

# Files

This section describes how to create and maintain file profiles.

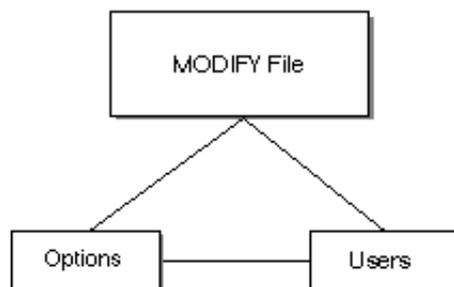
This section covers the following topics:

- What are File Profiles?
  - Listing File Profiles
  - Adding Files
  - Modifying Single Files
  - Copying Files
  - Deleting Files
  - Importing Files
- 

## What are File Profiles?

File profiles consist of file option settings and a list of the users authorized to use the file.

You can add file profiles to Super Natural before the corresponding DDM or file in the database exists or is linked to Super Natural.



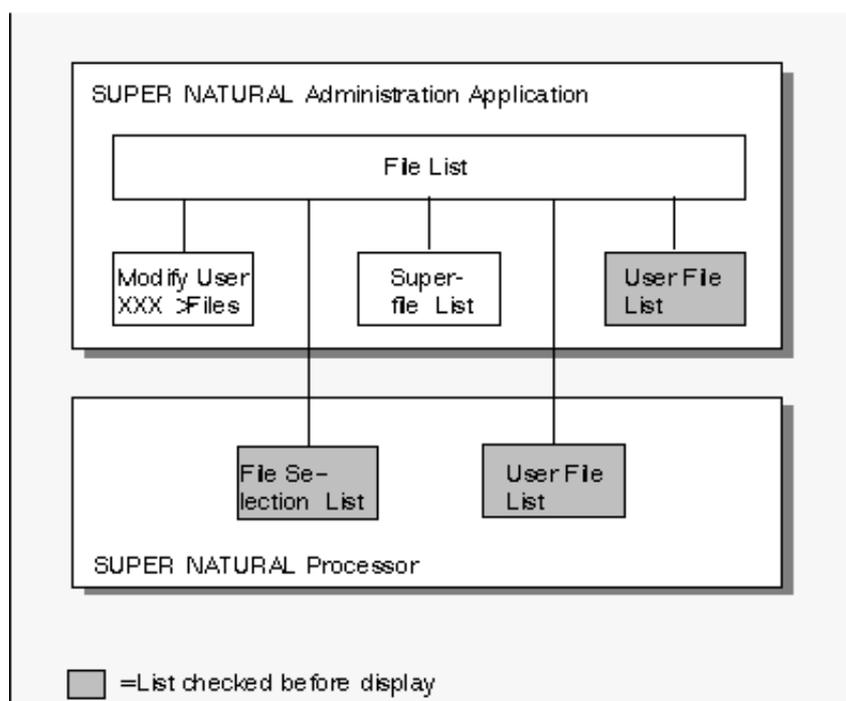
For further information on option hierarchy, see User Profile, Option and Adabas Password Hierarchies in **Technical Information**.

You can perform the following commands on file profiles:

	ADD	MODIFY	COPY	DELETE	INFO	IMPORT	MULTIMOD
File	X	X	X	X		X	

## File Lists

The File List in the Administration Application lists all the file profiles defined in Super Natural. No checks are carried out to determine whether the Natural files and DDMs exist or not. All other lists of files which you can invoke in the Super NaturalAdministration Application and the Super NaturalPROCESSOR are subsets of this list. In some cases, only files which fulfil certain conditions are displayed. The following diagram shows in which cases validity checks are carried out before a list of files is displayed:



The following table describes which checks are carried out:

### List Administration Files Displayed/Checks Performed Before Display Application

File List	All files, superfiles and user files defined in Super Natural (no checks).
Superfile List	All superfiles defined to Super Natural (no checks).
Modify User xxx >Files	All files, superfiles and user files added to the Super Natural user specified (no checks).
User File List	All user files which are defined in the current Personal Database. Super Natural checks that there is a corresponding DDM for each user file in the current FDIC. Super Natural also checks that the directory record for each user file exists.

**List Super Natural Processor****Files Displayed/Checks Performed Before Display**

User File List	All the user's own user files (file access code F). Super Natural checks that the directory record for each user file exists
File Selection List for Reporting Transactions:	<ol style="list-style-type: none"> <li>1. All the user's own user files (file access code F) (no checks).</li> <li>2. All files and other user's user files with file access codes "R", "A", "U" and "D" (no checks).</li> <li>3. All superfiles based on reporting transactions. Super Natural checks that the superfile transaction exists.</li> </ol>
File Selection List for Data Maintenance Transactions: Transaction Type ADD :	<ol style="list-style-type: none"> <li>1. All the user's own user files (file access code "F") (no checks).</li> <li>2. All files and other user's user files with file access codes "A" and "D".</li> <li>3. All superfiles based on data maintenance transactions with Transaction Type ADD.</li> </ol>
File Selection List for Data Maintenance Transactions: Transaction Types SINGLE/UPDATE MULTIPLE	<ol style="list-style-type: none"> <li>1. All the user's own user files (file access code "F") (no UPDATE checks).</li> <li>2. All files and other user's user files with file access codes "A", "U" and "D".</li> <li>3. All superfiles based on data maintenance transactions with Transaction Type UPDATE SINGLE or UPDATE MULTIPLE.</li> </ol>
File Selection List for Data Maintenance Transactions: Transaction Type DELETE	<ol style="list-style-type: none"> <li>1. All the user's own user files (file access code "F").</li> <li>2. All files and other user's user files with file access codes "D".</li> <li>3. All superfiles based on data maintenance transactions with Transaction Type DELETE.</li> </ol>

## Listing File Profiles

 **To obtain a list of files currently defined to Super Natural:**

1. Issue the FILE command.

Or:

Select the object File from the Administration Menu.

The File List screen appears as in the following example:

```

14:31          ***** Super Natural *****          1999-05-21
SBE          - File List -          SNMFL
                                     More:      +

      Cmd  File Name          File Type
      *-----
      ___ $CONNECT
      ___ A-U-FILE
      ___ AA-SUPER          Superfile
      ___ AAA              Superfile
      ___ AAAAAAAAA
      ___ AAAAAA1          Superfile
      ___ AAA1
      ___ AA1
      ___ AA2
      ___ AA8
      ___ AA9
      ___ ACTIVE-JOBS
      ___ ADMINISTRATION-FILE-DDM
      Add  _____
Cmd(s): Add, Modify, Copy, Delete
Select one command from list
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit          Flip      +          Canc
    
```

The File List screen shows the following:

- **All files currently defined to Super Natural including DDMs, user files and superfiles.**  
The DDMs and the files on which they are based are not necessarily defined either in the database or to Natural Security. Super Natural does not check this until a user adds a transaction using the file.
- **File type.**  
User files and superfiles are indicated in the File Type column.

## Adding Files

 **To add a file:**

- Issue the ADD FILE*name* command.

You can not add superfiles and user files.

The file is added (linked) to Super Natural. The Modify File > Options screen appears.

You can now set options and authorize users to use the file you have added. For further information, see Modifying Single Files in **Files**.

**Notes:**

1. When you add (link) a file to Super Natural, the file has no option settings and no user list. If you leave the options settings and/or the user list blank, the individual file settings which are part of each user profile are valid for users when accessing this file. Otherwise, options set for a file in its file profile override options set for it in a user profile. For further information on option hierarchy, see User Profile, Option and Adabas Password Hierarchies in **Technical Information**.
2. When you have finished modifying the file options and users, the file is added to the File List.

3. The DDM and the file on which it is based are not necessarily defined either in the database or to Natural Security. Super Natural does not check this until a user adds a transaction using the file.
4. Users of Natural Security can also use the Import function to define file profiles.

## Modifying Single Files

### ▶ To modify a single file:

- Issue the `MODIFY FILEname` command.

The Modify File >Options screen appears. You can either modify the file options or modify the user list.

For information on navigating between profile setting groups, see > Navigation in **Introduction**.

#### Note:

Users must restart their Super Natural sessions before your modifications are valid. Your modifications are valid for all new transactions but not for existing ones.

## Options

#### Note:

File options override user options. For further information on option hierarchy, see User Profile, Option and Adabas Password Hierarchies in **Technical Information**.

### ▶ To specify Options

1. Choose >Options

The Modify File >Options screen appears.

```

14:32                ***** Super Natural *****                1999-05-21
SBE                  Modify File SAG-TOURS-E-CONTRACT >Options        SRMFMO

                _ DDM Check / Display Options
                _ Database Access
                _ Exit Specification
                _ VSAM Files
                _ DL/1 Files

>Users
Mark function(s) or select by cursor
Command ===>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                Help          Exit          Flip          Canc

```

2. Mark the group(s) of options you want to modify and press Enter
3. Overtyping the options you want to modify if you are modifying a file.

Or:

Type settings if you are adding a file and press Enter

Your modifications/entries are saved.

You can modify the options listed in the following sections.

## DDM Check / Display Options

Option	Description
DDM Check on Modify	"Y" indicates that each time a Super Natural-transaction is modified, a check is made to see if the transaction is still consistent with the data definition module (DDM) for the file or files involved. A warning is issued when a user modifies a transaction if the DDM has been changed. "N" indicates that no check is to be made. Any changes made to the DDM since the transaction was created/last modified are ignored. The default is N.
Prefix for Inverse Field Output	Prefix used for files with both fields in regular and inverse format. See Super Natural in Inverse Mode in <b>Setting Up Super Natural</b> in the <i>Super Natural Installation documentation</i> . The default value is blank.
Display Occurrences (Multiple Value Field)	The default number of occurrences (i.e. values) that are to be displayed for a field defined as a multiple value field. The default setting is 1.
Display Occurrences (Periodic Group)	The default number of occurrences that are to be displayed for a field contained within a periodic group. The default setting is 1.
Suppress Numeric Sign	"Y" indicates that the sign of a numeric field is to be suppressed on the transaction report. "N" indicates that the signs of numeric fields are not to be suppressed. The default setting is N.
Run Modes Available	ONLINE run mode allows users to access the file online. BATCH run mode allows users to access the file in batch operation.

## Database Access

Option	Description
Physical Read Allowed	"Y" indicates that a physical read of an entire file is allowed in the case of a transaction in which the selection criteria specified requires such. "N" indicates that a physical read of an entire file is not allowed. The default setting is Y. This option allows separate settings for online and batch run mode. This option must be "N" for DL/ Ifiles.
Non-Descriptor Criteria Allowed	"Y" indicates that a transaction may use selection criteria that contain non-descriptors, i.e., fields that have not been defined as key fields. "N" indicates that the transaction may only use selection criteria comprised of key fields. The default setting is Y. This option allows separate settings for online and batch run mode.
Maximum Number of Criteria	The maximum number of criteria permitted within a transaction. The default setting is 99. This option allows separate settings for online and batch run mode.
Display Values For Key Fields Allowed	"Y" indicates that users can use the Values for Key Fields function on this file. "N" indicates that the user may not use the Values for Key Fields function. Default value = N .
Adabas Sorting Allowed	"Y" indicates that the Adabas internal sort feature may be used for a transaction that contains sort criteria comprised of one to three key fields. "N" indicates that the Adabas internal sort feature may not be used. The default setting is Y. This option allows separate settings for online and batch run mode. This option must be "N" for DL/ Ifiles.
Buffer/External Sorting Allowed	"Y" indicates that a buffer or external sort feature may be used. "N" indicates that a buffer or external sort feature may not be used. The default setting is Y. This option allows separate settings for online and batch run mode.
Maximum Number of Records	The maximum number of records that may be processed for a transaction. The default setting is 999999. This option allows separate settings for online and batch run mode.
Adabas Password	If an Adabas file that is security protected is to be available to Super Natural transactions, the password for the file must be provided. See the <i>Adabas Security documentation</i> for additional information on Adabas security.
Adabas Cipher Code	If an Adabas file that is ciphered is to be available to Super Natural transactions, the cipher code for the file must be provided. See the <i>Adabas Security documentation</i> for additional information on Adabas ciphering.

## Exit Specification

Option	Description
Exit Module Program ID	Specify the name of the external program to be activated. The program must be accessible via a Natural CALL or CALLNAT statement.
Use Natural Object	Mark this field if the user exit program is a Natural object.
Exit Location	Defines when the exit routine is to be executed. The available options are listed on the screen. Enter the appropriate number.

The exit module specifications made as file options are used as default values when the file is accessed. Users can override the default values using the Exit Specification function described in the section **User Exits** in the *Super Natural User's Guide*.

**Note:**

If the exit program requires parameters, the user must specify them manually using the Exit Specification function.

For further information on user exits, see Exit Programs.

**VSAM Files****Note:**

You can not use the transaction mode for data maintenance UPDATE MULTIPLE with VSAM files.

Option	Description
Record Type Field Name	Name of the field on which the record type is based.
Record Type Format	Format of the record type. "A" - alphanumeric, "N" - numeric, "B" - binary.
Record Type Length	Length of the record type (1 to 10).
Record Type Offset	Number of positions in the record type base field prior to the record type value. For example, if the record type being defined is located in the third position of the base field, the value 2 would be entered as offset to skip the first two positions.
Record Type Value	Value of the record type.
Record Type End Value	End value, if the record type is to cover a range of values (optional).

**Example:**

```
Record type field name CRUISE-ID is record type a key? Record type format N Record type length 1 Record type offset 1 Record type value 3 Record type end value 5
```

If a transaction is created using the user view as defined above, only those records of the physical file will be available that have the numbers 3, 4 or 5 (value/end value) as second character (offset) of the field CRUISE-ID.

**DL/1 File Options (DL/1 Considerations)****Note:**

The file options Physical Read Allowed and Adabas Sorting Allowed must be set to "N" for DL/1 files.

The following window is displayed:

```

14:32          ***** Super Natural *****          1999-05-21
SBE          Modify File SAG-TOURS-E-CONTRACT >Options          SRMFMO

                                     +-----DL/1 Files-----+
                                     ! File: SAG-TOURS-E-CONTRACT      !
                                     !                               !
_  DDM Check / Display O !                               !
                                     ! Enter up to 5 PSBs where this file is !
_  Database Access       ! included.                               !
                                     !                               !
_  Exit Specification    ! 1 .. _____                       !
                                     ! 2 .. _____                       !
_  VSAM Files            ! 3 .. _____                       !
                                     ! 4 .. _____                       !
_  DL/1 Files            ! 5 .. _____                       !
                                     !                               !
                                     ! (DL/1 only)                               !
                                     !                               !
                                     +-----+

```

The PSB entry is used for the NATPSB command when running a transaction against a DL/1 file.

If only one file is accessed in the transaction, the first PSB entry will always be used.

If two files have been linked for the transaction, the PSB lists of these files are compared to find a common PSB for the linked files.

**Note:**

This option is only valid when operating under CICS.

## Users

When you choose >Users, the Modify File >Users screen appears as in the following example:

```

14:33          ***** Super Natural *****          1999-05-21
SBE          - Modify File SAG-TOURS-E-CONTRACT >Users -          SRMFMO
                                     More:      +

  Cmd  User ID  Access  Password
  *-----*
  ___  AZ       R
  ___  BF       R
  ___  CCA      R
  ___  CCH      R
  ___  CF       D
  ___  CHEF     D
  ___  CMR      D
  ___  CR       R
  ___  DA       R
  ___  DEMO1    R
  ___  DEMO2    R
  Add  _____ Add Multiple: _

>Options
Cmd(s): Add, Modify, Delete
Select one command from list
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      Flip      +      Canc

```

The Modify File >Users screen displays the following information:

- 
- Users which are authorized to use the file you are modifying
- 
- Code for the data access level the user has for each file
- 
- Whether the user has an Adabas password for password protected files.

You use the Modify File >Users screen to link users to (give him/her authorization to use) to the file you are modifying/adding or to modify or delete existing links.

If you are adding a file, the Modify File>Usersscreen is empty.

### Adding / Linking Single Users to a File

#### ▶ To add (link) a user to a file:

1. Issue the ADD USER*name* command.

The Add/Modify Link to User window appears:

```

14:34          ***** Super Natural *****          1999-05-21
SBE           - Modify File SAG-TOURS-E-CONTRACT >Users -          SRMFMU

          Cmd  User ID  Access  Password          +--Add/Modify Link to User--+
          * _____          !                               !
          ___ AZ           R          !  User ID ..... CF_____ !
          ___ BF           R          !                               !
          ___ CCA          R          !  Access ..... D          !
          ___ CCH          R          !                               !
          mo CF           D          !  Password set ..          !
          ___ CHEF        D          !  Password ..... _____ !
          ___ CMR          D          !                               !
          ___ CR           R          +-----+

```

2. Determine the user's access level to the file by typing one of the following codes in the Access field:

File Access Code	Description
R	Read only
U	Update (includes read). The user can update existing records in this file. Not available under Natural Security.
A	Add (includes update). The user can add new records to this file. Not available under Natural Security.
D	Delete (includes add). The user can delete records in this file.

3. Enter a password in the Password field (optional).

Users who do not have the same password can not access transactions in public or common libraries created by this user using this file.

4. Press Enter.

The user is now authorized to use the file at the access level specified.

For further information on passwords, see User Profile, Option and Adabas Password Hierarchies in **Technical Information**.

## Adding / Linking Multiple Users to a File

### To link multiple users to a file:

1. Mark the Add Multiple field on the Modify File >User screen.

The Add/Link Multiple Users window appears:

```

14:34          ***** Super Natural *****          1999-05-21
SBE           - Modify File SAG-TOURS-E-CONTRACT >Users -          SRMFMU

          Cmd  User ID  Access  Password  +----Add/Link Multiple Users----+
          * _____  !      User ID  Access  Password !
          ___ AZ      R      !      * _____  !
          ___ BF      R      !      *****      !
          ___ CCA     R      !      A      !
          ___ CCH     R      !      AA     !
          ___ CF      D      !      AA1    !
          ___ CHEF    D      !      AA2    !
          ___ CMR     D      !      AA3    !
          ___ CR      R      !      AA4    !
          ___ DA      R      !      AA5    !
          ___ DEMO1   R      !      AA6    !
          ___ DEMO2   R      !      AA7    !
          Add _____ Add Multiple: x !      AA8    !
          !      AA9    !
          >Options !
          Cmd(s): Add, Modify, Delete +More: +-----+

```

2. Mark each user you want to use the file.
3. Type in a file access code for each user.

For further information on file access codes, see Adding / Linking Single Users to a File in **Users**.

4. Type in a password for each file (optional).
5. Press Enter.

The users are now authorized to use the file at the access levels specified.

## Modifying Links to Users

You can modify the access code and Adabas password for users already authorized to use the file.

### To modify a link to a user:

1. Issue the MODIFY *user* command.

The Add/Modify Link to User window appears.

2. Modify the file access code (optional).

If the Password Set field is marked, a password is already defined for the file. You can either change or delete the password.

3. Type a new password in the Password field to change the current password (optional).

Or:

Type blanks in the Password field to delete the current password (optional) and press Enter.

The user is now authorized to use the file at the access level specified.

## Deleting Links to Users

You can delete the link from the file to a user, the access code and a password for files the user is already authorized to use.

### ▶ To delete a file from the file list:

1. Issue the `DELETE user-id` command.
2. Confirm the deletion in the window which appears.

The user named is no longer authorized to the file.

## Copying Files

### ▶ To copy a file:

- Issue the `COPY FILE source file-name target file-name command`

A new file is created with the file options and user list of the source file.

## Deleting Files

### ▶ To delete a file:

1. Issue the `DELETE FILE file-name` command.
2. Confirm the deletion in the window which appears.

## Importing Files

When Super Natural is operating under the Natural Security system, you can use the Import File function instead of the Add File function to define files.

The Import File function is listed on the Special Services menu. For further information, see Importing Files in **Special Services**.