

*Extends Web content to new devices
without reauthoring*



IBM WebSphere Transcoding Publisher, Version 3.5

Highlights

Helps enable HTML content to be dynamically transcoded to WML, HDML and iMode, while XML can be transformed through XSL stylesheets

Minimizes the need for multiple versions of your Web site by dynamically adapting content for a variety of pervasive devices

Converts, reduces or eliminates images to match display capabilities and optimize delivery to constrained devices

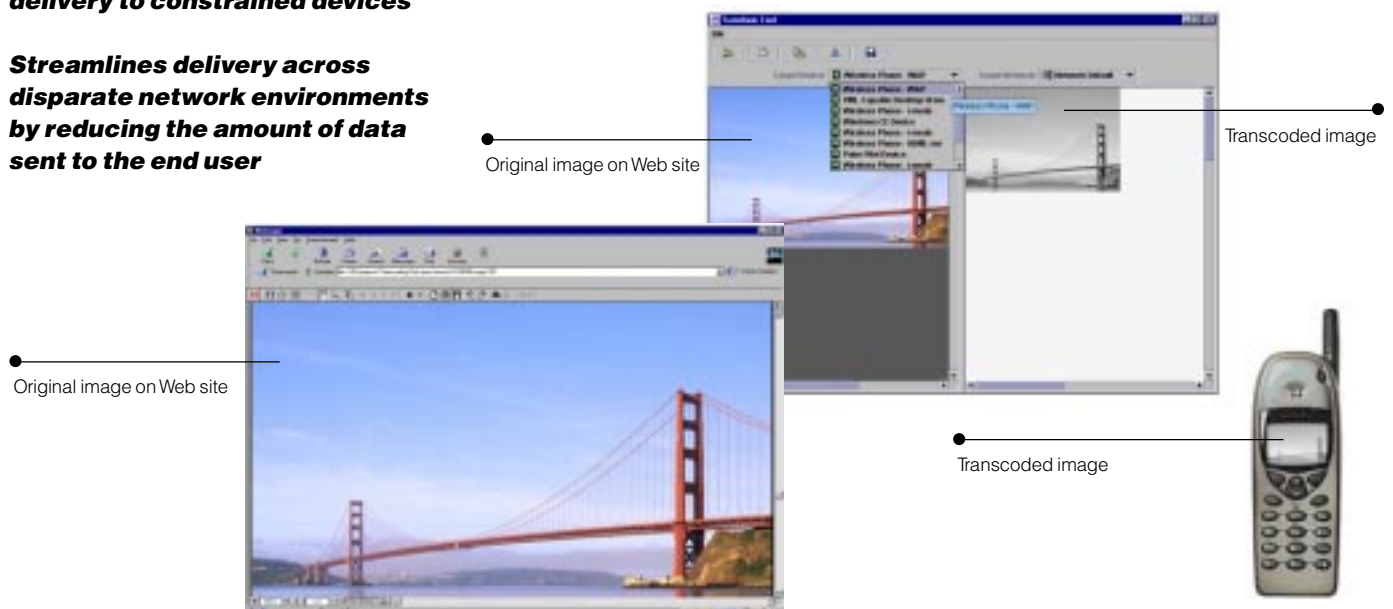
Streamlines delivery across disparate network environments by reducing the amount of data sent to the end user

Supports content customization techniques which allow you to select and tailor content for an optimized wireless Internet experience

Includes deck fragmentation, allowing Web content to be dynamically broken into smaller pieces in response to device memory limitations

Integrates with IBM WebSphere software platform for e-business

As e-business moves from the desktop to a new breed of pervasive computing devices, delivering greater access to your enterprise and Web content is vital to your competitiveness. IBM WebSphere® Transcoding Publisher, Version 3.5 provides this access by converting content from the wired Internet to formats that can be used on wireless devices, without the need to reauthor or create an entirely new Web site. With WebSphere Transcoding Publisher you have a simple solution to the complex problem of extending the reach of your data and applications across diverse business systems to a variety of pervasive devices.



e-business

With IBM WebSphere Transcoding Publisher, you can dynamically adapt the content of your Web site for a wide variety of pervasive devices.

A flexible, standards-based solution for optimizing the wireless Web experience

With WebSphere Transcoding Publisher, you can quickly and cost-effectively provide seamless access to mobile employees, customers, trading partners and resellers across the Internet, extranets and intranets. WebSphere Transcoding Publisher can dynamically adapt, reformat and filter your Web content*, minimizing the need to generate and maintain multiple versions of Web content or applications to support different target devices and environments.

WebSphere Transcoding Publisher consists of several interrelated components that provide an open, extendable platform for adapting your data to the pervasive computing environment. The primary components include:

- A set of standard content transformations or transcoders that can transform Web content for wireless devices
- A pluggable infrastructure to let you quickly integrate new transcoders, helping you to leverage services and enable you to incorporate new plug-ins as part of WebSphere Transcoding Publisher
- An administration console with the ability to add, enable and change profiles, transcoders, stylesheets and external annotation files
- A developer's toolkit providing specific GUI-based tools, sample programs, sample stylesheets, sample annotation files and detailed documentation that allow you to add or build custom transcoding solutions

Extend the reach of your Web content

WebSphere Transcoding Publisher extends the reach of existing content by dynamically transforming data so that it is suited for new environments, including the wireless Internet. This approach virtually eliminates the need for reauthoring content and the burden of maintaining multiple versions of your data so that the information can be viewed by almost any end user, anywhere.

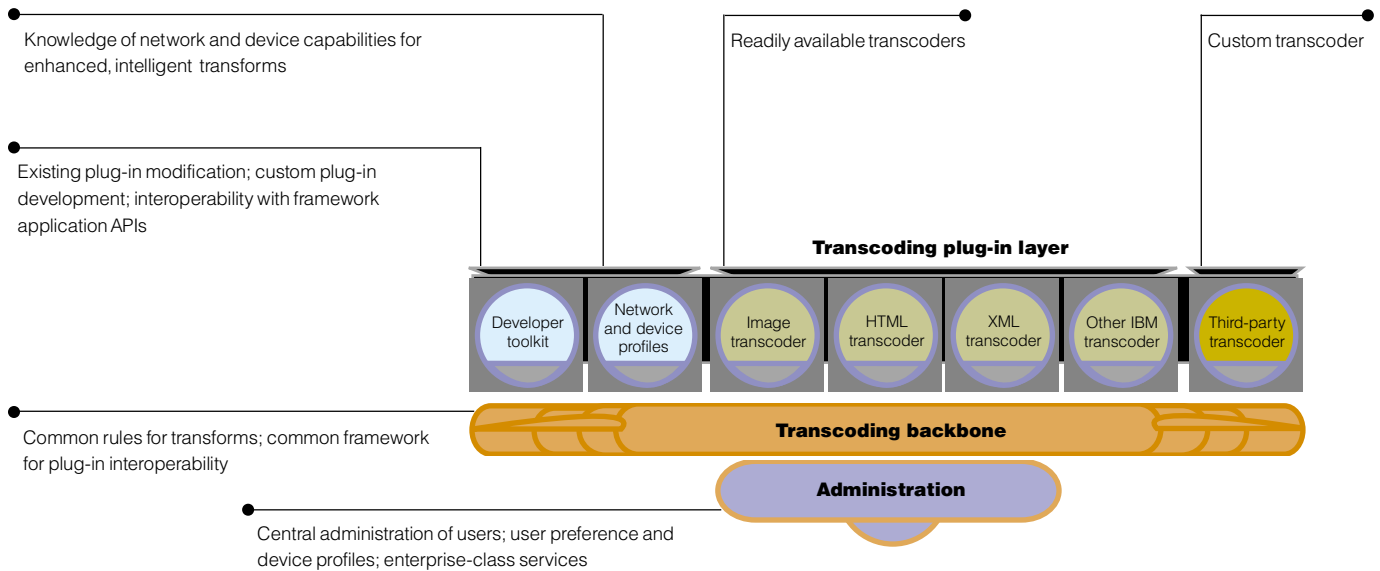
With more wireless subscribers than ever gaining Internet access through handheld devices, you need to be able to leverage existing investments in HTML- and XML-based content to reach these wireless Internet users. With WebSphere Transcoding Publisher, content is dynamically adapted for use with a wide variety of pervasive devices, including personal digital assistants (PDAs) and Internet-enabled phones, such as wireless application protocol (WAP) phones, WAP-enabled phones and HDML phones used in North America and iMode phones used extensively in Japan. As a result, the need to create multiple versions of your Web site is greatly minimized. By dynamically

bridging the different text and image formats and tailoring content to the specific device, WebSphere Transcoding Publisher helps you to broaden your market potential and provide new services, reaching a host of new customers in the process.

With WebSphere Transcoding Publisher, you can focus on your core business while it manages your information despite the complexity of emerging trends in device capabilities. A broad selection of transcoders allows you to modify your Web data and images for display on mobile client devices. Standard WebSphere Transcoding Publisher transcoders can be used independently or in conjunction with one another for more complex content transformations. These standard transcoders include:

- HTML to simplified HTML
- HTML to wireless markup language (WML)
- HTML to iMode (a variant of compact HTML)
- HTML to Handheld Device Markup Language (HDML)
- XML to a wide variety of formats through the use of Extensible Stylesheet Language (XSL) stylesheets
- JPEG images to GIF and WBMP formats
- GIF images to JPEG and WBMP formats

Additional transcoders can be quickly deployed and plugged-in to the extensible framework to respond to changing market conditions. The toolkit provides samples and documentation to allow developers to write easily pluggable transcoders.



Streamline content delivery across wireless networks

The challenge in today's e-marketplace is to deliver content across a variety of networks. As businesses and consumers integrate pervasive devices as part of their everyday habits, you need to streamline the delivery of your content to the mobile user so that information is provided efficiently and cost-effectively across costly, lower-bandwidth wireless networks. WebSphere Transcoding Publisher helps make accessing content across the wireless Internet quicker and easier — delivering only what you need, when you need it.

Content is streamlined before it is sent across the network, which allows the device to receive the information efficiently. When WebSphere Transcoding Publisher converts HTML to simplified HTML, images can become links to retrieve images; simple tables can be converted to bulleted lists; and features — such as JavaScript™ or applets of Shockware files — can be removed.

WebSphere Transcoding Publisher also converts, reduces or eliminates images to match display capabilities and optimize delivery to constrained devices. You can send smaller image files faster over wireless networks and smaller image files render quickly on small-screen devices. This capability saves the time it would take for the device itself to discard or alter images.

Because the capacity of the network influences the amount of content that can be sent to the mobile user, each network infrastructure determines where and how the content transformation technology should be deployed to deliver the content. Before downloading to the device, WebSphere Transcoding Publisher deck fragmentation

transcoder — available for WML, HDML and iMode — dynamically subdivides content into smaller pieces, enabling complex Web content to match the deck-size constraints of Internet-enabled phones. This capability frees content providers from many of the problems related to managing different constraints for different phones.

WebSphere Transcoding Publisher can be deployed in a number of ways, providing increased flexibility. Besides the stand-alone proxy server, caching proxy, servlet and JavaBeans™ transcoders, you can use the reverse proxy deployment option. An ideal solution for devices that do not have a means for users to specify a proxy, this flexibility allows WebSphere Transcoding Publisher to be deployed in a way that integrates with your existing network configuration. With these options, you can deploy WebSphere Transcoding Publisher where it will be most effective in your network infrastructure.

To simplify monitoring and management, WebSphere Transcoding Publisher allows you to store configuration information in an LDAP directory that is shared by multiple WebSphere Transcoding Publisher servers.

The WebSphere Transcoding Publisher framework provides a rich, dynamic environment for sequencing transcoders, monitoring requests and generating responses. The framework provides common services to transcoders that are plugged-in to the system and computer software to manipulate the data, such as evaluating preference information and responding appropriately to requests received from different devices or network types.

Customize presentation for end users

WebSphere Transcoding Publisher helps make communication through the wireless Internet more targeted, convenient and personalized. Not only can you extend your Web content to pervasive devices, but you can also customize the end-user experience so that the information is received effectively and in a most user-friendly fashion. The result is better interaction with customers, partners, suppliers and employees.

Using WebSphere Transcoding Publisher, you can customize content in several ways. With some custom Java™ programming, text clippers can be written to extract, or clip, specific content to be delivered to the device. For example, a cell phone user is able to retrieve a relevant portion—such as the daily stock price—from a corporate home page filled with other links and detailed information that is less essential to the specific transaction. Support is also available for an alternative approach to content selection, called annotation, based on annotating the original page with instructions for selecting and tailoring content. The annotation transcoder responds to an XML-compliant annotation language that can either be added to the original document or maintained in a separate file.

Also, WebSphere Transcoding Publisher can transform XML content to XML variants through the dynamic application of XSL stylesheets to customize format and layout. The stylesheet management functions help facilitate business-to-business information interchange.

WebSphere Transcoding Publisher includes a standard set of device and network profiles, containing configuration and capability information to support a wide variety of popular client devices and common network environments. When processing Web content, WebSphere Transcoding Publisher dynamically selects a network profile and a device profile to apply to the document.

The preference profiles define the characteristics of devices and networks. Individual preferences can indicate unique features, such as whether a device processes JavaScript or displays color images. Grouped together in profiles, the preferences define how data should be transcoded before it is delivered to the target device or network. With WebSphere Transcoding Publisher, adding support for new pervasive devices and stylesheets is a simple process through a graphical interface.

Designed to support developers and systems integrators, WebSphere Transcoding Publisher toolkit provides a rich set of application programming interfaces (APIs) for customizing existing transformation engines and integrating new transcoders as part of its pluggable framework.

IBM WebSphere Transcoding Publisher features at a glance

Feature	Benefit
Access to Web data and applications from pervasive devices, such as PDAs, Microsoft® Windows® CE devices and Internet-enabled phones	<ul style="list-style-type: none">• Extends reach of application content to new customers regardless of client device type, creating new business opportunities• Expands the reach of self-service applications for products and services• Helps enable dynamic content sharing with trading partners and suppliers across disparate systems
Plug-and-play transcoders for standard text and image formats, including XML, HTML, HDML, WML, cHTML, iMode, GIF, JPEG and WBMP	<ul style="list-style-type: none">• Provides convenient and virtually seamless access to Web content• Leverages existing IT assets (host data and Web application content) into new environments• Provides plug-and-play transforms to bridge standard content formats to pervasive device formats
Easy customization of content view	<ul style="list-style-type: none">• Helps you modify content for a wide selection of device types and matches display to end-user needs• Leverages text clippers, which can extract specific portions of the Web document to be displayed on the device for a more usable presentation and efficient delivery of information• Runtime support for a new content selection approach which makes it possible to select and tailor source content without programming
Rich, dynamic framework for transcoding that is extensible and standards-based	<ul style="list-style-type: none">• Provides an open, flexible solution• Extends easily by adding new device or network profiles and content transforms in response to market needs• Provides capability to add custom transcoders
Flexible implementation models, including WebSphere Application Server servlet, proxy and JavaBeans deployment	<ul style="list-style-type: none">• Serves as a network proxy to wireless-enable existing host applications or as a servlet running WebSphere Application Server; as a network proxy, works with caching products in your network
Easy-to-use developer toolkit with documentation and samples for building powerful solutions	<ul style="list-style-type: none">• Facilitates customizing Web content presentation• Simplifies customization of existing transforms or creation of new transforms• Supports developers and systems integrators by providing sample programs and GUI-based tools

IBM WebSphere Transcoding Publisher at a glance

Hardware requirements

IBM AIX® on IBM RS/6000® and Sun Solaris™ operating systems	<ul style="list-style-type: none">• 50MB of available disk space• 1GB of available memory• 333Mhz or higher processor
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Operating systems requirements

Microsoft® Windows NT® and Windows® 2000 operating systems	<ul style="list-style-type: none">• 50MB of available disk space• 512MB of available memory• Intel® Pentium® II/350Mhz or higher processor
Linux®	<ul style="list-style-type: none">• 50MB of available disk space• 512MB of available memory• Intel Pentium II/350Mhz or higher processor

IBM WebSphere Transcoding Publisher at a glance (continued)

Software requirements

- Server operating systems
(National Language versions are supported on all platforms.)
- IBM AIX, Version 4.3.2 or higher
 - Windows NT, Version 4.0 with IBM SP5®
 - Windows 2000 server
 - Sun Solaris, Version 7
 - Red Hat Linux, Version 6.2
 - SuSE, Version 6.4
 - Caldera eServer, Version 2.3
 - Turbo Linux, Version 6.0
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Note: If running as a servlet, IBM WebSphere Application Server, Version 3.5 is required. To use centralized configuration data, you must have Tivoli® SecureWay® Directory, Version 3.2 installed.

Client applications

- HTML-capable browsers, such as Microsoft Pocket Internet Explorer, Microsoft Internet Explorer and Netscape Communicator
 - Microbrowsers, such as Phone.com Up.Browser and Nokia WAP client
 - Devices with a standard HTTP browser
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Software supported

- Legacy integration
 - IBM WebSphere Host Publisher
 - Load balancing
 - IBM WebSphere Edge Server
 - Web serving
 - IBM WebSphere Application Server, Version 3.5
 - Pervasive computing
 - IBM WebSphere Transcoding Publisher is a key component of IBM WebSphere Everyplace Suite
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As your enterprise expands into new e-business markets, your ability to extend data and applications to the growing number of portable devices and pervasive computing environments becomes vitally important to reaching new customers and enhancing business-to-business relationships. WebSphere Transcoding Publisher propels your business to the second wave of the Internet—the wireless Internet—and helps ensure that your data and applications reach customers and employees in tomorrow's environments.

For more information

To learn more about IBM WebSphere Transcoding Publisher, visit:

ibm.com/websphere/transcoding