

# Association Administration

Since Predict Version 4.2 defining more than just one association between two object types is possible. To ensure unique identification of these associations an identifier, the Association code is necessary.

The terms active and passive association describe the different views of parent and child object on the same association. The term active association describes the view of the child object, while the term passive association describes the view of the parent object.

This section covers the following topics:

- Predefined Associations
  - Association Administration Menu
  - Add / Modify Association - Code A,M
  - Display Association - Code D
  - Purge Association - Code P
  - Select Association - Code S
  - Modify Attribute Number - Code T
  - Cross Reference of an Association - Code X
- 

## Predefined Associations

The following associations are predefined in Predict:

Parent	Association	Child	Code
Database	Contains FI	File	FI
	Contains DC	Dataspace	DC
Dataspace	Contains FI	File	FI
Field	Is verified by VE	Verification	VE
	Triggered by TR	Trigger	TR
File	Has Fields	Field	EL
	Has TR	Trigger	TR
Interface	Contains MD	Method	MD
	Contains PY	Property	PY
Keyword	Decomp. into KY	Keyword	KY
Library Structure	Contains SY	System	SY
Node	Contains SV	Server	SV
Network	Contains NO	Node	NO
	Uses VM	Virtual Machine	VM
Packagelist	Uses PR	Program	PR
Program	Uses FI concept.	File	FI
	Uses PR concept.	Program	PR
	Defines IE	Interface	IE
	Invokes MD	Method	MD
	Input FI	File	IN
	Returns FI	File	RE
Report Listing	Uses ET	Extract	ET
Server	Uses PR	Program	PR
System	Uses PR concept.	Program	PR
	Uses PG	Packagelist	PG
	Has subappl. SY	System	CS
	Has component PR	Program	CP
	Has component VE	Verification	CV
	Has component FI	File	CF
	Has library SY	System	LI
Virtual Machine	Contains DA	Database	DA

Child	Association	Parent	Code
Database	Belongs to VM	Virtual Machine	VM
Dataspace	Located in DA	Database	DA
Field	Belongs to FI	File	FI
Extract	Contained in RT	Report Listing	RT
File	Contained in DA	Database	DA
	Ref. by PR	Program	PR
	Contained in DC	Dataspace	DC
	Input to PR	Program	IP
	Result of PR	Program	RS
	Is comp. of SY	System	CF
Interface	Defined in PR	Program	PR
Keyword	Composed by KY	Keyword	KY
Method	Belongs to IE	Interface	IE
	Invoked by PR	Program	PR
Node	Contained in NW	Network	NW
Packagelist	Contained in SY	System	SY
Program	Belongs to SY	System	SY
	Used by PR	Program	PR
	Contained in PG	Packagelist	PG
	Used by SV	Server	SV
	Is comp. of SY	System	CP
Property	Defined in IE	Interface	IE
Server	Contained in NO	Node	NO
System	Contained in LS	Library Structure	LS
	Is subappl. of SY	System	CS
	Is library of SY	System	LI
Trigger	Triggers FI	File	FI
	Triggers EL	Field	EL
Verification	Verifies EL	Field	EL
	Is comp. of SY	System	CV
Virtual Machine	Belongs to NW	Network	NW

In addition to the predefined associations, user-defined associations can be created. User-defined associations can define a relationship between predefined as well as user-defined object types. With the exception of the object types Owner and Field, all objects types can be linked in any combination.

## Association Administration Menu

This menu is called by entering code A in the Metadata Administration menu.

```

09:45:32                ***** P R E D I C T 4.3.1 *****                2003-05-31
                        - Association Administration Menu -

                        Function

                        A Add an Association
                        D Display Association
                        M Modify Association
                        P Purge Association
                        S Select Association
                        T Modify attribute names and numbers
                        X Cross reference of an Association

Code .....

Object type code ....*
Association code ....*
Link direction .....*

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      -      -      Stop  -      -      Flip Print  -      Let      -      -      Main
    
```

Parameters	
Code	To select one of the functions available. The functions are described on the following pages.
Object type code	Code of the object type the association belongs to.
Association code	Unique association identifier.
Link direction	<p><b>A</b> Active or</p> <p><b>P</b> Passive</p> <p><b>Note:</b> If you add a new association (function code A), A (active) is obligatory.</p>

## Add / Modify Association - Code A,M

The left pane of the screen (Active Association) displays the view of the parent object, the right pane of the screen (Passive Association) displays the view of the child object.

### Defining the Association

The Add and Modify functions use the same screens.

```

13:13:30          ***** P R E D I C T 4.3.1 *****          2003-05-31
                    - Add Association -

Active Association          Passive Association
Code ..... PR             Code ..... SY
Name ..... PROGRAM        Name ..... SYSTEM
Title ..... Uses PR concept. Title ..... Belongs to SY

Object types
Parent ..... SY System
Child .....* PR Program

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
- - Stop - - Flip Print - - - -
    
```

The association codes must be unique concerning object types and the link direction. Referring to the above screen this implies that:

- among all active associations of object type SY (System), the code PR is allowed only once and
- among all passive associations of object type PR (Program), the code SY is allowed only once.

This ensures that an association can be identified uniquely with the object type, association code and and the link direction.

```

13:58:05          ***** P R E D I C T 4.3.1 *****          2003-05-31
                    - Add Association -

PR System Uses PR concept.          Added 2003-05-31 at 13:12
SY Program Belongs to SY           by HNO

Codes          Default associations
Parent object type ..... SY          Active for System ..... N
Child object type ..... PR          Passive for Program ..... N
Association internal ... 2000146      Unload for System ..... N
Association type no. ..* 4000146

Abstract      Zoom: N

Screen number .... 1          (H=Header)          Free attributes: 80
    
```

The fields Screen number and Free attributes are described in First Screen in the section **Object Type Administration**.

## Defining Attributes

Attributes of associations and attributes of object types are defined in the same manner.

### Defining the Header Layout for the Link Editor Screen

```

13:07:12          ***** P R E D I C T 4.3.1 *****          2003-05-31
                    - Modify header layout -

Parent name ..... CHNG-ENHANCEMENT          Modified 2003-05-31 at 10:53
Child name ..... HEB-TEST                    by HNO

      Number of:
      Attr. Scr.  Column          Length  Format
-----
1.  1      1      1      Association attribute header -----
2.  attr1          5      N 1.0
-----
1.  1      1      10     Child attribute header -----
2.  A          2      N 1.0
-----

Layout:          .....+.....1.....+.....2.....+.....3.....+.....4
                Heb-test          attr1      A
                -----          -----
    
```

This screen appears after the attributes have been defined. Here you can define the layout of the Link Editor screen.

**Note:**

The attributes of the child object type can only be defined if the child object type is a user-defined object type.

The following rules apply:

- The total length of all attribute values must not exceed 30 characters (including blanks to separate the columns).
- The text of the header lines can be modified as desired.
- The attributes of the association must be specified in their full length and must be positioned to the left of the attributes of the child object type in the Link Editor screen.
- Only the alphanumeric attributes of the child object type can be displayed in a length less than the length of the attribute type.
- In the field Length, a length greater than the attribute length can be defined for the header line text.

Parameters	
Number of Attr.	Number of the attribute in the definition screen.
Number of Scr.	Number of the definition screen of this attribute.
Column	Position in the Link Editor screen.
Assoc. attr. header	Header text for the attribute of the association in the Link Editor screen.
Child attr. header	Header text for the attribute of the child object type in the Link Editor screen.

## Display Association - Code D

Displays the association definition in a format similar to the screens that are used to add or modify the association definition.

```

13:58:05          ***** P R E D I C T 4.3.1 *****          2003-05-31
                    - Display Association -

PR System Uses PR concept.                               Added 2003-05-31 at 13:12
SY Program Belongs to SY                                by HNO

Names                                                    Abstract
  Active Association .. PROGRAM
  Passive Association .. SYSTEM

Codes
  Parent object type ..... SY SYSTEM
  Child object type ..... PR PROGRAM
  Association internal ... 2000004
  Association type no. ...* 2002000

Defaults
  Default child for System ..... Y
  Default parent for Program ..... Y
  Default download Association ..... Y
    
```

## Purge Association - Code P

Deletes all associations between objects of the parent type and objects of the child type as well as all retrieval models that report on the association.

## Select Association - Code S

Displays a list of associations. If both fields Object type code of parent/child are left blank, all association types are displayed. Enter a valid object type code for parent or child to restrict the selection to associations with the specified parent/child.

### Sample Output

```

13:35:34          ***** P R E D I C T 4.3.1 *****          2003-05-31
                    - Association Selection Menu -

Mark   Parent           Association           Child           Predef.
  _    SY System        PR Uses PR concept.  Program         yes
  _                                     PG Uses PG         Packagelist     yes
  _                                     CS Has subappl. SY System           yes
  _                                     CP Has component PR Program           yes
  _                                     CV Has component VE Verification         yes
  _                                     CF Has component FI File               yes
  _                                     LI Has library SY System             yes
  _                                     FI Uses File       File

Hit the corresponding PF-KEY to STOP, Enter 'X' to ABORT or 'T' for TOP : _
    
```

## Modify Attribute Number - Code T

The functions Modify attribute number of associations and Modify attribute number of object types are defined as described above.

## Cross Reference of an Association - Code X

Enter codes in fields Object type code, Association code and Link direction to display retrieval models which use the specified association.