

December 2018

Data Model Document Generation:
Creating Data Dictionary for OFSAA/OFSDF and
Download Specifications for OFSAA Staging from
ERwin

- Introduction to Data Model Document Generation..... 3
- Background on ERwin 2
 - OFSA Data Models in ERwin 2
 - Impact of ERwin use on data model documentation 2
 - Purpose of this guide..... 2
 - Data Dictionary 2
 - Download Specifications..... 3
 - Generation Process 5
- Requirements for Data Model Document Generation 6
- Generating the Data Dictionary 6
- Generating Download Specifications for Staging Area 12
- Conclusion..... 22
- Appendix A 23
- Appendix B 25

Introduction to Data Model Document Generation

This is a technical guide on how to generate the data dictionary documentation for Oracle Financial Services Analytical Applications (OFSAA) and Oracle Financial Services Data Foundation (OFSDF). The process of generating the download specifications for OFSAA Staging is also explained. Both these activities are performed in erwin.

Background on ERwin

OFSAA data models are present in ERwin. ERwin also helps in the creation of data model documentation.

OFSAA Data Models in ERwin

Since OFSAA version 5, the data model has been defined and delivered as an ERwin file. ERwin is a data modeling tool or environment on which, OFSAA currently depends. It is used to define all data model artifacts, both Logical and Physical data models, which are used by the OFSAA applications, as well as the Oracle Financial Services Data Foundation.

Impact of ERwin use on data model documentation

In the prior versions of OFSAA, the data model was documented in PDF form, and shipped separately from the actual application artifacts. Starting from OFSAA 5, this has changed. The primary store of all data model related documentation will be the ERwin data model file. The reasons for this are as follows:

1. ERwin permits complete definition of model-related documentation within the model itself. In other words, the model is now 'self-documenting'.
2. In many cases, clients typically perform several customizations to the model. This causes any fixed model documentation to progressively become outdated or inaccurate, as additional fields or tables are added to the data model for client-specific needs.
3. All OFSAA applications share a common physical data model, which is also shipped as part of the OFSDF. As clients may license independent OFSAA applications or OFSDF at different points in time, ERwin permits these models to be merged in a controlled manner to account for site-specific changes as well as release-specific changes from Oracle.

Model documentation can then be generated for the combined, updated model, and therefore stays up-to-date with both the latest internal (client-specific) and external (product-driven) changes.

Purpose of this guide

This guide explains the process of generating two important documentation artifacts from within ERwin.

Data Dictionary

The data dictionary is a detailed listing of all tables/columns constituting a specific OFSAA application. Today, the ERwin file containing the OFSAA data models provides the following information relevant to the creation of a data dictionary:

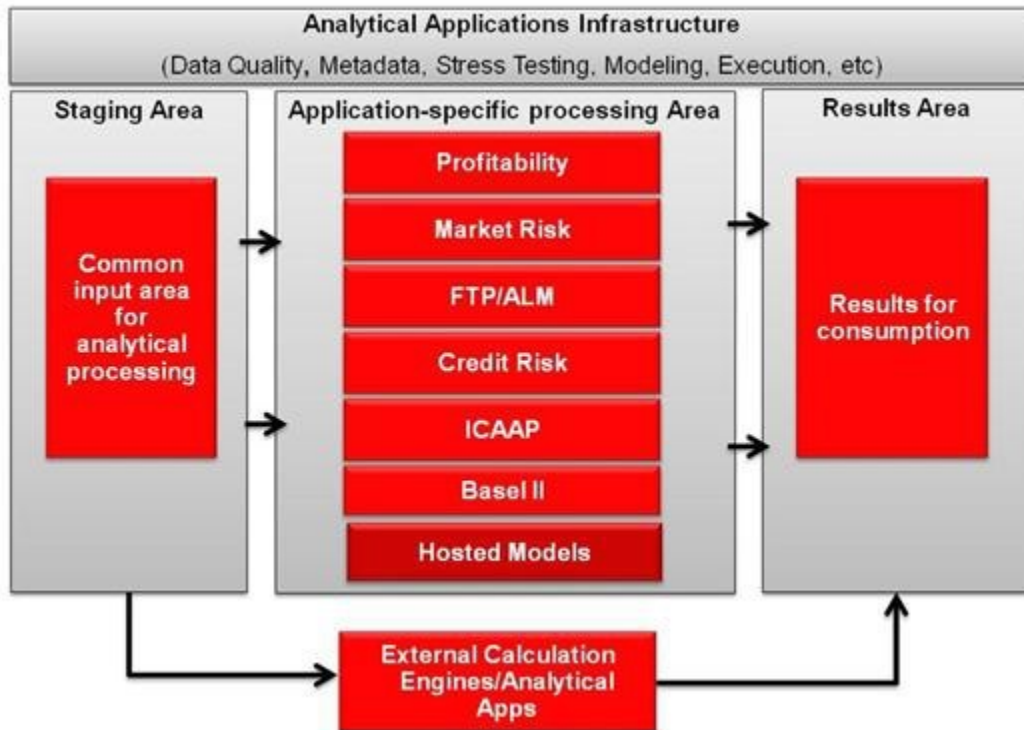
- Subject Areas in each part of the data model

A subject area is a specific grouping/organization of the data model content. It is a high-level categorization scheme that shows which application module or business analysis areas are served within the model. The tables and columns defined during the design process are grouped into these categories for easier navigation as well as comprehension of the model.

- Table/Entity definitions
 - Detailed definitions of all tables
 - Detailed, column level dictionary information including column specification, datatypes, as well as several User Defined Properties (UDPs) that provide additional metadata added during the design process to categorize a specific data model object.
- Data Model diagrams
 - Associated with each data model (either OFSAA or OFSDF) is a collection of data model diagrams (Entity Relationship diagrams). These are usually specific to a subject area, and provide a visual representation of the key entities, their relationships and keys.

Download Specifications

As indicated earlier, the OFSAA data model is a common data model supporting multiple OFSAA applications. The organization of the data model is split into 3 distinct areas.



1. Staging Area: This schema is the common data sourcing layer across all OFSAA applications, and also the OFSDF.
2. Processing Area: This refers to application-specific schemas that are exclusive to each OFSAA application, and provide storage/structures for intermediate outputs and application-specific configuration and setup data.
3. Results Area: This refers to the collection of star schemas with conformed dimensions that support BI/reporting from aggregated outputs from the processing area.

The use of the common sourcing layer means that a single table in the staging area can serve multiple and different analytical applications/processing engines within the OFSAA architecture.

Therefore, it is necessary to know how specific applications map to specific staging tables/columns, and what subset of the complete unified staging data model is actually used by each application.

The **download specification** is a supplemental document to the data dictionary that provides this listing. For each staging table/column, it provides key information such as definition, datatype, and so on. Additionally, it maps each column in a specific staging table to the OFSAA applications/components that use this column, and also indicates whether this column is mandatory or optional.

This provides implementers with a scoping documentation for data sourcing that specifies the data requirements applicable to a particular solution, for which the sourcing scripts need to be developed.

This is done by means of specialized metadata within ERwin called User Defined Properties (UDPs), which are additional tags that a data model designer can attach to any data model object in ERwin. For additional details on UDPs please refer to the ERwin Data Modeler documentation.

Generation Process

In order to produce the specific documentation described earlier, you can make use of ERwin's **Model Reporting Capabilities**, which allows data modelers to produce customized reports of various data model artifacts.

ERwin allows the generation of model-documentation in various levels of detail, and various formats like HTML, Text, PDF, and so on.

The generation process involves installing ERwin reporting templates for the Data Dictionary and Download Specification, and executing these templates, with customization of the outputs as required.

Note: This guide is not an exhaustive User guide for ERwin's reporting capabilities, but only details the specific steps to apply them to generate OFSAA/OFSDF documentation. Please refer ERwin documentation or Contextual Help within ERwin for more details.

Requirements for Data Model Document Generation

1. ERwin version 9.64.x
2. Latest documentation templates
 - To access the Data Dictionary template, [click here](#).
 - To access the Download Specification template, [click here](#).
 - To access IDM Full Reports, [click here](#).
3. The data models

Generating the Data Dictionary

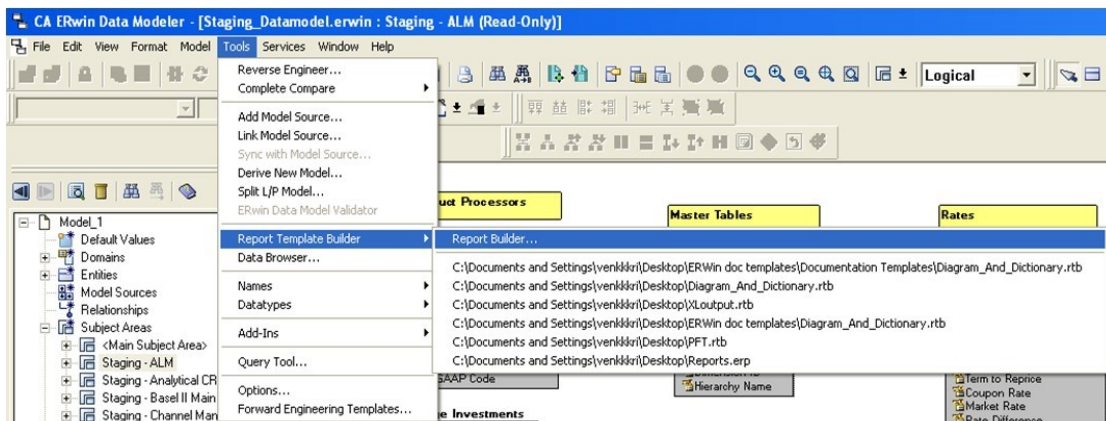
Step 1: Download the latest template

To access the latest Data Dictionary template, [click here](#). It consists of file extension .erps.

Step 2: Open the corresponding data model for which documentation needs to be generated, from within ERwin.

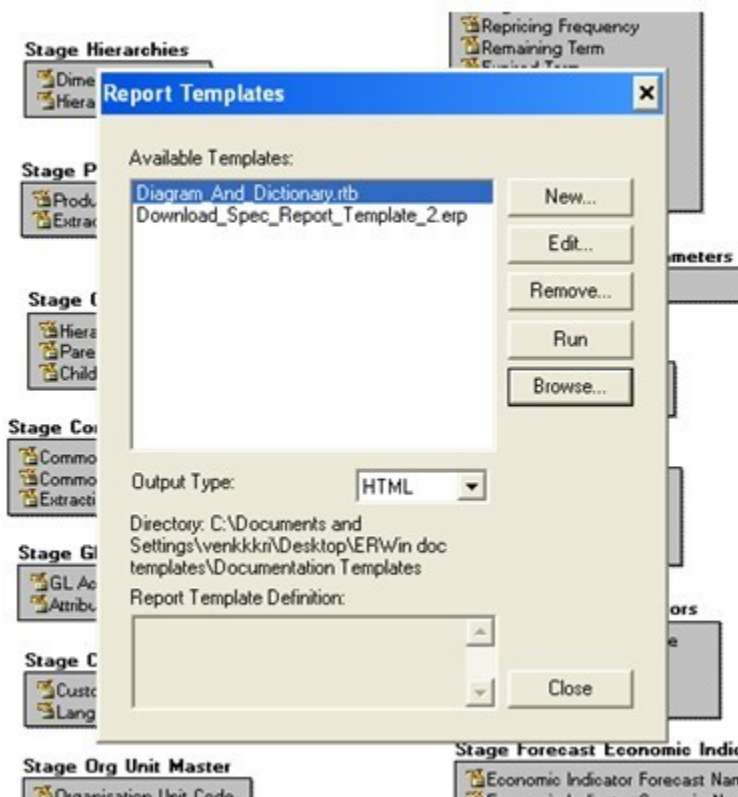
- Make sure that your model is up-to-date before generating documentation. Verify that the model for which you are generating the dictionary reflects the latest changes (Refer to model merge documentation for details on this process).
 - Specific to your institution
 - Latest product-release specific changes

Step 3: Locate and open the template from within ERwin. To do so, use the following menu navigation to open the Report Builder dialog in ERwin.



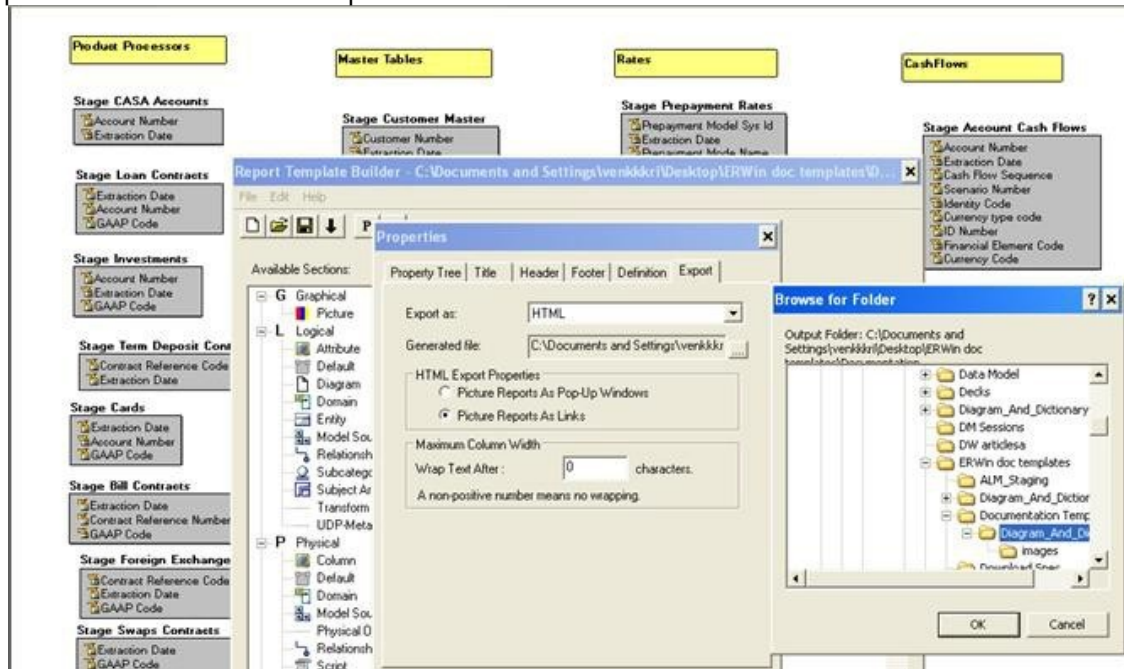
Make sure you use a single consistent location for installing all your data dictionary templates, and remove any old templates prior to the next step.

Step 4: Using the **Browse...** button from within the Report Builder, navigate to the folder containing the downloaded template. Click **Diagram_And_Dictionary.rtb** as shown in the following screenshot.



Step 5: Using the Edit button, change (if necessary) the following:

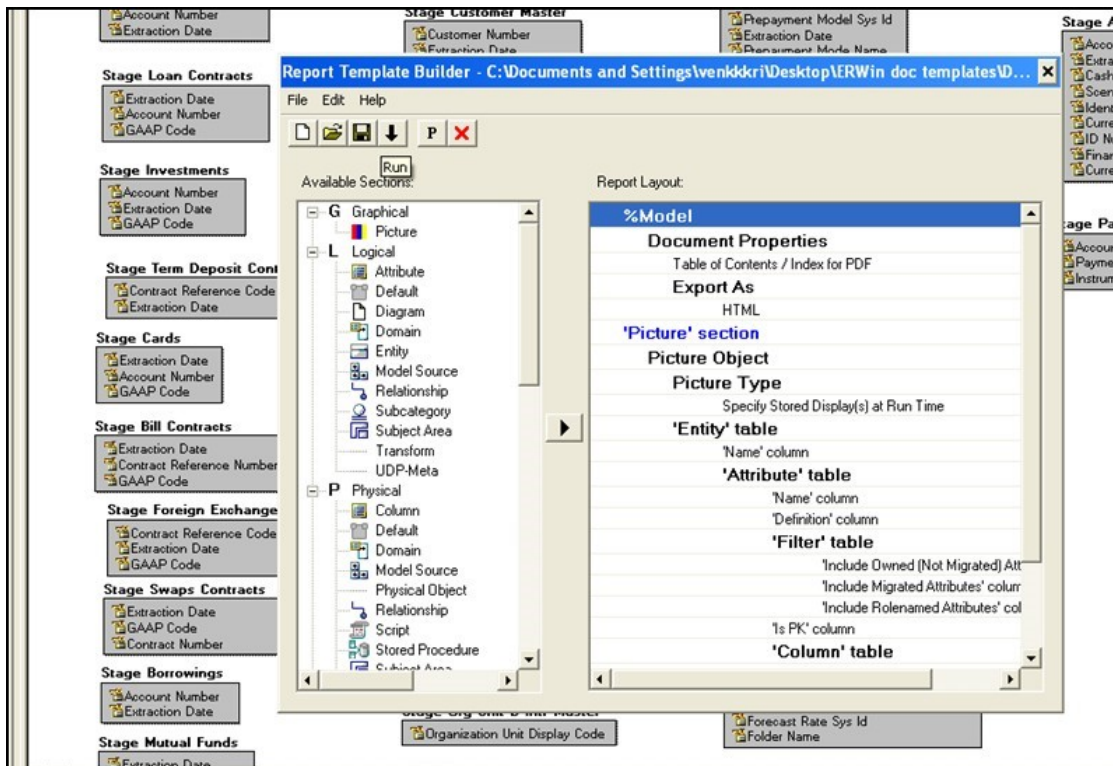
1. Location of the output HTML files/folders under the Export tab. The default is the same place as the downloaded template.



2. Formatting (if required): You can change formatting at a global level under Edit > Preferences in the Report Builder dialog box or at a template level under Edit

>Properties.

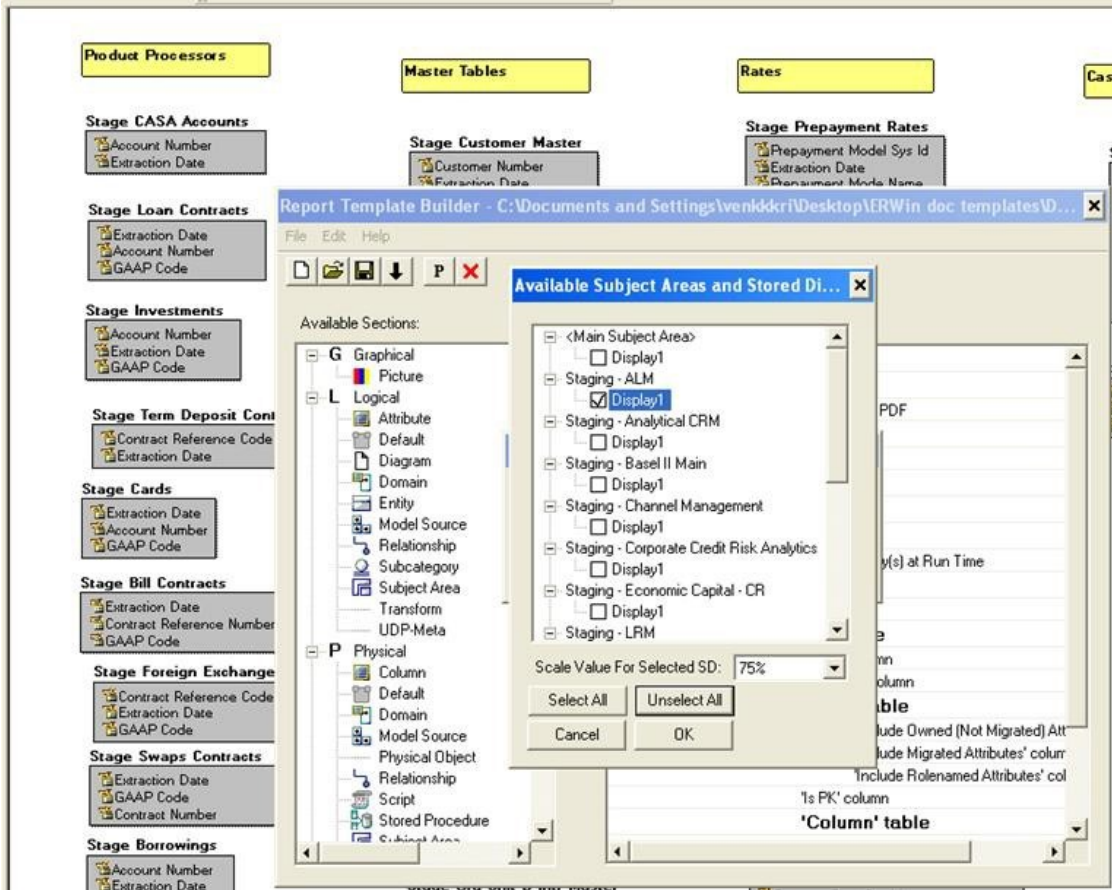
Step 6: Execute the template by clicking the Run icon, which is the icon with the arrow pointing downward.



This should result in the 'Available Subject Area and Stored Displays' dialog box asking for which **Stored Displays** you want to generate the documentation. This is essentially a list of all ER diagrams by subject area that is part of your current model.

Select the ones you wish to generate, and additionally **adjust the scaling factor** to make the attributes legible. See the following diagram for reference.

Note: If the subject area diagram is too large; that is, if you choose the scaling, then the generation of the picture may fail. Therefore, you may need to iterate a few times to achieve the 'right' scaling factor for the diagram that makes it both visible, as well as, reasonably sized.



Step 7: Click **OK** in the 'Available Subject Area and Stored Displays' dialog box. This should continue the report run and finally generate a HTML page which has a left-hand navigation frame with each of the selected subject areas chosen in step 6.



Clicking each will open up the corresponding diagram that is generated as jpeg and clicking an entity will open up the corresponding entity's HTML page showing the attributes. The arrow at the far right for an attribute, under the 'Column' column, will take you to the corresponding physical column definition with datatype, length, and so on. For example, the following screenshot shows this for the Account Number attribute in the Stage CASA Accounts Table, and its corresponding physical column definition (v_account_number).

The screenshot displays the 'OFSAA Data Dictionary and Model Documentation' interface. On the left, a sidebar shows 'Report Components' with '1. Picture section' and 'Stages - ADM/Display1'. The main content area is divided into sections: 'Entity' (Stage CASA Accounts), 'Attribute' (Account Number), and a table of physical column definitions.

| OFSAA Data Dictionary and Model Documentation | | | |
|---|-------------------|---------------------|---------------|
| Entity | | | |
| Name | | Stage CASA Accounts | |
| Attribute | | | |
| Name | Definition | Is PK | Column |
| Account Number | Account number | Yes | → |

| Name | Datatype | Null Option |
|------------------|-----------------|--------------------|
| v_account_number | VARCHAR(25) | NOT NULL |

Step 8: You can customize the HTML output with stylesheets if required. This requires HTML/CSS knowledge.

Generating Download Specifications for Staging Area

Step 1: Download the latest template and associated pre-formatted Excel workbook container. You need Excel version 97-2003 or later.

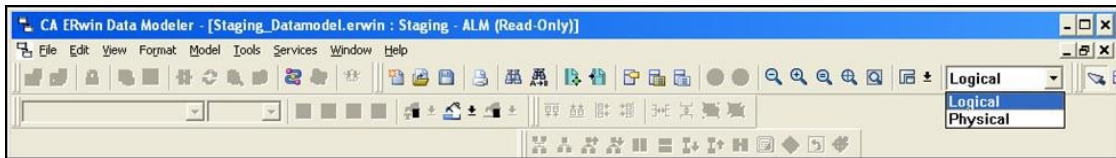
Note: The latest Download specification template is available at http://docs.oracle.com/cd/E26650_01/books/CommonDocuments/Download_Spec_Report_Template.erp

The extension is .erp (ERwin reports). *This is a different template facility than the one used for Data Dictionary documentation.*

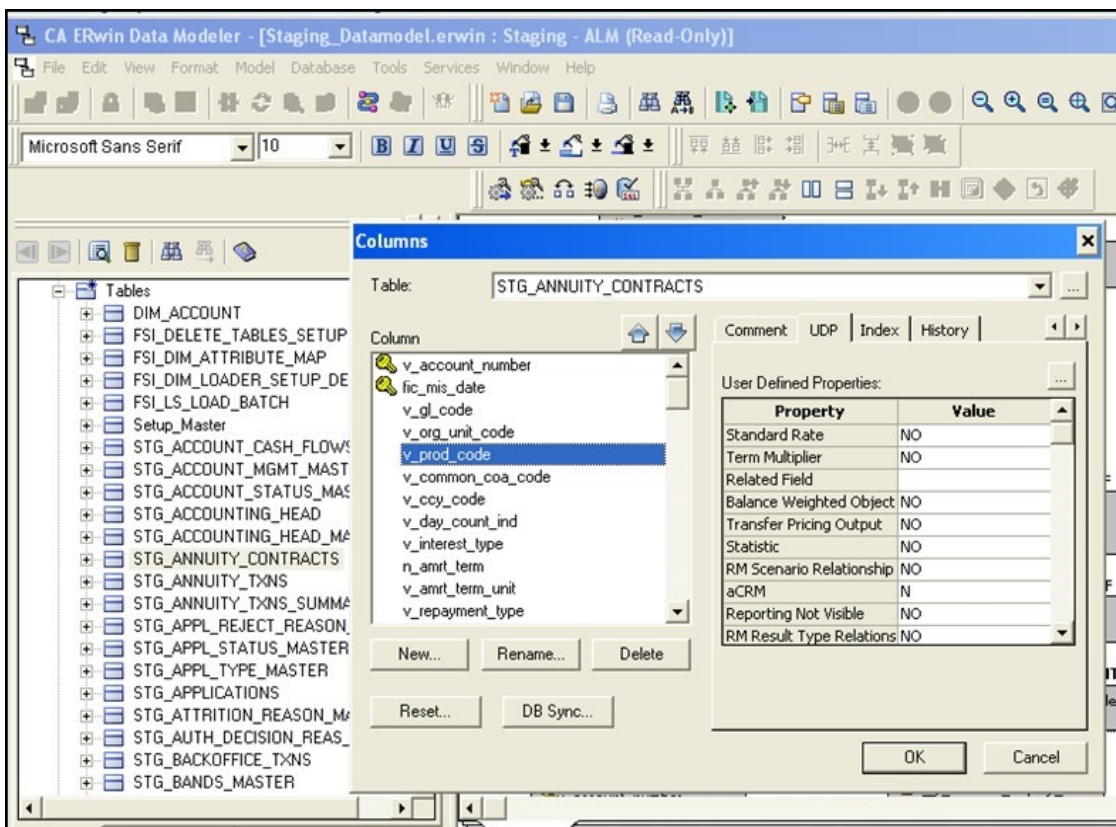
Step 2: Open the latest version of the **Staging Data Model** from which you want to generate the Download Specification.

All tables in the staging data model are either prefixed with 'STG_' or 'Stage' in the logical entity view.

Step 3: Verify that the User Defined Properties (UDPs) exist in the model. To do so, switch to the physical view by selecting this from the dropdown menu as shown in the following screenshot.



Now, double click any table in this view, to open up the details dialog box showing the detailed listing of columns for the table. Select any column, and scroll to the right, to the UDP tab. Click the tab. This should show you a list of UDPs applicable to that column. You should see something like the following screenshot.



In case you do not see the UDPs listed, recheck if you have the right version of the latest staging model.

Following table lists the Column UDP Names based on the specific financial services Applications like ALM, FTP, PFT, and so on.

| Column UDP Name | Application | Full Name |
|-----------------------------------|-------------|---|
| ALM | ALM | Asset Liability Management |
| FTP | FTP | Funds Transfer Pricing |
| GL ReconR | GL ReconR | General Ledger Reconciliation |
| ICAAP | ICAAP | Internal Capital Adequacy Assessment Process |
| MR Var | MR Var | Market Risk |
| PFT | PFT | Profitability |
| ROREC | ROREC | Operation Risk and Economic Capital |
| RP | RP | Retail Pooling |
| BASEL_I | BASEL | Basel |
| BASEL_II_BIS_MR_IMM | BASEL | Basel |
| BASEL_II_BIS_MR_STD | BASEL | Basel |
| BASEL_II_BIS_NON_SEC_AIRB | BASEL | Basel |
| BASEL_II_BIS_NON_SEC_FIRB | BASEL | Basel |
| BASEL_II_BIS_NON_SEC_STD | BASEL | Basel |
| BASEL_II_BIS_OR_ALT_STD | BASEL | Basel |
| BASEL_II_BIS_OR_BIA | BASEL | Basel |
| BASEL_II_BIS_OR_STD | BASEL | Basel |
| BASEL_II_BIS_SEC_STD | BASEL | Basel |
| BASEL_II_IFSB_MR | BASEL | Basel |
| BASEL_II_IFSB_NON_SEC | BASEL | Basel |
| BASEL_II_IFSB_OR | BASEL | Basel |
| BASEL_II_IFSB_SEC | BASEL | Basel |
| BASEL_II_INDIA_MR_STD | BASEL | Basel |
| BASEL_II_INDIA_NON_SEC_STD | BASEL | Basel |
| BASEL_II_INDIA_OR | BASEL | Basel |
| BASEL_II_INDIA_SEC_STD | BASEL | Basel |
| BASEL_II_USA_NON_SEC | BASEL | Basel |
| BASEL_II_USA_SEC | BASEL | Basel |
| HM | HM | Hedge Management |
| LLFP | LLFP | Loan Loss Forecasting & Provisioning |
| LRM | LRM | Liquidity Risk Management |
| CREC | CREC | Credit Risk and Economic Capital |
| BASEL_II_BRAZIL_NON_SEC_STD | BASEL | Basel |
| BASEL_II_BRAZIL_OR_ALT_STD | BASEL | Basel |
| BASEL_II_BRAZIL_OR_BIA | BASEL | Basel |
| BASEL_II_BRAZIL_OR_SIMPLE_ALT_STD | BASEL | Basel |
| ESTCP | ESTCP | Enterprise Stress Testing Capital Planning |
| CR | CR | Credit Risk |
| CIRCA | CIRCA | Customer Insight Retail Customer Analytics |
| CIIPA | CIIPA | Customer Insight Institutional Performance Analytics |
| CIRPA | CIRPA | Customer Insight Retail Performance Analytics |
| CICA | CICA | Customer Insight Channel Analytics |

| Column UDP Name | Application | Full Name |
|--|--|--|
| BASEL_III_BIS_NON_SEC_AIRB | BASEL | Basel |
| BASEL_III_BIS_NON_SEC_FIRB | BASEL | Basel |
| BASEL_III_BIS_NON_SEC_STD | BASEL | Basel |
| BASEL_III_BRAZIL_NON_SEC_STD | BASEL | Basel |
| BASEL_III_IFSB_NON_SEC | BASEL | Basel |
| BASEL_III_USA_NON_SEC | BASEL | Basel |
| BASEL_III_BIS_CAP_STRUCT | BASEL | Basel |
| ALMBI | ALMBI | Asset Liability Management |
| OIPA | OIPA | Business Intelligence |
| Oracle Insurance Solvency II Analytics | Oracle Insurance Solvency II Analytics | Oracle Insurance Performance Analytics |
| BASEL_III_USA_SEC_IRB | BASEL | Oracle Insurance Solvency II Analytics |
| MR | MR | Basel |
| QMR | QMR | Market Risk |
| EFPA | EFPA | Qualitative Management Reporting |
| BASEL_III_USA_CAP_STRUCT | BASEL | Enterprise Financial Performance Analytics |
| IFRS | IFRS | Basel |
| BASEL_II_BIS_CAP_STRUCT | BASEL | Basel |
| BASEL_II_BIS_SEC_RBA | BASEL | Basel |
| BASEL_II_BRAZIL_CAP_STRUCT | BASEL | Basel |
| BASEL_II_BRAZIL_MR_STD | BASEL | Basel |
| BASEL_II_CBRC_CAPITAL | BASEL | Basel |
| BASEL_II_CBRC_MR | BASEL | Basel |
| BASEL_II_CBRC_NON_SEC | BASEL | Basel |
| BASEL_II_CBRC_OR | BASEL | Basel |
| BASEL_II_CBRC_SEC | BASEL | Basel |
| BASEL_II_IFSB_CAPITAL | BASEL | Basel |
| BASEL_III_BIS_LEVERAGE_RATIO | BASEL | Basel |
| BASEL_III_BIS_SEC_IRB | BASEL | Basel |
| BASEL_III_BIS_SEC_SFA | BASEL | Basel |
| BASEL_III_BIS_SEC_STD | BASEL | Basel |
| BASEL_III_USA_LEVERAGE_RATIO | BASEL | Basel |
| BASEL_III_USA_SCP_EXP_LMT | BASEL | Basel |
| BASEL_II_BIS_REPORTING | BASEL | Basel |
| BASEL_III_BIS_REPORTING | BASEL | Basel |
| BD-AML | BD | Behavior Detection Anti Money Laundering |
| BD-FR | BD | Behavior Detection Fraud |
| BD-TC | BD | Behavior Detection Trade Compliance |
| BD-BC | BD | Behavior Detection Broker Compliance |
| BASEL_II_BIS_SEC_IRB | BASEL | Basel |
| ORA | ORA | Operational Risk Analytics |
| BASEL_III_USA_SEC | BASEL | Basel |
| Basel III - Capital Structure | BASEL | Basel |
| Basel III - Credit Risk - Non Securitization – | BASEL | Basel |

| Column UDP Name | Application | Full Name |
|----------------------------|----------------------|---|
| STD | | |
| Basel_III_INDIA_CAP_STRUCT | BASEL | Basel |
| FAH | FAH | Fusion Accounting Hub |
| Relationship Pricing | Relationship Pricing | Relationship Pricing |
| BASEL_III_INDIA_MR_STD | BASEL | Basel |
| Basel_III_INDIA_SEC_STD | BASEL | Basel |
| BASEL_III_USA_STD | BASEL | Basel |
| FATCA | FATCA | Foreign Account Tax Compliance Act |
| OR | OR | Operational Risk |
| BD-CTR | BD | Behavior Detection |
| BASEL_III_CBRC_IRB | BASEL | Basel |
| BASEL_III_CBRC_STD | BASEL | Basel |
| BSP | BSP | Balance Sheet Planning |
| RRDF | RRDF | Regulatory Reporting Data Foundation |

Following table lists the Table level UDP Names based on the specific financial services Applications like ALM, FTP, PFT, and so on.

| Table level UDP Name |
|---------------------------------|
| Staging - ALM Analytics |
| Staging - ALM |
| Staging - BSP |
| Staging - Basel II Analytics |
| Staging - Basel II |
| Staging - CA |
| Staging - EC |
| Staging - FTP |
| Table level UDP Name |
| Staging - GL RECON |
| Staging - ICAAP |
| Staging - LRM |
| Staging - Market Risk Analytics |
| Staging - Market Risk |
| Staging - OREC |
| Staging - PFT Analytics |
| Staging - PFT |
| Staging - PM - Capital Charge |
| Staging - PM - Transfer Pricing |
| Staging - Retail Pooling |
| Staging - HM |
| Staging - LLFP |

ALM
Oracle Mantas BC
Oracle Mantas FR
Oracle Mantas ML
Oracle Mantas TC
Oracle Insurance Solvency II Analytics
ESTCP
CRA
CI - Institutional
CI - Retail
CI - Customer
CI - Channel
Staging - CRA
GLRECON
Staging - Basel III
OIPA
EFPA
Solvency II
QMR
Reporting - Basel II
Reporting - Basel III
ORA
OR
Staging - OIPA
BASEL III USA STD

Table level UDP Name

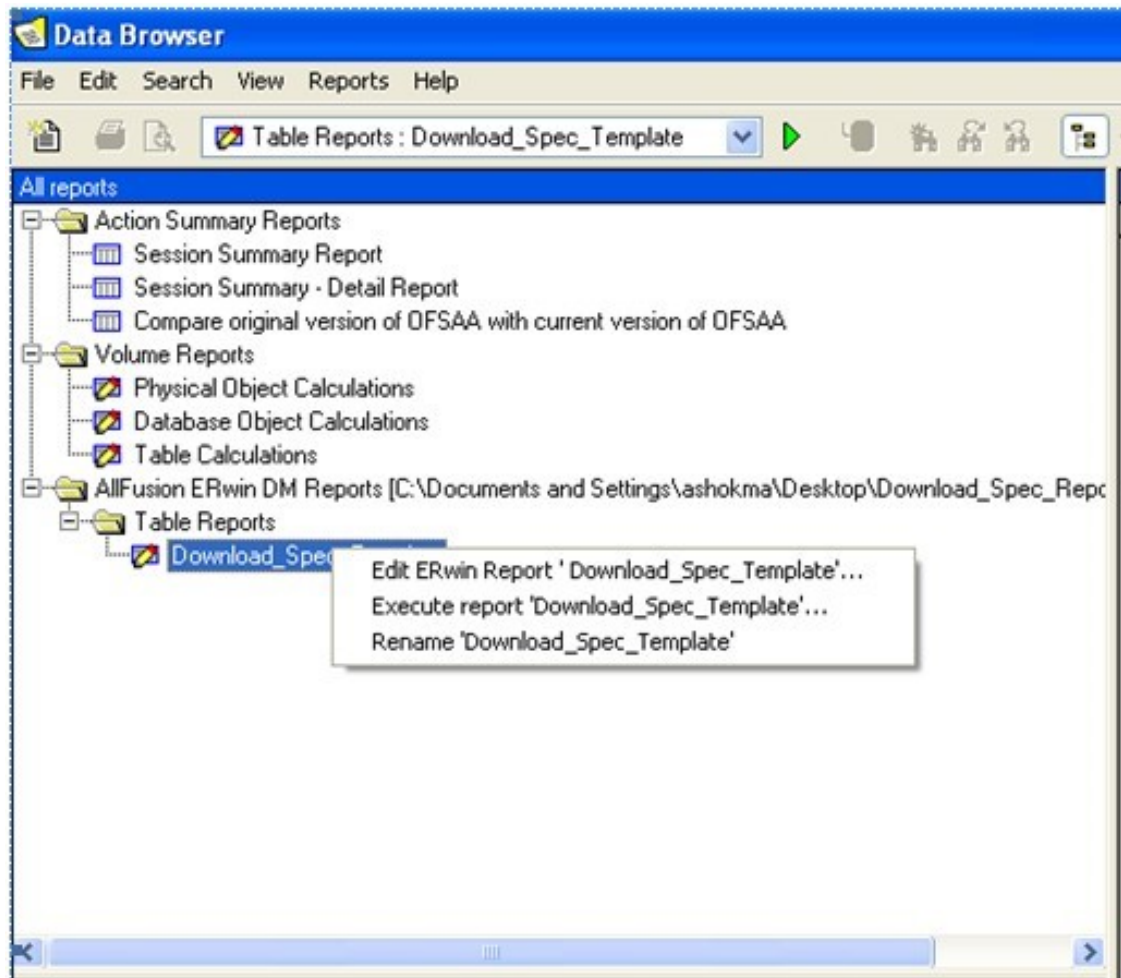
FAH
Relationship Pricing
BASEL III - Credit Risk - Non Securitization - STD
BASEL III - Market Risk
Basel III - Equity
Staging - Basel III Main
Mantas- FATCA
LRM
RRDF

Note: If a table UDP of an App is updated as 'yes', then all PK columns should be considered as DL-MAN in the download specifications.

To add the UDPs specific to an application, you need to edit your template, Download_Spec_Report_Template.ersps.

To edit the template,

- Select Tools, Data Browser, Reports, and then select Open Report File.
- In the dialog box that opens, navigate and select Download_Spec_Report_Template.ersps. The template, Download_Spec_Report_Template.ersps appears under **Table Reports** in the left side. See the following screenshot.



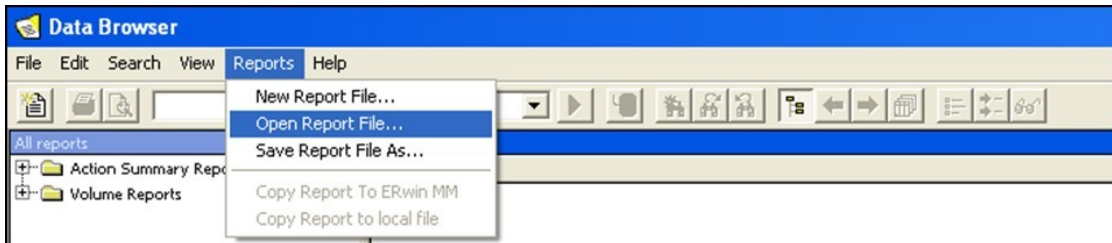
- Right click Download_Spec_Report_Template.erp and edit the template.
- Click the Columns and UDPs in the template and select the UDPs based on the application.

Step 4: Make sure the Excel Workbook (DLSpecContainer.xlsx) is open, and cell A1 is selected. This is necessary because you will be using the DDE facility to directly output to a pre-configured/pre-formatted Excel workbook. Alternatively, you can save the output of the ERwin as a csv file and open it in Excel, but you will have to handle the formatting by yourself in this case.

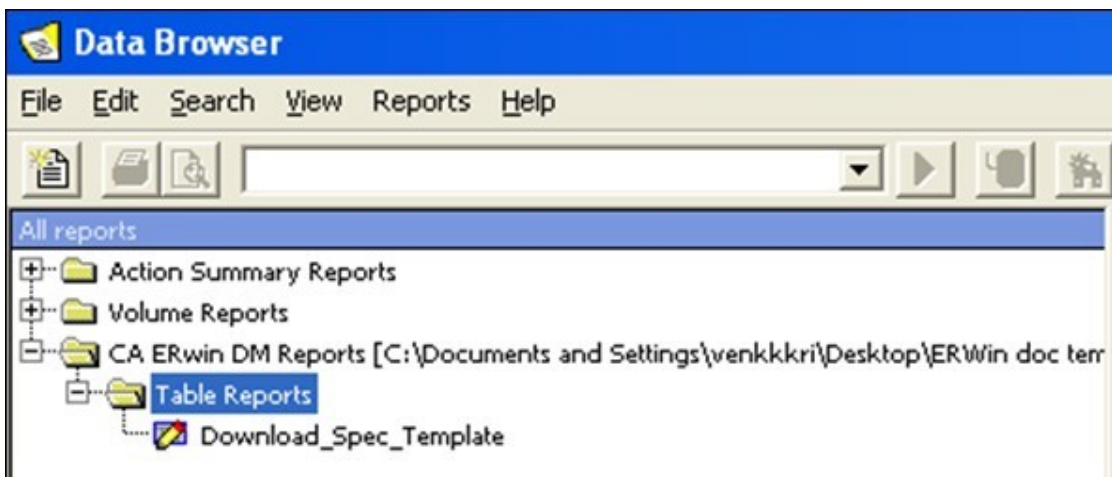
Step 5: Navigate to Data Browser under the Tools menu.



This will open up a separate window for the Reporting Data Browser, which looks like following screenshot. From here, click Reports then click the Open Reports File.



Locate the downloaded template and click it, to load the template. Your left view should look like the following screenshot:



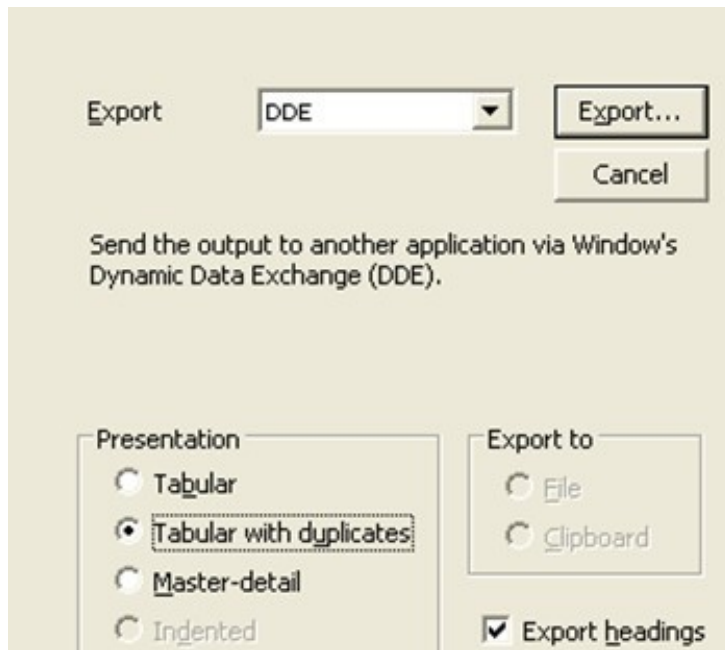
Step 6: Double click the template to execute it. This will generate a result set on the right, which looks like the following screenshot:

| Table Name | Table Column Name | Table Column Datatype | Table Column Null Option | Table Column Is PK | Table Column Comment | Table Column Is FK | Table Col | Table Column | Table Column ALM | Table Column BASEL_2 |
|------------------------|--------------------------|-----------------------|--------------------------|--------------------|---|--------------------|-----------|--------------|------------------|----------------------|
| Setup_Master | v_component_code | VARCHAR2(60) | NOT NULL | Yes | Component / Parameter code. | No | No | No | DL-NO | DL-NO |
| | v_component_desc | VARCHAR2(500) | NOT NULL | No | Description of component. | No | No | No | | |
| | v_component_value | VARCHAR2(200) | NOT NULL | No | Value of parameter / component. | No | No | No | | |
| STG_ACCOUNT_ADDRESS | V_CITY | VARCHAR2(255) | NULL | No | City component of this address. | No | | | DL-OPT | DL-NO |
| | V_COUNTRY | VARCHAR2(255) | NULL | No | Country code of this address. | No | | | | |
| | V_ADDRESS_LINE1 | VARCHAR2(255) | NULL | No | Fifth line of the address | No | | | | |
| | V_ADDRESS_LINE2 | VARCHAR2(255) | NULL | No | First line of the address | No | | | | |
| | V_ADDRESS_LINE3 | VARCHAR2(255) | NULL | No | Second line of the address | No | | | | |
| | V_ADDRESS_LINE4 | VARCHAR2(255) | NULL | No | Third line of the address | No | | | | |
| | V_ACCOUNT_NUMBER | VARCHAR2(50) | NOT NULL | Yes | Identifier of the account | No | Yes | No | | |
| | V_POSTAL_CODE | VARCHAR2(10) | NULL | No | Postal code component of | No | No | No | | |
| | V_ADDRESS_PURPOSE_T | VARCHAR2(20) | NOT NULL | Yes | Purpose, or usage, of this address relative to this customer (for example, M-Mailing Address or | No | Yes | No | | |
| | V_REGION | VARCHAR2(60) | NULL | No | Region or province | No | No | No | | |
| | V_ADDRESS_LINE2 | VARCHAR2(255) | NULL | No | Second line of the address | No | | | | |
| | V_ADDRESS_LINE3 | VARCHAR2(255) | NULL | No | Third line of the address | No | | | | |
| | V_DATA_ORIGIN | VARCHAR2(20) | NULL | No | Source system from which this data content has been extracted. | No | | | | |
| | V_STATE | VARCHAR2(255) | NULL | No | State or province | No | | | | |
| | V_ADDRESS_LINE1 | VARCHAR2(255) | NULL | No | First line of the address | No | | | | |
| | FIC_MIS_DATE | DATE | NOT NULL | Yes | This refers to the date on which processing commences. This is ideally, indicates if the beneficiary is the same as customer. | No | Yes | No | | |
| STG_ACCOUNT_BENEFICIAR | f_bene_name_as_cust_flag | CHAR(1) | NULL | No | This column stores the proportional share in percentage. | No | No | No | | |
| | n_proportional_share | NUMBER(6,4) | NULL | No | This column stores the relationship type as Nominee or Beneficiary | No | | | | |
| | v_relationship_type | VARCHAR2(10) | NULL | No | This column stores the unique identifier of the | No | | | | |
| | v_account_number | VARCHAR2(50) | NOT NULL | Yes | This column stores the unique identifier of the beneficiary | No | Yes | No | | |
| | v_bene_ref_code | VARCHAR2(40) | NOT NULL | Yes | | No | | | | |

Step 6b (Optional): You can perform a lot of additional formatting such as changing the column names and ordering by right clicking the result set in the left pane and choosing 'Edit Report Format'.

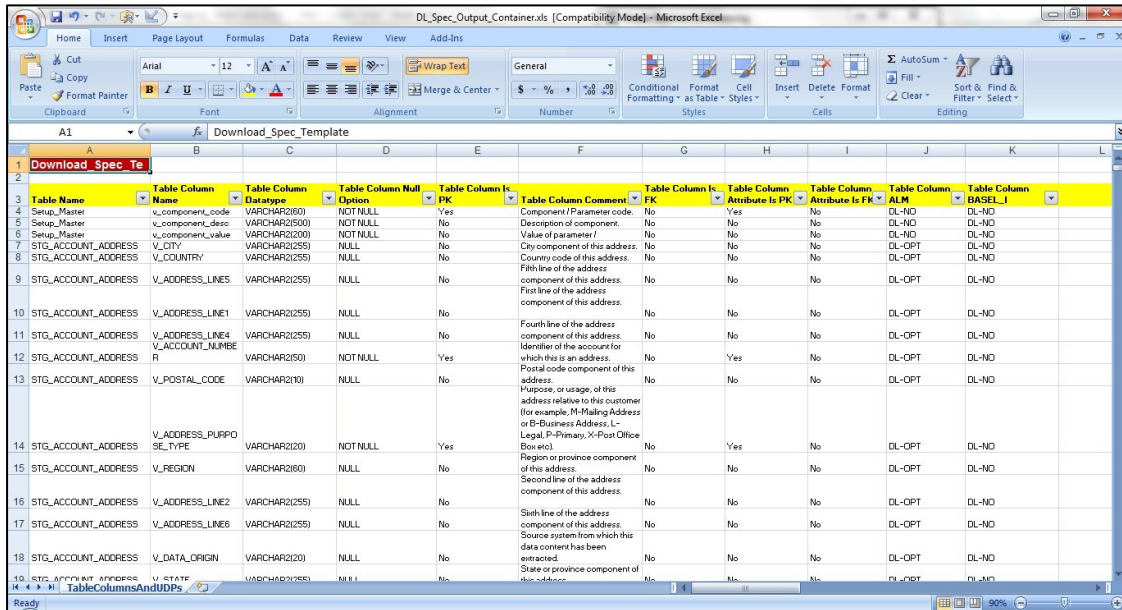
| Table Name | Table Column Name | Table Column Datatype | Table Column Null Option | Table Column Comment | Table Column Is FK | Table Col | Table Column | Table Column ALM | Table Column BASEL_2 |
|------------------------|-------------------------|-----------------------|--------------------------|----------------------|--------------------|-----------|--------------|------------------|----------------------|
| STG_ACCOUNT_CASH_FLOWS | v_account_number | VARCHAR2(25) | NOT NULL | Account Number | Yes | | | | |
| | fic_mis_date | DATE | NOT NULL | MIS Date | Yes | | | | |
| | n_cash_flow_sequence | NUMBER(5) | NOT NULL | Cash Flow Sequence | Yes | | | | |
| | n_scenario_no | NUMBER(5) | NOT NULL | Scenario Number | Yes | | | | |
| | n_acct_data_identity_cd | NUMBER(10) | NOT NULL | Identity Code | Yes | | | | |
| | v_cash_flow_date | DATE | NULL | Cash Flow Date | No | | | | |

Step 7: Once you are done with setting the formatting options for the output, from the File menu, click 'Export' to bring up the Export dialog box. From the dropdown list, select DDE. In the Presentation section, select 'Tabular with Duplicates'. Check, 'Export headings'.



Before clicking **Export...**, ensure that the downloaded Excel workbook DL_Spec_Output_Container.xls is open, and cell A1 is selected.

Now click, **Export...** You will see a list of open Excel worksheets. Select DL_Spec_Output_Container.xls and wait for the operation to complete. This can be slow, especially for larger models.



| Table Name | Table Column Name | Table Column Datatype | Table Column Option | Table Column Null | Table Column PK | Table Column Comment | Table Column FK | Table Column Attribute Is PK | Table Column Attribute Is FK | Table Column ALM | Table Column BASEL_I |
|---------------------|------------------------|-----------------------|---------------------|-------------------|-----------------|--|-----------------|------------------------------|------------------------------|------------------|----------------------|
| Setup_Master | v_component_code | VARCHAR2(50) | NOT NULL | Yes | Yes | Component / Parameter code. | No | Yes | No | DL-NO | DL-NO |
| Setup_Master | v_component_desc | VARCHAR2(500) | NOT NULL | No | No | Description of component. | No | No | No | DL-NO | DL-NO |
| Setup_Master | v_component_value | VARCHAR2(200) | NOT NULL | No | No | Value of parameter / | No | No | No | DL-NO | DL-NO |
| STG_ACCOUNT_ADDRESS | V_CITY | VARCHAR2(255) | NULL | No | No | City component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_COUNTRY | VARCHAR2(255) | NULL | No | No | Country code of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_LINES | VARCHAR2(255) | NULL | No | No | First line of the address component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_LINE1 | VARCHAR2(255) | NULL | No | No | First line of the address component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_LINE4 | VARCHAR2(255) | NULL | No | No | Fourth line of the address component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ACCOUNT_NUMBER | VARCHAR2(50) | NOT NULL | Yes | Yes | Identifier of the account for which this is an address. | No | Yes | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_POSTAL_CODE | VARCHAR2(10) | NULL | No | No | Postal code component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_PURPOSE_TYPE | VARCHAR2(20) | NOT NULL | Yes | Yes | Purpose, or usage, of this address relative to the customer (for example, M-Mailing Address or B-Business Address, L-Legal, P-Primary, X-Post Office Box etc). | No | Yes | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_REGION | VARCHAR2(60) | NULL | No | No | Region or province component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_LINE2 | VARCHAR2(255) | NULL | No | No | Second line of the address component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_ADDRESS_LINE6 | VARCHAR2(255) | NULL | No | No | Sixth line of the address component of this address. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_DATA_ORIGIN | VARCHAR2(20) | NULL | No | No | Source system from which this data content has been extracted. | No | No | No | DL-OPT | DL-NO |
| STG_ACCOUNT_ADDRESS | V_STATE | VARCHAR2(255) | NULL | No | No | State or province component of this address. | No | No | No | DL-OPT | DL-NO |

Conclusion

Factors like customizations, different license purchases, and so on, made the data model document generation a challenge. However, the model reporting capabilities of ERwin to come up with customized documentation in different formats has helped in developing the data model documents like data dictionary and download specifications, quite easier. With the help of templates, it is now possible to create data dictionaries for OFSAA and OFSDF. Similarly, with another set of templates, it is feasible to have download specifications for OFSAA Staging area.

Appendix A

User-defined properties are set for tables and columns within ERwin.

The following user defined properties can be set for the column:

| UDP Name | Description | List of values |
|--------------------------|--|----------------|
| Balance Range | Property to identify if the column within a table classified as 'PA Lookup Table' needs to be displayed under 'Range' within Lookup table definition. | YES / NO |
| Balance | Property to identify if the column is of type 'Balance'. | YES / NO |
| Standard Rate | Property to identify if the column is of type 'Standard Rate'. | YES / NO |
| Balance Weighted Object | Property to identify if the column is of type 'Balance Weighted Object'. | YES / NO |
| Processing Key | Property to identify if this column is used as a 'Processing Key' within the instrument, transaction and ledger_stat table. | YES / NO |
| Multiplier Related Field | Property to specify the name of the column that is used to store the multiplier for the corresponding 'Frequency' column. This property is used in Filters UI within OFSAAL. | Text |
| Related Field | Property to specify the name of the column that is used to store the multiplier for the corresponding 'Term' column. This property is used in Filters UI within OFSAAL. | Text |
| Term Multiplier | Property to identify if the column is used to store 'Term'. This property is used in Filters UI within OFSAAL. | YES / NO |
| Column Alias | Property to specify an alias for the column. This is used within the staging loader program for loading LEDGER_STAT table. | Text |
| Transfer Pricing Output | Property to identify if the column needs to be set as an alternate output column for writing transfer rates by transfer pricing engine. | YES / NO |
| Option Cost Output | Property to identify if the column needs to be set as an alternate output column for writing option | YES / NO |

| UDP Name | Description | List of values |
|-------------------------|--|----------------|
| Other Adj Spread Output | costing output by transfer pricing engine. Property to identify if the column needs to be set as an alternate output column for writing other adjustment spread by transfer pricing engine. | YES / NO |
| Other Adj Amount Output | Property to identify if the column needs to be set as an alternate output column for writing other adjustment amount by transfer pricing engine. | YES / NO |

Note: The user-defined property DT/FE/DT1 is not used within EPM applications. This property was introduced to categorize each attribute as Download (DL)/ Front-end (FE) / Computed through data transformation (DT). This property is used by ERM applications. This property may be discontinued and will be replaced by application specific user-defined properties to identify if the column is mandatory during download (DL-MAN) or optional during download (DL-OPT) or not required to be downloaded (DL-NO).

Appendix B

This appendix is applicable for customers with ERwin 9.x version and above.

- For applications that qualify on FSDf 7.4.1.0.0, use the [OFSAA Data Model Dictionary Template - FSDf 741](#) Template to generate DL-SPEC/Data Dictionary.
- For applications that qualify on FSDf 7.4.2.0.0, use the [OFSAA Data Model Dictionary Template - FSDf 742](#) Template.
- For applications that qualify on FSDf 8.0.0.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 800](#) Template.
- For applications that qualify on FSDf 8.0.1.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 801](#) Template.
- For applications that qualify on FSDf 8.0.2.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 802](#) Template.
- For applications that qualify on FSDf 8.0.3.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 803](#) Template.
- For applications that qualify on FSDf 8.0.4.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 804](#) Template.
- For applications that qualify on FSDf 8.0.5.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 805](#) Template.
- For applications that qualify on FSDf 8.0.6.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 806](#) Template.
- For applications that qualify on FSDf 8.0.7.0.0, use the [OFSAA Data Model Dictionary Template – FSDf 807](#) Template.

The new excel based template will enable user to generate both the data dictionary as well as the download specification using a single template. If you do not select any UDP's in the selection form, then the template will generate the Data dictionary only, and if the UDP's are selected , then it will generate DL-SPEC + Data Dictionary.

Perform the following steps to do the same:

1. Ensure that the Erwin Data Modeler version is Erwin 9 or later
2. Ensure macros are enabled in this excel before execution
3. Open the OFSAA data model in Erwin 9 or a later version before executing this template
4. Click the button below to launch the UDP selection Menu
5. Select the appropriate application UDP's(optional) and click on "Generate Report" button
6. On successful execution, the following message is displayed "Report generation is Complete"
7. Find the download specification and the data dictionary report in "OFSAA_Download_Spec" worksheet



CONNECT WITH US



CONTACT US

For more information about Oracle Financial Services Data Model Document Generation, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Integrated Cloud Applications & Platform Services

Copyright © 2021, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0821