

Report Metadata Query and Modification

Background

Over time, changes might need to be made to the names of cubes, or other cube objects such as dimensions or measures. However changing this information in the cube only will render an Analyzer report using this information useless since the queries issued by Analyzer will no longer be valid. In order to prevent this problem from occurring, Analyzer reports must be updated with the new information so they can work with the newly updated cube.

The capabilities described in this Support Guide are available in Analyzer Release 3.0.2353 and later.

Warnings and Important Notes

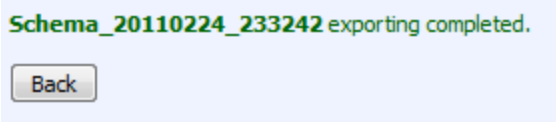
1. Only the **PropertyNewValue** and **Flags** fields can be changed, all other fields should ***NEVER*** be changed.
2. ***NEVER*** delete or add any records from/to the Schema table, or change the sequence of the Schema table.
3. The Schema table's **ReportId** field can be used to query any other tables that are related to the report using the JOIN statement, for example -- Folder Name, Owner Name, Company Name, etc.
4. If your intention is to modify the structure of the database then you should ***freeze*** the database before export and ***keep it frozen*** until you make your changes and import the changes back into Analyzer. Failure to follow this rule will result in import failure or unpredictable database states.
5. ***ALWAYS*** backup your Analyzer system database before you run the Schema Import function.

Steps

The **Schema Export** and **Schema Import** functions are now available for users belonging to the Administrator role. These two functions are listed under the **Others** section of the **User Page**.



The **Schema Export** function exports the cube schema for all Analyzer reports to a table within the Analyzer system database (name generated automatically, see screenshot below). The generated cube schema table contains information about the database, cube dimensions, level attributes, hierarchies, members, measures, KPIs, named sets, and custom measures (including user-defined MDX expressions). Administrators can query this table using SQL statements to gather information regarding which schema, dimensions, and measures are used in which reports or vice versa.



Any report that can't be exported will be noted during export status but it will not affect the export process.

The generated Schema table contains the following fields:
 ReportId, ReportName, ComponentName, DatabaseName, CubeName, ClassName, PropertyType, PropertyName, PropertyValue, PropertyNewValue, Flags

Id	ReportId	ReportName	BookmarkId	BookmarkName	ComponentId	ComponentName	DataSourceId	DatabaseName	CubeName	ClassName	PropertyType	PropertyName	PropertyValue	PropertyNewValue	Flags
1	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	Analyzer	DataSourceId	DataSource	747565472		0
2	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	Analyzer	DatabaseName	Database	Adventure Works DW		0
3	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	Analyzer	CubeName	Cube	Adventure Works		0
4	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	Name	Dimension	Product:Product Model Categories		0
5	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	AllMember	Member	[Product].[Product Model Categories].[All Products]		0
6	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	DefaultMember	Member	[Product].[Product Model Categories].[All Products]		0
7	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Category		0
8	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Subcategory		0
9	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Model		0
10	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	Name	Dimension	Sales Territory, Sales Territory		0
11	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	AllMember	Member	[Sales Territory].[Sales Territory].[All Sales Territories]		0
12	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonDimension	DefaultMember	Member	[Sales Territory].[Sales Territory].[All Sales Territories]		0
13	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Group		0
14	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Country		0
15	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Region		0
16	-99960911	Report 1	-1		9797361-e330-4805-980b-9d157c26ab51	PivotTable1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Measure	Sales Amount		0
17	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Dimension	Date: Fiscal		0
18	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Year		0
19	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Semester		0
20	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Quarter		0
21	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Month		0
22	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Date		0
23	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	YukonDimension	SkidMember	Member	[Date].[Fiscal].[Fiscal Year].[&[2002]]		0
24	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	DataSourceId	DataSource	747565472		0
25	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	Id	Kpi	Revenue		0
26	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	DatabaseName	Database	Adventure Works DW		0
27	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	CubeName	Cube	Adventure Works		0
28	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	DataSourceId	DataSource	747565472		0
29	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	Id	Kpi	Net Income		0
30	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	DatabaseName	Database	Adventure Works DW		0
31	-99960911	Report 1	1459926045	Bookmark1	3589276f-8c56-4314-9408-396f3c78b6d2	KPIViewer1	747565472	Adventure Works DW	Adventure Works	SSASMetric	CubeName	Cube	Adventure Works		0
32	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	QuickChart	DataSourceId	DataSource	747565472		0
33	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	QuickChart	DatabaseName	Database	Adventure Works DW		0
34	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	QuickChart	CubeName	Cube	Adventure Works		0
35	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	CharMeasure	Name	Measure	Gross Profit		0
36	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	CharMeasure	Name	Measure	Sales Amount		0
37	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	Name	Dimension	Date: Fiscal		0
38	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	AllMember	Member	[Date].[Fiscal].[All Periods]		0
39	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	DefaultMember	Member	[Date].[Fiscal].[All Periods]		0
40	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Year		0
41	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Semester		0
42	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Fiscal Quarter		0
43	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Month		0
44	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonLevel	Name	Level	Date		0
45	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	SkidMember	Member	[Date].[Fiscal].[Fiscal Year].[&[2002]]		0
46	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	SkidMember	Member	[Date].[Fiscal].[Fiscal Year].[&[2003]]		0
47	420151974	Report 2	-1		abc4654a-ec27-45d5-b069-680daeeaf570c	QuickChart1	747565472	Adventure Works DW	Adventure Works	YukonDimension	SkidMember	Member	[Date].[Fiscal].[Fiscal Year].[&[2004]]		0

Query Example

To find out which reports are using the “Order Quantity” measure from the Adventure Works Cube of the Adventure Works DW Database, a SQL Statement like the following can be used:

```
SELECT Distinct [ReportName]
FROM [BOStore].[dbo].[Schema_20110224_233242]
Where DatabaseName='Adventure Works DW' and CubeName='Adventure Works'
and PropertyType='Measure' and PropertyValue='Order Quantity'
```

Update Examples

The Schema database can be modified using standard SQL UPDATE statements. To change a value, set the new value in PropertyNewValue and set Flags to be equal to 1.

1. Modify Cube Name:

```
UPDATE Schema Table Name
SET PropertyNewValue = 'New Cube Name',
Flags = 1
WHERE (DataSourceId=xxx AND DatabaseName='xxx' AND CubeName='Old Cube Name' AND
PropertyType='Cube')
```

2. Modify Measure:

```
UPDATE Schema Table Name
SET PropertyNewValue = REPLACE(PropertyValue, 'Old Measure Name', 'New Measure Name'),
Flags = 1
WHERE (DataSourceId=xxx AND DatabaseName='xxx' AND CubeName='xxx' AND PropertyType IN
('Measure', 'MDX'))
```

Use the **Schema Import** command to import a modified Schema table. Analyzer will update all reports according to the imported Schema table.