Lab 1 – Deploying a Solution

In this lab, we are going to run through the installation of an integrated solution (application and middleware components). Express Runtime uses the Deployment Wizard to perform the install. This process would normally be kicked off from a set of disk images that contain a packaged solution. Since we haven't exported a solution yet, we will have to jumpstart the Deployment Wizard and choose a sample solution to deploy.

1. Select **Start > Programs > IBM Express Runtime 2.2 > Deployment Wizard**, the resulting window looks like Figure 1-1.



2. From the menu, click **File -> Open**.

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3. From the Open dialog (Figure 1-2), select IRU2_2SingleTargetSampleWin.ser and click **Open**.

😢 Open								×
Look in:	ColutionE	nabler			~	2	1	
My Recent Documents Desktop My Documents My Computer My Network Places	com deploymer DJTJRE eclipse eclipseSu externalSu iru_ant javadoc logs solutionLa targets userProgr workspac IauL2_2Mid IRU2_2Mid IRU2_2Sin	nt upport upportJars uuncher ams e Solution.ser idlewareAll.s tiTargetSam tiTargetSam ugleTargetSam ugleTargetSam	er leLnx.ser leWin.ser noleLnx.ser noleLnx.ser					
	File name: Files of type:	.ser					~	Open Cancel

Figure 1-2 Open dialog

Note: Once you open this solution, the deployment wizard behaves the same way that it would if the install was kicked off from distribution media.

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4. You will be greeted with a **Welcome** page that describes the solution you are deploying (Figure 1-3). Click **Next**.



Figure 1-3 Sample application welcome screen

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5. On the task selection screen (Figure 1-4), select **Sample application and IBM middleware for Windows**. Click **Next**.



Figure 1-4 Task selection screen

Note: This task combines the Express Runtime Publishing Document Manager sample application and all the middleware components needed to run the sample. All the applications are deployed together as a unit to the same target.

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 For each task, you would be presented with a Specify Target Computers window (see Figure 1-5). You are required to provide hostname or IP address of the machine where the sample application and middleware components will be deployed.



Figure 1-5 Specify Target screen

In this exercise, we will be doing a local deployment whereby everything will be deployed on the same machine where the solution file IRU2_2SingleTargetSampleWin.ser is located. By default, *localhost (this computer)* is already specified in **Target Computer**.

You may notice there is a **Test connections** button. You can use this button to test the connection across the network to the target computer that you have specified. You must have a user ID and password with Administrators authority on this target computer. Click on **Test connections** to see if the Deployment Wizard can deploy to the requested target machine.

7. When you have finished testing your connections, make sure you have **localhost** as the target and click **Next**.

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8. There is one **Configure Parameters** screen for each application, including the middleware components that we are going to deploy (unless there are no variables exposed for an application).

The first middleware component to configure is **DB2 Express**. You are asked to provide a DB2 Instance User ID and Password as well as a DB2 DAS User ID and Password, (which you have to scroll down to see). In this exercise, we will use **er22admin** for both IDs and passwords (see Figure 1-6).

😢 Deployment Wizard		
File Edit View Help		
	IBM Express Runtime 2.2 - Sample	Single Target Solution for Windows
√Welcome	Configure Parameters - DB2 Universal Data:	pase Express Edition for Windows
✓ Select Tasks	Trovide information for the configuration	
✓ Specify Targets	Typical Advanced	
→ Configure Parameters	* DB2 Copy Name	DB2
Sample application and IBM DB2 Universal Database E	* DB2 Instance Name	DB2
Express Runtime Publishin WebSphere Application Se HTTP Server for Windows	* DB2 Instance User Name	er22admin 🗮
Web server plug-in for IBM Express Runtime Publishir	* DB2 Instance User Password * Verify password:	***********
Summary Status	* DB2 Administration Server (DAS) User Name	er22admin
	* DB2 Administration Server (DAS) User Password	*****
	* Verify password:	
	* DB2 port number	50000
K Melp		< Back Next >

Figure 1-6 Configure parameters for DB2 Express

Note: As you page through these parameters screens, keep in mind that each of these variables are shown to the installer because that was specified in the wrappers. You may add or remove variables or make them read only depending on the needs of your solution.

9. Accept the defaults for the remaining parameters. Click **Next**.

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- Next, you will see the Configure Parameters Express Runtime Publishing Document Manager DB2 Configuration for the Windows, Linux, and Linux on POWER operating systems. Accept the defaults and click Next.
- 11. Configure WebSphere Application Server Express. Accept the defaults and click Next.
- 12. Configure IBM HTTP Server. Accept the defaults and click Next.
- 13. Configure Web server plug-in for IBM WebSphere Application Server. Accept the defaults and click Next.
- 14. Configure the **Sample application Publishing Document Manager** (see Figure 1-7). Take **special note** of the read only fields that have been shared between applications the installer only has to enter the information once.
- 15. Accept the defaults and click Next.

t Deployment Wizard						
File Edit View Help	IBM Express Runtime 2.2 - Sample S	Single Target Solution f	or Windows			
√Welcome √Select Tasks	Configure Parameters - Express Runtime Publi Server - Express Configuration for the Window Provide information for the configuration	ishing Document Manager We is, Linux and Linux on POWER parameters and click Next.	bSphere Application operating systems.			
✓ Specify Targets	Typical Advanced					
→ Configure Parameters Sample application and IBM	* indicates required fields					
DB2 Universal Database E Express Runtime Publishir	* Documents location (Windows)	C:\RuntimeDocs	Browse			
WebSphere Application Se HTTP Server for Windows Web server plug-in for IBM	* WebSphere Application Server - Express location (Windows):	NBMWebSpherelAppServer	Browse			
Express Runtime Publishir Summary	WebSphere Application Server - Express administrator user					
Status	WebSphere Application Server - Express administrator password					
	Verify password:					
	* DB2 Express user ID	er22admin				
	* DB2 Express password	*******				
Help		[< Back Next >			

Figure 1-7 Configure parameters for Express Runtime Publishing Document Manager

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16. The summary panel as shown in Figure 1-8 provides information on the tasks you selected in the previous steps, hostname or IP address of the target machine as well as the estimated time needed to deploy all tasks. Click **Deploy all** to start the deployment of **Sample application and IBM** middleware for Windows.



Figure 1-8 Summary Panel

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17. A screen similar to Figure 1-9 will be displayed when the deployment of sample application and IBM middleware starts.



Figure 1-9 Deployment Status

Note: the first time you attempt to deploy a solution, you will see popups as the deployment packages are being created. This is a one-time occurrence for each solution.

You can check the messages generated by the Deployment Wizard from time to time to see if the installation of each component is successful by clicking on the **Master log** button. The same log file can be retrieved from

C:\<ER_installation_directory>\SolutionEnabler\logs\IRU_DeploymentWizard.log

Alternatively, you can use the **Detailed messages** button to view the progress of the deployment.

The deployment will take approximately 15 minutes because the middleware components have already been deployed to your machine..

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18. A screen similar to Figure 1-10 will be displayed when the deployment finishes for all the components without any errors.

🗞 Deployment Wizard			
File Edit View Help	IBM Express Run	time 2.2 - Sample Single Target Solution for	
√Welcome √Select Tasks	Deployment Status The deployment status deployment messages	us t status for all the tasks you selected to deploy appears in the ssages table.	
✓ Specify Targets	100%	Estimated total time remaining: 0 minutes	
✓Configure Parameters	Deployment messages:		
√ Summary	Time	Message	
- Ar Statut	✓ 2007-02-22 22:30:08	Successfully deployed: Sample application and IBM middleware for Wi	
		Detailed messages Master log	
Help		< Back Close	

Figure 1-10 Deployment successful

19. A screen similar to Figure 1-11 will be displayed if you click on Detailed messages.

	Time 🔨	Task Name	Target	Message
A	2007-02-22 22:25:11	Sample application and I	localhost	IRU10023: Port 80 is in use.
Ð	2007-02-22 22:25:12	Sample application and I	localhost	IRU11233: To change the HTTP or administration server ports, modi
1	2007-02-22 22:25:12	Sample application and I	localhost	IRU03066: IBM HTTP Server for Windows 6.1.0.3 is already installed
1	2007-02-22 22:25:12	Sample application and I	localhost	IRU03022: Deployment is in progress for IBM Web server plug-in for
1	2007-02-22 22:25:19	Sample application and I	localhost	IRU03066: IBM Web server plug-in for IBM WebSphere Application S
1	2007-02-22 22:25:19	Sample application and I	localhost	IRU03022: Deployment is in progress for IBM Express Runtime Publ
1	2007-02-22 22:25:27	Sample application and I	localhost	IRU03000: The deployment was successful for IBM Express Runtim
1	2007-02-22 22:25:27	Sample application and I	localhost	IRU03022: Deployment is in progress for IBM Express Runtime Publ
1	2007-02-22 22:30:08	Sample application and I	localhost	IRU03000: The deployment was successful for IBM Express Runtim
1	2007-02-22 22:30:08	Sample application and I	localhost	IRU03018: The task deployment is complete.

Figure 1-11 Detailed message

Note: the yellow and blue icons at the top of the list indicate informational messages. In this case, they appear because in order to save time in the labs, the middleware components have already been installed on your machine. The IBM HTTP Server is the application that is already using Port 80, so nothing further needs to be done.

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- 20. Click **OK** to close the **Detailed message** dialog.
- 21. Click on **Master log** to see how information is gathered from all the log files and combined to show you the results of the deploy. After you finish browsing through the log, close the log window.
- 22. Click **Close** to close the Deployment Wizard. You will be asked if you want to save your changes, but you do not need to save the configuration information you entered at this time, so click **No**.
- Next, let's move on to test the Publishing Document Manager application. Open a browser window (Internet Explorer), type in the following URL - <u>http://localhost:9080/RuntimeDocumentMgmt/</u>. The application should execute, as shown below.

Doc Dist Sample - Microsoft Inte	met explorer			12/12
te Edit View Pavorites Tools				
🎯 Back 🔹 🐑 🐘 🚨 🦿	🖌 🔑 Search 🧏 Favorites 🚱 🔯 🎲 🔛	- U		_
dress 👜 http://localhost:9080/Runtime	DocumentMgmt/			× 🔁
is 👸 IBM Business Transformation Hon	epage 🔌 IBM Internal Help Homepage 👋 IBM Standard Softw	are Installer	🥌 SnagIt 🚰 🔠 '	
Express				
Runtime Publishi	ng			
	Welcome To The Document Mar	agement Sample Application		
Design Documentation				
	This application provides a password prote only see a subset of documents that they ha Administrators create, replace, update, and	ected site which allows users to log in a we access to. Publishers add documen delete users and document categorie	nd gain read-only access to a number of docunts to the system and categorize the document s.	ments. Users ts.
	You must log in to begin using this sample. click on one of the actions shown on the left	Initially you can use the administrator ic side of the screen to create additional	Admin with password admin. Once you are lo users, categories, and documents.	ogged in you can
		Username:		
		Password:		
		Login		

Figure 1-12 Publishing Document Manager page

Congratulations! You have successfully deployed WebSphere Application Server, HTTP Server, DB2 Express and the Publishing Document Manager application; configured them to work together and it's not even lunch time.