

# SYSPARM Utility

The SYSPARM utility is used to create and maintain a set of Natural profile parameters as an individual parameter profile that can be used for each Natural session.

When invoking Natural with dynamic profile parameters, you can specify individual parameters each time you invoke Natural. More comfortably, however, you can specify a set of parameters once in SYSPARM, store this set under a parameter profile name, and then invoke Natural with only one dynamic parameter: `PROFILE=profile-name`. The parameters defined in this parameter profile are then passed to Natural as dynamic parameters and must therefore comply with the syntax of `PROFILE` described in the *Parameter Reference* documentation.

For descriptions of the individual profile parameters that can be defined in a parameter profile, refer to the *Parameter Reference* documentation.

The parameter profiles are stored under user-defined names in the specified FNAT or FUSER Natural system file.

You can restrict the use of a parameter profile to specific users by setting the profile parameter `USER` as described in the *Parameter Reference* documentation.

The *SYSPARM Utility* documentation covers the following topics:

- Invoking SYSPARM
  - List Profiles
  - Display Profile
  - Add New Profile
  - Modify Profile
  - Editing Profiles
  - Copy Profile
  - Delete Profile
  - Direct Commands and Batch Processing
  - Maintaining Profiles in Different Environments
- 

## Invoking SYSPARM

 To invoke the SYSPARM utility

- Issue the following Natural system command:

```
SYSPARM
```

The **Menu** of the SYSPARM utility is displayed which provides the following functions and fields:

Field/Function	Explanation
<b>List Profiles</b>	Displays a list of all parameter profiles. From the list, you can select one or more profiles for display, modification or deletion.
<b>Display Profile</b>	Displays a specific parameter profile.
<b>Add New Profile</b>	Creates a new parameter profile.
<b>Modify Profile</b>	Changes an existing parameter profile.
<b>Copy Profile</b>	Creates a new parameter profile by copying an existing one.
<b>Delete Profile</b>	Deletes an existing parameter profile.
<b>Profile</b>	Selects the specified parameter profile. Enter a valid profile name or use asterisk (*) notation to select a range of profiles. Use asterisk (*) or leave this field blank to select all profiles available.
<b>Copy to</b>	Copies the specified parameter profile.
<b>DBID</b>	Selects the database ID (DBID) of the Natural system file where the parameter profile is stored. Default is the current FNAT.
<b>FNR</b>	Selects the file number (FNR) of the Natural system file where the parameter profile is stored. Default is the current FNAT.
<b>Password</b>	Specifies the password (8 characters) of the Adabas file where the parameter profile is stored.
<b>Cipher</b>	Specifies the cipher code (8 digits) of the Adabas file where the parameter profile is stored.

The SYSPARM functions listed above are described in the remainder of this documentation.

## List Profiles

This function is used to list all parameter profiles contained in the specified Natural system file. From the parameter profile list, you can view, modify or delete one or more profiles.

### To list parameter profiles

- In the **SYSPARM Menu**, enter function code **L** and, in the **Profile** field, enter the name of a parameter profile or specify a range of names:
  - Enter an asterisk (\*) or leave the field blank to list all parameter profiles.
  - Use asterisk (\*) notation to list all parameter profiles with names that start with a specified value, where value is any combination of one or more characters, for example: ABC\*
  - Use the greater than (>) sign to list all parameter profiles with names greater than or equal to a specified value, for example: ABC>

- Use the less than (<) sign to list all parameter profiles with names less than a specified value, for example: ABC<.

The **List Profiles** screen is displayed with a list of all parameter profiles of the specified name range.

You can press PF7 and PF8 to scroll up or down one page in the list.

### ▶ To view, modify or delete a single parameter profile

- Place the cursor anywhere in the **Sel.** or **Profile** column of the parameter profile you want to process and press one of the following PF keys:

PF Key	Line Command	Function
PF4	D	Invokes the <b>Display Profile</b> function.
PF5	M	Invokes the <b>Modify Profile</b> function.
PF6	X	Invokes the <b>Delete Profile</b> function.

Or:

In the **Sel.** column, next to the parameter profile you want to process, enter one of the line commands listed above and press ENTER.

Depending on the key pressed or line command entered, the selected parameter profile is either displayed on the screen or a delete confirmation window opens for this profile.

### ▶ To view, modify or delete multiple parameter profiles

1. In the **Sel.** column, next to the parameter profiles you want to process, enter one of the line commands listed in the table above.

You can use PF7 or PF8 to scroll up or down in the list of parameter profiles to go to the required items.

2. Press ENTER when you have finished entering all line commands for all parameter profiles.

Depending on the line command entered, the first parameter profile selected is either displayed on the screen or a delete confirmation window opens for this profile.

3. When finished with the first parameter profile, press PF3 or PF12 to process the next parameter profile. PF3 also saves the current parameter profile, if modified.

## Display Profile

This function is used to display a parameter profile.

### ▶ To display a parameter profile

- In the **SYSPARM Menu**, enter function code D and the name of an existing parameter profile.



## Modify Profile

This function is used to change the parameter specifications of a parameter profile.

### To modify a parameter profile

- In the **SYSPARM Menu**, enter function code M and the name of an existing parameter profile, and press ENTER.

Or:

Invoke the **Display Profile** screen for an existing parameter profile and press PF5.

Or:

Invoke the **List Profiles** screen and select one or more parameter profiles as described in the relevant section.

An edit screen with the parameter definitions of the specified parameter profile appears. For instructions on using this screen to add or modify definitions, see *Editing Profiles*.

## Editing Profiles

The edit screen of the SYSPARM utility appears when executing the **Add New Profile** or the **Modify Profile** function. This screen is used to enter the parameter specifications you want to include in a parameter profile. For detailed information about the profile parameters available, refer to the *Parameter Reference* documentation.

The edit screen looks similar to the example below:



- PF Keys
- Help with Parameters

## PF Keys

The following PF keys are available on the edit screen:

PF Key	Function
PF4	Checks whether the parameter specifications within the parameter profile are syntactically correct.
PF5	Stores the parameter profile.
PF9	Inserts one blank line below the line containing the cursor.
PF10	Deletes the line containing the cursor.
PF11	Copies the line containing the cursor.

## Help with Parameters

The **Help with parameters** field on the edit screen can be used to obtain help information on valid parameter specifications and incorporate new specifications into the current parameter profile.

### To view online help and include new parameters

1. In the **Help with parameters** field, enter one of the following:
  - The name of the required parameter.
  - One or more characters with asterisk (\*) notation (for example, PR\*) for all parameters whose names start with the specified character(s).
  - An asterisk (\*) for all parameters available.

2. Do *not* press ENTER yet if you want to *insert* a new parameter specification into an existing parameter profile and proceed with the following step.

Mark the input line below which you want to insert the new parameter specification(s) by placing the cursor on this line, and then press ENTER.

Or:

Press ENTER if you want to *append* a new parameter specification to the end of the parameter profile.

3. After performing the previous step, depending on the parameter value entered earlier, one of the following appears:
  - If you entered a full name, a help screen (see below) appears.
  - If you specified a name range using the asterisk (\*), a window opens with a list of all parameters of the specified range.

From this list, select the required parameter by entering any character in the input field next to the required parameter and pressing ENTER.

The help screen looks similar to the example below:

```

13:08:21          ***** NATURAL SYSPARM UTILITY *****          2009-02-11

The parameter AUTO is used to cause an automatic logon at the start
of the Natural session.

AUTO=ON          An automatic logon is executed at the start of the Natural
                  session. The value contained in the Natural system variable
                  *INIT-USER is used as the user ID for the logon.
AUTO=OFF          No automatic logon is performed.

Enter your parameter specification:          More Help:  (+,-)
>
>
>
>
>
Command==>

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Check                                Canc

```

The upper screen section contains help text on the specified parameter (in the example above, AUTO). If the text contains more than one page, you can enter a plus (+) sign before the **More Help** field to display the next page. Enter a minus (-) sign to return to the previous screen or enter a period (.) to terminate the help function and return to the edit screen.

The lower section contains five input lines (marked with >).

4. Press ENTER.
5. In the input lines, enter the required parameter specifications.

You can press PF4 to check the specifications.

6. Press PF3 to terminate the help function.

The edit screen appears with the new parameter specifications either appended to the end of the parameter profile or inserted below the input line marked with the cursor in Step 3.



## Copy Profile

This function is used to copy parameter profiles.

### To copy a parameter profile

1. In the **SYSPARM Menu**, enter the following:
  - Function code C.
  - In the **Profile** field, the name of the parameter profile from which you want to copy the new parameter profile.
  - In the **Copy to** field, the name of the new parameter profile.
2. Press ENTER.

A message appears indicating successful completion of the copy operation.

## Delete Profile

This function is used to delete an existing parameter profile.

### To delete a parameter profile

1. In the **SYSPARM Menu**, enter function code X and the name of the parameter profile you want to delete, and press ENTER.

Or:

Invoke the **List Profiles** screen and select one or more parameter profiles as described in the relevant section.

A **Delete a Profile** window opens with the name of the parameter profile you want to delete.

2. Confirm the deletion by entering the name of the parameter profile in the input field and pressing ENTER.

You can cancel a delete operation by pressing PF3 or leaving the input field blank and pressing ENTER.

A message appears indicating either successful completion or cancellation of the delete operation.

## Direct Commands and Batch Processing

The SYSPARM utility functions described earlier can also be executed by using corresponding SYSPARM commands in batch or online mode.

In addition to the functions provided on the SYSPARM utility screens, in batch mode, options are provided for specifying commentary text, the input delimiter and the input assign character.

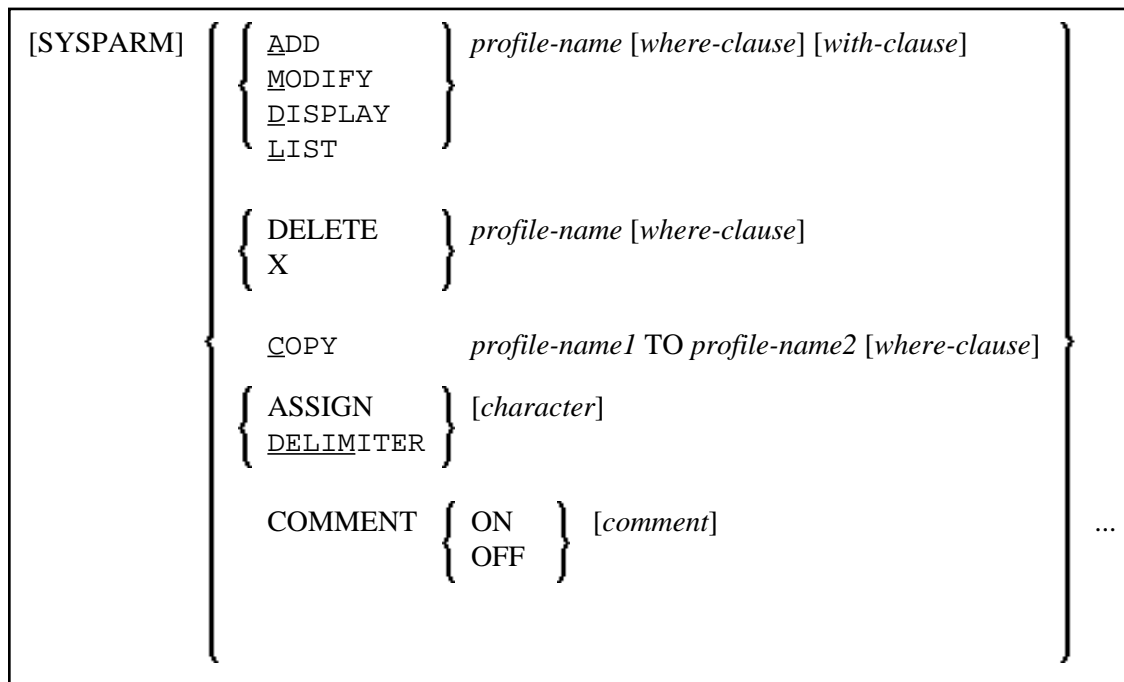
The symbols used in the syntax diagrams shown in this section are explained in *System Command Syntax* in the *System Commands* documentation.

This section covers the following topics:

- Basic Command Syntax
- where-clause
- with-clause
- Batch Processing
- Example of SYSPARM in Batch

## Basic Command Syntax

Displayed below is the basic syntax that applies when processing SYSPARM commands.



The keywords, the variable values to be supplied with the keywords, and the optional clauses indicated in the basic command syntax of SYSPARM are described in the following table:

Keyword	Explanation
SYSPARM	Invokes the SYSPARM utility.  This keyword is only required when executing SYSPARM commands from the NEXT or MORE prompt.
ADD	Executes the <b>Add New Profile</b> function.  To terminate an ADD command, enter a period (.) in a separate line.

Keyword	Explanation
MODIFY	<p>Executes the <b>Modify Profile</b> function.</p> <p>To terminate a MODIFY command, enter a period (.) in a separate line.</p> <p>To insert a commentary text into a parameter profile, place the comment between the characters /* and */.</p> <p>See also <i>Example Input</i>.</p>
DISPLAY	Executes the <b>Display Profile</b> function.
LIST	Executes the <b>List Profiles</b> function.
DELETE or X	Executes the <b>Delete Profile</b> function.
COPY	Executes the <b>Copy Profile</b> function.
ASSIGN	<p>Specifies or displays the input assign character. You need to change the input assign character before you start processing data that contains the input assign character defined for your current session. Otherwise, you will receive an appropriate Natural system error.</p> <p>If no value is specified, the output contains the character defined for your current session.</p>
DELIMITER	<p>Specifies or displays the input delimiter character. You need to change the input delimiter character before you start processing data that contains the input delimiter character defined for your current session. Otherwise, you will receive an appropriate Natural system error.</p> <p>If no value is specified, the output contains the character defined for your current session.</p>
COMMENT	<p>Not applicable to the command REPLACE.</p> <p>Activates (ON) the comment option and writes a comment after each parameter that is modified, or deactivates (OFF) the comment option.</p> <p>If activated, and if no individual <i>comment</i> (see below) has been specified, the comment inserted for each parameter contains the following data:</p> <ul style="list-style-type: none"> <li>● the ID of the user who last modified the parameter profile as generated by the Natural system variable *USER and</li> <li>● the date and time when the parameter profile was last modified as generated by the Natural system variables *DATV and *TIMX. (See also the relevant sections in the <i>System Variables</i> documentation.)</li> </ul> <p>To modify a comment, use the REPLACE command (see the <i>with-clause</i>).</p>

Keyword	Explanation
<i>character</i>	Any special character: see the Natural session parameters ID (Input Delimiter Character) and IA (Input Assign Character) described in the <i>Parameter Reference</i> documentation.
<i>comment</i>	A commentary text that is to be placed between the characters <i>/*</i> and <i>*/</i> .
<i>profile-name</i>	<p>The name of a parameter profile or a range of profiles. For a range, you can specify one of the following values where <i>value</i> is any combination of one or more characters:</p> <p><i>value*</i>      Selects all parameter profiles with names that start with <i>value</i>, for example: AB* selects AB and AB1 but not AA1.</p> <p><i>value&gt;</i>      Selects all parameter profiles with names greater than or equal to <i>value</i>, for example: AB&gt; selects AB and AB1 but not AA1.</p> <p><i>value&lt;</i>      All items with names less than or equal to <i>value</i>, for example: AX&lt; selects AB and AWW but not AXA.</p> <p>Name ranges are only allowed with the command LIST or, in batch mode, the commands LIST and DISPLAY.</p>
<i>profile-name1</i> <i>profile-name2</i>	<p>Only applies to the COPY command.</p> <p>The source parameter profile (<i>profile-name1</i>) from which to create a new parameter profile and the new target parameter profile (<i>profile-name2</i>) into which to copy the data.</p>
<i>where-clause</i>	Indicates a <i>where-clause</i> described in the relevant section.
<i>with-clause</i>	Indicates a <i>with-clause</i> described in the relevant section.
...	<p>Only applies in batch mode.</p> <p>Illustrates that you can specify more than one SYSPARM function by placing each function in a separate line.</p>

### ***where-clause***

The *where-clause* is optional and applies to the commands ADD, MODIFY, DISPLAY, LIST, DELETE and COPY. Its syntax is as follows:

[WHERE] [DBID <i>dbid</i> ] [FNR <i>fnr</i> ] [PASSWORD <i>password</i> ] [CIPHER <i>cipher</i> ]
---



**Note:**

In the syntax diagram above, the following only applies to the ADD command: [ WITH ]  
*parm-name=parm-value* [*parm-name=parm-value*]. . .

The keywords of the *with-clause* and the variable value that must be supplied with each keyword are explained in the following table:

Keyword	Valid Values
WITH	Optional keyword that indicates the start of a <i>with-clause</i> . Exception: When using the ADD command, you must use the keyword WITH to clearly separate the command from the contents of the parameter profile.
SCAN	Only applies to the commands LIST and DISPLAY.  Scans one or more parameter profiles available in the specified Natural system file for a text string (for example, a parameter or a parameter value) and provides a list of the parameter profiles that contain the specified text string.
NOSCAN	Only applies to the commands LIST and DISPLAY.  Exempts a text string from the scan over one or more parameter profiles available in the current Natural system file and provides a list of the parameter profiles that do <i>not</i> contain the specified text string.
ASSIGN	See ASSIGN in the basic command syntax.
DELIMITER	See DELIMITER in the basic command syntax.
COMMENT	See COMMENT in the basic command syntax.
FIRST	Moves a parameter and its value or a comment to the first position in a parameter profile. This can be required, for example, if you want to specify the profile parameter PARM.  Comments contained in the first position of a parameter profile will remain in this position. A parameter and its value will only be moved to the first position if no comment occupies this position. Otherwise, the parameter will be appended after the comment(s). A comment inserted with FIRST will always be placed in the first position, before any comment(s) that originally occupied this position.
LINE	Places the specified parameter(s) after LINE in a new line at the end of a parameter profile.
NEW	Appends a parameter to the end of a parameter profile but not necessarily in a new line. To place a parameter in a new line, use the parameter LINE.
REMOVE	Removes a parameter and the value assigned (including parentheses) from a parameter profile. The parameter to be removed can be a subparameter, such as the profile parameter DFS, which is a subparameter of the profile parameter RPC.
REPLACE	Replaces an old text string with a new text string contained in a parameter profile. See also the option COMMENT in the basic command syntax.
UPDATE	Updates the value assigned to a parameter.  If the specified parameter does not yet exist, it will be appended to the parameter profile.

Keyword	Valid Values
ADD	<p>For numbers: Increases the size of a parameter value by adding the specified number. The addition can be limited to a maximum or minimum value by specifying MAX or MIN (see below).</p> <p>For text: Appends the specified value to an existing list of values. If the primary parameter value is a single word, a list with two members consisting of the primary value and the specified value to be added is created.</p>
SUBTRACT	<p>For numbers: Decreases the size of a parameter value by subtracting the specified number. The subtraction can be limited to a maximum or minimum value by specifying MAX or MIN (see below).</p> <p>For text: Removes the specified value from an existing list of values. If this results in a one member or empty list, list notation (parentheses) remains.</p>
MAX	Specifies the maximum of a parameter value.
MIN	Specifies the minimum of a parameter value.
<i>text</i>	<p>Any text string contained in a parameter profile.</p> <p>The following applies to the commands SCAN and NOSCAN: The text string must <i>not</i> contain any blank characters.</p> <p>The following applies to the REPLACE command:</p> <p>If neither the old text nor the new text contains blank characters, place a blank character between old and new text. If the old text or the new text contains blank characters, place the input delimiter character specified between old text and new text and around the entire old/new text string.</p> <p>For example:</p> <pre>;This comment is old;This comment is new;</pre> <p>As an alternative to the specified delimiter character, you can choose any of the following characters:</p> <ul style="list-style-type: none"> <li>' an apostrophe</li> <li>,</li> <li>.</li> <li>;</li> <li>/ a slash</li> <li>\ a back slash</li> <li>  a vertical bar</li> </ul>
<i>character</i>	See <i>character</i> in the basic command syntax.
<i>parm-name</i>	The full name of a parameter.

Keyword	Valid Values
<i>parm-value</i>	The value assigned to a parameter.
<i>comment</i>	See <i>comment</i> in the basic command syntax.
<i>number</i>	A numeric value.

## Batch Processing

When processing SYSPARM in batch mode, consider the following:

- To terminate SYSPARM, in a separate line, enter a period (.) or FIN, where FIN ends the Natural session.
- To execute more than one SYSPARM function, specify each function in a separate line.
- To extend a function over two lines, enter the character defined with the session parameter CF (default is %) anywhere in the first line. This indicates continuation on the next line.

See also *Example of SYSPARM in Batch*.

### Related Topics:

*Natural in Batch Mode (Operations documentation)*

*Using the INPUT Statement in Non-Screen Modes (Statements documentation)*

*Using the INPUT Statement in Batch Mode (Statements documentation)*

## Example of SYSPARM in Batch

The examples shown in this section demonstrate the use of SYSPARM commands and the result of parameter profile modifications executed in batch:

- Example Profile TESTPROF - Before Job Submission
- Example Input
- Example Parameter Profile TESTPROF - After Job Execution
- Example Parameter Profile TESTPRO1 - After Job Execution

### Example Profile TESTPROF - Before Job Submission

```
/* This is a test profile. */
AUTO=ON FNAT = (102,110,PASSWORD) FUSER=(1099,1100,PASSWORD,12345678)
RPC=(RPCSIZE=80,SRVNAME=MYSERV,SERVER=ON,DFS=(SRV2,NODE1,,ACI))
PRINT=((2,12,18),AM=STD,DEST='PRINT**',OPEN=INITOBJ,CLOSE=CMD)
PRINT=((1,3,6-11,15),AM=NAF)
ESIZE=90
```

### Example Input

```
/*JCL
.
.
.
*/
SYSPARM
COPY TEST1 TO TESTPROF WHERE DBID 10 FNR 32
```



```

DISP  TESTPROF
COMMENT ON /* TESTUSER 29.Jan.2009 */
MODIFY TESTPROF with REM DFS
    REPLACE ;test profile;test profile for SYSPARM in batch;
    NEW BPSIZE 4096
    UPDATE ESIZE  ADD  20  MAX 100
    FIRST PARM INHOUSE
    DELIMITER $
    UPDATE FUSER (,6)
    ASSIGN :
    LINE IM=D, INTENS=1, AUTO=T, MT=0, MADIO=0
.
DISP  TESTPROF
ADD TESTPRO1 WITH /* 106,210 */
    FNAT=(106,210,PASSWORD),FUSER=(,211)
.
DISPLAY TESTPRO1
DELETE TESTPRO2 WHERE DBID 10 FNR 32
X TESTPRO3  WHERE DBID 10 FNR 32
.
FIN

```

### Example Parameter Profile TESTPROF - After Job Execution

```

/* This is a test profile for SYSPARM in batch. */
PARAM=INHOUSE /* TESTUSER 29.Jan.2009 */
AUTO=ON FNAT = (102,110,PASSWORD) FUSER=(,6) /* TESTUSER 29.Jan.2009 */
RPC=(RPCSIZE=80,SRVNAME=MYSERV,SERVER=ON, )
PRINT=((2,12,18),AM=STD,DEST='PRINT***',OPEN=INITOBJ,CLOSE=CMD)
PRINT=((1,3,6-11,15),AM=NAF)
ESIZE=100 /* TESTUSER 29.Jan.2009 */ BPSIZE=4096 /* TESTUSER 29.Jan.2009
*/
IM=D, INTENS=1, AUTO=T, MT=0, MADIO=0 /* TESTUSER 29.Jan.2009 */

```

### Example Parameter Profile TESTPRO1 - After Job Execution

```

/* 106,210 */
FNAT=(106,210,PASSWORD),FUSER=(,211)

```

## Maintaining Profiles in Different Environments

The SYSPARM utility is used to maintain parameter profiles within the same FNAT or FUSER system file.

To transfer parameter profiles (for example, copy or move) between different FNAT and/or FUSER system files, and to perform a parameter profile operation (for example, delete or find) in a different environment, you can use the SYSMAIN utility. For details, see *Processing Profiles* in the *SYSMAIN Utility* documentation.