

IBM WebSphere Host Access Transformation Services for Multiplatforms V7.0 — Eclipse Rich Client Platform support and improved development capabilities

Description	2
Product positioning	6
Education support	7
Offering Information	8
Publications	8
Technical information	8
Software Services	11
Ordering information	12
Terms and conditions	17
Prices	20
Order now	21

At a glance

New in Host Access Transformation Service (HATS) V7.0

- Eclipse Rich Client Platform support
- Simplified combination of multiple screens of tabular data
- Conversion of HATS table component data to a spreadsheet file
- Integration of Host Simulator tool with HATS toolkit to allow easier
 "offline" HATS development
- HATS and WebFacing application run-time interoperability

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at

http://www.ibm.com

For ordering, contact:

Your IBM representative or the Americas Call Centers at

800-IBM-CALL Reference: YE001

Overview

With Host Access Transformation Service (HATS), you can create Web applications and rich-client applications that provide an easy-to-use GUI for your 3270 applications running on IBM System z[™] platforms and your 5250 applications running on IBM System i[™] platforms. HATS Web applications, including portlets, can be developed with an interface that matches your company's Web or portal pages, and your users can access them through their Web browsers. HATS rich-client applications can be developed to run in an Eclipse Rich Client Platform (RCP) implementation or in the Lotus® Expeditor Client to provide native client applications targeted for a user's desktop.

With HATS, you can also create Web services that deliver standard programming interfaces to business logic and transactions contained within host applications. These Web services can be reused as building blocks to develop new internal applications or to integrate with applications outside your enterprise. Your host-based business tasks can then be included in your service-oriented architecture (SOA) solutions.

New in HATS V7.0

The focus for HATS V7.0 is to expand deployment of HATS applications to the Rich Client Platform and to allow developer efficiencies.

Key prerequisites

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

Planned availability dates

- March 2, 2007 (electronic software delivery)
- March 16, 2007 (media and documentation)

Description

The HATS Toolkit is a set of plug-ins for the Eclipse-based, IBM Rational® Software Delivery Platform. The HATS Toolkit enables you to develop new Web, portal, and rich-client applications, a step at a time, previewing and saving each change you make. Over time, or as quickly as you like, you can streamline your HATS application, making it easier to use than the host applications whose data it presents, and possibly move functions from the host applications into your HATS applications.

The development process for building HATS Web, portal, and rich-client applications is similar. HATS give you the capability to create a GUI suited to your business needs and standards. You can hide unnecessary information, organize data into tables, or display only required input fields. You can provide a drop-down list of valid values for an input field, and change the size and location of some of the text and provided navigation buttons.

After you have developed a HATS application, you deploy it to a production environment. The HATS run-time code runs as part of a HATS application deployed in a production run-time environment: WebSphere® Application Server, WebSphere Portal, or rich-client platform. Users interact with the HATS application through the HATS GUI and data is sent back and forth between the user and the host application.

Whether creating a Web application or a rich-client application, you may decide that basic customization is enough, but with HATS you can do much more. For example, you can:

- · Use HATS macro support to deliver streamlined navigation through multiple host screens
- Take your users directly to the first screen that you want them to use, bypassing other screens
- Use macros or the screen combination function to combine data from several host screens into one HATS GUI screen
- Use business logic and global variables to integrate your host applications with other back-end systems in your enterprise, as well as with your business partners' systems

From HATS macros, you can generate HATS Integration Objects, which are Java[™] beans that encapsulate interactions with a host application, and use them to create Web pages and Web Services. You can also use HATS Integration Objects in Enterprise JavaBeans.

New in HATS V7.0

Eclipse Rich Client Platform (Eclipse RCP) support: HATS gives you the ability to transform access to your existing host applications using rich-client GUI applications that run in Eclipse RCP or Lotus Expeditor Client environments. The Eclipse RCP is a subset of plug-ins provided by the Eclipse platform, which is best known as an open source tooling platform. The introduction of Eclipse RCP enables you to use the core functionality provided by Eclipse to build native client applications targeted for a user's desktop. Lotus Expeditor Client delivers a rich-client, run-time environment and integrated middleware components for extending many enterprise applications to server-managed laptop and desktop systems.

A rich-client environment can offer capabilities not available in a traditional Web environment, including:

- Improved response time
- Richer set of user interface (UI) widgets, which provide for a more native application appearance, for example, native tab folder control, editable combo boxes, toolbars, menu bars, and tables
- No dependency on WebSphere Application Server or WebSphere Portal
- Client side processing (distributed, not centralized on a single server)

· Printing 3270E print jobs directly to a user's local printer

Simplified combination of multiple screens of tabular data: A new screen combination wizard and editor are provided to make it easier to combine data from multiple host screens that can be navigated using a repeatable system of navigation. The wizard and editor allow a method to define the screen recognition criteria for the beginning and ending screens, how to navigate from screen to screen, the screen region containing the data to gather, and the component and widget to use to recognize and render the gathered data.

Conversion of HATS table component data to a spreadsheet file: HATS allows host data to be converted to a format that is easily consumed by a spreadsheet program. At runtime, the Table widget will generate a temporary .csv file or .xls of the table and provide a button or link as part of its output. When an end user clicks the button, the (already generated) file would be retrieved and opened appropriately on the end user's machine.

Integration of Host Simulator tool with HATS toolkit to allow easier "offline" HATS development: The HATS Toolkit includes a host simulation capability. With this capability, you can record host simulation trace files that can be saved and then used instead of a live host connection. Following are ways you can use host simulation files instead of using a live host connection:

- Create screen captures, screen events, and screen transformations using the host terminal function
- · Create and test macros using the host terminal function
- Test HATS applications using the Rational SDP local test environment
- · Deploy HATS applications to a run-time environment to use as demonstrations

In addition, the host simulation capability can be used in troubleshooting by allowing you to record a host simulation file in the run-time environment that you can use, along with other traces and logs, to document a failing scenario.

HATS and WebFacing application run-time interoperability: HATS interoperability with WebFacing applications provides the ability to perform data description specification (DDS) map transformation, as well as 5250 data stream transformation, within the same Web application. This function is particularly useful for those who have built a DDS source-based transformation application, using the WebFacing tool, that needs to interact with a host application that has been transformed using the HATS tool.

This function is also useful for HATS users who want to take advantage of transformation, based on DDS maps, provided by the WebFacing tool. With this support, a HATS application and a WebFacing application can be linked together to interoperate as a single enterprise application and use a single connection to a WebFacing server.

Note: The use of this function requires either WebSphere Development Studio Client or WebSphere Development Studio Client Advanced Edition and a license for WebFacing Deployment Tool for WebSphere Development Studio with HATS Technology.

Rendering patterns for transformations: When you create a new transformation for a host screen, you select a rendering pattern to use for the transformation. In addition to the Blank and Prepopulated (now named Prepopulated using Default Rendering) patterns, HATS now delivers two new patterns, Default Rendering and Prepopulated using Fields, from which you can select.

The Default Rendering pattern creates a new transformation that displays with default rendering at runtime. With this pattern, you can use default rendering with a non-default rendering set, or use default rendering and add individual components using the Insert Host Components wizard. An Options button is provided to select the rendering set to use. If you select the Use the default rendering set check box, the default rendering set that is current at runtime is applied. If you clear the check box, you can select a specific rendering set to always use.

The Prepopulated using Fields pattern creates a new transformation prefilled with labels and input fields that can be customized using the Edit Host Component wizard.

A Preview button is provided to display the transformation using the selected pattern.

Improved testing modes: The Run on Server (for Web projects) and Run (for rich-client projects) testing modes can be used to modify and test the run-time settings, defined in the runtime.properties file, that are deployed to the production environment. The Debug on Server (for Web projects) and Debug (for rich-client projects) testing modes can be used to modify and test run-time settings without modifying the settings, defined in the runtime.properties file, that are deployed to the production environment.

New and improved host components and widgets: Host components are HATS objects that are responsible for recognizing elements of the host screen. Widgets are HATS objects that are responsible for rendering recognized host components in a GUI for a host screen. Following are new host components and widgets and some of the new settings for existing components and widgets provided in HATS Version 7.0. Highlights include a new Table component, new List, Subfile, Combo (RCP only), and Toolbar (RCP only) widgets, and a new option on the Table widget that allows the user to retrieve table data in spreadsheet file format.

• Host components

- Field Support character level attributes for protected fields: This new setting allows you to accurately render the color and extended attributes of all characters in a protected field, instead of rendering the entire field with the color and attributes of the first character in the field.
- Light pen (attention): The light pen (attention) component is responsible for recognizing a light pen (also known as selection pen) attention field on 3270 host screens. This component is now included in the HATS Toolkit user interface and no longer must be manually defined in the HATS source files.
- Light pen (selection): The light pen (selection) component is responsible for recognizing a light pen (also known as selection pen) selection field on 3270 host screens. This component is now included in the HATS Toolkit user interface and no longer must be manually defined in the HATS source files.
- Subfile

Column breaks: To improve the ability to recognize columns in subfiles, a new setting, Column breaks, is provided on the Data tab of the subfile component. This setting allows you to identify the column locations and display the resulting column splits in the host screen view in real time. The setting defaults to values identified when table (visual) recognition is performed on the selection area. You can adjust these values as needed.

No visual text is required: This new setting on the Marker tab of the subfile component allows you to specify that a subfile end marker can be a high intensity field with no text.

- Table: The Table component is responsible for recognizing tables. It can be used instead of the Table (visual) component if you must indicate specific column numbers to use for column breaks in order to achieve the result you want.
- Widgets
 - Combo (RCP only): The Combo widget is responsible for rendering editable drop-down combination boxes.
 - Field Allow tabbing using links (Web-only): Specifies whether each protected field is rendered as an HTML link which allows tabbing between protected fields.

Note: Selecting this option causes an HTML anchor (A) tag to be generated for each protected field on the page and as a result increases the size of the Web page.

This setting is now included in the HATS Toolkit user interface and no longer must be manually defined in the HATS source files. Also, to avoid unnecessarily increasing the size of the resulting Web page, this option has been changed so that it is not selected by default.

- List: The List widget is responsible for rendering list boxes. It is now included in the HATS Toolkit user interface and no longer must be manually defined in the HATS source files.
- Subfile (check box): The Subfile (check box) widget is responsible for rendering a 5250 subfile and providing the use of check boxes for making selections.
- Subfile (popup): The Subfile (popup) widget is responsible for rendering a 5250 subfile and providing the use of items on a pop-up menu for making selections.
- Toolbar (RCP only): The Toolbar widget enables you to render function key and selection list items as buttons on a toolbar.
- New support For DBCS 3270 and 5250 fields: New support for all types of DBCS 3270 and 5250 fields is provided including data type checking, field length checking, copy and paste prevention, and AutoIME switching based on field types.
- Global rules enhancements
 - Screen-level global rules: Global rules enable pattern recognition and transformation of host input fields and work with customized and non-customized (default rendered) screens. They can now be defined at both the project level and at the screen level. Screen-level

global rules allow you to use default rendering for a screen and in addition customize the input fields on the screen. For example, by using the new Find input fields within a specified region pattern type in your screen-level global rule, you can pinpoint an input field to customize on a screen, (data within a table), while still using default rendering for the screen.

- New pattern type: The new Find input fields within a specified region pattern type recognizes any input field located within a host screen region as specified by start row, start column, end row, and end column. Optionally, a field length can be specified to further define the input fields to locate within the region.
- Print support configuration: The current set of print definitions has been expanded and reorganized in the connection settings editor. A new printing tab is now the central location for all print support definitions associated with the connection. In addition, for 3270E connections, the configuration information includes an easy method of defining the supported settings from the list of WebSphere Host On-Demand printer settings. Using these settings you can more easily configure HATS to print directly to a server-attached default Windows™ printer (Web-only), to print directly to a client-attached default Windows printer (RCP only), or to use Host On-Demand Printer Definition Table (PDT) files for specific non-Windows customized printer types. This function enables you to create advanced printing applications without having to pass in multiple print settings using Web site overrides.
- **Default rendering enhancement:** A new setting allows you to specify that default rendering should be used if nothing is recognized to render during transformation of a HATS component. This function is particularly useful when an application contains screens with fields that may switch between an unprotected and protected state. For example, if this function is not used and an input component is being used to recognize a region, nothing will be recognized and rendered if the field switches to a protected attribute. This setting can be specified at the project level and at the individual component level in a screen transformation.
- Client settings configuration: In the project settings editor on the Other tab, there is a new section named Client Settings. This new section provides a central location for specifying client side settings, eliminating the need to modify HATS source files. The following settings are available.
 - Enable HTTP compression (Web only): Specifies the use of HTTP compression to help reduce the number of bytes being transferred between the HATS runtime, which is running on the WebSphere Application Server, and the user's browser. This can reduce the transfer time between the HATS runtime and the browser (which helps improve response time) and can reduce the number of bytes flowing in the network (which helps improve network utilization).
 - Suppress sending unmodified fields: Specifies that HATS should not send modified input field data to the host when the contents of the field are identical to the data supplied by the host.
 - Include protected, read-only labels in default tab order (RCP only): Specifies that the default tabbing order of fields on the transformation view should include protected, read-only fields.
 - Enable auto advance: Specifies that when a user completely fills an input field with data, focus automatically advances to the next input field.

Include host and non-host input fields: Specifies that when auto advance is enabled, focus automatically advances to the next input field in the order of the input fields on the transformed screen without regard to the order of the input fields on the host screen.

If not specified when auto advance is enabled, focus automatically advances to the next input field in the order of the input fields on the host screen

 Enable overwrite mode (Web only): Specifies the use of enable overwrite mode (if it is supported by the browser). If enabled, text entered into an input field overwrites text at the cursor position one character at a time. If not enabled, text entered into an input field is inserted at the cursor position pushing existing text ahead.

Select all text on focus: Select this box if you want all text in a field to be selected when the field receives focus, which is typical behavior for a Web application. Clear this box if you want no text selected when the field receives focus, which is typical behavior for a terminal emulator.

Notes

 For Web applications, this setting does not affect the Enable overwrite mode setting behavior.

- For rich-client applications, this setting is a useful alternative to the Enable overwrite mode setting, which is not supported in this environment. When enabled, it functions like overwrite mode in that characters are overwritten as a user types into the field.
- For rich-client applications, text is selected only when the keyboard is used to tab into the field. Text is not selected when clicking the mouse in the field.

Enable busy page (Web only): Specifies whether a busy-page message is displayed when multiple requests are submitted by the user before processing has completed on the initial request.

Project themes: A new project theme wizard provides a simple method of setting, and later changing, a theme for the overall appearance and behavior of a HATS application. Using the wizard you can select whether you want the application to appear more like an emulator, more like a modern application, or a custom setting somewhere in between.

There are many options in the HATS project settings that change the appearance and behavior of the application. For example, options like Show OIA, Enable auto advance, and Enable overwrite mode can be used to enable a HATS application to behave more like an emulator. The new wizard provides a convenient method of setting the options in one place that together can be treated as a theme.

HATS coexistence: Both HATS V5 and HATS V6 can coexist on the same development machine with HATS V7. It is also possible for HATS V7 to be installed multiple times on the same system. If you have multiple Rational SDP offerings installed on your system, HATS V7 can be installed into each of them.

Migration: If you are a HATS V4, HATS V5, HATS V6, HATS V4 LE or HATS V5 LE user, you can migrate your projects to HATS V7. If you are a Host Publisher V4.0 or V4.01 user, you can migrate whole applications, or just the Integration Objects.

Accessibility by people with disabilities

- Interfaces commonly used by screen readers
- · Can be operated using only the keyboard
- Allows the user to request more time to complete timed responses
- · Communicates all information independently of color
- · Provides documentation in an accessible format
- Requires minimal reach and manual dexterity
- · Supports the attachment of alternative input and output devices

IPLA and subscription and support considerations

IPLA licenses can be transferred from one machine to another within, but not limited to an enterprise. You 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 (PoE). It is your 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

Application transformation

IBM offers a complete set of application transformation solutions that can enable enterprises to extend host applications to new users and to a service-oriented architecture. These solutions can allow customers to improve the user experience, adapt for broader connectivity, and innovate by changing the flow of applications for greater flexibility. The first style of transformation typically requires the lowest level of investment. With this method companies can achieve a quick return on investment by creating a better user experience. Improving the user interface can improve ease of use and can ultimately result in lower training costs, increased customer satisfaction, and boosts employee productivity.

Host Access Transformation Services is IBM's leading product for customers looking to improve the user experience of 3270 and 5250 applications.

Availability of national languages

Product description	Language	GA date
HATS Rich Client Multi V7.0.0	Multilingual (English International, French, Russian, Korean, Chinese – Simplified, Spanish, Portuguese- Brazilian, German, Japanese, Chinese – Traditional, Hungarian, Turkish, Czech, Italian, Polish)	March 16, 2007
HATS Standard Multi V7.0.0	Multilingual (English International, French, Russian, Korean, Chinese – Simplified, Spanish, Portuguese- Brazilian, German, Japanese, Chinese – Traditional, Hungarian, Turkish, Czech, Italian, Polish)	March 16, 2007
Trademarks		
System z and System i are trademarks of International Business Machines Corporation in the United States or other countries or both.		

Lotus, Rational, and WebSphere 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

The following educational offerings are available as listed below:

Course code Course title Course ty	pe
------------------------------------	----

SW913 Advanced Web-to-Host Classroom

SW725

Application Integration using IBM WebSphere® HATS Introduction to Self-study Building Web-to-Host Solutions Using IBM WebSphere HATS

IBM training provides education to support many IBM offerings. Descriptions of courses for IT professionals and managers are on the IBM training Web site

http://www.ibm.com/services/learning/ites.wss/tp/en?pageType=tp_search

Courses are periodically updated to include the latest content.

Call IBM training at 800-IBM-TEACH (426-8322) for catalogs, schedules, and enrollments.

Offering Information

Product information is available via the Offering Information Web site

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

Also, visit the Passport Advantage® Web site

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

Publications

No publications are shipped with this product.

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.

Technical information

Hardware requirements: HATS Toolkit requirements

- Intel® Pentium® III 800 MHz processor minimum: Higher is recommended.
- 1 GB RAM minimum: 2 GB RAM is recommended.
- Disk space: 500 MB DASD above what the requisite software delivery platform requires.
- Additional disk space: Will be required for Web or rich-client application resources developed.
- Display resolution: 1024 x 768 or higher is required.

Software requirements: HATS Toolkit requirements

- Microsoft[™] Windows[™] XP Professional with Service Packs 1 and 2 or
- Microsoft Windows 2000 Professional with Service Packs 3 and 4 or
- Microsoft Windows 2000 Server with Service Packs 3 and 4 or
- Microsoft Windows 2000 Advanced Server with Service Packs 3 and 4 or
- Microsoft Windows Server 2003 Standard Edition or

- Microsoft Windows Server 2003 Enterprise Edition
- One of the following software delivery platforms
 - IBM Rational® Application Developer V7.0
 - IBM Rational Software Architect V7.0
 - WebSphere Developer for System z[™] V7.0
 - WebSphere Development Studio Client V7.0 Standard
 - WebSphere Development Studio Client V7.0 Advanced Edition

Server run-time requirements

HATS enterprise applications may be deployed to the following WebSphere Application Server platforms:

- Windows 2000
- Windows 2003
- Windows XP
- AIX®
- z/OS®
- Solaris
- HP/UX
- Linux[™] for Intel
- · Linux on System z
- Linux on System i[™]
- Linux on System p[™]

HATS enterprise applications deployed to a WebSphere Application Server inherit the software and hardware requirements of the server.

Each HATS deployed application requires additional disk space. The minimum disk space required for each HATS application is approximately 40 MB.

One of the following WebSphere Application Servers

- WebSphere Application Server V5.1.1 or V6.0 or V6.1 with latest PTFs
- WebSphere Application Server ND V5.1.1, V6.0 or V6.1 with latest PTFs
- WebSphere Application Server for iSeries™ V5.1.1, V6.0 or V6.1 with latest PTFs
- WebSphere Application Server Network Deployment for iSeries V5.1.1, V6.0 or V6.1 with latest PTFs
- WebSphere Application Server Express V5.1.1, V6.0 or V6.1 with latest PTFs
- WebSphere Application Server Express for iSeries V5.1.1, V6.0 or V6.1 with latest PTFs
- WebSphere Application Server for zSeries® V5.1.1 or V6.0, or V6.1 with latest PTFs
- WebSphere Application Server Extended Deployment V6.0.x

HATS Rich Client Platform Support

- Lotus® Expeditor Client deployment
 - Lotus Expeditor V6.1 Client for Desktop
 - -- Microsoft Windows XP Professional with Service Packs 1 and 2 or
 - -- Microsoft Windows XP Home Edition with Service Packs 1 and 2 or
 - -- Microsoft Windows 2000 Professional with Service Pack 4 or
 - -- Red Hat Enterprise Linux 4.0 WS with GIMP Toolkit (GTK) support Update 3 with

Mozilla 1.7, GTK 2

- -- Novell Linux Desktop 9 (NLD9) Service Pack 2 with Mozilla 1.7 and compat-libstd-++lsb
- Lotus Expeditor V6.1 Toolkit
 - -- Microsoft Windows XP Professional with Service Packs 1 and 2 or
 - -- Red Hat Enterprise Linux 4.0 WS with GIMP Toolkit (GTK) support Update 3 with Mozilla 1.7, GTK 2
 - -- One of the following software delivery platforms
 - IBM Rational Application Developer V7.0
 - IBM Rational Software Architect V7.0
- Lotus Expeditor V6.1 Device Runtime Environment (DRE)
 - -- Microsoft Windows XP Professional with Service Packs 1 and 2 or
 - -- Red Hat Enterprise Linux 4.0 WS with GIMP Toolkit (GTK) support Update 3 with Mozilla 1.7, GTK 2
 - -- One of the following software platforms
 - Lotus Expeditor V6.1 Client for Desktop

Lotus Expeditor V6.1 — Toolkit

- Eclipse Rich Client Platform deployment
 - Eclipse V3.2 with EMF/SDO V2.2.0 on one of the following platforms
 - -- Microsoft Windows XP Professional with Service Packs 1 and 2 or
 - -- Microsoft Windows XP Home Edition with Service Packs 1 and 2 or
 - -- Microsoft Windows 2000 Professional with Service Pack 4 or
 - -- Red Hat Enterprise Linux 4.0 WS with GIMP Toolkit (GTK) support Update 3 with Mozilla 1.7, GTK 2
 - Novell Linux Desktop 9 (NLD9) Service Pack 2 with Mozilla 1.7 and compat-libstd-++lsb
 - One of the following Java™ Runtime Environment (JRE)
 - -- IBM 32-bit SDK for Windows, Java 2 Technology Edition 5.0 service release 1
 - -- IBM 32-bit SDK for Windows, Java 2 Technology Edition 1.4.2 service release 3
 - -- IBM 32-bit SDK for Linux on Intel architecture, Java 2 Technology Edition 5.0 service release 1
 - -- IBM 32-bit SDK for Linux on Intel architecture, Java 2 Technology Edition 1.4.2 service release 3
 - -- Sun Java 2 Standard Edition 5.0 Update 6 for Microsoft Windows
 - -- Sun Java 2 Standard Edition 1.4.2_10 for Microsoft Windows
 - -- Sun Java 2 Standard Edition 5.0 Update 6 for Linux x86
 - -- Sun Java 2 Standard Edition 1.4.2_10 for Linux x86

Supported browsers

- Windows requires Netscape 7.1, Internet Explorer 6.0 with SP1®, Mozilla 1.6, Firefox 1.5 or later, Opera 7.6 or later.
- AIX requires Netscape 7.1 or later.
- Solaris requires Mozilla 1.6, Firefox 1.5, Opera 7.6 or later.
- Linux requires Netscape 7.1, Opera 7.6, Konqueror 3.2, Mozilla 1.6, Firefox 1.5 or later.
- Macintosh requires Safari 1.2, Netscape 7.1, Firefox 1.5, Opera 7.6 or later.

Other software requirements

• 5250 Print support requires IBM iSeries Access for Web V5.2, or later. (

Note: This is available as part of the iSeries Access Family.)

- WebSphere Portal V5.1 or V6.0 is required for deployment of HATS V7 portlets.
- Tivoli® Access Manager V5.1 or V6.0 is required for Web Express Logon support.
- The i5/OS[™] V5R4 PTFs SI25893, SI25894, SI25747 are required to support HATS/Webfacing run-time interoperability.

Limitations

- BIDI support is available only with Internet Explorer 6.0 with SP[™] 1, or Mozilla 1.8 or later.
- Rich Client Platform support requires that the JRE included in the Lotus Expeditor V6.1 DRE be installed to the software delivery platform.
- In HATS rich-client applications, if you use ATOK2006 with Roman input mode, the input mode changes to Kana input mode using the AutoIME function. This is a limitation in the Eclipse environment.

Planning information

Migration: If you are a HATS V4, HATS V5, HATS V6, HATS V4 LE or HATS V5 LE user, you can migrate your projects to HATS V7. If you are a Host Publisher V4.0 or V4.01 user, you can migrate whole applications, or just the Integration Objects.

Software Maintenance is included with licenses purchased through Passport Advantage and Passport Advantage Express. Installation and technical support is provided by the Software Maintenance offering of the IBM International Passport Advantage Agreement. This fee service enhances your productivity, with voice and electronic access into IBM support organizations.

Packaging: Multi CCID

- WebSphere HATS V7.0 CD
- HATS V7.0 Runtime Enablement CD
- WebSphere Application Server V6.1 Network Deployment CDs
- HATS V7.0 License Information Booklet

System z CCID

- WebSphere HATS V7.0 CD
- HATS V7.0 Runtime Enablement CD
- HATS V7.0 License Information Booklet Limited terms and conditions for zSeries deployment

Security, auditability, and control

Host Access Transformation Services uses the security and auditability features of the host systems.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

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

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

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

To locate an IBM Business Partner, visit

http://www.ibm.com/software/solutions/isv

Ordering information

This product is only available via Passport Advantage. It is not available as shrinkwrap.

Product information

Licensed function title	Product grou	Product p category
Host Access Transformation Services with Rich Client	IBM Application Integration Middleware Other	WebSphere
IBM WebSphere Host Access Transformation Services for Multiplatforms	IBM Application Integration Middleware Other	WebSphere
Program name	PID number	Charge unit description
Host Access Transformation Services with Rich Client	5724-L02	Authorized User(s)
Host Access Transformation Services with Rich Client	5724-L02	Authorized User(s)
IBM WebSphere Host Access Transformation Services for Multiplatforms	5724-L02	Sub-capacity Value Unit for Linux on z
IBM WebSphere Host Access Transformation Services for Multiplatforms	5724-L02	Value Unit
IBM WebSphere Host Access Transformation Services for Multiplatforms	5724-L02	Value Unit for Linux on z
IBM WebSphere Host Access Transformation Services for	5724-L02	Authorized User(s)
Multiplatforms IBM WebSphere Host Access Transformation Services for Multiplatforms	5724-L02	Authorized User
IBM WebSphere Host Access Transformation Services for Multiplatforms	5724- L02	Sub-capacity Value Unit

Charge metrics definitions

Value Unit

A Value Unit is a pricing charge metric for program license entitlements which is based upon the quantity of a specific designated measurement used for a given program. Each program has a designated measurement. The most commonly used designated measurement is a processor core. However, for select programs, there are other designated measurements such as users, client devices, and messages. The number of Value Unit entitlements required for a program depends on how the program is deployed in your environment and must be obtained from a Value Unit table. You must obtain a PoE for the calculated number of Value Unit entitlements for your implementation. The Value Unit entitlements are specific to a program and may not be exchanged, interchanged, or aggregated with Value Unit entitlements of another program.

Processor (Value Unit)

A processor core is a functional unit within a computing device that interprets and executes instructions. A processor core consists of at least an instruction control unit and one or more arithmetic or logic unit. With multicore technology, each core is considered a processor. Not all processor cores require the same number of Value Unit entitlements. To calculate the number of Value Unit entitlements required, refer to the value unit table on the following Web site

 $http://www.ibm.com/software/sw-lotus/services/cwepassport.nsf/wdocs/pvu_licensing_for_customers$

With full capacity licensing, a PoE must be acquired for the appropriate number of value units based on all activated processor cores available for use on the server.

Sub-capacity processor (Value Unit)

For programs eligible for sub-capacity licensing, a PoE must be acquired for the appropriate number of value units based on all activated processor cores available for use in each partition (utilizing eligible partitioning technologies) where the program runs. Refer to the "International Passport Advantage Agreement Attachment for sub-capacity terms" or the program's license information to determine applicable sub-capacity terms.

Authorized user

An authorized user is one and only one individual (named or unnamed) within or outside your enterprise. A PoE must be obtained for each individual user accessing the program in any manner. A program licensed under an authorized user PoE may be installed on a single computer or server, and accessed by multiple users, provided that a PoE has been obtained for each individual user accessing the program either directly or indirectly (via a multiplexing program, device, or application server) through any means on behalf of the user.

Passport Advantage program licenses

Host Access Transformation Services for Multi

Part description	Part number
IBM WebSphere Host Access Transformation Services for	
Multiplatforms HATS Standard Multi Authorized User Linux z License & SW Maint.	D54R7LL
12 Months HATS Standard Multi Authorized User Linux z SW Maintenance Annual Renewal	EO1NHLL
HATS Standard Multi Authorized User License & SW Maint. 12Months	D53H4LL
HATS Standard Multi Authorized User SW Maint. Reinstatement 12 Months	D53H5LL
HATS Standard Multi Authorized User SW Maintenance Annual Renewal	E016VLL
HATS Standard Multi Value Unit License & SW Maintenance 12 Months	D58BDLL
HATS Standard Multi Value Unit SW Maintenance Annual Renewal	E02JFLL
HATS Standard Multi Value Unit SW Maintenance Reinstatement 12 Months	D58BELL
HATS Standard Multi Value Unit for Linux on z License & SW Maint. 12 Months	D58BGLL
HATS Standard Multi Value Unit for Linux on z SW Maint Reinstatemmt 12Mnths	D58BHLL
HATS Standard Multi Value Unit for Linux on z SW Maint. Annual Renewal	E02JGLL
HATS StandardMulti Auth. User Cmptitve TRADEUP License&SW Maint 12Months	D53H6LL

HATS StandardMulti Authorized User Linux z SW Maint.	D54R8LL
Reinstatement 12 Mnths HATS StandardMulti Value Unit Comptitve TRADEUP License & SW	D58BFLL
Maint 12Months HATS StndrdMulti Auth.User Linuxz Cmptitve TRADEUP	D54R9LL
License&SW Maint 12Mnths HATS StndrdMulti ValueUnit Linuxz Cmptitve TRADEUP License&SW Maint 12Mnths	D58BLLL
Host Access Transformation Services for Multi	
Part description	Part number
Host Access Transformation	
Services with Rich Client HATS RchClntMulti Auth. User HATS Stndrd TRDUP License&SW	D602LLL
Maint 12Mnths HATS Rich Client Multi Authorized User License & SW Maint. 12 Months	D602I LL
HATS Rich Client Multi Authorized User SW Maint. Reinstatement 12 Mnths	D602JLL
HATS Rich Client Multi Authorized User SW Maintenance Annual Renewal	E037VLL
HATS RichClientMulti Authorized User Comp. TRDUP License&SW Maint 12Mnths	D602KLL
Passport Advantage supply	
Program name/description	Part number
HATS Rich Client Multi V7.0.0 HATS Rich Client Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0 HATS Standard Multi V7.0.0	BMO44ML
HATS Standard Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0 Mas	BMO43ML

Passport Advantage customer: Media pack entitlement details

Customers with active maintenance or subscription for the products listed are entitled to receive the corresponding media pack.

HATS Standard Multi V7.0.0

Entitled maintenance offerings description	Media packs description	Part number
HATS Standard per SubCapacity Value Unit	HATS Standard Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0 Mas	BMO43ML
HATS Standard per SubCapacity Value Unit for Linux on z	HATS Standard Multi	BMO43ML
Host Access Transformation Svcs Multi Value Unit zSer S/390(R)	HATS Standard Multi	BMO43ML
Host Access Transformation Svcs for Multi per Value Unit	HATS Standard Multi Windows 2000, Windows XP, Windows Server 2003	BMO43ML

Host Access Transformation eServ zSeries per Registered User IBM Host Access Transformation Services Intranet Reg User	V7.0.0 Mas HATS Standard Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0 Mas HATS Standard Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0 Mas	BM043ML BM043ML
HATS Rich Client Multi V7.0.0		
Entitled maintenance offerings description	Media packs description	Part number
HATS with Rich Client per Authorized User	HATS Rich Client Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0	BMO44ML
HATS with Rich Client per Authorized User for Linux on z	HATS Rich Client Multi Windows 2000, Windows XP, Windows Server 2003 V7.0.0	BMO44ML

Cross-Platform Product for Use on System z

Order the part numbers that follow when there is an intention to acquire this cross-platform product for deployment on the System z or S/390 platform. This set of part numbers provides the identical supply and authorization as the other set in this announcement. The distinction is to identify the planned deployment platform.

Program name/description	Part number
HATS RchClntMulti Auth User Linuxz Comp.TRDUP License&SW	D602GLL
Maint 12Mnths HATS RchClntMulti Auth User	D602HLL
Linz HATS Stndrd TRDUP Lic.&SW Maint 12Mnths	
HATS Rich Client Multi Authorized User Linux z SW	E037ULL
Maint. Annual Renewal HATS RichClient Multi Authorized User Linux z License & SW	D602ELL
Maint. 12Mnths HATS RichClientMulti Authorized	D602FLL
User Linux z SW Maint. Reinstmnt 12Mnths	

Sub-capacity

IBM WebSphere Host Access Transformation Services for Multiplatforms

Part description	Part number
HATS Standard Multi SubCapacity Value Unit License & SW	D6028LL
Maintenance 12Mnths HATS Standard Multi SubCapacity	D6029LL
Value Unit SW Maint	
Reinstatement 12 Mnths HATS Standard Multi SubCapacity	E037SLL
Value Unit SW Maintenance	
Annual Renewal HATS StandardMulti Subcapacity	E037TLL
Value Unit Linuxz SW Maint. Annual Renewal	
HATS StandardMulti Subcapacity	D602CLL
ValueUnit Linuxz SW Maint Reinstmnt 12 Mnths	
HATS StandardMulti Subcapcity	D602BLL
Value Unit Linuxz License & SW Maint, 12 Mnths	
maine. 16 millio	

HATS StndrdMulti SubCpcty VU	D602DLL
Linuxz CmptitveTRADEUP	
Licnse&SW Maint 12Mnths	
HATS StndrdMulti SubCpcty	D602ALL
ValueUnit CmptitveTRADEUP	
Licnse&SW Maint 12Mnths	

Sub-capacity for selected middleware products

Sub-capacity licensing on a per processor or per Value Unit basis is available for selected middleware products. To offer sub-capacity licensing, IBM software products implement IBM Tivoli License Compliance Manager within their offerings so that you can monitor and report quarterly to IBM on the use of the programs on a continuous basis.

More information can be found on the Passport Advantage Web site

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

Eligibility requirements for sub-capacity licensing

To be eligible for sub-capacity licensing terms on this product, you must agree to install and configure IBM Tivoli License Manager for IBM Software, in accordance with the IBM Tivoli License Manager publications, and to enable the collection of program use data on all eligible machines subject to sub-capacity terms.

For those machines running programs with sub-capacity licensing terms, you must use IBM Tivoli License Manager for IBM Software to monitor program use and submit to IBM an IBM Use Report each calendar quarter. Multiple copies of IBM Tivoli License Manager for IBM Software or IBM Tivoli License Manager are not required. You can use more copies if you need them to support your operational environment, but only one copy is required to monitor all your sub-capacity licensed products.

Additionally, if this is the first product you have licensed under sub-capacity terms, you must agree to the terms of an attachment to your Passport Advantage or Passport Advantage Express contract and submit a new Passport Advantage enrollment form. First-time sub-capacity clients also have an opportunity to ensure a Primary Business Contact is established for their contracts.

For more information on required and entitled license capacity, license requirements and reporting, refer to 205-093, dated April 19, 2005.

If you order (this product) under sub-capacity terms, IBM Tivoli License Manager for IBM Software will be made available to you if you do not already have one. You must install and configure this tool for your sub-capacity products. Alternately, you can use Tivoli License Manager. Once the license manager software is installed, you will be required to register online (IBM may need to contact you in order to finalize the registration process). You must monitor program use on a continuous basis with an IBM Tivoli License Manager for IBM Software and submit IBM Use Reports to IBM on a calendar quarterly basis.

IBM Tivoli License Manager for IBM Software is documented in the following customer publications, which are available from IBM Publications Center at

http://www.elink.ibmlink.ibm.com/public/applications/publications/cgibin/pbi.cgi?

Publ i cat i on	Form number
Planning, Installation, and Configuration	SC32-1431
Admi ni strati on	SC32-1430
Problem Determination	SC32-9102
Data Dictionary Release Notes	SC32-1432 SC32-1429

For IBM Tivoli License Manager configuration guidance and instructions for specific products (including this product) acquired with sub-capacity terms, refer to

http://www.lotus.com/sub-capacity

The Web site will give you information about how to set up the product for detection by IBM Tivoli License Manager, any required maintenance, and any required steps that are unique to this product.

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.

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

Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

License Information form number

Program name	Program number	Form number
Host Access Transformation Services for Multi	5724- L02	Stndrd=L-DDCA- 6WFLAN, RCP= L-DDCA-6WFL2N

The program LI will be available for review on the IBM Software License Agreement Web site

http://www.ibm.com/software/sla/sladb.nsf

Limited warranty: Yes

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. Consult the IBM Software Support Guide for further information at

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

IBM will maintain this information for at least one year after the original licensee acquires the program ("Warranty Period").

Money-back guarantee: If for any reason you are dissatisfied with the program and you are the original licensee, 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.

For programs acquired under the IBM International Passport Advantage Agreement, this term applies only to your first acquisition of the program.

Copy and use on home/portable computer: No

Usage restriction: Yes

Program-unique terms

The following text is taken from the IBM WebSphere Host Access Transformation Solution Standard LI documents included with your purchase and is included here for your convenience. Note that these terms do not apply to HATS with Rich Client. A different LI document will accompany your purchase of HATS with Rich Client.

HATS Standard for Multiplatforms and HATS for zSeries

The WebSphere Host Access Transformation Services for Multiplatforms, or the WebSphere Host Access Transformation Services for Linux on z, each defined as the "program", is available based on two charging methods: Authorized User and Value Unit. Please consult your PoE to determine which charging method applies to your license.

The Authorized User and Value Unit versions of the program consist of the following components:

- IBM WebSphere Host Access Transformation Services ("HATS") Toolkit
- IBM WebSphere Host Access Transformation Services ("HATS") Runtime
- IBM WebSphere Application Server, Network Deployment

Entitlement to program upgrades does not entitle you to upgrades to the individual components unless such components are upgraded as part of a program upgrade. For example, if the IBM WebSphere Application Server Network Deployment program product is upgraded, you will not be entitled to such upgrade unless a program upgrade includes the upgraded version of IBM WebSphere Application Server Network Deployment.

Program-unique terms

The program is available based on two charging methods: Authorized User and Value Unit. The charging methods only apply when the program is used in a production environment If the Authorized User charging method is selected, the number of program licenses purchased must equal the number of Authorized Users accessing the program from the Internet and/or intranet.

Authorized User License option

An Authorized User is one and only one individual, machine, program, or device with a specific identity (ID) within or outside Your enterprise.

A PoE is required for each Authorized User accessing the program, or any program component, either directly or indirectly through any means on behalf of the Authorized User. An example of "indirect" access would be through a multiplexing program, device, or application server. Connections (from either users or other applications) made to the program through other products that act as connection concentrators must be counted as Authorized Users and are subject to use-base charges based on the number of Authorized Users of those concentrators. An Authorized User license to the program entitles a distinct Authorized User to access and use the components of the program subject to the limitations under the Component restrictions section.

Value Unit option

Under the processor Value Unit licensing structure, each processor core will be assigned a specific number of Value Units. You must acquire the total number of processor Value Units for each processor core on which the software programs are deployed. IBM continues to define a processor to be each processor core on a chip. For example, a dual-core chip contains two processor cores.

Each software program has a unique price per Value Unit. To determine the total cost of deploying an individual software program, you multiply the program price per Value Unit by the total number of processor Value Units required. Refer to the processor Value Unit table on the Passport Advantage site below for a list of Value Unit requirements by processor.

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

With full capacity licensing, you must acquire the appropriate number of Value Units based on all activated processors on the server available to the program or a component of the program. In sub-capacity licensing, you must acquire the appropriate number of Value Units based on all activated processors in partitions (utilizing eligible partitioning technologies) on the server available to the program or a component of the program.

Component restrictions

IBM WebSphere Host Access Transformation Services Toolkit

The license to the program entitles you to use the HATS Toolkit for an unlimited number of developers on an unlimited number of workstations for development purposes. Your entitlement to the HATS applications (run-time deployments), which are generated by the HATS Toolkit, must be in accordance with one of the charging methods above when deployed to production.

IBM WebSphere Application Server Network Deployment

Authorized User License Option

The program is accompanied by WebSphere Application Server Network Deployment. Except as modified by this Agreement, your use of the WebSphere Application Server Network Deployment components will be governed by the license terms that accompany the WebSphere Application Server Network Deployment components. The license to the program entitles you to install and use one copy of WebSphere Application Server Network Deployment on a machine with a single processor provided that you acquire fifty (50) Authorized User authorizations. You may use one additional copy of WebSphere Application Server Network Deployment on one additional processor for each additional one hundred (100) Authorized User authorizations that you acquire.

HATS Authorized Users	Total copies of WAS Network Deployment
1-49	0
50-149	1
150-249	2
250-349	3

For each copy of WebSphere Application Server Network Deployment to which you are entitled, you are authorized to install and use each component of WebSphere Application Server Network Deployment on a machine with a single processor. Alternatively, you may install and use each copy of WebSphere Application Server Network Deployment on a machine with multiple processors if you either:

and so on

i. allocate a copy of WebSphere Application Server Network Deployment to which you are entitled per this Agreement to each additional processor on such machine; or,

ii. acquire a Single Processor PoE of WebSphere Application Server Network Deployment for each additional processor on such machine; or,

iii. for partitionable System i and AS/400® machines running OS/400®, allocate a copy of WebSphere Application Server Network Deployment to which you are entitled per this Agreement to each additional processor on such machine or acquire a Single Processor PoE of WebSphere Application Server Network Deployment for each processor actually used by the entitled copy of WebSphere Application Server Network Deployment on such machine, as measured or limited using IBM provided tools. To determine the number of processors in a machine actually used by the entitled copy of WebSphere Application Server Network Deployment, you may aggregate portions of physical processors used in the same machine, but you must acquire an additional Single Processor PoE of WebSphere Application Server Network Deployment for any remaining fraction of a processor in such machine used by the entitled copy of WebSphere Application Server Network Deployment for any remaining fraction of a processor in such machine used by the entitled copy of WebSphere Application Server Network Deployment for any remaining fraction of a processor in such machine used by the entitled copy of WebSphere Application Server Network Deployment for any remaining fraction of a processor in such machine used by the entitled copy of WebSphere Application Server Network Deployment after this aggregation.

Value Unit option

and so on

You are authorized to install and use one (1) copy of WebSphere Application Server Network Deployment on the same server machine per each deployment of HATS Value Unit to which you are entitled under this Agreement.

In addition, the license to the program entitles you to use the WebSphere Application Server Network Deployment components only to run HATS applications, to run objects created by HATS applications, and to enable connections with HATS applications to other applications and sources of data. The license to the program does not for instance, entitle you to use the WebSphere Application Server Network Deployment components to run applications that do not require HATS applications to operate. If you wish to use the WebSphere Application Server Network Deployment components without these restrictions, you must purchase separate authorizations to use the WebSphere Application Server Network Deployment components.

Passport Advantage applies: Yes, and through the Passport Advantage Web site at

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

This product is only available via Passport Advantage. It is not available as shrinkwrap.

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

Yes. Software Maintenance is included with licenses purchased through Passport Advantage and Passport Advantage Express. Product upgrades and Technical Support are provided by the Software Maintenance offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software and Technical Support provides voice and electronic access to IBM support organizations, worldwide.

IBM includes one year of Software Maintenance with each program license acquired. The initial period of Software Maintenance can be extended by the purchase of a renewal option, if available.

While your Software Maintenance is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance via telephone and, if available, electronic access, to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, 7 days a week. For additional details, consult your IBM Software Support Guide at

http://techsupport.services.ibm.com/guides/handbook.html

Software Maintenance does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under the applicable agreements.

For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, visit the Passport Advantage Web site at

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

Other terms

Volume orders (IVO): No

iSeries Software Maintenance applies: No

Educational allowance available: Not applicable

Prices

Passport Advantage

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

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

Business Partner information

If you are an IBM Business Partner — Distributor for Workstation Software acquiring products from IBM, you may link to Passport Advantage Online for resellers where you can obtain Business Partner pricing information. An IBM ID and password are required. Copy the Web address below into the address field of your browser.

https://www.ibm.com/software/howtobuy/passportadvantage/paoreseller

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.

Order now

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

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

Phone:	800-IBM-CALL (426-2255)
Fax:	800-2I BM-FAX (242-6329)
Internet:	callserv@ca.ibm.com
Mail:	IBM Americas Call Centers
	Dept. Teleweb Customer Support, 9th floor
	105 Moatfield Drive
	North York, Ontario
	Canada M3B 3R1

Reference: YE001

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

System z, System i, System p, iSeries, i5/OS, SP, and IBMLink are trademarks of International Business Machines Corporation in the United States or other countries or both.

WebSphere, Passport Advantage, Rational, AIX, z/OS, zSeries, Lotus, SP1, Tivoli, S/390, AS/400, OS/400, and PartnerWorld are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Intel and Pentium are registered trademarks of Intel Corporation.

Microsoft and Windows are trademarks of Microsoft Corporation.

Java is a trademark of Sun Microsystems, Inc.

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

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

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.