage over time and through peak periods for both tuning and diagnostic purposes. The creation of these SMF 120 records is optional. Recording the records in the z/OS Systems Management Facilities follows the established processes and controls SMF provides to all z/OS users.

IBM ODM has long provided tools to help the client extend the use of rulesets created for Java applications to COBOL applications. This is part of our "one version of the truth" ruleset sharing strategy. With IBM ODM V8.5.1, these tools have been significantly enhanced. They now identify Java data structures that would be incompatible with COBOL-based rulesets in their initial run. For each problem structure identified, the tool provides specific information about the problem. In addition, the set of Java structures that can be converted to COBOL structures has been expanded, improving the likelihood of ruleset reuse.

While these tools assist in coordinating the data structures passed from Java and COBOL applications to the shared ruleset, it is still recommended that the rule design process take the potential of multilingual ruleset usage into account. The ruleset sharing enablement tools currently support Java to COBOL. Support for Java to PL/I is a recognized as a future opportunity for expansion of the tools. Support for COBOL or PL/I to Java is not required because these data structures are already rendered into Java structures to be passed to the rules engines.

IBM ODM for z/OS, V8.5 provided the initial support for PL/I applications to use decision management facilities without the need for web service interfaces. IBM ODM for z/OS, V8.5.1 continues to enhance the PL/I support in response to the expanding client experience. This is in keeping with IBM's goal of providing equivalent support for PL/I applications as is done for COBOL applications.

IBM ODM for z/OS, V8.5.1 consists of two orderable products, which together form a comprehensive platform for the management and execution of business rules and business events:

- **Decision Center for z/OS, V8.5.1:** Provides an integrated repository and management components for line-of-business, subject-matter experts to directly participate in the definition and governance of rules-based, decision logic.

  Through the capabilities of Decision Center, business and IT functions can work collaboratively by aligning the entire organization in the implementation of automated decisions and accelerating the maintenance lifecycle as they evolve based on new external and internal requirements.

- **IBM Decision Server for z/OS, V8.5.1:** Provides the run-time components to automate event and rule-based-decision logic on mainframe systems. It enables the detection of actionable business situations and the response of precise decisions based on the specific context of an interaction.

  With Decision Server, organizations can monitor a business network to discover and take action on event-based data patterns, as well as process information against hundreds or even thousands of business rules in order to determine how to respond within both front-end and back-end systems.

Decision Server for z/OS provides specific run times designed to handle the unique aspects of business rule and business event execution. For business
rule execution, three, separate run-time options are provided, by allowing
development teams to choose a deployment strategy that best fits their
mainframe applications and architecture.

A separate product offering, IBM Business Rules for z/OS, provides the same
business rule execution capabilities that are packaged within Decision Server for z/
OS to improve automation and maintainability of rule-based decision logic. Business
Rules for z/OS, V8.5.1 provides the business-rules-specific, run-time components of
Decision Server, for applications that are focused on decision automation and do not
require event-based data pattern detection. Three, different rule execution options
are provided by allowing development teams to build business rule solutions that
meet the specific needs of their mainframe applications and architecture.

IBM ODM for z/OS and Business Rules for z/OS help enable the creation of
applications to intelligently automate a wide range of decisions. Some examples of
these kinds of decision management applications include:

- Product and promotional offers
- Eligibility and pricing determinations
- Case and customer prioritizations
- Risk assessments and fraud determinations

These products provide the ability to adapt quickly to changing conditions, align
across business and IT, and act with precision and reliability.

**Benefits of migrating to IBM ODM for z/OS, V8.5.1**

The enhancements and items of interest for customers of existing precursor
products with current Support and Subscription agreements include the following:

- Enable access to and tracking of actual decision server usage in terms of the
  number of decisions made via the z/OS Systems Management Facilities (SMF).
  ODM clients can record, from the Rule Execution Server's perspective, the
  number of decisions made on behalf of its callers along with other supporting
  information. This information could be useful in understanding RES and zRES
  usage, for user charge back processes, and for ruleset behavioral diagnostics.
  The information will be captured in SMF Type 120 records.

- Enhance support for reusing Java-based rulesets with COBOL applications.
  The Java to COBOL enablement tools are enhanced. These tools identify
  unsupported Java data types along with supporting details to assist in the
  process of enabling an existing Java-based rulesets for use with COBOL
  programs.

- Support for PL/I language.
  Provides PL/I callers the same stubs that are provided for COBOL callers.
  Essentially, this support is handling PL/I include files to provide the decision data
  context in the same way IBM ODM accepts COBOL copybooks. IBM ODM can
  consume either format of the data structures.

Building on the initial support for PL/I applications provided in IBM ODM for z/
OS, V8.5 and Business Rules for z/OS, V8.5, the Version 8.5.1 offerings expand
on the PL/I data structures supported as part of the decision management
interface.

- Provide a new Decision Center incremental migration tool to help migrate
  Decision Center content from one version to the other on a per project basis.

In general:

- Decision testing and simulation within the zRule Execution Server environment.
- Ability to trace the execution of how a decision was made in zRule Execution
  Server through the Decision Warehouse feature.
• Decision evaluation with IMS batch applications. Provides the ability to call from a batch application to a zRule Execution Server on z/OS or from a Message Processing Region transaction.
• Streamlined process for making changes to the COBOL copybook that defines the data model. This removes Java steps.
• End-to-end support provided for Java, COBOL, and PL/I applications that access decisions hosted on IBM WebSphere Application Server for z/OS.
• Support of WebSphere Application Server on z/OS, V8.5.

IBM has deprecated the generation of rules in COBOL code capability in the ODM products as of Version 8.5. The deprecated capability continues to be supported for defect fixes and support questions, but no new enhancements, feature updates, or additional platform support are planned. This capability will be removed from the Operational Decision Manager products at a later date.

Customers using the generation of rules in COBOL code capability are encouraged to contact an IBM representative to evaluate the current IBM ODM product rules engine capabilities.

For the current list of languages supported, visit

http://www-01.ibm.com/software/websphere/ilog_supported_languages.html

Accessibility by people with disabilities

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


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

Decision management is an approach that combines software and expertise to increase the value of the frequent customer, partner, and internal interactions that take place within and across business systems. It involves both being able to make the best possible decision at the current moment based on data and situational context, as well as being able to use data to discover insights that can be used to continually improve decisions over time.

These decisions may be fully automated (for example, through an online application or a self-service, point-of-sale system) or they may be used to provide decision support to people (for example, through a system used at a call center, branch or store location, or in the back-office).

There are two primary technology areas that fit within the decision management concept:

- **Operational decision management** - Focuses on the automation and governance of frequently occurring, repeatable decisions that control the actions of critical business systems. The principal IBM mainframe offering in this area is IBM ODM for z/OS.
- **Analytic decision management** - Focuses on the transformation of data into predictive insight and prescriptive recommendations that can be utilized to improve repeatable decisions. The principal IBM offering in this area is IBM SPSS® Decision Management.

While these two technology areas are highly complementary, they can be used separately or together as part of a decision management solution. Each area brings a different focus to improving process and transactional decisions.

IBM ODM for z/OS provides the ability to intelligently automate a wide range of decisions across business processes and applications. It unites IBM capabilities for business rules management and business event processing in order to drive more responsive actions to business opportunities or risk conditions. By enhancing the IBM business rules repository to also govern event-based decisions, IBM ODM for z/OS helps provide organizations with the comprehensive capabilities needed to define, govern, and maintain the logic that will help drive the actions of critical business systems.

IBM ODM for z/OS lets business users test rule changes and design test scenarios against their z/OS structures to validate the business rule changes prior to deployment. It strengthens simulation analysis enabling use with z/OS file structures. It streamlines the decision development experience for z/OS developers and allows them to deploy a decision-based solution with fewer new (Java) skills required.

In addition, a standard API for COBOL and PL/I applications is provided to invoke rules independent of the Decision Server deployment in use. CICS, IMS, and z/OS batch applications are enabled to invoke rules from zRule Execution Server.

The configuration options include the capability to use the Decision Engine as the Rule Execution Server (RES) on WebSphere Application Server for z/OS, via a
WebSphere Optimized Local Adapter connector, as well as in the zRule Execution Server (zRES) in z/OS or CICS.

**Reference information**

For additional information on IBM ODM V8.5.1, refer to Software Announcement ZP13-0524, dated October 1, 2013.

For additional information on IBM ODM Application Pattern V8.5.1, refer to Software Announcement ZP13-0524, dated October 1, 2013.

**Availability of national languages**

<table>
<thead>
<tr>
<th>Description</th>
<th>Availability date</th>
<th>Language</th>
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<td>December 13, 2013</td>
<td>Multilingual, Chinese-Simplified, Chinese Traditional, Dutch, English US, French, German, Italian, Japanese, Korean, Polish, Portuguese Brazilian, Russian, Spanish</td>
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<tr>
<td>IBM Business Rules for z/OS V8.5.1</td>
<td>December 13, 2013</td>
<td>Multilingual, Chinese-Simplified, Chinese Traditional, Dutch, English US, French, German, Italian, Japanese, Korean, Polish, Portuguese Brazilian, Russian, Spanish</td>
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For the current list of supported languages, visit [http://www-01.ibm.com/software/websphere/ilog_supported_languages.html](http://www-01.ibm.com/software/websphere/ilog_supported_languages.html)

**Program number**

<table>
<thead>
<tr>
<th>Program number</th>
<th>Program name</th>
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<tr>
<td>5655-Y17</td>
<td>IBM Operational Decision Manager for z/OS</td>
</tr>
<tr>
<td>5655-Y31</td>
<td>IBM Business Rules for z/OS</td>
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**Product identification number - PID number**

IBM Operational Decision Manager for z/OS, V8.5.1

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<th>Subscription and Support PID number</th>
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IBM Business Rules for z/OS, V8.5.1

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<tr>
<td>5655-Y31</td>
<td>5655-ILH</td>
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Additional information

Consulting and services

Professional Services are available to help clients get into production quickly and, if desirable, to assist with planning and growing into full-blown business integration solutions. These services can be provided through our IBM Business Partner community or through IBM Global Services.

To contact a Software Services sales specialist, visit

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

Education support

IBM delivers a comprehensive portfolio of education services to help customers successfully deploy and integrate Application and Integration middleware products to their maximum potential.

Education is a key component to ensuring software success. The IBM education team is committed to providing the highest quality education available to help your company prosper in today's competitive marketplace. IBM delivers successful education programs that provide your people with the skills necessary to make your business profitable using IBM software.

The IBM education team works closely with IBM product developers and IBM services organizations to ensure that the courses we offer provide the most up-to-the-minute technical and product information. Our courses place an emphasis on the advanced knowledge and insight that only these sources can provide. We draw from a deep pool of IBM technical experience in the development of our courses, and pass that knowledge on to our students.

For more information about available education offerings, visit

http://www.ibm.com/training

For building skills for a smarter planet, visit


Offering Information

Product information is available via the Offering Information website

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

Publications

The following publication is shipped with this program:

<table>
<thead>
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<th>Title</th>
<th>Order Number</th>
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<tbody>
<tr>
<td>IBM Operation Decision Manager for z/OS, V8.5.1</td>
<td>GI11-9605</td>
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<td>- Program Directory</td>
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</tr>
<tr>
<td>IBM Business Rules for z/OS, V8.5.1</td>
<td>GI11-9606</td>
</tr>
<tr>
<td>- Program Directory</td>
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The documentation for IBM ODM for z/OS, V8.5.1 is provided in an information center and will be available on November 29, 2013 at

http://pic.dhe.ibm.com/infocenter/dmanager/v8r5m1/index.jsp

Translated documentation will be available on November 29, 2013.

Technical information

Specified operating environment

Hardware requirements
IBM System z processor, including z10, zEnterprise, or an equivalent hardware server capable of running z/OS V2.1 or z/OS 1.12, or later.

Software requirements
IBM ODM for z/OS, V8.5.1 supports:

• z/OS V2.1, or later
• z/OS V1.12, or later

Visit the following website for a complete detailed list of hardware and software requirements for IBM Decision Server for z/OS, V8.5.1 IBM Decision Center for z/OS, V8.5.1 and IBM Business Rules for z/OS, V8.5.1

http://www-01.ibm.com/support/docview.wss?uid=swg27023067

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
Refer to Usage restriction section in the Terms and conditions section of this announcement, or to the License Information document that is available on the IBM Software License Agreement website


Planning information

Packaging
The IBM Decision Server for z/OS, V8.5.1 product package includes:

• Products on 3590 tape
• Decision Server Windows™ DVDs
• License Information for Operational Decision Server for z/OS (GC34-2740)
• Program Directory - IBM Operational Decision Manager for z/OS, V8.5.1 (GI11-9605)
• Program Directory - WebSphere Application Server for z/OS, V8.5 (GI11-9488)

The IBM Decision Center for z/OS, V8.5.1 product package includes:

• Products on 3590 tape
• Decision Center Windows DVD
• License Information for Operational Decision Center for z/OS V8.5.1 (GC34-2739)
The IBM Business Rules for z/OS, V8.5.1 product package includes:

- Products on 3590 tape
- IBM Business Rules Decision Server Windows DVDs
- License Information for IBM Business Rules for z/OS (GC34-2741)
- Program Directory - IBM Business Rules for z/OS, V8.5.1 (GI11-9606)
- Program Directory - WebSphere Application Server for z/OS, V8.5 (GI11-9488)

This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

Security, auditability, and control

IBM ODM for z/OS, V8.5.1 and IBM Business Rules for z/OS, V8.5.1 use the security and auditability features of the host software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

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

Shopz 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). Shopz is available in the US and several countries in Europe. In countries where Shopz 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 Shopz website at


5655-Y17 IBM Operational Decision Manager for z/OS, V8.5.1
5655-Y08 IBM Operational Decision Manager for z/OS
   Software Subscription and Support
5655-Y31 IBM Business Rules for z/OS, V8.5.1
5655-ILH IBM Business Rules for z/OS
   Software Subscription and Support
Charge metric

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<td>5655-Y17</td>
<td>Value Unit</td>
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<td>IBM Business Rules for z/OS, V8.5.1</td>
<td>5655-Y31</td>
<td>Value Unit</td>
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The programs in this announcement all have Value Unit-based pricing.

<table>
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<tr>
<th>Program number</th>
<th>Program name</th>
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<td>5655-Y17</td>
<td>IBM Operational Decision Manager for z/OS, V8.5.1</td>
<td>VUE007</td>
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<td>5655-Y31</td>
<td>IBM Business Rules for z/OS, V8.5.1</td>
<td>VUE007</td>
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</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 minimum</th>
<th>MSUs maximum</th>
<th>Value Units/MSU</th>
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<tr>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>45</td>
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<tr>
<td>176</td>
<td>315</td>
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<tr>
<td>316</td>
<td>+</td>
<td>0.2</td>
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Value Units for mainframes without MSU ratings:

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<th>Hardware</th>
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<tr>
<td>MP3000 H50</td>
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<td>MP3000 H70</td>
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<tr>
<td>ESL models</td>
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</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 * 1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42 * .45</td>
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<tr>
<td>Tier B</td>
<td>130 * .36</td>
<td>46.80</td>
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<tr>
<td>Tier C</td>
<td>140 * .27</td>
<td>37.80</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185 * .20</td>
<td>237.00</td>
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</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.
Basic license

IBM ODM for z/OS, V8.5.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

Program name: IBM Operational Decision Manager for z/OS, V8.5.1
Program PID: 5655-Y17

Entitlement identifier | Description                  | License option/Pricing metric            |
----------------------|------------------------------|------------------------------------------|
S0170BV              | IBM Decision Server for z/OS | Basic OTC, Per MSU-day TUC               |
S0170BP              | IBM Decision Center for z/OS | Basic OTC, Per MSU-day TUC               |

IBM Business Rules for z/OS, V8.5.1 is eligible for On/Off CoD with a temporary use charge calculated based on MSUs per-day usage.

Program name: IBM Business Rules for z/OS, V8.5.1
Program PID: 5655-Y31

Entitlement identifier | Description                  | License option/Pricing metric            |
----------------------|------------------------------|------------------------------------------|
S0170DB              | IBM Business Rules for z/OS  | Basic OTC, Per MSU-day TUC               |

Translation from MSUs to Value Units

<table>
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<td>Tier B</td>
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<td>Tier C</td>
<td>176-315</td>
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<td>Tier D</td>
<td>316+</td>
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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 Operational Decision Manager for z/OS, V8.5.1
Program PID: 5655-Y17

Entitlement identifier | Description                  | License option/Pricing metric            |
----------------------|------------------------------|------------------------------------------|
S0170BV              | IBM Decision Server for z/OS | Basic OTC, Value Units                   |
S0170BV              | IBM Decision Server for z/OS | Basic OTC, Value Units                   |

Orderable supply ID | Language | Distribution medium |
-------------------|----------|---------------------|
S0170BS             | MUL      | 3590 tape cartridge  |
                     |          | uncomp              |

Websphere Application Server z/OS V8, Optional Code

Orderable supply ID | Language | Distribution medium |
-------------------|----------|---------------------|
S0177G3            | US English | 3590 tape cartridge  |
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Orderable supply ID  Language                   Distribution medium
S0170BW              US English                    3590 tape cartridge uncomp

Websphere Application Server z/OS V8, Optional Code

Orderable supply ID  Language                   Distribution medium
S0177G3              US English                    3590 tape cartridge uncomp

Program name: IBM Business Rules for z/OS, V8.5.1
Program PID: 5655-Y31

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Orderable supply ID  Language                   Distribution medium
S0170DC              US English                    3590 tape cartridge uncomp

Websphere Application Server z/OS V8, Optional Code

Orderable supply ID  Language                   Distribution medium
S0177JD              US English                    3590 tape cartridge uncomp

Subscription and Support PID: 5655-Y08

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Orderable supply ID  Language                   Distribution medium
S016VN9              US English                    Hardcopy publication

Subscription and Support PID: 5655-Y08

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Orderable supply ID  Language                   Distribution medium
S016VNC              US English                    Hardcopy publication
Subscription and Support PID: 5655-ILH

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Orderable supply ID Language Distribution medium

S016H0N US English 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.

**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 recom- mends 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 website 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**

- IBM ODM for z/OS , V8.5.1
  - Decision Center for z/OS , V8.5.1: L-ASAY-99XHP7
  - Decision Server for z/OS , V8.5.1: L-ASAY-99XFRH
- IBM Business Rules for z/OS , V8.5.1: L-ASAY-99YJ5Z

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

Usage restriction
Yes. Usage is limited to the quantity of Value Units licensed.

For additional information, refer to the License Information document that is available on the IBM Software License Agreement website


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
### Other support

SoftwareXcel

### 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.

### 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>
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<tr>
<td>5655-Y17</td>
<td>IBM Operational Decision Manager for z/OS, V8.5.1</td>
<td>Execution-based</td>
</tr>
<tr>
<td>5655-Y31</td>
<td>IBM Business Rules for z/OS, V8.5.1</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. 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 local IBM representative for the applicable charges.

Passport Advantage

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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