

# Cross References

This subsection covers the following topics:

- Displaying Cross References
- Usage of User Routines
- Usage of Symbol Tables
- JCL Usage
- Field Descriptions for JCL Usage
- Cross-Reference Listing in Batch

## Displaying Cross References

### ▶ To display cross references

1. Use the direct command XREF, described in the section Direct Commands of the Entire Operations Reference Documentation.

The following screen appears.

```

15.11.01                *** Entire Operations 4.1.1 ***                17:03:15
Owner UKSJU              Cross References Menu                          User ID UKSJU
-----
                                Cross References Menu

                                1 User Routine Usage
                                2 Symbol Table Usage
                                3 JCL Usage

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                                Help                End                                Menu

```

2. Choose the type of cross reference from the Cross Reference Menu.

## Usage of User Routines

### ▶ To use user routines

1. Enter the number for User Routine Usage and press Enter.

The following screen will be displayed:

```

20.11.01                *** Entire Operations 4.1.1 ***                11:20:55
                        Usage of User Routines
-----
Please mark one or several Types.

Cmd  Type
-    Input Condition User Routines
-    Resource Master Determination Exits
-    Master JCL and Natural Programs
-    End-of-Job Check User Routines
-    End-of-Job Action User Routines
-    Symbol Check User Routines
-    Symbol Prompt User Routines

Command => _____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
                        End

```

2. Mark one of the fields to select the cross reference you want to display.

## Usage of Symbol Tables

### ▶ To use symbol tables

1. Enter the number for Symbol Table Usage and press Enter.

The following selection window will open:

```

02.01.02          *** Entire Operations 4.1.1 ***          15:17:18

                Symbol Table Usage

Owner           ==> _____ (Blank for all, * for selection
Symbol Table ==> _____ or * and PF4 to process all
                               matching objects)
Usage in active jobs ==> N   (Y/N)

Destination           ==> 1
    1 - Screen  2 - Printer  3 - PC  4 - PC-CSV

Enter-----PF3-----PF4-----
                End      Apply
    
```

2. After you have completed the selection, use PF4 to create the report.

The report output on screen looks similar to this:

```

02.01.02      Entire Operations      15:20:34
                Symbol Table Usage Page  11

                Owner          DQA

                Symbol Table  QAOVERVIEW

Owner      Network      Run      Job
-----
DQA        DQATESTBED
DQA        DQATESTBED      SUB-01-ACT
DQA        DQATESTBED      SUB-02-ACT
DQA        DQATESTBED      SUB-10-ACT
DQA        QAN01MVS-X
DQA        QAN01MVS-X      QAN01J98EV
    
```

## JCL Usage

You can use option 3 JCL Usage to find out which JCL files are used in which networks.

### To invoke JCL Usage

1. Enter the number for JCL Usage on the command line and press Enter.

The following screen will appear:

```

15.11.01          *** Entire Operations 4.1.1 ***          17:03:15
Owne +-----+-----+-----+-----+-----+-----+-----+
---- !                                     ! -----
      !                                     !
      !           JCL Usage                 !
      !                                     !
      ! Enter selection criteria (with * Wildcard) or blank for all !
1    !                                     !
2    ! File/Natlib      : _____         !
3    ! Member          : _____         !
      ! JCL Location   : _____         !
      !                                     !
      ! Enter-----PF3-----             !
      !           End                       !
      +-----+-----+-----+-----+

Command => 3_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help           End                                     Menu
    
```

## Field Descriptions for JCL Usage

Field	Explanation
File/Natlib	You can restrict the cross reference to an individual file or Natural library (or a set of files with the same prefix) by using an * wildcard.
Member	You can restrict the cross reference to an individual member (or a set of members with the same prefix) by using an * wildcard.
JCL Location	You can restrict the cross reference to any one of the supported JCL locations, or leave blank to include any location.

2. Make your selection and press Enter to move on to the next screen:

```

15.11.01          *** Entire Operations 4.1.1 ***          17:23:04
Owne +-----+-----+-----+-----+-----+-----+
---- !         !         !         !         !         !
      !         !         !         !         !         !
      ! Enter ! Owner.....: _____ (Blank for all, * for selection !
1     !         ! Network....: _____ or * and PF4 to process all !
2     ! File/  !                                     matching objects) !
3     ! Membe !                                     !
      ! JCL L !                                     !
      !         ! Destination: 1 !
      !         !   1 - Screen 2 - Printer 3 - PC 4 - PC-CSV !
      ! Enter !                                     !
      !         ! Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9--- !
+-----+-----+-----+-----+-----+-----+
      !         Help      End      Apply Accpt !
      +-----+-----+-----+-----+-----+

Command => 3_____
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      End                                     Menu

```

Here you can restrict the cross-reference to particular owners and networks, using the \*, < and > wildcard characters. You can also choose any of the 4 destinations. Fields and PF keys are the same as for the reporting system, described above.

## Cross-Reference Listing in Batch

### ▶ To produce the cross-reference listing in batch

- Run XRJCL--P in a standard batch Natural job with LFILEs 131 and 216 assigned and printer file 1 correctly defined.

The program does 2 inputs:

1. File/Natlib, Member, JCL Location
2. Owner, Network

The following examples assume the Natural parameters IM=D,ID=,:

```

XRJCL--P
PROD1.JOBLIB,IEB*
SYS*,W

```

This will produce a list of all jobs in networks with names less than W under owners beginning with SYS that use JCL members beginning with IEB in dataset PROD1.JOBLIB.

```

XRJCLP
SYS*,*,NAT
*,*

```

This will produce a list of all jobs which use JCL in Natural libraries beginning with SYS.