

# CA-Librarian Members

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- Previous Versions

## CA-Librarian Members Overview

The LIBRARIAN facility enables access to CA-LIBRARIAN members, which you can maintain using Natural ISPF functions.

If the member consists of job control, you can make use of the Natural ISPF Macro facility. You can use all types of macro statements. Macro expansion is performed at submission time (see the SUBMIT command below). When creating a new member, you can also use the Edit macro feature to automatically create text lines which can then be modified. For details on the Macro facility, see the section Macro Facility in the Natural ISPF Programmer's Guide).

### ▶ To enter the LIBRARIAN facility

- Select the LIBRARIAN option from the Natural ISPF Main Menu.

The LIBRARIAN Entry Panel appears:

```

----- LIBRARIAN - ENTRY PANEL -----
COMMAND ===>

Dataset Name ===>
Member      ===>
Member pswd ===>
Programmer  ===>
Language    ===>
Expand      ===> ( Automatic expand of include )
Record length ===> ( If different from 80 )
Version     ===> ( YYMMDD,xxxxx,or -yyy )
Volume      ===> ( If not catalogued )
DS Password ===> ( If password protected )
Scan for    ===>
Edit macro  ===>
Node        ===> 148

```

You can specify the CA-LIBRARIAN member you wish to maintain in the input fields and enter a function command in the command line.

## Meaning of the input fields:

| Field         | Meaning   |
|---------------|---|
| Dataset Name  | Name of library in which the member resides. This field contains the name of the library last accessed. You can select any other library by overtyping the name.  |
| Member        | Member name (up to eight alphanumeric characters). Leave blank to list all members or use strings and wildcards (* and _) to generate a more selective list of member names. See the subsection Selection Windows and Wildcards in the section Command Logic.   |
| Member pswd   | Member password (up to four alphanumeric characters). The following strings are reserved for CA-LIBRARIAN and cannot be used as member password: BYPP, EXEC, FILL, LIST, NONE, NOPC, PERM, TEMP, TEST (BYPP is the default password if you do not assign one).  |
| Programmer    | Name of programmer for the member.  |
| Language      | Language (format) of member, for example: JCL, ASM (Assembler), COBOL, PL/1 etc.  |
| Expand        | Specifies expansion of -INC statements when using any of the following commands: BROWSE, SUBMIT, PRINT, COPY, EXPORT. Possible options:<br><b>0</b> Displays -INC statements without expanding them.<br><b>1</b> Displays -INC statements at all levels of nesting, together with the associated data records.<br><b>2</b> Displays -INC statements together with the associated data records. Any nested -INC statements are expanded but not displayed. Associated data is displayed, but the INC statements are displayed only if they are unexpandable.<br><b>3</b> Expands encountered -INC statements and the associated data of statements at all levels of nesting. All -INC statements are displayed only if unexpandable.<br><b>N</b> Synonym for 0 (default if selected function is EDIT)<br><b>Y</b> Synonym for 3<br>(default if selected function is not EDIT)<br><b>&lt;blank&gt;</b> Specifies default value. |
| Record length | Specify only if different from 80.  |
| Version       | Specify the required version of the member, if different from the current version. You can specify a version by date in the format YYMMDD, you can specify an absolute version by its number, or you can specify a version by its relative distance from the current version, for example: -12 means the twelfth version back from the current version. See the subsection Previous Versions for more details.  |
| Volume        | Volume serial number. Required only for uncataloged datasets.   |
| DS password   | Dataset password, if the library is protected.  |
| Scan for      | Selection criterion for listing LIBRARIAN members: all members as specified in the above fields are listed which contain the string entered here. When you select a member from this list for EDIT or BROWSE, the cursor is placed on the first occurrence of this string in the member. Issue the RFIND command to find the next occurrence.   |
| Edit macro    | Name of macro object to be used as a model for the member. The specified macro is executed and loaded into the Editor. See the section Macro Facility in the Natural ISPF Programmer's Guide for details.   |
| Node          | Select Entire System Server node. Enter a question mark ? and press Enter to open a window in which all node numbers appear with an ACTIVE or INACTIVE status report. If you do not specify a node, the default node is assumed.  |

For detailed information on CA-LIBRARIAN member characteristics, see the appropriate CA-LIBRARIAN documentation.

Natural ISPF provides a special CONTROL session command for CA-LIBRARIAN users.

CONTROL OFF suppresses the automatic control cards passed to CA-LIBRARIAN when a member is saved. Only the edited data (which may include user-defined control cards) are sent to CA-LIBRARIAN.

The command format is:

|                               |
|-------------------------------|
| <b>CONTROL [ON]<br/>[OFF]</b> |
|-------------------------------|

Meaning of the parameters:

| Parameter | Meaning  |
|-----------|--|
| ON        | Re-activates the automatic control cards.  |
| OFF       | Suppresses the automatic control cards. You can define your own control cards in the member. |

You must issue the CONTROL command before opening the new Editor session.

## Function Commands

The following function commands are available for CA-LIBRARIAN members.

| Command     | Parameter Syntax  |
|-------------|---|
| BROWSE      | dataset(member) PSWD=p EXPAND=Y/N VERSION=x VOL=v NODE=id                           |
| COPY        | dataset(member) PSWD=p VOL=v EXPAND=Y/N NODE=id, object-type object-parameters, REP |
| DELETE      | dataset(member) PSWD=p VOL=v NODE=id  |
| EDIT *      | dataset(member) PSWD=p LANG=l USER=u VERSION=x VOL=v MACRO=name NODE=id             |
| EXPORT      | dataset(member) PSWD=p VOL=v EXPAND=Y/N NODE=id, target-environment                 |
| INFORMATION | dataset(member) PSWD=p VOL=v EXPAND=Y/N NODE=id                                     |
| LIST        | dataset(*_*) PSWD=p PGMR=name LANG=l RECLen=r VOL=v MACRO=name NODE=id              |
| OUTPUT      | NODE=id   |
| PLAY        | dataset(member) PSWD=p VOL=v NODE=id  |
| PRINT       | dataset(member) PSWD=p VOL=v EXPAND=Y/N NODE=id, printer-name CC                    |
| RENAME      | dataset(member) PSWD=p VOL=v NODE=id, new-name                                      |
| SUBMIT      | dataset(member) PSWD=p VOL=v EXPAND=Y/N NODE=id1, TARGET=id2                        |

\* If you request an edit session with a new member, you may be required to type a description in a prompt window before you enter the Editor session. If you request an edit session with an existing member, you may be required to enter a reason for modifying the member in a window before you enter the Editor session. Whether either of these prompt windows appears depends on how the CA-LIBRARIAN interface has been set up (ask your system administrator).

**Note:**

If you issue any of the above function commands from outside the LIBRARIAN facility, you must specify the object-type parameter LIB before the object parameters.

A full description of these commands is contained in the section Command Reference. The object parameters correspond to the input fields on the LIBRARIAN Entry Panel (the keyword parameter PSWD corresponds to the member password). Below are some examples of function commands using full command syntax:

**Example: INFORMATION**

The following window opens as a result of the function command:

```

INFORMATION LIB LIB1.MASTER(ASMPROGX)

----- LIBRARIAN - ENTRY PANEL -----
COMMAND ===> INFORMATION LIB LIB1.MASTER(ASMPROGX)

      +-----INFORMATION-LIBRARIAN-----+
Data  !                                     !
Membe ! DSName  : LIB1.MASTER                !
Membe ! Created :   /   /   -   .            !
Progr ! Archive : YES   Levels: 020          !
Langu !                                     !
Expan ! Member  : ASMPROGX                    ! e )
Recor ! Pswd   : DCMB                          ! )
Versi ! Updated : 94/11/14 10:20:45           ! )
Volum ! Lang   : ASM                           ! )
DS Pa ! Records :    33                        ! )
Scan  ! Blocks :    1                          !
Edit  ! Pgmr   : JOSSI                          !
Node  ! Desc.  : NISPF TEST PROGRAM MVS/XA    !
      !                                     !
      +-----+

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Split End  Suspe Rfind Rchan Up      Down Swap Left Right Curso

```

Meaning of the fields:

| Field   | Meaning  |
|---------|--|
| DSName  | dataset name   |
| Created | Date dataset was created   |
| Archive | Archiving active for dataset YES or NO                               |
| Levels  | Maximum number of possible levels for archiving                      |
| Member  | Member name  |
| Pswd    | Member password  |
| Updated | Date and time of last member update in the format: YY/MM/DD-HH:MM:SS |
| Lang    | Language code of member  |
| Records | Number of lines in member  |
| Blocks  | Number of blocks occupied by member                                  |
| Pgmr    | Name of programmer for member  |
| Desc.   | Description of member  |

The programmer name and description are modifiable in this window. You can overtyping the current values with the new ones.

**Example: LIST**

The following list of CA-LIBRARIAN members is displayed as the result of the command:

```
LIST LIB LIB1.MASTER(A*)
```

The list shows all members starting with **A** in the library LIB1.MASTER.

```
LIST-LIB:LIB1.MASTER(A*)----- Row 0 of 12 - columns 010 076
COMMAND==>                                SCROLL==> CSR
MEMBER   PSWD           LAST UPDATE       LNG DESCRIPTION
** ***** top of list *****
ADAEX2T1 PXTX           91/11/21-07:57:51 ASS 'ADABAS - TEST1 PLOG EXIT'
ADAPL    WVDS           91/11/21-07:56:12 JCL 'ADABAS - PROCEDURE FOR ADARES
ALTPP    XHJG           94/01/25-13:06:49 ASM 'ALTPP'
ALT1D    RSLD           94/01/30-14:01:47 ASM ALT TABLE FUER CICSD
ALT1F    QPPF           94/06/23-09:20:07 ASM ALT FOR CICSY1F1
ALT1S    CMNP           94/01/29-16:31:24 ASM 'ALT FUER CICSY1S1 '
ALT1T    LZSH           94/01/30-14:02:38 ASM ALT FUER CICSY1T1
ALT1Z    HHRG           94/01/30-14:04:02 ASM ALT FUER CICSY1Z1
ALT2A    NXLJ           94/01/30-14:04:56 ASM 'ALT2A'
ALT2P    XKSF           94/01/30-14:06:20 ASM ALT FUER CICSY2P1
ALT2R    KJLB           94/01/30-14:07:29 ASM 'ALT FUER CICSY2R1'
ALT2W    STZN           94/01/30-14:09:26 ASM 'CICSTAB'
ASMHCL   WDBS           93/03/19-11:54:30 PRO 'FROM SYS1.PROCLIB'
AUSX5    KJFQ           94/09/02-15:42:35
** ***** bottom of list *****

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Split End  Suspe Rfind Rchan Up      Down Swap Left  Right Curso
```

## ▶ To display the whole description column

- Issue the Editor RIGHT command (usually assigned to PF11):

The following screen appears:

```
LIST-LIB:LIB1.MASTER(A*)----- Row 0 of 12 - Columns 010 076
COMMAND===>                                SCROLL===> CSR
  MEMBER  PSWD LNG DESCRIPTION                RECS BLKS PROGRAMMER
** ***** top of list *****
  ADAEX2T1 PXTX ASS 'ADABAS - TEST1 PLOG EXIT'      114   1 JECKE
  ADAPL    WVDS JCL 'ADABAS - PROCEDURE FOR ADARES  16   1 JECKE
  ALTPP    XHJG ASM 'ALTPP'                        28   1 JECKE
  ALT1D    RSLD ASM ALT TABLE FUER CICSDB         38   1 WOLFF
  ALT1F    QPPF ASM ALT FOR CICSY1F1              38   1 WOLFF
  ALT1S    CMNP ASM 'ALT FUER CICSY1S1 '          39   2 ZTS0060
  ALT1T    LZSH ASM ALT FUER CICSY1T1             39   1 ZTS0040
  ALT1Z    HHRG ASM ALT FUER CICSY1Z1             39   1 ZTS0060
  ALT2A    NXLJ ASM 'ALT2A'                        38   1 SCHWARZ
  ALT2P    XKSF ASM ALT FUER CICSY2P1             39   1 ZTS0040
  ALT2R    KJLB ASM 'ALT FUER CICSY2R1'           38   1 SCHWARZ
  ALT2W    STZN ASM 'CICSTAB'                     38   1 JECKE
  ASMHCL   WDBS PRO 'FROM SYS1.PROCLIB'           23   1 JECKE
  AUSX5    KJFQ                                     303   4 ZTS0080
** ***** bottom of list *****

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Split End  Suspe Rfind Rchan Up      Down Swap Left Right Curso
```

The meaning of the fields corresponds to the fields in the information window: the list shows the member name, member password, date and time of the last update, number or records in the member, number of blocks occupied, programmer name, language code and the description.

### Note:

The programmer name and description are modifiable in the information window invoked using the INFORMATION function command (see the example of the INFORMATION command).

## Line Commands

You can select a CA-LIBRARIAN member from a list by typing a line command in the input field preceding the member name and pressing Enter. Each line command is an abbreviation of a function command. The available line commands are:

| Line Command | Corresponding Function Command         |
|--------------|--|
| BR           | BROWSE                                 |
| CP           | COPY                                   |
| D            | DELETE                                 |
| E            | EDIT                                   |
| EX           | EXPORT                                 |
| I            | INFORMATION                            |
| L            | LIST (previous versions of the member) |
| OT           | OUTPUT                                 |
| PL           | PLAY                                   |
| PR           | PRINT                                  |
| R            | RENAME                                 |
| SB           | SUBMIT                                 |

Line commands can also be used as valid abbreviations of function commands entered in the command line of any system screen.

## Local Commands

### In Edit Mode:

If you display a CA-LIBRARIAN member in Editor format in EDIT mode, you can issue a local command from the Editor command line in addition to Editor commands.

The following local command is available:

| Command                | Meaning   |
|------------------------|---|
| IMPORT                 | Imports a PC file or CON-NECT document into the CA-LIBRARIAN member (see the subsection Natural Interface to External Environments in the section Useful Features).   |
| PASSWORD<br><password> | If the library is password-protected, use this command to enter the valid dataset password in order to update the edited member. If you enter the PASSWORD command without parameter, a window prompts you for the password. Password input in the window is invisible. |

### In List Mode:

If you display lists of CA-LIBRARIAN members in Editor format, you can issue the following local commands in addition to Editor scroll commands: ALL, LAYOUT, RELIST and SORT. For detailed information, see the corresponding subsections in the section Useful Features.

## Handling CA-LIBRARIAN Control Cards

Natural ISPF provides some features for flexible handling of CA-LIBRARIAN control cards:

- Using the Expand feature, you can specify whether the -INC statements in the member are expanded before browsing, printing, submitting, copying, exporting the member, or displaying information;
- With the CONTROL OFF session command, you can submit the edited member to CA-LIBRARIAN using the

Editor SAVE command without the automatic control cards. Only the edited text, including any control cards you have added in the member are processed. You can display the output of the member as processed using the OUTPUT function command.

## Previous Versions

Previous versions of CA-LIBRARIAN can be kept and retrieved using Natural ISPF.

### Listing Previous Versions

You can list previous versions of a CA-LIBRARIAN member by either:

- Issuing the LIST function command from any system screen, specifying library and member in the command syntax, or:
- Selecting a member from a list of members using the L line command.

The following screens show an example of a list of previous versions of a CA-LIBRARIAN member. The function command used to generate the list was:

```
LIST LIB LIB1.MASTER(ALTIT)
```

The second screen shows the result of a RIGHT scroll (usually performed using PF11).

```
LIST-LIB:LIB1.MASTER(ALTIT)----- Row 0 of 12 - columns 010 076
COMMAND===>                                SCROLL===> CSR
  LEVEL          PSWD LAST UPDATE      LNG DESCRIPTION                RECS
** ***** top of list *****
   4             LZSH 94/01/30-140238 ASM ALT FUER CISY1T1                39
   3             LZSH 94/01/13-172055 ASM ALT FUER CISY1T1                30
   2             LZSH 93/05/26-185907 ASM ALT FUER CISY1T1                19
   1             LZSH 93/05/26-185118 ASM ALT FUER CISY1T1                19
   0             LZSH 93/05/26-184920 ASM ALT FUER CISY1T1                19
** ***** bottom of list *****
```

```
LIST-LIB:LIB1.MASTER(ALTIT)----- Row 0 of 12 - columns 010 076
COMMAND===>                                SCROLL===> CSR
  LEVEL ATE      LNG DESCRIPTION                RECS  BLKS PROGRAMMER
** ***** top of list *****
   4 -140238 ASM ALT FUER CISY1T1                39    1 ZTS0040
   3 -172055 ASM ALT FUER CISY1T1                30    1 ZTS0040
   2 -185907 ASM ALT FUER CISY1T1                19    1 ZTS0040
   1 -185118 ASM ALT FUER CISY1T1                19    1 ZTS0040
   0 -184920 ASM ALT FUER CISY1T1                19    1 ZTS0040
** ***** bottom of list *****
```

This example shows that there are five versions of the member, Version 4 being the current version. You can select any version for edit or browse using the **E** or **B** line command (see also next subsection).

### Retrieving Previous Versions

You can retrieve a previous version of a CA-LIBRARIAN member in any of the following ways:

- Generate a list of previous versions and use an appropriate line command; possible line commands are E (EDIT), B (BROWSE), CP (COPY).
- Specify a library and member in the CA-LIBRARIAN Entry Panel, entering data in the Version field to identify

the required version. This can be a date in the format YYMMDD to identify the version created on that day, an absolute version number (as it appears in the list of versions), or a relative notation (for example, -5 selects the fifth version back from the current version).

**Note:**

If you do not type in a function command, EDIT is the default. If you do not specify a version, the current version is the default.

- Enter function command syntax from any Natural ISPF screen to retrieve a version, using the VERSION parameter. The available function commands are EDIT and BROWSE, for example:

```
EDIT LIB LIB1.MASTER(ALTIT) VERSION=4
```

If you edit and save a previous version, it automatically becomes the current version.