**eCommerce\_DWH\_StarSchema**

IN THIS PROJECT WE USED  **SLOWLY CHANGING DIMENSION** (SCD) TECHNIQUE TO DESIGN A DATA WAREHOUSE DATABASE FOR ECOMMERCE OLTP DATABASE.

WE CREATED SSIS PACKAGES TO DESIGN THE DIMENSIONS FOR STAR SCHEMA, SSIS PACKAGE FOR FACT TABLE.

ALSO. WE CREATED A MASTER PACKAGE TO DEFINE CONNECTIONS TO ALL DIMENSION AND FACT LOADS.

PRAAMETERIZSD THE CONNECTIONS AND DEFINE SSIS LOGGING ,BUILD THE PROJECT

FINALLY, WE DEPLOYED THE PROJECT FROM THE ISPAC FILE.

**WORK FLOW:**

/\*\*\*\* PHASE 1 \*\*\*\*/

STEP 1: CREATE DATABASE IN MY LOCAL SQL SERVER.

STEP 2: CREATE SCHEMAS IN ABOVE DATABASE

STEP 3: CREATE TABLES USING ABOVE SCHEMAS

STEP 4: DEFINE RELATIONS USING ABOVE TABLES AND SCHEMAS

STEP 5: ADD SAMPLE DATA INTO EACH TABLES

TO VERIFY DATA TYPES

TO VERIFY RELATIONS

/\*\*\*\* PHASE 2 \*\*\*\*/

STEP 6: IDENTIFY THE RELATIONS.

DESIGN THE DIMENSIONS FOR STAR / SNOWFLAKE SCHEMA IMPLEMENT DIMENSION LOADS. FOR THIS, CREATE SSIS PACKAGES FOR EACH OF THE INDIVIDUAL DIMENSIONS.

STEP 7: CREATE SSIS PACKAGE FOR FACT TABLE

FACT TABLE IS THE ACTUAL TABLE THAT HAS RELATIONS TO ABOVE DIMENSION TABLE.

STEP 8: CREATE A MASTER PACKAGE

DEFINE CONNECTIONS TO ALL DIMENSION LOAD PACKAGES FIRST. THEN DEFINE CONNECTIONS TO FACT LOADS PACKAGE.

PARAMETERIZE THE CONNECTIONS. TEST THE MASTER PACKAGE.

/\*\*\*\* PHASE 3 \*\*\*\*/

STEP 9: VALIDATE ALL PACKAGES

DEFINE SSIS LOGGING

DEFINE ON ERROR EVENT IN MASTER PACKAGE

DEFINE CHECKPOINTS WHEREVER NEDED

REVALIDATE THE PACKAGES

STEP 10: BUILD THE PROJECT. DEPLOY THE PROJECT FROM ISPAC FILE. TEST THECONNECTION PARAMETERS (CONFIGURE)VALIDATE PACKAGES.TEST EXECUTION.

SCHEDULE THE PACKAGES

