WebSphere Business Monitor V7.0: Clustering -Remote messaging, remote support, and Web pattern

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What this exercise is about

The objective of this exercise is to provide step by step instructions for installing WebSphere[®] Business Monitor V7.0 binaries and eventually create a remote messaging, remote support, and Web deployment environment pattern in a five machine topology good for 32-bit and 64-bit system users.

Exercise requirements

List of software required for the student to complete the exercise:

- IBM Installation Manager V1.3.3
- WebSphere Application Server V7.0.0.7
- WebSphere Business Monitor V7.0
- DB2

What you should be able to do

At the end of this exercise you should be able to:

- Install IBM Installation Manager V1.3.3
- Install WebSphere Application Server V7.0.0.7
- Install WebSphere Business Monitor V7.0
 - WebSphere Business Monitor V7.0 binaries including Alphablox
 - o WebSphere Application Server V7 Feature Pack for XML
- Create these WebSphere Business Monitor V7.0 profiles
 - o A deployment manager profile
 - Four custom profiles
- Generate a remote messaging, remote support, and Web deployment environment pattern

Exercise Instructions

Some instructions in this exercise might be Windows[®] operating-system specific. If you plan on running the exercise 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 exercise instructions using symbolic references, as follows:

Reference Variable	Windows Location	AIX [®] Location		
WBM deployment manager profile and DB2 (Machine 1)				
<wbm_home></wbm_home>	C:\IBM\WebSphere\MonServer			
<dmgr_profile_home></dmgr_profile_home>	<wbm_home>\profiles\Dmgr01</wbm_home>			
<db2_home></db2_home>	C:\IBM\DB2\SQLLIB			
W	BM custom profile 01 (Machine	2)		
<wbm_home></wbm_home>	C:\IBM\WebSphere\MonServer			
<custom01_profile_home></custom01_profile_home>	<wbm_home>profiles\Custom01</wbm_home>			
W	BM custom profile 02 (Machine	3)		
<wbm_home></wbm_home>	C:\IBM\WebSphere\MonServer			
<custom02_profile_home></custom02_profile_home>	<wbm_home>\profiles\Custom02</wbm_home>			
W	BM custom profile 03 (Machine	4)		
<wbm_home></wbm_home>	C:\IBM\WebSphere\MonServer			
<custom03_profile_home></custom03_profile_home>	<wbm_home>\profiles\Custom03</wbm_home>			
W	BM custom profile 04 (Machine	5)		
<wbm_home></wbm_home>	C:\IBM\WebSphere\MonServer			
<custom04_profile_home></custom04_profile_home>	<wbm_home>\profiles\Custom04</wbm_home>			

Windows users' note: When directory locations are passed as parameters to a Java[™] program such as EJBdeploy or wsadmin, it is necessary to replace the backslashes with forward slashes to follow the Java convention.

The following are the installation files you need to complete the exercise:

Product	File Name
WebSphere Business Monitor V7.0	Monitor_V7.0_Windows_32.zip

Introduction

IBM WebSphere Business Monitor is a comprehensive business activity monitoring software that provides an up-to-date view of your business performance and provides predictions so that you can take action before problems occur. Personalized business dashboards process business events and data, and calculate key performance indicators (KPIs) and metrics. WebSphere Business Monitor can collect events and data from a wide variety of sources including WebSphere Process Server and IBM FileNet[®] P8 BPM. In addition, you can use WebSphere Adapters to collect events from additional sources.

In this exercise, you will install and configure WebSphere Business Monitor in a remote messaging, remote support, and Web deployment environment pattern. The remote messaging, remote support, and Web deployment environment pattern is a pre-defined four-cluster topology pattern in which the monitor components and resources are allocated accordingly to the cluster that handles the highest loads. This topology is the most flexible and versatile, and is proffered by most users. The components are divided between the four clusters.

In this exercise, the remote messaging, remote support, and Web deployment environment pattern has two member servers assigned to each of the clusters which are spread across four nodes as shown in the diagram below:



The topology mapping table below, gives you an opportunity to foresee the naming pattern and helps assigning the member servers to a cluster. On generating the deployment environment, the clusters and their member servers are named by appending to the Deployment Environment name and the node name. Remember the cluster and their member server names can get lengthy if the Deployment Environment and the node names are long.

The table below shows the naming pattern used in the exercise and the deployment environment is named; wbm:

Clusters	Nodes	Member Servers	Host Name
when AppTarget	Custom01Node01	wbm .AppTarget.Custom01Node01.0	custom01.austin.ibm.com
wom.Applaiget	Custom02Node02	wbm .AppTarget.Custom02Node02.0	custom02.austin.ibm.com
when Magaaging	Custom02Node02	wbm.Messaging.Custom02Node02.0	custom02.austin.ibm.com
wom.Messaging	Custom03Node03	wbm.Messaging.Custom03Node03.0	custom03.austin.ibm.com
when Current	Custom03Node03	wbm.Support.Custom03Node03.0	custom03.austin.ibm.com
wom.support	Custom04Node04	wbm.Support.Custom04Node04.0	custom04.austin.ibm.com
ubm Hohann	Custom04Node04	wbm.WebApp.Custom04Node04.0	custom04.austin.ibm.com
data webapp	Custom01Node01	wbm.WebApp.Custom01Node01.0	custom01.austin.ibm.com

Clusters \rightarrow Nodes \rightarrow Member Servers mapping (Topology) table:

Node \rightarrow Server assignment table:

Nodes	Application Deployment Target	Messaging Infrastructure	Support Infrastructure	Web Infrastructure
Custom01Node01	1	0	0	1
Custom02Node02	1	1	0	0
Custom03Node03	0	1	1	0
Custom04Node04	0	0	1	1

Use the tables below to plan the naming pattern and the member servers for you environment:

Clusters \rightarrow Nodes \rightarrow Member Servers mapping (Topology) table:

Clusters	Nodes	Member Servers	Host Name

Node \rightarrow Server assignment table:

Nodes	Application Deployment Target	Messaging Infrastructure	Support Infrastructure	Web Infrastructure

Part 1: Preparing for the WebSphere Business Monitor installation image

In this part of the exercise, the WebSphere Business Monitor V7.0 DVD image is obtained and extracted -- creating the correct on-disk structure for the installation image.

1. The following is the installation file needed to install the WebSphere Business Monitor V7.0 binaries:

Product	File Name
WebSphere Business Monitor V7.0	Monitor_V7.0_Windows_32.zip

- 2. Obtain the WebSphere Business Monitor DVD image and extract in such a way to create the correct on-disk structure for the installation image
- 3. Extract the archive to a directory (for example C:\WBM70CDImage) and confirm that the directories and files are extracted correctly; it should appear similar to the picture below:

C:\WBM70CDImag	e			
Address 🛅 C:\WBM70	CDImage		•	🔁 Go
Custom DB2 Desktop-Component IEHS M DK	iaunchpad LICENSES repository responsefiles scripts WAS	WAS_SYNC autorun.inf launchpad.exe launchpad.ini launchpad.sh		

Part 2: Installing WebSphere Business Monitor V7.0 binaries

In this part of the exercise, you will install the WebSphere Business Monitor V7.0 binaries using the Installation Manager on an existing WebSphere Application Server – ND package group.

You will use the WebSphere Business Monitor V7.0 Common Launchpad to silently install WebSphere Application Server V7.0.0.7 and then launch the Installation Manager from the Common Launchpad to install the WebSphere Business Monitor V7.0 binaries on the WebSphere Application Server - ND package group.

If you are installing WebSphere Business Monitor V7.0 for the first time on this machine, you have the opportunity to update it with the latest available refresh pack, fixes and extensions at the same time when you install WebSphere Business Monitor V7.0.

Pre-requisite: Before going to the next step, ensure you have enough disk space to install WebSphere Application Server V7.0.0.7 and then the WebSphere Business Monitor binaries.

Complete the instructions below to install the WebSphere Business Monitor V7.0 binaries:

1. Navigate to the directory where the correct on-disk structure for the installation image was created

🗁 C:\WBM70CDImag	e		_ 🗆 ×
Address 🛅 C:\WBM70	CDImage		💌 🄁 Go
Custom DB2 Desktop-Component IEH5 DIM DK	iaunchpad LICENSES repository responsefiles scripts WAS	WAS_SYNC autorun.inf launchpad.exe launchpad.ini launchpad.sh	

2. Double-click **launchpad.exe** to launch the WebSphere Business Monitor Common Launchpad

👜 IBM WebSphere Business Monitor	¥7.0 Launchpad
IBM WebSphere Busin	ness Monitor V7.0
Launchpad	
WebSphere Business Monitor	IBM WebSphere Business Monitor
New installation	IBM® WebSphere® Business Monitor Version 7.0 provides the business community with the capability of monitoring
Installation on existing WebSphere Process Server or WebSphere Enterprise Service Bus	work flow performance, which improves work flow quality and productivity. This launchpad serves as a single point of reference for installing your monitoring environment.
Installation on existing WebSphere Application	WebSphere Business Monitor installation roadmap
Server	 To install a new WebSphere Business Monitor environment, click here.
Nonadministrative or nonroot installation	 To install WebSphere Business Monitor to an existing WebSphere Process Server or WebSphere Enterprise
WebSphere Business Monitor database scripts	 Service Bus (ESB) environment, click <u>here.</u> To install WebSphere Business Monitor to an existing
Migration information	To install WebSphere Business Monitor when the user
Additional software installation	does not have administrative or root privileges, click <u>here.</u>
Exit	Installation-related information
	 The latest critical fixes and information about this release Hardware and software requirements HebSphere Business Monitor Web site WebSphere Business Monitor information center WebSphere Application Server information center IBM AlphaBlox information center
	© Copyright IBM Corporation 2000, 2009. All Rights Reserved.
IBM.	

3. On the left navigation pane of the WebSphere Business Monitor Common Launchpad, click the WebSphere Business Monitor \rightarrow New Installation link

IBM WebSphere Business Monito BM WebSphere Busin aunchpad	ness Monitor V7.0 Select a language: English
WebSphere Business Monitor	New installation
 New installation Installation on existing WebSphere Process Server or WebSphere Enterprise Service Bus Installation on existing WebSphere Application Server Nonadministrative or nonroot installation 	Follow these steps to install a new WebSphere Business Monitor environment. 1. Install WebSphere Application Server Network Deployment: a. Specify the installation location: C:\IBM\WebSphere\MonServer b. Install WebSphere Application Server IBM Installation Manager will be installed or updated if needed. Then WebSphere Application Server Network Deployment is automatically imported into Installation Manager.
WebSphere Business Monitor database scripts Migration information Additional software installation Exit	 Install WebSphere Business Monitor When you install WebSphere Business Monitor, the required Feature Pack for XML is automatically selected for installation. After you have installed WebSphere Business Monitor, you must create a profile and configure the components. See the information center for detailed information about your next steps.
M.	

4. Specify the **Installation Location** for WebSphere Application Server Network Deployment in the text field

____a. Specify the Installation Location : Ex: C:\IBM\WebSphere\MonServer

Note: Ensure the specified WebSphere Application Server installation location does not exist. If so, you should see the warning dialog shown below, when you click the 'Install WebSphere Application Server' link.



M WebSphere Busin Nunchpad	ness Monitor V7.0 Select a language: English
WebSphere Business Monitor	New installation
 New installation Installation on existing WebSphere Process Server or WebSphere Enterprise Service Bus Installation on existing WebSphere Application Server Nonadministrative or nonroot installation WebSphere Business Monitor database scripts Migration information Additional software 	 Follow these steps to install a new WebSphere Business Monitor environment. Install WebSphere Application Server Network Deployment: a. Specify the installation location: C:\IBM\WebSphere\MonServer b. Install WebSphere Application Server IBM Installation Manager will be installed or updated if needed. Then WebSphere Application Server Network Deployment is automatically imported into Installation Manager. 2. Install WebSphere Business Monitor When you install WebSphere Business Monitor, the required Feature Pack for XML is automatically colorated for installation
installation Exit	After you have installed WebSphere Business Monitor, you must create a profile and configure the components. See the information center for detailed information about your next steps.

- ____5. Now, click the Install WebSphere Application Server link. This action silently installs IBM Installation Manager V1.3.3 to a default location, WebSphere Application Server V7.0.0.7 to the specified location and then imports the WebSphere Application Server repository to the Installation Manager.
- 6. A warning dialog pops-up, requesting to close the IBM Installation Manager if it is already installed and running at this time. Close the Installation Manager if it is already installed and running

IBM Web9	5phere Business Monitor ¥7.0 Launchpad 🛛 🛛 🔀
⚠	If IBM Installation Manager is already installed and is running, close it before you continue.
	ок

7. Click or. The WebSphere Application Server V7.0.0.7 installation progresses

(======================================	1
Installing WebSphere Application Server (this will take some time and the progress bar will not advance))

8. Once the installation is complete, you should see a pop-up stating that the WebSphere Application Server installation is successful and imported into Installation Manager



9. Click or

Note: Navigate to the WebSphere Application Server installation home logs directory, <WBM_HOME>\logs\install to verify the installation status. Open the log.txt file and scroll to the end of the file. You should see the status reported as INSTCONFSUCCESS

Note: The Installation Manager is installed to a default location. For Example on Windows, it is installed at C:\Program Files\IBM\BPMShared

_ 10. Back to the WebSphere Business Monitor Common Launchpad, click the Install WebSphere Business Monitor link

IBM WebSphere Business Monito IBM WebSphere Busin Launchpad	ness Monitor V7.0 Select a language: English
Launcnpad WebSphere Business Monitor New installation Installation on existing WebSphere Process Server or WebSphere Enterprise Service Bus Installation on existing WebSphere Application Server Nonadministrative or Nonadministrative or Nonroot installation WebSphere Business Monitor database scripts Migration information Additional software installation Exit	 New installation Follow these steps to install a new WebSphere Business Monitor environment. Install WebSphere Application Server Network Deployment: a. Specify the installation location: C:\\BM\WebSphere\MonServer b. Install WebSphere Application Server IBM Installation Manager will be installed or updated if needed. Then WebSphere Application Server Network Deployment is automatically imported into Installation Manager. Men you install WebSphere Business Monitor When you install WebSphere Business Monitor, the required Feature Pack for XML is automatically selected for installation. After you have installed WebSphere Business Monitor, you must create a profile and configure the components. See the information center for detailed information about your next steps.
IBM.	

11. The Installation Manager is launched as shown in the picture below. You should see a list of the packages shown below:

```
1) IBM WebSphere Business Monitor → Version 7.0.0.0
```

2) IBM WebSphere Application Server V7 Feature Pack for XML \rightarrow Version 1.0.0.0

Note: If you do not select any features in this panel, Business Space and WebSphere Business Monitor license files are installed on the WebSphere Application Server package group.

Select the packages to install.			
Toctallation Packages	Status	Vendor	
	Jocacus	venuor	
✓ ↓ Mine webpite ee business Monicon		IBM	
E- IBM WebSphere Application Server V7 Feature Pack for X	ML	IBM	
I Show all versions	Check	for Other '	Versions and Extension
Details			
IBM® WebSphere® Business Monitor 7.0.0.0			
If you do not select any features, Business Space and the WebSpher	e Business Monit	or license f	iles are installed.
More info			
 Repository: C:\WBM70CDImage\repository 			

Note: If you do **not** want to update with the latest available refresh pack, fixes and extensions, do not click the **Check for Other Versions and Extensions** button. Select the required packages and click **Next**

12. Click Check for Other Versions and Extensions button to search for the available refresh packs, fixes and extensions. This action gives an opportunity to update the packages with the latest refresh packs, fixes and extensions at the same time when you install WebSphere Business Monitor V7.0

Note: At the time of writing this document, there is no refresh pack available for monitor. However the XML feature pack Version 1.0.0.1 Fix Pack is available. Ensure your machine is connected to the network accessible to the WebSphere Business Monitor live repository Web site.

13. Once the search is complete, you should see an information dialog similar to the one shown in the picture below, displaying the number of other versions found



14. Click ox. You should see the Install Packages panel updated with the latest available packages, for example WebSphere Application Server V7 XML Feature Pack Version 1.0.0.1 **Note:** The Installation Manager only lists and selects recommended versions of the packages available at the time of search. If you want to install an older version, select the **Show all versions** check box. You should see all the available versions as shown below:

Installation Packages	Status	Vendor	License Key Type	
🖃 🗹 🧊 IBM® WebSphere® Business Monitor				
🖂 🔽 🖓 Version 7.0.0.0		IBM		
🖹 🖃 🚺 IBM WebSphere Application Server V7 Feature Pack for XML				
		IBM		
🗹 🕠 Version 1.0.0.1		IBM		
Show all versions	Check	for Other '	Versions and Extensio	ns

In this exercise, you will install WebSphere Business Monitor V7.0 with WebSphere Application Server V7 Feature Pack for XML Version 1.0.0.1 selected.

- _____15. In the select packages panel, select the packages with the appropriate versions you like to install
 - 1) Select IBM WebSphere Business Monitor → Version 7.0.0.0
 - 2) Select IBM WebSphere Application Server V7 Feature Pack for XML → Version 1.0.0.1

Install Packages			
Select the packages to install.			7
Installation Packages	Status	Vendor	License Key Type
□ IBM® WebSphere® Business Monitor		IBM	
□ IBM WebSphere Application Server V7 Feature Pack for XML		IBM	
Show all versions	Check	for Other V	ersions and Extensions
Details			
IBM® WebSphere® Business Monitor 7.0.0.0			
If you do not select any features, Business Space and the WebSphere Bu	siness Monit	or license f	files are installed.
More info	_		
 Repository: http://public.dhe.ibm.com/software/websphere/repositori 	es/		
< Back	Nevt N	Ĭr	Cancel
< Dauk	Next >	Ц	Cancer

Note: If you do not select any features in this panel, Business Space and WebSphere Business Monitor license files are installed on the WebSphere Application Server package group.

____ 16. Click **Next**

- 17. In the next panel, read the license agreements. If you agree to the terms, select the radio button next to Iaccept the terms in the license agreements and Click Next
- 18. In the next panel, select the radio button for Use the existing package group and then select IBM WebSphere Application Server ND as the Package Group Name

m Installation Manager	
Install Packages A package group is a location that contains one or more packages. Extens package group only and will share a common user interface. Select an exis	ions can be installed into a common sting package group for the extensions.
Install Licenses Location Features	Summary
☑ Use the existing package group	
O Create a new package group	
Package Group Name	Installation Directory
IBM WebSphere Application Server - ND_20091114_1110	C:\IBM\WebSphere\MonServer
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation <u>D</u> irectory: C:\IBM\WebSphere\MonServer	14_1110 Browse
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation Directory: C:\IBM\WebSphere\MonServer Details	I4_1110 Browse Disk Space Information
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation Directory: C:\IBM\WebSphere\MonServer Details • Shared Resources Directory: C:\Program Files\IBM\BPMShared	14_1110 Browse Disk Space Information Volume Available Space
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation Directory: C:\IBM\WebSphere\MonServer Details • Shared Resources Directory: C:\Program Files\IBM\BPMShared • Eclipse IDE: C:\IBM\WebSphere\MonServer	14_1110 Browse Disk Space Information Volume Available Space C: 15.56 GB
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation Directory: C:\IBM\WebSphere\MonServer Details • Shared Resources Directory: C:\Program Files\IBM\BPMShared • Eclipse IDE: C:\IBM\WebSphere\MonServer Installed Packages	14_1110 Browse,,, Disk Space Information Volume Available Space C: 15.56 GB
Package Group Name: IBM WebSphere Application Server - ND_2009111 Installation Directory: C:\IBM\WebSphere\MonServer Details • Shared Resources Directory: C:\Program Files\IBM\BPMShared • Eclipse IDE: C:\IBM\WebSphere\MonServer Installed Packages • IBM WebSphere Application Server - ND 7.0.0.7	14_1110 Browse Disk Space Information Volume Available Space C: 15.56 GB

____ 19. Click **Next**

- 20. In the next panel, click the **Expand All** button to see all the features. Accept the defaults but ensure the features listed below are selected. Do not select any stand-alone profile options.
 - IBM WebSphere Business Monitor Server 7.0.0.0 → WebSphere Business Monitor Server
 - a) Alphablox
 - 2) IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.1

BM Installation Manager					_ 🗆 🗵
Install Packages	;				
Select the features to inst	all.				1-
Install Licens	es 🔪 Locati	on Fea	atures Sun	nmary	
Features					
📮 🔽 🚺 IBM® WebSph	iere® Business Mo	nitor 7.0.0.0			
🚊 🐨 🔽 🏠 WebSpher	e Business Monitor	r Server			
Stand-	alone developmen	it WebSphere Moi	nitor profile (qmwa	s)	
Stand-	alone developmen	it WebSphere Moi	nitor on WebSpher	e Process Server pro	ofile (qmwps)
Stand-	alone developmen	it WebSphere Moi	nitor on WebSpher	e Enterprise Service	Bus profile (qmesb)
Alphablox					
🛛 🛄 🚺 IBM WebSpher	e Application Serv	er V7 Feature Pa	ck for XML 1.0.0.1		
Show dependencies			Exp	and All Collapse A	II Restore Default
🍲- Selected by Installatio	n Manager becaus	se of dependencie	es		
Details					
	M	2000			
IDM® websphere® bu	siness Monicor	7.0.0.0			
IF you do not select any re	atures, Business 2	pace and the we	opphere Business	Monitor license files (are installed.
Disk Space Information	n				
	Volume	Required	Temporary	Total	Available
Shared Resources Area	C:	0.0 KB	514.78 MB	514.78 MB	20.57 GB
Installation Directory	C:	650.73 MB		650.73 MB	20.57 GB
/			< Back N	ext > Insta	Cancel

_____ 21. Click **Next**

_____ 22. In the next panel, verify the WebSphere Business Monitor installation summary

Install Packages				-5
Review the summary informat	ion. Click Back to make changes	or click Install.		1
Install Licenses	Location Featur	res Su	ummary	
Target Location				
Package Group Name:	IBM WebSphere Application Ser	ver - ND_20100;	212_1439	
Installation Directory:	C:\IBM\WebSphere\MonServer			
Shared Resources Directory:	C:\Program Files\IBM\BPMShare	ed		
Packages				
Packages				
IBM® WebSphere® IBM® WebSphere Busir IbM® Alphablox IBM WebSphere Apple	Business Monitor 7.0.0.0 less Monitor Server ication Server V7 Feature Pack f	or XML 1.0.0.1		
Environment		Dis	sk Space Information	
English		с	Total Available Space 20.57 GE	e }
		Tot Tot	tal Download Size: 514.78 tal Installation Size: 1.14 G	3 MB ;B
Repository Information	1			

_____23. Click Install to continue with the installation. The WebSphere Business Monitor V7.0 installation progresses

Installing.: Retrieving files. 39 MB of 363 MB (11%) completed.	Davida Davida ad	Canaal	I
	Pause Download	Cancer	L

IBM Installation Manager
Install Packages
The packages are installed. <u>View Log File</u>
The next step is to use the manageProfiles command or the Profile Management Tool to augment existing profiles or create a new profile to enable the functionality provided by the feature pack. See the Information Center articles on creating, deleting, and augmenting profiles. Additionally, Network Deployment customers should read the profile rules and limitations topic.
The following packages were installed into package group IBM Which package do you want to start? WebSphere Application Server - ND_20100212_1439:
 IBM® WebSphere® Business Monitor WebSphere Business Monitor Server Alphablox IBM WebSphere Application Server V7 Feature Pack for
Note: If the packages support rollback, the temporary directory contains rollback files for installed packages. You can delete the
files on the <u>Files for rollback</u> preference page.

_ 24. Select the radio button for **Profile Management Tool** and click **Finish** when the installation is complete

Note: Optionally select the radio button for **None** to quit the Installation Manager. You can launch the WebSphere Business Monitor **Profile Management Tool** at a later time.

Alternative: Silently install WebSphere Business Monitor V7.0 binaries

In this part of the exercise, you will install WebSphere Business Monitor binaries in a silent mode using a readily available script supported by a response file. If you are installing WebSphere Business Monitor for the first time, the features are updated with the latest available recommended refresh packs, fixes and extensions at the same time when you install WebSphere Business Monitor V7.0 provided the correct live repository locations is/are defined.

WebSphere Business Monitor core files can be installed in a silent mode which can be helpful in the event of the graphical user interface not available due to operating system restrictions. To achieve this, you modify the readily available WebSphere Business Monitor installation script template (run_template.bat) and the response file template (template_response.xml) to suit your installation needs.

What the **run_template.bat** script template does?

- Sets the parameters mentioned below:
 - Sets the path to the WebSphere Application Server Network Deployment installation image (WAS)
 - Sets the path of the WebSphere Application Server Network Deployment installation location (WAS_LOCATION)
 - Sets the path to the Installation Manager Installation image (IM)
- Silently installs the WebSphere Application Server Network Deployment core file to the specified location
- Finally runs the Installation Manager executable file with template_response.xml response file as input

What the Installation Manager template_response.xml response file template does?

- Installs or updates the Installation Manager
- Synchronizes the WebSphere Application Server installation with the Installation Manager and creates a package group with the name; IBM WebSphere Application Server ND
- Installs the WebSphere Application Server V7 Feature Pack for XML using the Installation Manager
- Installs IBM WebSphere Business Monitor and features using the Installation Manager

Note: Visit Part 1: Preparing for the WebSphere Business Monitor installation image to extract and create the correct on-disk structure for the WebSphere Business Monitor V7.0 installation image.

Complete the instructions below to install WebSphere Business Monitor in a silent mode:

- ____1. Create an on-disk WebSphere Business Monitor installation image
- 2. Navigate through the **responsefiles**\WBM directories (Ex: C:\WBM70CDImage\ **responsefiles**\WBM). You should see two files, a script and a response file as shown below:

🗁 C:\WE	3M70CDImage\responsefiles\WBM	_ 🗆 🗵
A <u>d</u> dress	🛅 C:\WBM70CDImage\responsefiles\WBM	💌 🄁 Go
💿 run_te 🔮 templa	mplate.bat ite_response.xml	

3. Make a copy of the run_template.bat and template_response.xml files and name them, for example silent_run_template.bat and silent_template_response.xml

🗁 C:\W	8M70CDImage\responsefiles\WBM	_ 🗆 ×			
Address	🛅 C:\WBM70CDImage\responsefiles\WBM 📃 💌	🔁 Go			
💿 run_te	emplate.bat				
🔮 templa	👚 template_response.xml				
📄 silent_	_template_response.xml				
👅 silent_	run_template.bat				

Note: Ensure both the files exist in the \repositories\WBM directory of the installation image. Running the files from this location helps with using the relative paths set for the installation image, repository locations and so on in these files.

____4. Modify the **silent_run_template.bat** script to suit your installation needs

Note: In this exercise, you will modify the value for the **WAS_LOCATION** variable and then the name of the response file if you named it different from the original file name.

____ a. Edit the silent_run_template.bat file using a text editor

____b. Under the **PARAMETRS** section, modify the value for the **WAS_LOCATION** variable

Ex:set WAS_LOCATION = C:\IBM\WebSphere\MonServer

REM ###### PARAMETERS #######

set WAS IMAGE=.....WAS
set WAS_LOCATION=C:\IBM\WebSphere\MonServer
set IM_IMAGE=...\...\IM
set KEYRING=

Note: You need **not** modify the **WAS_IMAGE** and **IM_IMAGE** values unless this script template is moved to a different location or the installation image is created than the usual.

____ c. The next section of the script template, silently installs WebSphere Application Server Network Deployment to a specified installation location. You need not make any modifications to this section. Accept the defaults

```
"%WAS_IMAGE%\install" -silent -OPT silentInstallLicenseAcceptance=true -OPT
allowNonRootSilentInstall=true -OPT disableOSPrereqChecking=true -OPT
disableNonBlockingPrereqChecking=true -OPT installType=installNew -OPT
profileType=none -OPT feature=samplesSelected -OPT feature=languagepack.console.all
-OPT feature=languagepack.server.all -OPT installLocation="%WAS_LOCATION%"
```


REM Install WebSphere Application Server Network Deployment using a silent installation. REM

Note: Comment the WebSphere Application Server Network Deployment installation command, if it is already installed.

_____d. The final section of the script runs the response file template and logs the trace to a file in XML format. Modify the name of the response file if you named it different from the original. In this exercise, the file is renamed to silent_template_response.xml

echo "%IM_IMAGE%\installc" --launcher.ini "%IM_IMAGE%\silent-install.ini" -input "%PROGDIR%\silent_template_response.xml" -"%IM_IMAGE%\installc" --launcher.ini "%IM_IMAGE%\silent-install.ini" -input "%PROGDIR%\<mark>silent_template_response.xml</mark>" -log " "WYTATA

```
echo "%IM_IMAGE%\installc" --launcher.ini "%IM_IMAGE%\silent-install.ini" -input
"%PROGDIR%\silent_template_response.xml" -log
"%WAS_LOCATION%\logs\wbm\silent_install.log"
```

```
"%IM_IMAGE%\installc" --launcher.ini "%IM_IMAGE%\silent-install.ini" -input
"%PROGDIR%\silent_template_response.xml" -log
"%WAS_LOCATION%\logs\wbm\silent_install.log"
```

____e. Save and close the silent_run_template.bat script

- 5. Now, modify the silent_template_response.xml file to suit your installation needs. The response file defines a set of sequential activities called nodes which run specific tasks defined in that node
 - _____a. Node 1: <server></server> → the server node defines all the local and (or) live repository locations. You need not make any modifications to the **location** of the repositories, unless the response file and the script template are moved and run from a different location

```
All repositories are listed here.
A repository can be either a local location or a live repository.
If you have a local repository, replace the appropriate value below.
You do not need to remove the repository from this section if you decide not to install
that product
<server>
   <repository location="http://public.dhe.ibm.com/software/websphere/repositories/" />
</server>
```

Note: If you do not want the Installation Manager to update WebSphere Business Monitor and features to the latest available refresh packs, fixes and extensions at same time when you install WebSphere Business Monitor V7.0 binaries, remove the **repository** element (marked with an arrow in the picture shown above) with a live repository location defined.

_____b. Node 2: <profile></profile> → the profile node defines where the Installation Manager is installed. Note that the installLocation and the value for the eclipseLocation must be same. In this exercise you will set both the values to C:/IBM/IM/eclipse

</profile>

Note: The Installation Manager expects only one eclipse cache location. Modify the eclipse cache location to suit your needs, only if this is a new Installation Manager installation. In this exercise, the eclipse cache location is set to C:/IBM/IM/eclipseCache

_____ c. Node 3: <install></install> → the install node directs the Installation Manager installer to install the Installation Manager if not already installed. This node is ignored/skipped if the Installation Manager is already installed on this machine. In either case, you need not make any modifications to this node

______d. Node 4: <profile></profile> → the profile node defines where the WebSphere Application Server Network Deployment is installed. Specify the correct location where the WebSphere Application Server is installed. Note that the installLocation and the value for the eclipseLocation must be same. In this exercise the WebSphere Application Server is installed at C:\IBM\WebSphere\MonServer

This profile node defines where IBM WebSphere Application Server Network Deployment is installed

Modify the installLocation and eclipseLocation values to the proper to specify the correct direct

```
If the specified profile ID exists, you must also change the profile ID.
```

Note: The default profile ID (or Package Group name) for a WebSphere Application Server installation is IBM WebSphere Application Server – ND. If you are installing WebSphere Business Monitor on an existing

WebSphere Application Server which is already synchronized to the Installation Manager, meaning it already has a profile ID, provide the correct profile ID of that installation.

____ e. Node 4: <import></import> → the import node directs the Installation Manager to import the WebSphere Application Server Network Deployment installation location into the Installation Manager and creates a package group named after the profile ID you specified, which is IBM WebSphere Application Server - ND

- __ f. Node 5: <install></install> → the install node directs the Installation Manager to install the defined offerings under the specified profile group also called as the package group. There are two offerings defined. Accept the defaults
 - 1) com.ibm.websphere.XML.v10 offering installs the XML feature pack
 - 2) com.ibm.ws.WBM offering installs the Monitor feature including Alphablox

This installation node directs the IM installer to install IM-based offering.

The ID must match a valid offering ID of a repository that is specified in the first section of thi: The features value is optional. If it is ommitted, the default feature set is installed

Note: If the live repository location is defined for the mentioned offerings, the Installation Manager installs and updates the offerings with the latest available recommended refresh packs, fixes, and so on.

____g. Save and close the response file

- 6. Complete the instructions below to run the installation:
 - 1) Open a command window and change directories to C:\WBM70CDImage\responsefiles\WBM and run the command as shown below:
 - Type silent_run_template.bat and press the Enter key

📾 C:\WINDOWS\system32\cmd.exe	
C:\WBM70CDImage\responsefiles\WBM>silent_run_template.bat_	

- ____b. The WebSphere Business Monitor V7.0 installation progresses and in the sequence mentioned below:
 - Installs WebSphere Application Server V7.0.0.7

- Installs Installation Manager V1.3.3 or a recommended latest available version
- Imports the WebSphere Application Server V7.0.0.7 installation location to the Installation Manager repository and creates a package group (profile ID) named IBM WebSphere Application Server - ND
- Installs the XML feature pack, WebSphere Business Monitor including the Alphablox feature to the package group named IBM WebSphere Application Server –ND and updates with the available refresh packs, fixes and extensions if the live repository reference is made available



- 7. Verify the WebSphere Application Server installation
 - _____a. Navigate to the logs directory, <WBM_HOME>\logs\install to verify the installation status. Open the log.txt file and scroll to the end of the file. You should see the status reported as INSTCONFSUCCESS at the end of the file
 - 8. Verify the XML feature pack installation
 - _____a. Navigate to the logs directory, <WBM_HOME>\logs\xml to verify the installation status. From the install directory, open the installconfig.log file. You should see the status reported as INSTCONFSUCCESS at the end of the file

🚞 C:\IBI		
Address	🔁 C:\IBM\WebSphere\MonServer\logs\xml 📃 🗾	🔁 Go
🚞 install 🚞 update	».FP1001	

Note: If the live repository location is defined, the installation Manager updates the offering with the available fix packs, fixes and so on. In this case, you see an update directory with the version appended as shown in the picture above. Verify if the update is installed successfully by opening the installconfig.log file from the update.FP1001 directory.

- 9. Verify the WebSphere Business Monitor and alphablox installation
 - _____a. Navigate to the logs directory, <WBM_HOME>\logs\wbm to verify the installation status. From the install directory, open the installconfig_wbm.log and installconfig_abx.log file. You should see the status reported as INSTCONFSUCCESS at the end of the files

10. Run the Version Information command. Open a command window, change directories to <wbm_HOME>\bin and the versionInfo.bat. You should see the version information for all the offerings installed.

Part 3: Create WebSphere Business Monitor server deployment manager profile

In this part of the exercise, you will create a WebSphere Business Monitor deployment manager profile using the profile management tool (32 bit users only). If you are on a 64 bit operating system, you can use the manage profiles command.

Note: - For manual profile creation, visit: Alternative: Manually create WebSphere Business Monitor deployment manager profile.

Complete the instructions below to create a WebSphere Business Monitor V7.0 deployment manager profile:

- _____1. Launch the profile management tool
 - ____a. From the start menu, select From the start menu, select IBM WebSphere → Business Monitor 7.0 → Profile Management Tool

Note: Alternatively to launch the Profile Management Tool, navigate to <WBM_HOME>\bin\ ProfileManagement, double click pmt.bat

👸 Profile Management Tool 7.0	
ile Window Help	
😭 🚯 Profile Management Tool 🛛 🚯 Welcor	me
🕀 Welcome 🗙	
Welcome to the Profile Management T	ool
Launch Profile Management Tool	
This wizard creates run-time environments have a functional installation.	; that are referred to as <i>profiles</i> . At least one profile must exist to
An initial profile typically is created during that each contain a set of commands, con that defines a single application server en	the installation process. Use this wizard to create additional profiles figuration files, log files, deployable applications and other information vironment.
Click the <i>Launch Profile Management Tool</i> your profiles.	button or the Profile Management Tool tab above to begin managing
The online information centers provide mo typical topologies.	re information about the Profile Management tool and setting up
WebSphere Application Server - View	the online information center
WebSphere Business Monitor - View th	he online information center

2. Select the Profile Management Tool button

🏟 Profile Managem	ent Tool 7.0		
File Window Help			
📑 🔞 Profile Manag	ement Tool 💮 Welcome		
Profiles			- 8
Profile name	Environment	Profile path	Create
		Tronic part	
			Augment,
P	1		

- _____ 3. Click the Create button. The Environment selection panel is launched
- 4. In the **Environment Selection** panel, expand **WebSphere Business Monitor** and select Monitor server deployment manager

Profile Management Tool 7.0				
nvironment Selection				i a
elect a specific type of environment to create.				
invironments:				
Cell (deployment manager and a federated a	pplication server)			
Management				
Application server				
Custom profile				
Secure proxy (configuration-only)				
• WebSphere Application Server Feature Pack for 3	ML Version 1.0			
- WebSphere Business Monitor				
Monitor server deployment manager				
Monitor server custom profile				
Description				
Description				
A WebSphere Business Monitor deployment manage	r administers appli	ication servers t	hat are federated	l into, or
made a part of, the deployment manager cell.				
		-		

____ 5. Click Next

6. In the next **Profile Creation Options** panel, select the radio button for **Advanced** profile creation



- ___7. Click Next
- __ 8. In the next Optional Application Deployment panel, select the application to deploy to the WebSphere Business Monitor environment being created:

_____ a. Deploy the administrative console (recommended)

🚯 Profile Management Tool 7.0				_ 🗆 🗵
Optional Application Deployment				i g
Select the applications to deploy to the WebSphere Busin	ness Monitor env	vironment being a	reated.	
Deploy the administrative console (recommended).				
Install a Web-based administrative console that man is recommended, but if you deselect this option, the the profile exists.	ages the applica information cent	tion server. Dep ter contains deta	loying the administ iled steps for depl	trative console oying it after
	< Back	Next >	Finish	Cancel

- ___ 9. Click Next
 - 10. In the next **Profile Name and Location** panel, specify the profile name and the profile directory path to the profile being created
 - ____a. Profile name : Dmgr01
 - ____b. Profile Directory : <WBM_HOME>\profiles\Dmgr01

Ex: C:\IBM\WebSphere\MonServer\profiles\Dmgr01

🚯 Profile Management Tool 7.0	l ×
Profile Name and Location	3
Specify a profile name and directory path to contain the files for the run-time environment, such as commands, configuration files, and log files. Click Browse to select a different directory.	
Profile name:	
Dmgr01	
Profile directory:	
C:\IBM\WebSphere\MonServer\profiles\Dmgr01	
Browse	
Important: Deleting the directory a profile is in does not completely delete the profile. Use the manageprofiles command to completely delete a profile.	_
The following naming rules must be used:	
- Names must start and end with alphabetic characters (A-Z, a-z), numbers (0-9), and underscores (_) only.	
- Names may contain alphabetic characters (A-Z, a-z), numbers (0-9), periods (.), dashes (-) and underscores (_) only.	
- Names must not contain spaces or these characters: / (* , : ; = + ? <> % ' " [] # \$ $^{()}$ ()	
< Back Next > Finish Cancel	

- ____ 11. Click Next
- 12. In the next **Node Host and Cell Names** panel, specify the node name, host name and cell name for the deployment manager profile
 - ____a. Node name :wbmCellManager01
 - ___b. Host name : Ex: dmgr.austin.ibm.com
 - ____ c. Cell Name : wbmCell01

lode, Hos	st, and Cell Names		
Specify a nod	e name, a host name, and a cell na	me for this profile.	1
wbmCellMan	ager01		
Host name:			
dmgr.austin,	.ibm.com		
C <u>e</u> ll name:			
wbmCell01			
Yode name: Host name: Cell name: The following Names must Names may	A node name is for administration A host name is the domain name s A cell name is a logical name for th naming rules must be used: start and end with alphabetic chara contain alphabetic characters (A-Z, not contain spaces or these charac	by the deployment manager. The name must be university (DNS) name (short or long) or the IP address the group of nodes administered by this deployment in acters (A-Z, a-z), numbers (0-9), and underscores (, a-z), numbers (0-9), periods (.), dashes (-) and underscores (.), the acters: $/ \langle *, : : : = +? <> [\%] "[] # $ ^{ }()$	que within the cell. of this computer. nanager. _) only. derscores (_) only.
View the onlin	nation center for prome naming and ne information center	a migration considerations.	

____ 13. Click Next

- 14. In the next **Administrative Security** panel, select the check box for **Enable administrative security** and then type the administrative username and password::
 - ___a. User name : admin
 - ___b. Password : superSecret
 - ____ c. Confirm Password : superSecret

🚯 Profile Management Tool 7.()	
Administrative Security		le la
Choose whether to enable administ administrative tools. This administra finishes, you can add more users,	rative security. To enable security, supply a user name and pa ative user is created in a repository within business monitor. Af groups, or external repositories.	issword for logging into ter profile creation
💌 Enable administrative security		
<u>U</u> ser name:		
admin		
Password:		
••••		
Confirm password:		
••••		
See the information center for mor View the online information center	e information about administrative security.	
	< Back	iish Cancel

____ 15. Click Next

_____ 16. In the next Security Certificate (Part 1) panel, accept the defaults

Profile Managem	ent Tool 7.0					_ 0
curity Certific	ate (Part 1)					
noose whether to cr eate new certificate ystores, locate the	eate a default personal cer s, proceed to Part 2 and pr certificates then proceed to	tificate and root ovide the certific o Part 2 and veril	signing cer ate inform: fy the certi	tificate, or impo ation. To impor ficate informati	ort them from k t existing certif on.	eystores. To icates from
∙ <u>C</u> reate a new de	fault personal certificate.					
🖹 Import an existin	ig default personal certificat	e.				
Default persona	al certificate					
Path:	ļ					
						Browse
Pa <u>s</u> sword:						
Keystore <u>t</u> ype;						-
Keystore alias:						
	1					
Create a new roo	ot signing certificate.					
] Import an existin	ig root signing certificate.					
r-Root sianina cer	rtificate					
Pat <u>h</u> ;						
	,					Proviso
						browse,
Pass <u>w</u> ord:						
Keystore type;						~
Keystore aljas:						_
			< Back	Next >	Finish	Cancel

_____ 17. Click **Next**

_____ 18. In the next Security Certificate (Part 2) panel, accept the defaults

	ity Certificate (Part 2)
Modify t from key selected	the certificate information to create new certificates during profile creation. If you are importing existing certific ystores, use the information to verify whether the selected certificates contain the appropriate information. If t d certificates do not, click Back to import different certificates.
<u>R</u> e	estore Defaults
Def	ault personal certificate (a personal certificate for this profile, public and private key):
	Issued to distinguished name:
	cn=dmgr.austin.ibm.com,ou=wdpeCell01,ou=wdpeCellManager01,o=IBM,c=US
	I <u>s</u> sued by distinguished name:
	cn=dmgr.austin.ibm.com.ou=Root Certificate,ou=wdpeCell01,ou=wdpeCellManager01,o=IBM,c=US
	Expiration period in years:
Roo	ot signing certificate (personal certificate for signing other certificates, public and private key):
	Expiration period in years:
	15 💌
Def	ault keystore password:
••	•••
⊆on	firm the default keystore password:
••	••••
	he default value for the keystore is well documented in the Information Center and should be changed to prote
Note: Th the secu	unity of the Reystore files and SSL configuration.

- 20. In the next **Port Values Assignment** panel, review the ports assigned. You can change them to the required values, but ensure that the port numbers do not conflict with other services running on this machine
- _____ 21. Click **Next**
- 22. In the next Widows Service Definition panel, clear the check box for Run the deployment manager process as a Windows service

Profile Management Tool 7.0 indows Service Definition		
noose whether to use a Windows service to run bu pintor, and configure startup and recovery actions	usiness monitor. Windows services can start and stop 5.	business
Run the deployment manager process as a Wind	lows service.	
Log on as a local system account.		
C Log on as a specified user account.		
∐ser name:		
Administrator		
<u>P</u> assword;		
Startup type;		
Automatic		
The user account that runs the Windows service	e must have the following user rights:	
- Log on as a service		
	< Back Next > Finish	Capcel

- _____ 23. Click **Next**
- _____ 24. In the next **Database Configuration** panel, specify the parameters for the monitor database type:
 - ____ a. Database product: DB2 Universal Database
 - ____b. Common Database name : MONITOR
 - ____ c. Schema name : MONITOR
 - ____d. Select the check box for Delay execution of database scripts (must select if using a remote database)

🚯 Profile Management Tool 7.0				
Database Configuration				E
WebSphere Business Monitor components use a common based on that product. Database product:	database. Cho	ose a database p	roduct and enter	the information
DB2 Universal Database				•
Override the destination directory for generated scri	pts			
Database script output directory;				
C:\IBM\WebSphere\MonServer\profiles\Dmgr01\db	scripts\Monitor			
				Browse,,,
Common database name:				
MONITOR				
Schema name:				
MONITOR				
Delay execution of database scripts (must select if us	sing a remote da	atabase).		
	< Back	Next >	Einish	Cancel

____ 25. Click Next

- ____ 26. In the next **Database Configuration (Part 2)** panel, specify the additional monitor database configuration information:
 - ____a. User name: db2admin
 - ___b. Password: superSecret
 - ____ c. Confirm password: superSecret
 - ____ d. Location (directory) of JDBC driver classpath files: <WBM_HOME>\universalDriver.wbm/lib
 - ____e. JDBC driver type: 4
 - ___f. Database server host name: Ex: dbserver.austin.ibm.com
 - ____ g. Server Port: 50000 (default)
| 🏟 Profile Management Tool 7.0 | | | | |
|---|--|---|---|------------------------|
| Database Configuration (Part 2) | | | | |
| Additional information about the database server you are
Universal Database database. For database authenticati
used to connect to the database. The database user mu | e using is require
on, you must ty
st have read an | ed to complete co
pe the user nam
d write access or | onfiguration for the and password the the database. | he DB2
:hat will be |
| User name: | | | | |
| db2admin | | | | |
| Password: | | | | |
| ••••• | | | | |
| Confirm password: | | | | |
| ••••• | | | | |
| Location (directory) of JDBC driver classpath files: | | | | |
| C:\IBM\WebSphere\MonServer/universalDriver.wbm/lib | | | | |
| | | | | Browse |
| JDBC driver type: | | | | |
| <u>C 2</u> | | | | |
| • 4 | | | | |
| Type 2: Type 2 drivers require that you have a local inst
commonly used if your database is created locally. | allation of the c | latabase product | . Type 2 drivers | are |
| Type 4: Type 4 drivers use Java implementation to common require a database product on your local system. | municate with th | e actual databas | e. Type 4 drivers | s do not |
| Database server host name or IP address: | | | | |
| dbserver.austin.ibm.com | | | | |
| Database TCP/IP service port or listener port: | | | | |
| 50000 | | | | |
| | < Back | Next > | Finish | Cancel |

_____ 27. Click **Next**

28. The **Database validation failure** dialog pops-up

Database validation failure				×
The database does not exist on this syst You can create the database after the in If you plan to create the database later, Are you sure you want to proceed?	em. Istallation by runn please ignore this	ing the gener s warning.	ated database scripts or	n your database server.
	Yes	No		

- 29. Click **Yes** to proceed to the next step
- _____ 30. In the next **Profile Creation Summary** panel, verify the profile creation summary

🚯 Profile Management Tool 7.0				_ 🗆 🗵
Profile Creation Summary				i a
Review the information in the summary for correctness. I profile, Click Back to change values on the previous pane	f the information els.	n is correct, click	< Create to start o	reating a new
WebSphere Business Monitor profile type to create: M	onitor server de	ployment mana	ger	
Location: C:\IBM\WebSphere\MonServer\profiles\Dr	ngr01			
Disk space required: 10 MB				
Profile name: Dmgr01				
Make this profile the default: True				
Node name: wbmCellManager01				
Host name: dmgr.austin.ibm.com				
Federate to deployment manager: False				
Create a new database: False				
Generated database scripts location: C:\IBM\WebSp	here\MonServe	r\profiles\Dmgr(01\dbscripts\Monito	or
Database product: DB2 Universal Database				
Database name: MONITOR				
JDBC Driver Location: C:\IBM\WebSphere\MonServe	er/universalDrive	er.wbm/lib		
JDBC Driver Type: 4				
Database host name: dbserver.austin.ibm.com				
Database port number: 50000				
	< Back	Create	Finish	Cancel

____ 31. Click Create

_____ 32. Once the installation is complete, clear the check box for Launch the WebSphere Business Monitor first steps console in the **Profile Creation Complete** panel

🚯 Profile Management Tool 7.0					
Profile Creation Complete			i a		
The Profile Management Tool created the profile	successfully.				
You must create a network deployment environment to start the deployment manager so that nodes can be federated into its cell. After the deployment manager is started, you can administer the nodes 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.					
Launch the WebSphere Business Monitor first steps					
To start the Profile Management Tool later, use the PMT command in the <i>app_server_root</i> /bin/ProfileManagement directory or the option in the WebSphere Business Monitor first steps.					
See the information center for more information about WebSphere Business Monitor.					
Online information center link					
	< Back	Next > Fi	nish Cancel		

___ 33. Click Finish

Note: If you chose DB2 as the database and delayed running the database scripts, visit Task 1: Manually create WebSphere Business Monitor database and tables.

Verify the WebSphere Business Monitor administrative console menus

- _____34. Start the WebSphere Business Monitor deployment manager process, launch the administrative console and log in using the security credentials.
- 35. In the left navigation pane, click the **Welcome** link and ensure the correct WebSphere Business Monitor version is displayed

Velcome	? =
Integrated Solutions Console provio administrative console for multiple lists the product suites that can be this installation. Select a product su information.	des a common products. The table administered through iite to view more
Suite Name	Version
WebSphere Application Server	7.0.0.7

____36. In the left navigation pane, expand Servers and ensure the WebSphere Business Monitor configuration menu exists. Make sure the link works

🖻 Servers
New server
🗄 Server Types
🗄 Clusters
Deployment Environments
🛨 DataPower
🛨 Core Groups
WebSphere Business Monitor configuration

37. 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 make sure the links work



____38. In the left navigation pane, expand Security and ensure Monitor Data Security menu exists. Make sure the link works

Ξ	Se	curity
		Business Integration Security
	н.	Global security
	н.	Security domains
	н.	Administrative Authorization Groups
	н,	SSL certificate and key management
	н.	Security auditing
	н,	Bus security
	н,	JAX-WS and JAX-RPC security runtime
	н.	Monitor Data Security

_ 39. In the left navigation pane, expand Troubleshooting → Monitor Models and ensure Failed Event Sequences and Unrecoverable Events menus exist. Ensure the links work

🗆 Troubleshooting 🛛 🔫 🥌 🛶
Logs and trace
 Configuration problems
 Class loader viewer
🗄 Configuration Validation
🖯 Monitor Models 🛛 🗲 🗕
Failed Event SequencesUnrecoverable Events
🛨 Diagnostic Provider
🗄 Runtime Messages
WebSphere Business Monitor security

Alternative: Manually create WebSphere Business Monitor deployment manager profile

WebSphere Business Monitor deployment manager profile can be created manually using the **manageprofiles** command with the help of WebSphere Business Monitor deployment manager profile template. The manageprofiles command comes handy when creating profiles on 64-bit platforms.

Download: Profile creation scripts good for Windows and UNIX are available for download from the IBM Education Assistant. These scripts also use manageprofiles command. You can update the scripts with required options and then create profiles.

Note: For more options, navigate to <WBM_HOME>/bin and run the command below:

manageprofiles.bat -create -templatePath <WBM_HOME>/profileTemplates/wbmonitor/dmgr -help

Complete the instructions below to create WebSphere Business Monitor deployment manager profile using the manageprofiles command:

1. The following are the options commonly used to create a WebSphere Business Monitor deployment manager profile:

Parameter	Value		
-create	N/A		
-templatePath	<wbm_home>/profileTemplates/wbmonitor/dmgr</wbm_home>		
-profileName	Ex: Dmgr01		
-profilePath	<wbm_home>/profiles/Dmgr01</wbm_home>		
-nodeName	Ex: wbmCellManager01		
-cellName	Ex: wbmCell01		
-hostName	Ex: dmgr.austin.ibm.com		
-enableAdminSecurity	true		
-adminUserName	Ex : admin		
-adminPassword	Ex : superSecret		
-winserviceCheck	false (windows only)		
-wbmDBType	DB2_Universal for a DB2 Universal database		
	DB2UDBOS390_V8_1 for a DB2 for z/OS V8 database		
	DB2UDBOS390_V9_1 for a DB2 for z/OS V9 database		
	Oracle11g for Oracle 11g database		
-wbmDBDelayConfig	true		

-wbmDBName	Ex : MONITOR
-wbmDBSchemaName	Ex : MONITOR
-wbmDBDriverType	4
-wbmDBUserId	Ex : db2admin
-wbmDBPassword	Ex : superSecret
-wbmDBHostName	Ex : dbserver.austin.ibm.com
-wbmDBServerPort	Ex : 50000 (default)
-wbmDBJDBCClasspath	<wbm_home>\universalDriver.wbm\lib</wbm_home>

__2. Run the manageprofiles script. Navigate to the <WBM_HOME>/bin directory and run the manageprofiles script along with the options

Ex: For DB2_UNIVERSAL as database type

manageprofiles.bat -create -templatePath <WBM_HOME>\profileTemplates\wbmonitor\dmgr profileName Dmgr01 -profilePath <WBM_HOME>\profiles\Dmgr01 -nodeName wbmCellManager01 -cellName wbmCell01 -hostname dmgr.austin.ibm.com -enableAdminSecurity true adminUserName admin -adminPassword superSecret -winserviceCheck false -wbmDBType DB2_Universal -wbmDBDelayConfig true -wbmDBName MONITOR -wbmDBSchemaName MONITOR wbmDBDriverType 4 -wbmDBUserId db2admin -wbmDBPassword superSecret -wbmDBHostName dbserver.austin.ibm.com -wbmDBServerPort 50000 -wbmDBJDBCClasspath <WBM_HOME>\universalDriver.wbm\lib

Note: If you chose DB2 as the database and delayed running the database scripts, visit Task 1: Manually create WebSphere Business Monitor database and tables.

- _____ 3. Verify the installation
 - ____a. Navigate to <WBM_HOME>/logs/manageprofiles and locate the <profile_name>_create.log file

Ex: C:\IBM\WebSphere\MonServer\logs\manageprofiles\Dmgr01_create.log

- ____ b. You should see a string, INSTCONFSUCCESS written to the last line of the file. If so the installation is successful
- ____ c. If you **INSTCONFPARTIALSUCCESS** or **INSTCONFFAILED** appear in the last line of the log file, problems encountered during the installation
- 4. Run the installation verification test
 - ____a. Navigate to <WBM_HOME>/bin and run the ivt command with appropriate parameters
 - ivt.bat <SERVER_NAME> <PROFILE_NAME> -username <USER_NAME> password <PASSWORD>

Ex: ivt.bat dmgr Dmgr01 -username admin -password superSecret

5. Ensure the verification is successful. While the verification is complete, examine the SystemOut.log file. The file is located at <WBM_HOME>/profiles/Dmgr01/logs/dmgr

Part 4: Create WebSphere Business Monitor custom profiles

In this part of the exercise, you will create WebSphere Business Monitor custom profiles on all the designated machines using the Profile Management Tool (32 bit users only). A custom profile is an empty profile that gets created and eventually has to federate itself to the WebSphere Business Monitor deployment manager profile. If you are on a 64 bit operating system, you can use the manageprofiles command.

Note: - For manual profile creation, visit: Alternative: Manually create WebSphere Business Monitor custom profile

Prerequisites: -

- Before proceeding to the next step, ensure the deployment manager you want to federate this custom 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 a 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 security is enabled

Complete the instructions below to create a WebSphere Business Monitor custom profile:

- _____1. Launch the Profile Management Tool
 - ___ a. From the start menu, select IBM WebSphere → Business Monitor 7.0 → Profile Management Tool

Note: Alternatively to launch the Profile Management Tool, navigate to <wbm_HOME>\bin\ ProfileManagement, double click pmt.bat

- 2. Select the Profile Management Tool button
- 3. Click the Create button. The Environment selection panel is launched
- 4. In the Environment selection panel, expand WebSphere Business Monitor and select Monitor server custom profile

🚯 Profile Management Tool 7.0				_ 🗆 ×
Environment Selection				i
Select a specific type of environment to create.				
Environments:				
WebSphere Application Server Cell (deployment manager and a federated app Management Application server Custom profile Secure proxy (configuration-only) Secure prox (configuration-only) Secure prox (configuration-only) Secu	lication server) L Version 1.0			
A WebSphere Business Monitor custom profile contain: console or an application server. The typical use for a manager. After federating the node, use the deploym the node.	s an empty node custom profile is ent manager to	e, which does not s to federate its i create a server	t contain an admi node to a deployr or a cluster of sei	nistrative ment rvers within
	< Back	Next >	Finish	Cancel

- 5. Click Next
- 6. In the next **Profile Creation Options** panel, select the radio button for **Advanced** profile creation

🚯 Profile Management Tool 7.0				
Profile Creation Options				i a
Choose the profile creation process that meets your needs to assign a set of default configuration values to the profile configuration values for the profile.	. Select the Ty 9. Select the A	pical option to a dvanced option	llow the Profile M to specify your o	anagement Tool wn
C Typical profile creation				
Create a custom profile that uses default configurat names to the profile, node, and host. The node will Advanced profile creation	ion settings. 1 be federated	The Profile Mana to an existing de	gement Tool assig ployment managi	jns unique er.
Create a custom profile using default configuration profile and names of the profile, node, and host. Th	settings, You (le node will be	can specify the v federated to an	alues for the loca existing deploym	ation of the aent manager.
	< Back	Next >	Finish	Cancel

____7. Click Next

- ____ 8. In the next **Profile Name and Location** panel, specify the custom profile name and the location where the profile is created
 - ____a. Profile name : Custom01
 - ____b. Profile Directory : <WBM_HOME>\profiles\Custom01

Ex: C:\IBM\WebSphere\MonServer\profiles\Custom01

Profile Management Tool 7.0				
Profile Name and Location				
Specify a profile name and directory path to contain the f configuration files, and log files. Click Browse to select a	iles for the run- different direct	time environmen ory,	t, such as comma	ands,
Profile name:				
Custom01				
Profile directory:				
C:\IBM\WebSphere\MonServer\profiles\Custom01				
				Browse
Make this profile the default.				
Each installation of WebSphere Business Monitor al referring to a specific profile use the default profile	ways has one de . Select this opti	efault profile. Co on to make this	mmands that run profile the new d	ı without efault.
Important: Deleting the directory a profile is in does no command to completely delete a profile.	t completely dele	ete the profile. L	lse the manage	profiles
The following naming rules must be used:				
- Names must start and end with alphabetic characters (A	-Z, a-z), numbe	rs (0-9), and un	derscores (_) onl	у.
- Names may contain alphabetic characters (A-Z, a-z), nu	mbers (0-9), pe	riods (.), dashes	(-) and undersco	ores (_) only.
- Names must not contain spaces or these characters: / \backslash	*,;;=+? <	> %'"[]#\$	^{}()	
	< Back	Next >	Finish	Cancel

- 9. Click Next
- _____10. In the next Node and Host Names panel, specify the node name and host name for this profile

____a. Node name : Custom01Node01

____b. Host name : custom01.austin.ibm.com (fully qualified host name)

Best Practice: Keep the node name short.

Note: The topology mapping table (Visit the **Introduction** or **Part 5** sections), gives you an opportunity to foresee the naming pattern and helps assigning the member servers to a cluster. On generating the deployment environment, the clusters and their member servers are named by appending to the Deployment Environment name and the node name. Remember the clusters and their member server names can be lengthy if the node name is long.

🚯 Profile Management Tool 7.0				
Node and Host Names				i a
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 Host name: A host name is the domain name system (I The following naming rules must be used: - Names must start and end with alphabetic characters (<i>A</i> - Names may contain alphabetic characters (A-Z, a-z), no - Names must not contain spaces or these characters: / N See the information center for profile naming and migration View the online information center	the node is fed DNS) name (sho A-Z, a-z), numb umbers (0-9), p (* , : ; = + ? on consideratio	derated, the name ort or long) or the ers (0-9), and un eriods (.), dashes < > %'"[]#\$ ns.	e must be unique IP address of th derscores (_) on (-) and undersc ^ {}()	within the cell. is computer. ly. ores (_) only.
	< Back	Next >	Finish	Cancel

- ____ 11. Click Next
- _____ 12. In the next **Federation** panel, specify the node federation parameters:
 - ____a. Deployment manager host name or IP address : Ex: dmgr.austin.ibm.com (fully qualified host name of the deployment manager host machine)
 - ____b. Deployment manager SOAP port number : 8879 (default)
 - ____ c. Deployment manager authentication:
 - User name : admin
 - Password : superSecret
 - ____b. Clear the check box for Federate this node later

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

🎼 Profile Management Tool 7.0				
Federation				i a
Specify the host name or IP address and the SOAP port occur only if the deployment manager is running.	number for an ex	xisting deploym	ent manager. Fed	eration can
Deployment manager host name or IP address:				
dmgr.austin.ibm.com				
Deployment manager SOAP port number (Default 8879)	:			
8879				
User name:				
Password:				
 Federate this node later. You must federate this node later using the addNode of - is not running - has the SOAP connector disabled 	ommand if the de	ployment mana	ager:	
	< <u>B</u> ack	<u>N</u> ext >	Einish	Cancel

____ 13. Click **Next**

- 14. In the next **Port Values Assignment** panel, review the ports assigned. You can change them to the required values, but ensure that the port numbers do not conflict with other services running on this machine
- ____ 15. Click Next
 - __ 16. In the next Database Configuration panel, specify these parameters for the WebSphere Business Monitor database:
 - ____ a. Select DB2 Universal Database for the database product used by the deployment manager
 - ____b. Location (directory) of JDBC driver classpath files: <WBM_HOME>\universalDriver.wbm\lib

🚯 Profile Management Tool 7.0				
Database Configuration				a la
WebSphere Business Monitor components use a common based on that product.) database. Cho	ose a database p	roduct and enter	the information
Choose the database product used on the Deployment M	Manager:			
DB2 Universal Database				•
Location (directory) of JDBC driver classpath files:				
C:\IBM\WebSphere\MonServer/universalDriver.wbm/lib)			
				Browse
	< Back	Next >	Einish	Cancel

_____ 17. Click **Next**

_____ 18. In the next panel, verify the custom profile creation summary information

🚯 Profile Management Tool 7.0	_ 🗆 🗙
Profile Creation Summary	i a
Review the information in the summary for correctness. If the information is correct, click Create to start cre profile. Click Back to change values on the previous panels.	ating a new
WebSphere Business Monitor profile type to create: Monitor server custom profile Location: C:\IBM\WebSphere\MonServer\profiles\Custom01 Disk space required: 10 MB	
Profile name: Custom01 Make this profile the default False	
Node name: Custom01Node01 Host name: custom01.austin.ibm.com	
Federate to deployment manager: dmgr.austin.ibm.com:8879	
< Back Create Einish	Cancel

_____ 19. Click Create. The profile creation progresses

🚯 Profile Management Tool 7.0
Profile Creation Complete
The Profile Management Tool created the profile successfully.
Then, start the node agent and the deployment manager. The node agent must be started to allow the deployment manager to communicate with the federated node. Use the startNode command in the <i>profile_path</i> /bin directory to start the node agent.
Start the deployment manager so that other nodes can be federated into its cell. After the deployment manager is started, you can administer the nodes that belong to the cell. Use the administrative console of the deployment manager to create a server or cluster of servers within the node.
The WebSphere Business Monitor first steps contains links to important information and features that relate to the custom profile.
Launch the WebSphere Business Monitor first steps
To start the Profile Management Tool later, use the PMT command in the <i>app_server_root</i> /bin/ProfileManagement directory or the option in the WebSphere Business Monitor first steps.
See the information center for more information about WebSphere Business Monitor.
Online information center link
< <u>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel

- 20. Once the profile creation is complete, clear the check box for Launch the WebSphere Business Monitor First steps console and click Finish
- _____21. Similarly create the remaining custom profiles and name them as Custom02, Custom03 and Custom04 by repeating these instructions on the designated host machines. In this exercise, the nodes are named as Custom02Node02, Custom03Node03 and Custom04Node04
- 22. 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 display the correct versions (see the Version column) for WebSphere Application Server, XML Feature pack and WebSphere Business Monitor

Select	Name 🛟	Host Name 🗘	Version 🗘	Discovery Protocol 🗘	Status ሷ
You a	an administer the foll	owing resources:			
	<u>Custom01Node01</u>	custom01.austin.ibm.com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	тср	•
	Custom02Node02	custom()2 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	тср	•
	<u>Custom03Node03</u>	custom03 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	тср	↔
	Custom04Node04	custom04 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	тср	↔
	wbmCellManager01	dmgr.austin.ibm.com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	тср	↔
Total	5				

Alternative: Manually create WebSphere Business Monitor custom profile

WebSphere Business Monitor custom profile can be created manually using the manageprofiles command with the help of WebSphere Business Monitor custom profile template. The manageprofiles command comes handy when creating profiles on 64-bit platforms.

Prerequisites: -

- Before proceeding to the next step, ensure the deployment manager you want to federate this custom 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 a 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 security is enabled

Download: Profile creation scripts good for Windows and UNIX are available for download from the IBM Education Assistant. These scripts also use manageprofiles command. You can update the scripts with required options and then create profiles.

Note: For more options, navigate to <WBM_HOME>/bin and run the command below:

manageprofiles.bat -create -templatePath <WBM_HOME>/profileTemplates/wbmonitor/managed -help

Complete the instructions below to create a WebSphere Business Monitor custom profile using the manageprofiles command:

Parameter	Value
-create	N/A
-templatePath	<wbm_home>/profileTemplates/wbmonitor/managed</wbm_home>
-profileName	Custom01
-profilePath	<wbm_home>/profiles/Custom01</wbm_home>
-nodeName	Ex: Custom01Node01, Custom02Node02, Custom03Node03, Custom04Node04
-hostName	Ex: custom01.austin.ibm.com
-dmgrHost	Ex : dmgr.austin.ibm.com
-dmgrPort	8879 (default)
-dmgrAdminUserName	Ex : admin
-dmgrAdminPassword	Ex : superSecret

1. The following are the options commonly used to create a WebSphere Business Monitor custom profile:

-federateLater	false
-wbmDBType	DB2_Universal for a DB2 Universal database
	DB2UDBOS390_V8_1 for a DB2 for z/OS V8 database
	DB2UDBOS390_V9_1 for a DB2 for z/OS V9 database
	Oracle11g for Oracle 11g database
-wbmDBJDBCClasspath	<wbm_home>\universalDriver.wbm\lib</wbm_home>

2. Run the manageprofiles script

____a. Navigate to the <wbm_HOME>/bin directory and run the manageprofiles script along with the options

For DB2_UNIVERSAL as the database type:

manageprofiles.bat -create -templatePath <WBM_HOME>\profileTemplates\wbmonitor\managed
-profileName Custom01 -profilePath <WBM_HOME>\profiles\Custom01 -nodeName
Custom01Node01 -hostName custom01.austin.ibm.com -dmgrHost dmgr.austin.ibm.com dmgrPort 8879 -dmgrAdminUserName admin -dmgrAdminPassword superSecret -federateLater
false -wbmDBType DB2_Universal -wbmDBJDBCClasspath <WBM_HOME>\universalDriver.wbm\lib

_____ 3. Verify the installation

____a. Navigate to <WBM_HOME>/logs/manageprofiles and locate the <profile_name>_create.log file

Ex: C:\IBM\WebSphere\MonServer\logs\manageprofiles\Custom01_create.log

- ____ b. You should see a string, INSTCONFSUCCESS written to the last line of the file. If so the installation is successful
- ____ c. If **INSTCONFPARTIALSUCCESS** or **INSTCONFFAILED** appear in the last line of the log file, problems encountered during the installation
- 4. Similarly create the remaining custom profiles and name them as Custom02, Custom03 and Custom04 by repeating these instructions on the designated host machines. In this exercise, the nodes are named as Custom02Node02, Custom03Node03 and Custom04Node04
- 5. 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 display the correct versions (see the Version column) for WebSphere Application Server, XML Feature pack and WebSphere Business Monitor

Part 5: Generate a remote messaging, remote support, and Web pattern

In this part of the exercise, you will use the administrative console to generate a remote messaging, remote support, and Web deployment environment. The remote messaging, remote support, and Web pattern defines four clusters, which is a cluster for the application deployment (monitor models), a cluster for the messaging infrastructure, a cluster for the Common Event Infrastructure and other support applications plus a cluster for Business Space and other Web components. This pattern configures an environment that performs well for most of your business integration needs.

As you know four clusters are being created using the remote messaging, remote support, and Web deployment environment pattern option, it is a best practice to plan for the number of member servers each cluster will manage and on which managed node the member servers are created. In this exercise, you will assign two member servers for each cluster as shown below:

Note: The topology mapping table below, gives you an opportunity to foresee the naming pattern and helps assigning the member servers to a cluster. On generating the deployment environment, the cluster and their member servers are named by appending to the Deployment Environment and the node names. The cluster and their member server names can get lengthy if the Deployment Environment and node names are long.

The table below shows the naming pattern used in the exercise and the deployment environment is named; wbm:

Clusters	Nodes	Member Servers	Host Name
when AppTarget	Custom01Node01	wbm .AppTarget.Custom01Node01.0	custom01.austin.ibm.com
wbm.AppTarget	Custom02Node02	wbm .AppTarget.Custom02Node02.0	custom02.austin.ibm.com
when Moggoging	Custom02Node02	wbm.Messaging.Custom02Node02.0	custom02.austin.ibm.com
wom. Messaging	Custom03Node03	wbm.Messaging.Custom03Node03.0	custom03.austin.ibm.com
when Support	Custom03Node03	wbm.Support.Custom03Node03.0	custom03.austin.ibm.com
wom.support	Custom04Node04	wbm.Support.Custom04Node04.0	custom04.austin.ibm.com
wbm.WebApp	Custom04Node04	wbm.Web.Custom04Node04.0	custom04.austin.ibm.com
	Custom01Node01	wbm.Web.Custom01Node01.0	custom01.austin.ibm.com

Clusters > Nodes > Member Servers mapping (Topology) table:

Node \rightarrow Server assignment table:

Nodes	Application Deployment Target	Messaging Infrastructure	Support Infrastructure	Web Infrastructure
Custom01Node01	1	0	0	1
Custom02Node02	1	1	0	0
Custom03Node03	0	1	1	0
Custom04Node04	0	0	1	1

Use the tables below to plan the naming pattern and the member servers for your environment:

Clusters \rightarrow Nodes \rightarrow Member Servers mapping (Topology) table	:
--	---

Clusters	Nodes	Member Servers	Host Name

Node \rightarrow Server assignment table:

Nodes	Application Deployment Target	Messaging Infrastructure	Support Infrastructure	Web Infrastructure

Pre-requisites:

- Ensure the deployment manager process is running
- Ensure all the node agents 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 the node agents display the start status
 (

Select	Name 🛟	Node 🗘	Host Name 🗘	Version 💲	Status ሷ
You c	an administer the	e following resources	1		
	<u>nodeagent</u>	Custom01Node01	custom01.austin.ibm.com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	€
	<u>nodeagent</u>	Custom02Node02	custom02 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	€
	nodeagent	Custom03Node03	custom03 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	€
	<u>nodeagent</u>	Custom04Node04	custom04 .austin.ibm.com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	€
Total	4				

Complete the instructions below to generate the deployment environment using the administrative console:

- 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 Deployment Environments



3. In the Deployment Environments panel, click New... to launch the Deployment Environments wizard

Deployment Environments ? –								
Deployment Environments								
Select deployment environments to manage. You can manage deployment environments that are created with patterns or custom deployment environments.								
Start	Start Stop New Remove Import Export							
	••••							
Select	Status ≎	Deployment Environment Name 💠	Features ≎	Pattern ≎	Description ≎			
None								
Total ()							

- 4. In the next **Create new deployment environment** panel, provide the information below:
 - Select the radio button for Create a new deployment environment based on pattern
 - Deployment environment name : Ex: wbm
 - Select the radio button for Detailed: Show all steps

Create new deployment environment ? .					
Create a deployment environment that is based on a pattern or a custom deployment environment, or load an external deployment environment definition.					
Enter the deployment environment name and select the path to take through the wizard (Fast path or Detailed). If you choose "Fast path: Show only needed steps", the wizard displays only those pages that do not have assigned default values.					
At the end of the wizard, you can generate the deployment environment by clicking "Finish and Generate Environment", or you can click "Finish" to save the deployment environment definition. To generate the environment, you must properly configure all of the required parameters.					
Create Deployment Environment					
• Create a deployment environment based on a pattern					
C Create a deployment environment based on an imported design File path Browse					
* Deployment environment name wbm					
C Fast path: Show only needed steps					
Oetailed: Show all steps					
Next Cancel					

5. Click Next

6. In the next feature selection panel, select the radio button for the WBM feature

Cre	reate new deployment environment ? _						
	Select th	e feature for the deployn	nent environment.				
	Select	Features	Description				
	© WBM		WebSphere Business Monitor				
	Previous Next Cancel						

- ____7. Click Next
- 8. In the next deployment environment pattern panel, select the radio button for the Remote Messaging, Remote Support and Web pattern

Create ne	reate new deployment environment ? -						
Deploy used b configu with co deploy if you i	Deployment environment patterns are rules-based configurations of the most commonly used business integration topologies. A pattern provides a template for an environment configuration. Deployment environment patterns represent well-known, tested topologies with component configurations that work together; using patterns ensures reliable deployment environment functionality. You can create custom deployment environments if you require a configuration other than those supplied by the patterns.						
Select enviror	a pattern that provide nment:	s the topological characteristics of the deployment					
Selec	Select Deployment Description Environment Patterns						
o	Single Cluster	The single cluster pattern is the simplest pattern. It defines one application deployment target cluster, which includes the messaging infrastructure, the Common Event Infrastructure (CEI), and supporting applications.					
 Remote Messaging, Remote Support, and Web CEI and Web The remote messaging, remote support, and Web pattern defines one cluster for application deployment; one remote cluster for the messaging infrastructure; one remote cluster for the Common Event Infrastructure (CEI) and other supporting applications; and one cluster for Business Space and REST services related Web applications. 							
Pre	Previous Next Cancel						

- _____ 9. Click Next
- 10. In the next Step 1: Select Nodes panel, select the check boxes for all the four nodes to use in this deployment environment

Note: Ensure the nodes you select are of the WebSphere Business Monitor version (WBM 7.0.0.0)

→ <u>Step 1</u> : Select Nodes	Select Nodes							
<u>Step 2</u> : Clusters <u>Step 3</u> : System REST Service Endpoints	Select the nodes to use for the development environment. The <i>Remote Messaging, Remote Support, and Web</i> deployment environment <i>wbm</i> requires at least 1 node . For high- availability and failover environments, select two nodes. For scalability, select more than two nodes.							
<u>Step 4</u> : Import database configuration								
<u>Step 5</u> : Database	Select	Node ≎	Version	Host				
<u>Step 6</u> : Security		Custom01Node01	WBM 7.0.0.0	custom01.austin.ibm.com				
<u>otep /</u> : ourinnary		Custom02Node02	WBM 7.0.0.0	custom02.austin.ibm.com				
		Custom03Node03	WBM 7.0.0.0	custom03.austin.ibm.com				
	Custom04Node04 WBM 7.0.0.0 custom04.austin.ibm.c							
	Number of required nodes 1							
	Numbe	er of selected nodes	4					
Next Cancel								

- _____ 11. Click **Next**
- 12. In the next Step 2: Clusters panel, enter 1 to assign a member server to a cluster on a designated node and assign 0 to not assign a member server (Note: Refer to the Clusters → Node → Member Server mapping (Topology) table)

Note: By default every cluster in the configuration is mapped to all the nodes in the selection. Assign a number **0** to not assign a member server. The nodes you select must be of WebSphere Business Monitor Version 7.0.

	<u>Step 1</u> : Select Nodes	Clusters									
→	<u>Step 2</u> : Clusters	Map the clusters to configure.	Map the clusters to the listed nodes by indicating the number of cluster members to configure.								
	<u>Step 3</u> ; System REST Service Endpoints	Node ≎	Version	Application Deployment Target	Messaging Infrastructure	Supporting Infrastructure	Web Applications				
	<u>Step 4</u> : Import database configuration	Custom01Node01	WBM 7.0.0.0	1	0	0	1				
	<u>Step 5</u> : Database	Custom02Node02	WBM 7.0.0.0	1	1	0	0				
	<u>Step 6</u> : Security	Custom03Node03	WBM 7.0.0.0	0	1	1	0				
	<u>Step 7</u> : Summary	Custom04Node04	WBM 7.0.0.0	0	0	1	1				
	Previous Next	Cancel									

- _____ 13. Click Next
- 14. In the next Step 3: System REST Service Endpoints panel, accept the defaults



Note: If you do not have the information for the http protocol, host name and port number for the REST service endpoints, accept the defaults. You can update the values post environment configuration.

____ 15. Click **Next**

16. In the next **Step 4 : Import Database configuration** panel, accept the defaults

Note: Database configuration is out of scope to the document.

<u>Step 1</u> : Select Nodes	Import database configuration
Step 2: Clusters	If you defined a database design document, enter the document name in the following field to import it into the new deployment
<mark>Step 3</mark> : System REST Service Endpoints	environment. The database design document defines the database configuration for the selected deployment environment features. If you do not have a database design document, click Next to define the database parameters on the following page.
→ <u>Step 4</u> : Import	
configuration	Browse
<u>Step 5</u> : Database	Clear
<u>Step 6</u> : Security	
<u>Step 7</u> : Summary	
Previous Next	Cancel

- ____ 17. Click Next
 - ____18. In the next Step 5 : Database window, accept the defaults

Note: By default the monitor common database name is populated for all the components. If you plan to have exclusive database instances and schema names for various WebSphere Business Monitor components, you should input the values of your choice. You can give a different database name to the Message Engine, Business Space and the Common Event Infrastructure databases.

Note: To not create database tables during the deployment environment configuration, clear all the check boxes for **Create Tables** for the data sources where applicable. You might have to clear for creating tables if the database user has insufficient privileges to create tables.

_											
	<u>Step 1</u> : Select Nodes	Databas	Database								
	<u>Step 2</u> : Clusters	Edit the	Edit the database parameters for the data sources that are needed by this deployment environment.								
	<u>Step 3</u> : System	Edit	. Reset	Edit Provider							
	REST Service Endpoints		• *** ₩								
	<u>Step 4</u> : Import database configuration	Select	Component \$	Database Name ≎	Schema 🗘	Create Tables	User Name	Password	Server 🗘	Provider	Description
→) <u>Step 5</u> : Database		Business								Business
	<u>Step 6</u> : Security		Monitor Messaging	MONITOR	MONMEOO	V	db2admin	•••••	dbserver	DB2 Universal 🔻	Monitor messaging engine data
	Step 7: Summary		Engine								source
			Business Space	MONITOR	MONBSOO		db2admin	•••••	dbserver	DB2 Universal 💌	Business Space data source
			Common Event Infrastructure	MONITOR	MONCMOD	V	db2admin	••••	dbserver	DB2 Universal 💌	CEI Messaging Engine data source
	Previous Next Cancel										

____ 19. Click Next

- 20. In the next **Step 6 : Security** panel, ensure the administrative security credentials are filled for the authentication aliases mentioned below:
 - ____a. Common Event Infrastructure
 - ____b. WBM_Alphablox

Ex: User name: admin

Password: superSecret

<u>Step 1</u> : Select Nodes	Security								
<u>Step 2</u> : Clusters	Edit the user names and passwords for the authentication aliases that are needed by this deployment environment.								
<u>Step 3</u> : System REST Service Endpoints									
<u>Step 4</u> : Import database configuration	Component	User name	Password	Confirm Password	Description				
<u>Step 5</u> : Database → <u>Step 6</u> : Security	Common Event Infrastructure	admin	•••••	•••••	Authentication alias for the CEI event service JMS resources				
<u>Step 7</u> : Summary	WBM_Alphablox	admin	••••	•••••	WebSphere administrator authentication used by Alphablox server				
Previous Next Cance	·I		-	- -					

- _____ 21. Click Next
- _____ 22. In the next Step 9: Summary panel, verify the deployment environment configuration summary

<u>Step 1</u> : Select Nodes	Summary							
<u>Step 2</u> : Clusters <u>Step 3</u> : System REST Service Endpoints	This summary shows an overview of your new deployment environment. To save the deployment environment definition, dick on "Finish". To save the definition and generate the deployment environment, dick on "Finish and Generate Environment".							
	Overview							
<u>Step 4</u> : Import database configuration	Parameter	Parameter Value						
Step 5: Database	Deployment Enviror	nment Patter	'n	Remot	e Messaging	, Remo	te Support	;, and Web
	Deployment enviror	nment name		wbm		-		
<u>step 6</u> : security	Features			WBM				
→ <u>Step 7</u> : Summary	Deployment Enviror	nment Status	;	Incomp	olete			
	Deployment Targets	;						
	Cluster					Nodes		
	Application Deployn	nent Target				Custon Custon	n01Node01 n02Node02	L 2
	Messaging Infrastru	ucture				Custon Custon	n02Node02 n03Node03	2 3
	Supporting Infrastro	ucture				Custon Custon	n03Node03 n04Node04	3 4
	Web Applications					Custon Custon	n01Node01 n04Node04	L 4
	Data Sources							
	Component	Database Name	Sc	hema	Database Provider	ļ	Databas	e Host
	Business Space	MONITOR	MC	NBSOO	DB2_UNIVE	RSAL	dbserver	.austin.ibm.com
	Common Event Infrastructure	MONITOR	мо	NCMOO	DB2_UNIVE	RSAL	dbserver	austin.ibm.com
	Business Monitor Messaging Engine MONITOR MONME00 DB2_UNIVERSAL dbserver.austin.ibm.com							
	Security							
	Component		Auth	enticati	on			User Name
	Common Event Infr	astructure	Comr	nonEven	tInfrastruct	ureJMSA	uthAlias	admin
	WBM_Alphablox		Monit	orAlphat	oloxWASAlia	s		admin
Previous Finish	Finish and Generate	e Environme	nt		Cancel			

Note: Click **Finish** to save this deployment environment configuration session. You can verify and generate the environment at a later time. To verify, navigate through **Servers** \rightarrow **Deployment Environments** and then click the name of the deployment environment (Ex: wbm) you saved. On the deployment environment panel, you can verify the topology, data sources, and authentication aliases that are created during the environment generation. Click **Generate Environment** once the verification is complete.

- 23. Click **Finish and Generate Environment** to generate the WebSphere Business Monitor deployment environment
- ____24. Once the environment generation is complete, verify the Configuration Status and ensure that every action is successful

i.	2009-12-06 00:59:	28 Beginning co	nfiguration	
i.	2009-12-06 00:59:	28 CWLDB9015	: Deployment environment wbm	is being generated.
1	2009-12-06 00:59:	28 CWLDB90091	: Creating cluster wbm.AppTarge	t.
i.	2009-12-06 00:59:	29 CWLDB9010	: Creating duster member wbm.	AppTarget.Custom01Node01.0 on node Custom01Node01 for cluster wbm.AppTarget.
i.	2009-12-06 00:59:	36 CWLDB9010	: Creating cluster member wbm.	AppTarget.Custom02Node02.0 on node Custom02Node02 for cluster wbm.AppTarget.
ī.	2009-12-06 00:59:	41 CWLDB9009	: Creating cluster wbm.Support.	
1	2009-12-06 00:59:	41 CWLDB9010	: Creating duster member wbm.	Support.Custom03Node03.0 on node Custom03Node03 for cluster wbm.Support.
ī.	2009-12-06 00:59:	:46 CWLDB90103	: Creating cluster member wbm.	Support.Custom04Node04.0 on node Custom04Node04 for cluster wbm.Support.
ī.	2009-12-06 00:59:	:51 CWLDB9009)	: Creating cluster wbm.Messagin	g.
1	2009-12-06 00:59:	:51 CWLDB90103	: Creating cluster member wbm.	Messaging,Custom02Node02.0 on node Custom02Node02 for cluster wbm.Messaging.
i.	2009-12-06 00:59:	:55 CWLDB90103	: Creating duster member wbm.	Messaging,Custom03Node03.0 on node Custom03Node03 for cluster wbm.Messaging.
ī.	2009-12-06 00:59:	59 CWLDB9009	: Creating cluster wbm.WebApp.	
i.	2009-12-06 00:59:	:59 CWLDB90103	: Creating cluster member wbm.	WebApp.Custom01Node01.0 on node Custom01Node01 for cluster wbm.WebApp.
i.	2009-12-06 01:00:	:04 CWLDB90103	: Creating cluster member wbm.	WebApp.Custom04Node04.0 on node Custom04Node04 for cluster wbm.WebApp.
ī.	2009-12-06 01:00:	:08 CWLDB9013	: Configuring component WBI_C	EI on deployment target wbm. Support.
i.	2009-12-06 01:00:	24 CWLDB90221	: Creating authentication alias C	EIME_wbm.Messaging_Auth_Alias for component WBI_CEI.
i.	2009-12-06 01:00:	27 CWLDB9021	: Datasource CEI ME data source	is configured at scope Cluster=wbm.Messaging
ī.	2009-12-06 01:00:	27 CWLDB90221	: Creating authentication alias C	EIME_wbm.Messaging_Auth_Alias for component WBI_CEI.
ī.	2009-12-06 01:00:	49 CWLDB9013	Configuring component WBM_I	1essagingEngine on deployment target wbm.Messaging.
ī.	2009-12-06 01:00:	49 CWLDB90221	Creating authentication alias M	onitorME_wbm.Messaging_Auth_Alias for component WBM_MessagingEngine.
ī.	2009-12-06 01:00:	:53 CWLDB90211	: Datasource Monitor ME data sc	urce is configured at scope Cluster=wbm.Messaging
ī.	2009-12-06 01:00:	:53 CWLDB90221	Creating authentication alias M	onitorME_wbm.Messaging_Auth_Alias for component WBM_MessagingEngine.
i.	2009-12-06 01:00:	:55 CWLDB9013)	: Configuring component WBM_B	ventEmitterFactory on deployment target wbm.Support.
ī.	2009-12-06 01:00:	:56 CWLDB90133	: Configuring component WBM_/	ctionServices on deployment target wbm.Support.
i.	2009-12-06 01:01:	41 CWLDB9013	: Configuring component WBI_R	ESTSERVICES on deployment target wbm. WebApp.
i,	2009-12-06 01:01:	43 CWLDB9013	: Configuring component WBM_/	lphablox on deployment target wbm. WebApp.
i,	2009-12-06 01:02:	21 CWLDB9013	: Configuring component WBI_B	SPACE on deployment target wbm. WebApp.
i.	2009-12-06 01:04:	:19 CWLDB90221	: Creating authentication alias B	SPACE_Auth_Alias for component WBI_BSPACE.
i.	2009-12-06 01:04:	23 CWLDB9021	: Datasource Business Space da	a source is configured at scope Cluster=wbm.WebApp
i.	2009-12-06 01:04:	25 CWLDB9013	: Configuring component WBM_1	1obileDashboard on deployment target wbm. WebApp.
i,	2009-12-06 01:04:	31 CWLDB9013	: Configuring component WBM_S	cheduledServices on deployment target wbm.Support.
i,	2009-12-06 01:04:	:49 CWLDB9013]	: Configuring component WBM_B	ventEmitterServices on deployment target wbm.Support.
i.	2009-12-06 01:05:	:16 CWLDB9013)	: Configuring component WBI_B	SPACE on deployment target wbm. WebApp.
i,	2009-12-06 01:05:	:16 The configur	tion has ended.	
	Show Changes	Save Changes	Discard Changes Clo	e

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

- ____25. Click Save Changes
- _____ 26. Synchronize changes with the nodes
 - ____ a. In the left navigation pane, expand System Administration and click Save changes to master repository

⊟ Sy	🗆 System administration							
	Cell							
	Save changes to master repository							
	Deployment manager							
	Nodes							
	Node agents							
	Node groups							
Ŧ	Centralized Installation Manager							
	Console Preferences							
	Console Identity							

____b. In the save window, select the check box for synchronize changes with Nodes

Save	? -
Save	
Save your workspace changes to the master configuration.	
Click Save to update the master repository with your changes. Click Discard to discard your changes and begin work again using the master repository configuration. Click Cancel to continue working with your changes.	
Total changed documents: 0	
Synchronize changes with Nodes	
Save Discard Cancel	

____ c. Click save. The next window shows the status of the synchronization. Ensure there is no failure

ynchro	onize changes with Nodes		
Sync	hronize changes with Nodes		
The	current status of the Nodes being synchronized.		
	ADMS0205I: The configuration synchronization completed successfully for node: Custom04Node04.		
	ADMS0207I: Node Synchronization state for node: Custom02Node02 - initiate time: 2009.12.05 at 04:53:19:453 CST complete time: 2009.12.05 at 04:53:33:578 CST result: Complete No update occurred.		
	ADMS0205I: The configuration synchronization completed successfully for node: Custom02Node02		
	ADMS0208I: The configuration synchronization complete for cell.	•	
ок			

___ d. Click or

- _____ 27. Restart the deployment manager
- _____ 28. Restart all the node agents

Part 6: Verify and update the deployment environment configuration

In this part of the exercise, you will verify the functions, resources and applications configured during the deployment environment configuration.

Pre-requisites:

- Ensure the DB2 server is running
- Restart the deployment manager
- Restart the node agents

Deployment Environment Status icons:

Status icon	Warning icon	State	Description	
0	None	Unknown	The system cannot determine the current state of the deployment environment.	
	* !	Incomplete	The deployment environment is not missing any elements but is incomplete in some way. The warning message contains additional details.	
8 [!]		Not configured	The configuration is known and complete but has not yet been generated.	
sa s	₩ ₽	Deferred configuration	The deployment environment has been generated but deferred configuration has not been completed.	
0	6	Unavailable	The deployment environment is complete but at least one function is unavailable.	
*	*	Partially stopped	The deployment environment is available but at least one function is stopped or partially stopped.	
*	*	Stopped	All functions are stopped.	
(a)	A	Partially running	The deployment environment is available but at least one function is partially running.	
+	4	Running	The deployment environment is available and all functions are running.	

Complete the instructions below to verify the deployment environment configuration:

1. In the left navigation pane of the administrative console, expand **Servers** and then click the **Deployment Environments** link. The status of the deployment environment should display either as **Stopped** (Red Icon) or **Started** (Green Icon)

)ep	loymer	nt Environ	ments			?
D	eployr	nent Envi	ronments			
Select deployment environments to manage. You can manage deployment environments that are created with patterns or custom deployment environments.						
	Start	Stop	New Remove	Import	Export	
	ē) !!! #7)			
9	Select	Status ≎	Deployment Environment Name \$	Features ≎	Pattern 🗘	Description ≎
		*	<u>wbm</u>	WBM	Remote Messaging, Remote Support, and Web	
	Total 1					

_____2. Click the wbm (the name of the deployment environment) link

				ironments	yment Enviro
ıe	t by following the	vironmen	r the deployment en	sages Complete the configuration fo <u>erred configuration steps</u> .	Messa Messa Co defer
ology logy detail	Jeployment topolog ployment topology	d by its (ustom de	f resources as define be configured by its c	i <mark>vironments</mark> > wbm invironment manages a set c im deployment topology can l	olovment en ern. A custor
					nfiguration
Properties	Additional Prop			perties	General Prop
<u>yment</u> ogy	 Deployme Topology 			ent Environment	* Deploymen
<u>red</u> guration	Deterred Configura			ent environment Pattern Aessaging, Remote Support,	Remote Me and Web
ms	Related Items			n	Description
Sources	Data Source				
ntication 15	Authentic Aliases				
		*		ent Environment Status	Deploymen
		Status	Cluster Name		Cluster
		*	wbm.AppTarget	n Deployment Target	Application
		*	wbm.Support	g Infrastructure	Supporting
		*	wbm.Messaging	g Infrastructure	Messaging
		*	wbm.WebApp	ications	Web Applic
		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	wbm.Messaging wbm.WebApp ent Reset	g Infrastructure ications DK Generate Environm	Messaging Web Applic Apply Of

3. You should see four clusters listed and a warning in the **Messages** box over the top, referring to a deferred configuration. Click the **Deferred Configuration** link under the **Additional Properties** section

eployment Environments ? -							
Deployment Environments > wbm > Deferred Configuration							
These configuration steps detail what to do in order to complete a deployment environment configuration. The instruction steps are related to database name and database table creation that need to be performed by a database administrator.							
Configuration							
Configuration Done							
Instructions							
 Configure WBI_BSPACE: BPMDB0106I: Locate the database scripts for your database type in the directory C:\IBM\WebSphere\MonServer\profiles\Dmgr01 \dbscripts\BusinessSpace\wbm.WebApp\DB2\MONITOR (Note: The scripts might be generated ONLY after the deployment environment is generated). Run the scripts on the database host aimcp033.austin.ibm.com to create the tables for the database MONITOR and schema MONBS00. 							
Close							

- _ 4. Read the instructions. As per the instruction, you have to manually run a Business Space database script, which is done later in this exercise. Click Close
- 5. Click Cancel over the Deployment Environments panel
- 6. Now, verify the four clusters that were created. In the left navigation pane of the administrative console, expand Servers → Clusters and then click WebSphere application server clusters link

WebSphe	re application server clusters		? =						
WebSphere application server clusters									
🕀 Pref	Preferences								
New	Delete Start Stop Ripplestart	Imm	ediateStop						
Select	Name 🗅	Sta	tus 🖒						
			<u>-</u>						
You d	an administer the following resources:								
	wbm.AppTarget								
_		•							
	wbm.Messaging								
	wbm.Support 😫								
•									
	wbm.WebApp 😫								
Tatal 4									
Total	4								

7. Now, verify the member servers. In the left navigation pane, expand Servers → Server Types and then click WebSphere application servers link. You should see eight member servers listed as shown below:

Select	Name 🛟	Node 🗘	Host Name 🗘	Version 🗘	Cluster Name 🗘	Status ሷ		
You c	You can administer the following resources:							
	wbm.AppTarget.Custom01Node01.0	Custom01Node01	custom01.austin.ibm.com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm.AppTarget	8		
	wbm.AppTarget.Custom02Node02.0	Custom02Node02	custom02 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm.AppTarget	8		
	wbm.Messaging.Custom02Node02.C	Custom02Node02	custom02 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm. Messaging	8		
	<u>wbm.Messaging.Custom03Node03.0</u>	Custom03Node03	custom03 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm. Messaging	*		
	<u>wbm.Support.Custom03Node03.0</u>	Custom03Node03	custom03 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm.Support	*		
	<u>wbm.Support.Custom04Node04.0</u>	Custom04Node04	custom04 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm.Support	*		
	wbm.WebApp.Custom01Node01.0	Custom01Node01	custom01 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm. WebApp	*		
	wbm.WebApp.Custom04Node04.0	Custom04Node04	custom04 . austin. ibm. com	ND 7.0.0.7 WBM 7.0.0.0 XML FEP 1.0.0.0	wbm. WebApp	*		
Total	8							

8. Verify the Cluster Topology. In the left navigation pane, expand Servers \rightarrow Clusters and then click the Cluster Topology link. This a clear picture of The picture shown below is of the Cluster \rightarrow Nodes \rightarrow Cluster Members relationship

Cluster Topology ? _
Cluster Topology
Use this page to view a list of WebSphere application server clusters and proxy server clusters in a tree format.
Local Topology
- Wodes
$\Box \Box \Box Custom Condects (ND 7.0.0.7, WBM 7.0.0.0, NMC PCP 1.0.0.0)$
Closter members
<u>wohnoopport custom on oue costo</u> <u>wohnoopport custom on oue costo</u> <u>wohnoopport custom on oue costo</u> <u>Fig. 2.0.0.7. WBM 7.0.0.7. WILLEER 1.0.0.0.</u>
\square \square \square Cluster members
when Support Custom 04Node 04.0
E C Nodes
🕞 😭 Custom01Node01 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
Cluster members
Custom02Node02 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
🔁 🔁 Cluster members
wbm.AppTarget.Custom02Node02.0
E 🧐 wbm. Messaging
🖻 🚘 Nodes
Custom02Node02 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
🖻 🔁 Cluster members
wbm.Messaging.Custom02Node02.0
Custom03Node03 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
🖸 🔁 Cluster members
wbm.Messaging.Custom03Node03.0
E 🖓 wbm.WebApp
🖃 🦕 Nodes
Custom01Node01 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
🖂 🦕 Cluster members
wbm.WebApp.Custom01Node01.0
Custom04Node04 (ND 7.0.0.7, WBM 7.0.0.0, XML FEP 1.0.0.0)
Cluster members
Wbm.WebApp.Custom04Node04.0

- 9. Restart the **Node Agents** if not done earlier. In the left navigation pane, expand System Administration and then click Node agents. You should see three node agents listed
 - ____a. Select the check boxes for all the node agents and then click Restart
- 10. Start the deployment environment. In the left navigation pane, expand Servers and then click Deployment Environments
 - ____a. Select the check box for wbm (the name of the deployment environment) and then click Start

Deployment Environments ? -						
D	Deployment Environments					
Select deployment environments to manage. You can manage deployment environments that are created with patterns or custom deployment environments.				nments.		
	Start Stop New Remove Import Export					
S	elect	Status ≎	Deployment Environment Name ≎	Features ≎	Pattern 🗘	Description ≎
ſ		*	wbm	WBM	Remote Messaging, Remote Support, and Web	
Total 1						

_____11. This action starts all the four clusters. Ensure all the member servers are successfully started

Verify the components and functions configured on the Messaging Cluster:

In this section, you will verify the messaging engines configured on the wbm.Messaging cluster.

- 12. In the left navigation pane, expand Servers → Clusters and then click WebSphere application server clusters
- 13. In the WebSphere application server clusters panel to the right, click wbm.Messaging
- 14. In the next WebSphere application server clusters → wbm.Messaging panel, ensure the Configuration tab is selected and then click Messaging Engines under the Cluster Messaging section. You should see two messaging engines listed. Ensure they are running properly

Start	Start Stop •				
Select	Name 🔷	Description 🗘	Status 🗘 ሷ		
You c	You can administer the following resources:				
	wbm.Messaging.000- CEI.wbmCell01.BUS		€		
wbm.Messaging.000- MONITOR.wbmCell01.Bus Image: Constraint of the second seco					
Total 2					

Verify the components and functions configured on the Support Cluster:

In this section, you will verify the Common Event Infrastructure server support and Event emitter factories, configured on the wbm.Support cluster

15. In the left navigation pane, expand Service Integration → Common Event Infrastructure and then click Event service



_____ 16. In the **Event service** panel, click the **Event services** link under the **Additional Properties** section

Additional Properties				
-	Event services			
-	<u>Map security</u> roles to users or groups			

_____17. In the next panel, click the Default Common Event Infrastructure event server link

Name 🛟	Scope 🗘	Enable Event Distribution \diamondsuit	Enable Event Data Store 🖒	Event Data Store EJB JNDI Name 🗘	
You can administer the following resources:					
<u>Default Common</u> <u>Event</u> <u>Infrastructure</u> <u>event server</u>	Cluster=wbm.Support	true	false	ejb/com/ibm/events/datastore/imp	
Total 1					

_____18. In the next panel, verify the configuration

General Properties	Additional Properties
* Scope cells:wbmCell01:clusters:wbm.Support	 <u>Event groups</u> <u>Event data store</u>
* Name Default Common Event Infrastructure event server	Custom properties
* INDL name com/ibm/events/configuration/event-server/Default	
Description The profile of the event server shipped with the Common Event Infrastructure.	
Category	
Enable event distribution	
Enable event data store	
Event data store EJB JNDI name ejb/com/ibm/events/datastore/impl/DefaultDataStoreEJBLocalHome 💌	
Apply OK Reset Cancel	

- 19. Click the **Event** groups link to verify the event groups created. You should see two groups created
 - _ 20. In the left navigation pane, expand Service Integration → Common Event Infrastructure and then click Event emitter factories



21. In the next panel, verify all the event emitter factory configurations

New Delete					
Select Name 🛟		Scope 🗘	JNDI name 🗘		
You can administer the following resources:					
	<u>Default Common Event</u> <u>Infrastructure emitter</u>	Cluster=wbm.Support	com/ibm/events/configuration/emitter/Default		
	EmitterFactory	Cluster=wbm.Support	com/ibm/monitor/EmitterFactory		
	EmitterFactoryForREST	Cluster=wbm.Support	com/ibm/monitor/EmitterFactoryForREST		
	<u>MonitorEmitterFactory</u>	Cell=wbmCell01	com/ibm/monitor/MonitorEmitterFactory		
Total 4					

Verify the components and functions configured on the WebApp Cluster:

In this section, you will verify the Business Space and REST services on the wbm.WebApp cluster

- 22. In the left navigation pane, expand Servers → Clusters and then click WebSphere application server clusters
- 23. In the WebSphere application server clusters panel, click the wbm.WebApp
- 24. In the **WebSphere application server clusters** → **wbm.WebApp** window, ensure the Configuration tab is selected, click Business Space Configuration under the Business Integration section
 - _____ a. Ensure the Business Space Configuration panel indicates that business space has already been installed. You should see all the configuration parameter fields are not available indicating the Business Space is already installed

	 Messages Business Space has already 	/ been installed."
Veb Sphe	e application server clusters > wbm	
Jse the B VebSphei Ipplication VebSphei Iosted on	usiness Space Configuration page to e to your runtime environment. Busi n users to create, manage, and integ e Business Process Management po a server or cluster.	install Business Space powered by ness Space is a common interface for grate Web interfaces across the IBM rtfolio. The Business Space service is
Configura	tion	
Gener	al Properties	Additional Properties
Γ	Install Business Space service	REST service
	Database schema name MONBSOO	<u>endpoint</u> registration
	Existing Business Space data source	ie
	Business Space data source	

____ 25. Click Cancel

- _____26. In the WebSphere application server clusters → wbm.WebApp window, ensure the Configuration tab is selected, click REST Services under the Business Integration section
 - ____a. Ensure the **REST Services** panel indicates that the REST service endpoints are configured. verify all the default configuration

Note: If you did not provide the protocol, the host name and the http port for the REST services configuration values during the deployment environment generation, the end points can be configured to a server member of the WebApp cluster. Provide the correct information once you have it handy and save to the master configuration.

RE	ST service	5				
ĺ	Protocol: https:// I					
*	Host name	or virtual bost in	a load-balanced environment:			
	host. austir	i.ibm.com				
*_	Port:					
ſ	9449					
		. . .				
Ē	rest	11:		7		
				4		
E	Enabled	Туре	Description	URL		
	V	Monitor	Websphere Business Monitor REST services	https://host.austin.ibm.com:9449/rest/bpm/monitor		
	V	User Membership	User Membership REST API	https:// <mark>hos</mark> t.austin.ibm.com:9449/rest/ws/um		

___ 27. Click Cancel
____ 28. Launch the Business Space site

URL: http://<WebApp_hostname:port>/BusinessSpace

Ex: http://bspace.austin.ibm.com:9080/BusinessSpace

Note 1: Business Space is deployed to the WebApp cluster. Use the host name and port of a member server of that cluster. In this exercise, you have only a cluster and two member servers configured.

Note 2: If you had turned on security during the profile creation, the Business Space security credentials are same as credentials used to configure WebSphere Business Monitor security.

29. Login to the Business Space site and verify

Verify the Alphablox service:

In this section, you will verify the Business Space and REST services on the wbm.WebApp cluster

_____ 30. Launch the Alphablox administrative console and type the user name and password when prompted

URL: http://<Alphablox_hostname:port>/AlphabloxAdmin/home

Ex: http://bspace.austin.ibm.com:9080/AlphabloxAdmin/home

Note 1: The Alphablox service is deployed to a cluster where the Business Space is running. Use the host name and port of a member server of that cluster. In this exercise, you have only a cluster and two member servers configured.

Note 2: If you had turned on security during the profile creation, the Alphablox security credentials are same as credentials used to configure WebSphere Business Monitor security.

	E E				
The server aimcp03 requires a usernam	32.austin.ibm.com at AlphabloxAnalytics e and password.				
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).					
User name:	😰 admin 💌				
De enverd.					
Password:					
Password:	Remember my password				

_____ 31. The Alphablox administrative console is launched as shown in the picture below:

APPLICATIONS AL	OMINISTRATION	ASSEMBLY		Apping 0.5.7.0 Duild 54 (C.M.
			v	reision s.s.r.o Build ST [OA]
Application Sorting:	Iphabetical	C Recently Used		
IBM Alphablox FastF	orward			
IBM Alphablox	A sample IBM	Alphablox application		

IBM Alphablox Query Builder



Tool to generate queries and IBM Alphablox tags

32. Select the **ADMINISTRATION** tab and navigate through general management activities you can perform as an Alphablox Administrator

APPLICATIONS	ADMINISTRATION	ASSEMBLY			
				Versio	n 9.5.7.0 Build 51 [GA]
General	<u>Groups</u>	<u>Users</u>	Applications	<u>Data Sources</u>	<u>Cubes</u>
General Properties	3				
Startup Swatawa					
<u>System</u> Telnet Console					
Repository Manager	r				
IBM Alphablox Cube Manager	<u>9</u>				
Cluster Options					
Custom Properties					
User Definitions					
Application Definitio	<u>ns</u>				
Runtime Managem	ent				
Comments IBM Alphablex Cuby					
Application Session	<u>15</u>				
PDF Reports (DHTN	AL)				
Console					
<u>Start Console Sess</u>	ion				
Utilities					
<u>Essbase Setup</u>					

_ 33. Now select **ADMINISTRATION** → **Data Sources** tab. You should see three data sources. Select **MONITOR** from the data sources text area as shown in the picture below:

APPLICATIONS	ADMINISTRATION	ASSEMBLY			
				Versio	n 9.5.7.0 Build 51 [GA]
<u>General</u>	<u>Groups</u>	<u>Users</u>	Applications	Data Sources	<u>Cubes</u>
Data Sources					
filter:	Test	Selected Data So	ource		
Canned MONITOR MONITOR_CUBE					
create edi					
delete					

__ 34. Click the **Test Selected Data Source** button and ensure the data base connection is successful

Connected in: 0m 0s 0ms	data an				11	
Connected in: 0m 0s 0ms	uata sou	a source	e was su	iccessiu	1:	
Connected as user:						

35. Click Close

- _____ 36. Similarly select MONITOR_CUBE from the data source text area and test for a successful database connection
- _____ 37. Now, navigate through the remaining administration activities like managing groups, users, applications and cubes.

Verify the WebSphere Business Monitor components

In this section, you will verify the WebSphere Business Monitor components.

____ 38. In the left navigation pane, expand Servers and then click WebSphere Business Monitor configuration

🗆 Servers
New server
⊞ Server ⊤ypes
Deployment Environments
🛨 DataPower
⊞ Core Groups
WebSphere Business Monitor configuration

_ 39. In the WebSphere Business Monitor configuration panel to the right, verify each component and to a cluster the components are deployed.

on	tigure WebSphere Business Monitor							
or y iult cor	r your WebSphere Business Monitor environment to work properly, you must configure Jltiple components. The following tables show the status of the components that make up complete WebSphere Business Monitor environment.							
onf	nfigure WebSphere Business Monitor							
o vi) view the details of a component or to modify a configuration, click the component name.							
Required components: Ill components must display a green check mark for your WebSphere Business Monitor environment to work properly.								
	Component Status							
~	Outbound CEI event service	Configured using the event service on wbm.Support						
~	Messaging engine	Deployed on wbm.Messaging						
~	Action services	Deployed on wbm.Support						
~	Monitor scheduled services	Deployed on wbm.Support						
Op o d	tional components: configure an optional component, click the ady configured display a green check ma	e component name. Components that are rk.						
	Alphablox	Deployed on whro Webann						
	Dashboards for mobile devices	Deployed on wbm.WebApp						
-	Inbound event emitter services (JMS an	Deployed on wbm.Support						

Components that are already configured display a green check mark. Removing these components might affect other products.

	Component	Status
\checkmark	REST Services Gateway	Deployed on wbm.WebApp
✓	Business Space	Deployed on wbm.WebApp

____40. Click each of the component link, to verify the specific configuration of that component

Part 7: Create Business Space database tables

In this part of the exercise, you will create the business space database tables using the generated scripts. Eventually you will mark the Deployment Environment's deferred configuration as done.

Complete the instructions below to manually create Business Space database tables:

1. The Business Space database scripts are generated to the location mentioned below, on the business monitor deployment manager machine:

<DMGR_PROFILE_HOME>\dbscripts\BusinessSpace\DB2\

Ex: C:\IBM\WebSphere\MonServer\profiles\Dmgr01\dbscripts\BusinessSpace\

🚞 C:\IB	M\Web!	5phere\MonServer\profiles\Dmgr01\dbscripts		_ 🗆 🗵
Address	🛅 C:\I	BM\WebSphere\MonServer\profiles\Dmgr01\dbscripts	•	🔁 Go
🚞 Busine	essSpace			
🚞 Monito	or			

____2. Open the DB2 command window from Start → Programs → IBM DB2 → Command Line Tools → Command Window and change the directory to the location of the scripts

____ a. Edit this script, modify to suit your needs and run with the recommended usage to create the Business Space tables against the specified database:

configBusinessSpaceDB.bat

- ____b. Ensure the Business Space tables are created successfully. In this exercise the Business Space tables are created against the MONTIOR database
- _____ 3. Close the DB2 command window
- _____4. Mark the deferred configuration as done, for the Deployment Environment
 - ____ a. In the left navigation pane of the administrative console, expand Servers and then click Deployment Environments
 - ____b. Click wbm, the name of the deployment environment in the right panel
 - ____ C. In the next panel, click Deferred Configuration under the Additional Properties section

Deployment Environments ? -
Deployment Environments > wbm > Deferred Configuration
These configuration steps detail what to do in order to complete a deployment environment configuration. The instruction steps are related to database name and database table creation that need to be performed by a database administrator.
Configuration
Configuration Done
Instructions
 Configure WBI_BSPACE: BPMDB0106I: Locate the database scripts for your database type in the directory C:\IBM\WebSphere\MonServer\profiles\Dmgr01 \dbscripts\BusinessSpace\wbm.WebApp\DB2\MONITOR (Note: The scripts might be generated ONLY after the deployment environment is generated). Run the scripts on the database host aimcp033.austin.ibm.com to create the tables for the database MONITOR and schema MONBS00.
Close

- _____d. Click Configuration Done. You should see a message indicating the configuration is complete
- ____e. Save the changes to the master configuration
- __ 5. You should see a message stating the configuration is done as shown below:



____ 6. Click Close

Task 1: Manually create WebSphere Business Monitor database and tables

In this part of the exercise, you will create the WebSphere Business Monitor Common database and tables.

Pre-requisites:-

- Install and configure the WebSphere Business Monitor supported database product on a designated host machine. In this exercise, a supported DB2 version is used and the instructions are based on the DB2 product. Ensure the DB2 server is running at this time
- Copy the WebSphere Business Monitor Common database scripts to a temporary location of your database product host machine. The database scripts are generated to the location mentioned below:

<pre><dmgr_profile_home>\dbscripts\</dmgr_profile_home></pre>	<dmgr< th=""><th>_PROFILE_</th><th>_HOME>\dbscripts\</th></dmgr<>	_PROFILE_	_HOME>\dbscripts\
---	--	-----------	-------------------

🗁 C:\IBM\	WebSphere\MonServer\profiles\Dmgr01\dbscripts	- 🗆 🗵
Address 📔	C:\IBM\WebSphere\MonServer\profiles\Dmgr01\dbscripts	🗲 Go
🛅 Monitor		

Ex: C:\IBM\WebSphere\MonServer\profiles\Dmgr01\dbscripts*

Complete the instructions below to create the common database:

- 1. Open the DB2 command window from Start → Programs → IBM DB2 → Command Line Tools → Command Window and change the directory to the temporary directory where the scripts are copied, Ex: C:\temp\dbscripts
- 2. Run this script with the recommended usage to create the MONITOR database:
 - db2 -tf createDatabase.sql
 - **db2** -tf createTables.sql (Note: Connect to the MONITOR database before running this script)
- 3. The scripts create the Monitor database, that is MONITOR and create Monitor database tables
- _____4. Close the DB2 command window

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