

IBM Business Monitor V7.5

Installation and stand-alone server profile creation

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What this exercise is about

The objective of this exercise is to install IBM Business Monitor on a WebSphere Application Server and create a stand-alone server profile. Instructions are also provided for augmenting an existing IBM BPM Process Server or Process Center stand-alone server profile with IBM Business Monitor.

Exercise requirements

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

For Monitor on WebSphere Application Server

- IBM Business Monitor V7.5

For Monitor on IBM BPM Process Server or Process Center

- IBM BPM Advanced Process Server or Process Center V7.5
- IBM Business Monitor V7.5

What you should be able to do

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

- Install IBM Business Monitor
- Create IBM Business Monitor stand-alone server profile
- Augment an existing IBM BPM Process Server or Process Center stand-alone server profile with IBM Business Monitor

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
<MON_HOME>	C:\Program Files\IBM\WebSphere\AppServer
<MON_PROFILE_HOME>	<MON_HOME>\profiles\WBMon01
<DB_SCRIPTS>	<MON_PROFILE_HOME>\dbscripts.wbm
<MONBPM_HOME>	C:\IBM\BPM\v7.5
<MONBPM_PROFILE_HOME>	<MONBPM_HOME>\profiles\ProcSrv01 or <MONBPM_HOME>\profiles\ProcCtr01
<DB_SCRIPTS>	<MONBPM_PROFILE_HOME>\dbscripts.wbm

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.

Introduction

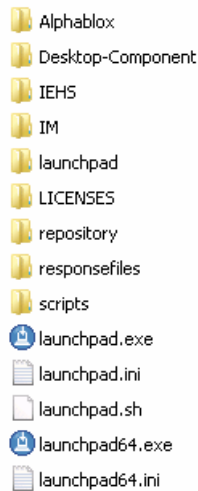
IBM® Business Monitor is comprehensive business activity monitoring software that provides an up-to-date view of your business performance and provides predictions so that you can take action before problems occur. Personalized business dashboards process business events and data, and calculate key performance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

In this exercise, you will install and create an IBM Business Monitor stand-alone profile. You will also augment an IBM BPM server with IBM Business Monitor.

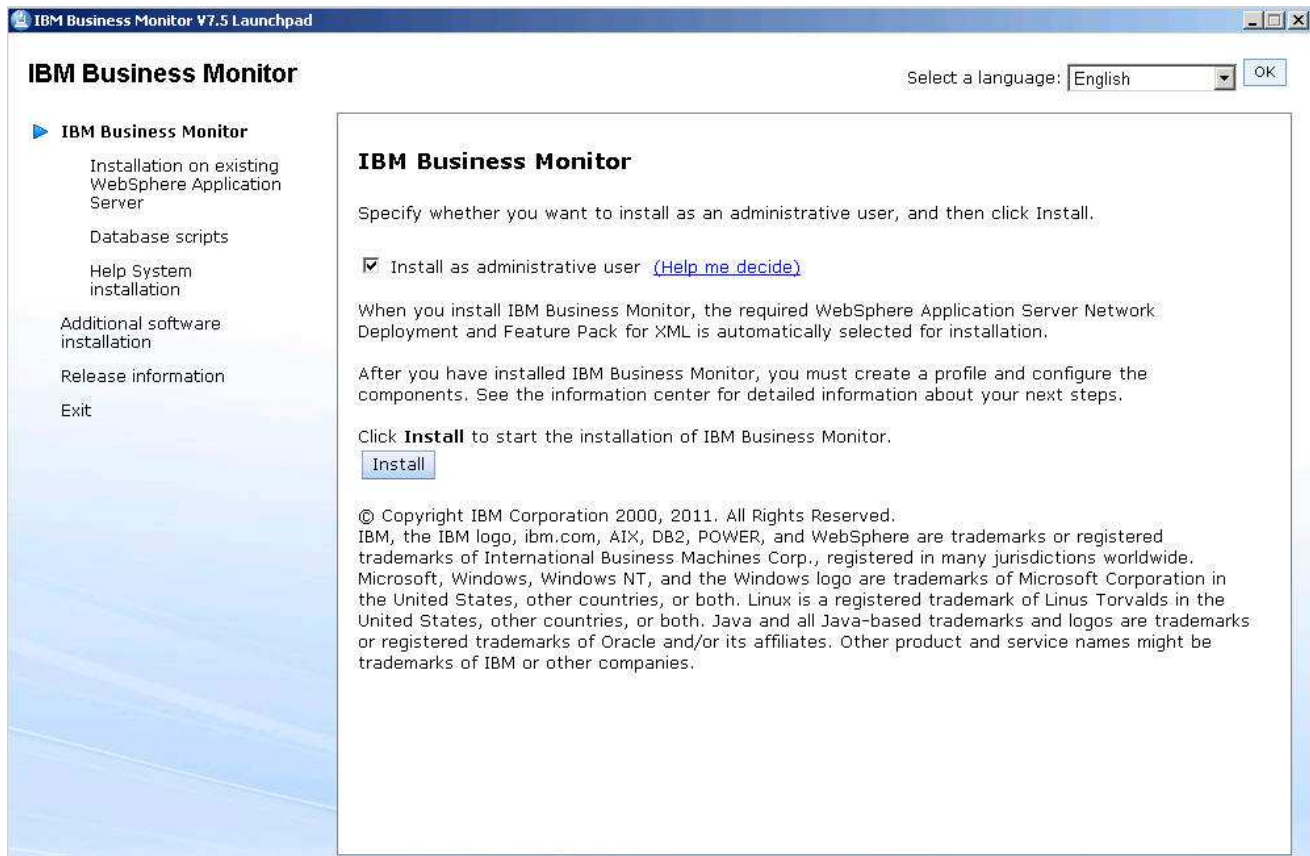
Part 1: Installing IBM Business Monitor

In this part of the exercise, you will install IBM Business Monitor.

1. Extract the IBM Business Monitor image files to a directory and confirm that the directories and files are extracted correctly; it should appear similar to the picture below:



2. Double-click `launchpad.exe`.



3. Click **Install**

Install Packages
Select packages to install:

Installation Packages	Status	Vendor	License Key Type
<input checked="" type="checkbox"/> IBM® Installation Manager Version 1.4.3	Will be installed	IBM	No key required
<input checked="" type="checkbox"/> IBM WebSphere Application Server - ND Version 7.0.0.17	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM WebSphere Application Server V7 Feature Pack for XML Version 1.0.0.9	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM® Business Monitor Version 7.5.0.0	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM® Cognos Business Intelligence 32 bit Version 10.1.0.1	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM® DB2 Express 32 bit Version 9.7.0.4	Will be installed	IBM	

Show all versions Check for Other Versions, Fixes, and Extensions

Details
IBM® Installation Manager 1.4.3
 IBM® Installation Manager [More info...](#)
 • Repository: E:\moncd\IM

4. A list of packages is displayed. In this example, all of them are selected for installation, including Installation Manager, WebSphere Application Server with feature pack, IBM Business Monitor, Cognos, and DB2 Express. Click **Next**

5. Accept the license agreement and click **Next**

Install Packages

Select a location for the shared resources directory and a location for Installation Manager.

Install > Licenses > **Location** > Features > Summary

When you install packages, files are stored in two locations:

- 1) The shared resources directory - resources that can be shared by multiple packages.
- 2) The installation directory - any resources that are unique to the package that you are installing.

Important: You can only select the shared resources directory the first time you install a package with the IBM Installation Manager. For best results select the drive with the most available space because it must have adequate space for the shared resources of future packages.

Shared Resources Directory:

Once installed, IBM Installation Manager will be used to install, update, modify, manage and uninstall your packages.

Installation Manager Directory:

Disk Space Information

Volume	Available Space
C:	10.30 GB

____ 6. Review the installation directories and change as required. Click **Next**.

Install Packages

A package group is a location that contains one or more packages. Some compatible packages can be installed into a common package group and will share a common user interface. Select an existing package group, or create a new one.

Install Licenses Location Features Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory
IBM WebSphere Application Server - ND	C:\Program Files\IBM\WebSphere\AppServer

Package Group Name: IBM WebSphere Application Server - ND
Installation Directory: C:\Program Files\IBM\WebSphere\AppServer

Details
Shared Resources Directory: C:\Program Files\IBM\WebSphere\AppServer-Shared

Disk Space Information

Volume	Available Space
C:	10.30 GB

7. Review the server installation directory and change as required. Click **Next**

Install Packages

Select the features to install.

Install
Licenses
Location
Features
Summary

Features

- IBM® Installation Manager 1.4.3
- IBM WebSphere Application Server - ND 7.0.0.17
 - Sample applications
 - National language support
 - Non-English language packages for the administrative console
 - Non-English language packages for the application server runtime environment
 - IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.9
- IBM® Business Monitor 7.5.0.0
 - Business Monitor Server
 - Stand-alone development Business Monitor profile (qmwas)
 - Stand-alone development Business Monitor on Process Server profile (qmbpmaps)
 - Stand-alone development Business Monitor on WebSphere Enterprise Service Bus profile (qmesb)
- IBM® Cognos Business Intelligence 32 bit 10.1.0.1
- IBM® DB2 Express 32 bit 9.7.0.4

Show dependencies

✔ Selected by Installation Manager because of dependencies

Details

IBM® Installation Manager 1.4.3

IBM® Installation Manager

Disk Space Information

	Volume	Required	Temporary	Total	Available
Shared Resources Area	C:	66.5 KB	3.67 GB	3.67 GB	10.30 GB
Installation Directory	C:	4.00 GB	46.06 MB	4.05 GB	10.30 GB

< Back
Next >
Install
Cancel

8. You can take the defaults here for the features to install. Do not select a profile since you will create that in the next section using the profile management tool.

The screenshot shows the 'Install Packages' wizard interface. At the top, it says 'Install Packages' and 'Fill in the configurations for the packages.' Below this is a progress bar with steps: 'Install', 'Licenses', 'Location', 'Features', and 'Summary'. The 'Common Configurations' section is active, with a sub-section for 'DB2 Credentials'. The instructions state: 'Specify a DB2 administrative user name and password (defaults are bpmadmin/bpmadmin1). Ensure that you adhere to the password rules set forth by your organization. If you enter a user name that already exists on your system, you must ensure that you enter the correct password for that user name.' There are three input fields: 'User name:' containing 'bpmadmin', 'Password:' with masked characters, and 'Confirm password:' with masked characters. At the bottom right, there are four buttons: '< Back', 'Next >', 'Install', and 'Cancel'. A help icon is visible at the bottom left.

___ 9. You can take the default user and password or you can change them at this time. Click **Next**.

Install Packages

Review the summary information.

Install Licenses Location Features **Summary**

Target Location

Package Group Name: IBM WebSphere Application Server - ND
Installation Directory: C:\Program Files\IBM\WebSphere\AppServer
Shared Resources Directory: C:\Program Files\IBM\WebSphere\AppServer-Shared

Packages

- IBM@ Installation Manager 1.4.3
- IBM WebSphere Application Server - ND 7.0.0.17
 - Sample applications
 - National language support
 - IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.9
- IBM@ Business Monitor 7.5.0.0
 - Business Monitor Server
- IBM@ Cognos Business Intelligence 32 bit 10.1.0.1
- IBM@ DB2 Express 32 bit 9.7.0.4

Environment
English

Disk Space Information

	Total Available Space
C:	10.30 GB

Total Download Size: 3.77 GB
Total Installation Size: 7.72 GB

► **Repository Information**

?

< Back Next > Install Cancel

____ 10. Review the summary and then click **Install**. The installation progresses.

Install Packages

The packages are installed. [View Log File](#)

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:

- IBM WebSphere Application Server - ND
 - IBM WebSphere Application Server - ND 7.0.0.17
 - IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.9
- IBM® Business Monitor 7.5.0.0
- IBM® Cognos Business Intelligence 32 bit 10.1.0.1
- IBM® DB2 Express 32 bit 9.7.0.4


Which program do you want to start?

Profile Management Tool

None

Installation Manager was successfully installed into: C:\Program Files\IBM\Installation Manager\eclipse

Note: If the packages support rollback, the temporary directory contains rollback files for installed packages. You can delete the files on the [Files for rollback](#) preference page.

 Finish

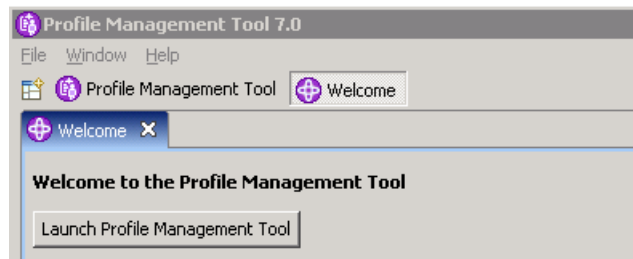
11. This panel displays when the installation has completed. You need the profile management tool, so leave that selected and click **Finish**

Part 2: Create IBM Business Monitor stand-alone server profile

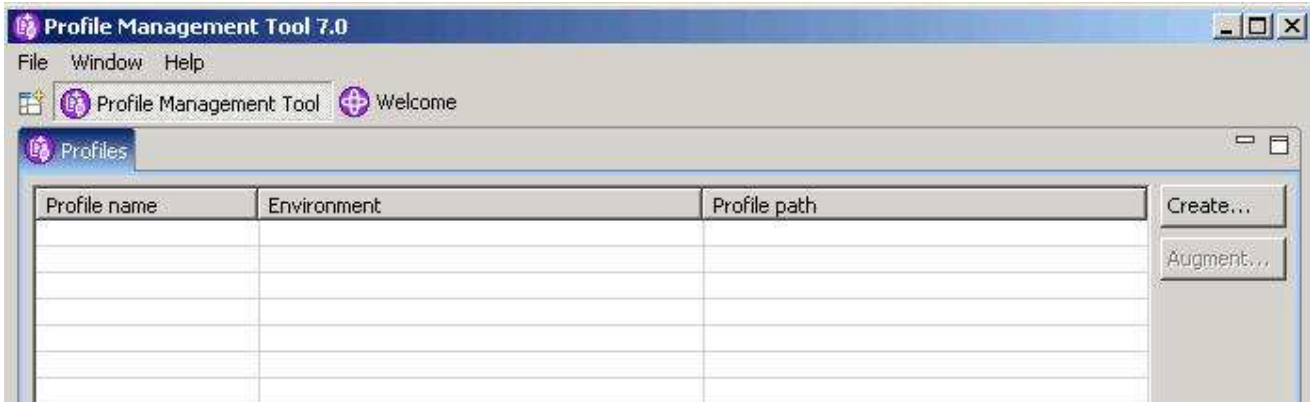
In this part of the exercise, you will create an IBM Business Monitor stand-alone server profile using the Profile Management Tool. For 64 bit systems, you will need to manually create the profile which is explained in the next section.

- ___ 12. Launch the Profile Management Tool
 - ___ a. From the start menu, select **IBM** → **Business Monitor 7.5** → **Profile Management Tool**

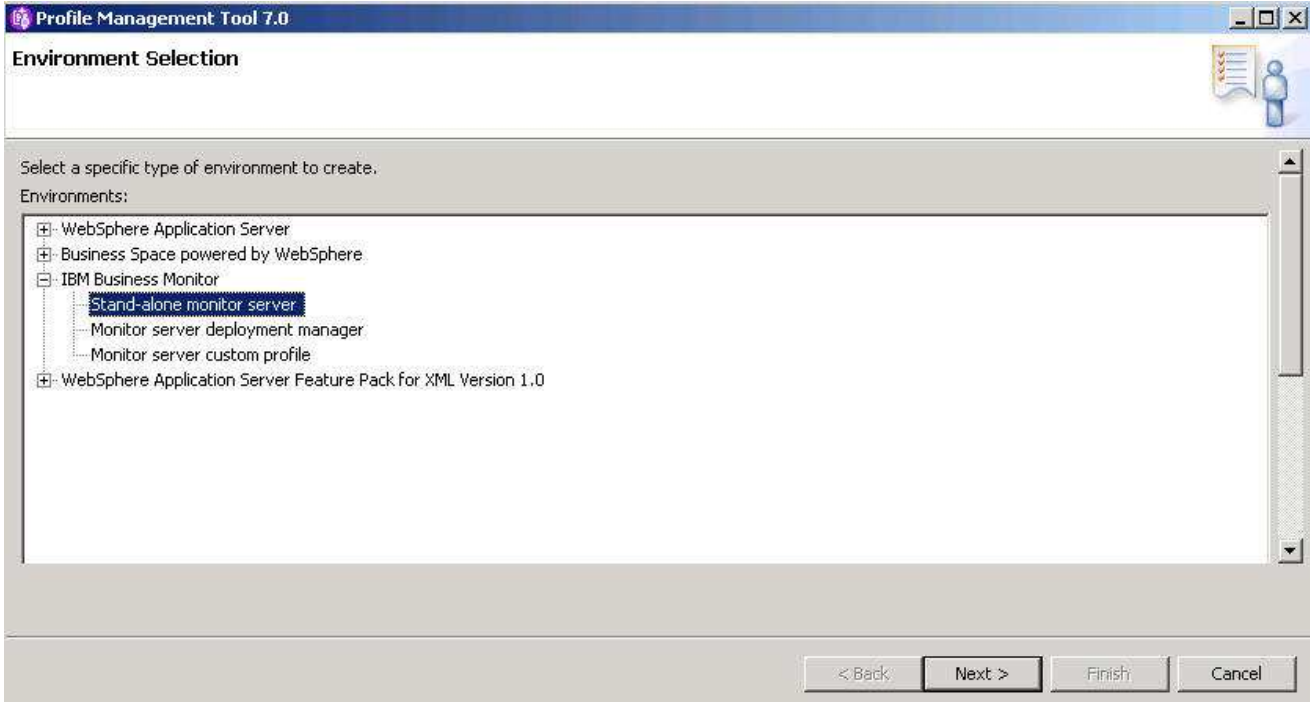
Note: Alternatively to launch the Profile Management Tool, navigate to <MON_HOME>\bin**ProfileManagement**, double click **pmt.bat**



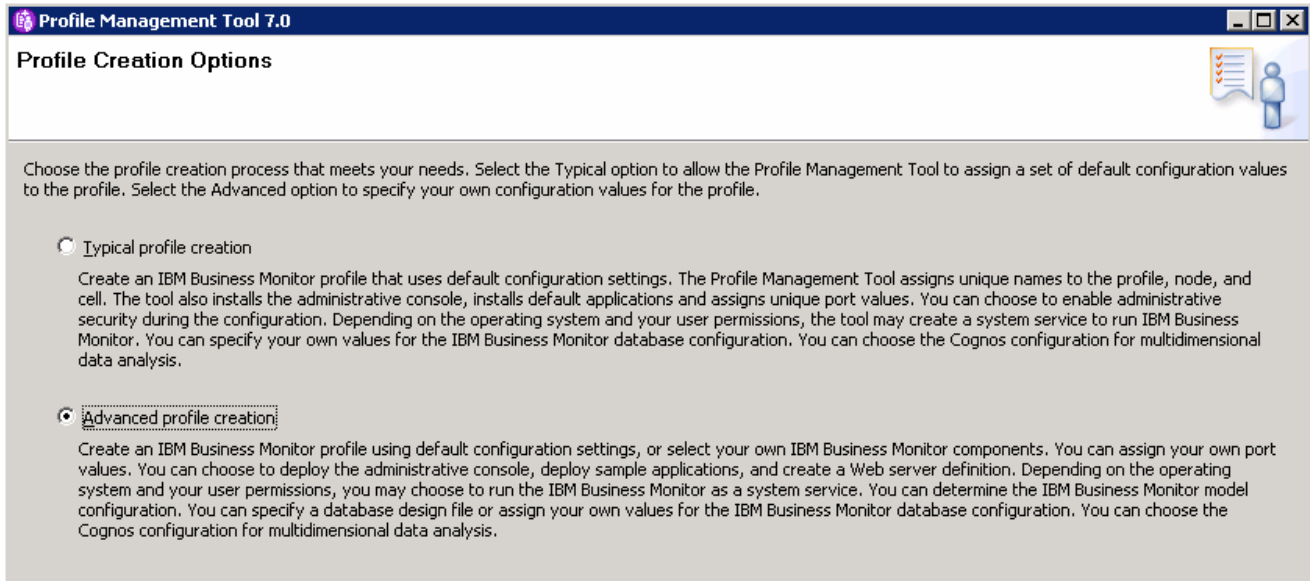
- ___ 13. Select the **Launch Profile Management Tool** button



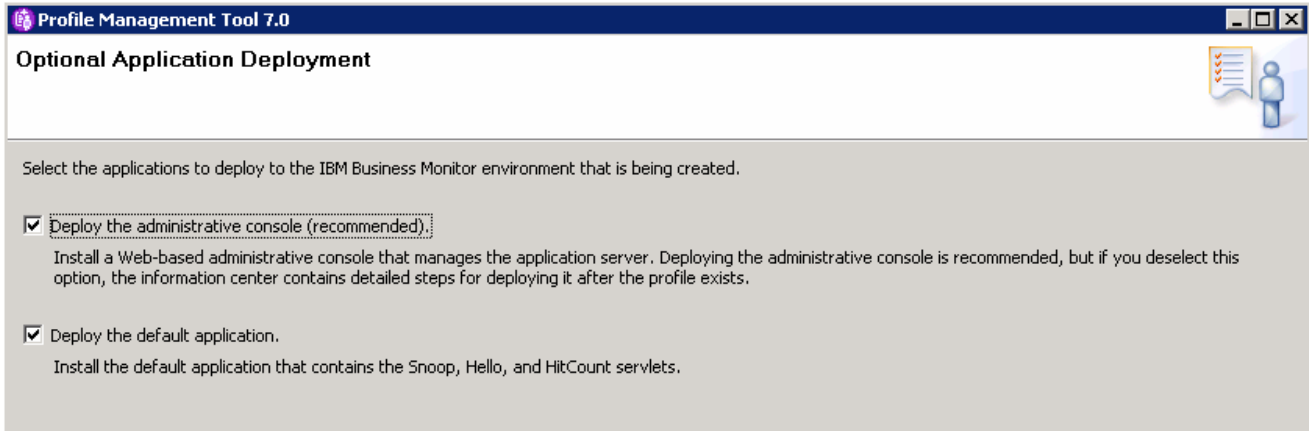
- ___ 14. Click the **Create** button.



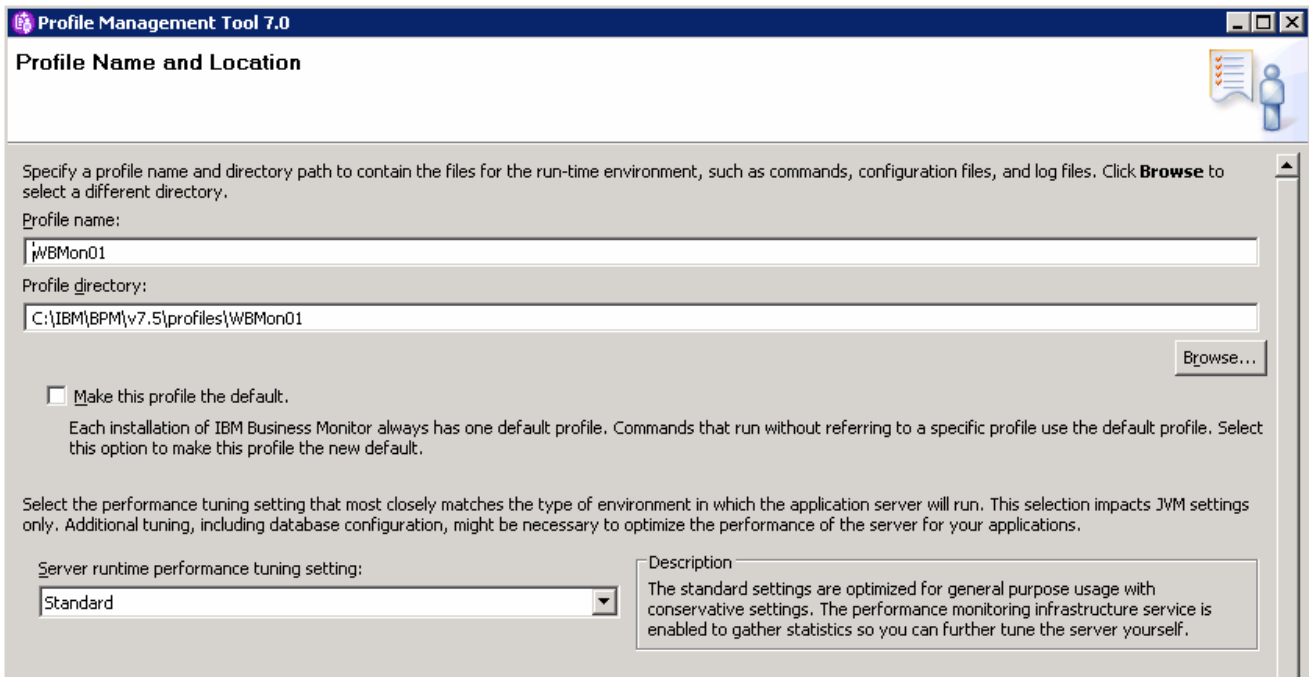
____ 15. In the **Environment Selection** panel, expand **IBM Business Monitor** and select **Stand-alone monitor server**



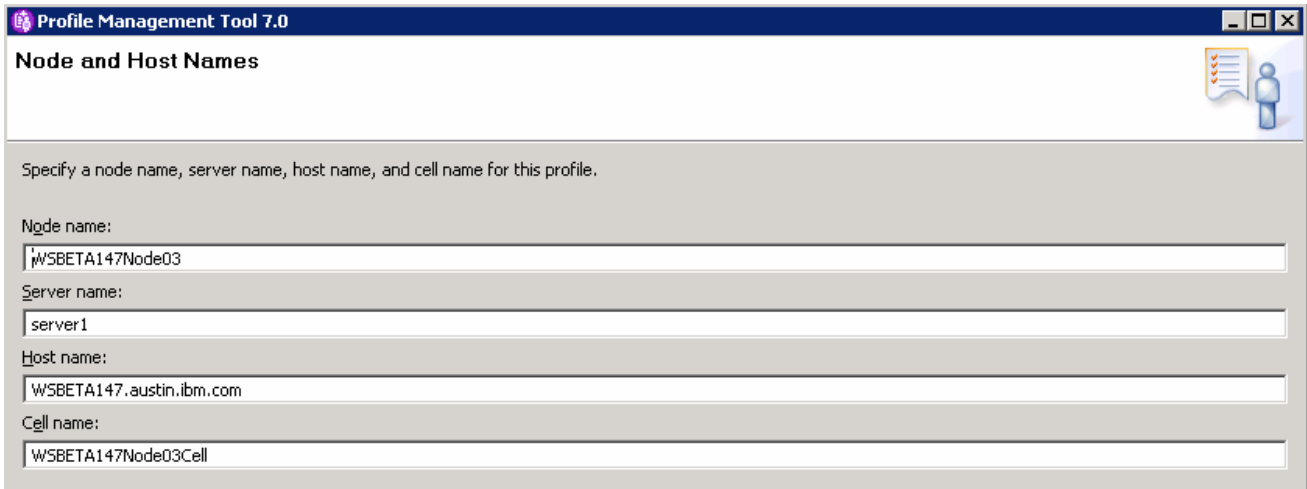
____ 16. Select **Advanced profile creation**, then click **Next**



____ 17. Select the applications to deploy to the IBM Business Monitor environment being created. It is recommended that you deploy the administrative console. Click **Next**.

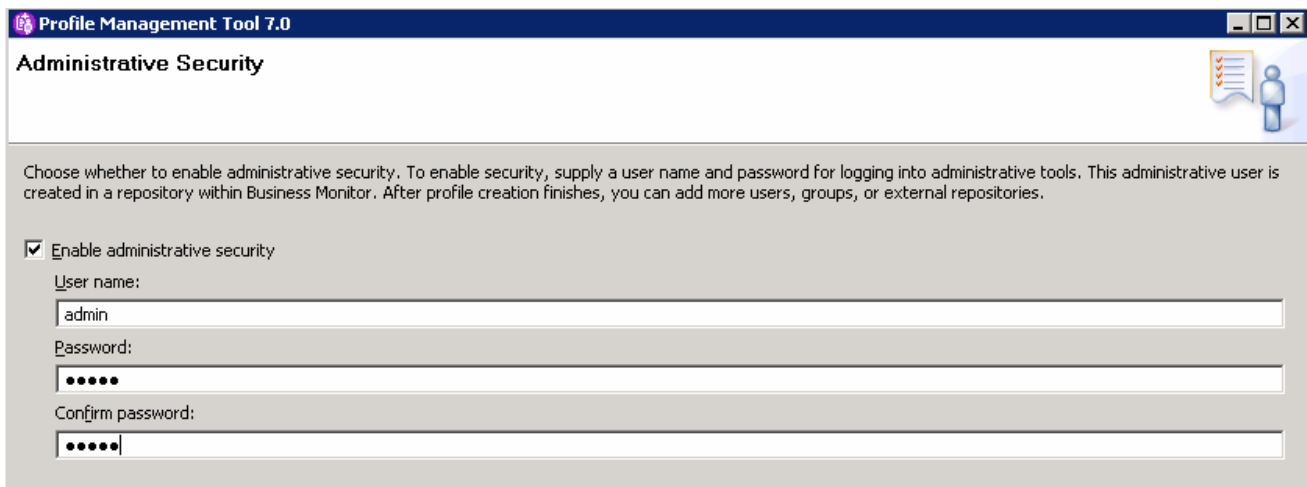


____ 18. In this panel, specify the profile name, directory path to the profile being created, and the performance tuning setting. Click **Next**.



The screenshot shows the 'Node and Host Names' panel in the Profile Management Tool 7.0. The title bar reads 'Profile Management Tool 7.0'. Below the title bar, the panel title is 'Node and Host Names'. A small icon of a person with a speech bubble is in the top right corner. The main area contains the instruction: 'Specify a node name, server name, host name, and cell name for this profile.' Below this are four text input fields: 'Node name:' with the value 'WSBETA147Node03', 'Server name:' with the value 'server1', 'Host name:' with the value 'WSBETA147.austin.ibm.com', and 'Cell name:' with the value 'WSBETA147Node03Cell'.

____ 19. In this panel, specify node and host names. Click **Next** .



The screenshot shows the 'Administrative Security' panel in the Profile Management Tool 7.0. The title bar reads 'Profile Management Tool 7.0'. Below the title bar, the panel title is 'Administrative Security'. A small icon of a person with a speech bubble is in the top right corner. The main area contains the instruction: 'Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within Business Monitor. After profile creation finishes, you can add more users, groups, or external repositories.' Below this is a checked checkbox labeled 'Enable administrative security'. Underneath are three text input fields: 'User name:' with the value 'admin', 'Password:' with five dots, and 'Confirm password:' with five dots.

____ 20. In the **Administrative Security** panel, select the check box for **Enable administrative security** and then type the administrative username and password. Click **Next** .

The screenshot shows a window titled "Profile Management Tool 7.0" with a sub-header "Security Certificate (Part 1)". Below the header is a help icon. The main content area contains instructions: "Choose whether to create a default personal certificate and root signing certificate, or import them from keystores. To create new certificates, proceed to Part 2 and provide the certificate information. To import existing certificates from keystores, locate the certificates then proceed to Part 2 and verify the certificate information." There are two radio button options: "Create a new default personal certificate." (selected) and "Import an existing default personal certificate." Below this is a section titled "Default personal certificate" with fields for "Path:", "Password:", "Keystore type:" (dropdown), and "Keystore alias:" (dropdown). A "Browse..." button is next to the Path field. The second radio button option is "Create a new root signing certificate." (selected) and "Import an existing root signing certificate." Below this is a section titled "Root signing certificate" with identical fields for "Path:", "Password:", "Keystore type:", and "Keystore alias:", also with a "Browse..." button.

____ 21. In this panel, accept the defaults and click **Next**.

The screenshot shows the 'Security Certificate (Part 2)' window in the Profile Management Tool 7.0. The window title bar includes the IBM logo and the text 'Profile Management Tool 7.0'. The main content area has a blue header with the title 'Security Certificate (Part 2)' and a help icon. Below the header, there is a paragraph of instructions: 'Modify the certificate information to create new certificates during profile creation. If you are importing existing certificates from keystores, use the information to verify whether the selected certificates contain the appropriate information. If the selected certificates do not, click **Back** to import different certificates.' A 'Restore Defaults' button is located below the instructions. The form is divided into two sections: 'Default personal certificate (a personal certificate for this profile, public and private key):' and 'Root signing certificate (personal certificate for signing other certificates, public and private key):'. The first section contains three text boxes: 'Issued to distinguished name:' with the value 'cn=WSBETA147.austin.ibm.com,ou=WSBETA147Node03Cell,ou=WSBETA147Node03,o=IBM,c=US'; 'Issued by distinguished name:' with the value 'cn=WSBETA147.austin.ibm.com,ou=Root Certificate,ou=WSBETA147Node03Cell,ou=WSBETA147Node03,o=IBM,c=US'; and 'Expiration period in years:' with a dropdown menu set to '1'. The second section contains one text box: 'Expiration period in years:' with a dropdown menu set to '15'. Below these sections are two password fields: 'Default keystore password:' and 'Confirm the default keystore password:', both showing masked characters. At the bottom, a note states: 'Note: The default value for the keystore is well documented in the Information Center and should be changed to protect the security of the keystore files and SSL configuration.'

____ 22. In this panel, accept the defaults. Click **Next** .

Profile Management Tool 7.0

Port Values Assignment

The values in the following fields define the ports for IBM Business Monitor and do not conflict with other profiles in this installation. Another installation or other programs might use the same ports. To avoid run-time port conflicts, verify that each port value is unique.

Default Port Values Recommended Port Values

Administrative console port (Default 9060):	9062
Administrative console secure port (Default 9043):	9045
HTTP transport port (Default 9080):	9082
HTTPS transport port (Default 9443):	9445
Bootstrag port (Default 2809):	2811
SIP port (Default 5060):	5065
SIP secure port (Default 5061):	5064
SOAP connector port (Default 8880):	8882
Administrative interprocess communication port (Default 9633)(X):	9636
SAS SSL ServerAuth port (Default 9401):	9409
CSIY2 ServerAuth listener port (Default 9403):	9408
CSIY2 MultiAuth listener port (Default 9402):	9407
ORB listener port (Default 9100):	9102
High availability manager communication port (DCS)(Default 9353):	9355
Service integration port (Default 7276):	7278
Service integration secure port (Default 7286):	7288
Service integration MQ interoperability port (Default 5558):	5560

- ___ 23. In this panel, review the ports assigned. You can modify them but ensure that the port numbers do not conflict with other services running on this machine. Click **Next**.
- ___ 24. In the **Windows service definition** panel, clear the check box for **Run the IBM Business Monitor process as a Windows service**. Click **Next**.
- ___ 25. In the Web server definition panel, clear the check box for **Create a Web server definition**. Click **Next**.

Profile Management Tool 7.0

IBM Business Process Manager Monitor Models

Important: To deploy these monitor models, you must have already created the IBM Business Monitor database, or allow this Profile Management tool to create the IBM Business Monitor database on the local server.

Deploy the global process monitor model and the human task monitor model.

You can use the global process monitor model to monitor any BPEL or BPMN process running on IBM Business Process Manager without monitor model generation or deployment steps. Processes are detected dynamically and tracked based on the events that they emit. To view the collected data in Business Space, you can use configured spaces for the global process monitor, or custom dashboards that you assemble with Business Monitor widgets.

Deploy IBM Business Monitor global process monitor model

For more information about the global process monitor model, see the online information center.
[Online information center link](#)

The human task monitor model is required to view human tasks in your dashboard using the IBM Business Monitor Human Task widget. This model and widget support only those human tasks running inside a Business Process Execution Language Process in IBM BPM Advanced.

You can use the widgets provided by IBM BPM Advanced to work with and supervise all forms of human tasks running in IBM BPM Advanced.

Deploy human task monitor model (requires IBM Business Process Manager Advanced)

Host name for IBM Business Process Manager:

Port number for IBM Business Process Manager (default port number is 2809):

- ____ 26. In this panel, optionally select the check boxes to deploy the global process monitor model and the human task monitor model. These are used in conjunction with the IBM Business Process Manager server to automatically monitor BPEL or BPMN processes. You will need the IBM BPM server host name and RMI port number. Click **Next**.

Profile Management Tool 7.0

Database Design

Specify whether to use a design file as the input for your database configuration. If you specify a database design file on this panel, subsequent panels for database configuration are skipped.

Use a database design file

Fully qualified path of the database design file:

Delay execution of database scripts (must select if using a remote database)

- ____ 27. In this panel, you can select to use a database design file. This file is normally setup by your database administrator and it contains the preconfigured database information for the Monitor database. In this example, it is not selected and then several more panels follow that allow you to manually enter the database configuration information. Click **Next**.

The screenshot shows the 'Database Configuration' panel in the Profile Management Tool 7.0. The title bar reads 'Profile Management Tool 7.0'. Below the title bar, the text says: 'IBM Business Monitor components use a common database. Choose a database product and enter the information based on that product.'

Database product: DB2 Universal Database

Override the destination directory for generated scripts
Database script output directory: C:\IBM\BPM\v7.5\profiles\WBMon01\dbscripts\Monitor

Database name: MONITOR

Schema name: MONITOR

Delay execution of database scripts (must select if using a remote database).

___ 28. In the **Database Configuration** panel, specify the database product and the database name. Click **Next**.

The screenshot shows the 'Database Configuration (Part 2)' panel in the Profile Management Tool 7.0. The title bar reads 'Profile Management Tool 7.0'. Below the title bar, the text says: 'Additional information about the database server you are using is required to complete configuration for the DB2 Universal Database database. For database authentication, you must type the user name and password that will be used to connect to the database. The database user must have read and write access on the database.'

User name: db2admin

Password: ●●●●●●

Confirm password: ●●●●●●

Location (directory) of JDBC driver classpath files: C:\IBM\BPM\v7.5\jdbcdrivers\DB2

Database server host name or IP address: WSBETA147.austin.ibm.com

Database TCP/IP service port or listener port: 50000

___ 29. In this panel, specify the database authentication and other configuration information. Click **Next**.

Profile Management Tool 7.0

Cognos Configuration

Configure IBM Business Monitor for multidimensional data analysis.

Create a new Cognos server configuration. You must provide a database user name with credentials to create tables.

Database name:
COGNOSCS

Database user name:
db2admin

Database password:
.....

Confirm password:
.....

The new Cognos server configuration uses the following values from the IBM Business Monitor database configuration:

Database product: DB2_UNIVERSAL
Database server host name or IP address: WSBETA147.austin.ibm.com
Location (directory) of the JDBC driver classpath files: C:/IBM/BPM/v7.5/jdbcdrivers/DB2

Execute database scripts during this profile augmentation.

Use an existing Cognos server configuration.

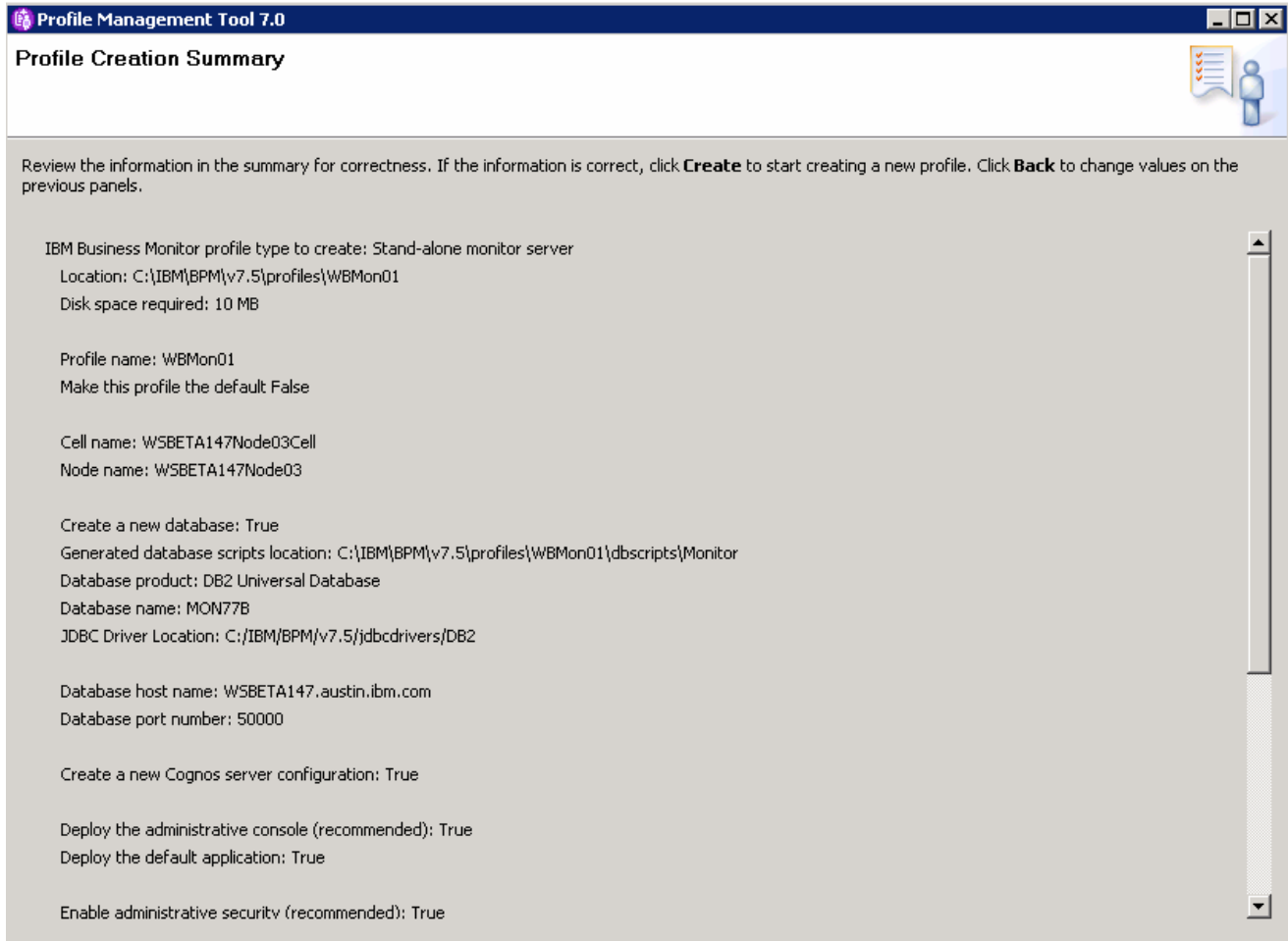
External dispatcher URI:
.....

Cognos administrator user name:
.....

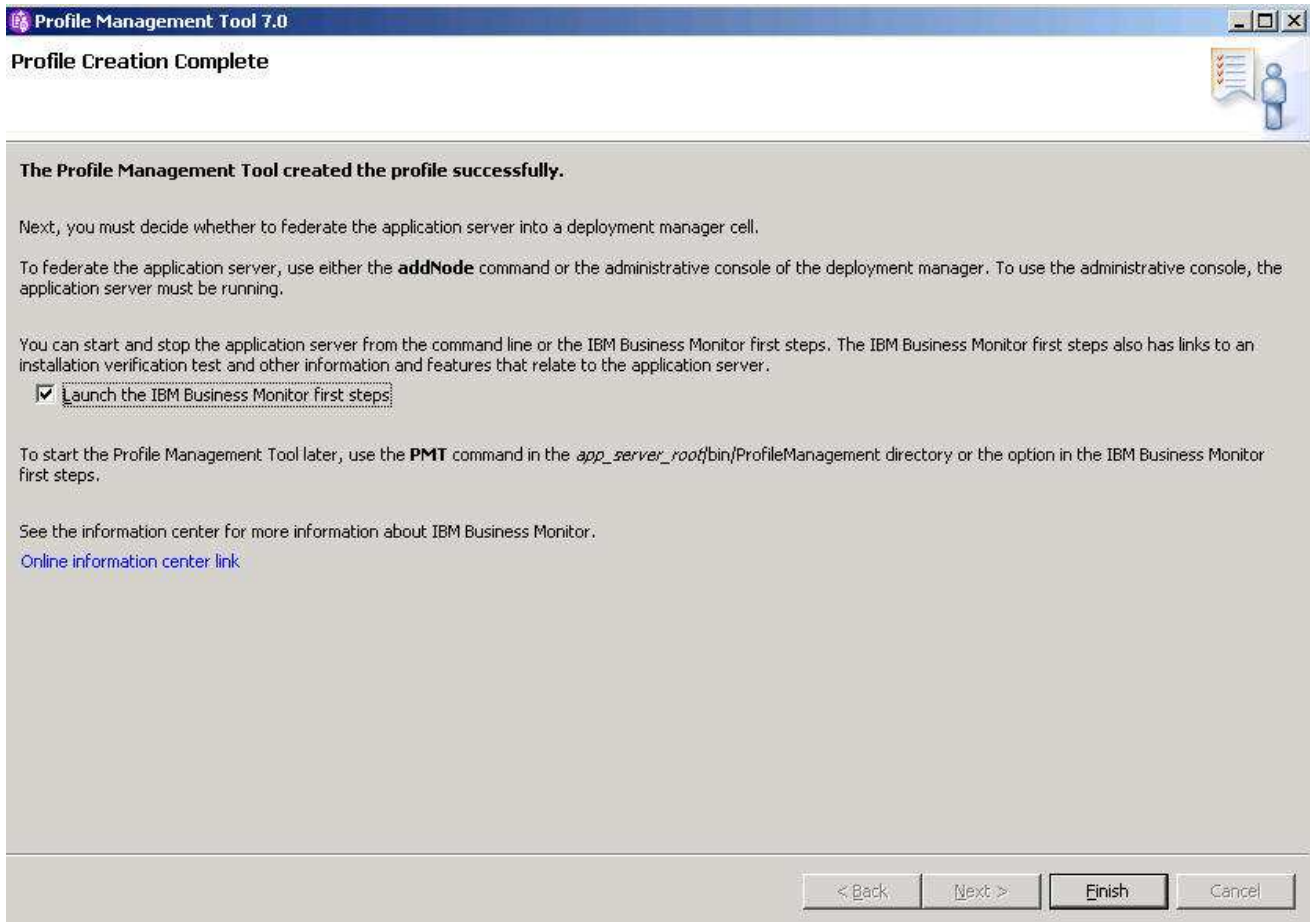
Cognos administrator password:
.....

Confirm Cognos administrator password:
.....

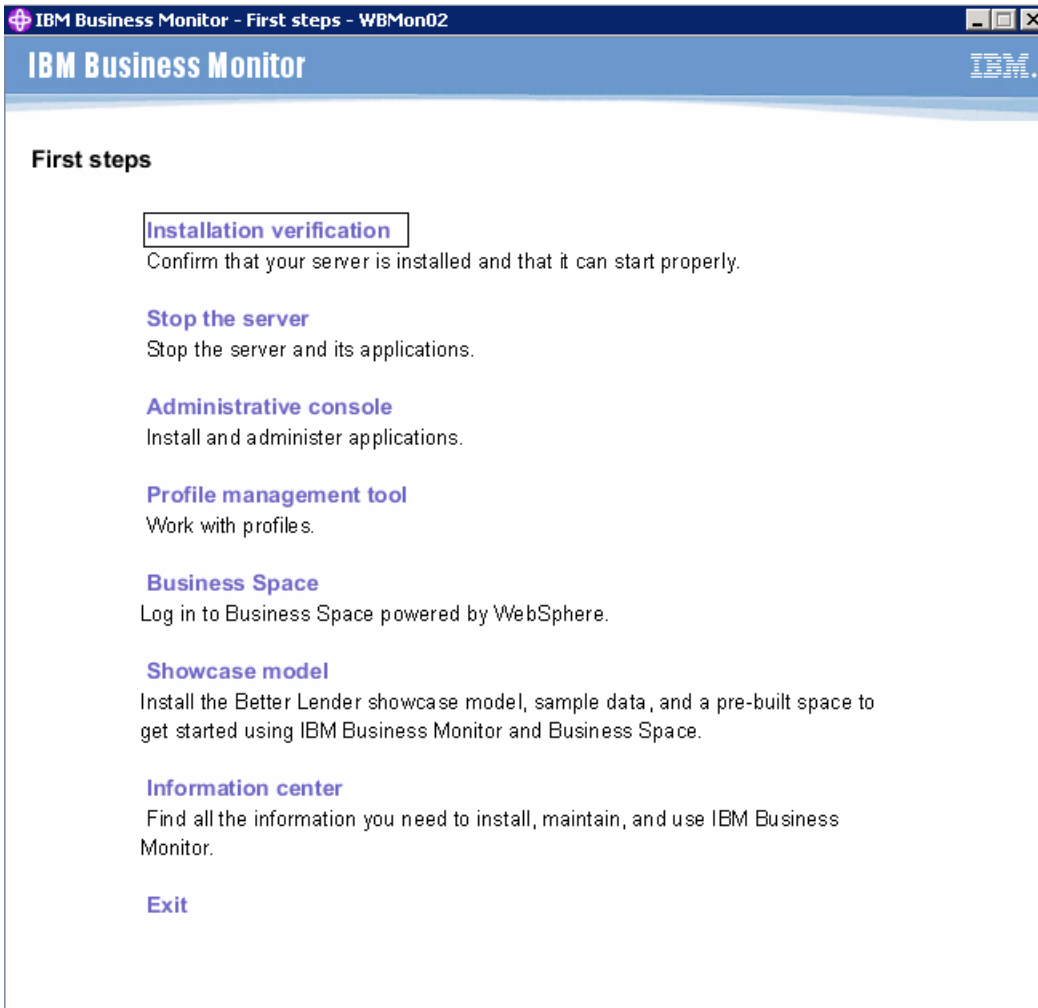
30. In this panel, specify the Cognos server configuration. You can create a new server configuration or connect to an existing Cognos server. Click **Next**.



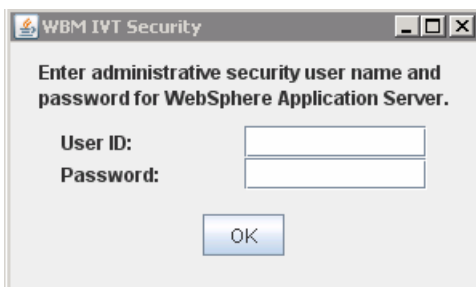
____ 31. Review the summary and click **Create**.



- ___ 32. Once the profile creation is complete, select the check box for **Launch the IBM Business Monitor first steps**. Click **Finish**.



___ 33. Click the **Installation verification** link. The installation verification test utility starts the monitor server and verifies the installation and configuration.



___ 34. Enter the administrative username and password. Click **OK**.


```
+ First steps output - Installation verification
- Summary: Monitor application status verification is successful

- Verify Database Connection
- Verify Data Source Connection
- Business Space data source passed
- Monitor_Admin_Database passed
- Monitor_Database passed
- Summary: Database testing is successful

- Mortgage Lending Model
- Verify Mortgage Lending Model
- Wait 120 seconds
- MortgageLendingBAMApplication passed
- Send events passed
- Wait 30 seconds
- Validate kpi: Total_Completed_Loans passed
- Validate kpi: Average_Application_Loan_Amount__x0028__x0024__x0029_ passed
- Validate kpi: Yearly_Total_of_Application_Loan_Dollars passed
- Uninstall MortgageLending model passed
- Summary: MortgageLending model verification is successful

- Summary: Installation verification is successful
```

____ 35. You should have results similar to this, showing that the verification was successful. Close the First Steps output and console.

Alternative: Manually create IBM Business Monitor stand-alone server profile

IBM Business Monitor stand-alone server profile can be created silently using the **manageprofiles** command. The manageprofiles command comes in handy when creating profiles on 64-bit platforms where the Profile Management Tool is not supported.

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

```
manageprofiles.bat (.sh) -create -templatePath <WBM_HOME>/profileTemplates/wbmonitor/default -help
```

____ 1. The options below are commonly used to create an IBM Business Monitor stand-alone profile:

Parameter	Value
-create	N/A
-templatePath	<WBM_HOME>/profileTemplates/wbmonitor/default
-profileName	WBMon01
-profilePath	<WBM_HOME>/profiles/WBMon01
-nodeName	Example: wbmNode01
-cellName	Example: wbmNode01Cell
-serverName	Example: server1
-hostName	Example: wbmserver.austin.ibm.com
-enableAdminSecurity	true
-adminUserName	Example: admin
-adminPassword	Example: superSecret
-winserviceCheck (windows only)	false
-wbmDBType	Use DB2_UNIVERSAL for connecting to DB2@. Use Oracle11g for connecting to either Oracle 10g or Oracle 11g. Use DB2UDBOS390 for connecting to DB2 for z/OS@. Use MSSQLSERVER_MICROSOFT for connecting to Microsoft SQL Server.

-wbmDBDelayConfig	If you ignore this parameter or set the value to false, a local database is created on the machine where the profile is created. If you set the value to true, the database and all required tables are not created during the installation.
-wbmDBName	Example: MONITOR
-wbmDBSchemaName	Example: MONITOR
-wbmDBDriverType	4
-wbmDBUserId	Example: db2admin
-wbmDBPassword	Example: superSecret
-wbmDBHostName	Example: dbserver.austin.ibm.com
-wbmDBServerPort	50000 (default)
-configureBSpace	true

___ 2. Run the manageprofiles script

- ___ a. Navigate to the `<WBM_HOME>/bin` directory and run the `manageprofiles` command with the options

Example:

```
manageprofiles.bat -create -templatePath
<WBM_HOME>\profileTemplates\wbmonitor\default profileName WBMon01 -profilePath
<WBM_HOME>\profiles\WBMon01 -nodeName wbmNode01 -cellName wbmNode01Cell -serverName
server1 -hostname wbmserver.austin.ibm.com -enableAdminSecurity true -adminUserName
admin -adminPassword superSecret -winserviceCheck false -wbmDBDelayConfig true -
wbmDBType DB2_Universal -wbmDBName MONITOR -wbmDBSchemaName MONITOR -wbmDBDriverType 4
-wbmDBUserId db2admin -wbmDBPassword superSecret -wbmDBHostName
dbserver.austin.ibm.com -wbmDBServerPort 50000 -configureBSpace true
```

___ 3. Verify the installation

- ___ a. Navigate to `<WBM_HOME>/logs/manageprofiles` and locate the `profile_name_create.log` file
- ___ 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. If you delayed creation of the database, copy the database scripts to the database host machine and run the scripts to create the IBM Business Monitor database and tables. Visit **Task 1** of this document for instructions.

___ 5. Navigate to `<WBM_HOME>/bin` and run the `ivt.bat` command with appropriate parameters

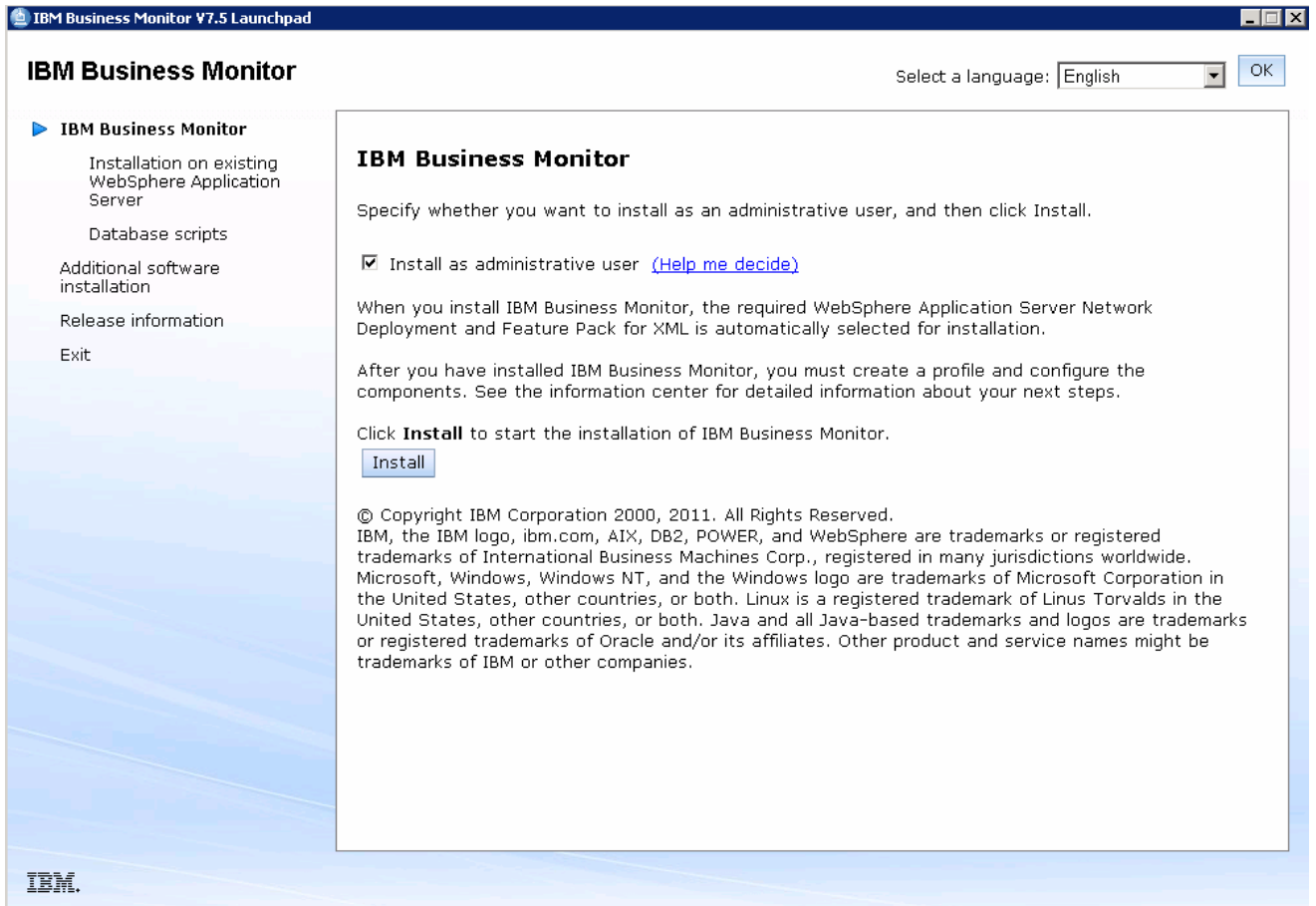
- `ivt.bat (.sh) <SERVER_NAME> <PROFILE_NAME> -username <USER_NAME> -password <PASSWORD>`

____ 6. Ensure the verification is successful. Examine the `SystemOut.log` file. The file is located at `<WBM_HOME>/profiles/WBMon01/logs/server1`

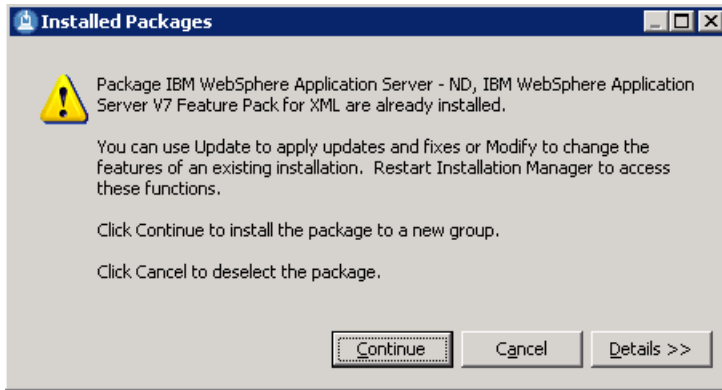
Part 3: Augment IBM BPM server stand-alone profile

In this part of the exercise, you will augment an existing IBM BPM Process Server V7.5 stand-alone server profile with IBM Business Monitor V7.5. For 64 bit systems, you will need to manually augment the profile which is explained in the next section.

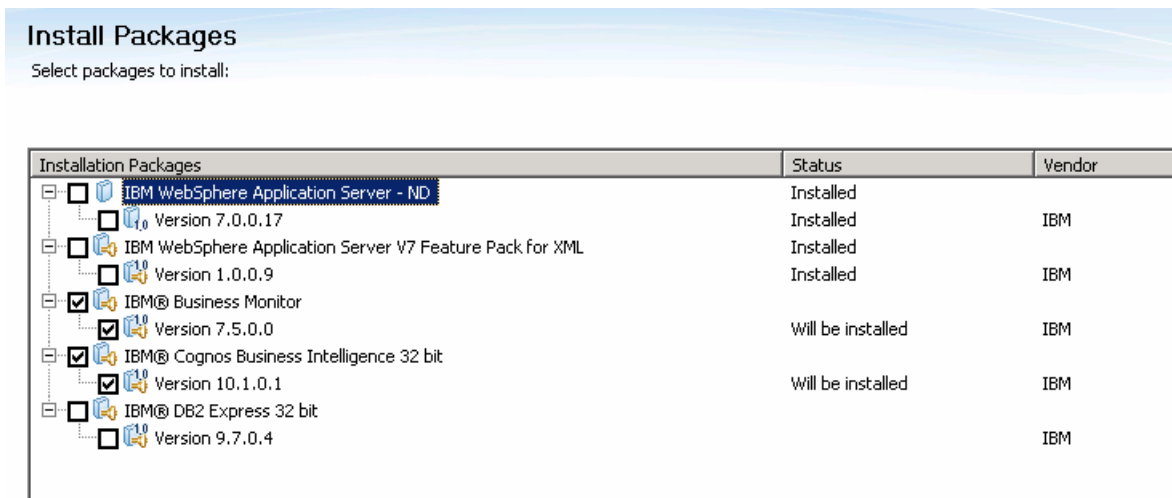
- ___ 7. Install IBM BPM Advanced, selecting either process server or process center during the installation. Then create a stand-alone server profile.
- ___ 8. Install IBM Business Monitor on the same host containing IBM BPM.
 - ___ a. Run launchpad.exe.



- ___ b. Click **Install**.

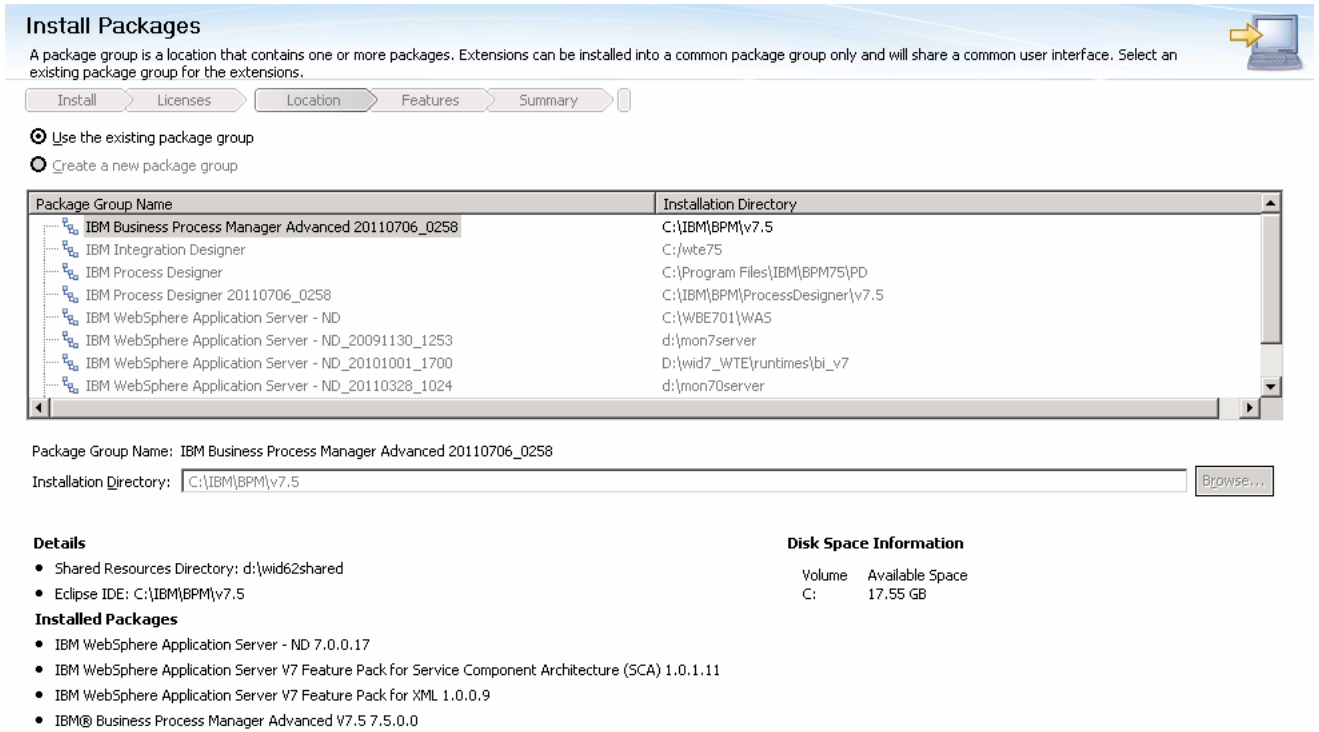


___ c. You are warned that WebSphere Application Server and the XML feature pack are already installed. Click **Continue**.



___ d. Clear the selection for IBM WebSphere Application Server – ND, since this was already installed with IBM BPM. Clear the selection for the associated Feature Pack for XML, since this was already installed with IBM BPM. You may also need to clear the DB2 Express selection if you already have a database product installed. Click **Next**.

___ e. Read and accept the license agreement. Click **Next**.



Install Packages

A package group is a location that contains one or more packages. Extensions can be installed into a common package group only and will share a common user interface. Select an existing package group for the extensions.

Install Licenses Location **Features** Summary

Use the existing package group
 Create a new package group

Package Group Name	Installation Directory
IBM Business Process Manager Advanced 20110706_0258	C:\IBM\BPM\v7.5
IBM Integration Designer	C:\Iwte75
IBM Process Designer	C:\Program Files\IBM\BPM75\PD
IBM Process Designer 20110706_0258	C:\IBM\BPM\ProcessDesigner\v7.5
IBM WebSphere Application Server - ND	C:\WBE701\WAS
IBM WebSphere Application Server - ND_20091130_1253	d:\mon7server
IBM WebSphere Application Server - ND_20101001_1700	D:\wid7_WTE\runtimes\bi_v7
IBM WebSphere Application Server - ND_20110328_1024	d:\mon70server

Package Group Name: IBM Business Process Manager Advanced 20110706_0258
 Installation Directory: C:\IBM\BPM\v7.5 Browse...

Details

- Shared Resources Directory: d:\wid62shared
- Eclipse IDE: C:\IBM\BPM\v7.5

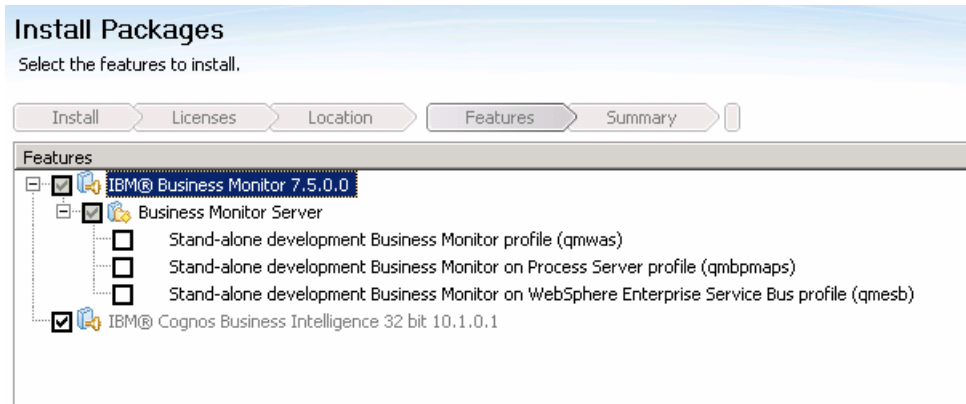
Installed Packages

- IBM WebSphere Application Server - ND 7.0.0.17
- IBM WebSphere Application Server V7 Feature Pack for Service Component Architecture (SCA) 1.0.1.11
- IBM WebSphere Application Server V7 Feature Pack for XML 1.0.0.9
- IBM® Business Process Manager Advanced V7.5 7.5.0.0

Disk Space Information

Volume	Available Space
C:	17.55 GB

___ f. Select to use the existing package group for IBM BPM and make sure that the correct package group is selected. Click **Next**.



Install Packages

Select the features to install.

Install Licenses Location **Features** Summary

Features

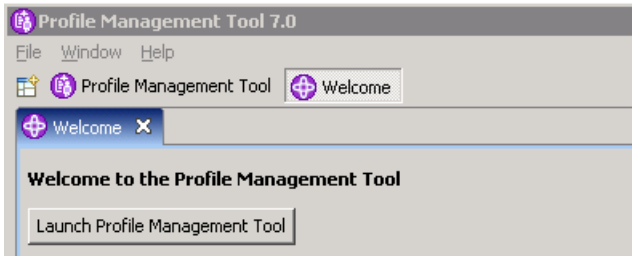
- IBM® Business Monitor 7.5.0.0
 - Business Monitor Server
 - Stand-alone development Business Monitor profile (qmwasm)
 - Stand-alone development Business Monitor on Process Server profile (qmbpmas)
 - Stand-alone development Business Monitor on WebSphere Enterprise Service Bus profile (qmesb)
 - IBM® Cognos Business Intelligence 32 bit 10.1.0.1

___ g. Review the features to install. You do not need to select a profile since you will augment the IBM BPM profile later. Click **Next**.

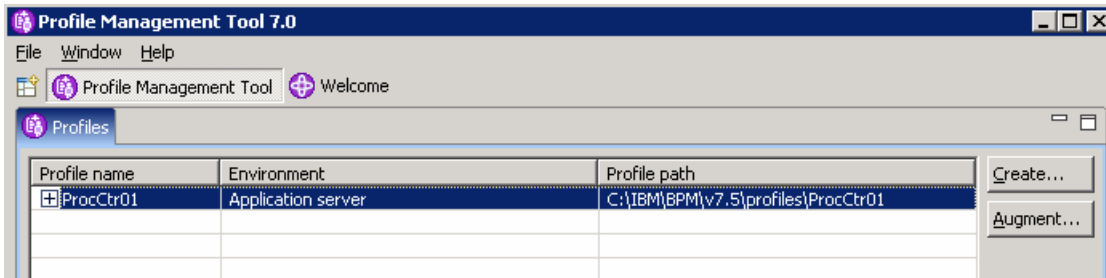
___ h. Review the summary and click **Install**.

___ 9. Launch the Profile Management Tool. From the start menu, select **IBM** → **BPM Advanced 7.5** → **Profile Management Tool**

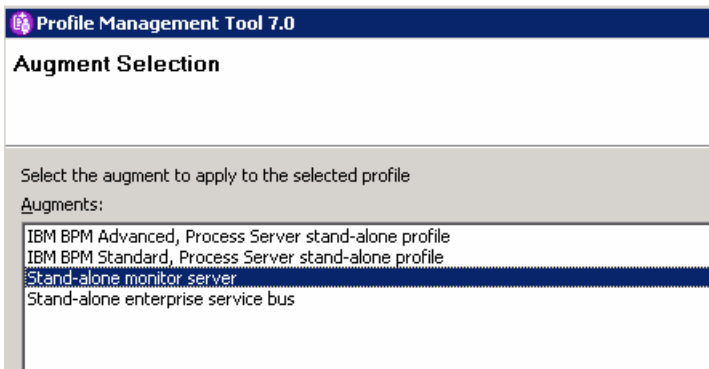
Note: Alternatively to launch the Profile Management Tool, navigate to <MONBPM_HOME>\bin**ProfileManagement**, double click **pmt.bat**



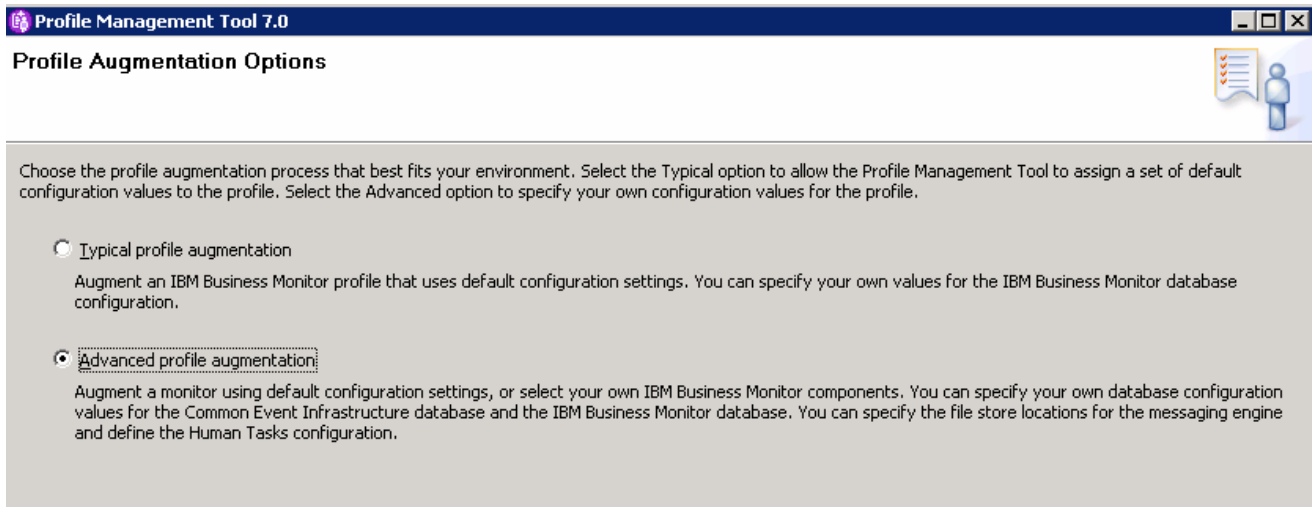
10. Select the **Launch Profile Management Tool** button. In the next panel you should see your BPM server profile listed. Select it, and then there may be a delay before the **Augment** button is enabled.



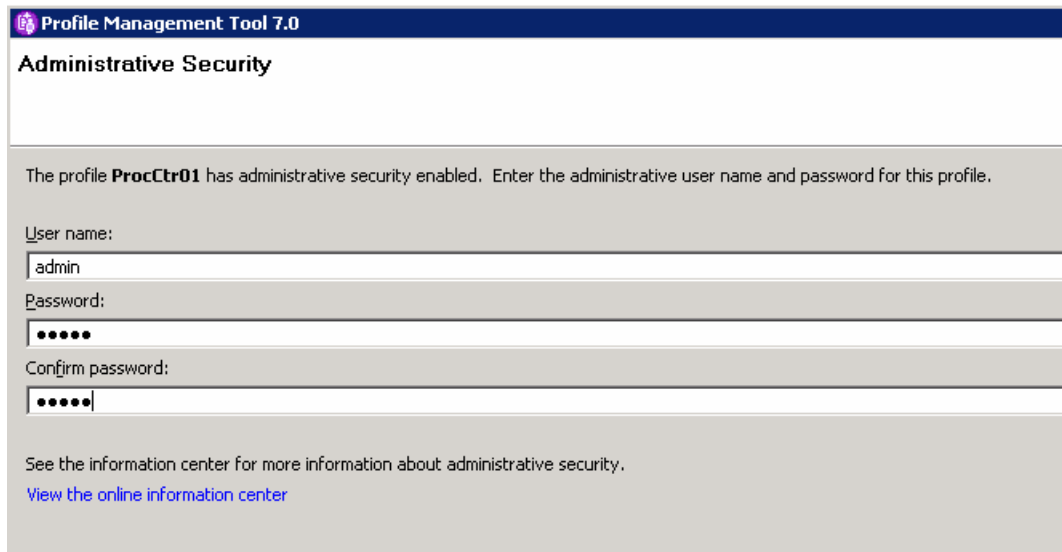
11. Click the **Augment** button.



12. In this panel, select **stand-alone monitor server**



___ 13. Select **Advanced profile augmentation**, then click **Next**



___ 14. Enter the user name and password for the IBM BPM server. Click **Next**.

Profile Management Tool 7.0

IBM Business Process Manager Monitor Models

Important: To deploy these monitor models, you must have already created the IBM Business Monitor database, or allow this Profile Management tool to create the IBM Business Monitor database on the local server.

Deploy the global process monitor model and the human task monitor model.

You can use the global process monitor model to monitor any BPEL or BPMN process running on IBM Business Process Manager without monitor model generation or deployment steps. Processes are detected dynamically and tracked based on the events that they emit. To view the collected data in Business Space, you can use configured spaces for the global process monitor, or custom dashboards that you assemble with Business Monitor widgets.

Deploy IBM Business Monitor global process monitor model

For more information about the global process monitor model, see the online information center.
[Online information center link](#)

The human task monitor model is required to view human tasks in your dashboard using the IBM Business Monitor Human Task widget. This model and widget support only those human tasks running inside a Business Process Execution Language Process in IBM BPM Advanced.

You can use the widgets provided by IBM BPM Advanced to work with and supervise all forms of human tasks running in IBM BPM Advanced.

Deploy human task monitor model (requires IBM Business Process Manager Advanced)

Host name for IBM Business Process Manager:

Port number for IBM Business Process Manager (default port number is 2809):

For more information about the human task monitor model, see the online information center.
[Online information center link](#)

15. In this panel, optionally select the check boxes to deploy the global process monitor model and the human task monitor model. These are used in conjunction with the IBM Business Process Manager server to automatically monitor BPEL or BPMN processes. If you select them you will need the IBM BPM server host name and RMI port number. Click **Next**.

Profile Management Tool 7.0

Database Design

Specify whether to use a design file as the input for your database configuration. If you specify a database design file on this panel, subsequent panels for database configuration are skipped.

Use a database design file

Fully qualified path of the database design file:

Delay execution of database scripts (must select if using a remote database)

16. In this panel, you can select to use a database design file. This file is normally setup by your database administrator and it contains the preconfigured database information for the Monitor database. In this example, it is not selected and then several more panels follow that allow you to manually enter the database configuration information. Click **Next**.

Profile Management Tool 7.0

Database Configuration

IBM Business Monitor components use a common database. Choose a database product and enter the information based on that product.

Database product:
DB2 Universal Database

Override the destination directory for generated scripts
Database script output directory:
C:\IBM\BPM\v7.5\profiles\ProcCtr01\dbscripts\Monitor

Database name:
MONITOR

Schema name:
MONITOR

Delay execution of database scripts (must select if using a remote database).

____ 17. In the **Database Configuration** panel, specify the database product and the database name. Click **Next**.

Profile Management Tool 7.0

Database Configuration (Part 2)

Additional information about the database server you are using is required to complete configuration for the DB2 Universal Database database. For database authentication, you must type the user name and password that will be used to connect to the database. The database user must have read and write access on the database.

User name:
db2admin

Password:
●●●●●●

Confirm password:
●●●●●●

Location (directory) of JDBC driver classpath files:
C:\IBM\BPM\v7.5\jdbcdrivers\DB2 Browse...

Database server host name or IP address:
WSBETA147.austin.ibm.com

Database TCP/IP service port or listener port:
50000

____ 18. In this panel, specify the database authentication and other configuration information. Click **Next**.

Profile Management Tool 7.0

Cognos Configuration

Configure IBM Business Monitor for multidimensional data analysis.

Create a new Cognos server configuration. You must provide a database user name with credentials to create tables.

Database name:

Database user name:

Database password:

Confirm password:

The new Cognos server configuration uses the following values from the IBM Business Monitor database configuration:

Database product: DB2_UNIVERSAL
Database server host name or IP address: WSBETA147.austin.ibm.com
Location (directory) of the JDBC driver classpath files: C:/IBM/BPM/v7.5/jdbcdrivers/DB2

Execute database scripts during this profile augmentation.

Use an existing Cognos server configuration.

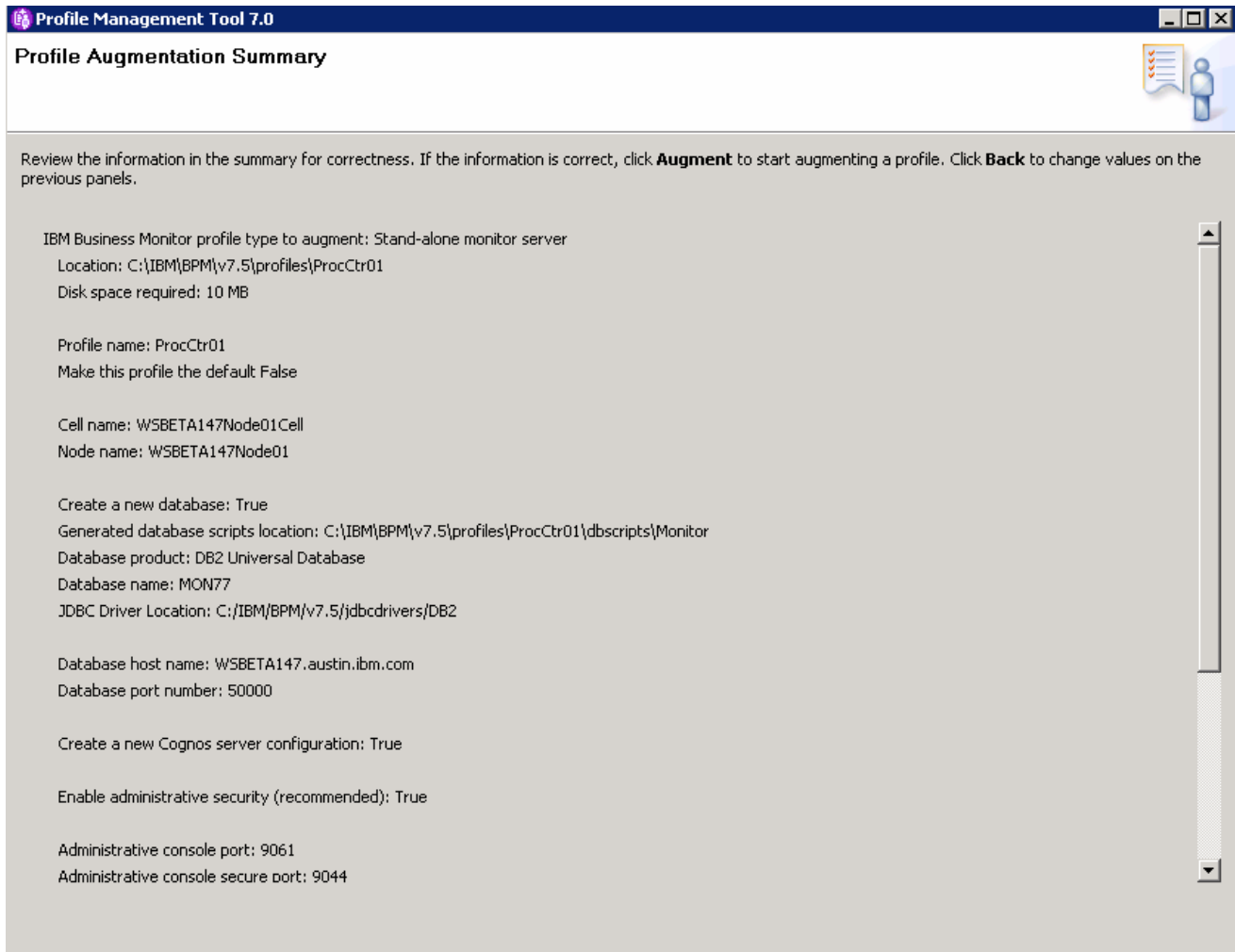
External dispatcher URI:

Cognos administrator user name:

Cognos administrator password:

Confirm Cognos administrator password:

19. In this panel, specify the Cognos server configuration. You can create a new server configuration or connect to an existing Cognos server. Click **Next**.



____ 20. Review the summary and click **Augment** .

____ 21. You will see a progress bar, and then you should see a panel indicating that the augmentation is complete.

Alternative: Manually augment IBM BPM Server stand-alone profile

In this part of the exercise, you will augment an existing IBM Process Server stand-alone server profile using the **manageprofiles** command. The manageprofiles command comes in handy when creating profiles on 64-bit platforms where the Profile Management Tool is not supported.

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

```
manageprofiles.bat -augment -templatePath <WBM_WPS_HOME>/profileTemplates/wbmonitor/default -help
```

____ 22. The options below are commonly used to augment an IBM BPM server with IBM Business Monitor:

Parameter	Value
-augment	N/A
-templatePath	<WBM_WPS_HOME>/profileTemplates/wbmonitor/default
-profileName	ProcSrv01
-profilePath	<WBM_WPS_HOME>/profiles/ProcSrv01
-adminUserName	Example: admin
-adminPassword	Example: superSecret
-wbmDBType	Use DB2_UNIVERSAL for connecting to DB2®. Use Oracle11g for connecting to either Oracle 10g or Oracle 11g. Use DB2UDBOS390 for connecting to DB2 for z/OS®. Use MSSQLSERVER_MICROSOFT for connecting to Microsoft SQL Server.
-wbmDBDelayConfig	If you ignore this parameter or set the value to false, a local database is created on the machine where the profile is created. If you set the value to true, the database and all required tables are not created during the installation.
-wbmDBName	Example: MONITOR
-wbmDBSchemaName	Example: MONITOR
-wbmDBDriverType	4
-wbmDBUserId	Example: db2admin
-wbmDBPassword	Example: superSecret
-wbmDBHostName	Example: dbserver.austin.ibm.com
-wbmDBServerPort	50000 (default)
-configureHumanTask	true
-humanTaskWPSHostname	Example: wps.austin.ibm.com
-humanTaskWPSRMIPort	2809 (default)

___ 23. Run the manageprofiles script

- __ a. Navigate to the <WBM_WPS_HOME>/bin directory and run the manageprofiles script along with the options

Example:

```
manageprofiles.bat -augment -templatePath
<WBM_WPS_HOME>\profileTemplates\wbmonitor\default -profileName WBMon01 -profilePath
<WBM_WPS_HOME>\profiles\WBMon01 -adminUserName admin -adminPassword superSecret -
```

```
wbmDBDelayConfig true -wbmDBType DB2_Universal -wbmDBName MONITOR -wbmDBSchemaName  
MONITOR -wbmDBDriverType 4 -wbmDBUserId db2admin -wbmDBPassword superSecret -  
wbmDBHostName dbserver.austin.ibm.com -wbmDBServerPort 50000 -configureHumanTask true  
-humanTaskWPSHostname procsrv.austin.ibm.com -humanTaskWPSRMIPort 2809
```

___ 24. Verify the installation

__ a. Navigate to `<WBM_WPS_HOME>/logs/manageprofiles` and locate the `<profile_name>_augment.log` file

__ 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

___ 25. If you delayed creation of the database, copy the database scripts to the database host machine and run the scripts to create the IBM Business Monitor database and tables. Visit **Task 1** of this document for instructions.

___ 26. Run the installation verification test

__ a. Navigate to `<WBM_WPS_HOME>/bin` and run the `ivt.bat` command with appropriate parameters

- `ivt.bat <SERVER_NAME> <PROFILE_NAME> -username <USER_NAME> -password <PASSWORD>`

___ 27. Ensure the verification is successful. While the verification is complete, examine the **SystemOut.log** file. The file is located at `<WBM_WPS_HOME>/profiles/ProcSrv01/logs/server1`

Task 1: Manually create IBM Business Monitor database and tables

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

Pre-requisites:-

- Install and configure the IBM 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 IBM 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:

`<DMGR_PROFILE_HOME>\dbscripts\Monitor\DB2`

Complete the instructions below to create the database:

- ____ 1. Open the DB2 command window from **Start → Programs → IBM DB2 → <DB2_instance> → Command Line Tools → Command Window** and change the directory to the temporary directory where the scripts are copied
- ____ 2. There are separate scripts to create the database and tables. Here are examples of commands to create them:
 - `db2 -tf createDatabase.sql`
 - `db2 -tf createTables.sql` (**Note:** Connect to the database before running this script)
- ____ 3. Close the DB2 command window.