



Document:

Essbase Beginner's Guide

Loading Data into Essbase Cube

Chapter-XI

Description:

This is another guide from Essbase beginner's series. The document provides the practical approach to load data into Essbase cube. The document is for public access. We assist Hyperion Essbase learner to explore the various ways to load data into Essbase cube. We encourage people to see one of world most advance and successful OLAP solution.

History:

Version	Description	Author	Publish Date
0.1	Initial Draft	Gaurav Shrivastava	18-Jan-2011
0.1	Review 01	Amit Sharma	01-Feb-2011

Table of Contents

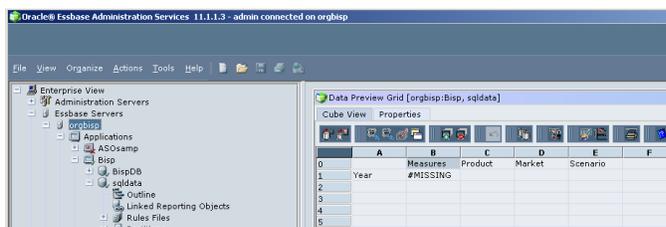
1) Manual Data Loading	3
2) Free form data loading	4
3) Data load using Rule file	5
4) Data load with header	8
5) Overwrite on Existing data	11
6) Add data value to existing data	12
7) Subtract data from existing data	14
8) Ignore field during data load	15
9) Data load with sing flip	16
10) Data load through Microsoft Excel lock & Send	18
11) Data Load through Smart View	20
12) Data load through SQL	21
13) Oracle Data Integration	24
14) Data load through MaxL Script	29
15) Data load Reject	31

Loading Data into Essbase

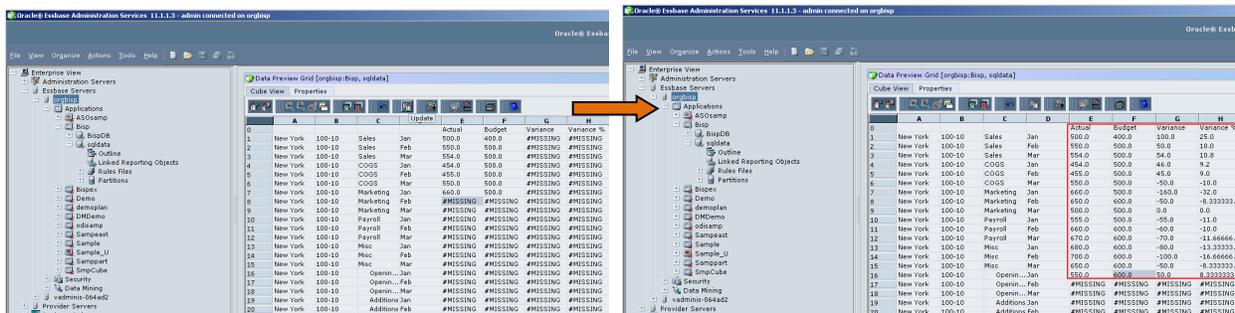
Loading data is the process of adding data values to an Essbase database from a data source such as a spreadsheet or SQL database. We are trying to demonstrate the various ways to load data into Essbase cube. Below is the step by step approach to load data into Essbase cube.

1) Manual Data Loading:-

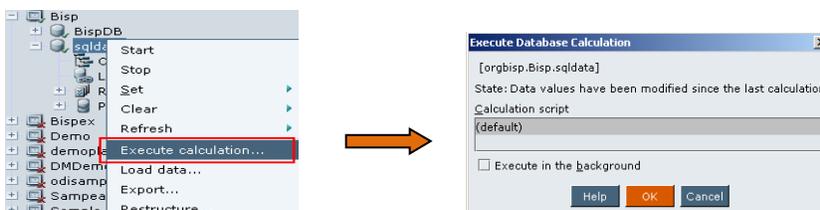
Essbase has option to load data manually. Before loading data into Essbase one can preview the existing data. To preview data into Essbase Cube right click on database then select preview data.



Drill down up to level 0 members of the database and insert data. You can load data at any level in BSO cube provided that the given member had storage property as store only. However, member with Dynamic Calc or Dynamic Calc and store doesn't allow to insert data into the member.

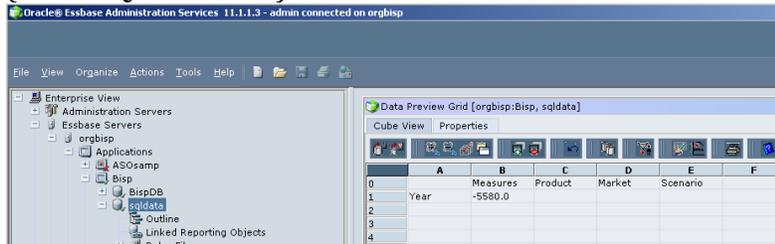


After inserting data in to field click on update button. Once the data has been loaded at level 0, I execute Default Calculation (Calc All) to ensure data is available at higher level for business user access. Follow the steps given in the below diagram.

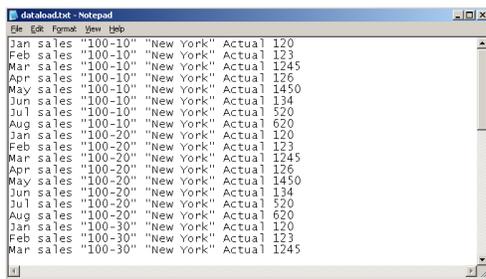


To execute database calculation click ok. You will have consolidated data at higher blocks. In the below diagram it is clearly visible that the data is available at year. We loaded data at

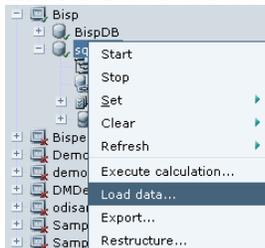
month level and as a result of calculation data gets consolidated at parent lever (Year→Qtr→Month).



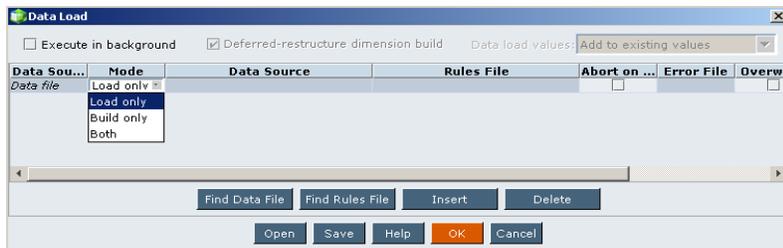
- 2) **Free form data Loading:-** If the source file format is 100% matching with the outline format, then only we will go for Free form data loading. There is no need to create rule file. Free form loading doesn't require any rule file when source file contains at least one member from each dimension and data appears at last column as given in below diagram. The free form loading can be done manually or we can create a import script to load data at scheduled time.



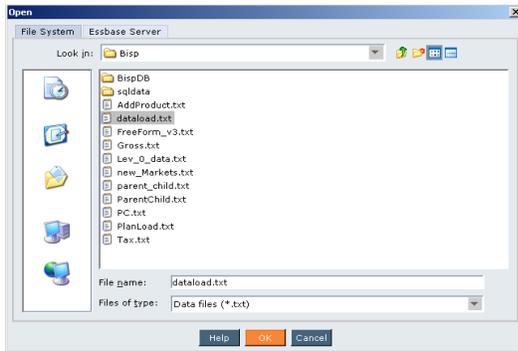
In order to load data into Essbase cube, Right click database and select load data.



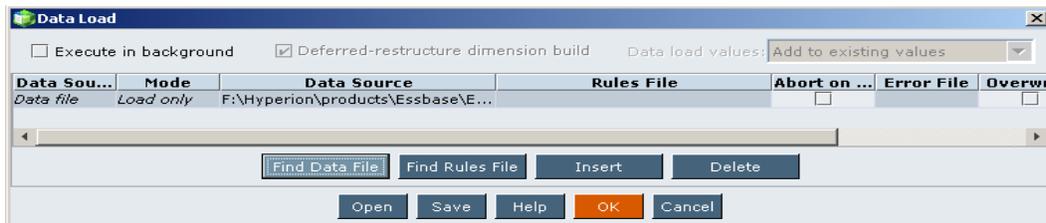
Go to Load data→Select "Load Only" from the given Drop Down. I'm assuming as my data source is flat file.



Browse database text file.



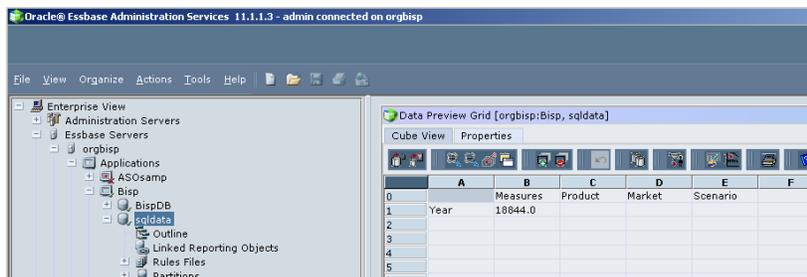
No need to do rule file selection and other option.



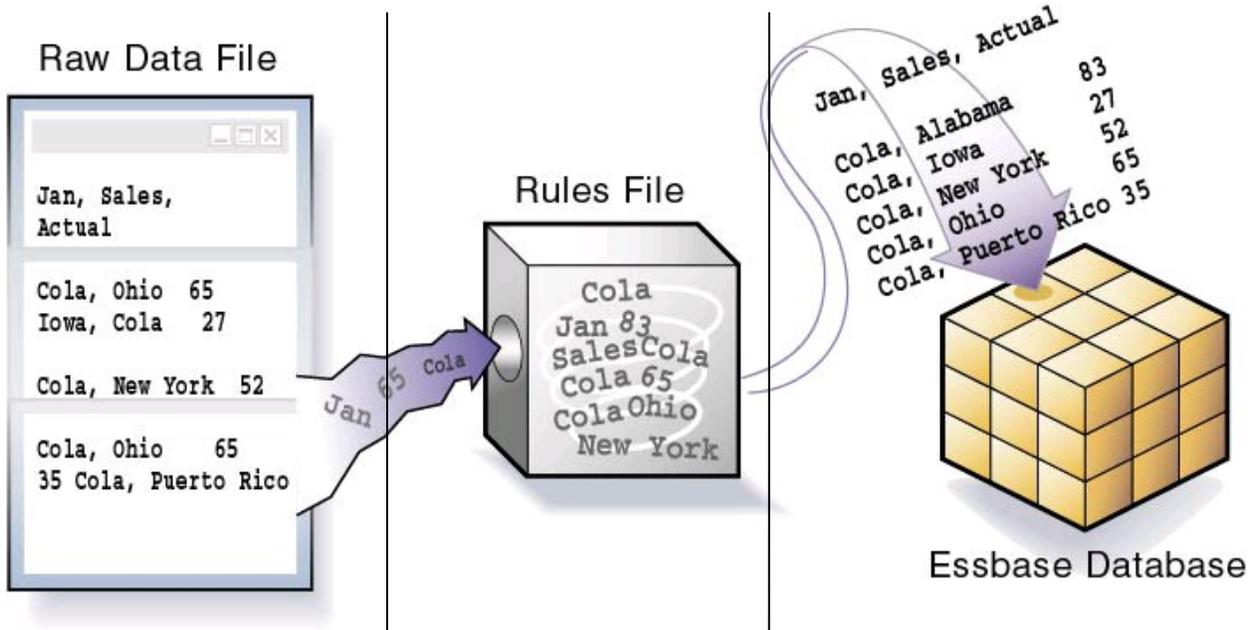
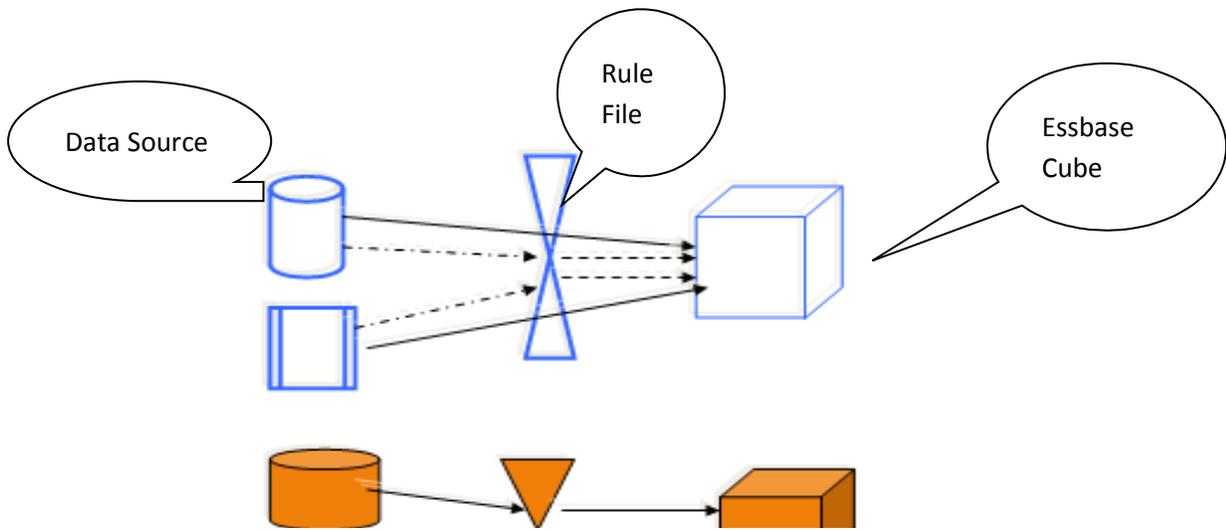
Just click ok....



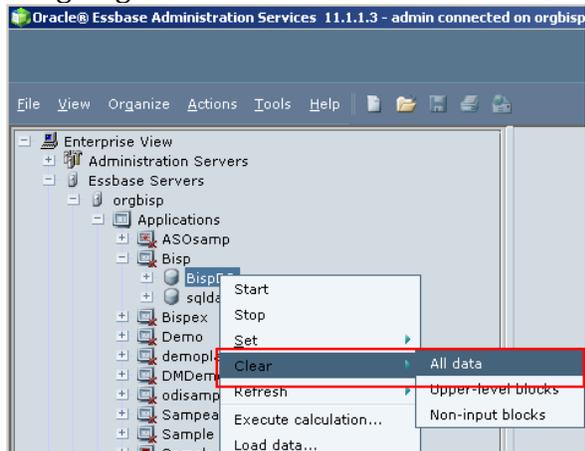
After successful loading of data, right click on database and Execute default Calculation to ensure data is available at higher blocks.



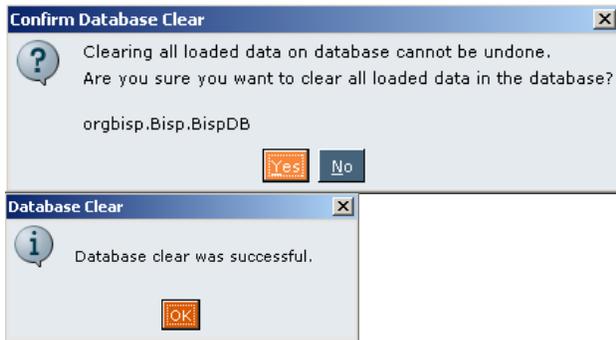
- Data Load Using Rules File:** Rules define operations that Essbase performs on data values or on dimensions and members when it processes a data source. Use rules to map data values to an Essbase database or to map dimensions and members to an Essbase outline. Rule file use for filtering data and then load in to metadata. Rule files use for mapping text file or source file with outline structure. The particular data will go to a particular field. First let's clear all available data. Just right click on database and clear all data.



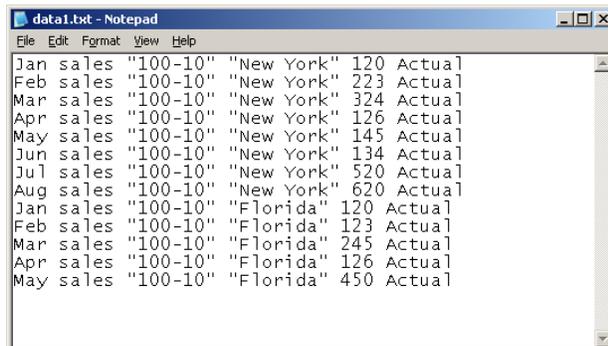
I'm going to clear all data before I load data from text file to Essbase cube.



Data deletion is a risky task so it will ask confirmation.

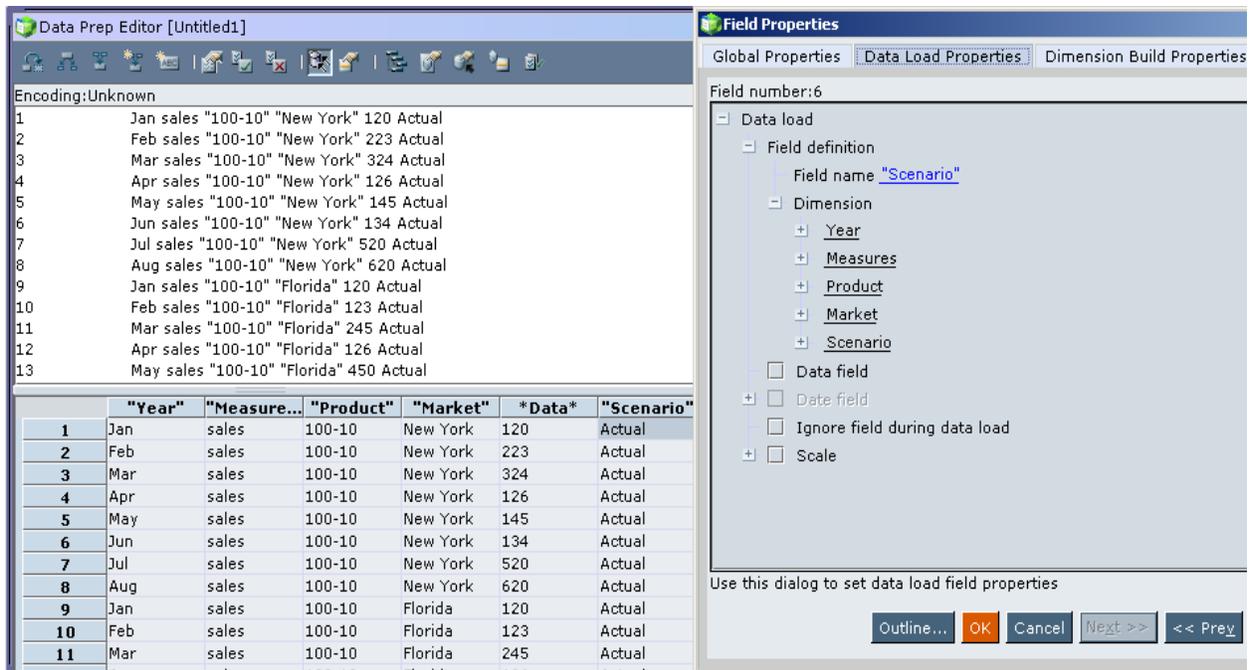


Create a rule file for the text file given below. The below text file is not aligned with the outline structure thus we need rule file to load the data. You need to build a rule file and specify that what data filed in which outline field.

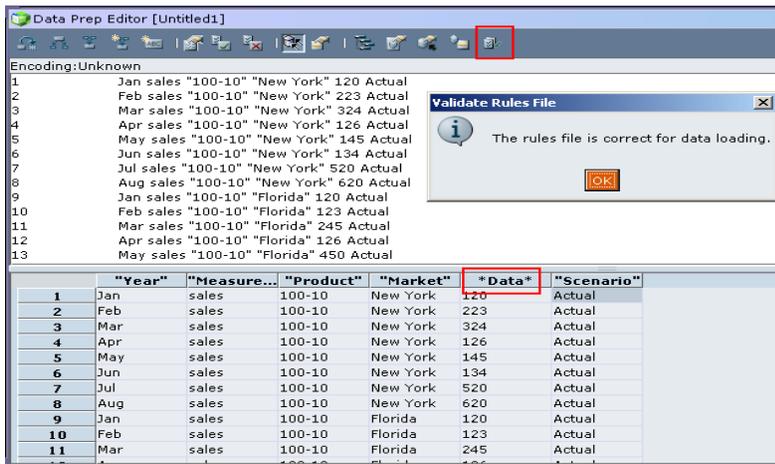


Step#1 Set space as delimiter. Map all fields of data source file.

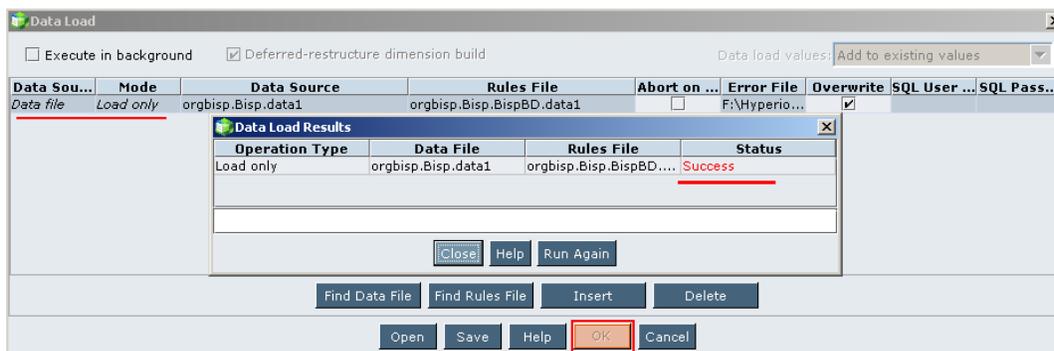
Step#2 Map all the fields from flat file to outline file given below and finally all the data field.



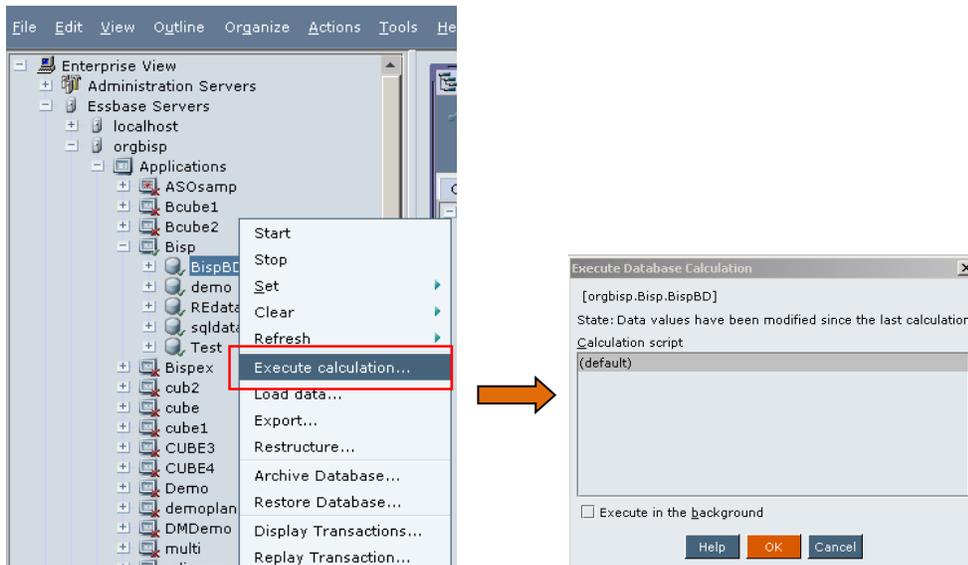
Once mapping has done, validate the rule file.



Select data file and rule file by using "Find Data File" and "Find Rule Files" button. Click ok



Right click ok database and execute calculation.



Data gets loaded.

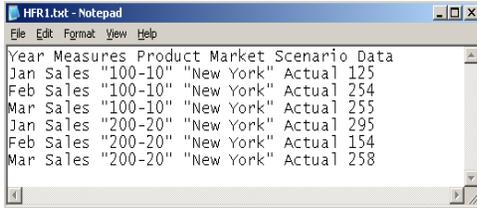
Data Preview Grid [orgbisp:Bisp, BispBD]

Cube View Properties

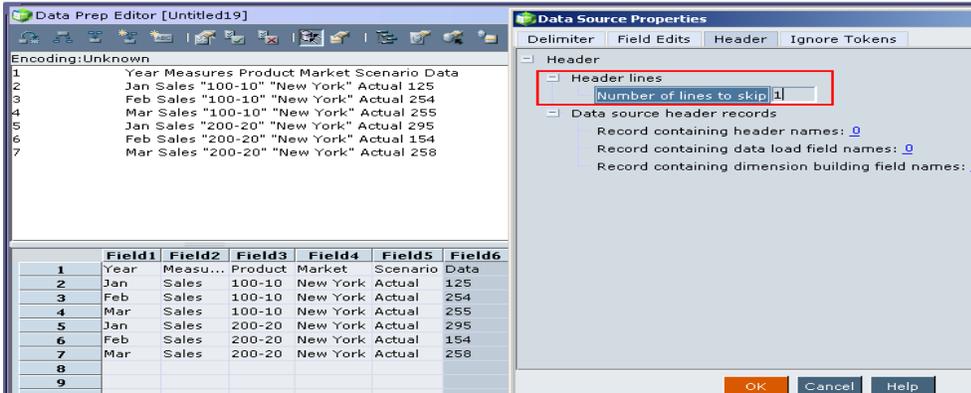
	A	B	C	D	E	F	G	H
0					Actual	Budget	Variance	Variance %
1	New York	100-10	Sales	Jan	120.0	#MISSING	120.0	#MISSING
2	New York	100-10	Sales	Feb	223.0	#MISSING	223.0	#MISSING
3	New York	100-10	Sales	Mar	324.0	#MISSING	324.0	#MISSING
4	New York	100-10	Margin...	Jan	100.0	#MISSING	100.0	#MISSING
5	New York	100-10	Margin...	Feb	100.0	#MISSING	100.0	#MISSING
6	New York	100-10	Margin...	Mar	100.0	#MISSING	100.0	#MISSING
7	New York	100-10	Profit %	Jan	100.0	#MISSING	100.0	#MISSING
8	New York	100-10	Profit %	Feb	100.0	#MISSING	100.0	#MISSING
9	New York	100-10	Profit %	Mar	100.0	#MISSING	100.0	#MISSING
10	New York	100-10	Profit ...	Jan	10.0	#MISSING	10.0	#MISSING
11	New York	100-10	Profit ...	Feb	18.583333...	#MISSING	18.583333...	#MISSING
12	New York	100-10	Profit ...	Mar	27.0	#MISSING	27.0	#MISSING
13	Florida	100-10	Sales	Jan	120.0	#MISSING	120.0	#MISSING
14	Florida	100-10	Sales	Feb	123.0	#MISSING	123.0	#MISSING
15	Florida	100-10	Sales	Mar	245.0	#MISSING	245.0	#MISSING
16	Florida	100-10	Margin...	Jan	100.0	#MISSING	100.0	#MISSING
17	Florida	100-10	Margin...	Feb	100.0	#MISSING	100.0	#MISSING
18	Florida	100-10	Margin...	Mar	100.0	#MISSING	100.0	#MISSING
19	Florida	100-10	Profit %	Jan	100.0	#MISSING	100.0	#MISSING
20	Florida	100-10	Profit %	Feb	100.0	#MISSING	100.0	#MISSING
21	Florida	100-10	Profit %	Mar	100.0	#MISSING	100.0	#MISSING

4) Data load with Header

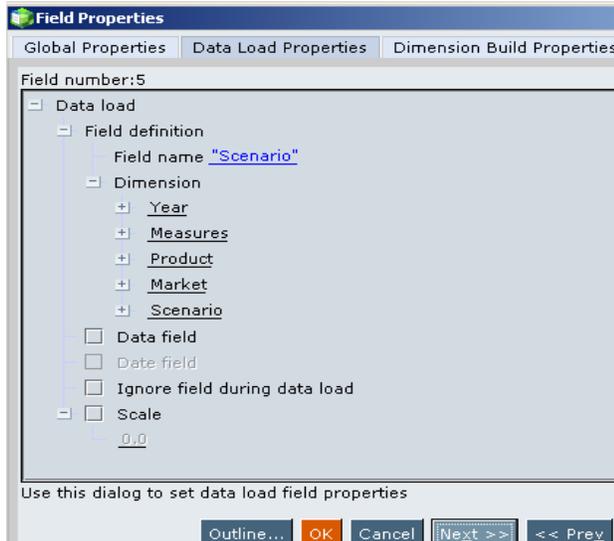
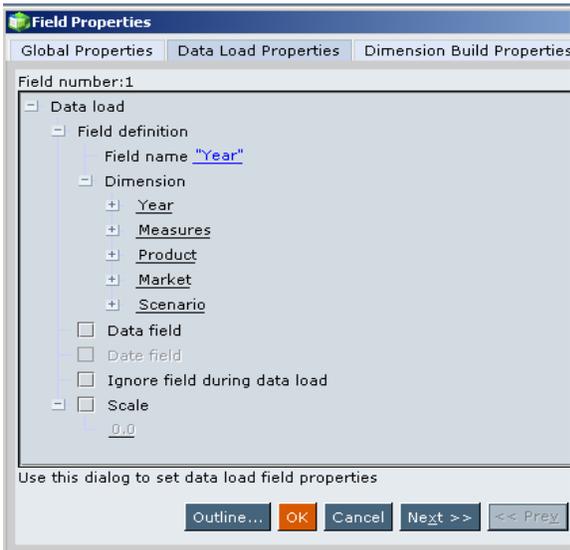
- a) Some times the data load file has header row. During data loading we want to skip first row considering it as header row. There is no need to load header information.



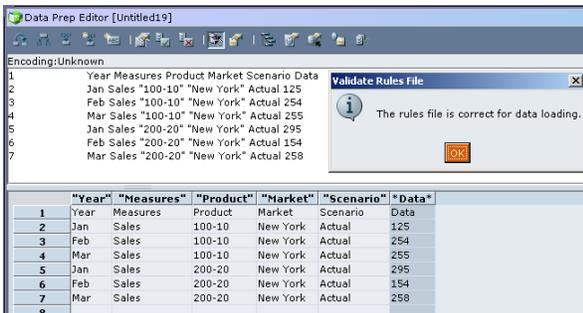
You need to skip header row while installation.



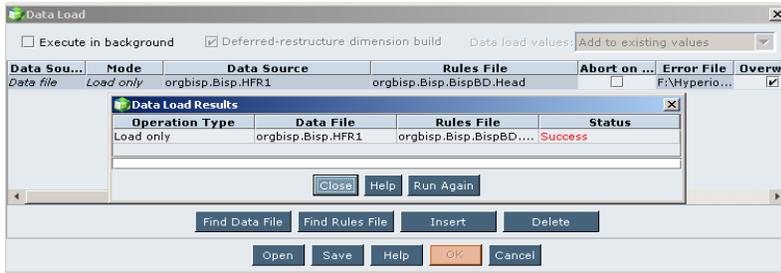
Set mapping properties with data source file.



Validate the build rule.



Select both data source file and rule file and click ok.

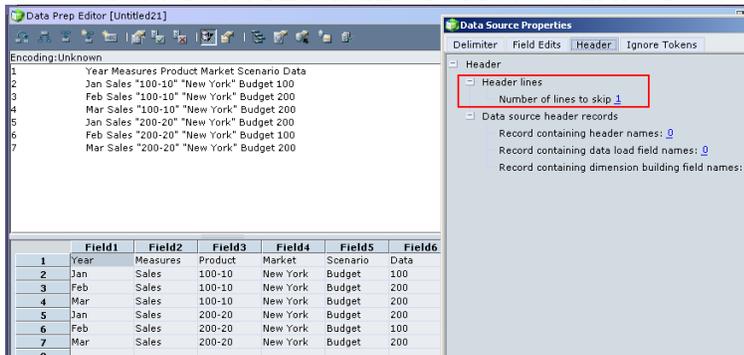


You can see the data load successfully.

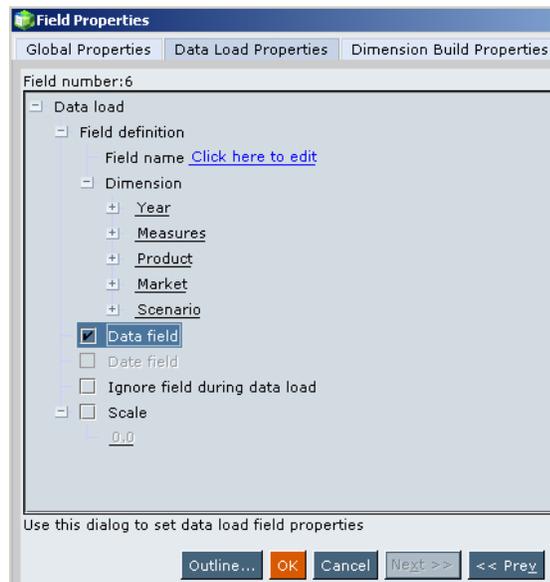
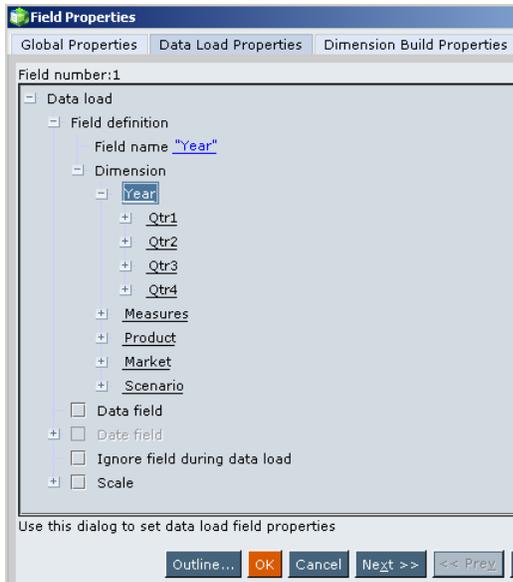
The screenshot shows the 'Data Preview Grid' window. The table below has a red box around the 'Actual' column for the last row.

	A	B	C	D	E	F	G	H
0					Actual	Budget	Variance	Variance %
1	New York	100-10	Sales	Jan	125.0	#MISSING	125.0	#MISSING
2	New York	100-10	Sales	Feb	254.0	#MISSING	254.0	#MISSING
3	New York	100-10	Sales	Mar	255.0	#MISSING	255.0	#MISSING
4	New York	200-20	Sales	Jan	295.0	#MISSING	295.0	#MISSING
5	New York	200-20	Sales	Feb	154.0	#MISSING	154.0	#MISSING
6	New York	200-20	Sales	Mar	258.0	#MISSING	258.0	#MISSING

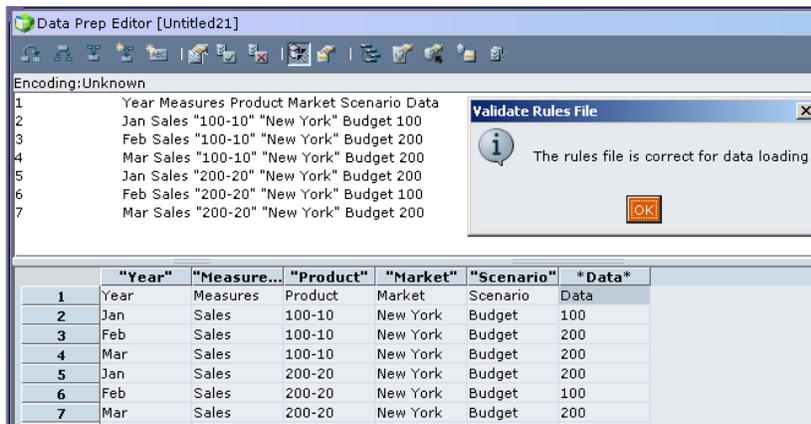
b) This data load source file has different scenario. You can set number of rows in header tab. That number of rows will not load while loading data.



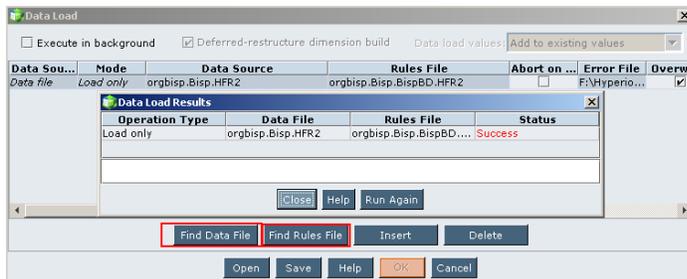
Map data source file



Validate rule file



Select both data source file and rule file from "Find Data File" and "Find Rules File" button respectively. Click ok



You can check data loaded successfully.

	A	B	C	D	E	F	G	H
0					Actual	Budget	Variance	Variance %
1	New York	100	Sales	Jan	125.0	100.0	25.0	25.0
2	New York	100	Sales	Feb	254.0	200.0	54.0	27.0
3	New York	100	Sales	Mar	255.0	200.0	55.0	27.500000...
4	New York	200	Sales	Jan	295.0	200.0	95.0	47.5
5	New York	200	Sales	Feb	154.0	100.0	54.0	54.0
6	New York	200	Sales	Mar	258.0	200.0	58.0	28.999999...

5) **Overwrite Existing Values** : While loading data into Essbase cube there is one option to overwrite the data value

This is the existing data value in Essbase server.

	A	B	C	D	E
0					Scenario
1	New York	100-10	Sales	Jan	120.0
2	New York	100-10	Sales	Feb	123.0
3	New York	100-10	Sales	Mar	1245.0
4	New York	100-10	Sales	Apr	126.0
5	New York	100-10	Sales	May	1450.0
6	New York	100-10	Sales	Jun	134.0
7	New York	100-10	Sales	Jul	520.0
8	New York	100-10	Sales	Aug	620.0
9	New York	100-10	Sales	Sep	120.0
10	New York	100-10	Sales	Oct	123.0
11	New York	100-10	Sales	Nov	1245.0
12	New York	100-10	Sales	Dec	126.0

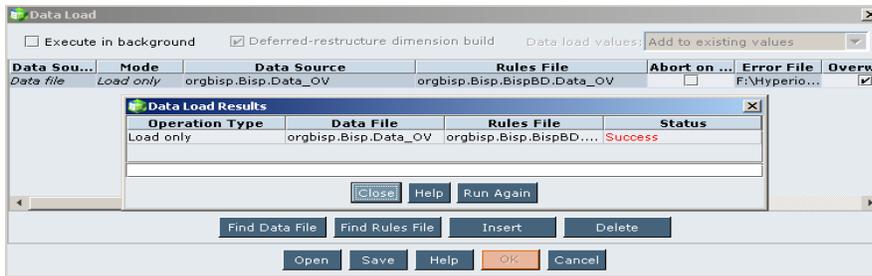
You can overwrite data on the existing data. While mapping data source file open data load settings go to data load values tab and select "Overwrite existing value" option.

The screenshot shows the 'Data Load Settings' dialog box with the 'Data Load Values' tab selected. Under 'Data values', the 'Overwrite existing values' radio button is selected and highlighted with a red box. Other options include 'Add to existing values' and 'Subtract from existing values'. There are also checkboxes for 'Sign flip' and 'On UDA', and a 'Dimension' link. The 'Global select/reject Boolean' section has 'And' selected.

Validate rule file

The screenshot shows the 'Data Prep Editor' window with a 'Validate Rules File' dialog box open. The dialog box contains an information icon and the text 'The rules file is correct for data loading.' with an 'OK' button below it.

Select data source file and rule file. Click ok



You can check new data is loaded in Essbase server.

	A	B	C	D	E
0					Scenario
1	New York	100-10	Sales	Jan	150.0
2	New York	100-10	Sales	Feb	180.0
3	New York	100-10	Sales	Mar	924.0
4	New York	100-10	Sales	Apr	140.0
5	New York	100-10	Sales	May	145.0
6	New York	100-10	Sales	Jun	140.0
7	New York	100-10	Sales	Jul	510.0
8	New York	100-10	Sales	Aug	600.0
9	New York	100-10	Sales	Sep	120.0
10	New York	100-10	Sales	Oct	123.0
11	New York	100-10	Sales	Nov	1245.0
12	New York	100-10	Sales	Dec	126.0

6) Add Data value to Existing data

This is the existing data value in Essbase server.

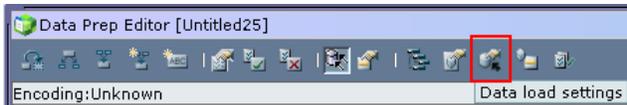
	A	B	C	D	E
0					Scenario
1	New York	100-10	Sales	Jan	150.0
2	New York	100-10	Sales	Feb	180.0
3	New York	100-10	Sales	Mar	924.0
4	New York	100-10	Sales	Apr	140.0
5	New York	100-10	Sales	May	145.0
6	New York	100-10	Sales	Jun	140.0
7	New York	100-10	Sales	Jul	510.0
8	New York	100-10	Sales	Aug	600.0
9	New York	100-10	Sales	Sep	120.0
10	New York	100-10	Sales	Oct	123.0
11	New York	100-10	Sales	Nov	1245.0
12	New York	100-10	Sales	Dec	126.0

You can add data in to existing data. The source file has updated data values.

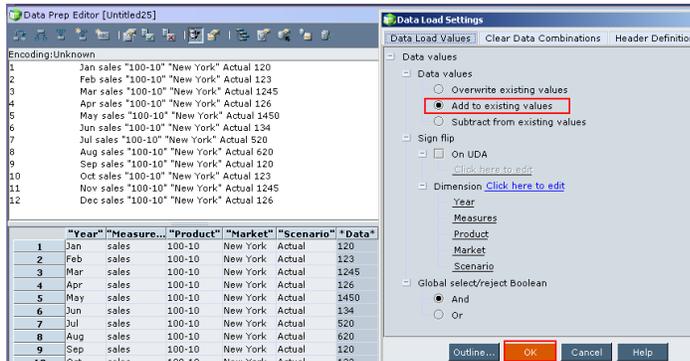
```

Jan sales "100-10" "New York" Actual 120
Feb sales "100-10" "New York" Actual 123
Mar sales "100-10" "New York" Actual 1245
Apr sales "100-10" "New York" Actual 126
May sales "100-10" "New York" Actual 1450
Jun sales "100-10" "New York" Actual 134
Jul sales "100-10" "New York" Actual 520
Aug sales "100-10" "New York" Actual 620
Sep sales "100-10" "New York" Actual 120
Oct sales "100-10" "New York" Actual 123
Nov sales "100-10" "New York" Actual 1245
Dec sales "100-10" "New York" Actual 126
  
```

Open data load settings



In data load settings, open data load value tab and select “Add to existing values” then click ok.



Select data source file and rule file.



Result after adding data.



7) Subtracting data from Existing data

This is the existing data value in Essbase server.

	A	B	C	D	F
0					Scenario
1	New York	100-10	Sales	Jan	270.0
2	New York	100-10	Sales	Feb	303.0
3	New York	100-10	Sales	Mar	2169.0
4	New York	100-10	Sales	Apr	266.0
5	New York	100-10	Sales	May	1595.0
6	New York	100-10	Sales	Jun	274.0
7	New York	100-10	Sales	Jul	1030.0
8	New York	100-10	Sales	Aug	1220.0
9	New York	100-10	Sales	Sep	240.0
10	New York	100-10	Sales	Oct	246.0
11	New York	100-10	Sales	Nov	2490.0
12	New York	100-10	Sales	Dec	252.0

You can subtract existing data value. Data file which you can use for subtraction.

```

Jan sales "100-10" "New York" Actual 120
Feb sales "100-10" "New York" Actual 123
Mar sales "100-10" "New York" Actual 1245
Apr sales "100-10" "New York" Actual 126
May sales "100-10" "New York" Actual 1450
Jun sales "100-10" "New York" Actual 134
Jul sales "100-10" "New York" Actual 520
Aug sales "100-10" "New York" Actual 620
Sep sales "100-10" "New York" Actual 120
Oct sales "100-10" "New York" Actual 123
Nov sales "100-10" "New York" Actual 1245
Dec sales "100-10" "New York" Actual 126

```

Create rule file for the data source files. Open data load settings and select “Subtract from existing values” option in the data load values tab.

The screenshot shows the 'Data Load Settings' dialog box with the 'Data values' section expanded. The 'Subtract from existing values' radio button is selected and highlighted with a red box. Other options include 'Overwrite existing values' and 'Add to existing values'. The 'Data Prep Editor' window in the background shows the same data file as in the previous screenshot.

Once rule file created successfully, select data source file and rule file then click ok.

The screenshot shows the 'Data Load' dialog box. A table lists data sources with columns for 'Data Source', 'Mode', 'Data Source', 'Rules File', 'Abort on ...', 'Error File', 'Overwrite', 'SQL User ...', and 'SQL Pass...'. A 'Data Load Results' pop-up window is open, showing a table with columns 'Operation Type', 'Data File', 'Rules File', and 'Status'. The status for the 'Load only' operation is 'Success'. Buttons for 'Close', 'Help', 'Run Again', 'Find Data File', 'Find Rules File', 'Insert', 'Delete', 'Open', 'Save', 'Help', 'OK', and 'Cancel' are visible.

You can see the data values get updated again.

	A	B	C	D	E
0					Scenario
1	New York	100-10	Sales	Jan	150.0
2	New York	100-10	Sales	Feb	180.0
3	New York	100-10	Sales	Mar	924.0
4	New York	100-10	Sales	Apr	140.0
5	New York	100-10	Sales	May	145.0
6	New York	100-10	Sales	Jun	140.0
7	New York	100-10	Sales	Jul	510.0
8	New York	100-10	Sales	Aug	600.0
9	New York	100-10	Sales	Sep	120.0
10	New York	100-10	Sales	Oct	123.0
11	New York	100-10	Sales	Nov	1245.0
12	New York	100-10	Sales	Dec	126.0

8) **Ignore field during data load:** Sometimes the data source files consist of some fields which you do not want to load into Essbase cube, Essbase rule interface provides an option to ignore the field while loading the data. This is the data source file, first field is not necessary.

```

www.downtownbmv.co.de Jan Sales "100-10" "New York" Actual 100
www.downtownbmv.co.de Feb Sales "100-10" "New York" Actual 200
www.downtownbmv.co.de Mar Sales "100-10" "New York" Actual 300

```

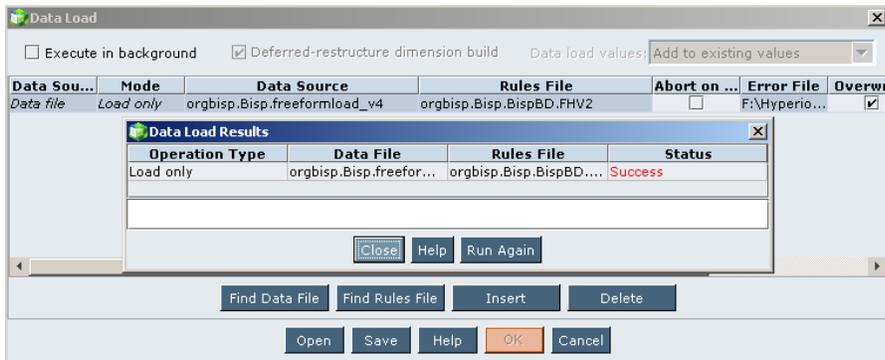
While mapping data source file make check box true "Ignore field during data load" option in data load properties.

	Field1	"Year"	"Measure..."	"Product"	"Market"
1	www.dow...	Jan	Sales	100-10	New York
2	www.dow...	Feb	Sales	100-10	New York
3	www.dow...	Mar	Sales	100-10	New York

After selecting all properties, mapping will look like as below.

	Field1	"Year"	"Measure..."	"Product"	"Market"	"Scenario"	*Data*
1	www.dow...	Jan	Sales	100-10	New York	Actual	100
2	www.dow...	Feb	Sales	100-10	New York	Actual	200
3	www.dow...	Mar	Sales	100-10	New York	Actual	300

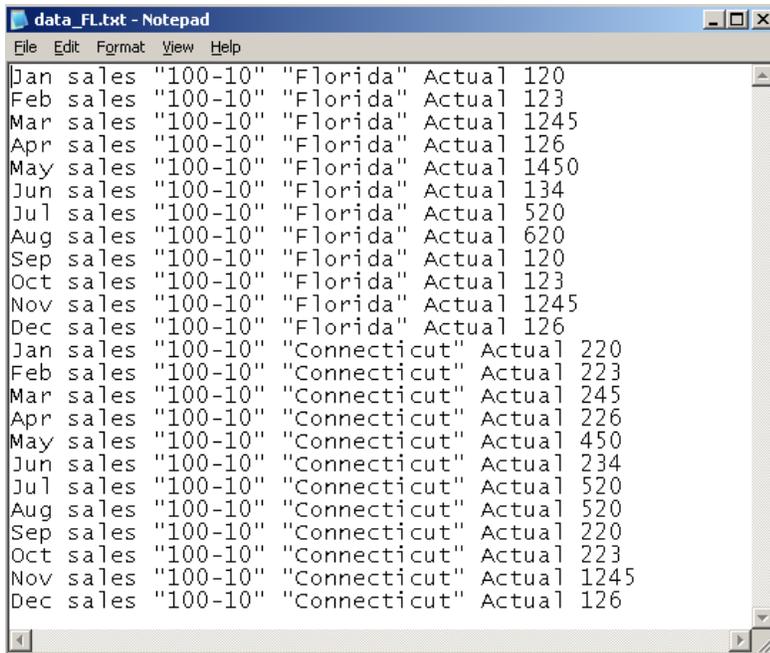
Select data source file and rule file then click ok.



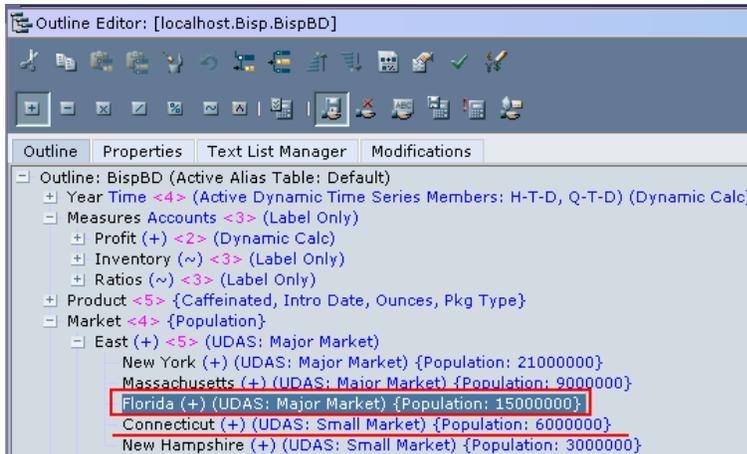
You can check data loaded successfully.

	A	B	C	D	E	F	G	H
0					Actual	Budget	Variance	Variance %
1	New York	100-10	Sales	Jan	100.0	#MISSING	100.0	#MISSING
2	New York	100-10	Sales	Feb	200.0	#MISSING	200.0	#MISSING
3	New York	100-10	Sales	Mar	300.0	#MISSING	300.0	#MISSING
4								

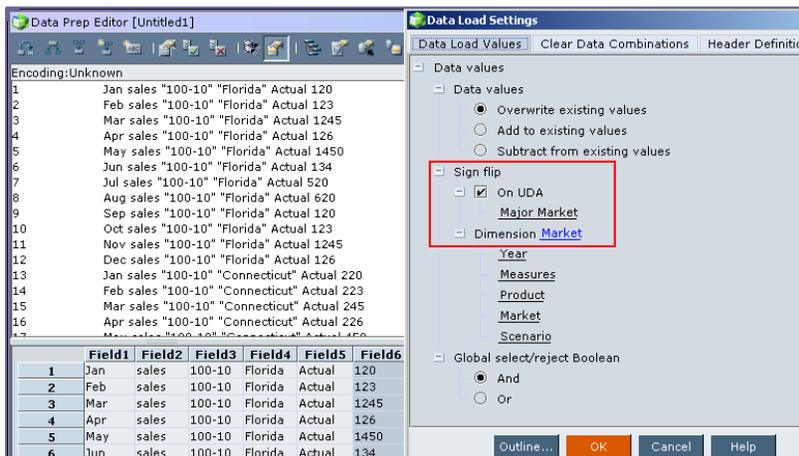
- 9) **Data load with Sign Flip:** Sometime there is need to load the data souce by flipping the sign('+' become '-' and '-' become '+'). We flip the sign based on UDAs associated with the member.The below example demonstrate you how to achieve this. This is the data source file which has data for two cities.



You can see UDA for "Florida" is major market.



Create rule file for the data source file. Open data load settings, go to data load values tab set sign flip on “Major market”.



Select data file and rule file, then click ok.



You can see data loaded successfully.

Data Preview Grid [localhost:Bisp, BispBD]

Cube View Properties

	A	B	C	D	E
0					Scenario
1	Florida	100-10	Sales	Jan	-120.0
2	Florida	100-10	Sales	Feb	-123.0
3	Florida	100-10	Sales	Mar	-1245.0
4	Florida	100-10	Sales	Apr	-126.0
5	Florida	100-10	Sales	May	-1450.0
6	Florida	100-10	Sales	Jun	-134.0
7	Florida	100-10	Sales	Jul	-520.0
8	Florida	100-10	Sales	Aug	-620.0
9	Florida	100-10	Sales	Sep	-120.0
10	Florida	100-10	Sales	Oct	-123.0
11	Florida	100-10	Sales	Nov	-1245.0
12	Florida	100-10	Sales	Dec	-126.0
13	Connecticut	100-10	Sales	Jan	220.0
14	Connecticut	100-10	Sales	Feb	223.0
15	Connecticut	100-10	Sales	Mar	245.0
16	Connecticut	100-10	Sales	Apr	226.0
17	Connecticut	100-10	Sales	May	450.0
18	Connecticut	100-10	Sales	Jun	234.0
19	Connecticut	100-10	Sales	Jul	520.0
20	Connecticut	100-10	Sales	Aug	520.0
21	Connecticut	100-10	Sales	Sep	220.0

10) Loading Data using Lock and Send method.

This method is perhaps the quickest, down and dirty, method of loading data into an Essbase database. While it is fast and easy, there are limitations and precautions. Since Microsoft Excel is the natural front end for Oracle Essbase, they do work rather seamlessly together. However, you do need to remember, that what you are doing with a spreadsheet's "Lock and Send" function is updating existing data as there are no provisions for adding new members to the database outline through Microsoft Excel. Also, Essbase seems to have difficulty locking too many data cells when asked by Microsoft Excel.

Due to performance issues, you may want to consider splitting spreadsheets that contain a considerable amount of rows. Update your desired cell then select complete outline with updated value then lock it.

New Microsoft Office Excel V

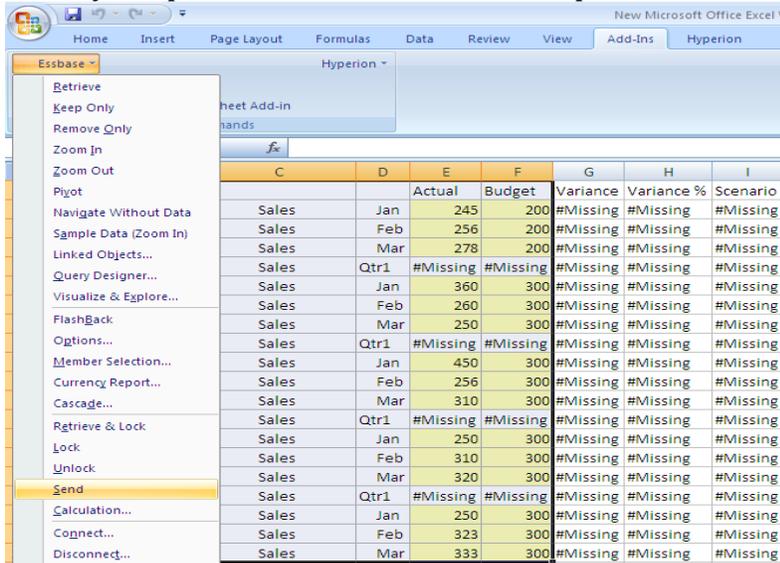
Home Insert Page Layout Formulas Data Review View Add-Ins Hyperion

Essbase -

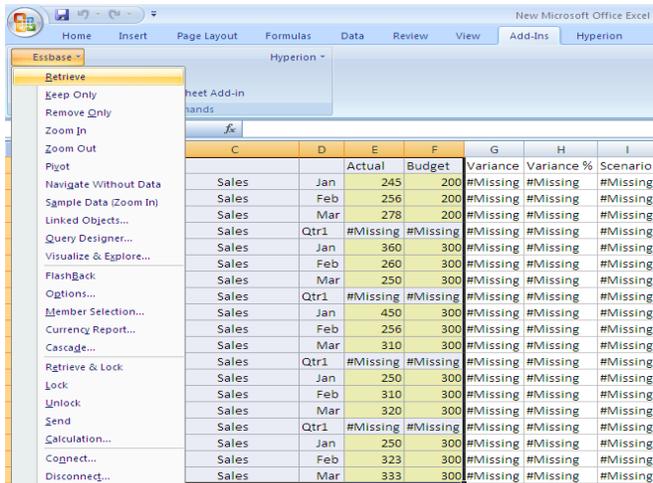
- Retrieve
- Keep Only
- Remove Only
- Zoom In
- Zoom Out
- Pivot
- Navigate Without Data
- Sample Data (Zoom In)
- Linked Objects...
- Query Designer...
- Visualize & Explore...
- Flashback
- Options...
- Member Selection...
- Currency Report...
- Cascade...
- Retrieve & Lock
- Lock**
- Unlock
- Send
- Calculation...
- Connect...
- Disconnect...

	C	D	E	F	G	H	I
			Actual	Budget	Variance	Variance %	Scenario
	Sales	Jan	245	200	#Missing	#Missing	#Missing
	Sales	Feb	256	200	#Missing	#Missing	#Missing
	Sales	Mar	278	200	#Missing	#Missing	#Missing
	Sales	Qtr1	#Missing	#Missing	#Missing	#Missing	#Missing
	Sales	Jan	360	300	#Missing	#Missing	#Missing
	Sales	Feb	260	300	#Missing	#Missing	#Missing
	Sales	Mar	250	300	#Missing	#Missing	#Missing
	Sales	Qtr1	#Missing	#Missing	#Missing	#Missing	#Missing
	Sales	Jan	450	300	#Missing	#Missing	#Missing
	Sales	Feb	256	300	#Missing	#Missing	#Missing
	Sales	Mar	310	300	#Missing	#Missing	#Missing
	Sales	Qtr1	#Missing	#Missing	#Missing	#Missing	#Missing
	Sales	Jan	250	300	#Missing	#Missing	#Missing
	Sales	Feb	310	300	#Missing	#Missing	#Missing
	Sales	Mar	320	300	#Missing	#Missing	#Missing
	Sales	Qtr1	#Missing	#Missing	#Missing	#Missing	#Missing
	Sales	Jan	250	300	#Missing	#Missing	#Missing
	Sales	Feb	323	300	#Missing	#Missing	#Missing
	Sales	Mar	333	300	#Missing	#Missing	#Missing

When you open Essbase add-ins there is option “send”.



The final operation of lock and send method is retrieve.



You can see the final updated database is showing in excel. This is very fast way to update data base. You can see the associated formula also execute automatically.

	A	B	C	D	E	F	G	H	I
					Actual	Budget	Variance	Variance %	Scenario
2	California	100-10	Sales	Jan	245	200	45	22.5	245
3	California	100-10	Sales	Feb	256	200	56	28	256
4	California	100-10	Sales	Mar	278	200	78	39	278
5	California	100-10	Sales	Qtr1	779	600	179	29.83333333	779
6	Oregon	100-10	Sales	Jan	360	300	60	20	360
7	Oregon	100-10	Sales	Feb	260	300	-40	-13.33333333	260
8	Oregon	100-10	Sales	Mar	250	300	-50	-16.66666667	250
9	Oregon	100-10	Sales	Qtr1	870	900	-30	-3.333333333	870
10	Washington	100-10	Sales	Jan	450	300	150	50	450
11	Washington	100-10	Sales	Feb	256	300	-44	-14.66666667	256
12	Washington	100-10	Sales	Mar	310	300	10	3.333333333	310
13	Washington	100-10	Sales	Qtr1	1016	900	116	12.88888889	1016
14	Utah	100-10	Sales	Jan	250	300	-50	-16.66666667	250
15	Utah	100-10	Sales	Feb	310	300	10	3.333333333	310
16	Utah	100-10	Sales	Mar	320	300	20	6.666666667	320
17	Utah	100-10	Sales	Qtr1	880	900	-20	-2.222222222	880
18	Nevada	100-10	Sales	Jan	250	300	-50	-16.66666667	250
19	Nevada	100-10	Sales	Feb	323	300	23	7.666666667	323
20	Nevada	100-10	Sales	Mar	333	300	33	11	333
21	Nevada	100-10	Sales	Qtr1	906	900	6	0.666666667	906

11) Data Load through smart view

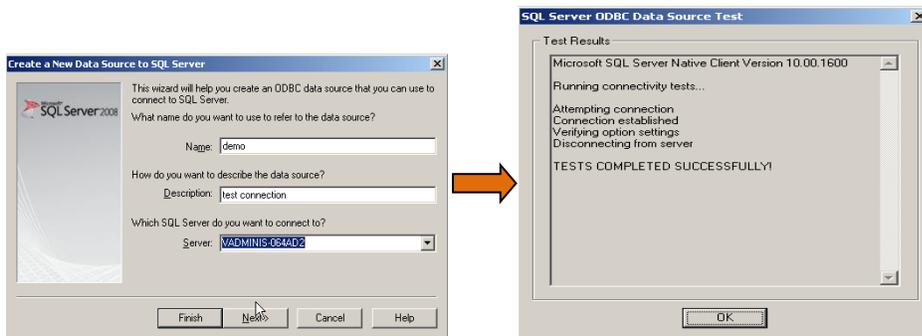
You can upload data directly from Excel. Insert 0 level data then click on submit data.

	A	B	C	D	E	F	G	H	I	J
					Actual	Budget	Variance	Variance %	Scenario	
2	New York	100-10	Sales	Jan	120	100	20	20	120	
3	New York	100-10	Sales	Feb	123	150	-27	-18	123	
4	New York	100-10	Sales	Mar	1245	1200	45	3.75	1245	
5	New York	100-10	Sales	Qtr1	1488	1450	38	2.620689655	1488	
6	New York	100-20	Sales	Jan	120	150	-30	-20	120	
7	New York	100-20	Sales	Feb	123	150	-27	-18	123	
8	New York	100-20	Sales	Mar	1245	1200	245	20.41666667	1245	
9	New York	100-20	Sales	Qtr1	1488	300	1188	396	1488	
10	New York	100-30	Sales	Jan	245	250	-5	-2	245	
11	New York	100-30	Sales	Feb	254	200	54	27	254	
12	New York	100-30	Sales	Mar	1245	1000	245	24.5	1245	
13	New York	100-30	Sales	Qtr1	1488	#Missing	1488	#Missing	1488	
14	New York	100	Sales	Jan	360	100	260	260	360	
15	New York	100	Sales	Feb	369	150	219	146	369	
16	New York	100	Sales	Mar	3735	1200	2535	211.25	3735	
17	New York	100	Sales	Qtr1	4464	1450	3014	207.862069	4464	

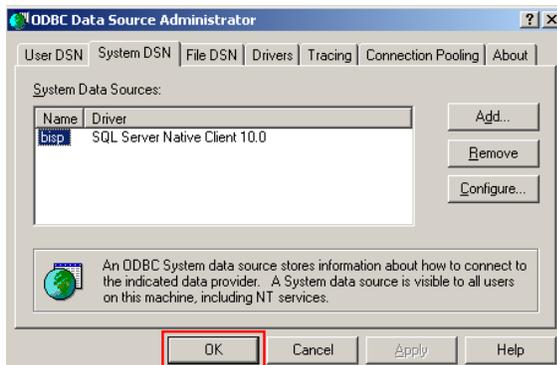
On refreshing excel sheet the updated value will comes automatically. Refreshed result shown in Excel.

	A	B	C	D	E	F	G	H	I
1					Actual	Budget	Variance	Variance %	Scenario
2	New York	100-10	Sales	Jan	120	100	20	20	120
3	New York	100-10	Sales	Feb	123	150	-27	-18	123
4	New York	100-10	Sales	Mar	1245	1200	45	3.75	1245
5	New York	100-10	Sales	Qtr1	1488	1450	38	2.620689655	1488
6	New York	100-20	Sales	Jan	120	150	-30	-20	120
7	New York	100-20	Sales	Feb	123	150	-27	-18	123
8	New York	100-20	Sales	Mar	1245	1200	45	3.75	1245
9	New York	100-20	Sales	Qtr1	1488	1500	-12	-0.8	1488
10	New York	100-30	Sales	Jan	120	250	-130	-52	120
11	New York	100-30	Sales	Feb	123	200	-77	-38.5	123
12	New York	100-30	Sales	Mar	1245	1000	245	24.5	1245
13	New York	100-30	Sales	Qtr1	1488	1450	38	2.620689655	1488
14	New York	100	Sales	Jan	360	100	260	260	360
15	New York	100	Sales	Feb	369	150	219	146	369
16	New York	100	Sales	Mar	3735	1200	2535	211.25	3735
17	New York	100	Sales	Qtr1	4464	1450	3014	207.862069	4464

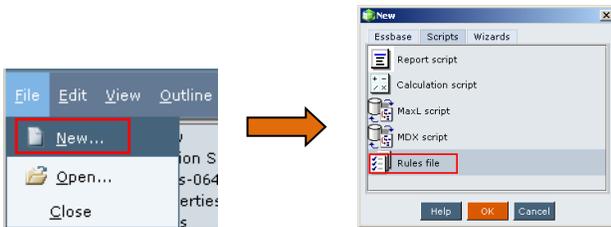
12) **Data Load through SQL Database:** You need to create system “DSN” for loading data through SQL database.



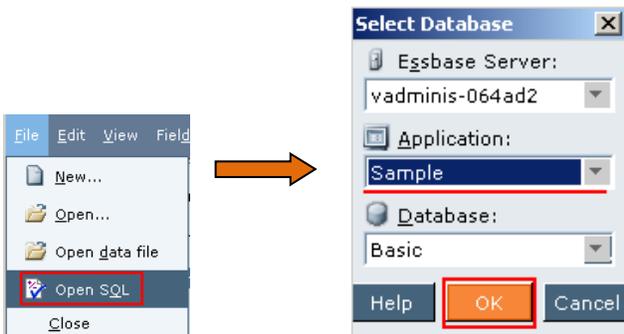
System DSN is created successfully.



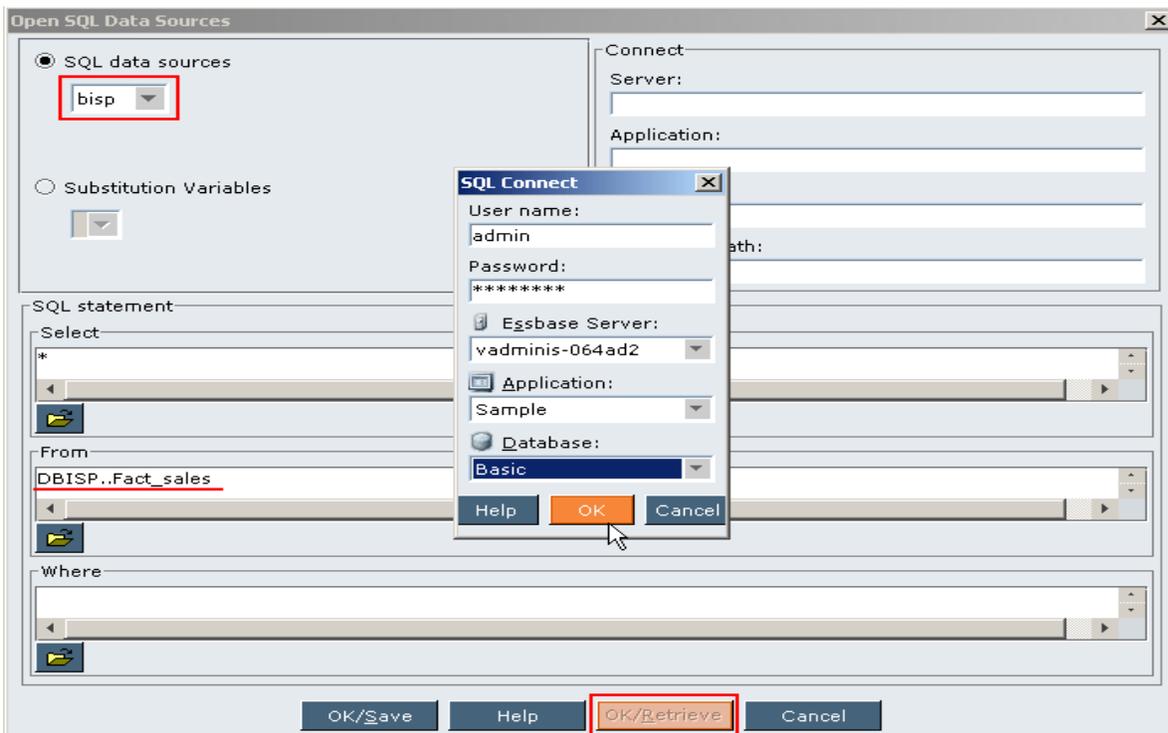
Now you need to create rule file for data load.



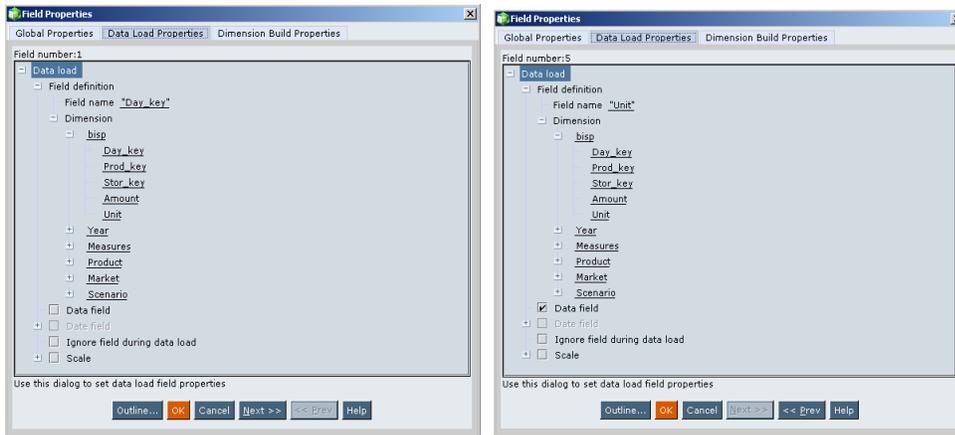
You have DSN for SQL server. Go to file and open “Open SQL”, and then you need to select Essbase server information server name, application name and database name.



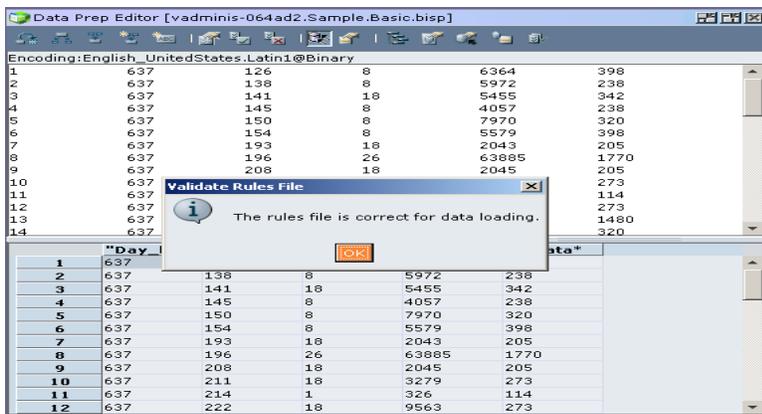
You have build DNS “bisp”, so you need not to specify connection information again. You need to write SQL statement then click ok and retrieve. You need to enter username/password in SQL Connect and specify Essbase server information click ok.



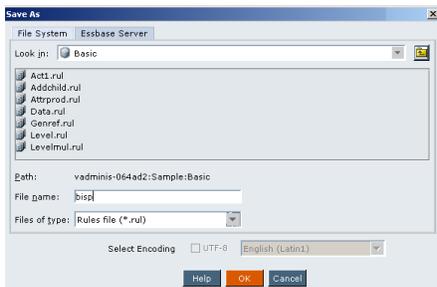
Set data load properties for building rule file.



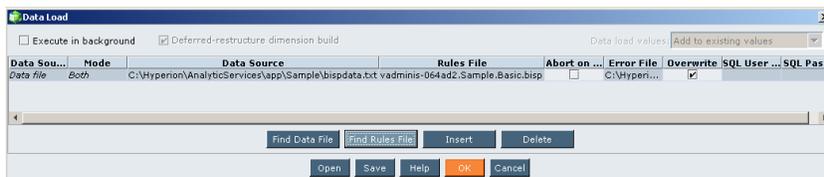
Validate the rule file



Save rule file.

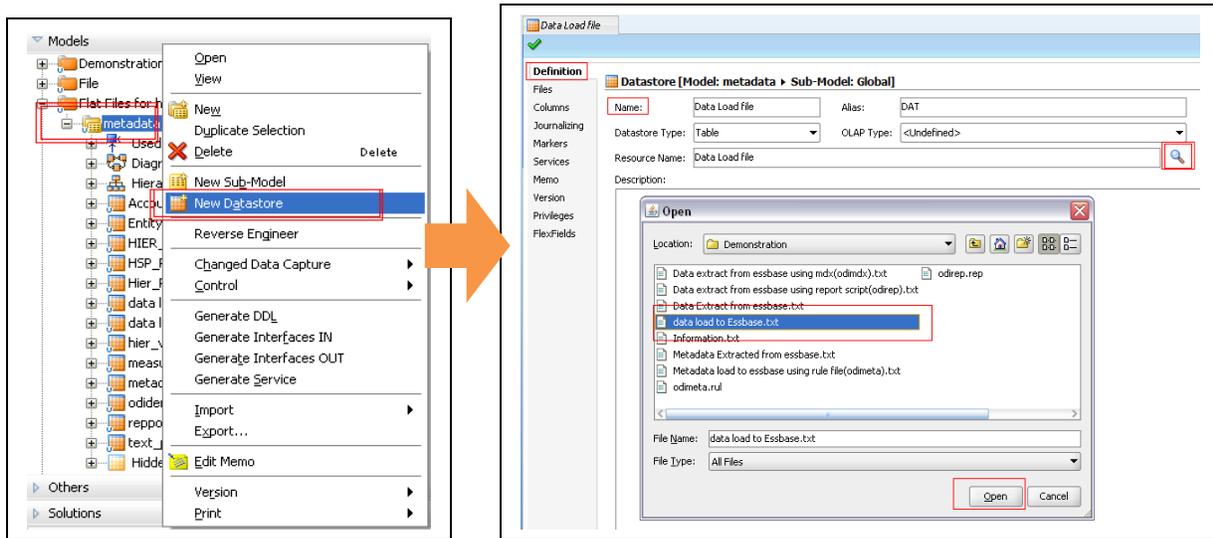


There is import and export wizard utility in SQL server, through which you can import data from SQL database into text file. Browse text file and rule file and click ok for loading data into Essbase.

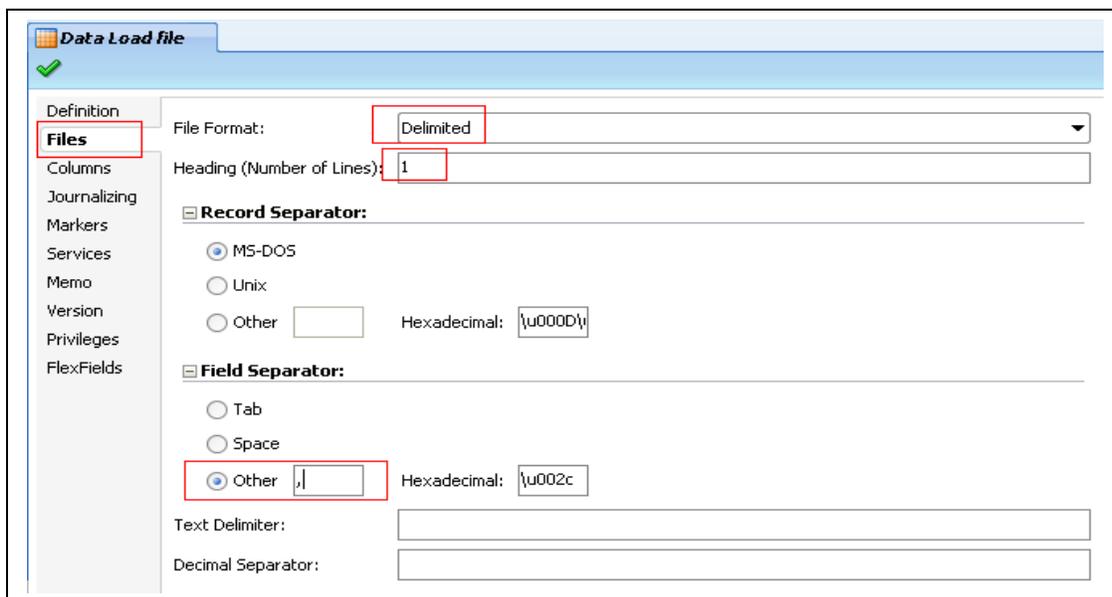


13) Loading data using Oracle Data Integration

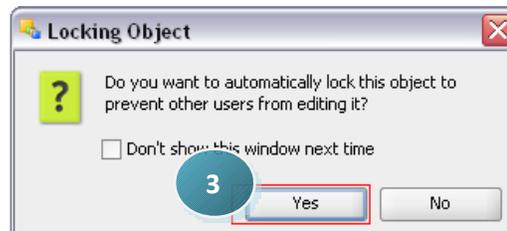
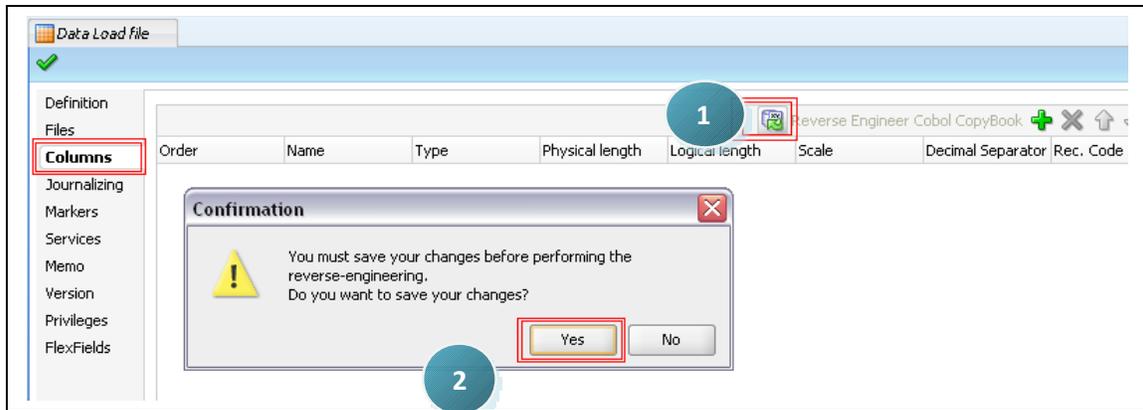
Step: 1) Creating Data Store for flat files. We will use same model which we have use during data extraction from Essbase to flat file. We need to create new data store for source text file. Select the model Right click and select New Data Store. In Definition tab enter the name then click on Resource Name browse button select you text file from open dialog box and press 'Open'.



Step: 2) Go to file tab select file format as delimited set heading to 1 and field separator to Comma (,).



Step: 3) Now go to Column tab and click on reverse engineer button.

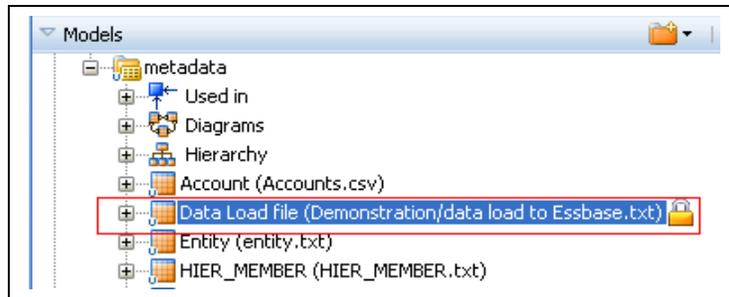


Order	Name	Type	Physical length	Logical length	Scale
1	Year	String	50	50	
2	Actual	String	50	50	
3	Market	String	50	50	
4	Budget	String	50	50	
5	Scenario	String	50	50	
6	Data	String	50	50	
7	Measures	String	50	50	
8	Variance	String	50	50	
9	Product	String	50	50	

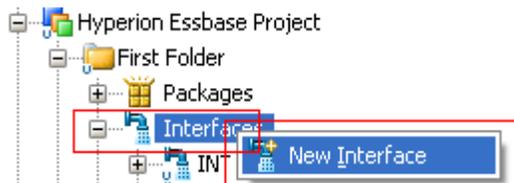
Step: 4) we need to change the data type of Actual, Budget and Variance to Numeric because it is numeric fields.

Order	Name	Type	Physical length	Logical length	Scale
1	Year	String	50	50	
2	Actual	Numeric	50	50	
3	Market	String	50	50	
4	Budget	Numeric	50	50	
5	Scenario	String	50	50	
6	Data	String	50	50	
7	Measures	String	50	50	
8	Variance	Numeric	50	50	
9	Product	String	50	50	

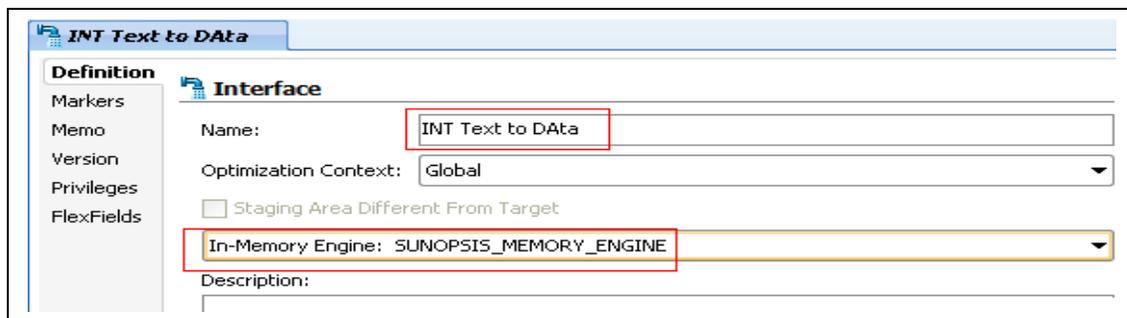
Step: 5) Save it.



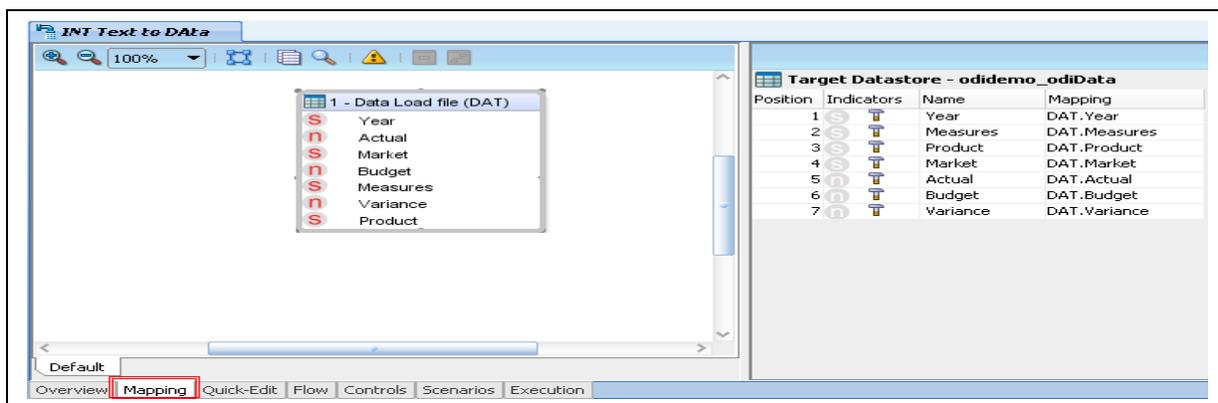
Step: 6) Source is ready, now we will create the interface. Select same project that we have created previously open it and select interface right click and new interface.



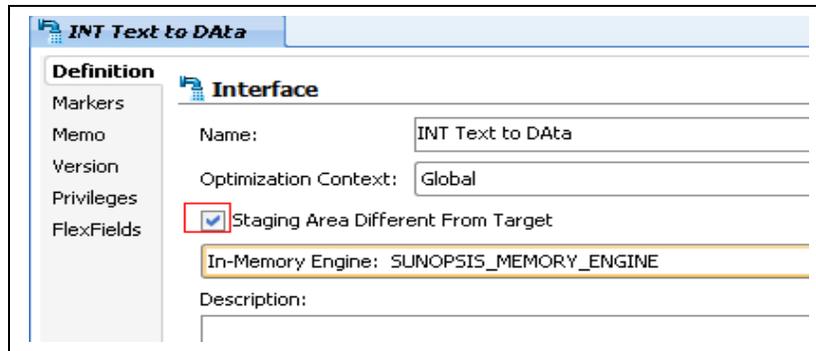
Specify the name, context and Staging area.



Step: 7) Go to mapping tab and drag load datastore and drop it to source area. Similarly drag Essbase odidemo_odidata to target place. It will ask you for auto mapping press 'Yes'.



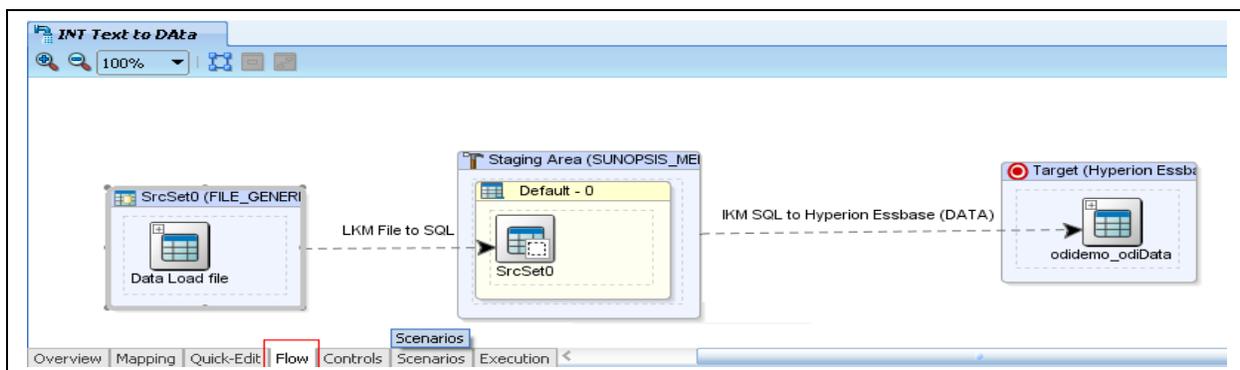
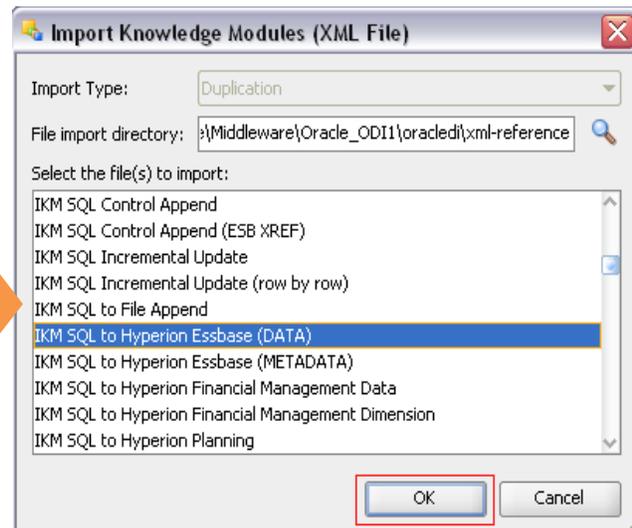
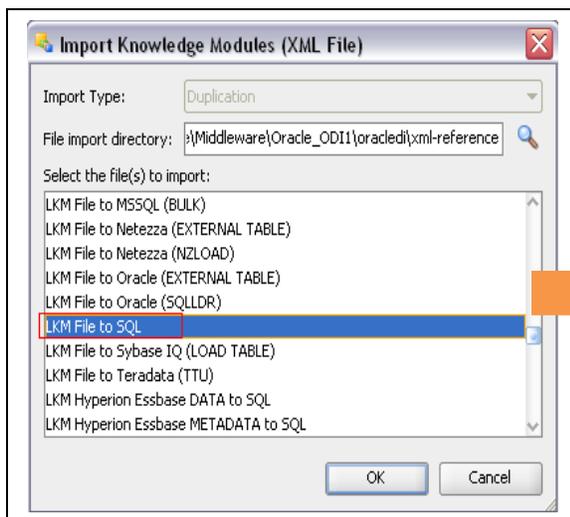
Step: 8) Go to overview tab and select staging area different from target check box.



Step: 9) Now go to Flow tab where you specify the Knowledge module for the interface these are the required knowledge module. If you have not imported it till now import it.

i) LKM File To SQL

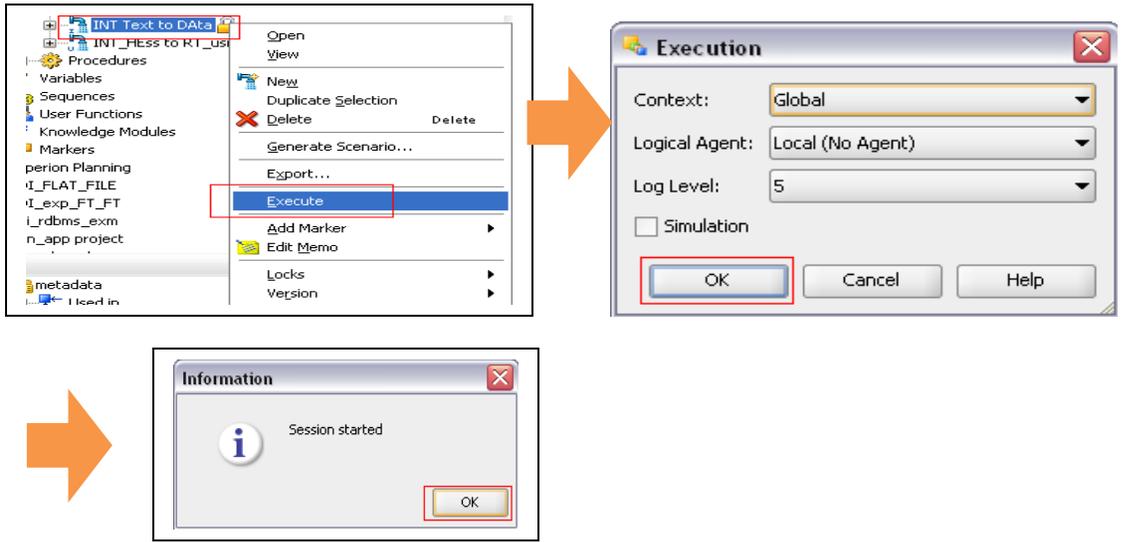
ii) IKM SQL TO Hyperion Essbase (Data).



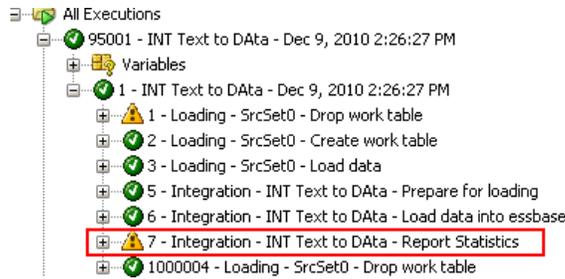
Step: 10) Save it.



Step: 11) Execute the interface.



Step: 12) Go to the operator tab and check the execution result.



Number of rows successfully processed: 444
 Number of rows rejected: 0

Step: 13) Now go to Essbase application refresh it and check the data.

	A	B	C	D	E	F	G	H
0	East	100	Profit	Year	Actual	Budget	Variance	Variance %
1	East	100	Inventory	Year	12656.0	13350.0	-494.0	-3.75663...
2	East	100	Ratios	Year	5384.0	5200.0	-184.0	-3.538461...
3	East	200	Profit	Year	66.395097...	67.450980...	-1.055883...	-1.565408...
4	East	200	Inventory	Year	2534.0	4360.0	-1826.0	-41.88073...
5	East	200	Ratios	Year	5957.0	5610.0	-347.0	-6.185383...
6	East	300	Profit	Year	51.537681...	53.935082...	-2.397400...	-4.444974...
7	East	300	Inventory	Year	6278.0	5910.0	-368.0	-6.226734...
9	East	300	Ratios	Year	45.980929...	48.608282...	-2.627352...	-5.405154...
10	East	400	Profit	Year	6344.0	7910.0	-1566.0	-19.79772...
11	East	400	Inventory	Year	8125.0	7990.0	-135.0	-1.689612...
12	East	400	Ratios	Year	60.628771...	62.908194...	-2.279423...	-3.623412...
13	East	Diet	Profit	Year	2408.0	2730.0	-322.0	-11.79487...
14	East	Diet	Inventory	Year	1867.0	1770.0	-97.0	-5.460225...
15	East	Diet	Ratios	Year	57.545144...	59.774964...	-2.229820...	-3.730358...
16	East	500	Profit	Year	#MISSING	#MISSING	#MISSING	#MISSING
17	East	500	Inventory	Year	#MISSING	#MISSING	#MISSING	#MISSING
18	East	500	Ratios	Year	#MISSING	#MISSING	#MISSING	#MISSING
19	West	100	Profit	Year	3549.0	8890.0	-5341.0	-60.07874...
20	West	100	Inventory	Year	8592.0	10250.0	-1658.0	-16.175609...
21	West	100	Ratios	Year	49.950540	51.047947	-1.097406	-2.149756

14) Data Load through MaxL script

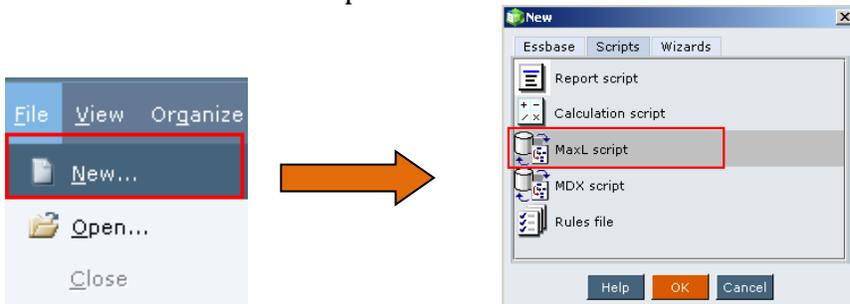
- 1) You can load data through "Maxl" script. This is the data source file for loading data through Maxl script.

```

data_FL.txt - Notepad
File Edit Format View Help
Jan sales "100-10" "Florida" Actual 120
Feb sales "100-10" "Florida" Actual 123
Mar sales "100-10" "Florida" Actual 1245
Apr sales "100-10" "Florida" Actual 126
May sales "100-10" "Florida" Actual 1450
Jun sales "100-10" "Florida" Actual 134
Jul sales "100-10" "Florida" Actual 520
Aug sales "100-10" "Florida" Actual 620
Sep sales "100-10" "Florida" Actual 120
Oct sales "100-10" "Florida" Actual 1235
Nov sales "100-10" "Florida" Actual 1245
Dec sales "100-10" "Florida" Actual 126
Jan sales "100-10" "Connecticut" Actual 220
Feb sales "100-10" "Connecticut" Actual 223
Mar sales "100-10" "Connecticut" Actual 245
Apr sales "100-10" "Connecticut" Actual 226
May sales "100-10" "Connecticut" Actual 450
Jun sales "100-10" "Connecticut" Actual 234
Jul sales "100-10" "Connecticut" Actual 520
Aug sales "100-10" "Connecticut" Actual 520
Sep sales "100-10" "Connecticut" Actual 220
Oct sales "100-10" "Connecticut" Actual 223
Nov sales "100-10" "Connecticut" Actual 1245

```

File → New → “MaxL Script”

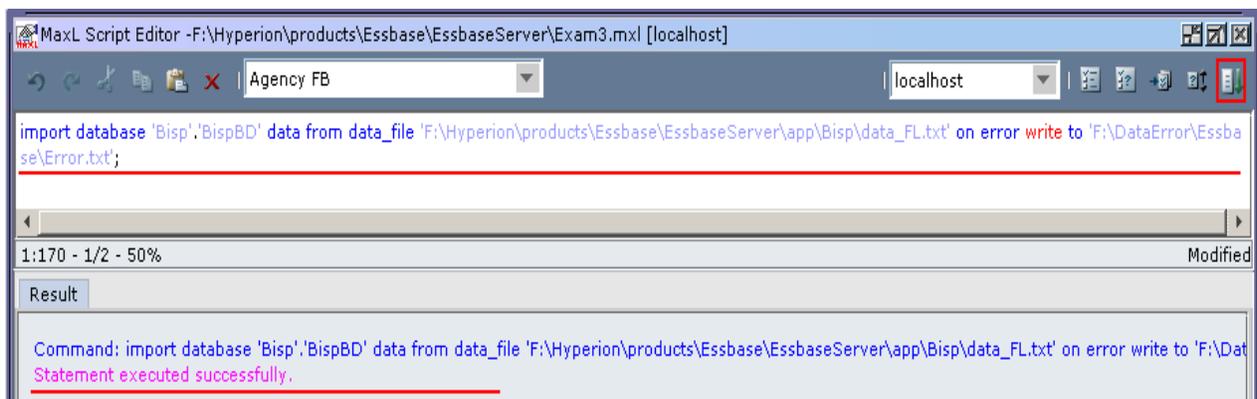


Write “MaxL Script” to load data. This is the script for loading data. Set data source file path and error file path.

```

import database 'Bisp'. 'BispBD' data from data_file
'F:\Hyperion\products\Essbase\EssbaseServer\app\Bisp\data_FL.txt' on error write to
'F:\DataError\Essbase\Error.txt';

```



You can check that data loaded successfully.

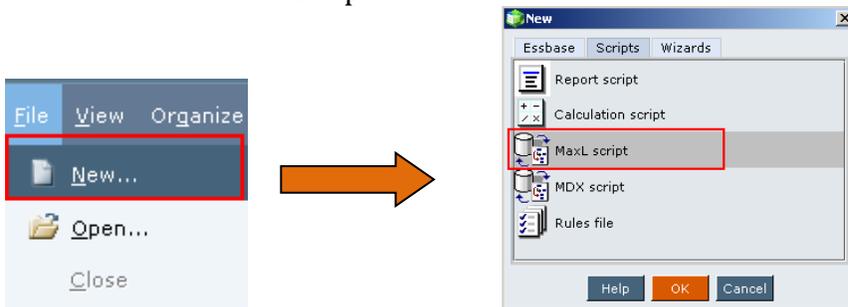
	A	B	C	D	F
0					Scenario
1	Florida	100-10	Sales	Jan	120.0
2	Florida	100-10	Sales	Feb	123.0
3	Florida	100-10	Sales	Mar	1245.0
4	Florida	100-10	Sales	Apr	126.0
5	Florida	100-10	Sales	May	1450.0
6	Florida	100-10	Sales	Jun	134.0
7	Florida	100-10	Sales	Jul	520.0
8	Florida	100-10	Sales	Aug	620.0
9	Florida	100-10	Sales	Sep	120.0
10	Florida	100-10	Sales	Oct	123.0
11	Florida	100-10	Sales	Nov	1245.0
12	Florida	100-10	Sales	Dec	126.0
13	Connecticut	100-10	Sales	Jan	220.0
14	Connecticut	100-10	Sales	Feb	223.0
15	Connecticut	100-10	Sales	Mar	245.0
16	Connecticut	100-10	Sales	Apr	226.0
17	Connecticut	100-10	Sales	May	450.0
18	Connecticut	100-10	Sales	Jun	234.0
19	Connecticut	100-10	Sales	Jul	520.0
20	Connecticut	100-10	Sales	Aug	520.0
21	Connecticut	100-10	Sales	Sep	220.0
22	Connecticut	100-10	Sales	Oct	223.0

2) Data load through MaxL script when the data source require rule file.

```

R_data.txt - Notepad
File Edit Format View Help
Jan sales "500-10" "New York" 120 Actual
Feb sales "500-10" "New York" 223 Actual
Mar sales "500-10" "New York" 324 Actual
Apr sales "500-10" "New York" 126 Actual
May sales "500-10" "New York" 145 Actual
Jun sales "500-10" "New York" 134 Actual
Jul sales "500-10" "New York" 520 Actual
Aug sales "500-10" "New York" 620 Actual
Jan sales "500-10" "Florida" 120 Actual
Feb sales "500-10" "Florida" 123 Actual
Mar sales "500-10" "Florida" 245 Actual
Apr sales "500-10" "Florida" 126 Actual
May sales "500-10" "Florida" 450 Actual
  
```

File → New → “Maxl Script”

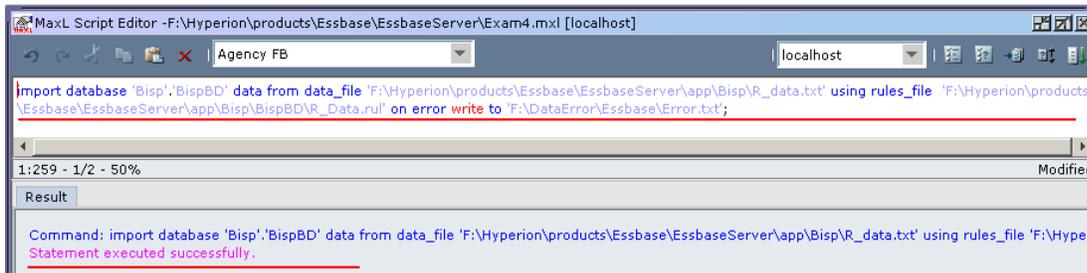


Write “MaxL Script” to load data. This is the script for loading data. Set data source file path, rule file path and error file path.

```

import          database          'Bisp'.\BispBD'          data          from          data_file
'F:\Hyperion\products\Essbase\EssbaseServer\app\Bisp\R_data.txt'          using          rules_file
'F:\Hyperion\products\Essbase\EssbaseServer\app\Bisp\BispBD\R_Data.rul' on error write to
'F:\DataError\Essbase\Error.txt';
  
```

Script executed successfully.

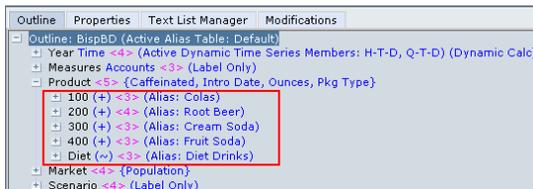


You can check that data loaded successfully in the Essbase server.

	A	B	C	D	E
0					Scenario
1	New York	500-10	Sales	Jan	120.0
2	New York	500-10	Sales	Feb	223.0
3	New York	500-10	Sales	Mar	324.0
4	New York	500-10	Sales	Apr	126.0
5	New York	500-10	Sales	May	145.0
6	New York	500-10	Sales	Jun	134.0
7	New York	500-10	Sales	Jul	520.0
8	New York	500-10	Sales	Aug	620.0
9	Florida	500-10	Sales	Jan	120.0
10	Florida	500-10	Sales	Feb	123.0
11	Florida	500-10	Sales	Mar	245.0
12	Florida	500-10	Sales	Apr	126.0
13	Florida	500-10	Sales	May	450.0

15) Dealing with the rejected records.

1) When data load gets fails the error message with rejected records store in “dataload.err” file. In the below example, we are trying to load the data for the member which does not exist in outline. Member “500-10” is not exists in the product dimension.



Rule file for respective data source file.

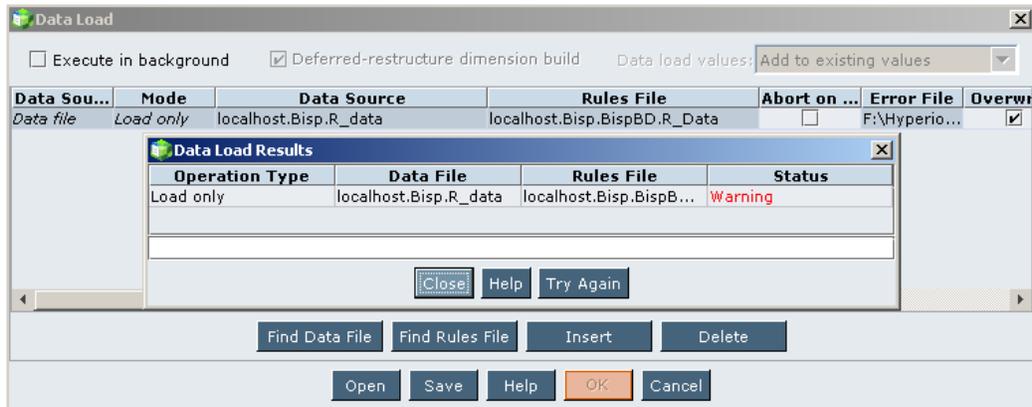
The screenshot shows the Data Prep Editor window with the following rule file content:


```
Encoding: English_UnitedStates.Latin1@Binary
1 Jan sales "500-10" "New York" 120 Actual
2 Feb sales "500-10" "New York" 223 Actual
3 Mar sales "500-10" "New York" 324 Actual
4 Apr sales "500-10" "New York" 126 Actual
5 May sales "500-10" "New York" 145 Actual
6 Jun sales "500-10" "New York" 134 Actual
7 Jul sales "500-10" "New York" 520 Actual
8 Aug sales "500-10" "New York" 620 Actual
9 Jan sales "500-10" "Florida" 120 Actual
10 Feb sales "500-10" "Florida" 123 Actual
11 Mar sales "500-10" "Florida" 245 Actual
12 Apr sales "500-10" "Florida" 126 Actual
13 May sales "500-10" "Florida" 450 Actual
```

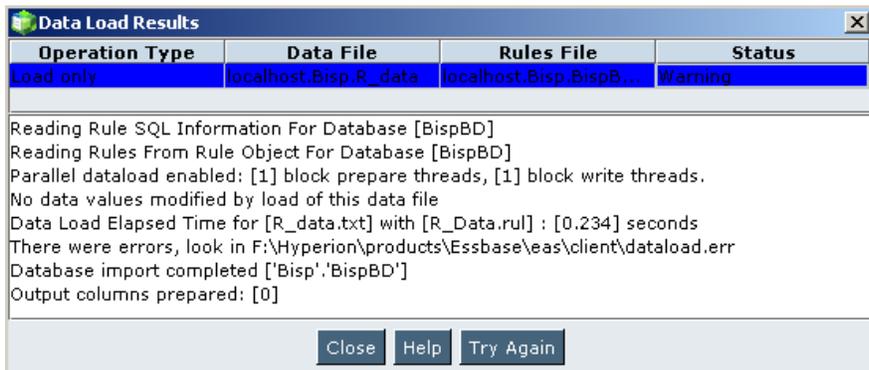
 Below the rule file, a table shows the resulting data structure:

	"Year"	"Measure..."	"Product"	"Market"	"Data"	"Scenario"
1	Jan	sales	500-10	New York	120	Actual
2	Feb	sales	500-10	New York	223	Actual
3	Mar	sales	500-10	New York	324	Actual
4	Apr	sales	500-10	New York	126	Actual
5	May	sales	500-10	New York	145	Actual
6	Jun	sales	500-10	New York	134	Actual
7	Jul	sales	500-10	New York	520	Actual
8	Aug	sales	500-10	New York	620	Actual
9	Jan	sales	500-10	Florida	120	Actual
10	Feb	sales	500-10	Florida	123	Actual

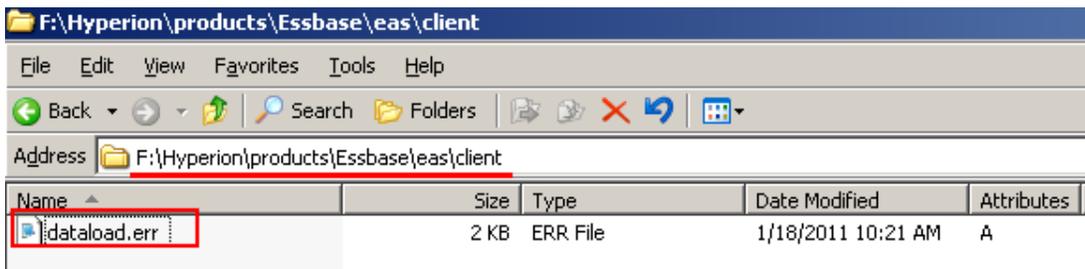
Select both data source file and rule file and click ok for loading data. Data load result shows warning message, it means that there is something wrong with data source file or rule file. Click on “Warning” for the detail information.



You can see detail warning message in the second part of data load results.



Detailed error message stored inside the following path “F:\Hyperion\products\Essbase\eas\client”. Open “dataload.err” file in notepad to see error message.



Error message says member not found in the present outline.

```

dataload.err - Notepad
File Edit Format View Help
// Member 500-10 Not Found In Database
Jan sales "500-10" "New York" 120 Actual
// Member 500-10 Not Found In Database
Feb sales "500-10" "New York" 223 Actual
// Member 500-10 Not Found In Database
Mar sales "500-10" "New York" 324 Actual
// Member 500-10 Not Found In Database
Apr sales "500-10" "New York" 126 Actual
// Member 500-10 Not Found In Database
May sales "500-10" "New York" 145 Actual
// Member 500-10 Not Found In Database
Jun sales "500-10" "New York" 134 Actual
// Member 500-10 Not Found In Database
Jul sales "500-10" "New York" 520 Actual
// Member 500-10 Not Found In Database
Aug sales "500-10" "New York" 620 Actual
// Member 500-10 Not Found In Database
Jan sales "500-10" "Florida" 120 Actual
// Member 500-10 Not Found In Database
Feb sales "500-10" "Florida" 123 Actual
// Member 500-10 Not Found In Database
Mar sales "500-10" "Florida" 245 Actual
// Member 500-10 Not Found In Database
Apr sales "500-10" "Florida" 126 Actual
// Member 500-10 Not Found In Database
May sales "500-10" "Florida" 450 Actual

```

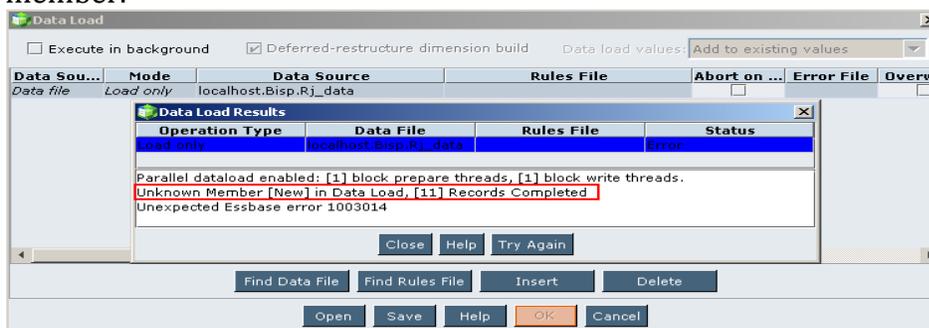
2) You will get error if data source file is in wrong format. Inverted coma is missing in the last record of data source file.

```

Rj_data.txt - Notepad
File Edit Format View Help
Jan sales "100-10" "New York" Actual 120
Feb sales "100-10" "New York" Actual 123
Mar sales "100-10" "New York" Actual 1245
Apr sales "100-10" "New York" Actual 126
May sales "100-10" "New York" Actual 1450
Jun sales "100-10" "New York" Actual 134
Jul sales "100-10" "New York" Actual 520
Aug sales "100-10" "New York" Actual 620
Sep sales "100-10" "New York" Actual 120
Oct sales "100-10" "New York" Actual 123
Nov sales "100-10" "New York" Actual 1245
Dec sales "100-10" "New York" Actual 126

```

You will get the following error message. Essbase server could not understand the last record. Error message says that 11 records are completed but there is one unknown member.



Correct the source file and reload the data.