# AT END OF DATA

**Structured Mode Syntax**

```
[AT]END [OF] DATA  [(r)]

   statement ...

END-ENDDATA
```

**Reporting Mode Syntax**

```
[AT]END [OF] DATA  [(r)]
{ statement            }
{ DO statement ... DOEND }
```

This chapter covers the following topics:

- Function

- Restrictions

- Syntax Description

- Example

For an explanation of the symbols used in the syntax diagram, see *Syntax Symbols*.

Related Statements: ACCEPT/REJECT | AT BREAK | AT START OF DATA | BACKOUT TRANSACTION | BEFORE BREAK PROCESSING | DELETE | END TRANSACTION | FIND | GET | GET SAME | GET TRANSACTION DATA | HISTOGRAM | LIMIT | PASSW | PERFORM BREAK PROCESSING | READ | RETRY | STORE | UPDATE

Belongs to Function Group: *Database Access and Update*

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# Function

The AT END OF DATA statement is used to specify processing to be performed when all records selected for a database processing loop have been processed.

This section covers the following topics:

- Processing

- Values of Database Fields

- Positioning

- System Functions

See also *AT START/END OF DATA Statements* in the *Programming Guide*.

## Processing

This statement is non-procedural, that is, its execution depends on an event, not on where in a program it is located.

## Values of Database Fields

When the AT END OF DATA condition for the processing loop occurs, all database fields contain the data from the last record processed.

## Positioning

This statement must be specified within the same program module which contains the loop creating statement.

## System Functions

Natural system functions may be used in conjunction with an AT END OF DATA statement as described in *Using System Functions in Processing Loops* in the *System Functions* documentation.

# Restrictions

- This statement can only be used in a processing loop that has been initiated with one of the following statements: FIND, READ, READ WORK FILE, HISTOGRAM or SORT.

- It may be used only once per processing loop.

- It is *not* evaluated if the processing loop referenced for END OF DATA processing is not entered.

# Syntax Description

| Syntax Element | Description |
|---|---|
| (r) | **Reference to a Specific Processing Loop:**<br>An AT END OF DATA statement may be related to a specific active processing loop by using the notation (r). If this notation is not used, the AT END OF DATA statement will be related to the outermost active database processing loop. |
| END-ENDDATA | **End of AT END OF DATA Statement:**<br>The Natural reserved word END-ENDDATA must be used to end the AT END OF DATA statement. |

# Example

```
** Example 'AEDEX1S': AT END OF DATA
************************************************************************
DEFINE DATA LOCAL
1 EMPLOY-VIEW VIEW OF EMPLOYEES
  2 PERSONNEL-ID
  2 NAME
  2 FIRST-NAME
  2 SALARY    (1)
  2 CURR-CODE (1)
END-DEFINE
*
LIMIT 5
EMP. FIND EMPLOY-VIEW WITH CITY = 'STUTTGART'
  IF NO RECORDS FOUND
    ENTER
  END-NOREC
  DISPLAY PERSONNEL-ID NAME FIRST-NAME
          SALARY (1) CURR-CODE (1)
  /*
   AT END OF DATA
    IF *COUNTER (EMP.) = 0
      WRITE 'NO RECORDS FOUND'
      ESCAPE BOTTOM
    END-IF
    WRITE NOTITLE / 'SALARY STATISTICS:'
                  / 7X 'MAXIMUM:' MAX(SALARY(1))  CURR-CODE (1)
                  / 7X 'MINIMUM:' MIN(SALARY(1))  CURR-CODE (1)
                  / 7X 'AVERAGE:' AVER(SALARY(1)) CURR-CODE (1)
    END-ENDDATA
  /*
END-FIND
*
END
```

See also *Natural System Functions for Use in Processing Loops* in the *System Functions* documentation.

### Output of Program AEDEX1S:

```
PERSONNEL          NAME                 FIRST-NAME            ANNUAL   CURRENCY
   ID                                                        SALARY    CODE
--------- -------------------- -------------------- ---------- --------

11100328  BERGHAUS             ROSE                    70800 DM
11100329  BARTHEL              PETER                   42000 DM
11300313  AECKERLE             SUSANNE                 55200 DM
11300316  KANTE                GABRIELE                61200 DM
11500304  KLUGE                ELKE                    49200 DM

SALARY STATISTICS:
      MAXIMUM:      70800 DM
      MINIMUM:      42000 DM
      AVERAGE:      55680 DM
```

Equivalent reporting-mode example: AEDEX1R.