

# How to install the Star Projects OLAP Suite.

These are the steps required to load the Star Projects Data Warehouse and OLAP model onto an existing SQL Server computer. The acronym PA refers to 'Project Accounting' product which is now known as Star Projects. **Version 2.0.1 for StarProjects v7**

## The OLAP Suite contents:

- Data Transformation Services (DTS) module
- PA Analysis SQL database
- OLAP cubes – WIP Analysis and Income Analysis
- Configuration files for attaching as views in eIntelligence Explorer AI.

## The Install folder contents:

How to install PA OLAP Suite.doc	This document
<b>Analysis PA SQL data folder</b> AnalysisPA Data	MSSQL backup of AnalysisPA database
<b>Copy to Olap Services Bin folder</b> msmdrep.mdb	The OLAP services control access database. To either copy as is and overwrite existing setup, or via Access, copy lines into existing database.
<b>Copy to Olap Services Data folder</b> Analysis PA folder Analysis PA.odb	The actual Analysis PA data OLAP cubes control file for Analysis PA
<b>Open in DTS Local Packages folder</b> PA Olap Views for dts load.sql Analysis PA Full Load.dts Analysis PA Schedule.dts	Views that need to be put into the PA database before running dts. The DTS package for loading the Data Warehouse The schedule to run the above DTS package and OLAP build.
<b>Copy to views folder</b> analyze_PA_Income.ini  analyze_PA_WIP.ini	These ini files should be copied in the "programs\epicor\eIntelligence Explorer AI\views" folder
<b>Copy to dict folder</b> analyze_PA_Income.ini  analyze_PA_WIP.ini	These ini files should be copied in the "programs\epicor\eIntelligence Explorer AI\dict" folder
<b>Run in SQL Query Analyzer</b> Insert AI views.sql	This is run on the control company to add the eIntelligence Explorer AI views to the views table.

## The Procedure:

*Please Note: The OLAP suite was designed for use using a DTS package. The following procedures were prepared specifically for sql server 2000 however the suite can also be deployed in sql server 2005 environments. Please refer to the end of this document for additional instructions.*

### 1. Preparation

Create a user PAOLAP password PAOLAP with read/write access to database "**AnalysisPA**" and read access to the PA databases.  
Ensure MS SQL Server with Data Analysis Server is loaded.  
Ensure Read-Only is removed from all files copied from the CD.  
Once you restore the database (AnalysisPA Data) be sure to recreate the PAOLAP user – drop and add to ensure this user has appropriate access and security

### 2. Data Warehouse Database

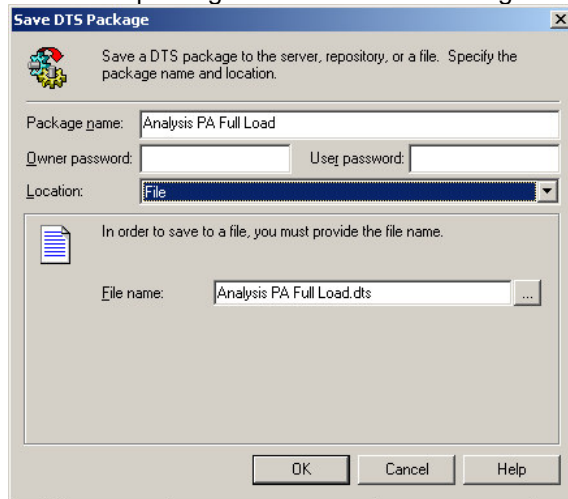
Backup and restore as per a normal database.

### 3. DTS package

The script called "PA Olap Views for dts load.sql" needs to be run on the Project Accounting database before using the dts package. This is typically done using Query Analyser. The dts package selects data from the source Project Accounting database and puts that data into the Analysis PA database for the olap cubes.

After running the script, proceed with running the dts package as follows:

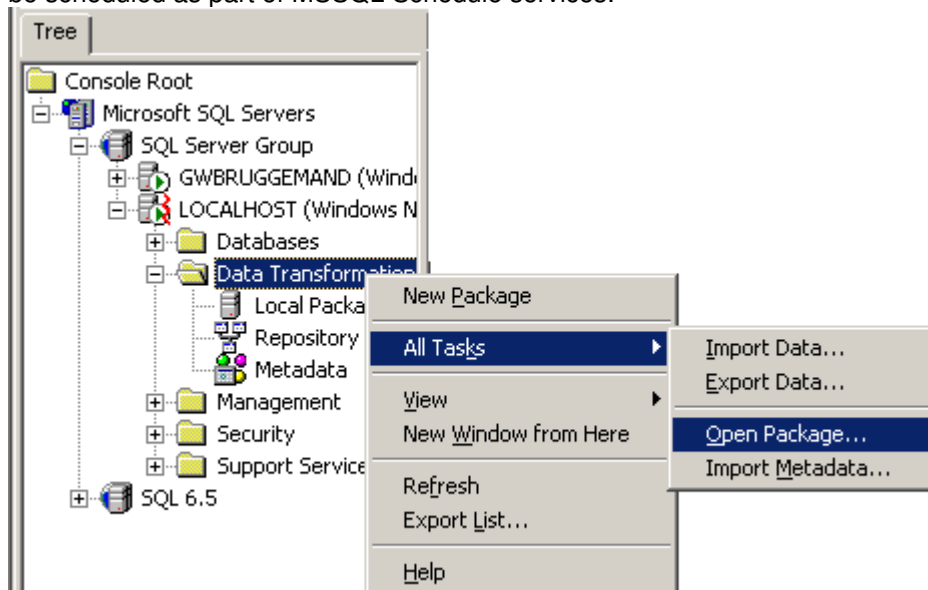
Save DTS package to a "Structured Storage File" (SQL 2000).



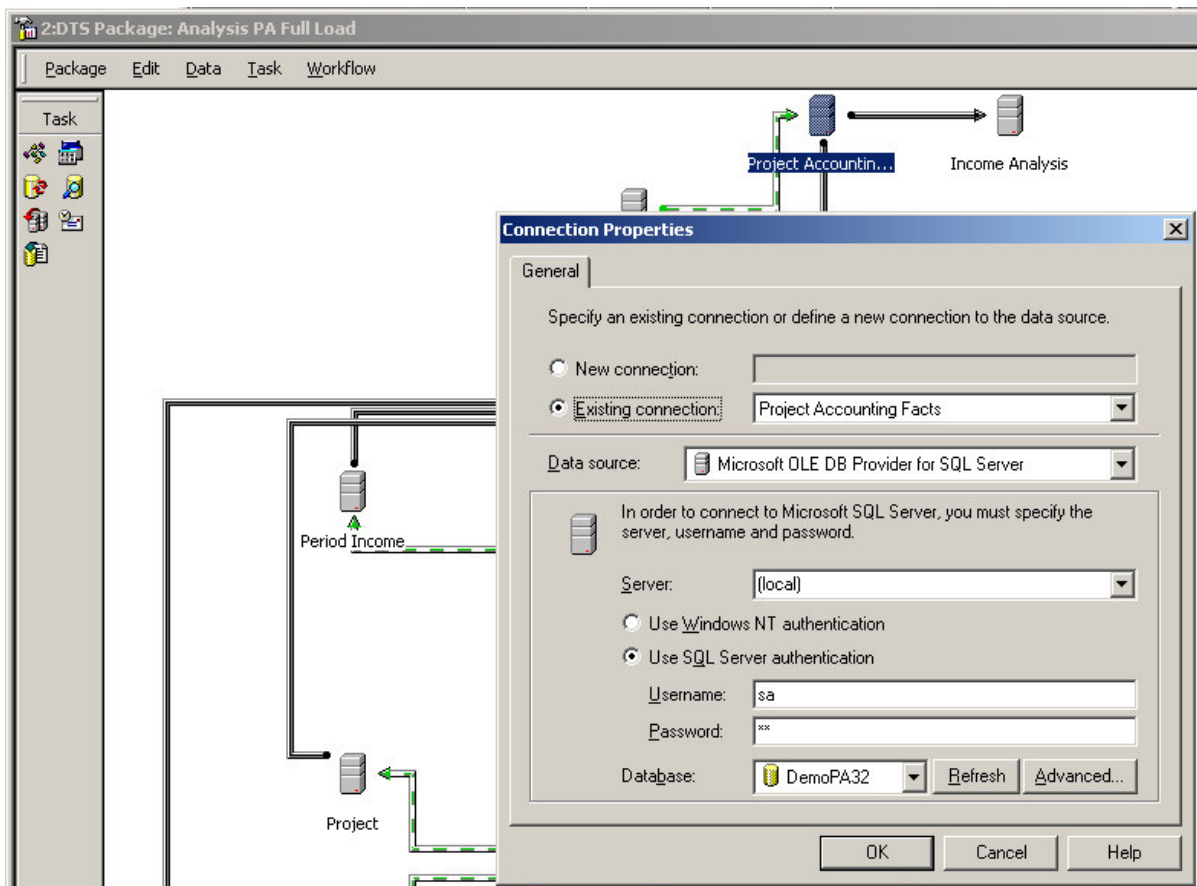
On target machine, Right click on the folder "Data Transformation Services" and select "All Tasks/Open Package". Load each DTS package, saving them to the "Local Packages" area in turn. There are two DTS packages:

- Analysis PA Full Load; and
- Analysis PA Schedule.

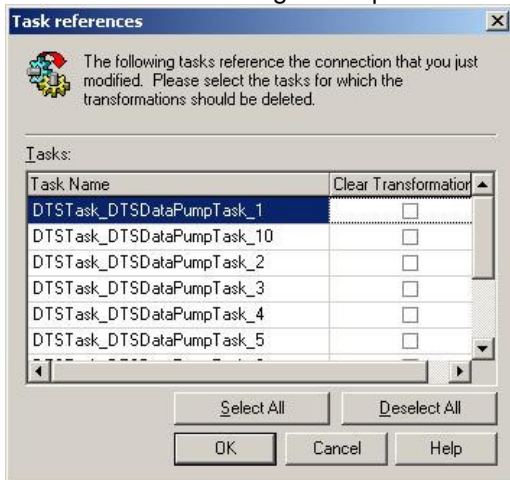
The schedule can be used to both update the Analysis PA Database and refresh the OLAP cube and can be scheduled as part of MSSQL Schedule services.



**Once loaded, change the data connection called "Project Accounting Facts" to point to the local PA data file by either double clicking or right click and select properties.**



SQL2000: The following box is presented. DO NOT select any boxes and just press OK.



Run the DTS to ensure it all works well.

#### 4. OLAP Services

- a.) Copy the following file to the "OLAP Services\bin" folder, located either under C:\program files or c:\mssql7
  - msmdrep.mdb

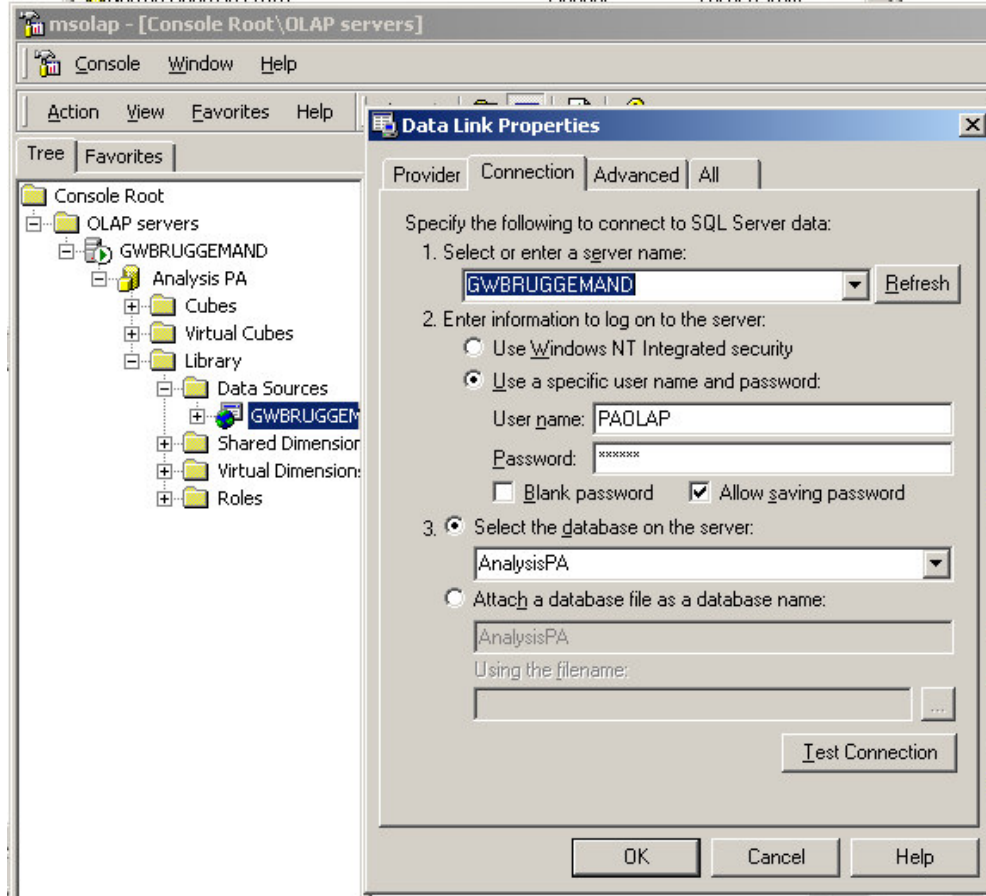
Alternatively, if the machine has Access, copy the records from the install file to the existing one. MSSQL Olap Services must be turned off, before this step. This does not replace the existing OLAP data.

- b.) Copy the actual OLAP data in the "OLAP Service\data" folder

The folder "Analysis PA"  
The file "Analysis PA.odb"

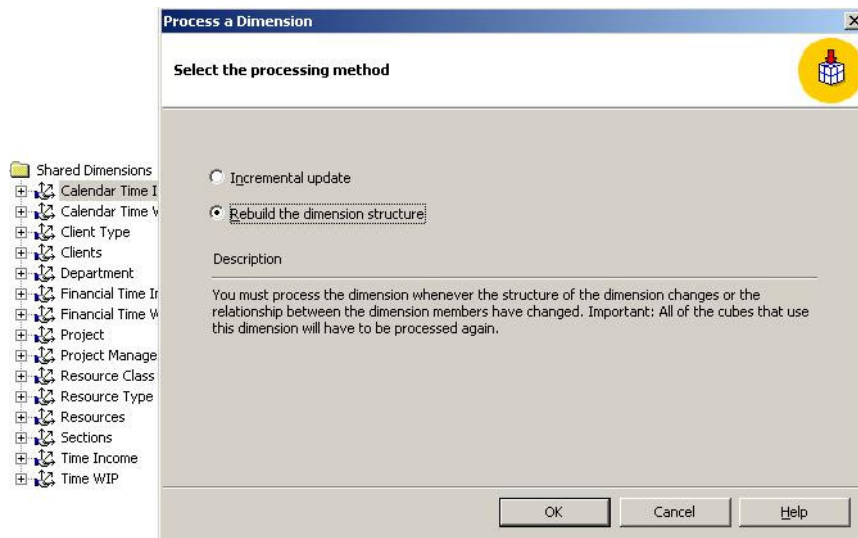
Both these need to be copied into the "OLAP Services\data directory on the target machine.

- c.) Open OLAP Manager to reconfigure the default connections:
  - a. Open down to OLAP Server/[Server\_name]/Analysis PA/Library/Datasources
  - b. Right click on the server name shown and select "Edit"
- c. Change the server name and user name and password and click OK.



Unfortunately, although the connection is changed to the local connection, the data connection name remains "GWBRUGGEMAND". This will be remedied in a later implementation.

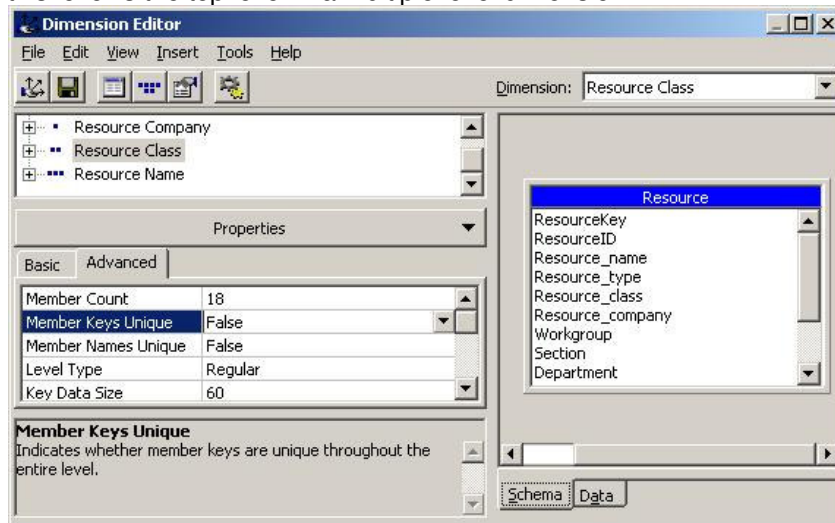
- d. Open the "Shared Dimensions" folder and right click on each dimension. Select "Process..." Select the option "Rebuild the dimension structure" and click "OK". This should refresh each of the dimensions such as Client, projects, dates, etc from the updated Analysis PA database. (*Selecting the option from the Shared dimensions folder of "Process All Dimensions" will only incrementally update the dimension data. The problem here is that the demo data will remain in the dimensions.*)



If an error occurs when processing, this may be caused by a “Non unique member”. As Project Accounting is so flexible, there is a multitude of different ways of setting up the system. This means that there may be some dimensions that need an extra level to ensure that the top level is unique. For example, you may need to add the company level to the client dimension, if the same client ID is in multiple companies within the one database. If you add a new top level, you need to ensure that the lower levels are all set as “Non Unique”

Right click on the dimension and select “Edit”.

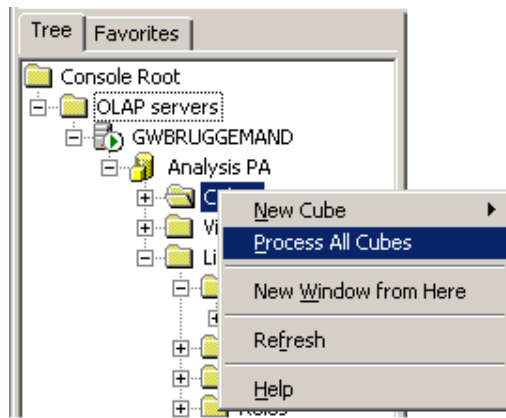
In the “Advanced” tab, the property of “Member Keys Unique” will be set to True when this level is the top level in a multiple level dimension.



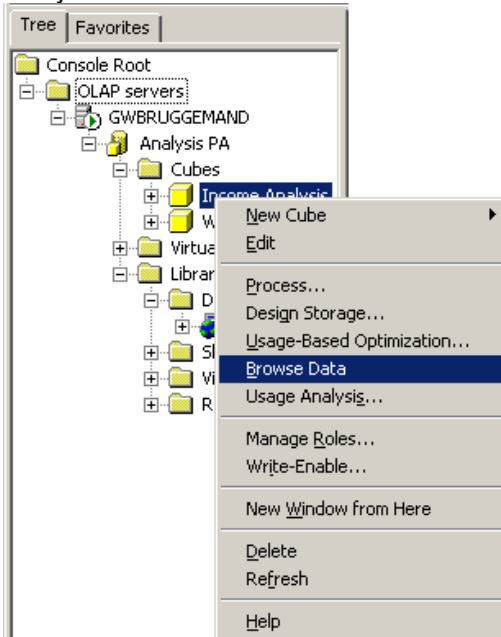
In the above example, we have added a company level to the Resource Class dimension, as the same resource class was in multiple companies, causing a “Non unique member” problem, which will not allow the dimension (and therefore the cube) to process. Once the Resource Company has been added, the “Member Keys Unique” property was changed to “False”.

This same solution can be made to any dimension which fails to process from a non unique member.

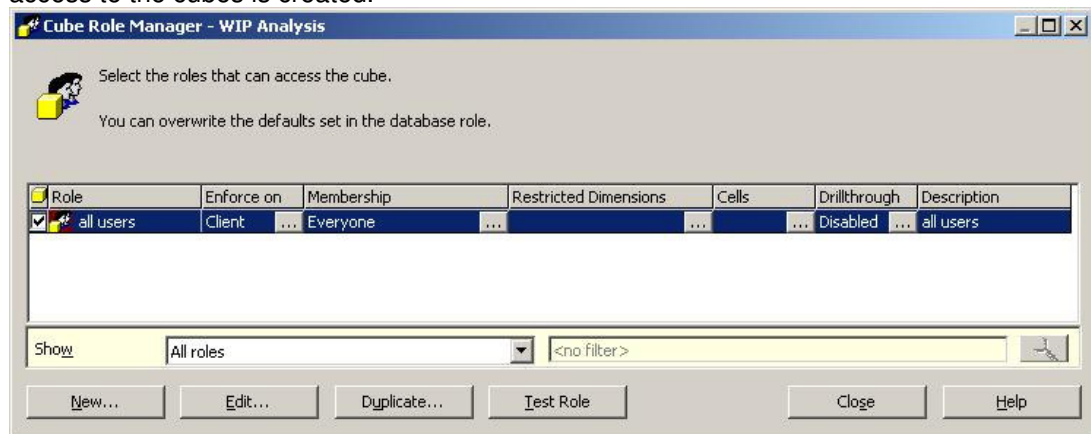
- e. Test the new connection by right clicking on the folder “Cubes” and selecting “Process all cubes”.



- f. When successful, open the cubes folder, right click on either the Income Analysis or WIP Analysis cubes and select “Browse Data”.

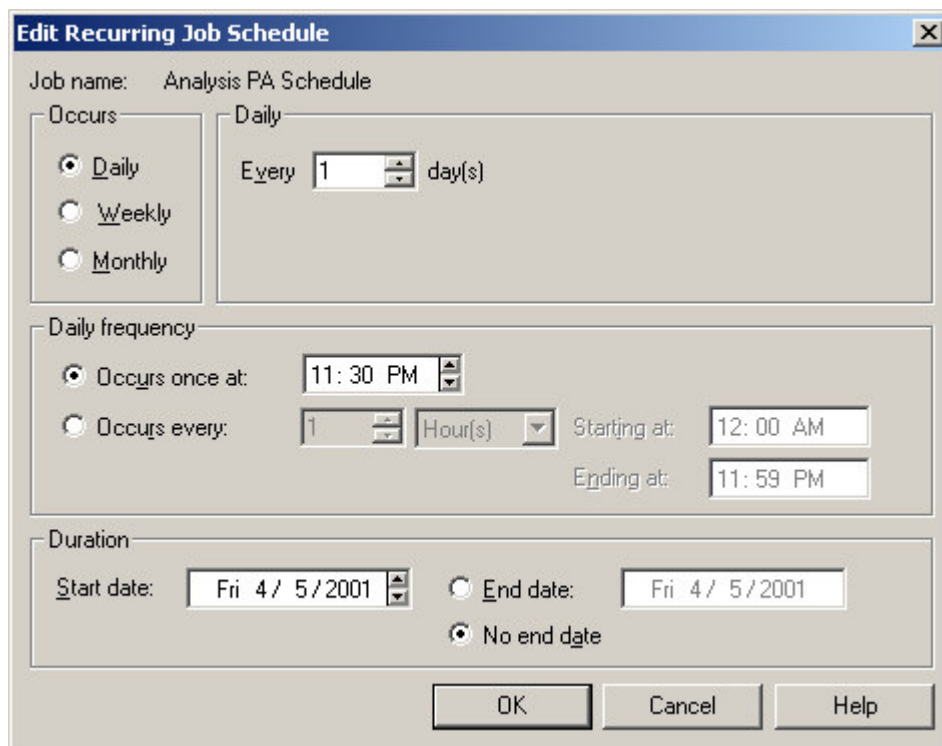


- g. Ensure that the permissions for EACH cube have the role of “all users” allowing everyone access to the cubes is created.



## 5. Setting up the schedule

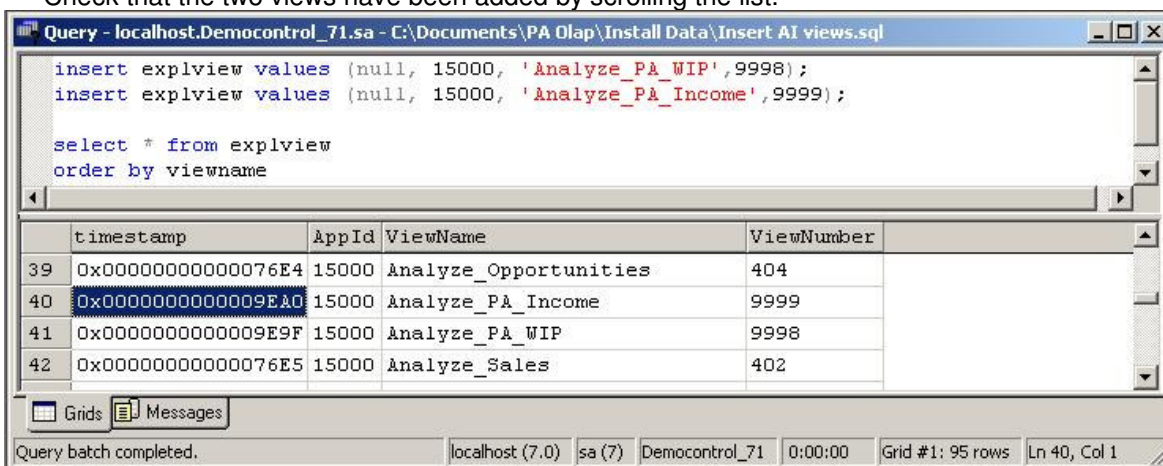
- To run the scheduling, the service “SQLServerAgent” must be running.
- Right click on the DTS Package “Analysis PA Schedule” and select “Schedule Package”.



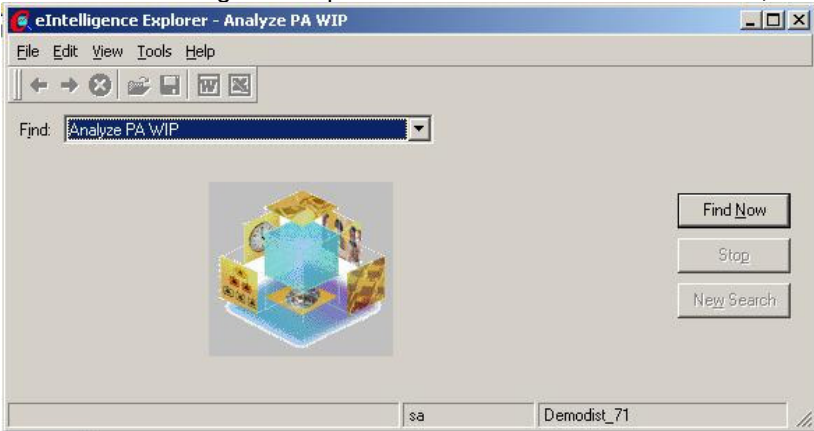
- c) So long as the SQLServerAgent is running, the Analysis PA database will be updated and the OLAP cubes refreshed each night.

## 6. Configure eExplorer AI for PA Analysis cubes

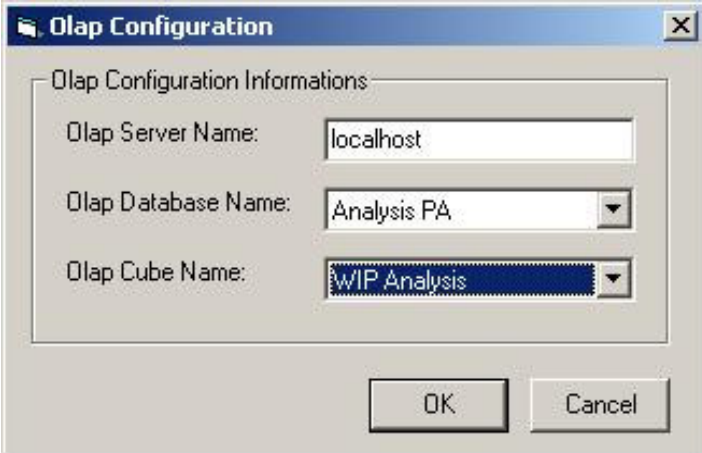
- Copy the following ini files to programs\epicor\Intelligence Explorer AI\dict:  
analyze\_PA\_Income.ini  
analyze\_PA\_WIP.ini
- Copy the following ini files to programs\epicor\Intelligence Explorer AI\views:  
analyze\_PA\_Income.ini  
analyze\_PA\_WIP.ini
- In SQL Query Analyzer, select the Control company and run the sql script named:  
Insert AI views.sql  
Check that the two views have been added by scrolling the list.



4. Run the eIntelligence Explorer AI and select the relevant view, and click “Find Now”



The first time you connect, the following screen will be displayed:



This will be remembered so that next time you will go straight to the exploring screen.

The defaults have been set in the relevant Analyze ini files.

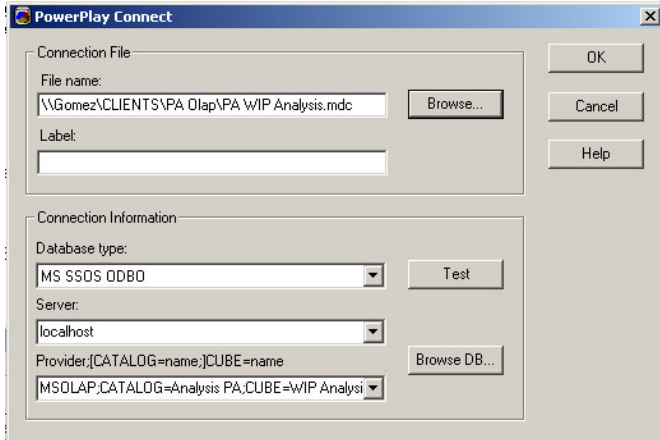


**7. \* Optional \*: Establish the Cognos PowerPlay connection.**

To use Cognos Powerplay with the cube developed by MSSQL OLAP services, you need to create a virtual “mdc” connection to the cube. This is done via the Cognos tool called “Powerplay Connect”.

Run Powerplay Connect. (Program Files\ Cognos BI\Tools)

**PowerPlay version 6.0:**



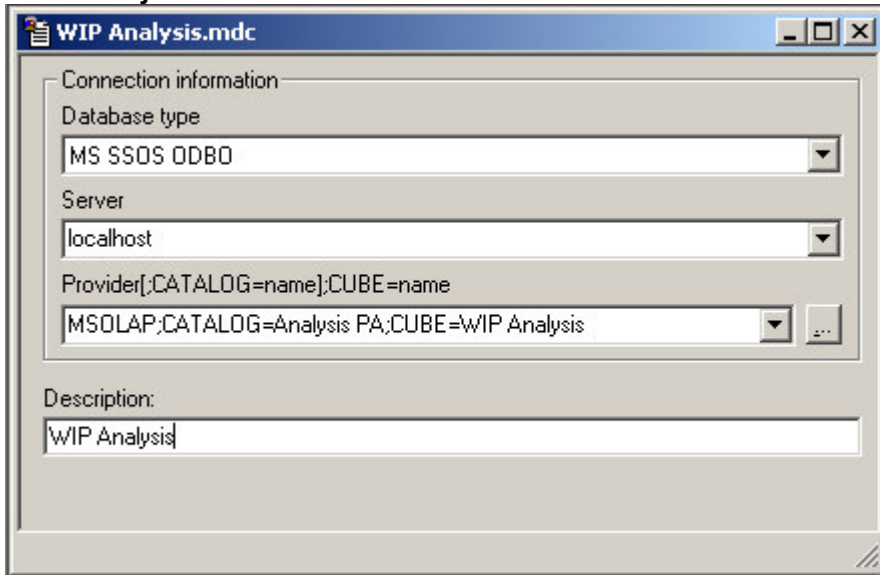
In File Name: enter the full path and file name, ending in ".mdc" for you connection.

The database type is "MS SSOS ODBO"

The server can remain "localhost" or the relevant server name.

Then select "Browse DB" which lists the OLAP Cubes available. Double click the desired cube and press OK.

**PowerPlay version 6.5:**



Once you have filled this dialog box, save the file to an appropriate spot.

To access via Powerplay, just open the \*.mdc as normal and start PowerPlaying.

## Additional steps required for SQL Server 2005.

DTS is considered a legacy application in 2005 and some tweaking needs to occur to allow the old 2000 DTS package to run under 2005. The following steps supplement the standard instructions above which were prepared for the 2000 platform. Not all screens for 2005 are shown.

### **Step 1a (Preparation)**

- Install 2000 DTS components  
search for **Microsoft SQL Server 2000 DTS Designer Components**  
file name is `SQLServer2005_DTS.msi` file which can be collected from  
<http://www.microsoft.com/downloads/details.aspx?familyid=50b97994-8453-4998-8226-fa42ec403d17&displaylang=en>
- Edit a file called `Sqlwb.exe.manifest`

**Warning** The following information contains steps to modify a file. Make sure that you back up the file before you modify it.

1. Open the `SQLInstall:\Program Files\Microsoft SQL Server\90\Tools\Binn\VSShell\Common7\IDE` folder.

**Note** `SQLInstall` is a placeholder for the drive where SQL Server 2005 is installed.

2. Open the `Sqlwb.exe.manifest` file in Notepad or in another text editor.
3. Remove the following lines of code from the `Sqlwb.exe.manifest` file.

```
<dependency> <dependentAssembly> <assemblyIdentity  
type="win32" name="Microsoft.Windows.Common-Controls"  
version="6.0.0.0" processorArchitecture="x86"  
publicKeyToken="6595b64144ccf1df"  
language="*"></assemblyIdentity> </dependentAssembly>  
</dependency>
```

4. Save the changes, and then exit Notepad or the text editor.

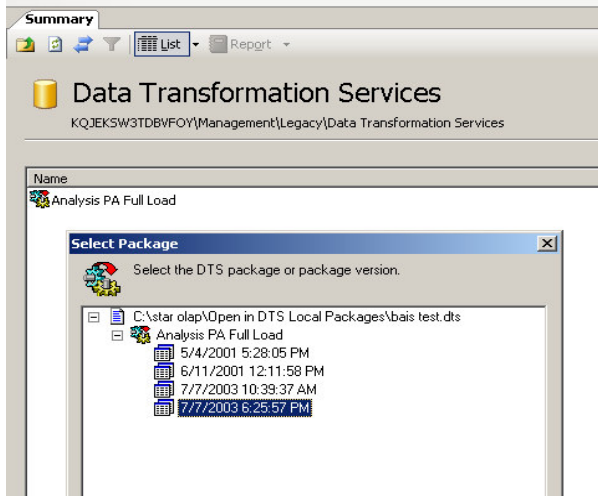
Refer to the following link for additional information / background if required:

<http://support.microsoft.com/kb/917406>

### Step 3 DTS Package

The DTS menu is located under the following tree branch

- Right click on the following option to access DTS functionality under 2005 SQL Server Management Studio → Legacy → Data Transformation Services Open Package File → Analysis PA Full Load  
IMPORTANT: expand out the tree branch and pick the most recent version



- Edit the *Analysis PA Full Load* package as follows

- a) right click on ANY of the the Project Accounting Facts object and select properties  
Select the StarProjects database name from the Database dropdown list
- b) when the Task references box appears, just hit OK straight away.

