SQL_BINDIN

SQL_BINDIN action

Function

The action specifies values of the parameters and executes a SQL command **SELECT** prepared by action SQL_PREPARE, if the latter action used parameterization and a keyword BINDOUT.

Declaration

```
SQL_BINDIN handleIdent_Int, retCodeIdent_Int, _Par1, _Par2, ...

SQL_BINDIN handleIdent_Int, retCodeIdent_Int, _VarRowIdent
```

Parameters

handleIdent_Int	in	Identifier - the unique number (handle) of a connection.
retCodeIdent_Int	out	Return code identifier.
_Par1, _Par2, ...	in	List of objects, constants or local variables, which will specify the values of parameters of parameterized SQL command **SELECT**.
_VarRowIdent	in	Reference to a row of local variable of the *Record* type or to a row of structured variable. The row's values will specify the values of parameters of parameterized SQL command **SELECT**.

Return code

The value of the parameter *transHandle_Int*. See the table of error codes. It is possible to get extended error information.

Description

Reading a database by the command SELECT is implemented in two or three phases.
The first (preparatory) phase is executed by the action SQL_PREPARE. The command SELECT, defined by a value of the expression *selectStringExpr*, is prepared (and if the keyword **BINDOUT** is not used, then also executed) in the database.
If the keyword **BINDOUT** was used, it means that the SQL SELECT command was parameterized, and the second phase is needed. The command **SQL_BINDIN** must be used to specify the values of the input parameters and execute the SQL statement.
The last phase is the sequential reading of the rows, prepared by the command SELECT, using the action SQL_FETCH.

Note: By using parameterization it is possible to make the work of SQL database easier, because the preparation (compilation) of parameterized SQL query will be performed only once (by the action SQL_PREPARE). Consequently the values of parameters must be specified by the action **SQL_BINDIN** (which will also execute the SQL command) and then the action SQL_FETCH may be called once or more times to obtain the results. Then it is possible to set new values of the parameters and re-execute the SQL command by repeating the action **SQL_BINDIN** and obtain the new results by one or more calls of the action SQL_FETCH.
By proper setting of the database parameters (e.g. Oracle: *session_cached_cursors*) it is possible to ensure recycling of cursors (compiled statements) between the calls of **SQL_PREPARE**.

Example

Work with a database (actions SQL_ ...)

```
 INT  _handle    ; handle to database
 INT  _retCode   ; return code
 TEXT _name      ; product name
 TEXT _type      ; product type
                 ; parameterized SQL command
 TEXT _sql =  "SELECT Name, Type FROM Products WHERE ID>= #PAR# AND ID<=
#PAR#"

 SQL_CONNECT MyDatabase, _handle, _retCode
 SQL_PREPARE _handle, _retCode, _sql BINDOUT _name, _type
 SQL_BINDIN  _handle, _retCode, 1, 100 ; read all products between 1 and
100

 DO_LOOP
   SQL_FETCH _handle, _retCode
   EXIT_LOOP _retCode #  _ERR_NO_ERROR
   ; data processing goes here
 END_LOOP

 SQL_FREE _handle
 SQL_DISCONNECT _handle
```

Related topics

DB_TRANS_OPEN
DB_TRANS_COMMIT
DB_TRANS_ROLLBACK
DB_TRANS_CLOSE

SQL_CONNECT
SQL_DISCONNECT
SQL_EXEC_DIRECT
SQL_EXEC_PROC

SQL_PREPARE
SQL_FETCH
SQL_FREE

SQL_SELECT

All database related actions.

Related pages:

Script actions