IBM
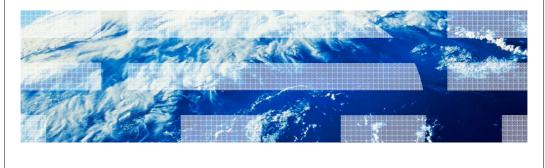
WebSphere Business Monitor

Configuration
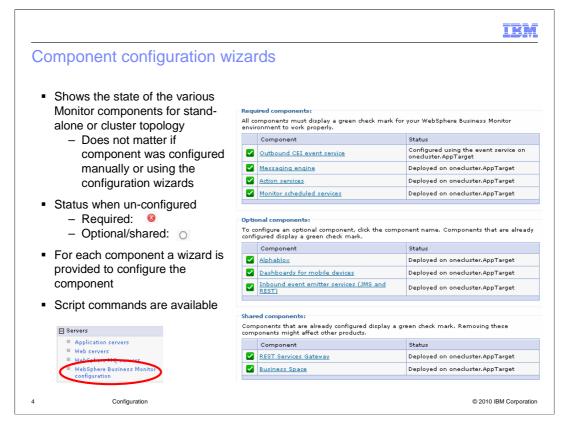
This presentation should give you an understanding of the component configuration options for WebSphere Business Monitor.

Goals

- Introduce configuration in WebSphere Business Monitor including component wizards and deployment environment wizard
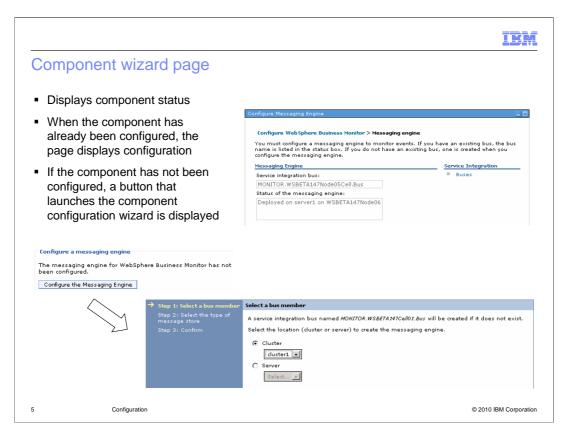
Configuration

This presentation will give you an understanding of the configuration of WebSphere Business Monitor including the use of the component configuration wizards and the deployment environment wizard.

Agenda

- Component configuration wizards
- Installation and configuration using the component wizards
- Deployment environment patterns
- Installation and configuration using the deployment environment wizard
- Deployment environment example

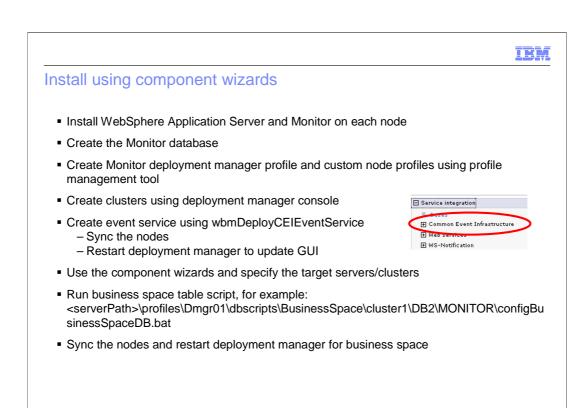Configuration

This is the agenda for this presentation. You will see how to use the component configuration wizards to configure WebSphere Business Monitor. Also, you will review the deployment environment patterns and how to use the deployment environment wizard to configure WebSphere Business Monitor. There is also a series of screen captures that show the generation of a single cluster pattern.

In the administrative console, you can view the WebSphere Business Monitor configuration page which shows you the current installation and configuration of various monitor components. This page shows the status for stand-alone or for clustered configurations. You can click the components to access wizards which guide you through the configuration of the component. You do not have to use the wizards, if you prefer to configure them manually or with scripts. Note that the component configuration status will display properly even if you configure the component without using the wizards. You can find more information about the commands for scripting in the reference section of the Monitor information center.

Component wizard page

- Displays component status

- When the component has already been configured, the page displays configuration

- If the component has not been configured, a button that launches the component configuration wizard is displayed

Configure Messaging Engine

Configure WebSphere Business Monitor > Messaging engine

You must configure a messaging engine to monitor events. If you have an existing bus, the bus name is listed in the status box. If you do not have an existing bus, one is created when you configure the messaging engine.

Messaging Engine   **Service Integration**

Service integration bus: ■   Buses

MONITOR.WSBETA147Node05Cell.Bus

Status of the messaging engine:

Deployed on server1 on WSBETA147Node06

Configure a messaging engine

The messaging engine for WebSphere Business Monitor has not been configured.

[Configure the Messaging Engine]

→ **Step 1: Select a bus member**   **Select a bus member**

Step 2: Select the type of message store

A service integration bus named *MONITOR.WSBETA147Cell01.Bus* will be created if it does not exist.

Step 3: Confirm

Select the location (cluster or server) to create the messaging engine.

(•) Cluster
[cluster1 ▼]

( ) Server
[Select... ▼]

5   Configuration   © 2010 IBM Corporation

This is a sample of the messaging engine component configuration page. It shows the current component status if the component has been configured previously. If the component is not configured, then you will also see a button that will launch the configuration wizard.

Install using component wizards

- Install WebSphere Application Server and Monitor on each node

- Create the Monitor database

- Create Monitor deployment manager profile and custom node profiles using profile management tool

- Create clusters using deployment manager console

- Create event service using wbmDeployCEIEventService
  - Sync the nodes
  - Restart deployment manager to update GUI

- Use the component wizards and specify the target servers/clusters

- Run business space table script, for example: <serverPath>\profiles\Dmgr01\dbscripts\BusinessSpace\cluster1\DB2\MONITOR\configBusinessSpaceDB.bat

- Sync the nodes and restart deployment manager for business space
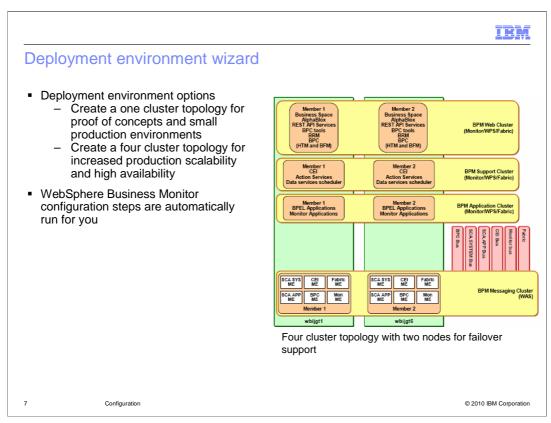

Configuration   © 2010 IBM Corporation

Before you use the component configuration wizards, you should have installed Monitor on each node, created the database and created at least one profile and at least one cluster. You should also have created the event service using the supplied script. After creating the event service you should sync the nodes. Note that you will need to restart the deployment manager in order to see the Common Event Infrastructure listing in the service integration menu in the administrative console.

Then you can use the component wizards to configure the required, optional and shared components, specifying the target servers or clusters.
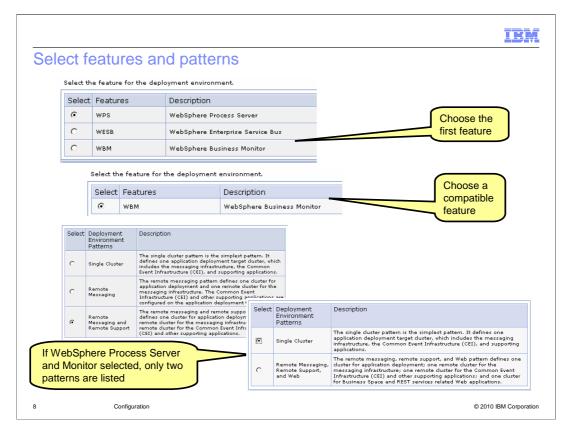
You will need to setup the business space database and there is a supplied script for that. Finally you can sync the nodes and restart the deployment manager as required by the business space setup.

Deployment environment wizard

- Deployment environment options
  - Create a one cluster topology for proof of concepts and small production environments
  - Create a four cluster topology for increased production scalability and high availability
- WebSphere Business Monitor configuration steps are automatically run for you

| Member 1
Business Space
AlphaBlox
REST API Services
BPC tools
BRM
BPC
(HTM and BFM) | Member 2
Business Space
AlphaBlox
REST API Services
BPC tools
BRM
BPC
(HTM and BFM) | BPM Web Cluster
(Monitor/WPS/Fabric) |

| Member 1
CEI
Action Services
Data services scheduler | Member 2
CEI
Action Services
Data services scheduler | BPM Support Cluster
(Monitor/WPS/Fabric) |

| Member 1
BPEL Applications
Monitor Applications | Member 2
BPEL Applications
Monitor Applications | BPM Application Cluster
(Monitor/WPS/Fabric) |

BPC Bus · SCA SYSTEM Bus · SCA APP Bus · CEI Bus · Monitor bus · Fabric

SCA SYS ME	CEI ME	Fabric ME	SCA SYS ME	CEI ME	Fabric ME	BPM Messaging Cluster (WAS)
SCA APP ME	BPC ME	Mon ME	SCA APP ME	BPC ME	Mon ME	
Member 1			Member 2			

| wbijgt1 | wbijgt6 |

Four cluster topology with two nodes for failover support

7   Configuration   © 2010 IBM Corporation

You can use the deployment environment configuration wizard to create the clusters and install and configure all the required components for a WebSphere Business Monitor network deployment topology. Two patterns are available for WebSphere Business Monitor: the single cluster pattern and the remote messaging, support and Web application pattern. The single cluster topology is useful for proof of concept purposes and for small production environments. The four cluster pattern provides increased scalability and high availability for production topologies. When using the deployment environment wizard, the configuration of the monitor components is handled automatically for you, including creation of the event service and cluster configuration.

Select features and patterns

Features represent the runtime processing capabilities of your deployment environment. The list of available features on the Deployment Environment Features page is based on the deployment manager profile. If your deployment manager profile has been augmented to include other products in addition to WebSphere Business Monitor, the deployment environment features page lists these features as well. In the example shown, the wizard prompts you to select the first feature such as WebSphere Process Server. Then a list of compatible features is shown, so you select WebSphere Business Monitor. You are given the option of choosing the deployment environment pattern, and this list is dictated by the choice of the features. If you choose Monitor then you are given two patterns, the single cluster or four cluster patterns.
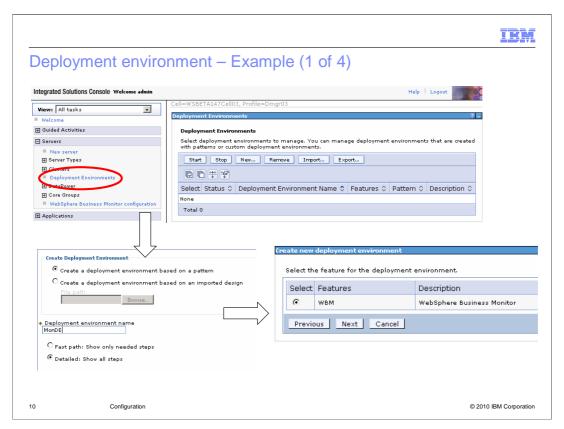
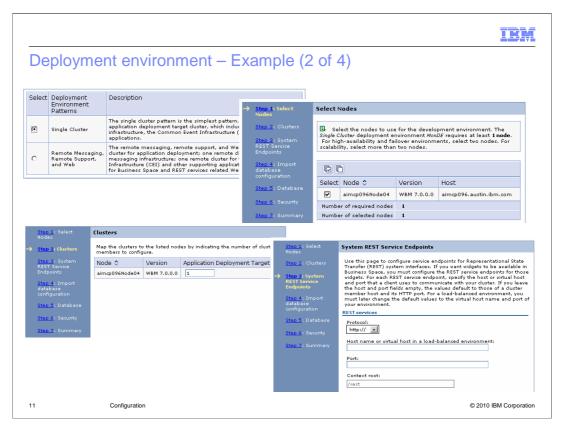## Install using deployment environment pattern

- Install WebSphere Application Server and Monitor on each node
- Create the Monitor database
- Create Monitor deployment manager profile and custom node profiles using profile management tool
- Create and generate the deployment environment using deployment environment wizard
- Save the configuration and sync the nodes
- Run business space table script, for example:
  <serverPath>\profiles\Dmgr03\dbscripts\BusinessSpace\MonDE.AppTarget\DB2\MDE1111\configBusinessSpaceDB.bat

Configuration   © 2010 IBM Corporation

Before you use the deployment environment wizard, you should have installed Monitor on each node, created the database and created at least one profile. Then you run the deployment environment wizard to create and generate the environment from one of the supplied patterns. You will save the configuration and sync the nodes. And you will need to setup the business space database so there is a supplied script for that.
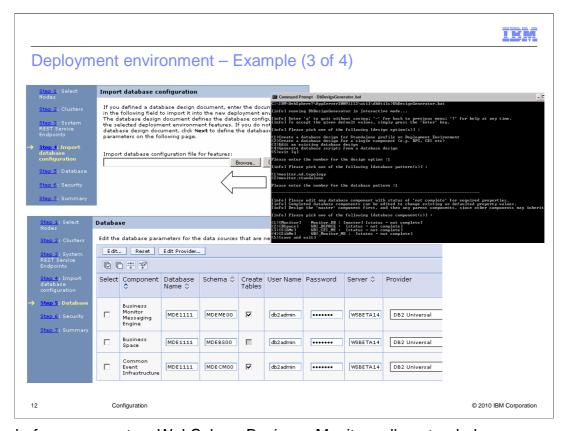
Deployment environment – Example (1 of 4)

Here are some screen captures taken while running the deployment environment wizard. From the deployment environment page, you select to create a new deployment environment and provide a name for it. You should select the detailed path option unless you are aware of all the defaults that are applied. On the features page, the list of available features is based on the deployment manager profile. If your deployment manager profile has been augmented to include other products then this page lists these features as well. Select to configure WebSphere Business Monitor.

Deployment environment – Example (2 of 4)

Next you are given a choice of the pattern, so select either the single cluster pattern or the four cluster pattern.

Now there are a series of steps listed for the configuration. In step one, you can choose from the list of nodes to use for the deployment. Select at least one node for the deployment environment. For high-availability and failover environments, select two nodes. For additional scalability, select more than two nodes. In step two, map the clusters to the nodes. In this example a single cluster is being configured so only the application deployment target is listed for mapping. If you select the four cluster pattern, then there are four cluster listed for mapping to nodes.

On the System REST endpoints page, configure service endpoints for Representational State Transfer (REST) interfaces. If you want widgets to be available in Business Space, you must configure the REST service endpoints for those widgets. To enter the information on this page, you must have already set up a proxy server or an HTTP server. Otherwise, skip this page and configure the endpoints later.
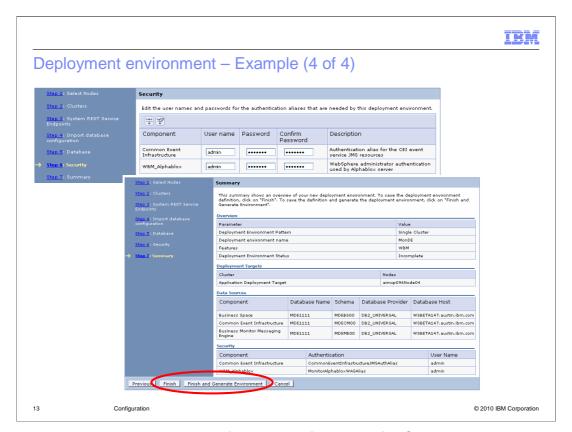
Deployment environment – Example (3 of 4)

Even before you create a WebSphere Business Monitor cell or stand-alone server profile, you can design your Monitor databases using the Database Design Tool. The Database Design Tool allows you to design the Monitor, business space, and systems integration bus messaging engine data stores in a single pass. The Database Design Tool wizard will ask about preferred database name, type, schema, and user, and will then create the database scripts customized for your environment. Your database administrator can review the scripts and create the database, in parallel with the creation of the Monitor server environment. The resulting database design can be passed into the Deployment Environment wizard, to ensure that the server environment is properly configured to connect to the databases.

On the 'Import database configuration' page, enter the path to the database design XML document. If you are not using the design tool then leave this blank.

On the Database page, configure the database parameters for data sources of the deployment environment. If you imported a database design document, the information on the Database page reflects the data source configuration as it exists in the database design document that you imported.

The 'Create tables' option is not selected if you are using a DB2 for z/OS or an Oracle database provider. The 'Create tables' option is not selected for the Business Space component. If your deployment environment includes the Business Space component, you need to create database tables for this component manually.

Deployment environment – Example (4 of 4)

On the security page, enter the configuration information for CEI and Alphablox. There can be other configuration steps displayed depending on the products that you selected in the feature list. On the summary page, verify that the information is correct before finishing and generating the environment. If you do not generate the environment now, you can select it in the list and generate it later.

Deployment environment – Generate

Configuration Status

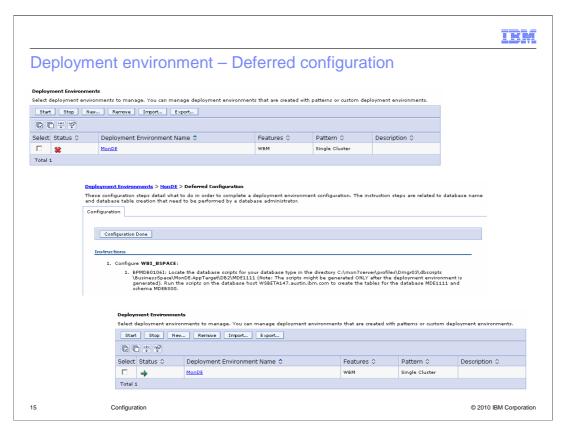|		
	2009-11-11 16:10:41	Beginning configuration ...
	2009-11-11 16:10:41	CWLDB9015I: Deployment environment MonDE is being generated.
	2009-11-11 16:10:41	CWLDB9009I: Creating cluster MonDE.AppTarget.
	2009-11-11 16:10:42	CWLDB9010I: Creating cluster member MonDE.AppTarget.aimcp096Node04.0 on node aimcp096Node04 for cluster MonDE.AppTarget.
	2009-11-11 16:10:55	CWLDB9013I: Configuring component WBI_CEI on deployment target MonDE.AppTarget.
	2009-11-11 16:11:37	CWLDB9013I: Configuring component WBM_MessagingEngine on deployment target MonDE.AppTarget.
	2009-11-11 16:11:39	CWLDB9022I: Creating authentication alias MonitorME_MonDE.AppTarget_Auth_Alias for component WBM_MessagingEngine.
	2009-11-11 16:11:44	CWLDB9021I: Datasource Monitor ME data source is configured at scope Cluster=MonDE.AppTarget
	2009-11-11 16:11:44	CWLDB9022I: Creating authentication alias MonitorME_MonDE.AppTarget_Auth_Alias for component WBM_MessagingEngine.
	2009-11-11 16:11:48	CWLDB9013I: Configuring component WBM_EventEmitterFactory on deployment target MonDE.AppTarget.
	2009-11-11 16:11:49	CWLDB9013I: Configuring component WBM_ActionServices on deployment target MonDE.AppTarget.
	2009-11-11 16:12:15	CWLDB9013I: Configuring component WBI_RESTSERVICES on deployment target MonDE.AppTarget.
	2009-11-11 16:12:17	CWLDB9013I: Configuring component WBM_Alphablox on deployment target MonDE.AppTarget.
	2009-11-11 16:12:44	CWLDB9013I: Configuring component WBI_BSPACE on deployment target MonDE.AppTarget.
	2009-11-11 16:13:25	CWLDB9022I: Creating authentication alias BSPACE_Auth_Alias for component WBI_BSPACE.
	2009-11-11 16:13:51	CWLDB9021I: Datasource Business Space data source is configured at scope Cluster=MonDE.AppTarget
	2009-11-11 16:13:53	CWLDB9013I: Configuring component WBM_MobileDashboard on deployment target MonDE.AppTarget.
	2009-11-11 16:13:59	CWLDB9013I: Configuring component WBM_ScheduledServices on deployment target MonDE.AppTarget.
	2009-11-11 16:14:22	CWLDB9013I: Configuring component WBM_EventEmitterServices on deployment target MonDE.AppTarget.
	2009-11-11 16:14:57	CWLDB9013I: Configuring component WBI_BSPACE on deployment target MonDE.AppTarget.
	2009-11-11 16:14:57	The configuration has ended.

Show Changes   Save Changes   Discard Changes   Close

▪ You cannot create more than one deployment environment in a cell (even if none are generated)

☐ Messages
  CWLDB9044W: Deployment environment definition MyMonSingleCluster cannot be created because WebSphere Business Monitor does not support multiple deployment environments in a single cell.

14   Configuration   © 2010 IBM Corporation

When the configuration completes, you can examine the configuration files to view the changes. Either save the changes to the master configuration or discard them.

Since Monitor does not support multiple deployment environments in a single cell, note that you cannot create more than one deployment environment in a cell even if none have yet been generated.

Deployment environment – Deferred configuration

Deployment Environments

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... |

Select	Status	Deployment Environment Name	Features	Pattern	Description
☐	✖	MonDE	WBM	Single Cluster	

Total 1

Deployment Environments > MonDE > 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

1. Configure **WBI_BSPACE**:
   1. BPMDB0106I: Locate the database scripts for your database type in the directory C:\mon7server\profiles\Dmgr03\dbscripts \BusinessSpace\MonDE.AppTarget\DB2\MDE1111 (Note: The scripts might be generated ONLY after the deployment environment is generated). Run the scripts on the database host WSBETA147.austin.ibm.com to create the tables for the database MDE1111 and schema MDEBS00.

Deployment Environments

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... |

Select	Status	Deployment Environment Name	Features	Pattern	Description
☐	➡	MonDE	WBM	Single Cluster	

Total 1

Configuration   © 2010 IBM Corporation

If you click a deployment environment in the list, and there are still configuration steps to perform, you will see a list of deferred configuration steps. In this case you see that the business space database needs to be created.

After you have generated a deployment environment, you should stop and restart all clusters, nodes, and the deployment manager.

Summary

- Covered configuration of WebSphere Business Monitor

16   Configuration   © 2010 IBM Corporation

In summary, this presentation covered the configuration of WebSphere Business Monitor. You learned how to use the configuration component wizards and the deployment environment wizard.

Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?

- Did it help you solve a problem or answer a question?

- Do you have suggestions for improvements?

Click to send e-mail feedback:

mailto:iea@us.ibm.com?subject=Feedback_about_WBPM_Monitor_Configuration.ppt

This module is also available in PDF format at: ../WBPM_Monitor_Configuration.pdf

Configuration   © 2010 IBM Corporation

You can help improve the quality of IBM Education Assistant content by providing feedback.

Trademarks, disclaimer, and copyright information