IBM WebSphere Studio Asset Analyzer V4.1 speeds application understanding and reduces the risk of application changes

Overview
Existing applications are an IT organization’s biggest asset, and maintaining them consumes a large portion of the typical IT budget. Organizations are seeking to increase maintenance productivity, reduce costs, and devote a greater portion of their budgets to projects that add new business value and enable their business to respond more flexibly to changing markets and IT requirements—including enabling existing applications for Web services and a Service-Oriented Architecture.

WebSphere® Studio Asset Analyzer for Multiplatforms V4.1 assists IT personnel with the maintenance, extension, and transformation of existing applications through rapid application understanding, impact analysis, and connector building assistance. It helps enterprise customers to modernize their existing enterprise assets by providing knowledge about their static IBM® zSeries® and distributed environments (finding and reusing application code and the componentry that connects that code), and their J2EE dynamic environment (understanding what code is executing in runtime environments). WebSphere Studio Asset Analyzer can help IT customers build and deploy applications that include mainframe and distributed components, and it effectively scales to become an enterprise-wide repository of application insight.

WebSphere Studio Asset Analyzer V4.1 offers the following enhancements:

- Deeper scanning
  - More thorough scanning by employing IBM’s actual COBOL and PL/I compilers
  - Expanded COBOL and PL/I support, including SQL CALL and SQL CREATE PROCEDURE statements and new DB2® syntax introduced in DB2 V8
- Easier PL/I application migration to the latest PL/I compiler through support of PL/I controlled variables and file declarations
- Updated distributed artifact support — J2EE 1.3, WebSphere Application Server V5 and V5.1, and more
- Increased productivity
  - New custom queries that enable you to more easily mine the WebSphere Studio Asset Analyzer metadata to meet your unique information requirements.
  - New bookmark capability that allows easy retrieval of summary and details pages.
  - The ability to make distributed artifacts the start (seed) of an impact analysis. In addition, impact analysis has an improved user interface and is more flexible.
  - Simplified installation and configuration
  - Numerous other usability and performance enhancements.
- Simpler integration with other tools
  - External API interface. A Web services API enables other tools to make use of WebSphere Studio Asset Analyzer’s application insight.
- Expanded platform support
  - IBM® pSeries® AIX® support. In addition to z/OS® and Windows™, WebSphere Studio Asset Analyzer can now scan source and runtime assets on AIX, and the WebSphere Studio Asset Analyzer Web applications themselves can be deployed on AIX.

Planned availability date
March 25, 2005

At a glance
WebSphere Studio Asset Analyzer can increase developer and analyst productivity by automating the discovery phase of a development cycle, which can consume nearly 1/3 of a project’s total development costs. It can:

- Reduce the complexity of software projects by delivering up-to-date knowledge of all application components from the code itself, supplementing outdated or nonexistent developers’ and analysts’ documentation
- Improve process and team efficiency by making the same application insight available to all team members
- Shorten the learning phase for new developers
- Aid understanding of application dependencies at multiple levels, including:
  - Jobs and transactions
  - Files and databases
  - Programs and applications
- Reduce risk in routine application maintenance and operational changes by enabling a thorough analysis of proposed changes
- Enable you to verify that you have all the source components for an application
- Help find existing application assets, which could be turned into components for reuse in Web or Web-services applications
- Provide a scalable, enterprise-wide repository of mainframe and distributed application insight
Programmatic access through either direct SQL queries or the new Web services API described below

Interactive access to WebSphere Studio Asset Analyzer’s application insight through a Web browser

Organizational access through either direct SQL queries or the new Web services API described below

The option to write your own scanner for your unique source components and import related application insight into WebSphere Studio Asset Analyzer

WebSphere Studio Asset Analyzer scans mainframe and distributed software assets, storing related application information in a DB2 repository that resides on the mainframe. You do not have to download your zSeries application inventory to a workstation, nor do you have to upload your distributed application inventory to a mainframe. WebSphere Studio Asset Analyzer scans source where it lives, whether that be in PDS/PDSE datasets on the mainframe, directories on Windows or AIX, or one of a number of source code management systems (SCMs). For distributed assets, WebSphere Studio Asset Analyzer supports scanning from IBM Rational® ClearCase®, CMVC, CVS, and PVCS. For mainframe assets, Serena ChangeMan ZMF and SCLM is supported. Other SCMs are supported through a user exit. A customer-supplied program calls the SCM (some programming is required). Web applications can be scanned from a WebSphere Application Server running on either Windows or AIX.

**Productivity enhancements**

**Impact analysis enhancements:** You can now use distributed artifacts as the starting point (seed) of an impact analysis, allowing you to determine the impact of changes to assets such as Java Packages, JSPs, and Data Sources, as well as many other distributed asset types. Impact analysis also has an improved, more flexible user interface enabling more direct user interaction with the process of performing analysis on the impact of changes:

- Wizard-driven interface for creating impact analyses
- Ability to indicate the scope of analysis, such as analysis only within programs or across program boundaries, by specifying a level for analysis
- Ability to control long-running impact analysis processes via a Cancel button, allowing you to end processes that you may have unintentionally started or that cover a broader set of analyses than you intended
- Informational messages throughout the process indicating the status of creating and performing analysis
- Tabbed output on Impact Analysis details page, enabling you to toggle between the summary, detailed, and graphical views of the results of impact analysis

**Specify data element scope:** New options allow you to view only top level data elements, only data elements actually used, or all data elements (used and declared).

**Bookmarks:** A new bookmark capability allows easy retrieval of summary and detail query pages.

**Custom queries:** New custom queries enable you to create, name, save, and reuse your own SQL queries to more effectively mine your repository of application insight to meet your unique information requirements.

**Simplified installation:** The Net.Data prerequisite is no longer required, which simplifies installation. There is no loss of product functionality due to this change.

**Other usability enhancements**

- Scalability improvements
- Enhanced Database Status page that enables users to more easily diagnose unresolved and unreferenced references and other anomalies in the scanning process
- Improved consistency across the user interface
- High-level Metrics page that provides inventory statistics at a glance
- Improved WebSphere look-and-feel

**Scanning improvements**

**Compiler-based scanning support for COBOL and PL/I**

In V4.1, you can select one of two scanning options:

1. The original method using a scanner internal to WebSphere Studio Asset Analyzer (primarily for older COBOL and PL/I source).
2. The Enterprise COBOL V3.3 and Enterprise PL/I V3.3 compilers for scanning. The actual IBM compilers provide more thorough scanning.

**PL/I controlled variables and file declaration support:** V4.1 identifies PL/I controlled variables and file declarations in order to aid in the migration of PL/I source code to the latest enterprise version of the PL/I compiler.

**Improvements to distributed artifact support:** V4.1 can scan the WebSphere Application Server V5 and V5.1 source and runtime environment. The latter helps developers understand the topology and application structure of running Web applications. Additional enhancements include support for J2EE 1.3 artifacts.

**Expanded COBOL and PL/I support:** In V4.1, WebSphere Studio Asset Analyzer “understands” the following additional constructs in COBOL and PL/I programs:

- The SQL CALL and SQL CREATE PROCEDURE statements
- New DB2 syntax introduced in DB2 V8

### New tools integration

**External API interface:** WebSphere Studio Asset Analyzer Version 4.1 provides a Web services interface, externalizing much of its application insight and making it accessible to other commercial or home-grown tools. For example, the IBM Asset Transformation Workbench uses this interface to initiate an impact analysis in WebSphere Studio Asset Analyzer and retrieve the results of this analysis. WebSphere Studio Asset Analyzer can pass a list of all application components and their locations in your source-code management system to the Asset Transformation Workbench for download and further analysis in the Asset Transformation Workbench.

### New platform support

**AIX support:** In addition to z/OS and Windows, WebSphere Studio Asset Analyzer can now scan source and runtime assets on pSeries AIX systems, and the WebSphere Studio Asset Analyzer Web applications themselves can be deployed on pSeries machines running AIX.

### Value Unit-based pricing

Value Unit pricing for eligible zSeries IBM Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each zSeries 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 customers. For each zSeries 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 offers additional price benefits for customers. The quantity of each zSeries IPLA program that you have acquired is referred to as “entitled license capacity.” If you wish to grow your entitled license capacity for a zSeries IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each zSeries 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 VUs 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 Web site

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 zSeries IPLA program you selected, refer to the Terms and conditions section.

**IPLA and Subscription and Support considerations**

IPLA licenses can be transferred from one machine to another within, but not limited to, an enterprise. The customer may aggregate the capacity for all the processors the product is operated on to achieve a more economic price. This will result in a single Proof of Entitlement. It is the customer’s responsibility to manage the distribution of Value Units within the limits of the entitlement of the product license.

Subscription and Support must cover the same capacity as the product license entitlement. Subscription and Support will be available in the country in which the agreement is made.

### Product positioning

You can use WebSphere Studio Asset Analyzer with related IBM products, including:

- WebSphere Studio Enterprise Developer, which offers a single enterprise tool for developing and maintaining a new generation of COBOL, Java, and Web services applications
- IBM CICS Interdependency Analyzer, which provides detailed understanding of your CICS application inventory through runtime analysis of CICS systems
- IBM Asset Transformation Workbench, which simplifies and accelerates large mainframe application transformation projects

**Business Partner information**

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business
Partner information for this announcement. A PartnerWorld ID and password are required (use IBM ID).

BP Attachment for Announcement Letter 205-075


**Trademarks**

MVS and IMS are trademarks of International Business Machines Corporation in the United States or other countries or both.
WebSphere, the e-business logo, zSeries, DB2, AIX, pSeries, z/OS, CICS, ClearCase, Rational, and Net.Data are registered trademarks of International Business Machines Corporation in the United States or other countries or both.
Windows is a trademark of Microsoft Corporation.
Java is a trademark of Sun Microsystems, Inc.
Other company, product, and service names may be trademarks or service marks of others.
**Education support**

**Consulting and services**

IBM consultants offer training services to provide:

- Installation, configuration, and inventory collection assistance
- A mentor workshop

**Installation, configuration, and inventory collection assistance:** The IBM consultant will work with your system administrators to install and configure the WebSphere® Studio Asset Analyzer host components. The IBM consultant will also scan your application components to build the information files, then to load the information into the database. This is the base line preparation needed for the change impact and componentization analysis you will do after your application information has been loaded. This services engagement offers faster implementation of WebSphere Studio Asset Analyzer, resulting in fewer technical problems, ease of deployment within your development community, and maximization of your staff’s productivity by leveraging IBM’s experienced consultants to:

- Verify the customer’s setup of WebSphere Studio Asset Analyzer prerequisite software and hardware
- Assist with the System Modification Program/Extended (SMP/E) installation and configuration of the WebSphere Studio Asset Analyzer host components, as well as workstation components
- Create, configure, and verify the DB2® database
- Configure the IBM HTTP Server and WebSphere Application Server
- Verify the host and workstation communication elements, if applicable
- Review and explain the documentation, with a focus on important user definition files
- Utilize the following WebSphere Studio Asset Analyzer features:
  - Perform inventory collection to analyze and store metadata about source programs, Job Control Language (JCL), CICS® basic mapping support (BMS) maps, CICS region, IMS™ resources, jar files, and so on
  - Demonstrate the new features of WebSphere Studio Asset Analyzer exploration and analysis via the browser-based user interface
- Invoke and customize, as appropriate, the analyzers to scan your application resources
- Review the results with key application management/staff personnel

**Mentor workshop:** The IBM consultant will conduct a training workshop for up to ten of your employees in the use of WebSphere Studio Asset Analyzer. Your team will get an overview of the features of the product with hands-on training to analyze the interdependencies and relationships of the pieces of your applications. They learn to use the tools to identify impacts caused by changes and build connectors to link Web pages to programs and data running on z/OS®. They will also learn to create components using the tools available. Your team will utilize the captured data from your applications — the programs with which they are familiar. This offering will:

- Describe the analyzers for source programs, JCL, CICS BMS maps, CICS region, IMS resources, jar files, and so on
- Demonstrate how to view relationships between your programs, data, and JCL
- Show you how a change will impact your application
- Illustrate how to use WebSphere Studio Asset Analyzer to assist in building connectors, or interface definitions, based on your existing CICS resources:
  - Transactions
  - Screen definitions (BMS maps)
  - Programs
  - Files
- Demonstrate how to use the connector to access data/programs running on z/OS
- Explain the output from the tools and how to read the information in the reports

The services offerings are quick-start, hands-on training for your developers to promote WebSphere Studio Asset Analyzer understanding and acceptance. Use of your application data ensures immediate utilization of the tools with relevant training for your intended WebSphere Studio Asset Analyzer usage. Get started today and maximize your staff’s productivity by leveraging IBM’s experienced consultants.

---

**Offering Information**

Product information is available via the Offering Information Web site

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

**Publications**

The Program Directory (G110-8679) and License Information (GC18-9522) are supplied automatically with the basic machine-readable material. No other hardcopy publications are shipped with the product.
The optional publication WebSphere Studio Asset Analyzer Configuration Guide (GC18-9517) will be available for a fee after product availability. It can be ordered from the IBM Publications Center.

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 U.S.) or customer number for 50 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.

Displayable softcopy publications: WebSphere Studio Asset Analyzer V4 publications are offered in displayable softcopy form. The displayable manuals are part of the basic machine-readable material.

Technical information

Specified operating environment

Hardware requirements: WebSphere Studio Asset Analyzer will run on any hardware configuration supported by the licensed programs specified below.

Software requirements: WebSphere Studio Asset Analyzer V4.1 software requirements can be grouped into runtime prerequisites and scanning prerequisites, as follows:

WebSphere Studio Asset Analyzer runtime prerequisites:
Prerequisites for the WebSphere Studio Asset Analyzer runtime components.

One of the following:

- z/OS V1.1 (5694-A01), or later
- OS/390® V2.10 (5647-A01), or later

One of the following:

- DB2 UDB for z/OS and OS/390 V7 (5675-DB2), Service Level UQ82348, or later
- DB2 UDB for z/OS V8 (5625-DB2), or later

Note: RUNSTAT in IBM DB2 Utilities Suite for z/OS V7.01 (5697-E98), or later, is required for tuning WebSphere Studio Asset Analyzer’s repository.

One of the following:

- WebSphere Application Server for z/OS and OS/390 V4 (5655-F31), Service Level W401605, or later, installed on the host with WebSphere Studio Asset Analyzer
- WebSphere Application Server for z/OS V5.1 (5655-I35), Service Level W510004, or later, installed on the host with WebSphere Studio Asset Analyzer
- WebSphere Application Server Advanced Edition V4.0.3, or later, installed on a server or workstation running Windows™ XP Professional (SP1, or later), Windows 2000, or Windows NT™ V4 (SP4, or later)
- WebSphere Application Server Enterprise V5.1, or later, installed on a server or workstation running AIX®, 5.2, Windows XP Professional (SP1, or later), Windows 2000, or Windows NT V4 (SP4, or later)

Note: If enabling distributed asset support capabilities, you must have WebSphere Application Server installed on Windows or AIX in order to have source viewing capabilities, even if you have installed WebSphere Application Server for z/OS.

To access WebSphere Studio Asset Analyzer from a client workstation:

- Microsoft Internet Explorer 5.5, or later. WebSphere Studio Asset Analyzer takes advantage of Adobe technology to render graphics in SVG format. Currently the Adobe Web browser plug-in for SVG exists in its most robust form only for Internet Explorer. In the future, when an Adobe plug-in provides similar support for other Web browsers, the WebSphere Studio Asset Analyzer development team intends to test them and extend WebSphere Studio Asset Analyzer support to other browsers.

To access WebSphere Studio Asset Analyzer programatically:

- WebSphere Application Server V5.1, if using the WebSphere Studio Asset Analyzer Web services API framework new in V4.1
- Any DB2 client or other method of issuing SQL commands against the WebSphere Studio Asset Analyzer repository in DB2

WebSphere Studio Asset Analyzer scanning prerequisites: The following software is required if you plan to scan related source or runtime assets in WebSphere Studio Asset Analyzer.

If you plan to scan DB2 catalog information, any of the following:
- DB2 UDB for z/OS and OS/390 V7 (5675-DB2), or later
- DB2 UDB for z/OS V8 (5625-DB2), or later

If you plan to scan WebSphere applications, any of the following:

- WebSphere Application Server Advanced Edition V4.0.3, or later, installed on a server or workstation running Windows XP Professional (SP1, or later), Windows 2000, or Windows NT V4 (SP4, or later)
- WebSphere Application Server V5.0, or later, installed on a server or workstation running AIX 5.2, Windows XP Professional (SP1, or later), Windows 2000, or Windows NT V4 (SP4, or later)

If you plan to use the IMS support in WebSphere Studio Asset Analyzer:

- IMS/ESA® Database Manager V5 (5685-012), or later
- IMS/ESA Transaction Manager V5 (5685-013), or later
- One of the following:
  - IMS Library Integrity Utilities for z/OS V1 (5655-I42), or later
  - IMS Library Management Utilities for OS/390 V1 (5655-E04), or later

If you plan to use the CICS support in WebSphere Studio Asset Analyzer:

- CICS Transaction Server V1.3 (5655-147), or later, with service level UQ48250

If you are using WebSphere Studio Asset Analyzer with WebSphere Application Server installed on Windows or AIX, you must also have the following installed on your Windows or AIX server:
One of the following:
- DB2 Connect® Enterprise Edition V7.02 (5648-D42)
- DB2 Connect Enterprise Edition V8.01, Fixpack 6 (5765-F30)

Note: While you can use DB2 Connect V7.1 with DB2 UDB V8, it is recommended that you use DB2 Connect V8, Fixpack 6.

Java™ Runtime Environment (JRE) V1.3.1 or V1.4

If you plan to use the COBOL and/or PL/I compiler-based scanning support new in WebSphere Studio Asset Analyzer V4.1:
- IBM Enterprise COBOL for z/OS V3.3 (5655-G53) with service level UQ97019
- IBM Enterprise PL/I for z/OS V3.3 (5655-H31)

Planning information

License charge clarifications: Some components of WebSphere Studio Asset Analyzer can be run on Windows or AIX systems. There is no additional license charge for WebSphere Studio Asset Analyzer components running on these operating systems. These components are licensed for use with WebSphere Studio Asset Analyzer only.

Packaging: The WebSphere Studio Asset Analyzer package is distributed with the following contents:
- Basic machine-readable material on the customer-selected distribution medium
- Program Directory (GI10-8679)
- License Information (GC18-9522)

Ordering information

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

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>
<th>Value Units/MSUs</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-M22</td>
<td>WebSphere Studio Asset Analyzer V4</td>
<td>VUE007</td>
<td>* 1.00</td>
<td>= 3.00</td>
</tr>
<tr>
<td>5655-G49</td>
<td>WebSphere Studio Asset Analyzer Subscription &amp; Support</td>
<td>VUE007</td>
<td>* .45</td>
<td>= 18.90</td>
</tr>
</tbody>
</table>

For each IBM ® server® zSeries® IBM Program License Agreement ( 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 zSeries 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>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base 1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tier A 4</td>
<td>45</td>
<td>0.45</td>
<td>1.80</td>
</tr>
<tr>
<td>Tier B 46</td>
<td>175</td>
<td>0.36</td>
<td>58.50</td>
</tr>
<tr>
<td>Tier C 176</td>
<td>315</td>
<td>0.27</td>
<td>46.80</td>
</tr>
<tr>
<td>Tier D 316</td>
<td>+</td>
<td>0.2</td>
<td>63.20</td>
</tr>
</tbody>
</table>

Value Units for mainframes without MSU ratings:

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

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

If your required license capacity is 1,500 MSUs for your selected zSeries 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>= 3.00</td>
</tr>
<tr>
<td>Tier A</td>
<td>42</td>
<td>= 18.90</td>
</tr>
<tr>
<td>Tier B</td>
<td>130</td>
<td>= 46.80</td>
</tr>
<tr>
<td>Tier C</td>
<td>140</td>
<td>= 37.80</td>
</tr>
<tr>
<td>Tier D</td>
<td>1,185</td>
<td>= 237.00</td>
</tr>
</tbody>
</table>

Total 1,500 343.50

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

Ordering z/OS through the Internet

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


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

Basic license

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

WebSphere Studio Asset Analyzer V4 is eligible for On/Off CoD with a Temporary Use Charge calculated based on MSUs-per day usage.
Program name: WebSphere Studio Asset Analyzer V4
Program PID: 5655-M22

Entitlement identifier  Description  License option/ pricing metric
S011JW0  WebSphere Studio Asset Analyzer V4  Basic OTC, Per MSU-day TUC

Translation from MSUs to Value Units

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

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

Program name: WebSphere Studio Asset Analyzer V4
Program PID: 5655-M22

Entitlement identifier  Description  License option/ pricing metric
S011JW0  WebSphere Studio Asset Analyzer V4  MSU-based OTC, Per Value Unit

Orderable supply ID  Language  Distribution medium
S011JW4  English  3480 Tape

Subscription and Support PID: 5655-G49

Entitlement identifier  Description  License option/ pricing metric
S00V941  WebSphere Studio Asset Analyzer Subscription and Support No Charge  Software Subscription and Support, Decline No Charge, Registration

Orderable supply ID  Language  Distribution medium
S00XM4Z  English  Hardcopy publication

Subscription and Support

To receive voice technical support via telephone during normal business hours 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 Support (IAAS). This offering:

- Entitles customers to future releases and versions at no additional charge. Note that the customer is not entitled to new products.

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

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

Customized Offerings

Product media is shipped only via Customized Offerings (for example, CBPDO, ServerPac, SystemPac®). Non-customized items (CDs, diskettes, source media, media kits) will continue to be shipped via the stand-alone product.

Terms and conditions

Licensing: IBM International Program License Agreement (IPLA). Proofs of Entitlement (PoEs) are required for all authorized use.

These products are licensed under the IPLA, the associated Agreement for Acquisition of Support, and the Addendum for Support (Z125-6312) which provides 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. S/390® and zSeries IBM Operational Support Services — SoftwareXcel is an option for those customers who desire added services.

Limited warranty applies: Yes

Warranty: This program has warranty for a minimum of one year from acquisition from IBM or authorized IBM Business Partner. The warranty provided to the customer, for at least one year from acquisition, is access to databases (read Web sites) for program information and FAQs, including any known fixes to defects, which the customer can download or obtain otherwise and install at leisure.

Program support: Enhanced Support, called Subscription and Support, 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. The customer will be notified of discontinuance of support with 12 months’ notice.

Money-back guarantee: If for any reason you are dissatisfied with the program, return it within 30 days from the invoice date, to the party (either IBM or its reseller) from whom you acquired it, for a refund. This applies only to your first acquisition of the program.

Copy and use on home/portable computer: No

Volume orders (IVO): No

Passport Advantage® applies: No
Software Maintenance applies: No

For operating system software, the revised IBM Operational Support Services — SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the newly announced 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 SoftwareXcel offering, visit http://www.ibm.com/services/sl/products

For additional information on the revised IBM Operational Support Services, refer to Services Announcement 601-023, dated July 10, 2001.

IBM Operational Support Services — SoftwareXcel: Yes

IBM @server™ iSeries™ Software Maintenance applies: No

Variable charges apply: No

Educational allowance available: Yes, 15% education allowance applies to qualified education institution customers.

Sub-capacity terms and conditions

For each zSeries 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 zSeries 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 zSeries IPLA program you selected, refer to the Ordering information section.

Program number  Program name          Terms
5655-M22     WebSphere Studio         Execution-based
             Asset Analyzer V4

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 zSeries IPLA program with these terms equals the MSU-rated capacity of the machines where the zSeries IPLA program executes.

For more information on mainframe MSU-rated capacities, refer to The System/370, System/390, and zSeries Machine Exhibit (Z125-3901) or visit the “Mainframes” section of the zSeries Exhibits Web site

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

Reference-based: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of the applicable 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 zSeries IPLA sub-capacity program with these terms equals the capacity of the LPARs where the zSeries IPLA program executes.

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

Reference-based: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of the applicable MLC program. This MLC program is called the “parent” program.

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

For more information on mainframe MSU-rated capacities, refer to The System/370, System/390, and zSeries Machine Exhibit (Z125-3901) or visit the “Mainframes” section of the zSeries Exhibits Web site

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

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

Additional information for products with reference-based terms: zSeries IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in the environment the zSeries IPLA program executes.

An environment is defined as either a single/stand-alone machine or a qualified Parallel Sysplex®. Customers may have one or more different environments across their enterprise. To determine the required license capacity for each environment, each zSeries IPLA program with referenced-based terms, each environment should be assessed separately.

When a zSeries IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the zSeries IPLA program must equal the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one:

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

Sub-capacity eligibility: To be eligible for sub-capacity charging on select zSeries 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 zSeries (or equivalent). On that machine:

- All instances of the OS/390 operating system must be migrated to the z/OS (or z/OS.e) operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating (or z/OS.e) 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 zSeries Software Pricing Web site

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 zSeries Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement — Attachment for z800 and z890 Software 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 zSeries Platform Programs Sub-Capacity Pricing (Z125-6929-02, or higher). Once the amendment is signed, the terms in the amendment replace any and all previous zSeries 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

To be eligible for On/Off Capacity on Demand pricing, customers must be enabled for temporary capacity on the corresponding hardware, and the required contract — Z125-6611, Attachment for Customer Initiated Upgrade and IBM @foryou On/Off Capacity on Demand — Software — must be signed prior to use.

Prices

Contact your IBM representative for pricing information for this announcement.

IBM Global Financing

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

http://www.ibm.com/financing

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

http://www.ibm.com/financing

<table>
<thead>
<tr>
<th>Order now</th>
</tr>
</thead>
</table>

To order, contact the Americas Call Centers, your local IBM representative, or your IBM Business Partner.

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

Phone: 800-IBM-CALL (426-2255)
Fax: 800-IBM-FAX (242-6329)
Internet: ibm_direct@vnet.ibm.com
Mail: IBM Americas Call Centers
Dept: IBM CALL, 11th Floor
105 Moatfield Drive
North York, Ontario
Canada M3B 3R1

Reference: LE001

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

Note: Shipments will begin after the planned availability date.

Trademarks

IMS, iSeries, System/370, z/Architecture, and IBMLink are trademarks of International Business Machines Corporation in the United States or other countries or both. WebSphere, the e-business logo, DB2, CICS, z/OS, OS/390, AIX, IMS/ESA, DB2 Connect, zSeries, SystemPac, S/390, Passport Advantage, System/390, and Parallel Sysplex are registered trademarks of International Business Machines Corporation in the United States or other countries or both. Windows, Windows NT, and Microsoft are trademarks of Microsoft Corporation. Java is a trademark of Sun Microsystems, Inc. Other company, product, and service names may be trademarks or service marks of others.

http://ibm.com/zseries/swprice