## **CA ERwin® Data Modeler**

## **Release Notes**

Release 9.6.0



This Documentation, which includes embedded help systems and electronically distributed materials (hereinafter referred to as the "Documentation"), is for your informational purposes only and is subject to change or withdrawal by CA at any time. This Documentation is proprietary information of CA and may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA.

If you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2015 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

## **Contact CA Technologies**

#### **Understanding your Support**

Review support maintenance programs and offerings.

#### **Registering for Support**

Access the CA Support online registration site to register for product support.

#### **Accessing Technical Support**

For your convenience, CA Technologies provides easy access to "One Stop" support for all editions of <u>CA ERwin Data Modeler</u>, and includes the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

For information about other Home Office, Small Business, and Enterprise CA Technologies products, visit http://ca.com/support.

#### **Provide Feedback**

If you have comments or questions about CA Technologies product documentation, you can send a message to <u>techpubs@ca.com</u>.

If you would like to provide feedback about CA Technologies product documentation, complete our short <u>customer survey</u>, which is also available on the CA Support website, found at <a href="http://ca.com/docs">http://ca.com/docs</a>.

#### **CA ERwin Data Modeler News and Events**

Visit <u>www.erwin.com</u> to get up-to-date news, announcements, and events. View video demos and read up on customer success stories and articles by industry experts.

## **Documentation Changes**

The following updates have been made since the latest release (r9.5.2) of this document:

- New Features and Enhancements (see page 21)—This chapter describes the new features, enhancements, and changes implemented for release r9.6.
- System Requirements (see page 46)—This topic is updated to include the new database that is supported in release r9.6.
- <u>Supported Target Server Databases</u> (see page 49)—This topic is updated to include the databases that are supported in release r9.6.
- <u>DBMS Requirements</u> (see page 50)—This topic is updated to include the new database that is supported in release r9.6.
- Issues Fixed in this Release (see page 70)—This topic provides the list of issues that are fixed in release r9.6.

The following updates have been made since the latest release (r9.5.1) of this document:

- New Features and Enhancements—This chapter describes the new features, enhancements, and changes implemented for release r9.5.2.
- Supported Target Server Databases—This topic describes the databases that are supported in release r9.5.2.
- Issues Fixed in this Release—This topic provides the list of issues that are fixed in the current release.

The following updates have been made since the latest release (r9.5) of this document:

- Metadata Integration Bridges Updated—This topic describes the Metadata Integration Bridges that are updated for release r9.5.1.
- Table of Supported Bridges—This topic provides the complete list of Metadata Integration Bridges that are supported in the current release.
- Issues Fixed in this Release—This topic provides the list of issues that are fixed in the current release.

The following updates have been made since the latest release (r9.2.0) of this document:

- New Features and Enhancements—This chapter describes the new features, enhancements, and changes implemented for release r9.5.0.
- Sample Model—This topic describes the sample model that is included with the product.

- Operating System Support—This topic describes the operating systems supported by the product.
- Issues Fixed in this Release--This topic includes the list of issues that are fixed in release r9.5.0.

The following documentation updates have been made since the last release (r9.0) of this documentation:

- New Features and Enhancements—This chapter describes the new features, enhancements, and changes implemented for r9.2.0.
- New Features and Enhancements—This chapter describes the new features, enhancements, and changes implemented for r9.1.
- Fixed Issues—This chapter describes the issues that are fixed for r9.1.
- Documentation Formats and Deliverables—Updated to include the addition of role based guides in a new section in the bookshelf.

The following documentation updates have been made since the last release (r8.2) of this documentation:

- New Features and Enhancements—This chapter describes the new features, enhancements, and changes implemented for r9.
- Operating System Support (see page 45)—Added version clarifier.
- System Requirements (see page 46)—Added the requirements for Mart server and web server.
- Documentation Formats and Deliverables—Updated to include the addition of role based guides in a new section in the bookshelf.

## **Contents**

Chapter 1: CA ERwin Data Modeler Editions	11
Community Edition	11
Standard Edition	
Workgroup Edition	15
Navigator Edition	16
CA ERwin Data Modeler for Microsoft SQL Azure	16
Sample Model	18
Chapter 2: New Features and Enhancements	21
Enhancement to the Notes Feature	21
Report Designer Enhancements	26
Mart-Level Reports in Report Designer	26
Model Validation Reports	28
TLX Reports	28
Export to PDF	29
Pinned Reports from the Report Designer Menu	29
Cross-Model Reports	30
Mart Model Reporting Status	31
Schedule Mart Report Synchronization	32
Use Multiple Threads to Update Mart Models for Reporting	33
Mart Report Data Compression	34
Reorder Diagrams	35
Sybase Support Enhancement	35
Redesigned User Defined Properties Editor	35
User Interface Enhancements	36
Meta Integration Bridges Enhancement	37
Initialize the Mart with a Windows-authenticated User	39
Use Multiple Threads to Load Models	40
Online Help Enhancement	
Additional Metadata in the Model Template Synchronization Wizard	41
Teradata Support Enhancement	41
Chapter 3: System Information	43
Release Numbering Scheme in CA ERwin Data Modeler	44
Operating System Support	
System Requirements	46

Administrative Privileges Required	48
Current User Installation	48
Supported Target Databases	49
CA ERwin Data Modeler Workgroup Edition Requirements	49
Administrator Server System Requirements	49
DBMS Requirements	
Client Workstation Requirements	51
CA ERwin Data Modeler Navigator Edition Requirements	51
Support for CA ERwin Data Modeler Workgroup Edition	51
Chapter 4: Installation Considerations for CA ERwin Data	
Modeler Workgroup Edition	53
CA ERwin Data Modeler and Mart Release Numbers	53
Microsoft SQL Server 2005 Permissions	53
Specify Use of Foreign Characters With Microsoft SQL Server 2005	54
Specify Use of Foreign Characters With Microsoft SQL Server 2000	54
Chapter 5: Installation Considerations for CA ERwin Data	
Modeler Navigator Edition	55
Silent Install	55
Chapter 6: General Considerations for Using CA ERwin Data	
•	57
Modeler Workgroup Edition	37
Model Conversion and Complete Compare Differences	57
Model Display in the Difference Reconciliation Dialog	57
Uninstalling CA ERwin Data Modeler Workgroup Edition	58
Chapter 7: General Considerations for Using CA ERwin Data	
Modeler Navigator Edition	59
Model Display in the Difference Reconciliation Dialog	59
Help Files	
Chapter 8: Known Issues	61
SQL 1105 Error	61
API Functions not Working for Sybase Mart	
Model and Version Name Limit on Oracle	
CA ERwin Data Modeler and Crystal Reports Shell Installation	
.Net Requirement	

Upgrading CA ERwin Data Modeler on Windows Server 2003	63
Mart Reports Work with Crystal Reports Developer Edition	63
Statistics not Reverse Engineered from Teradata	63
Report on Glossary Words Includes Extra Characters	63
Updating Profile Description from Notepad	63
Unwanted Result Rows in Report	64
DSM Logical to SQL Server 2012	64
Report Designer Functions for a Large Model	64
Subject Area Picture Report not Generated	64
Incorrect UDP in UDP Report	65
Invalid Column Node for DB2 LUW Model in View Report	65
Mart Server Name in Korean	65
Generating Reports with Korean Characters in User Name	65
Error While Creating a Profie Using Special Characters in Mart Administrator	66
Log Files not Created if Mart Server Run as Windows Service	66
Rollup Sub Tables Option Not Working for PDF	66
Physical Names Not Calculated in Mart Model Reports	67
Index Created for Columns Header Containing Name	67
Report Result Total Row Count Mismatch	67
Chapter 9: Fixed Issues	69
Issues Fixed in this Release	70
Chapter 10: Documentation	79
Documentation Formats and Deliverables	79
Technical Documentation Series	
Release Numbers	
Appendix A: Appendix	83
Appendix B: Third Party Software Acknowledgment	85

# Chapter 1: CA ERwin Data Modeler Editions

The following editions of CA ERwin Data Modeler are available:

**Community Edition** 

Standard Edition (see page 14)

Workgroup Edition

Navigator Edition (see page 16)

CA ERwin Data Modeler for Microsoft SQL Azure (see page 16)

This *Release Notes* details new features, enhancements, updates, and known issues for all editions of CA ERwin Data Modeler.

**Note:** Depending on the edition of CA ERwin Data Modeler you are using, not all features may be enabled for use. For more information about the differences between versions, click one of the Edition links.

## **Community Edition**

The Community Edition includes a limited number of features from the main product. It is designed to help data modelers learn data modeling techniques, create simple data models, and learn about the design and maintenance of a production database.

Most of the basic features are available, with limited access to the following features:

#### 25 Entities/Tables Per Model

You can reverse-engineer, import using Metadata Integration (MITI) bridges, or create up to 25 entities/tables per model. There is no restriction on the number of views you can create.

If you attempt to reverse engineer a script or a database with more than 25 tables, or attempt to open a model with more than 25 tables, a warning message displays. For Oracle and SQL Server, the reverse engineer process stops after creating 25 tables in the new model. For other databases, a warning message displays, stating that the import feature is disabled.

**Note:** Some operations that include the creation of temporary tables may also result in exceeding the allowed table limit. For example, if you reverse engineer a DB2/LUW script that contains 25 tables and a materialized view, the temporary table used to create the materialized view will cause you to exceed the allowed table limit for the model.

#### **Read-Only Complete Compare**

You can use Complete Compare features to evaluate and compare models, but you cannot commit changes you make in the Complete Compare wizard to the models you compare. The "Finish" button is disabled in the Resolve Differences dialog. In addition, demand loading of databases and Alter Script generation are not supported.

**Note:** If you are working with a database as part of the compare process, only the first 25 tables are reverse engineered to the model used during the compare. This may result in problems in the Complete Compare Resolve Differences dialog, where objects and properties between the models will not match. To avoid problems, work with a database that has fewer than 25 tables.

#### Reports

You can use the new reporting tool, Report Designer to generate and view reports. You can export reports to HTML, but not to TEXT and PDF. In addition, you cannot copy data that is displayed on the result gird.

#### Save As

You can save your models in the native \*.erwin format or as a template (\*.erwin tmpl). Save As XML, ER1, and ERT is not supported.

#### File Open

You can open a model in \*.erwin or \*.erwin\_tmpl format, and a SQL DDL file in the format \*.sql, \*.ers, or \*.ddl.

#### **Print a Model**

Support for printing models is included in the Community Edition, although the output includes a watermark.

#### **Working with Transformations in the Community Edition**

You can work with transformations to implement design decisions, such as partitioning tables. However, because of the limitation to 25 entities/tables per model, some transformation operations may not be possible. For example, if you are near the limit of 25 tables and choose to partition a table, you may surpass the table limit, and the transformation operation will not complete.

The Advisories Pane on the main workplace window reports a message reminding you that the intended action did not complete because of the object creation limit.

#### **Limited Database Support**

Support is included for modeling using the following databases:

- Oracle (10.x/11g/12c)
- SQL Server (2008/2012/2014)
- DB2 LUW (9.5, 9.7, 10.x)
- MySQL (5.x, using ODBC)
- ODBC (2.0, 3.0)
- Sybase (15.x/16)

#### Limited Access to Metadata Integration (MITI) Bridges

Support is limited to the following Metadata Integration (MITI) Bridges for import. Export using Metadata Integration (MITI) Bridges is not supported.

- Sybase PowerDesigner OOM 9.x to 15.x (using UML XMI)
- Sybase PowerDesigner CDM 6.x
- Sybase PowerDesigner CDM 7.5 to 15.x
- Sybase PowerDesigner PDM 6.1.x
- Sybase PowerDesigner 7.5 to 15.x
- Embarcadero ER/Studio
- Embarcadero ER/Studio (using DM1)
- OMG/CWM 1.x XMI 1.x
- OMG/UML 1.x XMI 1.x

**Note:** If the file you import has more than 25 tables, the Community Edition imports only the first 25 tables.

Other limitations of the Community Edition include the following:

- A copy of Crystal Reports 2008 is not included with the Community Edition.
- Features supporting the creation and implementation of data type standards are not enabled.
- Access to the CA ERwin Data Modeler Workgroup Edition is disabled. When working with Complete Compare, the option to compare your model with a model in a Mart is disabled.
- The Community Edition license is valid for one year. After one year you can reinstall the Community Edition with a new license, or purchase and install a full version of the product. You can install and use the Community Edition without entering a license key for 30 days from the date you installed the product.

#### **Documentation**

The Community Edition includes online help files and PDF guides available on the ERwin Bookshelf, which is accessible from the Start menu.

To view PDF files, you must download and install the Adobe Reader from the Adobe website if it is not already installed on your computer.

## **Standard Edition**

CA ERwin Data Modeler Standard Edition provides all the data modeling features used by Data Architects, Data Administrators, and Application Administrators, but does not include any workgroup modeling capabilities. You can use this edition as a standalone modeling tool, and as a Workgroup Edition client that can access and work with data models stored in a mart. When you enable data movement or dimensional modeling features, it provides a tool for assisting Data Administrators and Capacity Managers design data warehouses. Partners can use the API to create add-on solutions to CA ERwin Data Modeler. With the optional SQL Azure extension, you can take advantage of using SQL Azure as a target database.

## **Workgroup Edition**

CA ERwin Data Modeler Workgroup Edition provides all the data modeling features used by Data Architects and also includes workgroup modeling capabilities used by Database Administrators, Application Administrators, and Application Owners. It provides conflict resolution, versioning, security and standardization for multi-user modeling. Workgroup modeling operates in a client/server environment so processing is shared between the user client workstation and the server where the models are stored. Users access the stored models through a client, such as CA ERwin Data Modeler. Models are held in a platform and network independent database or mart that resides on a central server, using Microsoft SQL Server, Oracle, or Sybase as the host database. With the optional SQL Azure extension, you can take advantage of using SQL Azure as a target database.

The key features of CA ERwin Data Modeler Workgroup Edition include:

#### Web-based administrator (CA ERwin Mart Administrator)

Helps the administrator administer the Mart. The administrator creates the Mart database, installs and configures CA ERwin Mart Administrator before users can connect to the Mart. CA ERwin Mart Administrator is hosted on a web server and is accessed through an Internet browser.

#### Model change impact analysis

Provides a change summary showing the impact of changes and the history of the affected model objects, allowing you to select which changes to apply to the model repository.

#### **Version management**

Lets Data Architects store, access and analyze the history of a model and the changes made to it, lock down specific versions, run difference reports between versions, and seamlessly roll back models to previous states as required.

#### Concurrent model access with optional model locking

Allows multiple users to concurrently work on a given model without compromising the integration and integrity of their parallel efforts.

The administrator installs the program and initializes the database on the DBMS server. The administrator also has the responsibility of setting up the library structure in which models are organized, and assigning security profiles to users. Administration overhead is relatively low and proportional to the number and activity level of the users. After a model is saved to the database, control of who can work on the model and how changes are saved to the model is handled by security, making it possible for workgroups to work on large models without confusion. CA ERwin Data Modeler Workgroup Edition supports many security and administrative features related to its multiuser capabilities and the client/server environment in which it operates. For this reason, routine management is usually performed by a dedicated administrator. Administrators can find detailed information regarding their tasks and responsibilities in the CA ERwin Data Modeler Workgroup Edition Administration Guide.

You can also use CA ERwin Data Modeler Navigator Edition as a client. Read-only access is permitted to data models, so your workgroup can use this client to share information with others without the risk that unauthorized changes might be saved to the mart.

## **Navigator Edition**

CA ERwin Data Modeler Navigator Edition provides a cost-effective way to provide read-only access to models built with CA ERwin Data Modeler for viewing and analysis. This edition does not permit you to make any changes to models.

The key features of CA ERwin Data Modeler Navigator Edition include:

#### **Read-only access**

Read-only access is provided to models created by CA ERwin Data Modeler and it can also be used as a Workgroup Edition client for viewing a data model stored in a mart. Use the Navigator Edition to easily share model information without the risk of unauthorized changes to a model.

#### **Navigation and Viewing**

Provides those who need to view models, but not update them, full navigation and viewing of data models.

#### **Reporting and Publication**

Offers reporting and printing capabilities that generate in a variety of formats, including HTML and PDF.

## CA ERwin Data Modeler for Microsoft SQL Azure

If you plan to use SQL Azure as your target server with CA ERwin Data Modeler, verify that your SQL Azure license is present either on the computer on which you plan to run CA ERwin Data Modeler, or on the License Server. This means, if you are using a local CA ERwin DM license, then you must have the license for SQL Azure locally. If you are using a License Server to get the CA ERwin DM license, then you must have the license for SQL Azure on the License Server. If you do not have a SQL Azure license, you cannot select SQL Azure as a target server. This requirement is effective for all editions of CA ERwin Data Modeler, including Community Edition.

The following tables compare the differences in CA ERwin Data Modeler functionality depending on whether you are using the SQL Azure extension:

#### **Community Edition with SQL Azure Extension**

Limited database support, however SQL Azure is available as a target server for new models and deriving models

SQL Azure models can be opened directly

#### **Community Edition with SQL Azure Extension**

Opening a file in XML format is supported

Alter Script in Forward Engineering is enabled only for SQL Azure models

No entity/table volume limitation for SQL Azure models only

#### Notes:

- You can reverse engineer from any of the supported target server databases, but when the reverse engineer process finishes, switch to one of the available CE target server databases (DB2 for LUW, MySQL, ODBC/Generic, Oracle, SQL Azure, SQL Server, or Sybase).
- If you attempt to reverse engineer more than 25 entities/tables, verify that your target server is SQL Azure. If it is not, then only the first 25 entities/tables are converted and the rest are removed.

On-demand loading and model saving during Complete Compare is enabled only for SQL Azure models

Printing a SQL Azure model is supported and the output does not contain a watermark

Data type standards are supported

Only SQL Azure models can be saved in any of the available formats

Access to marts (workgroup modeling) is not supported

Full use of all available MITI import and export bridges

Crystal Reports is supported

Standard Edition	Standard Edition with SQL Azure Extension
SQL Azure is not available as a target server for new models and deriving models	SQL Azure is available as a target server for new models and deriving models
Opening a SQL Azure model launches a dialog prompting you to select a different target server	SQL Azure models can be opened directly
SQL Azure is not an option in the CA ERwin Data Modeler Target Server dialog	SQL Azure is available for selection in the CA ERwin Data Modeler Target Server dialog

Workgroup Edition	Workgroup Edition with SQL Azure Extension
SQL Azure is not available as a target server for new models and deriving models	SQL Azure is available as a target server for new models and deriving models
Opening a SQL Azure model launches a dialog prompting you to select a different target server	SQL Azure models can be opened directly
SQL Azure is not an option in the CA ERwin Data Modeler Target Server dialog	SQL Azure is available for selection in the CA ERwin Data Modeler Target Server dialog
Mart access is disabled for SQL Azure models	Mart access is enabled for SQL Azure models

## **Sample Model**

When you install CA ERwin Data Modeler, a sample model by name eMovies is installed. Use this model as an example to learn data modeling and to learn how to use the tool.

This model is available in the following folder:

<install folder>\ERwin Data Modeler r9\BackupFiles\Samples\Standard

**Note:** If you are using Microsoft Windows 7 or Windows 8, you must run the data modeling tool as an administrator to open the eMovies model.

The business requirements of this model are as follows:

- Manage employee details
- Manage store details
- Manage movie details
- Manage copies of movies
- Manage customer details
- Maintain movie rental details for customers
- Record payment details for rented movies
- Display the credit status of customers
- Generate invoices for customers
- Display overdue details for customers
- Search for customers
- Search for movies that are rented based on the rented date, customer phone number, employee number, or movie number

Apart from entities, attributes, and relationships, this model serves as an example for the following features:

- Domains
- Logical Model
- Subject Area
- Annotation
- Key Groups

- ER Diagrams
- Naming Standards Object
- Data Type Standards Object
- Themes
- Validation Rules

# Chapter 2: New Features and Enhancements

This section contains the following topics:

Enhancement to the Notes Feature (see page 21)

Report Designer Enhancements (see page 26)

Reorder Diagrams (see page 35)

Sybase Support Enhancement (see page 35)

Redesigned User Defined Properties Editor (see page 35)

<u>User Interface Enhancements</u> (see page 36)

Meta Integration Bridges Enhancement (see page 37)

Initialize the Mart with a Windows-authenticated User (see page 39)

Use Multiple Threads to Load Models (see page 40)

Online Help Enhancement (see page 40)

Additional Metadata in the Model Template Synchronization Wizard (see page 41)

Teradata Support Enhancement (see page 41)

## **Enhancement to the Notes Feature**

A new tab by name Extended Notes is added to all the model objects. This tab is in addition to the existing Notes tab. The existing Notes tab lets you only view the notes that are entered in this tab. The Extended Notes tab is a model object, and you can perform the following tasks:

- Search for Extended Notes using the Find and Replace dialog.
- Compare the properties of Extended Notes added to model objects using Complete Compare.
- Edit multiple Extended Notes at once using Bulk Editor.
- Create Extended Notes through API.

You can transfer the notes from the Notes tab to the Extended Notes tab. In the Extended Notes tab, you can associate a level of importance and can add a status to each note. You can also transfer a note from the Extended Notes tab to the Notes tab.

When you transfer a note from the Extended Notes tab to the Notes tab, the following changes occur:

- The Name, Importance, and Status information is deleted.
- The value in the Author field is deleted and the current user is displayed in the Created By field.
- The value in the Event field is deleted and User Note is displayed.

#### To search for an extended note, follow these steps:

- 1. Press Ctrl + F in the Model Explorer and enter a word from the note that you want to find, in the Find What field.
- 2. Click Find Next until you find the required object.

The extended note object that contains the keyword is displayed as <note name> under the Extended Notes node. When you find the matching extended note object, use the Locate in Model Explorer icon to go to the object.

#### To compare the extended notes using Complete Compare, follow these steps:

- 1. Select the left and right models.
- In the Type Selection page, select Extended Notes under the object for which you
  want to compare extended notes. For example, select Extended Notes under the
  entity and attribute nodes for a Logical model. For a Physical model, select
  Extended Notes under the table and column nodes. Select any other options that
  you want to compare.
- 3. Click Compare.

The differences in the extended notes are displayed in the Resolve Differences window under the Extended Notes node for each object.

#### To edit multiple extended notes using Bulk Editor, follow these steps:

- 1. Invoke the Bulk Editor Wizard.
- 2. In the Object Types page, select Extended Notes.
- 3. In the Property Type page, select the properties that you want to view or change.
- 4. In the Object Instances page, expand User Note and select the objects for which you want edit the extended notes.
- 5. Click Edit.

For more information about how to use the Bulk Editor, see the Changing the Properties of Multiple Objects scenario.

#### Use the following example to create an extended note through API:

Note: Before you execute this code, help ensure that EAL.dll is registered.

```
Sub updateAttribute()

' This Creates an Instance of SCApplication
Set SCApp = CreateObject("AllfusionERwin.SCAPI")

'Declare a variable as a FileDialog object.
Dim fd As FileDialog
'Create a FileDialog object as a File Picker dialog box.
Set fd = Application.FileDialog(msoFileDialogFilePicker)

fd.AllowMultiSelect = False
fd.Filters.Clear
fd.Filters.Add "Erwin File", "*.erwin", 1

If (fd.Show = -1) Then
    strFileName = fd.SelectedItems.Item(1)

Else
    Exit Sub
```

End If

```
'Set the object variable to Nothing.
 Set fd = Nothing
 'strFileName = "C:\models\test03.erwin"
   ' This is the name of the ER1 Model that needs to be updated
 Set SCPUnit = SCApp.PersistenceUnits.Add("erwin://" & strFileName)
 Set SCSession = SCApp.Sessions.Add
 SCSession.Open (SCPUnit)
 Set SCRootObj = SCSession.ModelObjects.Root
 Set SCEntObjCol = SCSession.ModelObjects.Collect(SCRootObj, "Entity")
Dim nTransId
nTransId = SCSession.BeginNamedTransaction("Test")
   For Each oEntObject In SCEntObjCol
     On Error Resume Next
     Set oEntCol = SCSession.ModelObjects.Collect(oEntObject, "Attribute")
        For Each oAttObject In oEntCol
           Set oUserNote =
SCSession.ModelObjects.Collect(oAttObject).Add("Extended_Notes")
           oUserNote.Properties("Comment").Value = "Test note1"
           oUserNote.Properties("Note_Importance").Value = "0"
                                                                    'enum
{0|1|2|3|4|5}
            oUserNote.Properties("Status").Value = "1"
                                                                    'enum {1|2|3}
        Next oAttObject
   Next oEntObject
```

SCSession.CommitTransaction (nTransId)
SCSession.Close

' Save the model
Call SCPUnit.Save("erwin://" & strFileName)
MsgBox "Incremental-Save successfully"
SCApp.Sessions.Remove (SCSession)

SCApp.PersistenceUnits.Clear

SCPUnit = Null

End Sub

## **Report Designer Enhancements**

The following enhancements are made to Report Designer in this release:

- Mart-level reports (see page 26): You can create reports on the Mart and generate reports across models. For example, you can generate a report on the domains that are included in all the models in a Mart.
- Report on validation rules (see page 28): You can now generate a report that validates certain criteria using filters. For example, you can generate a report of attributes that are primary keys.
- <u>TLX reports</u> (see page 28): Report Designer now includes model validation reports that are created using CA ERwin Template Language (TLX). TLX reports help you improve your data model by displaying problems and statistics of model objects.
- Export to PDF (see page 29): You can export reports to PDF.
- Pinned reports from toolbar (see page 29): You can access the Pinned reports from the Report Designer toolbar.
- <u>Model report status</u> (see page 31): You can know the reporting status of models on the Mart Open dialog.
- <u>Cross-model reports:</u> (see page 30) You can now generate a report on the properties of attributes and columns present across multiple models in a Mart.
- Scheduling Mart report synchronization (see page 32): You can synchronize the model changes with Mart report tables dynamically or schedule the synchronization for a later time.
- Using multiple threads to update report data (see page 33): You can configure a Mart to use multiple threads to update a model. Using multiple threads increases the performance of the update process and improves the time taken for large models to be available for reporting.
- Compressing Mart report data (see page 34): You can change the way the report information is stored in the report data table and improve the performance of Mart reporting.

## Mart-Level Reports in Report Designer

You can now generate reports on the Mart. The reports that you generate could be administrative or about the model objects. For example, you can generate a report on the profiles that are attached to users, or on the list of entities without primary keys. When you generate the report, you can use the filter to search within specific objects. The filter supports SQL wildcard characters such as ? and %.

**Note:** You must have the Reports: View permission to create Mart reports.

#### Follow these steps:

- 1. Open CA ERwin Data Modeler and log in to the Mart.
- 2. Click Tools, Report Designer.
- 3. Enter a name for the report and click Mart.
- 4. Select the report subject in the Select Report Subject pane.
- 5. [Optional] In the Select Report Fields pane, select Specify Attribute Name at Run Time or Specify Model Name at Run Time check box.
- 6. Select the properties that you want to include in the report and click one of the following buttons:
  - a. Click Run Report.

If you have selected an option under Filter By, the Mart Report Filter dialog opens.

Select the specific models that you want to get the results from. Enter the specific model object name. Use wildcard characters, if required.

The report is generated and displayed. If you do not specify any model or entity the generated report includes all the models. If you have used a wildcard, by default, wildcard is applied to all the names. For example, if you type ID, the report includes Cust ID and ID For Category.

b. To add the report to the current Report Solution, click OK.

## **Model Validation Reports**

You can now generate model validation reports such as tables that do not have columns and columns that do not have comments. The reports can be generated using filters, and filters are available for the following objects:

- Entity/Table
- Attribute/Column
- Subject Area
- Relationship
- Key group/Index
- Domain

#### Follow these steps:

- 1. Open ERwin Report Designer and create a report.
- 2. Select Logical, Physical, or Logical/Physical. For example, select Logical.
- 3. Select a subject in the Select Report Subject pane. For example, select Entity.
- 4. In the Select Report Fields pane, expand the Filter node for the required object and select the required criterion. For example, expand Entity, Filter, and select No Definition. Expand Properties and select Name.
- 5. Click Run Report.

The report opens in ERwin Report Designer. In this example, the report includes the names of entities that do not have a definition.

## **TLX Reports**

Report Designer now includes model validation reports that are created using CA ERwin Template Language (TLX). TLX reports help you improve your data model by displaying problems and statistics of model objects. You can generate the default reports or can configure new reports with custom properties. To configure new reports, you must be familiar with TLX scripting.

You can add two types of custom properties, filters and TLX properties. The code for a filter includes a function that returns TRUE or FALSE.

The following are some of the default TLX reports that are included in Report Designer:

- Entity level
  - Is Duplicate
  - No Columns
  - No Comment
  - No PK
- Column level
  - Different FK Datatype
  - Is Duplicate
  - No Comment
  - PK and Not NULL FK allows NULL
  - Using Default Datatype

For more information about how to create TLX reports, see the online help.

## **Export to PDF**

Now you can export the reports that you create using the ERwin Report Designer to PDF. After you run a report, right-click the report and click Export to PDF. You can also use the Export to PDF option on the Toolbar. By default, the exported PDF document is saved in the following folder:

C:\Users\<username>\AppData\Local\CA\ERwin Data Modeler\9.6\Report\Exporting

## **Pinned Reports from the Report Designer Menu**

You can now open the built-in reports from the Open pinned reports from disk toolbar item. The pinned reports are available in the local computer of the user. These reports are segregated into categories and each category of reports is available in a separate folder. You can create a folder of your own add the reports of your choice to it.

The following folder includes the built-in reports:

#### Windows XP

C:\Documents and Settings\All users\Application Data\CA\ERwin Data Modeler\9.6\Configuration\Report Solutions\

#### Windows 7

C:\Users\<user name>\AppData\Local\CA\ERwin Data Modeler\9.6\Report Solutions

Reports that are copied directly under this folder do not appear in the Pinned Reports dialog. The reports must be in a subfolder under this folder.

#### Follow these steps:

 Launch ERwin Report Designer and click Open pinned reports from disk on the toolbar.

The Pinned Reports dialog appears.

- 2. Select the category of the report that you want to see.
- 3. Select one or more reports that you want to run and click OK.

The report is included to the current Report Solution and the Pinned Reports dialog closes.

## **Cross-Model Reports**

You can now generate a report on the properties of attributes and columns present across multiple models in a Mart. When you generate the report, you can use the filter to search within specific models. The filter supports SQL wildcard characters such as ? and %.

#### Follow these steps:

- 1. Open CA ERwin Data Modeler and log in to the Mart.
- 2. Click Tools, Report Designer.
- 3. Enter a name for the report and click Mart.
- 4. Click Attribute/Column in the Select Report Subject pane.
- 5. In the Select Report Fields pane, select Specify Attribute Name at Run Time or Specify Model Name at Run Time check box.
- 6. Select the properties that you want to include in the report.
- 7. Click Run Report.

8. Select the specific models that you want to get the attributes from. Enter the attribute or column name.

By default, wildcard is applied to all the names. For example, if you type ID, the report includes Cust\_ID and ID\_For\_Category.

9. Click OK.

The report is generated and displayed.

## **Mart Model Reporting Status**

When a Mart model is modified and saved, although a confirmation message appears, the CA ERwin internal tables are still updated in the background. Further, when multiple users modify and save models simultaneously, models (internal tables) are queued for updating. If you generate a report on the model at this moment, the latest updates are not included. To provide you the correct reporting status of a model, the following enhancements are implemented:

- The Mart Open dialog is enhanced with a new column named Report Status. *Report Status* displays whether a model is ready for generating reports.
- The status bar of ERwin Report Designer shows the number of models that are ready for generating reports. The status *Mart Report sync progress (X/Y)* indicates that of the Y models that are available in the Mart, X models are ready for reporting.

The Report Status column includes the following statuses:

#### **Updated**

Specifies that the model is ready for report generation. When a report is generated on a model with this status, it includes the latest updates.

#### **Updating**

Specifies that the model is still being updated. When a report is generated on a model with this status, it does not include the latest updates. Further, when a model is saved for the first time, the report may not include any information.

#### **Pending**

Specifies that the model is queued for update. When a report is generated on a model with this status, it does not include the latest updates. Further, when a model is saved for the first time, the report may not include any information.

## **Schedule Mart Report Synchronization**

In the Workgroup Edition, the model data and model report data are stored in separate internal tables. The model report data table (m9ReportData) includes only those columns that are required to generate model-specific reports. When you update a model and save the changes, both the tables are updated. Although CA ERwin Data Modeler displays a message that the model is saved, the corresponding model report data table is still being updated in the background. In this scenario, if you try to generate a report, the report may not include the details that you have just updated. This means, there is a delay in the synchronization of model data and the model report data tables.

From this release onward, you can synchronize the tables dynamically or schedule the synchronization for a later time. Typically such synchronizations are scheduled for a time when there is minimum traffic on the server. The default is dynamic synchronization.

#### **Dynamic Synchronization**

Specifies that the model report data table is updated as and when the corresponding model is updated. You can see the reporting status of the source models in the Report Status column of the Mart Open dialog.

#### **Scheduled Synchronization**

Specifies that the model report data table is updated at the scheduled time. You can see the reporting status of the source models in the Report Status column of the Mart Open dialog.

#### Follow these steps:

- 1. Log out of the Mart and stop the Mart Server service.
- 2. Navigate to the \webapps\MartServer\WEB-INF folder on the computer where CA ERwin Mart Server is installed. Typically, the path for this folder is as follows:

```
C:\Program Files (x86)\CA\ERwin Mart Server
r9\Tomcat\webapps\MartServer\WEB-INF
```

3. Open the rest-context.xml file in a text editor such as Notepad and search for the following line:

```
cproperty name="refreshReportData" value="true" />
```

- 4. Change the value to "false".
- 5. Navigate to the following line:

```
<task:scheduled ref="reportTaskExecutor" method="run" cron="0 10 21 * * ?" />
```

6. Change the value for cron.

Here, cron indicates the scheduled time. In this example, cron="0 10 21 \* \* ?" indicates that the models are synchronized for report generation at 9:10 pm every day.

- 7. Save the XML file.
- 8. Start the Mart Server service and log in to the Mart.

## **Use Multiple Threads to Update Mart Models for Reporting**

In the Workgroup Edition, the model data and model report data are stored in separate internal tables. The model report data table (m9ReportData) includes only those columns that are required to generate model-specific reports. When you update a model and save the changes, both the tables are updated. Although CA ERwin Data Modeler displays a message that the model is saved, the corresponding model report data table is still being updated in the background. In this scenario, if you try to generate a report, the report may not include the details that you have just updated. This means, there is a delay in the synchronization of model data and the model report data tables.

This delay happens because, the update process is handled by a single thread in your computer. From this release onward, you can configure a Mart to use multiple threads to update a model. Using multiple threads increases the performance of the update process and improves the time taken for large models to be available for reporting.

#### Follow these steps:

- 1. Log out of the Mart and stop the Mart Server service.
- 2. Navigate to the \webapps\MartServer\WEB-INF folder on the computer where CA ERwin Mart Server is installed. Typically, the path for this folder is as follows:

```
C:\Program Files (x86)\CA\ERwin Mart Server
r9\Tomcat\webapps\MartServer\WEB-INF
```

3. Open the rest-context.xml file in a text editor such as Notepad and navigate to the following line:

```
cproperty name="maxPoolSize" value="8" />
```

4. Change the value to a number of your choice.

The maximum number of threads that you can create depends on the system resources of your Mart server. If you enter a number, only the maximum number of threads that can be created per the system resources is created.

#### Default: 8

- 5. Save the XML file.
- 6. Start the Mart Server service and log in to the Mart.

### **Mart Report Data Compression**

In the Workgroup Edition, the model data and model report data are stored in separate internal tables. The model report data table (m9ReportData) includes only those columns that are required to generate model-specific reports. When you update a model and save the changes, both the tables are updated. This approach is implemented to improve the performance of Mart report generation. From this release onward, you can improve the performance of Mart reporting further by changing the way the report information is stored in the report data table.

You can store the report information in two ways--binary or XML. By default, the report information is stored in binary format. Information is compressed in binary format, therefore it occupies less space. However, regardless of the format in which the information is stored, the accuracy of the information remains the same. When you change the storage format, the information for a model is converted to the new format the next time the model is saved. After you change the storage format, if you do not update a model, the storage format for that specific model is not changed. For example, suppose that you have 50 models in your Mart and the existing storage format is XML. The report data table has stored the information for all these models in XML format. Suppose that you change the format to binary and update 10 models today. The information for the 10 models is stored in binary format and the information for the remaining 40 models is in XML format.

#### Follow these steps:

- 1. Log out of the Mart and stop the Mart Server service.
- 2. Navigate to the \webapps\MartServer\WEB-INF folder on the computer where CA ERwin Mart Server is installed. Typically, the path for this folder is as follows:

```
C:\Program Files (x86)\CA\ERwin Mart Server
r9\Tomcat\webapps\MartServer\WEB-INF
```

3. Open the rest-context.xml file in a text editor such as Notepad and navigate to the following line:

```
compressReportData" value="true" />
```

**Default:** True (binary format)

- 4. To change the format to XML, change the value to "false".
- 5. Save the XML file.
- 6. Start the Mart Server service and log in to the Mart.

## **Reorder Diagrams**

You can now move diagram tabs and change the order of tabs at the model and the Subject Area level. To move a diagram, click the diagram tab and drag it to the position you want.

**Note:** Regardless of the order of tabs in the workspace, the ER Diagram Editor dialog lists the tabs in alphabetical order.

## **Sybase Support Enhancement**

CA ERwin Data Modeler is now compatible with SAP Adaptive Server Enterprise 16 (formerly known as Sybase Adaptive Server Enterprise). You can create data models and forward engineer the models to these databases; and you can reverse engineer these databases. However, new objects or properties that are added in these versions are not supported.

You can also use a SAP Adaptive Server Enterprise 16 database as a Mart database.

## **Redesigned User Defined Properties Editor**

The User Defined Properties (UDP) Editor has been redesigned to match with the object and property editors. There is no change in the objects to which you attach UDPs, or the type of properties you can create. Only the user-interface is redesigned.

The new dialog includes a search option and the text editor options such as spell check. The search option lets you search through a large list of UDPs. The text editor options let you edit the description.

When you add a List type of UDP, separate multiple list members by a comma. The value in the Default pane is displayed as the default value in the corresponding object editor.

## **User Interface Enhancements**

The following enhancements have been made to the user interface:

- You can sort the list of models in the Mart Open dialog. Click the required column heading to sort the list on the corresponding column.
- The column Lock Information is added to the Mart Open dialog. It displays the highest lock that is currently applied to a model.
- The column Report Status is added to the Mart Open dialog. For more information, see the Mart Model Reporting Status (see page 31) topic.

# **Meta Integration Bridges Enhancement**

CA ERwin Data Modeler has been updated to support Meta Integration® Model Bridge (MIMB) version 8.0.2 from Meta Integration® Technology, Inc. You can access the bridges when you click File, Import, From External Format or File, Export, To External Format.

You can now import from the following repositories:

- Embarcadero ER/Studio Repository
- IBM Cognos Content Manager Packages
- IBM DB2 Data Server (via JDBC)
- IBM Netezza Database (via JDBC)
- IBM Rational System Architect (SA) 7.1 to 11.x
- Informatica PowerCenter (Repository)
- Microsoft SQL Server Analysis Services 2005 to 2012 (Repository)
- Microsoft SQL Server Database (via JDBC)
- Microsoft SQL Server Integration Services (Repository)
- MicroStrategy 7.0 to 9.x
- Oracle Data Integrator (ODI)
- Oracle Database (via JDBC)
- Pivotal Greenplum Database (via JDBC)
- PostgreSQL Database (via JDBC)
- SAP BusinessObjects Designer (Repository)
- SAP BusinessObjects Information Design Tool (IDT) (File)
- SAP BusinessObjects Information Design Tool (IDT) (Repository)
- Sybase Database (via JDBC)
- Teradata Database (via JDBC)

You can now export to the following repositories:

SAP BusinessObjects Information Design Tool (IDT) (File)

The following bridges are removed:

- Open Text eDOCS Data Integration (Hummingbird) Genio
- Database SQL Script Beta bridge (Import bridge)
- RDBMS Database SQL Data Definition Language (DDL) (Export bridge)

The following bridges are renamed:

Old Name	New Name
Apache Hadoop Hive	Apache Hadoop Hive Server
Hadapt Hadoop Hive	Hadapt Hadoop Hive Server
Google Big Query	Google BigQuery
Sybase Database (via JDBC)	Sybase ASE Database (via JDBC)
Microsoft SQL Server Analysis Services 2005 to 2008 (Repository)	Microsoft SQL Server Analysis Services 2005 to 2012 (Repository)
Oracle Data Warehouse Administrative Console (DAC) - Alpha bridge	Oracle Data Warehouse Administrative Console (DAC)
Oracle Data Integrator (ODI) 11g - Beta bridge	Oracle Data Integrator (ODI)
Tableau - Beta bridge	Tableau (File)
Tableau Server - Beta bridge	Tableau Server (Repository)
IBM Cognos Framework Manager for ReportNet	IBM Cognos Framework Manager (FM) for ReportNet
IBM Cognos Framework Manager	IBM Cognos Framework Manager (FM)
SAP BusinessObjects Information Stewart (via MIR XMI)	SAP BusinessObjects Information Steward (via MIR XMI)
Sybase PowerDesigner CDM 8.0 to 15.x	Sybase PowerDesigner CDM 8.0 to 16.x
Sybase PowerDesigner PDM 8.x to 15.x	Sybase PowerDesigner PDM 8.x to 16.x

### Initialize the Mart with a Windows-authenticated User

In the previous releases, only a server user was allowed to initialize a Mart. Now a Windows-authenticated user can also initialize a Mart. Further, a Windows-authenticated user can log in to a Mart as a Windows user.

### To initialize a Mart with a Windows-authenticated user, follow these steps:

- 1. Provide the Active Directory details with user credentials in the Active Directory Details section in the CA ERwin Mart Configuration dialog.
- 2. Open CA ERwin Mart Administrator, enter the user name in the <domain name>/<user name> format. For more information about how to initialize a Mart, see the Workgroup Edition Implementation and Administration Guide.

### To log in as a Windows-authenticated user, follow these steps:

This procedure describes how to enable a Windows-authenticated user log in to a Mart that is already initialized. Use this procedure if the Mart is initialized with either a server user or a Windows-authenticated user.

- 1. Ensure that you have provided the Active Directory details with user credentials in the Active Directory Details section in the CA ERwin Mart Configuration dialog.
- 2. Log in to the Mart as an administrator and add the required user as a Windows user in the Mart. Ensure that the user belongs to the Active Directory that was provided at the time of configuring the Mart.

Now the Windows-authenticated user can log in to CA ERwin Mart Administrator by providing the user name in the <domain name>/<user name> format.

**Note:** A local Windows user who does not belong to a domain or who is not part of an Active Directory cannot log in to the Mart as a Windows user.

# **Use Multiple Threads to Load Models**

When you upgrade Mart models from a previous release to the current release using the Upgrade Mart utility, the time taken to upgrade depends on the number of models. Higher the number of models, longer is the time taken to upgrade. The reason for taking longer time is that the computer on which you run the wizard uses a single thread to process the models. From this release onward, you can configure the Upgrade Mart utility to use multiple threads and process multiple models simultaneously.

**Note:** The computer on which you run the upgrade process must have a minimum of 3 GB free memory to use multiple threads. If not, the message, "You need 3 GB free memory at least to launch multi-threads mode" appears.

The number of threads that you can use depends on the system resources of the computer on which you are running the Upgrade Mart utility. In addition, you can use a maximum of five threads.

#### Follow these steps:

1. From the Windows Start menu, go to All Programs, CA, ERwin, ERwin Data Modeler r9.6, MartUpgrade.

The Mart Upgrade dialog appears.

2. Click Upgrade Options and go to the Threads for Loading field. Enter a number that is less than 5.

### Default: 1

**Note:** The computer on which you run the upgrade process must have a minimum of 3 GB free memory to use multiple threads. If not, the message, "You need 3 GB free memory at least to launch multi-threads mode" appears.

- (Optional) To verify whether multiple threads are running for the upgrade process, open the Windows Task Manager and locate SourceConfigure.exe in the Processes tab. You can view the logs in the Working Directory for details of the models that failed upgrade.
- 4. Click Finish to start the upgrade process.

### **Online Help Enhancement**

From this release onward, online help is literally 'online'. This means, when you press F1, the help file is fetched from a website, as opposed to from the local computer. You can configure whether you want to view the help files from a website, or from your local computer. By default, the help files are fetched from a website.

To configure the application to fetch the help files from a your computer, click Tools, Options and select Use local help.

# Additional Metadata in the Model Template Synchronization Wizard

The Model Template Synchronization Wizard now includes additional metadata for ERwin built-in domains, naming options, and name mapping options. This enhancement lets you select options such as the case and length of logical attributes and Use Glossary options for objects.

# **Teradata Support Enhancement**

CA ERwin Data Modeler is now compatible with Teradata version 15.0. You can create data models and forward engineer the models to this database; and you can reverse engineer this database. However, new objects or properties that are added in this version are not available for selection when you forward engineer. Similarly, the new objects or properties are not *brought over* to the model when you reverse engineer from this version.

# **Chapter 3: System Information**

Review the following system information before installing and using the product.

This section contains the following topics:

Release Numbering Scheme in CA ERwin Data Modeler (see page 44)

Operating System Support (see page 45)

**System Requirements** (see page 46)

Administrative Privileges Required (see page 48)

**Current User Installation** (see page 48)

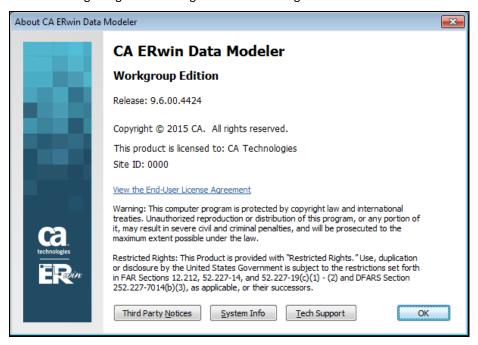
**Supported Target Databases** (see page 49)

CA ERwin Data Modeler Workgroup Edition Requirements (see page 49)

<u>CA ERwin Data Modeler Navigator Edition Requirements</u> (see page 51)

# Release Numbering Scheme in CA ERwin Data Modeler

Effective with r8, the release of this product is displayed in the *About CA ERwin Data Modeler* dialog using the following release numbering scheme:



The first number always indicates the main (GA) release, the second number indicates the service pack number of the main release, the third number indicates the patch number of the main release or service pack (or both), and the fourth number indicates the build number of the product. For example, the preceding illustration indicates that the product level is r8, Build 3685. The release 8.2.9.3685 in this dialog indicates r8 Service Pack 2, Patch Release 9, Build 3685.

If any documentation is updated after a main release, the cover page of the documentation always includes an edition number to indicate the release for which it was updated (see <u>Release Numbers</u> (see page 81) for more information).

# **Operating System Support**

CA ERwin Data Modeler requires that you have the 32-bit version of one of the following operating systems installed:

- Microsoft Windows Vista
- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2003 SP2
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 2012
- Microsoft Windows XP SP3: As Microsoft has dropped support for Windows XP, CA ERwin Data Modeler will no longer be tested for compatibility with that operating environment. Should you encounter any problem(s) using CA ERwin Data Modeler you should first verify that the problem(s) encountered are not related to an unsupported operating environment before reporting the problem(s) to CA.

Note: CA ERwin Data Modeler is a 32-bit application and is fully compatible with 64-bit operating systems, except for the following known issues:

64-bit database drivers and clients will not work with the application. The workaround is to use 32-bit database drivers and clients in the 64-bit operating system environment.

Running the CA ERwin API in a 64-bit environment requires some changes to the workstation registry. For more information about changing the registry, see the CA ERwin Data Modeler WE Implementation and Administration Guide.

### **System Requirements**

You can use any of the following combinations to install CA ERwin Data Modeler, the Mart database, and the MartServer application:

- Install CA ERwin Data Modeler, the Mart database, and the MartServer application on the same computer.
- Install CA ERwin Data Modeler, the Mart database, and the MartServer application on different computers.
- Install CA ERwin Data Modeler and the Mart database on one computer, and install the MartServer application on a different computer.
- Install CA ERwin Data Modeler on one computer, and install the Mart database and the MartServer application on a different computer.

Help ensure that you always install the MartServer application on the Windows operating system.

This topic includes the system requirements for the computers on which you plan to install CA ERwin Data Modeler, the Mart database, and the MartServer application.

The following requirements must be met or exceeded for CA ERwin Data Modeler to install and run correctly:

- Microsoft-based workstation, Intel Dual Core processor or equivalent
- 2 GB available hard drive space
- 2 GB RAM minimum; more is recommended for large models
- DVD-readable device (only if installing from DVD media)

**Note:** The minimum screen resolution supported is  $1024 \times 768$ . If your screen resolution is less than the minimum supported, some portions of the screen will not be visible.

The following requirements must be met or exceeded for the computer on which you install the MartServer application:

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 requirements:

- Microsoft Windows Vista
- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2003 SP2
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 2012
- Microsoft Windows XP SP3: As Microsoft has dropped support for Windows XP, CA ERwin Data Modeler will no longer be tested for compatibility with that operating environment. Should you encounter any problem(s) using CA ERwin Data Modeler you should first verify that the problem(s) encountered are not related to an unsupported operating environment before reporting the problem(s) to CA.

**Note:** CA ERwin Data Modeler is a 32-bit application and is fully compatible with 64-bit operating systems, except for the following known issues:

- 64-bit database drivers and clients will not work with the application. The workaround is to use 32-bit database drivers and clients in the 64-bit operating system environment.
- Running the CA ERwin API in a 64-bit environment requires some changes to the workstation registry. For more information about changing the registry, see the CA ERwin Data Modeler WE Implementation and Administration Guide.

### Database:

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

- Microsoft SQL Server 2005, 2008, 2012, or 2014
- Oracle 10g or 11g/12c
- Sybase Adaptive Server 15.0 through 15.7and SAP Adaptive Server Enterprise 16

The CA ERwin Mart Administrator web client meets the following requirements:

- 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

# **Administrative Privileges Required**

Because the installation process for CA ERwin Data Modeler writes to the registry and system folders, the person installing, upgrading, or removing CA ERwin Data Modeler must have Administrative privileges. If you run an install without Administrative privileges, all files may not be installed or upgraded, and users can encounter problems when running the software.

### **Current User Installation**

In the CA ERwin Data Modeler release 8.0, when you installed CA ERwin Data Modeler, only the user who installed the software could use it. Beginning with r8.2, the license mechanism is changed to *per machine* instead of *per user*. When you install CA ERwin Data Modeler, anyone using the computer can use it. In addition, if a valid license is available, multiple users can use CA ERwin Data Modeler simultaneously on a computer.

Because of this change, the license files are now available in the following locations:

### Windows XP

C:\Documents and Settings\All Users\Application Data\CA\ERwin Data
Modeler\<release number>

### Windows 7

C:\ProgramData\CA\ERwin Data Modeler\<release number> or

C:\Users\ALL Users\Application Data\CA\ERwin Data Modeler\<release number>

# **Supported Target Databases**

The application supports or is compatible with the following target databases:

- DB2 for i (5.x/6.x/7.x)
- DB2/LUW (9.5, 9.7/10.x)
- DB2/zOS (8.1, 9.1/10/11)
- Informix (9.x/10.x/11.x)
- MySql (5.x/6.x)
- ODBC/Generic (2.0, 3.0)
- Oracle (10g, 11g/12c)
- Progress (9.x/10.x)
- SAS (stabilized support)
- SQL Azure (using the SQL Azure Extension)
- SQL Server (2008, 2012/2014)
- Sybase Adaptive Server Enterprise (15), SAP Sybase Adaptive Server Enterprise (16)
- Sybase IQ (12.x)
- Teradata Database (13, 13.10, 14, 14.1, 15.0)

# CA ERwin Data Modeler Workgroup Edition Requirements

If you plan to use CA ERwin Data Modeler Workgroup Edition, review the following requirements to ensure your workgroup environment is set up properly.

### **Administrator Server System Requirements**

The disk space required for the administrative files used to create and manage the database is separate from the disk space required to accommodate models on the server where the database is located. Greater CPU speed, and more RAM and disk space result in better performance.

### **DBMS** Requirements

Before you install CA ERwin Data Modeler to use in a workgroup environment, ensure that you are using a supported DBMS as your host server. This release supports the following host DBMSs:

- Oracle 10g and 11g/12c
- Microsoft SQL Server 2005, 2008, 2012, and 2014
- Sybase Adaptive Server Enterprise 15.0 through 15.7 and SAP Adaptive Server Enterprise 16

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 2005, 2008, 2012, and 2014 you must be the database owner (dbo).

#### Notes:

- The dbo is no longer required to have the sysadmin role.
- The SQL Server 2005, 2008, 2012, and 2014 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.

Before you install Mart on the server, verify that the DBMS environment is prepared for the installation, and that the server system requirements meet at least the minimum specifications. At least one user with administrative privileges is available on the DBMS.

**Note:** The dbo role for Microsoft SQL Server or Sybase is necessary only during the installation or upgrade. You can strip the installer of the dbo role after the installation or upgrade is complete.

For more information about preparing the DBMS environment, see the CA ERwin Data Modeler Workgroup Edition *Implementation Guide*.

### **Client Workstation Requirements**

You must install CA ERwin Data Modeler on each client workstation that needs to access models in the mart, and each client workstation must have access to the DBMS on which the mart is located. It is recommended that client workstations have at least 2 GB of RAM.

You can install CA ERwin Data Modeler Navigator Edition as a client for CA ERwin Data Modeler Workgroup Edition.

**Note:** In a workgroup environment, CA ERwin Data Modeler users can only connect to a mart initialized with the same serial number identifier that the user has licensed on their local machine.

# **CA ERwin Data Modeler Navigator Edition Requirements**

If you plan to use CA ERwin Data Modeler Navigator Edition, review the following requirements to ensure your environment is set up properly.

### **Support for CA ERwin Data Modeler Workgroup Edition**

CA ERwin Data Modeler Navigator Edition is enabled for use with a mart-enabled version of CA ERwin Data Modeler (Workgroup Edition). Consult with your mart administrator for a GUEST user permission to access models in CA ERwin Data Modeler Workgroup Edition.

You must use a supported DBMS. This release supports the following host DBMSs:

- Oracle 10g and 11g/12c
- Microsoft SQL Server 2005, 2008, 2012, and 2014
- Sybase Adaptive Server Enterprise 15.0 through 15.7 and SAP Adaptive Server Enterprise 16

# Chapter 4: Installation Considerations for CA ERwin Data Modeler Workgroup Edition

Review the following installation considerations before installing the product. For more information about the installation process for a workgroup environment, see the CA ERwin Data Modeler Workgroup Edition *Implementation Guide*.

This section contains the following topics:

<u>CA ERwin Data Modeler and Mart Release Numbers</u> (see page 53)

<u>Microsoft SQL Server 2005 Permissions</u> (see page 53)

<u>Specify Use of Foreign Characters With Microsoft SQL Server 2005</u> (see page 54)

Specify Use of Foreign Characters With Microsoft SQL Server 2000 (see page 54)

### **CA ERwin Data Modeler and Mart Release Numbers**

You must install a Mart or must upgrade to a Mart that is of the same release number as CA ERwin DM. For example, install or upgrade to an r9.5.0 Mart when you install or upgrade to CA ERwin DM r9.5.0. Using different versions of CA ERwin DM and Mart may lead to unexpected results including corruption of the Mart database or the models. Therefore, we recommend that you install the same release of the Mart and CA ERwin DM.

### Microsoft SQL Server 2005 Permissions

For SQL Server 2000, you only need to have *public* assigned to save to the mart. However, when the repository is on a SQL Server 2005 instance, you need to have the *bulkadmin* permission designated as well. The ability to do bulk inserts (which was permitted by public, previously) is no longer part of the public permission. You must explicitly define this permission or when you attempt to save a model to a new mart instance created using a SQL Server 2005 database, an error "You do not have permission to use the bulk load statement." is returned.

# **Specify Use of Foreign Characters With Microsoft SQL Server 2005**

For Microsoft SQL Server 2005 and 2008, 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.

# **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.

# Chapter 5: Installation Considerations for CA ERwin Data Modeler Navigator Edition

Review the following installation considerations before installing the product. See the CA ERwin Data Modeler Navigator Edition *User Guide* for more information about the installation process.

### **Silent Install**

This product does not provide an unattended or silent install.

# Chapter 6: General Considerations for Using CA ERwin Data Modeler Workgroup Edition

The following sections contain general information you should know before using CA ERwin Data Modeler in a workgroup environment.

This section contains the following topics:

Model Conversion and Complete Compare Differences (see page 57)

Model Display in the Difference Reconciliation Dialog (see page 57)

Uninstalling CA ERwin Data Modeler Workgroup Edition (see page 58)

# **Model Conversion and Complete Compare Differences**

Unlike previous conversions to new releases, starting with r8, it is no longer valid to do a round-trip through another version of the product and use Complete Compare to compare the differences between the models. Due to the new changes and features in r8, the models will be different; use reports to detect and work with model differences.

### Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

**Note:** In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

# **Uninstalling CA ERwin Data Modeler Workgroup Edition**

You can use the Windows uninstall utility to uninstall CA ERwin Data Modeler. However, when you uninstall CA ERwin Data Modeler in a workgroup environment, the mart database remains intact. To remove the database from your computer, delete the mart database first, and then uninstall CA ERwin Data Modeler.

# Chapter 7: General Considerations for Using CA ERwin Data Modeler Navigator Edition

The following sections contain general information you should know before using CA ERwin Data Modeler Navigator Edition.

# Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

**Note:** In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

### **Help Files**

The context sensitive online help in CA ERwin Data Modeler Navigator Edition is identical to the online help in CA ERwin Data Modeler. This means that the online help may discuss capabilities such as saving a model that is not possible in the CA ERwin Data Modeler Navigator Edition product.

# **Chapter 8: Known Issues**

This section contains the known issues that you should review before using the application.

This section contains the following topics:

SQL 1105 Error (see page 61)

API Functions not Working for Sybase Mart (see page 62)

Model and Version Name Limit on Oracle (see page 62)

CA ERwin Data Modeler and Crystal Reports Shell Installation (see page 62)

.Net Requirement (see page 63)

Upgrading CA ERwin Data Modeler on Windows Server 2003 (see page 63)

Mart Reports Work with Crystal Reports Developer Edition (see page 63)

Statistics not Reverse Engineered from Teradata (see page 63)

Report on Glossary Words Includes Extra Characters (see page 63)

<u>Updating Profile Description from Notepad</u> (see page 63)

<u>Unwanted Result Rows in Report</u> (see page 64)

DSM Logical to SQL Server 2012 (see page 64)

Report Designer Functions for a Large Model (see page 64)

Subject Area Picture Report not Generated (see page 64)

Incorrect UDP in UDP Report (see page 65)

Invalid Column Node for DB2 LUW Model in View Report (see page 65)

Mart Server Name in Korean (see page 65)

Generating Reports with Korean Characters in User Name (see page 65)

<u>Error While Creating a Profie Using Special Characters in Mart Administrator</u> (see page 66)

Log Files not Created if Mart Server Run as Windows Service (see page 66)

Rollup Sub Tables Option Not Working for PDF (see page 66)

Physical Names Not Calculated in Mart Model Reports (see page 67)

Index Created for Columns Header Containing Name (see page 67)

Report Result Total Row Count Mismatch (see page 67)

### **SQL 1105 Error**

When you are upgrading to the current release on Microsoft SQL Server in a workgroup environment, during the mart conversion process, you may get the message "Sql 1105" if you run out of free hard disk space during the process.

Stop the conversion process, and either free or add hard disk space. Delete the already created r9 tables and then re-attempt the conversion.

### **API Functions not Working for Sybase Mart**

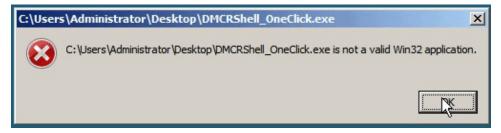
When Sybase is used as the Mart database and the Mart is accessed through API, the LocateMartDirectory and LocateMartDirectoryUnit functions do not work properly.

### **Model and Version Name Limit on Oracle**

In a workgroup environment, when you save a model to an Oracle mart, the model name must be less than 130 characters. If you exceed the 130 character limit, the model will not save. Because the version name is derived from the model name (for example, <ModelName>:<version number> by <UserName> on <VersionCreateDate>), you should use model names considerably less than 130 characters in length to avoid problems with saving a model version.

# **CA ERwin Data Modeler and Crystal Reports Shell Installation**

If the operating system of the machine on which you want to install CA ERwin Data Modeler version 9.0 through 9.6 and Crystal Reports is either Microsoft Windows Server 2008 or Microsoft Windows Server 2008 SP1, you may encounter the following error:



If you receive this error, the installation will not continue. You can perform one of the following to resolve this problem:

- Upgrade to Microsoft Windows Server 2008 SP2.
- Install CA ERwin Data Modeler version 9.0 through 9.6 and Crystal Reports Shell separately by downloading each application's individual installation program.
- Install CA ERwin Data Modeler version 9.0 through 9.6 and then run the Crystal Reports installation from the install wizard.

### .Net Requirement

The current release requires .NET 3.5 to be installed on your system. If you do not have it installed, the CA ERwin Data Modeler installation will attempt to install it.

# **Upgrading CA ERwin Data Modeler on Windows Server** 2003

While upgrading the current release of the product on the Windows Server 2003 platform, you may receive a digital signature policy error. This is an operating system error that can be resolved by applying the update for Windows Server 2003 (KB925336) from Microsoft.

# Mart Reports Work with Crystal Reports Developer Edition

You can generate Mart reports only if you have installed Crystal Reports Developer Edition on the computer from which you want to generate the reports.

### Statistics not Reverse Engineered from Teradata

Suppose a Teradata 14 or 14.1 database includes a table with the COLLECT STATISTICS option and the database is reverse engineered. The statistics are not populated in the reverse engineered model.

# Report on Glossary Words Includes Extra Characters

Suppose a report is generated on a model that includes an NSM object. If the glossary words are included in the report, extra characters appear for all glossary words.

# **Updating Profile Description from Notepad**

In the CA ERwin Mart Administrator Profile Management page, suppose the description is copied and pasted from a Notepad file and is saved. The updated description displays syntax (\n) as well.

### **Unwanted Result Rows in Report**

In a Subject Area report, suppose the Subject Area name is included in the report and the diagram name is specified at run time. The report lists all Subject Areas instead of the Subject Area that corresponds to the selected diagram.

# **DSM Logical to SQL Server 2012**

Suppose a Logical/Physical SQL Server 2012 model is attached with a DSM object that is active. Suppose a new Logical Definition for the Number domain is created and mapped to SQL Server 2012 and Date is selected for domain. If the newly created Logical Definition is applied to a column in a model, and if the physical view is seen, the data type is still displayed as Number.

### **Report Designer Functions for a Large Model**

Generating reports is a memory intensive process and when the data set is very large, the process uses the maximum memory. When the maximum memory is consumed, a warning message informs you that the application might stop responding if you continue processing the report. If you choose to continue to run the report and the memory is completely used, the program might stop responding. If you choose not to continue, the report execution is terminated.

To resolve this problem, you can generate multiple small reports with fewer properties.

### **Subject Area Picture Report not Generated**

There is a limitation on the size of a diagram report that you can generate--the maximum size is 1900 x 1440. Suppose you create a Subject Area report for a large model using Report Designer, and export the report to HTML. If you click the diagram in the HTML report, it does not open.

To resolve this problem, reduce the zoom level of the model to reduce the picture size and then generate the report.

### **Incorrect UDP in UDP Report**

Suppose you want to generate a report on the UDPs using Report Designer. Suppose you have already created a UDP report template and generated the report for a different model. If you close the model, open another model, and use the same template to generate the UDP report, then the report includes the UDP name from the previous model. In the result grid, the column heading shows the UDP name of the previous model, while the UDP value is of the current model. In addition, the properties of the Report Explorer also shows the UDP name of the previous model. However, the Report Properties dialog shows the correct UDP name.

# Invalid Column Node for DB2 LUW Model in View Report

In a DB2 LUW model, suppose a nickname table and a view exist and a Column Option level UDP is added to a column. If a View report is generated using the Report Designer, the Column Option node is available for View. If a user selects the Column Option node, the UDP is not included in the report for the selected column.

### Mart Server Name in Korean

Suppose that you provide the Mart Server machine name in the Korean language (Korean characters) and configure the Mart Server. If you try to connect to the Mart from CA ERwin DM and you provide the Korean language name for Server Name, the following message appears:

The client application version is different from the Mart Server version. Install the same version of the application and the Mart Server and then try.

If you try to log in to CA ERwin Mart Administrator by using the Korean language name, it does not display.

# **Generating Reports with Korean Characters in User Name**

Suppose that you have initialized a Mart with a user name that has Korean characters. You connect to the Mart with this user name and generate a report on Mart users (click Tools, Mart Reports, Global Reports, Users). The report is not generated and the message, *You can not connect. Incorrect log on parameters* is displayed. (The actual message is displayed in the Korean language. The message provided here is the translated message.)

# Error While Creating a Profie Using Special Characters in Mart Administrator

When you create a profile in Mart Administrator using special characters such as  $!@\#$\%^*()_+={}:"-<>?|/.,;'{}]$ , and space, you will get one of the following error messages repeatedly and the Mart Administrator hangs.

Illegal Group

or

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

or

String index out of Range:1

To avoid this error, create a profile without using the special characters. When the Mart Administrator hangs, refresh the Mart Administrator.

# Log Files not Created if Mart Server Run as Windows Service

If you are running Mart Server as a Windows service, log files are not created in the corresponding user folder. To resolve this problem, modify the folder path for log files. Add the absolute path, for example, "C:/Program Files/CA/ERwin Mart Server r9/Tomcat/logs/", in the log4j.xml and logging.properties files. Ensure that the system user has Write permission for this folder.

Typically, the log4j.xml file is available in the following folder:

Tomcat\webapps\MartServer\WEB-INF

and the logging.properties file is available in the following folder:

Tomcat\conf

### **Rollup Sub Tables Option Not Working for PDF**

Suppose for a Subject Area Picture Diagram report, the *Roll Up Subtables* option is selected and the report is exported to PDF. When an object is clicked on the Picture Diagram and the details of the object are displayed, the details are not rolled up.

# **Physical Names Not Calculated in Mart Model Reports**

Suppose that a Mart model includes naming standards, data type standards, or macros for object names. If a report is generated on the physical names of objects using Report Designer, the report does not include the calculated (or expanded) physical names. Only the following basic macros are supported:

- %EntityName()
- %DomainName
- %AttName
- %RelName
- %KeyName

# **Index Created for Columns Header Containing Name**

When a report is exported to PDF, indexes are generated only for those nodes that include the word 'Name' in the name of the node. For example, if you have two nodes, Schema Name and Table, only Schema Name is included in the index.

### **Report Result Total Row Count Mismatch**

Suppose that a Mart report includes a large number of rows and the report spans multiple pages. If the report is exported to HTML, 'Total <page count>' is displayed at the end of every subsection, which gives the count of the corresponding subsection. The total count of the report is different and it is not displayed in the HTML report.

# **Chapter 9: Fixed Issues**

This section includes the list of issues that is fixed.

This section contains the following topics:

<u>Issues Fixed in this Release</u> (see page 70)

### Issues Fixed in this Release

The following issues are fixed in this release:

### Problem No.: 11678 Issue No.: 21799070-1-Problem Creating Views

In CA ERwin Data Modeler release r9.5, when a DB2 for iSeries v5.x/6.x/7.x model was forward engineered, the schema did not include the related column name in the syntax for CREATE VIEW.

#### Problem No.: 12821 Issue No.: 21761196-1 - Forward Template Error

In CA ERwin Data Modeler Release r9.5.01, the button names are truncated on the Forward Engineer Schema Generation dialog on Windows 8 Korean language operating system.

### Problem No.: 13029 Issue No.: 21846962-1 - Harden Physical Name Error

In CA ERwin Data Modeler Release r9.0 through r 9.5.2, when a self-referencing relationship was role-named in the Logical view of a Logical/Physical model, and the Physical name was hardened, the Physical view still showed the foreign key name.

### Problem No.: 1332 Issue No.: 21703337-1- Martupgrade Utility - Stopped

When a specific Mart was being upgraded from Release r8.2 to r9.5 using the Mart Upgrade utility, the users and profiles were upgraded, but not the models. The utility stopped working as soon as the models were selected. The hardware details are as follows:

- Mart release r8.2 and r9.5 were using Oracle 11g database Linux operating system.
- Mart Server was on Windows 2008.
- CA ERwin Data Modeler Release r9.5 and the Mart Upgrade utility was on Window 7 operating system.

#### Problem No.: 12868 Issue No.: 21874953-1- Unchecking Delimit Identifiers

#### Issue No.: 21798744-1: DELIMIT IDENTIFIERS NOT FUNCTN

In CA ERwin Data Modeler Release r9.5.2, while forward engineering a SQL Server 2012 model, if the Delimit Identifiers check box was cleared, the generated script still included brackets for identifiers. It was noticed that the Using Brackets option was selected even when the Delimit Identifiers option was cleared.

### Problem No.: 13027 Issue No.: 21873647-1- Oracle 11 Create Index Wo Drop

In an Oracle 11g model in CA ERwin Data Modeler Release r9.5.2, when an existing IE index was changed and the Alter script generated, there was no DROP INDEX statement before the CREATE INDEX statement.

#### Problem No.: 13049 Issue No.: 21913039-1- Wrong Connection Help File

In CA ERwin Data Modeler Release r9.5.2, the wrong help file appeared when the Database Connection option was clicked on the Actions menu. The help text described connecting to the Mart, instead of describing connecting to a database.

#### Problem No.: 13016 Issue No.: 21893401-1:MODEL CRASHES WHILE UPGRADING

When a specific model was opened in CA ERwin Data Modeler Release R9.5, it crashed and displayed a message to contact CA Technical Support.

#### Problem No.: 13019 Issue No.: 21883680-1:RUNTIME ERR OPEN MDL AFTER SAV

In a specific Oracle 10g model in CA ERwin Data Modeler Release R9.5, when the Subject Area was switched, a new table was added, and the model was saved, the model could not be opened again. The 'Runtime Error' message was displayed.

#### Problem No.: 13039 Issue No.: 21909226-1:DS COMMENT CARRIAGE RETURN

In CA ERwin Data Modeler Release r9.5.2, when the Data Movement check box was selected for a model, comments could not be entered properly in the DS Comments dialog, which is part of the Column Editor. When Enter was pressed in the first line of the comment, the Column Editor closed.

# Problem No.: 12456 Issue No.: 21444712-1: TRY TO OPEN A R7.2.9 MODEL IN R8.2.3, ERWIN CRASH

When a specific model of Mart Release r7.2.9 was upgraded to Mart Release r8.2.3 and the model was opened in CA ERwin Data Modeler Release r8.2.3, the application crashed.

### Problem No.: 12995 Issue No.: 21870698-1: DERIVED ENTITY HAS WRONG NAME

In a logical only model in CA ERwin Data Modeler Releases r9.2, r9.5, and r9.5.2, suppose a many-to-many relationship was created and transformed, and the associate entity was renamed. If a physical only model was derived from this model, the new name of the associate entity was not retained.

#### Problem No.: 12985 Issue No.: 21868566-1: DATE TRUNCATED ON PRINT DIAG

In CA ERwin Data Modeler Release r9.5.2, when the Region and Language of the operating system was changed to United Kingdom and English, the year portion of the date was truncated on the printed diagrams. The truncation appeared under Margins in the Page Setup dialog.

Problem No.: 12939 Issue No.: 21843223-1: REVERSE ENGINEER MYSQL CRASH

In CA ERwin Data Modeler Release r9.5, when a script was used to reverse engineer from a specific MySQL database, the application crashed without any error message. When an edited script was run, it displayed parsing errors.

#### Problem No.: 13018 Issue No.: 21867692-1- Connect To Oracle Failed

In CA ERwin Data Modeler Release r9.5.2, when connecting to a specific Oracle 11g Mart, the error message, "Unhandled exception has occurred in your application. If you click continue, the application will ignore this error and attempt to continue. If you click Quit, the application will close immediately. Object reference not set to an instance of an object."

#### Problem No.: 12994 Issue No.: 21867021-1: ERWIN CRASHES AT SUB-PARTITION

In CA ERwin Data Modeler Release r9.5 and r9.5.2, when a partition type was changed on the sub-partition Tab, the application crashed.

#### Problem No.: 12847 Issue No.: 21717539-1: REVERSE ENGINEER FAILS ON ORAC

In CA ERwin Data Modeler Release r9.5, when a specific Oracle 11g database was reverse engineered, the application crashed when Table, Synonym was selected in the option set. However, the database was reverse engineered without any problems when synonyms was not selected.

#### Problem No.: 12531 Issue No.: 21794739-1: ERWIN CRASH UPGRADE MDL TO 9.5

A specific CA ERwin Data Modeler Release r7.3.11 model could not be opened in r9.5. The user tried to open the model in multiple ways, but the application crashed every time.

### Problem No.: 12935 Issue No.: 21844800-1: ALTER MISSING DROP IE INDEX

In an Oracle 10g/11g model in CA ERwin Data Modeler Release r8.2.08, suppose a table had an IE index, a PK index, and an AK index, and a few columns. If the data type of a column was changed and the ALTER script was generated, the script did not include DROP IE Index statements, but it included CREATE IE Index statements.

#### Problem No.: 12541 Issue No.: 21511492-1: DS COMMENTS LOST AFTER PASTE

In CA ERwin Data Modeler Release r9.0, suppose a comment was copied and pasted to multiple columns in the DS Comment tab in the Column Editor. While pasting comments, if the Forward and Back buttons were used to navigate between the columns, the comment entered in the previous column was lost when the Back button was clicked.

### Problem No.: 12949 Issue No.: 21849876-1: Dangling Rel. Line

Dangling relationship lines are displayed in the Subject Area model view.

#### Problem No.: 12963 Issue No.: 21843606-1: FE SP\_ADDEXTENDEDPROPERTY

When a specific SQL Server 2008/2012 model was upgraded from CA ERwin Data Modeler Release r7.3 to r9.5.2 and the model was forward engineered, the following error was displayed:

```
EXEC sp_addextendedproperty

@name = 'MS_Description', @value = 'Stores data about a patient.',

@level0type = 'SCHEMA', @level0name = 'dbo',

@level1type = 'TABLE', @level1name = 'Patient',

@level2type = 'INDEX' -- this parameter should not be generated for a table go

EXEC sp_addextendedproperty

@name = 'MS_Description', @value = 'Defines the users in Five9 that are allowed access to this database.',

@level0type = 'SCHEMA', @level0name = 'dbo',

@level1type = 'TABLE', @level1name = 'Five9User',

@level2type = 'CONSTRAINT' -- this parameter should not be generated for a table

Go
```

This error was not displayed when the model was forward engineered in CA ERwin Data Modeler Release r7.3.

#### Problem No.: 12850 Issue No.: 21795357-1: FE-UDB PK DO NOT GENERATE

In a DB2 LUW model in CA ERwin Data Modeler Release r8.2.08, despite setting the Primary Key to Not Generate, the primary key constraint was generated during forward engineering.

#### Problem No.: 12968 Issue No.: 21864635-1: Add Dbo In The List Of Owners

In CA ERwin Data Modeler Release r9.5.2, dbo was missing in the list of owners in the SQL Server Schema Editor.

#### Problem No.: 11796 Issue No.: 21865311-1: Fe: Check Model Crash ERwin

In CA ERwin Data Modeler Release r9.5, when two specific Oracle 10g models were forward engineered, the process did not complete and the application stopped responding.

Problem No.: 12956 Issue No.: 21854890-1: TLX QUESTIONS ON WRITEFILE

In CA ERwin Data Modeler Release r9.5, documentation was missing for the new macro named WriteFile.

#### Problem No.: 12952 Issue No.: 21851810-1: CAN'T UPGRADE A BIG MODEL

When a specific model was being upgraded from CA ERwin Data Modeler Release r7 to r9.5 the error message, "Unexpected condition. Please contact CA Support." appeared.

### Problem No.: 12964 Issue No.: 21572494-1: FAIL TO DRIVE PHYSICAL MODEL TO L/P MODEL

In CA ERwin Data Modeler Release r9.2, when a specific Physical Only model was derived to a Logical/Physical model, the GDM-23 error appeared and no objects were added to the target model.

#### Problem No.: 13091 Issue No.: 21816638-1: REVERSE ENGINEER DB2 ZLINUX

In CA ERwin Data Modeler Release r8.0, when a DB1/LUW 9.7 model was forward engineered, a column had the TIMESTAMP data type. However, when the database was reverse engineered, the data type showed as TIMESTAMP (6). Further, when the two models were compared using Complete Compare, the TIMESTAMP data type was shown as a difference.

#### Problem No.: 12840 Issue No.: 21768224-1: Query History List Array

In CA ERwin Data Modeler Release r9.5, the customer wanted a query that returned ENTITY event history, on the same lines as it is displayed in the History tab of the Entity editor.

#### Problem No.: 12945 Issue No.: 21852001-1: MAXIMUM LENGTH FOR VIEW NAMES

In CA ERwin Data Modeler Release r9.5.02, when the maximum length for View names was set to 18 characters for a DB2 z/OS version 8.1 model, the names that were more than 18 characters were not truncated.

#### Problem No.: 12801 Issue No.: 21750892-1- Upgrade Loses Partitioning Key

When a specific DB2 LUW model was upgraded from CA ERwin Data Modeler Release r7 to either r8.2.8 or r9.5.1, the Partitioning keys were missing from all the tables.

#### Problem No.: 12571 Issue No.: 21818942-1: FE TABLE IN NON-ALPHABETICAL ORDER

When a model was forward engineered in CA ERwin Data Modeler Release r7 and r8, the table names were displayed in alphabetical order in the script. However, in Release r9, the tables were not in alphabetical order. The customer wanted to know how to get the tables in alphabetical order in Release r9.

Problem No.: 12920 Issue No.: 21813889-1: BULK EDITOR-CSV IMPORT WIPES OUT DATA SOURCE

In CA ERwin Data Modeler Release r9.5, suppose the Bulk Editor was used to display the column name and data source and the details were exported to a CSV file. If some of the data types were modified in the CSV file and the file was imported, the data sources were not available.

## Problem No.: 1324 Issue No.: 21801448-1: MDLMT CAN'T INITIALIZE MART/ERROR: MUST 32 MB OR MORE DB

In CA ERwin Data Modeler Release r9.5.02, a SQL Server 2008 database was created for a Mart on Windows Server 2008 R2 operating system. The Mart could not be initialized, as it failed with the error message, "Must select a 32 MB or greater size database in order to create a mart."

## Problem No.: 12876 Issue No.: 21793864-1: IN CC MISSING PERIOD WHEN CREATE WHENUPDATED SYNTAX MYSQL

When a specific existing MYSQL model (right model) was compared with a model reverse engineered from a database (left model) and some changes were made to the right model and the ALTER script was generated, the script didn't include a period between the owner name and the table name.

## Problem No.: 1322 Issue No.: 21781921-1: MDLMT UNABLE CHANGE PASSWORD WHNE LOGIN MART BY UPPER CASE USER ID

In CA ERwin Data Modeler Release r9.5.1, when a user logged in to a Mart using the user name in upper case letters, the user could not change the password.

#### Problem No.: 12362 Issue No.: 21837468-1: Query Tool Export Excel Size

In CA ERwin Data Modeler Release r9.0, when the definitions in an Oracle 10g model were exported to CSV, the size was limited to just over 4000 characters. The remaining portion of the definition was truncated.

#### Problem No.: 12825 Issue No.: 21775543-1: US BANK - Error Message

In CA ERwin Data Modeler Releases r8.2.8 and r9.5, when a specific model was upgraded from Release r7.3 and a data type was changed in the physical side of the model, the error message, "Unexpected and serious condition occurred in the application" appeared repeatedly.

#### Problem No.: 10470 Issue No.: 18593841-1: Table Clustered Index Append

In a DB2 LUW model in CA ERwin Data Modeler Release r7.3.6, a clustered index could be created on a table that was defined as Appendable.

#### Problem No.: 11609 Issue No.: 21783866-1-Print To Pdf Not Printing Head

In CA ERwin Data Modeler Release r8.2.08, when a model from the Model Manager was printed, the page header printed extra characters as given below:

FINMET Data Mart Netezza?lid={8C203745-69B6-4C6E-B32E-B54B2958CA6A}+00000000 mid={E09C8306-311E-4BB3-A53D-E119033265D5}+00000000 ver=27"

#### Problem No.: 12307 Issue No.: 21714234-1: When Creating The Modules

In CA ERwin Data Modeler Releases r9.5, when a model was created from a specific template, the attributes of the templates were not copied to the model. This happened especially when the name macro for a user defined domain was changed in the template. The name of the domain reverted to the original name in the new model.

#### Problem No.: 12884 Issue No.: 21809486-1: NO GENERATING IDENTITY PROPERY

In CA ERwin Data Modeler Release r9.5, for a SQL Server 2008 model, if the Starting Value and Increment By values were not filled, the column was not created as an Identity column. However, this was possible in SQL Server 2012 with Release r9.5.2.

#### Problem No.: 12796 Issue No.: 21750582-1- Data Source Import Crash

In an Oracle 10g model in CA ERwin Data Modeler Release r9.5, data source could not be imported from one model to another. The application stopped responding.

#### Problem No.: 13092 Issue No.: 21619369-1: Stored Procs Not Generating

When a model was upgraded from CA ERwin Data Modeler Release r7.3.8 to r9.0 and forward engineered, a stored procedure was generated only for the first table, although it was attached to multiple tables. When the user upgraded to CA ERwin Data Modeler Release r9.5, and tried the same model, the problem recurred.

#### Problem No.: 12642 Issue No.: 21590427-1: Fe:use Old Validtn/defalt Name

In CA ERwin Data Modeler Release r8.2.08, for an Oracle 10g model, when an attribute was copied from another entity/attribute, the existing default and check constraints were copied over as it is.

#### Problem No.: 12475 Issue No.: 21468376-1: Cc Option Not Saved

In CA ERwin Data Modeler Release r9.5.0, when Complete Compare (CC) was performed repeatedly, all the selected options were brought over from one CC session to the next, except for Include Generated Object Only. Although this option was not selected originally, it was selected for all new CC sessions.

#### Problem No.: 13093 Issue No.: 21633543-1: Refresh After Change Of Dts

In CA ERwin Data Modeler Release r9.0, if a data type standard was changed from active to inactive, the physical model did not refresh to show it. However, if the data type standard was changed from inactive to active, the model refreshed immediately.

Problem No.: 12560 Issue No.: 21517625-1- Reverse Engineer Owner Problem

In CA ERwin Data Modeler Release r8.2.07, while reverse engineering an Oracle 10g/11g model, if a Tablespace and the owner were specified, the owner was ignored and only the tables owned by the current user were included.

#### Problem No.: 12310 Issue No.: 21655903-1: PHYSICAL DICTIONARY DEFECT

In CA ERwin Data Modeler Release r9.5, when the Physical Dictionary report was generated, the comments added to attributes were not included.

## Problem No.: 12819 Issue No.: 21458716-1: MACROS %FOREACHLOGENTITY() RETURN PHYSICAL ONLY TABLE

In CA ERwin Data Modeler Release r9.0, the macros %ForEachLogEntity(), %ForEachEntity() and %ForEachTable() ignore the Logical only (for entities) and Physical Only (for tables) settings. %ForEachLogEntity() returns physical only tables as well, and, %ForEachTable() returns logical only entities as well.

## Problem No: 12615 Issue No.: 21546550-1: CAN'T LOGIN FROM ERWIN TO MART BY USING LDAP USERS

In CA ERwin Data Modeler Release r9.2, if an Active Directory member was added as a Mart user, but the user was not added as a named Windows user, then when the user tried to log in to Mart, the error message, "Invalid user ID or password. Please try to log in again" appeared.

#### Problem No.: 1312 Issue No.: 21430896-1: MDLMT MART REPORT DB LOGIN FAILED

In CA ERwin Data Modeler Release r8.2.07, r9.0, and r9.1, when a Windows-authenticated user logged in to a SQL Server 2008 Mart and tried to create reports such as entities.rpt, datatype nulls.rpt, the log in dialog did not have the Windows authentication option. If the user typed the credentials manually, the error message, "Login failed, please try again" appeared. This error started appearing after the Mart was moved to a new database.

## Problem No.: 12566 Issue No.: 21543577-1: PSEUDO TABLE USER-DEFINED SQL MARKED TO GENERATE

In CA ERwin Data Modeler Release r9.2, when reversing engineering a SQL Server 2012 script or database, for views with User-defined SQL that referenced another database (objects such as synonyms, stored procedures, and functions) the pseudo table that the application created were marked to generate in the Table Editor.

## Problem No.: 12535 Issue No.: 21517932-1: FE SS 2012 GET TRIGGER ERROR INCORRECT SYNTAX NEAR '@ERRNO'

In CA ERwin Data Modeler Release r9.2, when a specific SQL Server 2012 model was forward engineered, the error, "[Microsoft][SQL Server Native Client 11.0][SQL Server]Incorrect syntax near '@errno'. Execution Failed!" appeared.

#### Problem No.: 12432 Issue No.: 21403615-1: Oracle Re Failure 9.2 (part2)

In CA ERwin Data Modeler Release r9.2, when a specific Oracle 11g database was reverse engineered, the process was terminated abruptly. The SQL trace file did not include any error. However, the same database could be reverse engineered to earlier versions of the application properly.

#### Problem No.: Issue No.: 21892904-1: RPT DESGNR DIAGRAM ALPHA SORT

In CA ERwin Data Modeler Release r9.5, when a Subject Area report was generated using the Report Designer, the Subject Areas could not be sorted alphabetically.

#### Problem No.: Issue No.: 21799178-1: SERVER USER

In CA ERwin Data Modeler Release r9.5, when a Subject Area report was generated and exported to PDF, the order of the diagrams in the PDF did not match the order in the application.

#### Problem No.: 13118 Issue No.: 21981226-1: CANNOT RENAME MQT INDEXES

In a DB2 LUW version 9.7 model in CA ERwin Data Modeler Release r8.2.08, suppose that a macro was used to name the table indexes. The application populated the names of materialized query table indexes automatically. It did not let the use change the names of materialized query table indexes.

## **Chapter 10: Documentation**

This section contains information about current product documentation.

This section contains the following topics:

<u>Documentation Formats and Deliverables</u> (see page 79) <u>Technical Documentation Series</u> (see page 81) <u>Release Numbers</u> (see page 81)

#### **Documentation Formats and Deliverables**

The Bookshelf provided with CA ERwin Data Modeler, which is installed by default, includes documentation for CA ERwin Data Modeler Navigator Edition. You can open the Bookshelf in a web browser from the CA ERwin Data Modeler Start menu.

The documentation provided on the Bookshelf includes the following guides:

Deliverable Name	Format Provided		
Add-In Manager Online Help	HTML		
API Reference Guide	HTML and PDF		
Data Modeling Overview Guide	HTML and PDF		
(This guide was earlier known as Methods Guide.)			
Editing Forward Engineering Templates	HTML and PDF		
Implementation Guide	HTML and PDF		
Implementation and Administration Guide (Workgroup Edition)	HTML and PDF		
(The individual Administration and Implementation guides are merged to create one guideImplementation and Administration Guide.)			
Installation Guide	HTML and PDF		
Metamodel Reference	HTML		
CA ERwin Data Modeler Online Help	HTML		
CA ERwin Mart Administrator Online Help	HTML		
ERwin Release Notes	HTML and PDF		
Mart Server Release Notes			

Deliverable Name	Format Provided	
Template Language and Macro Reference	PDF	
Upgrade Wizard Help	HTML	
User Guide (Navigator Edition)	HTML and PDF	

**Note:** For more information about the CA ERwin Data Modeler editions, see <u>CA ERwin Data Modeler Editions</u> (see page 11).

The bookshelf includes a new section named Roles. This section includes documentation relevant to the tasks performed by each role in HTML format. The Roles section includes the following documentation:

Deliverable Name
Applying a theme to a model
Changing the description of multiple objects
Applying data type standards
Applying naming standards
Creating a model
Generating or viewing reports
Compare models using Complete Compare
Create a Database Schema
How to Reverse Engineer a Database or a Script
How to Set Up CA ERwin Web Portal and Publish Models
Upgrading Mart
Setting up concurrent licenses
Using a local license
Using concurrent licenses
Adding users
Installing and configuring Mart

#### **Technical Documentation Series**

The Template Language and Macro Reference (*Template Lang and Macro Ref.PDF*) technical document is provided on the Bookshelf and can also be accessed from the Tech Docs menu item on the CA ERwin Data Modeler Start menu.

The CA ERwin Data Modeler metamodel reference and overview technical documents are provided on the CA ERwin Data Modeler Metamodel Reference Bookshelf. This Bookshelf is accessible from the Tech Docs menu item on the CA ERwin Data Modeler Start menu. It contains an overview of the metamodel (*ERwin Metamodel Overview.PDF*) and the metamodel object and property descriptions are provided in HTML format (*Metamodel Reference*).

To view PDF files, you must download and install the Adobe Reader from the Adobe website if it is not already installed on your computer.

#### **Release Numbers**

The release number on the title page of a document might not correspond to the current product release number; however, all documentation delivered with the product, regardless of release number on the title page, will support your use of the current product release. The release number changes only when a significant portion of a document changes to support a new or updated product release. For example, a document for r8 may still be valid for r8.1. Documentation bookshelves always reflect the current product release number.

Occasionally, we must update documentation outside of a new or updated release. To indicate a minor change to the documentation that does not invalidate it for any releases that it supports, we update the edition number on the cover page. First editions do not have an edition number.

## **Appendix A: Appendix**

This section contains the following topics:

Third Party Software Acknowledgment (see page 85)

# **Appendix B: Third Party Software Acknowledgment**

The following license agreements are available in the \Bookshelf Files\TPSA folder in the CA Bookshelf:

- Boost Software License
- Flexera FLEXNet Publisher
- springsource Idap 1.3.1
- Commons Collections 3.2.1
- Commons Logging 1.1.1
- Commons Lang 2.5
- Commons Pool 1.5.5
- Commons IO 2.0.1
- Commons DBCP 1.4
- Log4j 1.2.16
- Google-gson 1.7.1
- Spring Security 3.0.7
- Spring Framework 3.0.6
- Commons FileUpload 1.2.2
- Open CSV 1.8
- Oracle 11G JDBC driver 11.1.0.6
- OpenSSL 0.9.7.d
- Google ctemplate 2.2
- Tomcat 7.0.56

#### Oracle (Sun) JRE 1.8.0\_25

JRE v.1.8

This Product is distributed with JRE v.1.8. Use of the Commercial Features of the JRE for any commercial or production purpose requires a separate license from Oracle. 'Commercial Features' means those features identified Table 1-1 (Commercial Features In Java SE Product Editions) of the Software documentation accessible at http://www.oracle.com/technetwork/java/javase/documentation/index.html. Oracle has provided additional copyright notices and information that may be applicable to portions of the JRE in the THIRDPARTYLICENSEREADME file accessible at http://www.oracle.com/technetwork/java/javase/documentation/index.html.

#### ■ Meta Integration Bridges

CA ERwin Data Modeler's metadata import/export capabilities are powered by Meta Integration® Model Bridge (MIMB), copyright 1997-2006.

Meta Integration is a registered trademark of Meta Integration Technologies, Inc. in the United States.