



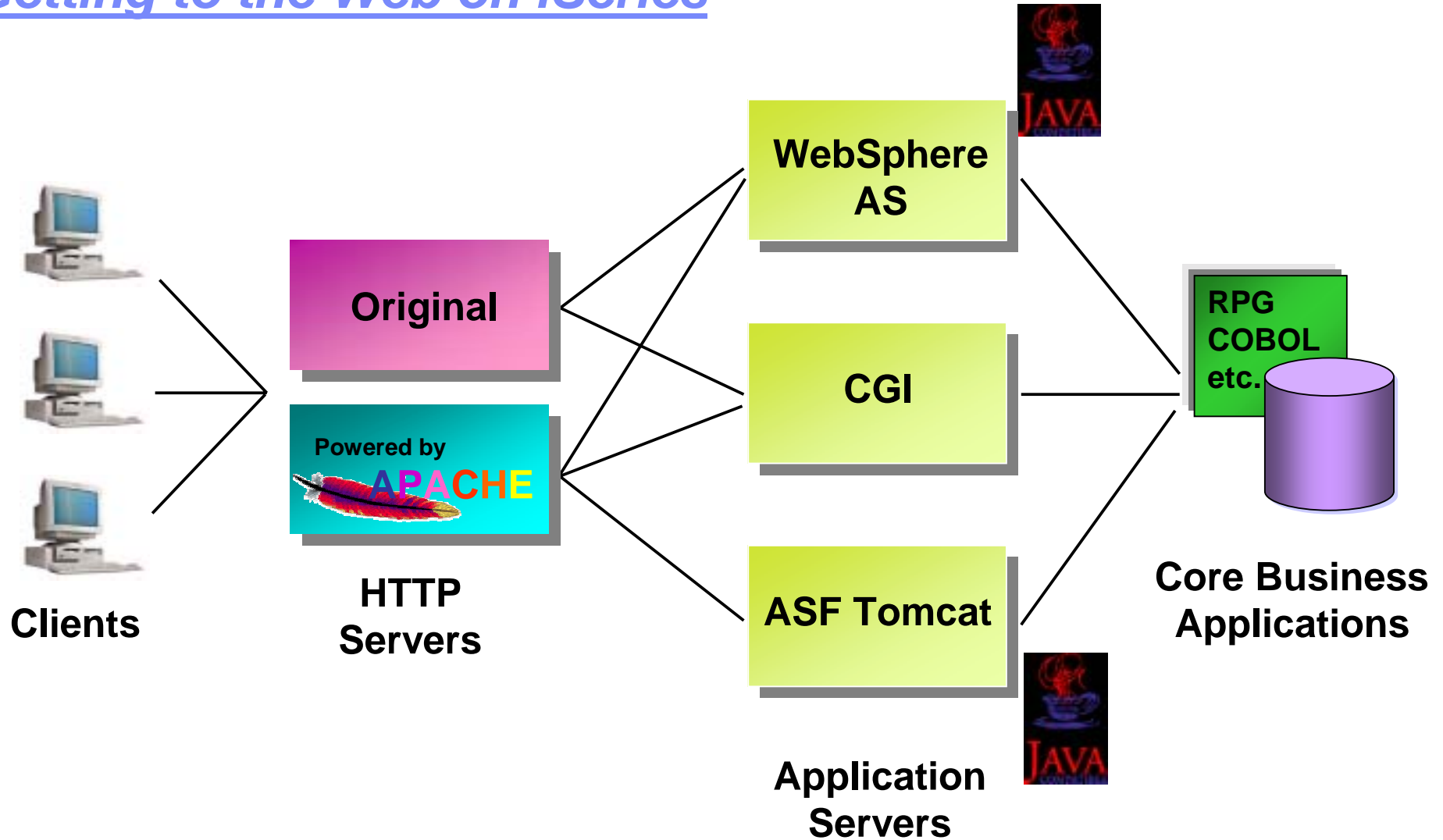
IBM eServer iSeries

# iSeries and the Web

February 2003 Update

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# Getting to the Web on iSeries



## WebSphere: Foundation For e-business

### Not Categorized as WebSphere

- **WebFacing Tool**
  - Included in WDS
  - 1 copy in WebSphere-Express
- **iSeries Access for the Web**
  - Part of iSeries Access Family

### WebSphere Portal Server

Access widespread and diverse data sources from anywhere, anytime, by anyone you allow

### WebSphere Commerce

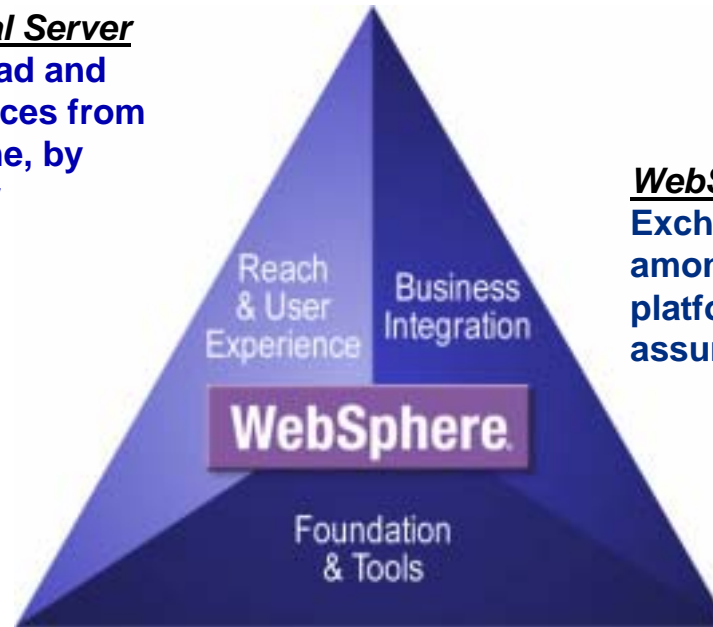
Powerful sell-side solutions to handle the broad range of challenges encountered in B2B and B2C environments

### WebSphere Studio

Professional development tools based on a common workbench technology

### WebSphere Application Server

High performance and extremely scalable transaction engine for dynamic e-business applications



### WebSphere MQ

Exchange information among more than 35 platforms with assured delivery

**The dynamic e-business infrastructure for IBM, partner and customer solutions**



# IBM WebSphere Application Server

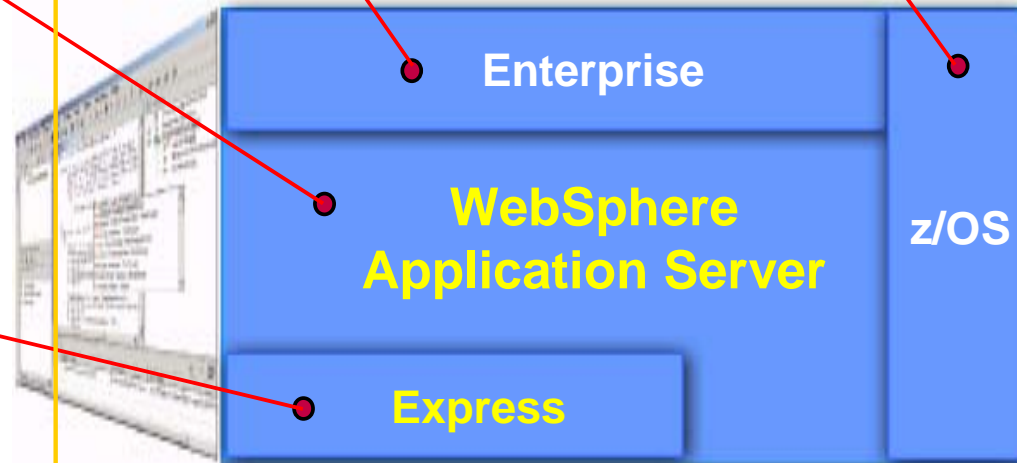
An extended J2EE and Web services **'build-to-integrate'** platform for creating, composing and choreographing adaptable networked application flows and behaviors

## iSeries Support

The **mainstream** Web services J2EE 1.3 application server enabling industry leading QoS and flexible deployment options

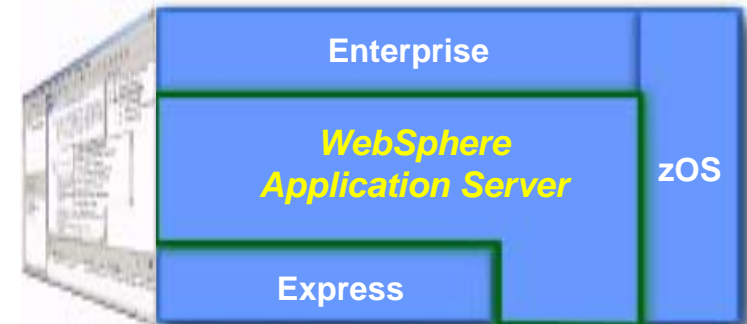
An easily approachable **"on-ramp"** to e-business, providing fast and productive development, deployment of dynamic Web applications

A J2EE Web services application server specifically optimised to the unique **QoS of z/OS**



## WAS V5 (Base and Network Deployment)

**General Availability  
V5R1 & V5R2 – 24/1/2003**

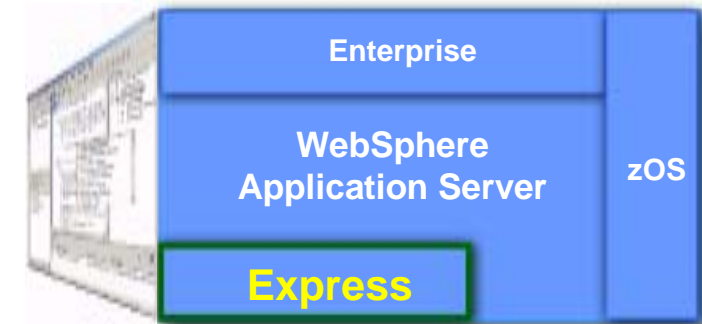


- WebSphere Application Server V5 - £5544 per CPU
- WAS Network Deployment V5 - £8325 per CPU
  - Adds clustering, workload mgmt., distributed security, systems management and directory
- Fully **J2EE 1.3** certified including a native, high performance **JMS messaging server** based on WebSphere MQ V5.3
- Provides a comprehensive XML **Web services** environment based on the latest open standards
- Improved, easy-to-use automated administration and management services
- Network Deployment includes advanced caching, security, workload management, availability and clustering services

**Sub-Capacity Pricing Available for iSeries**

## WebSphere Application Server – Express V5

**General Availability**  
**V5R2 – 21/2/2003**  
**V5R1 – 14/3/2003**



- Support for **Servlets, JSPs** and XML **Web services** standards
- Includes a copy of WebSphere Dev Studio Client (WDS*c*)
- Includes IBM Telephone Directory Application
- Pricing
  - £1343 per CPU (unlimited number of users – intranet/extranet/Internet)
  - £16 per user (Intranet only registered users – buy in increments of 20 users)
  - Price includes 1 year of Software Maintenance (Passport Advantage)
- Current customers with WAS Std. Edn (V3.02 or V3.5)
  - Entitled to 1 copy of WAS-Express V5 for iSeries
  - Must have ordered WAS V3.X by 28/1/2003

**Minimum iSeries = 300 cpw**  
**& 500 MB memory!**

## WAS – Express Graphical Install Wizards




HTTP Server Administration on BENNEVIS - Microsoft Internet Explorer

File Edit View Favorites Tools Help

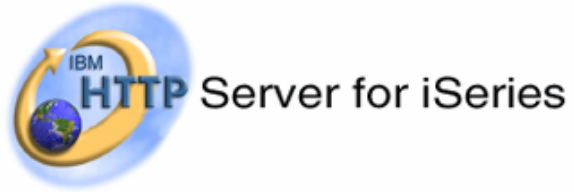
Back Forward Stop Home Search Favorites Media Print Print Preview Stop


Address <http://bennevis.2001/HTTPAdmin> Go Links DAP

HTTP Server with **WebSphere** Application Server - Express for iSeries 

Welcome Setup Manage TCM Related Links

## Welcome to IBM HTTP Server with WebSphere Application Server - Express for iSeries



**WebSphere** Application Server - Express for iSeries 

- Getting Started with HTTP Server**  
 How do I get started? What do I need to get my web site up and running? Let "Getting Started with HTTP Server" show you how.
- What's New with HTTP Server**  
 Find out what's new in the latest release of IBM HTTP Server for iSeries.
- Fundamental Apache Concepts**  
 Understanding some fundamental concepts will make managing your HTTP server (powered by Apache) much easier to do.
- Beyond the Basics**  
 Dig into more advanced HTTP server topics such as virtual hosting, ASF Tomcat, highly available HTTP servers and search engines.
- Overview of WebSphere Application Server - Express**  
 Why should you use Application Server - Express? How is Application Server - Express different from Apache HTTP Server? How are virtual hosts and aliases different in the two servers? How do you get your e-business applications up and running? If you're new to application serving, start here. You'll learn about fundamental application server concepts and the product's architecture.
- WebSphere Application Server - Express Configuration and Management**  
 Now that you're ready to use WebSphere Application Server - Express, you'll need to administer resources and applications. Learn how to use the HTTP Server GUI to manage the application server, install applications, and manage resources. Here you'll also find information on using the Web-based administrative console to secure applications and monitor performance.
- Application Development for WebSphere Application Server - Express**  
 Are you new to developing e-business applications? Or do you just need some programming tips? Here you'll find information about developing servlets and JavaServer Pages (JSP) files for WebSphere Application Server - Express.

<http://www.ibm.com/eserver/iseries/software/http/> Local intranet



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HTTP Server with **WebSphere** Application Server - Express for iSeries

Welcome Setup Manage TCM Related Links

Tasks and Wizards

- Create New HTTP Server
- Create New Express Server
- Migrate Original Server to Apache
- Create ASF To

Global Settings

- Global Server Settings
- Access Control Lists (original only)

Internet Users and Groups

Search Engine Setup

### Set Up Your Servers

Set up the servers that define your web presence, set up how users will access your servers, and fine how searching will be done across your web site.

**Tasks and Wizards**

Select to create a HTTP server, or migrate an existing original HTTP server to a new HTTP (powered by Apache) server, or create an application server.

**Global Settings**

Change your global settings that will affect all of your HTTP servers, as well as set up your access control lists for use with your original servers.

**Internet Users and Groups**

Set up your Internet users and groups for additional access control to your web presence. Certificates can be used to identify and group users.

**Search Engine Setup**

Set up a search engine for your web site. This allows you to control how searching will be done across your web servers.

javascript:selectitem("163061764", "/HTTPAdmin/Frame/express.taskCreateExp/Frames", parent.form)

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HTTP Server Administration on BENNEVIS - Microsoft Internet Explorer

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HTTP Server with **WebSphere**. Application Server - Express for iSeries

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Search Engine Setup

## Create New Express Server

Welcome to the Create New Express Server wizard. This wizard creates a new WebSphere Application Server - Express to run web applications with dynamic content. An application server consists of several pieces that you will need to consider and configure before your server will function.

- Virtual Hosts**

Virtual hosts are the mechanism that route the URL request from the browser to the applications. Many application servers use one virtual host to control the routing of requests. If you wish for more granular control, you can create more virtual hosts to route a particular URL to a specific application. A single virtual host can receive requests from one or more HTTP servers.
- Install Application**

Applications must be installed onto the application server to be accessed by your customers. The Install Application wizard will take your Enterprise Archive (EAR) or Web Archive (WAR) file that contains the application and deploy the application on the server.

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Search Engine Setup

## Create New Express Server

### Specify Application Server - Express Name

Specify a unique name for the application server.

Application server name:

Click **Next** to continue or **Cancel** to leave at anytime.

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Search Engine Setup

## Create New Express Server

### Select HTTP Server Type

The application server requires an association with a HTTP server. This HTTP server will route the incoming URL requests to this application server.

Choose the HTTP server type:

- Create a new HTTP server (powered by Apache)
- Select an existing HTTP server (powered by Apache)

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- Search Engine Setup

## Create New Express Server

### Create a new HTTP server (powered by Apache)

A new HTTP server (powered by Apache) will be created and configured to be used by this application server.

HTTP server name:

Your HTTP server may listen for requests on a specific IP address or on all IP addresses of the system.

On which IP address and TCP port would you like your HTTP server to listen?

IP address:

Port:

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HTTP Server Administration on BENNEVIS - Microsoft Internet Explorer

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Search Engine Setup

## Create New Express Server

### Specify Internal Ports Used by the Server

The Application Server - Express, uses several internal services such as internal HTTP transport service, Simple Object Access Protocol (SOAP) service, name service, and several other services to perform its processing. In order for these services to be configured, you must provide a block of 12 consecutive ports that are currently not in use on your system. Specify the first TCP port number in the range and the wizard will assign the ports that are to be used by each internal service. For example, if 3001 is entered as the first port in the range, then ports 3001 to 3012 will be configured.

First port in range:

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HTTP Server with **WebSphere** Application Server - Express for iSeries

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  - Access Control Lists (original only)
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- Search Engine Setup

## Create New Express Server

### Select Business and Sample Applications

The Application Server - Express has business and sample applications that you can optionally choose to install in this application server. Choose the applications that you would like installed and the wizard will deploy them for you.

Select which business applications to install:

- IBM Telephone Directory - An online phone book, providing powerful search capabilities with an easy to use interface.

Select which sample applications to install:

- ExpressSamples - A set of samples, including SnoopServlet, that can be used to verify that your application server is working.
- DB2 Web Services - A set of samples that demonstrate using the Web Services Object Runtime Framework to deploy web services.

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Search Engine Setup

## Create New Express Server Summary

When you click **Finish** this Application Server - Express will be created.

**Application server name:** was5ex1  
**Associated HTTP server:** WAS5EX1WS  
**HTTP server addresses:** \*:12000  
**Internal port range:** 12001 - 12012  
**Virtual host:** default\_host

**Business applications:**

Application name	URL to access application
IBM Telephone Directory	BENNEVIS:12000/bizApps

**Sample applications:**

Application name	URL to access application
ExpressSamples	BENNEVIS:12000/Snoop

Back Finish Cancel

Done Local intranet



HTTP Server Administration on BENNEVIS - Microsoft Internet Explorer

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HTTP Server with **WebSphere** Application Server - Express for iSeries

Welcome Setup **Manage** TCM Related Links

Server: was5xBW - WAS - Express V5

Running [Play] [Stop] [Refresh]

- Tasks and Wizards
  - Create New Express Server
  - Create Virtual Host
  - Install New Application
  - Create JDBC Provider
  - Create Data Source
- Server Properties
  - Server Tracing
  - Server Ports
- Applications
  - Manage Installed Applications
- Resource Configuration
  - Manage Virtual Hosts
  - Manage JDBC Providers
  - Manage Data Sources
- Problem Determination
  - View Logs
- Tools
  - Launch Express Console

### Manage Application Server - Express "was5xBW"

**Create Additional Virtual Host**

The default virtual host "default\_host" was created for this application server. However, you can specify additional virtual hosts for more control over what URI's can run which applications.

Virtual hosts can communicate with one or more HTTP servers. When creating a virtual host you must also define which HTTP server(s) the application will use to serve its contents. This wizard will create an additional virtual host and update the corresponding HTTP server to send requests to the application server.

**Install New Application**

After creating the server and virtual host you can install your applications.

Applications must be installed on an application server to be accessed by your users. Use this wizard to install your applications. Make sure your applications are located in an IFS directory on this iSeries server.

**Create Data Source**

Then, define the resources the application server will use to access data for your applications.

Applications typically use information contained within databases. In order for the application server to communicate with those databases you will need to create links called Java Database Connector (JDBC) Providers and data sources for each application. Use these wizards to create those resources.

▼ Details

#### Current Configuration for Server - was5xBW

Manage Virtual Hosts	Manage Installed Applications	Manage Data Sources
<ul style="list-style-type: none"> <li><input checked="" type="radio"/> default_host</li> <li><input checked="" type="radio"/> admin_host</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> IBM Telephone Directory</li> <li><input checked="" type="radio"/> ExpressSamples</li> <li><input checked="" type="radio"/> adminconsole</li> <li><input checked="" type="radio"/> OE Demo</li> <li><input checked="" type="radio"/> Business Applications</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="radio"/> Default Datasource</li> </ul>

Local intranet

## IBM Telephone Directory

- WebSphere Application Server is web plumbing
  - IBM Telephone Directory provides "out-of-the-box" functionality
  - iSeries-only offering for WAS V5 and WebSphere-Express V5 for iSeries
- 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.
- IBM Telephone Directory is no-cost for first 1,000 entries
  - IBM Global Services special bid for > 1,000

