

# WebSphere Business Monitor V6.2 – Configuring a remote CEI server

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## What this exercise is about

The objective of this lab is to provide instructions for installing WebSphere Business Monitor V6.2 as a stand-alone server, then configuring it to use a remote CEI server which is installed on a second machine.

To enable the WebSphere® Business Monitor server to manage a remote CEI event server, you must install support files into the installation folder of the remote CEI server. If the CEI server is in a different cell than the WebSphere Business Monitor server, these tasks guide you through the configuration to enable the remote system to send events to WebSphere Business Monitor.

## Lab requirements

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

- WebSphere Business Monitor V6.2 which includes
  - WebSphere Application Server V6.1.0.21
  - Alphablox V9.5
- WebSphere Process Server V6.2
- DB2 ESE V9.5
- You should have two machines, or you may use just one machine if it has sufficient memory to allow starting two stand-alone servers simultaneously.

## What you should be able to do

At the end of this lab you should be able to do the following:

- Install DB2 on machine 1.
- Install WebSphere Business Monitor on machine 1.
- Install WebSphere Process Server on machine 2.
- Configure single sign-on and SSL on both machines.
- Copy the crosscell JAR's to the remote server and register the plug-ins.
- Run the queue bypass scripts on the remote server and test the JDBC connection.
- Deploy a monitor model to the monitor server.
- Submit events on the remote server.
- Verify that monitoring context instances are created.

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## Introduction

To enable the WebSphere® Business Monitor server to manage a remote CEI event server, you must install support files into the installation folder of the remote CEI server. If the CEI server is in a different cell than the WebSphere Business Monitor server, then you must change the configuration to enable the remote system to send events to WebSphere Business Monitor. The remote server can be WebSphere Process Server 6.1, WebSphere Process Server 6.2, or WebSphere Application Server 6.1.

For WebSphere Business Monitor version 6.2, there are two options for receiving events, "Queued" and "Queue Bypass".

In previous releases, only the queued option was available and you would use the crosscell scripts to create an SI bus link which would create the connection between the buses on the two servers.

In this release, queue bypass is a new method for the consumption of events from the CEI server into the server Moderator for a monitoring model. Event flow skips the monitoring model's JMS queue and instead places all events directly into the monitoring model's event database table. This will increase server throughput.

This lab will show you how to install DB2 and a stand-alone monitor server onto machine 1. Then you will install a stand-alone process server on machine 2. Then you will configure the queue bypass connection.

You will not need an LDAP server since you will use the built-in VMM file based repositories.

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## Part 1: Install DB2 on machine 1

- \_\_\_ 1. Activate the license.
  - \_\_\_ a. Unzip your activation zip to <DB2License> folder. An example of the license file is DB2\_ESE\_Auth\_User\_Activation\_V95.zip.
  - \_\_\_ b. Copy the 'db2' folder in <DB2License> to the 'db2' folder in the DB2 image folder <DB2Image>.
  - \_\_\_ c. The DB2 installer will use this information to activate the license.
  - \_\_\_ d. As an alternative, you could also wait until DB2 is installed, then open the DB2 control center, then select Tools > License center > select the system name in the drop down > License > Add > Browse to <DB2License>\db2\license\db2ese\_u.lic > Ok.
- \_\_\_ 2. Run setup.exe in <DB2Image> to start the DB2 installer. Specify the following options in the wizard:
  - \_\_\_ a. Specify typical installation type.
  - \_\_\_ b. You do not need to specify a response file.
  - \_\_\_ c. The default installation path is acceptable: \ibm\sqllib.
  - \_\_\_ d. For user information, you do not need to specify a domain.
  - \_\_\_ e. Enter a user and password. In this example the user is db2admin and the password is db2admin.
  - \_\_\_ f. You do not need to prepare the DB2 tools catalog.
  - \_\_\_ g. You do not need to setup notification.
  - \_\_\_ h. Operation system security is not required.
- \_\_\_ 3. See the appendix for a series of screen captures for the installation process.

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## Part 2: Install monitor server on machine 1

- \_\_\_ 1. To install the supporting software properly, make sure that your folder structure is correct for the Monitor install image.
  - \_\_\_ a. The Alphablox install.exe should be located in <MonitorImage>\ABX\Windows\.
  - \_\_\_ b. The WebSphere Application server install.exe should be located in <MonitorImage>\WAS\.
- \_\_\_ 2. Install a stand-alone Monitor server.
  - \_\_\_ a. Run Launchpad.exe in <MonitorImage>.
  - \_\_\_ b. Use the following options in the wizard:
    - 1) Select basic installation type.
    - 2) Specify a short path for the installation, such as c:\MonServer62.
    - 3) Enable administrative security, specifying a user and password. In this example the user is admin and the password is admin.
    - 4) You do not need to configure human tasks.
    - 5) For the database configuration, specify DB2 Universal Database. Select the option to create a local database. Provide a database name and schema name. In this example the database and schema names are MON62.
    - 6) Enter your DB2 user and password, and select JDBC driver type 4.
    - 7) See the appendix for a series of screen captures for the installation process.
- \_\_\_ 3. Make a backup of your monitor server profile.
  - \_\_\_ a. For example, copy C:\MonServer62\profiles\WBMon01 to a backup folder.
- \_\_\_ 4. Start the server.
  - \_\_\_ a. Programs > IBM WebSphere > Business Monitor 6.2 > Profiles > WBMon01 > Start the server.
- \_\_\_ 5. Check the SystemOut.log for any errors.
  - \_\_\_ a. For example, look in C:\MonServer62\profiles\WBMon01\logs\server1\SystemOut.log.
- \_\_\_ 6. Log into the administrative console, to verify that it works properly.
  - \_\_\_ a. For example, open this URL: <https://localhost:9043/ibm/console>

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## Part 3: Install process server on machine 2

- \_\_\_ 1. Install a stand-alone process server. You will not need DB2 for this installation since Derby will be used.
  - \_\_\_ a. Run Launchpad.exe in <WPSImage>.
  - \_\_\_ b. Use the following options in the wizard:
    - 1) If you already have an application server on the machine, you will be prompted to use it or create a new server. Select the option to create a new application server.
    - 2) Select typical installation type.
    - 3) You do not need to load the samples.
    - 4) Enter a short path for the installation such as \ProcServer62.
    - 5) For the environment, select stand-alone server.
    - 6) Enable administrative security and enter the user and password. In this example the user is admin and the password is admin.
    - 7) See the appendix for a series of screen captures for the installation process.
- \_\_\_ 2. Make a backup of your process server profile.
  - \_\_\_ a. For example, copy C:\ProcServer62\profiles\ProcSrv01 to a backup folder.
- \_\_\_ 3. Start the server.
  - \_\_\_ a. Programs > IBM WebSphere > Process Server 6.2 > Profiles > ProcSrv01 > Start the server.
- \_\_\_ 4. Check the SystemOut.log for any errors.
  - \_\_\_ a. For example, look in C:\ProcServer62\profiles\ProcSrv01\logs\server1\SystemOut.log.
- \_\_\_ 5. Log into the administrative console, to verify that it works properly.
  - \_\_\_ a. For example, open this URL: <https://localhost:9043/ibm/console>

---

## Part 4: Configure single sign-on and SSL on monitor server on machine 1

- \_\_\_ 1. Configure 'Single Sign-on' on monitor server on machine 1.
- \_\_\_ a. In the administrative console, navigate to Security > Secure administration, applications and infrastructure > Authentication > Web security > click the 'Single sign-on (SSO)' link
  - \_\_\_ b. In the 'Single sign-on (SSO)' panel, do the following:
    - 1) Select the check box for 'Enabled'
    - 2) Ensure the check box for 'Requires SSL' is NOT selected
    - 3) Enter your domain name, such as ibm.com
    - 4) Select the check box for 'Interoperability Mode'
    - 5) Clear the check box for 'Web bound security attribute propagation'
    - 6) Click OK.
  - \_\_\_ c. Click to save the configuration.
  - \_\_\_ d. On the Secure administration, applications and infrastructure page, find the Authentication section, then click the link 'Authentication mechanisms and expiration'
    - 1) Enter a password such as 'monitor' and the same for the confirm password
    - 2) Enter the key file name such as 'C:\monitor.key'
    - 3) Click the 'Export Keys' button. This action exports a key file to the specified location.
    - 4) Click Ok
  - \_\_\_ e. Click to save the configuration.
- \_\_\_ 2. Setup SSL on monitor server on machine 1.
- \_\_\_ a. In the administrative console, navigate to Security > SSL certificate & key management > Key stores & certificates
  - \_\_\_ b. Click NodeDefaultTrustStore > Signer certificates > Retrieve from port
  - \_\_\_ c. For the host name, enter the remote CEI server machine name. For example, aimcp096.austin.ibm.com.
  - \_\_\_ d. Enter the remote server port. For example, 8880
    - 1) You can verify the remote port by logging into the remote server administrative console and navigating to Servers > Server1 > Ports.
  - \_\_\_ e. Enter the alias as wps62

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\_\_\_ f. Click to retrieve signer information.

**Retrieved signer information**

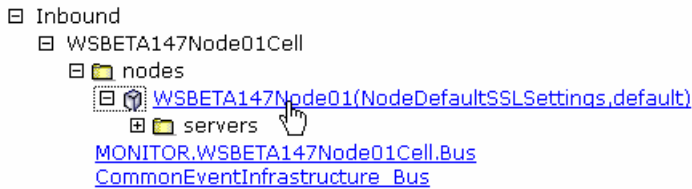
Serial number	81543256427842
Issued to	CN=aimcp096.austin.ibm.com, O=IBM, C=US
Issued by	CN=aimcp096.austin.ibm.com, O=IBM, C=US
Fingerprint (SHA digest)	CE:28:52:AB:38:45:04:1A:4B:EB:A3:C5:A5:72:4A:5A:7A:47:91:6A
Validity period	November 14, 2023

\_\_\_ g. Click Ok.

\_\_\_ h. Click to save the configuration.

\_\_\_ i. In the administrative console, navigate to Security > SSL certificate & key management > Manage endpoint security configuration.

\_\_\_ j. For the inbound event node, navigate to Inbound > <yourCell> > nodes > then click the node link



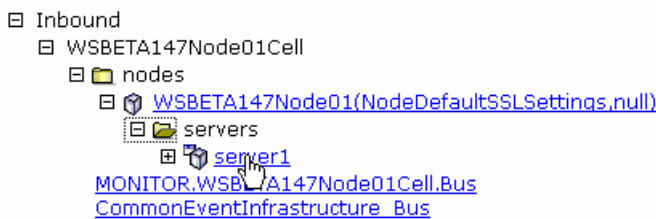
\_\_\_ k. Make sure you have the default SSL configuration and the default alias:

**Specific SSL configuration for this endpoint**

SSL configuration:

Certificate alias in key store:

\_\_\_ l. For the inbound event node server, navigate to Inbound > <yourCell> > nodes > <yourNode> > servers > then click the server1 link



**Specific SSL configuration for this endpoint**

Override inherited values

SSL configuration:

Certificate alias in key store:

\_\_\_ m. Make sure that override is unchecked:

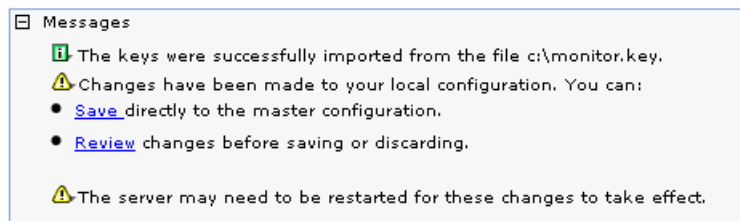


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- \_\_\_ n. Perform the same checks and updates for the outbound event node and server.
- \_\_\_ o. Save the configuration.
- \_\_\_ p. Restart the server.
- \_\_\_ q. Check SystemOut.log for errors.

## Part 5: Configure single sign-on and SSL on process server on machine 2

- \_\_\_ 1. Copy the monitor.key file from machine 1 to machine 2. In this example it is copied to machine 2 at location C:\monitor.key.
- \_\_\_ 2. Configure 'Single Sign-on' on process server on machine 2.
- \_\_\_ a. In the administrative console, navigate to Security > Secure administration, applications and infrastructure > Authentication > Web security > click the 'Single sign-on (SSO)' link
- \_\_\_ b. In the 'Single sign-on (SSO)' panel, do the following:
- 1) Select the check box for 'Enabled'
  - 2) Ensure the check box for 'Requires SSL' is NOT selected
  - 3) Enter your domain name, such as ibm.com
  - 4) Select the check box for 'Interoperability Mode'
  - 5) Clear the check box for 'Web bound security attribute propagation'
  - 6) Click OK.
- \_\_\_ c. Click to save the configuration.
- \_\_\_ d. On the Secure administration, applications and infrastructure page, find the Authentication section, then click the link 'Authentication mechanisms and expiration'
- 1) Enter a password such as 'monitor' and the same for the confirm password
  - 2) Enter the key file name such as 'C:\monitor.key'
  - 3) Click the 'Import Keys' button.



- 4) Click Ok
  - \_\_\_ e. Click to save the configuration.
- \_\_\_ 3. Setup SSL on process server on machine 2.
- \_\_\_ a. In the administrative console, navigate to Security > SSL certificate & key management > Key stores & certificates
- \_\_\_ b. Click NodeDefaultTrustStore > Signer certificates > Retrieve from port
- \_\_\_ c. For the host name, enter the monitor server machine name. For example, wsbeta147.austin.ibm.com.
- \_\_\_ d. Enter the remote server port. For example, 8880

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1) You can verify the monitor server port by logging into the monitor server administrative console and navigating to Servers > Server1 > Ports.

- \_\_\_ e. Enter the alias as mon62
- \_\_\_ f. Click to retrieve signer information.

**Retrieved signer information**

Serial number	68251877823840
Issued to	CN=WSBETA147.austin.ibm.com, O=IBM, C=US
Issued by	CN=WSBETA147.austin.ibm.com, O=IBM, C=US
Fingerprint (SHA digest)	FC:30:8E:06:18:AE:9E:33:F9:1F:79:D1:F8:7D:56:EC:CC:27:AC:EF
Validity period	November 14, 2023

- \_\_\_ g. Click Ok.
- \_\_\_ h. Click to save the configuration.
- \_\_\_ i. In the administrative console, navigate to Security > SSL certificate & key management > Manage endpoint security configuration.
- \_\_\_ j. For the inbound event node, navigate to Inbound > <yourCell> > nodes > then click the node link
- \_\_\_ k. Make sure you have the default SSL configuration and the default alias:

**Specific SSL configuration for this endpoint**

SSL configuration  
NodeDefaultSSLSettings

Certificate alias in key store  
default

- \_\_\_ l. For the inbound event node server, navigate to Inbound > <yourCell> > nodes > <yourNode> > servers > then click the server1 link

**Specific SSL configuration for this endpoint**

Override inherited values

SSL configuration  
NodeDefaultSSLSettings

Certificate alias in key store  
(none)

- \_\_\_ m. Make sure that override is unchecked:
- \_\_\_ n. Perform the same checks and updates for the outbound event node and server.
- \_\_\_ o. Save the configuration.
- \_\_\_ p. Restart the server.
- \_\_\_ q. Check SystemOut.log for errors.

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## Part 6: Copy crosscell jar files to the remote server on machine 2

- \_\_\_\_ 1. From the <was\_root>/scripts.wbm/crosscell folder of the local Business Monitor server installation, copy the mon61to61CrossCell.zip file to the <wps\_root>/plugins folder of the remote CEI server and extract the contents.
- \_\_\_\_ 2. Stop the remote server.
- \_\_\_\_ 3. From the remote CEI server's <wps\_root>/Profiles/<profile>/bin folder, run the command to configure the process server to recognize the new plugin jar files that were extracted into the plugins directory in the previous steps: osgiCfgInit.bat
- \_\_\_\_ 4. Start the remote server.

## Part 7: Run the queue bypass scripts on the remote server on machine 2

1. From the <was\_root>/scripts.wbm/queuebypass folder of the local Business Monitor server installation, copy all files in this folder to the <wps\_root>/bin folder of the remote CEI server.
2. From the <wps\_root>/bin folder of the remote CEI server, run configQueueBypass.bat. Here is a sample. You will need to substitute the correct cell name of your monitor server, and you need to substitute the correct server name. Note that if you try to copy and paste from here to the command line on your server, the dashes may not copy properly, so you may need to overtype them.

```
configQueueBypass.bat -profilePath c:\ProcServer62\profiles\ProcSrv01
-remoteCellName WSBETA147Node01Cell -dbType "DB2_Universal" -
dbDriverType "4" -dbJdbcClasspath
c:\ProcServer62\universalDriver_wbi\lib -dbServerName
wsbeta147.austin.ibm.com -dbPort 50000 -dbName MON62 -dbUserId
db2admin -dbPassword db2admin
```

```
C:\ProcServer62\bin>configQueueBypass.bat -profilePath c:\ProcServer62\profiles\
ProcSrv01 -remoteCellName WSBETA147Node01Cell -dbType "DB2_Universal" -dbDriverT
ype "4" -dbJdbcClasspath c:\ProcServer62\universalDriver_wbi\lib -dbServerName w
sbeta147.austin.ibm.com -dbPort 50000 -dbName MON62 -dbUserId db2admin -dbPasswo
rd db2admin
C:\ProcServer62\profiles\ProcSrv01\bin>setupCmdLine.bat
call createQueueBypassDataSource.py
C:\ProcServer62\bin>
```

3. Check the configQueueBypass.log in the same folder for any errors.

```
configQueueBypass.log - Notepad
File Edit Format View Help
WASX7337I: By request, this scripting client is not connected to any server process. Certain configuration and application operations will be...
WASX7303I: The following options are passed to the scripting environment and are available as arguments that are stored in the argv variable:
remoteCellName=WSBETA147Node01Cell
dbType=DB2_Universal
dbDriverType=4
dbJdbcClasspath=c:\ProcServer62\universalDriver_wbi\lib
dbServerName=wsbeta147.austin.ibm.com
dbPort=50000
dbName=MON62
dbUserId=db2admin
dbPassword=db2admin
cellName=a1mcp096Node02Cell
nodeName=
serverName=
--- parms for jdbcProviderInfo
jdbcProviderName      = MonitorDBProvider
jdbcProviderDesc     = Monitor DB2 JDBC XA Driver
jdbcProviderImplClass = com.ibm.db2.jcc.DB2XADataSource
jdbcProviderClasspath = c:\ProcServer62\universalDriver_wbi\lib\db2jcc.jar;c:\ProcServer62\universalDriver_wbi\lib\db2jcc_license...
--- parms for dataSourceAuthAliasInfo
dataSourceAuthAliasName = Monitor_JDBC_Alias
dataSourceAuthAliasDesc = Authentication for Monitor_JDBC_Alias
dataSourceAuthAliasUsername = db2admin
dataSourceAuthAliasPassword = db2admin
--- parms for dataSourceInfo
dataSourceName = Monitor_WSBETA147Node01Cell_Routing_Database
dataSourceDesc = XA DataSource for Monitor Routing Database
dataSourceJndi = jdbc/wbm/WSBETA147Node01Cell/MonitorDatabase
dataSourceHelperClassName = com.ibm.websphere.rsadapter.DB2UniversalDataStoreHelper
dataSourceMaxConnections = 100
jdbcProviderName = MonitorDBProvider
dataSourceAuthAliasName = Monitor_JDBC_Alias
providerType = DB2 Universal JDBC Driver Provider
Did not find JDBC Provider: MonitorDBProvider
Create JDBC Provider with: [['name', 'MonitorDBProvider'], ['providerType', 'DB2 Universal JDBC Driver Provider'], ['description', 'Monitor D
List all Aliases
Checking Aliases for a match to Monitor_JDBC_Alias
allAuthAliasArray[1]=(cells/a1mcp096Node02Cell)security.xml#JAASAuthdata_1228259939500)
allAuthAliasArray[2]=(cells/a1mcp096Node02Cell)security.xml#JAASAuthdata_1228260031796)
allAuthAliasArray[3]=(cells/a1mcp096Node02Cell)security.xml#JAASAuthdata_1228260081468)
allAuthAliasArray[4]=(cells/a1mcp096Node02Cell)security.xml#JAASAuthdata_1228260194375)
allAuthAliasArray[5]=(cells/a1mcp096Node02Cell)security.xml#JAASAuthdata_122826093406)
Create Alias with: alias: Monitor_JDBC_Alias description: Authentication for Monitor_JDBC_Alias userId: db2admin
>> createdatasource
Did not find DataSource: Monitor_WSBETA147Node01Cell_Routing_Database under MonitorDBProvider
Found JDBC Provider: MonitorDBProvider(cells/a1mcp096Node02Cell)resources.xml#JDBCProvider_1228318943531)
Got the provider
Create datasource with: [['name', 'Monitor_WSBETA147Node01Cell_Routing_Database'], ['providerType', 'DB2 Universal JDBC Driver Provider'], ['
update the pool for: [['name', 'Monitor_WSBETA147Node01Cell_Routing_Database'], ['providerType', 'DB2 Universal JDBC Driver Provider'], ['des
update the properties for: [['name', 'Monitor_WSBETA147Node01Cell_Routing_Database'], ['providerType', 'DB2 Universal JDBC Driver Provider'],
```

4. Check that the data source was created.

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- \_\_\_ a. On the remote server's administrative console, navigate to Resources > JDBC > Data sources. You should see the routing database entry in the list.

Monitor_WSBETA147Node01Cell_Routing_Database	jdbc/wbm/WSBETA147Node01Cell/MonitorDatabase	Cell=aimcp096Node02Cell
--	--	-------------------------

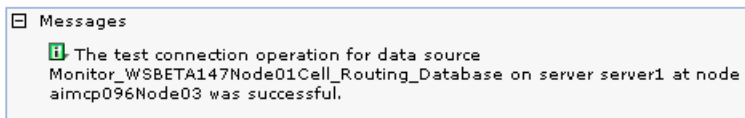
- \_\_\_ 5. From the <wps\_root>\bin folder of the remote CEI server, run setupQueueBypass.bat. Here is a sample. You will need to substitute the correct cell and node names of your remote CEI server. Note that if you try to copy and paste from here to the command line on your server, the dashes may not copy properly, so you may need to overtyping them.

```
setupQueueBypass.bat -wasHome c:\ProcServer62 -profileName ProcSrv01 -
profilePath c:\ProcServer62\profiles\ProcSrv01 -cellName aimcp096Node02Cell
-nodeName aimcp096Node03
```

```
[echo] NODE_META_DATA_FILE: c:\ProcServer62\profiles\ProcSrv01/config/cells
/aimcp096Node02Cell/nodes/aimcp096Node03/node-metadata.properties
[echo] Add WBM routing feature
[propertyfile] Updating property file: C:\ProcServer62\profiles\ProcSrv01\config
\cells\aimcp096Node02Cell\nodes\aimcp096Node03\node-metadata.properties
[echo] Done add WBM routing feature

BUILD SUCCESSFUL
Total time: 1 second
```

- \_\_\_ 6. Restart both servers.
- \_\_\_ 7. Test the JDBC connection.
- \_\_\_ a. On the remote server's administrative console, navigate to Resources > JDBC > Data sources.
- \_\_\_ b. Click the 'Monitor <yourCell> Routing Database' in the list.
- \_\_\_ c. Click the button 'Test connection'.



## Part 8: Install the Clips And Tacks BAM monitor model on the monitor server on machine 1

- \_\_\_ 1. On monitor server's administrative console, install the Clips and tacks BAM model EAR, and specify the remote CEI server configuration.
  - \_\_\_ a. Navigate to Applications > Install new application
  - \_\_\_ b. Browse to the ear file, C:\Labfiles62\RemoteCEIServer\ClipsAndTacksApplication.ear
  - \_\_\_ c. Make sure that you select 'Show me all installation options and parameters'.

- \_\_\_ d. In step 12 (Select monitor model CEI options) specify the remote CEI server.
  - 1) Click location remote, also enter your remote CEI server name and port. For example, aimcp096.austin.ibm.com, 2810.
    - a) You can verify the remote CEI server port by logging into the remote server administrative console and navigating to Servers > Server1 > Ports.
  - 2) Click security enabled, and enter the user and password for the server
  - 3) Click the button 'refresh list' on the page, and you should see that the events group profile list is updated with the remote cell:

Event group profile list name

Select	Event group profile list name	Scope
<input checked="" type="checkbox"/>	Event groups list	cell=aimcp096Node02Cell, node=aimcp096Node03, server=server1

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**Distribution mode**

- Active (monitor model queue-based)  
 Active (monitor model queue bypass)  
 Inactive

4) Verify that queue bypass is selected on this page:

\_\_\_ e. Finish the installation and verify that it completes successfully:

SECJ0400I: Successfully updated the application ClipsAndTacksApplication with the appContextIDForSecurity information.

ADMA5011I: The cleanup of the temp directory for application ClipsAndTacksApplication is complete.

ADMA5013I: Application ClipsAndTacksApplication installed successfully.

Application ClipsAndTacksApplication installed successfully.

To start the application, first save changes to the master configuration.

Changes have been made to your local configuration. You can:

- [Save](#) directly to the master configuration.
- [Review](#) changes before saving or discarding.

\_\_\_ f. Check SystemOut.log for errors. Here is a sample of messages for a successful installation:

1) ApplicationMg A WSVR0221I: Application started: ClipsAndTacksApplication

2) [12/3/08 10:52:53:937 CST] 00000044 LifecycleServ I  
com.ibm.wbimonitor.lifecycle.LifecycleServices start( String, long ) CWMLC0126I: Model  
[ClipsAndTacks] version [2007-09-11T12:07:30] start completed.

3) [12/3/08 10:52:53:984 CST] 00000044 MMIntegration I  
com.ibm.wbimonitor.lifecycle.MMIntegration\_General bindJMS\_BATCH CWMLC0804I:  
\*\*\*\*\* 'GENERAL' integration sequence is COMPLETE. modelID: 'ClipsAndTacks'

4) [12/3/08 10:52:55:968 CST] 00000010 ConsumerDaemo I  
com.ibm.wbimonitor.mm.ClipsAndTacks.20070911120730.moderator.ConsumerDaemonH  
andlerImpl startDaemon() CWMRT3005I: The Monitor Model "ClipsAndTacks  
20070911120730" is starting consumption on this server or cluster member in SERIAL\_MT  
mode with reordering=false from NORMAL\_QUEUE\_BYPASS.

\_\_\_ 2. The application does not start automatically after installation, so leave the application in stopped status so that the model will leave the events in the inbound event table, so then you can easily check that the remote event configuration is working.



## Part 9: Run events on the remote CEI server on machine 2

The supplied program is 'BatchCBEWriter61' and it will submit the events to the Common Event Infrastructure. Look for the program in \Labfiles62\ClipsAndTacks\BatchCBEWriter. This program reads XML files which represent the common base events for the model.

- \_\_\_ 1. Update BatchCBEWriter61.bat to point WAS\_HOME to the CEI server home, for example 'set WAS\_HOME=C:\ProcServer62'.
- \_\_\_ 2. Update config.properties, setting the serverName and portNumber. You can find the port number by browsing the server log and finding 'bootstrap port'. For example, check for the log at C:\ProcServer62\profiles\ProcSrv01\logs\server1\SystemOut.log . Here is an example of the config.properties settings:
  - \_\_\_ a. connect.serverName = localhost
  - \_\_\_ b. connect.portNumber = 2810
- \_\_\_ 3. Open a command window, then change directory to the folder containing BatchCBEWriter61, for example, type this command
  - \_\_\_ a. cd \Labfiles62\ClipsAndTacks\BatchCBEWriter
- \_\_\_ 4. Run commands to load the common base events to the server.
  - \_\_\_ a. batchcbewriter61 -Dsource.filename="c:/Labfiles62/clipsandtacks/cbe/allevnts.xml"
  - \_\_\_ b. When it prompts you for user identity and password, enter 'admin' for both (without the quotation marks)
- \_\_\_ 5. When you run BatchCBEWriter61, you should see results such as:

```
C:\drivers\events>batchcbewriter61 -Dsource.filename="c:/drivers/events/clipsandtacks/allevnts.xml"
Getting CBEs.
Getting Emitter.
Removing GlobalInstanceIds.
Setting missing values.
Changing Instance Ids.
Updating timestamps.
Validating CBEs.
Sending CBEs.
START=09:14:10.875
Sending cbe[10].
Sending cbe[20].
Sending cbe[30].
Sending cbe[40].
Sending cbe[50].
Sending cbe[60].
Sending cbe[70].
Sending cbe[80].
END=09:14:24.390
TotalTime=13515 milliseconds.
CBEs/second=6.215316315205327
```

- \_\_\_ 6. Check the logs on monitor server and process server for errors.
- \_\_\_ 7. Since the Clips and Tacks application is stopped the events should stay in the incoming events table. On the monitor server, open the DB2 control center, and navigate to the

IBM WEBSHERE BUSINESS MONITOR 6.2 – LAB EXERCISE

INCOMING\_EVENTS table. Open the table to view the 68 event records that were submitted:

**Open Table - INCOMING\_EVENTS**  
 WSBETA147 - DB2 - MON62 - CLIPSANDTACKS.INCOMING\_EVENTS

Edits to these results are performed as searched UPDATEs and DELETEs. Use the Tools Settings to change the form of editing.

ID	VERSION	QUEUE_ID	OBSERVED	PAY
69	200709111207...	active		0
70	200709111207...	active		0
71	200709111207...	active		0
72	200709111207...	active		0
73	200709111207...	active		0
74	200709111207...	active		0
75	200709111207...	active		0

8. Start the ClipsAndTacksApplication on the monitor server, then wait a few minutes, then check the MCT\_CLPSNDTCKSM\_<timestamp> table in the DB2 control center for records. You should see 20 monitoring context instances:

**Open Table - MCT\_CLPSNDTCKSM\_20070911120730**  
 WSBETA147 - DB2 - MON62 - CLIPSANDTACKS.MCT\_CLPSNDTCKSM\_20070911120730

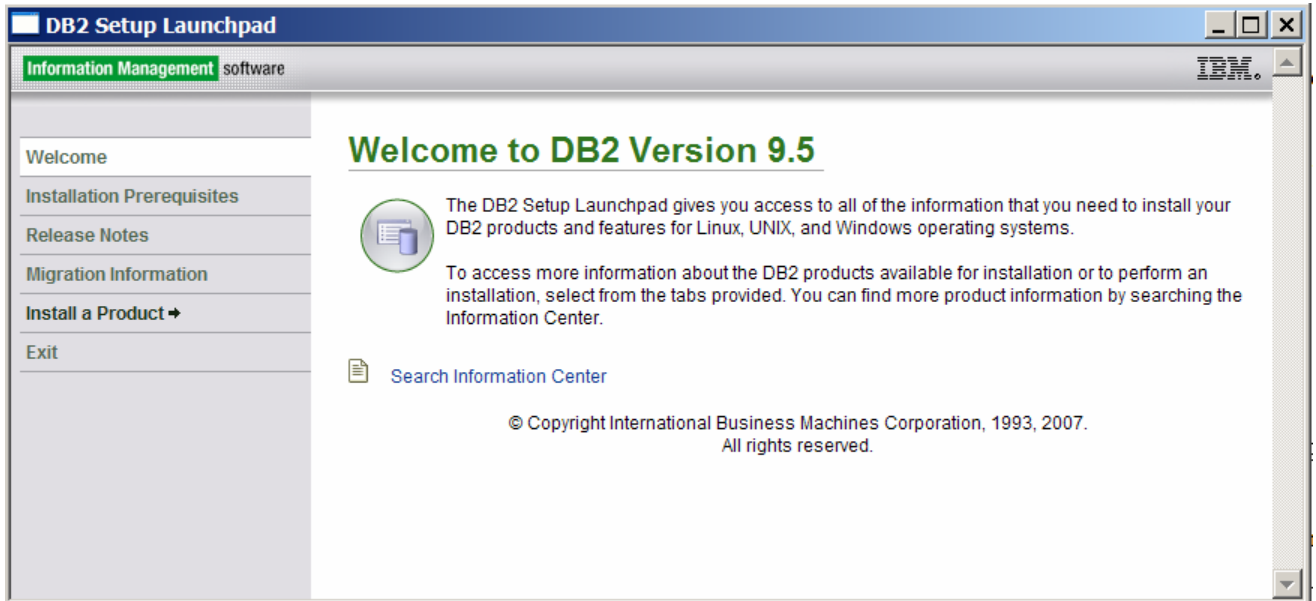
Edits to these results are performed as searched UPDATEs and DELETEs. Use the Tools Settings to change the form of editing.

MCIID	PARENT_MCIID	CREATION_TIME	TERMINATION_TIME	AB_
2		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
6		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
12		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
15		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
3		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
4		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
5		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
7		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
8		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
9		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
11		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
13		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
14		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
16		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
19		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
20		Dec 3, 2008 9:23:1...	Jan 1, 9999 12:00:00 A...	
1		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
10		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
17		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	
18		Dec 3, 2008 9:23:1...	Dec 3, 2008 9:23:13 PM...	

## What you did in this exercise

You installed DB2 and a stand-alone monitor server onto machine 1. Then you installed a stand-alone process server on machine 2. Then you configured and verified the queue bypass connection. Also, you deployed a model and sent events from the remote server to the monitor server.

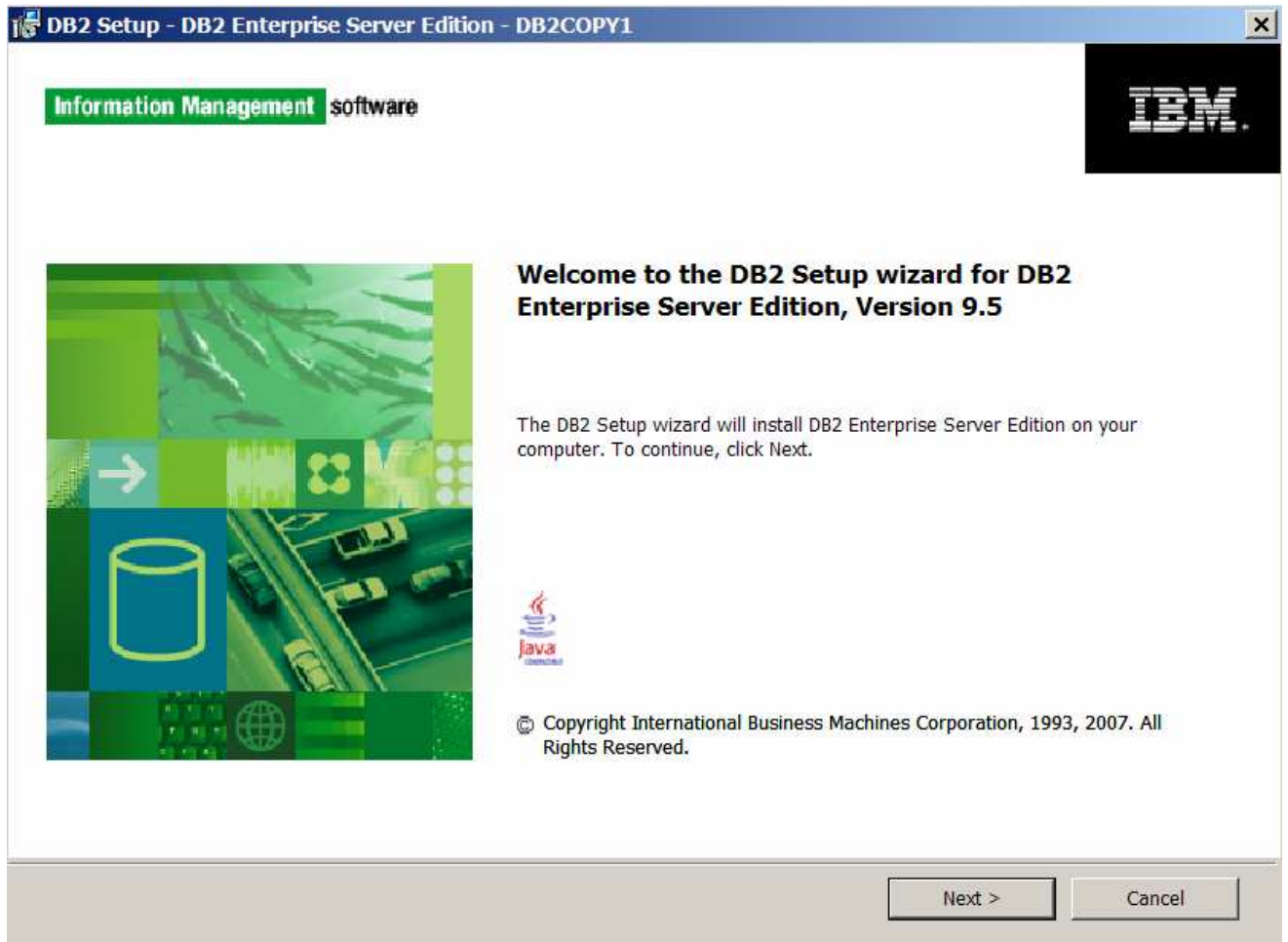
## Appendix 1: Screen captures for the DB2 install



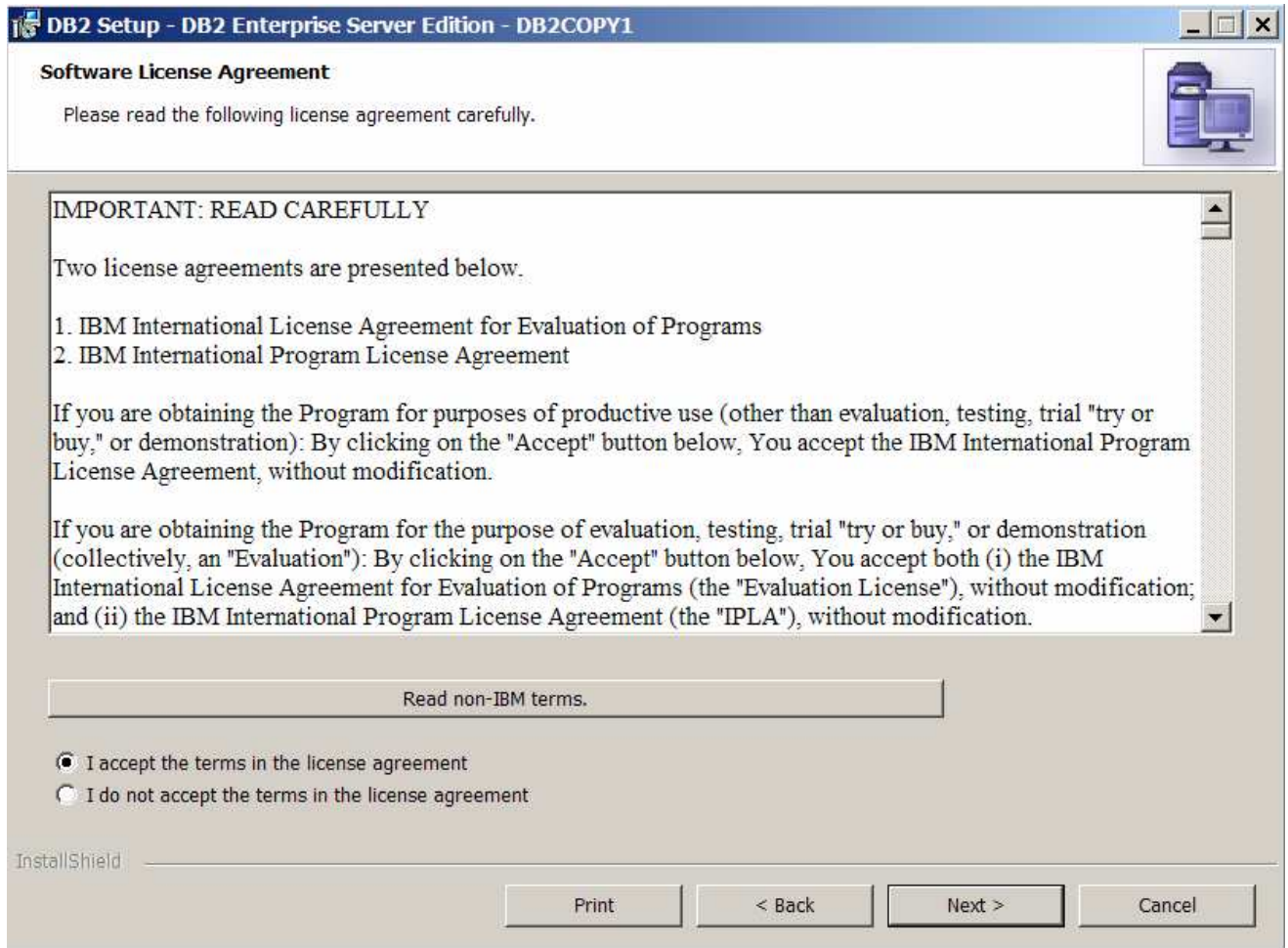
1.



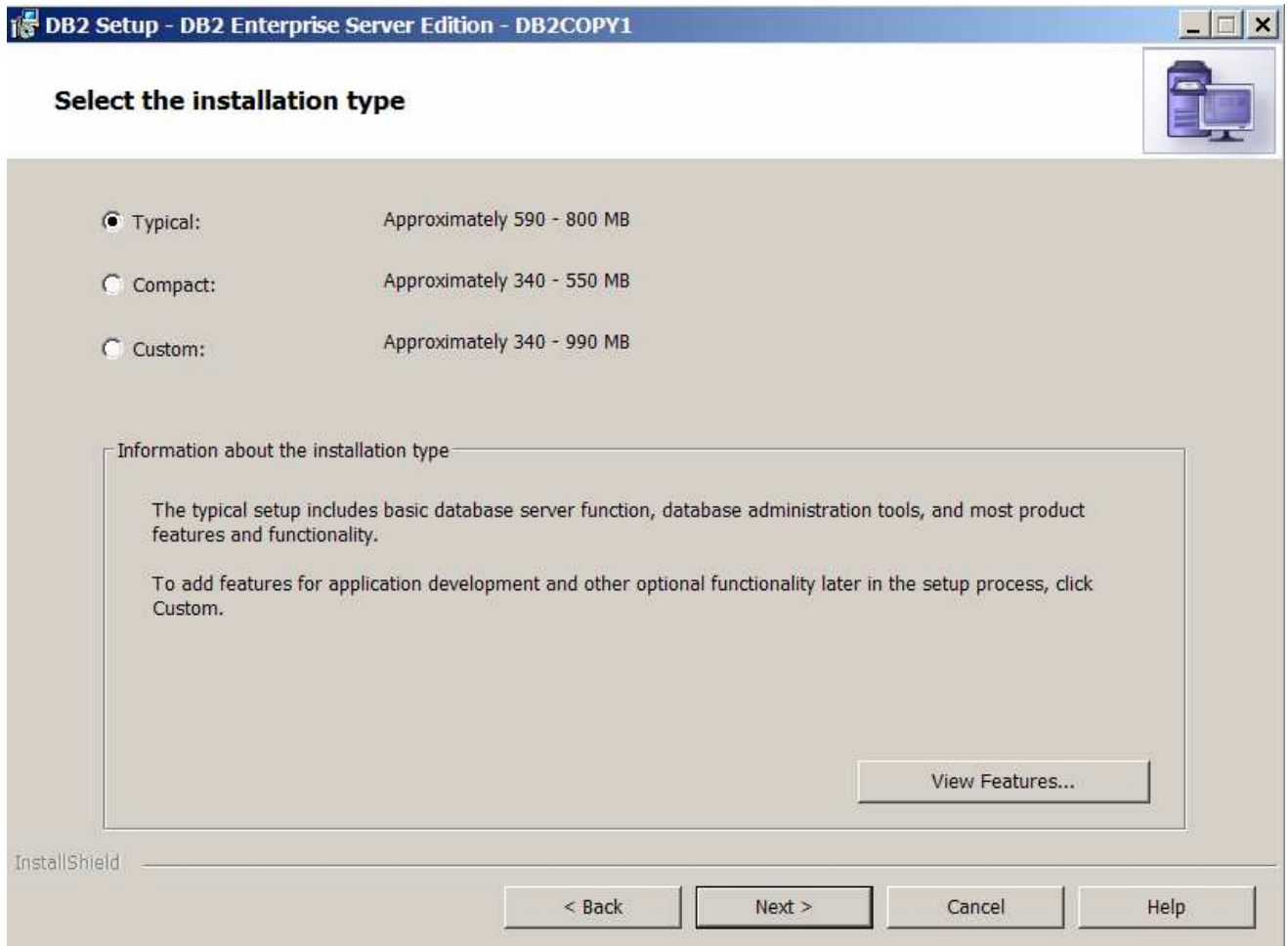
2.



\_\_\_ 3.



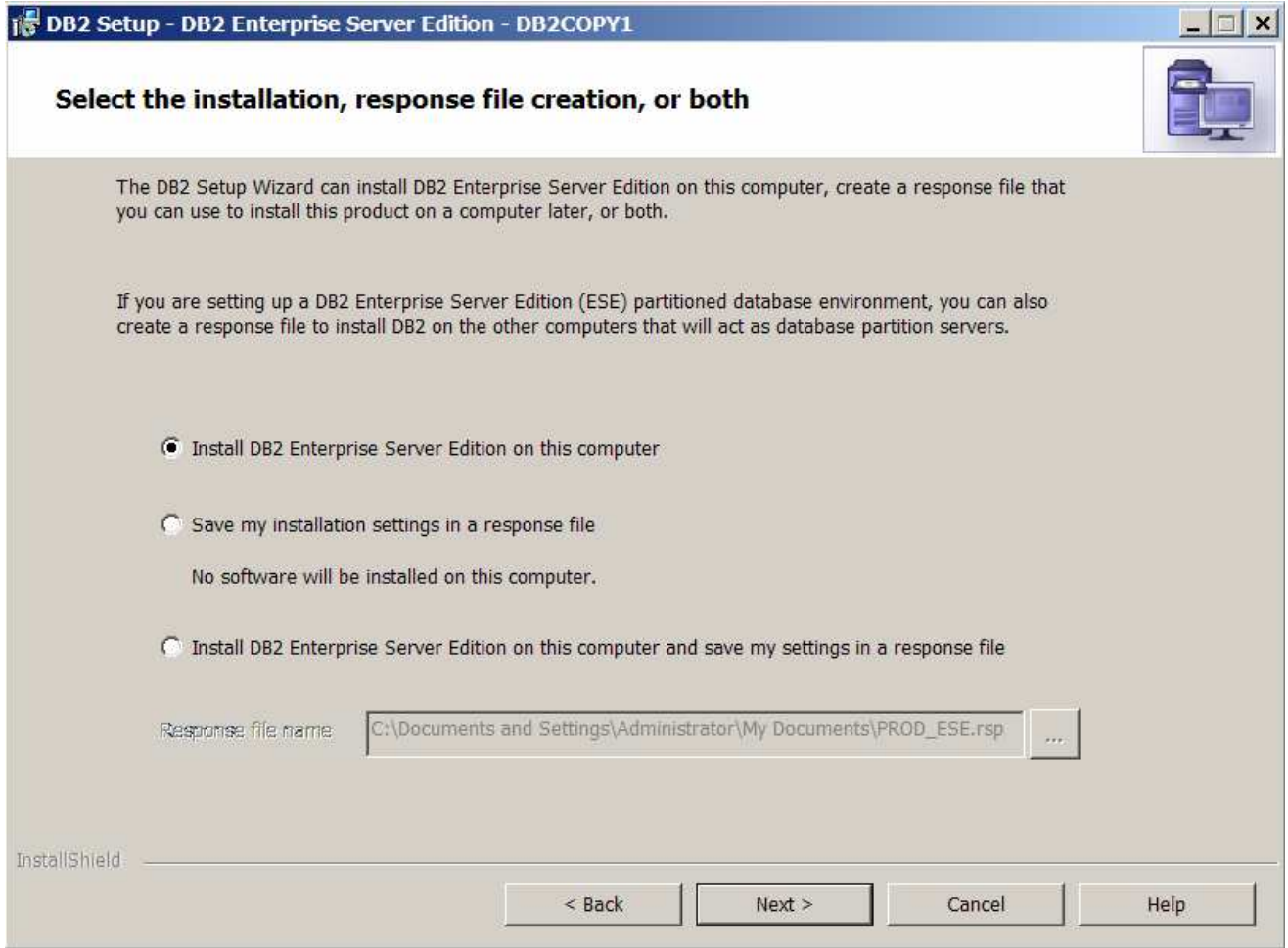
4.



5.



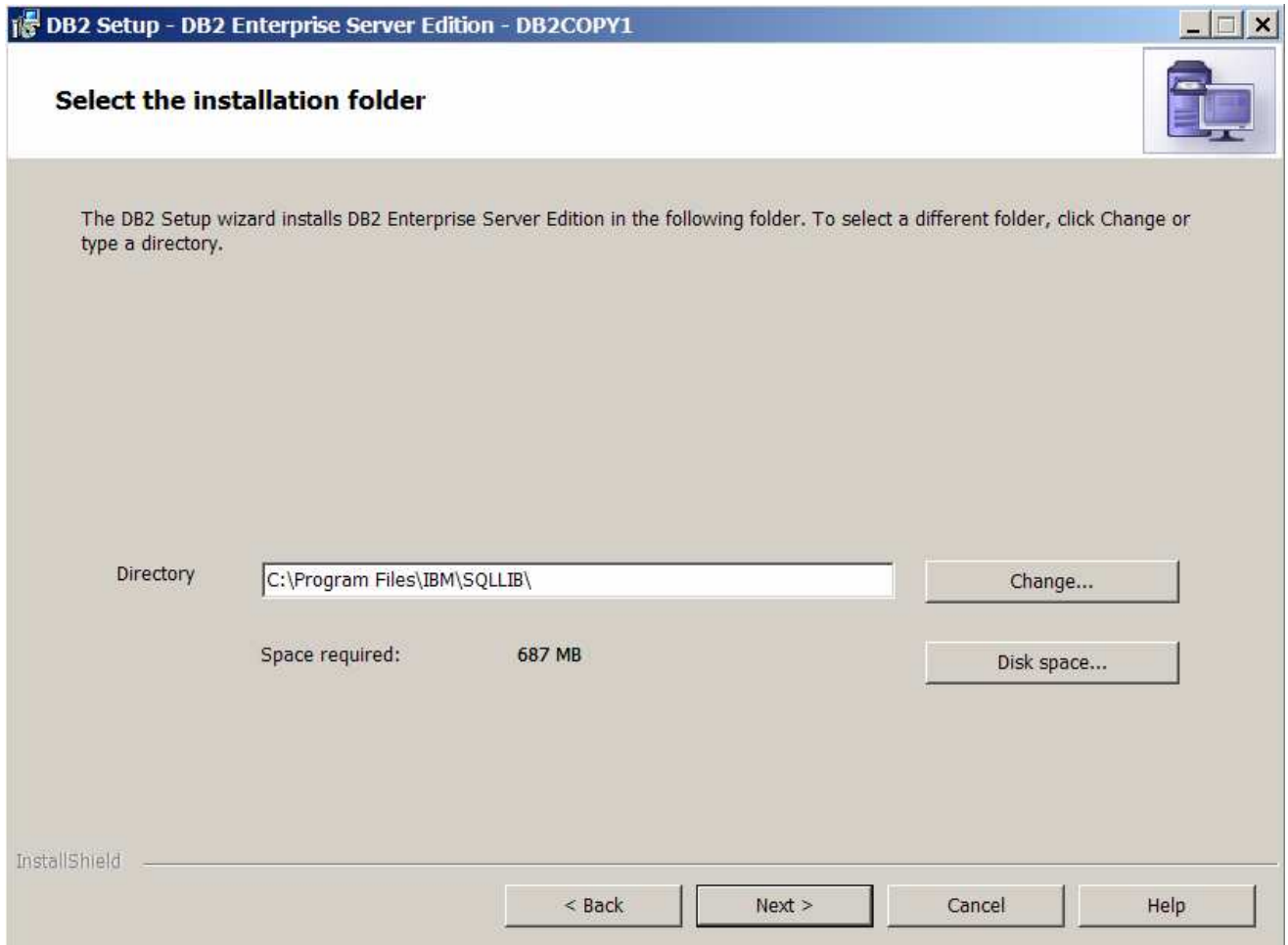
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6.



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\_\_\_ 7.

DB2 Setup - DB2 Enterprise Server Edition - DB2COPY1

### Set user information for the DB2 Administration Server

The DB2 Administration Server (DAS) runs on your computer to provide support required by the DB2 tools. Specify the required user information for the DAS.

User information

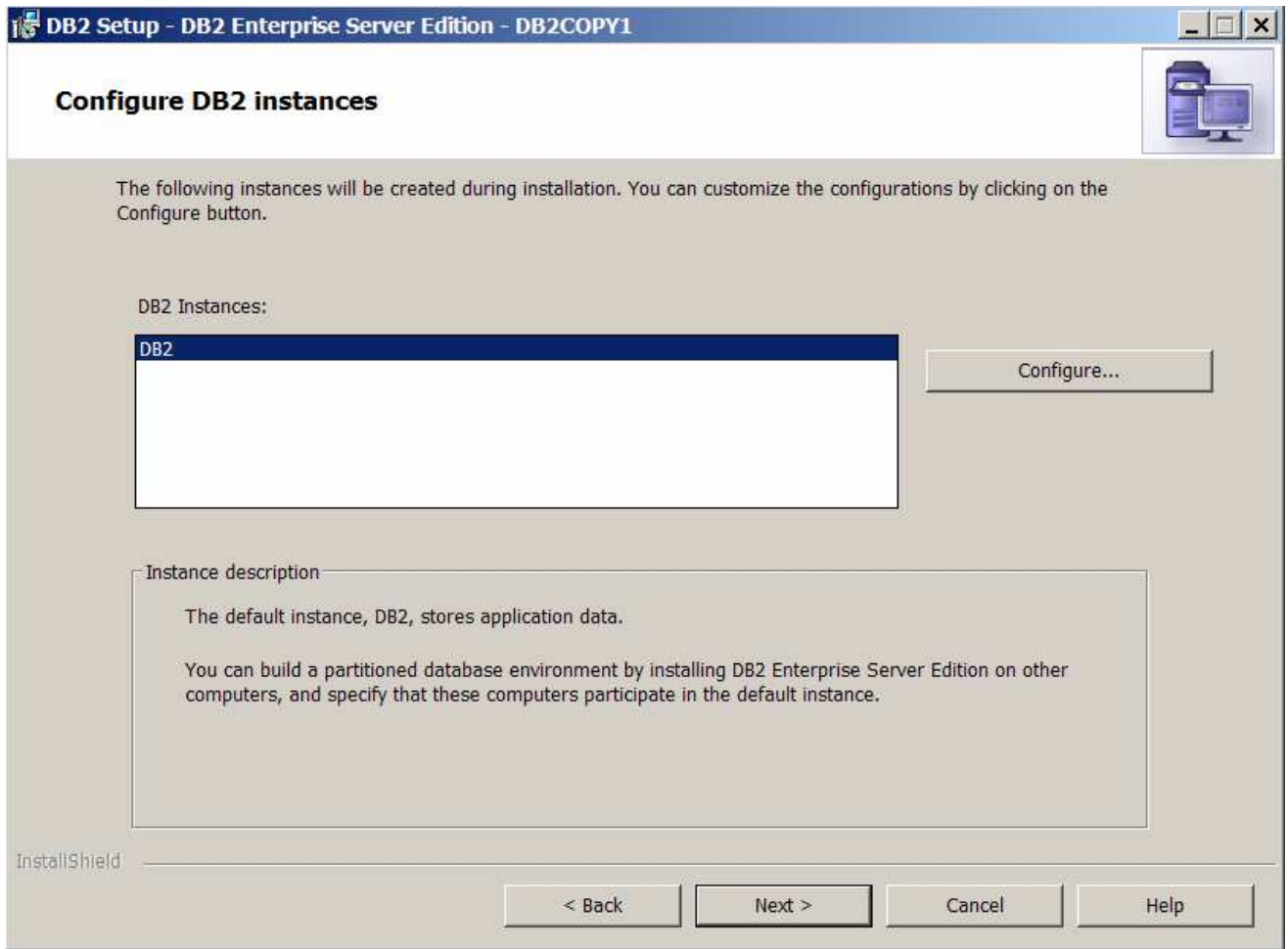
Domain	None - use local user account
User name	db2admin
Password	*****
Confirm password	*****

Use the same user name and password for the remaining DB2 services

InstallShield

< Back    Next >    Cancel    Help

\_\_\_ 8.



9.

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**Prepare the DB2 tools catalog**

The DB2 tools catalog must be created in order to use the Task Center and scheduler. These tools allow you to schedule common tasks such as backups. The DB2 tools catalog must be stored in a DB2 database.

Prepare the DB2 tools catalog

Instance: DB2

Database:

- New: TOOLSDB
- Existing: ...

Schema:

- New: SYSTOOLS
- Existing: ...

InstallShield

< Back    Next >    Cancel    Help

10.

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**Set up notifications**

You can set up your DB2 server to automatically send e-mail or pager notifications to alert administrators when a database needs attention. The contact information is stored in the administration contact list. You need an unauthenticated SMTP server to send these notifications.

If you do not set up your DB2 server to send notifications at this time, the health alerts are still recorded in the administration notification log.

Set up your DB2 server to send notifications

Notification SMTP server:

Administration contact list location

Local - Create a contact list on this computer

Remote - Use an existing contact list on another DB2 server

Remote DB2 server:

InstallShield

< Back    Next >    Cancel    Help

11.

**DB2 Setup - DB2 Enterprise Server Edition - DB2COPY1**

### Enable operating system security for DB2 objects

Specify if you would like to enable operating system security for DB2 files, folders, registry keys, and other objects on your computer. If you enable this security, operating system access to DB2 objects will be limited to the groups specified below.

Note: The DB2 Setup wizard has detected that the group names shown below already exist on your computer.

Enable operating system security

Information on the DB2 administrators group and DB2 users group is available by clicking Help.

**DB2 administrators group**

Domain: None - use local group

Group name: DB2ADMNS

**DB2 users group**

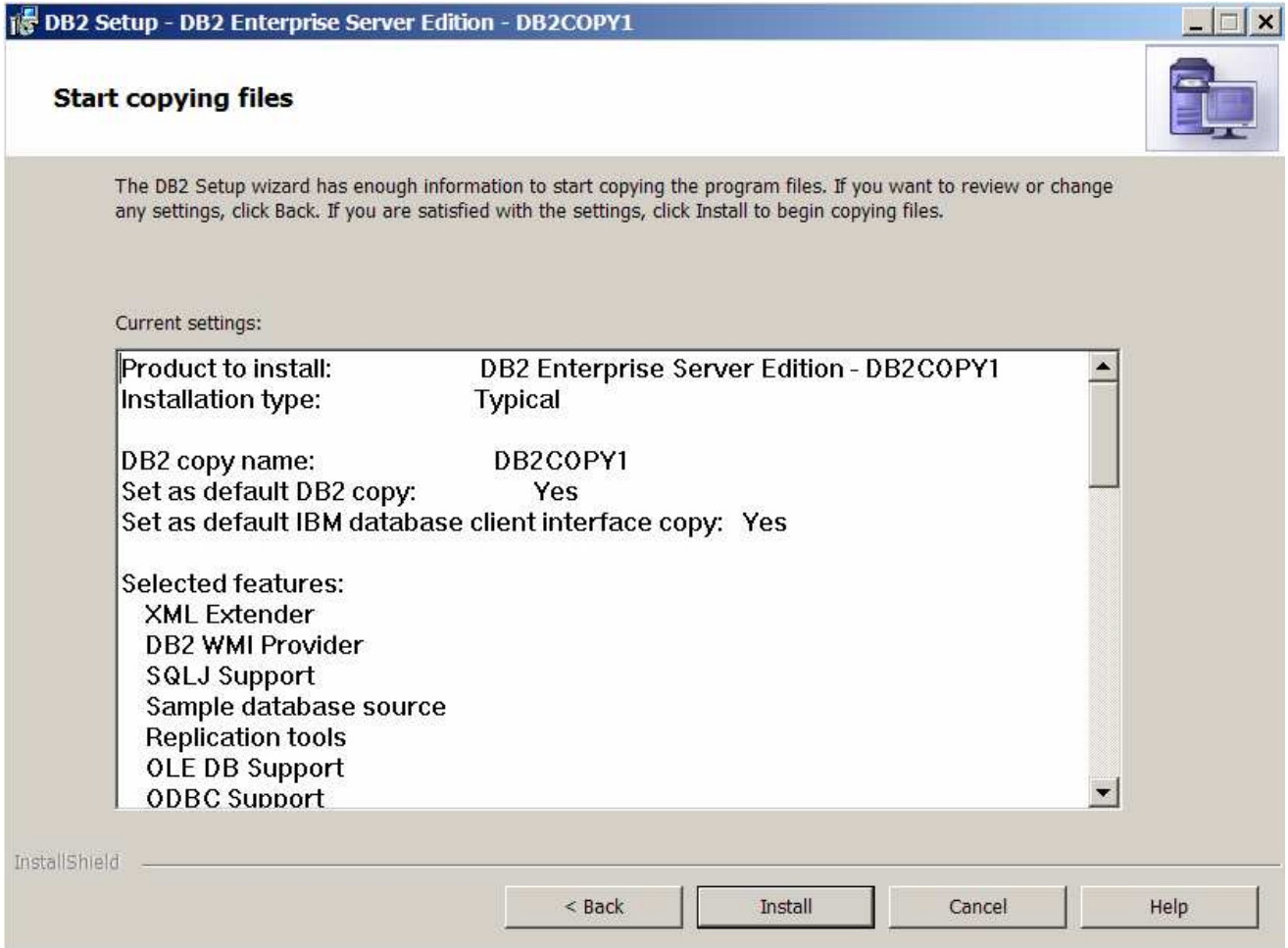
Domain: None - use local group

Group name: DB2USERS

InstallShield

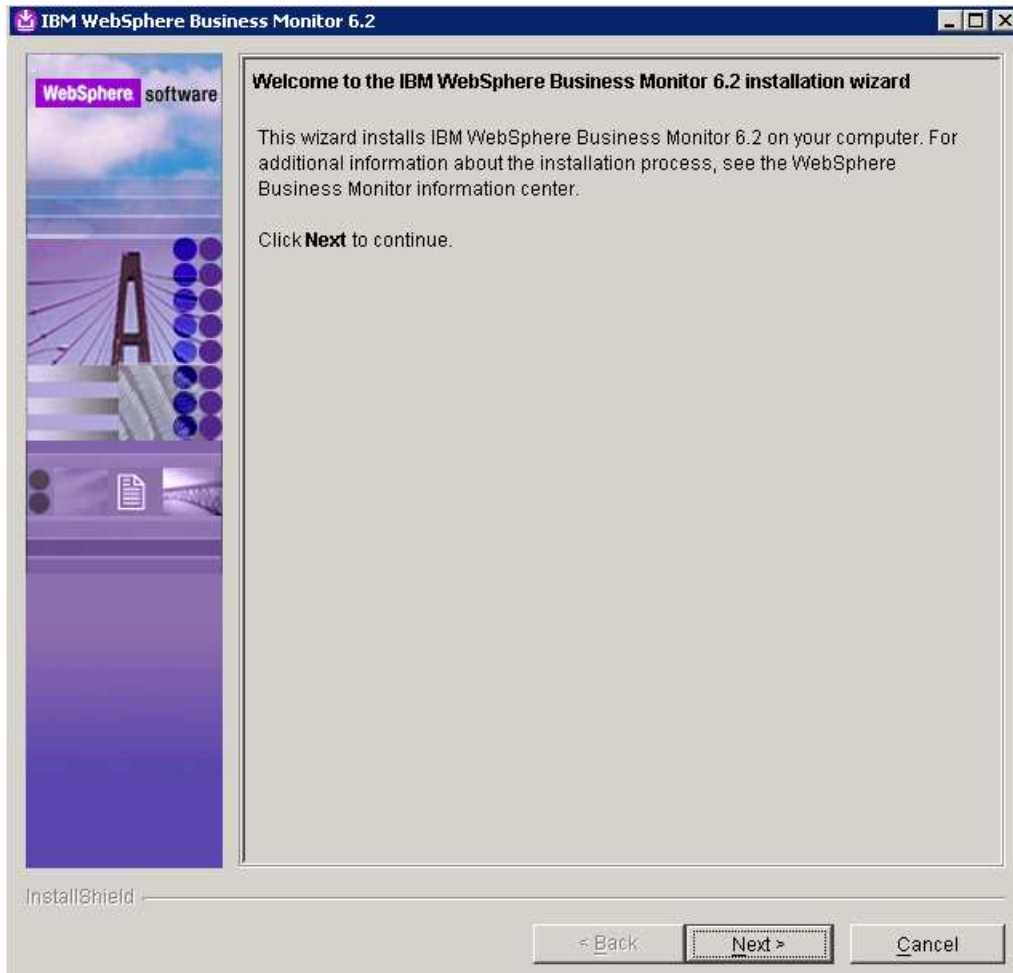
< Back    Next >    Cancel    Help

12.



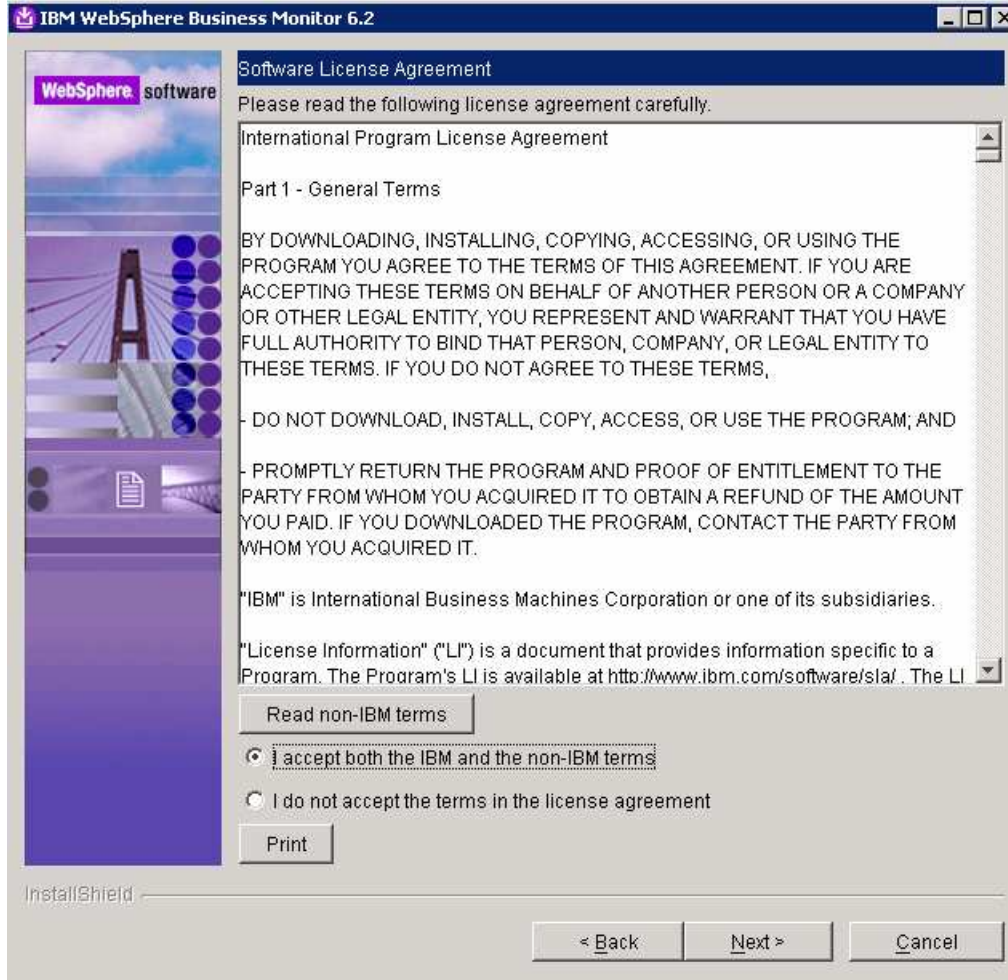
13.

## Appendix 2: Screen captures for the monitor server install



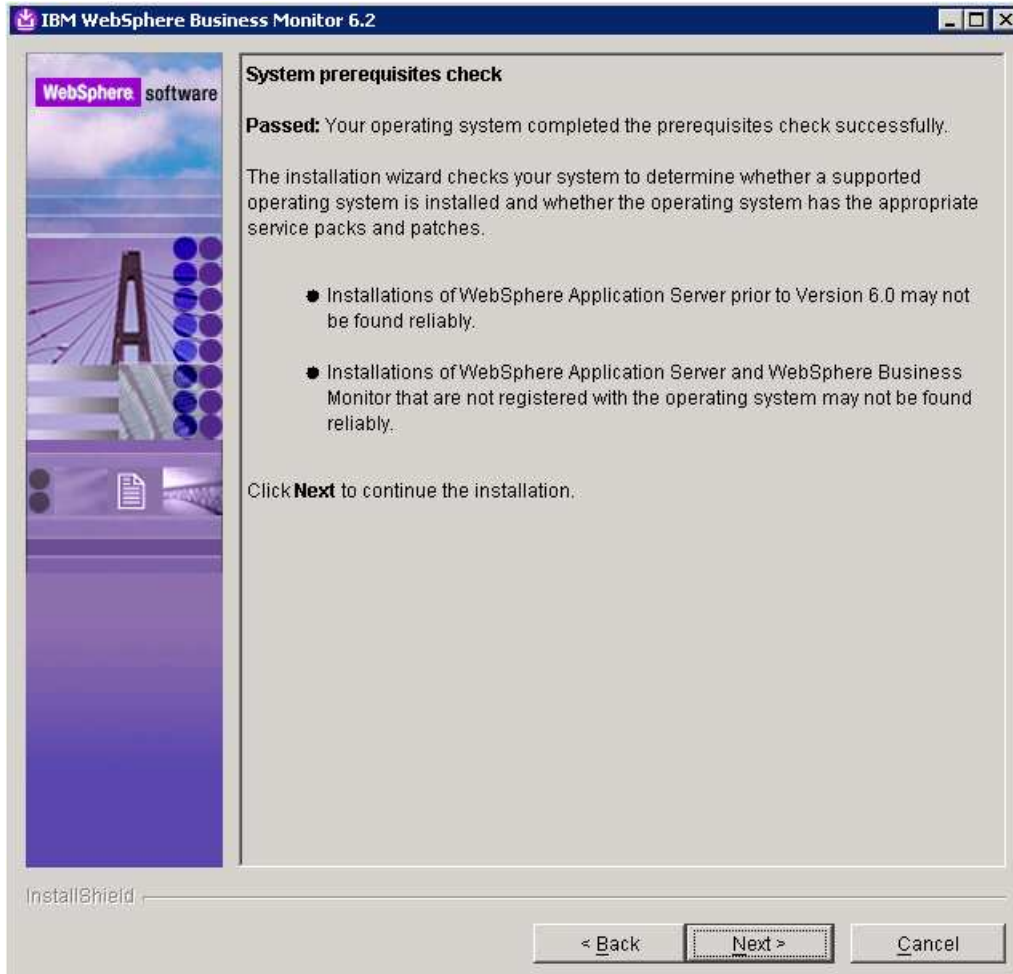


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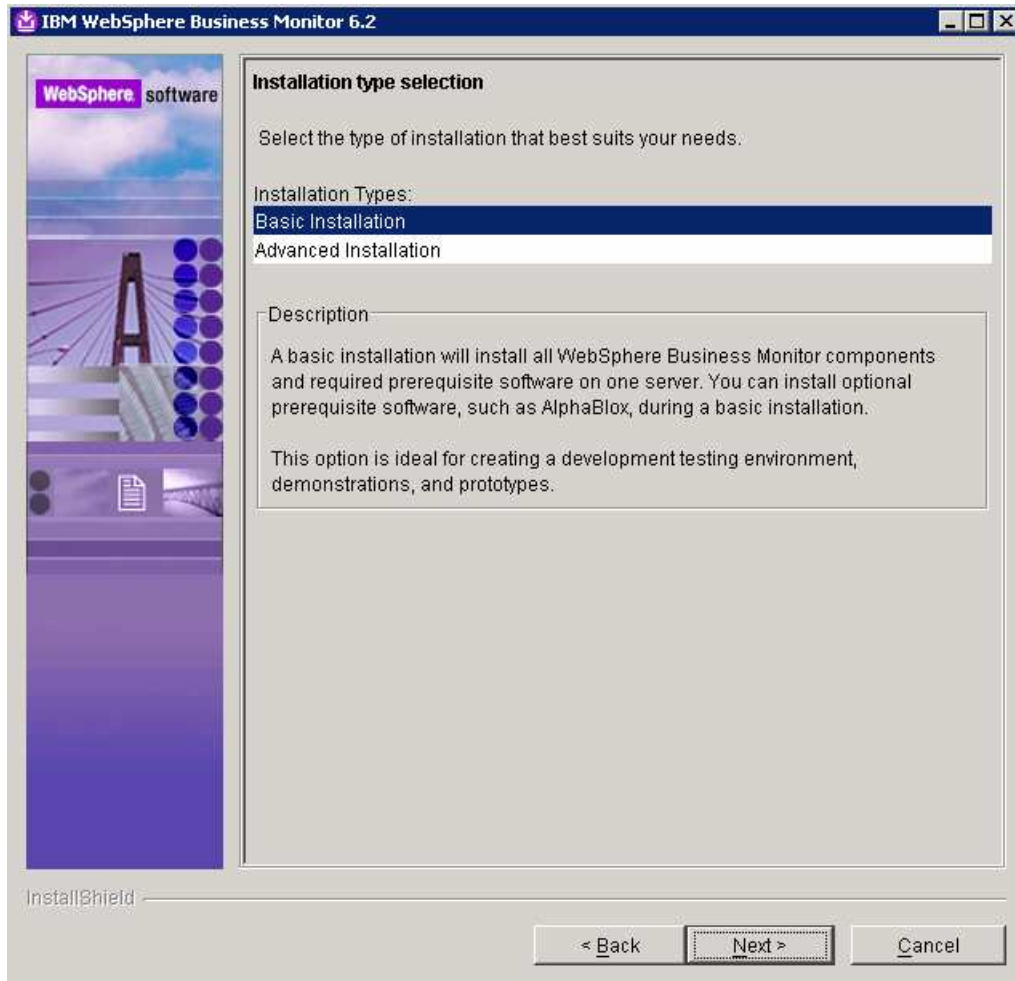
\_\_\_\_ 2.

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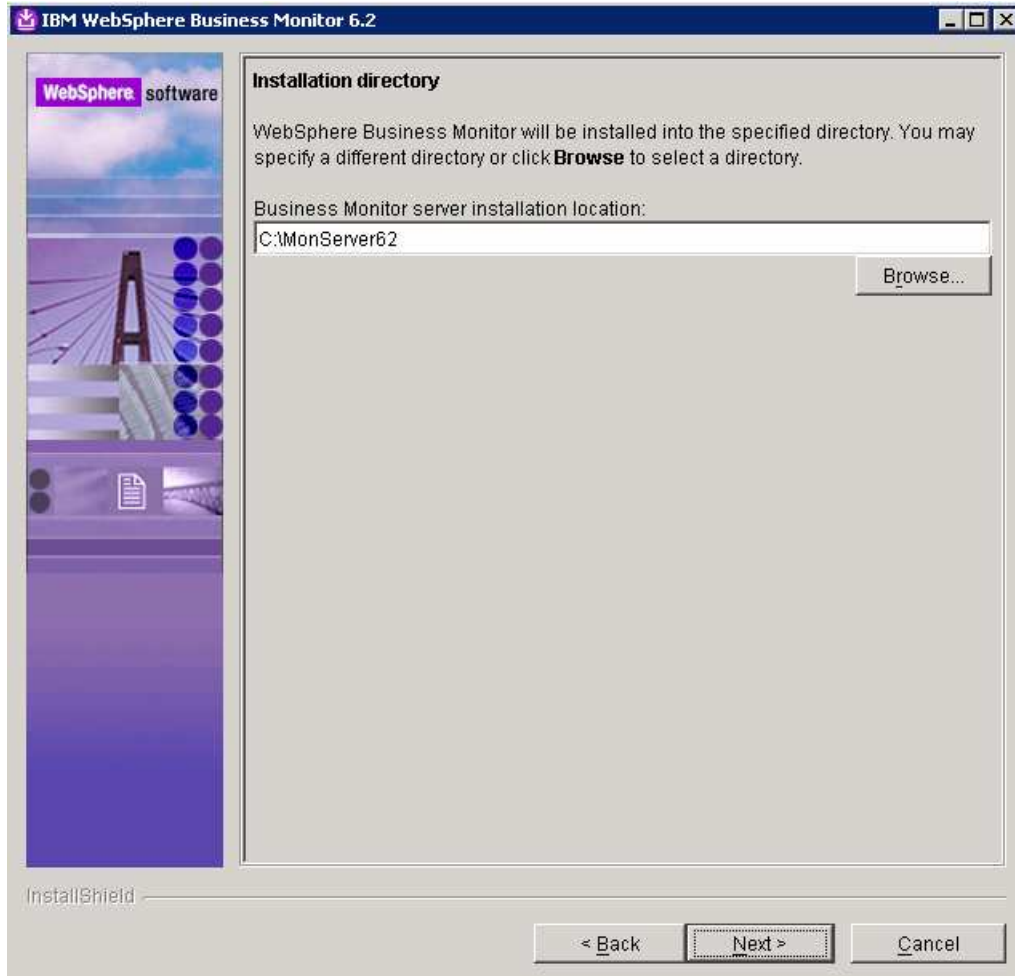


\_\_\_ 3.

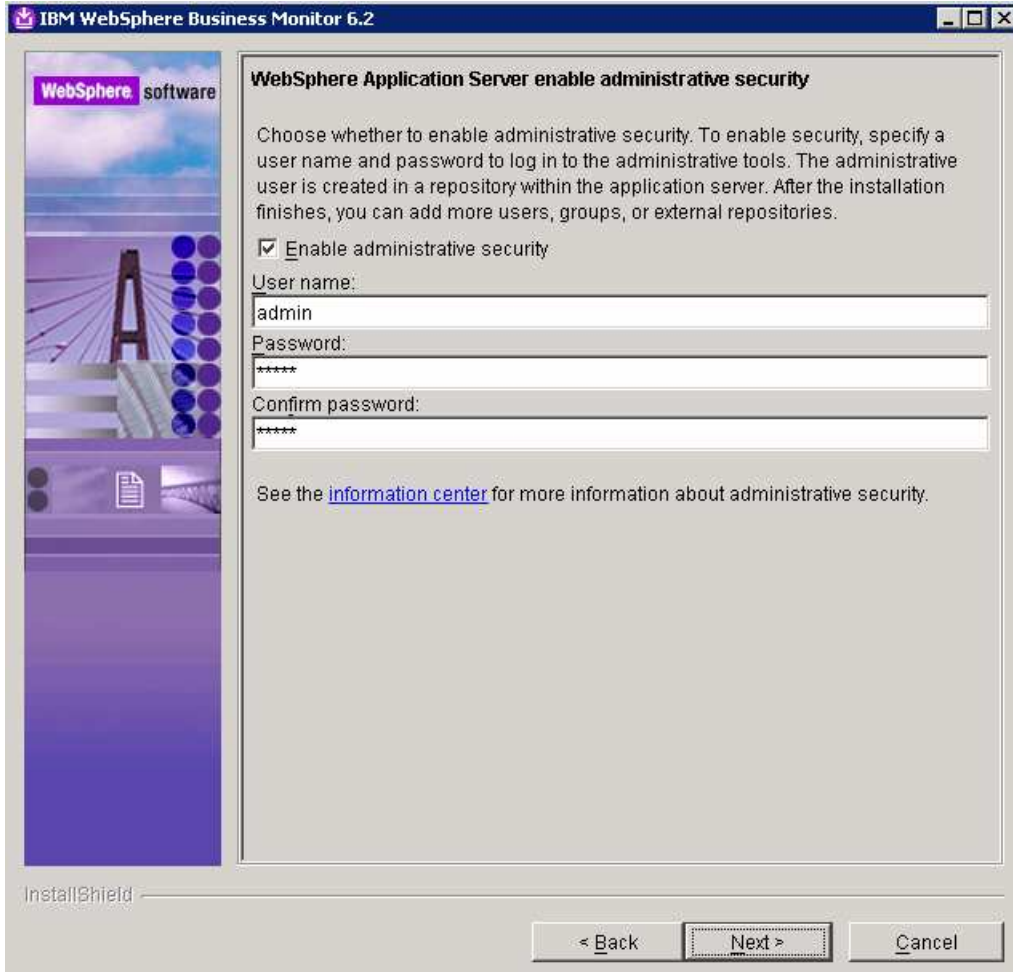
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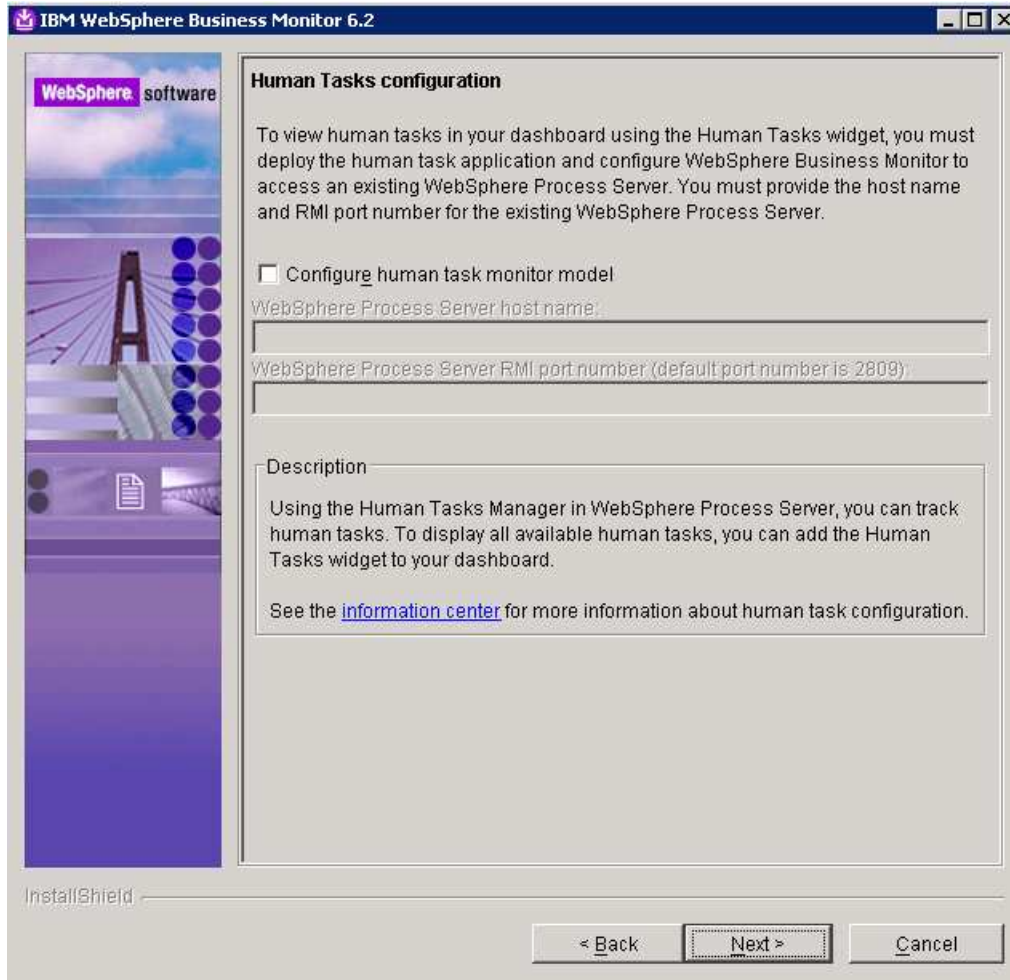


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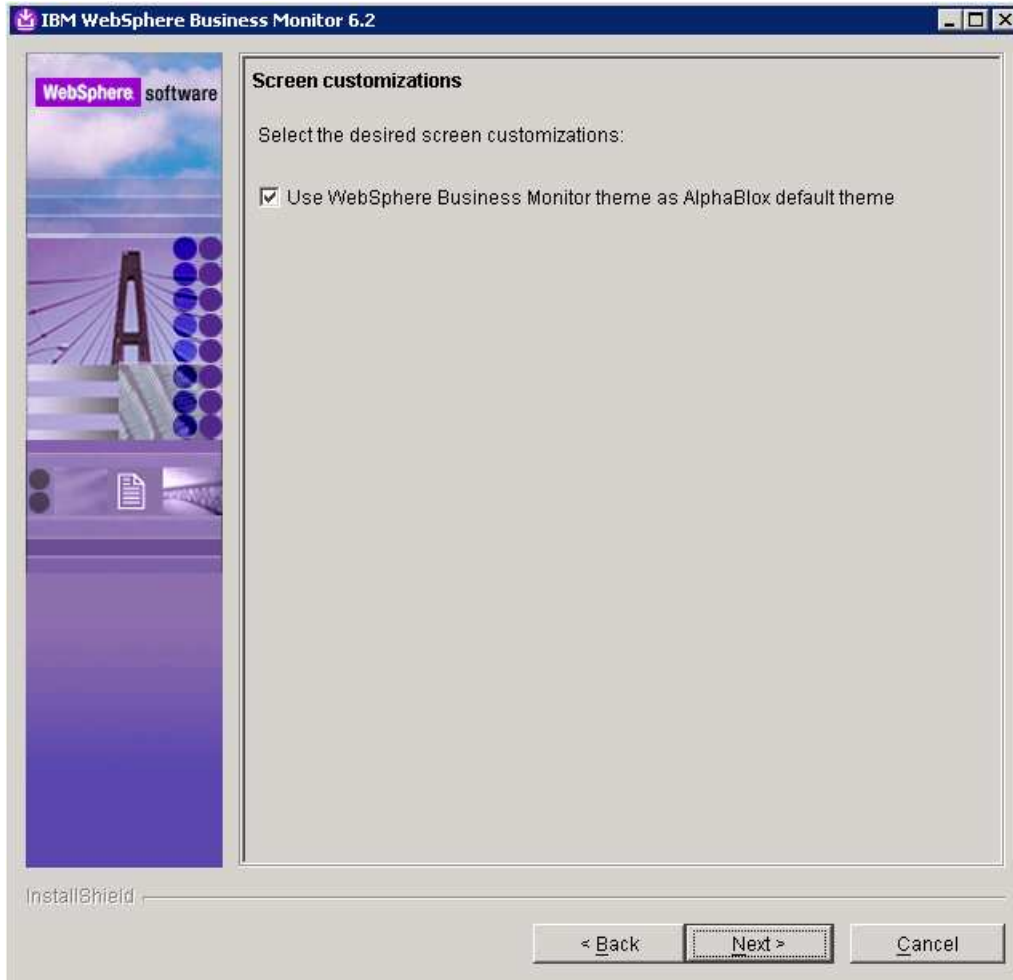
\_\_\_ 6.

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\_\_\_ 7.

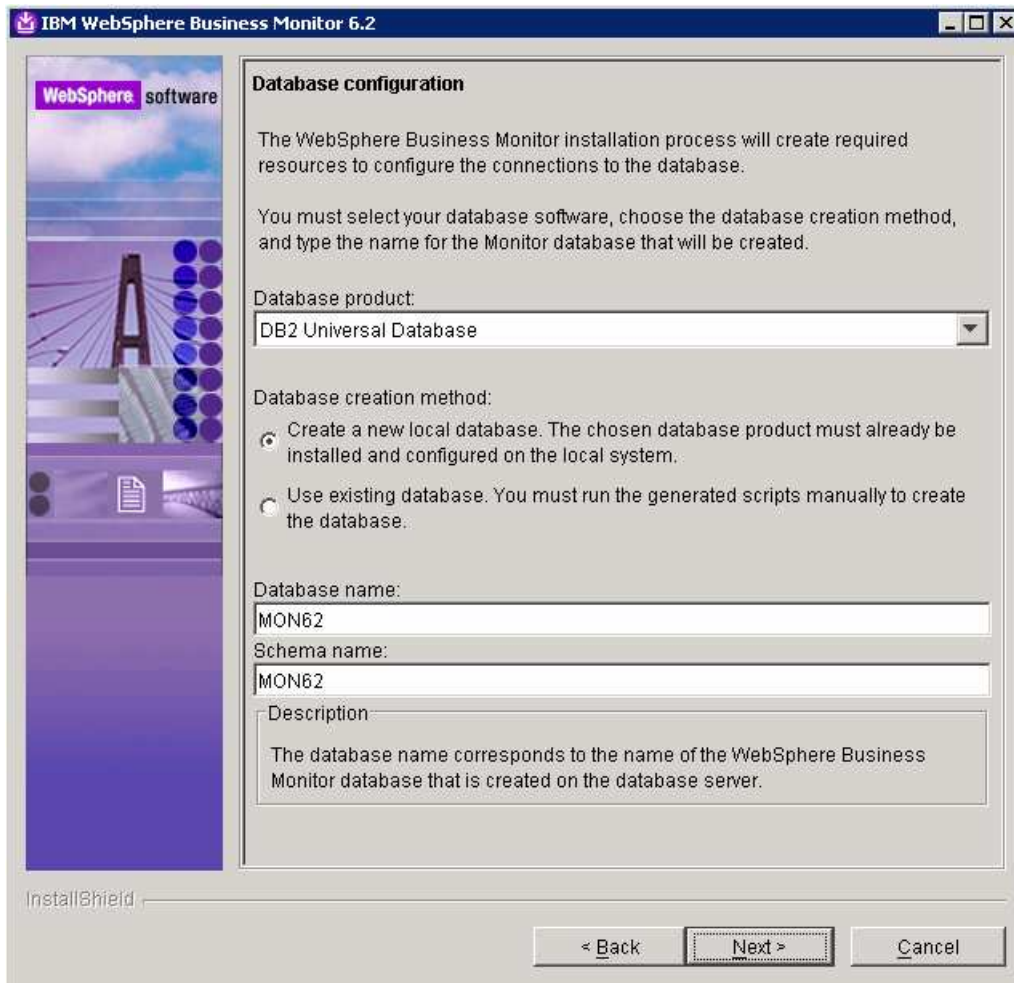
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\_\_\_ 8.



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**Additional database configuration**

To configure the database connections during this installation, you must provide additional information about the database server you are using.

For database authentication, you must type the user name and password for the database user that will be used to create the Monitor database. The database user must have read and write access on the database.

User name:  
db2admin

Password:  
\*\*\*\*\*

Confirm password:  
\*\*\*\*\*

JDBC driver classpath files directory for WebSphere Business Monitor:  
C:\MonServer62\universalDriver.wbm\lib

Browse...

JDBC driver type:

2 (requires database software or database client to be installed on the local system)

4

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

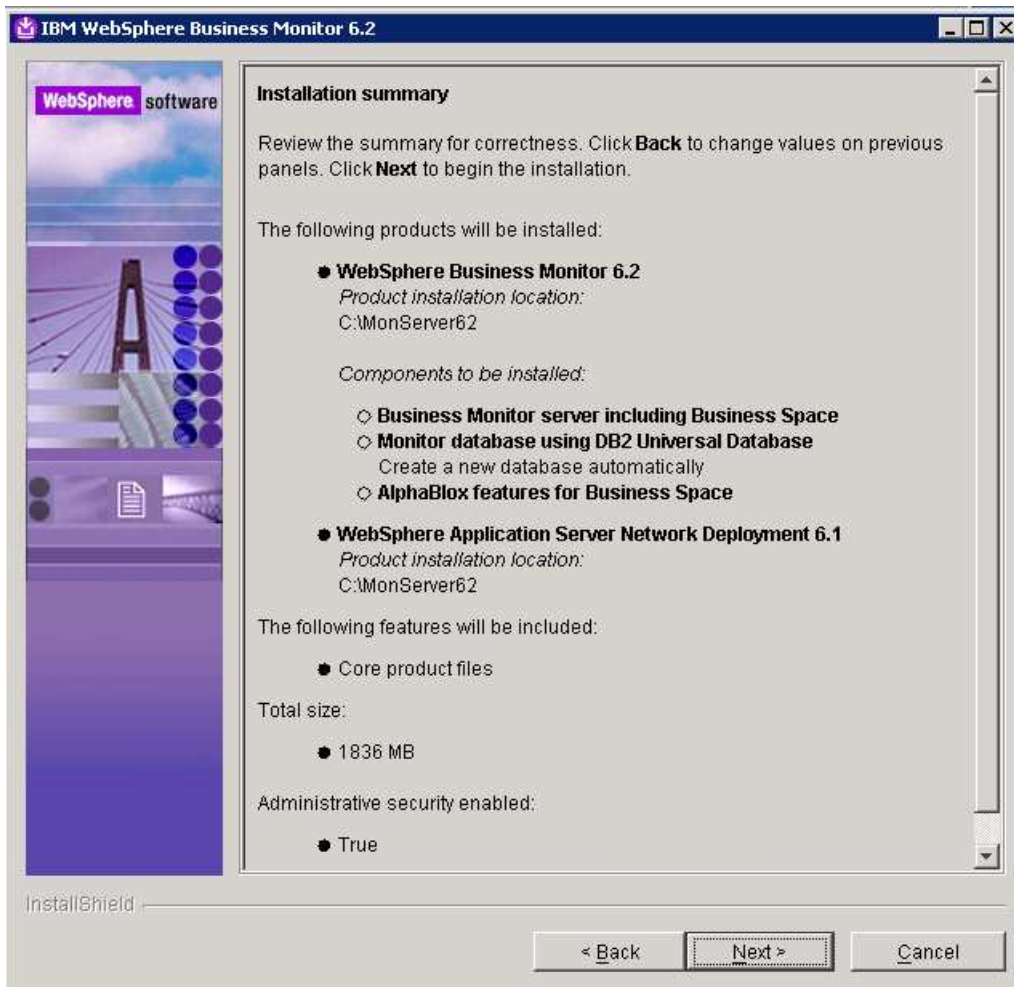
Database TCP/IP service port or listener port:  
50000

InstallShield

< Back    Next >    Cancel

10.

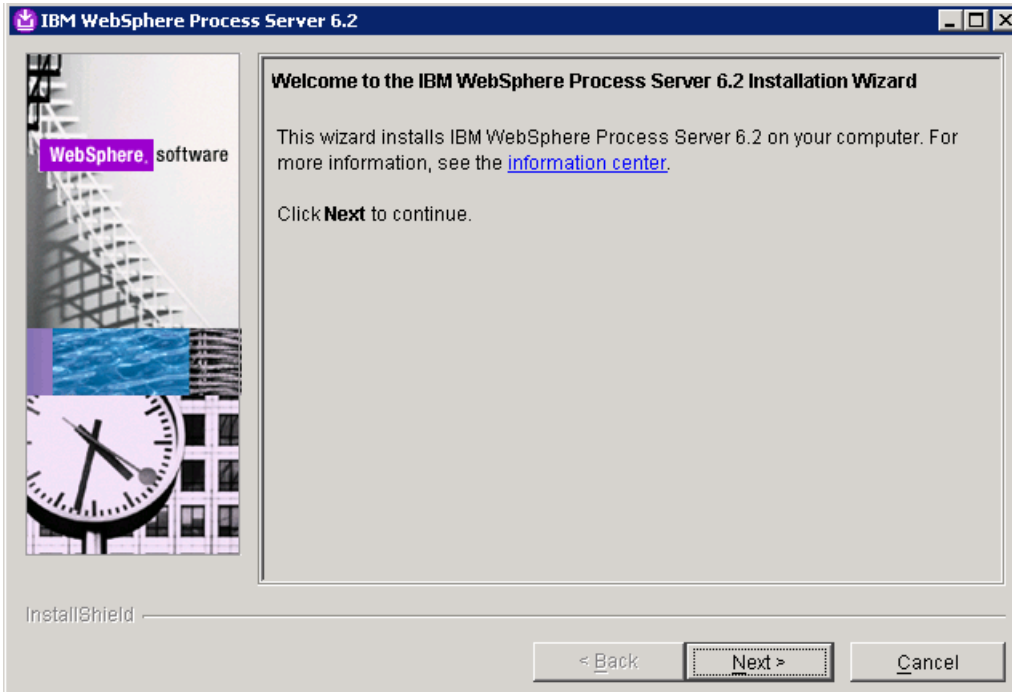
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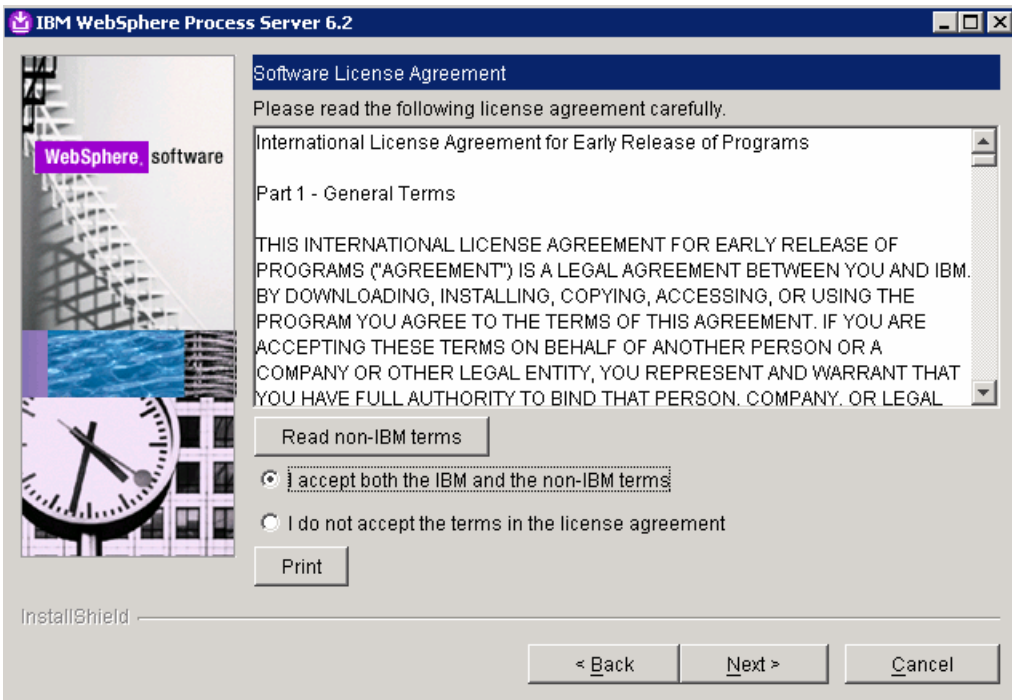
11.



## Appendix 3: Screen captures for the process server install

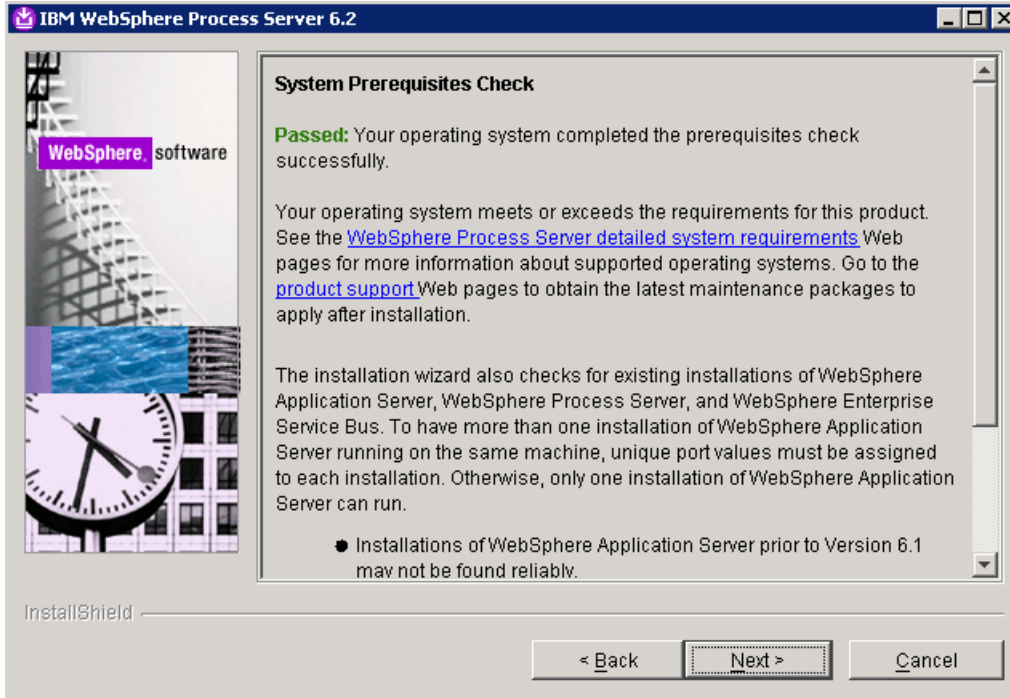


\_\_\_ 1.

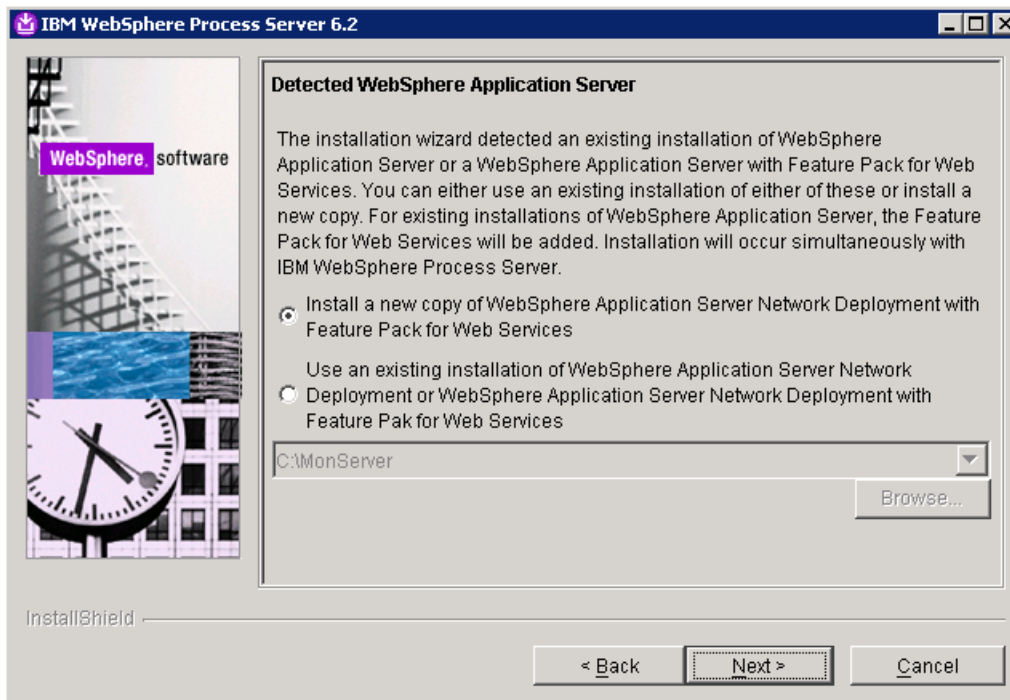


\_\_\_ 2.

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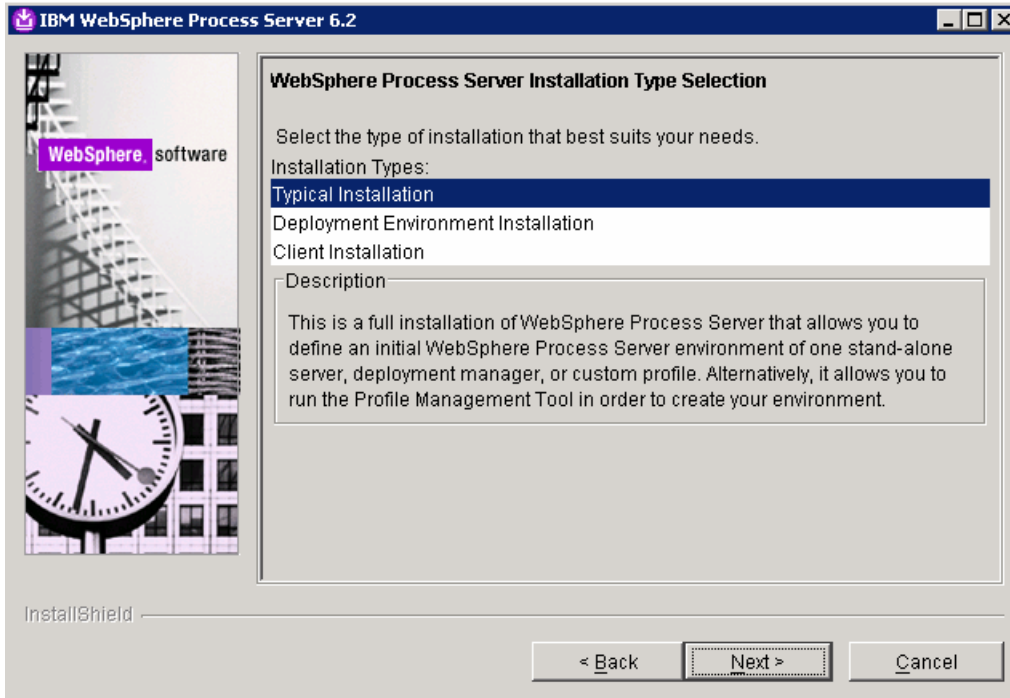


\_\_\_ 3.

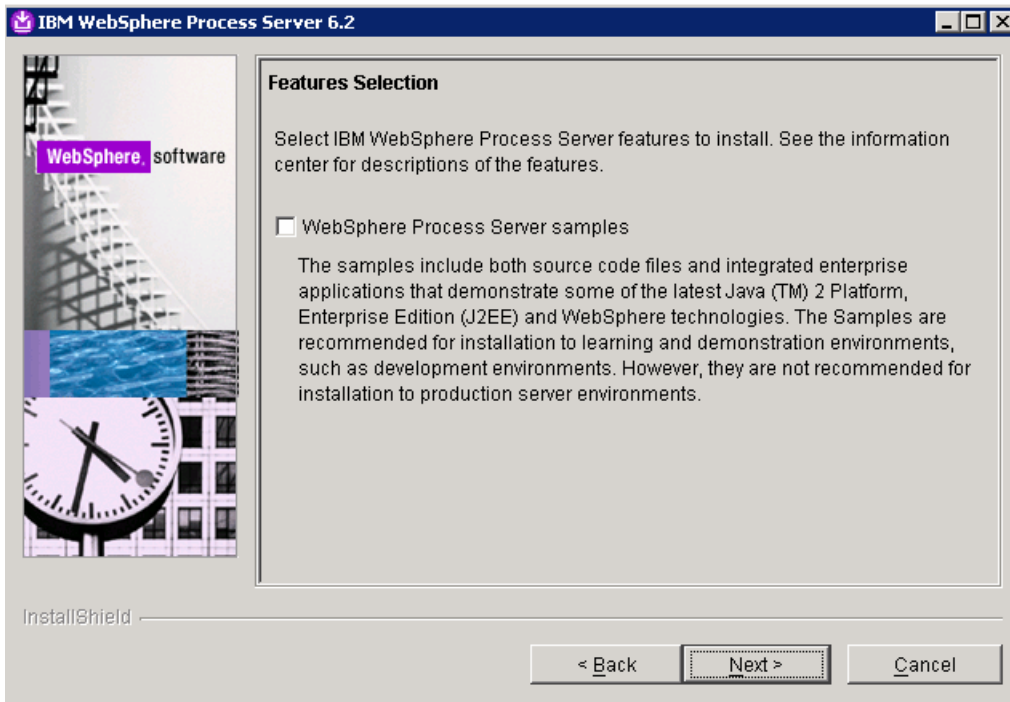


\_\_\_ 4.

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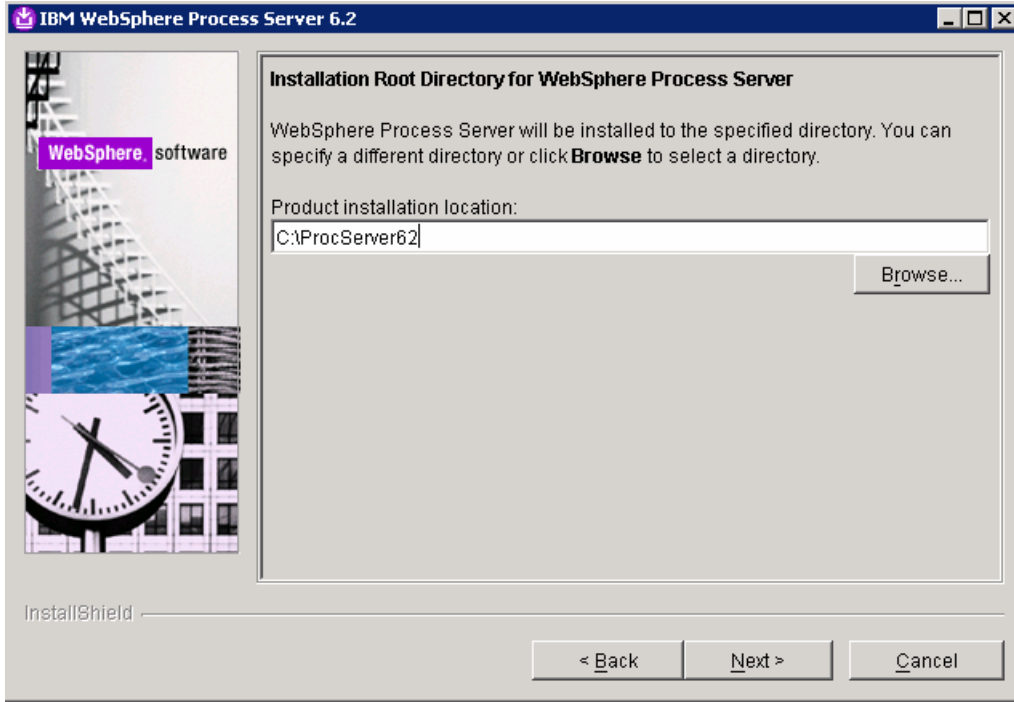


5.

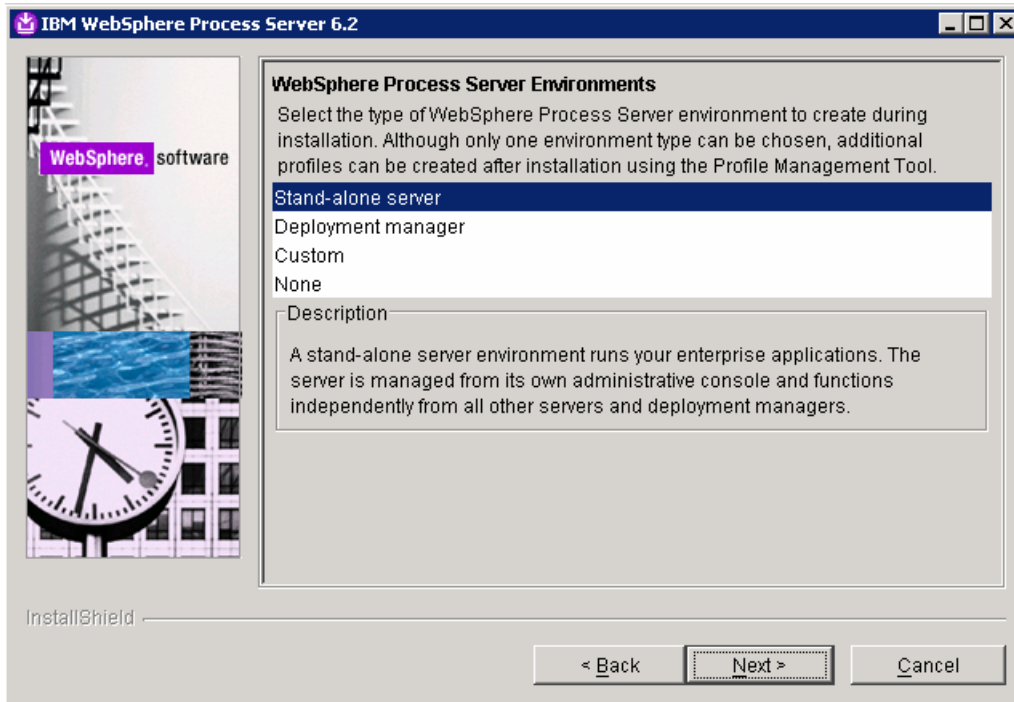


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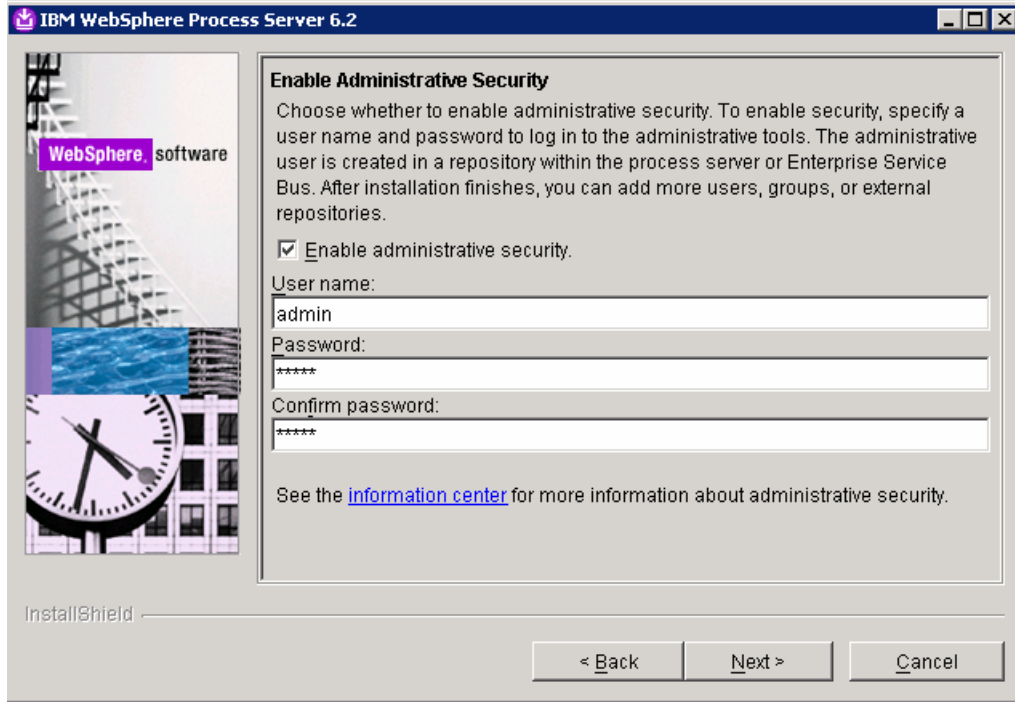
\_\_\_ 7.



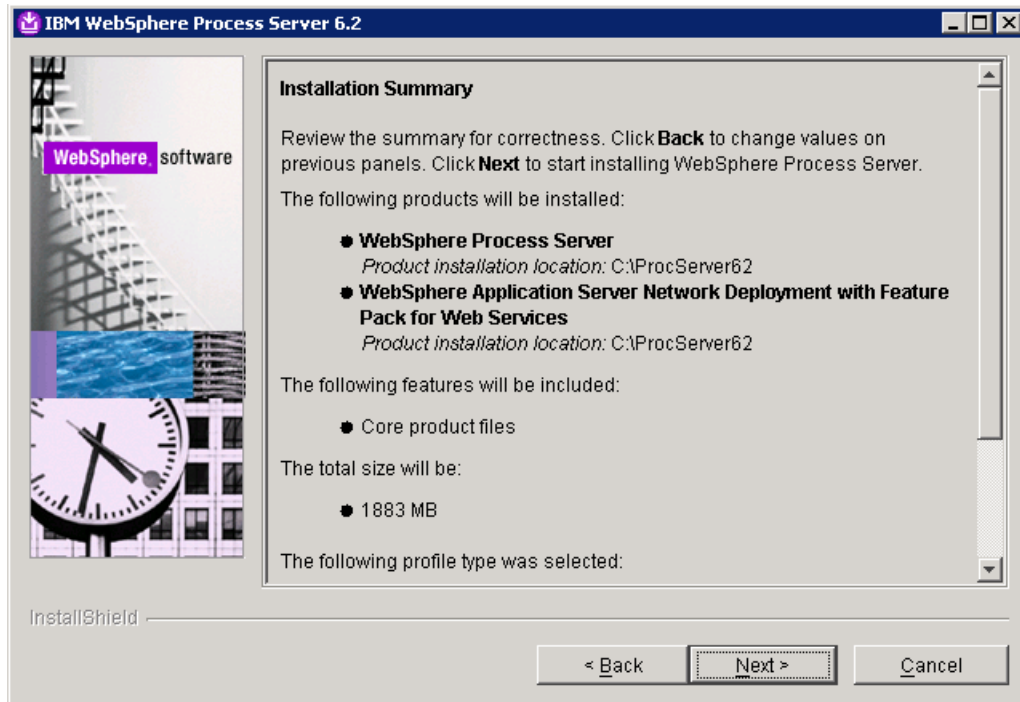
\_\_\_ 8.



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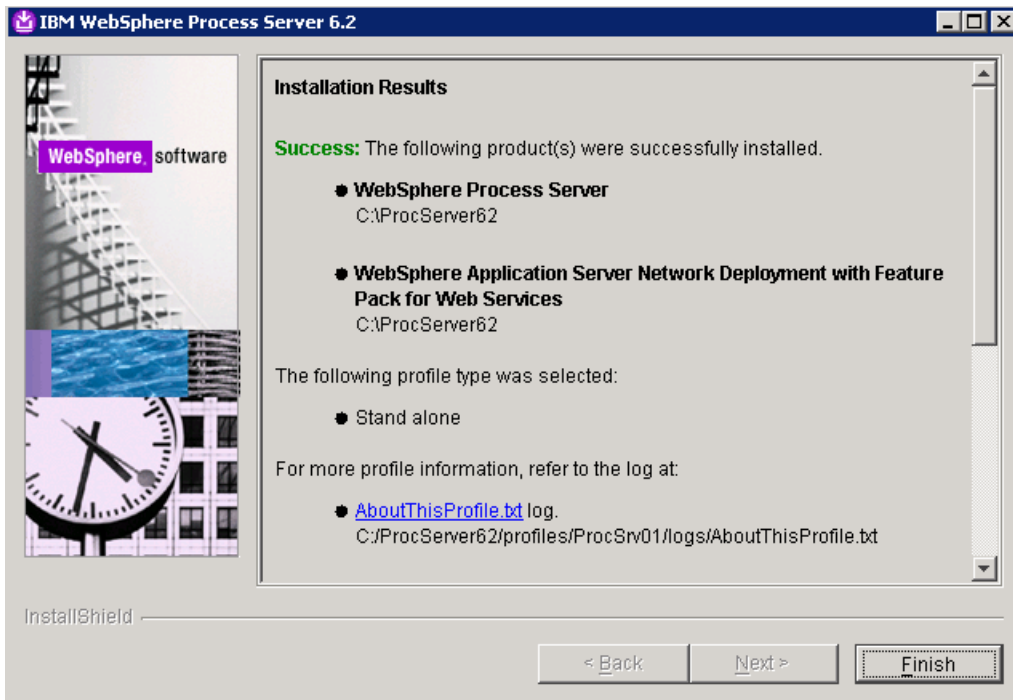
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11.

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