

Navigating in PAC

This section discusses the facilities provided for navigating in PAC, including the PAC user profiles, logging on to the PAC system, menus and screens, and the maintenance and reporting facilities for PAC entities.

This chapter covers the following topics:

- PAC User Profile
 - Logging On to PAC
 - PAC Maintenance and Reporting Facilities
 - About PAC Menus and Screens
 - Listing Locked Data
-

PAC User Profile

Contact the PAC administrator at your site for information about the PAC functions and entities you are allowed to use; these permissions are specified in your PAC user profile. The functions and entities you are allowed to use determine the PAC maintenance and/or reporting menus and screens you can access.

You may or may not be authorized to

- use the PAC administration functions;
- authorize migration event processing;
- submit migration events for processing;
- use the PAC utilities (migration, scan, compare).

Logging On to PAC

 **To use the full range of PAC options and functions, log on to the PAC system:**

1. Log on to Natural.
2. From the Natural system screen, enter LOGON SYSPAC or simply SYSPAC.
3. Enter MENU on the Logon Accepted screen (if your PAC administrator has configured your system accordingly, the Logon Accepted screen may not appear).

The PAC Main Menu appears listing those PAC entities for which the PAC administrator has assigned maintenance and/or reporting permissions in your user profile. That list will include all or some part of the list shown in the screen below.

```

16:34:08          ***** PREDICT APPLICATION CONTROL *****          2000-04-21
User PACUSR
Code Entity
-----
A Applications
E Migration Events
F File Translation Tables
J Jobs
K Keywords
L Application Status Links
M Maintenance Requests
Q Change Control Logs
S Statuses
T Migration Paths
V Versioned Objects
C Compare Function
? Help
. Exit
-----
Code .. _

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

```

Note:

If the PAC banner has been activated by your site, the banner will be displayed first.

The PAC entities that may be listed on the Main Menu include the following:

Code	Entity	Description
A	Applications	Maintain applications, which identify and group Natural, foreign, and/or Predict objects and define the default options to be used during their processing.
C	Compare	Compare versioned objects
E	Migration Events	Maintain migration events, which define the tasks/ procedures for migrating application objects from one status to another.
F	File Translation Tables	Maintain file translation tables, which ensure that the correct DBID/FNR set is used in each PAC environment to locate user data referenced by views/DDMs needed by Natural objects at execution time.
J	Jobs	Maintain the JCL used for the batch processing of various PAC functions including migrations.
K	Keywords	Define keywords that may be assigned to PAC entities.
L	Application Status Links	Maintain the subset of status conditions valid for an application life-cycle.
M	Maintenance Requests	Maintain maintenance requests for defining or tracking problems that are solved by objects defined to PAC.
O	Change Control Logs	The check-out/check-in facility keeps track of the actions taken to maintain objects under the control of PAC.
S	Statuses	Maintain status definitions, which define the physical and logical environments controlled and accessed by PAC.
T	Migration Paths	Maintain migration paths, which define the movement of application objects between two statuses.
V	Versioned Objects	Assign versions to migrated objects, view version information and other related objects/information.

Entering the relevant code accesses another menu that displays a list of sub-functions. The specific functions displayed depend on which permissions the PAC administrator has assigned in your user profile.

PAC Maintenance and Reporting Facilities

The maintenance subsystem is for defining and maintaining PAC entities. The reporting subsystem allows you to display, list, select, or print information about the PAC environment, including all defined entities. If you have access to the maintenance subsystem, both maintenance and reporting functions are presented on each entity menu (Menu) as shown in the previous screen. If you only have access to the reporting subsystem, a menu presenting only reporting functions is presented for each entity as shown below.

```

17:03:23          ***** PREDICT APPLICATION CONTROL *****          2000-04-21
User PACUSR          - Migration Event Menu -

Code  Sub-Function          Code  Sub-Function
-----
A    Add an Event          P    Purge an Event
C    Copy an Event         R    Display Audit Report of Event
D    Display an Event      S    Select an Event
H    Hardcopy an Event     U    Submit an Event for processing
L    Display Migration List of Event  ?    Help
M    Modify an Event       .    Exit
-----

Code ..... _
Event ..... _____
New Event ... _____
Selection criteria.. E
User-Id .... _____ Application . _____
State ..... _           From Status . _____
Date from .. _____ To Status ... _____

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

The sub-functions listed on maintenance and reporting menus are primary activities to help you define and maintain and/or retrieve different kinds of information about PAC entities.

```

21:15:26          ***** PREDICT APPLICATION CONTROL *****          2000-04-21
User PACUSR          - Migration Event Reporting Menu -

Code  Sub-Function
-----
D    Display an Event
H    Hardcopy an Event
L    Display Object List of Event
R    Display Audit Report of Event
S    Select an Event
?    Help
.    Exit
-----

Code ..... _
Event ..... _____
Selection crit.. E
Application .... _____
State ..... _           Date From .. _____
User Id ..... _____

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

Several sub-functions (for example, Add, Display, Hardcopy, Modify, Select, and Help) are common to most or all PAC entities. Other sub-functions are unique to a particular PAC entity. For example, the following sub-functions are unique to the Migration Event entity shown in the screen examples above:

Code	Sub-Function
R	Display Audit Report of Event (migration event reporting)
U	Submit an Event for processing (migration event maintenance)

You can access a sub-function from an entity menu by entering the appropriate code and additional selection criteria requested in the fields provided.

If you leave the selection criteria fields blank or enter an asterisk (*) or range notation in any of these fields, a Selection List screen is displayed. On this screen, you may select the desired object(s) by entering the relevant number on the command line, or by marking the object with the cursor.

Maintenance and reporting sub-functions can be processed directly from selection list screens accessed with function code S to select from a list.

Refer to the sections Using Selective Processing and Using Range Notation for more information.

Using PAC Maintenance Sub-Functions

You may use the maintenance sub-functions for PAC entities as defined by the PAC administrator in your user profile.

Some fields on the maintenance screens permit data to be entered only at the time the PAC entity is initially defined, and these field values cannot be changed later.

Additional Options allow you to perform additional maintenance functions without having to navigate through a series of menus and screens. Refer to the section Accessing PAC Additional Options for more information.

Note:

Some of the sub-function names may be used as direct commands that can be entered on the command line. Refer to the PAC Reference documentation.

The following maintenance sub-functions are available to PAC entities:

Code	Sub-Function	Description
A	Add	Add (define) PAC entities on the Add screen. The name must be unique and must begin with an alphabetic character; it may be up to 32 characters in length (maintenance requests may be up to 20 characters). Embedded blanks are automatically changed to the underscore () character.
C	Copy	Copy PAC entities such as applications, jobs, migration events, and file translation tables (FTTs).
E	Edit	Edit PAC entities such as JCL for jobs, keyword descriptions.
L	Link	Link application to status (Application Menu). Link status to an application (Status Menu).
M	Modify	Modify information about PAC entities by entering a unique entity name or alias, or using range notation to select from a list.
P	Purge	Purge (delete) PAC entities. You are told how many subordinate entities will also be purged and you are requested to confirm the Purge request.
R	Rename	Rename jobs.
S	Select	Display a list of PAC entities on the Selection List screen by entering the entity name or using range notation to display the selection list.
U	Submit	Submit a job or migration event for processing.
?	Help	Display help information for a field. Refer to the section Accessing Field Help for more information.
	Exit	Exit from a PAC function.

Using PAC Reporting Sub-Functions

You may use the reporting sub-functions for PAC entities as defined by the PAC administrator in your user profile. No maintenance may be performed from reporting subsystem menus.

The reporting subsystem allows you to

- track the activities of previously migrated applications;
- verify the current status of applications;
- verify source changes to objects;
- track the movement of objects;
- view object interdependencies;
- view cross-reference data about objects under PAC control; and
- track maintenance activities for objects under PAC control.

Additional Options allow you to retrieve additional information about PAC entity interdependencies without having to navigate through a series of menus and screens. Refer to the section Using PAC Additional Options for more information.

The reporting sub-functions available to PAC entities are described in the following table. The same code may be used for different sub-functions, depending on the particular entity:

Code	Sub-Function	Description
D	Display	Display information about PAC entities by entering an entity name or alias, or by using range notation to select from a list.
H	Hardcopy	Produce a hard copy of a PAC entity. Refer to the section Using the Hardcopy Sub-Function for more information.
L	Display	Display object list for a migration event.
L	List	Display JCL for jobs; display keyword descriptions.
N	Display Destination Status	Display the migration path destination status(es) for an origin status.
O	Display Origin Status	Display the migration path origin status(es) for a destination status (Migration Path Menu).
O	Objects for Application Status	Display the objects of an application in a specific status (Application Status Menu).
O	Select All Open Logs	Displays a list of change control logs (Change Control Log Menu).
R	Display	Display audit report of a migration event (Migration Event Menu). Display statuses linked to an application.
S	Select	Display a list of PAC entities on the Selection List screen by entering the entity name or using range notation to display the selection list. Refer to the sections Using Selective Processing and Using Range Notation for more information.
T	Display	Display a list of PAC applications linked to a specific status (Status Menu) or statuses linked to a specific application (Application Menu).
U	Display Status	Display status(es) with no application links; display application(s) with no status links.
V	Object Version Audit History	Display the object versions of objects for an application in a specific status.
X	Predict Cross-reference Data	Display the Predict cross-reference data for a specific application.
?	Help	Display help information for a field. Refer to the section Accessing Field Help for more information.
	Exit	Exit from a PAC function.

Note:

Some of the sub-function names may be used as direct commands from the command line. Refer to the PAC Reference documentation.

About PAC Menus and Screens

PAC is driven by menus that lead you into the system and help you to navigate through subsystems, functions, and sub-functions.

This section covers the following topics:

- Menu/Screen Attributes
- Using Direct Commands
- Using PF Keys
- Accessing Field Help
- Accessing Error Message Text
- PAC Entity Sub-Function Screens
- Using Selective Processing
- Using Range Notation
- Using the Natural Editor
- Using the Hardcopy Sub-Function
- Using PAC Additional Options

Menu/Screen Attributes

The attributes described in the following table are common to all PAC menu screens:

Attribute	Description
Time	The current time appears in the upper left corner of the screen.
Title	The product name (PAC) and the menu title appear in the top center of the screen. The title is modifiable.
Date	The current date appears in the upper right corner of the screen.
User	The user ID of the person currently using PAC is displayed directly under the current time.
Code/Function	The Code and Function or Sub-Function columns list the functions or subsystems available from the menu along with their function codes.
Code	The input field for any of the codes listed in the Code column.
Command	A PAC direct command can be entered on this line.
PF Keys	PF key assignments for use with this menu are given across the bottom of the screen. PF key numbers without assignments are not functional for the particular screen.

Using Direct Commands

PAC allows you to issue direct commands from most screens in the PAC system. Refer to the PAC Reference documentation for more information about PAC commands.

Using PF Keys

The PF keys that are unique to individual screens are explained in context. General PF key assignments are described below:

Key	Function	Description
PF1	Help	Displays the PAC Help facility for this screen.
PF2	Menu	Returns you to the PAC Main Menu.
PF3	Exit	Goes back one screen in the screen structure.
PF4	Opts	Accesses the Additional Options.
PF5	Confirm	Confirms an action.
PF6	--	Goes back to the first screen of a selection list.
	++	Goes forward to the last screen of a selection list.
PF8	+	Goes forward one screen of a selection list.
	-	Goes back one screen of a selection list.
PF10	<	Shifts the screen to the left.
PF11	>	Shifts the screen to the right.
PF12	Canc	Cancel the current function and backs out any changes not yet committed.

Accessing Field Help

Online help is provided for all fields in the PAC system. You can access the Help facility in two ways:

- Press PF1 (Help) to invoke a help screen relevant to the functions of the field where the cursor is positioned; or
- Enter a question mark (?) in the first position of a data entry field (excluding the direct command line) to access a help screen specific to that data entry field.

If there is no help text available for a particular field, a message may be displayed to that effect. In this case, you should verify with your PAC administrator that the help maps and text in the library SYSPACUS are accessible in the SYSPAC library.

Accessing Error Message Text

Where it is available, PAC provides access to extended text for error messages displayed on your screen. You can access error message text in two ways:

- Enter D or DISPLAY on the command line while the error message is displayed;
- Enter a h followed by the message number on the command line; for example, h 7126.

You can exit from the extended error message and return to the previous screen by pressing PF3 (Exit) or entering a period (.).

PAC Entity Sub-Function Screens

Certain entity sub-function screens are similar to each other and across all PAC entities. These similarities are discussed in the following paragraphs.

Entity sub-function screens are accessible using menu Codes or direct commands. Refer to the PAC Reference documentation for more information about PAC commands.

Display/Modify Screens

The PAC Display screens allow you to view information about PAC entity definitions. Maintenance may not be performed on display screens. The PAC Modify screens are used to edit PAC entity definitions. Display and modify screens are similar to the Add screen and are available for most PAC entities. The following screen is a typical example:

```

21:21:24          ***** PREDICT APPLICATION CONTROL *****          2000-04-21
User UKMJ                - Display Application -

Application . UKMJ_APPLIATION          Modified: 2000-04-21 by UKMJ
Keys ..... ////////////////////////////////////////////////////
Appl. Type .. NAT
SYSDIC Appl. UKMJ_PREDICT_____
Prefix ..... MJ_   Level .. 1.1.2_____ Gen No .. 40000
Title ..... demo application_____

PREDICT CASE Usage ..... N          DB2 Support ..... N

Default NATURAL Library
Development .. _____
Incorporate .. _____
Maintenance .. _____
Test ..... _____

Additional Options ..... N

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Opts          Links NNAT          Canc
    
```

Display/modify screens show entity-specific information that was entered on an add/modify screen when the entity was defined to PAC or modified. Most display/modify screens provide

- the name of the entity;
- information about when and by whom the entity was added/modified; and
- access to Additional Options.

Purge Windows

The PAC Purge option is used to delete PAC entities. The following Purge Confirmation window is a typical example:

```

13:21:11          ***** PREDICT APPLICATION CONTROL *****          2001-04-06
User VMU          - Application Menu -

Code  Sub-Fu  +-----+-----+
-----+-----+
A   Add an  |          --- Purge Confirmation ---          |
B   Add Pr  | Application EXAMPLE                          |
C   Copy A  | will be purged along with the following:      |
D   Displa |     nn Application Status Link and            |
L   Link S  |     nn Migration Paths.                      |
M   Modify  |
-----+-----+
          | Enter 'CONFIRM' or press PF5 to purge or '.' |
          | to exit ... _____                      |
          +-----+-----+

Code .....
Application ..... VERA-EXAMPLE_____
New Application .. _____
Keyword ..... _____

PAC7257: (W) Application has not been modified.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit                                     Canc
    
```

For most PAC entities, the Purge Confirmation window displays information specific to the entity to be purged. This example for purging an application reminds you that the associated application status links, migration path definitions, and file translation tables will be purged along with the application.

From the Purge Confirmation window, you can

- type CONFIRM at the cursor position or press PF5 if you still wish to purge the application;
- type a period (.) at the cursor position or press PF3 (Exit) to return to the Application Menu without purging the application.

Selection List Screens

For most PAC entities, PAC Selection List screens allow you to select a specific entity, or several entities. The following screen is a typical example:

```

17:04:39          ***** PREDICT APPLICATION CONTROL *****          2000-04-21
User UKMJ          - Application Selection List -
  SELECT APPLICATION *
C Nr Application Name          Title          Typ
-----
_  1 ES-APPL                      NAT
_  2 FISA                          NAT
_  3 FISC                          NAT
_  4 FISI                          NAT
_  5 H-PRD                         PRD
_  6 HAIFI                         NAT
_  7 JHE_APPL                     NAT
_  8 MARK-DICTO                   PRD
_  9 MARK-FREDO                   NAT
_ 10 MARK-FREDO_001              NAT
_ 11 MARK-FREDO_002              NAT
_ 12 PREDICT                      PREDICT Data Dictionary    PRD
_ 13 PREDICT_CASE                 PREDICT CASE                PCA
_ 14 SHARK                       NAT

          Mark Selection, Enter Number or 'T' (Top) __

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help          Exit          --          +          Canc

```

On most Selection List screens, the SELECT sub-function displayed in the status line directly under the User field indicates that you accessed the screen using

- selective processing;
- range notation or blank in the entity field along with the Copy, Display, Modify, Link, Purge, or Select sub-function; or
- the SELECT direct command.

If you accessed the screen with the S (Select ... from a List) sub-function or the SELECT direct command for one or more of the listed entities, the sub-functions specific to that entity (except Add) may be processed directly by entering the function code for the sub-function in the "C" column.

A period (.) entered in the "C" column returns you to the entity menu.

If you mark the entity with the cursor or enter an X or an S in the "C" column, or if you enter the corresponding number (from the "Nr" column) in the Mark Selection... field, the entity menu along with the name of the specified entity is displayed.

Using Selective Processing

Selective processing is an online facility that allows you to display a Selection List screen containing a list of all entities meeting specified selection criteria. You can access a PAC Selection List from a PAC sub-function menu by

- entering the desired code in the Code field and
 - an asterisk (*) in the fields displayed below the Code field; or
 - nothing (blank) in the fields displayed below the Code field.
- entering code S (Select) and

- nothing (blank) in the fields displayed below the Code field; or
- a range as described in the section Using Range Notation, below.

Using Range Notation

Many PAC sub-functions allow attributes to be specified as a range using the following notation:

Notation	Displays a list of . . .
blank or *	all objects/entities beginning with the first item.
value*	objects/entities beginning with the specified value.
value>	objects/entities greater than or equal to the specified value.
value<	objects/entities less than or equal to the specified value.

Using the Natural Editor

Many PAC sub-functions are performed using the Natural editor screen or window. Refer to the PAC Reference documentation for more information about the Natural editor commands used by PAC.

Using the Hardcopy Sub-Function

The hardcopy sub-function is available only on selected PAC menus and only if you are running PAC under the Software AG product Com-plete. From menus that support the hardcopy sub-function, you can print information about PAC entities by entering

- code H (Hardcopy) in the Code field; and
- the name of the entity you wish to print in the relevant field.

The hardcopy is produced at the destination printer defined to Com-plete.

Using PAC Additional Options

Additional Options fields allow you to trace the interdependencies of PAC entities and perform sub-functions on PAC entities without selecting a sub-function from a menu. The Additional Options are specific to the particular PAC entity; however, those listed in the following table are common to most PAC entities:

Option	Description
Aliases	Alternative name for a PAC entity such as an application. A window is displayed for adding/editing aliases.
Date	The dates and times a PAC entity was added/modified and the user ID and terminal ID of the person who added/modified the entity.
Description	Description of an entity (for example, application, status).
Keys	List of available keywords for a PAC entity such as an application or a job. A window is displayed for adding/editing. Before a keyword may be used in PAC, it must be defined to the PAC system.

For some PAC entities, Additional Options are processed only after all other changes are made to the rest of the screen. After the options are processed, the user is returned to the original screen.

At this time, all fields, except Additional Options and the command line, are protected so that no further processing may be performed on them. Thus, in the maintenance subsystem, once you enter the Additional Options submenu, all updates on the maintenance screen are locked from further data entry.

Accessing Additional Options from a Window

1. You can access the Additional Options window by pressing PF4 (Opts) or typing over the default with Y (Yes) in the Additional Options field.

```

13:57:26          ***** PREDICT APPLICATION CONTROL *****          2001-04-06
User VMU          - Display Event -

Event ..... ABC-01-01          Modified: 2001-03-13 by XSETIM
Application . ABC
From Status . CONTROL
To Status   ... TEST
Exec Mode   ... COPY Objects in Batch Using
Scheduled   ... _____ at _____

Notes .....
Maintenance Request .. CAPA
Processing State ..... Validated

Additional Options ... Y

-----+-----+
* Migration List ..... N
  Audit Report ..... N
  Authorization Info..... N
  Job Information ..... N
  Description ..... N
  * Dates ..... N
-----+-----+

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit Opts          ObLst Auth          Canc
    
```

An asterisk (*) at an Additional Options field indicates that the field contains unique information and suggests that you access the option. For example, "*Authorization Info" indicates that there are added parameters and information.

2. In the Additional Options window, type over the defaults with Y (Yes) to access the desired option screen. The default in Additional Options fields is generally N (No).

You may access several options, one after another, by entering Y in multiple fields, then moving from one option to the next by repeatedly pressing ENTER. On Natural editor screens, however, you must enter a period (.) on the editor command line before you press ENTER to move to the next option.

Accessing an Additional Option Directly

On several entity screens, a PF key option is available to access a particular additional option directly without having to access an Additional Options window. For example, PF7 (ObLst) on certain migration event screens allows you to directly access the Object List Editor window. The screen above shows an example of the PF7 (ObLst) key.

Assigning Aliases to a PAC Entity

PAC allows you to assign alternative names to PAC entities so that you can access those entities more easily. All data entry fields that request the name of a PAC entity also allow you to enter the name of a previously assigned alias.

You may not assign the same alias to more than one entity of the same type. Aliases must be at least two (2) characters in length and must begin with an alphabetic character.

The Alias Names window is accessed using the "Aliases" option on the Additional Options window. You can specify up to sixteen (16) alternate names for the current entity.

Listing Locked Data

To gain exclusive control, PAC locks data by applying a series of unique identifiers to data involved in processing requests or migrations.

If your PAC administrator has specified Y (Yes) for the List Locked Data option in your PAC user profile, the Locked Data screen appears automatically when you log on to PAC. This screen displays a list of all the data entities locked by you or your batch user ID. It identifies the data or entity, data/entity types, the reason for locking (for example, for editing), and the dates and times they were locked.

You may view or release (unlock) only data that has been locked by you. Only a PAC administrator may unlock data that was locked by other users. If you attempt to access data locked by another user while you are using the PAC maintenance sub-functions, the Locked Data Warning window appears as shown in the following example:

```

14:07:31          ***** PREDICT APPLICATION CONTROL *****          2001-04-06
User VMU          - Migration Event Menu -

Code  Sub-Function          Code  Sub-Function
----  -
+-----+
|          --- Locked Data Warning ---          |
| Migration Event data was locked by User XXXXXX at TID ZZZZZZ |
| on yy-mm-dd hh:mm:ss          |
| Migration Event .. (event here)          |
| Reason ..... MODIFY          |
|          |
| Either another user is modifying, or a previous Edit session was |
| terminated abnormally. Unlock must be done by the PAC          |
| Administrator          |
+-----+
State ..... _          From Status . _____
Date from .. _____ To Status ... _____

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

The Locked Data Warning window provides information about the locked data, and informs you that only a PAC administrator is authorized to unlock the data. Contact your PAC administrator for assistance.