Metadata Definitions – Flexible Modes in CA ERwin Data Modeler

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Introduction

In any enterprise, one of the major problems faced by the data management team is lack of the metadata information for all tables developed. Even if the data management team wants to publish the definitions of tables and attributes, the lack of metadata definitions limits them to publish only the structure of table. It’s a serious constraint when it comes to reusability as the team who wants to use these tables will not be able to know purpose of the tables. Even during the acquisition and mergers of organizations, some of the vital information used by the team is to look for the tables and attribute’s metadata information which will help them to compare.

Most of the data modeling tools provides the features to capture the metadata information for the tables and attributes but one of the issues faced by the data modeler is that of flexibility. In this article we are going to see the flexible features provided by CA ERwin Data Modeler in capturing the metadata definitions of the tables and attributes. It’s applicable to both relational and dimensional model.

In this article first we will see the regular way of capturing the definitions and what are the alternate flexible ways provided by CA ERwin Data Modeler.

Metadata Definition Capture

Let’s take a simple example of table named Person with the attributes depicted in the diagram below.

In the conventional way, if the definition for the table needs to be updated it will be done by selecting the table, right click select Table Properties -> Comments.
It will allow to open up window with the <<database product name >> Tables, just like screen shot below to update the comments for the table.
In order to capture the attribute definitions select the table in the model, right click and select the Comments
It will open up the following window
Metadata Capture from MS Excel

The above conventional method is well known to most of the ERwin data modelers but sometimes in a large data modeling effort such as building the data warehouse the data is sourced from multiple source systems so the definition of the table and attributes could be more elaborate. So in this kind of a scenario its better to capture the business context from the business rather than a simple definition, but we cannot ask the business analyst or business manager to enter it in the data model using the ERwin tool. So the ERwin data modeling tool provides very simple MS Excel interface in which the business user can enter the definitions and it can be imported directly into the model.

Let me explain step by step how to import the definitions from the excel spreadsheet.

Step 1: Store the model locally in the hard disk as this feature cannot be used if the model is stored in the model mart. Even if the model is stored in the model mart, store it locally, update the definitions from the excel sheet and store it back into the model mart without losing anything.

Step 2: Use the excel sheet “Import Definitions” provided by CA (this contains VB macro to interact with ERwin file store locally) to fill the entity and attribute definitions. It contains 3 sheets. See the screenshot below.
<table>
<thead>
<tr>
<th></th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click the button below to update an ERwin Model with the information from the Entity Definition Worksheet</td>
</tr>
<tr>
<td>2</td>
<td>Update EntityDefs</td>
</tr>
<tr>
<td>3</td>
<td>Click the button below to update an ERwin Model with the information from the Attribute Definition Worksheet</td>
</tr>
<tr>
<td>4</td>
<td>Update AttributeDefs</td>
</tr>
</tbody>
</table>

Visit [www.erwin.com/community](http://www.erwin.com/community)
A          | B
---|---
1  | Entity Name | Entity Definition
2  | Person_Dim  | It's a dimensional table to capture person details and the changes made to the attributes in a type 2 method.
Step 3: Open the first sheet and click on “Update Entity Defns” which will update the definitions written for that particular table into the data model. Similarly click on the “Update Attribute Defns” which will update the attribute definitions.

Note:

1. Keep the data model closed otherwise you will get an error that it’s open.
2. Make sure table and column names are exactly same as in the data model.

It’s not only for business people but also for the data modelers who can enter the definitions in MS Excel and get the approval from the business or data management team, then it can uploaded separately using this utility.

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Metadata Capture using Reports

The tables metadata can be edited/entered using the Data Browser provided in the tool. Select the table and click on the “Data Browser” icon.

It will open the data browser window and click on the “Column Comment” and you will see “Column Report”, double click on the column report which will allow you to edit the comments for both table and attributes.
When you make the changes to the comments it will get stored and you can see the changes in the comments.

**Conclusion**

Though the comments for the table and attributes looks insignificant, it is very useful from the data management standpoint since it reduces considerable amount of time while consolidating the attributes or entities or databases. It’s also a very useful way of documenting databases if you generate the reports using Data Browser. Knowing the importance of the metadata definitions, CA ERwin Data Modeler provides very flexible ways of capturing the comments for both tables and columns.