Performance Analyzer 1.0

About Performance Analyzer
Performance Analyzer is a utility that analyzes the performance of mappings and session with the help of the mapping XMLs. This utility helps in allocating minimum bytes required for data cache, index cache and DTM buffer size for better and efficient performance. It reads the mapping xml as an input parameter.

Purpose
The purpose of the Performance Analyzer is:
1. To Read the mapping XML
2. To Calculate the required cache and DTM size
3. To Analyze the amount of memory allocated
4. To generate a XML, based on which the performance is analyzed. The analysis is done at two levels Mapping and Session level.

- Mapping Level:
At the mapping level, the performance can be affected by certain transformations which involve cache creation like Lookup, Sorter, Joiner, Rank and Aggregator.

The XML created by the Performance Analyzer will display an XML that gives out information about these cache creations. If these cache indexes accommodate more space than the required amount, the XML gives out the information, which helps in keeping a check about allocating the required space, preventing it from spilling out to the disk, thus affecting the performance.

- Session Level:
At the session level the Performance Analyzer:

1. Calculates the DTM (which has to be in sync with the mapping level setting to avoid bottleneck at the session level), required buffer block size * (atleast 20 rows at a time) for the analyzed mapping.

[* The block size calculation depends on the number of Source and Target and their precision.
The formulae required for calculating DTM Size are as below.
1) Calculation for SessionBufferBlock
   SessionBufferBlock = (((NumberOfSource + NumberOfTarget) * 2))
2) Ideal block size
   BufferBlockSize = 20 * (Total Precision of Source and Target)
   Total Precision of Source and Target is calculated by adding the precision of each Source and Target according to the Guidelines of Administrator Guide specified numbers.
3) The Required DTM size to accommodate the calculated BufferBlock Size;
   DTM Size = ( SessionBufferBlock * BufferBlockSize * number of partition)/(0.9)]

Usage
The Parameters to use the utility are:
1. **XML mapping**: Click the **Browse File** to select the mapping XML to analyze the performance
2. **Number of rows**: Specify the number of rows to calculate the performance.
3. **Number of Partition**: If the sessions are partitioned, specify the number of partition for that session. The default value is one.
4. **Precision**: Select **Low** or **High** to determine the precision mode of the server.
5. **Analyze Mapping**: Click the Analyze Mapping button to calculate and analyze the XML
6. **View Output**: Clicking the View Output button will display the output of the analyzed XML in another window.

Note: The XML file for the report will be generated at the main directory where the Performance Analyzer is installed. By default the name of the XML will end with _Performance Analyzer.xml.

Limitation
1. This Utility can be used to calculate the Index, Data cache for transformation present within the mapping in mapping xml only
2. This Utility provides output only for those mapping xml that are exported only from Designer client.
3. The calculations are made only for ASCII mode.