

# Working with Data Maintenance Transactions

This section describes how to perform the data maintenance functions available in Super Natural.

This section covers the following topics:

- What are Data Maintenance Transactions?
  - Listing Transactions
  - Adding Data Maintenance Transactions
  - Adding Data
  - Updating Data
  - Deleting Data
- 

## What are Data Maintenance Transactions?

Data maintenance transactions are transactions which you can use to perform the data maintenance functions Add, Update and Delete. The type of data maintenance function you perform depends on the setting of your data maintenance mode Report Type.

You can not use data maintenance transactions to modify field definitions or add new fields.

Data maintenance transactions are intended for use with your user files only. Do not perform data maintenance functions on database files without asking your Super Natural administrator.

The Super Natural administrator decides whether you may perform data maintenance, on which files and at which level.

**Note:**

Data maintenance transactions can use primary and secondary files, but not lookup files.

If you set the transaction mode Logging to "Y", you can write a report containing the data that has been processed in a data maintenance transaction to a printer, the Natural program editor or to Con-Nect. For further information, see **Defining Transaction Modes for Data Maintenance**.

## Listing Transactions

▶ **To obtain a list of transactions:**

- Select the object Transactions from the Menu.

Or:

Issue the TRANSACTION command.

The List Transactions screen appears.

The Transaction List screen functions in the same way as all object list screens in Super Natural. For general information on how to use object list screens, see The Object List Screens in **Starting Up**.

The List Transactions screen lists both reporting and data maintenance transactions.

## Adding Data Maintenance Transactions

▶ **To add a data maintenance transaction:**

1. Enter a new transaction name in the Name column of the List Transactions screen in the input field next to the Add field.

Or:

Issue the ADD TRANSACTION *name* command.

The Add Transaction window appears.

**Note:**

You can use the CHECKLIST function and the NEXT function to help you add and modify data maintenance transactions. For further information, see Using Super Natural.

```

17:24                      ***** Super Natural *****                      08.Jan.1998
SN1110                      - Transaction List -                               Friday

Cmd  Name      Descript +-----Add Transaction-----+
      DATMAN_   !                                     !
      _____ ! Transaction ID .... DATMAN_   !
      _____ ! Description ..... _____ !
      _____ !                                     !
      _____ !                                     !
      _____ ! File name ..... _____ !
      _____ !                                     !
      _____ ! Modify modes ..... _         !
      _____ ! Data maintenance .. N (Y/N)   !
      _____ !                                     !
      _____ +-----+
    
```

2. Type a new transaction name in the Transaction ID field if no name is present.
3. Modify or delete the transaction description if you wish.
4. If you know the name of the file on which you want to perform data maintenance, enter it in the Enter File Name field.

The file you choose here is called your primary file.

5. If you don't know the name of the file you want to use, enter an asterisk (\*) and the File Selection List window appears.
6. Mark the Modify Modes field to invoke the Modify Data Maintenance Modes window.

You can use the Modify Data Maintenance Modes window to modify the default modes for the current transaction only. The modes govern the basic conditions under which the transaction runs. For further information on data maintenance modes, see *Defining Transaction Modes for Data Maintenance*.

If you don't mark the Modify Modes field, you continue to add the transaction using your default modes.

7. Enter Y (Yes) in the Data Maintenance field, to add a data maintenance transaction.
8. Press Enter.

```

17:30                               ***** Super Natural *****           08.Jan.1998
SN1110                               - Transaction List -                       Friday

Cmd  Name      Descript + +-----File Selection List-----+
*_____*_____  !!      File Name           Access  Info !
___  CONNECT  Report T !!  _  UF-SBE-EMPLOYEE-DATA    F      _  !
___  CONTROL  control !!  _  UF-SBE-NEW                F      _  !
___  DATACH  (92-11-1 !!  _  UF-SBE-SUMMARY           F      _  !
___  DATACH2 (92-11-1 !!  _  UF-SBE-USER-FILE-RECORDS F      _  !
___  DATACH3 Destinatio !!  _  UF-SBE-USERFILEV         F      _  !
___  DATA2   data mai !!  _  UF-SBE-USERFILE1        F      _  !
___  DATA3   data mai !!  _  UF-SBE-YACHT            F      _  !
___  DATA4   data mai !!  _  FINANCE                  D      _  !
___  DATA5   data mai !!  _  GB-PERSONNEL             D      _  !
___  DATA6   data mai + !  _  KEDB2                    D      _  !
___  DDM1     SAG ch pri !  _  KEFINANCE                 D      _  !
___  DDM2     SAG compan !  _  KEPERS                     D      _  !
Add  datman_  !  _  MITARBEITER              D      _  !
                                           !
Cmd(s): Modify, Execute, +More: +-----+
    
```

If you have marked the File Name field with an asterisk (\*), the File Selection List window appears as in the following example:

The File Selection List window only displays the files you can use for the transaction type specified. For example, if transaction type DELETE is specified, only the files with access codes D or F are presented for selection.

The file access codes in the Access column indicate your access level to each file as follows:

File Access Code	Description
U	Update (includes read). You can update existing records to this file.
A	Add (includes update). You can add new records to this file.
D	Delete (includes add). You can delete records in this file.
*	This file is being deleted. Access is not possible.
S	Superfile. For further information on superfiles, see <b>Defining Files</b> .
F	User file. All data maintenance functions are available (read, add, update and delete). For further information on user files, see <b>Working with User Files</b> .

9. Choose your primary file.
10. Mark the Information column to obtain an extended file description from the data dictionary Predict. This feature is only available at sites where Predict is installed. No dictionary information is available for user files.
11. Press Enter.

What happens now is dependent on the Transaction Type specified. The four different Transaction Types for data maintenance are described in the following sections:

## Adding Data

 **To add data:**

1. Add a data maintenance transaction of Transaction Type ADD.

The following version of the Worksheet appears:

```

17:33                ***** Super Natural *****                08.Jan.1998
SN3011                - Worksheet -                                Friday

Ref DB      Field Name      Seq   Opt   Func Def   Info Del
BB          _____      ___   ___   ___   ___   ___   ___
BC          _____      ___   ___   ___   ___   ___   ___
BD          _____      ___   ___   ___   ___   ___   ___
BE          _____      ___   ___   ___   ___   ___   ___
BF          _____      ___   ___   ___   ___   ___   ___
BG          _____      ___   ___   ___   ___   ___   ___
BH          _____      ___   ___   ___   ___   ___   ___
BI          _____      ___   ___   ___   ___   ___   ___
BJ          _____      ___   ___   ___   ___   ___   ___
BK          _____      ___   ___   ___   ___   ___   ___
BL          _____      ___   ___   ___   ___   ___   ___
BM          _____      ___   ___   ___   ___   ___   ___
BN          _____      ___   ___   ___   ___   ___   ___
BO          _____      ___   ___   ___   ___   ___   ___

Enter "*" in Fieldname column to select fields or enter NEXT
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Next Exit      Incl Flip -      +      Sel Run Canc
    
```

The Worksheet contains the following columns specific to Report Types ADD, UPDATE SINGLE and UPDATE MULTIPLE:

2. In the Sequence column number the fields to which you want to add data.
3. In the Option column enter one of the following codes for each field marked in the Selection column:

Code	Description
R	Indicates a required field. You must supply a value for a required field.
C	Indicates that the contents you add to this field will be copied to the next record. (Transaction Type ADD only)
D	Indicates that the field will be displayed for information only, you may not update it. If you leave this column blank, you can choose whether you want to update the field when it is displayed. (Transaction Types UPDATESINGLE and UPDATE MULTIPLE) or whether you want to add a value to it (Transaction Type ADD).

The other columns function as described in the section The Worksheet earlier in this documentation. When you have finished making entries on the Worksheet, you can specify logical conditions, calculation or file linking if you wish. You can not specify selection criteria.

#### 4. Issue the RUN command.

The fields you have chosen in the Sequence column of the Worksheet are displayed. You can now supply your own values.

Before you supply your own value, the fields are filled with map filling characters. Map filling characters allow you to distinguish between alphanumeric and numeric fields. They also indicate field length. You can define which characters you want to use as map filling characters by changing your transaction option Map Filling Character. For further information, see Adjusting a User Profile. The recommended characters are the underscore ( \_ ) for alphanumeric and the full stop ( . ) for numeric fields.

When you add data, the occurrences of multiple-value fields and periodic groups are presented in separate records. This is called flattening records. For further information on flattening, see Transaction Options in **Adjusting a User Profile**.

5. To add data, type in a value (overtyping the map filling characters).
6. Press Enter or PF3.

If you have assigned a value to a field in the Calculation Editor, the value you assigned does not appear but overrides any entries you make for the field here.

The following is an example of the output for an ADD transaction:

```

17:39:21                                     1998-01-08
IDATMAN                                       0

TITLE ..... _____
SURNAME ..... _____
FIRST-NAME-1 ..... _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                     Exit      Add      Flip                                     Canc
    
```

## Updating Data

You can use two transaction types to update data: UPDATE SINGLE and UPDATE MULTIPLE.

When you update data, the occurrences of multiple-value fields and periodic groups are presented in separate records. This is called flattening records. For further information on flattening, see Transaction Options in Adjusting a User Profile.

**Note:**

You can not update subfields (redefined database fields defined in the Define User Field window).

## Displaying Single Records

 **To update data displaying records singly:**

1. Add a data maintenance transaction of Transaction Type UPDATE SINGLE.

The version of the Worksheet specific to Report Types ADD, UPDATE SINGLE and UPDATE MULTIPLE appears. This version of the Worksheet is described in the section **Adding Data**.

2. Make your entries on the Worksheet.
3. Specify selection criteria.
4. Specify logical conditions or calculation, file linking and lookup if you wish.
5. Issue the RUN command.

The records found are displayed consecutively. The fields for each record are displayed vertically and may cover more than one screen.

6. To update a record, overtype the current entries.
7. To display the next record, press Enter.

The following is an example of the output for an UPDATE SINGLE transaction:

```

17:46:59  SURNAME                                1998-01-08
IDATMAN2                                     0

SURNAME ..... HOLLY
PERSON-ID ..... 0.....
SEX .....
BIRTH-DATE ..... 0

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                Exit      Updt  Flip      +                               Canc
    
```

## Displaying Multiple Records

 **To update data displaying multiple records:**

1. Add a data maintenance transaction of Transaction Type UPDATE MULTIPLE.

This transaction type is only available for Adabas files.

You can not number multiple-value fields and periodic group fields in the Sequence column of the Worksheet.

The main difference between this transaction type and UPDATE SINGLE is the way the records are presented for updating.

The following is an example of output for an UPDATE MULTIPLE transaction:

```

18:21:47  YACHT-ID                                1998-09-07
IMUSTER0                                     0

  YACHT-ID  YACHT-NAME                                Y ID-CH-BA ID-S-OWNE DID-DESC
- 1         ANTIGONE_____ A 21_____ 0..... _____
- 2         EDELWEISS_____ A 21_____ 0..... _____
- 3         HELENA_____ A 21_____ 0..... _____
- 4         MEDEA_____ A 21_____ 0..... _____
- 5         ATLANTIC OCEAN_____ A 24_____ 0..... _____
- 6         SYSTEM FUNCTION_____ A 21_____ 0..... _____
- 7         ATHENE_____ A 24_____ 0..... _____
- 8         PANDORA_____ A 21_____ 0..... _____
- 9         APHRODITE_____ A 21_____ 0..... _____
- 10        ANDROMEDA_____ A 21_____ 0..... _____
- 11        CIRCE_____ A 21_____ 0..... _____
- 12        PENTHESILEA_____ A 24_____ 0..... _____
- 13        HAITI_____ A 25_____ 0..... _____
- 14        ATLANTIS_____ A 21_____ 0..... _____
- 15        BREAKDANCE_____ A 24_____ 0..... _____
- 16        JAMAICA_____ A 25_____ 0..... _____

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                Exit      Updt  Flip      +                      Cancel
    
```

If the line length of this horizontal display is not sufficient, you can mark records to be updated in the first column to invoke vertical display as in transaction type UPDATE SINGLE.

2. To update records, overwrite the current entries.
3. Press PF5 to save your changes.

The records are updated and the next page is displayed.

## Deleting Data

### Deleting Records Singly

 **To delete data:**

1. Add a data maintenance transaction of Transaction Type DELETE.

The Worksheet appears as described in the section **The Worksheet**.

2. Continue to add a transaction which selects all the records you want to delete.

The fields you select to be displayed allow you to review each record before deletion.

3. Specify logical conditions, calculation or file linking if you wish.
4. Issue the RUN command.

Each record is presented separately for review.

5. To continue to the next record without deleting, press Enter or PF8 (page one page forwards).

6. To delete a record, press PF3 (delete).

The entire record is deleted, not just the fields selected for display. Only the records displayed are deleted.

## **Deleting the Contents of a User File**

You can delete all the records in a user file using the Delete User File Data Only function described in the section **User Files**.

