



Lab 3 – Packaging, Deploying and Testing a WebFaced Application within WebSphere Application Server – Express for iSeries

Overall Lab Guide

The objective of this lab is to show, how to package WebFaced Application into J2EE specified formats (WAR and EAR) and how to create a Websphere Application Server Express V5.0 Web Application in the Websphere Application Server Express V5.0 Administration Console.

Note: The pictures in these labs show a similar application being built. Some of the names and icons may be different from the environment you are working with.

The Steps in this Lab

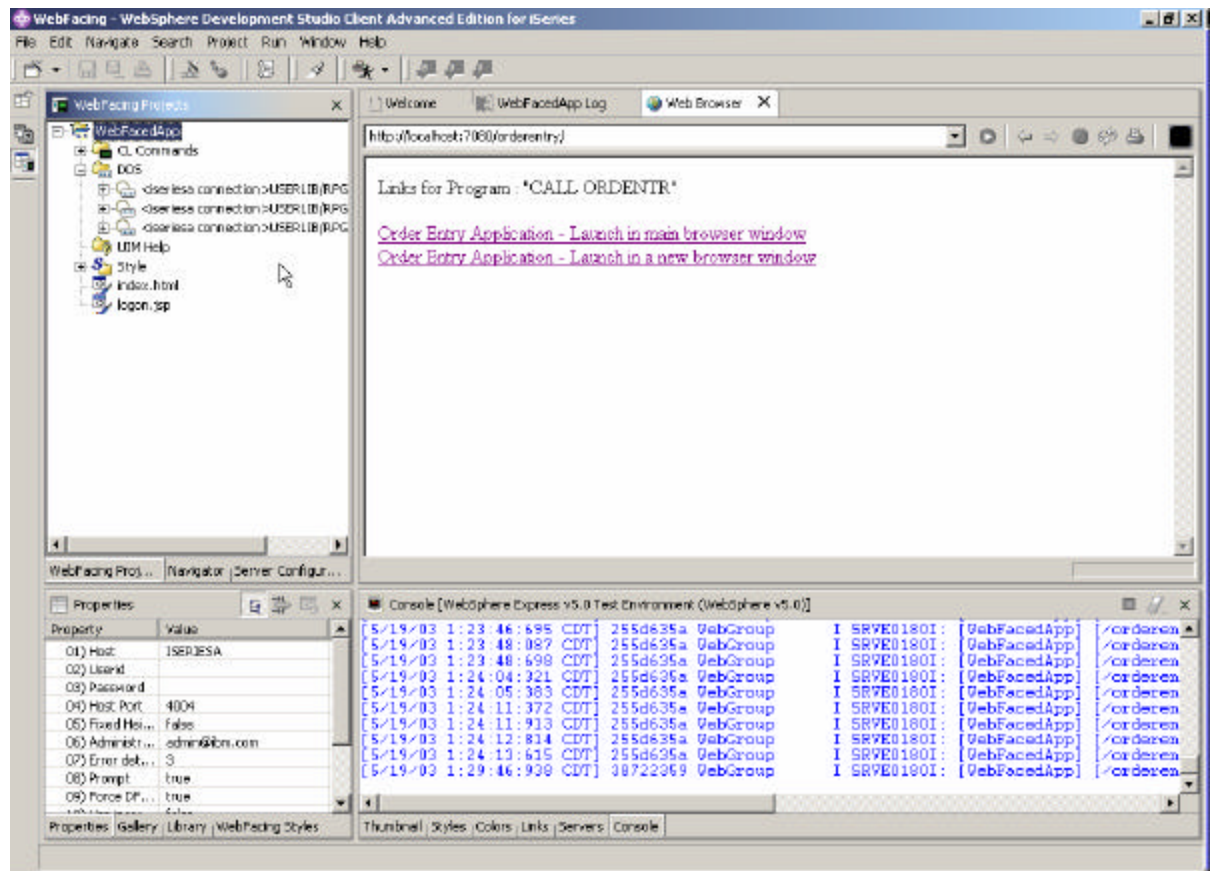
1. Creating the Web Archive (WAR) file
2. Creating a Enterprise Application in the WebSphere Application Server
3. Run the WebFaced application

1. Creating the Web Archive (WAR) file

In this exercise we describe how to a create WAR file, which will be used to deploy the application on WebSphere Applications Server Express V5.0.

1. Go back to Web Facing Perspective from Server Perspective

Click on WebFacing Perspective icon in the left icon bar.



2. Make sure you have mapped your iSeries as a Network Drive so that you can create the WAR files in your team directory on iSeries.

3. Select **WebFacedApp** project under WebFacing Projects

From Menu option select **File -> Export**

___ 4. Select WAR file in Export window

(this is the **Web AR**chive Format)



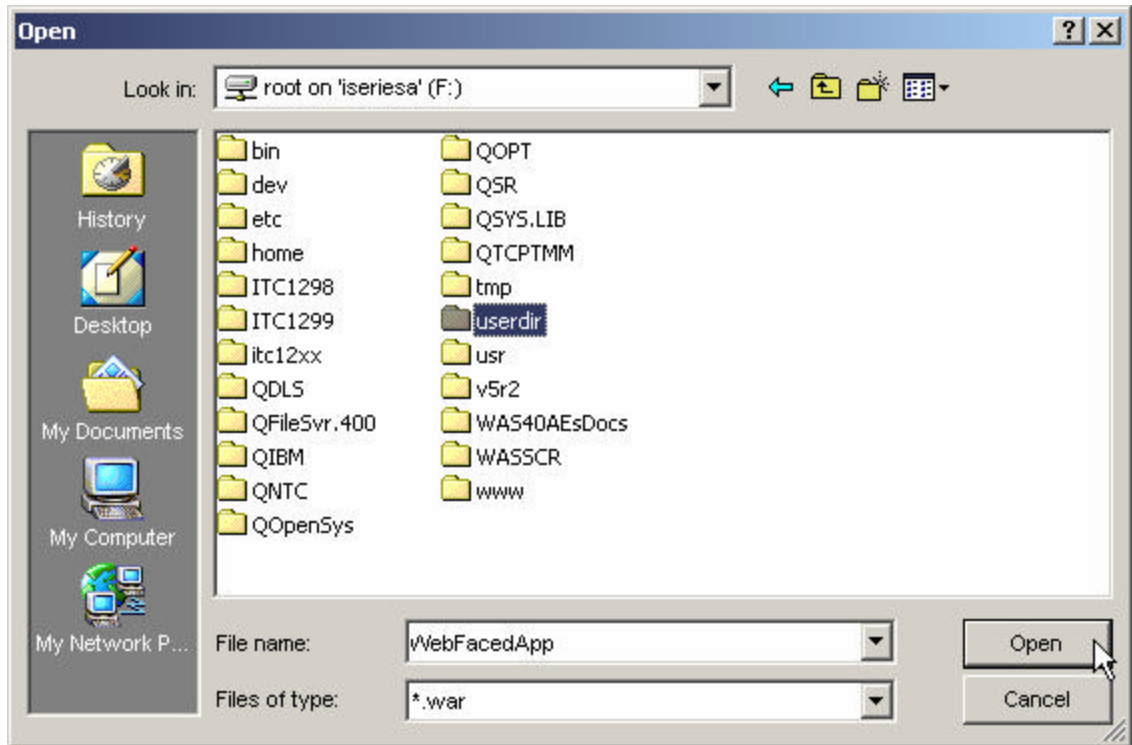
Click on Next button

___ 5. **WAR Export**

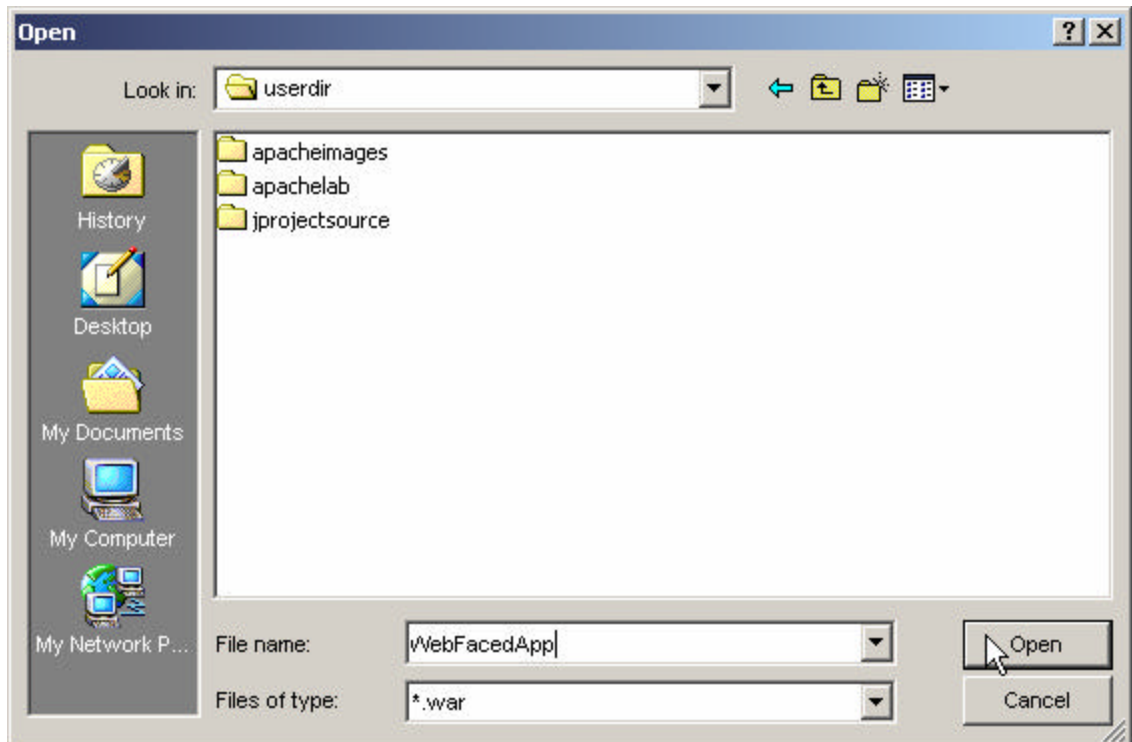
Select **WebFacedApp** for what resources do you want to export,

Click the Browse button to choose a location to export your project to.

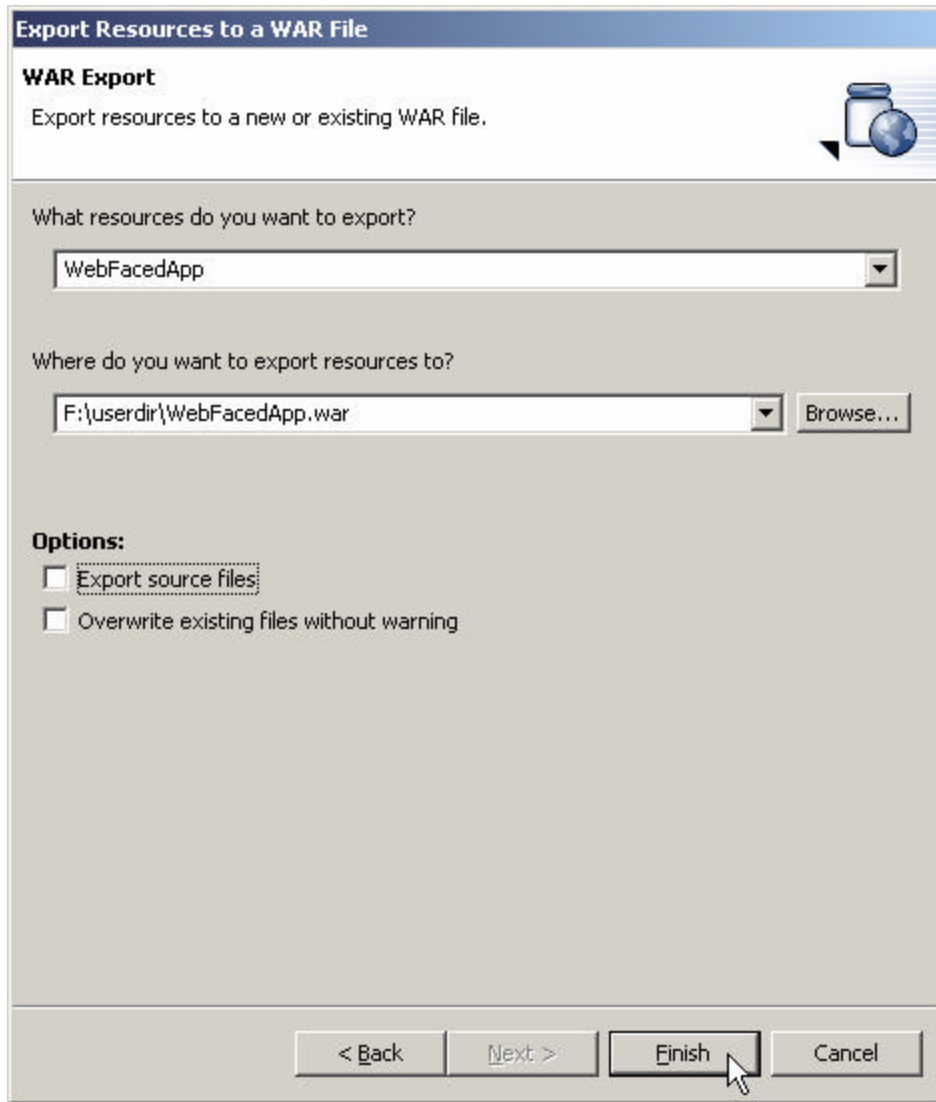
Go to your team directory on iSeries System using mapped network drive from previous step.



Select your **user directory** (set-up in lab preparation) and Click on open
Enter filename: **WebFacedApp** and click on Open




Back in WAR export window



Click on **Finish**.

This export to a WAR file will take a little while. It is copying the project information to your mapped drive, but also creating the descriptors and formatting required for a WAR file.

__ 6. **Validate what you just published on the mapped drive.**

If you do not have an **Windows Explorer** session going, **right mouse click** on the **Start** button (lower left hand corner of the laptop display), select **Explorer**. Or you can click the icon that looks like this  on the bottom left edge of your PC display. Otherwise, just use the session you already have running.

Check your team directory to ensure that the **WebFacedApp.war file** is there.

2. Creating a WebSphere Application Server Express V5.0 Enterprise Application

Creating an Enterprise Application with the WebSphere Application Server Express V5.0 Admin interface

During this exercise you will start the WebSphere Application Server Express V5.0 Administrative Browser Console. The console allows you to manage your Websphere application server environment. The following tasks will be covered in this lab:

- Starting the admin. Browser console
- Navigating through the WebSphere Application Server Express V5.0 environment using the console
- Install the WebFacedApp WAR file as an Enterprise Application using the Wizard
- Starting the Application

As a result of this exercise, you will create the Enterprise Application needed to run your WebFaced user interface.

What You Should be Able to Do

As a result of this exercise you will learn how to use the **WebSphere Application Server Express V5.0 Browser Admin console**. You will be able to start it and gain an understanding of the different parts in the console. You will be able to go through all steps needed to define all pieces needed to run WebFaced applications in WebSphere Application Server Express V5.0:

- Use the WebSphere Application Server Express V5.0 browser console
- Navigate through the Console environment
- Use the WebSphere Application Server Express V5.0 browser console and its Wizards to create an enterprise application needed to run the WebFaced application.
- Use the WebSphere Application Server Express V5.0 browser console to start the application

__ 1. **Starting the WebSphere Application Server Express V5.0 Express browser Admin**

To start the WebSphere Application Server Express V5.0 Admin, open up a browser. To do this, look on the bottom left of your laptop and find an icon like this:



For Internet Explorer (recommended, you can use Netscape, but don't resize the window in the middle of an activity, you risk losing it). Click on it to bring up a browser.

When the browser comes up enter this URL:

http://<system_name>: 2001

- When prompted, enter your iSeries userid and password.
- **Click on IBM WebSphere Application Server Express for iSeries**, IBM HTTP Server with WebSphere Application Server Express for iSeries page should appear.
- **Click on Manage tab** and Select your WebSphere Application Server Express V5.0 Express Server instance in the Server list box on the top

__ 2. **Install WebFaced Application**

- **Click on Install New Application link** in left navigation pane
- Specify Application Location
 - i. **Select Application is Contained in a WAR file** radio button
 - ii. **IFS Path of WAR file**

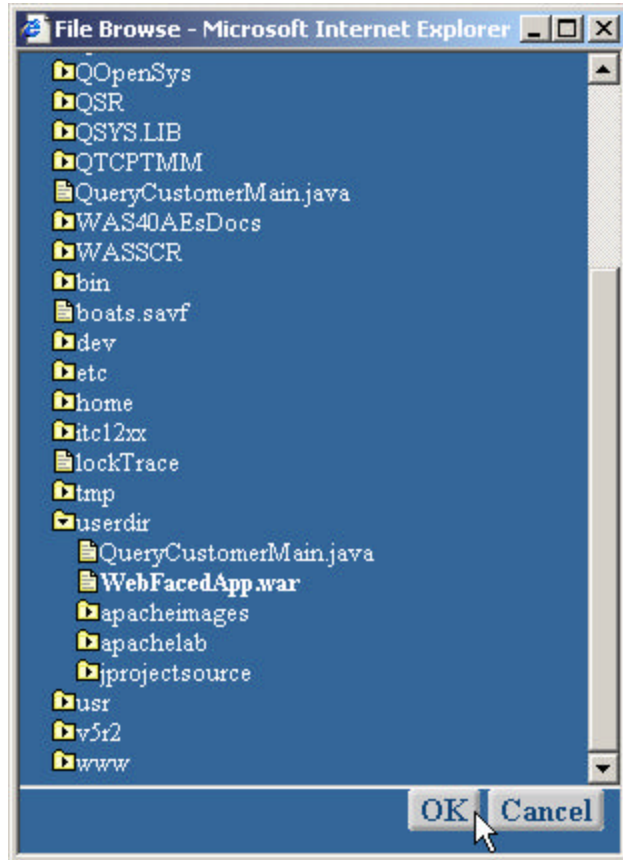
By default the IFS path for WAR file will be:

/QIBM/UserData/WebASE/ASE5/<your_was_instance>/installableApps/

Change it to your team directory where the WAR file has been exported to in previous step.

Select and delete the default IFS path shown.

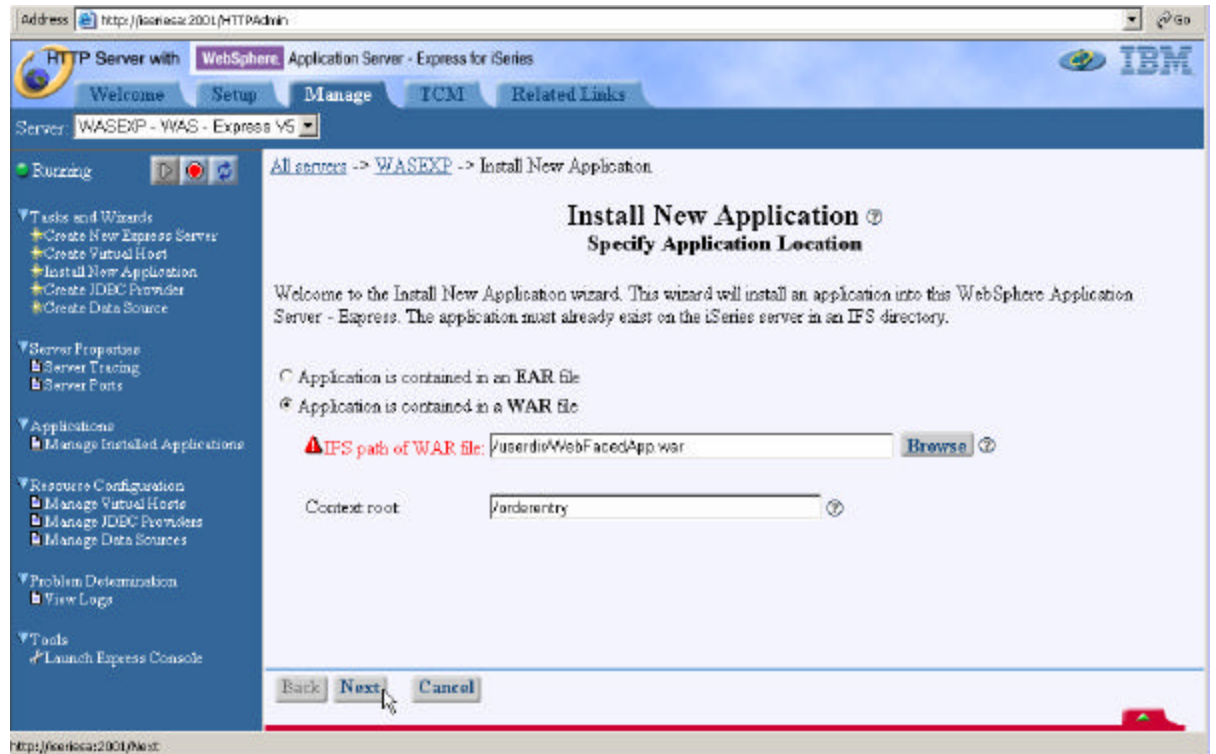
1. **Click on browse** and navigate to your team directory



2. **Select WebFacedApp.war** file created in the previous step
 3. **Click on OK** in the file browse window.
- iii. **Context Root** input field enter **/orderentry**
This is part of the URL for invoking the application from a browser.
We will just point to the application itself.

IBM WebFacing Tool – Packaging, Deploying and Testing an WebFaced Application within WebSphere Application Server - Express for iSeries

Here is the screen shot:



iv. Click on **Next**.

- **Provide Options to Perform Install**

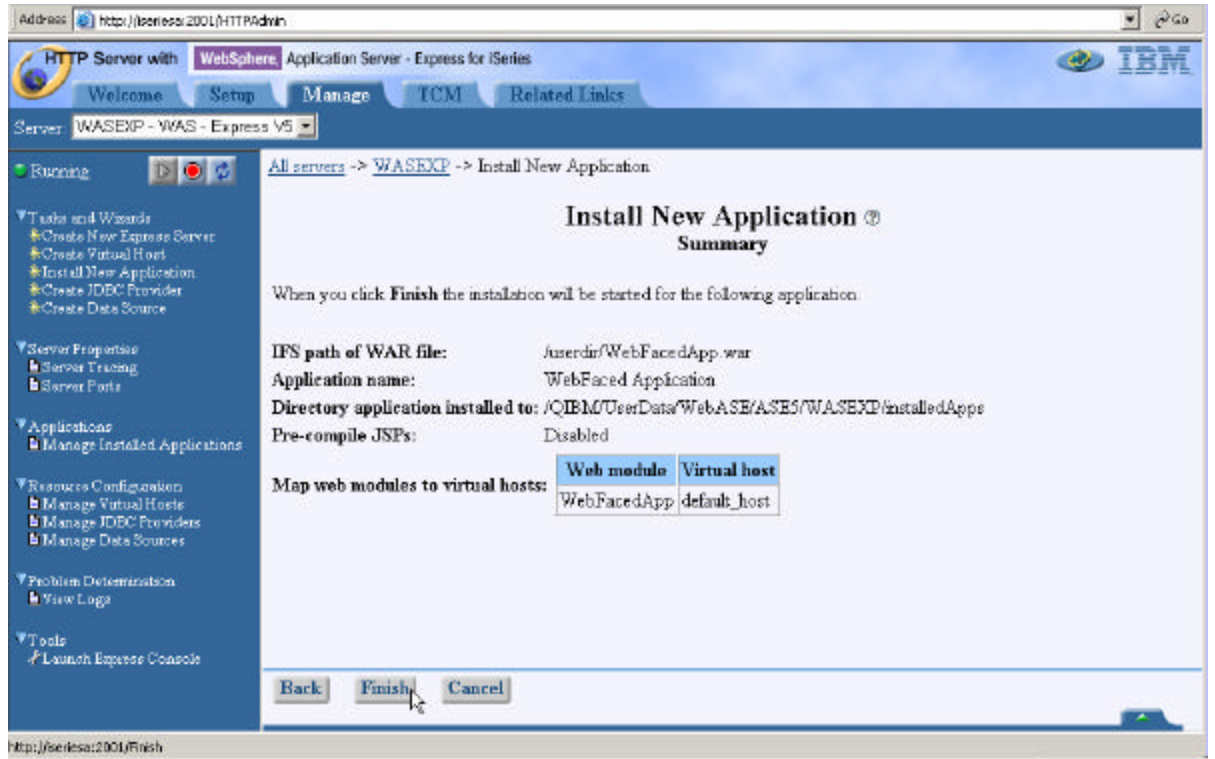
- i. Application Name: Enter **WebFaced Application**
- ii. do not select Pre-Compile JSPs option (Take a Default)
- iii. **Click on Next**.

- **Map Virtual Hosts for Web Modules**

- i. Virtual Host: Select **default_host** (already selected)
- ii. **Click on Next**

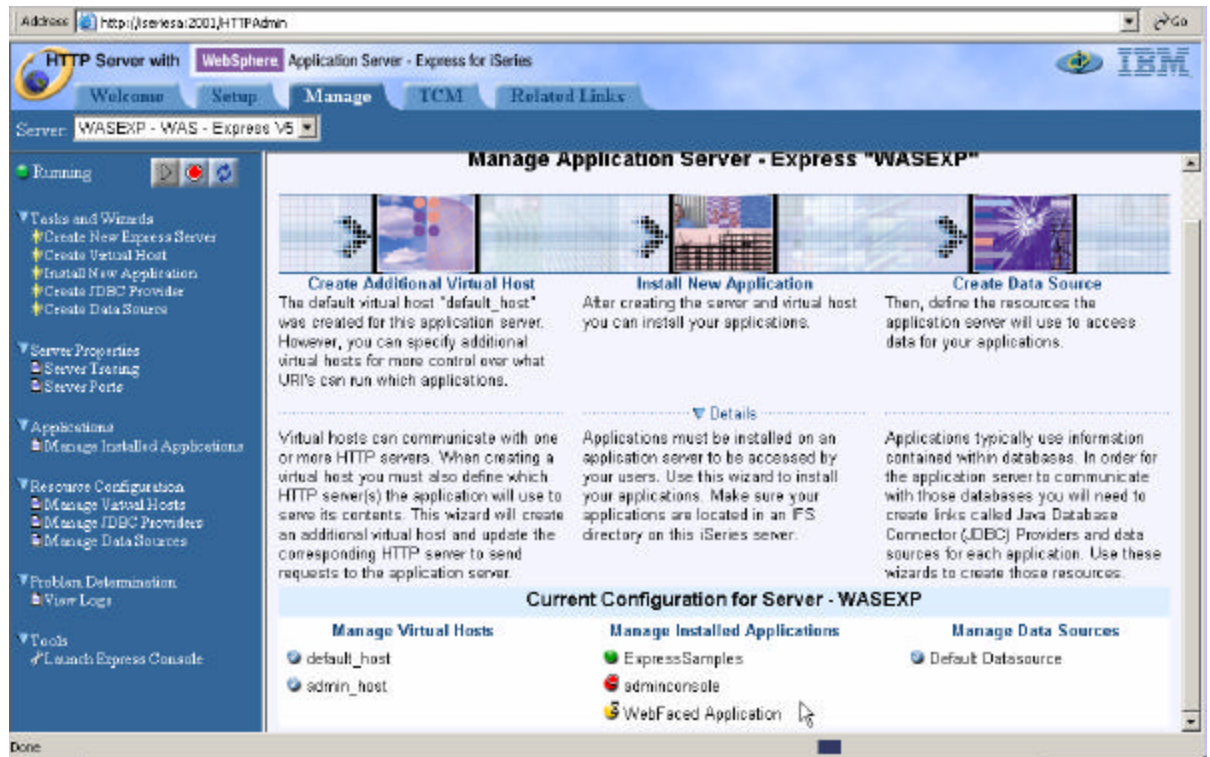
- **Summary**

- i. Review the Summary

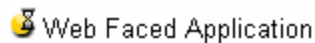


- ii. Click on Finish

- Wait until Application Installation is over



Yellow dot with hour glass next to application name

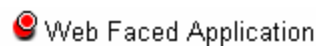


Indicates that it is currently installing the application.

Click on Manage Installed Applications under Applications in the left navigation pane.



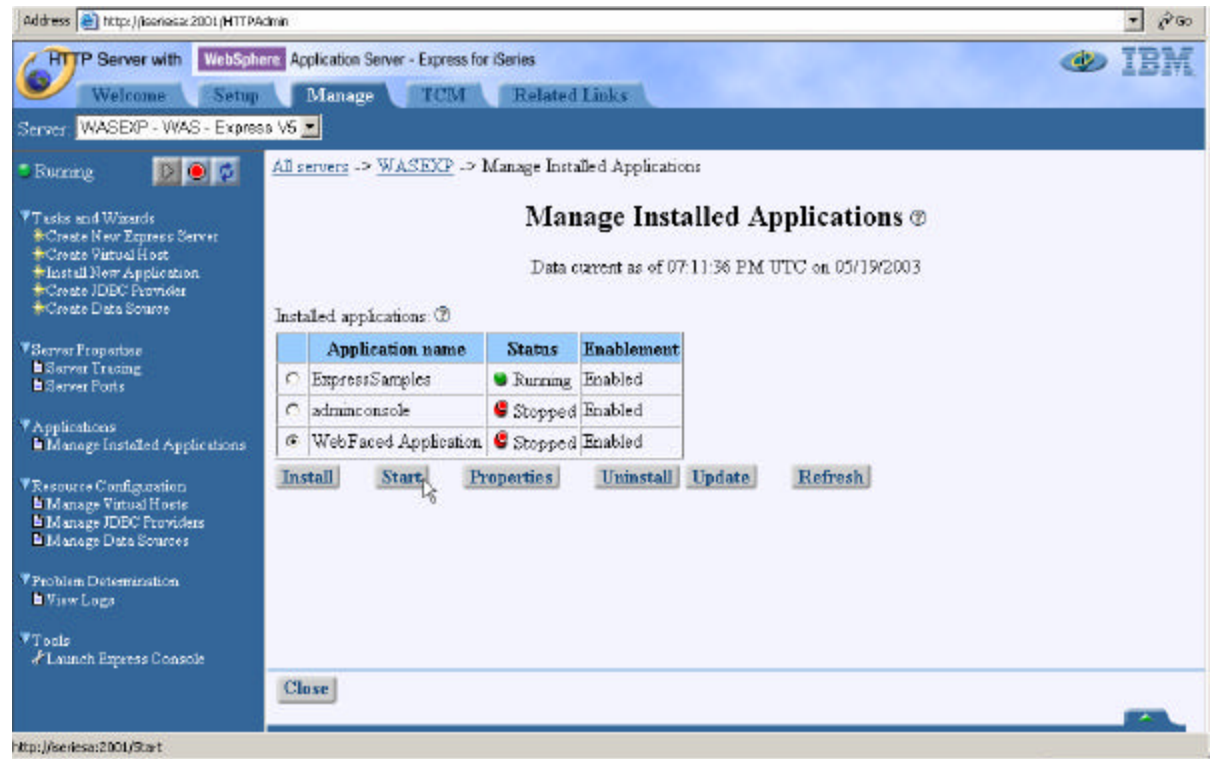
Click on Refresh Button () in right navigation pane to refresh the status and wait until it turns to red dot.



which indicates that Application Installed but currently in Stopped Status.

__ 3. Start WebFaced Application

- **Click on Manage Installed Application link** in left navigation pane
- **Select WebFaced Application**

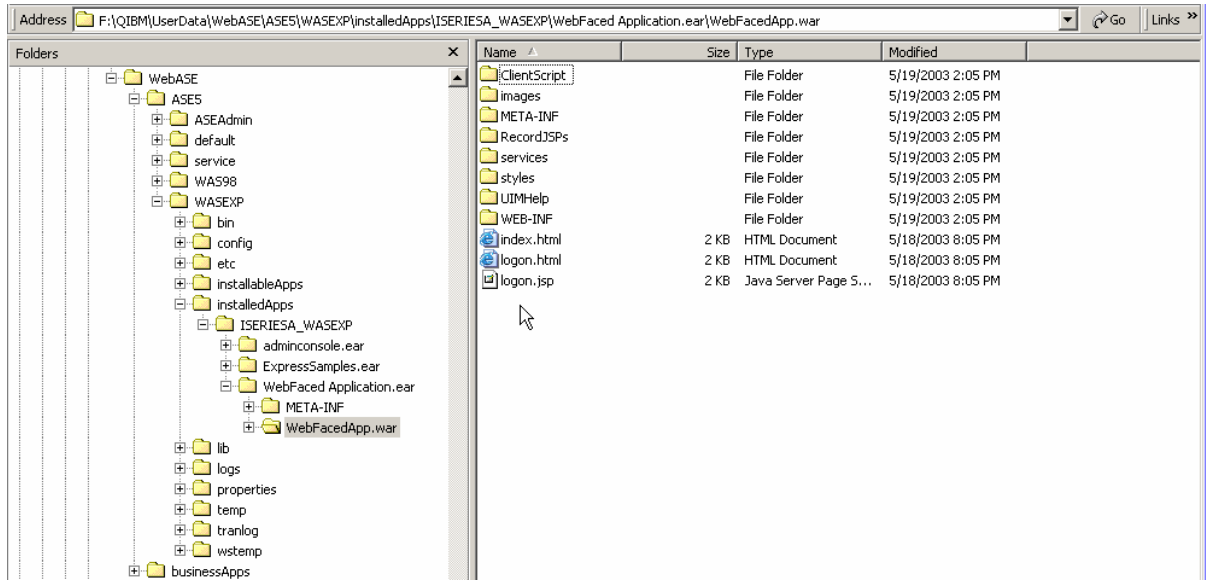


- **Click on Start** and wait until Status shows Running ( Running).

4. Application Components on the Server

Let's look at where the enterprise application ended up in your WebSphere instance files. Use your Windows Explorer to expand the IFS directories down to your instance.

/QIBM/UserData/WebASE/ASE5/<your_was_instance>/InstalledApps/<system_name>_<your_was_instance>/Web Faced Application.ear



We are now ready to test our application.

3. Running the WebFaced application

During this exercise you will start Internet Explorer, specify the URL to show the **index.html** page generated by the WebFacing tool. Then select the WebFaced application and start it. The following tasks will be covered in this lab:

- Starting Internet Explorer
- Specifying the correct URL to load the **Index.html** page
- Selecting the correct link to invoke the WebFaced application
- Using the WebFaced application

As a result of this exercise, you will point the browser to the Web application you just created. From the initial web page you will select the link created by the WebFacing conversion to invoke the WebFaced application.

What You Should be Able to Do

As a result of this exercise you will be able to invoke the web application in IE. You also will be able to start the WebFaced application and understand how to navigate through the converted User Interface.

- Use the Internet Explorer to point to the Web Application
- Select the Link specified in earlier exercises to invoke the RPG application
- Use the browser to step through the WebFaced application

__ 1. **Display Index page**

Use an Internet Explorer (recommended) browser to show the Index.html page (this is the preferred browser for the webfacing output).

Choose *Start*→*Programs*→*Internet Explorer* or use the shortcut 

The browser will appear on your desktop. Specify the following URL:

<http://<system name>:<HTTP server port>/orderentry>
e.g. <http://iseriesa:59900/orderentry>

If the application server is running and the URL is correct you should see the **index.html** page that has been generated by the WebFacing program.

__ 2. **Testing the webfaced application**

- Go to your browser window and click one of the **Order Entry** links,

When prompted, enter your iSeries userid and password.

If everything is in place you should get the first screen of your application.

Please note, the first time a screen is invoked, it is being compiled as a JSP. This takes time. Further accesses to the same screen should appear faster.

Select a **customer** from the subfile

Go through the same steps as earlier in the Lab and try the different options to create an order.

Congratulations, you have completed the Packaging, Deploying and Testing a WebFaced Application within WebSphere Application Server – Express for iSeries. .