WebSphere Business Monitor V6.2 Advanced Installation Highly available and scalable environment

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What this exercise is about

The objective of this lab is to provide instructions for installing WebSphere Business Monitor V6.2 product in a Deployment Manager Environment using the '**Advanced**' installation type.

This lab uses a five machine topology in a deployment manager environment:

- Machine 1: WebSphere Business Monitor V6.2 deployment manager and DB2 for the MONITOR database
- Machine 2: WebSphere Business Monitor V6.2 custom profile
- Machine 3: WebSphere Business Monitor V6.2 custom profile
- Machine 4: WebSphere Business Monitor V6.2 custom profile
- Machine 5: WebSphere Business Monitor V6.2 custom profile

If you are not setting up a production environment but you are using this lab for learning purposes, you could reduce the number of machines in the environment to just two. You could install the deployment manager and DB2 on machine 1. For machine 2, the number of cluster members that you can run simultaneously is limited by the amount of memory you have on the machine, so if you do not have a lot of memory, then you can create just two clusters, an application cluster and a support cluster, thus you will have only two cluster members that are running simultaneously on the machine.

Lab requirements

List of system and software required for the student to complete the lab:

- WebSphere Business Monitor V6.2
- WebSphere Application Server V6.1.0.21
- DB2 UDB ESE V9.5
- Alphablox V9.5
- IBM Information Center

Some instructions in this lab are Windows[®] operating-system specific. If you plan on running the lab on an operating-system other than Windows, you will need to run the appropriate commands, and use appropriate files (.sh or .bat) for your operating system. The directory locations are specified in the lab instructions using symbolic references, as follows:

Reference Variable	Windows Location	AIX [®] /UNIX [®] Location	
Monitor Deployment Manager Environment (Machine 1)			
<was62_home></was62_home>	C:\IBM\WebSphere\MonServer		
<dmgr_home></dmgr_home>	<was62_home>\profiles\Dmgr62</was62_home>		
<db2_home></db2_home>	C:\IBM\DB2\SQLLIB		
	Monitor Custom Profile 01 (Machine 2)		
<was62_home></was62_home>	C:\IBM\WebSphere\MonServer		
<wbmonitor_home></wbmonitor_home>	<was62_home>\profiles\Custom01</was62_home>		
<alphablox_home></alphablox_home>	C:\IBM\WebSphere\Alphablox_server		
	Monitor Custom Profile 02 (Machine 3)		
<was62_home></was62_home>	C:\IBM\WebSphere\MonServer		
<wbmonitor_home></wbmonitor_home>	<was62_home>\profiles\Custom02</was62_home>		
Monitor Custom Profile 03 (Machine 4)			
<was62_home></was62_home>	C:\IBM\WebSphere\MonServer		
<wbmonitor_home></wbmonitor_home>	<was62_home>\profiles\Custom03</was62_home>		
Monitor Custom Profile 04 (Machine 5)			
<was62_home></was62_home>	C:\IBM\WebSphere\MonServer		
<wbmonitor_home></wbmonitor_home>	<was62_home>\profiles\Custom04</was62_home>		
<alphablox_home></alphablox_home>	C:\IBM\WebSphere\Alphablox_server		

Introduction

WebSphere Business Monitor V6.2, Advanced installation allows you to customize the installation of the Monitor components on one or multiple machines and it can be used for small to large production systems.

WebSphere Application Server V6.1.0.21 is the only mandatory prerequisite for WebSphere Business Monitor V6.2 installation. When it comes to the Advanced installation type, the InstallShield wizard installs the WebSphere Application Server V6.1.0.21 and silently uses the customized "Profile Management Tool (PMT)" to create and augment the WebSphere Business Monitor (WBM) profiles This is only done silently if you choose to create a profile at the time of installation. You can also install without creating the profile and then create/augment manually later. In this installation document you will augment profiles manually for each install. The advanced installation type supports the standard profile management for network deployment flexibility.

WebSphere Business Monitor V6.2 installation supports Derby (Cloudscape V10), DB2 and Oracle for the MONITOR database.

In the following diagram you can see the topology for the installation in this lab. Machine 1 contains the deployment manager and DB2. Machine 2, 3, 4 and 5 contain various clusters for the monitor models, support applications, business space and Alphablox.



Part 1: Preparing for the WebSphere Business Monitor installation

In this section of the lab, the pre-requisite software will be obtained and extracted in such a way that an on-disk WebSphere Business Monitor V6.2 installation image is created on all the machines where the monitor deployment manager and custom profiles will be installed. Note: For V6.2, the installation image is bundled in a DVD. You can copy the contents from the DVD to the hard disk, then skip to part 2 in this document to run the launchpad. If you are assembling the image from separate binaries, then you may need this document part to build the Monitor image.

1. Obtain the pre-requisite software and extract all the software except Alphablox in one folder. If while extracting you get a message prompting to replace any jdk files then click **Yes to All**.



In the diagram below, you will see a folder named **monitorExtract** that contains the extracted WebSphere Application Server, WebSphere Business Monitor, and Information Center software.

Address 🛅 C:\monitorExtract		
Folders ×	Name	
 Desktop My Documents My Computer My Computer My Computer My Computer Style Floppy (A:) Local Disk (C:) Documents and Settings Docume	 custom Desktop_Components IFC JDK launchpad licenses WAS WBM launchpad.exe launchpad.ini launch.js launch.bat autorun.inf 	

Note:

Executables should be placed directly under the directories specified above, so that **install.exe** or **install.sh** can be silently launched. Add subdirectories only when directed to do so otherwise creation of those will prevent your installation from successful completion.

- 2. Create a new folder under the monitor extract and call it **ABX**.
- 3. Create a subfolder under **ABX** and call it **Windows**. Copy the **install.exe** for Alphablox under **Windows** folder. The path to the Alphablox installer should look as below:

C:\monitorextract\ABX\Windows\installer

The final directory structure will display as below. You are now ready to begin the installation.



Part 2: Installing the WebSphere Business Monitor core product files

In this part of the lab you will install WebSphere Business Monitor core product files on the host machines where you will be creating monitor deployment manager and custom profiles.

Complete the following instructions to install the WebSphere Business Monitor core product files using the WebSphere Installation Manager:

1. From the directory containing the pre-requisites and the WebSphere Business Monitor software, double click **launchpad.exe** to launch the Common Launchpad program

	Select a language
Welcome	
Prerequisite Information	Welcome to WebSphere Business Monitor Version 6.2
Installation Options	IBM [®] WebSphere [®] Business Monitor Version 6.2 provides the busines
Documentation	productivity. This launchpad serves as a single point of reference for in monitoring environment.
Migration Information	Consult the installation options to help determine the best installation
WebSphere Business Monitor Installation	environment. For full documentation, visit the on-line <u>WebSphere Bus</u> information center.
Exit	WebSphere Business Monitor Version 6.2 requires some prerequisite s some prerequisite software is optional, depending on the features you more details on the prerequisite software, both required and optional, <u>Software</u> .
	If you are migrating from a previous release of WebSphere Business I complete some tasks prior to installing WebSphere Business Monitor V tasks after you install the 6.2 version. For more details on the pre-ins <u>Migration Information</u> .
	 <u>View the product overview for WebSphere Business Monitor</u> Learn about WebSphere Business Monitor and its components <u>Install WebSphere Business Monitor</u>

2. On the welcome screen, click WebSphere Business Monitor Installation in the left pane and click Launch the installation wizard for WebSphere Business Monitor to the right. This launches the WebSphere Business Monitor V6.2 InstallShield wizard

	Select a language En
Welcome	
Prerequisite Information	WebSphere Business Monitor Installation
Installation Options	The installation process of WebSphere Business Monitor Version 6.2 is cor major tasks:
Documentation	
Migration Information	 Installing WebSphere Business Monitor and optionally installing re- software
WebSphere Business Monitor Installation	 Creating or augmenting a profile using the Profile Management To
Exit	Both tasks can be completed using the installation wizard for WebSphere
	Launch the Installation wzard for WebSphere Business Monitor Install WebSphere Business Monitor using the installation wizard

3. In the IBM WebSphere Business Monitor 6.2 installation wizard panel click Next

or chair is a state is the provide contract of the state			
/elcome to the IBM WebSph	ere Business Monito	or 6.2 installation wi	zard
his wizard installs IBM Web dditional information about t lusiness Monitor information lick Next to continue.	Sphere Business Moi he installation proces center.	hitor 6.2 on your com ss, see the WebSphi	iputer. For ere
	1		-
	teicome to the IBM WebSph his wizard installs IBM WebS dditional information about t usiness Monitor information lick Next to continue.	his wizard installs IBM WebSphere Business Monito dditional information about the installation proces usiness Monitor information center. lick Next to continue.	his wizard installs IBM WebSphere Business Monitor 6.2 installation wi distonal information about the installation process, see the WebSphi usiness Monitor information center.

- 4. In the next window, read the license agreement. If you agree to the terms, select the radio button next to I accept the terms in the license agreement.
 - _ 5. Click **Next**. The monitor installation program performs an operating system prerequisite check and warns you if the product installation is not supported

System prerequisites check	-
Passed: Your operating system completed the prerequisites check successfully.	
The installation wizard checks your system to determine whether a supported operating system is installed and whether the operating system has the appropriate service packs and patches.	
 Installations of WebSphere Application Server prior to Version 6.0 may not be found reliably. 	
 Installations of WebSphere Application Server and WebSphere Business Monitor that are not registered with the operating system may not be found reliably. 	
Click Next to continue the installation.	
< Back Next > Cancel	

- ____6. Click Next
- 7. In the Installation type selection window, select Advanced Installation

Installation type selection	
Select the type of installation the	at best suits your needs.
Installation Types:	
Basic Installation	
Advanced Installation	
Description	
An advanced installation will a Monitor components to differe can reuse existing installation	illow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software.
An advanced installation will a Monitor components to differe can reuse existing installation This option is ideal for produc	allow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software. tion environments
An advanced installation will a Monitor components to differe can reuse existing installation This option is ideal for produc	illow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software. tion environments.
An advanced installation will a Monitor components to differe can reuse existing installation This option is ideal for produc	Illow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software. tion environments.
An advanced installation will a Monitor components to differe can reuse existing installation This option is ideal for produc	allow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software. tion environments.
An advanced installation will a Monitor components to differe can reuse existing installation This option is ideal for produc	Illow you to distribute the WebSphere Business nt servers. Using an advanced installation, you is of prerequisite software. tion environments.

8. Click Next

9. In the Component selection window, select Business Monitor server including Business Space. The Monitor database check box is selected by default and not selectable, indicating that the monitor database creation is mandatory. Optionally, select the check box for Information Center.

Component selection	1
Business Monitor server including Business Space	
Portlet-based dashboards	
Monitor database	-
Description Business Monitor server includes the installation of the	
	Component selection Select the components to install on this server: Select the components the installation of the server: Select the component the server: Select the components the installation of the select the server: Select the component the server: Select the server: Select the component the server: Select the select select th

____ 10. Click Next

11. In the Feature selection window, select Alphablox features for Business Space



- _____ 12. Click Next
- 13. In the Installation directory window, click Browse to specify a different directory for Business Monitor server installation location. Change the path to C:\IBM\WebSphere\MonServer

g IBM webSphere Busin		
WebSphere software	Installation directory WebSphere Business Monitor will be inst specified directory. You may specify a diffe Browse to select a directory. Business Monitor server installation locati	alled into the erent directory or click ion:
	C:\IBM\WebSphere\MonServer	Browse
nstallShield	e Doole Monte	Cancel

- ____ 14. Click Next
- 15. In the **WebSphere Business Monitor profile environments** window, select **None** for **Profile Environments**

ebSphere software	WebSphere Business Monitor profile environments
	Select the type of profile environment to create for
and the second	Business Monitor Server during installation. Although only
12 A R. 185	profiles can be created after installation using the Profile
. 00	Management Tool. To augment an existing profile, select
	NUTE
50	Profile Environments:
	Stand-alone
	Deployment manager
	Custom
	None
	Description
1	

Note: Selecting **None** for WebSphere Business Monitor profile environments, installs the core product files and does not create any profiles or runtime servers. You can use the Profile Management Tool (PMT) which provides several options for creating or augmenting new WebSphere Business Monitor profiles.

_____ 17. Click Yes for the warning

Warning	×
	WebSphere Business Monitor requires at least one profile to be functional. Are you sure you want to proceed without creating a profile?
	Yes No

_____18. In the following Installation Summary window, review the business monitor installation summary

皆 IBM WebSphere Busine	ess Monitor 6.2	
WebSphere. software	Installation summary	4
	Review the summary for correctness. Click Back change values on previous panels. Click Next to begin the installation.	to
	The following products will be installed:	
	 WebSphere Business Monitor 6.2 Product installation location: C:\IBMWebSphere\MonServer 	
	Components to be installed:	
	 Business Monitor server including Business Space AlphaBlox features for Business 	
	Space O Information center	
	WebSphere Application Server Networ Deployment 6.1 Product installation location: C1IRMW/ebSphere/MonServer	ĸ
	The following features will be included:	
	Core product files	
	Total size:	
	• 1753 MB	_
	Administrative security enabled:	<u>•</u>
InstallShield	e	
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ar	ncel

19. Click **Next** to continue with the installation. The installation progresses and will take a couple of minutes to complete. Once the installation is complete, review the **Installation Results** window.

🝟 IBM WebSphere Busine	ess Monitor 6.2	- 🗆 🗵
TBM WebSphere Busine	Success: The following product(s) were success installed. WebSphere Business Monitor 6.2 C:\IBMWVebSphere\MonServer Business Space O AlphaBlox features for Business S O Information center WebSphere Application Server Networ Deployment 6.1 C:\IBMWVebSphereBusiness Monitor first st Click Finish to exit.	sfully Space
InstallShield -	< Back Next > Ein	nish

_____ 20. Deselect the check box for launching the profile management tool and click Finish

Part 3: Create WebSphere Business Monitor deployment manager profile

Complete the following instructions to create a WebSphere Business Monitor V6.2 deployment manager profile using the **Profile Management Tool**.

1. From the start menu navigate to Programs → IBM WebSphere → Business Monitor 6.2 and select Profile Management Tool. The WebSphere Business Monitor Profile Management Tool is launched.

Note: Alternatively, you can launch the Profile Management Tool by running the '**pmt.bat** (**sh**)' script located at '**<WAS61_HOME>\bin\ProfileManagement**'

Profile Management Tool				
Velcome to the Profile Management tool				i a
Important information for Version 6.1				_
This wizard creates run-time environments that are ref functional installation.	erred to as <i>profile</i> .	s. At least one p	profile must exist	to have a
contain a set of commands, configuration files, log files	, deployable applic	tations and othe	er information that	at defines a
contain a set of commands, configuration files, log files single application server environment. See the online information center for more information opologies for application servers.	about the Profile N	fations and othe	er information that	g up typical
contain a set of commands, configuration files, log files single application server environment. See the online information center for more information topologies for application servers. WebSphere Application Server - Online information	about the Profile M	Management too	onal promos cruc r information tha	g up typical
contain a set of commands, configuration files, log files single application server environment. See the online information center for more information topologies for application servers. WebSphere Application Server - Online information WebSphere Business Monitor - Online information of	about the Profile M center link	Management too	onal promotion that	g up typical

- 2. Click Next in the Welcome to the Profile Management tool window
- 3. In the Environment Selection window select WebSphere Business Monitor

§ Profile Management Lool	
Invironment Selection	i a
Select the type of environment to create. Fovironments:	-
Cell (deployment manager and a federated application server) Deployment manager Application server Custom profile WebSphere Business Monitor Description WebSphere Business Monitor enables users to monitor their business processes in real time by providing a v display of business process status. WebSphere Business Monitor alerts and notifies key users to fadilitate	isual
< Back Next > Finish	Cancel

- ____4. Click Next
- 5. In the Profile Type Selection window, select WebSphere Business Monitor deployment manager

🚯 Profile Management Tool				
Profile Type Selection				i a
Select a profile type for the WebSphere Business Monito Profile Type:	r environment.			1
WebSphere Business Monitor application server WebSphere Business Monitor custom profile WebSphere Business Monitor deployment manager WebSphere Business Monitor federated server profile				
Description A WebSphere Business Monitor deployment manager a made a part of, the deployment manager cell.	dministers appl	cation servers tha	t are federated i	nto, or
	< Back	Next >	Finish	Cancel

____6. Click Next

7. In the **Profile Creation Options** window, select **Advanced profile creation**

🚯 Profile Management Tool	<u>- 0 ×</u>
Profile Creation Options	B
Choose the profile creation process that meets your needs. Select the Typical option to allow the Profile Ma Tool to assign a set of default configuration values to the profile. Select the Advanced option to specify you configuration values for the profile.	nagement 📥 Jrown
C Typical profile creation	
Create a deployment manager profile that uses default configuration settings. The Profile Managem assigns unique names to the profile, node, host, and cell. The tool also installs the administrative cor assigns unique port values. You can choose to enable administrative security during the configuratio Depending on the operating system and your user permissions, the tool may create a system service the deployment manager. You can specify your own values for the WebSphere Business Monitor dat configuration.	ent Tool nsole and n. e to run :abase
Advanced profile creation	<u>.</u>
< Back Next > Finish	Cancel

____ 8. Click Next

9. In the **Optional Application Deployment** window, ensure the check box for **Deploy the administrative console** is selected.

🚯 Profile Management Tool	
Optional Application Deployment	
Select the applications to deploy to the WebSphere Application Server environment being created. Deploy the administrative console (recommended). Install a Web-based administrative console that manages the application server. Deploying the administrative console is recommended, but if you deselect this option, the information center contains detailed steps for deploying it after the profile exists.	ative or
< Back Next > Finish	Cancel

_____ 10. Click Next

11. In the **Profile Name and Location** window, enter DMgr62 as the profile name and enter C:\IBM\WebSphere\MonServer\profiles\Dmgr62 as the **Profile directory**.

🚯 Profile Management Tool	
Profile Name and Location	A state of the
Specify a profile name and directory path to contain the files fi configuration files, and log files. Click Browse to select a differ Profile name: Dmgr62 Profile directory: C:\IBM\WebSphere\MonServer\profiles\Dmgr62 Important: Deleting the directory a profile is in does not com command to completely delete a profile.	or the run-time environment, such as commands, arent directory. Browse pletely delete the profile. Use the manageprofiles
<	Back Next > Finish Cancel

_____ 12. Click Next

_____ 13. In the **Node, Host and Cell Name** window, enter the following values:

Node name:mondmgrCellManager01

Host name : mondmgr.austin.ibm.com (fully qualified host name of the host machine)

Cell name : mondmgrCell01

🚯 Profile Management Tool	<u> </u>
Node, Host, and Cell Names	la g
Specify a node name, a host name, and a cell name for this profile.	1
Node name:	
ynondmgrCellManager01	
Host name:	
mondmgr.austin.ibm.com	
Cell name:	
mondmgrCell01	
Node name: A node name is for administration by the deployment manager. The name must be unique withi cell. Host name: A host name is the domain name system (DNS) name (short or long) or the IP address of this co	n the omputer. 💌
< Back Next > Finish	Cancel

_____14. Click Next

15. In the Administrative Security window, ensure the Enable administrative security checkbox is selected and then enter monadmin as the user name and weblsphere as the password. Enter weblsphere again as confirm password.

🚯 Profile Management Tool				
Administrative Security				a la
Choose whether to enable administrative security. To er into administrative tools. This administrative user is crea creation finishes, you can add more users, groups, or ex	nable security, su ted in a reposito xternal repositori	upply a user name ry within the appl es.	e and password fo ication server. Aft	r logging 🔺 er profile
Enable administrative security				
•••••				
Confirm password:				
				<u>•</u>
	< <u>B</u> ack	<u>N</u> ext >	Einish	Cancel
_16. Click Next				
17. In the Port Values Assignment window desired values, but ensure that the port machine	r, review the p number do no	orts assigned t conflict with	You may char other services	nge them to the running on this
_18. Click Next				
19. In the Windows Service Definition wind a Windows service and click Next	dow, deselect	Run the dep	loyment mana	iger process as
_ 20. In the Database configuration window,	select the fol	lowing:		

Database Product : DB2 Universal Database

Database creation option : Use existing database

Database name : MONITOR

Schema name : MONITOR

Note:

Database creation method: Upon choosing the **Use existing database** option, the profile management tool creates the required resources and configures the connections for an existing or non existing MONITOR database. If the MONITOR database is not yet created, you must manually run the generated scripts to create the database after the installation is complete.

🚯 Profile Management Tool	
Database Configuration	i g
WebSphere Business Monitor components use a common database. Choose a database product and enter the information based on that product. Database product:	he 🔺
DB2 Universal Database	•
Override the destination directory for generated scripts Database script output directory:	
C:\IBM\WebSphere\MonServer62\profiles\Dmgr62\dbscripts.wbm	
Bro	wse
Database creation options:	
○ <u>C</u> reate a new local database	
The chosen database product must already be installed and configured on the local system. • Use an existing database	
You must run the generated scripts manually to create the database.	
Database <u>n</u> ame:	
MONITOR	
<u>S</u> chema name:	
MONITOR	-
< <u>B</u> ack <u>N</u> ext > Einish	Cancel

21. Click Next

____ 22. In the Database configuration (Part 2) window, enter the following information :

User name: db2admin

Password : db2admin

Confirm Password: db2admin

Location (directory) of JDBC driver classpath files:

C:\IBM\WebSphere\MonServer62\universalDriver.wbm\lib

JDBC driver type : 4

Database server host name or IP address: <your-IP-address> for example: dbserver.austin.ibm.com

Server port : 50000

🚯 Profile Management Tool 📃 🗌 🗙
Database Configuration (Part 2)
Additional information about the database server you are using is required to complete configuration for the DB2 Universal Database database. For database authentication, you must type the user name and password that will be used to connect to the database. The database user must have read and write access on the database.
dser name:
Password:
Confirm password:
•••••
Location (directory) of JDBC driver classpath files:
C:/IBM/WebSphere/MonServer62/universalDriver.wbm/lib
Browse
JDBC driver type:
C 2
4
Type 2: Type 2 drivers require that you have a local installation of the database product. Type 2 drivers are commonly used if your database is created locally.
Type 4: Type 4 drivers use Java implementation to communicate with the actual database. Type 4 drivers do not require a database product on your local system.
Database server host name or IP address:
dbserver.austin.ibm.com
Database TCP/IP service port or listener port:
50000
< Back

Note: The profile management tool uses the information provided in this window to verify the database connection and to verify that the database is installed and running. If the MONITOR database does not exist at this time, click **Yes** in the warning dialog and continue with the profile creation. You can use the database scripts that are generated and manually create the database once the installation is complete.

____ 23. Click Next

____24. In the following **Profile Creation Summary** window, review the deployment manager profile creation summary and click **Create**. The profile creation begins.

🕼 Profile Management Tool 📃 🗖
Profile Creation Summary
Review the information in the summary for correctness. If the information is correct, click Create to start creating a new profile. Click Back to change values on the previous panels.
WebSphere Business Monitor profile type to create: WebSphere Business Monitor deployment manager Location: C:\IBM\WebSphere\MonServer62\profiles\Dmgr62 Disk space required: 10 MB Profile name: Dmgr62 Make this profile the default True
Cell name: mondmgrCell01 Node name: mondmgrCellManager01 Host name: mondmgr.austin.ibm.com
Create a new database: False Generated database scripts location: C:\IBM\WebSphere\MonServer62\profiles\Dmgr62\dbscripts.wbm Database product: DB2 Universal Database Database name: MONITOR JDBC Driver Location: C:/IBM/WebSphere/MonServer62/universalDriver.wbm/lib JDBC Driver Type: 4 Database host name: dbserver.austin.ibm.com Database port number: 50000
Deploy the administrative console (recommended): True Enable administrative security (recommended): True
< <u>Back</u> [Create] Einish Cancel

25. Once the installation is complete, select Launch the WebSphere Business Monitor first steps check box in the Profile Creation Complete window.

🚯 Profile Management Tool				
Profile Creation Complete				
The Profile Management Tool created the prof	ile successfull	y.		
You must create a network deployment environment t federated into its cell. After the deployment manager	o start the deplo is started, you c	yment manager so t an administer the no	hat nodes can be ides that belong to the cell.	
You can start and stop the deployment manager from the command line or the WebSphere Business Monitor first steps. The WebSphere Business Monitor first steps also has links to an installation verification test and other information and features that relate to the deployment manager.				
To create or augment another profile now, select the	following option:			
Create or augment another profile				
To start the Profile Management Tool later, use the P I directory or the option in the WebSphere Business Mo	MT command in I nitor first steps.	the <i>app_server_room</i>	f/bin/ProfileManagement	
See the information center for more information about	: WebSphere Bus	iness Monitor.		
Online information center link				
	< <u>B</u> ack	Next >	Einish Cancel	

26. Click Finish

27. In the WebSphere Business Monitor - First Steps – DMgr62 window, click Installation verification to verify the installation was a success.



Note: Now that you successfully created the WebSphere Business Monitor deployment manager profile, run the generated database scripts to create the MONITOR database and tables. The next section shows you how to create the database.

Part 4: Manually create MONITOR database and tables

In this part of the lab, you will create the MONITOR database and tables.

Pre-requisites:

- Install and configure the WebSphere Business Monitor supported database product on a designated host machine. In this lab, a supported DB2 version is used and the instructions are based on the DB2 product.
- Ensure the DB2 server is running at this time
- The MONITOR database scripts are generated to the following location on the Monitor deployment manager machine:
 - o <DMGR_HOME>\dbscripts.wbm\

Example: C:\IBM\WebSphere\MonServer\profiles\Dmgr62\dbscripts.wbm

🗁 C:\IBM\WebSphere\Mon	Server\profiles\Dmgr62\dbscripts.wbm	_ 🗆 🗵
Address 🛅 C:\IBM\WebSphe	ere\MonServer\profiles\Dmgr62\dbscripts.wbm	💌 🄁 Go
🔤 createDatabaseDb2.ddl	🔊 stopwatch.jar	
🚾 createDatabaseDb2Zos.ddl		
🚾 createDatabaseDerby.ddl 🚽		
🚾 createDatabaseOracle.ddl		
🖬 dim_time_data.del		

• Copy the MONITOR database scripts to a temporary location in your database host machine:

🚞 C:\temp\dbscripts.wbm	
Address 🛅 C:\temp\dbscripts.wbm	💌 🄁 Go
📾 createDatabaseDb2.ddl	
📾 createDatabaseDb2Zos.ddl	
📾 createDatabaseDerby.ddl	
🚾 createDatabaseOracle.ddl	
📾 dim_time_data.del	
🔊 stopwatch.jar	

Use the database script for your database product

Complete the following instructions to manually create the MONITOR database:

- 1. Open the DB2 command window from Start → Programs → IBM DB2 → Command Line Tools → Command Window and change the directory to C:\temp\dbscripts.wbm
- 2. Run the **createDatabaseDb2.ddl** script using the following command:
 - db2 -tf createDatabaseDb2.ddl



- _____ 3. Close the DB2 command window
- 4. Start the deployment manager and ensure it starts successfully. Review the SystemOut.log for any database related failure messages

• <DMGR_HOME>\bin\startManager.bat

- 5. Test the data sources for connection to the MONITOR database. The following are the data sources of interest:
 - ____a. Login in to the deployment manager administrative console. In the left navigation pane, expand 'Resources → JDBC' and click the 'Data Sources'

New	Delete Test connection N	Aanage state
D	D # 9	
Select	Name 🛟	JNDI name 🗘
V	<u>Monitor Admin Database</u>	jdbc/wbm/MonitorAdminDatabase
	<u>Monitor Database</u>	jdbc/wbm/MonitorDatabase
▼	Monitor ME Database	jdbc/wbm/MonitorMEDatabase
•	Monitor mondmgrCell01 Routing Datab	<u>ase</u> jdbc/wbm/mondmgrCell01/MonitorDatabase

- ____ b. Select the check boxes for all of the Monitor data sources listed and then click the 'Test connection' button
- ____ c. Ensure the database is successfully connected
- 6. Review the Monitor administrative console menus

____a. In the left navigation pane, expand **Servers** and ensure the **WebSphere Business Monitor configuration** menu exists. Ensure the link works



____ b. In the left navigation pane, expand Applications → Monitor Services → Monitor Action Services → Template Definitions. Also expand Recorded Events Management. Ensure all the menus marked in the picture below exist. Also ensure all the links work



____ c. In the left navigation pane, expand Security and ensure Monitor Data Security menu exists. Ensure the link works



IBM WebSphere Business Monitor 6.2 - Lab exercise

_____d. In the left navigation pane, expand **Troubleshooting** → **Monitor Models** and ensure **Failed Event Sequences** and **Unrecoverable Events** menus exist. Ensure the links work



____e. In the left navigation pane, click the **Welcome** link and ensure the WebSphere Application Server and WebSphere Monitor Server versions are correct

'elcome Integrated Solutions Console provide administration console for multiple p the product suites that can be admin installation. Select a product suite to	es a common roducts. The table lists istered through this view more information.
Suite Name	Version
WebSphere Application Server	6.1.0.21
WebSphere Business Monitor	6.2.0.0

Part 5: Create WebSphere Business Monitor custom profiles

In this part of the lab, you will create WebSphere Business Monitor custom profiles on all the designated machines. A custom profile is an empty profile that gets created and eventually federates itself to the WebSphere Business Monitor deployment manager profile.

Note: It is mandatory that you create a custom profile, which is an empty node that has no runtime servers created or any configuration changes and then federate it to the deployment manager.

Prerequisites:

- Before proceeding further, ensure the deployment manager profile is installed and running successfully at this time
- Make a note of the fully qualified host name of the deployment manager host machine
- Make note of the deployment manager SOAP port number
- Make a note of the primary user name and password of the deployment manager administrative security credentials, if enabled
- From the start menu navigate to **Programs** → **IBM WebSphere** → **Business Monitor 6.2** and select **Profile Management Tool**. The WebSphere Business Monitor Profile Management Tool is launched.

Note: Alternatively, you can launch the Profile Management Tool by running the '**pmt.bat** (**sh**)' script located at '**<WAS61_HOME>\bin\ProfileManagement**'

- _ 1. Click **Next** in the **Welcome** window.
- 2. In the Environment Selection window, select WebSphere Business Monitor.

🚯 Profile Management Tool				
Environment Selection				i g
Select the type of environment to create.				
Environments:				
Cell (deployment manager and a federated application serv Deployment manager Application server Custom profile WebSphere Business Monitor Description	ver)			
WebSphere Business Monitor enables users to monitor the of business process status. WebSphere Business Monitor improvement of their business processes. WebSphere Bus IBM Business Process Management portfolio and is tightly Business Modeler, and WebSphere Process Server.	eir business pr alerts and not siness Monitor integrated wil	ocesses in real tin ifies key users to provides significa th WebSphere Ap	ne by providing a facilitate continue nt new enhancen plication Server, f	visual display bus hents to the WebSphere
	< Back	Next >	Finish	Cancel

____ 3. Click Next

4. In the following **Profile Type Selection** window, select **WebSphere Business Monitor custom** profile

🚯 Profile Management Tool	
Profile Type Selection	i a
Select a profile type for the WebSphere Business Monitor environment.	
Profile Type:	
WebSphere Business Monitor application server WebSphere Business Monitor custom profile webSphere Business Monitor deployment manager WebSphere Business Monitor federated server profile	
Description A WebSphere Business Monitor custom profile contains an empty node, which does not contain an administrat or an application server. The typical use for a custom profile is to federate its node to a deployment manager federating the node, use the deployment manager to create a server or a cluster of servers within the node.	ive console . After
< Back Next > Finish	Cancel

- ____ 5. Click Next
- 6. In the **Profile Creation Options** window, select **Advanced profile creation**

🚯 Profile Management Tool 📃 📃	
Profile Creation Options	ĝ
Choose the profile creation process that meets your needs. Select the Typical option to allow the Profile Management 1 to assign a set of default configuration values to the profile. Select the Advanced option to specify your own configuration values for the profile.	Fool ition
O Typical profile creation	
Create a custom profile that uses default configuration settings. The Profile Management Tool assigns unique names to the profile, node, and host. The node will be federated to an existing deployment manager.	
Advanced profile creation Create a custom profile using default configuration settings. You can specify the values for the location of the profile and names of the profile, node, and host. The node will be federated to an existing deployment manager	r.
< Back Next > Finish Cance	el
7. Click Next	

__8. In the **Profile Name and Location** window, enter Custom01 as the profile name and enter C:\IBM\WebSphere\MonServer\profiles\Custom01 as the **Profile directory**

🚯 Profile Management Tool	
Profile Name and Location	i a
Specify a profile name and directory path to contain the files for the run-time environment, such as commands, configuration files, a files. Click Browse to select a different directory. Profile name:	and log 🔺
Custom01 Profile directory:	
C:\IBM\WebSphere\MonServer\profiles\Custom01	wse
Important: Deleting the directory a profile is in does not completely delete the profile. Use the manageprofiles command to con delete a profile.	npletely
< Back Next > Finish	Cancel

_____ 9. Click Next

_____10. In the **Node and Host Names** window, enter the following values:

Node name : Custom01Node01

Host name : <your host name>, for example: custom01.austin.ibm.com (fully qualified host
name)

🔹 Profile Management Tool 📃	
Node and Host Names	ĝ
Specify a node name and a host name for this profile.	
Node name:	
Custom01Node01	
Host name:	
custom01.austin.ibm.com	_
Node name: A node name is used for administration. If the node is federated, the name must be unique within the cel	
Host name: A host name is the domain name system (DNS) name (short or long) or the IP address of this computer.	
See the information center for profile naming and migration considerations. Online information center link	
< Back Next > Finish Cance	

_____ 11. Click Next

_____ 12. In the **Federation** window, enter the following parameters:

Deployment manager host name or IP address: <your DMgr host name> , for example: mondmgr.austin.ibm.com (fully qualified host name)

Deployment manager SOAP port number : 8879 (Default)

Deployment manager authentication (if administrative security is enabled)

- User name : monadmin
- **Password** :weblsphere

🚯 Profile Management Tool 📃 🗆 🗙
Federation
Specify the host name or IP address and the SOAP port number for an existing deployment manager. Federation can occur only if the deployment manager is running. If security is enabled on the deployment manager, you must specify a user name and password.
Deployment manager host name or IP address:
mondmgr.austin.ibm.com
Deployment manager SOAP port number (Default port number is 8879): 8879 Deployment manager authentication If administrative security is enabled on the deployment manager, you must provide a user name and password to authenticate with the server. User name:
monadmon Password:
See the information center for more information about deployment manager profiles. Online information center link
< <u>Back</u> Enish Cancel

Note: The **User name** and **Password** must match the deployment manager **Administrative Security** credentials. Also ensure that the deployment manager SOAP port number is correct. If you are unable to connect, then the deployment manager may not be running or the information you provided in the **Federation** window is not correct.

- _____ 13. Click **Next**
- 14. In the **Port Values Assignment** window, review the custom profile port values assigned. You can change them to the new values, but ensure that the port numbers do not conflict with other services running on this machine. Click **Next**
- 15. In the Database Configuration window, ensure that DB2 Universal Database is selected. Enter C:/IBM/WebSphere/MonServer612/ universalDriver.wbm/lib as the location of JDBC driver classpath files.

🚯 Profile Management Tool	
Database Configuration	E g
WebSphere Business Monitor components use a common database. Choose a database product and enter the based on that product.	information
Choose the database product used on the Deployment Manager:	
DB2 Universal Database	▼
Location (directory) of JDBC driver classpath files: C:/IBM/WebSphere/MonServer62/universalDriver.wbm/lib	
	Browse
< Back	Cancel

- ____ 16. Click Next
- 17. In the Profile Creation Summary window, review the custom profile creation summary information and click Create. The profile creation begins.
- 18. Once the installation is complete, deselect the Launch the WebSphere Business Monitor first steps check box and click Finish.
- ____ 19. Click Finish

Note: The above instructions lead you to create a WebSphere Business Monitor custom profile and federate it with the WebSphere Business Monitor deployment manager. The node agent should have been started. Remember that this is an empty node as no server is created at this time.

- 20. Similarly create the remaining custom profiles and name them as **Custom02**, **Custom03** and **Custom04** by repeating the above instructions on the designated host machines. In this lab, the nodes are named as **Custom02Node02**, **Custom03Node03** and **Custom04Node04B**
- ____21. After creating all of the custom profiles, login to the administrative console. In the left navigation pane, expand System Administration and click the Nodes link. Ensure the nodes you added are listed and ensure that the nodes you added show version WBM 6.2.0.0.

Select	Name 🛟	Version 🗘	Discovery Protocol 🗘	Status ሷ	
	Custom01Node01	ND 6.1.0.21 WBM 6.2.0.0	тср	↔	
	Custom02Node02	ND 6.1.0.21 WBM 6.2.0.0	тср	↔	
	Custom03Node03	ND 6.1.0.21 WBM 6.2.0.0	тср	•	
	Custom04Node04	ND 6.1.0.21 WBM 6.2.0.0	тср	↔	
	mondmgrCellManager01	ND 6.1.0.21 WBM 6.2.0.0	тср	⊕	

Part 6: Create clusters and member servers

In this part of the lab, you will create four clusters and their member servers to accommodate the various Business Monitor functions and components.

It is a best practice to plan for the number of clusters you will be creating. Also plan for the number of member servers, which cluster will be managing the member servers and on which managed node the member servers will be created.

Clusters	Nodes	Member Servers
mon Models	Custom01Node01	models.Custom01Node01.0
mon.models	Custom02Node02	models.Custom02Node02.1
mon Support	Custom02Node02	support.Custom02Node02.0
mon.oupport	Custom03Node03	support.Custom03Node03.1
mon Moscoging	Custom01Node01	msg.Custom01Node01.0
mon.messaging	Custom04Node04	msg.Custom04Node04.1
mon Rusinoss	Custom03Node03	business.Custom03Node03.0
mon.dusiness	Custom04Node04	business.Custom04Node04.1

Clusters \rightarrow Node \rightarrow Member Server topology mapping table:

Pre-requisites:

- Ensure the Deployment Manager server is running
- Ensure all the node agents of the custom profiles federated to this deployment manager are running
 - In the left navigation pane of the deployment manager administrative console, expand **System** administration and then click **Node agents**
 - In the **Node agents** panel to the right, ensure that all of the node agents display the status as green (♣)

Select	Name 🛟	Node 🗘	Version 🗘	Status ሷ
	nodeagent	Custom02Node02	ND 6.1.0.21 WBM 6.2.0.0	€
	<u>nodeagent</u>	Custom04Node04	ND 6.1.0.21 WBM 6.2.0.0	€
	<u>nodeagent</u>	Custom03Node03	ND 6.1.0.21 WBM 6.2.0.0	€
	<u>nodeagent</u>	Custom01Node01	ND 6.1.0.21 WBM 6.2.0.0	€

Complete the following instructions to create the clusters and their member servers:

- 1. Launch the WebSphere Business Monitor deployment manager administrative console, enter the security credentials and then click **Log in.** The default URL is: http://localhost:9060/admin
- 2. In the left navigation pane of the administrative console, expand **Servers** and click **Clusters**.



____ 3. In the Server clusters window, click New to launch the cluster creation wizard.

Server clusters ? -				
Server clusters				
Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a <u>guided activity</u> . A guided activity provides a list of task steps and more general information about the topic.				
Preferences				
New Delete Start Stop Ripplestart ImmediateStop				
Select Name 🗘 Status ሷ				
None				
Total 0				

_____a. In the Step 1: Enter basic cluster information section, enter mon.Models as the Cluster name and leave the rest default.

Create a new cluster	2.	-
Create a new cluster		
→ Step 1: Enter basic cluster information	Enter basic cluster information	
Step 2: Create first duster member	* Cluster name mon.Models	
Step 3: Create additional duster members	Prefer local. Specifies whether enterprise bean requests will be routed to the node on which the client resides when possible.	
Step 4: Summary	Configure HTTP session memory-to-memory replication	
Next Cancel		

- _____4. Click Next
- 5. In Step 2: Create first cluster member, enter models.Custom01Node01.0 as the member name and select Custom01Node01 from the Select node dropdown.
- ____6. Enter 2 as the Weight.
- 7. Select Generate unique HTTP ports
- 8. Select Create the member using an application server template and select default_defaultWBM.

Create a new cluster	2 -
Create a new cluster	
Step 1: Enter basic cluster information	Create first cluster member
→ Step 2: Create first cluster member	The first cluster member determines the server settings for the cluster members. A server configuration template is created from the first member and stored as part of the
Step 3: Create additional cluster members	this template.
Step 4: Summary	models.Custom01Node01.0
	Select node Custom01Node01(ND 6.1.0.21)
	* Weight 2 (020)
	 Generate unique HTTP ports Select basis for first cluster member: Create the member using an application server template. default_defaultWBM
	 Create the member using an existing application server as a template. (none) Create the member by converting an existing application server.
	O None. Create an empty cluster.
Previous Next C	Cancel

- ____ 9. Click Next
- 10. In **Step 3: Create additional cluster members**, enter the following values to create the second cluster member on **Custom02Node02**:

Member name : models.Custom02Node02.1

Select node : Custom02Node02

Weight : 2 (default).

Select Generate unique HTTP ports.

	Step 1: Enter basic cluster information	Create additional cluster members				
→	Step 1: Enter Dasic cluster information Step 2: Create first cluster member Step 3: Create additional cluster members Step 4: Summary	Create additional cluster members Enter information about this new cluster member, and click Add Member to add this cluster member to the member list. A server configuration template is created from the first member and stored as part of the cluster data. Additional cluster members are copied from this template. * Member name models.Custom02.Node02.1 Select node Custom02Node02(ND 6.1.0.21) * Weight 2 (020)				
		Generate unique HTTP ports Add Member Use the Edit function to edit the properties of a cluster member that is already included in this list. Use the Delete function to remove a cluster member from this list. You are not allowed to edit or remove the first cluster member or an already existing cluster member.				
		Edit Delete				
		Select Member name Nodes Version Weight				
			models.Custom01Node01.0	Custom01Node01	ND 6.1.0.21 WBM 6.2.0.0	2
	Previous Next Cancel					

_____ 11. Click **Add Member**. This action adds the additional cluster member server to the table as shown below:

E	Edit Delete				
Ū					
Se	lect	Member name	Nodes	Version	Weight
		models.Custom01Node01.0	Custom01Node01	ND 6.1.0.21 WBM 6.2.0.0	2
		models.Custom02Node02.1	Custom02Node02	ND 6.1.0.21 WBM 6.2.0.0	2

- ____ 12. Click Next
- _____ 13. In **Step 4: Summary**, review the summary of actions and click **Finish**.

Step 1: Enter basic	Summary	
Step 2: Create first	Summary of actions:	
cluster member	Options	Values
Step 3: Create	Cluster Name	mon.Models
additional cluster members	Core Group	DefaultCoreGroup
includers	Node group	DefaultNodeGroup
→ Step 4: Summary	Prefer local	true
	Configure HTTP session memory-to-memory replication	false
	Server name	models.Custom01Node01.0
	Node	Custom01Node01(ND 6.1.0.21 WBM 6.2.0.0)
	Weight	2
	Clone Template	default_defaultWBM
	Clone Type	default
	Generate unique HTTP ports	true
	Server name	models.Custom02.Node02.1
	Node	Custom02Node02(ND 6.1.0.21 WBM 6.2.0.0)
	Weight	2
	Clone Template	default_defaultWBM
	Clone Type	default
	Generate unique HTTP ports	true
Previous Finish	Cancel	

- 14. Save to the master configuration and synchronize changes with the nodes
- 15. Repeat the above steps to create the mon.Support, mon.Messaging and mon.Business clusters and their member servers. Use the Cluster → Node → member server mapping table as a reference
 - ____16. Start the clusters

Note: Ensure all node agents are running at this time. (System Administration → Node agents)

- ____a. In the left navigation pane of the administrative console, expand Servers and click Clusters.
- ____b. In the **Clusters** section, select the check box for all of the clusters listed
- ____ c. Click **Start**. This action starts all the member servers assigned to the respective clusters. Review the runtime logs for all the member servers.

Server clusters ?					
Server clusters					
Use th of a gr routed guided	Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a <u>quided activity</u> . A guided activity provides a list of task steps and more general information about the topic.				
🕀 Pre	ferences				
New	Delete Start Stop Ripplestart	ImmediateStop			
	C # \$				
Select	Name 🛟	Status ሷ			
	mon.Business	*			
	mon.Messaging	*			
	mon.Models	*			
	mon.Support	*			
Total	Total 4				

Part 7: Deploy and configure the common event infrastructure

In this part of the lab, you will deploy and configure the common event infrastructure (CEI) service. In this lab, you will deploy the CEI event service on the **mon.Support** cluster.

Note: You can skip the instructions in this part of the lab if you plan to use an existing CEI service in the cell or a remote cell. However you must configure the Monitor **Event Emitter Factory** and **Event Service Transmission** to use the existing CEI service.

Note: The instructions in this part of the lab must be completed on the deployment manager machine. You may have to complete some instructions on a different machine for creating the event database depending on where the database server is located.

Complete the following instructions to deploy and configure the CEI service on a cluster:

1. Open a **Command Window** and change directory to **<DMGR_HOME>\bin** (C:\IBM\WebSphere\MonServer\profiles\Dmgr62\bin)

2. Run the wsadmin command line utility using the following command:

• wsadmin – username monadmin – password web1 sphere

C:\IBM\WebSphere\MonServer\bin>wsadmin -username monadmin -password web1sphere_

- 3. Deploy the CEI service to a cluster using the following command:
 - \$AdminTask deployEventService { -clusterName <CLUSTER_NAME> }

Example: \$AdminTask deployEventService { -clusterName mon.Support }

C:\IBM\WebSphere\MonServer\bin>wsadmin -username monadmin -password web1sphere WASX7209I: Connected to process "dmgr" on node mondmgrCellManager01 using SOAP onnector; The type of process is: DeploymentManager WASX7029I: For help, enter: "\$Help help" wsadmin>\$AdminTask deployEventService -clusterName mon.Support_

- _____4. Save the changes to the master configuration using the following command
 - \$AdminConfig save

wsadmin>\$AdminConfig Save

Note: By default, the CEI service uses Derby as the database. As the CEI service is deployed to a cluster, you should use a supported database other than Derby. The next steps shows you how to configure it for DB2.

- 5. Generate the database configuration scripts using the following command:
 - \$AdminTask configEventServiceDB2DB { -clusterName <CLUSTER_NAME> jdbcClassPath <WAS61_HOME>\universalDriver.wbm\lib -dbHostName <HOST_NAME> -dbName <DATABASE_NAME> dbUser <USER_NAME> -dbPassword <PASSWORD> }

```
Example: $AdminTask configEventServiceDB2DB { -clusterName mon.Support -
jdbcClassPath C:\IBM\WebSphere\MonServer612\universalDriver.wbm\lib -
dbHostName dbserver.austin.ibm.com -dbName MONITOR -dbUser db2admin -
dbPassword superSecret }
```

wsadmin>\$AdminTask configEventServiceDB2DB { -clusterName mon.Support -jdbcClass Path C:\IBM\WebSphere\MonServer\universalDriver.wbm\lib -dbHostName mondmgr.aust in.ibm.com -dbName MONITOR -dbUser db2admin -dbPassword db2admin }

- ____6. Save changes to the master configuration using the following command:
 - \$AdminConfig save
- _____7. Complete the following instructions to create the EVENT database
 - ____a. The EVENT database scripts are generated to the following location on the deployment manager machine:
 - <DMGR_HOME>\databases\

🗁 C:\IBM\WebSphere\MonServer`\profiles\Dmgr62\databases	
Address C:\IBM\WebSphere\MonServer \profiles\Dmgr62\databases	💌 🄁 Go
event	

b. Copy the 'event' database scripts directory to a temporary location in your database host machine:

🛅 C:\temp\event\n			
Address 🔂 C:\temp\	Address 🛅 C:\temp\event\mon.Support\dbscripts\db2		
CatalogSeed.db2	dbConfigureCr.sh	▼fastpurge.bat	
Cr_db.db2	dbConfigureRm.bat	■ fastpurge.sh	
Cr_event_db2.bat	dbConfigureRm.sh	剩 ins_metadata.db2	
cr_event_db2.sh	exec_purge.bat	■ reorg.bat	
Cr_event_db2.sh	exec_purge.sh	■ reorg.sh	
백일 cr_tbl_catalog.db2	exec_reorg.bat	™_event_db2.bat	
백일 cr_ts.db2	exec_reorg.sh	rm_event_db2.sh	
백일 cr_ts_catalog.db2	exec_runstats.bat	runstats.bat	
좋 dbConfigureCr.bat	exec_runstats.sh	runstats.sh	

- __ c. Open the DB2 command window from Start → Programs → IBM DB2 → Command Line Tools → Command Window and change the directory to C:\temp\event\mon.Support\dbscripts\db2
- _____d. Run the 'cr_event_db2.bat' script using the following command:
 - cr_event_db2.bat server db2admin



____e. Ensure the script runs successfully

A DB2 CLP - DB2COPY1	
NSERT INTO cei_t_cat_eventdef (event_def_name, parent_name) VALUES('cei_ev efinition_removed', 'cei_event_definition') B20000I The SQL command completed successfully. OMMIT	vent_
B200001 The SQL command completed successfully.	
ne coent service bb2 uatabase nonoi2 created successfully. onnect reset B200001 The SQL command completed successfully.	
:\temp\event\mon.Support\dbscripts\db2>_	

____f. Close the command window

8. Back to the deployment manager machine, run the following command to enable the CEI service

```
____ a. $AdminTask enableEventService { -clusterName <CLUSTER_NAME> }
```

Example: \$AdminTask enableEventService { -clusterName mon.Support }

```
C:\IBM\WebSphere\MonServer\bin>wsadmin -username monadmin -password web1sphere
WASX7209I: Connected to process "dmgr" on node mondmgrCellManager01 using SOAP
onnector; The type of process is: DeploymentManager
WASX7029I: For help, enter: "$Help help"
wsadmin>$AdminTask deployEventService -clusterName mon.Support_
```

- 9. Save the changes using the following command:
 - \$AdminConfig save
- _ 10. Restart the deployment manager, all the node agents and the member servers. Ensure the CEI service, the CEI Bus and the message engine start successfully.

Note: Visit Appendix: Troubleshooting CEI deployment at the end of the document to resolve any issues.

Part 8: Configuring the WebSphere Business Monitor environment

You have already created the clusters and configured CEI in the previous sections. Now, you will configure multiple components that are needed for your WebSphere Business Monitor environment to function properly, These components can be configured using the WebSphere Business Monitor configuration section of the administrative console. Required components include the messaging engine and the event emitter factory. Optionally, you will deploy and configure other WebSphere Business Monitor supporting applications using the same method in later sections.

Pre-requisites:

You must have completed the following tasks:

- Created clusters and their member servers
- Deployed CEI to a cluster

This table lists the components to be installed and the target clusters:

Component	Target Cluster
Messaging Engine	mon.Messaging
Event Emitter Factory	mon.Support
REST API service	mon.Business
Action services	mon.Support
Data service scheduler	mon.Support
Dashboard for mobile devices	mon.Business

Note: The instructions in this part of the lab must be completed on the deployment manager machine.

- 1. Configure the **messaging engine**.
 - ____a. Login to the Administrative console for the deployment manager
 - ____ b. In the navigation panel, click Servers → WebSphere Business Monitor configuration. A list of required and optional components is displayed. Review the status of each component. Since this is a custom node, none of the components are installed or configured, and you must complete the remaining steps to install or configure the components

⊡	🗆 Servers					
		Application servers				
		Generic servers				
		Proxy Servers				
		Version 5 JMS servers				
		Web servers				
		Clusters				
		Cluster topology				
	н,	Generic Server Clusters				
	н,	WebSphere MQ servers				
	🛨 Core groups					
		WebSphere Business Monitor configuration				

You will next create a bus and configure the message engine by completing the following steps. A bus is a managed communication mechanism that supports service integration through synchronous and asynchronous messaging. A bus consists of interconnecting messaging engines that manage bus resources

The status for the service integration bus and the messaging engine is on this window. If you have an existing bus, the bus name will be listed in the status box. If you have not previously created a bus, one will be created when you configure the messaging engine

____ c. In the WebSphere Business Monitor Configuration window, click Messaging Engine under Component

WebSphere Business Monitor configuration					
For yo configu	For your WebSphere Business Monitor environment to work properly, you must configure multiple components.				
WebSp	ohere Business Monit	tor Configuration			
This page shows the status of the components that make up a complete WebSphere Business Monitor environment. To modify the configuration of a component, click the component name to display the details.					
	Component		Status		
\otimes	Messaging engine		Does not exist		
۲	Event emitter factor	¥.	Does not exist		
0	REST API service		Not deployed		
0	Business Space		Not deployed		
0) Action services Not deployed				
0	Data services scheduler Not deployed				
0	Dashboard for mob	ile devices	Not deployed		
0	AlphaBlox Not deployed				

_____d. In the next window, click **Configure the Messaging Engine**. This launches the configuration wizard

WebSphere Business Monitor configuration > Messaging engine					
Use this page to configure the messaging engine for Web	Sphere Business Monitor.				
Messaging Engine	Service Integration				
Service integration bus for WebSphere Business Monitor	 Buses 				
Does not exist					
Messaging engine status					
Does not exist					
Configure a messaging engine					
The messaging engine for WebSphere Business Monitor has not been configured.					
Configure the Messaging Engine					

____e. In the Create a new messaging engine window, under Select a bus member section, select Cluster radio button and select mon.Messaging



- ___ f. Click Next
- __ g. In the Create a new messaging engine window, under Select the type of message store section, select Data store

	Step 1: Select a bus	Select the type of message store
→	member Step 2: Select the type of message store	Choose the type of message store for the persistence of message state.
	Step 3: Confirm	O Data store
		File store
	Previous Next Cancel]

- ___h. Click Next
- ____i. In the Create a new messaging engine window

- 1) In section Provide the message store properties, select Use existing data source.
- 2) Select jdbc/wbm/MonitorMEDatabase for Data source JNDI name
- 3) Enter MONITOR as the Schema name
- 4) Select Monitor_JDBC_Alias for Authentication Alias
- 5) Select Create Tables

	Step 1: Select a bus Provide the mes		de the message store properties
	member Step 2: Select the type of message store	Seleo	t properties for the data store.
→	Step 3: Provide the message store		Create default data source with generated JNDI name.
	properties	\odot	Use existing data source
	Step 4: Confirm		Data source JNDI name
			jdbc/wbm/MonitorMEDatabase
			Schema name
			MONITOR
			Authentication Alias
			Monitor_JDBC_Alias
			Create tables
-	Previous Next Cancel]	

- ___j. Click Next
- ____k. Review the summary of actions

	Step 1: Select a bus	C	onfirm		
	member Step 2: Select the type of message store		The following is a summary of your selections. To complete the messaging engine creation, click Finish. If there are settings that you want to change, click Previous to review your selections.		
	Step 3: Provide the message store properties		Summary of actions:		
⇒	→ Step 4: Confirm		Service integration bus	The bus MONITOR.mondmgrCell01.Bus will be created	
			Bus member	WebSphere:cell=mondmgrCell01,cluster=mon.Messaging	
			Message store type	Database store	
			Create default datasource	No	
			Message store type	jdbc/wbm/MonitorMEDatabase	
			Message store type	MONITOR	
			Datasource authentication alias	Monitor_JDBC_Alias	
			Create tables	Yes	
	Previous Finish Cancel				

- ___I. Click **Finish** to complete the configuration
- ____m. Ensure the service integration bus for WebSphere Business Monitor is successfully configured and ensure the messaging engine is deployed successfully on the **mon.Messaging** cluster

Messaging Engine 📃 🗖				
WebSphere Business Monitor configuration > Messaging engine Use this page to configure the messaging engine for WebSphere Business Monitor.				
Messaging Engine	Service Integration			
Service integration bus for WebSphere Business Monitor	Buses			
MONITOR.mondmgrCell01.Bus				
Messaging engine status				
Deployed on mon.Messaging				

____n. In the left navigation pane of the administrative console, click **Servers** → **WebSphere Business Monitor configuration**. Ensure the **Messaging Engine** is deployed (Green) as shown below:

	Component	Status
	Messaging engine	Deployed on mon.Messaging
8	Event emitter factory	Does not exist
0	REST API service	Not deployed
0	Business Space	Not deployed
0	Action services	Not deployed
0	Data services scheduler	Not deployed
\bigcirc	Dashboard for mobile devices	Not deployed
\bigcirc	AlphaBlox	Not deployed

- 2. Configure the **Event emitter factory**
 - ___a. In the navigation panel, click Servers \rightarrow WebSphere Business Monitor configuration

	Component	Status
	Messaging engine	Deployed on mon.Messaging
\otimes	Event emitter factory	Does not exist
0	REST API service	Not deployed
\bigcirc	Business Space	Not deployed
0	Action services	Not deployed
\bigcirc	Data services scheduler	Not deployed
\bigcirc	Dashboard for mobile devices	Not deployed
\bigcirc	AlphaBlox	Not deployed

____b. In the WebSphere Business Monitor Configuration window, click Event emitter factory

____ c. This launches the configuration wizard. To configure the event service to a cluster, select mon.Support from the dropdown.

Event Emitter Factory				
Event Emitter Factory				
WebSphere Business Monitor configuration > Event emitte	er factory			
WebSphere Business Monitor uses an event emitter factory to emit outbound events. The event emitter factory must be configured to emit events to an event service.				
Event Emitter Factory	Applications			
Event emitter factory status	 Enterprise 			
Not deployed	applications			
	Common Event Infrastructure			
The event emitter factory for WebSphere Business Monitor has not been configured.	 Event services Event emitter factories 			
Configure an event emitter factory				
Select the server or cluster to which contains the event service you want to configure the event emitter factory to use				
mon.Support 💌				
Configure the Event Emitter Factory				

- ____ d. Click Configure the Event Emitter Factory
- ____e. Ensure the event emitter factory is configured successfully

Messages CWMTW1306I: The event emitter factory has	s been		
successfully configured to use the event service on mon.Support. WebSphere Business Monitor configuration > Event emitter factory			
			the spin a submission for the submission of the spin and
WebSphere Business Monitor uses an event emitte	r factory to emit outbound ed to emit events to an event		
WebSphere Business Monitor uses an event emitte events. The event emitter factory must be configure ervice.	r factory to emit outbound ed to emit events to an event		
WebSphere Business Monitor uses an event emitte events. The event emitter factory must be configure ervice.	r factory to emit outbound ed to emit events to an event <u>Applications</u>		
WebSphere Business Monitor uses an event emitte events. The event emitter factory must be configure ervice. Event Emitter Factory Event emitter factory status	r factory to emit outbound ed to emit events to an event <u>Applications</u> Enterprise		
WebSphere Business Monitor uses an event emitte events. The event emitter factory must be configure ervice. Event Emitter Factory Event emitter factory status Configured using the event service on	r factory to emit outbound ed to emit events to an event <u>Applications</u> Enterprise applications		
WebSphere Business Monitor uses an event emitte events. The event emitter factory must be configur ervice. Event Emitter Factory Event emitter factory status Configured using the event service on mon.Support	r factory to emit outbound ed to emit events to an event <u>Applications</u> Enterprise applications Common Event		

_____f. In the left navigation pane of the administrative console, click Servers → WebSphere Business Monitor configuration. Ensure the Event emitter factory is deployed (Green) as shown below:

	Component	Status
	<u>Messaging engine</u>	Deployed on mon.Messaging
	Event emitter factory	Configured using the event service on mon.Support
\bigcirc	REST API service	Not deployed
\bigcirc	Business Space	Not deployed
\bigcirc	Action services	Not deployed
\bigcirc	<u>Data services scheduler</u>	Not deployed
0	<u>Dashboard for mobile</u> <u>devices</u>	Not deployed
0	AlphaBlox	Not deployed

- _____3. Configure the **REST API service**. WebSphere Business Monitor uses REST services to extract monitored data or to create custom dashboards and reports based on monitored data
 - $_$ a. In the navigation panel, click Servers \rightarrow WebSphere Business Monitor configuration

	Component	Status
>	Messaging engine	Deployed on mon.Messaging
	Event emitter factory	Configured using the event service on mon.Support
\bigcirc	REST API service	Not deployed
0	Business Space	Not deployed
\bigcirc	Action services	Not deployed
\bigcirc	<u>Data services scheduler</u>	Not deployed
0	<u>Dashboard for mobile</u> <u>devices</u>	Not deployed
0	AlphaBlox	Not deployed

____b. Click **REST API service**

____ c. To deploy **REST API service** to a cluster, select mon.Business from the dropdown

REST API Service	Applications
REST API service status	Enterprise
Not deployed	applications
'he REST API service for WebSphere Business Mon as not been deployed.	iitor
he REST API service for WebSphere Business Mon as not been deployed. Deploy REST API service	litor
The REST API service for WebSphere Business Mon has not been deployed. Deploy REST API service Select the server or cluster to which you want to do the REST API service	eploy
The REST API service for WebSphere Business Mon has not been deployed. Deploy REST API service Select the server or cluster to which you want to do the REST API service mon.Business	eploy

- ____ d. Click Deploy REST API service
- ____e. Ensure the **REST API service** application is successfully deployed

ST API Service	<u> </u>
Messages CWMTW0353I: The REST API service has been successfully deployed on mon.Business.	
WebSphere Business Monitor configuration > REST A	P I service
Use this page to deploy the REST API service for WebS	Sphere Business Monitor.
WebSphere Business Monitor configuration > REST A	PI service
Use this page to deploy the REST API service for WebS	phere Business Monitor.
REST API Service	<u>Applications</u>
WebSphere Business Monitor configuration > REST A	PI service
Use this page to deploy the REST API service for WebS	Sphere Business Monitor.
REST API Service	<u>Applications</u>
REST API service status	Enterprise

4. Configure **Dashboard for mobile devices**

_ a. In the navigation panel, click Servers \rightarrow WebSphere Business Monitor configuration

Web	WebSphere Business Monitor Configuration			
This page shows the status of the components that make up a complete WebSphere Business Monitor environment. To modify the configuration of a component, click the component name to display the details.				
	Component	Status		
	Messaging engine	Deployed on mon.Messaging		
	Event emitter factory	Configured using the event service on mon.Support		
	REST API service Deployed on mon.Business			
\bigcirc	Business Space	Not deployed		
\bigcirc	Action services	Not deployed		
\bigcirc	O Data services scheduler Not deployed			
0	O Dashboard for mobile devices Not deployed			
\bigcirc	AlphaBlox	Not deployed		

____b. Click Dashboard for mobile devices

Dashboard for Mobile Devices	Applications
Dashboard for mobile devices status	Enterprise
Not deployed	applications
The dashboard for mobile devices for WebSphere Business Monitor has not been deployed.	
Deploy dashboard for mobile devices	
Select the server or cluster to which you want to deploy the dashboard for mobile devices mon.Business	
Deploy Dashboard for Mobile Devices	

- ____ c. To deploy dashboard for mobile devices to a cluster, select mon.Business from the dropdown
- _____d. Click Deploy Dashboard for mobile devices
- ____e. Ensure the dashboard for mobile devices application is successfully deployed to the designated cluster

Messages GWMTW05511: The dashboard for mobile device been successfully deployed on mon.Business.	es has
Ise this page to deploy the dashboard for mobile dev	ices for WebSobere Bus
Jse this page to deploy the dashboard for mobile dev Monitor. <mark>)ashboard for Mobile Devices</mark>	ices for WebSphere Bus Applications
Jse this page to deploy the dashboard for mobile dev Monitor. Dashboard for Mobile Devices Dashboard for mobile devices status	ices for WebSphere Bus <u>Applications</u> Enterprise

5. You may similarly deploy the action services and data services scheduler to the mon.Support cluster

Note: To verify the WebSphere Business Monitor related configuration and supporting applications are installed, deployed, or configured properly, navigate to **Servers** \rightarrow **WebSphere Business Monitor configuration**. Verify that all items are complete and marked as a green.

WebSphere Business Monitor Configuration

WebSphere Business Monitor configuration

For your WebSphere Business Monitor environment to work properly, you must configure multiple components.

WebSphere Business Monitor Configuration

This page shows the status of the components that make up a complete WebSphere Business Monitor environment. To modify the configuration of a component, click the component name to display the details.

	Component	Status		
	Messaging engine	Deployed on mon.Messaging		
	Event emitter factory	Configured using the event serv mon.Support	vice on	
	REST API service	Deployed on mon.Business		
0	Business Space	Not deployed		
	Action services	Deployed on mon.Support		
	<u>Data services scheduler</u>	Deployed on mon.Support		
	<u>Dashboard for mobile</u> <u>devices</u>	Deployed on mon.Business		
0	AlphaBlox	Not deployed		

Part 9: Configure business space on a cluster and create database tables

In this part of the lab, you will be installing and configuring **Business Space** on the mon.Business cluster. Configuring Business Space sets up a browser-based graphical user interface for the business users of your application and cluster that are running with the profile you set up. In Business Space, you and your application users can customize content from products in the WebSphere Business Process Management portfolio.

Complete the following instructions to install and configure Business Space:

1. In the Administrative console for the deployment manager, navigate to Servers \rightarrow Clusters

Server clusters	Server clusters				
Use this page to change the configuration settings for a cluster. A server cluster consists of a group of application servers. If one of the member servers fails, requests will be routed to other members of the cluster. Learn more about this task in a <u>guided activity</u> . A guided activity provides a list of task steps and more general information about the topic.					
Preferences ■					
New Delete Start Stop Ripplestart ImmediateStop					
Select Name 🔿	Status ሷ				
mon.Business	◆				
mon.Messaging	€				
mon.Models	\$				
mon.Support	□ mon.Support. ↔				
Total 4					

- 2. Click mon.Business cluster
- 3. In the **Configuration** window, ensure the **Configuration** tab is selected

Server clusters	? =
<u>Server clusters</u> > mon.Business	
Use this page to change the configuration setting of a group of application servers. If one of the m routed to other members of the cluster. Runtime Configuration Local Topology	gs for a cluster. A server cluster consists nember servers fails, requests will be
General Properties	Cluster messaging
* Cluster name mon.Business	Messaging engines
Bounding node group name DefaultNodeGroup 🔽	Business Integration Business Space
☑ Prefer local	Configuration System REST Service So do pictor
Enable failover of transaction log recovery	Additional Properties
Apply OK Reset Cancel	 <u>Cluster members</u> <u>Backup cluster</u>
	Endpoint Listeners

- 4. Click Business Space Configuration under the Business Integration section
- 5. In the **Business Space Configuration** page complete the following:

Select Install Business Space service

Enter IBMBUSSP (or a different database name configured in your environment) as the **Database schema name**

Select Monitor_Database in the Create Business Space data sour	ce using	j drop) down
--	----------	--------	--------

General Properties
Install Business Space service
Database schema name IBMBUSSP
Existing Business Space data source
Create Business Space data source using: Monitor_Database 💌
Apply OK Reset Cancel

- ____ 6. Click **OK**
- 7. Save to the master configuration. Synchronize changes with the nodes

Complete the following instructions to manually create the Business Space database:

8. The Business Space database scripts are generated to the following location on the Monitor deployment manager machine:

<DMGR_HOME>\dbscripts\BusinessSpace\DB2\<Monitor_DB_Name>

Example: C:\IBM\WebSphere\MonServer\profiles\Dmgr62\dbscripts\BusinessSpace\DB2\MONITOR

🗁 C:\IBM\WebSphere\MonServer62\profiles\Dmgr62\dbscripts\BusinessSpace\DB2\MONITOR	_ 🗆 🗙
Address 🛅 C:\IBM\WebSphere\MonServer62\profiles\Dmgr62\dbscripts\BusinessSpace\DB2\MONITOR	🔁 Go
Image: createTable_BusinessSpace.sql Image: upgradeData612_BusinessSpace.sql Image: upgradeSchema612_BusinessSpace.sql	

9. Copy the Business Space database scripts to a temporary location in your database host machine:

🗁 C:\temp\dbscripts\DB2	
Address C:\temp\dbscripts\DB2	💌 ラ Go
CreateTable_BusinessSpace.sql	

- 10. Open the DB2 command window from Start → Programs → IBM DB2 → Command Line Tools → Command Window and change the directory to C:\temp\dbscripts\DB2
- _____ 11. Connect to the monitor database you created using the following command:
 - db2 connect to MONITOR user <USER_NAME> using <PASSWORD>

Example: db2 connect to MONITOR user db2admin using db2admin

BB2 CLP - DB2COPY1	_ 🗆 🗡
C:\temp\dbscripts\DB2>db2 connect to MONITOR user db2admin using db2admin Database Connection Information	
Database server = DB2/NT 9.5.0 SQL authorization ID = DB2ADMIN Local database alias = MONITOR	
C:\temp\dbscripts\DB2>_	-

12. Run the createTable_BusinessSpace.sql script using the following command:

db2 –tf createTable_BusinessSpace.sql

📾 DB2 CLP - DB2COPY1	_ 🗆 🗙
C:\temp\dbscripts\DB2>db2 connect to MONITOR user db2admin using db2admin	_
Database Connection Information	
Database server = DB2/NT 9.5.0 SQL authorization ID = DB2ADMIN Local database alias = MONITOR	
C:\temp\dbscripts\DB2>db2 -tf createTable_BusinessSpace.sql_	-

_____ 13. Close the DB2 command window

- 14. Ensure the Business Space applications are installed successfully (Application → Enterprise Applications). The applications are named BusinessSpaceManager and IBM_BSPACE_WIDGETS.
- 15. Restart the **mon.Business** cluster. Ensure you do not see any Business Space database related error messages in the runtime logs (SystemOut.log).

Part 10: Enabling business space widgets

In this part of the lab, you will deploy and register the Representational State Transfer (REST) endpoints for the monitor and alphablox widgets with Business Space.

Pre-requisites:

Create BusinessSpace/registryData directory on all the nodes in the Business Space cluster

• <WAS61_HOME>\profiles\Custom01\BusinessSpace\registryData

Example: C:\IBM\WebSphere\MonServer612\profiles\Custom04\BusinessSpace/registryData

C:\IBM\WebSphere\MonServer612\profiles\Custom01\BusinessSpace/registryData

Enabling widgets with Business Space

By default the Business Space widgets are not enabled. You should enable the widgets before using the Business Space. You should edit the Business Space end point registration files, make necessary changes and then copy the files to the **BusinessSpace\registryData** directory on all the nodes where Business Space is installed.

Note: The instructions must be completed on all the machines (cluster members) where the business space is installed.

Complete the following instructions to enable the Business Space widgets:

- ____1. The Business Space end point registration files are located at:
 - <WAS62_HOME>\BusinessSpace\registryData on the all the custom profiles where Business Space is installed

Example: C:\IBM\WebSphere\MonServer\BusinessSpace\registryData

🗁 C:\IBM\WebSphere\Mo	onServer \BusinessSpace\	registryData	
Address 🛅 C:\IBM\WebSph	ere\MonServer \BusinessSpace	\registryData	💌 🄁 Go
🖭 bcmEndpoints.xml	🖭 monitorWidgets.xml	🔮 wpsEndpoints.xml	
🔮 bpcEndpoints.xml	📄 productivityWidgets.xml	🕋 wpsWidgets.xml	
🔮 fabricEndpoints.xml	🔮 pubserverEndpoints.xml	🖭 wsumEndpoints.xml	
🔮 fabricWidgets.xml	📄 pubserverWidgets.xml		
🔮 googleWidgets.xml	📄 sampleWidgets.xml		
🖭 bmEndpoints.xml	🖭 smEndpoints.xml		
🖭 monitor ABXEndpoints . xml	🖭 visualStepEndpoints.xml		
🖭 monitorEndpoints.xml	🖭 visualStepWidgets.xml		

 Copy the 'monitorEndpoints.xml' and 'monitorABXEndpoints.xml' file to <WAS61_HOME>\profiles\Custom01\BusinessSpace\registryData on all the nodes where Business Space is installed

🗁 C:\IBM\WebSphere\MonServer \profiles\Custom01\BusinessSpace\registryData	_ 🗆 ×
Address 🗁 C:\IBM\WebSphere\MonServer\profiles\Custom01\BusinessSpace\registryData	🛨 🔁 Go
monitorABXEndpoints.xml	
monitorEndpoints.xml	

3. Restart the '**mon.Business**' cluster

Complete the following instructions if you have REST Services application running in a different cell than that of the Business Space cluster.

4. Take a backup of the 'monitorEndpoints.xml' and 'monitorABXEndpoints.xml' file and then edit it using a text editor.

____a. For **monitorEndpoints.xml**, type the <HOST_NAME>:<PORT> as shown below:

<tns:endpoint action="addUpdate"></tns:endpoint>
<tns:id>{com.ibm.wbimonitor}monitorServiceRootId</tns:id>
<tns:version>1.0.0</tns:version>
<tns:url>http://restservice_hostname:9080/rest/</tns:url>
<pre><tns:description>Location of backing services for Monitor widgets</tns:description></pre>

Where HOST_NAME is the fully qualified host name of the machine where the REST services is running.

____b. For **monitorABXEndpoints.xml**, type the <HOST_NAME>:<PORT> as shown below:

<tpre><tms:Endpoint action="addUpdate">

Where HOST_NAME is the fully qualified host name of the machine where the REST services is running.

Save the endpoint registry files and ensure you copy them to the **BusinessSpace\registryData** directory you created under the profile directory of the custom nodes.

Restart the *mon.Business* cluster and review the runtime logs. You should not see any JSP related warning messages

Part 11: Install and configure Alphablox in a cluster

For instructions on Alphablox installation and configuration in a cluster refer to **WBMonitorV61_AlphabloxClustering.pdf** which is a separate lab document.

What you did in this exercise

In this lab you installed the Monitor core product files on nodes in your topology. You created the deployment manager profile and the Monitor database. You created custom profiles, clusters and cluster member servers. Also, you configured CEI and Monitor supporting applications. Finally, you configured business space in the cluster.

Appendix: Troubleshooting CEI deployment

Issue 1: If you encounter the following message:

CWSIS0002E: The messaging engine encountered an exception while starting. Exception: com.ibm.ws.sib.msgstore.MessageStoreRuntimeException: CWSIS1524E: Data source, jdbc/com.ibm.ws.sib/mon.Support-CommonEventInfrastructure_Bus, not found.

Resolution: Create a new data source using *jdbc/com.ibm.ws.sib/mon.Support*-*CommonEventInfrastructure_Bus as* JNDI name

Issue 2: Missing bus connector role

- In the navigation pane of the administrative console, click Service Integration → Busses
- Under Security, click Enabled corresponding to CommonEventInfrastructure_Bus
- Select an authentication alias from the dropdown for Inter-engine authentication alias
- Click Apply
- Under Additional properties, click Users and groups in the bus connector role
- In the next panel, click New
- In the next panel, select **User name** radio button and enter the administrative user name (Example: monadmin)
- Click OK
- Save to the master configuration

Issue 3: Missing Authentication Alias for **CommonEventInfrastructure_ActivationSpec** resource adapter

- In the navigation pane of the administrative console, click Resources → Resource Adapters → J2C activation specifications
- In the next panel, click CommonEventInfrastructure_ActivationSpec
- Set the appropriate authentication alias
- Click OK
- Save to the master configuration
- Restart the cluster

This page is left intentionally blank.