

Overview of Profile Parameters

This chapter provides information on the profile parameters that can be set in the NATPARM parameter file (or an alternative parameter file).

File	Edit	Configuration	Search
	Database Management...		
	Natural Execution Configuration...		
	Natural Development Environment...		
	Product Configuration...		
	Client/Server...		

The individual parameters are divided into the following parameter groups according to their functions.

- Database Management
- Natural Execution Configuration
- Natural Development Environment
- Product Configuration
- Client/Server

This section lists all parameters that can be set with the Configuration Utility. However, if you are not an administrator, not all of these parameters are displayed. Some parameters can only be seen and thus set by users who are defined as administrators (see also *Administrator Assignments* in the local configuration file).

For a full description of all available profile parameters, see the *Parameter Reference* or follow the links provided in this section.

Database Management

This parameter group contains the following categories:

- General Parameters
- Adabas Specific
- Administrator DBMS Assignment
- User DBMS Assignment

See also: *Database Management System Assignments* in the global configuration file.

General Parameters

The following profile parameters apply to the supported database management systems.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Database updating	DBUPD
Execution of END/BACKOUT TRANSACTION	ET
ET at end of program	ETEOP

Adabas Specific

If Natural is used with Adabas, review the following profile parameters and, if necessary, adjust the default values to meet your specific requirements.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Adabas user identification	ETID
Multifetch	MFSET
Terminate when no ISN found with FIND statement	RCFIND
Terminate when no ISN found with GET statement	RCGET
Record hold processing	WH
Adabas OPEN/CLOSE processing	OPRB

Administrator DBMS Assignment

The following profile parameters are used to assign administrator-specific database management system settings.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Administrator logical files	LFILE
XA database list	XADB
Translation of file number	TF

User DBMS Assignment

The following profile parameters are used to assign user-specific database management system settings.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
User database ID	UDB
Database for transaction data	ETDB
User logical files	LFILE

Natural Execution Configuration

This parameter group contains the following categories:

- Batch Mode
- Buffer Sizes
- Character Assignments
- Command Execution
- Date Representation
- Device/Report Assignments
- Error Handling
- Field Appearance
- Limits
- Program Loading and Deletion
- Regional Settings
- Report Parameters
- Steplibs
- System Files
- System Variables
- Work Files

Batch Mode

The profile parameters which affect the batch mode behavior of Natural are arranged on the following pages:

- Channels
- Appearance
- Frame Characters

See also *Natural in Batch Mode* in the *Operations* documentation.

Channels

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Input data file name	CMOBJIN
Input data code page	CPOBJIN
Input commands file name	CMSYNIN
Input commands code page	CPSYNIN
Output file name	CMPRINT
Output code page	CPPRINT
Natural log	NATLOG
Enable error processing	CC

Appearance

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Similar output	BMSIM
Display input data	ECHO
Display session-end message	ENDMSG
Display trailing blanks	BMBLANK
Display control characters	BMCONTROL
Display process time	BMTIME
Display window title	BMTITLE
Display Natural version	BMVERSION

Frame Characters

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Frame characters	BMFRAME

Buffer Sizes

Natural uses several buffer areas for the storage of programs and data. You may need to adjust their sizes in order to achieve maximum buffer efficiency.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Storage for sort program	SORTSIZE
Source area size	SSIZE
Work area size	USIZE
SAG editor buffer pool size	EDTBPSIZE
SAG editor logical files	EDTLFILES

See also *Buffer Pool Assignments* in the local configuration file.

Character Assignments

The following profile parameters are used to change default character assignments.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Terminal command character	CF
Clear key character	CLEAR
Decimal character	DC
Filler character	FC
Help character	HI
Input assign character	IA
Input delimiter character	ID
Thousands separator character	THSEPCH

Once a character has been defined to replace a default character, this character cannot be used as data.

Command Execution

The following profile parameters are used to control the execution of commands.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Enable command mode	CM
Enable terminal command %% and %	ESCAPE
Disable Natural commands	NC
Dynamic recataloging	RECAT

Date Representation

The following profile parameters are used to control the representation of dates.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Date format in output	DFOUT
Date format in STACK	DFSTACK
Date format in report titles	DFTITLE
Date format	DTFORM
Maximum year	MAXYEAR
Year sliding window	YSLW

Device/Report Assignments

These parameters are used to modify your screen and printer configurations as well as your report assignments.

See also the profile parameter `CMPRTnn` which is used for additional reports in batch mode.

Device Assignments

The device assignments are shown in a scrollable list of configurable logical devices (VIDEO and the logical printers LPT1 to LPT31) as used in the `DEFINE PRINTER` statement. The following information can be changed:

Close mode

You can select a different close mode for each logical printer. Possible values are:

Close Mode	Description
Auto	Printers are automatically closed at the end of a program or when the execution of a called method is terminated. This is the default setting.
User	Closing of printers is controlled by the user. The printer is closed, if one of the following conditions is met: <ul style="list-style-type: none"> ● a <code>CLOSE PRINTER</code> statement is executed, ● a <code>DEFINE PRINTER</code> statement is executed, ● the session terminates.

Notes:

1. Instead of using the device `TRANSFER`, it is recommended to use a logical printer device (one of LPT1 to LPT31) where the device destination of the physical output device has been set to

the value "E" (send data to an Entire Connection terminal). See also *Defining Printers* in the *Natural Connection* documentation.

2. If the device TRANSFER is used in the report assignments, the close mode for this device is determined as follows: The report number to which the device TRANSFER has been allocated is used as the device number (for example, for report number 2 the device LPT2 is used). The close mode that is defined for this device is also used as the close mode setting for the device TRANSFER.

The following program example describes the user-controlled closing of printers. Note that the close mode must be first set in the parameter file.

```
DEFINE DATA
  LOCAL
    1 #OUT (A8)
END-DEFINE
*
#OUT := *PROGRAM
*
* Write to report with close mode "user"
WRITE (1) 'OUTPUT PROGRAM: ' #OUT
*
* Write to report with close mode "auto"
WRITE (2) 'OUTPUT PROGRAM: ' #OUT
*
* Close printer 1
* Printer 1 is user-controlled
CLOSE PRINTER (1)
*
END
```

Line Size

See the description of the LS parameter.

Page Size

See the description of the PS parameter.

Max. Pages

See the description of the MP parameter.

Physical Output Device

The path and/or name of the program, script (including any arguments) or file that should receive the print data. Programs and scripts can read the incoming print data via `stdin`.

For example, you can specify the standard print command of your printer spooler with all options as described below.

- For UNIX System V:

```
lp options
```

- For BSD-UNIX:

`lpr options`

Line size, page size and maximum page number should be compatible with your hardware printer assignments.

Device Destination

Determines how Natural should interpret the information in the **Physical Output Device** field.

Option	Description
F	If "F" is specified, this is assumed to be a file specification.
D	If "D" is specified, this is assumed to be a command or script.
E	If "E" is specified, all data that are written to this logical printer are sent to an Entire Connection terminal. That is: output data which normally appear on the screen are written into an NCD file. See also <i>Defining Printers</i> in the <i>Natural Connection</i> documentation.

Note:

The following applies to the **Physical Output Device** field if the **Device Destination** field has been set to "F". As with work files, a file name can be defined by using environment variables. Any existing file of the same name at the specified location is normally overwritten, unless the entered file name is immediately prefixed by two right angle bracket characters (>>).

Report Assignments

The report assignments are shown in a scrollable list in which you can assign a Natural report number (report 1 to report 31) to a logical device name. The following information can be changed:

Override default report number

See the *Parameter Reference* for a description of the profile parameter MAINPR.

Device

For each report number, you can select another output medium. Possible values are (you can also press PF2 to select one of these values):

Value	Description
LPT1 to LPT31	Outputs the report data to the corresponding physical device (see the Physical Output Device field in the device assignments).
SOURCE	Outputs the report data to the source area. The user can then, for example, issue the <code>EDIT</code> command to open the output data in the editor and save it accordingly.
DUMMY	Report data are discarded.
INFOLINE	Report data are sent to the infoline. See also the description of the terminal command <code>%X</code> .

Report 0 is always implicitly assigned to VIDEO (that is, the output is shown on the screen). No other report number can be assigned to VIDEO.

Profile

In addition to the name of the logical device, you can assign a printer profile that has been defined in the **Printer Profiles** node of the global configuration file. All defined printer profiles can be selected by pressing F2. Select the blank entry if you do not want to use any of these profiles.

Error Handling

The following profile parameters are used to control error handling within Natural.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Error processing for PA/PF keys	IKEY
Display system error messages in full	MSGSF
Automatic REINPUT	REINP
Sound terminal alarm	SA
Sound bell on syntax error	SNAT
Zero division	ZD
Suppress message number prefix NAT	NOAPPLERR
Allow runtime interrupt	RTINT

Field Appearance

The following profile parameters influence I/O handling.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Control variable modified at input	CVMIN
Filler chars protected	FCDP
Enable lowercase	LC
Numeric fields entry	NENTRY
Overwriting protected	OPF
Zero printing	ZP
Print mode	PM

Limits

The following profile parameters are used to prevent a single program from consuming an excessive amount of internal resources.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Error on loop limit	LE
Processing loop limit	LT
Maximum number of DBMS calls	MADIO
Maximum number of program calls	MAXCL
Size of page data set	PD
System time delay	SD

Program Loading and Deletion

The following profile parameters are used to control the dynamic loading and deletion of programs.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Dynamic loading of non-Natural programs	CDYNAM
Allow dynamic parameter	DYNPARM
Release GDA in utility mode	FREEGDA
Read only access to system files	ROSY
Buffer pool search first	BPSFI
Error transaction program name	ETA
Program command line parameter	PRGPAR
Program to receive control after Natural termination	PROGRAM
Natural stack command line	STACK

Regional Settings

The following profile parameters are used to control the country- or region-specific settings of Natural.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Day differential	DD
Time differential	TD
User language	ULANG
Use UTF-8 format for sources	SUTF8
Retain source format	SRETAIN
Code page conversion error	CPCVERR
Default code page	CP
Substitution character	SUBCHAR
Display order of output data	DO

Report Parameters

The following profile parameters are used to control various attributes of Natural reports.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Page eject	EJ
Numeric edit mask free mode	EMFM
Line size	LS
Page size	PS
Spacing factor	SF
Default input terminal mode	IM

Steplibs

The following parameters are used to manage the steplibs.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
*STEPLIB	STEPLIB
Steplib Extension	For information on how to define additional steplibs and how to use the columns in this table, see <i>Additional Steplib Assignments</i> below.

Additional Steplib Assignments

You can define up to eight libraries that can be searched for objects which cannot be found in the current library. These additional steplibs are defined in a table. The steplib number is shown in the first column. The following information can be specified:

Name

The name of an existing library.

DBID

The database ID of the file system where the library is located.

FNR

The file number of the file system where the library is located.

Note:

The following application programming interfaces are available for handling multiple steplibs: USR3025N (when Natural Security is not installed) and USR4025N (when Natural Security is installed).

System Files

The following profile parameters are used to specify the Natural system files.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
FNAT (Natural system file for system programs)	FNAT
FUSER (Natural system file for user programs)	FUSER
FSEC (Natural Security system file)	FSEC
FDIC (Predict system file)	FDIC
FDDM (Natural system file for DDMs)	FDDM

The physical location of each system file is defined in the global configuration file. See *System Files* in the global configuration file.

System Variables

The following profile parameters are used to adjust Natural system variables for the start of a Natural session.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Automatic logon	AUTO
Startup library	INIT-LIB
Startup program	STARTUP
User ID	USER

See also the *System Variables* documentation.

Note:

You can use the command line parameters NATVERS (to specify the Natural version) and PARM (to specify a specific Natural parameter file) at session startup. These parameters can only be specified dynamically, therefore, they cannot be modified or viewed within the Configuration Utility.

Work Files

The following profile parameters can be used to specify work file settings.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Entire Connection protocol mode	ECPMOD
Entire Connection local NCF protocol	NCFVERS
PC support	PC
Max. work file number	WORK
Alternate sort work file names	TMPSORTUNIQ
Work file open on first access	WFOPFA
Work files	For information on how to define work files and how to use the columns in this table, see <i>Work File Assignments</i> below.

See also the profile parameter *CMWRKnn* which applies to batch mode.

See also *Work Files* in the *Operations* documentation.

Work File Assignments

The work file assignments are shown in a scrollable list containing work files with the numbers 1 to 32. The work file number is shown in the first column. When a work file name has already been defined for a work file number, this information (path and name) is shown in the **Name** column.

The following information can be changed:

Type

For each work file number, you can select another work file type. Possible values are (you can also press PF2 to select one of these values):

Work File Type	Description
Default	Determines the file type from the extension for upward compatibility.
Transfer	Used to transfer data to and from a PC with Entire Connection. This work file type represents a data connection between a Natural session on UNIX or OpenVMS and an Entire Connection terminal on a PC. The work file data is written in Entire Connection format on the PC.
SAG	Binary format.

Work File Type	Description
ASCII	<p>Text files with records terminated by a linefeed (LF).</p> <p>When you press PF4, you can change the properties for this work file type: a dialog box appears in which you can specify the following information:</p> <p>Code page</p> <p>You can specify the code page that is to be used for writing the work file (ICU code page name; IANA name recommended). When a code page is not defined here, the default code page defined with CP is used.</p>
ASCII compressed	<p>ASCII format where all trailing blanks are removed.</p> <p>When you press PF4, you can change the properties for this work file type: a dialog box appears in which you can specify the following information:</p> <p>Code page</p> <p>You can specify the code page that is to be used for writing the work file (ICU code page name; IANA name recommended). When a code page is not defined here, the default code page defined with CP is used.</p>
Entire Connection	<p>With this work file type, you can read and write (for example, with the statements READ WORK FILE and WRITE WORK FILE) directly to a work file in Entire Connection format on the local disk.</p> <p>Note: No transfer to a PC is possible. The Entire Connection terminal is not used in this process.</p>
Unformatted	<p>A completely unformatted file. No formatting information is written (neither for fields nor for records).</p> <p>When you press PF4, you can change the properties for this work file type: a dialog box appears in which you can specify the following information:</p> <p>Code page</p> <p>You can specify the code page that is to be used for writing the work file (ICU code page name; IANA name recommended). When a code page is not defined here, the default code page defined with CP is used.</p>
Portable	<p>Files which can handle dynamic variables exactly and can also be transported (for example, from a little endian machine to a big endian machine, and vice versa).</p>

Work File Type	Description
CSV	<p data-bbox="407 254 1195 352">Comma-separated values. Each record is written to one line in the file. By default, a header is not written. The default character which is used to separate the data fields is a semicolon (;).</p> <p data-bbox="407 386 1195 485">When you press PF4, you can change the properties for this work file type: a dialog box appears in which you can specify the following information:</p> <p data-bbox="407 518 505 548">Header</p> <p data-bbox="467 581 1162 646">When set to "ON", a header with the Natural field names is written to the file.</p> <p data-bbox="407 680 662 709">Separator character</p> <p data-bbox="467 743 1174 808">You can select a different separator character. If you require a separator character which is not listed, you can enter it.</p> <p data-bbox="407 842 542 871">Code page</p> <p data-bbox="467 905 1162 1045">You can specify the code page that is to be used for writing the work file (ICU code page name; IANA name recommended). When a code page is not defined here, the default code page defined with CP is used.</p>

For information on the work file formats which result from a specific work file type, see *Work File Formats* in the *Operations* documentation.

Close mode

You can select a different close mode for each work file. Possible values are:

Close Mode	Description
Auto	<p>This is the default setting. Work files are automatically closed at the end of a program or when the execution of the first called method in a method call hierarchy is terminated and the first called method was called over COM.</p> <p>If the first called method was called locally (not over COM), the work files are not closed.</p> <p>Example: Method A (called over COM) invokes method B which in turn invokes method C. When the execution of method A is terminated, all work files are closed.</p>
User	<p>Closing of work files is controlled by the user. The work file is closed, if one of the following conditions is met:</p> <ul style="list-style-type: none"> ● a CLOSE WORK FILE statement is executed, ● a DEFINE WORK FILE statement is executed, ● the session terminates.

The following program example describes the user-controlled closing of work files. Note that the close mode must be first set in the parameter file.

```

DEFINE DATA
  LOCAL
    1 #OUT (A8)
END-DEFINE
*
#OUT := *PROGRAM
*
* Write to work file with close mode "user"
WRITE WORK 1 'OUTPUT PROGRAM: ' #OUT
*
* Write to work file with close mode "auto"
WRITE WORK 2 'OUTPUT PROGRAM: ' #OUT
*
* Close work file 1
* Work file 1 is user-controlled
CLOSE WORK FILE 1
*
END

```

Attributes

You can define different attributes for each work file. You can specify one attribute for each of the following categories:

Category	Possible Attributes	Default Attribute	Description
Append mode	NOAPPEND or APPEND	NOAPPEND	Decides whether new data overwrites the current data in the work file or whether new data is appended at the end of the current data.
Keep/delete work file after close	KEEP or DELETE	KEEP	Decides whether the work file is kept after closing it or whether it is deleted.
Write byte order mark (BOM)	BOM or NOBOM	NOBOM	Decides whether a byte order mark is written in front of the work file data. Only available for the work file types which write code page data: ASCII, ASCII compressed, Unformatted and CSV. For these work file types, the attribute BOM can only be set, if the code page UTF-8 is defined for the work file (see the description of the Type column). If a work file of another type is written or a code page other than UTF-8 is defined, the specification of the attribute BOM is ignored during runtime. See also <i>Work Files and Print Files on Windows, UNIX and OpenVMS Platforms</i> in the <i>Unicode and Code Page Support</i> documentation.

Attributes cannot be defined for the work file type "Transfer".

You can enter a unique abbreviation for each attribute. The delimiter character can be one of the following: blank, comma(,) or semicolon (;). Example: "a, d" which stands for APPEND and DELETE.

You can only specify one attribute for each category. You can specify them in any sequence. When no attributes are specified in the table, the default values are used.

Name

Specify the location (path and name) of the work file.

See also *Defining Work File Names with Environment Variables* in the *Operations* documentation.

Natural Development Environment

This parameter group contains the following categories:

- Compiler Options
- Environment Assignments
- Remote Debugging

Compiler Options

The following profile parameters are used to set options for the Natural compiler.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Compiler output	CO
Interpretation of database field short names	DBSHORT
Dump generation	DU
Length/format specification	FS
Keyword checking	KCHECK
Structured mode	SM
Generate symbol tables	SYMGEN
Syntax error control	SYNERR
Dynamic thousands separator	THSEP
Translate quotation marks	TQMARK
MASK compatible with MOVE EDITED	MASKCME
Parameter checking for CALLNAT statement	PCHECK
Internal sign representation of format P	PSIGNF
Endian mode	ENDIAN
Generation of global format identifiers	GFID
Active cross reference	XREF

See also the description of the system command COMPOPT.

Environment Assignments

The following profile parameters are used to adjust Natural environment variables.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Other editor	EDITOR
Usage of editor ring buffer	EDTRB
Access to operating system from Natural	SHELL

Remote Debugging

The following profile parameters are used to allow for remote debugging.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Remote debugging	RDACTIVE
Node name	RDNODE
Port number	RDPOR

See also the *Debugger* documentation.

Product Configuration

This parameter group contains the following categories:

- Entire Transaction Propagator
- Entire System Server
- Function Keys
- Web I/O Interface

Entire Transaction Propagator

The following profile parameters are used in conjunction with Software AG's Entire Transaction Propagator.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
ETP database list	ETPDB
Size of ETP work area	ETPSIZE

Entire System Server

The following profile parameter is used in conjunction with Software AG's Entire System Server Interface.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
ESX database	ESXDB

Function Keys

The following profile parameter is used to assign values to PA, PF and CLEAR keys.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
CLR, PA1 to PA3, PF1 to PF24	KEY

Web I/O Interface

The following profile parameter is used for Unicode support with the Natural Web I/O Interface.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Web I/O Interface	WEBIO

Client/Server

This parameter group contains the following categories:

- Remote Dictionary Access
- Remote Procedure Call

Remote Dictionary Access

The following profile parameter is used for remote dictionary access.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Name of logical dictionary server	USEDIC When a logical dictionary server has been defined in the global configuration file, you can specify its name here. See <i>Dictionary Server Assignments</i> in the global configuration file.

Remote Procedure Call

The profile parameters which apply to the Natural Remote Procedure Call (RPC) are grouped under the following headings:

- RPC (General)
- RPC (Client)
- RPC (Server)

RPC (General)

These profile parameters apply to both client and server.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Request buffer size (KB)	MAXBUFF
ACI version	ACIVERS
Code page	CPRPC

RPC (Client)

These profile parameters apply to the client only.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Automated remote execution	AUTORPC
Retry service on alternative server	TRYALT
Send-buffer compression	COMPR
Request timeout (sec)	TIMEOUT
Default server	DFS
Remote directory servers	RDS
Library for service directory	RPCSDIR

RPC (Server)

These profile parameters apply to the server only.

Option	See the <i>Parameter Reference</i> for a description of this profile parameter
Start session as RPC server	SERVER
Logon required for server request	LOGONRQ
Server name	SRVNAME
Server node	SRVNODE
Server user ID	SRVUSER
Server wait time (sec)	SRVWAIT
Server termination event	SRVTERM
Server commit time	SRVCMIT
Transport protocol	TRANSP
RPC trace level / Trace on error	TRACE