

CONTROL® 10.1 – Overview	2
Enhancements for the Information Navigator	2
Nested Branch Behavior	2
Scratchpads	5
Miscellaneous Enhancements	5
Enhancements for the Administrator	6
Excel Content Data Sources	6
Support for Oracle Data Bases	9
Miscellaneous Enhancements	9
Enhancements to Universe	10

### CONTROL® 10.1 - Overview

This release wraps up the version 10 effort by completing support for CONTROL® customers running the Oracle relational database. In addition, a number of enhancements have been included based on feedback from version 10 users. These enhancements fall mainly into the category of refinement of the features that facilitate fast creation and simple maintenance of applications.

The most significant enhancement is the direct support of Excel Content datasources, which allows you to directly map from tables, named ranges, and ad hoc ranges in Excel workbooks – skipping the creation of intermediate .csv files saving time and steps.

Excel 2016 is fully supported and a number of issues were found and improved related to using CONTROL® with Excel 2013 and 2016.

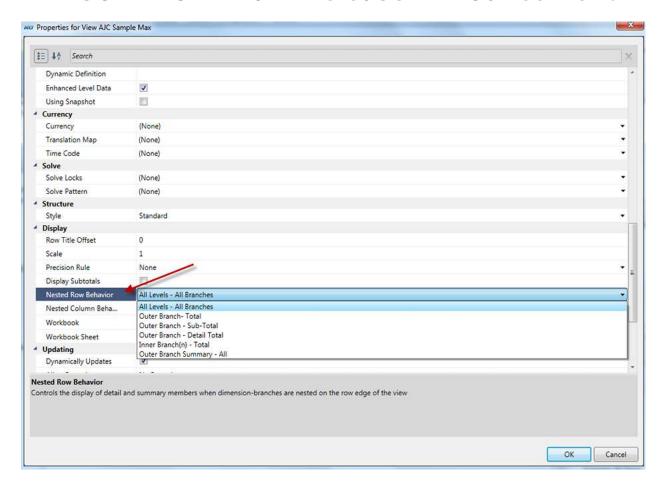
In addition, version 10.1 incorporates numerous improvements in performance, packaging, and user experience with large scale applications.

### **Enhancements for the Information Navigator**

#### **Nested Branch Behavior**

You can control the summarization levels of row or column members when multiple branches are on an edge using two new scoped view properties:





Here is an example of the Outer Branch-Detail Total option. Note that there is a single grand total row for all the row edge dimensions:



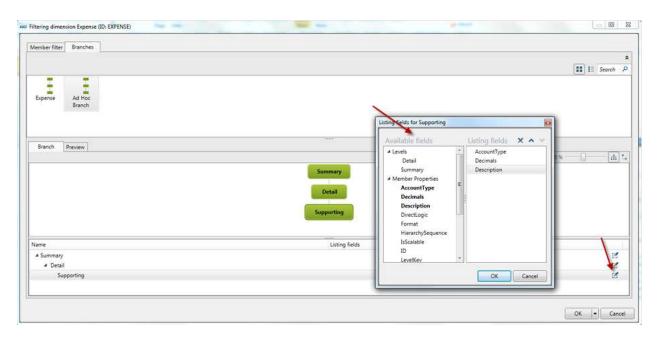
Filters:	Scenarios (Current Budget)									
Pages:	•									
F	T. Boostoot	Y	M/Q/Y	5 1 2000		***		** 2000	1 2000	2000
Expense	Department	Project	Jan 2009	Feb 2009	Mar 2009	-1Q09	Apr 2009	May 2009	Jun 2009	-2Q09
Auto Expenses	*Gas Scooter Division	*Product Enhancement *Market Growth	57	59 237	62 249	178 713	65	69	72	206 825
		*Cost Reduction	226	178	187	535	262 196	275 206	289 216	619
		*General	170 751	813	1,856	3,419	2,314	2,072	1,731	6,116
	*JumpStart Marketing Division	*General	/31	813	494	3,419	494	494	494	1,483
	*Motor Scooter Division	*General	276	276	276	829	276	276	276	829
	-JumpStart, Inc.	-Total Projects	1,480	1,564	3,125	6.169	3,608	3,392	3,079	10,079
Meals and Entertainment Expense	*Gas Scooter Division	*Cost Reduction	148	198	247	593	297	3,332	3,073	297
	das scotter bivision	*General	593	790	988	2,370	1,185	988	593	2,765
	*Motor Scooter Division	*General	907	1,813	2,720	5,439	907	1,813	4,533	7,253
	*HQTS	*General	538	616	695	1,849	773	538	616	1,927
	-JumpStart, Inc.	-Total Projects	2,185	3,416	4,649	10,251	3,161	3,338	5,742	12,241
Travel Expense	*Gas Scooter Division	*General	5,926	4,938	3,950	14,814	3,950	3,950	3,950	11,851
	*JumpStart Marketing Division	*General	19,752	19,752	11,654	51,157	11,654	11,654	11,654	34,961
	*Motor Scooter Division	*General	9,876	9,876	10,423	30,175	9,876	9,876	9,876	29,628
	*HQTS	*General	19,752	16,496	16,641	52,889	16,354	15,128	15,739	47,222
	-JumpStart, Inc.	-Total Projects	55,305	51,062	42,668	149,035	41,834	40,608	41,219	123,661
-Travel & Entertainment		-Total Projects	58,970	56,042	50,442	165,454	48,603	47,339	50,040	145,982
-Total Operating Expenses		-Total Projects	2,671,499	1,798,037	1,835,900	6,305,435	2,102,618	2,360,500	2,214,623	6,677,741

#### Filter and Detail

The following improvements have been made to the filter wizard:

- You can use a pre-defined branch to initialize an ad hoc branch by right-clicking on the branch you want to copy and choosing the new "Copy to Ad Hoc Branch" command.
- Changes to ad hoc branches are immediately reflected in the selected member list.
- There is an "Unselect All" context menu option to clear all the selections in an ad hoc branch.
- Levels in an ad hoc branch can be moved up or down.
- The algorithm for determining where to place a new level into a branch has been improved.
- The mechanism for adding listing levels has been changed so it is easier to add and delete listing multiple levels:





#### Scratchpads

Several enhancements have been made to extend the utility of this popular feature:

- The <Keywords> section is now automatically added to the scratchpad's meta-data.
- There is a new method (callable from a program script) that will cycle through the pages of the scratchpad, executing Excel formulas, and filing the newly computed values to the database. This is valuable for those cases where the model's variable logic resides in Excel formulas embedded in the scratchpad and a change to the Excel formula is required.

#### Miscellaneous Enhancements

- In the Select Page dialog, double-clicking a member will now select the member, dismiss the dialog, and apply the change.
- The Expand and Compress commands now work in the Expand Multi-Page and Print View dialogs, similar to the Select Page dialog.
- Dimension-branch buttons in views can now be named with either the branch name, or the dimension name, unless a dimension is used more than once. This behavior is controlled by a keyword &KCI BranchCaption, which should be set to NEW to display dimension names.
- In dynamically defined views, you can selectively override the filter and branch definitions.
- You can set the initial page member for each dimension-branch in a view.



- You can control the automatic compression behavior of each dimension-branch in a view.
- For multi-level variable dimensions, the drill/compress/expand behavior is now determined more logically based on formulas and hierarchical relationships.
- There is a new method that will cycle through the pages of an updateable computational view, executing Excel formulas, and filing the newly computed values to the database.
- The Totals First property is now applied to custom dimensions which have parent/child structure, multi-level expandable members, or both.
- The order and grouping of view properties has been improved to give more prominence to commonly used properties.
- Performance improvements have been made in formatting computational views.
- Data sorts can now reference custom members, as well as, variable members.
- Improvements to the filter wizard including:
  - o Better placement of added levels in ad hoc branches for complex dimensions.

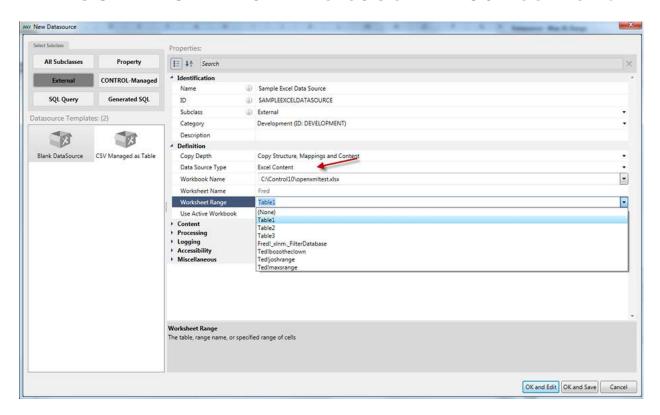
#### **Enhancements for the Administrator**

Customers using the Oracle database can now upgrade to CONTROL® Version 10.1 and enjoy the full functionality of the new administrative interface, documented in the Version 10.0 release announcement.

#### **Excel Content Data Sources**

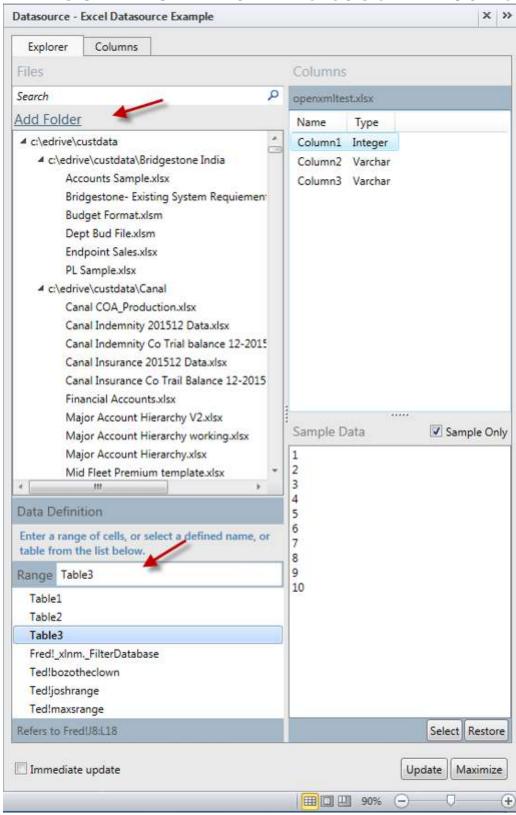
You can define a data source object to reference a range of cells in an Excel workbook, defined by an Excel table, a named range, or an ad hoc range (i.e. Sheet1!A1:G540):





You can use the explorer tab of the task pane to preview the contents of various ranges in an Excel workbook, and you can now select a different folder to explore:





Excel content data sources have all the features of file-based data sources:

• They can be mapped from.



- They can be used in source data models.
- They can be used directly in source data views.
- They have a relational table equivalent, with the same reload table rules.

As of this release, Excel Content data sources may not be written to, or updated from the CONTROL® application.

#### Support for Oracle Data Bases

Customers using Oracle will have substantially the same end-user experience as SQL Server customers. However, due to Oracle's differential behavior regarding data definition language (DDL) operations, the following restrictions apply:

- Changing the level structure of a non-custom dimension requires that all other pending object changes are saved.
- Copying a model or non-custom dimension requires that all other pending object changes are saved.
- Making certain structural changes, such as changing the type or size of a level must be immediately committed, and all other pending objects changes are saved.

In all of these cases, the user is warned and asked to confirm.

#### Miscellaneous Enhancements

- Filters, branches, and keywords whose usage is as a filter or branch have a new property (Interface Usage) defining whether they will appear in the view task pane and/or the filter wizard.
- Scripts have new properties specifying whether they will be used as a "Utility Script" and if so, for which objects. Utility scripts will be available to end users from the CONTROL® View ribbon and the specific object ribbons in a future release.
- Numerous performance and functional improvements have been made in the behaviors of scenarios using Store Some or Store All with the Recalculate Automatically option. (Referred to as Just In Time recalculation).
- Improvements have been made to the automatic creation of indexes for object tables.
- Objects can be edited from a menu or a form command button.
- Initialization of map associations is substantially improved.
- Initialization of allocation transform map associations is substantially improved.
- Conversion of Internally Defined (9.2 and earlier) allocation transforms to Mapping Defined transforms is now available as a script.



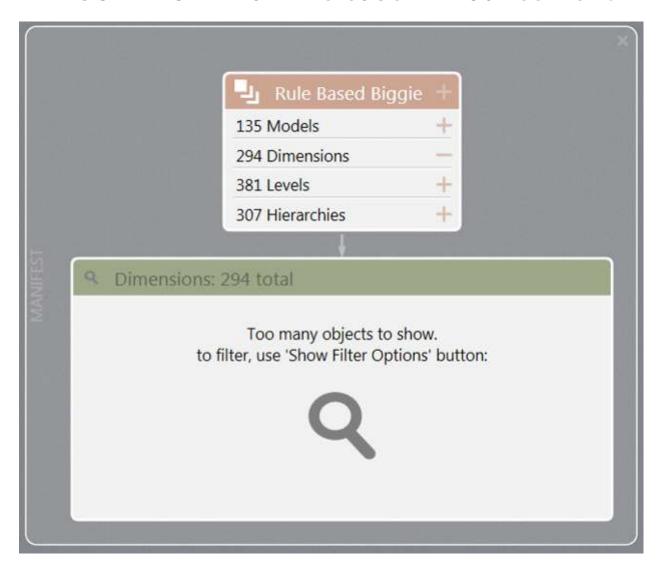
- Hierarchy object views will have both member ID and Name appear in a single column if the name column is not requested separately. This is supported in a new dynamic view option (ReportsTo).
- There is a new "Quick Edit" command available on the object navigation task pane which will edit objects without opening the object views on the primary sheet or sheets. This is designed for the experienced administrator who needs to quickly check or revise the essential object characteristics.
- A dynamic mapping with the update only behavior has been optimized for the case where a single source value updates many targets. This occurs in many mappings involving rates or prices.
- The test function for mapping-based allocation transforms now shows the test results of the source to target and optionally driver to target mappings.
- The custom dimension object view now has a column for parent member which allows definition of hierarchical relationships.
- Rule based manifests are now supported and are defined by a filter on the available objects.
- Improved the editing of non-custom dimension structures.
- Manifests now have a Restore Behavior property that determines how ALL the objects in the manifest are restored. This is a default setting that can be overridden when the manifest is restored. One allowed value is "Specified by object", to allow object by object restore behaviors.
- Several improvements to validation and error reporting in hierarchy rollup object views, including intelligent defaulting of blank values and detection of ambiguous names and reporting relationships.
- Improved the order and categorization of properties for some objects.
- For users of the ForecastPro add-in, event models are now supported and performance has been significantly improved for large scale forecasts
- Map and Mapping associations have a "Used Associations" option

#### **Enhancements to Universe**

The visualization capabilities in the Universe have been improved in several respects:

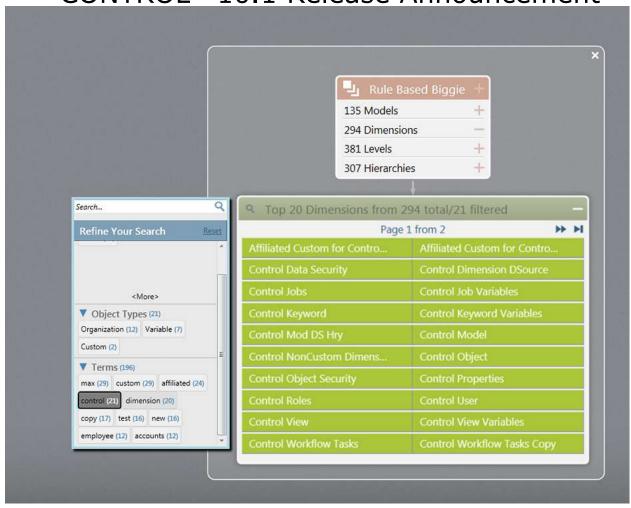
In cases where there are too many objects to easily visualize, there is now an appropriate message:





Showing the filter options presents the user with a "mini-faceted search" panel, which lets you choose the objects you'd like to see based on category, subclass, or the commonly encountered terms in the object names:





#### Other enhancements include:

• Objects which do not have a useful structural visualization (e.g. Levels) will be shown with all objects which reference that object.

