

CA ERwin Mart Server

Release Notes

Version 9.0.0



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Chapter 1: Welcome

Welcome to the CA ERwin Mart Server (Mart Server) Release Notes. Mart Server is an essential component in CA ERwin DM Version 9 Mart. Mart Server is deployed on a web server and includes the software to communicate with the Mart Database and CA ERwin DM.

This section contains the following topics:

[Mart Architecture](#) (see page 7)

[Checklist](#) (see page 9)

[Installing and Configuring Mart](#) (see page 10)

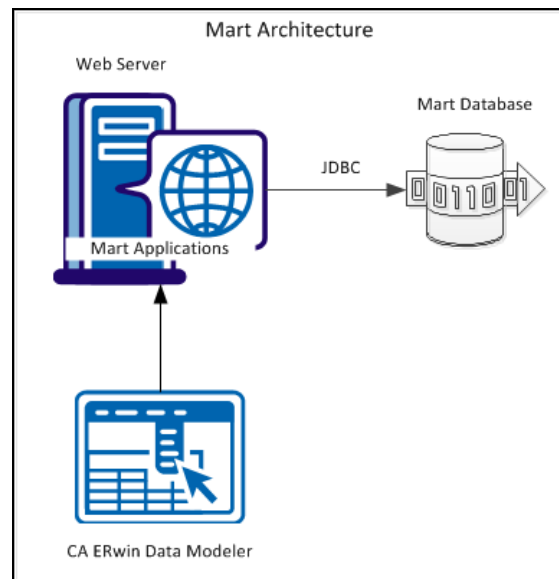
[Troubleshooting](#) (see page 33)

[Sample Files](#) (see page 41)

[Documentation Formats and Deliverables](#) (see page 45)

Mart Architecture

In the previous versions, CA ERwin Data Modeler connected to the Mart server directly. Now, CA ERwin Data Modeler connects to the Mart server through a web server. The following diagram shows the new architecture:



The new architecture has the following benefits:

- **Separate logical and physical users:** In the previous versions, Mart (or Model Manager) users required database level privileges to access Mart functionality. The Mart database administrators added or deleted users in the Mart database. This approach is changed now. The logical users are separated from physical users, so Mart Administrators can create Mart users without creating the corresponding database users.
- **Authentication through Active Directory services:** Earlier, if you wanted to provide access to a user group, you added each user individually. Now, because of the new architecture, you can use the Active Directory services and can provide access to the group. Anyone who is part of the group gets access.
- **Mart administration outside CA ERwin Data Modeler:** In the previous versions, Mart Administrators used CA ERwin Data Modeler for administrative activities such as permissions management. This required non-modelers to know how to use CA ERwin Data Modeler. In the new architecture, the administration component (CA ERwin Web Admin) is built on a separate layer on top of CA ERwin Data Modeler and is hosted on a Web server. Mart Administrators can access CA ERwin Web Admin from any computer and can perform administrative activities through a web console.

Checklist

To use Oracle as the Mart database:

- You know the user name and password to connect to the database.
- You know the port number where Oracle is running.
- You know the name of the database.
- You know the IP address or the name of the computer where the database is running.
- You have created a data tablespace of at least 32 MB.
- You have created an index of at least 32 MB.
- You have created a temporary tablespace.
- You have assigned data tablespace as default tablespace to this user.
- You have assigned the temporary tablespace that you have created to this user.
- You have created the CA ERwin Data Modeler Workgroup Edition Installer role.
- You have granted Oracle privileges to the Installer role.

To use SQL Server as the Mart database:

- You know the user name and password to connect to the database.
- You have verified that SQL Server is running.
- You have verified that TCP/IP is enabled.
- You know the port number where SQL Server is running, if you are not using the default port.
- You know the IP address or the name of the computer where the database is running.
- You know the name of the database.
- The minimum size of the database is 60 MB.
- The minimum file size of the transaction log is 50 MB.
- The size of tempdb is at least 16 MB.

To use Sybase as the Mart database:

- You know the user name and password to connect to the database.
- If you are not using the default port, you know the port number where Sybase is running.
- You know the IP address or the name of the computer where the database is running.
- You know the name of the database.

- The minimum size of the database is 32 MB.
- You have located the data device on a different disk than the transaction log.
- The size of the Stored Procedure Cache is at least 20MB.
- The size of tempdb is at least 16MB.
- You have allocated at least 64MB RAM to the database server.

To use IIS to connect to Mart:

- You know the server name where you have installed Tomcat.
- You know the server name where you have installed IIS.
- You have created the Worker.properties, isapi_redirect.reg, isapi_redirect.properties, uriworkermap.properties, and uniworker.properties files.

To install Mart Server:

- You know the server name where you have installed the web server. For example, you know the computer name where Tomcat is installed.
- If you have changed the default port number, you know the port number on which the web server is running.
- You know the computer name where you have created the Mart database.
- You know the port number where the database is running.
- You know the database instance name if you are using SQL Server.
- You know the user name and password to connect to the database.

Installing and Configuring Mart

Mart comprises the following components:

- Database
- Applications
- Web server

The Mart application includes a web-based component named CA ERwin Mart Administrator. CA ERwin Mart Administrator helps you manage Mart through a web console.

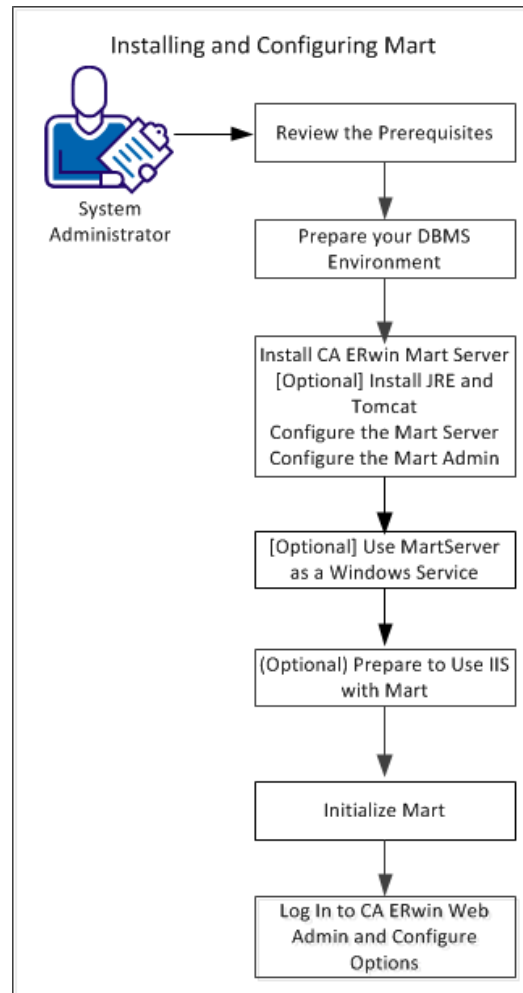
The Web server hosts CA ERwin Mart Administrator and you can use a Web server of your choice. If you have not installed a Web server, use the ERwin Mart Server option and install Tomcat.

Install one of the following databases for the Mart database:

- SQL Server 2000, 2005, 2008, or 2012
- Oracle 10g or 11g
- Sybase 15.x

After installing Web server and the Mart server, provide the details of their properties.

The following diagram illustrates how to install and configure Mart:



Complete the following steps to install and configure Mart:

1. [Review the prerequisites](#) (see page 12).
2. [Prepare Your DBMS Environment](#). (see page 15)
3. [Install CA ERwin Mart Server](#). (see page 24)
4. [\(Optional\) Use MartServer as a Windows Service](#). (see page 27)
5. [\(Optional\) Prepare to Use IIS with Mart](#). (see page 27)
6. [Initialize Mart](#) (see page 29).
7. [Log in to CA ERwin Mart Administrator and configure options](#) (see page 32).

Review the Prerequisites

Before you install Mart components, help ensure that the minimum system requirements that are outlined in this topic are met.

System requirements for Mart server

Hardware requirements (based on physical hardware performance, not a virtual environment):

- 2 GHZ or higher dual core processor
- 4 GB RAM (8 GB or more for large marts)
- 4 GB of disk space or more as required to support your specific mart

Operating system:

- Microsoft Windows Vista
- Microsoft Windows 2008 Server SP2
- Microsoft Windows 2003 Server SP2
- Microsoft Windows XP SP3
- Microsoft Windows 7

Notes:

- CA ERwin Data Modeler has only been certified on the 32-bit versions of the Windows operating systems described in the preceding list. CA ERwin Data Modeler is a 32-bit application. You may experience problems running CA ERwin Data Modeler on a 64-bit operating system.
- CA ERwin Data Modeler is compatible with Microsoft Windows 8 Release Preview. You may experience problems with shortcuts and CA ERwin DM third-party components.
- Microsoft .NET Framework 3.5 or higher
- All current Microsoft Windows critical updates are applied

Database:

The Mart Server can use a “standalone” or share an existing database server:

- Microsoft SQL Server 2000, 2005, 2008, or 2012
- Oracle 10g or 11g
- Sybase 15.x

CA ERwin Mart Administrator web client:

- Supported browsers:
 - Microsoft Internet Explorer 8[®] or newer
 - Mozilla Firefox[®] v.9.0 or newer
 - Google Chrome 14 or newer
 - Apple Safari 5 or newer
- Adobe Flash plug-in version 8 or newer for the respective browser

Other requirements

Help ensure that the following additional requirements are met:

- If you want to use Microsoft IIS as the web server, you have configured it.
- The DBMS is installed and prepared for creating the Mart Database.
- The Mart database is created. At least one user with administrator privileges is present. If you are using Oracle, you have run the initial queries. For more information about the initial queries, see the Implementation Guide.

Note: For Microsoft SQL Server 2005, 2008, and 2012 select Mixed Mode Authentication during installation. For Oracle Version 10g and 11g, modify the following parameters in the initialization file (InitSID.ora):

```
Remote_OS_Authent=""
```

```
OS_Authent_Prefix=TRUE
```

- If you want to add Windows Group users, you have the Active Directory Server details.

Important disclaimer notice on all requirements

1. The requirements mentioned previously define the minimum requirements which permit CA ERwin Data Modeler r9 to run with reasonable performance based on a small business use case scenario. The actual requirements for an enterprise wide use case based on larger models and configurations require significantly greater resources to obtain acceptable performance.
2. These requirements are based on actual physical hardware (no virtual environment) and the following assumptions:
 - Minimal to no network overhead (both the database and application servers are locally installed)
 - Vendor's default install of the current version of their software (with all current service or fix packs)
 - No other applications sharing the defined hardware configuration (e.g., a "clean" machine)

Any other hardware/software configurations are acceptable as long as they provide the same (or better) performance characteristics identified.

Prepare Your DBMS Environment

Perform the following setup tasks in your DBMS environment before you can install and use the software:

1. Install the DBMS on the server where you plan to store the mart.

For more information about memory and disk space requirements, see the system requirements for each DBMS (Microsoft SQL Server, Sybase, and Oracle).

2. Create the mart.

Use the DBMS features to create or identify the required storage objects and the mart. The specific requirements vary depending on your DBMS type.

Note: To create, update, or delete a mart in CA ERwin Data Modeler Workgroup Edition, you must have the following database rights:

- For Microsoft SQL Server 2000, 2005, 2008, and 2012 you must be the database owner (dbo).

Notes:

- The dbo is no longer required to have the sysadmin role.
- The SQL Server 2005, 2008, and 2012 TRUSTWORTHY database property is no longer required for the mart. After you install this product, you can optionally reset this property to OFF.
- For Oracle, you must be the database schema owner and have the DBA role.

Tasks to Create a Microsoft SQL Server DBMS

The following tasks must be performed by the DBA and system administrator responsible for installing CA ERwin Data Modeler Workgroup Edition on a Microsoft SQL Server DBMS:

1. Use a graphical user interface (GUI) tool, ISQL (all versions), SQL Administrator, or Enterprise Manager to create the CA ERwin Data Modeler Workgroup Edition database. If a GUI tool is not available, you can use ISQL to type in the appropriate commands manually.

Your database should meet the following criteria:

- The initial size of the database file should be set to 60 MB.
- The initial size of the transaction log file should be set to 50 MB.
- Set the maximum file size to unrestricted file growth for both files (recommended, but not required).
- Increase the Set Auto grow file by 10 percent (recommended, but not required).

The new database is *owned* by the user who created it.

Set the Truncate Log on Checkpoint option and have the server generate checkpoints frequently. By selecting this option, the log is emptied periodically and should not fill up and cause rollbacks.

Note: For best performance ensure that separate devices are used to store the data and the transaction log.

2. Verify tempdb size.

Significant temporary space is required for installation and use. The temporary segments need at least 16 MB of available space. You should also increase available space as the number of concurrent users increase.

Microsoft SQL Server 2005 Permissions

For SQL Server 2000, you only need the public permission assigned to save to Mart. However, when the repository is on a SQL Server 2005 instance, you must have the *bulkadmin* permission designated too. The ability to do bulk inserts (which the public permission permitted previously) is no longer part of the public permission. As the administrator, you explicitly define this permission. Assign the bulkadmin permission to the physical user that connects to the database. If you do not define the permission, when you create a mart using a SQL Server 2005 database, and save it, an error appears.

Specify Use of Foreign Characters With Microsoft SQL Server 2000

For Microsoft SQL Server 2000, select specific settings in the Client Network Utility to have certain foreign language characters in your models recognized.

Follow these steps:

1. Click Programs, Microsoft SQL Server, Client Network Utility on the Start menu.

The SQL Server Client Network Utility dialog opens.

2. Select the following check boxes on the DB-Library Options tab:

- Automatic ANSI to OEM conversion
- Use international settings

3. Click OK.

Your configuration is set to recognize foreign language characters in your models.

Specify Use of Foreign Characters With Microsoft SQL Server 2005

For Microsoft SQL Server 2005, 2008, and 2012 modify your registry settings to have certain foreign language characters in your models recognized.

Follow these steps:

1. Click Run on the Start menu.

2. Enter *regedit*.

The Registry Editor opens.

3. Verify or add the following registry entry:

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSSQLServer\Client\DB-Lib]

"AutoAnsiToOem"="ON"

"UseIntlSettings"="ON"

4. Click File, Exit.

Your configuration is set to recognize foreign language characters in your models.

Tasks to Create a Sybase DBMS

The DBA and the system administrator responsible for installing the software on a Sybase database management system perform the following tasks:

1. Use a graphical user interface (GUI) tool, ISQL (all versions), SQL Administrator, Sybase Central Java, or Enterprise Manager to create the mart database. If a GUI tool is not available, use ISQL to type the appropriate commands manually.

Your database must meet the following criteria:

- The size of the data device you create determines the size of the database. The minimum database size is 32 MB so there has to be at least one device that is 32 MB. Create the data device on a different disk (and disk controller) than the transaction log.
- For optimum performance, verify that separate devices are used to store the data and the transaction log. For example, you can increase performance by creating a 50-MB data device and a 25-MB log device. A minimum of 40 MB of disk space (data and log) is required.

2. Verify the Stored Procedure Cache.

Set the Stored Procedure Cache size to at least 8 MB. Setting it higher improves performance, especially when many users are accessing the server concurrently. Setting it lower results in fatal errors and rollbacks when the Stored Procedure Cache size is exceeded.

Note: The installation creates more than 100 stored procedures. The client invokes these stored procedures to control changes to the data in the database.

3. Verify tempdb size.

Significant temporary space is required for installation and use. The temporary segments need at least 16 MB of available space. Increase the available space as the number of concurrent users increase.

4. Verify the memory allocated to the database server.

Allocate at least 32 MB of RAM to the database server. The amount of RAM allocated is ideally half of the available RAM on the server.

Transact-SQL Commands

If a graphical DBMS access tool is not available, you can use Transact-SQL commands through ISQL.

Example: Create a device using the Transact-SQL DISK INIT command through ISQL

```
DISK INIT NAME = 'mmdata',      /* The logical name. */
PHYSNAME = 'C:\SQL\DATA\mmdata.dat', /* The physical name. */
VDEVNO = 1<= virtual_device_number => 255
/* System dependent. */
SIZE = number_of_2K_blocks      /* 1024 here is 2MB!!! */
[, VSTART = virtual_address,    /* Optional */
CNTRLTYPE = controller_number] /* Optional */
```

Example: Create a database using the Transact-SQL CREATE DATABASE command through ISQL

```
CREATE DATABASE mmmaster
[ON {DEFAULT | database_device} [= size_in_megabytes] /* The device created in #1.
*/
[, database_device [= size_in_megabytes]]...] /* A database can span devices. */
[LOG ON database device [= size_in_megabytes>] /* Separate log device. */
[, database device [= size_in_megabytes]]...] /* A transaction log can span devices.
*/
```

Example: Add logins to the database with the *sp_addlogin* and *sp_adduser* commands using Transact-SQL through ISQL

```
sp_addlogin login_id [, passwd [, defdb [, deflanguage]]]
sp_adduser login_id [, username [, grpname]]
```

After you execute these commands, the DBA can alias an existing login as the Database Owner (dbo) or change the dbo to an existing login using *sp_changedbowner*. Use ISQL to execute the following:

```
sp_changedbowner login_id [,true]
```

Tasks to Create an Oracle DBMS

The DBA and the system administrator responsible for installing the software on an Oracle database management system performs these tasks.

Use graphical tools or SQL *Plus (all versions), SQL*DBA, or the Oracle Enterprise Management Console to perform these tasks. Examples of SQL commands are included where appropriate. Data file paths, data file sizes, role names, and user names are included for example only.

1. Check SYSTEM tablespace.

The installation creates several stored procedures. All triggers, stored procedures, and packages are kept in the Oracle SYSTEM tablespace. The standard size of the SYSTEM tablespace assumes that you are not using procedural options, so the SYSTEM tablespace often needs to be expanded. If other Oracle applications are not using procedural code, then the SYSTEM tablespace should be expanded to 32 MB. If other Oracle applications also use procedural code, expand the SYSTEM tablespace to at least 32 MB.

2. Check Rollback Segment tablespace.

If your instance uses UNDO tablespace, do not create rollback segments.

Significant rollback space is required for installation and use. The rollback segments should be in their own separate tablespace and each have at least 16 MB of available space. There should be one rollback segment for every four concurrent users, with a maximum of 50 rollback segments. The available space should scale upward with increasing numbers of rollback segments. Finally, the rollback segment optimal parameter should be set to control rollback segment growth and space consumption.

Note: For Steps 3, 4, and 5, use Dictionary-managed tablespaces.

3. Create a data tablespace of at least 32 MB.

For example:

```
CREATE TABLESPACE MyMart
DATAFILE '/db01/oracle/rdbms9i/data/mymart.ora' SIZE 100M;
```

Or For Locally Managed extents:

```
CREATE TABLESPACE Mymart
DATAFILE '/db01/oracle/rdbms9i/data/mymart.ora' SIZE 100M
EXTENT MANAGEMENT LOCAL SEGMENT SPACE MANAGEMENT AUTO;
```

4. Create a index tablespace of at least 32 MB.

For example:

```
CREATE TABLESPACE MMARTINDEX  
DATAFILE '/db02/oracle/rdbms9i/data/mmartindex.ora' SIZE 75M;
```

Or For Locally Managed extents:

```
CREATE TABLESPACE MMARTINDEX  
DATAFILE '/db02/oracle/rdbms9i/data/mmartindex.ora' SIZE 75M  
EXTENT MANAGEMENT LOCAL SEGMENT SPACE MANAGEMENT AUTO;
```

5. Create a temporary tablespace.

For example:

```
CREATE TEMPORARY TABLESPACE MMTEMP TEMPFILE  
'/db03/oracle/rdbms9i/data/mmarttemp.ora' SIZE 50M;
```

Or For Locally Managed extents:

```
CREATE TEMPORARY TABLESPACE MMTEMP TEMPFILE  
'/db03/oracle/rdbms9i/data/mmarttemp.ora' SIZE 50M  
EXTENT MANAGEMENT LOCAL UNIFORM SIZE 1M;
```

Note: For more details about syntax and options regarding tablespace creation, see the appropriate Oracle documentation.

6. Create an Oracle user with DBA privileges to be used by the CA ERwin Data Modeler Workgroup Edition Installer or designated schema owner.

Assign the data tablespace as this user's default tablespace, and the temporary tablespace as this user's temporary tablespace.

For example:

```
CREATE USER STEVE IDENTIFIED BY STEVE  
DEFAULT TABLESPACE MyMart  
TEMPORARY TABLESPACE MMTEMP  
QUOTA UNLIMITED ON MyMart  
QUOTA UNLIMITED ON MMARTINDEX;
```

7. Create the CA ERwin Data Modeler Workgroup Edition Installer role.

The following example is the role required by the Oracle user installing CA ERwin Data Modeler Workgroup Edition.

```
CREATE ROLE MMINSTALL;
```

8. Grant Oracle privileges to the Installer role.

The following example shows the Oracle privileges that the CA ERwin Data Modeler Workgroup Edition Installer needs to install on Oracle. For the last command, you must log in as sys with the sysdba role in the user-name or the command will fail.

```
grant create sequence to MMINSTALL;  
grant create table to MMINSTALL;  
grant create view to MMINSTALL;  
grant drop public synonym to MMINSTALL;  
grant create public synonym to MMINSTALL;  
grant create procedure to MMINSTALL;  
grant select on dba_data_files to MMINSTALL;
```

9. Create the CA ERwin Data Modeler Workgroup Edition User role.

For example:

```
CREATE ROLE MMUSER;
```

When you select this role as the CA ERwin Data Modeler Workgroup Edition User role during Step 4 of the installation procedure, the Setup program generates grant statements that grant object level privileges to this role.

10. Grant the create session Oracle privilege to the User role.

For example:

```
grant create session to MMUSER;
```

Note: The create session privilege is the only privilege that an Oracle user needs to use the database.

11. Grant the CA ERwin Data Modeler Workgroup Edition User role to the Installer role.

For example:

```
grant MMUSER to MMINSTALL;
```

12. Select the CA ERwin Data Modeler Workgroup Edition tablespaces and User role.

When prompted for tablespace and role information, select the CA ERwin Data Modeler Workgroup Edition data tablespace, the CA ERwin Data Modeler Workgroup Edition index tablespace, and the CA ERwin Data Modeler Workgroup Edition User role (the role created in Step 9).

Database Objects Installation

Install the software on an Oracle DBMS to create the following database objects:

- Tables
- Indexes
- Stored procedures
- Public synonyms

Oracle SQL Commands

If a graphical DBMS access tool is not available, you can use Oracle SQL commands through SQL*DBA or SQL*Plus.

Example: Create a tablespace using the CREATE TABLESPACE command

```
CREATE TABLESPACE mm_data      /* The tablespace name. */
DATAFILE 'C:\ORANT\DATABASE\mmdata.dat' /* The data file name. */
SIZE integer_value K or M or G /* The data file size */
DEFAULT STORAGE (              /* The default storage parameters */
  INITIAL integer_value K or M or G /* The initial extent size */
  NEXT integer_value K or M or G    /* The next extent size */
  PCTINCREASE integer_value /* The percent to grow extents */
  MINEXTENTS integer_value /* The minimum number of extents */
  MAXEXTENTS integer_value /* The maximum number of extents */
);
```

Example: Create an Oracle user using the CREATE USER command

```
CREATE USER mm_user_1 /* The user id name */
IDENTIFIED BY password /* The user password */
DEAFULT TABLESPACE tablespace_name /* The user's default tablespace */
TEMPORARY TABLESPACE tablespace_name /* The user's temporary tablespace */
QUOTA unlimited_or_integer_K_M_G ON tablespace_name /* The user's quota on a
tablespace */
;
```

Example: Grant user privileges using the GRANT command

```
GRANT role_or_privilege_name
TO user_or_role
;
```

Mart Creation Requirements

To create the mart, you must meet one of the following requirements:

- You must be the database owner (dbo) in the target database on the Microsoft SQL Server 2005, 2008, 2012 or Sybase server

Note: The database owner (dbo) is necessary only during the software installation or upgrade. It is not necessary after you create the mart.

- You must be the database schema owner user and have the DBA role in the target database on the Oracle server.

Install CA ERwin Mart Server

The Mart Server and Mart Admin war files are deployed on a Web server. You can either use an existing web server, or install the web server through the CA ERwin MartServer Installation Wizard. You must install CA ERwin Mart Server and configure it regardless of whether you use Mart Server as a Windows service.

Follow these steps:

1. Do one of the following tasks:
 - Insert the installation DVD and select Mart Server Installation.
 - Download the Mart Server.exe file from the online CA Technologies product page and run it.

The CA ERwin MartServer Installation Wizard appears.

2. Go through the wizard steps to install CA ERwin Mart Server.

Depending on the options you select, CA ERwin Mart Server and/or Java Runtime Environment (JRE) and Tomcat are installed.

Note: If Java (any version) is already available in the computer and the environment variable JRE_HOME is set, the installer overwrites JRE_HOME with the new Java path. The JRE version that is shipped with the installer is 1.6.0_31. If a Tomcat web server is already installed in the computer and the environment variable CATALINA_HOME is set, the installer replaces CATALINA_HOME with the new path.

3. After you close the wizard, from the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, Configure MartServer.

The CA ERwin Mart Configuration dialog appears.

Configure the CA ERwin Mart Server

1. Complete the following fields in the Mart Server tab:

Database Type

Specifies database server type.

Port No.

Specifies the port number of the database server.

Server Name

Specifies the name of the database server where you have installed the Mart database. For example, suppose that you are using SQL Server 2008 as the Mart database. Enter the name of the computer where SQL Server 2008 is installed.

Instance Name

Specifies the name of the database instance.

Database Name

Specifies the name of the Mart database.

Note: Use a new database. Do not specify the name of an existing database that you have used for an older version of Mart.

User Name

Specifies the user name to connect to the Mart database.

Password

Specifies the password to connect to the Mart database.

Note: The following fields--Domain Controller Name, Domain/User Name, and Password are required only if you are using Active Directory authentication.

Domain Controller Name

Specifies the fully qualified name of the Active Directory Server (Domain Controller).

Domain/User Name

Specifies the domain name and user name in the <domain name>/<user name> format.

Password

Specifies the password of the domain user.

Configure CA ERwin Mart Administrator

1. Enter the following information in the Mart Administrator tab:

Server Name

Specifies the name of the computer where the Web Server is present. For example, if you are using Tomcat, enter the name of the computer where Tomcat is installed.

Default: localhost

Port Number

Specifies the port number on which the Web Server is running.

Default: 18170

Use IIS

Specifies that you want to use the IIS web server to connect to Mart. This check box is available only if you have configured IIS.

Application Name

Specifies the application name with which the Web Server is identified.

Default: MartServer

2. Click Configure.

The CA ERwin Mart Administrator and the Mart Server are configured.

More information:

[Configure IIS Web Server](#) (see page 28)

Use Mart Server as a Windows Service

CA ERwin DM Version 9.0 Mart provides two ways to start the web server that hosts Mart Server:

- Start the web server manually.
- Use a Windows service to start the web server.

For example, if you have used Tomcat as the web server to host Mart Server, you can start Tomcat in two ways:

- Start Tomcat through the startup.bat file or through a shortcut to this file.
- Use a Windows service to start Tomcat.

The benefits of using a Windows service to start a web server are as follows:

- Any user with administrative privileges on a computer can start the Windows service, whereas, only designated users can start a web server manually.
- A Windows service runs regardless of whether a user has logged in. A manually-started web server shuts down when the user who started it logs out.

Follow these steps:

1. From the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, Create MartServer Service to create the MartServer Windows service.

Creating the service is a one-time task. After the service is created, you only have to start and stop the service.

2. From the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, Start MartServer Service to start the web server.

Prepare to Use IIS with Mart

If you want to use Microsoft Internet Information Services (IIS) as the web server, configure it before deploying Mart Server.

Configure IIS Web Server

The Mart Server is built using Java technology. Therefore, if you want to connect to Mart through IIS, configure IIS to use the JK ISAPI redirector plugin. Using this plugin, IIS sends servlet and JSP requests to Tomcat.

Follow these steps:

1. Help ensure that Tomcat is working properly. Open a browser and type the following in the Address bar:

`http://<servername>:18170/web-console`

The default Tomcat home page appears. <servername> is the name of the computer where you have installed Tomcat. 18170 is the default port number where Tomcat is running. If you are using a different port number, use that port number here. In addition, help ensure that the port number you are using is included in the server.xml file. Typically, the server.xml file is available in the <Tomcat_Home>/conf folder.
2. Install IIS.
3. Create a folder on the computer where you have installed IIS. Download the isapi_redirect.dll file for Windows from the Apache Tomcat website and copy to the new folder.
4. Create the workers.properties file in the folder that you created in the previous step.
5. Create the uniworkers.properties file in the folder that you created in Step 5.
6. Follow these steps and create an IIS filter for the DLL placed in Step 5:
 - a. From the Windows Start menu, click Run, and then type inetmgr.
The Internet Information Services (IIS) Manager window opens.
 - b. Click the computer name, Sites.
 - c. Click Default WebSite, right-click and select Add Virtual Directory.
The Add Virtual Directory dialog appears.
 - d. Enter the path for the isapi_redirect.dll file in the Physical Path field and click OK.
 - e. Click the newly added virtual directory.
The Default Web Site Home window opens.
 - f. Double-click ISAPI filters and click Add in the top right corner.
 - g. Enter the filter name. Enter the path for the isapi_redirect.dll file in the Executables field.
 - h. Click OK.
7. Create the isapi_redirect.reg file to indicate the location of workers.properties files are created previously. Double-click this file and update the registry.

8. Restart the IIS web server.
9. Stop the MartServer service and start it again.

Note: See the Appendix for sample workers.properties, uniworkers.properties, isapi_redirect.reg, isapi_redirect.properties, and uriworkermap.properties files.

Initialize Mart

When you access the Mart database through CA ERwin Mart Administrator for the first time, you must initialize the database.

Note: Before you proceed, verify that you have installed a DBMS and created the Mart database. If you are using Oracle, verify that you have run the initial queries. If the Mart is already initialized, the Login page appears.

When you open CA ERwin Mart Administrator for the first time, the Initialize Mart web page that is relevant to your Mart database appears.

Note: Initializing a Sybase Mart is same as initializing a SQL Server Mart.

More information:

[Prepare Your DBMS Environment](#) (see page 15)

Initialize SQL Server Mart

Initialize a SQL Server Mart

Follow these steps:

1. If you are using MartServer as a Windows service, help ensure that the service is started. If not, from the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, Start Mart Server to start the Mart Server.

A Windows command prompt window appears and indicates when the server starts.

2. From the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, CA ERwin Mart Administrator.

CA ERwin Mart Administrator opens in your default browser.

3. Complete the following fields:

Username

Defines the user name with which you want to access the Mart.

Password

Defines the password for the user name.

Confirm Password

Confirms the password that you entered in the previous field.

Email Address

Defines the email address for the user account that you are creating.

4. Click Initialize.

The user name is added as an administrator of Mart, Mart is initialized, and the Login web page appears. Initializing is a one-time task. After Mart is initialized, the user who initialized must log in first. Later, any other user who wants to use CA ERwin Mart Administrator can log in.

Note: The user name that is entered here is an application level user and not a database user. Remember the password that you have entered here, because without the password you cannot log in to CA ERwin Mart Administrator for the first time.

Initialize an Oracle Mart

Initialize an Oracle Mart

Follow these steps:

1. If you are using MartServer as a Windows service, help ensure that the service is started. If not, from the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, Start Mart Server to start the Mart Server.

A Windows command prompt window appears and indicates when the server starts.

2. From the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, CA ERwin Mart Administrator.

CA ERwin Mart Administrator open in your default browser.

3. Complete the following fields:

Username

Defines the user name with which you want to access the Mart.

Password

Defines the password for the user name.

Confirm Password

Confirms the password that you entered in the previous field.

Email Address

Defines the email address for the user account that you are creating.

Mart Role

Defines the role of the user for the Mart.

Table Tablespace

Defines the table tablespace in which the Mart tables are created.

Index Tablespace

Defines the index tablespace in which the Mart indexes are created.

4. Click Initialize.

The user name is added as an administrator of Mart, Mart is initialized, and the Login web page appears. Initializing is a one-time task. After Mart is initialized, the user who initialized must log in first. Later, any other user who wants to use CA ERwin Mart Administrator can log in.

Note: The user name that is entered here is an application level user and not a database user. Remember the password that you have entered here, because without the password you cannot log in to CA ERwin Mart Administrator for the first time.

Log In to CA ERwin Mart Administrator and Configure Settings

After Mart is initialized, the user who initialized must log in first. When you log in to Mart for the first time, configure it per the requirements of your organization. You can configure the following settings:

- Default profile for the model creator
- Use default password
- Email notification

Follow these steps:

1. From the Windows Start menu, click All Programs, CA, ERwin, ERwin Mart Server r9, CA ERwin Mart Administrator and log in.

The CA ERwin Mart Administrator home page appears.

2. Click Settings.
3. Complete the following fields:

Default profile for model creator

Specifies the profile that is assigned to a user on a model. This profile is assigned whenever a user creates a model and saves it to Mart for the first time. The user inherits the permissions of the default profile selected here on the model that is saved. For example, suppose that User1 is assigned with Modeler profile and the System Administrator selects Architect as the default profile for model creator. If User1 creates Model1 and saves it to Mart, for Model1, User1 inherits the permissions of Architect. Now, suppose that the System Administrator selects Viewer as the default profile for model creator, and suppose that User1 creates Model2 and saves it to Mart. For Model2, User1 inherits the permissions of Viewer.

Use Default Password

Specifies the default password that you want to use for new users and for resetting passwords, in the absence of an SMTP server for emails.

Note: Select this option only if you do not have an SMTP server that is configured for emails.

SMTP host name

Specifies the name of the SMTP host. Enter the name in the mail.domain.com format. Notification emails are sent from this server.

Port number

Specifies the port number of the SMTP server. The default port number is 25. If your company is using an alternate port number for the mail server, specify that port number.

Authenticate

Specifies whether transactions with the SMTP server are authenticated. Select the check box to authenticate.

User name

Specifies the user name to authenticate the SMTP server. Select the Authenticate check box to enable authentication.

Password

Specifies the password to authenticate the SMTP server. Select the Authenticate check box to enable authentication.

Administrator email

Specifies the email ID of the Mart administrator. Notifications to Mart users are sent from this ID.

No-reply email from

Specifies the email ID from which administrative emails such as the password reset email are sent.

4. Click Save.

Mart options are configured.

You have installed and configured CA ERwin DM version 9.0 Mart.

Troubleshooting

This section explains the errors that you can encounter while installing and configuring Mart, and how you can troubleshoot them.

Note: The Mart Server log files are available in the following location:

Windows XP: {user.home}/Local Settings/Application Data/CA/ERwin Mart Server/logs/application.log

Windows 7: {user.home}/AppData/Local/CA/ERwin Mart Server/logs/application.log

Port out of range

Symptom:

Every time I connect to the web server, I get the following error message:

```
java.lang.IllegalArgumentException: port out of range 80821.
```

Solution:

Type the correct port number in the Configure CA ERwin Mart Administrator's Server dialog and then restart your web server.

Call failed on the server

Symptom:

When I try to connect to the Mart server, I get the following error:

500 The call failed on the server; see server log for details

Solution:

The probable reasons for this error could be one of the following reasons:

- The server name is not correct.
- The application name is not correct. By default, the application name is MartServer and it is case sensitive.

Type the correct server name and application name in the CA ERwin Mart Administrator's Server dialog and the Configure MartServer Details dialog. Restart the web server.

Application Internal Error

Symptom:

When I try to connect to the database, I get the following error:

Application Internal Error

Solution

You get this error when the MartServer application is unable to connect to the required database. The probable reasons for this error could be the following:

- The database details provided in the Configure MartServer Details dialog are incorrect.
- The username and the password for the database are incorrect.
- The database is not present.
- The port number for the database is incorrect.
- The network is down.

Ensure that you enter the correct details of your database in the Mart Server tab of the CA ERwin Mart Configuration dialog.

ORA-12514 TNS listener does not currently know of service requested in connect descriptor

Symptom:

When I try to open the CA ERwin Mart Administrator page, I get the Application Internal Error. The Tomcat windows shows the following error message:

```
ORA-12514, TNS:listener does not currently know of service requested in connect descriptor
```

Solution:

Use a fully-qualified instance name when starting the Mart Server.

Mart already exists. Specify another database name

Symptom:

When I try to connect to Mart, I get the following error message:

```
An earlier mart is already present in the database you are trying to initialize. This process can not be continued. Please specify another database name to continue.
```

Solution:

You get this error when you try to connect to an old Mart that you have used for CA ERwin DM Release 7.x, 8.x, or release 9 pre-Beta.

Create a database and provide its details in the Configure MartServer Details dialog.

Initialize page is not loading in Internet Explorer

Symptom:

When I type the URL to initialize my Mart in Internet Explorer, the Initialize Mart page is taking a long time to load.

Solution:

The Initialize Mart page does not load because the Active Scripting option in Internet Explorer is disabled.

To enable Active Scripting, follow these steps:

1. In Internet Explorer, click Tools, Internet Options.
2. In the Security tab, click the Custom Level button.
The Security Settings – Local Intranet Zone window opens.
3. From the list of options, locate Scripting, Active Scripting, and select Enable. Click OK.
4. Restart Internet Explorer and enter the URL to initialize Mart.
The Mart Initialize page opens.

The Tomcat server is not starting properly. The Configure button is disabled.

Symptom:

My administrator has given me the Administrator rights and when I start the Tomcat server, I get a series of errors. Also, I cannot click the Configure button in the configuration dialog because it is disabled.

Solution:

Right-click Start Server, and click Run as Administrator.

The Tomcat server starts without any error, and the configuration button is enabled.

A connection with the server could not be established

Symptom:

When I try to connect to the web server from CA ERwin Data Modeler, I get the following error message:

A connection with the server could not be established

Solution:

Verify that you have provided the correct port number and then reconnect to the web server.

The server name or address could not be resolved

Symptom:

When I try to connect to the web server from CA ERwin Data Modeler, I get the following error message:

The server name or address could not be resolved

Solution:

Verify that the server name where the web server is installed is correct and then reconnect to the server.

Note: If the web server and CA ERwin Data Modeler are installed in the same computer, you can give the server name as localhost. If the web server is installed in one computer and CA ERwin Data Modeler is installed in another computer, then the server name will be the name of the computer where you have installed the web server.

Invalid user ID or password

Symptom:

When I try to connect to the server, I get the following error message:

Invalid user ID or password. Please try again to login.

Solution:

Type the correct user name and password.

Note: The user should be an application level user and not a database user.

Error 12029

Symptom:

When I connect to the web server, I get the following error message:

Error 12029

Solution:

Restart the web server.

Unable to load the web page from my web browser

Symptom:

When I type the URL in Internet Explorer or Google Chrome to connect to the web server, I get the following error messages:

For Internet Explorer

Internet Explorer cannot display the webpage

For Google Chrome

Oops! Google Chrome could not connect to localhost:18170

Solution:

Restart the web server.

Test connection failed

Symptom:

When I try to upgrade to CA ERwin DM version 9.0 Mart on a 64-bit computer, I get the following message:

Test connection failed

Solution:

CA ERwin DM is a 32-bit application. When you try to upgrade to version 9.0 Mart on a 64-bit computer, the COM components do not work.

Follow these steps:

1. Paste the code included at the bottom of this topic to a Notepad file and name it as 64_Bit_Upgrade.reg. Note down the folder where you have created this file.

2. After installing CA ERwin DM version 9.0, right-click 64_Bit_Upgrade.reg and select Merge.

3. From the Windows Start menu, go to Run and type the following commands to re-register the r8 and r9 EAL components:

```
regsvr32.exe "<Install Dir>\CA\ERwin Data Modeler r9\EAL.dll"
```

```
regsvr32.exe "<Install Dir>\CA\ERwin Data Modeler r9\
Upgrade\R8_Binaries\EAL.dll".
```

4. Right-click 64_Bit_Upgrade.reg and select Merge again.

You can now upgrade to version 9.0 Mart on a 64-bit computer.

64_Bit_Upgrade.reg

Copy the following code and paste it to a new Notepad file:

```
Windows Registry Editor Version 5.00
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{9527D0BA-ED75-4b0e-BF4B-E35565DE9852}]
```

```
@="CA ERwin Data Modeler Script Client API"
```

```
"AppID"="{9527D0BA-ED75-4b0e-BF4B-E35565DE9852}"
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\AppID\{9527D0BA-ED75-4b0e-BF4B-E35565DE9852}]
```

```
"DllSurrogate"=""
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{40FDB0E6-D772-455d-B1C8-83CE79445403}]
```

```
@="CA ERwin Data Modeler Script Client API Property Bag"
```

```
"AppID"="{40FDB0E6-D772-455d-B1C8-83CE79445403}"
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\AppID\{40FDB0E6-D772-455d-B1C8-83CE79445403}]
```

```
"DllSurrogate"=""
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{6774E2C3-06E9-4943-A8D4-E3007AB1F42E}]
```

```
@="CA ERwin Data Modeler Script Client API"
```

```
"AppID"="{6774E2C3-06E9-4943-A8D4-E3007AB1F42E}"
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\AppID\{6774E2C3-06E9-4943-A8D4-E3007AB1F42E}]
```

```
"DllSurrogate"=""
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\CLSID\{7D7B1602-9832-4ac6-A224-F0092FAF0D7E}]
```

```
@="CA ERwin Data Modeler Script Client API Property Bag"
```

```
"APPID"="{7D7B1602-9832-4ac6-A224-F0092FAF0D7E}"
```

```
[HKEY_CLASSES_ROOT\Wow6432Node\AppID\{7D7B1602-9832-4ac6-A224-F0092FAF0D7E}]
```

```
"DllSurrogate"=""
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\AppID\{9527D0BA-ED75-4b0e-BF4B-E35565DE9852}]
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\AppID\{40FDB0E6-D772-455d-B1C8-83CE79445403}]
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\AppID\{6774E2C3-06E9-4943-A8D4-E3007AB1F42E}]
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Classes\AppID\{7D7B1602-9832-4ac6-A224-F0092FAF0D7E}]
```

Appendix A: Sample Files

This section contains the following topics:

[Sample workers.properties File](#) (see page 42)

[Sample isapi_redirect.properties File](#) (see page 43)

[Sample isapi_redirect.reg File](#) (see page 44)

[Sample uniworkers.properties File](#) (see page 44)

[Sample uriworkermap.properties File](#) (see page 44)

Sample workers.properties File

The workers.properties file includes the following parameters:

```
worker.list
worker.<workername>.host
worker.<workername>.port
worker.<workername>.type
worker.<workername>.connection_pool_size
```

The descriptions of the parameters are as follows:

workers.list

Lists all the workers that are defined. When you start the web server, the plug-in instantiates these workers.

worker.<workername>.host

Defines the IP address of the computer where Tomcat (WA-OP) is installed.

worker.<workername>.port

Defines the port that the AJP workers inside Tomcat listen to. By default, AJP13.Workers listen to port 8009.

worker.<workername>.type

Defines the type of worker. The type of the worker can be ajp13, ajp14, jni, lb, or status.

worker.<workername>.connection_pool_size

Defines the number of connections made to AJP back-end.

The following is a sample workers.properties file:

```
# This file provides minimal jk configuration properties needed to
# connect to Tomcat.
#
# The workers that jk should create and work with
#
worker.list=lb,jk-status
#
# Defining a worker named node1 and of type ajp13
# Note that the name and the type do not have to match.
#
worker.node1.type=ajp13
```

```
worker.node1.host=localhost
worker.node1.port=8009
#
# Defining a load balancer
#
worker.lb.type=lb
worker.lb.balance_workers=node1
#
# Define status worker
#
worker.jk-status.type=status
```

Sample isapi_redirect.properties File

The following is a sample isapi_redirect.properties file:

```
extension_uri=/jakarta/isapi_redirect.dll
# Full path to the log file for the ISAPI Redirector
log_file=C:\apache-tomcat-7.0.21\bin\logs\isapi_redirect.log
# Log level (debug, info, warn, error or trace)
log_level=info
# Full path to the workers.properties file
worker_file=C:\apache-tomcat-7.0.21\bin\native\workers.properties
# Full path to the uriworkermap.properties file
worker_mount_file=C:\apache-tomcat-7.0.21\bin\native\uriworkermap.properties
```

In this example, *jakarta* refers to the virtual directory you have added before you created the ISAPI filter.

Sample isapi_redirect.reg File

The following is a sample isapi_redirect.reg file:

```
REGEDIT4

[HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Jakarta Isapi
Redirector\1.0]

"extension_uri"="/jakarta/isapi_redirect.dll"

"log_file"="C:\apache-tomcat-7.0.21\bin\logs\isapi.log"

"log_level"="debug"

"worker_file"="C:\apache-tomcat-7.0.21\bin\native\workers.properties"

"worker_mount_file"="C:\apache-tomcat-7.0.21\bin\native\uriworkermap.prop
erties"
```

In this example, *jakarta* refers to the virtual directory you have added before you created the ISAPI filter.

Sample uniworkers.properties File

The following is a sample uniworkers.properties file:

```
/MartServer/*=node1
```

Sample uriworkermap.properties File

The following is a sample uriworkermap.properties file:

```
# This file provides sample mappings for example wlb
# worker defined in workermap.properties.minimal
# The general syntax for this file is:
# [URL]=[Worker name]
/*=lb
#
# Mount jkstatus to /jkmanager
# For production servers you will need to
# secure the access to the /jkmanager url
#
/jk-manager=jk-status
```

Documentation Formats and Deliverables

The following documents are provided for Mart Server:

Deliverable Name	Format Provided
CA ERwin Mart Administrator Online Help	HTML
Release Notes	HTML and PDF