

Incorporating DB2 and SQL/DS Tables/Views

Prerequisites

- For DB2 tables and views, a Predict object documenting the DB2 database containing the tables/views must exist.
- For SQL/DS tables and views, a corresponding database object in Predict is not required. See the section DB2 and SQL/DS in the **Predict and Other Systems documentation**.

Note:

See Concepts of Incorporation for basic information on how to use incorporation functions.

Selecting DB2 and SQL/DS Tables/Views

The Incorporate DB2 Tables/Views screen is called with function code I and object code T2 in a Predict main menu or with the command INCORPORATE TABLES.

```
09:30:17          ***** P R E D I C T  4.2.2  *****          2002-07-31
Plan    0          - Incorporate DB2 Tables/Views -

Table / View name .....

Select options
  Tables or Views ....*
  Creator name .....
  DB2 database name ...

Processing option
  Connect automatic ... N (Y,N)
```

Parameters	
Table / view name	The name in DB2 of the tables and views from which the data dictionary objects are to be created. Asterisk notation is allowed.
Tables or views	Limit the function to files of one type. Valid values: T DB2 tables V DB2 views
Creator name	The DB2 "creator" of the tables and views from which the data dictionary objects are to be created. Asterisk notation is allowed.
DB2 database name	The name in DB2 of the database or databases in which the specified tables and views reside. Asterisk notation is allowed. When incorporating Tables/Views from SQL/DS, this parameter is protected.
Connect automatic	Y DB2 table/views and the Predict object will be connected by the Compare function (code T) if no differences were detected between the field lists of the two objects.

Files which meet the given selection criteria and are not already connected to a Predict file object are listed as below.

```

13:03:38          ***** P R E D I C T 4.2.2 *****          2002-07-31
                    - Incorporate DB2 Tables/Views -
Search-crit.: Table/View name=ALL,DB name=ALL,Creator=ALL
                    Doc.
Cmd Creator      Table/View name      Database  T  exists      Remark
___ ABA          DEMO1                DSNDB04  T  No
___ ABA          PLAN_TABLE                DSNDB04  T  No
___ AZ          APPT_TODAY                DSNDB04  V  No
___ AZ          D_BAR                    PREDICT  T  No
___ AZ          D_FX                    PREDICT  T  No
___ AZ          D_NAT1                  DSNDB04  T  Yes
    
```

Columns in the List	
Creator	Creator in DB2.
Table/view name	Name of the table/view.
Database	Name of DB2 database(s) where the table/view is implemented.
T	Type of the DB2 file: T DB2 table V DB2 view
Doc. exists	Y Predict object exists for the table/view.
Remark	
Any of the following type-specific remarks or blank. For type-independent remarks see Remarks which apply to all Object Types.	
DA missing, ST missing, DS missing	The DB2 database, storagegroup or tablespace the table/view belongs to are not documented in Predict. Incorporation is not possible.
Master missing	The specified DB2 view cannot be incorporated as a data dictionary object until a dictionary object for a related DB2 table or view has been created.
Invalid file-type	The type of the specified DB2 table or view does not match the type of the corresponding Predict object: the file type of the data dictionary object is either not D (DB2 table) or not E (DB2 view).

The tables/views in the list can then be processed by entering a function code in the Cmd column. The functions T, C and I apply.

Incorporation Functions for Tables/Views

The functions T, C, M and I apply.

Note:

Corresponding DB2 tables/views and Predict file objects of type D and E are identified by DB2 table/view name.

Compare - Code T

Compares DB2 table/views and corresponding Predict file object.
Differences between field lists and attributes of the tables/views are reported.

If no differences between the field lists are found and Connect automatic is set to Y, the DB2 tables/view and the Predict file object are connected.

Connect - Code C

Connects DB2 tables/views to Predict file object and

- copies current information from the DB2 catalog to the dictionary object;
- writes to the generation log of the Predict file object that a corresponding implemented table/view existed when the connection was established.

Display Masters - Code M

DB2 databases, storagegroups and tablespace and tables/views a table/view is related to must be documented in Predict before the table/view can be incorporated.

This function finds all objects that are not documented. These can then be incorporated before the table/view is incorporated.

Incorporate - Code I

Scope of the Incorporation

- One Predict file object is created for each table or view.
The ID of the new file object consists of the creator name and DB2 name of the table or view joined by a hyphen.
- One field object is created for each field in the table or view.
The ID assigned to each new field object will be the name of the field in DB2. For each view that is incorporated, the appropriate parts of the subselect specification in the SQL statement CREATE will be copied to the file and field objects created.
- One field object is added to file SAG-DISTINCT-TYPE for each distinct type that is not already documented.
The ID assigned to each new field object consists of the schema name and the type name concatenated by a hyphen.
The connection between the standard fields of SAG-DISTINCT-TYPE and the table field is established if the field in DB2 is distinct type.
- One Predict file object with file type IV (Intermediate view) is created for each subselect clause in the from clause of a view definition. For each column in the select list of subselect a Predict field object is created. For each intermediate view that is created, the appropriate parts of the subselect specification in the SQL statement CREATE will be copied to the file and field objects created.
- One Predict field object (type SP) for each composite index is created.
- One Predict field object (type SP) for each composite foreign key is created if there is not already a Predict field object for a composite index built from the same columns.
- One Predict relationship object is created for each foreign key.
- Labels defined for columns are documented as field headers.
- A trigger object is added for each trigger defined for a table.
A link is established either to the file object via association *Has TR* or to the corresponding field objects in case of an update trigger.
- A verification is added and linked to the corresponding field for each check constraint that is defined for one column.
- Attributes of the corresponding file object are updated for each table check constraint (check expression for more than one column).

Calling the Function

Before the function is executed, enter the following parameters in an additional input screen:

Incorporation Options	
Comments as abstract	<p>Y String constants assigned with COMMENT ON are to be incorporated as the abstract of the corresponding Predict object:</p> <ul style="list-style-type: none"> ● Comments assigned to the table or view are to be copied to the file object. ● Comments assigned to a field of the table or view are to be copied to the field object.
List incorporated code	<p>Y The values of all attributes incorporated for the table or view are to be listed.</p>

Incorporating DB2 Tables and Views in Batch Mode

Command: INCORPORATE TABLE

Enter parameters on the next line in positional or keyword form.

Field	Keyword	Position
Table/View name	TABLE	1
Tables or Views	TYPE	2
Creator name	CREATOR	3
DB2 Database name	DB2NAME	4
Connect automatic	AUTO-CONNECT	5
Function	SUB-FUNCTION	6
Incorporate comments	COMMENT	7
List incorporated code	LIST	8

Note:

The keyword ABSTRACT can be used as a synonym for COMMENT.

Example

To incorporate the table 'TDEPT' in database 'DSN8130', code the command:

```
INCORPORATE TABLE
TABLE=TDEPT,TYPE=T,DB2NAME=DSN8130,,SUB-FUNCTION=I
```

or

```
INCORPORATE TABLE
TDEPT,T,DSN8130,,I
```

The example above uses the Natural parameters ID=, and IA==