

IBM WebSphere Development Studio Client for iSeries

Refacing an iSeries Green Screen Application using WebSphere Development Studio Client Version 5.0

Exercises

Overall Lab Guide

The objective of this lab is to have the students work with an existing 5250 application and use the WebFacing Tool to create a browser based user interface, and then run this application as an e-business application. This lab is an extension of the WebSphere Application Server — Express for iSeries Configuration and Administration lab demonstrated how to create and test WebSphere instances. At the end of the lab, the student should know how to use the IBM WebFacing Tool. This lab will guide the student through most of the steps involved in the WebFacing process. This lab also shows how to create a WebSphere Application Server — Express V5.0 Web Application in the WebSphere Application Server — Express V5.0 Administration Console.

The Steps in this Lab

- **1.** A Brief Look at 5250 Application
- 2. Creating a WebFacing project in WebSphere Development Studio Client
- 3. Convert the DDS to JSPs
- **4.** Running the WebFaced Application in WebSphere Application Server Express V5.0 Test Environment in WebSphere Development Studio Client
- 5. Creating the Web Archive (WAR) file
- 6. Creating a Enterprise Application in the WebSphere Application Server
- 7. Run the WebFaced application

A brief look at the 5250 application

Exploring the 5250 application

During this first section of the lab, you will be familiarizing yourself with the 5250 screens of the application you are about to WebFace during this lab exercise.

You will explore the 5250 application by:

- ? Running it in an Emulation window
- ? Learning how to invoke it
- ? Learning what screen it provides
- ? Learning what command keys are supported and what functions they allow

What You Should be Able to Do

As a result of this exercise, you will be able to go through the application's screens. You will understand how to invoke the application. You will understand how to navigate through the application.

- ? Invoke the application
- ? Use the application screen and command keys
- ? Know the functionality of the application

Setup

Download the apilib.savf file from the Web site. Restore the contents of this save file to a library called APILIB on the iSeries server. Add the APILIB library to the library list for the user profile to be used in this lab.

For the purposes of this lab, you are team number 1. When asked for a team number xx, assume team01.

Signing on to your iSeries server

Start 5250 Emulator Session to Lab iSeries system (Refer to Lab Information Sheet)

You should see an iSeries 5250 emulation window with the sign-on screen on your desktop.

- ? Sign on using a valid userid and password.
- ? On the command line of the 5250 screen, invoke the Order Entry Application by keying in:

∠ CALL ORDENTR

- ? The first panel that you see requires a customer number
- ? Press command key 4

You will be presented with a list of customers in a window

- ? Select a customer by keying in **1** in the Options entry field
- ? Press the Enter key to proceed.

You will see a screen with the **detail customer data**.

You will notice that an order number has been assigned as well.

You are ready to order some parts.

- ? Press **command key 4** to get a list of parts in a window.
- ? Select a part that has several quantities left by keying in a **1** in the option field Back on the order screen, the part appears on the order on the first line.
- ? Change the quantity field to 1 or 2
- ? Press Enter, the detail order line is now part of this order
- ? You can press **command key 6** to accept the order

When you feel as though you understand how the application works, stop adding orders.

? Press **command key 3** to exit the application.

You are now ready to put a brand new user interface onto this application.

Creating a Project using the IBM WebFacing Tool

Using the Project Wizard within the IBM WebFacing Tool

During this section of the lab, you will use the IBM WebFacing Tool project wizard inside the WebSphere Development Studio Client Integrated Development Environment to create a new WebFacing project. This project using the IBM WebFacing Tool will then be used to facilitate the conversion of your DDS source and to test the generated output.

You will explore the IBM WebFacing tool project wizard by:

- ? Invoking the IBM WebFacing tool project wizard
- ? Stepping through the IBM WebFacing tool project wizard pages &
- ? Providing the correct input for the project wizard #
- ? Start the creation of a new IBM WebFacing tool project #

What You Should be Able to Do

As a result of this exercise, you will be able to create a new project using the IBM WebFacing Tool.

- ? Start WebSphere Development Studio Client &
- ? Start the IBM WebFacing Tool project wizard &
- ? Step through the project wizard pages &
- ? Provide the correct information to the project wizard &
- ? Browse through the new project in the IDE

___1. Invoking WebSphere Development Studio Client

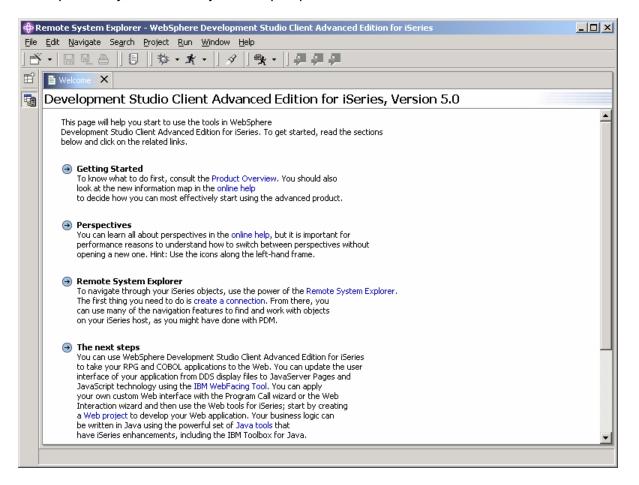
To start WebSphere Development Studio Client, press the **Start** button on the task bar of your desktop

Choose Start Programs IBM WebSphere Studio WebSphere Development Studio Client Advanced Edition for iSeries



or click on the WebSphere Development Studio Client icon desktop (if available)

After a few moments of loading, the workbench appears. If the workbench has been used previously, it will already show a perspective.



2. Start the WebFacing perspective, by selecting the Perspective menu item on the workbench Menu bar.



If there is a **WebFacing option** available on the submenu, select **WebFacing** and skip the next step.

Otherwise, select the Other.... option on the submenu

A list similar to the figure below will appear:

🕀 Select Perspective	×
Java Java Browsing Java Type Hierarchy Plug-in Development Profiling Remote System Explorer (default) Resource Server Web Web Web Web Resource Server Server Server Server Server Server Server Server Server	
OK Cancel	

Select WebFacing from the list

Click OK.

- **3.** Create Web Facing Project
 - ? Select the **File** option from the Workbench menu bar
 - ? Select **New** from the Menu pull down
 - ? Select **WebFacing Project** from the next sub menu

The WebFacing project wizard will appear.

____ 4. WebFacing Project dialog

Enter following details:

Project name: wflabxx

(where xx is your team number... refer to lab information sheet) Enterprise Application Project name: wflabxxEAR Context Root: wflabxx

(where xx is your team number... refer to lab information sheet)

WebFacing Project	
WebFacing Project	
Create a WebFacing Project	
Project name: wflabxx	
Vse default	
New project location; $\int C: \langle Documents and Settings \rangle Administrator \rangle M_{2}$	y Documents\IBM\wdsc\workspace\wflabxx Browse
Enterprise Application Project: New Existing 	
New project name: wflabxxEAR	
🔽 Use default	
New project location; C:\Documents and Settings\Administrator\	My Documents\IBM\wdsc\workspace\wflabxxEAR Browse,
Context root: wflabxx	
WebFacing project features:	
Enable Struts support Generate JSP custom tags	Enables a run-time architecture based on the Struts
	projects. See the WebFacing documentation for more
	< Back Next > Einish Cancel
-	

Click Next.

5. Select the J2EE level.

On this second page, you need to set the J2EE level. For this lab, you will need to set it to J2EE 1.3.

Click Next.

6. The Select display file source members to convert dialog

On this page of the new project wizard, you need to specify where your DDS source is located. Specifically, the IBM WebFacing Tool needs to know:

- ? Server name
- ? Library name
- ? Source file name
- ? Member name

You need to specify the **server name** to be used in the **connection** combination box.

Select the correct iSeries server (refer to Lab Information Sheet) from the drop down combination box list.

If your assigned server name appears in the list, select it and skip to the next step.

If the list does **not** contain your assigned server name, you need to add the server to the list.

You do this by pressing the *New...* button to the right of the Connections box.

eject name: wflabox					
nnection: mjs1				1000	• New
rary: +LIBL	File: ALL	<u>•</u>		DSPF MNU005	
	- 100 <u>1</u> 00 1				
k Refresh DDS list butto	on , then select files or memb	ers and add them to the	table for conver-	sion:	
Befresh DC	05 list				
		Library	File	Member	1
		, car or y	1.00	- Hereber	
		» 1			

When the **New Connection** dialog appears,

New		
Remote iSeries S	ystem Connection	
Define connection i	information	
Parent profile:	Team	•
Connection name:	Connection	
Host name:	iSeries Server	•
Description:	Connection to the iSeries Server	
E northead and		
✓ Verify host name	10	
	< <u>B</u> ack <u>N</u> ext > <u>Finish</u>	Cancel

Select Parent Profile: Team

- Enter Connection Name: same as iSeries Hostname (refer to Lab Information Sheet)
- Enter the Host Name: iSeries Server Name (refer to Lab Information Sheet)
- Enter Default User ID: iSeries User ID (refer to Lab Information Sheet)

Press the Finish button in the **New Connection** dialog.

- ___7. Back in the WebFacing project wizard:
 - ? Check that your iSeries server is selected in the connection combo box
 - ? Make sure *LIBL is selected in the library filter combo box
 - ? Select the *Refresh list* button
 - ? When prompted, enter iSeries password and press OK to continue.

The library list of your iSeries job is displayed in the tree view list on the project wizard page.

Select your assigned team library (refer to Lab Information Sheet) from the list.

WebFacing Project Select display file source members to co Member ITC1205/RPGAPP(SLTPARTD) added.					
Project name: wflabxx Connection: RACKEM Library: *LIBL File Click Refresh DDS list button , then select file	e: *ALL es or members and	add them to the	Member: Member types: table for conver:	DSPF MNUDDS	▼ <u>New</u> ▼
RACKEM *LIBL *ALL *ALL DSPF MNUDDS		Library ITC1205 ITC1205 ITC1205	File RPGAPP RPGAPP RPGAPP	Member ORDENTD SLTCUSTD SLTPARTD	
		< <u>B</u> ack	<u>N</u> ext >	Einish	Cancel

- ? Expand it by clicking on the + sign beside the library name
- ? Select source file **RPGAPP** (containing DDS source physical file members) from the expanded list
- ? Expand RPGAPP
- ? Select **all** members from the list
- ? Press the >> button in the middle to copy the selected members over to the list of selected members
- ? Press the **Next >** button at the bottom of the **Select Display file source** dialog to proceed to the next wizard page.

Now the IBM WebFacing Tool knows which DDS members to convert for this project.

The Select UIM source members to convert dialog appears.

If you have UIM help panels, you can specify the source locations of the source members on this page of the project wizard. However, in this application, we do not have UIM help so you can skip this panel.

Press the **Next** > button at the bottom of the **Select UIM source** dialog to proceed to the next wizard page.

8. The Specify CL commands Page

You will now provide the information that will allow the WebFacing wizard to create the initial **index.html** page to start the Order Entry application.

Remember what you keyed in on the command line in the 5250 emulation during the previous exercise to start the order entry application?

In case you forgot, it was: CALL ORDENTR

The WebFacing runtime needs to know the invocation command for your application in order to send this invocation command to the iSeries server to start your application from the browser.

The following page in the WebFacing project wizard will allow you to specify the necessary information.

ebFacing Project				
	nds Ids that are used in your applica enerated hypertext links.	tion, the command labels	you want to use, and	I the signon
Project name: wfla	ьxx			
know the text that v	es hypertext links that you can (will be shown for each link and th e several CL commands are used	ne CL command that each	link will invoke. On th	
program MYPGM with	uires interactive parameters you h a part number parameter, you ced when you click on the invoca	would enter CALL MYPG	M PARM('∂') as th	e CL command. The variable
CL command:	Call ordentr			_
	Call Order Entry			—
Command label:	,			Add
Prompt for sig				Modify
C Sign on with s				<u></u>
User ID				
Password		Confirm password		
CL Command		Command Label	User ID	
CALL ORDENTR		Call Order Entry	*PROMPT	Delete
				Move Up
				Move Down
				move bowin

- ? Enter CALL ORDENTR into the CL command entry field
- ? Enter Order Entry Application into the Command Label entry field
- ? Click the Add button on the right side of the dialog. Make sure the text and command you keyed into the entry fields is shown in the list at the bottom of the dialog
- ? Click **Next >** button on this project wizard page

____9. The Choose a Web style Page

The next page allows you to select a Web style for your converted screens.

WebFacing Project		
Choose a Web style Select a "Look and Feel" style to use for the project.		
Select a predefined or previously customized style: avenue corporate1 fun gradient sage sage1		
	< Back Next > Einish	Cancel

- Select any style from the list of available styles.
 Click the **Next** > button at the bottom of this dialog.

____ 10. The Complete WebFacing Project page

At this point, we want you to just create the project; we do not want you to convert the source now. Conversion is the next section of the lab.

WebFacing Project	
Complete WebFacing project	
You have indicated the specifications for your new WebFacing project. To continue, click Finish.	
You are about to create a WebFacing project. Do you also want to convert the selected display files?	
O Yes. I want to create the project and proceed with conversion now.	
No. I only want to create the project now.	
<pre>Einish</pre>	Cancel

- ? Select the **No**, **I** only want to create the project now button
- ? Click the **Finish** button

This completes the project set-up exercise.

You are now ready to convert and run your application.

Convert Selected Members

Converting selected DDS members

During this exercise, you will start the conversion of the DDS source that you selected in the previous lab

The following tasks will be covered in this lab:

- ? Selecting DDS source to convert
- ? Starting the conversion
- ? Work with the conversion log

As a result of this exercise, you will create JavaServer Pages, XML data bean definitions, and several other files that are needed for the WebFaced application.

What You Should be Able to Do

As a result of this exercise, you will be able to use the **IBM WebFacing Tool** to convert selected DDS source members:

- ? Use the IBM WebFacing Tool to select certain members for conversion
- ? Use the IBM WebFacing Tool to start the conversion process
- ? Analyze the conversion logs

Using the IBM WebFacing Tool to start the Conversion

- __1. In the WebFacing perspective, select the project <u>you have been working</u> on in the previous exercise, wflabxx
 - ? Expand this project by **clicking** on the **+** sign beside its icon in the tree view
 - ? You should see an icon named **DDS** in the expanded tree **If** you **do not** see a **DDS** folder:
 - You might be in the **Navigator** view,
 - Scheck the pane title bar,

If it shows Navigator,

Locate the WebFacing projects tab at the bottom of the list pane
 Click on it.

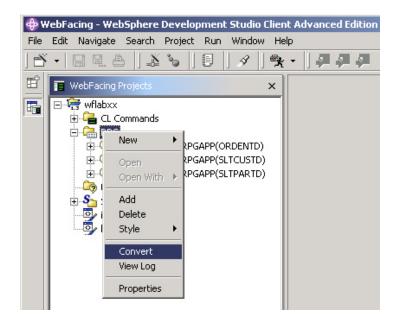
Now the **WebFacing projects** view should be active and you should be able to locate the **DDS** folder.

2. Expand the DDS folder by clicking on the **+** sign beside it

You should see all 3 members that you selected in the previous exercise.

Since you are converting all members in the project, you can work with the **DDS** folder icon.

Right mouse click on the DDS folder icon:



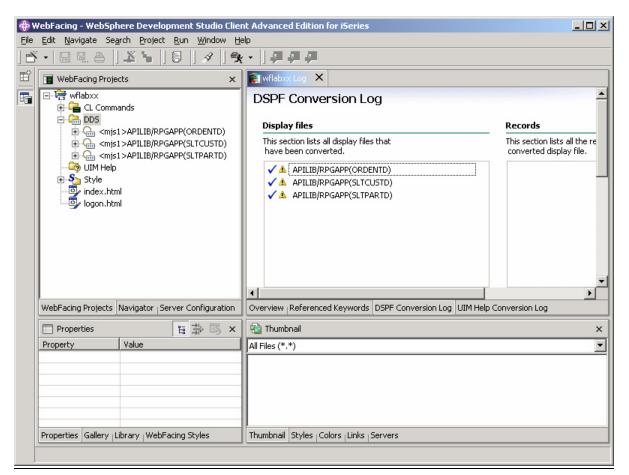
Select **Convert** from the pop-up menu.

The conversion process starts.

(You **may** be prompted for a sign-on and password. Look for the screen and use your team id and password. If you do not see a prompt, it is OK, just continue.)

Wait until the conversion finishes

3. Notice the conversion log in the right hand pane:



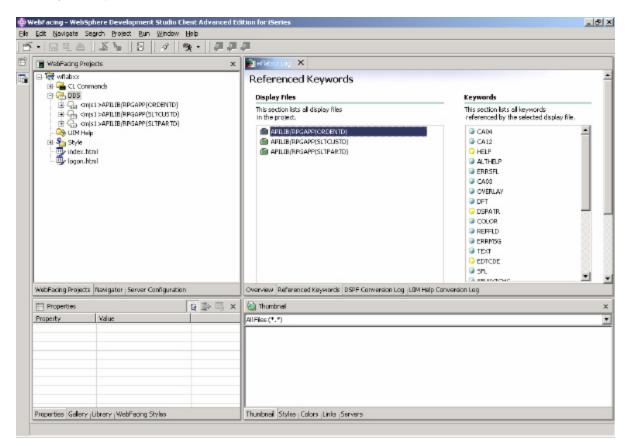
Check the log.

×

- At the bottom of the log are tabs:
 - ? Overview
 - ? Referenced Keywords
 - ? DSPF Conversion Log
 - ? UIM Help Conversion Log

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On these pages, you can get more details on the conversion (e.g. Referenced Keywords).



Check out the information on the other log pages.

Then, proceed to the next lab exercise and run the application with its new User Interface.

Running the WebFaced Application

Running the WebFaced application

During this exercise, you will use the **WebSphere Application Server** — **Express V5.0 test environment** that is embedded in WebSphere Development Studio Client. Using the test environment will make the process of testing your application a lot easier than doing the testing in a remote WebSphere Application Server — Express V5.0 environment. After you have tested your application, you would move the files and use WebSphere Application Server — Express V5.0 on a server to do the final testing and then move the files from the WebFacing conversion onto your production WebSphere Application Server — Express V5.0 environment.

The following tasks will be covered in this lab:

- ? Starting the application in the test environment
- ? Selecting the correct link on the invocation index.html page to invoke the WebFaced application
- ? Using the WebFaced application

As a result of this exercise, you will specify in the WebFacing perspective that you want to run your project in the WebSphere Development Studio Client test environment. From the initial web page, you will select the link created by the IBM WebFacing Tool to invoke the WebFaced application.

What You Should be Able to Do

As a result of this exercise, you will be able to load the initial invocation page and invoke the WebFaced application in the browser that is included in WebSphere Development Studio Client. You will understand how to navigate through the converted User Interface.

- ? Use the WebSphere Application Server Express V5.0 test environment to run the Web Application
- ? Select the Link on the invocation web page to invoke the RPG application
- ? Use the html based user interface to step through the WebFaced application

____1. Using the WebSphere Application Server — Express V5.0 test environment to show the Index.html page

• 🗔 🔍 🙈	arch Project Run Window				
		9 · 33			
📻 WebFeding Proje		x	Nefebax Log X		
	en en With ► d late		Referenced Keywords Display Files The sector late all display files in the project. APILIB(RPSAPP(SLTOJSTO) APILIB(RPSAPP(SLTPARTO)	Keywords This section kets all keywords referenced by the selected display file. © CADE © CAI2 © HELP © ALTHELP © ERRISFL © CAD3 © CWERLAY © DERAITR © COLOR © REFEDD © ERRISF	*
Pro WebFacing Projects	atore From Local Retory operiles Nexigator Server Configuration		Overview Referenced Keywords DSPF Converso	GERRMSG GERRMSG GEREMSG GEREMSG GEREMSG GEREMSG SE SE	-
Properties		と 事 問 ×			
Property OI) Host O2) Userid O3) Pessword O4) Host Part O5) Fixed Height O6) Administrat O7) Error oft eff O8) Prompt O9) Farce DFR O9) Farce DFR	3 true		All'riles(*,*)		
Properties Gallery IL	Ubrary WebFading Styles		Thunbrial Styles Colors Links Servers		

? Right mouse click on the **wflabxx project** icon:

? Select *Run on server* from the pop-up menu

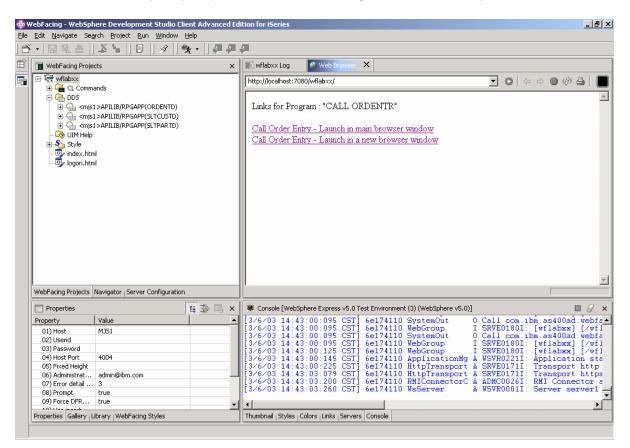
A pop-up window will ask for you to choose which server you would like to run on. Select WebSphere Application Server — Express v5.0 Test Environment. Click **OK**.

Server Selection
Create a new server of the following type:
WebSphere Express v5.0 Test Environment
WebSphere v5.0 Test Environment WebSphere Express v5.0 Test Environment
WebSphere v5.0 Remote Server Attach Remote Application Server Attach
Set server as project default (do not prompt)
OK Advanced Cancel

After a few moments (be patient), the WebSphere Application Server will be started on your PC.

? The browser will appear in the right-hand pane of the workbench.

You will see the index.html page that has been generated by the IBM WebFacing Tool. Notice that your perspective has been changed to Server Perspective.



? In your browser pane, click on the top Order Entry Application link and sign in with your iSeries user name and password, when prompted.

🦉 L	ogon - Microsoft Internet Explorer	<u>- 🗆 ×</u>
		_
	Please type your user name and password.	
	User Name:	
	Password:	
	Logon	
		-

- ? After a few moments, you will see the following screen. (Keep in mind the first time the JSP is requested, it has be compiled into a servlet. If you run the application a second time, you will see performance is improved)
- ? You will see the first WebFaced screen of your application.

WebFacing - WebSphere Development Studio Clien	t Advanced Edition for iberies	
<u>E</u> dit <u>N</u> avigate Se <u>a</u> rch <u>P</u> roject <u>R</u> un <u>W</u> indow <u>H</u> e	lp	
š • 日 🖳 A 🛛 🌋 🐂 🗍 🕖 🖉 🛠	-] 伊伊伊	
WebFacing Projects ×	🗊 wflabxx Log 🛛 🕹 Web Browser 🗙	
⊡- 🚑 wflabxx ⊕- 🚘 CL Commands	http://localhost:7080/wflabxx/WFLogon?inv=cl491798turnCacheOff=1046984931451 💽 🕻 🗢 🗢	• 🗇 🕹 🔳
DDS	Call Order Entry	<u> </u>
Image: Complete Application (Complete Application)	Parts Order Entry	
⊕ Ganger (Barrier) (Barrier) ⊕ Ganger (Barrier) ⊕ Ganger (Barrier) (Barri	Type choices, press Enter. Enter 2=Change	
ogon.html	Exit Customer number Order numbe Cancel	r:
	= HELP	
		_ _
WebFacing Projects Navigator Server Configuration	Done]
Properties 🗄 🛱 K	Console [WebSphere Express v5.0 Test Environment (3) (WebSphere v5.0)]	■ <u>/</u> ×
Property Value		flabxx][Serv_ flabxx][Serv
01) Host MJS1		flabxx] [Serv flabxx] [Serv
02) Userid 03) Password	[3/6/03 15:09:05:713 CST] 17f38431 WebGroup I SRVE0180I: [wflabxx] [/wf	flabxx][Serv
04) Host Port 4004		flabxx] [Serv flabxx] [Serv
05) Fixed Height	[3/6/03 15:09:05:763 CST] 17138431 WebGroup I SRVE01801: [wildbax] [/wildbax]	flabxx] [Serv
06) Administrat admin@ibm.com	[3/6/03 15:09:05:763 CST] 17f38431 WebGroup I SRVE0180I: [wflabxx] [/wf	flabxx] [Serv
oryendi decairin o	[3/6/03 15:09:05:763 CST] 17f38431 WebGroup I SRVE0180I: [wflabxx] [/wf [3/6/03 15:09:05:864 CST] 17f38431 WebGroup I SRVE0180I: [wflabxx] [/wf	flabxx] [Serv flabxx] [Serv
08) Prompt true	[3/0/03 13.03.03.004 CDI] 1/130431 WEDGroup I DRVED1801: [WIIBDXX] [/WI	rianxx] [Serc
	<u> ا</u>	
Properties Gallery Library WebFacing Styles	Thumbnail Styles Colors Links Servers Console	

Click the **Prompt** button.

Select a **customer** from the pop-up window (subfile)

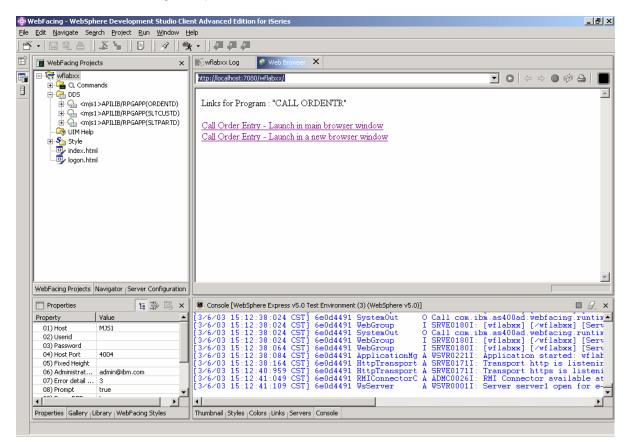
Go through the same steps as you did in exercise 1 (at the beginning of the lab) and try the different options to create an order.

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 the WebFacing Perspective from Server Perspective.

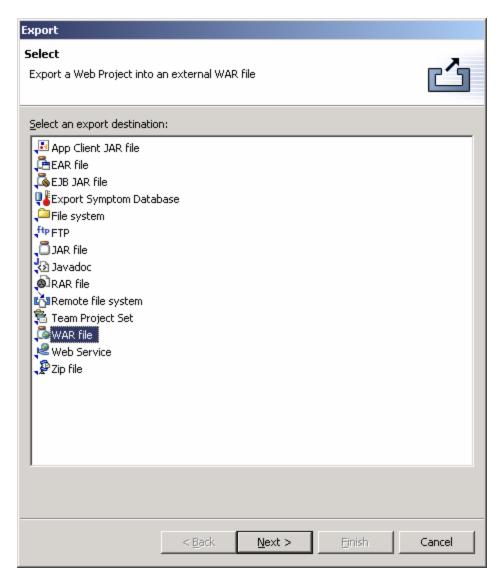
Click on the WebFacing Perspective icon in the left icon bar.



- __ 2. Make sure you have mapped your iSeries server as a Network Drive so that you can create the WAR files in your team directory.
- **3.** Select wflabxx 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 the Next button.

___5. WAR Export

Select wflabxx for the resources you want to export,

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

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

Open				? ×
Look in:	🚽 root on 'itcebiz2	?'(H:)	- 🗢 🗈 🖶	
History History Desktop My Documents My Computer My Computer	ATEAM dev dev gwtemp files of type:	 itc1207 itc1208 itc1209 itc1210 itc1211 itc1212 itc1213 itc1214 itc1215 itc1298 itc1299 javaperf 	initin QDLS QFileSvr.400 QIBM QNTC QOPenSys QOPT QSR QSYS.LIB QTCPTMM S623401 S623402	Open Cancel

Select your team directory (refer to Lab Information Sheet) and click Open.

Open					? ×
Look <u>i</u> n:	G ITC1299		•	🗢 🖻 💣 🎟 •	
3					
History					
Desktop					
My Documents					
My Computer					
	1				
My Network P	File <u>n</u> ame:]		-	<u>O</u> pen
	Files of type:	*.war		•	Cancel

Enter filename: WebFacedApp and click Open.

This takes you back to the WAR export window.

Export Resources to a WAR File WAR Export Export resources to a new or existing WAR file. What resources do you want to export? wflabxx Where do you want to export resources to? H:Vtc1299WebFacedApp.war Options: Export source files Overwrite existing resources without warning	F			
Export resources to a new or existing WAR file. What resources do you want to export? Wrflabxx Where do you want to export resources to? H:Vitc1299WebFacedApp.war Browse Dptions: Export source files	Export Resources to a WA	R File		
wflabxx where do you want to export resources to? H: vitc1299WebFacedApp.war Image: Dptions: Export source files		r existing WAR file.		ر آن
wflabxx where do you want to export resources to? H: vitc1299W/ebFacedApp.war Image: Dptions: Image: Dptions:	What resources do you wan	t to export?		
<pre>Where do you want to export resources to? H:\tic1299\WebFacedApp.war Browse Browse Dptions: Export source files</pre>				
H: Vitc1299WVebFacedApp.war	wflabxx			-
H: Vitc1299WVebFacedApp.war				
H: Vitc1299WVebFacedApp.war				
H:Vitc1299W/ebFacedApp.war	where do you want to expon	t resources to?		
Options:	H:\itc1299\WebFacedApp	.war	-	Browse
Export source files				
Export source files				
Export source files				
	Options:			
Overwrite existing resources without warning	Export source files			
	Overwrite existing resou	urces without warning		
		-		
< Back Next > Finish , Cancel		r Book	Finish	Canaal
< <u>B</u> ack <u>M</u> ext > <u>Finish</u> <u>Cancel</u>		- Dack Mext #		Cancer

Click 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 a **Windows Explorer** session currently running, **right mouse click** on the Start button (lower left hand corner of the laptop display), select

Windows Explorer. You also can click the icon that looks like this on the bottom left edge of your PC display. If you have a session you already running, use that.

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

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 wflabxx WAR file as an Enterprise Application using the wizard
- ? Start 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 the 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 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 screen and find an icon like this:

for Microsoft Internet Explorer (recommended) or click on Netscape Navigator. DO NOT RESIZE THE WINDOW in the middle of an activity, you risk losing the information). Click on the icon to bring up a browser.

When the browser appears, enter this URL: http://<system_name>: 2001

- ? When prompted, enter your userid and password (Please refer to Lab Information Sheet)
- ? Click **IBM HTTP Server for iSeries** an IBM HTTP Server for iSeries page should appear.
- ? Click the Manage tab and select your WebSphere Application Server Express V5.0 server instance (WASxx) in the server list box.

2. Install WebFaced Application

- ? Click on the Install New Application link in left navigation pane
- ? Specify the Application location
 - i. Select Application is contained in a WAR file radio button
 - ii. IFS Path of WAR file
 - 1. *Click Browse* and navigate to your team directory (i.e. ITC12xx).
 - 2. Select WebFacedApp.war file created in the previous step.
 - 3. Click OK in the file browse window.
- iii. In the Context Root input field, enter /wflabxx (where xx is your team number). This is part of the URL for invoking the application from a browser. We will just point to the application itself.

Here is the screen shot for TEAM99:

	ere Application Server - Express for iSeries	🐠 IBM
Welcome Setup		
Server: WAS99 - WAS - Express	<u>vs</u>	
🛛 Rtanning 🛛 🔃 💆	<u>All servers</u> -> <u>WAS99</u> -> Install New Application	*
▼ Tasks and Winards ♥ Create Now Express Server ♥ Create Vizical Host ♥ Install New Application ♥ Create IDBC Provider ♥ Create Data Source	Install New Application Specify Application Location Welcome to the Install New Application wixard. This wixard will install an applica Server - Express. The application must already exist on the iSeries server in an IF	tion into this WebSphere Application
Server Properties Server Teering Server Ports Applications Discuss Installed Applications	C Application is contained in an EAR file © Application is contained in a WAR file IFS path of WAR file: [/ftc1299/WebFacedApp war	Browse @
 ▼Resource Configuration Manage Varial Hosts Manage IDBC Providers Manage Data Sources Problem Determination View Logs ▼Fools ✓Launch Express Console 	Context root /wflab59 ⑦ Back Next Cancel	-

iv. Click Next.

Provide Options to Perform Install ?

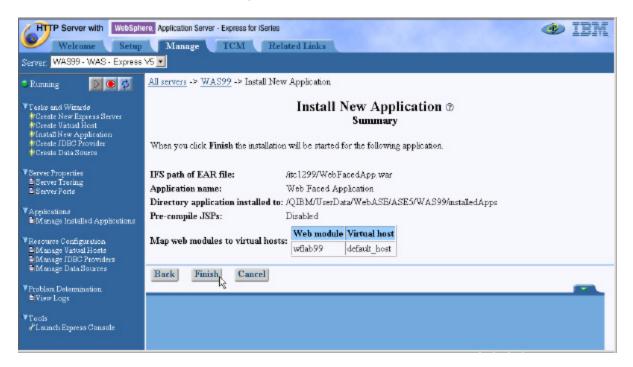
- Application Name: Enter WebFaced Application do not select Prei. Compile JSPs option (Take Default) Click **Next**.
- ii.

Map Virtual Hosts for Web Modules ?

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

? Summary

i. Review the Summary.



ii. Click Finish.

? Wait until Application Installation is over ...



The yellow dot with an hour glass next to the application name

(⁴ Web Faced Application) indicates that it is currently installing the application.

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

Click the **Refresh** button (**Refresh**) in the right navigation pane to refresh the status and wait until it turns to a red dot (^{SWeb Faced Application}) which indicates that the application installed but currently is in Stopped Status.

___ 3. Start WebFaced Application

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

Welcome Setup Server WAS99 - WAS - Express	Manage TCM	Related Links	IBM 👁
Server. WAS99 · WAS · Express	All servers -> WAS99 -> Ma	anage Installed Applicat	ions
▼ Lasis and Winardo + Croate Non Espects Server + Create Vistual Host + Install New Application + Create DBC Provider		-	stalled Applications @ f 09:34:58 PM UTC on 01/17/2003
Create Data Source	Installed applications: ®		
V Servet Properties Servet Tracing Servet Ports	Application name C ExpressSamples	Status Enablem	ent
Applications	adminconsole Web Faced Application	 Running Enabled Stopped Enabled 	
 Resource Configuration Manage Virtual Hosts 	Install Start	operties Uninst	all Update Refresh
Manage IDBC Providers Manage Data Sources	Close		
V Problem Determination			
▼ Tools			

Click Start and wait until the status shows that the application is 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/WASxx/InstalledApps/<system_name>_WASxx/ WebFaced Application.ear

Address 🗋 H:\QIBM\UserData\WebASE\ASES\WAS99\installedApps\ITCEBIZ2_WAS99\Web Faced Application.ear\WebFacedApp.war					•	ê Go	Links »		
Folders	×	Name 🛆	9	ize	Туре	Modified			
WebASE		ClientScript			File Folder	1/17/2003 3:16 PM			
🖻 🛄 ASE5		🚞 images			File Folder	1/17/2003 3:16 PM			
🕀 🛄 ASEAdmin		META-INF			File Folder	1/17/2003 3:16 PM			
🕀 🧰 service		RecordJSPs			File Folder	1/17/2003 3:16 PM			
🕀 🛄 WAS01		🚞 styles			File Folder	1/17/2003 3:16 PM			
🕀 🛄 WAS77		🗀 UIMHelp			File Folder	1/17/2003 3:16 PM			
🕀 🧰 was98		WEB-INF			File Folder	1/17/2003 3:16 PM			
Ė 🗀 WA599		🐔 index.html	2	KB	HTML Document	1/8/2003 8:26 AM			
i⊒ ⊶ 🧰 bin		🐔 logon.html	2	KB	HTML Document	1/8/2003 8:26 AM			
庄 🗀 config									
🗄 🛄 etc									
🗄 🗀 installableApps									
🚊 🧰 installedApps		R							
🖻 💼 ITCEBIZ2_WAS99		N2							
🕀 🙆 adminconsole.ear									
🕀 🙆 ExpressSamples.ear									
🖻 🧰 Web Faced Application.ear									
🕀 🧰 META-INF									
😟 🔂 WebFacedApp.war									
🕀 💼 lib									
😟 🙆 logs									
🕀 🧰 properties									
😟 🛄 temp									
🕀 🧰 tranlog									
🗄 🗀 wstemp									

We are now ready to test our application.

Running the WebFaced application

During this exercise, you will start Internet Explorer and 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 that 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 Internet Explorer. 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>:60xx/wflabxx

where the xx is your team number.

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.

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 in **exercise 1** (at the beginning of the lab) and try the different options to create an order.

Congratulations, you have use the IBM WebFacing Tool to modernize your 5250-based RPG application and make it available on the Web.