

Special Requirements for Natural Tools for DB2

To be able to use the Natural Tools for DB2 (see the relevant section), consider the following requirements and recommendations:

- Retrieval and Explain Functions
 - LISTSQL and Explain Functions
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Retrieval and Explain Functions

In order to be independent of DB2 versions, the Natural Tools for DB2 Retrieval and Explain functions have been designed not to access the DB2 catalog tables directly, but to access identical tables qualified by the creator name SYSSAG.

Thus, before you can use the Retrieval or Explain functions, you must create these tables. The SYSSAG tables must have the same columns as the DB2 catalog tables and they must be created as ALIAS, VIEW, or TABLE.

To help you create these tables, sample SQL code is provided in the member DEMSQL4 in the Natural system library SYSDB2. By default, it creates an ALIAS SYSSAG.xxx for the corresponding SYSIBM table.

For some catalog tables no indexes are defined. For performance reasons, consider creating copies of these tables with appropriate indexes.

For the following tables it is recommended to work with copies of the catalog tables:

SYSCOLAUTH
SYSDBRM
SYSFORIGNKEYS
SYSINDEXPART
SYSKEYS
SYSSTMT
SYSSYNONYMS
SYSTABLEPART
SYSVIEWS

The CREATE TABLE and CREATE INDEX statements required are included as comments in the sample SQL member DEMSQL4. In addition, DEMSQLUP includes sample SQL code to update the data in the copies of the catalog tables.

For any other table, it is recommended that you create an ALIAS or a VIEW that points to the corresponding SYSIBM table.

Note:

The sample SQL members can be executed with the ISQL part of SYSDB2. ISQL enables you to read SQL members from the Natural system library SYSDB2. To save an SQL member in any other library, you can use the command LIBRARY MYLIB in the ISQL input screen to switch to another library and then save the SQL member. You cannot save SQL members in the library SYSDB2.

LISTSQL and Explain Functions

These functions access DB2 PLAN_TABLEs. To use these functions, a PLAN_TABLE must exist for your SQLID. For the layout of the PLAN_TABLE, see the relevant DB2 documentation by IBM of the EXPLAIN command.

It is recommended that you create an index on the following columns of the PLAN_TABLE:

APPLNAME
PROGNAME
COLLID
QUERYNO
TIMESTAMP DESC
QBLOCKNO
PLANNO
MIXOPSEQ