

# DBSHORT - Interpretation of Database Field Short Names

This Natural profile and session parameter can be used to determine the interpretation of database field short names. It corresponds to the option `DBSHORT` of the Natural system command `COMPOPT`.

A database field defined in a DDM is described by two names:

- the short name with a length of 2 characters, used by Natural to communicate with the database (especially with Adabas);
- the long name with a length of 3-32 characters (1-32 characters, if the underlying database type accessed is DB2/SQL), which is supposed to be used to reference the field in the Natural programming code.

Under special conditions, you may reference a database field in a Natural program with its short name instead of the long name. This applies if running in Reporting Mode without Natural Security and if the database access statement contains a reference to a DDM instead of a view.

The decision if a field name is regarded as a short-name reference depends on the name length. When the field identifier consists of two characters, a short-name reference is assumed; a field name with another length is considered as a long-name reference. This standard interpretation rule for database fields can additionally be influenced and controlled by setting the compiler option `DBSHORT` to `ON` or `OFF`:

|                                     |     |   |   |
|-------------------------------------|-----|---|---|
| <b>Possible settings</b>            | ON  | <p>The usage of a short name is allowed for referencing a database field.</p> <p>However, a data base short name is <i>not permitted</i> in general (even if DBSHORT=ON)</p> <ul style="list-style-type: none"> <li>● for the definition of a field when a view is created;</li> <li>● when a view field is used in the programming code;</li> <li>● when a DEFINE DATA LOCAL statement was previously used to defines variables;</li> <li>● when running under Natural Security.</li> </ul>  |   |
|                                     | OFF | <p>A database field may only be referenced via its long name. Every database field identifier is considered as a long-name reference, regardless of its length.</p> <p>If a two character name is supplied which can only be found as a short name but not as a long name, syntax error NAT0981 is raised at compile time.</p> <p>This makes it possible to use long names defined in a DDM with 2-byte identifier length. This option is essential if the underlying database you access with this DDM is SQL (DB2) and table columns with a two character name exist. For all other database types (for example, Adabas), however, any attempt to define a long field with a 2-byte name length will be rejected at DDM generation.</p> <p>Moreover, if no short-name references are used (what can be enforced via DBSHORT=OFF), the program becomes independent of being compiled without Natural Security.</p> |   |
| <b>Default setting</b>              | ON  |   |   |
| <b>Dynamic specification</b>        | yes |   |   |
| <b>Specification within session</b> | yes | Applicable Statements:  | OPTIONS                                     |
|                                     |     | Applicable Command:   | Either GLOBALS or DBSHORT option of COMPOPT |

### Examples:

Assume the following data base field definition in the DDM EMPLOYEES:

| Short Name | Long Name    |
|------------|--------------|
| AA         | PERSONNEL-ID |

Example 1:

```

OPTIONS DBSHORT=ON
READ EMPLOYEES
  DISPLAY AA      /* data base short name AA is allowed
END

```

## Example 2:

```
OPTIONS DBSHORT=OFF
READ EMPLOYEES
  DISPLAY AA      /* syntax error NAT0981, because DBSHORT=OFF
END
```

## Example 3:

```
OPTIONS DBSHORT=ON
DEFINE DATA LOCAL
1 V1 VIEW OF EMPLOYEES
  2 PERSONNEL-ID
END-DEFINE
READ V1 BY PERSONNEL-ID
  DISPLAY AA      /* syntax error NAT0981, because PERSONNEL-ID is defined in view;
                  /* (even if DBSHORT=ON)
END-READ
END
```