

Content Accelerator Framework V1

Usage Instructions

This document contains indicative instructions to use CAF V1 utility set, version 1.0.2b.

CAF V1 is a free utility code, not maintained by Oracle as a licensed product.

Table of Contents

1	Purpose	3
1.1	Overview	3
1.2	Use Cases and Value	3
1.3	Functional Architecture	5
2	Install and Configuration	7
2.1	System Prerequisites	7
2.2	Installation Procedure	8
3	Report Cloning Usage Instructions	10
3.1	Screen 1: Selecting source content to clone and launching cloner	10
3.2	Screen 2: Configuration Details	11
3.3	Screen 3: Select Target Subject Area	12
3.4	Screen 4: Required Object Mappings Screen	12
3.5	Screen 5: Optional Column Mappings – Filter objects	17
3.6	Screen 6: Destination Details	18
3.7	Screen 7: Process log messages	19
3.8	Results of cloning process	20
3.9	Specific Report Objects	22
3.10	Cloning Multiple Requests at once	24
3.11	Known limitations & Frequently Asked Questions	25
4	Other Features usage Instructions	27
4.1	Synchronizing Webcat and RPD	27
4.2	Cloning Dashboards	31
4.3	Cloning Repository Objects	34
4.4	Session Log Files	37
5	Detailed Table of Contents	39

1 Purpose

1.1 Overview

Content Accelerator Framework V1 (CAF V1) is designed to help OBI EE power users deploy template reports and RPD constructs from any source environment into their own OBI EE environment. The key functionality of CAF V1 allows easy duplication of any existing reports or logical RPD construct from one OBI EE environment to another one. Both, source and target environment could have nothing in common and be completely different. The only prerequisite is that the target environment already has at least a basic logical model designed within its RPD.

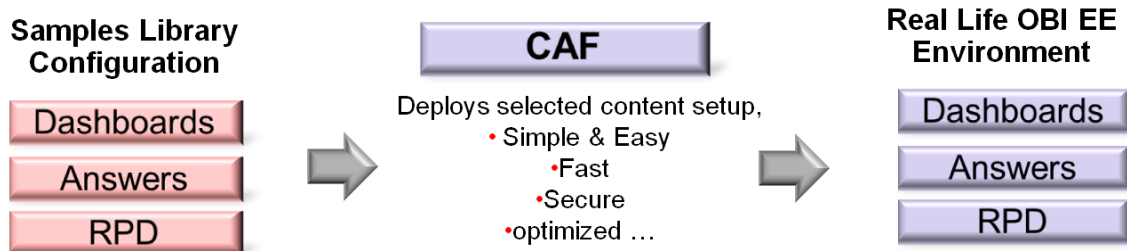
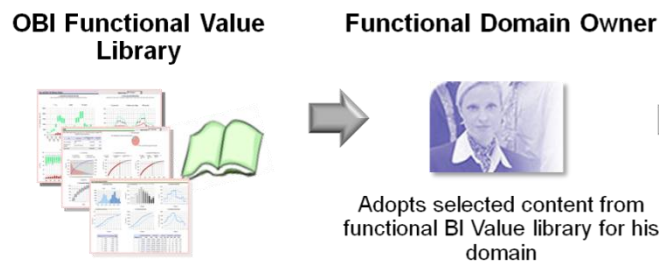
CAF V1 clones any report existing in any Webcat, there is no specific property that makes a report be a template eligible to cloning by CAF V1. From a list of existing reports or dashboards (any kind of reports, including a highly formatted layout with different views, including various Webcat calculations), a functional user is able to select analysis of his interest and can clone this analysis to his environment.

1.2 Use Cases and Value

User browses an existing application (for instance OBI EE Sample Sales) and sees a type of report on revenue which would be of great interest to him if applied to his business domain. However, although the user can clearly project how he would use this report in his business, his underlying RPD model may significantly differ from the Sample Sales model, and also, the template report itself may leverage advanced answers techniques that which are new to the user. Both these reasons make a manual reverse-engineering and copy of the Sample Sales report be a lengthy and uncertain process for the user.

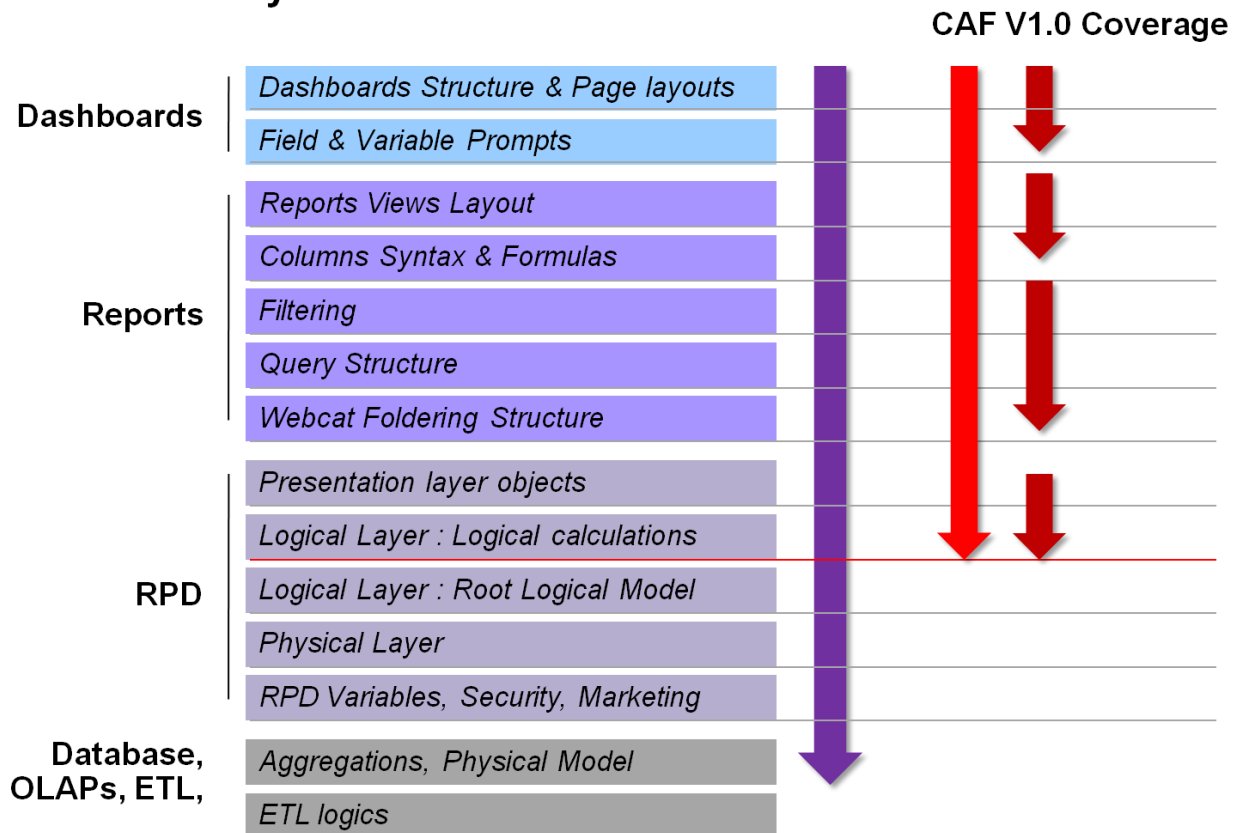
CAF V1 will help safely importing this report and the underlying required objects in the user environment. CAF V1 allows cloning the report or dashboard from Sample Sales application on to his business domain in a matter of a few clicks.

CAF V1 propagates all required OBI EE setup for the selected report to work in the target environment.



CAF V1 addresses all product value layers from dashboard level down to RPD logical calculations. It deploys in target environment all logical calculations, report design, report column calculations, filters, report views layout, dashboards construct, variables and prompts that are necessary for rendering the final report.

Value Layers of BI Content



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1.2.1 Other examples of CAF V1 usage

User sees a dashboard/report he likes and wants to implement on his own environment quickly, but he is not sure of how to really set it up. What should be done in RPD and how?; What should be done in Web Catalog?
 User is interested in implementing new logical metrics in his environment, but is not sure how to properly set them up in RPD,
 User has renamed some existing objects in his RPD, but as a result, reports are broken or RPD aliases are required. CAF V1 will synchronize the Webcat with the RPD changed names ensuring that all the existing reports work properly with the correct names.

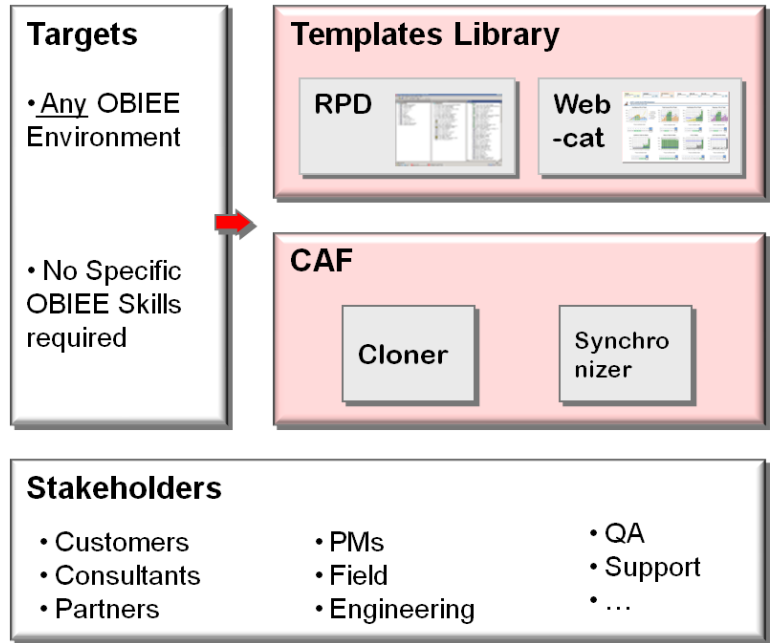
1.2.2 Benefits

CAF V1 offers multiple benefits to OBI EE users and stakeholders:
 Rapid Time to Value, speeding up Implementation & adoption: by quicker deployment through cloning of existing models
 Accelerate learning curve by browsing templates of OBI EE possibilities.
 Lowering TCO by better leveraging OBI EE technical architecture & features, easy adoption of best Practices
 Reduce Design and development risk: Automated high quality designs
 Drives better & deeper usage of OBI EE platform and Increase ROI

1.3 Functional Architecture

CAF V1 is composed of two modules: Cloner and Synchronizer

Cloner allows to replicate OBI content from one environment to another
 Synchronizer detects impacts of RPD changes into Webcat, and fixes them
 Both modules are targeted to be used by at advanced OBI EE users, having RPD and Catalog Manager access.



1.3.1 CAF V1 Cloner Module Functional Sequence

1. User selects reports to clone
2. Cloner analyses reports syntax, and asks for minimum mapping info needed to clone reports
3. Utility clones report & dashboard definitions in target context, using mappings info provided

Source Webcat



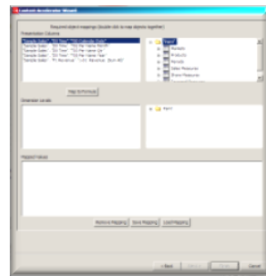
Online or Offline

Source RPD



Offline

Cloner



Target Webcat



Online or Offline

3.a Webcat objects created using columns from existing environment

3.b If needed, repository logical calculations created in target RPD

Target RPD



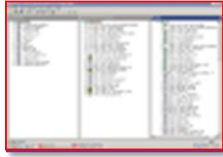
Offline

Requests can be cloned from a source environment to a target environment easily with the help of the Content Accelerator Framework. When a Request is cloned, complete layout along with its views and formatting are carried forward to the target request.

1.3.2 CAF V1: Synchronizer Module Functional Sequence

OBI EE implementation projects often rename out-of-the-box RPD objects. Manual propagation of these RPD changes into a large web catalog is difficult.

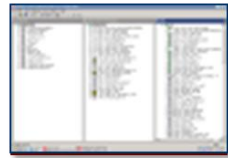
Original RPD



Offline

- Renaming of existing objects (Logical &/or Pres)
- Re-Foldering, shuffling of objects (Logical &/or Pres)
- Pres Aliases cleaning

Modified RPD



Offline

Synchronizer

Original Webcat



Online or Offline



Spots any name changes of objects used in selected reports (including aliases), and updates webcat definition with correct new names

Updated Webcat



Online or Offline

2 Install and Configuration

2.1 System Prerequisites

2.1.1 MS Windows :

CAF V1 has been tested on MS Windows XP operating environment. There is no guarantee that it may support other OS environments

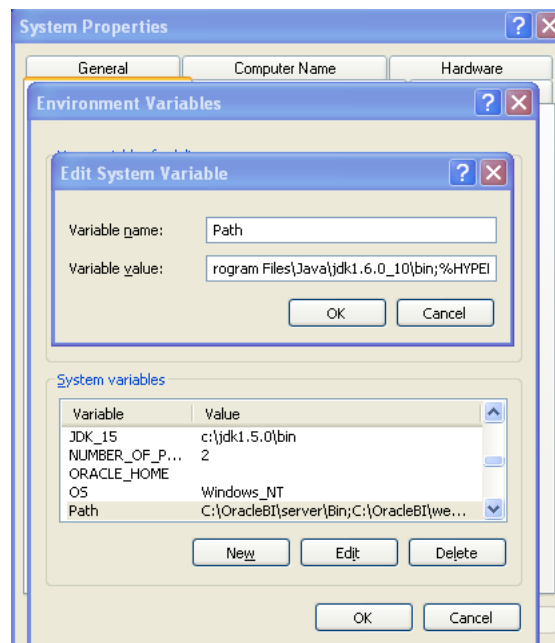
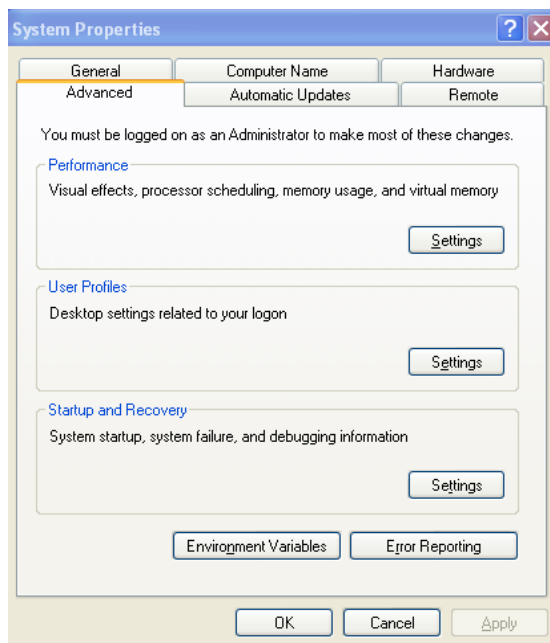
2.1.2 OBI EE 10.1.3.4 or higher

CAF V1 requires a properly installed OBI EE 10.1.3.4 or higher environment. Should user need to operate CAF V1 on previous releases of OBI EE, please contact product management.

2.1.3 Java Sdk 1.6.0_10 or higher

CAF V1 requires Java Sdk 1.6.0_10 or higher to performs. This version can be installed at the time OBI EE installs, or, if OBI EE has already been installed with a lower version of jdk, user can still separately install jdk **1.6.0_10 or higher** and update the PATH variable :

To update the PATH variable, right click on My Computer and choose Properties. Go to Advanced tab. Choose Environment Variables. Under System variables, choose the Path variable and click on edit. In the Variable value, update the jdk entry to point to the path where jdk **1.6.0_10** is installed. If there are multiple jdk entries in the Variable value, ensure that the first entry points to jdk **1.6.0_10**.



2.2 Installation Procedure

To install CAF V1 on Windows XP environments follow the steps below :

2.2.1 Pre-installation tasks

2.2.1.1 Unzipping

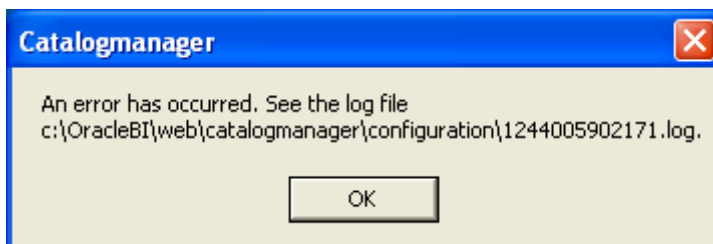
Unzip the content of CAF_V101_Install.zip into your local OBI EE install subdirectory at top level: `..\OracleBI\`. This creates a temporary subdirectory with all source files: `..\OracleBI\TEMP_CAFV1_Install`. This directory and all its content will be erased from your disk upon completion of install.

2.2.1.2 Pre-installation tasks

Before running the installer, perform the following important tasks.

Delete the file (or take a backup of it, outside of the root OBI installation directories) : `\OracleBI\web\catalogmanager\plugins\com.siebel.analytics.web.catalogmanager_1.0.0.jar`. If you cannot delete this file, close any open instances of OBI Catalog Manager. To ensure that all instances of catalog manager have been closed, go to Windows task manager and in the Processes tab, make sure you have no running instances of `catalogmanager.exe` and no Java processes running.

Next, try to open Catalog Manager. It should fail with the following error. This step is to ensure that the catalogmanager is not able to access the previous version of the jar. You can now proceed with the installation.

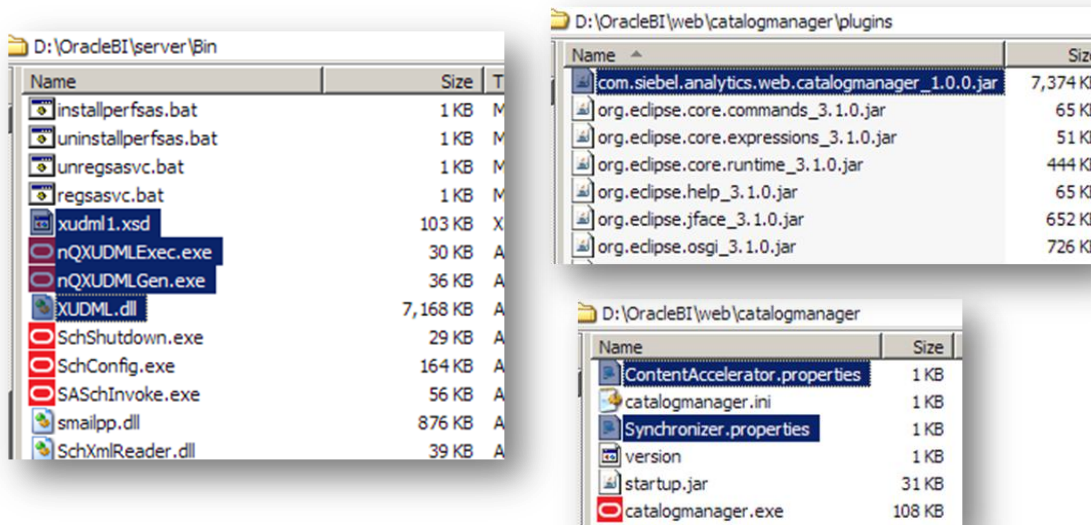


2.2.2 Installation

Run `CAFV1_Install.bat` from `C:\OracleBI\TEMP_CAFV1_Install`. This batch file executes the following operations:

Copy 4 new files - `nQXUDMLExec.exe`, `nQXUDMLGen.exe`, `xudml1.xsd`, `XUDML.dll` – to `..\OracleBI\server\Bin`

Copy 2 new files - `ContentAccelerator.properties`, `Synchronizer.properties` – to `..\OracleBI\web\catalogmanager`



2.2.3 Configuration

User can configure CAF V1 by editing files:..\OracleBI\web\catalogmanager\ContentAccelerator.properties and ..\OracleBI\web\catalogmanager\Synchronizer.properties.

2.2.3.1 Log files target path

It is required to update the values for `LOG_FOLDER=C:\OracleBI\web\catalogmanager\log` with proper path for your setup (retain double slashes\ syntax).

2.2.3.2 Other parameters

All other parameters in this file can be updated, but are not mandatory. They will dynamically be updated during first completed CAF V1 processes.

3 Report Cloning Usage Instructions

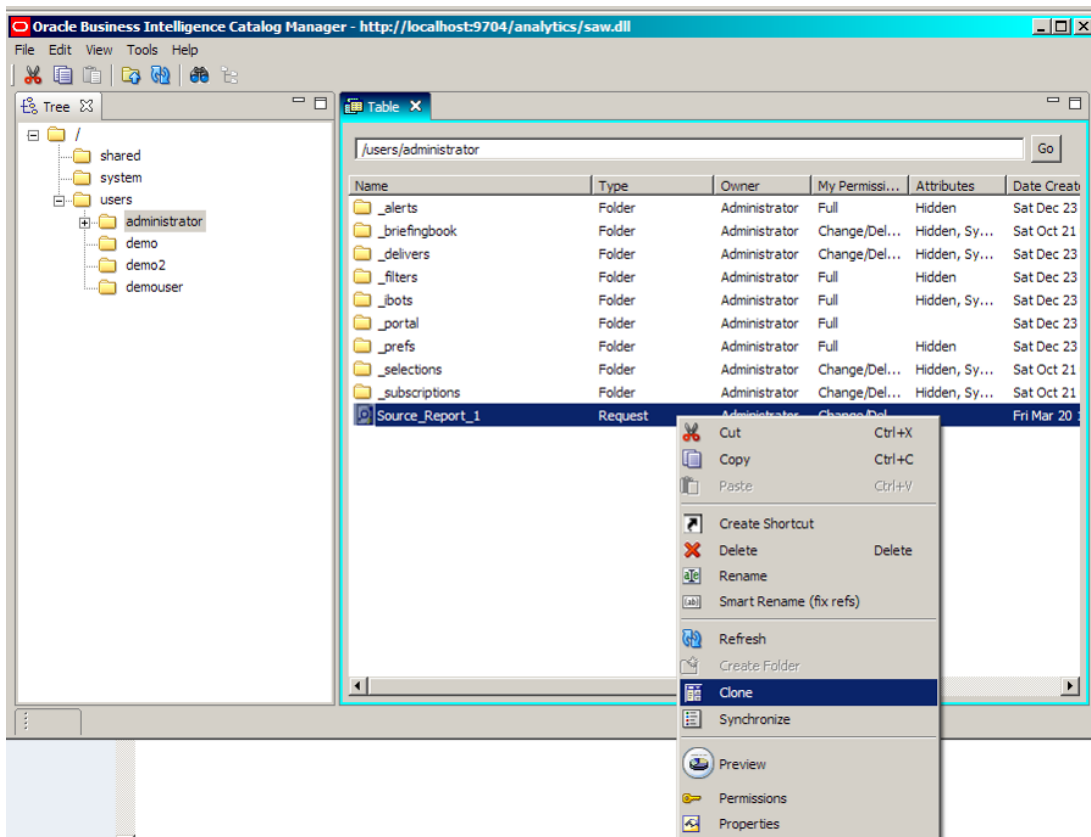
This section describes the usage and functionality of CAF V1 Cloning modules.

CAF V1 Cloner utility is invoked from Catalog Manager available as part of the OBI EE install. Catalog Manager is opened from Program Files > Oracle Business Intelligence > Catalog Manager. Or from ..\OracleBI\web\catalogmanager, file Catalogmanager.exe.

Open a Web Catalog from the Catalog Manager (online or offline). This Web Catalog will be the source for cloning objects. The sections below describe how to clone selected content from this catalog into a target catalog and how they can be synchronized with changes made to source RPD.

3.1 Screen 1: Selecting source content to clone and launching cloner

To clone a Request, or a group of requests, or a Dashboard or a group of Dashboards, browse the opened catalog in Catalog Manager and select all the objects that you want to clone. Right click and choose the **Clone** option from the contextual menu to launch CAF V1 cloning Wizard.



For this illustration, we clone a single report “Source Report 1” which is built using “Sample Sales” Subject Area.

Multiple reports can be selected at once as a batch source for cloning. Select multiple reports in Catalog Manager, right click and select **Clone** in contextual menu. Rest of the steps in the wizard is similar to that of report cloning. Refer to section 3.10 of this document for more details.

3.1.1 Dashboard pages

Cloner also works with dashboard pages as sources. It clones the full layout of the selected page and the reports exposed within in these pages. When selecting dashboards pages in Catalog Manager, right click and select clone in the contextual menu. Rest of the steps in the wizard is similar to that of report cloning.

3.2 Screen 2: Configuration Details

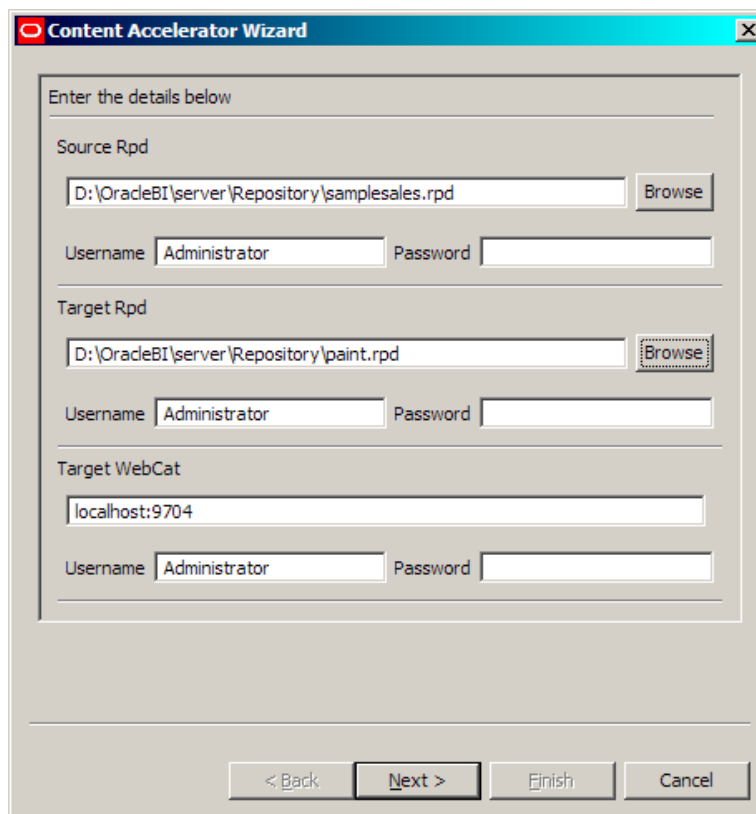
This screen prompts for connection details of source and target environments:

3.2.1 Source RPD:

Path to the RPD file that supports the source report/dashboard selected for cloning. CAF V1 requires this information to list the objects used in selected source report/dashboards, and identify the minimum set of mappings needed with objects in the target environment. Some logical calculations in source RPD (used in reports) may also get cloned into the target RPD. Only the offline version of source RPD is accepted by CAF V1 (practically, you only need a copy of the RPD originally used to support the source reports). No modification will happen to source RPD during cloning process.

3.2.2 Target RPD

Path to the RPD file of the target environment, where the selected source objects (Reports/Dashboards) will be cloned. CAF V1 requires access to the target RPD in order to offer users with possible mappings for objects required in selected source objects (Reports/Dashboards). An offline version of target RPD is required. CAF V1 may proceed with some modifications to target RPD code during cloning process, in case some logical calculations are needed in source reports. A warning message will be displayed before updating target RPD and a backup of the original target RPD will be saved in the same folder as the target RPD with a '_backup' suffix to its name.



The screenshot shows the 'Content Accelerator Wizard' dialog box. It has a title bar with a red 'X' icon and the text 'Content Accelerator Wizard'. The main area is titled 'Enter the details below' and contains three sections:

- Source Rpd:** A text box containing 'D:\OracleBI\server\Repository\samplesales.rpd' and a 'Browse' button.
- Username:** A text box containing 'Administrator'.
- Password:** An empty text box.
- Target Rpd:** A text box containing 'D:\OracleBI\server\Repository\paint.rpd' and a 'Browse' button.
- Username:** A text box containing 'Administrator'.
- Password:** An empty text box.
- Target WebCat:** A text box containing 'localhost:9704'.
- Username:** A text box containing 'Administrator'.
- Password:** An empty text box.

At the bottom of the dialog box, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

3.2.3 Target Web Catalog

Provide details of the target Web Catalog instance (in the format hostname:portnumber) where generated code for clone of reports/dashboards will be saved. CAF V1 requires an online Web Catalog in order to clone the reports. Note that this can be any online Web Catalog, CAF V1 will only use it to create folders, reports and dashboards with the right objects. Once there, these reports can easily be manually copied and/or moved to another instance again.

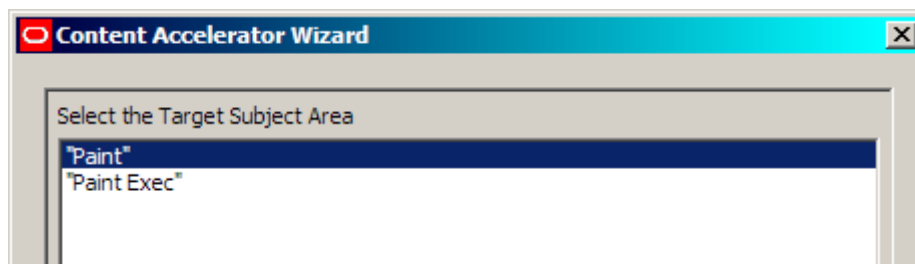
In this example, the source RPD for the cloning is samplesales.rpd (where original report was built), and the target is paint.rpd. The cloning process will create the result reports on the localhost online Webcat.

Performance Note: when clicking “Next” button on this screen, CAF V1 will sequentially parse both source and target RPDs under xml format (leveraging XUDML). If any of these repositories have a large size, the amount of time required for CAF V1 to complete this step and load next screen may take up to a minute or more.

Configuration Note: upon completion of the first cloning, CAF V1 will retain the information of Source and Target RPD in a configuration file, and these will default for the next use of CAF V1. You can update and override these configuration defaults by editing the file directly. Refer to section 2.2.3 in this document for more details.

3.3 Screen 3: Select Target Subject Area

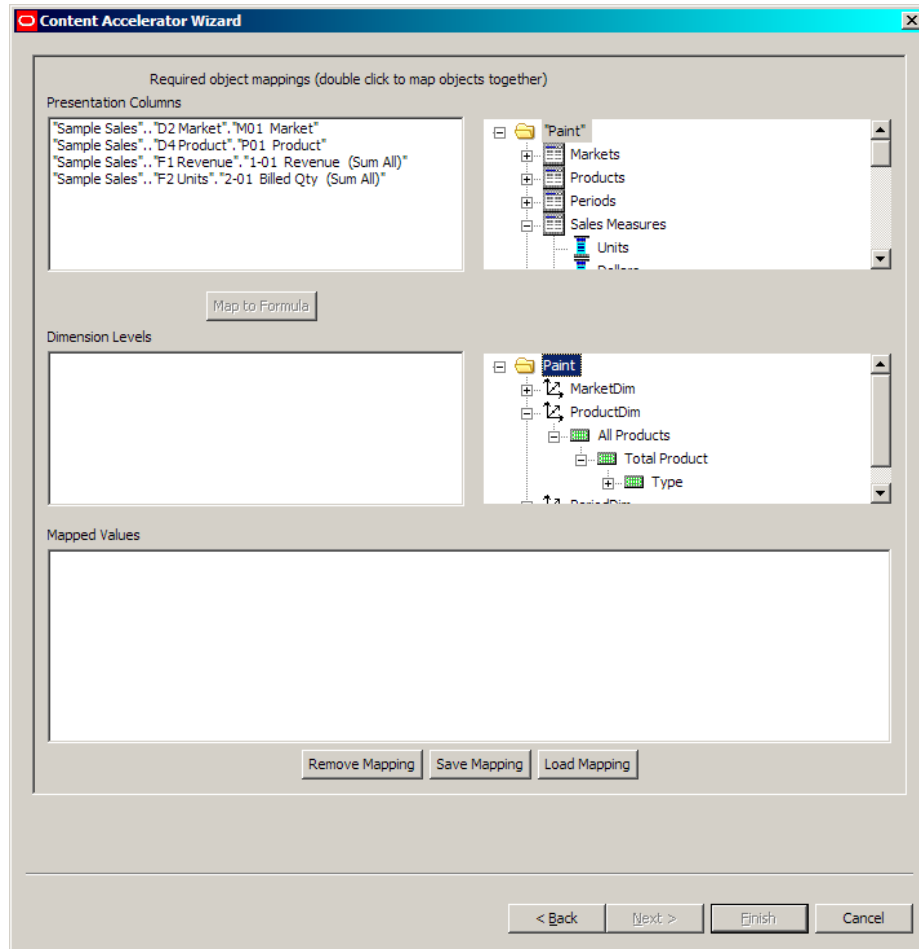
This screen displays the list of Subject Areas available in the target RPD. Select the one you want to clone the reports on.



3.4 Screen 4: Required Object Mappings Screen

In this screen, CAF V1 allows you to provide source to target mapping for each column that is required to recreate the source content you selected.

During the initial parsing step (Screen 2) CAF V1 cloner identified the very minimum set of columns that is required for recreating the report. Now, it prompts you for providing proper mapping of each these columns, to the selected Subject Area in the target environment. To proceed to next step, all columns in this screen need to be mapped to target columns.



3.4.1 Understanding list of required column mappings: Source Report 1 Example

In the case of our example, CAF V1 is requiring mapping information for four columns only. Let's take a detailed look at the source report design in order to understand why only these four columns are required by CAF V1. The "Source Report 1" query report is designed with following columns and filters:

D0 Time	D4 Product	F1 Revenue	F2 Units	Answers Calculation
T05 Per Name Year ↑↓	P01 Product ↑↓	1-01 Revenue (Sum All) ↑↓	2-01 Billed Qty (Sum All) ↑↓	Avg Product Revenue by Year ↑↓

Display Results Remove All

Filters

Add filters to the request criteria by holding down the CTRL key and clicking on column names in the selection pane, or by clicking on t

M04 Region is equal to / is in East		
AND E01 Employee Name is prompted		

Columns 1 to 5 are from the RPD, column 6 is a calculation in Answers:

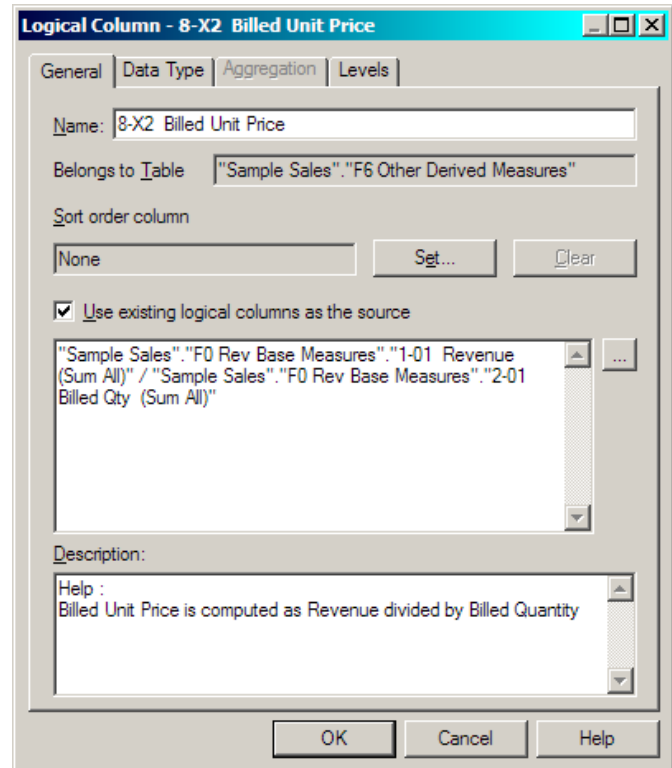
Column 1 & 2, "**D0 Time**".**"T05 Per Name Year"** and "**D4 Product**".**"P01 Product"** are: attribute objects from dimensions in Sample Sales which are directly mapped to physical columns in Samplesales data source. Note that "D0 Time" is a dimension flagged as Time dimension in Samplesales RPD.

For both these columns, CAF V1 will require a substitute in target Subject Area, in order to replicate the report. Column 3&4, "**F1 Revenue**".**"1-01 Revenue (Sum All)"** and "**F2 Units**".**"2-01 Billed Qty (Sum All)"**: measures object from fact table in Sample Sales which are directly mapped to physical columns in Samplesales datasource. For both these columns, CAF V1 will require a direct substitute in target Subject Area, in order to replicate the report.

Column 5, "F2 Units"."8-X2 Billed Unit Price": measures object from fact table in Sample Sales. This object is an RPD logical calculation, it's defined as a formula only involving other logical objects in RPD: Revenue divided by Billed Quantity.

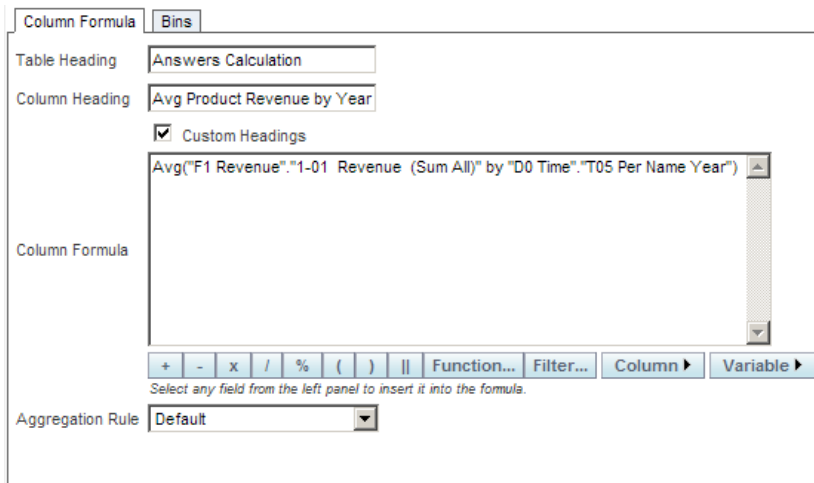
For this column, CAF V1 will be able to directly replicate the logical formula in the target RPD, and use the new object in the target report design. Therefore, only substitutes for the components of the logical formula will be required in CAF V1 mappings. In this case, Revenue and Quantity, which are already in the list from previous columns in the report.

Column 6, **Avg Product Revenue by Year** is an Answers calculation formula, defined as average of product revenue by year.



CAF V1 will directly recreate the exact same Answers calculation in the target report. Therefore only substitutes for components of the Answers formula will be required in CAF V1 mappings. In this case, Revenue and Year, which are already in the list from previous columns in the report.

Filtered columns: notice that the report also involves filter columns. Objects only used for filtering clauses in source report will not show up in the "Required Object Mappings Screen". They will be processed in a separate mappings screen as optional objects.



From looking into the report design, a minimum of only four columns are required for CAF V1 to properly clone the report: columns, 1 to 4, that is, Year, Product, Revenue and Quantity.

Notice that only these few columns appear in the "Required Object Mappings Screen". CAF V1 will recreate the other necessary logical objects in target RPD using the necessary source columns for these calculations, and it will recreate Answers based calculation in the target report.

If multiple reports are chosen for cloning simultaneously, then this screen shows a common list of fields that need to be mapped for all the reports selected.

3.4.2 Mapping Presentation columns

To map a source column to a target column, click on the source column, then double click on the target column of your choice in the right pane. Once a column is mapped, it is removed from the top left section and appears down in the Mapped Values section. To remove a mapping, highlight the mapping in the Mapped Values section and select the Remove Mapping button.

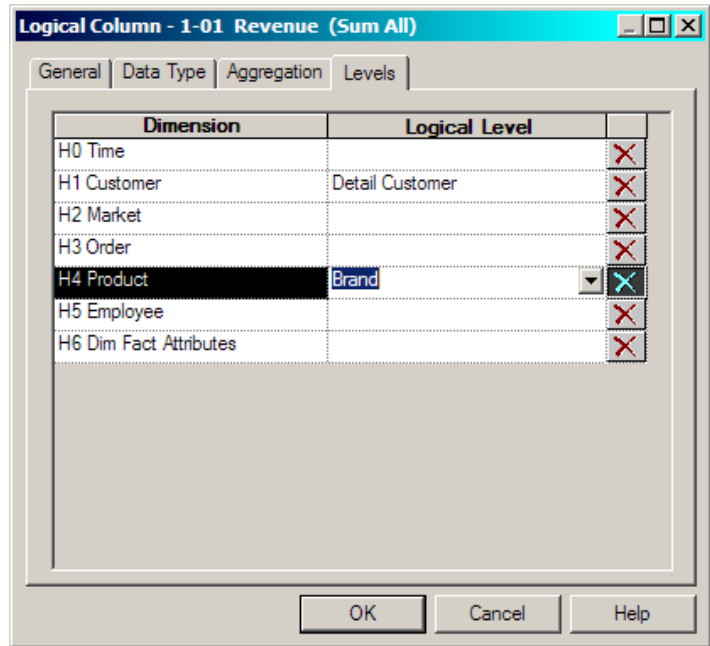
3.4.3 Dimension Level Mappings

In case the source objects are involving level based metrics or specific logical calculations such as AGOs or TODATEs formulas, CAF V1 will require to know target hierarchies to use and level in that hierarchy that substitute to levels in the source hierarchies. Note that all requests might not require dimension levels to be mapped. For example, a dimension Level mapping is required for the following commonly encountered scenarios:

If the source report has a logical column that uses a Level in its formula expression. For example, RPD time series functions **Ago**(<<Measure>>, <<Level>>, <<Number of Periods>>), or **ToDate**(<<Measure>>, <<Level>>).

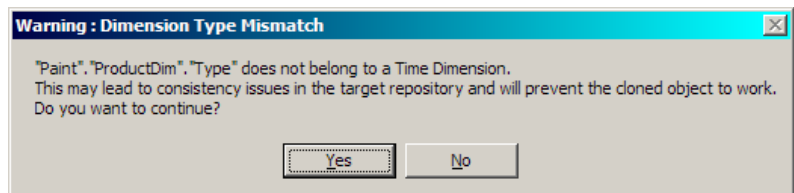
If the source report includes a level based metric in its definition. Level based metrics are metric which are explicitly set to aggregate at a specific level of a dimension in the RPD. (group by)

When CAF V1 detects a dimension level in any of the column expressions used in a source report, then this level shows up in the list of dimension levels that are required to be mapped. Typically, this mapping process is fairly intuitive for majority of reports cloned.



Note: if the level belongs to a dimension of type 'Time' (such case when using Time series functions), then the substitution dimension level from target RPD must also be of type 'Time'. Otherwise the new object created in target RPD by CAF V1 will not be consistent. CAF V1 cloner will display a warning message.

User can override the warning and proceed with the mapping to a non time dimension level, but this will break consistency of target report until that dimension is manually upgraded to become a Time dimension.

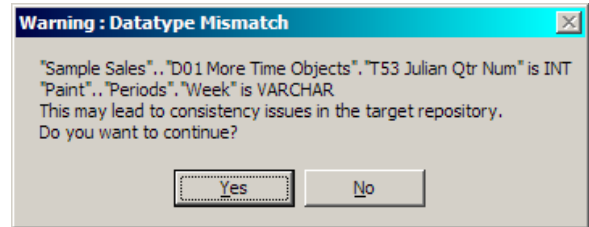


3.4.4 Warnings

If data type of the source and target columns are not the same, CAF V1 displays a warning message. The user can still proceed with the mapping, but there is a risk that the report may not work correctly. The impact of using different data type's column varies depending on the report itself, or on which data types are matched together. Generally, it is advised to comply with identical data type requirement, unless user is very familiar with the source report design and understands the consequences.

If the aggregation rules of the source and target columns are not the same, the utility displays a warning message but the user can still proceed with the mapping.

Some columns in source report may expect specific aggregation rules or have calculations that include a formula forcing data aggregation. When providing with substitute objects, overriding these aggregations with different ones may prevent the report to render correct results. For example, some source reports may expect a metric that aggregates with a sum rule (like revenue). Mapping this metric to a target column with an average aggregation rule (like DSO ratio) or a period end aggregation (like headcount), or anything else, may impact the target report to run properly. In most case, it's straight forward to assess the impact of such a match / mismatch, by mentally picturing the source report with the new metric, and validating that it will still be functional with the new metric. CAF V1 warning reminds user about this risk.



3.4.5 Saving and Re-using mappings

The **Save Mapping** button at the bottom of the screen allows Mappings detail information to be saved and reused for subsequent cloning process. This feature can be very helpful when multiple cloning processes have to happen between two similar environments. Saving a mapping detail set can be done by clicking the Save Mapping button. Then all the current mappings get saved to a text file in the path provided by the user.

Reusing pre-saved mappings for subsequent cloning processes is done by selecting the **Load Mapping** button and choosing an existing mapping file. Only those mappings in the file that are relevant to the columns present in the current report that is currently being cloned will be loaded up by the utility. User can load many pre-saved mappings files one by one during a single mapping process, appending mapping information to the remaining list of objects. It is also possible to edit the saved mappings file using a simple text editor.

3.4.6 Option: Mapping to manually entered Formulas

The button **Map to Formula** allows user to manually enter a new logical formula beyond providing just a simple one to one mapping. For instance, source column Revenue could be mapped to a new object: Revenue / Employee in the target RPD. The formula in the dialog box will be replicated in the logical layer of target RPD, as an additional RPD logical object, and will then be used by CAF V1 as a substitute to the source Revenue column in this case.

Exercise caution in leveraging this advanced feature:

3.4.6.1 Syntax and consistency breaches

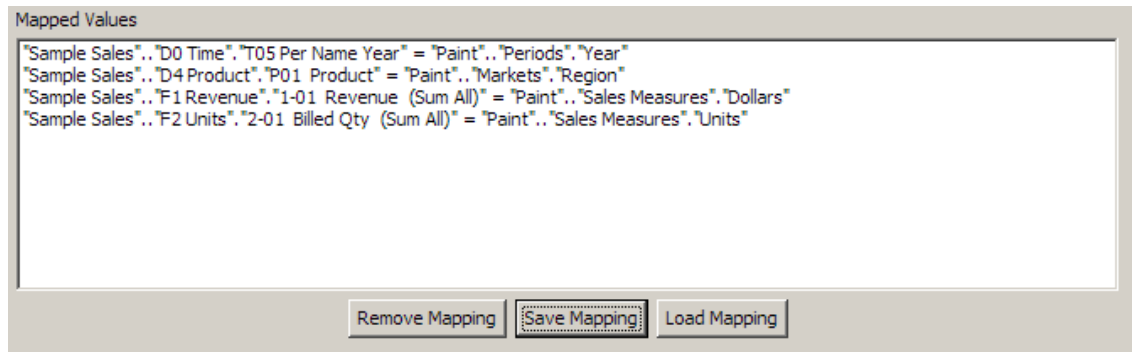
Make sure that the formula in the dialog box which is entered manually complies with proper Answers syntax. There is a potential RPD consistency issue when mixing logical columns together. Consistency checks are not performed when entering free formulas in CAF. The automated creation of these objects may generate consistency issues. Be extremely careful when entering these formulas.

3.4.6.2 Duplicating formulas by inserting Spaces in the syntax

CAF V1 compares the column formula manually entered, with the objects in the RPD, to check if the definition already exists. In doing so, it takes the formula as it is, including all the spaces. However, when the formula is eventually written to the RPD, the admin tool removes all the extra spaces and maintains only one space between the operands. This implies that, if the RPD has a object with formula Revenue * 100 and if the user enters the formula Revenue*100 in the CAF formula screen (without any spaces), then CAF will create a new object for the definition entered.

3.4.7 Source Report 1 Example

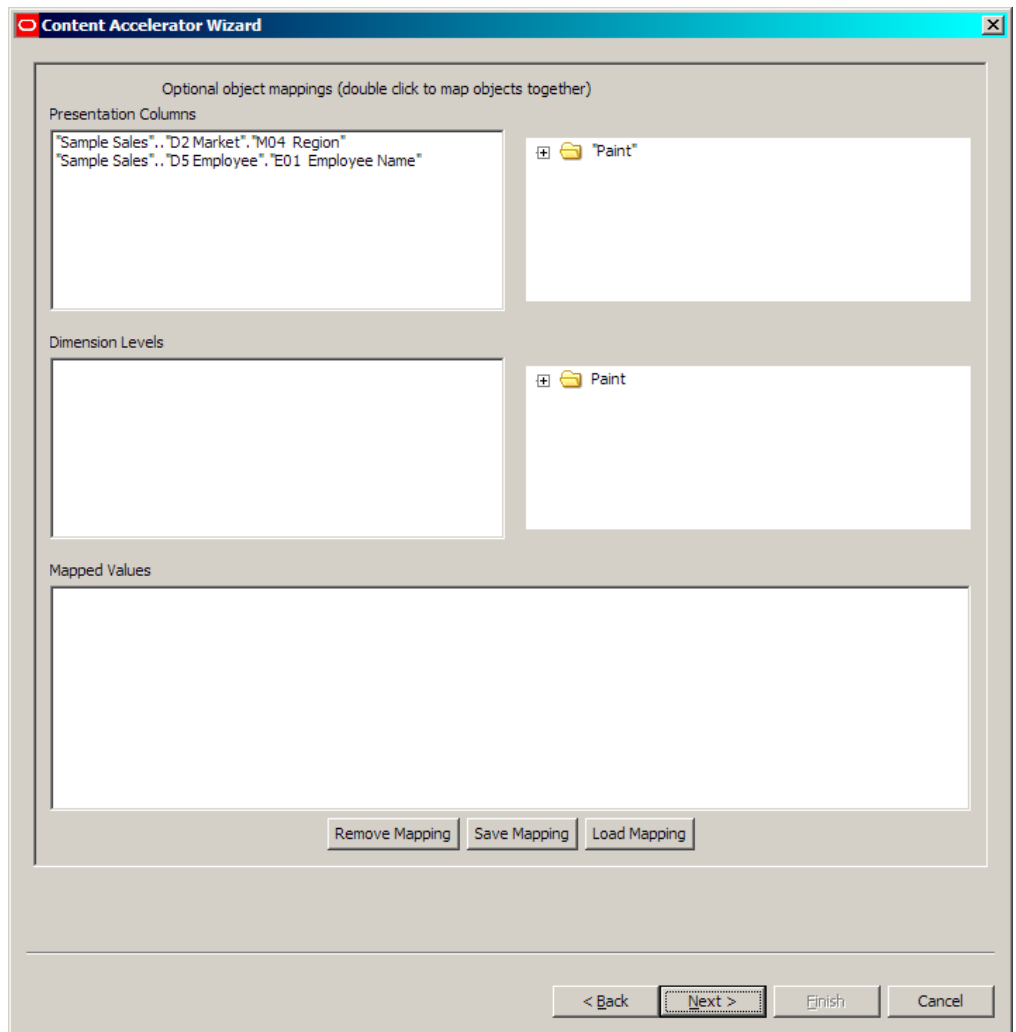
For our Source Report 1 Example, let's use following mappings objects.



3.5 Screen 5: Optional Column Mappings – Filter objects

This screen lists all the columns only used by filters in the source requests. CAF V1 considers these columns as not mandatory for the reports to function properly. That is, user can either choose to provide mapping for all the columns in this screen, or just for the subset of the columns that he wants to be incorporated in the target. Only those columns for which mapping are provided will be carried forward as filter definitions in the target.

All the columns used in filter definitions of source reports are listed as optional columns for mapping during the cloning process. If a filter column is already part of Required Column Mapping list (i.e. is already part of a report column formula, refer to section 3.4 in this document), then its substitute mapping will be reused and the column will not be listed in this the Optional Column Mapping screen.



Save Mappings functionality is available for Optional Column Mapping screen, as for Required Column Mapping screen. Same mappings file may be reused here.

3.5.1 : Source Report 1 Example

For our Source Report 1 Example, let's ignore all optional mappings and override the step by directly clicking Next button.

3.6 Screen 6: Destination Details

3.6.1 Path for Target Requests

In this screen, CAF V1 needs user to specify the folder path where target requests will be created in the target Webcat. In case this path does not exist in the Webcat, CAF V1 will create it. By default, each target request will have the same name as its source request. However, user can override this to be any name. If a report with that name already exists in the same location, CAF V1 will overwrite it.

3.6.2 Add Prefix

Clicking on Add Prefix and providing prefix text will have target requests names prefixed with the entered text. This feature is useful if the same source request is cloned on multiple targets (within the same folder). Then the prefix can help differentiate between the various target reports.

3.6.3 Create Dashboard

If user wishes to create a new dashboard with each cloned report, then click on Create Dashboard and provide the dashboard name. This feature will expose target reports within single dashboard pages, each under the _Portal folder that leverages the path specified above. This feature will create a page per cloned report. It is different from the dashboard cloning process where existing dashboards are used as a source for cloning process (Refer to section 4.2 in this document)

The screenshot shows the 'Content Accelerator Wizard' dialog box. The 'Path for Target Request(s)' field is populated with '/shared/Cloned'. Below this, there are two columns: 'Source Request(s)' and 'Target Request(s)'. The 'Source Request(s)' field contains 'Source_Report_1' and the 'Target Request(s)' field also contains 'Source_Report_1'. There are three checkboxes: 'Add Prefix' (unchecked), 'Create Dashboard' (unchecked), and 'Perform Consistency Check' (checked). A text box for 'Prefix Text for Target Request(s)' is empty. A text box for 'Dashboard Name' is also empty. A note at the bottom reads: 'Note: Cloning the selected objects will result in changes on the Target RPD.' At the bottom right, there are four buttons: '< Back', 'Next >', 'Finish', and 'Cancel'.

3.6.4 Expected Impact on Target RPD

If the source requests cloning process involves no creation of any logical columns in the target RPD, then a message is displayed in this dialog box to confirm no impact expected on target RPD.

If the cloning process involves creation of logical columns in the target RPD, then user can choose to also Perform Consistency Check during the cloning. CAF V1 will then check if target RPD is consistent after adding new objects to it, and will list the results of consistency messages in the log. Consistency issues will not prevent the cloning process to happen. It is possible that mappings selected, or formulas entered in mappings result in inconsistencies issues in the target RPD. This means that an inconsistent target RPD can be created, and its objects used in cloned requests, although the RPD it's not proper for use. In this case, a message of inconsistency will be displayed in final summary screen, as well as in the session's log.

A backup of the original RPD is maintained in the same directory as the original one, with '_backup' added to it., users can always revert to the original RPD, as the backup remains available.

3.6.5 Source Report 1 Example

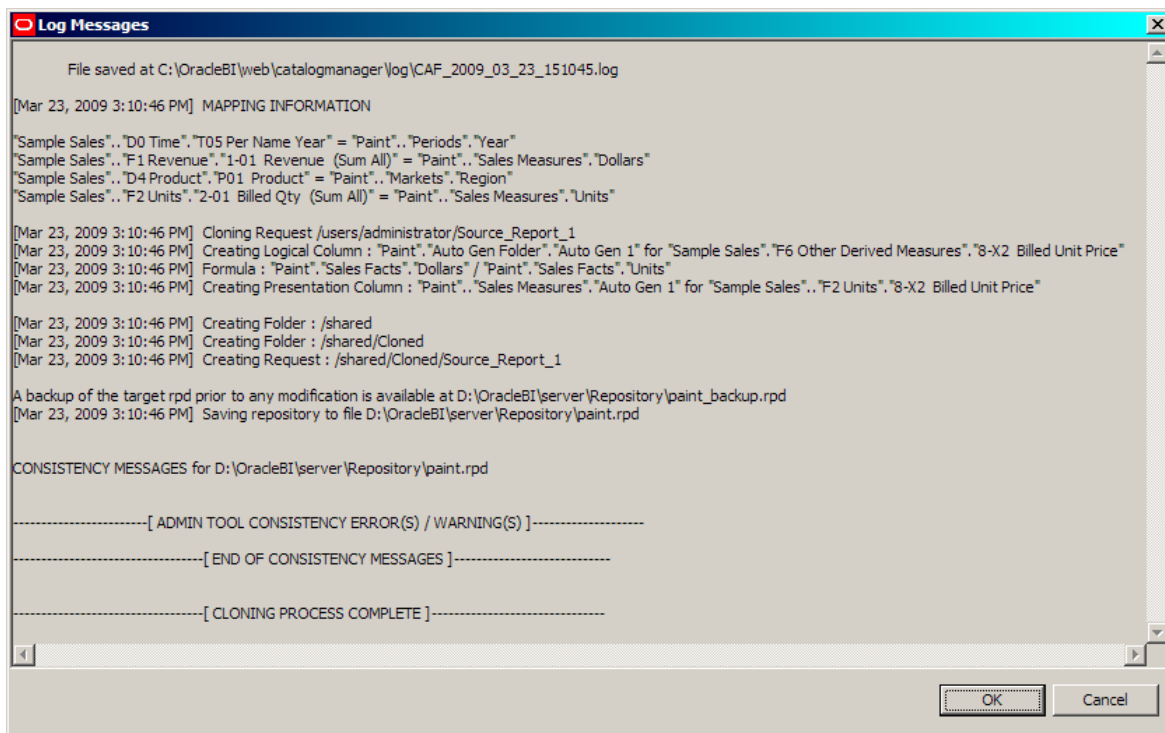
For our Source Report 1 Example, let's use following simple destination details,

In the case of our example, CAF V1 indicates it will need to alter target RPD with the logical calculation included in the source report ("8-X2 Billed Unit Price").

Note that if this exact logical calculation had already existed in the target RPD (regardless of the column name or its location in the presentation layer, CAF V1 would have found it out and would have used it for target reports. In this case, it would not have needed to change the target RPD at all.

3.7 Screen 7: Process log messages

In this screen, CAF V1 Cloner displays the detailed log information of the cloning process, which is also saved in the path indicated at top of the screen.



The log sequentially displays information about which column was mapped in this cloning process, then, per each cloned request it displays:

Changes that happened in target RPD (which logical column created and where) located

Changed that happened in target Webcat

Results of Consistency check for RPD

All cloning processes generate unique log files as well, refer to section 4.4.1 of this document for further details.

3.8 Results of cloning process

3.8.1 Answers Results

At this point, all views and layouts existing in the source report are exactly cloned in the target environment report, as per their respective definition in the source report. Using Answers to browse the online Webcat, we can find the cloned target requests located within the folder specified in the destination path (Screen 6).

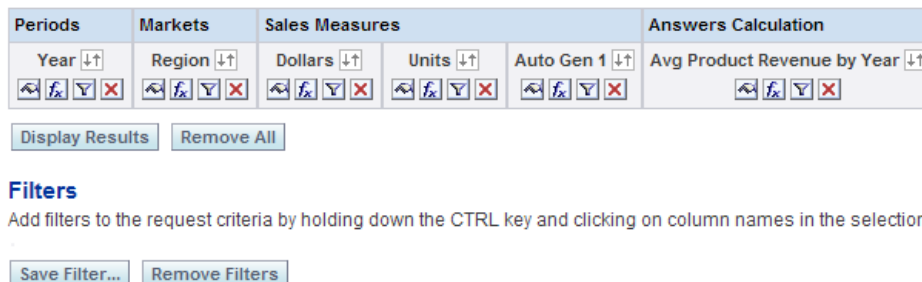


Note that the original description of the source report was cloned in target report, and appended with an extension that highlights the cloning process time and date that generated this report. That way, by looking up the unique log file for this cloning process, it's possible for user to trace where this cloning sourced from.

3.8.2 Source Report 1 Example

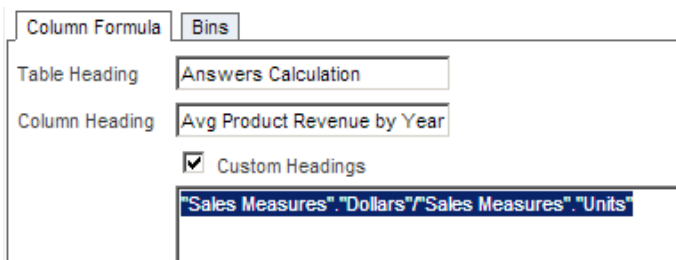
For our Source Report 1 Example, a new report was created under \Shared\Cloned. Notice the new report includes a copy of the original description of Source Report, extended with a CAF V1 addition of "Result of Cloning process on Date: Time". This enable full traceability via log file of which cloning process and what source this cloned object originates from.

Open cloned report to see it's using the following columns, as per our mappings information.



Notice that this version of the report does not have filters, as we did not enter any mappings in the optional screen about the filtered objects. As a result, CAF V1 fully ignored the filters setups in the cloned target.

Notice the Answers Calculated object (last column) whose formula is exactly defined as the one of the source request, but using the new mapped objects.

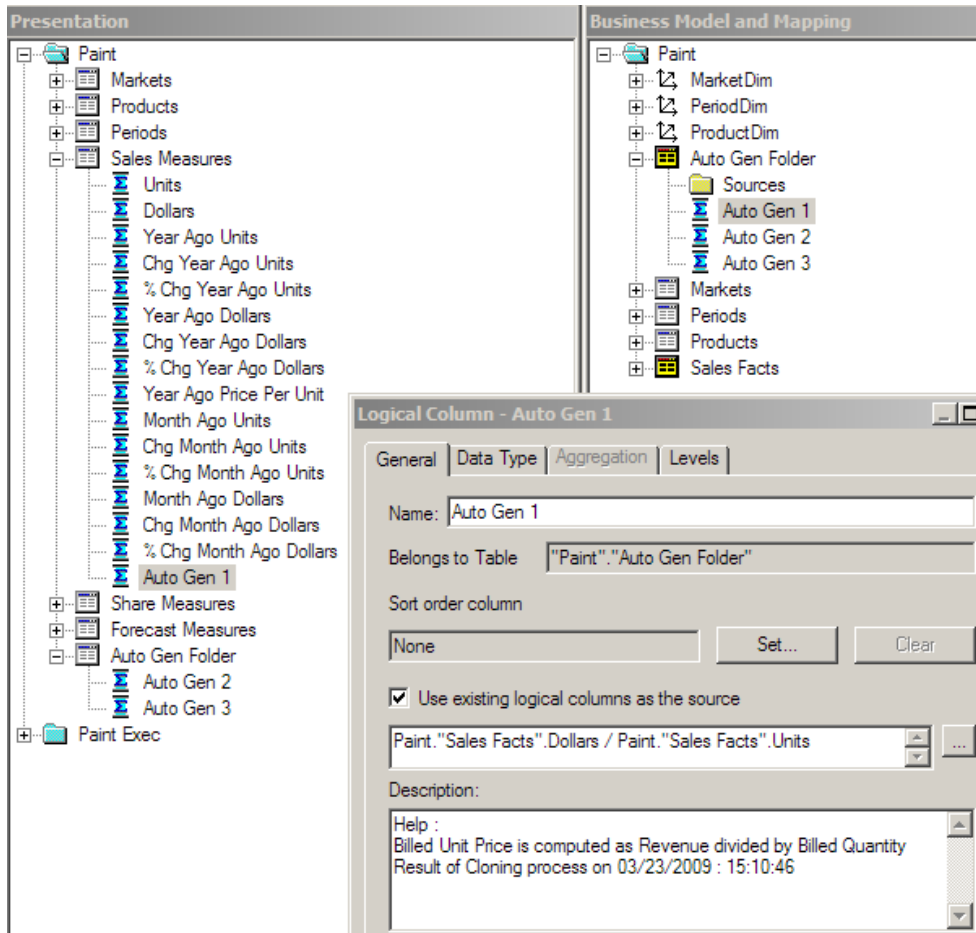


Also, notice the logical calculated object which was "8-X2 Billed Unit Price" in the source request, and now replaced with "Auto Gen 1" in the target report. This is the name of the newly created column in the target RPD, which replicates the exact formula of "Billed Unit Price" object, but using the newly mapped objects in target RPD. The naming of the new object was dynamically generated by CAF V1 in target RPD. Synchronizer utility allows to seamlessly update this name to user suited name, both in RPD and Webcat.

3.8.3 RPD Results:

In our example, the cloning process also had an impact on target RPD and created a logical calculation that did not already exist in it. The source column in the source report was "**8-X2 Billed Unit Price**", and the created column in the RPD is now "**Auto Gen 1**".

CAF V1 creates RPD object with an automated sequential naming ('Auto Gen 1', 'Auto Gen 2' and so on) in order to remove initial confusion as their origin. CAF V1 locates newly created logical objects by default in "Auto Gen Folder" in the logical layer, and can expose them in the same presentation layer folder as the original objects if possible.



Notice the new object includes a copy of the original description of Source object, extended with a CAF V1 addition of "Result of Cloning process on Date: Time". This enable full traceability via log file of which cloning process and what source this cloned object originates from.

To properly rename newly created objects as per functional users need, and synchronize new names across RPD and Answers reports, use Synchronizer utility (Refer to section 4.3 of this document).

3.9 Specific Report Objects

3.9.1 Report Filters Objects

CAF V1 will clone report filters clause.

If the column object used in the filter clause is also present as a report column, then the column will appear in the Required Column Mappings screen and user must provide a mapping for this column. CAF V1 will then replicate the filter clause with the mapped column.

If the filter column is not one of the report columns, then CAF V1 considers it as not mandatory for the reports to function properly. It will appear as a mapping choice under Optional Column Mapping Screen. That is, user can either choose to provide mapping for all these columns, or just for a subset that he wants to be incorporated in the target. Only those columns for which mapping are provided will be carried forward as filter definitions in the target.

3.9.1.1 Filters Criteria Values

Filter criteria values will replicate as is in the target reports. IE, if a filter has a value being hardcoded in source report, the same value will appear as identical in the target report. While the mapped column object will substitute to the source filter object, the value of the criteria may remain, possibly creating a mismatch.

If the source report filter is leveraging a Presentation Variable for its criteria value, the same definition will be replicated in the target report.

3.9.1.2 Presaved filters

If a report includes reference to a Presaved filter, CAF V1 ignores it and will not carry it forward this reference to the target request. In the following example, the clause with 'All Prompted Filters' is a presaved filter and will not be cloned. Other filter clauses will be cloned (assuming user provided necessary mappings information in optional mappings screen)

Filters

Add filters to the request criteria by holding down the CTRL key and clicking on column names in the selection pane, or by clicking on its name in the selection pane. ?

RANK(SUM(F1 Revenue.1-01 Reve... is less than or equal to @_Top_N_Limit}{10} [Copy] [Close]

OR RANK(SUM(F1 Revenue.1-01 Reve... is less than or equal to @_Top_N_Limit}{10} [Copy] [Close]

Edit Filter Group

AND [Folder] All Prompted Filters [Copy] [Close]

Save Filter... Remove Filters

3.9.1.3 Filters Grouping Structure

AND/OR clause structure in the filter setup will be preserved by CAF V1 when cloning requests. Assuming user provides mapping information for the filter object, CAF V1 will recreate the hierarchy of AND/OR grouping structure.

3.9.2 Navigation target paths

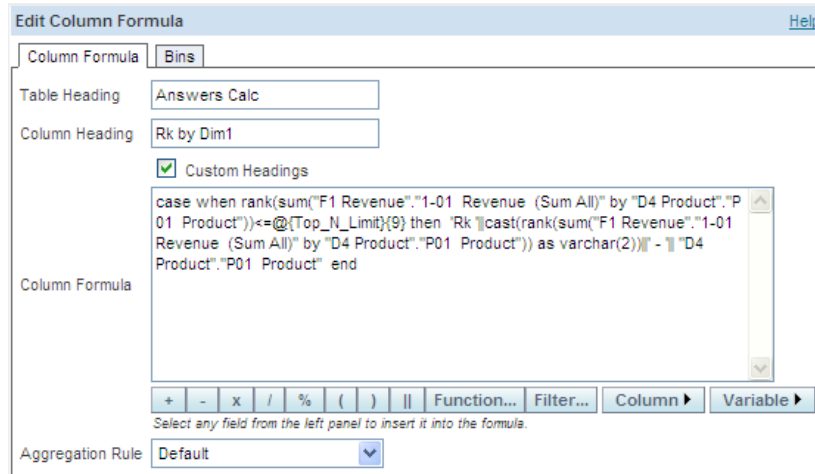
Navigation target paths from source report are copied at identical in target report. That is, some navigation setup may exist in the target report, inherited from source report, but leading to improper target path. These may need manual fixing.

3.9.3 Presentation Variables leveraged in Reports

When source reports leverage Presentation Variables, CAF V1 Cloner will fully replicate their structure within target report.

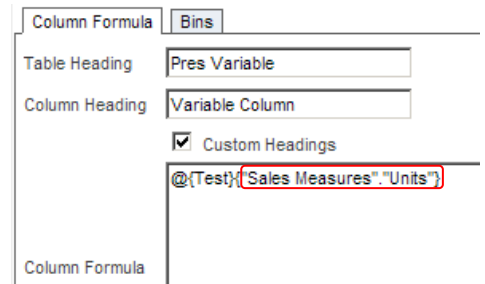
3.9.3.1 General Case

For Presentation Variables that are NOT referring to column names (default values is not representing a column object name), default values are carried forward to the target environment at identical. In the following example, the source Request uses a Presentation Variable Top_N_Limit with default value 9. When this report is cloned, the Presentation Variable definition and the default value will be carried forward as it is.



3.9.3.2 Presentation Variables referring to column names in the query

Web variables that are carrying a column object name (default values is representing a column object name from the Subject Area), will have their default values updated by CAF V1 Cloner. That is, the initial default value in the source report will appear in the Required Mapping Screen, and a substitution column will be expected by CAF V1 Cloner, in order to replace the default value in the Target report. For example, in the formula below, where Presentation Variable represents an Answers column, the default value of the Presentation Variable will be part of the required column to map in during cloning process.

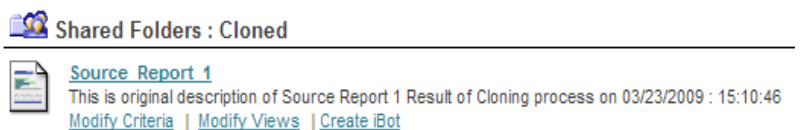


3.9.4 Column Selector views

Column selector views in source report will be replicated in target reports with only default column choice being mapped. Additional choices in the column selector, other than the defaulted one, will be ignored by CAF V1. That is, these columns will not appear as choices

3.9.5 Report Descriptions

The original report description of the source report are cloned in target reports descriptions, and are appended with an extension that highlights the cloning process time and date that generated this report. That way, by looking up the unique log file for this time / date cloning process, it's possible to trace where this exact cloning sourced from.



3.10 Cloning Multiple Requests at once

CAF V1 Cloner process works at identical when cloning multiple requests together. To run this, select multiple reports at once in a Catalog Manager folder, and right click “Clone” in contextual menu. The cloning process remains exactly the same whether an individual request or a group of multiple requests is being cloned

The primary benefit of cloning multiple requests together is to provide a common set of source to target mappings, that applies to the whole set of reports. If more than one report selected uses a given Subject Area column, then this object is listed only once for mapping, thereby reducing the number of columns that need to be mapped by user. For a given column, the same mapping provided once will be used in all the reports that use this source column. That is, If user maps the source column “1-01 Revenue (Sum All)” to “Headcount” in the target Subject Area, then the same mapping will apply to all the reports that have been chosen for this cloning. This applies to both mandatory as well as optional columns lists.

Note:

In case of multiple requests cloning, all the target requests will be created in the same folder based on the path provided by the user in the Destination Details screen.

CAF V1 is currently not able to simultaneously process multiple reports that originate from different Subject Areas. When selecting report A and B as source reports, respectively coming from SA1 and SA2 source Subject Areas, and mapping them both to SA3 target Subject Area, only report A will be cloned properly. The solution to this issue is to group reports from similar Subject Areas when batch cloning them.

3.11 Known limitations & Frequently Asked Questions

3.11.1 CAF V1: Known Limitations

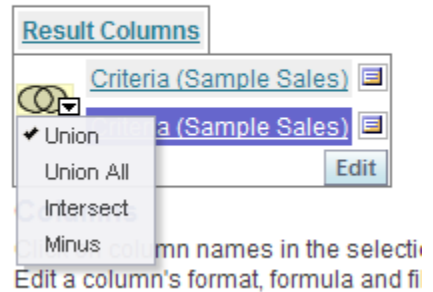
3.11.1.1 Not cloning Reports using Set Operations :

CAF V1 is currently not able to process cloning/synchronizing of reports that leverage Set Operations such as Union, Union All, Intersect, or Minus clauses in their syntax. If one source report selected for cloning uses a Set Operation, the process will either fail, or will offer no source columns to map in the required mapping screen. CAF V1 does not provide explicit indication that a report uses a Set Operation, users need to be careful not to select such a report for cloning source.

The fact that a single report combines objects from multiple subject areas is the limitation for current CAF V1 ability. A workaround for cloning these reports is to directly use the xml search and replace option available in Catalog Manager (under Tools menu), and replace old columns xml with new columns xml strings.

Set Operations

Combine criteria from one or more su columns and filters. Numbers of colu



3.11.1.2 Not cloning Report using RPD columns Aliases in their definitions

CAF V1 is currently not able to process reports that use rpd aliases in their definition. Aliases are alternative object names defined in the properties of Presentation layer objects in the RPD. CAF is limited both with the Presentation Tables and Presentation Columns aliases.

If the source report selected for cloning uses a Presentation Column alias or Presentation Table alias in its definition, then the column with this alias will not be replaced in the target report by the mapping provided. To avoid this issue, replace the alias object name in the source report by the natural name of the object in presentation layer.

3.11.1.3 Not processing RPDs containing Essbase Metadata

This version of CAF does not support source or target RPD which include Essbase metadata. If CAF is used with an RPD that contains Essbase metadata, it will stop at step 2 with the following error :

“Error occurred while initializing the source rpd : Exception occurred while initializing repository !!!”

3.11.1.4 Dependency to 10.1.3.4 nQXUDMLExec.exe codes for RPD parsing

CAF V1 leverages both the initial 10.1.3.4 version of nQXUDMLExec.exe and nQXUDMLGen.exe code. These utilities are in their initial version for 10.1.3.4 and were not fully maintained as such. Some issues with the parsing of specific RPD syntax may arise due to the fact that these utilities were in their initial version for 10.1.3.4. A blocking syntax in these utilities will prevent CAF V1 from working properly.

3.11.2 CAF V1 FAQs :

3.11.2.1 No Presentation columns show in 'Required Object Mappings' screen.

User initiates cloning of objects, chooses the source and target RPD and click Next. CAF V1 then shows no Presentation columns in the 'Required Object Mappings' screen. What is the problem ? This issue can be of two major origins:

Objects selected by user for cloning and the source RPD selected are not in synch. That is, none of the objects used by the reports exist in the RPD selected as source RPD. CAF V1 reads through the source report definition and expects to find all the appropriate objects from the source RPD. If this is not the case, then CAF V1 cannot identify the source mappings, and nothing is shown in the screen. The process cannot go further until appropriate RPD is selected.

In the process of cloning a dashboard page, this page happens to have no reference to any report (could be only text views on that page. In this case, CAF will not show any mappings required.

3.11.2.2 Which one is the source Webcat that I clone from ?

The Webcat originally opened from Catalog Manager is the source Webcat. It can be opened in online or offline mode to this source Webcat.

The target Webcat is chosen on screen two, after the cloning process was launched. The target Webcat must necessarily be online before you try to clone.

Once you are connected to your source Webcat, you can clone the same report onto multiple different targets. This however cannot be done in one go. You need to go through the cloning process once for each target environment.

3.11.2.3 Source and target RPDs. Should they be online/offline. Where do they physically need to be present?

Source and target RPDs are both opened offline by CAF V1. Ideally, user should leverage a local copy on the machine where CAF V1 is running in order to enhance CAF V1 performance, but the repositories can be picked up from a network location.

CAF V1 generates an XML file of content in each source and target RPD during the cloning process. The XML file is roughly 1.5 to 2 times the size of the RPD chosen and will be maintained in the same location where the RPD resides. These XML files are generated once user clicks the Next button after Screen 2 'Configuration Details'. Both these XML files will be deleted by CAF V1 upon completion of the cloning process.

3.11.2.4 After choosing source and target RPDs and clicking Next, CAF V1 appears to hang with no error message

This usually happens when either the source or target RPD is of large size. CAF V1 parses through the files and generates an XML version of each RPD during this step. This step can take up to a few minutes. As an example, a 70 megs size source RPD makes Takes 4 minutes for CAF to parse on a typical laptop hardware environment.

4 Other Features usage Instructions

4.1 Synchronizing Webcat and RPD

4.1.1 What is Synchronizer

Cloning processes that create new logical objects in target RPDs also result in poor-functional naming of new columns (Auto Gen 1', 'Auto Gen 2' and so on). Proper functional renaming of these objects needs to happen to fully complete CAF V1 process, and to make reports fully intuitive to functional users. However, re-arranging and renaming objects in target RPD impacts its presentation layer, and may thereby break Answers requests that use these columns.

This is where CAF V1 Synchronizer helps, by allowing to automatically fix Answers reports with updated RPD objects names.

Note that while this capability is essential to a fully functional CAF V1 cloning process, it can be extremely useful in contexts outside of Cloning process as well. Deploying RPD objects/folder name changes in Webcat is often a very challenging and costly process. CAF V1 Synchronizer utility will allow to make this task smart and fully automated.

Let's call our target RPD and Webcat just after Cloner process completed, "Stage1 Target RPD" and "Stage1 Target Webcat". At the minute of last cloning process finishes, "Stage1 Target RPD" and "Stage1 Target Webcat" are totally in synch (that is, reports in the Webcat are using names that all exist in RPD). However, these names may not be functionally meaningful. With the two steps below, Synchronizer will take us to a "Stage 2" status, where Target RPD objects are properly renamed, and Target Webcat made be in synch with these changes.

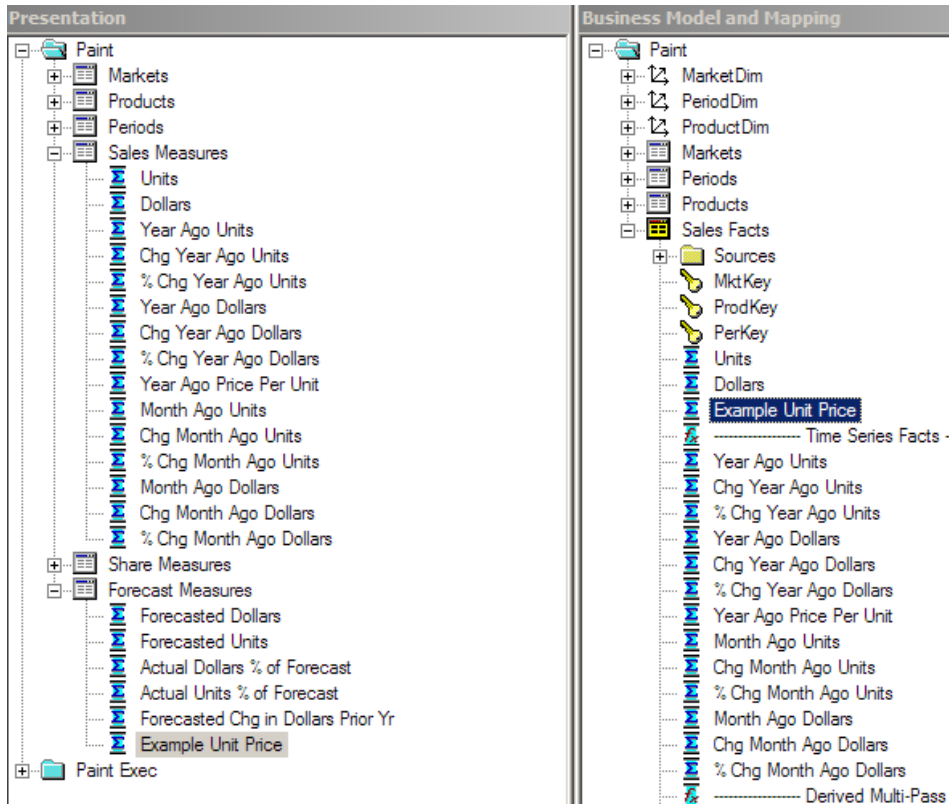
4.1.2 Updating Stage 1 RPD objects:

After cloning processes completes, user may open Stage 1 target RPD and directly change names of 'Auto Gen' objects (or any other objects) to anything more meaningful. The user may also re-arrange logical and presentation folders, place columns in a different folders, delete or rename any folders, do as many shuffling of object as required in both logical and presentation layer. Let's call resulting version of Target RPD to be "Stage2 Target RPD"

In order to run CAF V1 Synchronizer, you need to keep a copy of the original "Stage1 Target RPD" version. Synchronizer needs that as a starting point to be able to detect the changes that happened between Stage1 and Stage2 Target RPDs,

4.1.2.1 Source Report 1 Example

In the case of our “Stage1 Target RPD” resulting from our Source Report 1 example, let’s change its content to the following: renamed Auto Gen 1 to become Example Unit Price, moving it under Sales Fact logical table, and moving the presentation object into Forecast Measures presentation table.



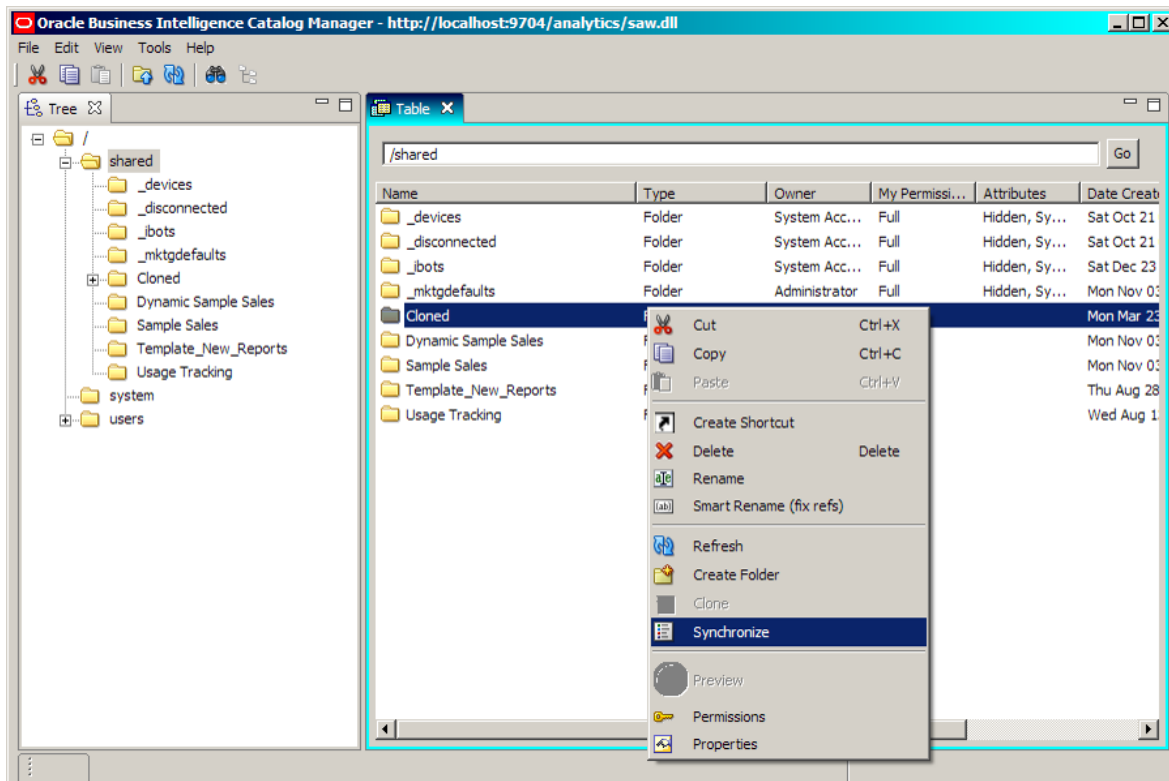
4.1.3 Synchronizing Webcat with updated RPD objects:

In the following step, Synchronizer will automatically detect name changes and folder changes that Presentation and Business Model column have undergone between Stage 1 and Stage 2, and will update selected Webcat reports accordingly.

4.1.3.1 Launch Synchronizer

Open “Stage 1 Webcat” in Catalog Manager (Online of Offline) and select all the report objects that you want to synchronize clone. Right click and choose the Synchronize option from the contextual menu. This launches the CAF V1 Synchronizer Wizard.

Synchronizer can be invoked on a single report, or on multiple requests simultaneously. It can also be invoked on a folder, in which case, it will synchronize all the requests within that folder. Synchronizer cannot be invoked on dashboard objects.



4.1.3.2 Synchronizer main Screen

In this screen, you need to provide Synchronizer with path to both Stage 1 RPD (Original RPD) and to Stage 2 RPD (modified RPD). The Backup Objects option will allow to preserve a backup copy of the Webcat requests before Synchronizer updates their objects.

Upon clicking Finish button, CAF V1 Synchronizer will parse through both RPDs and detect modifications that happened between the files. Then it will identify the requests use any of the modified objects, and that need to be synchronized. It then updates each of these requests with the proper new name of the column in the target RPD.

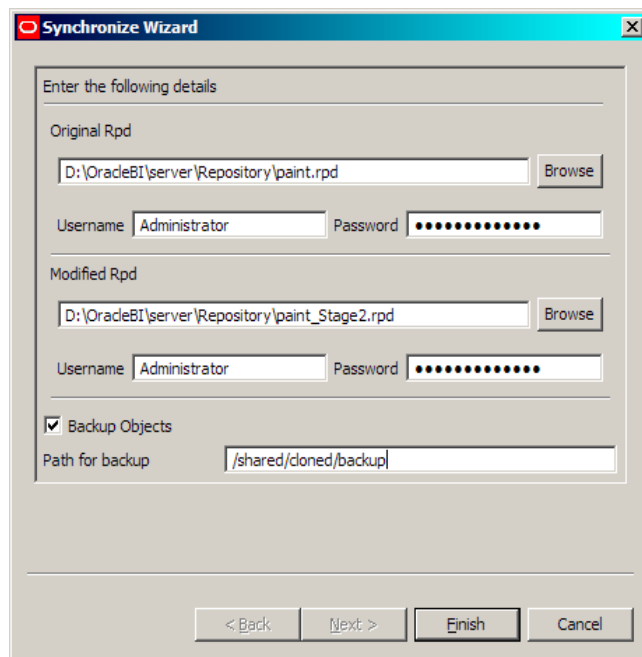
4.1.3.3 Functional limitations

Following are the scenarios where CAF V1 Synchronizer will detect changes between the Stage 1 and Stage2 RPDs:

- If a presentation layer column has been renamed or moved to a different folder,
- If a presentation layer folder has been renamed or moved, or deleted and recreated
- If a presentation layer column/folder has been deleted and recreated from the logical layer.
- If the logical layer column/folder has been renamed or moved

Synchronizer will **NOT** be able to detect changes between source and target in the following scenario

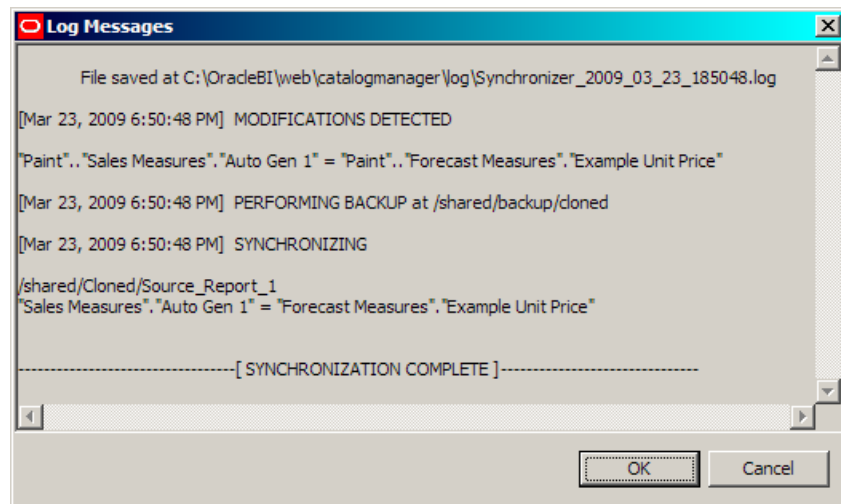
- If the logical layer column has been deleted from the model
- If the presentation layer column was moved into a different presentation Subject Area
- If the presentation column appears more than once in a single presentation Subject Area



4.1.3.4 Synchronizer Log Screen

In this screen, CAF V1 Synchronizer displays the detailed log information of the Synchronizing process.

The log displays data about which column were detected as modifications between the two RPDs, then details about changes made in each impacted requests selected: All Synchronizing processes generate a log file stored in the path indicated in config

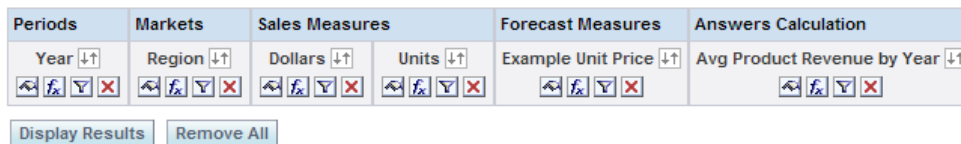


file:..\OracleBI\web\catalogmanager\ Synchronizer.properties. Each log is named after the date-time of the Synchronizing process, and stores all the detailed info.

Note: in order to properly view the log content, open the file using Wordpad type editor instead of notepad.

4.1.3.5 Source Report 1 Example

From its original definition using Auto Gen 1 Column, the target report is now changed to leverage the correct new name.



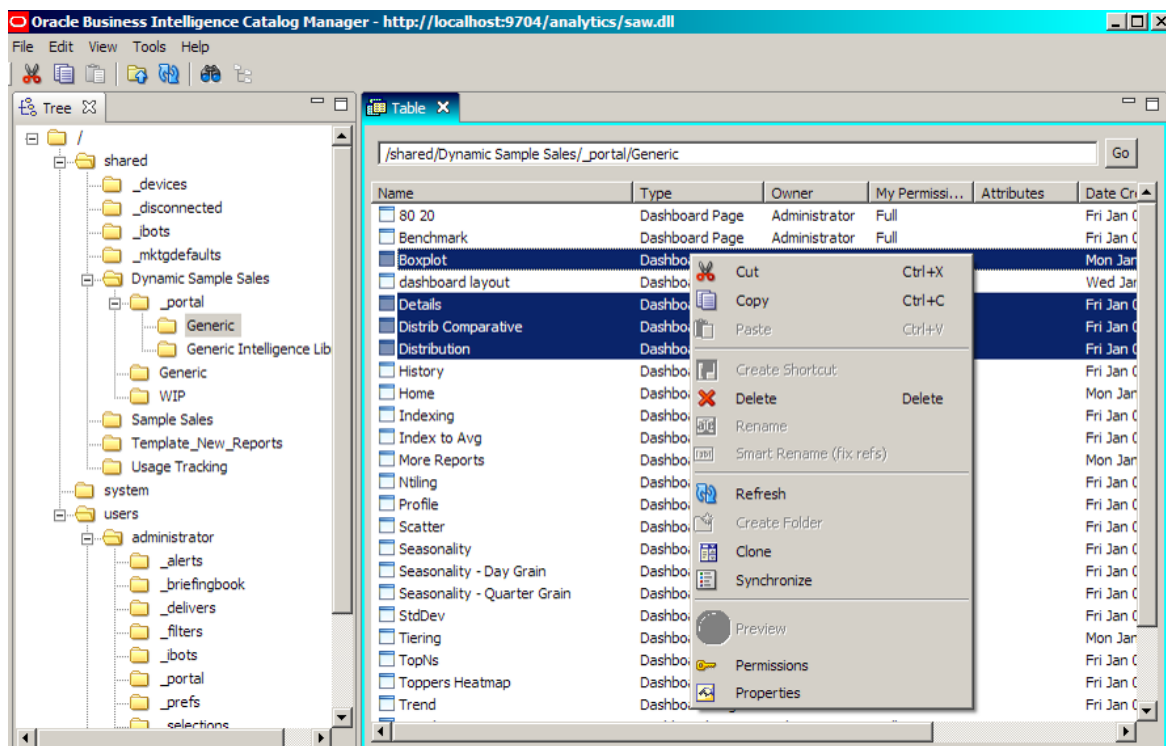
4.1.4 Using CAF V1 Synchronizer in other contexts

Note that CAF V1 Synchronizer can be used in any circumstance outside of specific cloning processes. For example, when columns of an RPD have been renamed or moved around and user wishes to efficiently and safely synchronize these updates in Webcat reports, Synchronizer will drastically help. The only requirement to allow CAF V1 Synchronizer process to happen is to keep a copy version of the original RPD before the changes.

4.2 Cloning Dashboards

Similar to requests cloning, dashboards can also be cloned by either choosing a single dashboard at a time or multiple dashboards together. When a dashboard page is cloned, the complete layout including columns, sections and formatting, as well as the complete set of dashboard objects (reports, prompts, links etc...) are carried forward as to the target environment. Requests and Prompts that are exposed within the dashboard page are also cloned into the target environment, within the path provided by the user.

Dashboard cloning is very similar to Request cloning: within an instance of Catalog Manager, navigate to a dashboard folder (any subfolder of a .._Portal\ folder). There, select one or many dashboard pages at once and right click the contextual menu to select Clone option:



Note: the “Dashboard Layout” object that is present in every dashboard folder cannot and should not be cloned. This object is not a real dashboard page and holds meta information about the dashboard. It will be automatically generated by target OBI EE environment during any cloning.

4.2.1 Objects cloned when cloning a Dashboard

When a dashboard page is cloned, all its content is replicated in the target environment:

4.2.1.1 Dashboard Overall Layout

Dashboard Pages, Columns and Sections, as well as their formatting are copied across in target Webcat. The location for the cloned dashboard in target environment is the one specified in the Destination Details screen during cloning process, under “dashboard name”.

4.2.1.2 Requests exposed on dashboard

Requests that are exposed within sections in the dashboard will be cloned automatically, and saved as new requests in the target environment. As in any other cloning process, cloned objects will be saved in the path specified in the Destination Details screen. In case of multiple requests or prompts exposed in the page, a common set of source to target mappings need to be provided, similar to cloning multiple requests.

Note: Requests will be cloned if they show within sections, irrespective of how they are displayed: embedded in sections, or as links within dashboard or in separate windows.

4.2.1.3 Prompts

Dashboard prompts are cloned to the target environment during the process of dashboard cloning, exactly like Reports are cloned. Objects used by the prompts will appear in the Required Column Mappings screen during cloning process, and will be replaced by substitute mappings columns. Once mapped, the prompts are created in the target, in the directory provided by the user. If the prompt sets a Presentation Variable, then the same setup definition is carried forward.

Following is an example of dashboard prompt in the source dashboard.

Group	Column	Operator	Control	Show	Default to	Set Variable	Label
	T05 Per Name Year	is equal to / is in	Multi-Select	All Values	Report Defaults	Year	
<input type="checkbox"/>	T03 Per Name Qtr	is equal to / is in	Multi-Select	All Values	Report Defaults	Quarter	

When the dashboard containing this prompt is cloned, the two prompt columns ‘T05 Per Name Year’ and ‘T03 Per Name Qtr’ appear in the list of Required columns for mapping. Once they are mapped to targets, they are created in the target environment with the same properties. This is how the target prompt would look. Note the prompt columns here have been replaced by the target objects.

Group	Column	Operator	Control	Show	Default to	Set Variable	Label
	Year	is equal to / is in	Multi-Select	All Values	Report Defaults	Year	
<input type="checkbox"/>	Quarter	is equal to / is in	Multi-Select	All Values	Report Defaults	Quarter	

Note: default values for prompts will carry forward as they are in the source version of the prompts. This may create a mismatch in the dashboard, until manually edited. If the prompt sets the value of a Presentation Variable, the definition is carried forward as well.

4.2.1.4 Link or Images, Text, Embedded Content, Folders

The setup of these objects will be copied exactly at identical in the target environment. That is, the URL or the request path that shows as a target in the link object will be exactly copied over, without any cloning of the target report.

Similarly, the path information for a Folder exposed in a dashboard will be exactly copied over, without any cloning happening of the contained requests.

Note: if a request appears under a Link or Image object in a dashboard, the path will be copied over by cloner, but the report will not be cloned.

4.2.1.5 Guided Nav Links

In the case of Guided Nav Links embedded in dashboards:

the Source Request on the Guided Nav setup will be handled like a report, and will be cloned into the target path with proper column substitution.

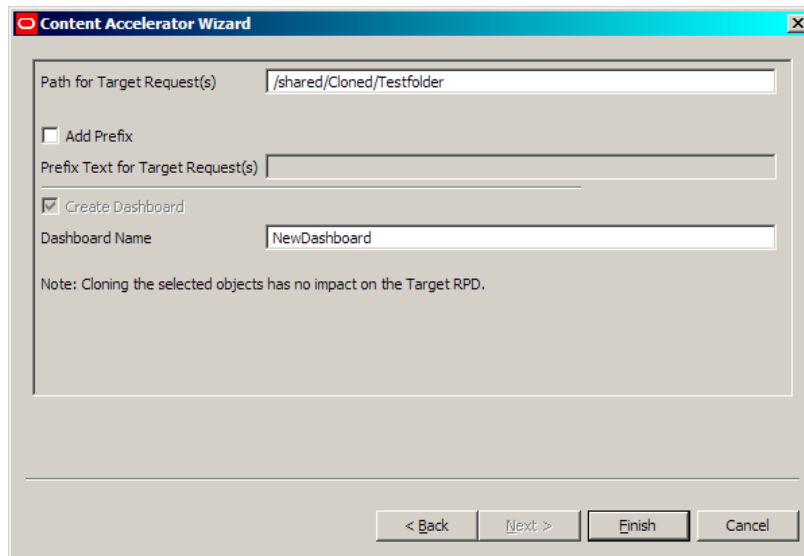
The Link properties target report will be handled as a link, and will be copied over in the new environment as such. That is, the target report for the Guided Navigation will not be cloned, and the new Guided Navigation in the target environment will point to the same link as the one in the source environment.

4.2.2 Where is the result content located when cloning a Dashboard

More precisely, cloned dashboard path will be of the following structure:

/Shared/First_folder_of_request_target_path/_Portal/name_of_dashboard/Name_of_cloned_pages.

For example, the cloning info in the image below, results in:

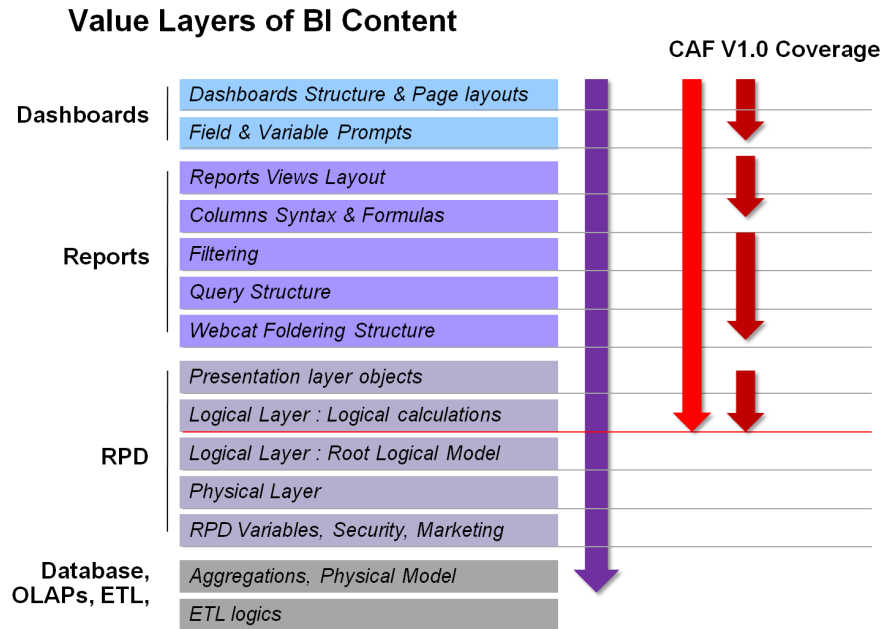


Reports present under dashboard being cloned under **/Shared/Cloned/Testfolder**

Dashboard pages created under a new dashboard: **/Shared/Cloned/NewDashboard/**

4.3 Cloning Repository Objects

CAF V1 Cloner utility handles seamless duplication of logical calculations from one RPD to another, by leveraging XUDML API of OBI EE RPD. This feature allows to rapidly and safely export / import some logical constructs from one environment to another.



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The interface for CAF V1 Cloner is Catalog Manager. In order to invoke CAF V1 to clone a repository calculation, user need to build an Answers query that contains this logical object, then clone this query into the target environment.

Note that in the case of cloning only RPD objects, a single query containing all the objects to clone, without any layouts or views, is sufficient to initiate the cloning process.

4.3.1 What RPD objects can CAF V1 clone ?

Different kinds of columns can be present in one Answers request:

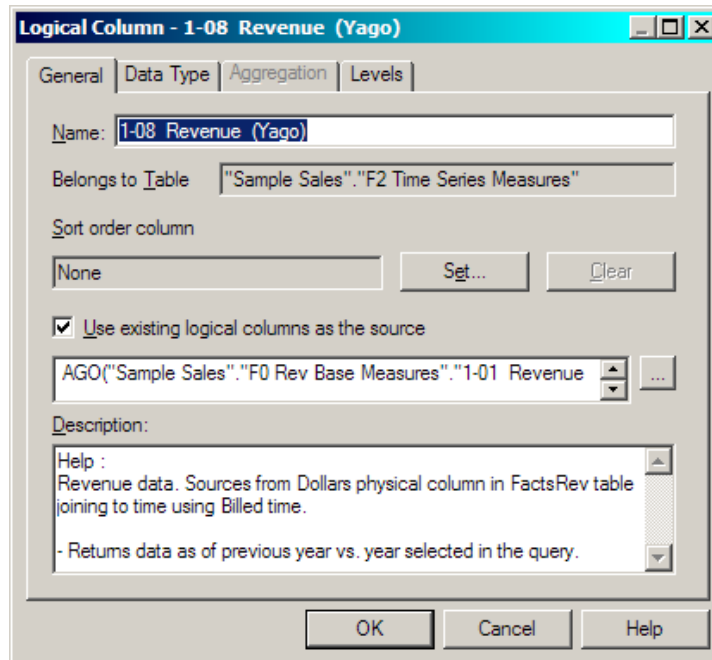
- 1) Subject Area Columns which, in RPD, are mapped to a physical column or a physical formula calculation
- 2) Subject Area Columns which, in RPD, are mapped to a combination of logical objects
- 3) Columns that are Answers calculations of other columns in the Subject Area

CAF V1 cloner will clone all logical Calculations and all Answers calculations.

CAF V1 cloner will NOT clone RPD objects that directly map to physical column or physical formula calculation

4.3.2 What is an RPD logical calculation object ?

These objects can be exclusively recognized as flagged with “Use existing logical Columns as the source” in their definition.



Logical Calculations are formulas combining other objects in RPD, and have no direct relationship to any object from Physical Layer in RPD.

4.3.3 What if the same logical formula already exists in target RPD

Once mappings information is provided, CAF V1 will parse the target RPD to detect if exact same logical formula already exists in target RPD. If yes, regardless of the name and folder location of the logical object, CAF V1 will leverage the existing object for use in the target reports and will not create any new object. Session log information will detail this mapping.

4.3.4 If one logical calculation involves other logical calculations as components

CAF V1 Cloner will look for the whole hierarchy of logical objects it needs to support the report, and create all the ones it does not find already existing in Target RPD.

For instance, if an source report users column “Unit Price monthly variation” which is logically defined in source RPD as

Unit price / Unit price Month Ago

With Unit Price being defined as:

Revenue / Quantity

CAF V1 Cloner will only require mapping for Revenue and Quantity objects, as well as Month dimension level. It will then see if any of the logical calculations required already exist in target RPD. If none is, CAF V1 will create 3 logical calculations:

Auto Gen 1 = Revenue / Quantity

Auto Gen 2 = Ago (Revenue / Quantity, Month level, 1)

4.3.5 Where will CAF V1 create objects in the Target Repository

Logical objects created by CAF V1 are all grouped with a sequential naming (Auto Gen 1, Auto Gen 2, etc) under a logical layer folder named **Auto Gen Folder**. Note that Auto Gen Folder has no logical table source, as this folder only carries logical calculations (that is, object sourcing from other existing logical objects).

4.3.5.1 How to recognize the content of CAF V1 created objects ?

Before any renaming is done on Target RPD, all CAF V1 created objects have similar names of type Auto Gen X, and if many have been created, it's not intuitive to recognize what is what. For each created object, CAF V1 Cloner replicates the description that is present in the source RPD, plus a cloning message. This description is accessible through Query Repository feature (Tools menu), and can help a lot in recognizing which object is which one, and help proceed to renaming.

The session log as well indicates exactly what object was cloned from which source object in RPD, and allows total functional transparency (Refer to section 3.7 of this document)

4.3.6 Are there risks of breaking Target RPD

Risks on Target RPD are null or extremely limited, mainly for following reasons:

CAF V1 cloner will always save a backup of target RPD before modifying it (extended with `_backup` after its name). However, user should make sure that this backup is not regularly overridden when running cloner multiple times.

CAF V1 cloner will never :

update, change or delete any existing object in target RPD

update any Logical Table Sources or logical table definition of any kind in target RPD

CAF V1 will only append to Target RPD, with visible objects, and provide full traceability in the session logs. Deleting back objects created by CAF V1 and reverting to starting point is very easy to do.

The higher risk in Target RPD is that CAF V1 cloning process results in extending Target RPD with inconsistent content. This can happen in several cases. For instance if in substitution information provided by user in Required Mappings Screen:

columns are mismatching aggregation rules or object data types, and if a logical calculation is trying to use other logical calculation as its component

if dimension level information is not of type Time dimension when source calculation expects it, or if level are mismatched in several calculations

if data type of objects in logical column formula is overridden to wrong type compared to expectation...

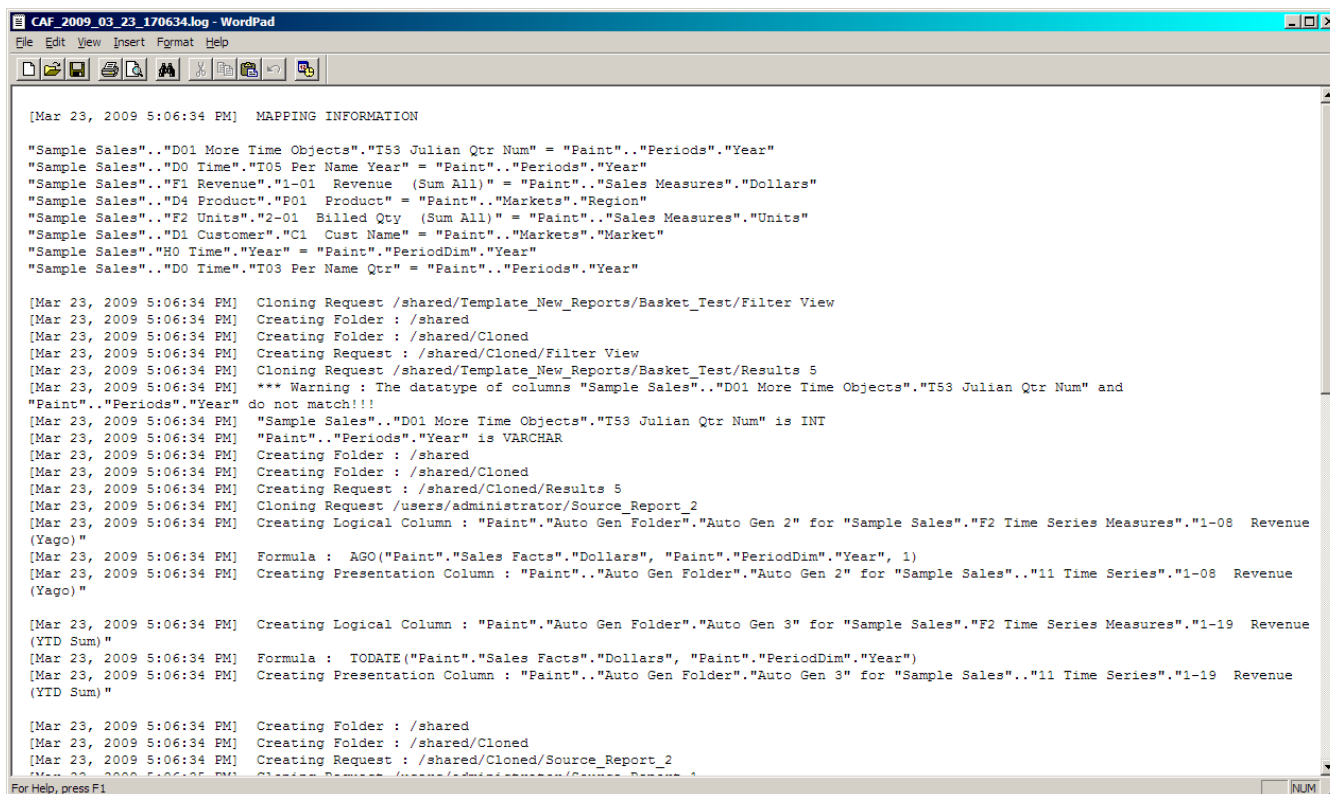
In most of the cases, CAF V1 cloner will warn users with a warning message (refer to section 3.4.4 of this report). But users can override the warning and proceed with their mappings. Therefore, it is strongly advised that users have a good understanding of source logical calculation designs in OBI EE, and a reasonable knowledge of the target logical model in RPD.

4.4 Session Log Files

4.4.1 Cloner log files

Each cloning process generates a unique log file stored in the path indicated in config file:..\\OracleBI\\web\\catalogmanager\\ContentAccelerator.properties. Each log is named after the date-time of the cloning process, and stores all the detailed info.

In order to properly view the log files content, prefer opening the file using Wordpad type editor instead of notepad.



```
[Mar 23, 2009 5:06:34 PM] MAPPING INFORMATION
"Sample Sales"..D01 More Time Objects".T53 Julian Qtr Num" = "Paint"..Periods".Year"
"Sample Sales"..D0 Time".T05 Per Name Year" = "Paint"..Periods".Year"
"Sample Sales"..F1 Revenue".1-01 Revenue (Sum All)" = "Paint"..Sales Measures".Dollars"
"Sample Sales"..D4 Product".F01 Product" = "Paint"..Markets".Region"
"Sample Sales"..F2 Units".2-01 Billed Qty (Sum All)" = "Paint"..Sales Measures".Units"
"Sample Sales"..D1 Customer".C1 Cust Name" = "Paint"..Markets".Market"
"Sample Sales"..H0 Time".Year" = "Paint".PeriodDim".Year"
"Sample Sales"..D0 Time".T03 Per Name Qtr" = "Paint"..Periods".Year"

[Mar 23, 2009 5:06:34 PM] Cloning Request /shared/Template_New_Reports/Basket_Test/Filter View
[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared
[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared/Cloned
[Mar 23, 2009 5:06:34 PM] Creating Request : /shared/Cloned/Filter View
[Mar 23, 2009 5:06:34 PM] Cloning Request /shared/Template_New_Reports/Basket_Test/Results 5
[Mar 23, 2009 5:06:34 PM] *** Warning : The datatype of columns "Sample Sales"..D01 More Time Objects".T53 Julian Qtr Num" and
"Paint"..Periods".Year" do not match!!!
[Mar 23, 2009 5:06:34 PM] "Sample Sales"..D01 More Time Objects".T53 Julian Qtr Num" is INT
[Mar 23, 2009 5:06:34 PM] "Paint"..Periods".Year" is VARCHAR
[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared
[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared/Cloned
[Mar 23, 2009 5:06:34 PM] Creating Request : /shared/Cloned/Results 5
[Mar 23, 2009 5:06:34 PM] Cloning Request /users/administrator/Source_Report_2
[Mar 23, 2009 5:06:34 PM] Creating Logical Column : "Paint".Auto Gen Folder".Auto Gen 2" for "Sample Sales".F2 Time Series Measures".1-08 Revenue
(Yago)"
[Mar 23, 2009 5:06:34 PM] Formula : AGO("Paint".Sales Facts".Dollars", "Paint".PeriodDim".Year", 1)
[Mar 23, 2009 5:06:34 PM] Creating Presentation Column : "Paint"..Auto Gen Folder".Auto Gen 2" for "Sample Sales"..11 Time Series".1-08 Revenue
(Yago)"
[Mar 23, 2009 5:06:34 PM] Creating Logical Column : "Paint".Auto Gen Folder".Auto Gen 3" for "Sample Sales".F2 Time Series Measures".1-19 Revenue
(YTD Sum)"
[Mar 23, 2009 5:06:34 PM] Formula : TODATE("Paint".Sales Facts".Dollars", "Paint".PeriodDim".Year")
[Mar 23, 2009 5:06:34 PM] Creating Presentation Column : "Paint"..Auto Gen Folder".Auto Gen 3" for "Sample Sales"..11 Time Series".1-19 Revenue
(YTD Sum)"

[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared
[Mar 23, 2009 5:06:34 PM] Creating Folder : /shared/Cloned
[Mar 23, 2009 5:06:34 PM] Creating Request : /shared/Cloned/Source_Report_2
[Mar 23, 2009 5:06:34 PM] Cloning Request /users/administrator/Source_Report_2
```

The log lists all the mappings that user provided during the session and documents every single action that CAF V1 Cloner performed on target Webcat or target RPD :

- Creation of every single Webcat object (folders, reports),
- Creation of RPD objects (presentation and logical) and detail of logical formulas,
- Warning messages in process,
- Consistency check messages,
- Backup copies of files generated
- ...

4.4.2 Synchronizer log files

Like cloning processes, each Synchronizer process generates a unique log file stored in the path indicated in config file:..\\OracleBI\\web\\catalogmanager\\Synchronizer.properties. Each log is named after the date-time of the cloning process, and stores all the detailed info.

In order to properly view the log files content, prefer opening the file using Wordpad type editor instead of notepad.

```

Synchronizer_2009_01_07_114857.log - WordPad
File Edit View Insert Format Help
[Jan 7, 2009 11:48:57 AM] MODIFICATIONS DETECTED

"Sample Sales"..11 Time Series."1-22 Revenue (R3M Sum)" = "Sample Sales"..test"."this is my new metric name"
"Sample Sales"..D1 Customer."C9 Last Order Date" = "Sample Sales"..test"."C9 Last Order Date"
"Sample Sales"..D1 Customer."C3 Cust Type" = "Sample Sales"..test"."C3 Cust Type"
"Sample Sales"..D1 Customer."C0 Cust Key" = "Sample Sales"..test"."C0 Cust Key"
"Sample Sales"..D1 Customer."C6 Cust Industry" = "Sample Sales"..test"."C6 Cust Industry"
"Sample Sales"..D1 Customer."C2 Cust Status" = "Sample Sales"..test"."C2 Cust Status"
"Sample Sales"..D1 Customer."C-00 Cust Key (Segmentation)" = "Sample Sales"..test"."C-00 Cust Key (Segmentation)"
"Sample Sales"..D1 Customer."C8 First Contact Date" = "Sample Sales"..test"."C8 First Contact Date"
"Sample Sales"..D1 Customer."C7 Credit Rate" = "Sample Sales"..test"."C7 Credit Rate"
"Sample Sales"..D1 Customer."C1 Cust Name" = "Sample Sales"..test"."C1 Cust Name"
"Sample Sales"..D1 Customer."C5 Segment" = "Sample Sales"..test"."C5 Segment"

[Jan 7, 2009 11:48:57 AM] PERFORMING BACKUP at /shared/backup/cloned

[Jan 7, 2009 11:48:57 AM] SYNCHRONIZING

/users/administrator/Example 3
"11 Time Series"."1-22 Revenue (R3M Sum)" = "test"."this is my new metric name"

-----[ SYNCHRONIZATION COMPLETE ]-----
For Help, press F1 NUM

```

The log lists all the modifications that CAF V1 detected between both RPD selected in the process and documents every single update performed on each impacted Webcat report. It also indicates where backups of reports were maintained.

4.4.3 Exception log files

An exception log file named CAF_Exception.log is created during a cloning or synchronizing process. If the cloning process completes without any exceptions, this file will have no content and will be 0 bytes in size. However, in event of an exception causing the cloning/synchronizing process to abort midway, this exception file will provide more details about the error and where exactly it occurred. This file is created under the folder ..\OracleBI\web\catalogmanager\log.

5 Detailed Table of Contents

1	Purpose	3
1.1	Overview	3
1.2	Use Cases and Value	3
1.2.1	Other examples of CAF V1 usage	4
1.2.2	Benefits	4
1.3	Functional Architecture	5
1.3.1	CAF V1 Cloner Module Functional Sequence	5
1.3.2	CAF V1: Synchronizer Module Functional Sequence	6
2	Install and Configuration	7
2.1	System Prerequisites	7
2.1.1	MS Windows :	7
2.1.2	OBI EE 10.1.3.4 or higher	7
2.1.3	Java Sdk 1.6.0_10 or higher	7
2.2	Installation Procedure	8
2.2.1	Pre-installation tasks	8
2.2.1.1	Unzipping	8
2.2.1.2	Pre-installation tasks	8
2.2.2	Installation	8
2.2.3	Configuration	9
2.2.3.1	Log files target path	9
2.2.3.2	Other parameters	9
3	Report Cloning Usage Instructions	10
3.1	Screen 1: Selecting source content to clone and launching cloner	10
3.1.1	Dashboard pages	11
3.2	Screen 2: Configuration Details	11
3.2.1	Source RPD:	11
3.2.2	Target RPD	11
3.2.3	Target Web Catalog	12
3.3	Screen 3: Select Target Subject Area	12
3.4	Screen 4: Required Object Mappings Screen	12
3.4.1	Understanding list of required column mappings: Source Report 1 Example	13
3.4.2	Mapping Presentation columns	15
3.4.3	Dimension Level Mappings	15
3.4.4	Warnings	15
3.4.5	Saving and Re-using mappings	16
3.4.6	Option: Mapping to manually entered Formulas	16
3.4.6.1	Syntax and consistency breaches	16
3.4.6.2	Duplicating formulas by inserting Spaces in the syntax	16

3.4.7	Source Report 1 Example	17
3.5	Screen 5: Optional Column Mappings – Filter objects.....	17
3.5.1	: Source Report 1 Example	18
3.6	Screen 6: Destination Details	18
3.6.1	Path for Target Requests	18
3.6.2	Add Prefix	18
3.6.3	Create Dashboard	18
3.6.4	Expected Impact on Target RPD	18
3.6.5	Source Report 1 Example	19
3.7	Screen 7: Process log messages.....	19
3.8	Results of cloning process.....	20
3.8.1	Answers Results	20
3.8.2	Source Report 1 Example	20
3.8.3	RPD Results:	21
3.9	Specific Report Objects.....	22
3.9.1	Report Filters Objects	22
3.9.1.1	Filters Criteria Values.....	22
3.9.1.2	Presaved filters	22
3.9.1.3	Filters Grouping Structure.....	22
3.9.2	Navigation target paths	22
3.9.3	Presentation Variables leveraged in Reports	23
3.9.3.1	General Case.....	23
3.9.3.2	Presentation Variables referring to column names in the query	23
3.9.4	Column Selector views.....	23
3.9.5	Report Descriptions.....	23
3.10	Cloning Multiple Requests at once	24
3.11	Known limitations & Frequently Asked Questions	25
3.11.1	CAF V1: Known Limitations	25
3.11.1.1	Not cloning Reports using Set Operations	25
3.11.1.2	Not cloning Report using RPD columns Aliases in their definitions	25
3.11.1.3	Not processing RPDs containing Essbase Metadata	25
3.11.1.4	Dependency to 10.1.3.4 nQXUDMLExec.exe codes for RPD parsing	25
3.11.2	CAF V1 FAQs	26
3.11.2.1	No Presentation columns show in ‘Required Object Mappings’ screen.	26
3.11.2.2	Which one is the source Webcat that I clone from ?.....	26
3.11.2.3	Source and target RPDs. Should they be online/offline. Where do they physically need to be present?	26
3.11.2.4	After choosing source and target RPDs and clicking Next, CAF V1 appears to hang with no error message	26
4	Other Features usage Instructions	27
4.1	Synchronizing Webcat and RPD	27
4.1.1	What is Synchronizer	27
4.1.2	Updating Stage 1 RPD objects:	27

4.1.2.1	Source Report 1 Example.....	28
4.1.3	Synchronizing Webcat with updated RPD objects:.....	28
4.1.3.1	Launch Synchronizer	28
4.1.3.2	Synchronizer main Screen.....	29
4.1.3.3	Functional limitations	29
4.1.3.4	Synchronizer Log Screen.....	30
4.1.3.5	Source Report 1 Example.....	30
4.1.4	Using CAF V1 Synchronizer in other contexts	30
4.2	Cloning Dashboards	31
4.2.1	Objects cloned when cloning a Dashboard	32
4.2.1.1	Dashboard Overall Layout	32
4.2.1.2	Requests exposed on dashboard.....	32
4.2.1.3	Prompts	32
4.2.1.4	Link or Images, Text, Embedded Content, Folders	32
4.2.1.5	Guided Nav Links	33
4.2.2	Where is the result content located when cloning a Dashboard	33
4.3	Cloning Repository Objects	34
4.3.1	What RPD objects can CAF V1 clone ?	34
4.3.2	What is an RPD logical calculation object ?	35
4.3.3	What if the same logical formula already exists in target RPD	35
4.3.4	If one logical calculation involves other logical calculations as components.....	35
4.3.5	Where will CAF V1 create objects in the Target Repository	36
4.3.5.1	How to recognize the content of CAF V1 created objects ?.....	36
4.3.6	Are there risks of breaking Target RPD.....	36
4.4	Session Log Files.....	37
4.4.1	Cloner log files	37
4.4.2	Synchronizer log files.....	37
4.4.3	Exception log files	38
5	Detailed Table of Contents	39