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WebSphere Transcoding Publisher Version 3.5

Optimizing the wireless Web experience

October 19, 2000

www.ibm.com/websphere/transcoding/

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The difference
is WebSphere.





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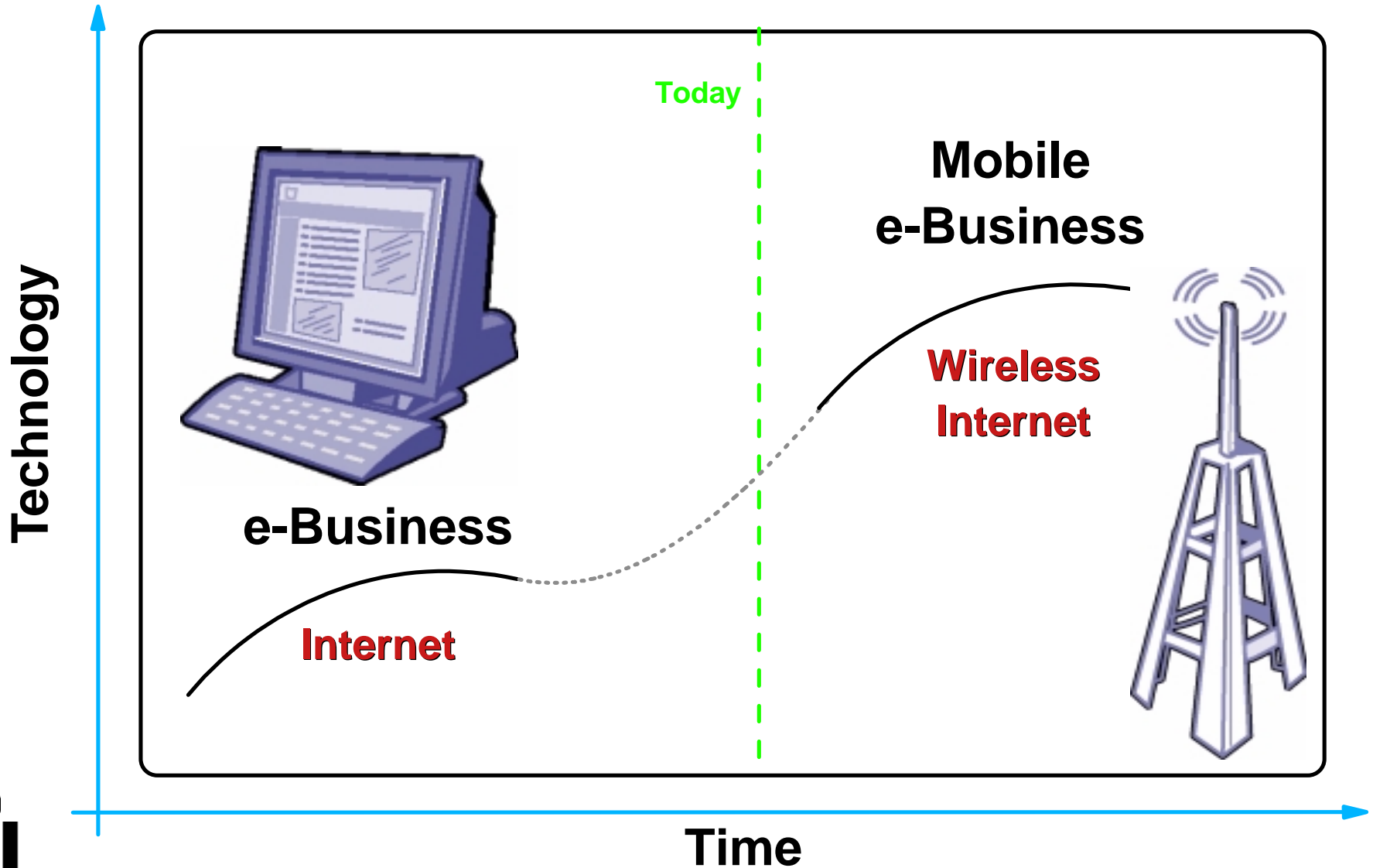
Agenda

- **The Business Need for Transcoding**
- **WTP Value Proposition**
- **WTP v3.5 Key Messages**
- **What's New in WTP v3.5**
- **Sales Opportunities for WTP**
- **WTP Competitive Positioning**
- **WTP v3.5 Product Availability & Pricing**
- **Resources Available**

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The second wave of e-business is coming -- the wireless Internet



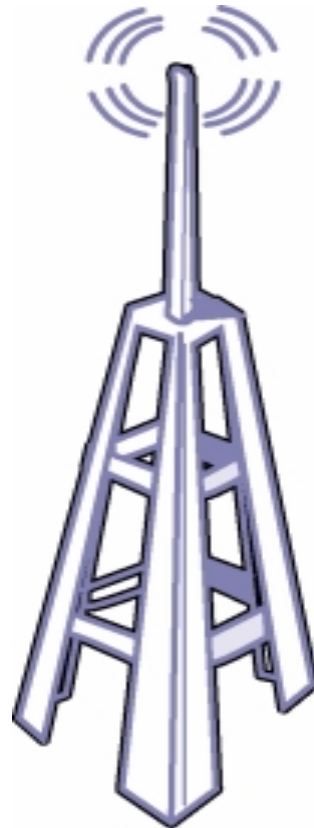
The wireless Internet is at its infancy, and the market complexity is high

Content



HTML, XML, cHTML, HDML, WML, iMode, etc.

Wireless Networks



GSM, CDMA, TDMA, etc.

Devices



PDAs, HDML-based Phones, WAP Phones, iMode Phones, Mobile Companions, VADs, etc.



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Investments in Web content can be leveraged by bridging markup languages



Content

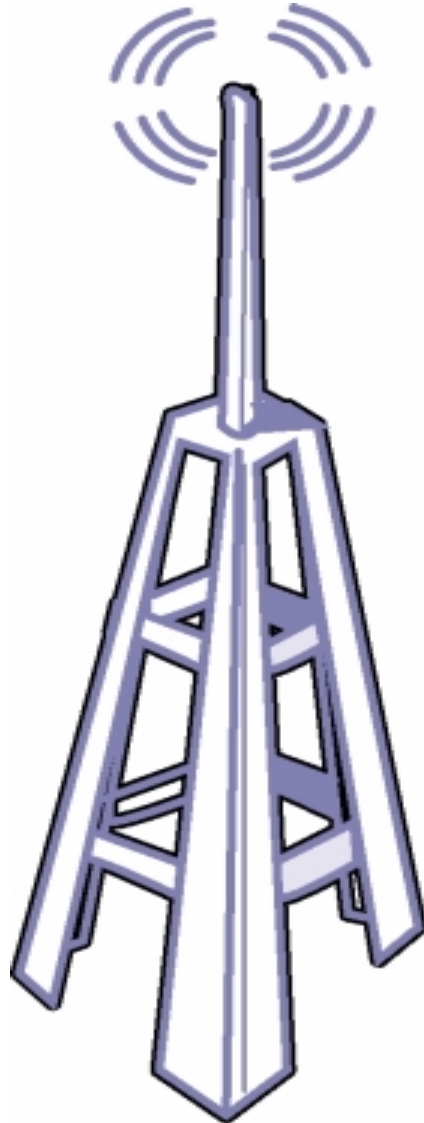
- ▶ Existing Web content was designed for browser-based display and is graphic intensive
- ▶ Primary markup language of the Internet is HTML
- ▶ Pervasive devices support a variety of non-standardized markup languages: cHTML, HDML, WML, iMode, etc.
- ▶ Must either re-author or dynamically transcode content to reach these device users
- ▶ XML will be important for the growth of pervasive applications
 - ▶ more sophisticated applications and data sources are available in XML
 - ▶ according to W3C, the next generation of HTML will be deployed as an XML suite



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Content delivery can be streamlined by minimizing what is sent over the network

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Networks

- ▶ Pervasive applications can be delivered to end users via wireless technology or synchronization
- ▶ Wireless technology is still at its dawn
 - ▶ 10 incompatible standards
 - ▶ low bandwidth
 - ▶ limited capabilities of wireless devices
- ▶ Advanced network services (WAP, iMode) and device-side support (Microsoft, Symbian) are intermediary solutions to bandwidth and device limitations
- ▶ While the 3rd generation networks to be deployed within the next 2-3 years are meant to offer permanent solution to standards, there are still bandwidth and protocol issues





The user experience can be optimized by customizing the content view

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Devices

- ▶ Depending on the transmission technology pervasive devices can be split into three groups: wireless, wired and embedded
- ▶ Devices have a wide variety of displays, screen sizes, and graphic capabilities
- ▶ Currently in a device war of models, standards and operating systems
- ▶ Device microbrowsers may be open or closed
- ▶ Almost all of the most popular devices require some sort of content adaptation, because of markup languages, formatting or both



Value Proposition

■ WebSphere Transcoding Publisher:

- ▶ **Extends** existing Web **content** to new devices, allowing you to reach new markets and provide new services without re-authoring
- ▶ **Streamlines delivery** so that content is provided efficiently to a variety of users across wireless networks
- ▶ **Customizes** content **presentation** for the end user and enables better interaction with customers, business partners and employees

...optimizing the wireless Web experience



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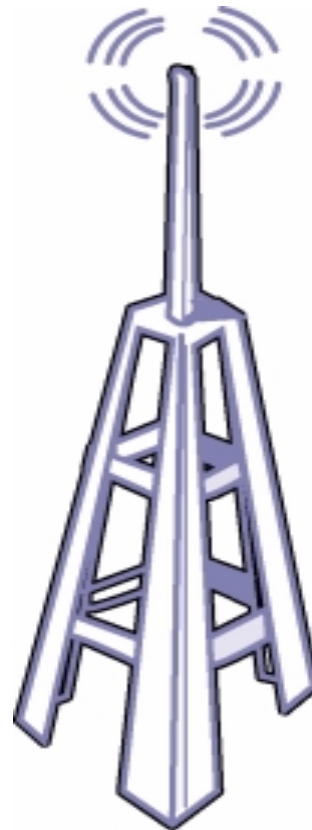
WebSphere Transcoding Publisher addresses wireless Internet complexities

***Extends
Content***



Bridges markup languages and image formats

***Streamlines
Delivery***



Simplifies content in response to wireless network constraints

***Customizes
Presentation***



Adapts display to end user device capabilities

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Transcoding at work...



WTP extends existing Web content to new devices



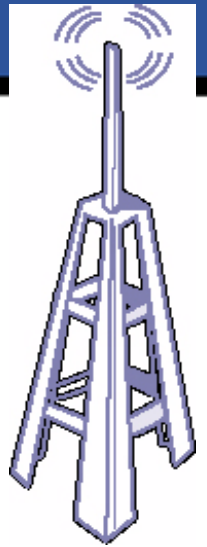
■ Bridges Markup Languages

- ▶ HTML → WML
- ▶ HTML → HDML *New!*
- ▶ HTML → iMode *New!*
- ▶ XML → XML' via XSL stylesheets

■ Converts Image Formats

- ▶ JPEG → GIF
- ▶ GIF → JPEG
- ▶ JPEG → WBMP *New!*
- ▶ GIF → WBMP *New!*

WTP streamlines content delivery across wireless networks



- **Simplifies HTML content**
- **Reduces, modifies or eliminates images**
- **Performs deck fragmentation**
 - ▶ In addition to WML, now offered for HDML, iMode **New!**
 - ▶ Now offered for servlet configuration **New!**
- **Offers several flexible deployment options**
 - ▶ Network proxy, WebSphere servlet, JavaBeans
 - ▶ Now reverse proxy option **New!**
- **Centralizes storage of administration information**
 - ▶ via LDAP directory **New!**
- **Integrates with the WebSphere software platform for e-business**
 - ▶ Supports WebSphere Application Server v3.5 **New!**



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WTP customizes content presentation for the end user



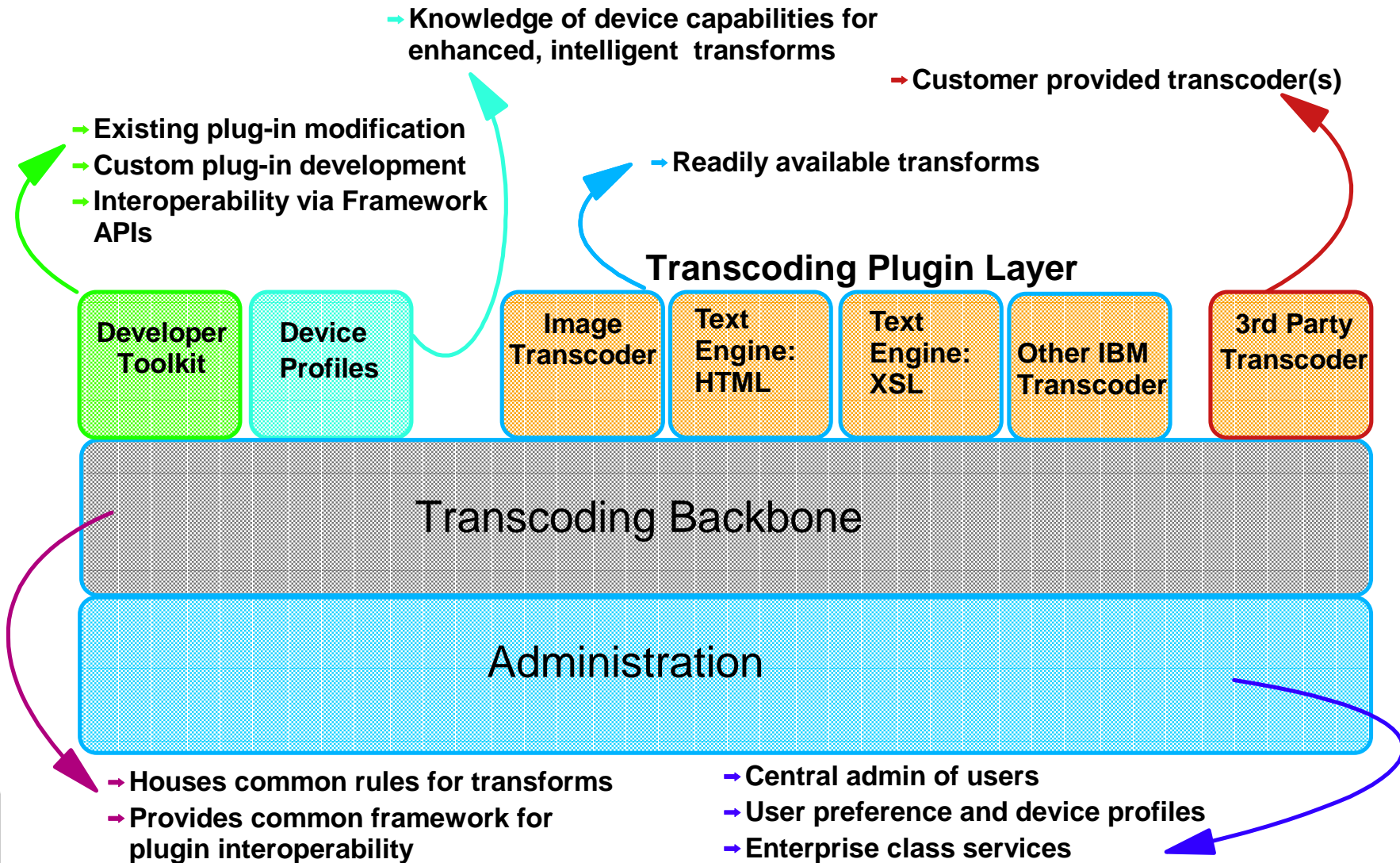
- **Selects a subset of content for display**
 - ▶ HTML clipping is now available in addition to WML clipping **New!**
 - ▶ Run-time support for annotation **New!**
- **XSL stylesheets can be dynamically applied to XML content to customize format and layout**
 - ▶ Parameterization **New!**
 - ▶ Internationalization **New!**
- **Device profiles allow for a device-level personalization of content**
- **Easy-to-user developer's toolkit with tools, documentation, and samples**
 - ▶ Transform tool enhancements **New!**

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WebSphere Transcoding Publisher v3.5

reaches more devices, transcodes across more formats and has improved flexibility and administration capability





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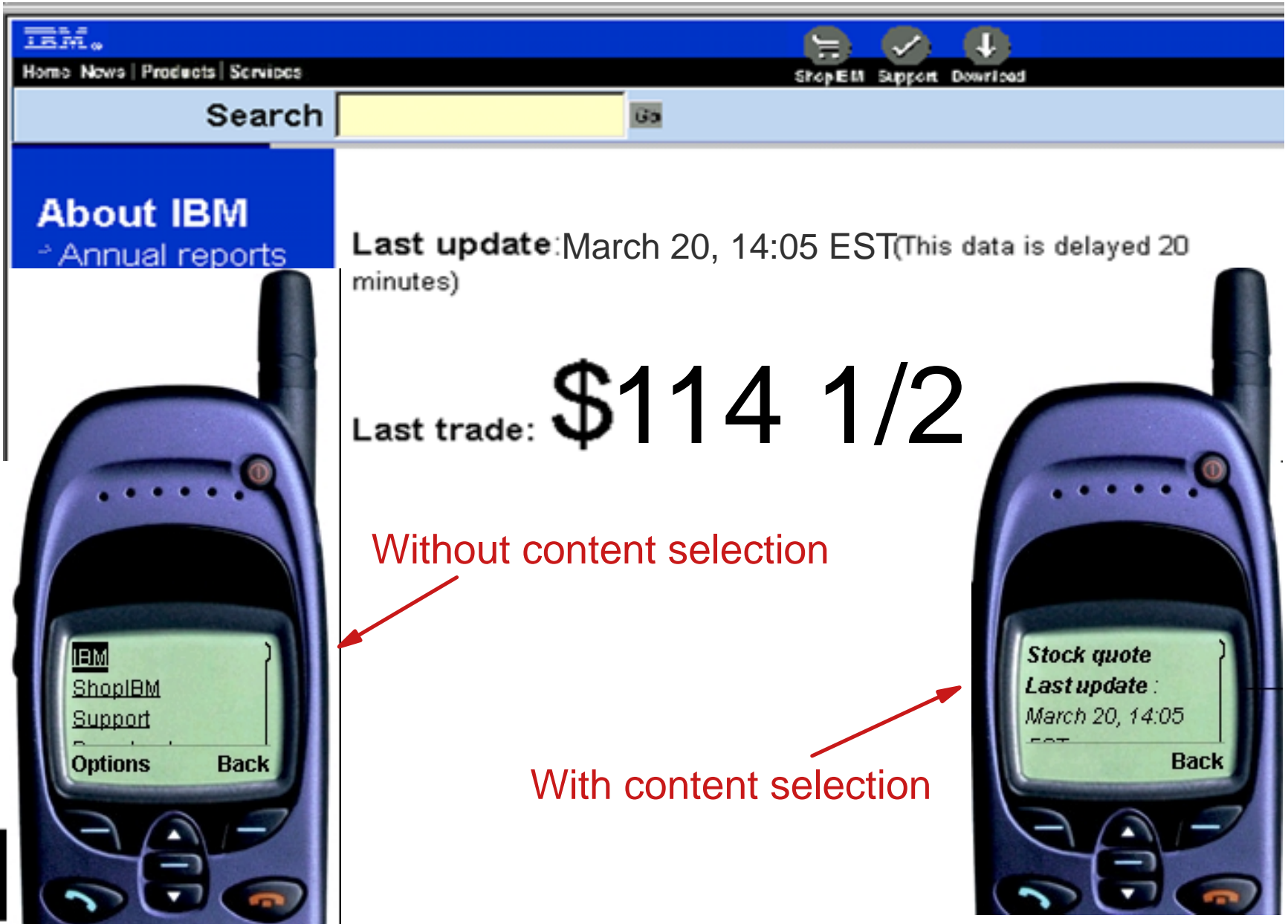
What's new in WebSphere Transcoding Publisher Version 3.5 -- *Highlights*

- **New language transcoders**
- **New image transcoders**
- **Support for WebSphere Application Server Version 3.5 (in servlet mode)**
- ➔ **Enhanced content selection capabilities**
- ➔ **Improved stylesheet processing for XML content**
- **Expanded pervasive device support**
- ➔ **Increased deployment flexibility**
- **Extended deck fragmentation capabilities**
- **Improved administration capability**
- **Toolkit enhancements**

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Content selection presents a subset of information for a customized view



The image shows a desktop browser window at the top with the IBM logo and navigation links (Home, News, Products, Services). Below the search bar, there is a blue sidebar with 'About IBM' and 'Annual reports'. The main content area displays 'Last update: March 20, 14:05 EST (This data is delayed 20 minutes)' and 'Last trade: \$114 1/2'. Below the browser window, two purple mobile phones are shown. The left phone's screen displays a menu with 'IBM', 'ShopIBM', 'Support', 'Options', and 'Back'. A red arrow points from the text 'Without content selection' to this phone. The right phone's screen displays 'Stock quote', 'Last update: March 20, 14:05 EST', and 'Back'. A red arrow points from the text 'With content selection' to this phone.

Annotation -- a new approach for HTML content selection

- **Annotation runtime has been added in WTP 3.5**
 - ▶ **Introduces a framework for applying Annotation files to specific URL's**
 - ▶ **Annotation files contain XML-compliant language for selecting content for modification or removal**
 - ▶ **Annotations can be contained in external annotation files or within the content source**
 - ▶ **Annotation file creation tools are under development**

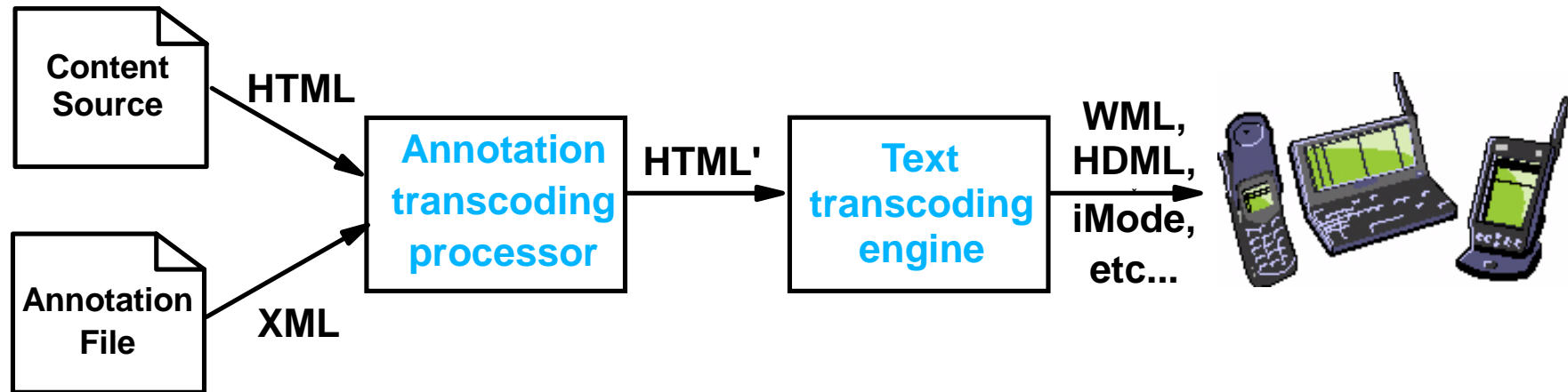
```
<?xml version='1.0' ?>
<annot version="1.0">
<description target="//FORM[1]"
take-effect="after">
    <remove tag="all" />
</description>

    <description target="//TABLE[1]/1"
take-effect="before">
    <keep tag="IMG" />
</description>
```

← **Sample Annotation file**



Annotation makes it possible to easily select and tailor source content



- Enables quick and easy:
 - ▶ content selection and attribute setting
 - ▶ image and form replacement
 - ▶ form and table reduction and reformatting
- Unlike clipping, annotation is performed once prior to transcoding to various markup languages
- Transcoding is therefore only acting on a subset of original HTML content, improving efficiency
- No Java programming is required


Annotation example: table reduction

ShopIBM - E Series - Microsoft Internet Explorer

United States ShopIBM + Support

Home Products Consulting Industries News About IBM Call 1-888-SHOP-IB

E Series Comparison



- View rebates and promotions
- Take a product tour
- Looking for a Different Product?

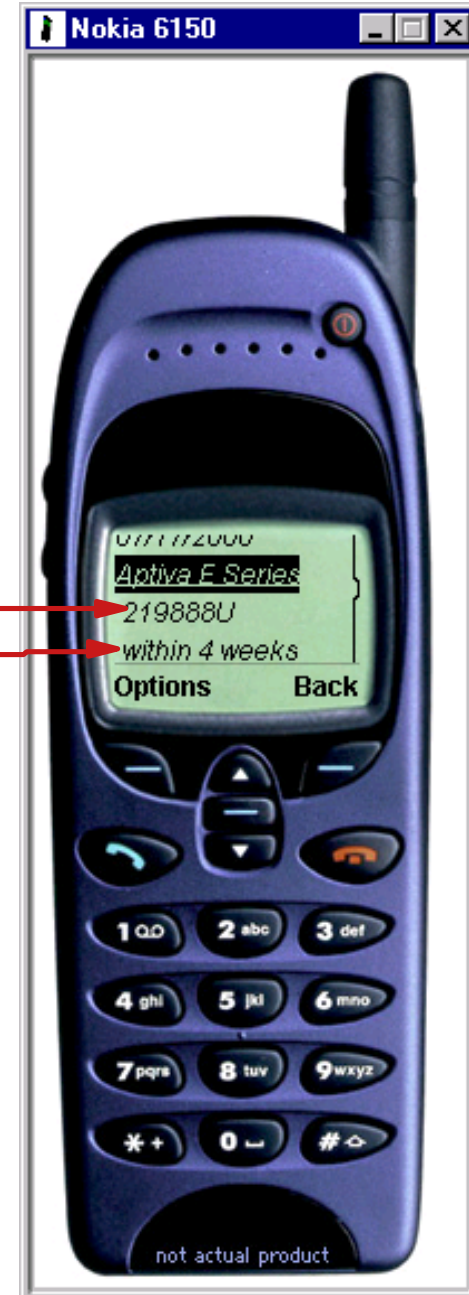
Call 1-888-SHOP-IBM ext.7000 to order by phone

Call me now → /

Sort this chart by: Price Processor Availability

Compare more models: S Series

Model name	IBM Web Price / Finance	Availability as of 07/17/2000	Processor / Speed (MHz)	Memory (std/max/type) (MB)	Hard disk size (GB)	CD-ROM speed
Aptiva E Series 219888U New!	\$2,219.00* As low as \$62.00/mo. for 48 mos. Consumer Financing Through MBNA**	within 4 weeks	Pentium III / 933	128/512 SDRAM	45GB (Ultra ATA/66)	16X-8X
Aptiva E Series 219882U	\$1,439.00* As low as \$41.00/mo.	within 4 weeks	Pentium III / 600	128/512 SDRAM	30GB (Ultra ATA/66)	48Xmax-20Xmin

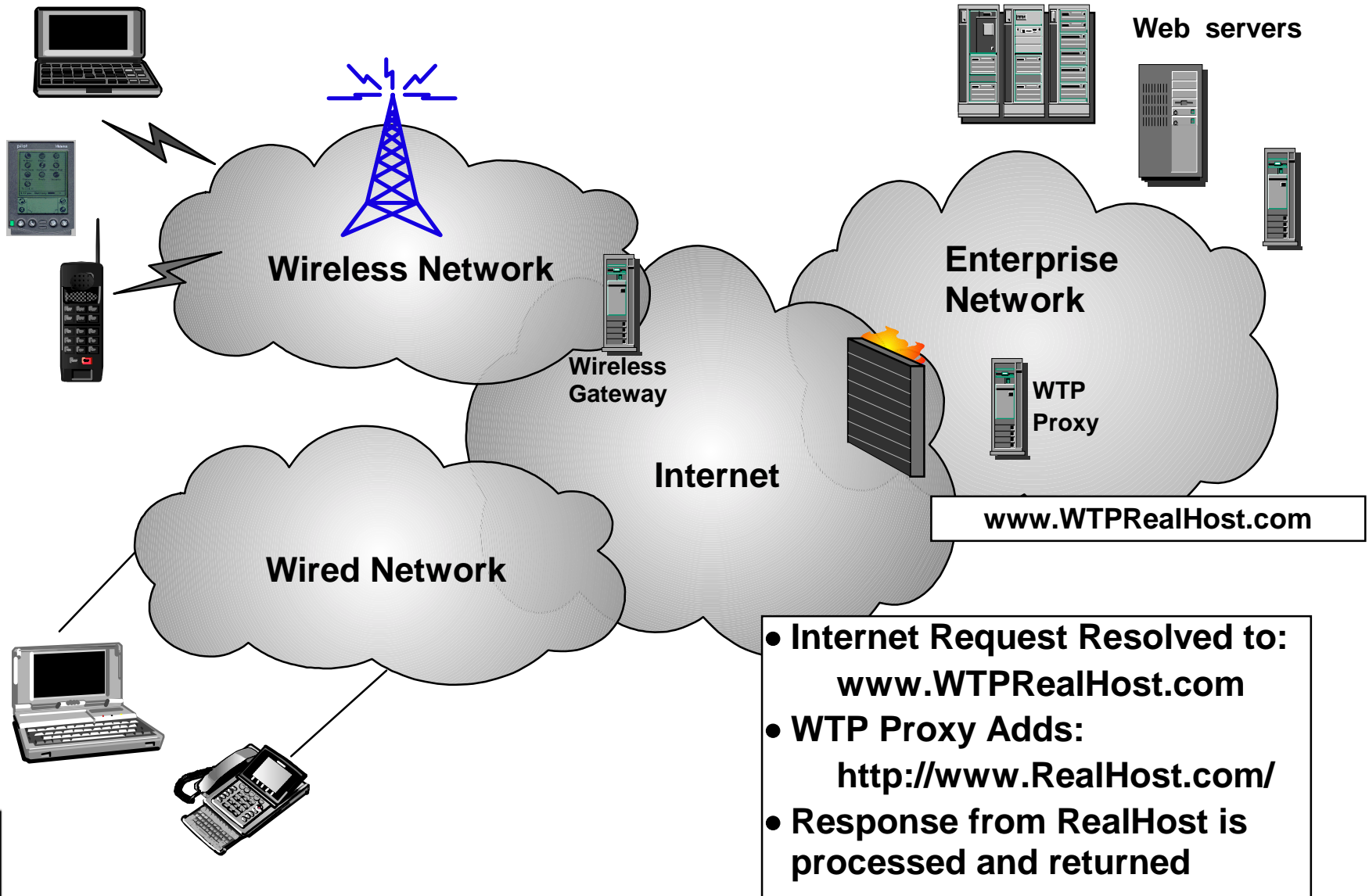




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Reverse proxy deployment option allows proxy to act as a server

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Stylesheet Enhancements

■ Parameterization

- ▶ Reduces the number of stylesheets that need to be maintained
- ▶ Parameters pass information into stylesheet processing and logical stylesheet processing based on input
- ▶ Provides the ability to handle minor variances across similar devices

■ Internationalization

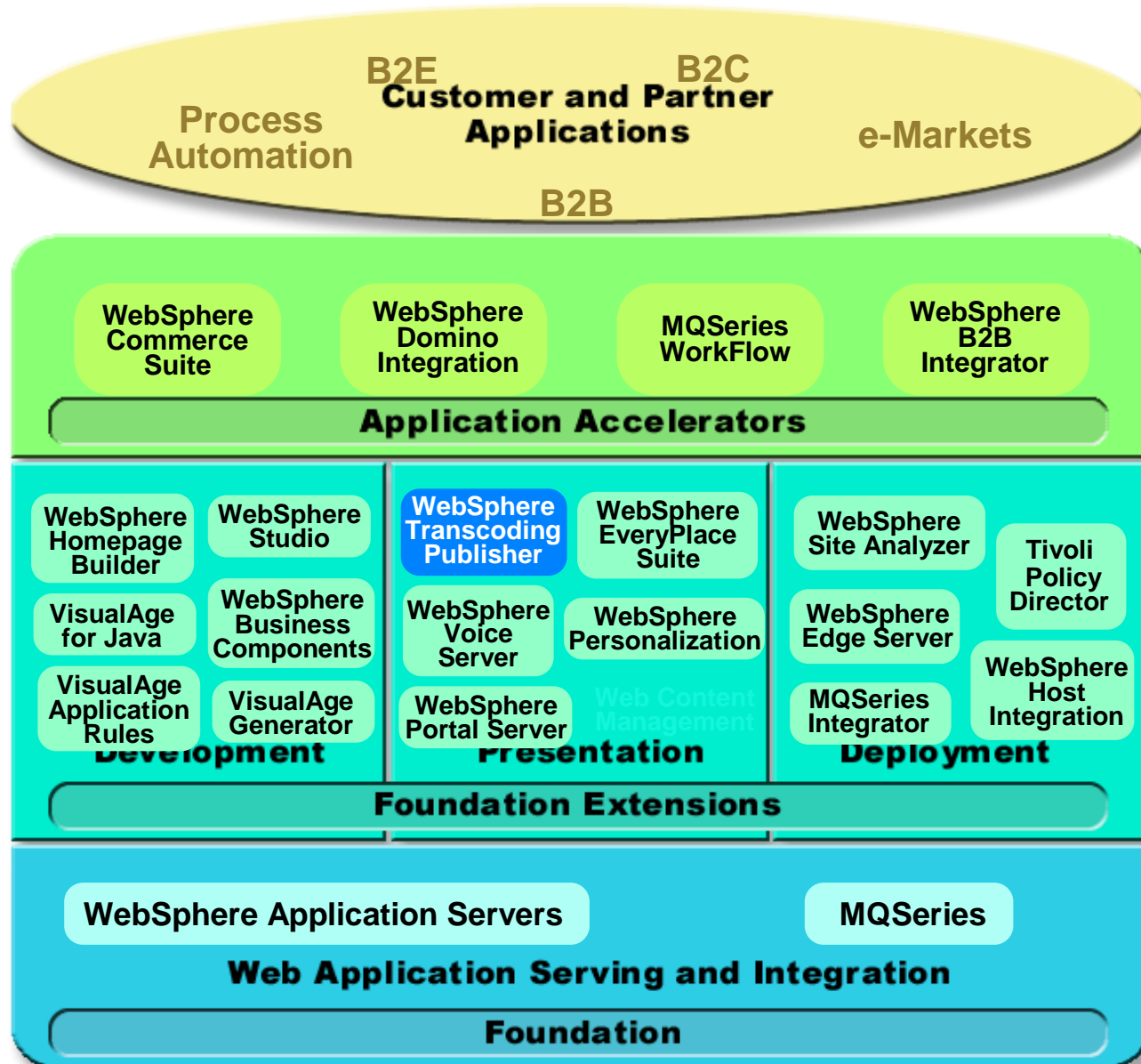
- ▶ Allows a single stylesheet to be adapted for multiple languages
- ▶ Uses input parameters to specifically select the language strings used for replacement in a XML document
- ▶ Starter set of common terms in 10 languages

■ Administration and Usability

- ▶ General improvements in the use and administration of stylesheets and stylesheet configuration

WTP is integrated into the WebSphere software platform for e-business

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Customer References

- **Enterprise / Content Owners**
 - ▶ Banca Popolare di Milano / We@Bank (EMEA)
 - ▶ Sanwa Bank / Ewing Securities (AP)
 - ▶ Commerce Scout (NA)
- **Service Providers and Consulting Services**
 - ▶ BT Cellnet (EMEA)
 - ▶ Brightpod (NA)
 - ▶ YacCom (EMEA)
 - ▶ Luminant (NA)
 - ▶ WAPHead! (AP)



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Banca Popolare di Milano We@Bank



- **Banca Popolare di Milano (BPM) is a cooperative with over 100,000 member organizations across Italy. BPM comprises organizations focused on trading, funds, assets, insurance, core banking, credit, leasing, and retail and corporate banking. BPM is building its new wireless banking solution, We@Bank, around WebSphere Application Server Enterprise Edition and WebSphere Transcoding Publisher.**

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Sanwa Bank / Ewing Securities



- **Sanwa Bank, Ltd. was founded in Osaka, Japan, in 1656 and today manages an asset base of over \$400 billion (US) across 200 branches in 25 countries. In April 2000, Sanwa Bank opened Ewing Securities, a subsidiary devoted to on-line securities trading. In September, Ewing enabled wireless securities trading for phones from NTT DoCoMo, JSky, and other popular vendors using IBM's WebSphere Transcoding Publisher. With Transcoding Publisher, Ewing customers are able to trade in the Tokyo, Osaka, and Nasdaq markets.**

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CommerceScout

- **CommerceScout develops next-generation commerce tools to add depth and efficiency to a company's research and procurement cycle. CommerceScout comparison and decision support tools expedite quoting, integrated MRP/ERP volume and replenishment purchases, as well as marketplace analytics such as purchasing the same product across multiple marketplaces.**
- **Ted Malley, Chief Technical Officer says *"We chose IBM Transcoding Publisher because it allows us to quickly add wireless device support to our users in the CommerceScout Network without having to write all of the utility code required for transcoding. Since we're an existing WebSphere customer, the Transcoding Publisher gives us the time to market we need to be competitive in the B2B marketplace tools space, as well as a solid platform to deploy on. We chose Transcoding Publisher for the CommerceScout Network to quickly support a wide variety of output formats; not only for wireless, but for pure XML/XSL transformations as well."***



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British Telecom Cellnet Genie



- **BT Cellnet handles over 30 million wireless calls a day and serves 99% of the UK population. The first company in the UK to offer WAP service to customers and the first to launch a Mobile Internet service (Genie), BT Cellnet is optimising its mobile service using IBM's WebSphere Transcoding Publisher.**
- **Dominic Badger, BT's New Technologies Program Manager, says: *"We realised that we needed industrial strength technology to support our rapidly growing customer base and the wide variety of devices they are using. Working with IBM, we are able to support the wireless devices already in the market while having the flexibility to accommodate new ones as they emerge. WebSphere enables us to deliver content seamlessly, secure in the knowledge that as the wireless market evolves, our service will be able to mirror its growth."***



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Brightpod



- An application service provider closely affiliated with its founding investor Ericsson, Brightpod designs enterprise portals for the mobile Internet, enabling businesses and their customers to access a company's Internet or Intranet-based content and applications through wireless devices. Brightpod chose IBM technology to power its new online service offering, which creates instant mobile portals for a small monthly fee.
- Don Shirley, CEO, says: *"Our Brightpod Online service required a product that enabled Web-to-wireless translation without requiring that we re-author content. Transcoding Publisher and the WebSphere platform provide us with a robust and continually evolving solution from which to offer this service as well as others down the road."*

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YacCom



- **YacCom provides turnkey solutions for the development of advanced wireless and Internet technologies, applications, and associated services. The company is active across the key aspects of wireless and Internet technology and applications development, from the early stage development of new technologies to the deployment of end-user services.**
- ***"The main challenge YacCom has encountered is to adapt contents to the great variety of devices available in the market today, forcing us to redesign entire applications or to build additional interfaces onto existing ones. Thanks to Websphere Transcoding Publisher, which customizes content for specific devices from one single-source of data, our development time is drastically reduced, enabling us to offer our clients more pervasive solutions without extra cost", says Jacky Boscher, President.***

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Luminant



l u m i n a n t

- **Luminant Worldwide Corporation is an integrated e-business services firm with over 1000 employees. Luminant professionals (known as Luminaries) “stretch the Net” to deliver business value through increased revenues, productivity and customer loyalty. Based in Dallas, Luminant is enabling its Internet for wireless access using WebSphere Transcoding Publisher.**
- **Bruce Grant, Key Practice Director, Advanced Technologies, said: *“Using WebSphere Transcoding Publisher, we can create our content once and seamlessly deliver that content to a wide range of wireless devices. WebSphere Transcoding Publisher is helping us deliver vital business information directly to the palms of our employees' and our customers' hands.”***



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WAPHead!

- **WAPHead! is a technology integrator focused on wireless Internet consulting, application development and hosting services in the Asia Pacific market. The WAPHead! wireless Internet portal supports Chinese and English mobile phones and handheld personal organizers. The company has developed two applications -- mobile banking and mobile stock trading -- based on IBM's WebSphere Transcoding Publisher and has included the product as a key component in its mobile architecture. WAPHead chose Transcoding because the product supports many markup languages, a vital feature in Asia, and because of the product's ease of use and cost competitiveness.**

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IBM



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WebSphere Transcoding Publisher Competitive Outlook

- **WTP is the most general content adaptation solution available today**

- **Key Competitors**
 - ▶ Oracle - Portal to Go
 - ▶ AvantGo - Enterprise Online
 - ▶ Aether Software - ScoutWeb
 - ▶ NetMorf - Sitemorfer
 - ▶ Service Providers such as Everypath

- **WebSphere Transcoding Publisher named best of breed with independent product reviews**
 - ▶ InfoWorld - May 29, 2000
 - ▶ e-Week - July 10, 2000

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WTP Competitive Advantages

- ✓ Supported on many different web servers on multiple platforms. Development can also be done on several platforms as well, not just on Windows NT/2000.
- ✓ Supports multiple deployment options (proxy, reverse proxy, servlet, Java Bean) giving customers the power and flexibility to use WTP the way that they want to use it.
- ✓ Provides a wide variety of standard transformations and a pluggable framework for adding new transforms.
- ✓ Provides image transcoding which is unique in the market.
- ✓ Does not require a database to work.
- ✓ Provides fragmentation which allows WTP to more effectively reach devices with limited storage capacity.
- ✓ Supports the easy creation and editing of Preference Profiles. Preference Profiles are a "map" that tells WTP how to transform content that is sent to an end user device.
- ✓ Does not require any client code to be installed on the end user's device.
- ✓ Has the capability to transform any content on the fly, rather than only having access to pre-defined content.



Product Availability & Pricing

■ Availability

- ▶ Launch at CTIA Wireless IT 2000 on 10/17
- ▶ Worldwide announcement: 10/24
- ▶ General availability: 11/24

■ Pricing

- ▶ \$30,000 (\$US) per processor

■ Platforms

- ▶ AIX, Windows NT & 2000, Solaris, and Linux
- ▶ All platforms translated to 10 languages
- ▶ Supported on multiple Linux platforms:
RedHat, SuSE, Caldera and Turbo Linux



Resources Available

- **Revised WTP 3.5 White paper**
- **Revised WTP 3.5 Spec Sheet (G325-3987-01)**
- **Online sales enablement kit available 11/00**
- **Updated Web site:**
www.ibm.com/websphere/transcoding
- **Updated W3 site:**
w3.software.ibm.com/sales/aim/prod/transcoding/
 - ▶ **competitive information**
- **WTP Workshops**
 - ▶ **Advanced Topics Workshop for IBMers**
 - ▶ **Programming Workshop for BPs through SPCs**
- **Redbook (Version 1.1) (SG24-5965)**
- **InfoWorld review of Version 1.1 available**
- **Canned WTP demo available by EBU (01/01)**