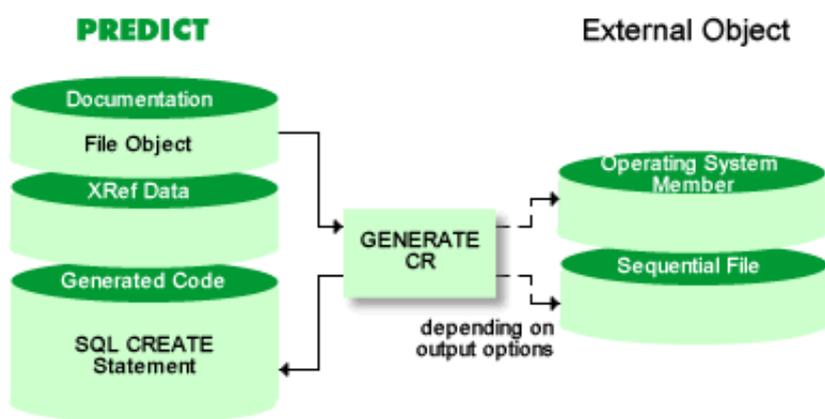


# Generating for SQL

The following topics provide necessary knowledge on Generating for SQL.

## SQL CREATE Statements

With the function Generate SQL Create Statements you can generate CREATE TABLE or CREATE VIEW statements. For Adabas SQL Server you can generate CREATE TABLE DESCRIPTION and CREATE CLUSTER DESCRIPTIONS. These SQL statements are stored as Natural members.



## Calling the Function

The Generate SQL Create Statements screen is called with function code G and object code CR in a Predict main menu or with the command GENERATE CR.

```

10:41:04          ***** P R E D I C T 4.2.2 *****          2002-07-31
Plan 10          - Generate SQL Create Statements -

File ID .....

Save as member ..... *          Save in library ..... CRELIB
Overwrite option ..... Y (Y,N)  Op. system member .....
Punch / output .....* N

List generated code ..... Y (Y,N)

Truncate creator ..... N (Y,N)  Label on ..... Y (Y,N)
Generate defaults ..... Y (Y,N)  Comment on ..... Y (Y,N)
Generate procedures ..... Y (Y,N)
Generate indexes ..... Y (Y,N)  Defer option for indexes .* N
    
```

Values for input fields which have been locked by your data dictionary administrator cannot be overwritten. These fields are skipped when positioning the cursor with the TAB key. See Generation Defaults.

### Parameters

<p>The parameters Save as member, Save in library, Overwrite option and Op. system member, Punch/output and List generated code are described in the section Generation Defaults.</p>	
File ID	<p>ID of the Predict file object from which the CREATE statement is to be generated. CREATE statements can be generated from the following file types:</p> <p><b>A, B</b> (with parameter Adabas SQL usage set to Y) Adabas tables and views</p> <p><b>AT</b> Adabas table clusters</p> <p><b>D, E</b> DB2 tables and views</p> <p><b>BT, BV</b> Adabas D tables and views</p> <p><b>JT, JV</b> INGRES tables and views</p> <p><b>OT, OV</b> ORACLE tables and views</p> <p><b>XT, XT</b> INFORMIX tables and views</p> <p><b>YT, YV</b> SYBASE tables and views</p> <p><b>X</b> General SQL file</p>
Truncate creator	<p><b>Y</b> The creator is truncated from all object names in the CREATE statement.</p> <p>For DB2 CREATE statements: If parameter Generate indexes is set to Y, the creator is truncated in the generated distinct types and indexes, too.</p>
Generate indexes	<p><b>Y</b> Only applicable to DB2: CREATE INDEX statements are also generated.</p>
Generate defaults	<p><b>Y</b> For Sybase tables: If default values have been specified in Predict for fields in the file, the following statements are generated:</p> <ul style="list-style-type: none"> <li>● create default</li> <li>● sp_bindefault</li> </ul> <p>For other SQL systems: A corresponding DEFAULT clause is generated as part of the generated CREATE TABLE statement. If a default for non-null values has been specified in Predict for fields in the file, this value is used in the generated CREATE statement.</p>

Generate procedures	<p>Only applicable to Sybase, Informix and Ingres tables if triggers are defined and linked to the corresponding file object in Predict via <i>Has TR</i> or to field of the file via <i>Triggered by TR</i> and these triggers contain references to procedures.</p> <p><b>Y</b> For Sybase, Informix and Ingres tables, the statement CREATE PROCEDURE is also generated.</p>
Label on	<p><b>Y</b> The string specified in the Predict field attribute Header1 is used as label for the columns (SQL statement LABEL ON).</p>
Comment on	<p><b>Y</b> The first eight abstract lines of the field and file objects in Predict are entered as comments for the columns and the table (SQL Statement COMMENT ON).</p>
Defer option for indexes	<p><b>Y</b> The SQL statement CREATE INDEX is generated with the clause DEFER YES.</p> <p><b>N</b> The SQL statement CREATE INDEX is generated without the clause DEFER YES.</p> <p><b>S</b> A list containing all indexes is displayed. Enter Y for indexes which you would like to generate with the DEFER YES clause.</p> <p>If you enter N or leave the field blank, the CREATE INDEX statement is generated without this clause.</p>

## Generating SQL CREATE Statements in Batch Mode

Command: GENERATE SQL-CREATE

Enter parameters on next line in positional or keyword form. File ID is obligatory, all other parameters are optional. If a parameter is not specified, the default value is taken.

<b>Field</b>	<b>Keyword</b>	<b>Position</b>
File ID	FILE-ID	1
Save as member	MEM	2
Save in library	LIB	3
Overwrite option	REP-OPT	4
Op. system member	OS-MEMBER	5
Punch / output	PUNCH	6
Truncate creator	TRUNC-CREATOR	7
Generate defaults	DEFAULTS	8
Generate procedures	PROCEDURES	9
Generate indexes	INDEX	10
Label on	LABEL	11
Comment on	COMMENT	12
Defer option for indexes	DEFER	13
<b>If you are working with Entire System Server</b>		
- DB-ID	NP-DBID	14
- Dataset	NP-DSNAME	15
- Volume	NP-VOLSER	16
- Library	NP-LIB	17
- Sublibrary	NP-SUBLIB	18
- Member type	NP-MEMTYPE	19
- VSAM catalog	NP-VSAMCAT	20

## Sample Output

```

13:50:03          ***** P R E D I C T 4.2.2 *****          2002-07-31
                    - Generate SQL Create Statements -          Page: 1

File ID .. DSN8230-EMPPROJACT

CREATE TABLE DSN8230.EMPPROJACT
  (EMPNO              CHAR(6)          FOR SBCS DATA
                                NOT NULL,
   PROJNO            CHAR(6)          FOR SBCS DATA
                                NOT NULL,
   ACTNO              SMALLINT         NOT NULL,
   EMPTIME           DECIMAL(5, 2),
   EMSTDATE          DATE,
   EMENDATE          DATE,
   UNIQUE (          PROJNO,
                    ACTNO,
                    EMSTDATE,
                    EMPNO),
   FOREIGN KEY REPAE (EMPNO)
     REFERENCES DSN8230.EMP ON DELETE RESTRICT,
   FOREIGN KEY REPAPA (PROJNO,
                      ACTNO,
                      EMSTDATE)
     REFERENCES DSN8230.PROJACT ON DELETE RESTRICT)
IN DATABASE DSN8D23A
AUDIT NONE
DATA CAPTURE NONE;
CREATE INDEX DSN8230.XEMPPROJACT2
ON DSN8230.EMPPROJACT
  (EMPNO          ASC)
USING STOGROUP DSN8G230
  PRIQTY 12
  SECQTY 12
  ERASE NO
PCTFREE 10
SUBPAGES 8
BUFFERPOOL BP0
CLOSE NO;
CREATE UNIQUE INDEX DSN8230.XEMPPROJACT1
ON DSN8230.EMPPROJACT
  (PROJNO          ASC,
   ACTNO           ASC,
   EMSTDATE        ASC,
   EMPNO           ASC)

USING STOGROUP DSN8G230
  PRIQTY 12
  SECQTY 12
  ERASE NO
PCTFREE 10
SUBPAGES 8
BUFFERPOOL BP0
CLOSE NO;

DIC1800 SUMMARY:    16 FIELD(S) PROCESSED

```