What is WebSphere?

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Phases of e-business Adoption

iSeries customers are demanding that we provide the tools and infrastructure to create the applications of the future...

"Get on the Net"  
"Buying, not browsing... Working, not surfing."

"Optimize operations... dynamically respond to the needs of customers, employees, partners."

Access  
Publish  
Transact  
Integrate Internally  
Integrate Externally  
Adapt Dynamically

Access  
Enterprise Integration
**iSeries Customers**

![Diagram of e-business transition phases with pie chart showing adoption by states: Early (80%), Integrating (15%), Advanced (5%)]

- **Early (80%)**
  - Access
  - Publish
  - Transact

- **Integrating (15%)**
  - Integrate Internally
  - Integrate Externally

- **Advanced (5%)**
  - Adapt Dynamically

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**Developers Road Map Points the Way**

![Flowchart showing roadmap for developers with remote system explorer (RSE), existing customers, existing solution providers, new to iSeries, and e-business points the way]

- **Existing Customers**
  - Better Tools
  - Better User Interface
  - Better Architecture
  - Better Solutions
  - Better Portability
  - Better Scalability

- **Existing Solution Providers**
  - PDM
  - 5250
  - RPG
  - ILE RPG

- **New to iSeries**
  - RSE
  - Web Tools
  - Java Tools
  - J2EE / EJBs

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**Optimize operations... dynamically respond to the needs of customers, employees, partners.**

**Buying, not browsing... Working, not surfing.**

**Get on the Net**
WebSphere on iSeries

The leading software platform for e-business on demand

Reduce Business Risk
Rely upon a high-quality foundation to rapidly build and deploy applications for high-performance e-business on demand

Strengthen Relationships
Enhance customer, partner, employee and supplier user experiences for optimal satisfaction

Optimize Operations
By integrating applications & automating business processes for operational efficiencies & business flexibility

WebSphere MQ

WebSphere Application Server

WebSphere Host Integration

WebSphere Development Studio

WebSphere Commerce

WebSphere Portal Server

WebSphere on iSeries

WebSphere Express

The leading software platform for e-business on demand

Reduce Business Risk
Rely upon a high-quality foundation to rapidly build and deploy applications for high-performance e-business on demand

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WebSphere MQ Express

WebSphere Development Studio Express

WebSphere Commerce Express

WebSphere Portal Server Express

WebSphere Express Application Server

WebSphere Express Item Synchronization
Upgrade Paths...

- **WebSphere Standard Edition 3.5**
  - No Charge
  - Configurator

- **WebSphere Single Server 4.0**
  - $8,000/CPU plus Maint.

- **WebSphere Advanced 4.0**
  - $12,000/CPU plus Maint.

- **WebSphere Base 5.0**
  - $8,951/CPU (includes Maint.)

- **WebSphere Express 5.0**
  - $2,000/CPU or $25/User
  - No charge from 3.5 SE PPA Only

- **WebSphere Network Deployed 5.0**
  - $13,441/CPU (includes maint.)

For more details and configurations, please refer to the images provided.
## WebSphere Integration

### Bundle

<table>
<thead>
<tr>
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### Configuration Wizards

- Welcome to IBM HTTP Server for iSeries
- Set Up Your Servers
- Tasks and Wizards
  - WebSphere Development Studio for iSeries

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9-10
### CPW Issues

**Under 512MB**

| S10, S01, Pxx | S20 / #2161, #2163 | 170 / #2407, #2408, #2409 | 630 / #2150, #2151 |
| 100, 150      | 170 / #2159, #2160, #2164 | 200, 206, 250             | 600             |
| 170 / #2289, #2290, #2291 | 170 / #2292 | 270 / #2422, #2423, #2424 | 620 / #2175, #2179, #2180, #2181 |
|               |                | 270 / #2248, #2452, #2454 | 720 / #2061     |
|               |                | 3xx, 4xx                   | 820 / #2425, #2426, #2457, #2456 |

**512MB - 1GB**

| S30 / #2257 | S20 / #2170, #2165 | 640 / #2185, #2186, #2187 | 800             |
| 170 / #2176, #2183, #2383 | 170 / #2384, #2385, #2386 | 640 / #2237             | 100, 150        |
| 640 / #2238, #2239 | 270 / #2250, #2431 | 720 / #2062             | 620 / #2175, #2179, #2180, #2181 |
| 53S / #2155 | S30 / #2152 | 820 / #2395, #2427, #2458 | 720 / #2061     |
|               |                | 800             | 820 / #2425, #2426, #2457, #2456 |

**1GB - 300 - 500 CPW**

| SB1, SB2, SB3 | S20, S30, S40 | 640 / #2238, #2239 | 800             |
| 170 / #2388 | 270 / #2252, #2259 | 720 / #2062         | 620 / #2175, #2179, #2180, #2181 |
| 270 / #2432, #2434 | 53S / #2155, #2157 | 820 / #2395, #2427, #2458 | 720 / #2061 |
| 53S / #2155, #2157, #2162 | 53S / #2156, #2157, #2162 | 800             | 820 / #2425, #2426, #2457, #2456 |

**Over 1GB**

| 640 / #2238, #2239 | 270 / #2250, #2431 | 800             | 620 / #2175, #2179, #2180, #2181 |
| 53S / #2155, #2157, #2162 | 53S / #2156, #2157, #2162 | 800             | 820 / #2425, #2426, #2457, #2456 |

**SB1, SB2, SB3**

| S20, S30, S40 | 640 / #2238, #2239 | 720 / #2062         | 620 / #2175, #2179, #2180, #2181 |
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### Workload Estimator

**Basic Workload Selection**

- Add Workloads to This Solution (help)
- Expert View

**Add Workloads to This Solution**

- **Default Workload**
- **Dynamic Workload**
- **File Server (Large Workload)**
- **SAP Workload**
- **Java Workload**
- **Main Workload**
- **Traditional Workload**
- **WebSphere Workload**
- **Web Services & Java Workload**
- **WebSphere Workshop**
- **WebSphere Commerce Workload**
- **WebSphere Portal Server Workload**

**IBM Telephone Directory**

- WebSphere Application Server is web plumbing
  - IBM Telephone Directory provides "out-of-the-box" functionality

- Provide ISV's and customers with an application which can be used immediately
  - "Started simple" with WebSphere
  - Provide a valuable application all customers can use

- Powerful search capabilities
  - Name - photo - phone - role - division - department - management chain, etc.

- No-cost for first 1,000 entries
  - IGS services for additional entries

**Integrated Tools**

Integrates WebSphere Development Studio for iSeries + WebSphere Application Server = ☺

WebSphere Development Studio for iSeries

- Combines Legacy and web development in one offering
- Host & client tools
- RPG, Cobol, C & C++
- Java, HTML, XML, & Web Services
- WebSphere Development Studio Client (WDSc) is Windows tool bundle
- 1 copy of WDSc is shipped with WebSphere-Express for iSeries

80,000 copies shipped since May 23, 2001!

WebSphere Studio Application Developer
Build robust J2EE™ applications with Enterprise JavaBean™ (EJB™) Components --
Advanced tools for code generation, performance tuning & best practices --
Relational schema center -- EJB-to-RDB mapping tools

WebSphere Development Studio Advanced Edition for iSeries
WRKSPFLF, STRUTS, Build robust J2EE applications with Enterprise JavaBeans
WebSphere Development Studio for iSeries
WebFacing -- CODE -- iSeries extensions to WSSDa
WebSphere Studio Site Developer Advanced
J2EE™ -- Java™ -- Servlets -- JavaServer™ Pages -- XML --
Web Services -- Built in WebSphere Application Server test environment
Database tools -- Integrated Java Development Environment

WebSphere Studio Homepage Builder
WYSIWYG Page editing wizard -- JavaScript™--
Dynamic HTML -- Cascading Style Sheets --
WebVideo Studio -- Advanced image effects

WebSphere Studio Workbench
Common User Interface -- Project Management -- Debugging Services --
Plug-in Services & Tools -- Desktop & Help Frameworks -- Local & Team Resource Management

A single, comprehensive development environment
iSeries Specific or Cross Platform
Common Base
Better UI - HATS

- Original 5250
- Refaced
- Customized
- Integrated

WebFacing Tool

- Built on WebSphere Application Server
- Part of WebSphere Development Studio for iSeries
- Migrate RPG/5250 applications to GUI
- End-users access applications via browser
- Quick and easy to convert applications
- No interactive workload on NEW systems
After WebFacing

... Like this

Or this ...

iSeries Access for the Web

Economical, easy to use and Install
Best for Intranet end users

iSeries Access for the Web
- Administrator & end-user tool
- Screen for screen conversion
- Access iSeries resources via browser
- Use with WebFacing - for system screens administrator can customize/limit access to resources
**WebSphere Host Publisher**

- Programmer tool
- Modernize existing 5250 applications
- Combine multiple back-end applications (iSeries, zSeries, VAX, etc)
- Customize applications
- Take 1,000 screens down to 200
- Supports WAS V3.5 & V4 (not WAS V5 or WebSphere - Express V5)

**Best for restructuring applications to modify application flow and automate application navigation**
Can expose selected paths of an existing application to a Web view
Can change order and placement of application presentation

*Improved Interfaces*

Porter County Indiana - Tax Details Screen
**Improved Interfaces**

**Porter County - Tax Search Form - Tax Information Results**

**HATS Limited Edition**

- Limited Edition Included in iSeries Access
- A Web-to-host HTML emulator...
- Includes a rules-based transformation engine...
- Converts green screens to graphical user interfaces (GUIs)...
- Dynamic conversion....
- Customer can upgrade to full HATS server via Host Integration Solution for iSeries
- Zero footprint / zero download
- Full server supports 3270 & 5250
Host Integration Solution

<table>
<thead>
<tr>
<th></th>
<th>Registered User</th>
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<tr>
<td>HIS Cross Platform</td>
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Host Integration Solution includes WebSphere App Server and WSAD

- **Functionality**
  - **Browser based** - Single point of access
  - **Single Sign On** - Global access
  - **Portlets** - Windows to all major applications
  - **Access** - Secure, filtered access to corporate data

- **Business Value**
  - Funnel and filter to the overwhelming information
  - Make better decisions when you have the right information
  - Provide a common "desktop" with the proper tools that different jobs require
  - Removing stovepipe applications and departments
  - More Effective experience

Portal Integration

- **Mutiple Editions**
  - **Portal Enable**  $72K per CPU
  - **Portal Extend**  $125K per CPU
  - **Portal Experience**  $500K per CPU
  - **Portal Express**  $77/User  $30K/CPU
  - **Portal Express Plus**  $122/User  $48K/CPU  ST/QP
WebSphere MQ v5.3

- Connects to any commercial system in business today (35 different Platforms)
- Ignore network disruptions - important data is always delivered.
- Requires programming skills to leverage the rich set of API’s

Typical Uses
- Exactly-once, assured delivery
- Single API across > 35
- OS-platforms
- Network integration across SNA, TCP/IP, SPX, NetBIOS
- Transactional control
- Content Independence
- Single record -> 100 MB files
- Allows value-chain integration, within
and across enterprises

ibm.com/software/integration/wmq/v53/g325-1981-00.pdf

Collaboration

Optimized for collaboration and workflow
Optimized for distributed transactions and components

Technology-independent messaging infrastructure

<table>
<thead>
<tr>
<th>Database</th>
<th>Messaging</th>
<th>Application Development</th>
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</thead>
<tbody>
<tr>
<td>Application Integration</td>
<td>Replication</td>
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Manageability
Availability
Security
Scalability

1Series zSeries xSeries pSeries Linux
Customers and partners may enter the map at any stage and may choose to exit at any stage as well.
### Use Baby Steps

- Move to V5Rx
- Migrate to ILE RPG/COBOL
- Think in terms of interoperation
- Start thinking about using APIs like Client Access and Java Tool Kit

### Move to ILE

- New ways to distribute reports
- New ways to enable queries
- New ways to integrate e-mail and data

### WEB

- WebSphere App Server
- EDI / XML
- Commerce Suite
- WebSphere Dev Studio
- MQ Series, Connect for iSeries
- Wireless
- Portal Server
- Partner Tools

### Move to Java and OO

- Add a GUI to your existing applications
- Examine function and navigation issues that accompany the GUI
- Start thinking about Java & HTML
- WebSphere Dev Studio
- Partner Products

### Think New Function

- Business Intelligence
- Audio and Video Components
- Voice / Image integration
- LPAR
- Partner Products

### Improve Client Integration

- NT / SQL Server
- Heterogeneous Integration

### Reface Existing Apps

- Add a GUI to your existing applications
- Examine function and navigation issues that accompany the GUI
- Start thinking about Java & HTML
- WebSphere Dev Studio
- Partner Products

### Tools Network

Developing applications for integrated applications servers? Looking for the right set of tools to meet your development and production requirements? This page covers all stages of application life cycle management. It also provides an organized approach to advance the critical steps for your application development and deployment needs, such as:

- Application design, construction and debug
- Automated software quality
- Software configuration management
- Application server software for e-commerce and e-business
- Software reengineering and transformation
- Business intelligence
- Systems management

**www.ibm.com/servers/enable/tools/iseries**