

IBM InfoSphere Master Data Management
Version 11.3

*Quick Installation
including the MDM Workbench*



IBM InfoSphere Master Data Management
Version 11.3

*Quick Installation
including the MDM Workbench*



Note

Before using this information and the product that it supports, read the information in “Notices and trademarks” on page 25.

Edition Notice

This edition applies to version 11.3 of IBM InfoSphere Master Data Management and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2014.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Chapter 1. Overview of a quick installation with the MDM Workbench . . . 1

Stand-alone workstation installation with DB2 . . . 1

Chapter 2. Installing a stand-alone workstation with DB2 3

Acquiring and extracting the installation files . . . 3

Preparing for a stand-alone installation with DB2 . . 3

Installing a stand-alone workstation installation with DB2 4

Prerequisite checks for stand-alone installations with DB2 10

Chapter 3. Verifying the base installation 13

Verifying the installation with the Test Client on WebSphere Application Server 13

Test Client properties 14

Installation logs 15

Viewing Installation Manager log files 15

Viewing the InfoSphere MDM installation logs . . 16

Chapter 4. Worksheets for installation and configuration 17

Installation directory worksheet 17

DB2 or DB2 for z/OS data source worksheet . . . 18

WebSphere Application Server installation worksheet 19

InfoSphere MDM application configuration worksheet 20

History installation worksheet 21

Notices and trademarks 25

Index 31

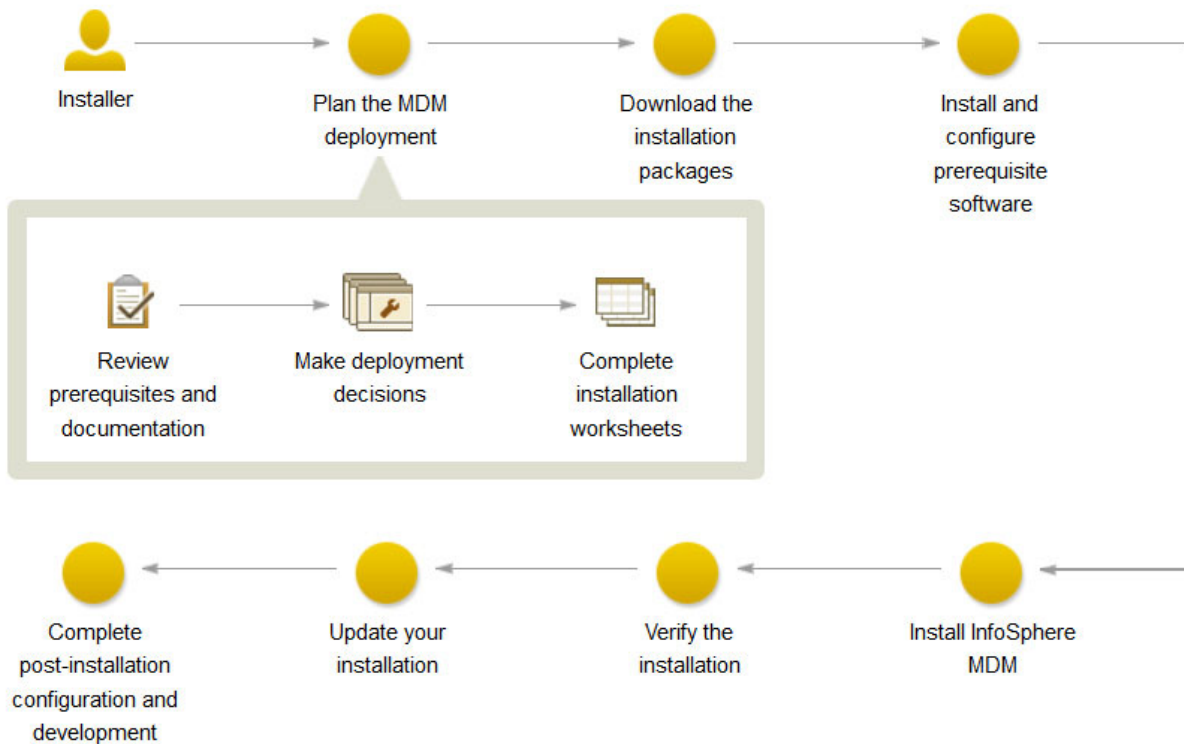
Contacting IBM 33

Chapter 1. Overview of a quick installation with the MDM Workbench

The scenario in this cookbook leads you through a quick installation of InfoSphere® MDM that includes the MDM Workbench.

Important: Before you install the software in this scenario, you review the user accounts, directory structure, system requirements, and other requirements for any installation in the *InfoSphere MDM Installation Guide*. That guide also includes troubleshooting, fix pack, and client installation topics.

Restriction: This *limited* scenario does not cover every possible configuration and architecture. For details about other configurations, see the *InfoSphere MDM Installation Guide*.



Stand-alone workstation installation with DB2

A stand-alone workstation installation with DB2® implies that you are selecting to install an InfoSphere MDM edition, IBM® WebSphere® Application Server, IBM DB2 for Linux, UNIX, and Windows, IBM Rational® Application Developer, and InfoSphere MDM Workbench on a Microsoft Windows or Linux workstation.

This illustration shows a stand-alone workstation installation with DB2. Like the server scenario, you download IBM WebSphere Application Server (base deployment), IBM DB2, your InfoSphere MDM edition, and InfoSphere MDM Workbench.

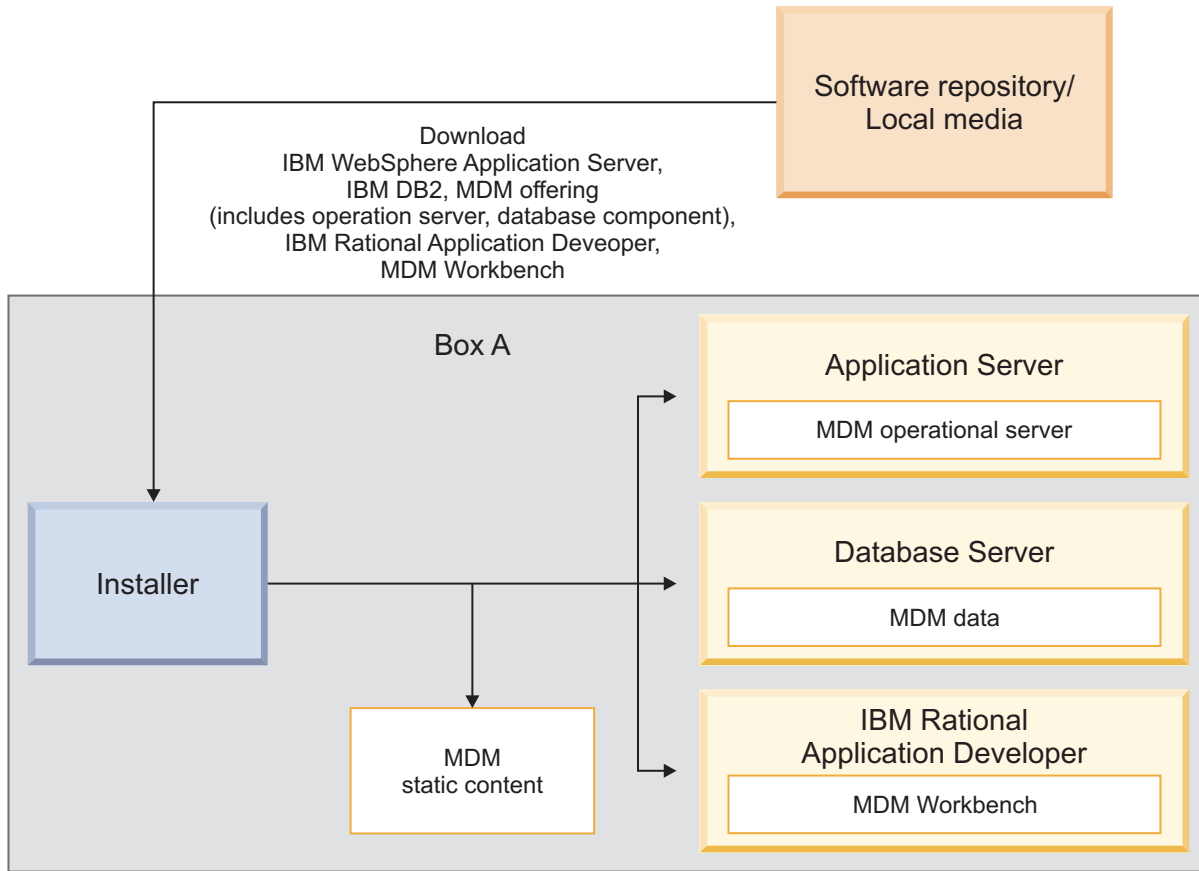


Figure 1. Stand-alone workstation installation with DB2

For a stand-alone workstation installation with DB2, IBM Installation Manager completes the following actions:

1. Installs IBM WebSphere Application Server (base deployment) with default messaging, IBM DB2 for Linux, UNIX, and Windows, and IBM Rational Application Developer.
2. Installs InfoSphere MDM Workbench in IBM Rational Application Developer.
3. Installs the MDM operational server and database components. The MDM static content is content that the installer extracts into the installation directory (*MDM_INSTALL_HOME*). Static content can include client applications like Batch Processor, Management Agent, Management Console, MDM Collector, MDM configuration scripts (**madconfig** utility scripts) and other applications.
4. Automatically creates your IBM WebSphere Application Server profile and configures your database, application server, and data stewardship applications using default settings.
5. Deploys the InfoSphere MDM components to the application server.

Chapter 2. Installing a stand-alone workstation with DB2

Complete the tasks in this section to install a stand-alone InfoSphere MDM workstation with IBM DB2.

About this task

A stand-alone workstation installation with DB2 enables you to deploy an InfoSphere MDM edition, IBM WebSphere Application Server, IBM DB2 for Linux, UNIX, and Windows, IBM Rational Application Developer, and InfoSphere MDM Workbench on a Microsoft Windows workstation.

Your workstation must be a Microsoft Windows or Linux operating system. Other operating systems are not supported for stand-alone workstation installations. Stand-alone installations with DB2 must be run as a root user on Linux or an administrator user on Microsoft Windows.

Important: Before you begin the process of installing InfoSphere MDM, review the known problems. Some of the known installation problems require you to complete specific preinstallation configuration tasks. Failure to complete these configuration tasks can result in a failed installation.

Acquiring and extracting the installation files

The installation media for installing InfoSphere MDM is available as downloadable installation image files.

About this task

Use the Download IBM InfoSphere Master Data Management page to help determine the parts that you need for your licensed edition and version. Use the information in the system requirements topic to determine the supported versions for WebSphere Application Server and fix packs.

Important: Before you begin installing InfoSphere MDM, ensure that you have downloaded all of the latest installation packages and fix packs required for your licensed edition and version.

Procedure

To obtain installation image files from IBM Passport Advantage[®], download and extract the files into a directory called MDM. When you extract the files, they will be placed into a folder structure that reflects the parts that you have downloaded.

Preparing for a stand-alone installation with DB2

Before you begin a stand-alone server installation with DB2 or stand-alone workstation installation with DB2, make sure that you complete the planning steps and meet the prerequisites. These steps are applicable only to stand-alone installations with DB2.

About this task

A stand-alone installation with DB2 deployment type must be done on a clean server or a clean workstation.

Procedure

- Review the readme file for system requirements and potential issues that might affect your installation.

- Read the release notes for information about supported product features or enhancements to the release.
- Review and complete the installation worksheets.
- Complete the “Acquiring and extracting the installation files” on page 3 task.
- Review Installation requirements.
- Review Stand-alone installation deployment types.
- If you are installing in a Dynamic Host Configuration Protocol (DHCP) environment, you must set the host IP in the `/etc/hosts` file. This setting is not required if your host uses a static IP. This setting is not required for custom installations either.
- For stand-alone installations with DB2, ensure that you are logged in as the root user, assuming that IBM DB2, InfoSphere MDM, and IBM WebSphere Application Server will all be installed using root.

Important: To perform installations as a root user, you must install IBM Installation Manager in *admin* mode. To install IBM Installation Manager in admin mode, log in as the root user, then run the `install` command.

What to do next

Continue with starting your installation with LaunchPad and use the installation instructions for your stand-alone with DB2 deployment type.

Installing a stand-alone workstation installation with DB2

Use this procedure to run a stand-alone workstation installation with DB2. Stand-alone workstation installations are supported on Microsoft Windows or Linux operating systems only. A stand-alone workstation installation implies that you are selecting to install an IBM InfoSphere Master Data Management edition, IBM WebSphere Application Server, IBM DB2 for Linux, UNIX, or Windows, InfoSphere MDM Workbench, and IBM Rational Application Developer (RAD) on a clean workstation.

Before you begin

Make sure that you meet these prerequisites:

- The server on which you are installing does not have any existing instances of MDM, IBM WebSphere Application Server, or IBM DB2.
- You have access to InfoSphere MDM, IBM WebSphere Application Server, IBM DB2, IBM Rational Application Developer (RAD), and MDM Workbench offerings.

If you are installing on Microsoft Windows:

- You must be running in Administrator mode for IBM Installation Manager to write to the Windows registry. Administrator mode is not used for IBM AIX®, Linux, or Solaris.
- On a Microsoft Windows 7 operating system, you must install MDM into a directory that is not virtualized.

Make sure that the required 32-bit libraries are available on your 64-bit operating system.

Your installation media must be in the correct locations for LaunchPad to start. See “Acquiring and extracting the installation files” on page 3.

About this task

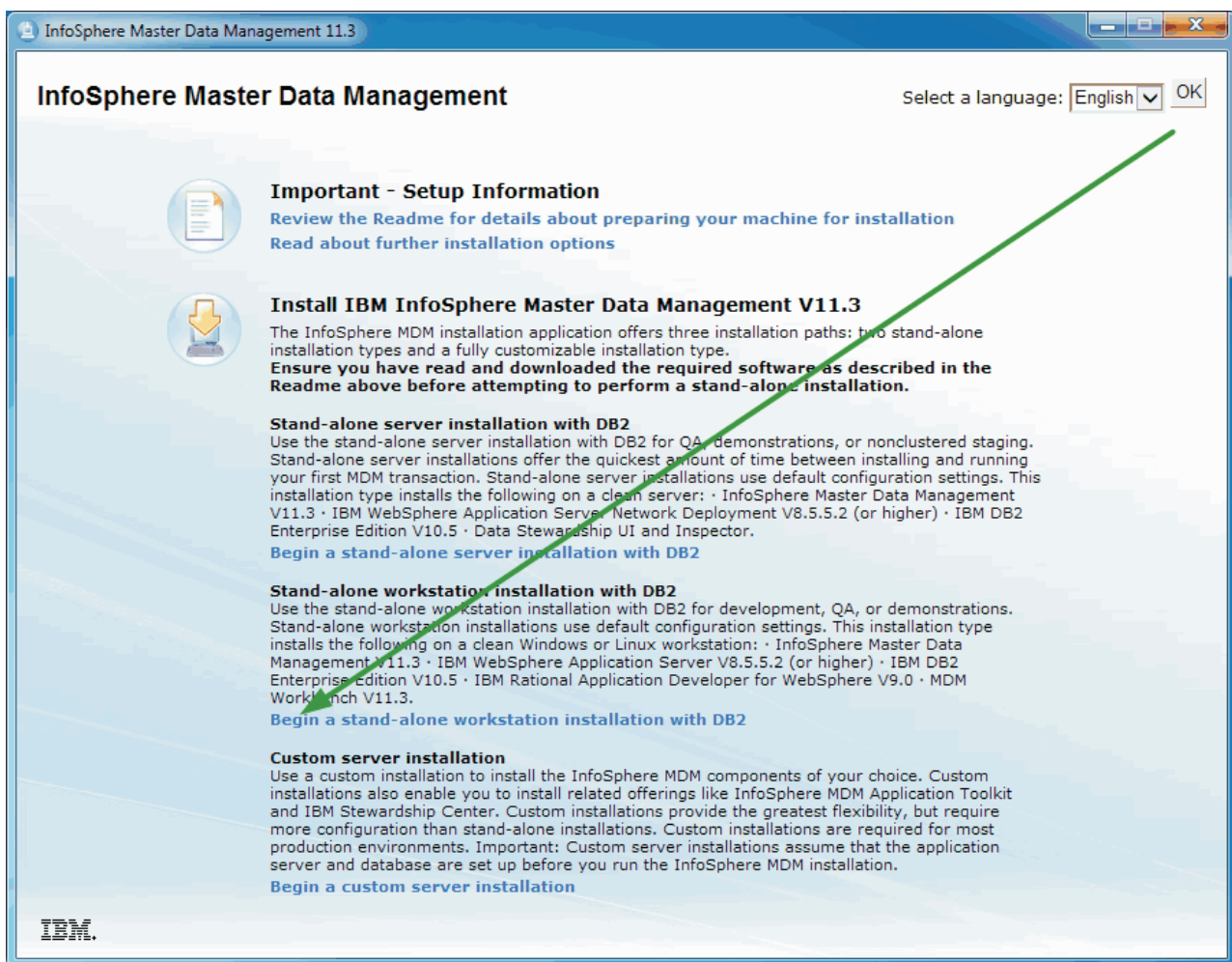
During a stand-alone installation with DB2, default configuration values are used automatically by the installation application. You can review the configuration worksheets if you want to know what the defaults are before you begin the installation.

For workstation installations, you must use IBM WebSphere Application Server base deployment.

Attention: The stand-alone installation with DB2 is configured to use specific TCP or SOAP ports for the application server. For a successful installation, first verify that the following TCP or SOAP ports are not in use: 50000 - 50002 and 60000 - 60004.

Procedure

1. Review and ensure that your system meets the prerequisites listed in the preceding sections of this topic.
2. From the *download_path/MDM/disk1*, start LaunchPad using one of these scripts:
 - Microsoft Windows: `launchpad.exe` - On Microsoft Windows, right-click on the script and choose **Run as Administrator**.
 - Linux and UNIX: `launchpad.sh` - Run as root user



3. On the Install Packages panel, verify that the following items are selected:
 - IBM WebSphere Application Server
 - IBM DB2
 - IBM Rational Application Developer (RAD)
 - InfoSphere MDM Standard or Advanced Edition
 - InfoSphere MDM Workbench

Attention: Clearing any of the preselected components automatically changes the installation mode from a stand-alone installation to a custom installation.

Install Packages
Select packages to install:

Installation Packages	Status	Vendor	License Key Type
<input checked="" type="checkbox"/> IBM DB2 Enterprise Server Edition <input checked="" type="checkbox"/> Version 10.5.0.0	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM WebSphere Application Server <input checked="" type="checkbox"/> Version 8.5.5.2	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM® Rational® Application Developer for WebSphere® Software <input checked="" type="checkbox"/> Version 9.0	Will be installed	IBM	
<input checked="" type="checkbox"/> InfoSphere MDM Standard Edition or Advanced Edition <input checked="" type="checkbox"/> Version 11.3.0.0	Will be installed	IBM	
<input checked="" type="checkbox"/> IBM InfoSphere Master Data Management Workbench <input checked="" type="checkbox"/> Version 11.3.0.0	Will be installed	IBM	

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

Details
IBM DB2 Enterprise Server Edition 10.5.0.0
 Deploy IBM DB2 Database for the MDM database. [More info...](#)
 • Repository: C:\Builds\DB2

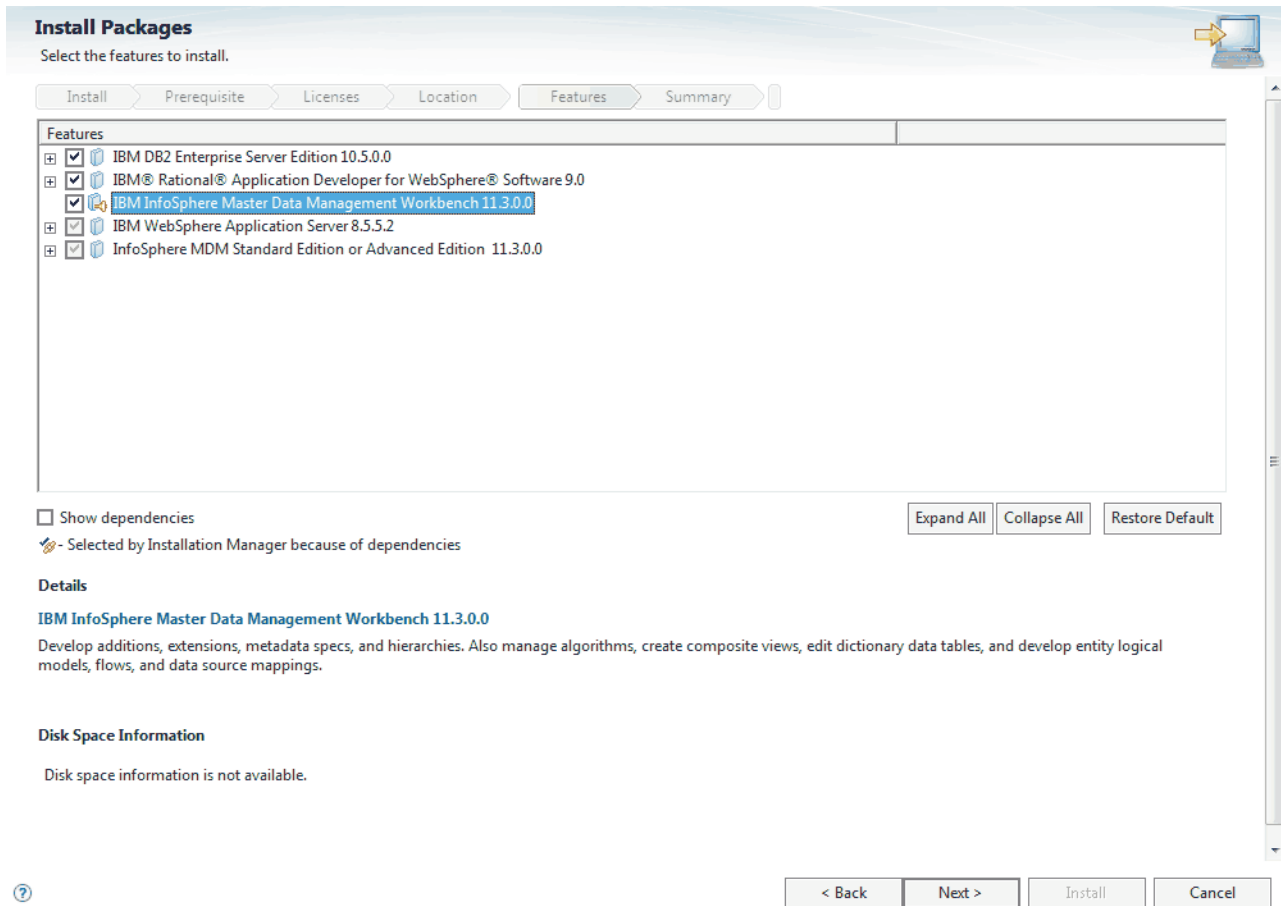
4. Click **Next**.
5. On the extend eclipse panel, define whether you wish to extend an existing installation of Eclipse, then click **Next**.
6. Review and accept the license agreement, then click **Next**.
7. Choose whether to install into an existing package group or create a new package group.

Tip: If you are unsure of what to choose, then accept the default. Most installations should create a new package group.

Important: If you have IBM Rational Application Developer installed, make sure that you do not install InfoSphere MDM into the same package group. Select **Create a new package group**.

8. On the same panel, define the **Installation Directory** into which you want to install each component. If you choose to install a component in a directory other than the default, select that component and click **Browse** in the **Installation Directory** field.
Review the disk space information, then click **Next**.
9. On the language panel, English is always selected.
 - a. If you want to support any languages in addition to English, select them.
 - b. Some packages support more languages than others. If you want more languages, click the twistie for **Translations Supported by Only Some Packages** and select each additional language that you want.
 - c. Click **Next**.

10. On the features panel, select the InfoSphere MDM features, applications, and optional components to install and click **Next**.



11. On the user credentials panel, provide the connection credentials for your WebSphere Application Server and database instances.

Install Packages
Click Next to proceed

Install Prerequisite Licenses Location **Features** Summary

Configuration for InfoSphere MDM Standard Edition or Advanced Edition 11.3.0.0
User Credentials

Enter the user credentials and passwords to be created and used by the installer

WebSphere Application Server Credentials

WebSphere Application Server user name

WebSphere Application Server user password

Confirm WebSphere Application Server user password

MDM Credentials

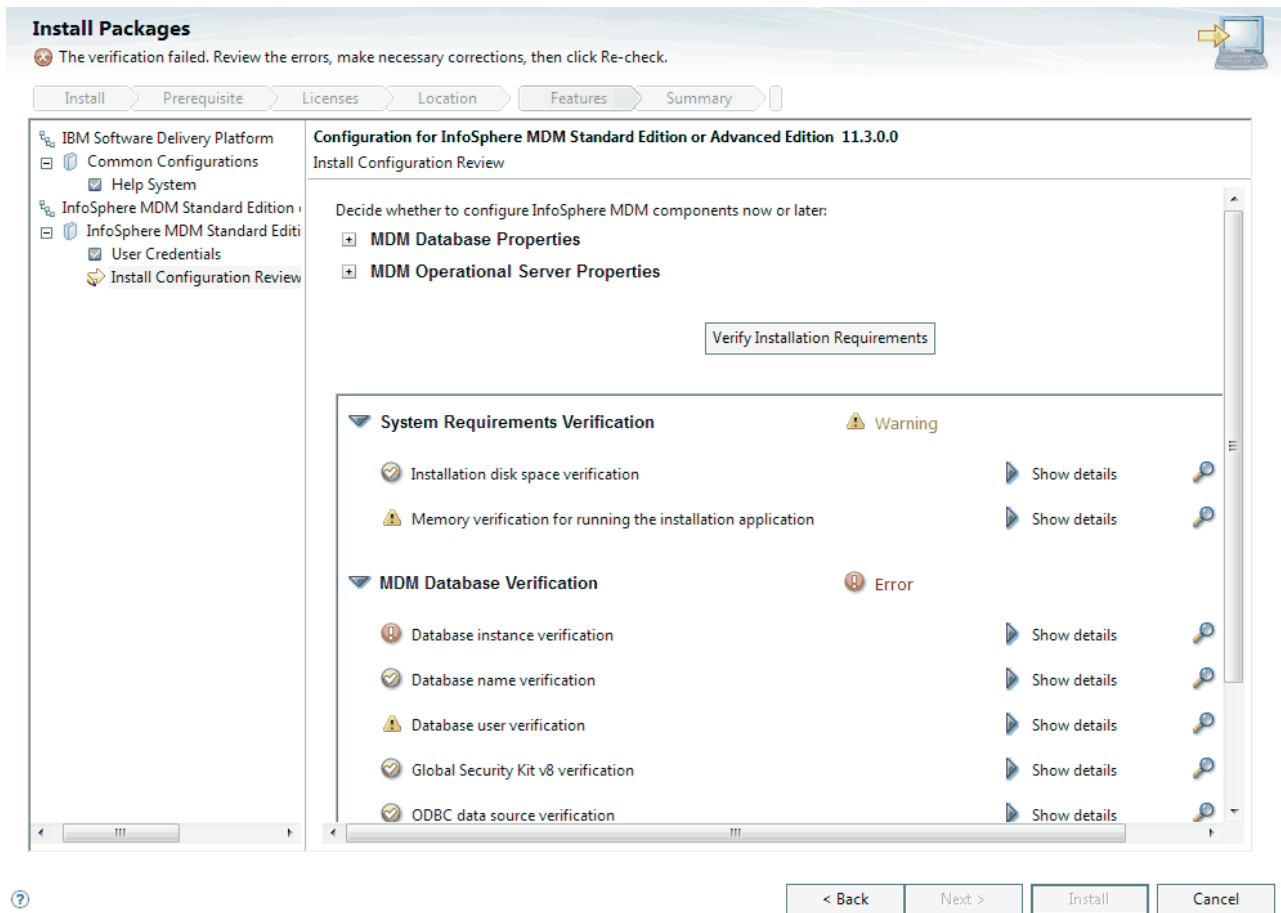
MDM user name

MDM user password

Confirm MDM user password

< Back Next > Install Cancel

- Review the installation summary information to ensure that the details are accurate, then click **Verify Installation Requirements** to run the prerequisite checks. Click **Show details** to view more details for each result.



The checks will help to ensure that your environment and configuration is sufficient to successfully complete the installation.

13. Take corrective action to address any warnings or errors in the prerequisite checks, then click **Install**.
14. On the Help System Common Configurations panel, select one of the options for how you want to access IBM Rational Application Developer (RAD) help and click **Next**.
15. Click **Install**.
16. On the final IBM Installation Manager panel, click **View Log Files** if you want to open the log file viewer.
17. Click **Finish**, then close IBM Installation Manager.

What to do next

A success message on the final installer panel indicates that the verification tests were automatically run as part of the installation process. You can also view the log files to verify a successful installation. If the installation is not successful, view the log files and use the information in the troubleshooting topics to assist you.

After installation, if you want to add or remove a feature (for example, add an application or another language translation), or modify any of your configuration settings, you can run IBM Installation Manager again and select **Modify**.

For a list of user names and passwords that are created by the installer, see the topic about default user accounts created during a stand-alone installation deployment (see related reference topics).

Prerequisite checks for stand-alone installations with DB2

The InfoSphere MDM installer application runs tests to ensure that certain prerequisites are in place before each stand-alone installation with DB2 begins.

The prerequisite checking tool helps to prevent you from beginning an installation that will be unable to successfully complete due to any missing prerequisites.

Tip: Run the prerequisite checks from within Installation Manager from the Installation Configuration Review panel by clicking **Verify Installation Requirements**.

When running a stand-alone installation with DB2, the installation application runs the following prerequisite checks.

Table 1. System checks

Prerequisite check	Description	Resolution
Installation disk space verification	This check validates that there is sufficient disk space to install InfoSphere MDM and all required software for a stand-alone with DB2 deployment, including the WebSphere Application Server profile and the database.	Ensure that there is at least 32 GB of disk space available on the installation target machine.
Memory verification for running the installation application	This check validates that there is sufficient memory to run the installation. This message is a warning only.	Ensure that the system that you are installing on has at least 8 GB of RAM. Note: You can choose to ignore this warning, but the installation may fail.

Table 2. Database checks

Prerequisite check	Description	Resolution
Database instance verification	The check validates that the database does not already exist. Stand-alone installations with DB2 require an environment without a preexisting database.	If your installation environment has a preexisting database, remove it before attempting to complete the installation.
Database name verification	The check validates that the database name is valid.	The database name must consist of 12 or fewer alphanumeric characters. Underscore (_) characters can be used in the name. Other characters are not supported.
Database user verification	This check determines if the database user specified in the installation panels exists. This user should not already be present in the system. This message is a warning only.	Delete the database user if it already exists. The stand-alone installation with DB2 will create the user during installation. Alternately, ensure that the db2admin database user has the same default password. Note: You can choose to ignore this warning, but the installation may fail.

Table 2. Database checks (continued)

Prerequisite check	Description	Resolution
Global Security Kit v8 verification	<p>This check determines if the Global Security Kit library is present from a previous DB2 installation.</p> <p>If the Global Security Kit library is present and the installed version is below the minimum requirement for InfoSphere MDM, then the check will fail. If the Global Security Kit library is the wrong version, then the DB2 database manager is unable to start.</p>	<p>Delete the Global Security Kit library folder (GSK8\lib64), then continue with the installation.</p> <p>Tip: On Microsoft Windows, You can locate the GSK8 folder by checking the Path in your System variables and looking for a directory path similar to C:\Program Files\IBM\GSK8\lib64</p>
ODBC datasource verification	<p>This check determines whether an ODBC datasource exists in a Microsoft Windows registry. This check will fail with an error if an ODBC datasource already exists.</p> <p>Note: For non-Windows systems, this check will always pass.</p>	<p>If an ODBC datasource exists in your Windows registry, remove the datasource:</p> <ol style="list-style-type: none"> 1. Open the Windows Registry Editor by running the command regedit. 2. Find the entry HKEY_LOCAL_MACHINE\SOFTWARE\ODBC\ODBC.INI. 3. Expand ODBC.INI, locate the ODBC datasource entry, then right-click it and select Delete. 4. Under ODBC.INI, select the ODBC Data Sources entry. In the display pane, all of the subentries are shown. 5. Locate the ODBC datasource entry in the list of subentries. Right-click the entry and select Delete.

Table 3. Operational server checks

Prerequisite check	Description	Resolution
SOAP port verification	<p>This check determines if the required port numbers for SOAP are available. Both of the required port numbers, 8879 and 8880, must be available.</p>	<p>Ensure that both ports 8879 and 8880 are available for use by SOAP.</p>

Chapter 3. Verifying the base installation

The IBM Installation Manager automatically runs a verification routine to test the installation by running three physical transactions to add a person, an organization, and a contract, and one virtual transaction. If these transactions are successful, then the installation completes successfully.

Additionally, you can use the Test Client to run test transactions to ensure that InfoSphere MDM is installed correctly.

Verifying the installation with the Test Client on WebSphere Application Server

Verify your installation with the application server Test Client, which completes a number of preset test cases.

About this task

The Test Client only supports DB2 and Oracle databases.

Procedure

1. In the `TestClient.properties` file in the `MDM_INSTALL_HOME/IVT/properties` folder, enter the user name at `user=` and the password at `password=` if application security is enabled.
2. Edit any other required properties to create the parameters for the test you want to run. For information about the properties you can edit, see the test client properties topic.
3. Go to the `MDM_INSTALL_HOME/IVT` directory:
4. Clear the data by following the steps for your installation type:
 - Take these steps to clear the data if you installed InfoSphere MDM on DB2:
 - a. Connect to the DB2 database.
 - b. Clear the DB2 data by running the following script at the command line:

```
db2 -tvf ./sql/deleteIVTdata
```
5. From the command line, to run the test cases, run the script:

```
TestClient.sh TEST_CHANNEL XML_FOLDER [USER_NAME PASSWORD]
```

 where:
 - `TEST_CHANNEL` is the method to send the test cases to the server, either:
 - For RMI, enter `rmi`
 - For HTTP, enter `soap`
 - For JMS, enter `jms`
 - `XML_FOLDER` is the folder that contains the XML test cases that you want to run, either:
 - For TCRM test cases, enter `./testCases/xml`
 - For virtual MDM test cases, enter `./testCases/xml_virtual`
 - For admin test cases, enter `./testCases/xml_admin`
 - For TCRM composite test cases, enter `./testCases/xml_composite`
 - For a messaging test case, enter `./testCases/xml_msg`
 - If security is enabled, enter the user name to log on to the system at `USER_NAME`
 - If security is enabled, enter the password for the user name at `PASSWORD`

For example, to run the admin test cases on WebSphere Application Server through HTTP with security not enabled, enter

TestClient.sh soap testCases/xml_admin

6. When the test is complete, you can see the results in the following directories:
- To see the responses that were created by the tests, check the `./response` folder for each test case (such as `./testCases/xml/response`).
 - To see the logs, the list of test cases run, and their statuses, check the log files in `MDM_INSTALL_HOME/IVT/logs`.

Example

The following table shows the tests, with corresponding command lines, that you can run:

Table 4. Installation verification tests

To run the test:	Use the command:
To provide a request file to run single TCRM test case	TestClient.sh rmi ./testCases/xml/TCRMaddPerson.xml
To run JMS test cases	Provide the queue connection factory, request queue name, and response queue name in the TestClientJMS.properties file, then run TestClient.sh jms ./testCases/xml
To run messaging test cases	<ul style="list-style-type: none"> • For DB2: <ol style="list-style-type: none"> 1. Run <code>IVT/sql/db2/update_event_active.sql</code> to activate an event 2. Restart the WebSphere Application Server 3. Run <code>TestClientWL.sh rmi ./testCases/xml_msg</code>
To run the admin test cases	TestClient.sh rmi ./testCases/xml_admin

Test Client properties

You can edit the entries in the `TestClient.properties` file in the `MDM_INSTALL_HOME/IVT/properties` folder to set the parameters for the test.

Table 5. Properties that can be set in the Test Client properties file

To set the parameter for:	Set the following parameter to:
To run test cases without sorting	sort=
To sort the test cases by directory. See <code>regex=</code> for sort criteria	sort=d
To sort the test cases. See <code>regex=</code> for sort criteria	sort=f
To sort directories and test cases. See <code>regex=</code> for sort criteria	sort=d f
To extract the first match as sorting comparison key. The sort order is based on the key. The default is to extract the last digital number from request file.	regex= [0-9]*[0-9]\$
To sort by string order	regex=
To add a user name	user=
To add a password	password=
To test the extracted value by using a regular expression	java -cp ./lib/TestClient.jar -regex tcrctest_001
For information about using Java to run test cases	java -cp ./lib/TestClient.jar ?
To use the MDM JMS adapter, enter the queue connection factory name	QueueConnectionFactory=
Enter the request queue destination name	RequestQueue=

Table 5. Properties that can be set in the Test Client properties file (continued)

To set the parameter for:	Set the following parameter to:
Enter the response queue destination name	ResponseQueue=

Installation logs

There are two types of logs that are created during the installation process. One set logs IBM Installation Manager related information and the other logs InfoSphere MDM related information.

The location of IBM Installation Manager logs depends on how the application was installed. If IBM Installation Manager was installed in admin mode (root user on UNIX), the logs are in `/var/ibm/InstallationManager/logs`. If the application was not installed in admin mode, the logs are in `$HOME/var/ibm/InstallationManager/logs`.

You can also specify a location for the IBM Installation Manager logs by updating the Agent Location variable (`cic.appDataLocation`) in the `config.ini` file. The `config.ini` is in the `InstallationManager_INSTALL_HOME/eclipse/configuration` directory.

InfoSphere MDM logs are in the `MDM_INSTALL_HOME/logs/database` directory.

The following directories contain logs that are created when the physical MDM database SQL scripts are run (by manual installation and by the installer):

- `MDM_INSTALL_HOME/logs/database/DomainData`
- `MDM_INSTALL_HOME/logs/database/CoreData`
- `MDM_INSTALL_HOME/logs/database/CMData`

Log files that are created by bootstrapping a virtual MDM database that uses ODBC are in `MDM_INSTALL_HOME/logs/database/Virtual`

Viewing Installation Manager log files

The IBM Installation Manager application creates log files during the installation process. These logs can be viewed through a browser.

Before you begin

You must have a browser available in which to view the log files. If you are on a server that does not have a browser, copy the logs to a workstation.

About this task

The logs contain messages with INFO, DEBUG, WARNING, or ERROR labels. If the installation is successful, all messages have an INFO or DEBUG label. Messages that are identified as WARNING or ERROR must be reviewed.

Procedure

1. Go to the `./InstallationManager/logs` directory.
2. Open the `index.xml` file.
3. From the **All Log Files** table, click a link that corresponds to the IBM Installation Manager session that installed InfoSphere MDM.
4. Locate the following link: **Custom operation MDM Operational Server, verifying install location in unit `mdmv.app.set.install.location`**.

That link, and subsequent links, show installation process messages.

5. Look for messages that are identified as WARNING or ERROR. The messages must be reviewed to identify potential problems with your installation.
6. Click a link to view native log file representations of an installation process segment.
Such processes can include running custom Java™ code to manage InfoSphere MDMfiles, to run the **madconfig** utility Ant-based tool that in turn runs SQL scripts, and to implement the WebSphere Application Server MBean API that deploys InfoSphere MDM deployment archives like EBA and EAR files, and other actions.

Results

If you have messages that are identified as WARNING or ERROR, try to determine the cause of the issue by searching for Java or Ant exception errors. If you locate a workaround for the WARNING or ERROR, attempt to fix the installation or contact IBM Software Support.

Viewing the InfoSphere MDM installation logs

During the installation process, logs are created in the *MDM_INSTALL_HOME*/logs/database directory. Use these logs to help you when troubleshooting or verifying your installation.

About this task

Logs are stored in .xml files with the date and time of the installation as the file name. For example, a file with the name *20130312_1101.xml*, indicates the installation occurred on March 12, 2013 at 11:01. You can access the logs in two different ways.

Procedure

- On the final IBM Installation Manager panel after the installation is complete, click **View Log File**.
- Go to the *MDM_INSTALL_HOME*/logs/database directory and open the .xml file.

Chapter 4. Worksheets for installation and configuration

The installation worksheets list all of the values that you must specify during an InfoSphere MDM installation process. Completing the installation worksheets before you install the components can help you plan your installation, save time, and enforce consistency during the installation and configuration process.

If you are performing a stand-alone installation with DB2, the installation application uses several default configurations. This limits the amount of input that you are required to provide.

Reuse the worksheets for each runtime environment that you plan to implement. For example, you might have a production environment, a test environment, and a training environment.

Use the worksheets for gathering key details about applications and components, including their base configuration settings that are defined within IBM Installation Manager. Any operational server, user application, or component configuration steps that are required outside of IBM Installation Manager are described in separate individual application or component topics.

Installation directory worksheet

Use this worksheet to record the root directory of the host on which you want to install InfoSphere MDM.

If you install more runtime environments later, they might not point to the same database as the one used for the initial environment. If you are installing multiple runtime environments, reuse the installation worksheet to define the unique directory values for each environment.

If you are installing on Microsoft Windows:

- You must be running in Administrator mode for IBM Installation Manager to write to the Windows registry. Administrator mode is not used for IBM AIX, Linux, or Solaris.
- On a Microsoft Windows 7 operating system, you must install MDM into a directory that is not virtualized.

The parameters that are listed in the following table equate to prompts or fields that you see in IBM Installation Manager.

Table 6. InfoSphere MDM installation directory worksheet

Parameter	Description	Your value
Use the existing package group	<p>Choose this option if you want the InfoSphere MDM components to be installed into an existing Eclipse shell or directory. You cannot modify the directory name if you choose this option.</p> <p>Do not choose this option if you previously installed other products by using IBM Installation Manager, such as IBM Rational Application Developer.</p> <p>InfoSphere MDM Workbench must be installed into the same package group as IBM Rational Application Developer.</p>	

Table 6. InfoSphere MDM installation directory worksheet (continued)

Parameter	Description	Your value
Create a new package group	<p>This option is the default setting. IBM Installation Manager creates a default IBM/MDM directory under the root directory that you choose. Or, you can name the directory as you want.</p> <p>For example <code>MDM_INSTALL_HOME/IBM/MDM_test</code> or <code>MDM_INSTALL_HOME/IBM/MDM_prod</code></p>	

DB2 or DB2 for z/OS data source worksheet

Use this data source worksheet to identify parameters for the IBM DB2 for Linux, UNIX, and Windows or IBM DB2 for z/OS® data source to which your MDM operational server is connecting.

For virtual MDM, all IBM AIX®, Linux, or Solaris data source information is stored in an `odbc.ini` file in the `MDM_INSTALL_HOME/conf` directory. The physical MDM does not require data source information to be stored.

When you define the names for your databases and user accounts, consider giving the associated database instance, user account, and data source configuration the same name. You might also want to include the InfoSphere MDM version in your name. Using this naming convention can help other members of your organization and IBM Software Support understand the mapping between instances, accounts, and databases.

The parameters that are listed in the following table equate to prompts or fields that you see in IBM Installation Manager.

Table 7. IBM DB2 or DB2 for z/OS data source worksheet

Parameter	Description	Your value
Database type	Both DB2 for Linux, UNIX, and Windows and DB2 for z/OS are supported for all InfoSphere MDM editions.	
Database host name	Identify the fully qualified address of the host on which the database is installed. The default is <code>localhost</code> .	
Database port	Identify the database port or use the default port number provided. The DB2 default is <code>50000</code> .	

Table 7. IBM DB2 or DB2 for z/OS data source worksheet (continued)

Parameter	Description	Your value
Database user name	<p>The database user name must have DBA privileges.</p> <p>Restrictions on length and supported characters for user names and passwords are dependent upon any restrictions that might be imposed by your operating system.</p> <p>If you install InfoSphere MDM using a stand-alone installation, the DB2 database user name and password defaults to <code>mdminst11</code> on Linux and UNIX and to <code>db2admin</code> on Microsoft Windows.</p>	
Database password	Provide a password for the database user name.	
Database name	<p>Provide a name that identifies the InfoSphere MDM database. The default is <code>MDMDB</code>.</p> <p>The name must consist of 12 or fewer alphanumeric characters. Underscore (<code>_</code>) characters can be used in the name. Other characters are not supported.</p>	

WebSphere Application Server installation worksheet

Use the IBM WebSphere Application Server configuration worksheet to identify parameters for the application server that is used to host your MDM operational server.

The parameters that are listed in the following table equate to prompts or fields that you see in IBM Installation Manager.

Table 8. IBM WebSphere Application Server installation worksheet

Parameter	Description	Your value
Deployment type	<p>Specify the deployment type and note the IBM WebSphere Application Server profile name. Your options are Network Deployment Edition or Base Edition (unmanaged).</p> <p>Network Deployment is used for server or cluster installations. A base deployment is typically used in workstation or demonstration installations.</p> <p>If you choose Base, then the operational server is deployed on <code>server1</code> of the IBM WebSphere Application Server Base. The installer runs a sequence of commands against <code>server1</code> to configure the application server and deploy applications. Make sure that <code>server1</code> is running before you proceed with the deployment. For example, use a profile name of <code>AppSrv1</code>.</p>	

Table 8. IBM WebSphere Application Server installation worksheet (continued)

Parameter	Description	Your value
IBM WebSphere Application Server home	Specify the fully qualified directory in which IBM WebSphere Application Server is installed. The default on Linux and UNIX is /opt/IBM/WebSphere/AppServer. The default on Microsoft Windows is C:\Program Files (x86)\IBM\WebSphere\AppServer.	
IBM WebSphere Application Server profile home	If you are using a base deployment, specify the fully qualified path of the application server profile home directory. The default on Linux and UNIX is /opt/IBM/WebSphere/AppServer/profiles. The default on Microsoft Windows is C:\Program Files (x86)\IBM\WebSphere\AppServer\profiles.	
Host name	Identify the fully qualified address of the host on which IBM WebSphere Application Server is installed. The default is localhost.	
SOAP port	Identify the SOAP port of the deployment manager on the remote computer, if you are using remote deployment. The default is 8879.	
User name	Identify the IBM WebSphere Application Server user name. The user must have administrative privileges.	
Password	The IBM WebSphere Application Server user password.	
Server	Specify the server where you want to deploy InfoSphere MDM. After you select the node in IBM Installation Manager, all of the servers that are available for that node show in the list. If you want to create a new server for deployment, you can specify the new name on the configuration panel and it is created in IBM WebSphere Application Server during the installation process.	

InfoSphere MDM application configuration worksheet

Use the application configuration worksheet to identify parameters for the MDM operational server.

The parameters that are listed in the following table equate to prompts or fields that you see in IBM Installation Manager on the Application Configuration panel.

Table 9. MDM application installation worksheet

Parameter	Description	Your value
MDM application name	Specify the name of the MDM operational server. This name is used in IBM WebSphere Application Server. The default is E001.	

Table 9. MDM application installation worksheet (continued)

Parameter	Description	Your value
MDM user name	Specify the user name that this instance of InfoSphere MDM will use to log into the MDM client applications and user interfaces. Note: This user is not the WebSphere Application Server admin user who administers the InfoSphere MDM instance, and does not need to match that user name.	
MDM user password	Specify the password for the MDM user.	
RMI port	Specify the port on which the Remote Method Invocation (RMI) registry service listens for connections from other services. In a clustered environment, all nodes must use the same RMI port to communicate. The default is 9999. Note: The MDM operational server uses RMI to receive and send transaction requests and responses.	
Matching style	Specify whether you want to use a probabilistic or deterministic matching style.	
Enable multiple time zone deployment	Select this option if your application is running across different time zones, or your data has time-sensitive values under different time zones.	
Default time zone	Select the client default time zone from the list. If a time zone is not specified, the application server time zone is used.	
Messaging	Specify the messaging type for your implementation. If you want to use the internal WebSphere messaging, select IBM WebSphere Default Messaging. Most virtual MDM configurations will select IBM WebSphere Default Messaging and install the Message Brokers feature.	

History installation worksheet

Use this worksheet to record parameters for your history trigger configuration.

History triggers are used by physical MDM operational servers.

There are two sets of triggers that generate data for physical MDM database history tables. The first set is for the core and domain tables. The second set is for the configuration management tables. Each set consists of history triggers and delete triggers.

The parameters that are listed in the following table equate to prompts or fields that you see in IBM Installation Manager.

Table 10. History installation worksheet

Parameter	Description	Your value
Industry	<p>Specify the industry type that is supported in this implementation. You can specify only one type.</p> <p>There are four supported industry types. Each option installs the code tables and data for that industry type.</p> <ul style="list-style-type: none"> • Insurance - Choose this option for lines of business such as Life, Health, Annuities, Pensions, Property and Casualty, and others. • Banking - Choose this option for lines of business such as Retail Banking, Commercial Banking, Credit Cards, Loans, and others. • Telecommunication - Choose this option for lines of business such as Wireless, Cable Television, Satellite Television, Internet, Telephone Services, and others. • Manufacturing - Choose this option for lines of business such as Precision Tools, Aerospace, Electrical, Heating, Mechanical, and others. 	
History triggers	<p>There are three history trigger options. You can specify only one.</p> <ul style="list-style-type: none"> • None. Choose this option if you do not want to install any triggers. Choosing this option prevents history from being stored in the database. • Simple. Choose this option to install only the update triggers. When a record is updated in the database, a copy of that record (before the update) is added to the history table. Past versions of the record are stored in the history table. • Compound. Choose this option if you want to install both insert and update triggers. When a record is added to the database, or when a record is updated in the database, a copy of the record is added to the history table. Copies of both the current and past versions of the record are stored in the history table. 	

Table 10. History installation worksheet (continued)

Parameter	Description	Your value
Case sensitive searches	<p>By default, name searches for contracts, products, and categories are not case-sensitive. Check the Enable case-sensitive searches check box only if you want to place case-sensitive restrictions on your searches.</p> <p>Once this feature is activated, database objects are created and you cannot deactivate the option.</p>	
Code table languages	<p>Translated code table values used for predefined lists and error messages are included with the physical MDM operational server.</p> <p>English is the default language.</p>	
Application resource language	Specify the corresponding language translations for the user interface to install.	

Notices and trademarks

This information was developed for products and services offered in the U.S.A.

Notices

This information was developed for products and services offered in the U.S.A. This material may be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
J46A/G4
555 Bailey Avenue
San Jose, CA 95141-1003 U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. _enter the year or years_. All rights reserved.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Privacy Policy Considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

Depending upon the configurations deployed, this Software Offering may use session and persistent cookies that collect each user's name, user name, password, profile name, or other personally identifiable information for purposes of session management, authentication, enhanced user usability, single sign-on configuration, or web page identification that the user tried to load prior to login. These cookies can be disabled, but disabling them will also likely eliminate the functionality they enable.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at www.ibm.com/privacy and IBM's Online Privacy Statement at www.ibm.com/privacy/details the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at www.ibm.com/software/info/product-privacy.

General statement regarding product security

IBM systems and products are designed to be implemented as part of a comprehensive security approach that might require the use of other systems, products, or services to be most effective. A comprehensive security approach must be reviewed whenever systems and products are added to your environment.

No IT system or product can be made completely secure, and no single product or security measure can be completely effective in preventing improper access.

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information that is altered, destroyed, or misappropriated, or can result in misuse of your systems to attack others.

IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

IBM does not believe that any single process can be completely effective in helping identify and address security vulnerabilities. IBM has a multilayered approach:

- An ongoing, internal initiative promotes consistent adoption of security practices in development of products and services, with the goal of continually improving the quality and security characteristics of all IBM products and services. This initiative is described in the IBM Redguide *Security in Development: The IBM Secure Engineering Framework*, which contains public information about software development practices from IBM.
- Tests and scans of IBM products use various IBM technologies to proactively identify and remediate defects and vulnerabilities, including high or greater criticality vulnerabilities. Remediation takes place within IBM-defined response target timeframes for analysis, impact assessment, and fix delivery.

- The IBM Product Security Incident Response Team (PSIRT) manages the receipt, investigation, and internal coordination of security vulnerability information that is related to IBM offerings. The IBM PSIRT team acts as a focal point that security researchers, industry groups, government organizations, vendors, and customers can contact through the IBM PSIRT portal to report potential IBM product security vulnerabilities. This team coordinates with IBM product and solutions teams to investigate and identify the appropriate response plan.
- A global supply-chain integrity program and framework provide buyers of IT products with a choice of accredited technology partners and vendors in the Open Group Trusted Technology Forum (OTTF).

Because security of computer systems and computer software is a very complex issue, IBM does not provide information about development practices for individual products other than what is found in standard product documentation or as published through IBM's public activities.

Public information about software development practices recommended by IBM is documented in the IBM Secure Engineering Framework. This information is a compilation of practices from across IBM business units and development teams.

In most cases, published vulnerabilities are documented at timely intervals through IBM Security Bulletins that include the associated Common Vulnerability Scoring System (CVSS) base score. In some cases, IBM might contact customers directly and discreetly regarding specific vulnerabilities.

Customers who want to further validate the vulnerability of IBM Software beyond the assessments that are performed internally by IBM are welcome to conduct their own scans against licensed software. They may use the tool of their choice within the existing software licensing terms. For example, scanning is acceptable, but reverse compiling or reverse engineering IBM Software is not authorized except as expressly permitted by law without the possibility of contractual waiver.

Trademarks

IBM, the IBM logo, and ibm.com[®] are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

The following terms are trademarks or registered trademarks of other companies:

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Linear Tape-Open, LTO, the LTO Logo, Ultrium, and the Ultrium logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

ITIL is a registered trademark, and a registered community trademark of The Minister for the Cabinet Office, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Index

A

- application name 20
- application resource language 21

C

- case sensitive searches 21
- cell
 - WebSphere Application Server 19
- checklist 17
- checklists 17, 18, 19, 20, 21
- cluster 19, 20
- code table language 21
- configuration
 - worksheets 17
 - DB2 data source 18
 - history triggers 21
 - installation directory 17
 - MDM application 20
 - WebSphere Application Server 19
- customer support
 - contacting 33

D

- database
 - home 18
 - host name 18
 - manual install 18
 - port 18
 - schema 18
 - type 18
 - user name and password 18
- deployment
 - multiple time zone 20
- deployment type
 - stand-alone 1
 - WebSphere Application Server 19

H

- host name 19

I

- industry 21
- installation
 - viewing logs 16
 - Installation Manager 15
 - worksheets 17
- installation requirements
 - testing 10
 - verifying 10
- installing
 - stand-alone deployment type 1
 - stand-alone workstation 4
 - verifying 13, 14

L

- language
 - application resource 21
 - code table 21
- legal notices 25
- logs
 - viewing 16
 - Installation Manager 15

M

- matching style 20
- messaging
 - Message Brokers 20
 - WebSphere Default Messaging 20
- multiple time zone deployment 20

N

- node
 - WebSphere Application Server 19

P

- package group
 - existing 17
 - new 17
- password 19, 20
- preparing to install
 - setting up installation media 3
 - stand-alone installation with DB2 3
- prerequisite check 10

R

- RMI port 20

S

- server
 - WebSphere Application Server 19
- SOAP port 19
- software services
 - contacting 33
- stand-alone
 - installation 4
- stand-alone installation
 - deployment type
 - for workstation 1
- support
 - customer 33

T

- trademarks
 - list of 25

U

- user name 19

V

- verification test 10
- verifying installation requirements 10
- verifying the installation 13, 14

W

- WebSphere Application Server
 - cell 19
 - deployment type 19
 - home 19
 - node 19
 - profile 19
 - server 19
 - WebSphere default
 - messaging 20
 - worksheets 17
 - DB2 or DB2 for z/OS data source 18
 - history triggers 21
 - installation directory 17
 - MDM application 20
 - WebSphere Application Server 19

Contacting IBM

You can contact IBM for customer support, software services, product information, and general information. You also can provide feedback to IBM about products and documentation.

The following table lists resources for customer support, software services, training, and product and solutions information.

Table 11. IBM resources

Resource	Description and location
Product documentation for InfoSphere MDM	You can search and browse across all the InfoSphere MDM documents at http://www.ibm.com/support/knowledgecenter/SSWSR9_11.3.0 .
Product documentation for InfoSphere MDM Custom Domain Hub, including InfoSphere MDM Reference Data Management	You can search and browse across all the InfoSphere MDM Custom Domain Hub documents at http://www.ibm.com/support/knowledgecenter/SSLSQH_11.3.0 .
IBM Support Portal	You can customize support information by choosing the products and the topics that interest you at www.ibm.com/support/ .
Software services	You can find information about software, IT, and business consulting services, on the solutions site at www.ibm.com/businesssolutions/ .
My IBM	You can manage links to IBM web sites and information that meet your specific technical support needs by creating an account on the My IBM site at www.ibm.com/account/ .
Training and certification	You can learn about technical training and education services designed for individuals, companies, and public organizations to acquire, maintain, and optimize their IT skills at www.ibm.com/software/sw-training/ .
IBM representatives	You can contact an IBM representative to learn about solutions at www.ibm.com/connect/ibm/us/en/ .

Providing feedback

The following table describes how to provide feedback to IBM about products and product documentation.

Table 12. Providing feedback to IBM

Type of feedback	Action
Product feedback	You can provide general product feedback through the Consumability Survey at https://www.ibm.com/survey/oid/wsb.dll/studies/consumabilitywebform.htm .
Documentation feedback	To comment on the product documentation: <ul style="list-style-type: none">• Click the Feedback link on the bottom of any topic in IBM Knowledge Center• Online reader comment form: www.ibm.com/software/data/rcf/• E-mail: comments@us.ibm.com



Printed in USA

GI13-2678-00

