

# Natural View Concept

Some Natural SQL statements also support the use of Natural views.

A Natural view can be specified instead of a parameter list, where each field of the view - except group fields, redefining fields and fields prefixed with L@ or N@- corresponds to one parameter (host variable).

Fields with names prefixed with L@ or N@ can only exist with corresponding master fields; that is, fields of the same name, where:

- L@ fields are converted into LINDICATOR fields,
- N@ fields are converted into INDICATOR fields.

L@ fields should have been specified at view definition, immediately before the master fields to which they apply.

```
DEFINE DATA LOCAL
01 PERS VIEW OF SQL-PERSONNEL
  02 PERSID      (I4)
  02 NAME       (A20)
  02 N@NAME     (I2)           /* null indicator of NAME
  02 L@ADDRESS  (I2)           /* length indicator of ADDRESS
  02 ADDRESS    (A50/1:6)
  02 N@ADDRESS  (I2)           /* null indicator of ADDRESS
01 #PERSID     (I4)
END-DEFINE
...
SELECT *
  INTO VIEW PERS
  FROM SQL-PERSONNEL
  WHERE PERSID = #PERSID
...
END-SELECT
```

The above example is equivalent to the following one:

```
...
SELECT *
  INTO PERSID,
  NAME INDICATOR N@NAME,
  ADDRESS(*)INDICATOR N@ADDRESS LINDICATOR L@ADDRESS
  FROM SQL-PERSONNEL
  WHERE PERSID = #PERSID
...
END-SELECT
```

## Note:

When accessing varchar data types with Natural for Windows, Natural for UNIX or Natural for OpenVMS, there must be a corresponding length indicator variable in the view.