



# Essbase Analytics Link: On-Demand Essbase Cubes for HFM Financial Data



**2.28.11**

# Presenters



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# AGENDA

- About MindStream Analytics
- Objectives of the Webinar
- What is EAL
- Why EAL?
- How does EAL work
- EAL Components
- Other Uses for EAL
- EAL Setup
- Post Synchronization Results
- EAL Demonstration
- Q&A



# MindStream Analytics



MindStream Analytics helps companies identify, implement and manage technology that allows them to effectively analyze and predict key metrics. MindStream Analytics is a consulting and managed services provider that specializes in the implementation and management of financial and analytic applications. For more information, please visit <http://www.mindstreamanalytics.com>.

# Objectives of the Webinar

Attendees will learn about:

- What is Essbase Analytics Link / Why use it?
- EAL Components
- Deploying a fully functional and customized Essbase Cube
- Populated with HFM data at all levels of aggregations
- With only a few clicks
- Without Prior knowledge of Essbase

## What is Essbase Analytics Link for HFM

Oracle Essbase Analytics Link for Hyperion Financial Management enables the delivery of effective management and financial analytic reporting to a broad user community. It integrates and merges multiple operational data sources into a single data model, providing detailed information for analytical measurements (KPIs) and the application of advanced analytics. Merging financial and operational information in a single platform makes it easy to deliver a comprehensive management reporting environment.

# Why EAL?

- Merge different sources of information into one single data model
- Combines information from Relational and OLAP into one OLAP model to streamline Management Reporting
- Real-time and on-demand synchronization by the push of a button
- Facilitate movement of Financial Data with complex financial, consolidation, or aggregation rules
- Eliminates Data Latency – automatic data push
- Can select which Metadata and Data gets pushed to Essbase with simple selection screens
- Requires easy-to-setup steps:
  - Setup Analytics Link Server (5 min)
  - Setup HFM Server and Application Name (5 min)
  - Setup Essbase Server, Application and Database Name (5 min)
  - Setup EAL Bridge (10 min – depends on mapping)

# How does EAL for HFM work



- Setup and Executed through Essbase Administration Services
- Setup Connection Points for HFM and Essbase through “Analytics Link Servers” section in EAS
- Does NOT require building an outline, import / export, or data integration
- Once connections are setup – update mapping which will be used to create the outline
- Create the Database / Outline with one push of a button
- One button push to synchronize Metadata / Data between HFM and Essbase application. Can choose to automate this at various times
- Updates instantly available via Essbase application through Hyperion Reporting tools (Reporting / Smartview, Web Analysis, etc.) for analysis



# EAL Components



- Analytics Link Application Server
  - Manages Metadata Extraction from HFM
  - Creates Essbase Outline
- Analytics Link Repository
  - Stores Metadata from HFM
  - Ensures consistency between HFM and Essbase
- Analytics Link Data Synchronization Server
  - Creates EAL application
  - Performs Data Aggregation on demand
  - Synchronizes Data with HFM
- Analytics Link Administration Services Console Plug-in
  - User Interface and Administration
- Analytics Link Financial Management Connector – to HFM

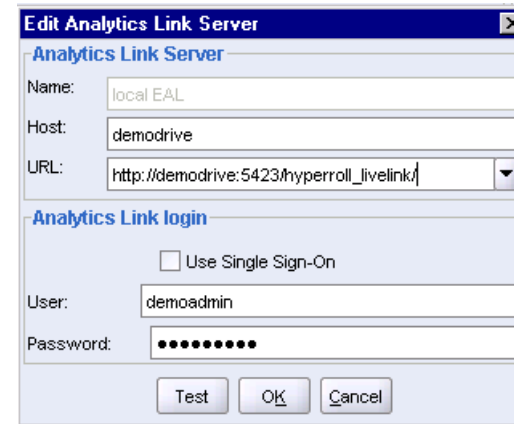
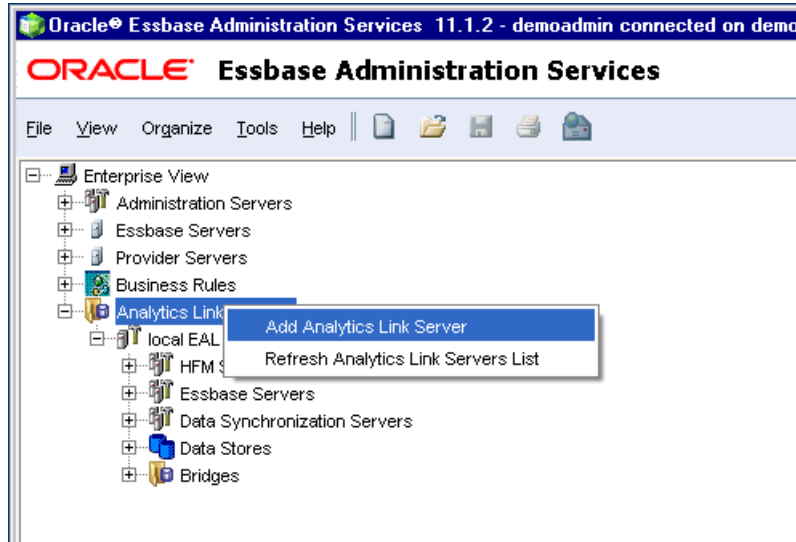
# Other Uses for EAL



- Can create Relational Data Stores for:
  - Extracting Metadata and Data into a Relational Database
  - Storing Mapping Tables for Essbase Outline Customizations
  - Joining Multiple FM Dimensions into an Essbase Dimension
- Can change the look of the members (Such adding a Parent name to the Child name – i.e. – Parent.Child)
- Can extract Currency information (Custom 1 and 2)
- Resolves Duplicate Names
- Can write SQL statements to map changes to the member names in the outline
- Can create an off-line database (that will remain static)

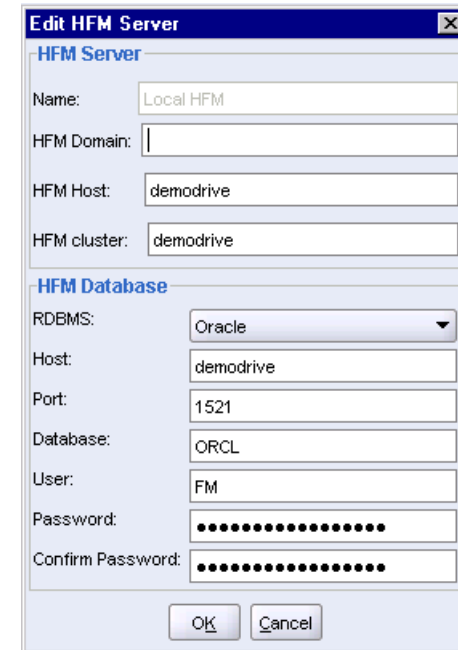
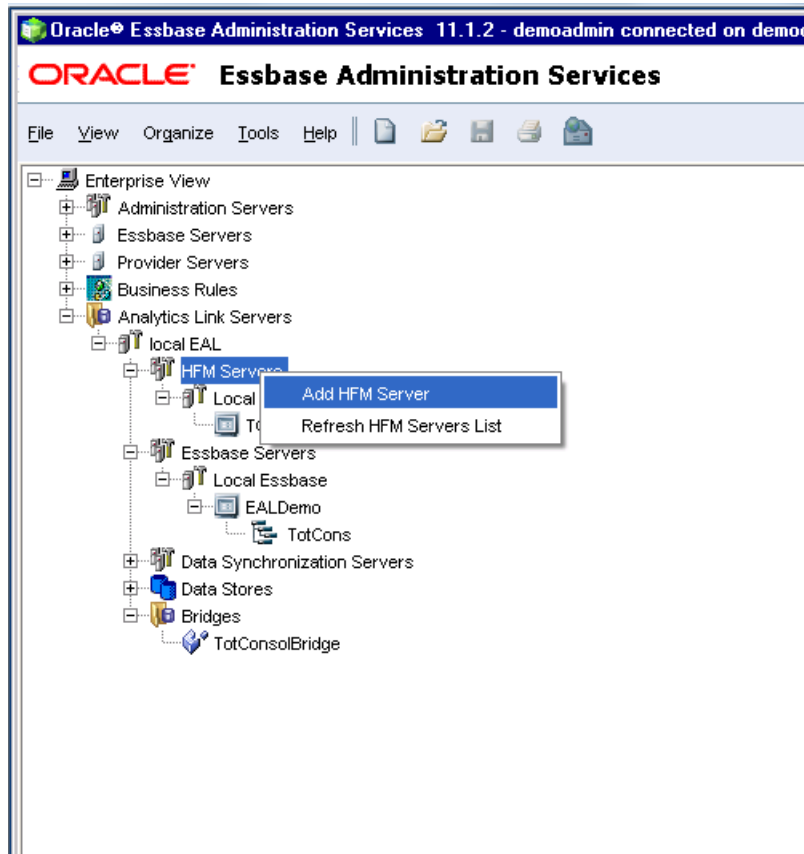
# EAL Setup

Setup Analytics Link Server (URL based on WebLogic or Apache Tomcat)



# EAL Setup

## Setup HFM Server (Parent to hold HFM applications)



**Edit HFM Server**

**HFM Server**

Name: Local HFM

HFM Domain:

HFM Host: demodrive

HFM cluster: demodrive

**HFM Database**

RDBMS: Oracle

Host: demodrive

Port: 1521

Database: ORCL

User: FM

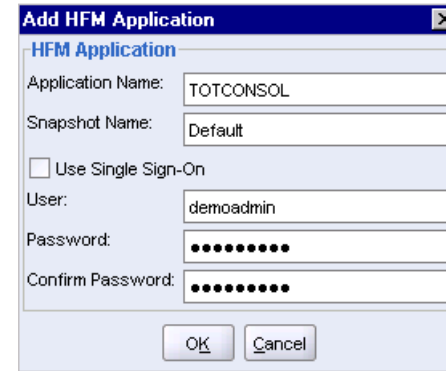
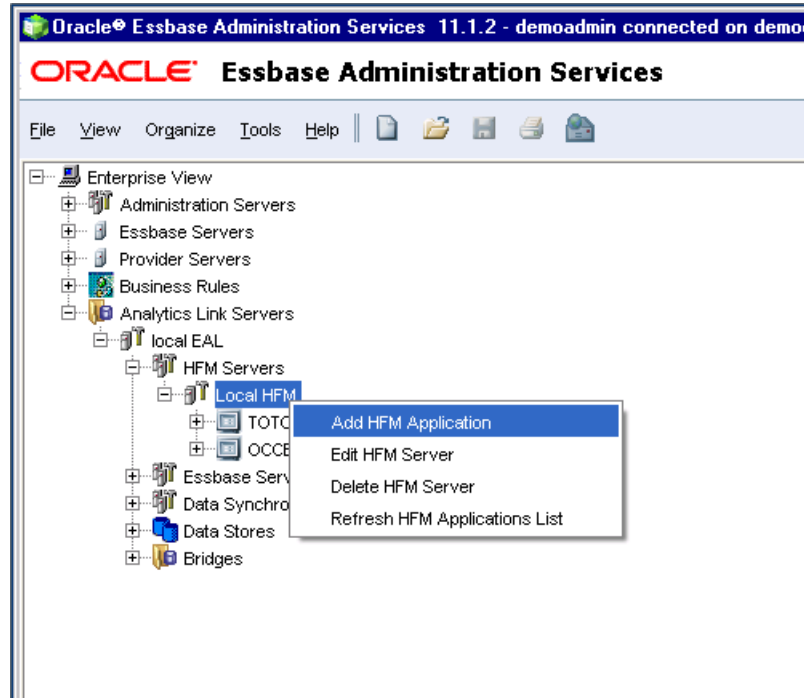
Password: .....

Confirm Password: .....

OK Cancel

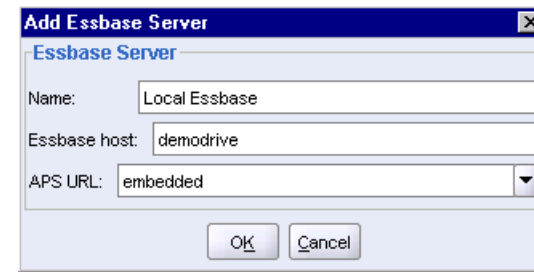
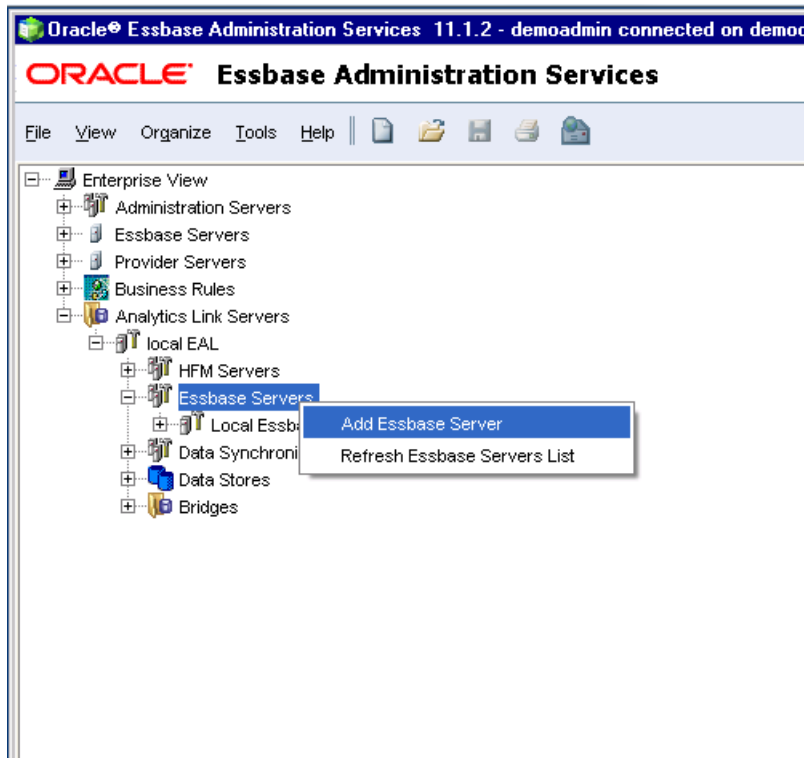
# EAL Setup

Setup HFM Application (Match name with HFM application)



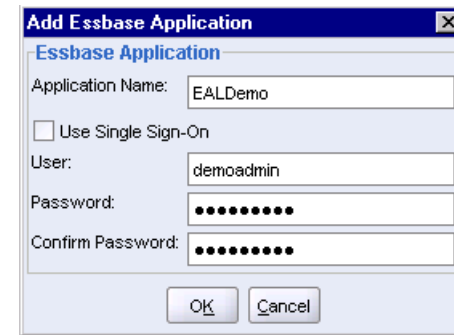
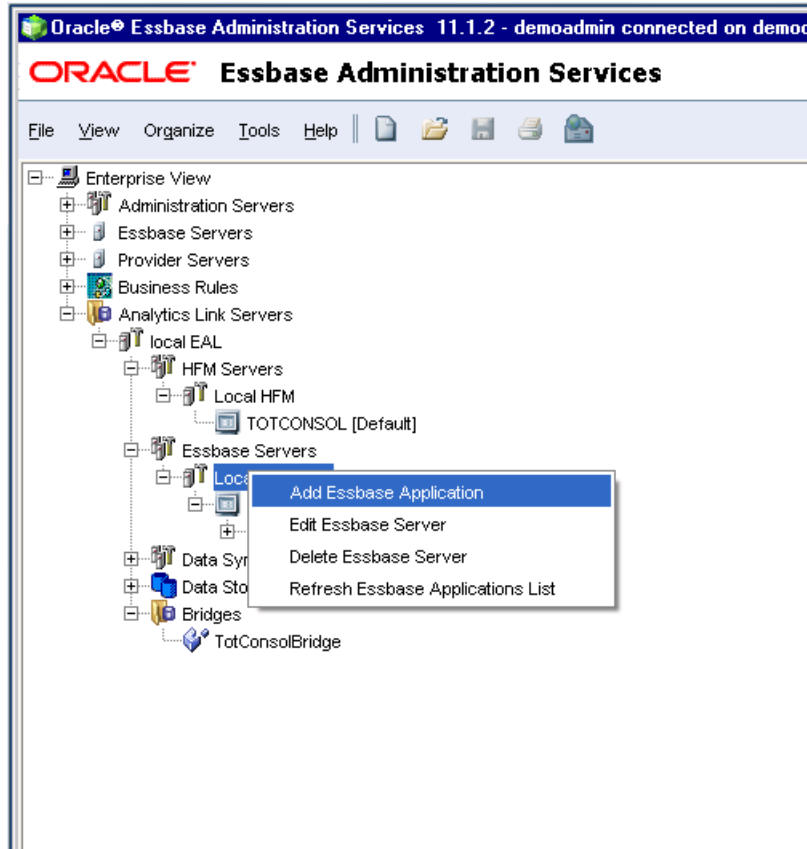
# EAL Setup

Setup Essbase Server (Parent to hold Essbase application and database)



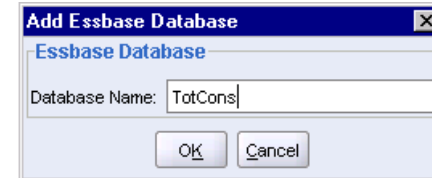
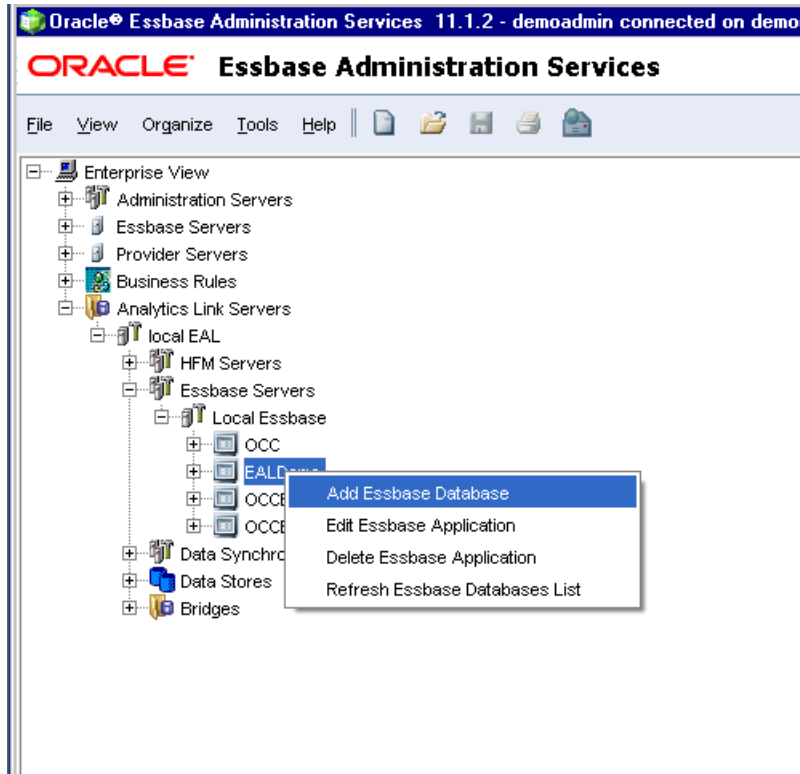
# EAL Setup

Setup Essbase Application (Can name this within parameters of Essbase)



# EAL Setup

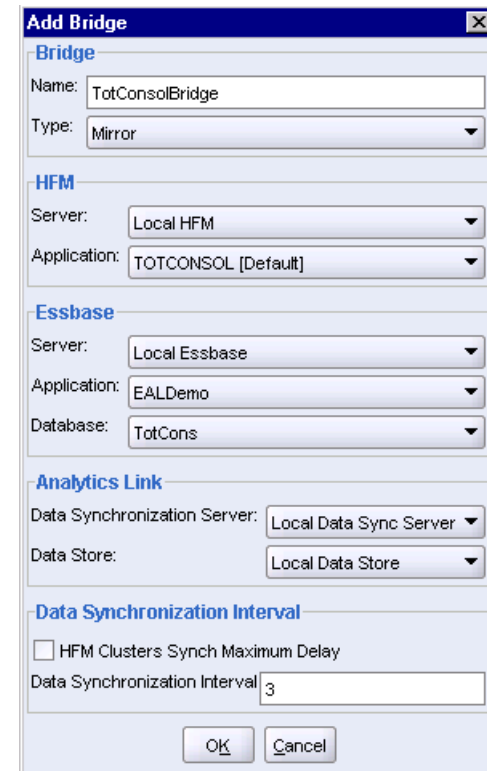
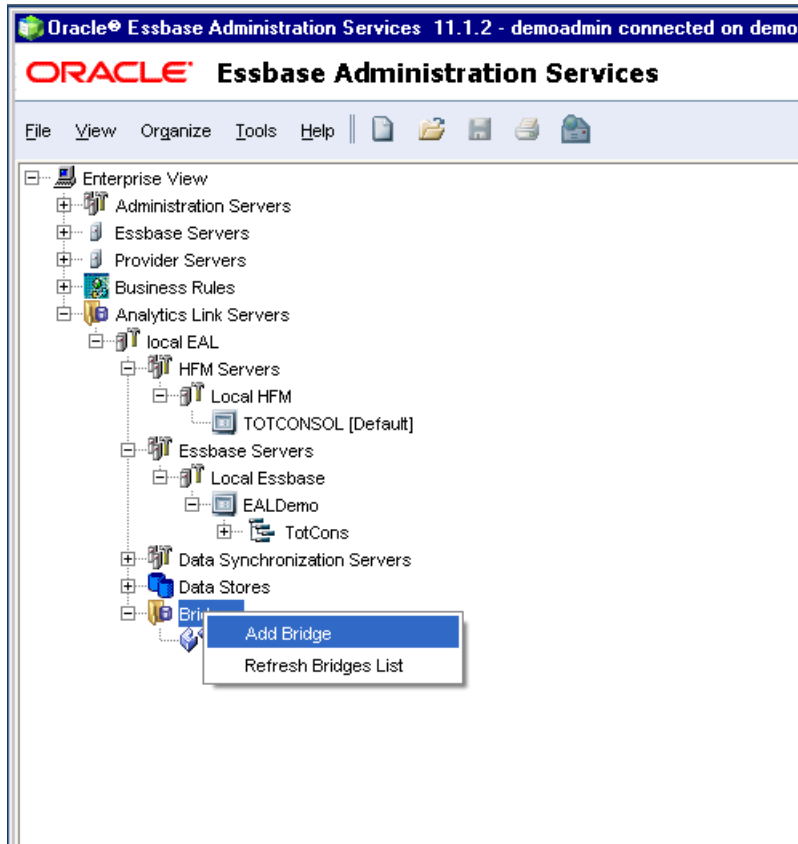
## Setup Essbase Database (Create Database Name)





# EAL Setup

Setup Bridge (Links HFM to Essbase applications as defined before)



The 'Add Bridge' dialog box contains the following configuration fields:

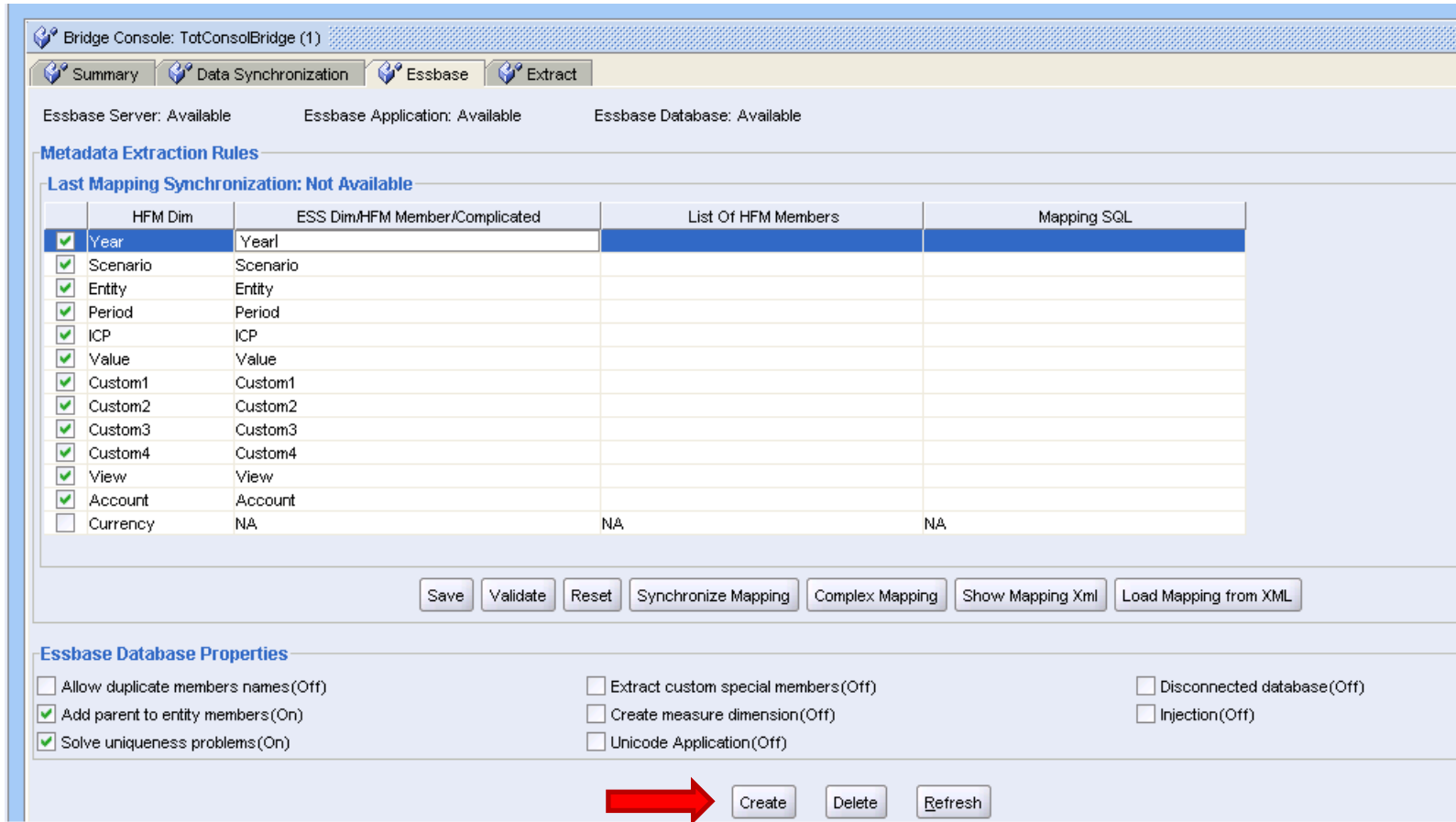
- Bridge:** Name: TotConsolBridge; Type: Mirror
- HFM:** Server: Local HFM; Application: TOTCONSOL [Default]
- Essbase:** Server: Local Essbase; Application: EALDemo; Database: TotCons
- Analytics Link:** Data Synchronization Server: Local Data Sync Server; Data Store: Local Data Store
- Data Synchronization Interval:**  HFM Clusters Synch Maximum Delay; Data Synchronization Interval: 3

Buttons: OK, Cancel

←  
Default setting for Bridge

←  
Synch time (seconds)

## Setup Essbase Outline Dimension names and Member Selections)



Bridge Console: TotConsoBridge (1)

Summary | Data Synchronization | **Essbase** | Extract

Essbase Server: Available    Essbase Application: Available    Essbase Database: Available

### Metadata Extraction Rules


Last Mapping Synchronization: Not Available

|                                     | HFM Dim  | ESS Dim/HFM Member/Complicated | List Of HFM Members | Mapping SQL |
|-------------------------------------|----------|--------------------------------|---------------------|-------------|
| <input checked="" type="checkbox"/> | Year     | Year1                          |                     |             |
| <input checked="" type="checkbox"/> | Scenario | Scenario                       |                     |             |
| <input checked="" type="checkbox"/> | Entity   | Entity                         |                     |             |
| <input checked="" type="checkbox"/> | Period   | Period                         |                     |             |
| <input checked="" type="checkbox"/> | ICP      | ICP                            |                     |             |
| <input checked="" type="checkbox"/> | Value    | Value                          |                     |             |
| <input checked="" type="checkbox"/> | Custom1  | Custom1                        |                     |             |
| <input checked="" type="checkbox"/> | Custom2  | Custom2                        |                     |             |
| <input checked="" type="checkbox"/> | Custom3  | Custom3                        |                     |             |
| <input checked="" type="checkbox"/> | Custom4  | Custom4                        |                     |             |
| <input checked="" type="checkbox"/> | View     | View                           |                     |             |
| <input checked="" type="checkbox"/> | Account  | Account                        |                     |             |
| <input type="checkbox"/>            | Currency | NA                             | NA                  | NA          |

Save   Validate   Reset   Synchronize Mapping   Complex Mapping   Show Mapping Xml   Load Mapping from XML

### Essbase Database Properties

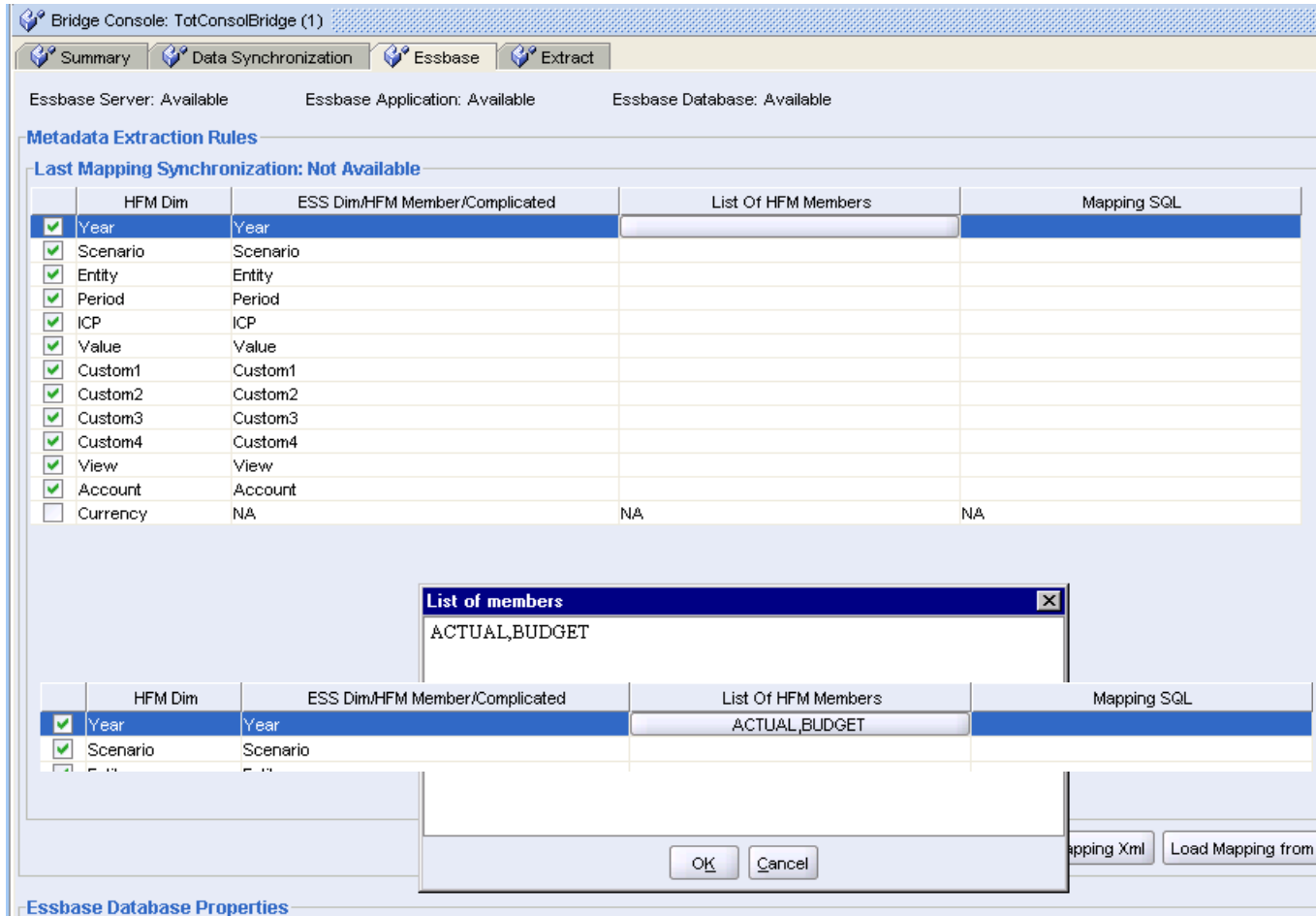
Allow duplicate members names(Off)     Extract custom special members(Off)     Disconnected database(Off)  
 Add parent to entity members(On)     Create measure dimension(Off)     Injection(Off)  
 Solve uniqueness problems(On)     Unicode Application(Off)

 Create   Delete   Refresh

“Create” button creates the Database Outline

# EAL Setup

Select specific members to extract from HFM and place those in Outline



Bridge Console: TotConsolBridge (1)

Summary | Data Synchronization | Essbase | **Extract**

Essbase Server: Available    Essbase Application: Available    Essbase Database: Available

**Metadata Extraction Rules**

Last Mapping Synchronization: Not Available

|                                     | HFM Dim  | ESS Dim/HFM Member/Complicated | List Of HFM Members | Mapping SQL |
|-------------------------------------|----------|--------------------------------|---------------------|-------------|
| <input checked="" type="checkbox"/> | Year     | Year                           |                     |             |
| <input checked="" type="checkbox"/> | Scenario | Scenario                       |                     |             |
| <input checked="" type="checkbox"/> | Entity   | Entity                         |                     |             |
| <input checked="" type="checkbox"/> | Period   | Period                         |                     |             |
| <input checked="" type="checkbox"/> | ICP      | ICP                            |                     |             |
| <input checked="" type="checkbox"/> | Value    | Value                          |                     |             |
| <input checked="" type="checkbox"/> | Custom1  | Custom1                        |                     |             |
| <input checked="" type="checkbox"/> | Custom2  | Custom2                        |                     |             |
| <input checked="" type="checkbox"/> | Custom3  | Custom3                        |                     |             |
| <input checked="" type="checkbox"/> | Custom4  | Custom4                        |                     |             |
| <input checked="" type="checkbox"/> | View     | View                           |                     |             |
| <input checked="" type="checkbox"/> | Account  | Account                        |                     |             |
| <input type="checkbox"/>            | Currency | NA                             | NA                  | NA          |

**List of members**

ACTUAL,BUDGET

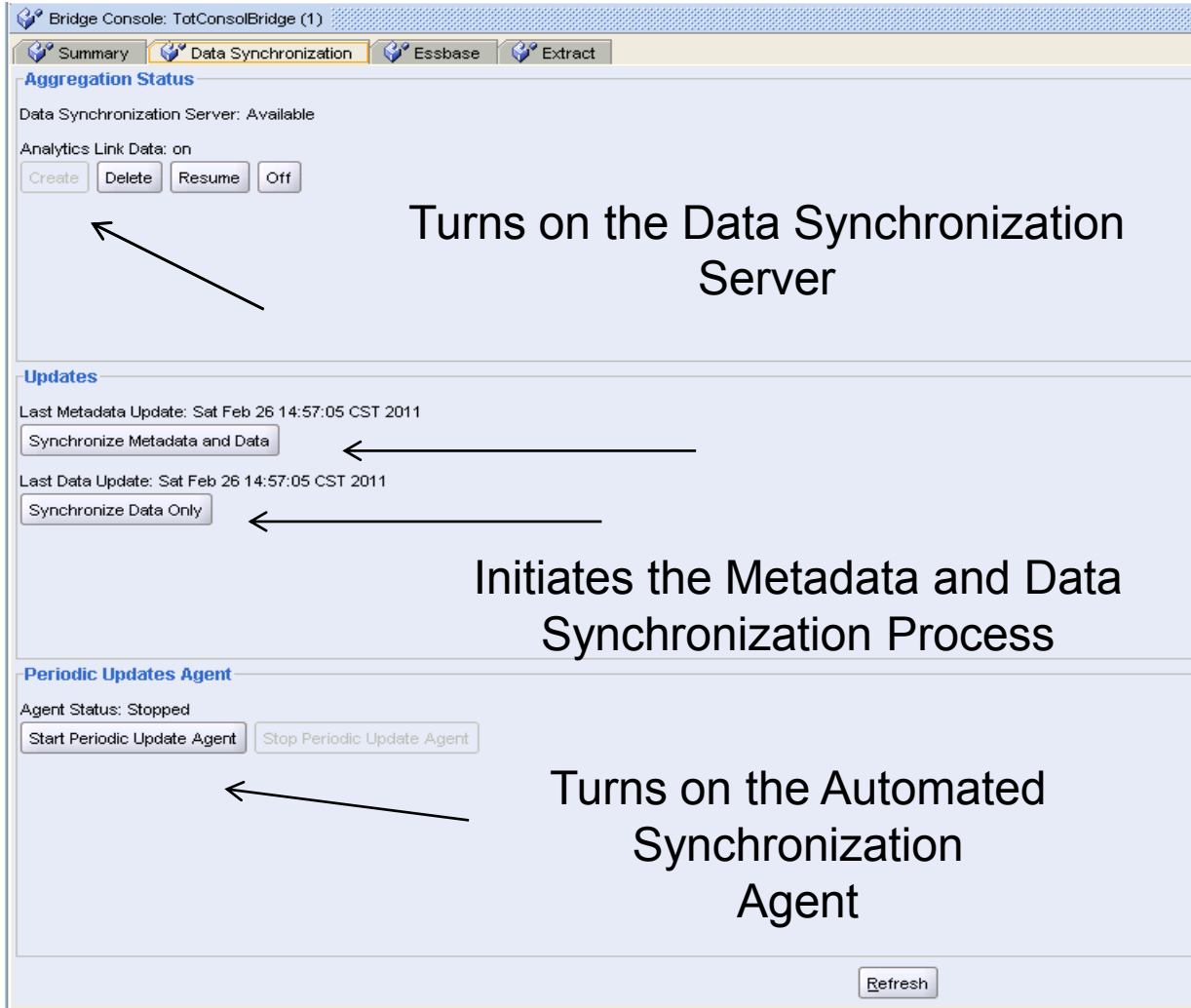
OK    Cancel

|                                     | HFM Dim  | ESS Dim/HFM Member/Complicated | List Of HFM Members | Mapping SQL |
|-------------------------------------|----------|--------------------------------|---------------------|-------------|
| <input checked="" type="checkbox"/> | Year     | Year                           | ACTUAL,BUDGET       |             |
| <input checked="" type="checkbox"/> | Scenario | Scenario                       |                     |             |

Mapping Xml    Load Mapping from >

Essbase Database Properties

# EAL Setup



Bridge Console: TotConsolBridge (1)

Summary | **Data Synchronization** | Essbase | Extract

### Aggregation Status

Data Synchronization Server: Available

Analytics Link Data: on

Create Delete Resume Off

Turns on the Data Synchronization Server

### Updates

Last Metadata Update: Sat Feb 26 14:57:05 CST 2011

Synchronize Metadata and Data

Last Data Update: Sat Feb 26 14:57:05 CST 2011

Synchronize Data Only

Initiates the Metadata and Data Synchronization Process

### Periodic Updates Agent

Agent Status: Stopped

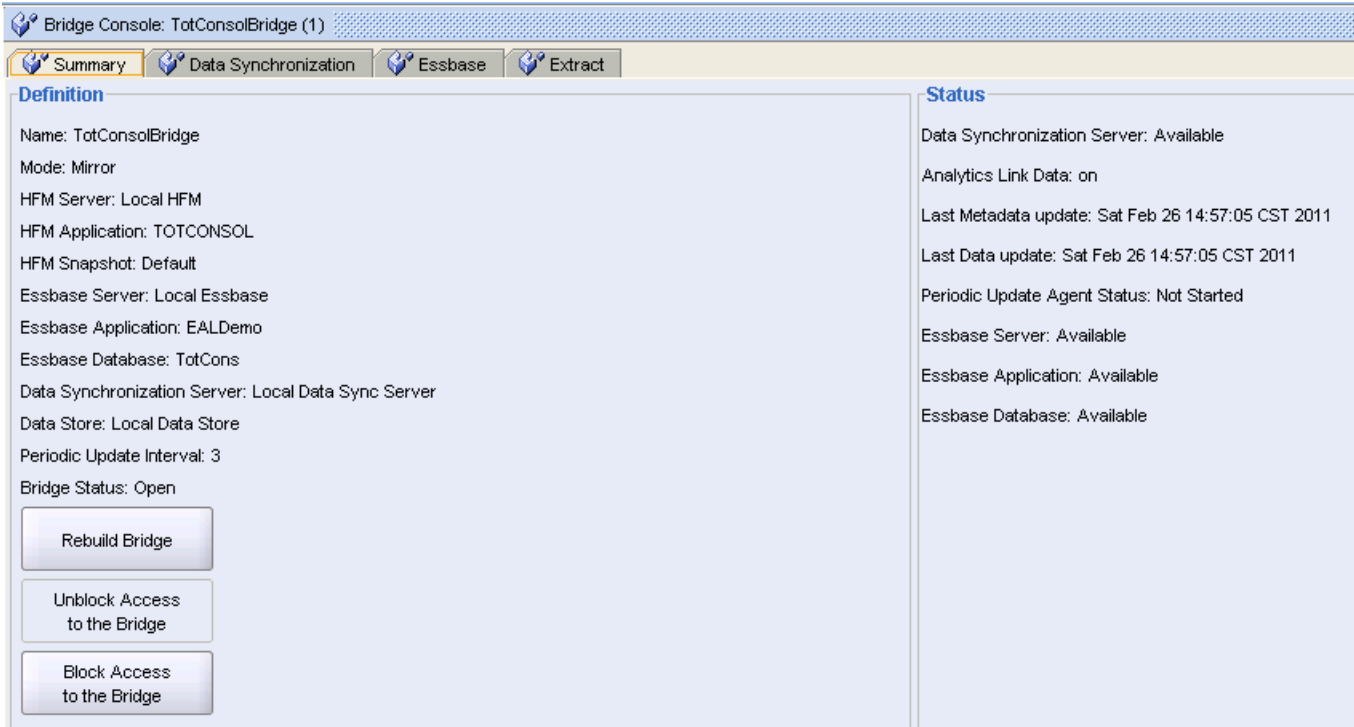
Start Periodic Update Agent Stop Periodic Update Agent

Turns on the Automated Synchronization Agent

Refresh

Bridge  
Console  
Settings  
in EAL

## Bridge Console Summary Page in EAL



The screenshot displays the Bridge Console Summary Page for a bridge named 'TotConsolBridge (1)'. The interface includes a navigation bar with tabs for 'Summary', 'Data Synchronization', 'Essbase', and 'Extract'. The 'Summary' tab is active, showing two main sections: 'Definition' and 'Status'.

**Definition**

- Name: TotConsolBridge
- Mode: Mirror
- HFM Server: Local HFM
- HFM Application: TOTCONSOL
- HFM Snapshot: Default
- Essbase Server: Local Essbase
- Essbase Application: EALDemo
- Essbase Database: TotCons
- Data Synchronization Server: Local Data Sync Server
- Data Store: Local Data Store
- Periodic Update Interval: 3
- Bridge Status: Open

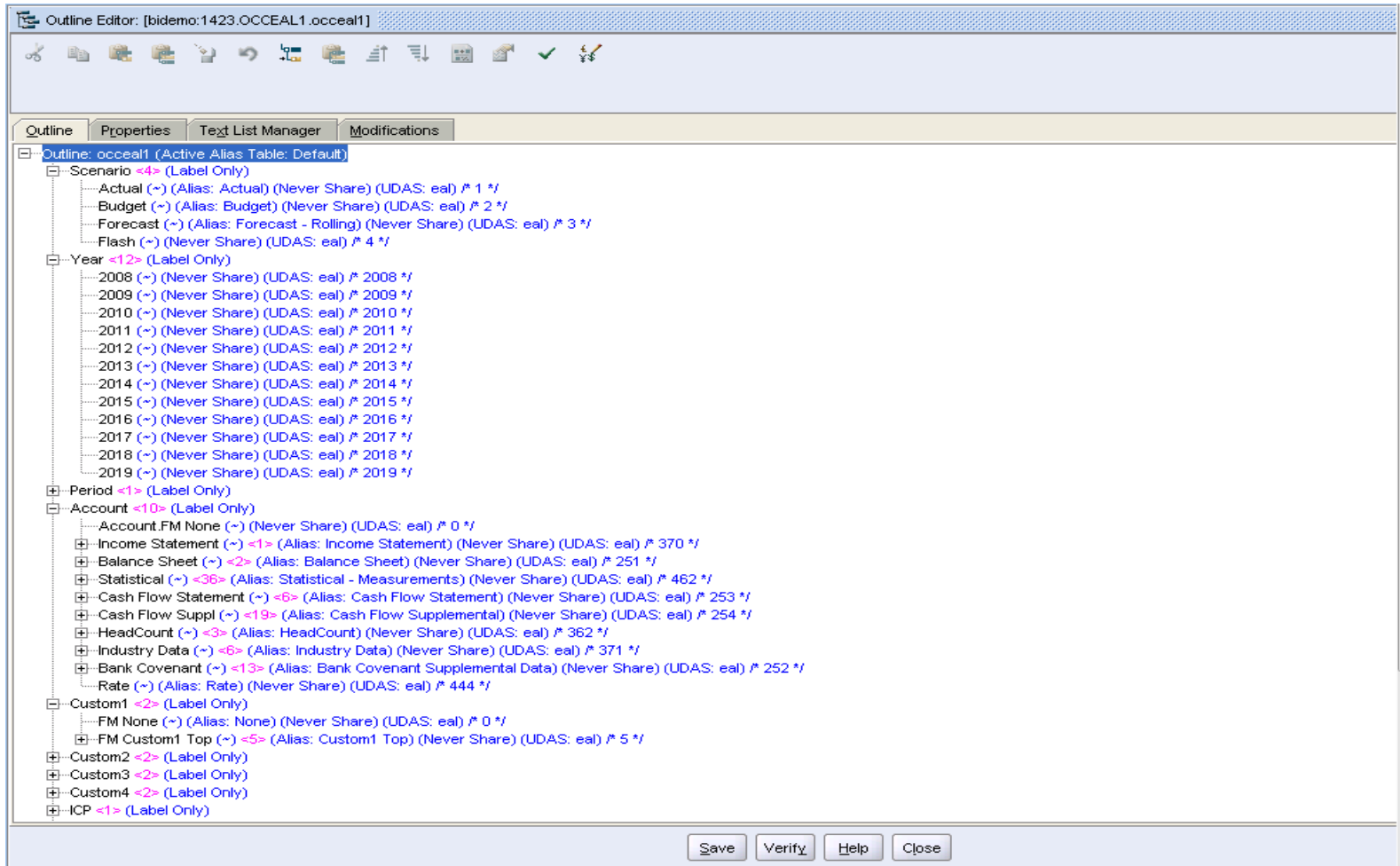
Below the definition section are three buttons: 'Rebuild Bridge', 'Unblock Access to the Bridge', and 'Block Access to the Bridge'.

**Status**

- Data Synchronization Server: Available
- Analytics Link Data: on
- Last Metadata update: Sat Feb 26 14:57:05 CST 2011
- Last Data update: Sat Feb 26 14:57:05 CST 2011
- Periodic Update Agent Status: Not Started
- Essbase Server: Available
- Essbase Application: Available
- Essbase Database: Available

# Post Synchronization Results

## New Essbase Outline created from EAL Synchronization



The screenshot displays the 'Outline Editor' window for a file named 'bidemo:1423.OCCEAL1.occeal1'. The interface includes a toolbar with various icons and a tabbed menu with 'Outline', 'Properties', 'Text List Manager', and 'Modifications'. The main area shows a tree view of the outline structure:

- Outline: occeal1 (Active Alias Table: Default)
  - Scenario <4> (Label Only)
    - Actual (-) (Alias: Actual) (Never Share) (UDAS: eal) # 1 \*/
    - Budget (-) (Alias: Budget) (Never Share) (UDAS: eal) # 2 \*/
    - Forecast (-) (Alias: Forecast - Rolling) (Never Share) (UDAS: eal) # 3 \*/
    - Flash (-) (Never Share) (UDAS: eal) # 4 \*/
  - Year <12> (Label Only)
    - 2008 (-) (Never Share) (UDAS: eal) # 2008 \*/
    - 2009 (-) (Never Share) (UDAS: eal) # 2009 \*/
    - 2010 (-) (Never Share) (UDAS: eal) # 2010 \*/
    - 2011 (-) (Never Share) (UDAS: eal) # 2011 \*/
    - 2012 (-) (Never Share) (UDAS: eal) # 2012 \*/
    - 2013 (-) (Never Share) (UDAS: eal) # 2013 \*/
    - 2014 (-) (Never Share) (UDAS: eal) # 2014 \*/
    - 2015 (-) (Never Share) (UDAS: eal) # 2015 \*/
    - 2016 (-) (Never Share) (UDAS: eal) # 2016 \*/
    - 2017 (-) (Never Share) (UDAS: eal) # 2017 \*/
    - 2018 (-) (Never Share) (UDAS: eal) # 2018 \*/
    - 2019 (-) (Never Share) (UDAS: eal) # 2019 \*/
  - Period <1> (Label Only)
  - Account <10> (Label Only)
    - Account.FM None (-) (Never Share) (UDAS: eal) # 0 \*/
    - Income Statement (-) <1> (Alias: Income Statement) (Never Share) (UDAS: eal) # 370 \*/
    - Balance Sheet (-) <2> (Alias: Balance Sheet) (Never Share) (UDAS: eal) # 251 \*/
    - Statistical (-) <36> (Alias: Statistical - Measurements) (Never Share) (UDAS: eal) # 462 \*/
    - Cash Flow Statement (-) <6> (Alias: Cash Flow Statement) (Never Share) (UDAS: eal) # 253 \*/
    - Cash Flow Suppl (-) <19> (Alias: Cash Flow Supplemental) (Never Share) (UDAS: eal) # 254 \*/
    - HeadCount (-) <3> (Alias: HeadCount) (Never Share) (UDAS: eal) # 362 \*/
    - Industry Data (-) <6> (Alias: Industry Data) (Never Share) (UDAS: eal) # 371 \*/
    - Bank Covenant (-) <13> (Alias: Bank Covenant Supplemental Data) (Never Share) (UDAS: eal) # 252 \*/
    - Rate (-) (Alias: Rate) (Never Share) (UDAS: eal) # 444 \*/
  - Custom1 <2> (Label Only)
    - FM None (-) (Alias: None) (Never Share) (UDAS: eal) # 0 \*/
    - FM Custom1 Top (-) <5> (Alias: Custom1 Top) (Never Share) (UDAS: eal) # 5 \*/
  - Custom2 <2> (Label Only)
  - Custom3 <2> (Label Only)
  - Custom4 <2> (Label Only)
  - ICP <1> (Label Only)

At the bottom of the window, there are buttons for 'Save', 'Verify', 'Help', and 'Close'.

# Post Synchronization Results



## New Essbase Application compared to HFM

|   | A                  | B       | C         | D         | E        | F          | G          | H     | I           | J          | K | L | M | N |
|---|--------------------|---------|-----------|-----------|----------|------------|------------|-------|-------------|------------|---|---|---|---|
| 1 |                    | January | January   | January   | February | February   | February   | March | March       | March      |   |   |   |   |
| 2 |                    | 2008    | 2009      | 2010      | 2008     | 2009       | 2010       | 2008  | 2009        | 2010       |   |   |   |   |
| 3 | Actual             | -       | 4168867.6 | 722912.54 | -        | 7617257.66 | 2599833.87 | -     | 10546985.16 | 5198651.37 |   |   |   |   |
| 4 | Budget             | -       | -         | 2608873   | -        | -          | 5158389    | -     | -           | 8234394    |   |   |   |   |
| 5 | Forecast - Rolling | -       | -         | -         | -        | -          | -          | -     | -           | -          |   |   |   |   |
| 6 | Flash              | -       | -         | -         | -        | -          | -          | -     | -           | -          |   |   |   |   |

Essbase

Oracle Enterprise Performance Management System Workspace, Fusion Edition - Windows Internet Explorer

**ORACLE** Enterprise Performance Management System Workspace, Fusion Edition Logged in as demoadmin | Help | Logout

View: <Scenario View> | Entity: Consol.OCCG | Value: <Entity Currency> | Account: EBITDA\_Adj | ICP: [ICP Top] | CUSTOM1: [Custom1 Top] | CUSTOM2: Prod

| Period   | January   | February  | March      |
|----------|-----------|-----------|------------|
| Year     | 2009      | 2009      | 2009       |
| Actual   | 4,168,868 | 7,617,258 | 10,546,985 |
| Budget   |           | 2,608,873 | 5,158,389  |
| Forecast |           |           |            |
| Flash    |           |           |            |

HFM

# EAL Demonstration



- Setup of EAL components
- Run the Synchronization
- View the newly created Essbase Outline
- View Essbase data from HFM in Smartview



# Thank You!

**Seth Landau – [slandau@mindstreamanalytics.com](mailto:slandau@mindstreamanalytics.com)**

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