For applying incremental loading, do one of the following methods:

**Time Based CDC (doesn’t provide delete record tracking)**

1. Build meta data table to store last date (first record has very old value at the beginning eg. 1/1/1900) To guarantee the initial load.
2. Assign last date to variable and make the initial value for the variable to very future date like( 1/1/2099) because when the update task fails for any reason then the records in the source at this case is already in the destination so when loading it will cause an error due to duplicates but when assign the variable new date so the condition will give nor records because no records has dates bigger than (1/1/2099).
3. Determine the primary key either id or date from source table that will be used in where condition.
4. Modify the fact table data flow task to include where condition for load only inserted rows (where modifdata( column in source table) > last date (variable))

And mofifdate < cut of date (package start time)

1. Then make execute sql task after dataflow task of fact table to update the last date in the meta data table and the date will be the package start time (to avoid any possible missing transaction in case the loading process of fact table took too much time).

**Log-based CDC.**

It’s applied using transactional log in the DBMS.

1. For example, CDC feature in the MSSQL server to store changes (insert, delete, update) in the CDC tables.
2. Then use CDC control task in SSIS to load changes in the destination.