

OBJECTIVE: To develop a formalized process to logically refresh EDW data and schemas to facilitate effective development and testing, using a sequenced, cascading approach in consideration of current overall environment state.

This proposed process is in strict consideration of a (one-time) baseline setting project for the production environment as a prerequisite

- Set baseline for PROD:
 - Copy (**backup / restore**) to UAT
 - Copy (**backup / restore**) to TEST
 - Copy (**backup / restore**) to DEV
- Begin Scheduled / Automated “Copy Back” Process that **backs up each database**, and **restores each database** that exists in the PROD environment, into the UAT environment. (*Interval TBD*)
- Data** in PROD is populated through **ETL processes** using **various products and techniques** (*ADF, SSIS, SQL Agent, Alteryx, Etc.*)
- Engineer / Adopt process that promotes **DDL** changes that occur in DEV environment to TEST environment using **GitHub**. (*Interval TBD*)
- Engineer / Adopt process that promotes **DML** changes that occur in DEV environment to TEST environment using **GitHub**. (*Interval TBD*)
- Engineer / Adopt process that promotes **DDL** changes that occur in TEST environment to UAT environment using **GitHub**. (*Interval TBD*)
- Engineer / Adopt process that promotes **DML** changes that occur in TEST environment to UAT environment using **GitHub**. (*Interval TBD*)
- Engineer / Adopt process that promotes **DDL** changes that occur in UAT environment to PROD environment using manual **Release Process**. (*Interval TBD*)
- Engineer / Adopt process that promotes **DML** changes that occur in UAT environment to PROD environment using manual **Release Process**. (*Interval TBD*)
- Engineer / Adopt process that sequentially refreshes **DATA** in UAT via manual / automated “Copy Back” process from PROD and subsequently promotes **DDL / DML** changes to UAT from TEST using GitHub. This will facilitate an integrated testing environment (*i.e. fresh data, and latest code versions.*)
- Make available Sandbox environment that enables development / prototyping of **DDL** changes against databases that are individually backed up, and restored from higher environment(s) using **Ad-Hoc “Copy Back” Processes**. Depending upon use-case, these DDL changes are promoted to (*formal*) DEV environment and included in the SDLC.
- Make available Sandbox environment that enables development / prototyping of **DML** changes against databases that are individually backed up, and restored from higher environment(s) using **Ad-Hoc “Copy Back” Processes**. Depending upon use-case, these DDL changes are promoted to (*formal*) DEV environment and included in the SDLC.

