

iSeries. mySeries.

Getting Started with

WebSphere Application Server – Express V5

Anna Sue Parker
asparker@us.ibm.com

- Primer for serving web applications
- What is WebSphere Application Server (WAS) - Express
 - How to Get WAS - Express
- Implementing WAS - Express
 - ✓ Plan for it!
 - ✓ Install it!
 - ✓ Configure it!
 - ✓ Use it!
- Introduce Business Solutions
 - The IBM Telephone Directory V5.2
 - Survey Creator application
- Where to get help



What, Where are... the HTTP, Application, & Transaction Servers ?



Web (HTTP) server

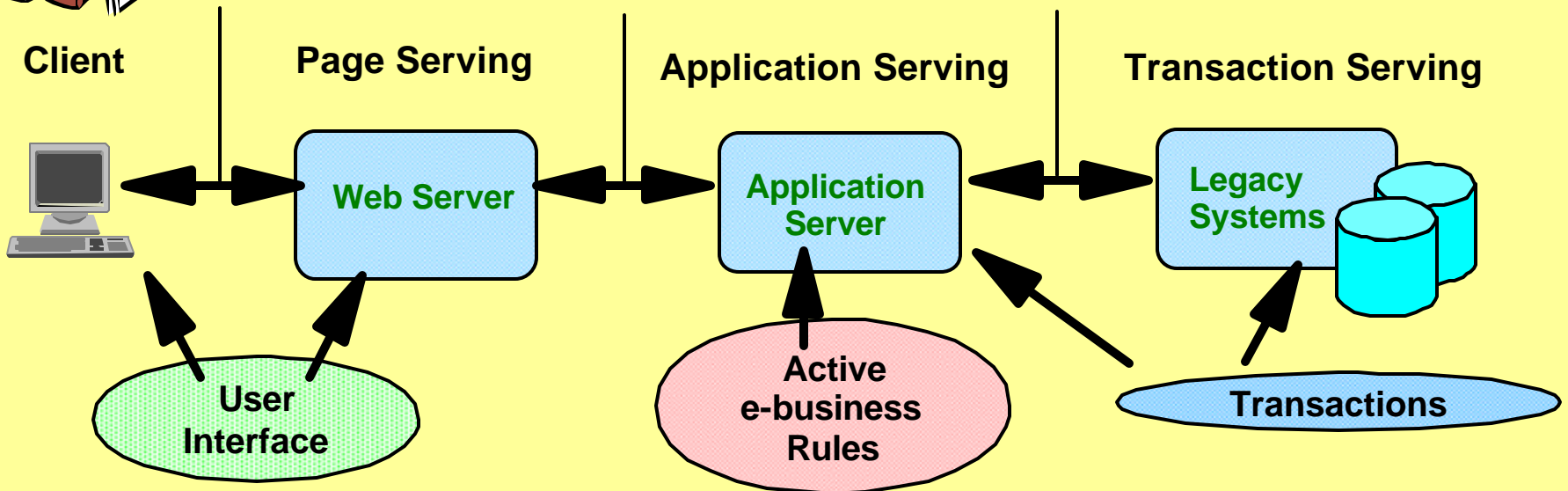
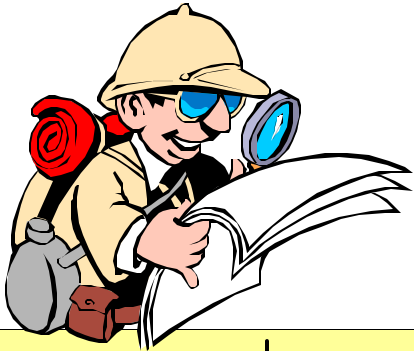
- Provides pages (UI) to the browser
- Manages link to client

Transaction server

- Handle most transactions, running the state of the business

Application server

- Extends a Web server's capabilities to handle dynamic requests
- Provides a simplified way to access enterprise applications
- Provides system-level services to the deployed Web applications

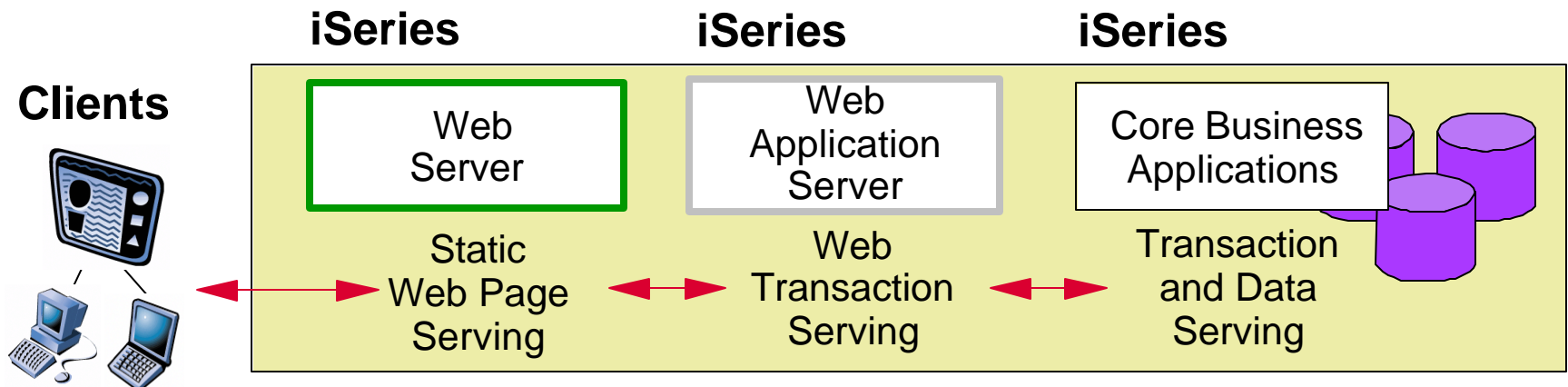


iSeries Web Servers

- IBM HTTP Server for iSeries (not supported in V5R3)
- IBM HTTP Server (Powered by Apache)
- Domino HTTP server

Web Application Servers for iSeries

- IBM WebSphere Application Server Express V5.0 and 5.1
- IBM WebSphere Application Server V5.0 and 5.1
(Base and Network Deployment)
- Apache Software Foundation's Jakarta Tomcat
(not strategic for IBM solutions)





“WAS Express”

- Affordable solution to manage dynamic Web sites
- Simplified Web application server
 - Integrated administration tools
- Simplified programming model
 - Java and non-Java programmers
 - Entry level web application development
- Runs on OS/400 V5R1 and later
 - Follow-on offering for WebSphere Application Server Standard Edition (SE) 3.5
 - Replacement for ASF Tomcat



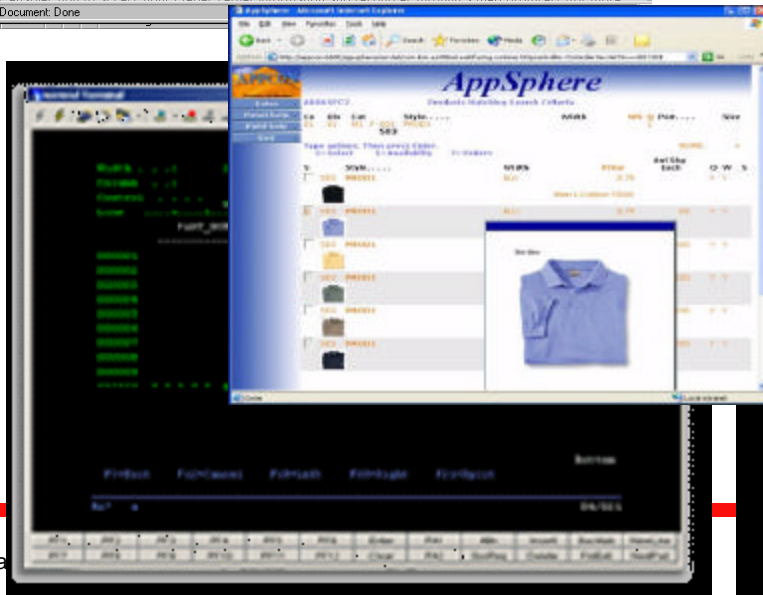
Easy to maintain and administer!

<http://www.ibm.com/servers/eserver/series/software/websphere/wsappserver/>

is Perfect for Application Refacing



- iSeries Access for Web
- HATS
- IBM WebFacing Tool





How to Get WAS - Express?

Included with
V5R3 i5/OS

Method #1

Any customer upgrading to i5/OS automatically gets WAS - Express

- IBM Web Enablement for iSeries (5722 – WE1) is the ordering vehicle
 - WAS – Express V5.0 Comes pre-loaded
 - WAS – Express V5.1 Not pre-loaded but CD's shipped with the order
 - If customers do not want IBM Web Enablement for iSeries – Feature can be removed from order during eConfig

Method #2

Get WAS - Express with your New/Upgraded iSeries Server

WebSphere Application Server - Express comes packaged with the following software packaging combinations:

Hardware Model	Software Package Edition (V5R2)
800	Standard & Advanced Edition
810	Enterprise Edition
i825, i870, i890	Enterprise Edition

Method #3

Passport - Buy WAS - Express for iSeries media package

(part number BA0C3ML, 20 user license bundles)

Where do you start?

- ✓ Plan for it!
- ✓ Install it!
- ✓ Configure it!
- ✓ Use it!





Plan for it!- Start with documentation - Infocenter



The screenshot shows the IBM Infocenter website interface. The top navigation bar includes 'Home', 'Products & services', 'Support & downloads', and 'My account'. A search bar is present with a 'Go' button. The left sidebar contains a tree view of categories, with 'e-business and Web serving' expanded to show 'Application servers', which includes 'WebSphere Application Server - Express V5.1' and 'WebSphere Application Server - Express V5'. The main content area displays search results for 'Application servers', featuring a summary and two links: 'WebSphere Application Server - Express V5.1' and 'WebSphere Application Server - Express V5'. Both links and their corresponding text blocks are highlighted with red boxes.

✓ All IBM WebSphere Application Server - Express for iSeries documentation is available in the iSeries Information Center!

✓ Step-by-step installation instructions included.

✓ Navigate to :
<http://publib.boulder.ibm.com/html/as400/infocenter.html>

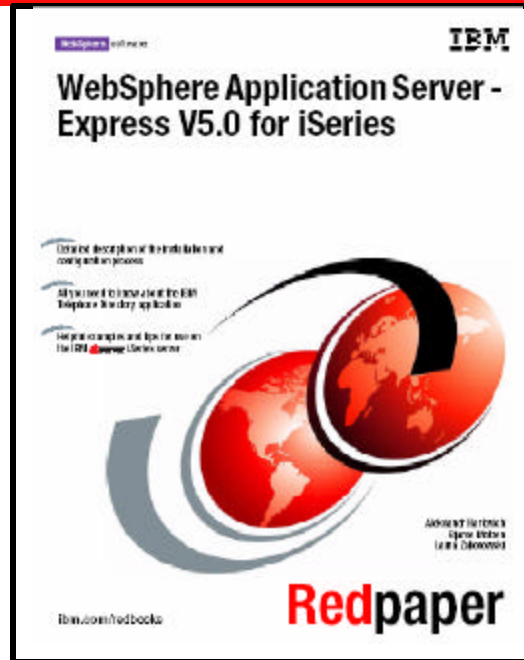


Plan for it! - WAS Express Redpaper, Redbook



WebSphere Application Server Express V5.0 for iSeries

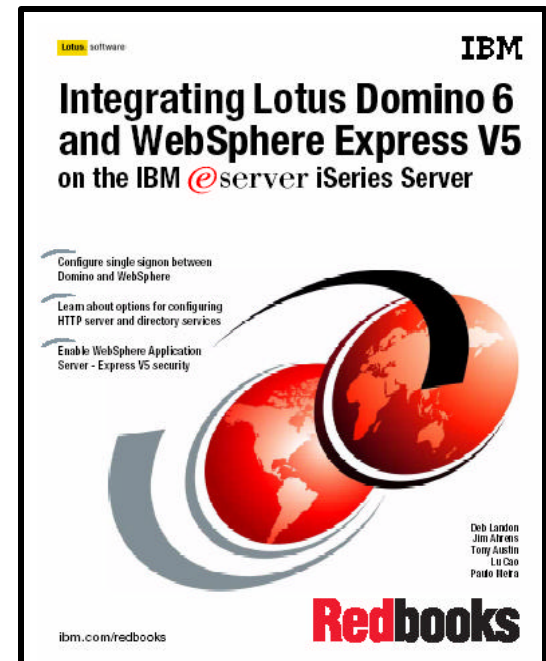
REDP-3624-00



www.ibm.com/redbooks

Integrating Lotus Domino 6 and WebSphere Express V5.0 on the IBM eServer iSeries Server

SG24-6998-00





Plan for it! - Hardware Requirements



Workload Estimator - <http://www-912.ibm.com/wle/EstimatorServlet>

Minimum Configuration



Express requires less system resources!

<p>I5/OS V5R3 or OS/400 V5R2M0 or V5R1M0</p>	<p><u>Processor CPW*</u></p> <p>300</p>	<p><u>Memory*</u> (Per Instance)</p> <p>512 MB</p> <p>(768 MB for support for Web Admin GUI)</p>
<p><i>2 MB L2 cache (recommended)</i></p>		

*For running the application server only. Values define available resources and existing system workloads should be understood. Smaller configurations may be used, but performance degradation should be expected.

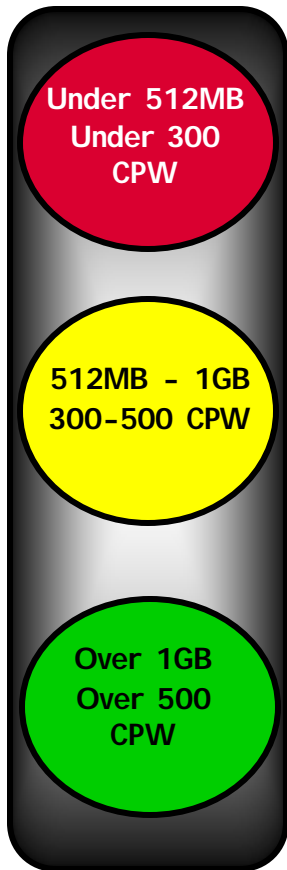


Applications may add additional configuration requirements. Use the [IBM Workload Estimator Tool](http://www-912.ibm.com/wle/EstimatorServlet) to develop a custom configuration estimate based on application design aspects. (<http://www-912.ibm.com/wle/EstimatorServlet>)



Plan for it! -Is your AS/400 or iSeries ready?

@server®



**Under 512MB
Under 300
CPW**

Bxx, Cxx, Dxx, Exx, Fxx
S10, S01, Pxx
S20 / # 2161, # 2163
100, 150
170 / # 2159, # 2160, # 2164
170 / # 2289, # 2290, # 2291
170 / # 2292

170 / # 2407, # 2408, # 2409
200, 20S, 250
270 / # 2422, # 2423, # 2424
270 / # 2248, # 2452, # 2454
3xx, 4xx
500, 510, 50S
53S / # 2154

530 / # 2150, # 2151
600
620 / # 2175, # 2179, # 2180, # 2181
720 / # 2061
820 / # 2425, # 2426, # 2457, # 2456

**Need HW
Upgrade for any
WAS**

**512MB - 1GB
300-500 CPW**

S30 / # 2257
S20 / # 2170, # 2165
170 / # 2176, # 2183, # 2383
170 / # 2384, # 2385, # 2386
270 / # 2250, # 2431
53S / # 2155
530 / # 2152

620(1)
640 / # 2185, # 2186, # 2187
640 / # 2237
720 / # 2062
820 / # 2395, # 2427, # 2458
800
810

**WAS-Express, WebFacing &
IBM Telephone Directory**

**Over 1GB
Over 500
CPW**

SB1, SB2, SB3
S20(1), S30(1), S40
170 / # 2388
270 / # 2252, # 2253
270 / # 2432, # 2434
53S / # 2156, # 2157
530 / # 2153, # 2162

640 / #2238, #2239
650
720(1), 730, 740
820(1), 830, 840
825
870
890

**WAS-Express, V5, ND, WebFacing,
IBM Telephone Directory
(1000+ cpw = Portal & Commerce)**

All 2004 i5 models

(1) = Except as listed above



Software prerequisites for WAS Express V5.1

- ✓ OS/400® V5.1, or later
 - ✓ Latest OS/400 or i5/OS CUM Package
 - ✓ IBM Developer Kit for Java, V1.4 (5722-JV1 option 6).
 - ✓ OS/400 Qshell Interpreter (5722-SS1 option 30)
 - for using the scripts included with the product.
 - ✓ OS/400 Directory Services (5722-SS1 option 32)
 - to secure WebSphere resources using LDAP or LTPA.
 - ✓ IBM TCP/TP Connectivity Utilities for iSeries
 - to configure and run WebSphere Application Server.
 - ✓ The following HTTP Servers are supported:
 - HTTP Server (powered by Apache) is available as licensed program product **5722-DG1**.
 - Lotus® Domino™ for iSeries HTTP Server.
 - ✓ OS/400 Digital Certificate Manager (5722-SS1 option 34)
 - for protocol for the connection between the Apache HTTP server and the WebSphere Application Server.
 - ✓ Cryptographic Access Provider (5722-AC3)
- Installing user profile requires *ALLOBJ and *SECADM authority, or *SECOFR user profile. *IOSYSCFG is required to use the HTTP Server Administration interface.

Determine whether or not WebSphere Application Server - Express is preloaded on your iSeries server

- Access the License Program menu and enter this command at your OS/400 or i5/OS command prompt:
 - ❖ go licpgm
 - ❖ Select option 10 (Display Installed License Programs).
 - ❖ Press **F11** twice to display the options.
- This is what you should see for **WAS Express V5.1**:
 - 5722E51 *BASE** WebSphere Application Server - Express
 - 5722E51 2** IBM WebSphere Application Server Express V5(Shipped with WAS 5.1 editions is IBM Business Solutions (5722-BZ1),
5722BZ1 *BASE IBM Business Solutions)
- **WAS Express V5.0**: This is what you should see if option *Base, option 2 and option 3 are installed for WAS Express V5.0:
 - 5722IWE *BASE WebSphere Application Server - Express
 - 5722IWE 2 IBM WebSphere Application Server Express V5
 - 5722IWE 3 IBM Telephone Directory (version 5.1)

Installation Steps for WAS Express V5.1 (5722-E51)

1. Install all prerequisite products
2. Install Optional products
3. Install the Cumulative PTF package (don't IPL though!)
4. End all HTTP Admin jobs:

```
ENDTCPSVR SERVER (*HTTP) HTTPSVR(*ADMIN)
```

5. Using the IBM WebSphere Application Server - Express for iSeries (5722-E51) CD-ROM:

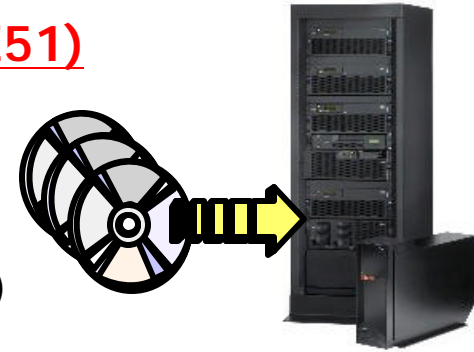
```
RSTLICPGM LICPGM(5722E51) DEV(OPT01)
```

6. Install option 2 from the same CD-ROM:

```
RSTLICPGM LICPGM(5722E51) DEV(OPT01) OPTION(2)
```

7. Install the Group PTFs for IBM WAS - Express for iSeries V5.1
V5R2M0 Group PTF SF99274 or V5R3 Group PTF SF99275

8. **OK to IPL now!**



After your IPL, do the following:

- ✓ Configure license information*
 - Usage limit from your invoice or POE (WRKCLICINF)
- ✓ Ensure TCP/IP Configuration*
 - Ensure parameter settings and determine port availability
 - WAS will use the iSeries host name as the node name
 - This host name must be accessible or WAS will not start
 - ensure the host name and IP address are in the local hosts table
 - ensure the TCP/IP interface associated with the host name IP address is started

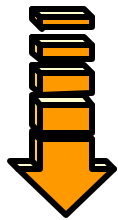
➤ Start the WAS Express Subsystem & HTTP Admin Server

- ❖ **QSYS/STRSBS SBSD(QASE51/QASE51)**
[or (QASE5/QASE5) for WAS Express V5.0]
- ❖ **QSYS/STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)**

* Details provided in the [IBM WebSphere Application Server - Express for iSeries installation documentation!](#)

- ✓ **Unique to iSeries** is an integrated wizard style interface
- ✓ Navigate to **http://your-iSeries:2001/**
- ✓ Click on **IBM Web Administration for iSeries**

But Wait....



* If you want to add the ITD application during the WAS Express configuration, then FIRST 5722-IWE option 3 or 5722-BZ1 must be installed, AND.. follow the steps in the InfoCenter to configure, setup and start the OS/400's Lightweight Directory Access Protocol (LDAP) server which is built in to OS/400 and i5/OS.

iSeries Tasks

ASJ1



IBM Web Administration for iSeries

Configure HTTP servers, application servers and deploy applications



iSeries Navigator URL Advisor

Learn how to add OS/400 administration tasks into your web application



Digital Certificate Manager

Create, distribute, and manage Digital Certificates



IBM Directory Server for iSeries

Administer the IBM Directory Server



IBM IPP Server for iSeries

Configure the IBM IPP Server



Cryptographic Coprocessor

Configure the cryptographic coprocessor



iSeries Web-Based Help Server

Administer the iSeries Web-based help server



Configure it!

@server®

- Latest Group PTFs for IBM HTTP Server must be applied for Web Admin GUI.
- <http://www-1.ibm.com/servers/eserver/series/software/http/services/service.htm>

IBM Web Administration for iSeries

Setup | Manage | Advanced | Related Links

WebSphere. IBM

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache

IBM Web Administration for iSeries

Getting started - Create and learn about the servers needed to run your Web content.

Create a New HTTP Server

Create a new HTTP Server (powered by Apache) to run your HTTP Web content. This wizard will create everything you need to get started with simple Web serving.

[More Information...](#)

Create a New WebSphere Application Server

Create a new WebSphere Application Server Instance to run your dynamic Web applications. Create either a WebSphere Application Server - Express or WebSphere Application Server (base).

[More Information...](#)

✓ Click the **Setup** tab.

✓ Click **Create an Application Server**

Or

✓ Select **Create a New WebSphere Application Server** from main window to reach the Introductory page. Read this and click the **Next** button.

Series.

IBM Web Administration for iSeries

Setup | Manage | Advanced | Related Links

WebSphere

Create Application Server

Select WebSphere Application Server Version

Your system has more than one version of WebSphere Application Server installed.

Choose the type of application server to create

- V5.0 (base) *WebSphere Application Server V5.1 allows you to add dynamic function to static HTML Web pages and is intended for less complex Web applications.*
- V5.1 - Express**
- V5.0 - Express

Back **Next** Cancel

- ✓ Read the introductory page and click the Next button.
- ✓ If multiple versions of WAS installed, Select the desired version for the new application server.
- ✓ Click the **Next** button.

IBM Web Administration for iSeries

Setup | Manage | Advanced | Related Links

WebSphere IBM

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

Specify Application Server Name

Specify a unique name for the application server.

Application server name:

Server description:

Back **Next** Cancel

- ✓ Specify a name for your new application server instance - remember this name for later use.
- ✓ Click the **Next** button.

IBM Web Administration for iSeries

Setup | Manage | Advanced | Related Links

WebSphere IBM

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

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)

Back Next Cancel

- ✓ Elect to create a new HTTP server (powered by Apache) instance to support your new application server instance.
- ✓ Express instance creation wizard can also work with existing or Domino HTTP server instances
- ✓ Click the **Next** button.

Common Tasks and Wizards

- ▶ Create HTTP Server
- ▶ Create Application Server
- ▶ Migrate Original to Apache
- ▶ Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

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:

HTTP server description:

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:

Note: Most browsers make requests to port 80 by default.

- ✓ Specify a name for your HTTP server (powered by Apache) instance - remember this name for later use.
- ✓ Specify a port number (if not 80) for the HTTP server instance to use - remember this value for later use.
- ✓ Click the **Next** button.

IBM Web Administration for iSeries
WebSphere

Setup | Manage | Advanced | Related Links

Common Tasks and Wizards

- ▶ Create HTTP Server
- ▶ Create Application Server
- ▶ Migrate Original to Apache
- ▶ Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

Specify Internal Ports Used by the Application Server

The WebSphere application server 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 13 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 10001 is entered as the first port in the range, then ports 10001 to 10013 will be configured.

First port in range:

- ✓ Select the first in a range of 13 consecutive available ports for the Express instance to use.
 - ✓ Example: start at port 25001
 - ✓ port 25001 - RMI port
 - ✓ port 25006 - SOAP port
 - ✓ port 25010 - WAS Express internal HTTP server port
 - ✓ port 25011 - HTTP port for the full function console
 - ✓ port 25012 - HTTPS port for the full function console
- ✓ Click the **Next** button.

Next

Back

Cancel

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

Select Business and Sample Applications

You may optionally install business and sample applications for this application server. Choose the applications that you want installed and the wizard will deploy them for you.

Select which business applications to install:

Note: Installing an IBM business application automatically installs the IBM Welcome Page application.

- 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 built on

- ✓ Specify to install the **IBM Telephone Directory*** and **ExpressSamples** applications.
- ✓ Click the **Next** button.

- If you want to install ITD during the WAS Express configuration, then.. follow the steps in the InfoCenter to configure and setup the OS/400's Lightweight Directory Access Protocol (LDAP) server which is built in to OS/400 and i5/OS.
- And... 5722-IWE option 3 or 5722-BZ1 must be installed.

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

LDAP Authentication

The wizard will connect to your LDAP server and attempt to gather the proper configuration parameters. The configuration for LDAP cannot continue without a valid LDAP Administrator user and password for this connection.

Specify LDAP user and password: ?

LDAP administrator DN: e.g. cn=admin

LDAP administrator password:

- ✓ Specify to LDAP administrator password.
- ✓ Must be defined prior to creation of WebSphere Application Server
- ✓ Click the **Next** button.

Back **Next** Cancel



Configure it! - include IBM Telephone Directory (ITD)

IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links



WebSphere

All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

LDAP Configuration Parameters

The Business applications utilize LDAP to store user information for authentication purposes. Below is where the administrator user and group will reside in your LDAP directory.

Information describing user entries ?

Parent DN:
Naming attribute: cn
Object class: inetOrgPerson

Information describing the administrative group entry ?

Parent DN:
Naming attribute: cn
Object class: groupOfUniqueNames
Member attribute: uniqueMember

- ✓ Verify LDAP parameters
- ✓ Click the **Next** button.



Configure the new application server - step 6

IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links



WebSphere



All Servers HTTP Servers | Application Servers | ASF Tomcat Servers

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

Create WebSphere Application Server - Express, V5.1

Summary

When you click **Finish** this WebSphere application server will be created.



Application Server

HTTP Server

LDAP Configuration

✓ LDAP Configuration and Business Applications are included when ITD and Survey Creator are selected during configuration.

Application server name: WAS51Exp1

Server description: WebSphere application server created by the Create Application Server wizard.

Internal port range: 10003 - 10015

Virtual host: default_host

Business applications:

Application name	URL to administer application
IBM Welcome Page	ATSI5P2:10002/bizApps
IBM Telephone Directory	

Sample applications:

Application name	URL to access application
ExpressSamples	ATSI5P2:10002/snoop

Note: To access the installed application(s), start the application server and HTTP server, then enter a URL from the table above in a browser window to access the application.

- ✓ Review the configuration parameters.
- ✓ Print configuration Summary
- ✓ Click the **Finish** button.

Back

Finish

Cancel



Printable Summary

IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links

All Servers | HTTP Servers **Application Servers** ASF Tomcat Servers

Creating [Refresh] Instance/Server: WSX51asp/WSX51asp - WAS - Express, V5.1

WASX 51 created by AS.

Server "WSX51asp/WSX51asp" is in the process of being created. To update the status, click the Refresh icon above.

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.

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

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

- ✓ You iSeries is now creating your new Express *and* HTTP server (powered by Apache) instances!
- ✓ This screen shows the status of your new Express instance.
- ✓ Periodically click the Refresh button until the Express instance status changes from **Creating** to **Stopped**.

IBM® Configure it! – Completion



IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links

All Servers | HTTP Servers **Application Servers** ASF Tomcat Servers

Stopped   

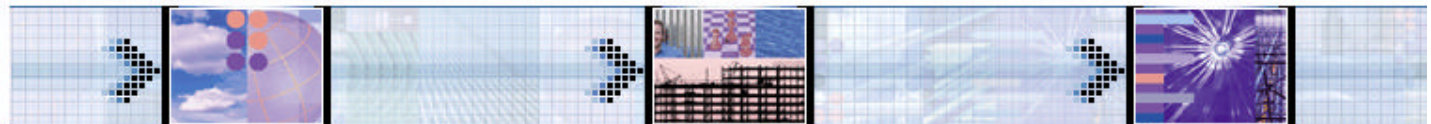
Instance/Server: WSX51asp/WSX51asp - WAS - Express, V5.1

- Common Tasks and Wizards
 - Create HTTP Server
 - Create Application Server
 - Migrate Original to Apache
 - Create WebSphere Portal
- WAS Wizards
 - Create Virtual Host
 - Install New Application
 - Create JDBC Provider
 - Create Data Source
 - Deploy IBM Telephone Directory
 - Deploy IBM Survey Creator
- Server Properties
 - Server Tracing
 - Server Ports
 - View HTTP Servers
- Applications
 - Manage Installed Applications
- Resource Configuration
 - Manage Virtual Hosts
 - Manage JDBC Providers
 - Manage Data Sources
- Problem Determination
 - View Logs
- Tools
 - Launch A...

Manage Application Server - Express, "V5.1"

Instance: WSX51asp Server: WSX51asp

WebSphere application server created by Anna Sue.



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

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 integrated file system directory on this iSeries server.

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.

Current Configuration for Server - WSX51asp/WSX51asp

Manage Virtual Hosts

- default_host

Manage Installed Applications

- IBM Welcome Page v1.1
- IBM Telephone Directory v5.2
- ExpressSamples
-

Manage Data Sources

- Default Datasource

ITD and ExpressSamples installed

***5722-BZ1 must be installed for Welcome Page v1.1 and ITD V5.2**



Configure it! - Successful starting of the WAS server install

IBM Web Administration for iSeries

Setup **Manage** Advanced | Related Links

All Servers | HTTP Servers **Application Servers** ASF Tomcat Servers

Running Instance/Server: WSX51asp/WSX51asp - WAS - Express, V5.1

Manage Application Server - Express, "V5.1"

Instance: *WSX51asp* Server: *WSX51asp*

WebSphere application server created by Anna Sue.

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal

WAS Wizards

Applications

- Manage Installed Applications

Resource Configuration

- Manage Virtual Hosts
- Manage JDBC Providers
- Manage Data Sources

Problem Determination

- View Logs

Tools

- Launch Administrative Console

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.

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Current Configuration for Server - WSX51asp/WSX51asp

Manage Virtual Hosts	Manage Installed Applications	Manage Data Sources
<input checked="" type="checkbox"/> default_host	<input checked="" type="checkbox"/> IBM Welcome Page v1.1	<input checked="" type="checkbox"/> Default Datasource
<input checked="" type="checkbox"/> admin_host	<input checked="" type="checkbox"/> IBM Telephone Directory v5.2	
	<input checked="" type="checkbox"/> ExpressSamples	

- ✓ Click the **Start** button to start your Express instance.
- ✓ Periodically click the **Refresh** button until the Express instance status changes from **Starting** to **Running**.





Configure it! - Successful starting of the HTTP server instance



IBM Web Administration for iSeries

Setup | **Manage** | Advanced | Related Links

All Servers | **HTTP Servers** | Application Servers | ASF Tomcat Servers

Running [Start] [Stop] [Refresh] Server: WAS51EXP - Apache Server area: Global configuration

Manage Apache server "WAS51EXP" (Apache/2.0.49)

HTTP server created by the Create Application Server wizard.

Welcome to the IBM Web Administration for iSeries manage forms for HTTP Server (powered by Apache) and easily. With IBM HTTP Server working the Web for business.

Under Common Tasks and Wizards. For the wizard has been successfully completed.

Once you have the basic server configuration, use the Server Properties forms to tailor your HTTP business needs.

If Web serving is a critical aspect of your business, use high availability and scalability of your Web scalability can be achieved through the use of iSeries clustering.

Common Tasks and Wizards:
Create HTTP Server
Create Application Server
Migrate Original to Apache
Create WebSphere Portal

HTTP Tasks and Wizards:
Add a Directory to the Web
LDAP Configuration

URL Mapping

Request Processing
HTTP Responses
Content Settings
Directory Handling

Security

- ✓ Using the **Server** field pulldown, select your HTTP Server (powered by Apache) instance you created with the wizard.
- ✓ Click the **Start** button.
- ✓ The status will change from **Stopped** to **Running**.



Use it! - Snoop

Verify your installation is working, by running the Snoop Servlet.

In your browser, type the host name, port, and the application Snoop.

http://hostname:9090/Snoop

The screenshot shows a Netscape browser window titled "Snoop Servlet - Netscape". The address bar contains the URL "http://9.19.47.108:8090/Snoop", which is highlighted with a red box. Below the browser window, the output of the Snoop Servlet is displayed on a yellow background. It includes sections for "Requested URL:", "Servlet Name:", and "Request Information:". The "Requested URL:" field contains "http://9.19.47.108:8090/Snoop". The "Servlet Name:" field contains "Snoop Servlet". The "Request Information:" section is a table with the following data:

Request method	GET
Request URI	/Snoop
Request protocol	HTTP/1.1



IBM Business Solutions

Home

Welcome

You are at the IBM Business Solutions home page. Select one of the following business applications. You will be prompted to log in if necessary.



[IBM Survey Creator](#)

Create, configure, and manage Web-based surveys.



[IBM Telephone Directory](#)

Lookup your co-workers online.

✓ Try **IBM Telephone Directory** right away! Navigate to

<http://your-iseriesshostname/ibm-bizApps/welcome/home.do>

(specify the specific HTTP server port if you didn't select the default of 80 when using the configuration wizard)

✓ Click the **IBM Telephone Directory** link.

IBM Business Solutions

Home

Search
For more search options use [Advanced Search](#).

Add an Entry
Add an entry to the telephone directory.

Search

Use the search bar below to search for entries in the directory. Enter the last name first, when searching on name.

Search on: Search for:
Name Search e.g. Smith, John

Tips

To search for matches that begin or end with the same characters, use an asterisk (*) as a wildcard.

Examples of searches on name: Smith, John
Smi*
*ith

- ✓ Add information for an employee!
- ✓ Click the **Add an Entry** link.
- ✓ You will be asked to authenticate. Use the password you specified for Administrator when you ran the configuration (Note that the password is case sensitive!)

Home

Search
For more search options use [Advanced Search](#).

Add an Entry
Add an entry to the telephone directory.

[Help](#)

Add an Entry

- Entry added successfully. Listing information is available for immediate viewing.

Fill out the form below and click "Submit" to add a new entry to the directory. Fields marked with an asterisk (*) are required.

New entry information:

First name: *

Middle initials:

Last name: *

Suffix: e.g. Jr., III

Common name: *

Password:

Confirm password:

Listing information:

Preferred first name: e.

Title:

✓ Populate the registration page with data for a specific employee. When finished, click the **Submit** button at the bottom of the page.

✓ That's it! You've registered an employee within IBM Telephone Directory. Now try searching for that employee by clicking the **Search** link.

IBM Business Solutions

[Home](#)

Search
For more search options use [Advanced Search](#).

Add an Entry
Add an entry to the telephone directory.

[Help](#)

Search

Use the search bar below to search for entries in the directory. Enter the last name first, when searching on name.

Search on:

Name ▼

Search for:

WOODS

e.g. Smith, John

Tips

To search for matches that begin or end with the same characters, use an asterisk (*) as a wildcard.

Examples of searches on name: Smith, John
Smi*
*ith

✓ On the **Search** page, specify to search on a **Name**, then specify to search for the name you just entered, with the last name followed by the first name. Click the **Search** button.



Use it! - IBM Telephone Directory V5.2

IBM Business Solutions

[Home](#)



Search

For more search options use [Advanced Search](#).

Add an Entry

Add an entry to the telephone directory.

[Help](#)

Search

Search on:

Search for:

Name



woods

Search

e.g. Smith, John

✓ You should see the information for the employee you just entered!



[View Department Members](#)



[View Management Chain](#)



[View Direct Report Members](#)

Woods, Tiger

Preferred first name: Tigger

Title: 2nd best

Email: tigger@myemail.any

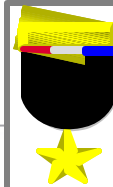


Employee type: regular

Manager listing: No

Additional details:

Last modified: 9/9/04 6:41 PM



Congratulations.
You are ready to deploy your own applications!!

But...there is something new.



IBM Business Solutions V1.0

iSeries Exclusive!

- “Start Simple” business application
- Provides enterprise Web applications for iSeries (5722-BZ1)
 - IBM Telephone Directory – V5.2 (new version)
 - IBM Survey Creator Application V1.0
 - Welcome Page V1.1
- IBM Business Solutions cannot be ordered separately.
 - Obtained by ordering i5/OS V5R3 or one of the Version 5.1 editions of WebSphere Application Server for iSeries.

For more info:
installed using RSTLICPGM and obtain Group PTFs
<http://www-1.ibm.com/servers/eserver/iseries/software/bizapps/index.html>



Announcing IBM Survey Creator V1.0 !

- Deploy into any version of WebSphere Application Server for iSeries
- Ready to use immediately for creating, configuring, and managing surveys
 - Web user authentication related information is managed securely by the OS/400's (LDAP) server
 - Information relating to the configuration of a survey and its subsequent results are stored in an IBM DB2 Universal Database on the iSeries
 - Survey application will be available on 5/28/2004 via PTF
 - Application source will be delivered WDS c 5.1.2

Survey Name	Status	Description
Office Poll	Disabled	Team survey for February.
Employee Feedback	Disabled	Quality improvement ideas & suggestions.
Becky's baby	Disabled	Baby pool

Employee Feedback

Properties Questions Preview Results

Add "Select One" Question

This question type allows your participants to select one answer from multiple choices using radio buttons or a menu. Enter the information below, then click the "Finish" button to create your question.

Fields marked with an asterisk (*) are required.

Format:

Question text: * How satisfied are you with our facilities?

Answers: * Choice text:

Choices: Very satisfied, Satisfied, Neutral, Unsatisfied, Very unsatisfied

Include "Other" choice: Yes No

Required question: Yes No

Include "Comments" textbox: Yes No

Passthrough HTML:

<Back Finish Cancel

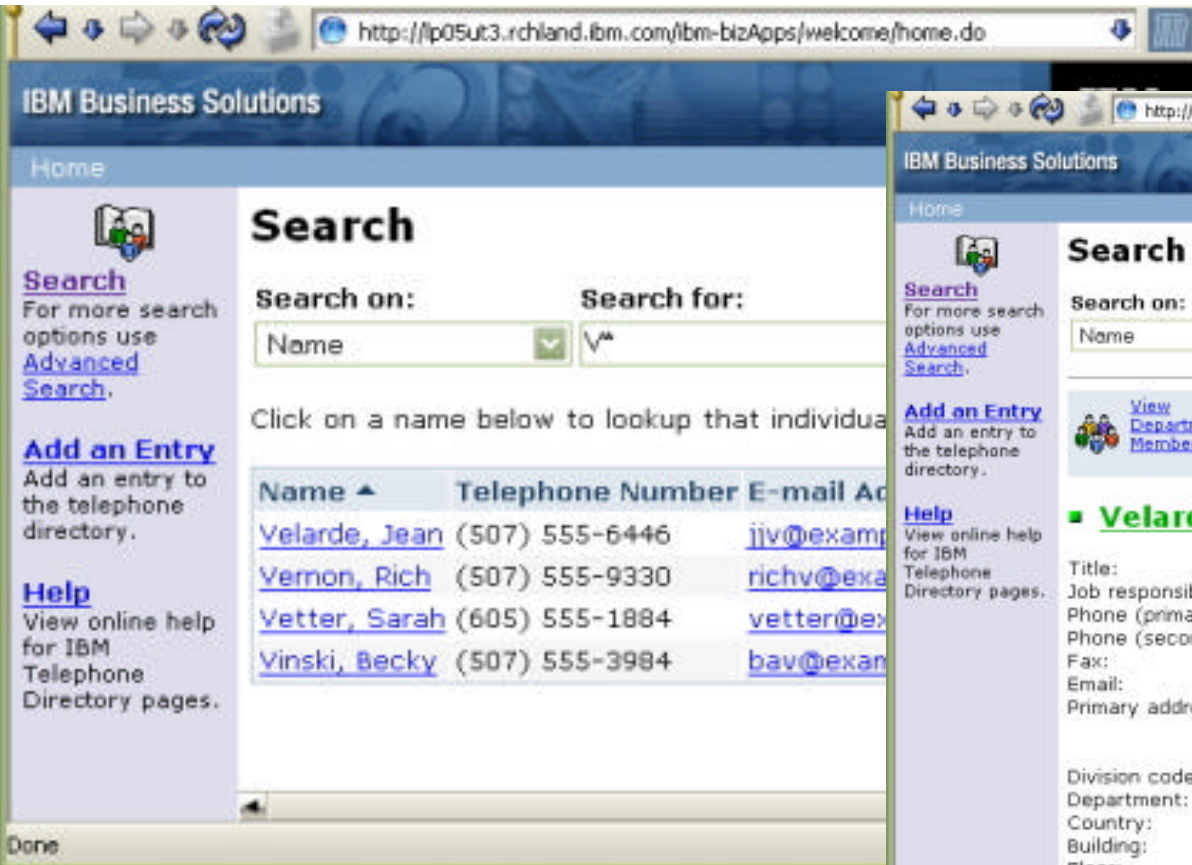


New - IBM Business Solutions



IBM Telephone Directory V5.2 !

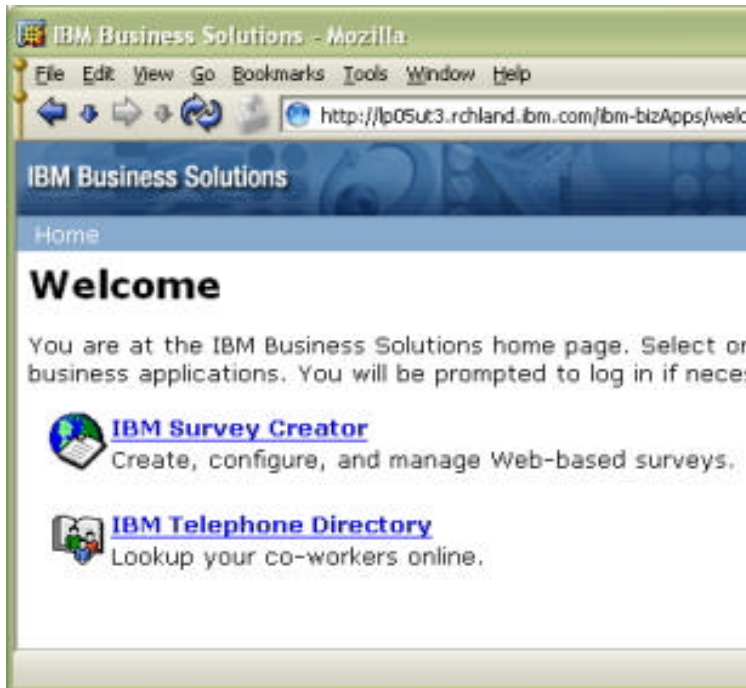
- Deploy into any version of WebSphere Application Server for iSeries
- Provide ISV's and customers with an application which can be used immediately
- Advanced features including integration of Sametime and single-sign on with EIM.





Welcome Page V1.1!

- Deploy into any version of WebSphere Application Server for iSeries
- Two-fold purpose
 - Starting point for business applications
 - Administrator interface for Survey application and Telephone Directory





Configure it! - Deploying Business Solutions



IBM Web Administration for iSeries

Setup Manage Advanced | Related Links

All Servers | HTTP Servers Application Servers ASF Tomcat Servers

Stopped Instance/Server: WAS50Basetest/WAS50Basetest - WAS, V5 (base)

Deploy IBM Telephone Directory

Welcome to the Deploy IBM Telephone Directory wizard.

WAS Wizards

- Create Virtual Host
- Install New Application
- Create JDBC Provider
- Create Data Source
- Deploy IBM Telephone Director
- Deploy IBM Survey Creator

IBM Web Administration for iSeries

Setup Manage Advanced | Related Links

All Servers | HTTP Servers Application Servers ASF Tomcat Servers

Running Instance/Server: jazz01/jazz01 - WAS - Express, V5

Deploy IBM Survey Creator

Welcome to the Deploy IBM Survey Creator wizard. This wizard will help you deploy the IBM Survey Creator application.

WAS Wizards

- Create Virtual Host
- Install New Application
- Create JDBC Provider
- Create Data Source
- Deploy IBM Telephone Director
- Deploy IBM Survey Creator

Server Properties

- Server Tracing
- Server Ports
- View HTTP Servers

✓ After the installation of Business Solutions, deployment options are included in the WAS Wizards for

- ✓ IBM Telephone Directory
- ✓ IBM Survey Creator

Since the IBM Survey Creator application is not deployed on this server, the wizard will deploy it.



Configure it! – Business Solutions (5722-BZ1)

IBM Web Administration for iSeries

Setup | Manage | Advanced | Related Links



WebSphere

All Servers | HTTP Servers | Application Servers | ASF Tomcat Servers

Stopped
 Start
 Stop
 Refresh

Instance/Server: WSX51asp/WSX51asp - WAS - Express, V5.1

Manage Application Server - Express, "V5.1"

Instance: WSX51asp Server: WSX51asp

WASX 51 created by AS.



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.

Install New Application

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

Create Data Source

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

- Common Tasks and Wizards
 - Create HTTP Server
 - Create Application Server
 - Migrate Original to Apache
 - Create WebSphere Portal

- WAS Wizards
 - Create Virtual Host
 - Install New Application
 - Create JDBC Provider
 - Create Data Source
 - Deploy IBM Telephone Directory
 - Deploy IBM Survey Creator

- Server Properties
 - Server Tracing
 - Server Ports
 - View HTTP Servers

- Applications
 - Manage Installed Applications

- Resource Configuration
 - Manage Virtual Hosts
 - Manage JDBC Providers
 - Manage Data Sources

- Problem Determination
 - View Logs

- Tools
 - Launch Administrative Console

✓ Manage Application properties

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.

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 integrated file system directory on this iSeries server.

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.

Current Configuration for Server - WSX51asp/WSX51asp

Manage Virtual Hosts

- default_host
- admin_host

Manage Installed Applications

- ExpressSamples
- IBM Welcome Page v1.1
- IBM Telephone Directory v5.2
- adminconsole
- IBM Survey Creator v1.0

Manage Data Sources

- Default Datasource
- Survey DataSource

✓ All Samples and Business Solution installed

Need Help? Have a Question?

- Work with your IBM Business Partner for your WebSphere on iSeries needs.
- Encourage them to use the IBM Virtual Innovation Center (VIC) to obtain WebSphere on iSeries assistance
 - All IBM Business Partners can register with the VIC at no additional charge
 - For the exclusive use of Business Partners selling, installing, implementing IBM software on iSeries.
- All software defect related support still should be directed through Supportline and is built into the maintenance of the Software and you can obtain that support from calling 1-800-IBM-SERV or your local country support lines.



To Better Understand the WebSphere Software Platform on iSeries!

WebSphere on iSeries web

Start Here!

> ibm.com/eserver/iseries/websphere

WebSphere for IBM eServer iSeries Buying & Selling Guide

> www.redbooks.ibm.com/redpapers/abstracts/REDP3646.html

IBM iSeries Nation

> ibm.com/eserver/iseries/nation/

WebSphere and iSeries References

> ibm.com/software/success/cssdb.nsf/topstoriesFM?OpenForm&Site=wssoftware

To Build WebSphere Software Platform Skills and Solutions!

iSeries Developers Roadmap

> ibm.com/eserver/iseries/roadmap

IBM Redbooks - iSeries Domain

> publib-b.boulder.ibm.com/redbooks.nsf/portals/AS400

IBM IT Education Services - iSeries Training

> ibm.com/services/learning/us/catalog/iseries/

IBM Web Lecture Services - iSeries College

> www.ibmweblectureservices.ihost.com/ibm/iseries

IBM developerWorks

> ibm.com/developerworks/

IBM Global Services – iSeries Practice

> ibm.com/eserver/iseries/service/igs/

IBM Custom Technology Center

> ibm.com/eserver/services/

iSeries Benchmark Centers

> ibm.com/eserver/iseries/benchmark

Business Partners in WebSphere Portal Catalog

> ibm.com/software/genservers/portal/partners/partners2.html

To Leverage WebSphere Partner Programs!

IBM PartnerWorld

> ibm.com/partnerworld

eServer Solutions Enablement

> ibm.com/servers/enable/i/

WebSphere Innovation Connection Online

> ibm.com/websphere/partners

Getting Started with WebSphere

iSeries. mySeries.

WebSphere Application Server Express Version 5

? Questions ?



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