

Idea: GEN function with Db2 table as input

The list of Db2 objects which are input for the MIG and GEN functions are currently taken from Admin Tool's ISPF panels. What is missing is a functionality that DBAs can maintain a list of Db2 tables in a Db2 table itself and then let the contents of this table be input for MIG or GEN.

Alternative 1 for providing input to the MIG/GEN function:

In this alternative, the tool provides a Db2 table which is populated by the DBA upfront. For example, let us assume we have a Db2 table ADB.NAME_LIST with

TB_NAME VARCHAR(128) NOT NULL

The DBA has populated ADB.NAME_LIST with table names:

- TAB01
- TAB02
- TAB03
- ...

The user specifies the following for the MIG/GEN process

- exactly one source schema name
- a list containing one or more target schema names
- one database pattern for each target schema
- an option how to proceed if a target object exists (stop processing or skip the object)

For every table name in ADB.NAME_LIST the tool should look in the source Db2 catalog for a table in the given source schema name. It should determine the underlying table space and database DDL.

Then it should look in each target schema if the table already exists. If the table exists and the user specified to skip the object in that case, the tool should not generate DDL (neither CREATEs nor ALTERs) for that object. If the table does not exist the tool should generate DDL for the table and all dependent objects but also for the underlying table space.

The user should have an option to let the tool also generate the CREATE DATABASE statement for the target database if the database does not exist yet.

The tool should only translate database names and schema names to the target environment. All other names and attributes (e.g. database properties, table space properties [e.g. CCSID, Numparts, Maxpartitions, Bufferpool]) should be copied from the source.

The generated DDL should be placed into WSLs, one WSL per target schema. Optionally, the tool should generate one large WSL containing all the DDL statements across all schemas.

Alternative 2 for providing input to the MIG/GEN function

In this alternative, the tool accepts a SQL statement as input for source object selection. The user needs to make sure that the SQL returns a result set consisting of 1 column.

This column (VARCHAR(128) not null) contains a list of tables which are source for the MIG/GEN function.

The further processing should be identical to alternative 1.

Proposal for another enhancement: M:N schema migration

This enhancement should provide the possibility to have a list of GEN/MIG source objects from multiple schemas and migrate them to another list of multiple schemas by specifying masks.

For example, the input list of tables looks like this:

- S1.TABLE1
- S1.TABLE2
- S2.TABLE1
- S2.TABLE3

The user should have the option to specify the following mapping:

- Source schema S1 to target schema T1
- Source schema S2 to target schema T2

The existing masking capabilities of Db2 Administration Tool currently only allow to map one source schema to one target schema. With this enhancement it would be possible to run a DDL generation for several environments in just one job execution.