

Product Documentation

ER/Studio® Data Architect

New Features Guide

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Contents

| New Features Summary | 4 |
|--|------|
| Top New Features | . 4 |
| General Updates | . 4 |
| DBMS Updates | . 7 |
| Details of Top New Features | . 12 |
| Bi-Directional Object Commenting between Portal and ER/Studio DA | 12 |
| Portal Integration to Browse Repository within ER/Studio DA | 14 |
| Portal Search Integration to Retrieve Models from ER/Studio Repository | 15 |

NEW FEATURES SUMMARY

The new features supported by ER/Studio Data Architect 8.5.3 (previously known as ER/Studio) fall into the following categories.

- Top New Features
- General Updates
- DBMS Updates

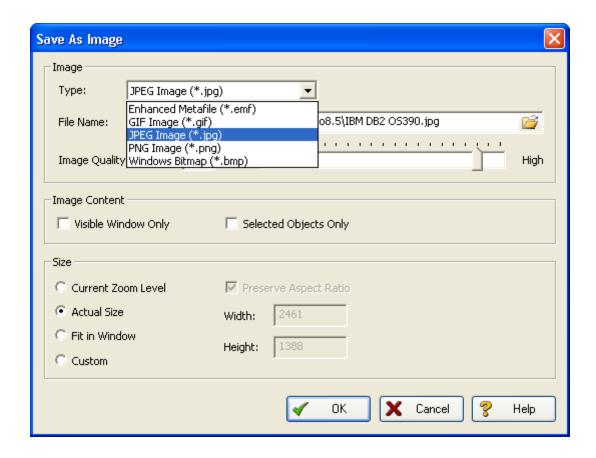
TOP NEW FEATURES

- Bi-Directional Object Commenting between Portal and ER/Studio DA
- Portal Integration to Browse Repository within ER/Studio DA
- Portal Search Integration to Retrieve Models from ER/Studio Repository

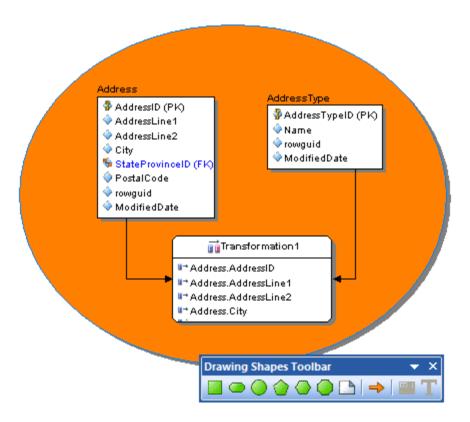
GENERAL UPDATES

- Windows 7 Support: ER/Studio DA now runs on Windows 7.
- Improved Repository Performance: Checking in and out, retrieving, and updating diagrams is now much faster.

• Image Export Improvements: Export an image of diagram in any of the following formats: Enhanced Metafile (.emf), GIF Image (.gif), JPEG Image (.jpg), and Windows Bitmap (.bmp).



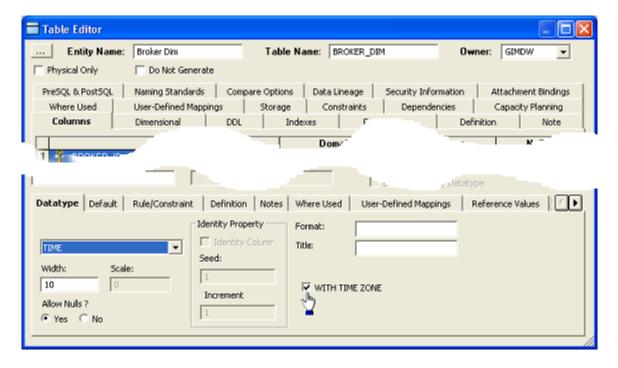
• **Drawing Shape Support on VDL diagrams**: Choose any of the tools on the Drawing Toolbar including the line drawing tool to enhance the representation of visual data lineage diagrams.



DBMS UPDATES

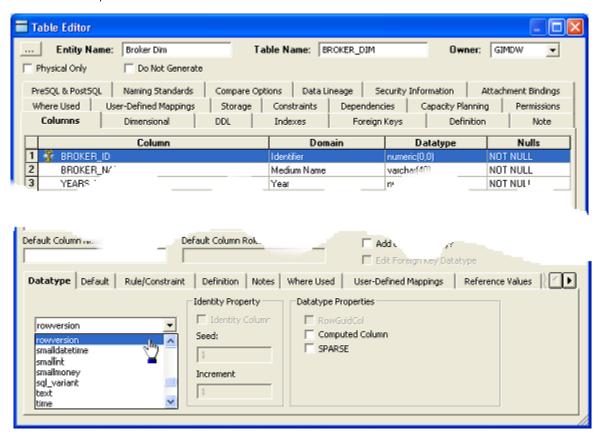
- Teradata 12.0 Support
 - Support for the Teradata platform now includes the WITH TIME ZONE property for TIME and TIMESTAMP datatypes.

When the TIME or TIMESTAMP datatype is selected for the Teradata platform, the WITH TIME ZONE option displays.WITH TIME ZONE allows you to explicitly specify the time zone. When WITH TIME ZONE is not specified, the time zone of the SQL session is the default.



• Interbase 2009 Support

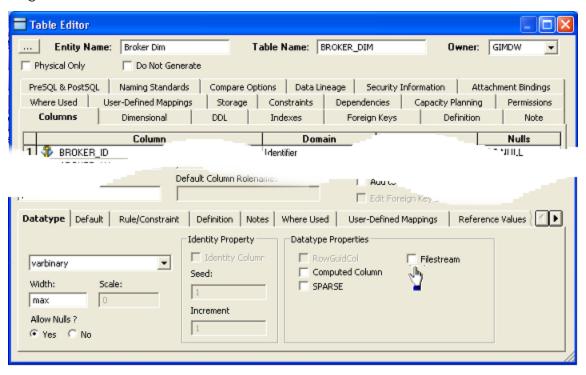
• ER/Studio support for Microsoft SQL Server 2008 now includes "rowversion" column datatype. The rowversion datatype exposes automatically generated, unique binary numbers in a database. It is an incrementing number, 8 bytes in size, that can be used to version-stamp table rows.



A table can have only one rowversion column. Every time that a row with a rowversion column is modified or inserted, the incremented database rowversion value is inserted in the rowversion column. This property makes a rowversion column a poor candidate for keys, especially primary keys. Any update made to the row changes the rowversion value and, therefore, changes the key value.

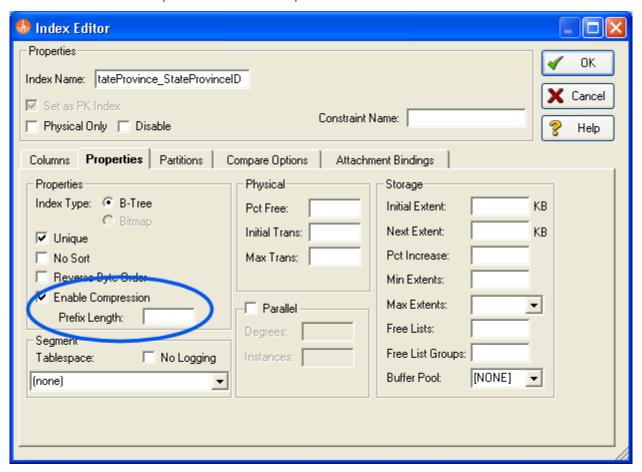
Rowversion is a synonym for timestamp. Users can specify rowversion as data type in ERSDA, but the created column on MS SQL Server 2008 is timestamp."

• ER/Studio support for Microsoft SQL Server 2008 now includes the FILESTREAM storage option for varbinary (BLOB) datatypes. When the varbinary (BLOB) datatype is selected and the size is defined as max, the Filestram option appears. Data for a column of the varbinary Filestream type is stored in the file system, and the only limit on the size of the data is the storage available on the host machine. For a table to have a Filestream column, it must also have a column of the uniqueidentifier datatype that has the ROWGUIDCOL attribute. This column must allow NOT NULL values and must have either a UNIQUE or PRIMARY KEY single-column contraint.



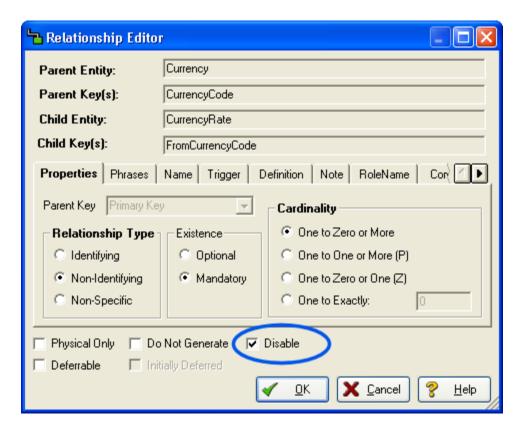
• Oracle Updates

• **Compression on index-organized tables**: On the Properites tab of the Index Editor, there is now an option to enable compression for concatenated indexes.



Enable Compression: (COMPRESS) Select to enable index compression. Compression can repress duplication of keys in non-unique indexes. For concatenated indexes (indexes with multiple columns), the compress option can reduce the size of the index by more than half. For concatenated indexes (indexes with multiple columns), compression can reduce the size of the index by more than half. The compress option allows you to specify the prefix length for multiple column indexes.

• **Support for enabling/disabling constraints**: On the Relationship Editor, you can choose to disable the foreign key of a child entity so the foreign key is not propagated from the parent to the child entity.



disables the foreign key of a child entity. The following is an example of the DDL generated for the child entity when the FK is disabled:

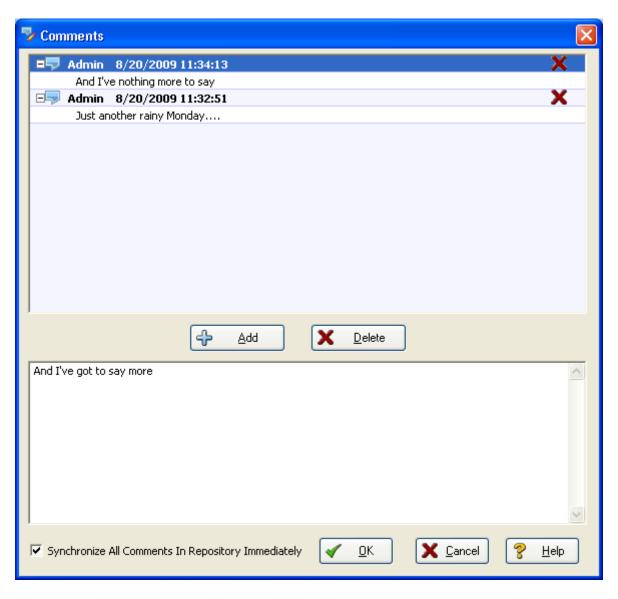
```
CREATE TABLE Entity2(
PK2 CHAR(10) NOT NULL,
a2 CHAR(10),
b2 CHAR(10),
PK1 CHAR(10) NOT NULL,
CONSTRAINT PK2 PRIMARY KEY (PK2),
CONSTRAINT RefEntity11 FOREIGN KEY (PK1)
• REFERENCES Entity1(PK1) DISABLE
```

DETAILS OF TOP NEW FEATURES

BI-DIRECTIONAL OBJECT COMMENTING BETWEEN PORTAL AND ER/STUDIO DA

1

NOTE:



2 Enter the comment in the bottom area of the Comment editor and then click Add.

- If you want the Repository to be updated immediately with the new comments, select **Synchronize All Comments In Repository Immediately**. This option is not available if you are not logged in to the Repository.
- 4 Add more comments if desired and then click **Save**.

NOTE: If you are adding comments to a Repository diagram, you can add and commit comments to an object without needing to check out or check in the diagram. Click the Synchronize Comments button in the Repository toolbar and your comments are added to the diagram, with your Repository user name and the comment date and time.

Notes

• You can add comments to most ER/Studio DA objects, including the following object types:

| • Alias | • Attachment Binding | Attachment Types | Attachments |
|--|-----------------------------------|--------------------------------------|---|
| Attribute | Attribute | Auxiliary Table | • Column |
| • Data Lineage Column | • Data Lineage Source | • Data Lineage Table | Data Movement Column |
| • Data Security | Database | • Diagram | • Dictionary |
| Dictionary Default | • Dictionary Rule | • Domain | • Entity |
| • Function | Logical Model | Logical Submodel | Package and Object Type |
| Physical Model | • Physical Submodel | • Procedure | • Reference Value |
| Relationship | Security | Security Binding | • Stogroup |
| • Synonym | • Table | • Tablespace | • User Data Type |
| • View | • View Column | • Visual Data Lineage Objects | |

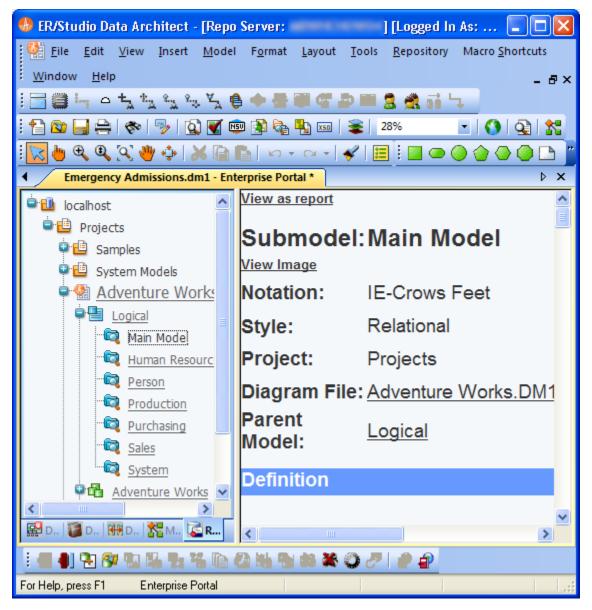
- For ER/Studio Repository users, when logged in to the Repository, any comments added are stamped with the Repository user name and date.
- Comments are stamped with the user name and comment creation date and time.
- You can delete the comment by clicking the X for the comment in the Comments dialog.
- Once logged in to the Repository, you can share your comments with other ER/Studio DA users by storing them with the diagram file in the Repository.

To download existing or new comments in the open diagram, click Repository > Update Comments.

•

PORTAL INTEGRATION TO BROWSE REPOSITORY WITHIN ER/STUDIO DA

The Repository window displays reports generated by the ER/Studio Portal when you click an item in the Repository explorer. You can click links in the report displayed to view other reports, generate a report in a different format, view related reports, and attach labels and comments to your reports.

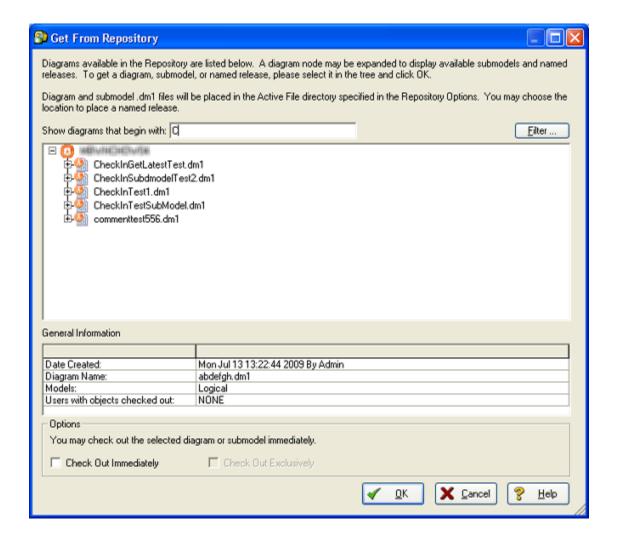


PORTAL SEARCH INTEGRATION TO RETRIEVE MODELS FROM ER/STUDIO REPOSITORY

Retrieving repository objects downloads copies of selected diagrams, submodels, or named releases from the Repository onto the user's local machine. The data model, submodel or named release is copied from the Repository to your local system. If a local version of the object exists, the Get from Repository operation refreshes the local copy with the version from the Repository.

NOTE: Permissions assigned to your user account in the Repository Security Center determine what type of access you have to Repository objects. For more information, see <u>About Repository Permissions</u>.

- 1 Log in to the Repository.
- 2 Choose Repository > Diagrams > Get from Repository.



- 3 In the **Get From Repository** dialog, there are three ways to find a diagram.
- Browse to and then select the object.
- In the Show diagrams that begin with: field, enter the first few letters of the diagram name. As you type the list of diagrams updates to display just the diagrams that match the letter or letters entered.
- Click Filter to . The Filter function uses the ER/Studio Portal to access the Repository.
 - If you are already logged in to the Portal, the Filter Diagram List displays where you can enter search criteria.
 - If you are not already logged in to the Portal, you are prompted to log in now. ER/Studio DA tries to connect to the Portal specified in the Repository Options. For more information, see "Configuring the Repository and Portal" in the ER/Studio Data Architect User Guide.
- 4 To make changes to the object, if you have permission to make changes, select **Check Out Immediately**, otherwise the file will be read-only.
 - TIP: You can prevent other users from making changed to the object by selecting Check Out Exclusively. Otherwise, when you check in your changes you can resolve any differences between your version and the version in the Repository if another user checked in changes to the same object. For more information, see "Checking In Objects" in the ER/Studio Data Architect User Guide.

5 Click **OK**.

The object selected is copied from the Repository to the Models directory as specified in Tools > Options > Directories > Models.

Notes

- If a model with the same name already exists in the Models directory, as specified in Tools > Options > Directories > Models, then you will be alerted that proceeding with the Get from Repository operation will result in the local copy being overwritten with the version from the Repository. You can then choose to cancel the Get operation without affecting the contents of the local version.
- You can view a Named Release, but, in general, you may not modify it. A special Repository operation, Rollback Diagram, lets you Check In a Named Release as the latest version of a Diagram; once the Roll Back operation is completed, you can Check Out the Diagram (or a portion of it) to modify it.
- 6 Select Filter list of diagrams based on Enterprise Portal search criteria.
- •
- •

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Creating Special Search Strings (Using the Query Parser).

| Operator | Search criteria | Example | |
|----------|--|--|--|
| AND (&&) | Contains ALL the search terms entered | apples AND oranges AND bananas apples && oranges && bananas | |
| OR () | Contains at least one of the words entered | cats OR dogs cats dogs | |
| " " | Contains the exact phrase entered | "exactly this" | |
| | Does NOT contain some of the words entered | apples NOT oranges NOT bananas | |
| + | Must contain a term and may contain another | +apples oranges | |
| - | Must contain a term and must not contain another | +apples -oranges | |
| ? | Matches with a single character replaced | c? (matches cat but not coat | |
| * | Matches zero or more characters | do* (matches do, dog, dogs, dogsled) | |
| ~ | Terms are spelled similarly | land~ (matches land, sand, band) | |
| ""~ | Terms are found in close proximity to each other | "diagram update" ~10 (matches objects where diagram and update appear within 10 words of each other) | |

The Portal uses Apache Lucene Query Parser to enable these search string operators. There are some special characters that when used within the syntax must be escaped. The following are special characters:

To escape these characters, enter a backslash (\) before the special character.

For more details on the Lucene Query Parser, see http://lucene.apache.org/java/2 4 0/queryparsersyntax.html.