

# Program

This section covers the following topics:

- Program Maintenance
- Program Retrieval
- Program Active Retrieval

## Program Maintenance

The Program Maintenance Menu is called with the command MAINTAIN PROGRAM.

### Overview of Functions and Commands

Function	Code	Command
Add a program	A	ADD PROGRAM
Copy program	C	COPY PROGRAM
Modify program	M	MODIFY PROGRAM
Rename program	N	RENAME PROGRAM
Purge program	P	PURGE PROGRAM
Edit description	W	EDIT PROGRAM DESCRIPTION
Display program	D	DISPLAY PROGRAM
Link children	L	LINK PROGRAM <active-association-type>
Edit owners of a program	O	EDIT PROGRAM OWNER
Edit entry-points	R	EDIT PROGRAM ENTRY
Select program	S	SELECT PROGRAM
Redocument program	X	REDOCUMENT PROGRAM
Edit procedure code of a program	Y	EDIT PROGRAM PROCEDURE

### Parameters

Keyword	Field	Position
ID	Program ID	1
<>	Copy ID	2

### Program-specific Maintenance Commands

See also Standard Maintenance Commands.

Command	Description									
EDIT PROGRAM ENTRY<Program-ID>	Use this command to edit entry points of a program directly.									
EDIT PROGRAM PROCEDURE<Program-ID>	Use this command to edit the procedure code of a program directly.									
REDOCUMENT PROGRAM<Member><Library>	<p>Creates Predict objects of type program by scanning source programs and/or XRef data and extracting comment lines and other information. If member and library are specified, the given member is redocumented using the default options. See also <b>Redocument Program</b> in the section <b>Program</b> in the Predefined Object Types in Predict documentation. The following table shows the parameters available online.</p> <table border="1" data-bbox="600 725 940 871"> <thead> <tr> <th data-bbox="600 725 722 770">Keyword</th> <th data-bbox="722 725 831 770">Field</th> <th data-bbox="831 725 940 770">Position</th> </tr> </thead> <tbody> <tr> <td data-bbox="600 770 722 815">MEM</td> <td data-bbox="722 770 831 815">Member</td> <td data-bbox="831 770 940 815">1</td> </tr> <tr> <td data-bbox="600 815 722 860">LIB</td> <td data-bbox="722 815 831 860">Library</td> <td data-bbox="831 815 940 860">2</td> </tr> </tbody> </table>	Keyword	Field	Position	MEM	Member	1	LIB	Library	2
Keyword	Field	Position								
MEM	Member	1								
LIB	Library	2								

## Redocumenting Programs in Batch Mode

This is one of the few maintenance commands that can be used in batch mode. The following parameters are only available in batch mode and cannot be used online.

<b>Keyword</b>	<b>Field</b>	<b>Position</b>
MEMBER	Member	1
LIBRARY	Library	2
LANGUAGE	Language	3
SOURCE	Source/XRef	4
MEMBER-TYPE	Member types	5
DBNR	Database number	6
FNR	File number	7
PSW	Password	8
CIPHER	Cipher	9
PROCESS-OPT	Processing option	10
SYSTEM	Link to system	11
PREFIX	Program ID prefix	12
LIBRARY-PREFIX	Lib.name as sec.prefix	13
COMMENTS	Abstract	14
DESCRIPTION	Description	15
DESC-OPT	Replace/append descript.	16
PROGRAM-LIST	Program list	17
FILE-LIST	File list	18
DEFAULT-OWNER	Default owner	19
DEFAULT-KEY1	First default keyword	20
DEFAULT-KEY2	Second default keyword	21
<b>Implementation Pointer</b>		
POINTER-LIB	Library	22
POINTER-FNR	Fnr	23
POINTER-DBNR	DBnr	24
ABSTRACT	Abstract	25
STRUCTURE	Library structure	26

## Example

Batch command to document all programs in library TESTLIB in Adabas file 8, database 1:

```
REDOCUMENT PROGRAM
LIBRARY=TESTLIB , FNR=8 , DBNR=1 , PROCESS-OPT=A
```

or

```
REDOCUMENT PROGRAM
, TESTLIB , 8 , 1 , , A
```

This example uses the Natural parameters IA==, ID=,

## Program Retrieval

The Program Retrieval Menu is called with the command RETRIEVE PROGRAM.

### Overview of Functions and Commands

Retrieval Type	Code	Default Output Mode	Command
Programs	D	D	DISPLAY PROGRAM
		L	LIST PROGRAM
		S	SELECT PROGRAM
		D	SHOW PROGRAM
Execute retrieval models	E	T	EXECMODEL PROGRAM
Dummy/Placeholder program	C	L	DUMMY PROGRAM <passive-association-type>
Programs with parents	B	D	PARENTS PROGRAM <passive-association-type>
Programs with no parents	O	L	FREE PROGRAM ANY   ALL   <passive-association-type>
Programs with children	T	D	CHILDREN PROGRAM <active-association-type>
Programs with no child	U	L	EMPTY PROGRAM ANY   ALL   <active-association-type>

## Parameters

Keyword	Field	Position
ID	Program ID	1
PARENT	Contained in SY	2
MEM	Member	3
LIB	Library	4
RES	Restrictions	5
OUT	Output options	6
TYPE	Program of type	7
LANGUAGE	Language	8
FNR	User system Fnr	9
DBNR	User system DBnr	10
MODEL	Model	11
MODE	Output mode	12

## Program-specific Retrieval Commands

Program objects are processed with Standard Retrieval Commands.

## Program Active Retrieval

The Program Active Retrieval Menu is called with the command ACTIVE PROGRAM.

## Overview of Functions and Commands

Retrieval Type	Code	Default Output Mode	Command
Programs			see Retrieval
Entries ref. by members	R	L	REFERENCED PROGRAM
		C	COUNT PROGRAM
Entries not referenced	U	L	UNUSED PROGRAM
Programs not implemented	N	L	Note:XIST PROGRAM
Programs using programs	P	L	USING PROGRAM
Programs using files	F	L	USING FILE

## Parameters

<b>Keyword</b>	<b>Field</b>	<b>Position</b>
ID	Program ID	1
PARENT	Contained in SY	2
MEM	Member	3
LIB	Library	4
ENTRY	Entry	5
RES	Restrictions	6
OUT	Output options	7
TYPE	Programs of type	8
LANGUAGE	Language	9
FNR	User system Fnr	10
DBNR	User system DBnr	11
SET	Save set	12
LIB-STRUCTURE	Library structure	13
MODE	Output mode	not possible

## Program-specific Active Retrieval Commands

<b>Retrieval Command</b>	<b>Description</b>
REFERENCED PROGRAM	Lists the members that reference the specified entry points of the documented programs.
COUNT PROGRAM	Lists the libraries which use the specified entries and indicates the number of references per library and, if the entry is used in more than one library, the total number for all libraries.
UNUSED PROGRAM	Lists entry points not referenced by any member.
Note:XIST PROGRAM	Lists programs that are defined in Predict but do not correspond to members actually implemented.
USING FILE	Lists programs with Files which are linked or used according to XRef data.
USING PROGRAM	Lists programs with Programs which are linked or used according to XRef data.