IBM eServer<sup>™</sup> iSeries<sup>™</sup>

# The ABC's of Installing WebSphere Application Server - Express on iSeries

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## Agenda

- What is WebSphere Application Server (WAS) Express
- What is Included with WAS Express
- Examples of Applications that Use WAS Express
- How to Get WAS Express
- Implementing WAS Express
  - -Planning for it
  - -Installing it
  - Configuring it
  - -Starting it
- Using the IBM Telephone Directory with WAS Express
- Questions and Answers



## What is WebSphere Application Server - Express

An extended J2EE & Web services

'build-to-integrate' platform for creating,

composing & choreographing adaptable networked application flows and behaviors

iSeries Support

A J2EE web services application The mainstream Web services J2EE server specifically optimized to 1.3 application server enabling the unique Qo5 of z/O5 industry leading QoS and flexible deployment options Enterprise An easily approachable WebSphere 1 "on-ramp" to **z/0**\$ e-business, providing Application Server fast and productive (Base and ND) development, deployment of dynamic web Express applications



#### What is Included in WAS - Express

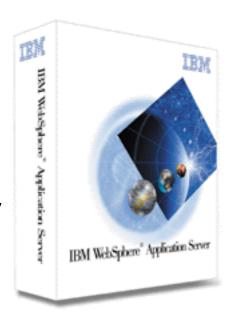
1. Web application server - WAS-Express V5

#### 2. Application development tool

WebSphere Development Studio Client (WDSc) 1 copy

#### 3. Includes IBM Telephone Directory (ITD)

- WebSphere Application Server is web plumbing
- ITD provides "out-of-the-box" functionality
- iSeries-only offering for WAS V5 and WebSphere-Express V5 for iSeries
- "Started simple" with WebSphere
  - Provide a valuable application all customers can use
  - Powerful search capabilities
  - Name, photo, phone, role, division, dept, mgmt chain
  - ITD is no-cost for first 1,000 entries
    - Small media charge in PPA (approx \$25)
    - ► IGS special bid for 1,000+ entries







#### WAS - Express is Perfect for Application Refacing



- iSeries Access for Web
- Host Publisher
- HATS
- IBM WebFacing Tool







#### Examples of Applications that Use WAS - Express

- Able-One Systems Inc.
- ACG srl
- ACS Limited
- Aktion Associates, Inc.
- Andrews Consulting Group
- Appcon
- Aptis
- AS Computanse
- Associated Data Services
- Avnet Computer Marketing
- Barsa Consulting, LLC
- Binary Tree
- Boost Information Systems
- Brij Image & Information
- **■** C.I.D.
- Cape Cod Bay Systems
- Clear Technologies
- CIM Strategies
- CMI
- Computech Resources, Inc.
- Contenlo Consulting Ltd
- Corning Data Services
- Counterpoint Systems
- Covenco
- DPS Inc.
- E.D. Smith & Sons Ltd.

- Engineered Business Systems, Inc.
- Enjac Essentials B.V.
- GEAC
- GEMKO Information Group, Inc.
- Genelco (Liberity)
- Gus Group AG + Co. KG
- Haverstick Consulting
- IBS
- Infocon Corporation
- Integrated Distribution Solutions
- Inter-American Data, Inc. (IAD)
- Island Pacific
- J.DREGER IT-Operations
- KDP Software Limited
- Keane Inc/First Coast
- Keller Schroeder & Associates
- Kube
- Lansa
- Lawson Software
- Mapics
- McKesson HBOC
- M.R.S. Company Limited
- MEA Computing
- Mid-Comp International PTY LTD
- Morpheus Limited
- Network Plus Consulting

- New Generation Software
- Oasis Computer Systems, Inc.
- Paragon Consulting Services Inc.
- PlanetJ Corporation
- Presence OnLine
- Primark Systems, Inc.
- Quantum Intelligence, Inc.
- Query Spa
- Republic Idemnity of America
- Rippe and Kingston
- RyTE Consulting, Inc.
- SclumbergerSema
- Serti Informatique Inc.
- SH S.r.l
- Siemens Health Services
- Soft Design A/S
- SoftLanding Systems
- Strategies and Solutions
- SystemObjects Europe
- TRAX sp. z o.o
- Tri-Bry IT Solutions
- UBL INFORMATIONSSYSTEME GmbH & Co. KGaA
- Virtual400
- Volubis
- Wright Professional Services, Inc.
- 3X Corporation



## How to Get WAS - Express: Method #1

#### Trade Up to WAS - Express from WAS Standard Edition 3.02 & 3.5

- Customers who currently have WAS Standard Edition (V3.02 or V3.5) & OS/400 SW subscription (5733-AS3)
- Must have ordered WAS V3.X for OS/400 by 1/24/2003
- Entitled to 1 copy of WAS-Express for iSeries ("one processor worth")
  - -If WAS SE V3.X runs on one cpu = one copy of WAS Express
  - -If WAS SE V3.X runs on multiple cpu's = one copy of WAS Express
  - -If WAS SE V3.X runs on 100 iSeries servers = 100 copies of WAS Express
- Customers must order "maintenance renewal" for WAS Express to receive subscription and support from Passport Advantage



## How to Get WAS - Express - 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
800	Advanced Edition
810	Enterprise Edition
i825, i870, i890	Enterprise Edition

- Includes Software Maintenance via Passport
  - For 1 year from date of hardware installation
  - Maintenance = Software Subscription + Support
- Entitled to run WAS-Express for iSeries on all processors on that server



## How to Get WAS - Express - Method #3

#### Buy it via Passport

- WebSphere Application Server Express is included in the following software packaging combination
- Includes Software Maintenance via Passport
  - For 1 year from date of hardware installation
  - Maintenance = Software Subscription + Support

WebSphere Express Part Number Description	1 Year Lic	2 Year Lic	Renewal	After
	& Maint	& Maint	Before	License
WAS Express for iSeries (Charge is per Processor)	\$1,913.00	\$2,296.00	\$425.00	\$1,275.00
	D524PLL	D524QLL	E00NDLL	D524RLL
WAS Express for iSeries 20 users (Charge is per User - min.bundle of 20)	\$458.00	\$550.00	\$102.00	\$305.00
	D5255LL	D5256LL	E00NILL	D5257LL
WAS Express for iSeries Developer (Charge is per Developer)	\$361.00	\$433.00	\$80.25	\$241.00
	D524WLL	D524XLL	E00NFLL	D524YLL
Upgrade from 20 User Bundle to Per Processor Charge	\$1,435 D524SLL			
Upgrade from Competitive Product to WAS Express Per Processor Charge	\$1,435 D525CLL			

Prices reflect Passport "A" Pricing Levels and are subject to change



#### Implementing WebSphere Express



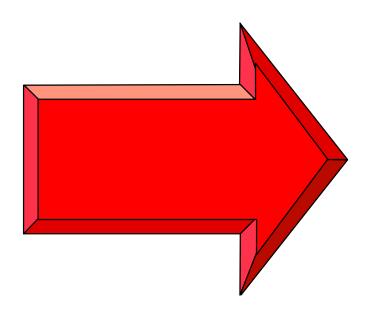
#### Start Here!



- ✓ 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



## What are the steps?



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



#### Plan for it!

## Minimum Configuration

Express requires less system resources!



OS/400	Processor CPW*	Memory* (Per Instance)
V5R2M0 or V5R1M0	300	512 MB

\*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 <u>IBM Workload Estimator Tool</u> to develop a custom configuration estimate based on application design aspects. (http://www-912.ibm.com/supporthome.nsf/document/16533356)



## Is your AS/400 or iSeries ready?

Under 512MB
Under 300
CPW

512MB - 1GB
300-500 CPW

Over 1GB Over 500 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

**S30** / # 2257

**S20** / # 2170, # 2165

**170** / # 2176, # 2183, # 2383 **170** / # 2384, # 2385, # 2386

**270** / # 2250, # 2431

**53S** / # 2155

**530** / # 2152

**620**<sub>(1)</sub>

**640** / # 2185, # 2186, # 2187

**640** / # 2237

**720 /** # 2062

**820** / # 2395, # 2427, # 2458

800 810 WAS-Express, WebFacing & IBM Telephone Directory

SB1, SB2, SB3 S20<sub>(1)</sub>, S30<sub>(1)</sub>, 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

870 890 WAS-Express, V5, ND, WebFacing, IBM Telephone Directory (1000+ cpw = Portal & Commerce)

(1) = Except as listed above



#### Plan for it!

#### Order the following software:

- Prerequisite Products: IBM HTTP Server (powered by Apache), IBM Developer Kit for Java, QShell Interpreter, iSeries Access for Windows, TCP/IP Connectivity Utilities
- ✓ 5722-IWE: IBM WebSphere Application Server Express for iSeries (includes IBM Telephone Directory)
- ✓ Latest OS/400 V5R2M0 CUM Package
- ✓ Latest IBM WebSphere Application Server Express for iSeries V5R2M0 Group PTF (SF99271)





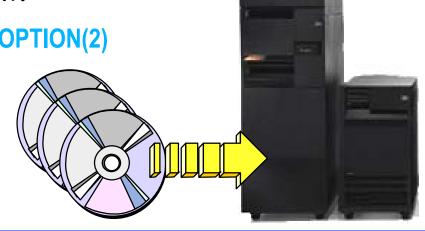
#### Install it!

- ✓ Install all prerequisite products
- ✓ Install the Cumulative PTF package (don't IPL though!)
- ✓ Using the IBM WebSphere Application Server Express for iSeries (5722-IWE) CD-ROM:

RSTLICPGM LICPGM(5722IWE) DEV(OPT01)

✓ Install option 2 from the same CD-ROM:

RSTLICPGM LICPGM(5722IWE) DEV(OPT01) OPTION(2)



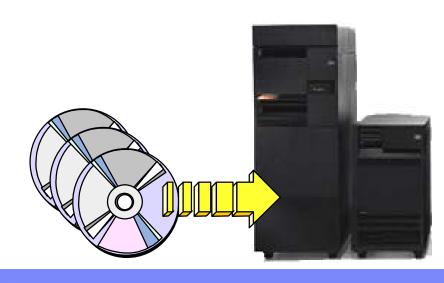


#### Install it!

✓ Using the IBM Telephone Directory CD-ROM:

RSTLICPGM LICPGM(5722IWE) DEV(OPT01) OPTION(3)

- ✓ Install the IBM WebSphere Application Server Express for iSeries V5R2MO Group PTF SF99271
- ✓ Ok to IPL now!





#### After your IPL, do the following:

- Configure license information\*
  - Usage limit from your invoice or POE
- Ensure TCP/IP Configuration\*
  - Ensure parameter settings and determine port availability
- Start the IWE Subsystem & HTTP Admin Server
  - QSYS/STRSBS SBSD(QASE5/QASE5)
  - QSYS/STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)

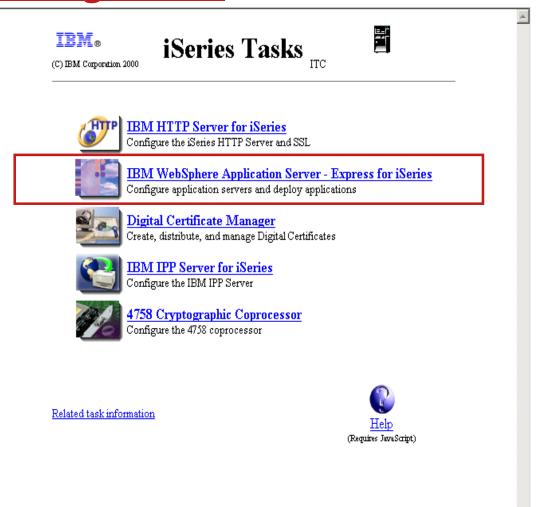




**Unique to iSeries** is an integrated wizard style interface that allows you to quickly create an <u>Expressinstance</u> and a supporting <u>HTTP server (powered by Apache)</u> instance. This allows you to begin your e-business application deployment right away!

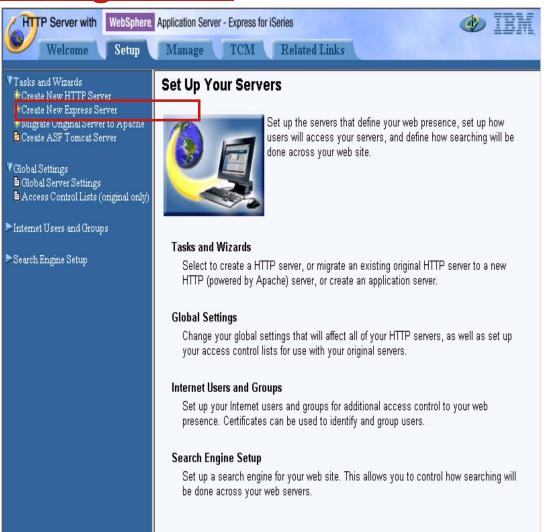
Here's how it works...





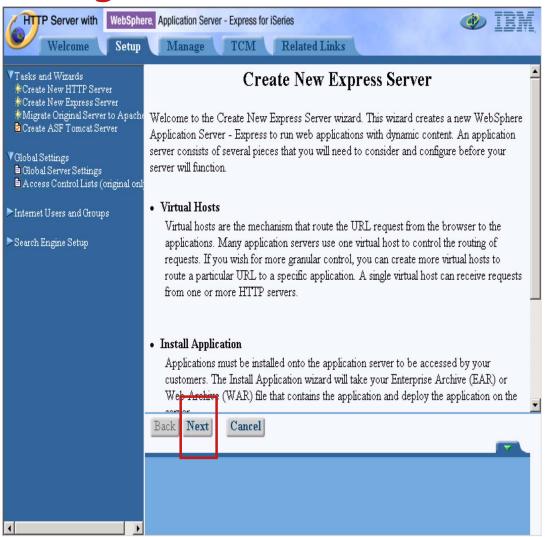
- ✓ Navigate to http://your-iSeries:2001/
- ✓ Click IBM WebSphere
  Application Server Express for iSeries





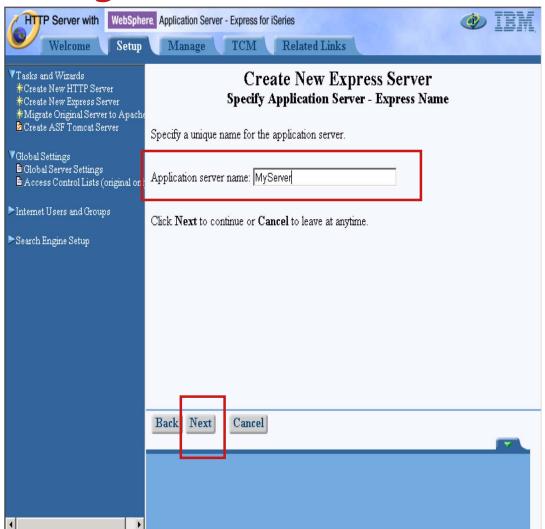
- ✓ Click the Setup tab.
- ✓ Click Create an Express Server.





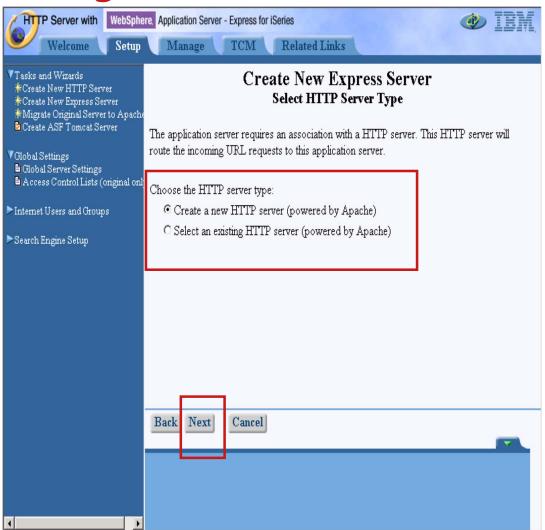
- Read the introductory page.
- Click the Next button.





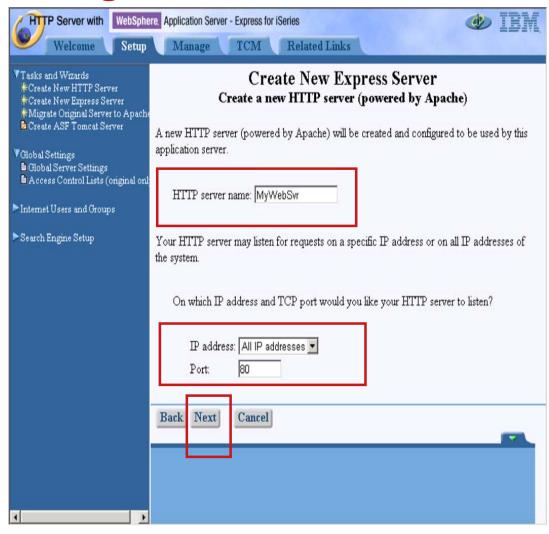
- Specify a name for your new application server instance remember this name for later use.
- Click the Next button.





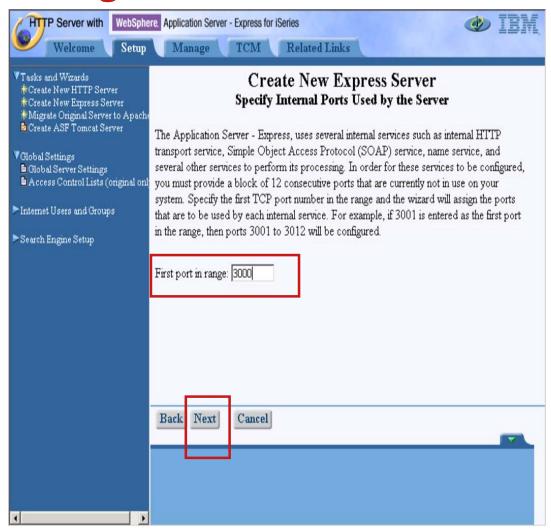
- Elect to create a new HTTP server (powered by Apache) instance to support your new application server instance.
- Click the Next button.





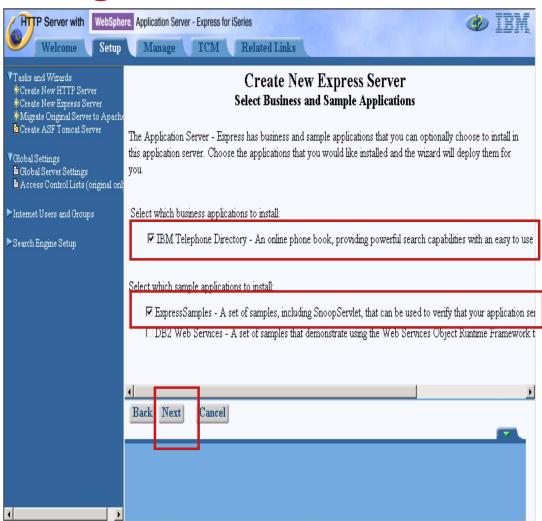
- Specify a name for your HTTP server (powered by Apache) instance - remember this name for later use.
- Specify a port number (if not 80) for the HTTP server instance to use - remember this value for later use.
- Click the Next button.





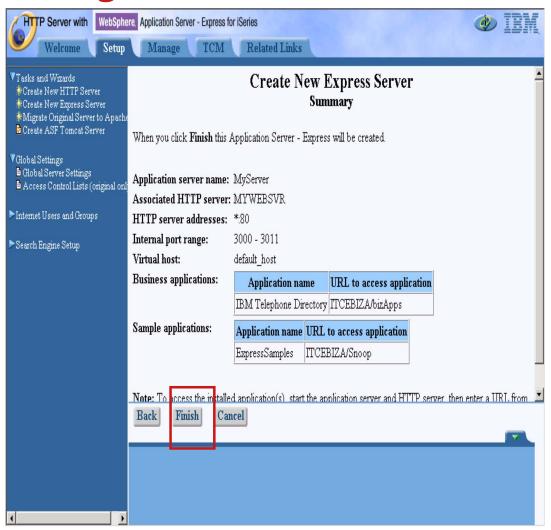
- Select the first in a range of 12 consecutive available ports for the Express instance to use.
- Click the Next button.





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





- Review the configuration parameters.
- Click the Finish button.





Providers and data sources for each

application. Use these wizards to

create those resources.

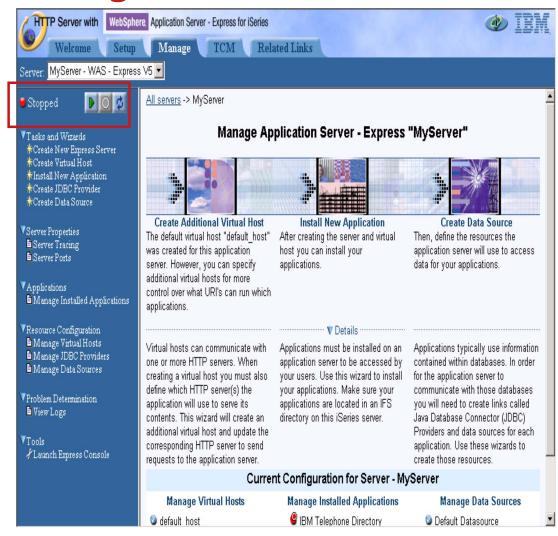
- ✓ You iSeries is now creating your new Express and HTTP server (powered by Apache) instances!
- This screen shows the status of your Express instance.
- Periodically click the Refresh button until the Express instance status changes from Creating to Stopped.

additional virtual host and update the

corresponding HTTP server to send

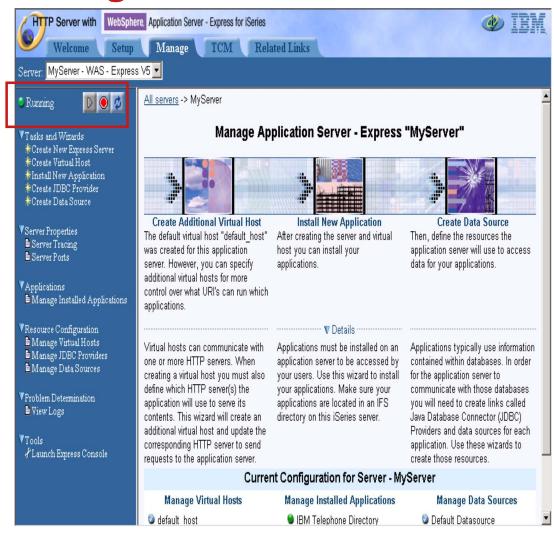
requests to the application server





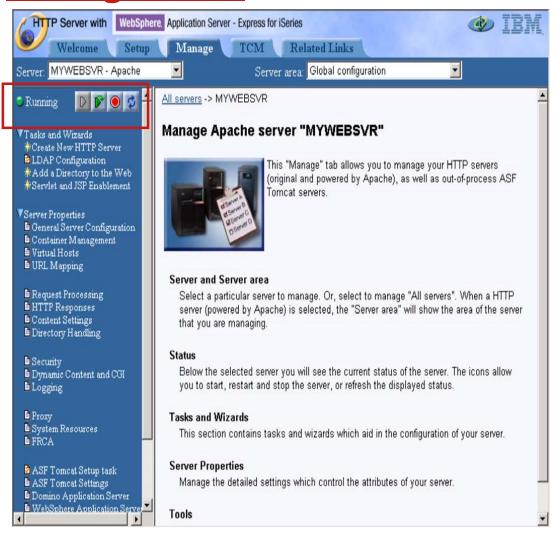
Click the Start button to start your Express instance.





Periodically click the Refresh button until the Express instance status changes from Starting to Running.





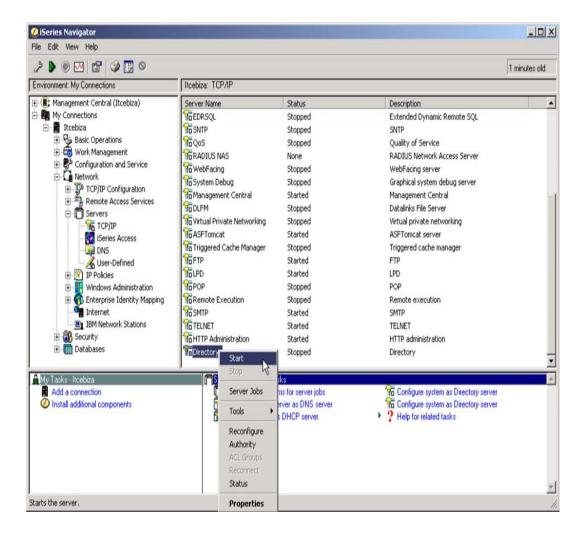
- ✓ Using the Server field pulldown, select your HTTP Server (powered by Apache) instance you created with the wizard.
- Click the Start button.
- ✓ The status will change from 
  Stopped to Running.



IBM Telephone Directory V 5.1 for iSeries is a business application that can be used for a company's IBM Telephone Directory V 5.1 for iSeries is a business application that can be used for a company's directory of white pages. Exclusively included on a CD with IBM WebSphere Application Server - Express for iSeries, IBM Telephone Directory for iSeries is an application that provides a company with a directory for managing information about people. It manages names, telephone numbers, departments, and e-mail addresses for company personnel.

This telephone directory application is integrated into the IBM WebSphere Application Server - Express for iSeries GUI for easy deployment and administration. Personnel information is managed securely by the OS/400's Lightweight Directory Access Protocol (LDAP) server which is built in to OS/400.

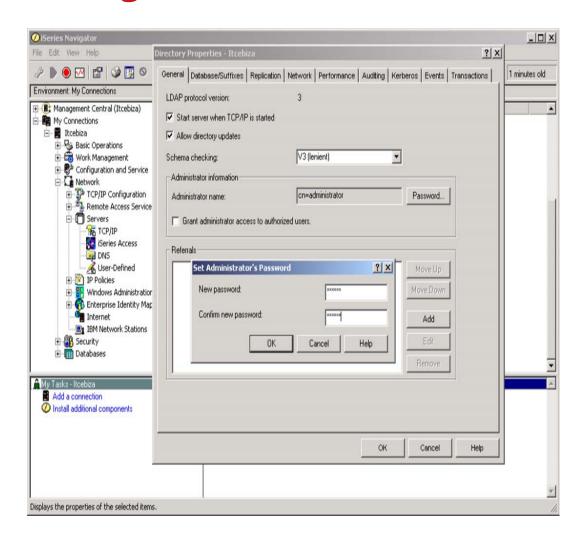




✓ From iSeries Navigator, start the **Directory** TCP/IP service.

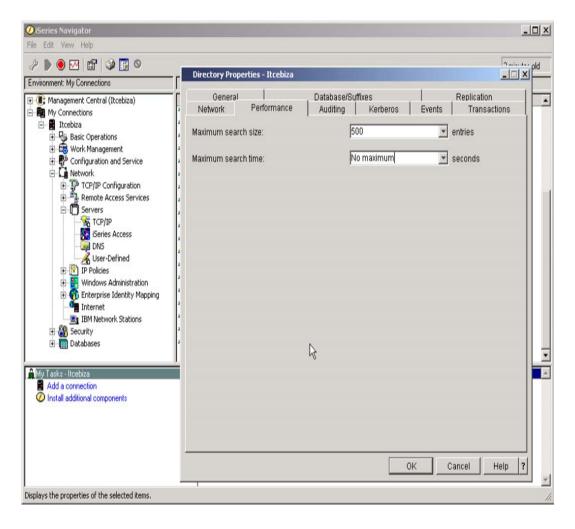
Note: If you don't see the option to start
Directory services, you must configure it first.
See the installation documentation.





✓ From the Directory properties menu, select the General tab and specify an administration password (if you haven't specified one already).





- Click the Performance tab and verify that the Maximum search size field is set to the value No maximum or a value greater than 1000.
- Click OK and specify to restart the server now when prompted.



OSH Command Entry

Ś

===> itdsetup -w myldappwd -a myitdpwd -u

F3=Exit F6=Print F9=Retrieve F12=Disconnect F13=Clear F17=Top F18=Bottom F21=CL command entry



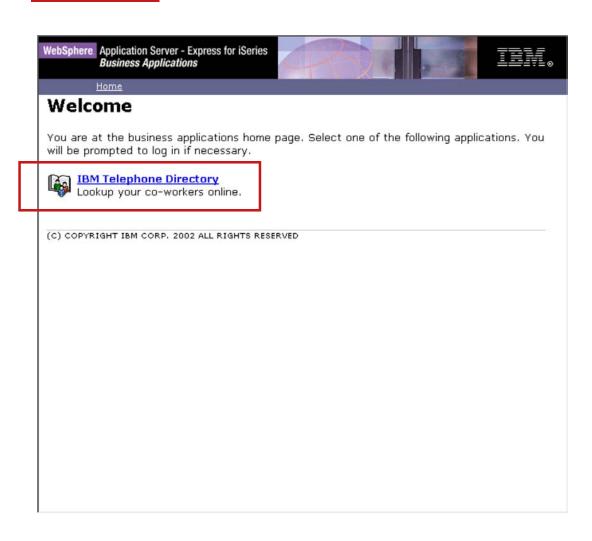
\*The configuration script can be customized with optional parameters For details on all parameters, see the Express documentation

Directory Services must be configured to support IBM Telephone Directory using a supplied configuration script\*. From the QShell command prompt (STRQSH) enter command:

itdsetup -w myldappwd -a myitdpwd -u

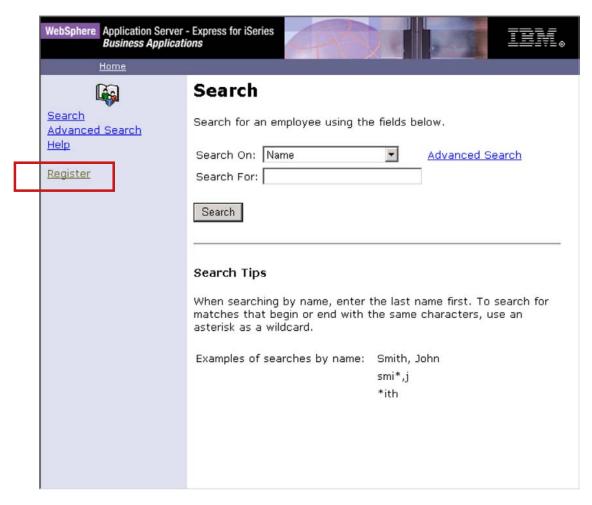
where myldappwd is your Directory Services Administration password, and myitdpwd password is the IBM Telephone Directory administrators password you specify now for use later. Note that both of these are passwords are case sensitive!!





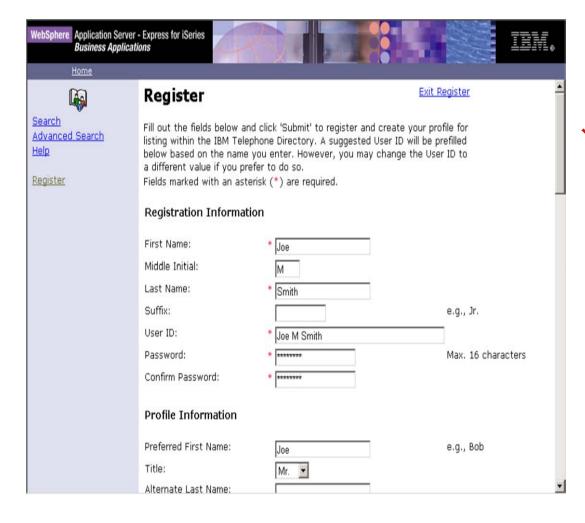
- Try IBM Telephone Directory right away! Navigate to http://your-iseries/bizApps (specify the specific HTTP server port if you didn't select the default of 80 when using the configuration wizard)
- Click the IBM Telephone Directory link.





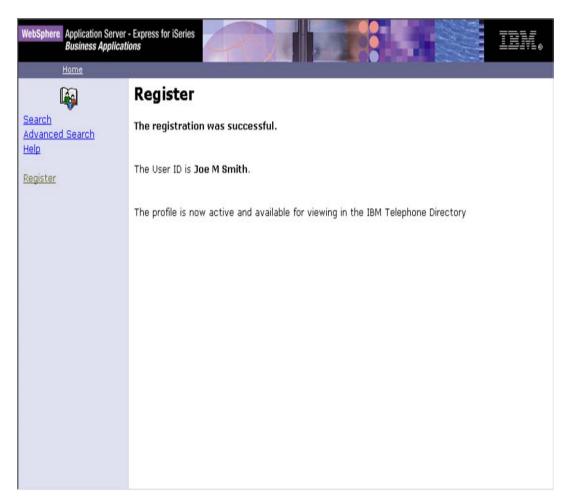
- ✓ Add information for an employee! Click the Register link.
- ✓ You will be asked to authenticate. Use the password you specified when you ran the ITD configuration script (Note that the password is case sensitive!)





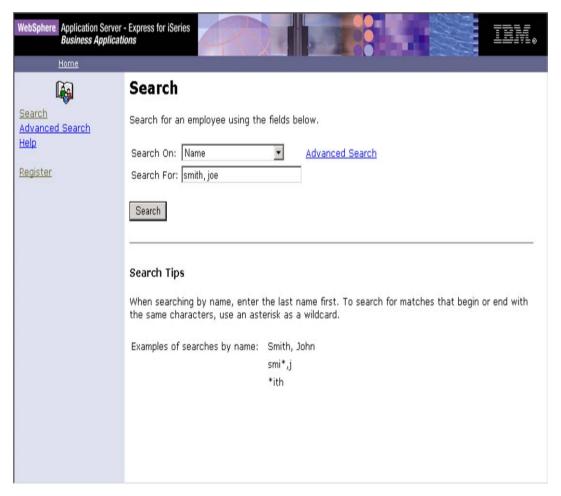
✓ Populate the registration page with data for a specific employee. When finished, click the Submit button at the bottom of the page.





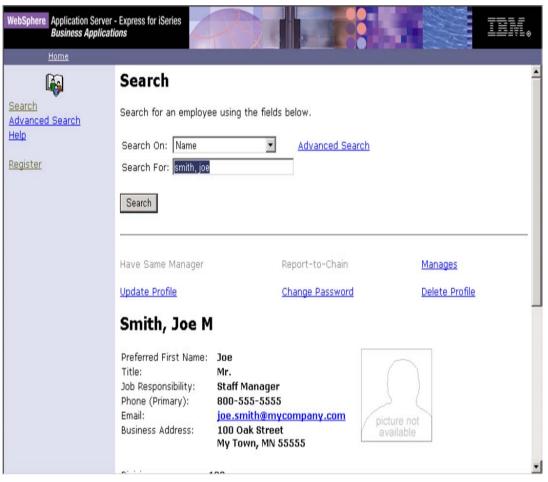
✓ That's it! You've registered an employee within IBM Telephone Directory. Now try searching for that employee by clicking the Search link.





✓ 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.





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



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



#### More Information!

To learn all there is about WebSphere on iSeries, including products, education, and services available, check out the first edition of the IBM WebSphere for iSeries Buying and Selling Guide Redpaper. http://www.redbooks.ibm.com/redpapers/pdfs/redp3646.pdf

Join the iSeries Nation, the essential destination for the iSeries community. Become a citizen today! Registration is quick and easy, and gives you access to valuable offers and a wealth of information to help you improve your IT department and your business.

http://www-1.ibm.com/servers/eserver/audience/Homepage.wss?view=ination

Take advantage of IBM Redbooks that provide positioning and value guidance, installation and implementation experiences, typical solution scenarios, and step-by-step "how-to" guidelines.

#### http://www.redbooks.ibm.com

REDP3624 WebSphere Application Server - Express V5.0 for iSeries

SG24-6801 The IBM WebFacing Tool: Converting 5250 Applications to Browser-based GUIs

SG24-6804 iSeries Access for Web V5R2 and WebSphere Host Publisher V4.0

IS-3710R01 Hot V5R2 iSeries Access Topics: Administering its Software, Functions, and Users; using HATS (Residency)

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