Aim:

The Main aim of the Project is to refresh the data changes if present on daily basis/hourly basis. Whenever the process runs, it must store all the auditing/logging information in separate audit tables.

SSMS:

Data Base: AdventureWorksDW2017 find below



- Find dimension tables related to assigned fact table (from AdventureWorksDW2017) below and create source database with dims and fact table.
- Create destination database.
- User defined Stored Procedure to raise flag for Changes exist or not.
- Create control log, package log, Package names list tables with meaningful schemas.
- **Control log** table should contain the details of the execution.
- Package log table should contain details of execution, insert/update count.
- Package Names list table should contain details of every package like Name and Type of table.
- All the SQL queries should be in Indentation.

Note: User defined stored procedures to raise flag depend on changes exist or not while comparing source table and destination table. If the changes exist, then Insert/update the records in destination tables without using SCD Component (SSIS) for dim tables.

Batch 1: Fact Internet sales

Batch 2: Fact Finance

Batch 3: Fact Reseller Sales

Logging tables Template:

Control Log

Parent Execution ID	Control Package Name	
1	CONTROL PACKAGE	
2	CONTROL PACKAGE	
3	CONTROL PACKAGE	
4	CONTROL PACKAGE	

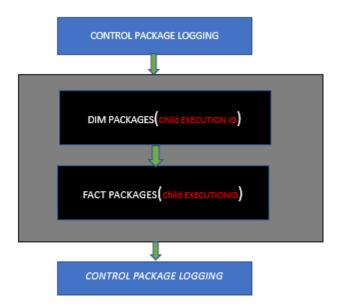
Package Log

Parent Execution ID	Child Execution ID	Package Name	Package Id
1	1	DIM 1	1
1	2	DIM 2	2
1	3	FACT 1	3
1	4	FACT 2	4
2	5	DIM 1	1
2	6	DIM 2	2
2	7	FACT 1	3
2	8	FACT 2	4

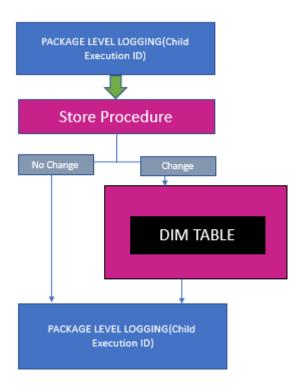
Integration services:

- Implement Control/Parent package to run child packages (dims, facts).
- ETL Implementation for Child packages.
- In dim package template implement.
- Implement Project parameter connections.
- Fact Table shouldn't contain any duplicates or updates, Fact table should be loaded batch wise (10k records per batch).

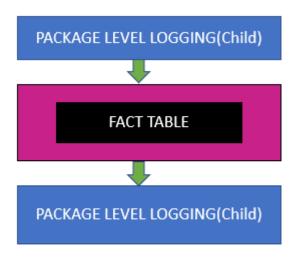
Control Package Template:



Dim Package Template:



Fact Package Template:



Analysis services:

- Create a cube for assigned tables without using cube wizard.
- Create partitions, aggregations for last three years.
- Below results should be displayed in browser tab,

Fact Finance: The Amount for departments (Manufacturing, Quality assurance) should be doubled.

Fact Internet Sales: Add sales amount and tax amount for country United states.

Fact Reseller Sales: Add sales amount and tax amount for currency EUR.

Reporting services:

• Create a report for Control log, package log tables using drill down and drill through concept and filter it by status of the execution.

Note:

- Use proper fonts and colours to beautify your report.
- Use Heading, Charts, Graphs, Indicators etc. if possible, for the report.