

# SQL\_CONNECT

## SQL\_CONNECT action

|                  |   |  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
|------------------|---|--|--|------------|----|---|---------------|----|---|----------------|----|--|-----------------|-----|--|------------------|-----|-------------------------|-----------------|----|---|
| Function         | The action establishes connection to a database (open a database).  |  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| Declaration      | <div>SQL_CONNECT</div> <div>dbObjIdent, handleIdent_Int, retCodeIdent_Int [TRANS _transHandle_Int]</div> <div>SQL_CONNECT</div> <div>connectString, handleIdent_Int, retCodeIdent_Int ON dbManIdent</div>   |  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| Parameters       | <table><tr><td>dbObjIdent</td><td>in</td><td>Reference to an object of Database or Database table types.</td></tr><tr><td>connectString</td><td>in</td><td>Identifier of Text type or a text constant containing a connect string to the database.</td></tr><tr><td>dbManIdent_Int</td><td>in</td><td>Reference to an object of Process type (DbManager), that will be executed the required commands.</td></tr><tr><td>handleIdent_Int</td><td>out</td><td>Identifier - the unique number (handle) of a connection.</td></tr><tr><td>retCodeIdent_Int</td><td>out</td><td>Return code identifier.</td></tr><tr><td>transHandle_Int</td><td>in</td><td>Identifier for an unique number (handle) of the connection to a database.</td></tr></table>  |  |  | dbObjIdent | in | Reference to an object of Database or Database table types. | connectString | in | Identifier of Text type or a text constant containing a connect string to the database. | dbManIdent_Int | in | Reference to an object of Process type (DbManager), that will be executed the required commands. | handleIdent_Int | out | Identifier - the unique number (handle) of a connection. | retCodeIdent_Int | out | Return code identifier. | transHandle_Int | in | Identifier for an unique number (handle) of the connection to a database. |
| dbObjIdent       | in  | Reference to an object of Database or Database table types.                                      |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| connectString    | in  | Identifier of Text type or a text constant containing a connect string to the database.          |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| dbManIdent_Int   | in  | Reference to an object of Process type (DbManager), that will be executed the required commands. |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| handleIdent_Int  | out   | Identifier - the unique number (handle) of a connection.   |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| retCodeIdent_Int | out   | Return code identifier.  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| transHandle_Int  | in  | Identifier for an unique number (handle) of the connection to a database.                        |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| Return code      | The value of the parameter transHandle_Int. See the table of error codes. It is possible to get extended error information.   |  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| Description      | <p>Identifier for a number (handle) of the connection is used during another work with an opened database. Return code describes the action success (__ERR_NO_ERROR).</p> <p>An unique number (identifier, handle) is assigned to each opening of a database by a script. It is necessary to close this number using the action SQL_DISCONNECT, when having finished the work with database. If all databases (opened by this script during its activity) are not to be closed by calling the action SQL_DISCONNECT after the script termination, they will be closed automatically. Handle is valid only within the frame of a script, that opened the database.</p> <p>The action SQL_CONNECT always opens a database (not a table, unlike the actions DB_CONNECT and PG_CONNECT), because it allows to work with a whole database (all tables contained in it) via a connection created by this way. If an object of Database table is used to open a database, the database will be internally opened by means of its parent, so an object of Database.</p> <p>Opened database may be determined by an object of Database or Database table type (the first declaration type) or by so-called connect string (the second declaration type).</p> <p>In the first type, it is not necessary to enter the name of a process of DbManager type that will be interpret follow commands, because this is given by the parent relation between an object of Database type and the process. The command SQL_CONNECT will use the configuration parameters User, Password and DSN from the object configuration of particular object of Database type.</p> <p>The second declaration type allows to create the connection to an database on the basis of knowing the Name, Password and DSN using so-called connect string. It contains:</p> <p>"UID=user name;PWD=user password;DSN=DSN name".</p> <p>The key words UID, PWD and DSN represent values of individual parameters. If some of them is not entered, it will be substituted by a null string. This declaration type requires to specify, using a reference, a process of DbManager type, that will be provide the execution of individual commands. Next optional parameters of connection string are related to optimization and are described together with the process DbManager.</p> <p>If a database is opened using an object of Database or Database Table type, it is able to enter transHandle_Int. Thereby all SQL_* commands are to be executed within the frame of the specified Connection. The connection must be created before using the action DB_TRANS_OPEN. If the clause TRANS is not stated, there will be used the Automatic connection.</p> <p>If a database is opened by a connect string, the process DbManager always creates a new connection to the database. If the key word ACD (Auto Commit Disable) is placed in the connect string, then the mode Auto Commit is disabled within the frame of this new connection, an it is necessary to execute the command Commit manually.</p> |  |  |            |    |   |               |    |   |                |    |  |                 |     |  |                  |     |                         |                 |    |   |
| 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\\_DISCONNECT](#)  
[SQL\\_EXEC\\_DIRECT](#)  
[SQL\\_EXEC\\_PROC](#)

[SQL\\_PREPARE](#)  
[SQL\\_BINDIN](#)  
[SQL\\_FETCH](#)  
[SQL\\_FREE](#)

[SQL\\_SELECT](#)

All database related actions.



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