

Predict Application Control

PAC Administration

Version 2.6.1

November 2016

This document applies to Predict Application Control Version 2.6.1.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

Copyright © 1990-2016 Software AG, Darmstadt, Germany and/or Software AG USA, Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA, Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at <http://softwareag.com/licenses/> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third-Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with Software AG.

Document ID: PAC-ADMIN-261-20161120

Table of Contents

PAC Administration	v
I Introduction	1
1 Introduction	3
File Adjust Function - PACADJST	4
Access the PAC Administrator Functions	5
II	7
2 PAC and Security	9
3 PAC Security Considerations	11
NSC Configuration	12
Securing PAC Objects	13
Setting Up Your Security Environment	16
Natural Security Entities	18
4 Handling of Protected Objects in PAC	23
Handling Security from the User's Point-of-View	25
Handling Security from the Administrator's Point-of-View	25
Handling Security from the Application's Point-of-View	26
Handling Security from the Application's - Status Link Point-of-View	26
Handling Security from the Migration Path's Point-of-View	27
Handling Security from the Migration Event's Point-of-View	27
Handling Security from the JCL's Point-of-View	28
Handling Security from the FTT's Point-of-View	28
Handling Security from the PAC Object's Point-of-View	29
Handling Security from the Change Control Log's Point-of-View	29
III Defaults Maintenance	31
5 General Defaults Maintenance	33
6 Extended Description Skeletons	35
7 Predict Generation Defaults	37
Sets of Generation Defaults	38
Linked Databases	38
Predict Generation Defaults	39
Copying Predict Generation Defaults from Predict	40
Modifying Linked Databases	42
Displaying Predict Generation Defaults	43
Purge Predict Generation Defaults	44
Select Generation Defaults	45
8 Applymod Defaults	47
9 System Defaults	51
10 Display Control Information	53
11 Display and Modify System Defaults	55
12 Display and Modify NSC PAC User Profile Defaults	57
13 Display and Modify User Profile Defaults	59
14 User Exit Defaults	61
IV Other Maintenance	65

15 Foreign Object Maintenance	67
16 Locked Data Maintenance	71
Display Locked Data	73
Release Locked Data	78
Reset a Migration Event	85
Select Locked Data	89
Undo a Migration Event	90
17 Request Table Maintenance	93
Table Types	94
Request Table Maintenance Entry Definitions	95
Request Table Maintenance Sub-Functions	96
Add Table Entry	96
Display a Table Entry	98
Modify a Table Entry	98
Purge a Table Entry	99
Select Table Entries	100
18 User Profile Maintenance	103
Add User Profile	104
Copy User Profile	108
Select User Profile from List	109
Display User Profile	110
Modify User Profile	111
Purge User Profile	111

PAC Administration

Predict Application Control (product code: PAC) is a tool for controlling applications throughout the software life-cycle and for ensuring the integrity of applications in the production environment.

The PAC Administration documentation is intended for PAC administrators. It describes the PAC administrator functions, how to access them, security considerations, the file adjust function.

Introduction

PAC and Security

Defaults Maintenance

Other Maintenance

I Introduction

1 Introduction

■ File Adjust Function - PACADJUST	4
■ Access the PAC Administrator Functions	5

This chapter covers the following topics:

File Adjust Function - PACADJST

The PAC file adjust function allows the PAC administrator to reset/adjust an internal record on the PAC system files (ACF system file and PCF system file) after PAC is installed and initialized. This ensures the integrity of the PAC system.

After renumbering the ACF and/or PCF system files using the Adabas ADADBS utility or Adabas Basic Services, and modifying the NTFILE definitions in your Natural nuclei to reflect the new physical file numbers of the changed ACF and/or PCF system files, use the following procedure:

1. Log on to the library SYSPAC using the updated Natural nucleus.



Note: The LFILE dynamic parameter may be used temporarily.

2. At the NEXT prompt, enter the command PACADJST to invoke the File Adjust Function.

When a new ACF or PCF system file is specified, PAC verifies each file individually. If the values are not correct, an appropriate message is displayed and processing is terminated. If the values are correct, the results are displayed in a report shown in the following example:

```
The PAC Control Status has been adjusted

Application Control File  has been adjusted
Predict Control File     has been adjusted

Adjustment of Metadata follows .....

Selecting Archive Status ARCHIVE
Adjusting Application-Status Link for Application ... ADJ-APPL
Selecting Control Status CONTROL
Adjusting Application-Status Link for Application ... ADJ-APPL
Adjusting Application-Status Link for Application ... COMMON
Adjusting Application-Status Link for Application ... ORD-EXAM
Adjusting Application-Status Link for Application ... PREDICT
Adjusting Application-Status Link for Application ... ADJUST
Adjusting Application-Status Link for Application ... ADJ-APPL
Adjusting Application-Status Link for Application ... ORD-EXAM ***
*** Processing has now successfully completed ***
```

The report displays the results of the PAC verification as follows:

- If all renumbered files are consistent with the installation files, the appropriate message is displayed for each PAC file, for example: "... File has been adjusted".

- Adjustment of metadata: When the file renumbering is completed, PAC automatically updates application status links with the new file numbers of the ACF and PCF system files.
- When the adjust function is completed, the message "Processing has now successfully completed" is displayed.

Access the PAC Administrator Functions

Access the PAC administrator functions from the NEXT prompt on the Natural system library screen by entering

- SYSPAC; then ADMIN; or
- SYSPACA; then MENU.



Note: For Natural Security reasons, the menu program in SYSPACA logs you on to SYSPAC, checks whether you are allowed to use SYSPACA, and then executes ADMIN.

The Administrator Functions menu is displayed providing the following functions to the authorized PAC administrator:

```

16:24:39      **  PREDICT APPLICATION CONTROL  ***      2007-05-11
User POR      - Administrator Functions -

      Code  Function
      ----  -
      G  General Defaults
      L  Locked Data Maintenance
      N  FOREIGN Data Maintenance
      T  Request Table Maintenance
      U  User Profile Maintenance
      ?  Help
      .  Exit
      ----  -

      Code ... _

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

```

Code	Function	Description
G	General Defaults	<ul style="list-style-type: none">- Modify application defaults.- Maintain defaults for extended description skeletons of: application, migration events, JCL text for a job and maintenance requests.- Maintain sets of Predict generation defaults.- Maintain the default setting of applymods.- Maintain the migration paths' default.- Maintain the values of control, system and user profile defaults.- Set user exit defaults.
L	Locked Data Maintenance	Display, release and select data that has been locked.
N	Foreign Maintenance	Display the table for defining the foreign objects that are supported by your PAC installation.
T	Request Table Maintenance	Maintain the status and action tables used when maintenance requests are defined to PAC.
U	User Profile Maintenance	Add, copy, modify, display, and purge the profiles of users of the PAC system.

II

■ 2 PAC and Security	9
■ 3 PAC Security Considerations	11
■ 4 Handling of Protected Objects in PAC	23

2 PAC and Security

This chapter covers the following topics:

- **PAC Security Considerations**
- **Handling of Protected Objects in PAC**

3

PAC Security Considerations

■ NSC Configuration	12
■ Securing PAC Objects	13
■ Setting Up Your Security Environment	16
■ Natural Security Entities	18

This chapter covers the following topics:

NSC Configuration

PAC provides both online and batch security.

- [Online Security](#)
- [Batch Security](#)

Online Security

The following rules apply to PAC online security:

- The startup transaction is MENU; no profile is needed if you are using Natural Security, otherwise a profile must be defined. "Steplib" must be set to SYSTEM.
- Users who submit Predict events must be linked to SYSDICBE.
- Users who may authorize migration events are assigned when the migration path is defined by PAC. These users may or may not be a PAC administrator.

With Natural Security

- PAC user profiles can only be maintained using PAC administrator functions.
- Under Natural Security, the protection of library SYSPAC determines the user's (or group's) ability to access PAC.
- Under Natural Security, the protection of library SYSPACA determines the user's (or group's) ability to perform PAC administrator functions.
- If running Natural Version with Natural Security, you may define library SYSPACUS as a steplib of library SYSPAC (in addition to SYSTEM). For details, see the PAC/PAA Installation documentation.

Without Natural Security

- Define steblibs
If Natural Security is not installed, the standard steplib setting and any additional site-specific steplib setting must be applied as well, using the Natural LOGON user exit.
- Modify LOGON
A sample of LOGON source is provided in library SYSPACUS.
- Move LOGON000 into the FNAT system library.

Batch Security

To accommodate environments that do not allow the same user ID to be used simultaneously for both online and batch, the PAC administrator must specify a batch user ID for each online user.

Depending on the installation standards, each user can be allocated a unique batch ID, or several users may use a single batch ID.

If a user's batch user ID is different from the online user ID, then the batch user ID also must be defined to PAC and must have the same PAC access authority as the online user ID. The batch user ID should then be included in the user's online user profile.

AUTO=ON Option

The batch jobs that carry out migration requests may use the Natural Security parameter AUTO=ON so that passwords need not be passed explicitly to Natural Security. When AUTO=ON is set, the job name on the first card of the JCL must be a valid user ID defined to Natural Security.

Alternatively, AUTO=OFF may be used if the migration jobs are modified.



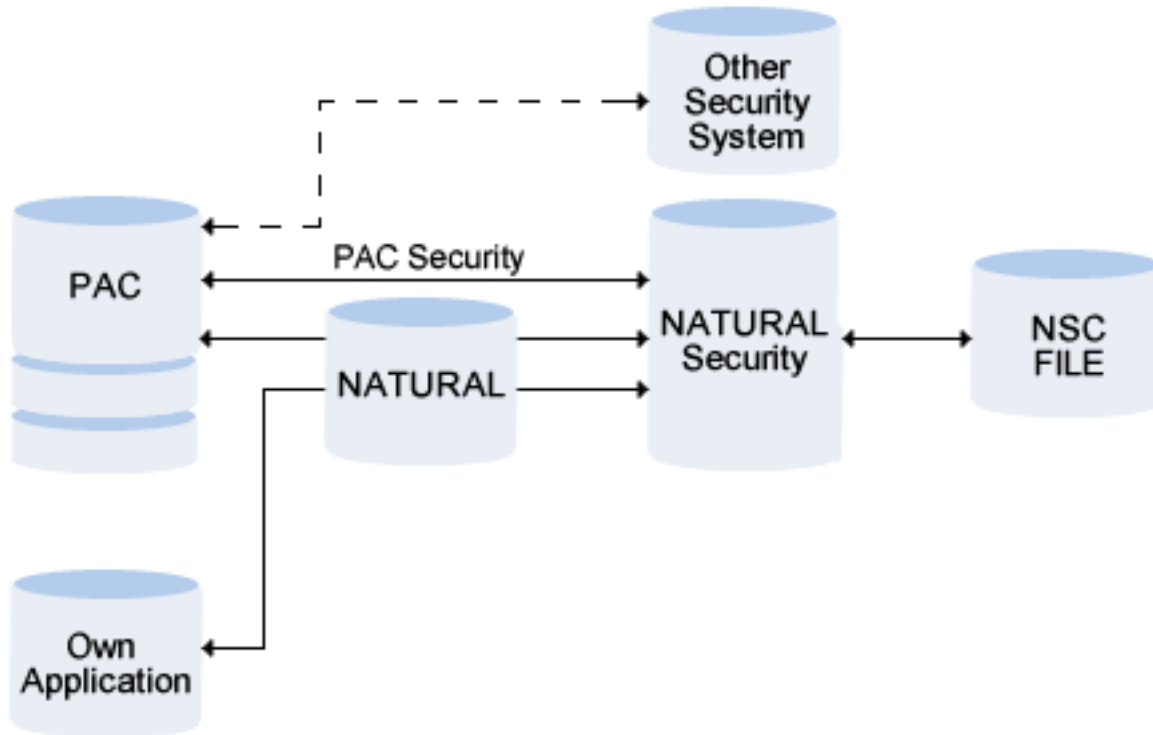
Notes:

1. For Predict migrations, an additional window is displayed requesting this information at job submission time.
2. If AUTO=OFF is used for a Predict migration, then appropriate user ID and password information must be specified. This is required for Predict events because multiple logons are generated for Predict events that cannot be specified in the JCL.
3. AUTO=ON functions the same way for Predict migrations as it does for other migrations.

Securing PAC Objects

The Predict Security System controls access to a PAC environment either using security definitions stored in a Natural Security file or via user exit PACEX33

An individual environment can be defined for each user or group of users and protected against unauthorized access.



This section covers the following topics:

- [Terminology](#)
- [PAC Security using Natural Security](#)
- [Internal Check Routine](#)

Terminology

Link ID

When a user logs on to a library, the Link ID is determined as follows:

- If the user is linked directly to the library, the link ID is the same as the user ID.
- If the user is linked to the library indirectly as member of a group, the link ID is the group ID.

See your *Natural Security documentation* for more information.

Natural Security File

This file contains the security definitions used by the PAC Security System for protecting objects against unauthorized access.

NSC External Object

In terms of PAC security, an instance of an external object type.

NSC External Object Type

In terms of PAC security, an external object type is a class of objects to be protected. The following external object types are available for protecting PAC data:

- PAC Application
- PAC FTT
- PAC JCL TEXT

PAC Security

PAC Security means the following:

- the external object types in Natural Security, for example PAC Application
- the security profiles defined to limit access to instances of external object types.

Security Object

A security definition in Natural Security.

PAC Security using Natural Security

PAC Security is realized with the Software AG product Natural Security. This product allows you to

- define the persons who can process the protected objects
- define the objects to be protected

PAC transfers the administrative functions listed above to Natural Security. A security object is a security definition valid for different data types:

- Range of PAC objects (for example all applications that start with USER1)
- Fully qualified PAC object (for example application USER1-FI-ADA2)

Internal Check Routine

When a PAC function is called, an internal PAC routine generates an Natural Security call. This call checks the security definitions in Natural Security for

- the current link ID
- the function the user wants to execute
- the data the user wants to access.

Activating Natural Security via Parameter in PAC

The Security Check does not depend on whether Natural Security is installed. The PAC parameter Protection in the System Defaults determines whether PAC Security is called. This parameter can be defined for each ACF file.

Security Check when Calling PAC

The system checks whether the current user is authorized to logon to library SYSPAC.

Setting Up Your Security Environment

PAC definitions are not protected in Natural Security as default. This means that when PAC is delivered, each user has access to every object and can execute any PAC function. PAC Security only takes effect when access to objects is explicitly restricted for individual users or groups of users. This section lists the steps necessary to set up your environment so you can protect objects and functions against unauthorized access.

This section covers the following topics:

- [Step 1: Define PAC Libraries in Natural Security](#)
- [Step 2: Define PAC Users in Natural Security](#)
- [Step 3: Define PAC Defaults](#)
- [Step 4: Add Natural Security Definitions](#)
- [Step 5: Modify PAC User Profile - Recommended](#)

- [Step 6: Set Protection Flag](#)

Step 1: Define PAC Libraries in Natural Security

Libraries SYSPAC, SYSPACA, SYSPACUS, SYSPAA and SYSPAAUS must be defined as libraries in Natural Security. See [Library](#).

Step 2: Define PAC Users in Natural Security

PAC users must be defined as Users in Natural Security. See [User](#).

New users can be added manually with the function Add user in Natural Security.

The users must be authorized to logon to the library SYSPAC in Natural Security. See your *Natural Security* documentation for more information.

Step 3: Define PAC Defaults

Enter database and file number of the NSC file in the General Defaults > System Defaults > Modify System Defaults screen.



Note: Do *not* set the parameter Protection to Y at this point! You must first add the Natural Security definitions as described in Step 4 below.

Step 4: Add Natural Security Definitions

Default Definitions (Mandatory)

Add the standard definitions for Natural Security with the General Defaults > System Defaults > Modify NSC > PAC User Profile Defaults.

Additional Security Definitions Individually (Optional)

If you wish, you can create your own Security definitions for any object in Natural Security - either for an individual user or for a group of users.

Step 5: Modify PAC User Profile - Recommended

To prevent users changing Security parameters, we recommend you to check the existing PAC user profiles for the administration authorization.

Step 6: Set Protection Flag

After you have added Natural Security default definitions, set the parameter Protection in the General Defaults > System Defaults screen to Y to activate Security. This parameter can be defined for each ACF file.

Natural Security Entities

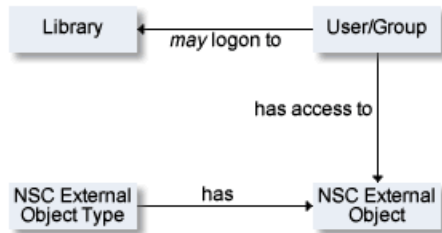
This section describes the entities in Natural Security that are used for security definitions in PAC.

This section covers the following topics:

- [Conceptual Data Model - Extract](#)
- [Instance](#)
- [User](#)
- [Group](#)
- [Library](#)

■ NSC External Object Types

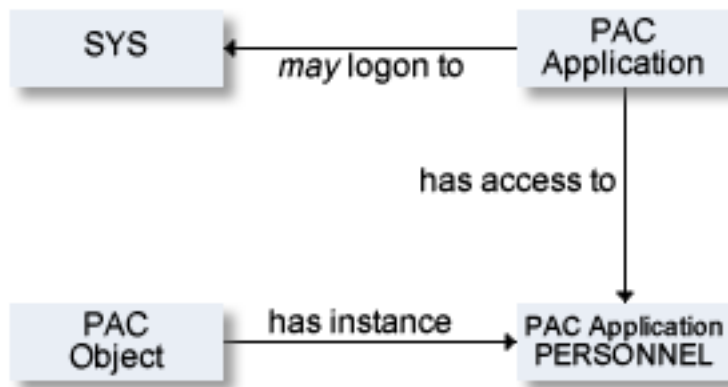
Conceptual Data Model - Extract



Instance

This example illustrates the following situation:

The user Smith is authorized to logon to library SYSPAC and has access to Application object PERSONNEL, an instance of NSC external object type PAC application.



User

General Rules

- A user is the central point of the PAC Security system. This object represents a person that works with the system.
- Users can be a member of one or more groups. See [Group](#).
- When a user logs on to a library, the link ID is determined as follows:
 - If the user is linked directly to the library, the link ID is the same as the user ID.
 - If the user is linked to the library indirectly as member of a group, the link ID is the group ID.

See your *Natural Security documentation* for more information.

Group

General Rules

- A group in Natural Security is a collection of users. See [User](#).
- The number of users in a group is unlimited.
- Groups have no relationships with other groups. This means a group cannot be part of another group.
- A user can belong to several groups.
- New groups can also be added in Natural Security with the function Add user.

Library

To use PAC Security, the libraries SYSPAC, SYSPACUS, SYSPAA and SYSPAAUS must be defined as libraries in Natural Security.

NSC External Object Types

An NSC external object type is a group of things to be protected.

Adding NSC External Object Types for PAC

These NSC external object types and their standard definitions are added in Natural Security with the General Defaults > System Defaults > Modify NSC PAC User Profile Defaults.

- Application
- FTT
- JCL Text

Access to NSC External Object Types

The default value for all NSC external object types is allowed. If you keep the default value as allowed and do not add any security definitions, each user can execute any function and access any PAC object.

If you set the default value for a NSC external object type to disallowed, you have to give each user or group explicit access to all instances of this NSC external object type they needs for their work.

Access Modes

The following access can be given for instances of all NSC external object types:

NSC External Object	Permission
Application Note: An application-specific function is not allowed to a user unless he has the reading permission for the relevant application. A user is allowed to list or display any entity (application, application - status link, migration path, migration event, object, token, object - status link, historic object - status link, change control log) if he has reading permission for the relevant application. This applies also to entity attachments. A PAC user who has read and modify access for an application can be called an "administrator" of this application.	read add modify delete adding event modify event submit event delete event
FTT Note: A PAC FTT function is not allowed to a user unless he has reading permission to the relevant FTT. A user is allowed to list or display an FTT if he has reading permission for the FTT. A user is allowed to add, modify or delete an FTT if he has the reading and the further appropriate permission for it.	read add modify delete
Job Control Note: A PAC JCL text function is not allowed to a user unless he has reading permission for the relevant JCL text. A user is allowed to list or display a JCL text if he has reading permission for it. A user is allowed to add, modify or delete a JCL text if he has the reading and the further appropriate permission for it.	read add modify delete

Access Mode Values

- Y: Access is granted
- N: Access is denied

Security Definitions at Object Level

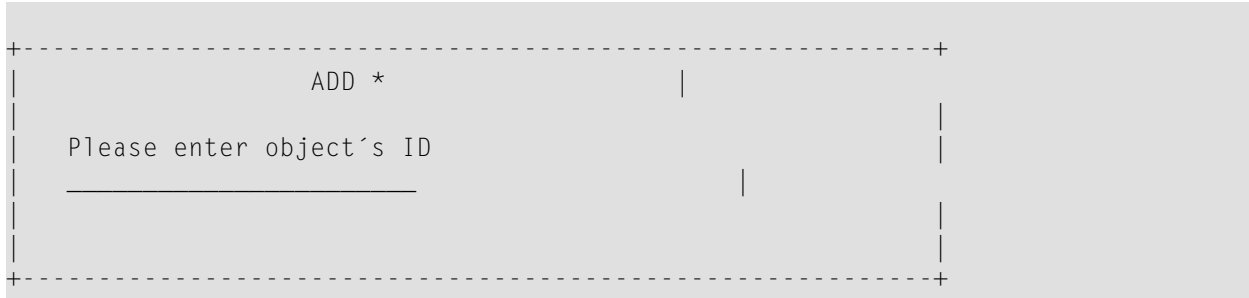
Security definitions can be added in Natural Security for PAC objects.

Adding Definitions at Object Level

All instances must be added manually in Natural Security.

To add security definitions to documentation objects:

- Logon to library SYSSEC
- Select Maintenance, then choose PAC Application / PAC FTT / PAC JCL TEXT
- In the command line enter ADD
- In the upcoming window enter the object name. See also screen below.



Access Modes

Possible access modes for instances of this NSC external object type are READ, ADD, MODIFY and DELETE.

With PAC Security you can determine that certain users or groups only have access to certain objects. There are three strategies you can follow when protecting objects:

- Protect *Individual objects* Example: The application SALARY can only be read/modified by certain users.
- Protect a *range of objects* Use naming conventions to group objects and take advantage of asterisk notation in Natural Security. Example: User USER1 has been denied READ access to application objects in general, but READ access for applications that begin with his user ID. The more specific authorization has priority.
- Protect *all objects* of a particular type.

4 Handling of Protected Objects in PAC

■ Handling Security from the User's Point-of-View	25
■ Handling Security from the Administrator's Point-of-View	25
■ Handling Security from the Application's Point-of-View	26
■ Handling Security from the Application's - Status Link Point-of-View	26
■ Handling Security from the Migration Path's Point-of-View	27
■ Handling Security from the Migration Event's Point-of-View	27
■ Handling Security from the JCL's Point-of-View	28
■ Handling Security from the FTT's Point-of-View	28
■ Handling Security from the PAC Object's Point-of-View	29
■ Handling Security from the Change Control Log's Point-of-View	29

This chapter covers the following topics:

It is possible to use PAC under the following security approaches:

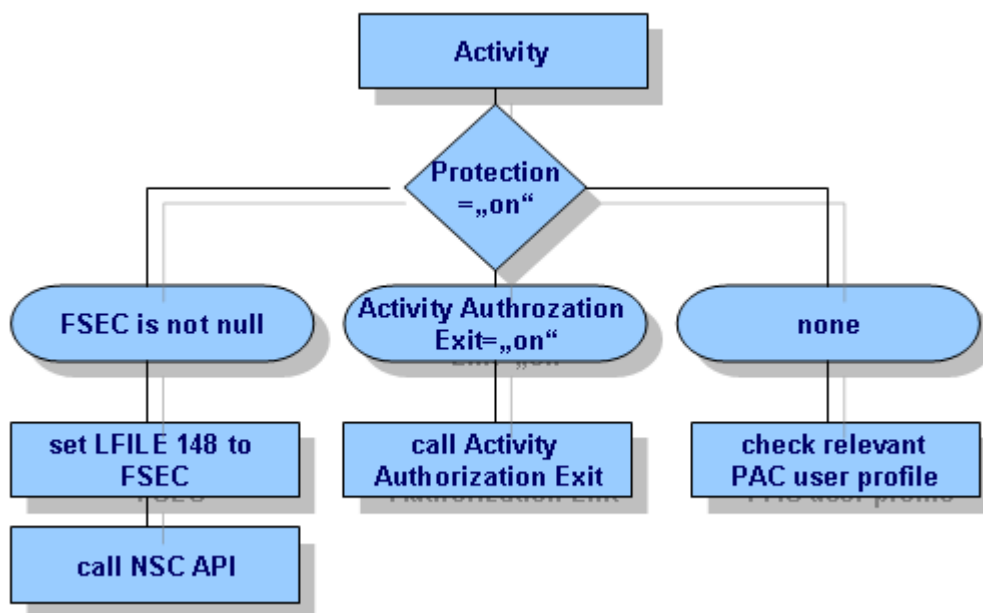
- NSC profiles
- PAC profiles
- Activity Authorisation Exit

Every time, you are confronted with the object type Application, you have to deal with the security topic in PAC.

The following PAC entities belong to exactly application:

- application
- application - status link
- migration path
- migration event
- object
- token (record of archived or retired object)
- object - status link
- historic object - status link
- change control log

The following diagram illustrates what happens in terms of security if an activity is invoked.



If the call of the NSC API fails (e.g. because NSC is not installed, the FSEC is unreachable or does not contain the NSC PAC user profile defaults, then PAC seeks a PAC profile for the current user ID. If such a profile is found and turns out to be one of a PAC administrator, it is used instead of the non-existent or unusable NSC profiles. If such a profile is not found or turns out not to be one of a PAC administrator, the activity will not be authorized. In particular, if this happens at the beginning of a PAC session, the user does not get access to PAC - even to functions that are allowed to anyone with some NSC PAC profile.

Handling Security from the User's Point-of-View

NSC

According to an FSEC, each user either is a PAC user or not. The NSC definitions do not differentiate between one ACF and another. If PAC works under the NSC regime, the relevant NSC definitions are sought in the FSEC specified in the ACF. A user will be allowed to start a PAC session if he is a PAC user according to the NSC definitions in the FSEC specified in the ACF. If the checking of the said definition fails because NSC is not installed in the current FNAT or because the relevant FSEC is unreadable or because it does not contain PAC related defaults, then a PAC profile of the user will be sought (in the ACF), and, if it is found and one of an administrator, then PAC will switch to PAC regime.

Activity Authorization Event

A USER is allowed to start a PAC session if and only if PACEX033 responds to a call with 0000 or 0001 (PACEX033-PARA.RESP).

PAC

A USER is allowed to start a PAC session if and only if he has a PAC profile (in the ACF).

Handling Security from the Administrator's Point-of-View

All approaches

A USER is considered a PAC administrator if he has a PAC profile (in the ACF) with the Administrator flag at 'Y'es.

Handling Security from the Application's Point-of-View

NSC

A user is allowed to view an application record if he has NSC reading permission for the application. One is allowed to add an application record only if he has NSC reading and adding permissions for the application. A user is allowed to modify an application record only if he has NSC reading and modifying permissions for the application. He is allowed to purge an application record only if he has NSC reading and deleting permissions for the application.

Activity Authorization Event

A user is allowed to view an application record if PACEX033 responds to a call with 0000 or 0001 (PACEX033-PARA.RESP) and TRUE (or another odd value) in PACEX033-PARA.PERM(0). He is allowed to add an application record only if PACEX033 responds to a call with 0000 or 0001 (PACEX033-PARA.RESP) and TRUE (or other odd values) in both PACEX033-PARA.PERM(0) and PACEX033-PARA.PERM(1). A user is allowed to modify an application record only if PACEX033 responds to a call with 0000 or 0001 (PACEX033-PARA.RESP) and TRUE (or other odd values) in both PACEX033-PARA.PERM(0) and PACEX033-PARA.PERM(2). He is allowed to purge an application record only if PACEX033 responds to a call with 0000 or 0001 (PACEX033-PARA.RESP) and TRUE (or other odd values) in both PACEX033-PARA.PERM(0) and PACEX033-PARA.PERM(3).

PAC

A user is allowed to view an application record if the Applications flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge an application (record) only if the Applications flag in his PAC profile is at 'M'odify.

Handling Security from the Application's - Status Link Point-of-View

NSC

See Application.

Activity Authorization Event

See Application.

PAC

A user is allowed to view an application - status link if the Application Status Links flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge an application - status link only if the Application Status Links flag in his PAC profile is at 'M'odify.

Handling Security from the Migration Path's Point-of-View

NSC

See Application.

Activity Authorization Event

See Application.

PAC

A user is allowed to view a migration path if the Migration Paths flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge a migration path only if the Migration Paths flag in his PAC profile is at 'M'odify.

Handling Security from the Migration Event's Point-of-View

NSC

A user is allowed to view a migration event (and its attachments: migration list, audit report, etc) if he has NSC reading permission for the application. A user is allowed to add a migration event only if he has NSC reading and event adding permissions for the application. A user is allowed to modify a migration event only if he has NSC reading and event modifying permissions for the application. To be allowed to authorise an event a user must be allowed to modify it and must have logged on to SYSPAC with an id (individual or chosen group) listed among the authorisers in the relevant migration path. A user is allowed to submit a migration event only if he has NSC reading and event submitting permissions for the application. A user is allowed to purge or refresh a migration event only if he has NSC reading and event deleting permissions for the application. A user is allowed to finalise an archiving event only if he has NSC reading and event submitting permissions for the application and has logged on to SYSPAC with an id (individual or chosen group) listed among the authorisers in the application's CONTROL to RETIRE migration path.

Activity Authorization Event

Like under NSC regime with [PACEX033-PARM.PERM(0,4,5,6,7)], for the application, defining the reading, event adding, event modifying, event submitting, and event deleting permissions respectively.

PAC

A user is allowed to view a migration event if the Migration Events flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge a migration event only if the Migration Events flag in his PAC profile is at 'M'odify. He is allowed to authorise an event only if the Author-

ize Migration Events flag in his PAC profile is at 'Y'es and he has logged on to SYSPAC with an id (individual or chosen group) listed among the authorisers in the relevant migration path. He is allowed to submit or refresh an event only if the corresponding flag in his PAC profile is at 'Y'es. He is allowed to finalise an archiving event only if he is a PAC administrator.

Handling Security from the JCL's Point-of-View

NSC

A user is allowed to view a PAC JCL text (job) if he has NSC reading permission for it. He is allowed to add, modify, purge, or submit (directly, not by submitting an event) a JCL text only if he has reading and a corresponding permission for the JCL text.

Activity Authorization Event

Like under NSC regime with [PACEX033-PARM.PERM(0,1,2,3,4)], for the JCL text, defining the reading, adding, modifying, deleting, and submitting permissions respectively.

PAC

A user is allowed to view or submit a JCL text if the Jobs flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge a JCL text only if the Jobs flag in his PAC profile is at 'M'odify.

Handling Security from the FTT's Point-of-View

NSC

A user is allowed to view a PAC FTT if he has NSC reading permission for it. He is allowed to add, modify, or purge an FTT only if he has reading and a corresponding permission for the FTT.

Activity Authorization Event

Like under NSC regime with [PACEX033-PARM.PERM(0,1,2,3)], for the FTT, defining the reading, adding, modifying, and deleting permissions respectively.

PAC

A user is allowed to view an FTT if the File Translation Tables flag in his PAC profile is at 'M'odify or 'R'ead. He is allowed to add, modify, or purge an FTT only if the File Translation Tables flag in his PAC profile is at 'M'odify.

Handling Security from the PAC Object's Point-of-View

NSC

A user is allowed to view a PAC object (and its attachments: source, USED list, etc) if he has NSC reading permission for the application. He is allowed to purge an object or its historical object - status link only if he has reading and event submitting permissions for the application and has logged on to SYSPAC with an id (individual or chosen group) listed among the authorisers in the application's CONTROL to RETIRE migration path. He is allowed to purge an object's archive token only if he has reading and event submitting permissions for the application and has logged on to SYSPAC with an id (individual or chosen group) listed among the authorisers in the application's ARCHIVE to RETIRE migration path.

Activity Authorization Event

Like under NSC regime with [PACEX033-PARM.PERM(0,6)], for the application, defining the reading and event submitting permissions respectively.

PAC

A user is allowed to view a PAC object if the Object Versions flag in his PAC profile is at 'R'ead. He is allowed to purge an object, its historical object - status link, or archive token only if he is a PAC administrator.

Handling Security from the Change Control Log's Point-of-View

NSC

A user is allowed to view or purge a change control log only if he has NSC reading permission for the application.

Activity Authorization Event

Like under NSC regime with [PACEX033-PARM.PERM(0)], for the application, defining the reading permission.

PAC

A user is allowed to view a change control log if the Change Control Logs flag in his PAC profile is at 'R'ead. He is allowed to purge a change control log only if he is a PAC administrator.

III

Defaults Maintenance

This chapter covers the following topics:

- **General Defaults Maintenance**
- **Extended Description Skeletons**
- **Predict Generation Defaults**
- **Applymod Defaults**
- **System Defaults**
- **NSC PAC User Profile Defaults**
- **Display Control Information**
- **Display and Modify System Defaults**
- **Display and Modify User Profile Defaults**
- **User Exit Defaults**

5 General Defaults Maintenance

Using the General Defaults maintenance sub-functions you can:

- see and modify the values of the Level Name, Prefix, Gen No and MCG options fields of applications;
- see and modify the four extended description skeletons: default descriptions of applications, migration events, maintenance requests and a default JCL text;
- maintain sets of Predict generation defaults;
- see and modify the default settings of applymods;
- see and modify the values of migration job, batch/online, workfile usage, and copy/move/include fields of migration paths.
- see and modify the values of some system parameters and the default user profile;
- see and set user exit switches.

To access the general defaults maintenance functions, enter Code G on the Administrator Functions menu.

The General Defaults menu appears:

```
17:40:39          ***** PREDICT APPLICATION CONTROL *****          2007-04-20
User SAGU          - General Defaults -

          Code  Sub-Function
          ----  -
          E    Extended Description Skeletons
          G    PREDICT Generation Defaults
          M    Applymod Defaults
          S    System Defaults
          U    User Exit Defaults
          ?    Help
          .    Exit
          ----  -

          Code ... _

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

This chapter covers the following topics:

- **Extended Description Skeletons**
- **Predict Generation Defaults**
- **Applymod Defaults**
- **System Defaults**
- **Display Control Information**
- **Display and Modify System Defaults**
- **Display and Modify User Profile Defaults**
- **User Exit Defaults**

6 Extended Description Skeletons

Applications, migration events and maintenance requests have "descriptions" - i.e., texts attached to the entities and accessible through Additional Options pop-ups or keys from the screens displaying the attributes of the entities. When an application, migration event or a maintenance request is added, its description is set at the appropriate default value specified by the PAC administrator, using the facility described in this section. If no default value has been specified, none is automatically attached to the entity being added. The maintainer of the entity is free to modify or discard the description attached to the entity by default.

The fourth description skeleton is actually a default JCL text. If specified by the PAC administrator, it is substituted whenever a JCL text is created in the ACF through the Jobs function on the Main Menu of the Reporting and Maintenance subsystem of PAC. The maintainer of the JCL text can then edit the default text into the JCL text desired.

To create, see or modify a description skeleton, enter Code E on the General Defaults menu.

The Description Skeletons menu appears:

```
17:48:32          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU      - Modify Defaults for Description Skeletons -
```

```
Code  Object
-----
A   Description of a Application
E   Description of a Migration Event
J   Default JCL for a Job
M   Description of a Maintenance Request
?   Help
.   Exit
-----
```

```
Code ...
```

```
Command ==>
```

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

➤ **To process a description skeleton:**

- 1 Choose one of the four skeletons by entering an appropriate Code value.
A screen similar to that of a Natural editor appears.
- 2 Edit the skeleton.
- 3 Use the command SAVE to save the newly edited skeleton.
- 4 Enter "." to leave the editor and return to the Description Skeletons menu.

7

Predict Generation Defaults

■ Sets of Generation Defaults	38
■ Linked Databases	38
■ Predict Generation Defaults	39
■ Copying Predict Generation Defaults from Predict	40
■ Modifying Linked Databases	42
■ Displaying Predict Generation Defaults	43
■ Purge Predict Generation Defaults	44
■ Select Generation Defaults	45

This chapter covers the following topics:

Sets of Generation Defaults

When PAC is initialized, a set of Predict generation defaults called "DEFAULTS" is automatically defined for use with migrations of Predict data into PAC.

Additionally, the PAC administrator may copy and store different sets of Predict generation defaults from Predict and may assign to each a specific name for use with migrations of Predict data into PAC.

The defaults to be used with a Predict migration event can be specified during authorization by entering the appropriate name of the defaults set previously saved.

If no defaults set is specified for a migration of Predict data into PAC, the default set DEFAULTS is used.



Note: Note: If the DEFAULTS set is not found or if the specified set is not found, error 7012 is returned, indicating the defaults set that could not be located; the migration terminates at the generation step.

Linked Databases

Generation defaults for Adabas files have up to ten (10) databases to which files may be linked. On the Copy View Defaults screen, the Adabas Subsystem Specification DB-ID parameter determines whether a linked database is required. (This means that the generated DDM will not be assigned a DBnr.)

If the DB-ID=N is set in the stored generation defaults of Predict, a DDM with DBnr=0 is generated, even if the file is linked to several databases.

If DB-ID=Y is set in the stored generation defaults, Adabas files can be linked to databases. Note the following:

- Where no database is linked, the generation aborts and error 2047 is returned.
- Where one database is linked, PAC generates the view/DDM, using this database. The resulting DDM will have this database Dbnr.
- Where several databases are linked, PAC determines the database as follows:
 - If the file is linked to one or more databases in the object list of the event, PAC takes the first database in alphabetical order.

- If the file is linked to one or more databases in the generation defaults, PAC takes the database from there. A database can be specified for each event for which the generation defaults set is used. PAC checks sequentially to determine whether the userview is linked to a database. The first database found with a link to the userview is selected for the generation.

PAC User Exit PACEX037

If the user exit PACEX037 is active, PAC invokes the exit before the generation command is built in order to determine the linked database to be used for the DDM generation. If no linked database is found or DBID=N is set, a blank is passed to the exit. The user exit may then verify, override, or reset the linked database name.

Predict Generation Defaults

From the Predict Generation Defaults menu, you can copy, display, purge, or select Predict userview generation defaults; and modify the list of linked databases.

From the General Defaults menu, enter Code G (Predict Generation Defaults).

The Predict Generation Defaults menu appears:

```

17:54:00          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU          - Predict Generation Defaults -

Code  Sub-Function
----  -
C     Copy Generation Defaults from Predict
D     Display Generation Defaults
M     Modify Linked Databases List
P     Purge Generation Defaults
S     Select Generation Defaults from a List
?     Help
.     Exit
----  -

Code ..... _
Defaults name ... _____
Predict DBnr .... 222 Fnr ... 153
Replace ..... N

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

```

In addition to the Code field, the following input fields are available for processing generation defaults:

Input Field	Description
Defaults Name	Name of the set of generation defaults. The name can be 1 to 8 characters long and have any combination of characters.
Predict DBnr/Fnr	Database number (DBnr) and file number (Fnr) of the Predict (FDIC) file from which the new defaults are to be copied.
Replace	Used with subfunction code C (Copy Generation Defaults from Predict). If a set of generation defaults already exists with the specified name: N (Default): The existing set is not replaced; Y: the existing set is replaced.

Copying Predict Generation Defaults from Predict

You can copy the Predict generation defaults in your FDIC file to the PCF system file.

The generation defaults, as they are currently defined in the referenced FDIC, file will be copied.



Note: The values for these are not modifiable in PAC. To change the options, you must change the values in Predict, then copy the defaults into PAC.

The following are forced defaults for the DDM generation defaults.

Parameter	Default
General comments	Y
Short comments	Value is variable, independent of what is set in Predict
List verification	Y
Generate UDFs	Y
List UDFs	Y
List related maps	Y
List generated code	Y

» To copy Predict generation defaults:

- 1 Enter Code C (Copy Generation Defaults) and a name for the Predict userview generation defaults to be copied.

The Copy View Defaults screen appears, displaying the Predict userview generation defaults to be copied:

```

19:08:59          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU              - Copy View Defaults -                               ↵

Generation Defaults ..... DFL00002                                       ↵

Overwrite option ..... Y (Y,N)      Adabas Subsystem                      ↵

List generated code ..... N (Y,N)      Use ADASTAR access-nr .... N      ↵

Adabas version ..... I3                Specification DB ID ..... N      ↵

                                           DB2 Subsystem                      ↵

                                           Truncate creator ..... N (Y,N)   ↵

Field name prefix .....

Line comments ..... N (Y,N,O)  IMS Subsystem                            ↵

General comments ..... Y (Y,N)      Generate UDFs ..... N (Y,N)
Short comments ..... 3 (0-16)      Replace UDFs ..... Y (Y,N)
Generate verif. rules ... Y (Y,N)   List UDFs ..... N (Y,N)
Replace verif. rules .... Y (Y,N,S)  IMS field suffix ..... N (Y,N)
List verif. rules ..... Y (Y,N)      Natural Subsystems                ↵

                                           Generate security ..... N (Y,N)
VSAM trailing BLANK char ...         Super Natural file opt ... N (Y,N)
                                           Super Natural file DBNR .. (0-254)
Linked Databases List ..... N        Super Natural file FNR ... (0-255)
Command ==>

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

```



Note: Except for the Linked Databases List, the values for these defaults are not modifiable in PAC. To change the options, you must change the values in Predict, then copy the defaults into PAC.

- 2 To modify the linked databases, type Y over the default in the Linked Databases List field.

For more information, refer to [Modify Linked Databases](#).

- 3 To copy the generation defaults, press ENTER. Or, to terminate the function without copying the defaults, press PF3 (Exit) or PF12 (Canc).

When you press ENTER, the Verification Defaults window appears, verifying that rules as well as views will be copied.

- 4 To complete the copying of the generation defaults, press ENTER. Or to terminate the function without copying the defaults, press PF3 (Exit) or PF12 (Canc).

The message "Generation Defaults have been copied." appears on the Predict Generation Defaults menu after you have successfully copied the Predict generation defaults to your PCF system file.

Modifying Linked Databases

➤ To modify the list of databases linked to the Predict userview generation defaults

- access the Modify Linked Databases List screen in one of the following ways:

From this Screen	User Action
Copy View Defaults	Type Y over the N default in the Linked Databases List field.
Predict Generation Defaults	Enter Code M (Modify Linked Databases List) and the name of the generation defaults set to be modified.
Predict Generation Defaults Selection List	Enter M (Modify Linked Databases List) in the C field adjacent to the name of the generation defaults set to be modified.

The Modify Linked Databases List screen appears:


```

14:07:23          ***** PREDICT APPLICATION CONTROL *****          2000-05-07
User: SAGXX          - Modify Linked Databases List -

Gen Defaults .. DB2-TRUN
Title ..... DB2 defaults to be used for the truncation of creator_____

Linked DBs .... PROD-DB_____
                  TEST-DB_____
                  _____
                  _____
                  _____
                  _____
                  _____
                  _____
                  _____
                  _____

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

```

From this screen, you can

- modify or add the database names of up to 10 databases;

The database names can be entered, using uppercase or lowercase text; however, the first character must be capitalized.

- modify the entry in the Title field, which is used to specify an extended name or description for the generation defaults set;
- press ENTER to confirm your modifications.

You are returned to the Predict Generation Defaults menu.

Displaying Predict Generation Defaults

To display Predict userview generation defaults, access the Display View Defaults screen.

From this Screen

User Action

Predict Generation Defaults Menu	Enter Code D (Display Generation Defaults) and the name of the userview in the Defaults Name field.
Predict Generation Defaults Selection List	Enter D (Display Generation Defaults) in the C field adjacent to the name of the userview.

```

17:59:51          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
  User SAGU              - Display View Defaults -

Generation Defaults ..... DFL00001
Overwrite option ..... Y (Y,N)      Adabas Subsystem
List generated code ..... N (Y,N)    Use ADASTAR access-nr .... N
Adabas version ..... I1              Specification DB ID ..... N
                                      DB2 Subsystem
                                      Truncate creator ..... N (Y,N)

Field name prefix .....
Line comments ..... N (Y,N,0)      IMS Subsystem
General comments ..... Y (Y,N)      Generate UDFs ..... N (Y,N)
Short comments ..... 3 (0-16)       Replace UDFs ..... Y (Y,N)
Generate verif. rules ... Y (Y,N)    List UDFs ..... N (Y,N)
Replace verif. rules .... Y (Y,N,S)  IMS field suffix ..... N (Y,N)
List verif. rules ..... Y (Y,N)     Natural Subsystems
                                      Generate security ..... N (Y,N)
VSAM trailing BLANK char ...          Super Natural file opt ... N (Y,N)
                                      Super Natural file DBNR .. (0-254)
Linked Databases List ..... N        Super Natural file FNR ... (0-255)
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit                                     Canc

```

The Display View Defaults screen lists the generation defaults for the specified Predict userview. This screen is similar to the Copy View Defaults screen; however, the Display View Defaults screen may not be modified.

To display a list of databases linked to the generation defaults, type Y over the N default in the Linked Databases List field.

The Display Linked Databases List screen appears. The linked databases list may not be modified. For an example of a similar screen, refer to [Modify Linked Databases](#).

Purge Predict Generation Defaults

The purge function is used to purge the defaults for both rules and userviews.

To purge a Predict generation default set, access the Purge Confirmation window in one of the following ways:

- From the Predict Generation Defaults menu, enter Code P (Purge Generation Default) and the name of the generation default set to be purged in the Defaults Name field.
- From the Predict Generation Defaults Selection List, mark the desired generation default set with P in the "C" column.

From the Purge Confirmation window, do one of the following:

- To purge the Predict generation defaults, enter CONFIRM or press PF5.
- To terminate the function without purging the defaults, enter a period (.) or press PF3 (Exit) or PF12 (Canc).

The message "Predict ... Generation Defaults purged" appears after you have successfully purged the Predict generation defaults.

Select Generation Defaults

To display a selection list of all Predict generation default sets, enter Code S (Select Generation Defaults). Use range notation if you want to limit the list of generation defaults.

The Predict Generation Defaults Selection List screen appears displaying a list of Predict generation default sets which have been copied into PAC as shown in the following example:

```

18:02:07          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU          - PREDICT Generation Defaults Selection List -
Select Predict Generation Defaults *
C Nr Gen Defaults Title
- - - - -
_  1 DEFAULTS
_  2 DFL00001

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

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

```

To display a specific set of Predict generation defaults on the Display View Defaults screen, mark the defaults set with an X in the C column, or enter the number (from the Nr column) in the Mark Selection... field.

You may modify a linked databases list (M), display generation defaults (D), or purge generation defaults (P) directly from this screen by marking the name of the generation defaults set with the

appropriate code in the C column. Refer to the relevant sections for examples of the resulting screens.

8 Applymod Defaults

Applymods are switches whose settings influence the behavior of PAC object processing. There is a default set of such switches for PAC as a whole and a separate set for each migration event. The default set consists of 23 applymods numbered as follows: 1, 2, 4 - 6, 8 - 20, 23, 24, 29 - 31.

Each event set consists of 18 applymods. The applymods 1, 20, 23 are contained only in the default set. Each applymod in the default set can take as value N(o), Y(es), D(eactivate), and A(ctivate). Each applymod in an event set can take as value N(o) and Y(es). In contexts other than migration, only the default settings are valid and have the switch "off", Y and A and "on".

At migration, there are 18 pairs of switches, each of which has eight possible settings. These settings have the following effects:

Default setting	Event setting	Effect
N	N	off
N	Y	on
Y	N	off
Y	Y	on
D	N	off
D	Y	off
A	N	on
A	Y	on

The 21 default applymod values are set by the PAC administrator with facility described in this section. The 18 applymod values of each migration event are derived (N,D f N; Y,A f A) from the default settings at event addition and can be subsequently changed whenever the event is authorized and (the default) applymod is set to "N".

The roles of individual applymods are described in PAC Reference documentation.

To see or modify the default applymod settings, enter Code M on the General Defaults menu.

The Applymod Defaults menu appears:

```

18:15:15          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU          - Applymod Defaults -

                  Code  Sub-Function
                  ----  -
                  D    Display Applymods
                  M    Modify Applymods
                  ?    Help
                  .    Exit
                  ----  -

Code ... _

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

```

Enter Code D to display the values of the default applymods or Code M to modify them. In the first case, a Display Applymods screen appears. In the second case, the following Modify Applymods screen appears. On the first screen, the fields of the first column containing the values of the default applymods are protected; on the second screen, they are not protected.

```

18:16:40          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU          - Modify Applymods -

                                          Modified: 2000-04-11 by SAGU

Used      Number      Applymod Description
-----
N          1          Disallow Override of ParmS during Authorization
N          2          Do not optimize size of Cataloged object
N          3          Not Implemented
N          4          Suppress Audit Report creation during Migration
N          5          Suppress GDA auto expand during Migration
N          6          Migrate objects only previously migrated
N          7          Not Implemented
N          8          Force all DDMs/LDAs/PDAs to be unloaded during Migration
N          9          Expand facility should select for Languages 1-9 on Maps
N         10          Migrate objects to a status only if they have changed
N         11          Check runtime subordinates immigrating
Enter options (above), or '?' (help) or '.' (exit): __

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

```



Note: To change the applymod settings, remember to press ENTER before using PF3 to return to the Applymod Defaults menu.

Press PF4 to see when and by whom the default applymod values were last modified.

9 System Defaults

The system defaults maintenance functions in the Administration subsystem of PAC allow you

- to see the control information of PAC - i.e. of the ACF and PCF system files;
- to see and modify the values of eight PAC parameters;
- to see and modify the default user profile which contains the initial settings used at user profile addition.

To access the system defaults maintenance functions, enter Code S on the General Defaults menu.

The System Defaults menu appears:

```
13:56:53      **  PREDICT APPLICATION CONTROL  ***      2007-05-23
User POR      - System Defaults -

Code  Sub-Function
-----
  B   Display Control Information
  D   Display System Defaults
  M   Modify System Defaults
  P   Modify User Profile Defaults
  U   Display User Profile Defaults
  S   Modify NSC PAC User Profile Defaults
  V   Display NSC PAC User Profile Defaults
  ?   Help
  .   Exit
-----

Code ... _

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

10

Display Control Information

Enter Code B on the System Defaults menu to access a Display Control Information screen:

```
18:35:12          ***** PREDICT APPLICATION CONTROL *****          2009-01-24
User VMU          - Display Control Information -

ACF System File ..... 00164,00137
PCF System File ..... 00164,00135
PCF PREDICT version ... 4.5

PAC Version ..... 2.6.01
Installation Date ..... 2009-01-23 10:16:55

NATURAL Version ..... 4.2.03

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

The screen contains:

- the database and file numbers of PAC's ACF systemfile;
- the database and file numbers of PAC's PCF system file;
- the version and release numbers of PAC;

- the date and time associated with the version of PAC;
- the date and time when the user initialized PAC.

Press ENTER to return to the System Defaults menu.

11

Display and Modify System Defaults

Enter Code D on the System Defaults menu to display the system defaults of the PAC. A Display System Defaults screen will appear. It differs from a Modify System Defaults screen only in that all its fields except the command line are protected.

Enter Code M on the System Defaults menu to modify the system defaults of the PAC.

A Modify System Defaults screen appears:

```
14:09:39          **  PREDICT APPLICATION CONTROL  ***          2007-05-23
User POR          - Modify System Defaults -

                                     Modified: 2007-05-11  By: SMR

System Title ..... **  PREDICT APPLICATION CONTROL  ***__
Display Banner Screen ..... Y

ET Maximum ..... 50__
Roll Count ..... 50__

Default Batch User ID ..... *USER__
JCL Substitution Character ... &
Finalize PAC Job Name ..... OS_BATCH_JCL_____
Maintenance Request Gen No ... 00000

PCF Coordinator FDIC ... Dbnr 164__ ... Fnr 167__
Protection ..... N
FSEC .....Dbnr 180__ ... Fnr 55__

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

The values of its nine unprotected fields are described below:

Value	Description
System Title	The title to appear at the top of the PAC screens.
Display Banner Screen:	NO (N) not to display a banner screen when the PAC is started; YES (Y) to display it.
ET Maximum	The maximum number of held ISNs.
Roll Count	The maximum number of teleprocessing transactions between Natural task rolls (the TP parameter).
Default Batch User ID	@USER substitution parameter Batch user ID User ID batch User ID Natural session User ID to be used when a batch job is submitted. This value is also used for the @USER substitution parameter in batch job JCL. The default will substitute @USER with the user's Natural session user ID (*USER).
JCL Substitution Character	The initial character of the names of JCL substitution parameters.
Finalize PAC Job Name	The name of the JCL text to be used at archiving event finalization unless the finalizer specifies another JCL text or finalizes the event online.
Maintenance Request Gen No	The current maintenance request @GEN replacement.
PCF Coordinator FDIC	Enables you to set / define the Coordinator FDIC for the PAC PCF file.
Protection	The switch for turning on or off the protection of PAC objects.
FSEC	The database ID and file number of the FSEC where to maintain the security profiles. If Protection=Y without FSEC specification, the user exit PACEX033 is used instead of the authorization check. If the FSEC ID is specified, the check is performed via NSC routines.

Modify the displayed values and press ENTER to apply the changes. Press PF3 to return to the System Defaults menu without changing the values of the PAC parameters.

12

Display and Modify NSC PAC User Profile Defaults

Enter Code S on the System Defaults menu to modify the default NSC PAC user profile defaults. A Display NSC PAC User Profile Defaults screen will appear. If you enter code V, you will receive the same screen where the fields are protected.

```
13:57:43          **  PREDICT APPLICATION CONTROL  ***          2007-05-23
User POR          Display NSC PAC User Profile Defaults

NSC defaults for PAC entities in FSEC  Dbnr ... 180      Fnr ... 55

Application:

  Read ..... N  Add ..... N  Modify ..... N  Delete ..... N
  Add event .. N  Modify event .. N  Submit event .. N  Delete event .. N

FTT:

  Read ..... Y  Add ..... Y  Modify ..... Y  Delete ..... Y

JCL text:

  Read .... Y  Add ..... Y  Modify .... Y  Delete .... Y  Submit .... Y

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help  Menu  Exit                                     Canc
4A0 22,015 ↵
```

The NSC profile of a user is a set of flags determining the permissions for a given user ID.

Here, you can specify the default values for access modes in PAC by defining the NSC external objects in FSEC. If you want to specify different and more specific values, you have to perform the definitions in SYSSEC directly, where three additional entries for the PAC specification are added.

NSC responds with "yes" or "no" to a query specifying user ID, an NSC object of one of the for types and a permission type.

13

Display and Modify User Profile Defaults

Enter Code U on the System Defaults menu to display the default user profile containing the initial settings used at user profile addition. A Display User Profile Defaults screen will appear. It differs from a Modify User Profile Defaults screen only in that all its fields are protected.

Enter Code P on the System Defaults menu to modify the default user profile.

The Modify PAC Profile screen appears:

```
08:58:12                Predict Application Control                2003-10-07
User DBA                 - Modify PAC Profile -

+-----+-----+-----+-----+
|                                     |
|               - Profile Options for PAC user DBA               |
|                                     |
|               ----- Functions -----                           |
| Administrator ..... Y   Submit Migration Events ..... Y   |
| Authorize Migration Events ... Y   Refresh Migration Events ..... Y   |
|                                     |
|               ----- Maintenance Entities -----               |
| Applications ..... M   Application Status Links ..... M   |
| Statuses ..... M   File Translation Tables ..... M   |
| Jobs ..... M   Keywords ..... M   |
| Maintenance Requests ..... M   Migration Events ..... M   |
| Migration Paths ..... M   |
|                                     |
|               ----- Retrieval Entities -----                 |
| Change Control Logs ..... R   Object Versions ..... R   |
|                                     |
+-----+-----+-----+-----+

Help  Menu  Exit  Opts                Prof                Canc  ↵
```

14

User Exit Defaults

User exits are sets of CALLNATs in PAC. Each such set is a set of CALLNATs of a subprogram of a particular name documented in PAC Reference documentation. The user can write the subprogram himself using the parameters described in PAC Reference documentation. If then the subprogram is catalogued in SYSPAC or its step library and the user exit is "switched on" by the PAC administrator with the facility described in this section, the subprogram will be called in certain situations. If the subprogram is available, but the user exit is not switched on, the CALLNATs of the exit are bypassed. If the user exit is switched on, but the subprogram is not available, NAT0082 occurs. Apart from the subprogram names PAC user exits have numbers. There are 37 of them, numbered as follows: 1-28, 30-32, 34-38, 40.

For each (numbered) PAC user exit, there is a switch at any time set to NO (N) for "off" or YES (Y) for "on". To see or modify these settings enter Code U on the General Defaults menu.

The User Exit Defaults menu appears:

```

18:42:28          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
  User SAGU              - User Exit Defaults -

      Code  Sub-Function
      ----  -
      D    Display User Exits
      M    Modify User Exits
      ?    Help
      .    Exit
      ----  -

Code ... _

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

```

Enter Code D to display the settings of the user exit switches or Code M to modify them. In the first case, a Display User Exits screen appears; in the second case, the following Modify User Exits screen appears. The two screens differ in that, on the first screen, the fields of the first column containing the settings of the switches are protected while, on the second screen, they are not.

```

18:43:38          ***** PREDICT APPLICATION CONTROL *****          2000-04-20
User SAGU          - Modify User Exits -

Page 1                      Modified: 1998-04-06 by EDSW

Used   Number   Exit Description
-----
N      1        PAC initialization user exit
N      2        PAC termination user exit
N      3        Adabas file security exit (MIGEX003)
N      4        PAC entity purge validation
N      5        Concurrent migration verification
N      6        Compilation error verification
N      7        Change Control List verification
N      8        Application location validation (Appl-Status link)
N      9        Verification of duplicate objects for migration
N     10        Migration object list verification
N     11        General validation for batch job
N     12        Batch job submission verification
Enter options (above), or '?' (help) or '.' (exit): __
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Date      --  -  +                      Canc

```



Note: To change the user exit switch settings, remember to press ENTER before using PF3 to return to the User Exits Defaults menu.

Press PF4 to see when and by whom the default applymod values were last modified.

IV

Other Maintenance

This chapter covers the following topics:

- **Foreign Object Maintenance**
- **Locked Data Maintenance**
- **Request Table Maintenance**
- **User Profile Maintenance**

15 Foreign Object Maintenance

The foreign object types to be accepted by PAC must be defined by the PAC administrator, using the Foreign Maintenance Administration Function. Then some of these acceptable foreign object types can be allowed for an application and assigned to a location specified in an application-status link for a migration. How to define a foreign type is described here. Allowing an already defined type for an application and assigning it to a location are described in the PAC User's Guide.

Enter Code N on the PAC Administrator Functions Menu to open the following Foreign Maintenance screen.

```
15:50:38          ***** PREDICT APPLICATION CONTROL *****          2000-01-30
User SAGU          - Foreign Maintenance -

                                Code  Sub-Function
                                ----  -
                                M    Modify Table
                                D    Display Table
                                ?    Help
                                .    Exit
                                ----  -

                                Code ... _

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

Enter Code M (Modify Table) or D (Display table) to display the Foreign Support Maintenance screen.

```

15:53:25          ***** PREDICT APPLICATION CONTROL *****          2000-01-30
User SAGU          - Foreign Support Maintenance -

  No  Code Type Long Text      Short Description      Add Date  Add User
  ---  ---  ---  ---          ---  ---          ---  ---
  1   3COL  L   COBOL LOAD__ COB L_          1998-09-19 SAGU
  2   3COS  S   COBOL SOURCE COB S_          1998-09-19 SAGU
  3   3JCL  S   JCL TEXT____ JCL____        1998-09-19 SAGU
  4   3POM  S   POEM____     POEM____        1998-12-14 SAGU
  5   _____
  6   _____
  7   _____
  8   _____
  9   _____
 10   _____
 11   _____
 12   _____

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

```

If you accessed the table, using the M (Modify Table) code, you can add or modify the types of foreign datasets to be supported at your site. Object types not entered on this table will not be displayed in further selection screens.

Every dataset name and type entered in this table will be stored as a record on the ACF to facilitate the use of the table in the future.

The purpose of this table is to reduce the complexity for the application developer by reducing the list of supported foreign objects. When defining an application, the project leader may want to further limit the foreign objects supported for a particular application. This will make the selection of foreign objects easier since the user will not be concerned with foreign objects their application does not use.



Note: A foreign type definition can be purged only if it is not allowed for any application and not assigned to any location specified in an application-status link. To purge such a definition, blank out its line on the Foreign Support Maintenance screen.

➤ To define a foreign dataset to be supported by your PAC installation:

- 1 Enter an object Type code.

For foreign objects, the type code is automatically prefixed with a "3". You are allowed to specify up to three additional characters. This code is used to identify the object type on the object list for migration events and must uniquely identify the dataset. This code cannot be modified once the dataset has been used.

- 2 Enter an object format (Fmt).

Valid values for the object format include

S	for source code, the default.
L	(Load) for compiled (object) code.

- 3 Enter both a Long Text and a Short text name for the dataset, and a short Description.

The long text name is limited to 12 characters; the short text name to 6 characters; and the description to 15 characters.

16

Locked Data Maintenance

■ Display Locked Data	73
■ Release Locked Data	78
■ Reset a Migration Event	85
■ Select Locked Data	89
■ Undo a Migration Event	90

Data is locked by PAC when it is being processed. Users can unlock data which they themselves have locked.



Note: Only a PAC administrator can unlock data which has been locked by other users.

If a migration event is not successfully completed, the data it locked remains locked. An uncompleted event can be resubmitted. In this case, an attempt is made to resume its processing from the beginning of the first uncompleted step. The PAC administrator can reset an uncompleted event. In this case, the data locked by the migration event remains locked. If, however, the event is resubmitted, it is restarted from the beginning rather than from the last step reached. The PAC administrator can also release an uncompleted event. If the event has not reached step 6, it is backed out. If it has reached step 6, its completion is forced.

On the Administrator Functions menu, enter Code L (Locked Data Maintenance). Or enter the command UNLOCK on the command line of any PAC menu.

The Locked Data Menu appears:

```

17:03:00          ***** PREDICT APPLICATION CONTROL *****          2000-03-03
User SAGU          - Locked Data Menu -

      Code  Sub-Function
      ----  -
      D    Display Locked Data
      R    Release Locked Data
      S    Select Locked Data
      ?    Help
      .    Exit
      ----  -

Code ... _
User ... _____

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

```

This chapter covers the following topics:

Display Locked Data

From the Locked Data Menu, you can display all locked data or data locked by a specified user if you are a PAC administrator. If you are not a PAC administrator, you can display the data which you yourself have locked.

This section covers the following topics:

- [Data Locked by a User](#)
- [Details of a Locked Entity](#)
- [Details of an Application Locked by a Migration](#)

Data Locked by a User

To access a list of data locked by a user, enter Code D (Display Locked Data) and the user ID of the user.

If you do not specify a user, a list of all data locked by all users is displayed.

A Display Locked Data screen appears:

17:03:37		***** PREDICT APPLICATION CONTROL *****		2000-03-03	
User SAGU		- Display Locked Data -			
C	Nr	Name of Locked Entity	Lock Type	Reason	User ID
-	-	-	-	-	-
-	1	CLOVER	Application	Migration	EDSW
-	2	HEATHER-DEV0-CONTROL-1	Migration Event	MODIFY	SAGU
Mark Selection, Enter Number or 'T' (Top) ____					
Command ==>					
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---					
Help Menu Exit -- + > Canc					

This screen lists the following: the name and the type of a locked entity; the cause of the locking (modification, deletion or migration); the user ID of the user who locked the entity. Each entry is assigned a number on the screen ("Nr" column), and an input field is provided for selecting an entry ("C" column).

Press PF11 to display the ID of the terminal from which the data were locked and the date and time at which the data was locked. Press PF10 to again display the cause of the locking and the user ID.

Details of a Locked Entity

To display information about an entity listed as locked on the Display Locked Data screen, enter the number of the entry (from the "Nr" column) in the Mark Selection field, or enter D in the "C" column next to the entry, or mark the entry with the cursor.

The specified locked data is displayed in a Display Locked Data window:


```

17:03:37      ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU      - Display Locked Data -

C Nr Name of Locked Entity      Lock Type      Reason      User ID
-----
+-----+
|      --- Display Locked Data ---      |
| Migration Event data was locked by User SAGU at TID PCM18 |
| on 1998-03-03 16:51:16                  |
| Migration Event .. HEATHER-DEV0-CONTROL-1 |
| Reason ..... MODIFY                    |
+-----+

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

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

```

This window identifies the following: the entity locked; the user who locked it; whether it was locked by a batch job or from an identified terminal; the time at which it was locked; the cause of the locking.

Details of an Application Locked by a Migration

If the information you displayed is about an application locked by a migration event, the resulting Display Locked Data window looks like this:

```

17:03:37      ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU      - Display Locked Data -

C Nr Name of Locked Entity      Lock Type      Reason      User ID
-----
+-----+
|      --- Display Locked Data ---      |
| Migration Event data was locked by User EDSW      at TID Batch |
| on 1998-03-03 16:58:47      |
| Event ..... CLOVER-DEVO-CONTROL-1      |
| Application .. CLOVER      |
| From Status .. DEVO      |
| To Status .... CONTROL      |
| Reason ..... Migration      |
| Step Number .. 2 - Versions Created      |
| Display locked data for Migration Event ..... N      |
+-----+

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

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

```

Some information is provided about the migration event that performed the locking: the origin and the destination statuses and the number and description of the step reached by the event.

To display the data which is locked by the migration event, type Y over the N default in the field "Display locked data for Migration Event".

A Display Locked Migration Event Data screen appears, displaying a list of the objects locked by the migration event which locked the application:

```

17:07:09          ***** PREDICT APPLICATION CONTROL *****          2000-03-03
User SAGU          - Display Locked Migration Event Data -
Event ..... CLOVER-DEVO-CONTROL-1
Application .. CLOVER
From Status .. DEVO                      LIB .. ESO          (222,122)
To Status .... CONTROL                   LIB .. * PACS * (222,144)

Object              Object Type          Version Status
-----
ES_Z_L03            Local                  00001 Locked
ES_Z_N99            Subprogram                00001 Locked
ES_Z_P04            Program                  00001 Locked
ES_Z_P05            Program                  00001 Locked
ES_Z_P09            Program                  00002 Locked
ES_Z_P11            Program                  00001 Locked
CLOVER-DEVO-CONTROL-1 Migration Event          Locked
CLOVER              Application                00001 Locked

Press ENTER to continue or '.' to Exit: _
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit                                Canc

```

This screen provides the following additional information:

- the Natural locations of the origin and non-production destination migrations which are identified by their library names, and data base and file numbers;
- the name and type of each entity which has been locked;
- the version number of each object migrated by the locked migration event;
- The state of each locked object. The possible status values are:

Check in of an object being migrated from maintenance;

Check out of an object being migrated to maintenance;

Roll in of a compile time subordinate which is being entered into the PCF system file to be used at the compilation incident to migration;

Roll out of a versioned object being replaced in the PCF system file by another of the same name to be used at the compilation incident to a migration;

Locked of the migration event that has caused the locking; of the application locked; of an object being migrated from or to a type other than maintenance; of an object being aligned or retired.

Release Locked Data



Caution: The releasing of data locked by a migration event, which has not reached step 6, is accompanied by the undoing of the migration effects. The releasing of data locked by a migration event, which has reached step 6, forces the event's completion - for example, newly migrated objects stay in CONTROL.

➤ **To release locked data use the following procedure.**

- 1 To access a Release Locked Data screen, do one of the following:
 - On the Administrator Functions menu, enter Code R (Release Locked Data) and optionally enter a user ID in the User field to limit the list.
 - On the Display Locked Data screen, mark the locked entity with R in the "C" column.

```

17:08:07      ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU      - Release Locked Data -

```

C	Nr	Name of Locked Entity	Lock Type	Reason	User ID
_ 1		CLOVER	Application	Migration	EDSW
_ 2		HEATHER-DEV0-CONTROL-1	Migration Event	MODIFY	SAGU

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

Command ==>

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

This screen provides the same information as the Display Locked Data screen - that is, it lists the name and type of a locked entity; the cause of the locking (modification, deletion or migration); the user ID of the user who locked the entity. Each entry is assigned a number on the screen ("Nr" column); and an input field is provided for selecting an entry ("C" column).

Press PF11 to display the ID of the terminal from which the data were locked and the date and time at which the data were locked. Press PF10 to again display the cause of the locking and the user ID.

- 2 Select the data you want to release by
- either entering the number of the entry (from the "Nr" column) in the Mark Selection field;
 - or by entering Rs in the "C" column next to the entries;
 - or by marking the entry with the cursor.

If you select data that is not locked by a migration event, the Release/Reset/Undo Confirmation window appears:

```
17:03:37      ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU              - Release Locked Data -

C Nr Name of Locked Entity      Lock Type      Reason      User ID
-----
+-----+
|          --- Release Confirmation ---          |
| Migration Event data was locked by User UKMJ      at TID DAEETCAV |
| on 2001-05-03 10:04:08                               |
| Event ... TEST                                         |
| Reason .. MODIFY                                       |
| The Release option has been invoked. Enter 'RELEASE' to confirm or '.' |
| to Exit .. _____                               |
+-----+

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

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

It is similar to the Display Locked Data window because it provides the following information: the entity locked; whether it was locked by a batch job or from an identified terminal; the time at which it was locked; and the cause of the locking.

If you select data which is locked by a migration event, the Release/Reset Confirmation window appears:

```

17:03:37      ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU              - Release Locked Data -

+-----+
|          --- Release/Reset/Undo Confirmation ---          |
|                                                            |
| Migration Event record was locked by User UKMJ      at TID DAEETCAV |
| on 2001-05-03 10:14:05                                         |
|                                                            |
| Event ..... UKMJ_TESTING_UNDO_002                          |
| Application .. UKMJ_APPLICATION                               |
| From Status .. UKMJ_TEST_1                                    |
| To Status .... UKMJ_PRODUCTION                               |
| Reason ..... Migration                                       |
| Step Number .. 6 - Versions Copied                           |
|                                                            |
| Enter 'RELEASE' to unlock, 'RESET' to reset, 'UNDO' to undo emigration |
| or '.' to Exit ... _____                                |
+-----+

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

Command ==>

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

```

It is similar to the Display Locked Data window because it provides the following information: the event that caused the locking; the origin and the destination statuses; and the number and

description of the step reached by the event. You can release the locked data or reset / undo the migration event. The resetting is described in section [Reset a Migration Event](#).

- 3 On either the Release or Release/Reset Confirmation window
 - To release the locked data, enter RELEASE.
 - To exit the window and display the Release Locked Data screen again without unlocking the data, enter a period (.), or press PF3 or PF12.

When you enter RELEASE, the Release Locked Data screen appears. The layout of the screen depends on the type of data being released.

If data locked by a migration event is being released, the screens look like this:


```

10:21:01          ***** PREDICT APPLICATION CONTROL *****      2001-05-03
User UKMJ          - Release Locked Migration Event Records -

Event ..... UKMJ_TESTING_UNDO_001

Application .. UKMJ_APPLICATION

From Status .. UKMJ_DEVELOPMENT          LIB .. UKMJD23 ( 164,00247)
To Status .... UKMJ_TEST_1                LIB .. UKMJT23 ( 164,00247)

Object              Object type          Vers.   Action

JULES1              Program              Saved deactivated
JULES1              Program              Catlg deactivated
JULES1              Program              0003 Deleted
JULES1              Program              0002 Restored in PCF
JULES2              Program              Saved deactivated
JULES2              Program              Catlg deactivated
JULES2              Program              0003 Deleted
JULES2              Program              0002 Restored in PCF
JULES3              Program              Saved deactivated
JULES3              Program              Catlg deactivated
JULES3              Program              0003 Deleted
JULES3              Program              0002 Restored in PCF
JULES4              Program              Saved deactivated
MORE.....

```

```

10:22:05          ***** PREDICT APPLICATION CONTROL *****          2001-05-03
User UKMJ          - Release Locked Migration Event Records -

Event ..... UKMJ_TESTING_UNDO_001

Application .. UKMJ_APPLICATION

From Status .. UKMJ_DEVELOPMENT          LIB .. UKMJD23 ( 164,00247)
To Status .... UKMJ_TEST_1              LIB .. UKMJT23 ( 164,00247)

Object                Object type          Vers.    Action

JULES4                Program              0003 Deleted
JULES4                Program              0002 Restored in PCF
UKMJ_PREDICT_APPLICATION Dictionary          Closed
UKMJ_TESTING_UNDO_001 Migration Event      Backed Out
UKMJ_APPLICATION      Application          Unlocked

MORE....

```

The screens are similar to the Display Locked Migration Event Data screen with the exception that, in the rightmost column, actions performed on the entities are listed rather than the status of the entities.

- To scroll through the complete list of entities, press ENTER.
- To interrupt the unlocking and to return to the Release Locked Data screen enter a period (.) or press PF3.

Release Locked Data screen displays one of the following messages:

- "... data released", if the selected data was released;

- "... was not released", if some of the selected data was not released.

Reset a Migration Event

When a migration event is reset, the following occurs:

- The step number of the event is reset to 1.
- The audit report is deleted.

If the event is then resubmitted, the data locked by it is released and the event is immediately re-started from the beginning. Since the application remains locked between the resetting and the resubmission, the state of the application's compartment will be the same at both submissions. It can, however, occur that the states of the compartments of the steplib applications or application Predict are different at the two submissions. Also, the states of any migration may change from the first submission to the second.

➤ **To reset a migration event, use the following procedure:**

- 1 Enter Code R (Release Locked Data) on the Locked Data Maintenance menu.
A Release Locked Data screen appears.
- 2 On the Release Locked Data screen, select the migration event to be reset either by entering an R or placing the cursor in the "C" column, or by entering the number (from the "Nr" column) in the Mark Selection field.

A Release/Reset Confirmation window for the migration event appears:

```

17:03:37          ***** PREDICT APPLICATION CONTROL *****          2000-03-03
User SAGU          - Select Locked Data -

+-----+
|          --- Release/Reset/Undo Confirmation ---          |
| Migration Event record was locked by User UKMJ          at TID DAEETCAV |
| on 2001-05-03 10:26:13                                     |
|                                                             |
| Event ..... UKMJ_TESTING_UNDO_001                         |
| Application .. UKMJ_APPLICATION                           |
| From Status .. UKMJ_DEVELOPMENT                          |
| To Status .... UKMJ_TEST_1                                |
| Reason ..... Migration                                     |
| Step Number .. 2 - Versions Created                       |
|                                                             |
| Enter 'RELEASE' to unlock, 'RESET' to reset, 'UNDO' to undo emigration |
| or '.' to Exit ... _____                             |
|                                                             |
+-----+

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

Command ==>

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

```

It is similar to the Display Locked Data window. It provides information about: the event that did the locking; the origin and the destination statuses; the number and description of the step reached by the event.

You have the option of releasing the locked data or reset the migration event.

3 Enter RESET.

A Special Event Processing screen appears:

```

17:25:53          ***** PREDICT APPLICATION CONTROL *****      2000-03-03
User SAGU          - Special Event Processing -                      ↵
                                                                    ↵
Event ..... CLOVER-DEV0-CONTROL-1                                  ↵
                                                                    ↵
Date ... 97-03-03 16:58:47  Tot Lines ... 20          1625      Page ... 1  ↵
Del Line 0100 PAC6902: (A) Migration initiated at 97-03-03 16:58 by EDSW  ↵
Del Line 0100 PAC6905: (A) ACF System File assignment .. (222,144)        ↵
Del Line 0100 PAC6905: (A) PCF System File assignment .. (222,145)        ↵
Del Line 0100 PAC6920: (A) COPY Objects Online                          ↵
Del Line 0100 PAC6904: (A) Applmods in effect for Migration .... (14)     ↵
Del Line 0100 PAC7020: (A) Application Lock applied at 97-03-03 16:58.    ↵
Del Line 0000 PAC6902: (A) Create Version initiated at 97-03-03 16:58     ↵
Del Line 0000 PAC7057: (A) ES_Z_P04.0001 (Progrm) -- created.             ↵
Del Line 0000 PAC7057: (A) ES_Z_P05.0001 (Progrm) -- created.             ↵
Del Line 0000 PAC7057: (A) ES_Z_P09.0002 (Progrm) -- created.             ↵
Del Line 0000 PAC7057: (A) ES_Z_P11.0001 (Progrm) -- created.             ↵
Del Line 0000 PAC7057: (A) ES_Z_N99.0001 (Subpgm) -- created.             ↵
Del Line 0000 PAC7057: (A) ES_Z_L03.0001 (Local) -- created.              ↵
Del Line 0000 PAC7053: (A) 6 Natural objects processed.                  ↵
Del Line 0000 PAC6903: (A) Create Version completed at 1998-03-03 16:58   ↵
Del Line 0100 PAC6902: (A) Precompile initiated at 1998-03-03 16:58:56   ↵
Del Line 0100 PAC6906: (A) Compile List deleted at 1998-03-03 16:58:56   ↵
MORE

```

The Special Event Processing screen lists the actions being taken to reset the migration event.

- 4 Press ENTER to scroll.

```

17:27:02          ***** PREDICT APPLICATION CONTROL *****
2000-03-03
User SAGU          - Special Event Processing -

Event ..... CLOVER-DEV0-CONTROL-1

Date ... 97-03-03 16:58:47  Tot Lines ... 11      1730      Page ... 2
Del Line 0100 PAC6902: (A) PostCmple initiated at 1998-03-03 16:59:29
Del Line 0100 Errors with Compile
Del Line 0100 Object      Error Line
Del Line 0100 -----
Del Line 0100 ES_Z_P04 0924 0130
Del Line 0100 Subroutine, GDA or external report not found.
Del Line 0100 ES_Z_P05 0924 0130
Del Line 0100 Subroutine, GDA or external report not found.
Del Line 0100 PAC7067: (C) 00000002 errors in Compile phase.
Del Line 0100 PAC7066: (A) 00000004 Natural objects successfully compiled.
Del Line 0100 PAC6903: (A) Compiling completed at 1998-03-03 16:59:30

Event CLOVER-DEV0-CONTROL-1 has been RESET -- Audit Report Flushed

MORE

```

When the migration event has been reset, a message informs you that the event has been reset and the audit report has been flushed.

Select Locked Data

From the Locked Data Menu, enter Code S (Select Locked Data).

A Select Locked Data screen appears:

```

17:28:47          ***** PREDICT APPLICATION CONTROL *****          2000-03-03
User SAGU              - Select Locked Data -

C Nr Name of Locked Entity          Lock Type          Reason          User ID
- - - - -
_  1 CLOVER                          Application        Migration        EDSW
_  2 FURZE                           Application        Migration        SACUBAT
_  3 HEATHER-DEV0-CONTROL-1          Migration Event    MODIFY           SAGU

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

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

```

This screen lists the following information: the name and the type of a locked entity; the cause of the locking (modification, deletion, or migration); the user ID of the user who locked the entity. Each entry is assigned a number on the screen ("Nr" column) and an input field is provided for selecting an entry ("C" column).

Press PF11 to display the ID of the terminal from which the data was locked and the date and time at which the data was locked. Press PF10 to again display the cause of the locking and the user ID.

The entries on the Select Locked Data screen are listed in alphabetical order by user ID.

To display information about an entity listed on the Select Locked Data screen, enter the number of the entity (from the "Nr" column) in the Mark Selection field or enter D in the "C" column next to the entry.

Selected locked data can be released by marking entries of the Selected Locked Data screen with R the "C" column.

Undo a Migration Event

This function is applicable to migrations to test or production and to retirements from test or production, provided the event has reached stage 6 and have not been unlocked.

When a migration event is undone, the following occurs:

- The migration steps are reversed and ACF data is updated.
- The event is unlocked.

To undo a migration event, use the following procedure:

1. Enter Code R (Release Locked Data) on the Locked Data Maintenance menu.

A Release Locked Data screen appears.

2. On the Release Locked Data screen, select the migration event to be undone either by entering an R or placing the cursor in the "C" column, or by entering the number (from the "Nr" column) in the Mark Selection field.

A Release/Reset/Undo Confirmation window for the migration event appears:


```

0:14:20          ***** PREDICT APPLICATION CONTROL *****          2001-05-03
User UKMJ          - Release Locked Data -

+-----+
|          --- Release/Reset/Undo Confirmation ---          |
|
| Migration Event record was locked by User UKMJ          at TID DAEETCAV
| on 2001-05-03 10:14:05
|
| Event ..... UKMJ_TESTING_UNDO_002
| Application .. UKMJ_APPLICATION
| From Status .. UKMJ_TEST_1
| To Status .... UKMJ_PRODUCTION
| Reason ..... Migration
| Step Number .. 6 - Versions Copied
|
| Enter 'RELEASE' to unlock, 'RESET' to reset, 'UNDO' to undo emigration
| or '.' to Exit ... _____
|
+-----+

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

```

It is similar to the Display Locked Data window. It provides information about:

- the event that did the locking;
- the origin and the destination statuses;
- the number and description of the step reached by the event.

You have the option of releasing the locked data, resetting the migration event or undoing the migration event.

Enter UNDO.

```
10:45:52          ***** PREDICT APPLICATION CONTROL *****          2001-05-03
User UKMJ          - Event Migrate Processing -

Event Name ... UKMJ_TESTING_UNDO_002
Application .. UKMJ_APPLICATION
From Status .. UKMJ_TEST_1                      Lib .UKMJT23 (00164,00247)
To Status .... UKMJ_PRODUCTION                  Lib .* PAA * (00164,00239)
PAC6902: (A) Unlock      initiated at 2001-05-03 10:45:52
PAC7053: (A) 4 NATURAL objects processed.
PAC6914: (W) Application Lock was removed at 2001-05-03 10:45:52
PAC6903: (A) Unlock      completed at 2001-05-03 10:45:52

MORE....
```

When the migration event has been undone, a message informs you that the event has been undone.

17

Request Table Maintenance

■ Table Types	94
■ Request Table Maintenance Entry Definitions	95
■ Request Table Maintenance Sub-Functions	96
■ Add Table Entry	96
■ Display a Table Entry	98
■ Modify a Table Entry	98
■ Purge a Table Entry	99
■ Select Table Entries	100

The request table maintenance facility allows you to set up table entries and perform maintenance functions for maintenance requests.

These tables are used when maintenance requests are defined to PAC; they determine the sequence in which maintenance requests are retrieved for selective processing.

Tables are used to provide an interface between PAC maintenance requests and external tracking systems in the user's environment.

This chapter covers the following topics:

Table Types

PAC currently provides two table types: Status and Action.

Status and Action tables are used with maintenance requests to facilitate the documentation of problems in PAC. These tables are user-defined and should be derived from the external problem-tracking system currently in use by the user.

Once table definitions are added to PAC, and the user adds maintenance requests to PAC, the Status and Action attributes are validated against those Status and Action tables defined by the PAC administrator.

Status Table Examples

Code Status Text

OLE Open

INI Initial, new problem

CLO Closed

INF Inform user

WER Waiting for additional error information

INC Incomplete information given

QUE Question



Note: The only Status that cannot be deleted is CLO (Closed). A maintenance request with the Status of Closed can no longer be modified.

Action Table Examples

Code Action Text

SRC Source change

VER Next version

DOC Documentation change

MSC Miscellaneous

HDW Hardware problem

SFT Software problem

Request Table Maintenance Entry Definitions

Request Table Maintenance Entries comprise the following attributes:

Attribute	Description
Table Type	Table type Maintenance request table type Valid table types are Status Action
Text Code	Table text code A unique three-character identifier for a table entry.
Text Value	Table text value A unique description (up to 12 characters in length) for a table entry.
Text Sequence	Table text sequence number A sequence number (1-999) that allows you to specify the priority for the table entry; that is, the sequence in which maintenance requests appear in the Maintenance Request selection screen.
Notes	Comments about the specified table entry.
Message	Displays messages relevant to modifying table entries.

The following Status Table example shows how these attributes might be assigned:

Table Type: Status

Text Code	Text Value	Sequence Number
OPN	OPEN	20
CLO	CLOSED	30
INI	INITIAL	10
WAI	WAITING	50
USR	USER PROBLEM	70
VER	NEXT VERSION	45

Even though INI and OPN normally appear alphabetically after CLO, the sequencing facility allows you to see all open maintenance requests after the "Initial" but before "Closed". Then, within each of these classes (Initial, Open, Closed), you can assign priorities (1-999) to each maintenance request, followed by the actions.

Request Table Maintenance Sub-Functions

To access request table maintenance sub-functions from the Administrator Functions menu, enter Code T (Request Table Maintenance).

The Request Table Maintenance Menu appears:

```
23:08:34          ***** PREDICT APPLICATION CONTROL *****          2000-04-03
User SAGU          - Request Table Maintenance Menu -

      Code  Sub-Function
      ----  -
      A    Add Table Entry
      D    Display Table Entry
      M    Modiry Table Entry
      P    Purge Table Entry
      S    Select Table Entry
      ?    Help
      .    Exit
      ----  -

Code ..... _
Table Type ..... _____
Text Code ..... _____
Text Value ..... _____

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

You may add, display, modify, and purge table entries and select table entries from a list.

Add Table Entry

To add a table entry, enter on the Request Table Maintenance Menu:

- Code A (Add Table Entry)
- Table Type (STATUS or ACTION)
- Text Code (unique 3 character Text Code)
- Text Value (up to 12 characters)

Both the value of Text Code and Text Value can be subsequently used to specify the entry on the Request Table Maintenance Menu and the Status and Action values in maintenance requests. The Text Value will display the maintenance requests.

Neither a Text Code value nor a Text Value value can be shared by more than one entry of the same table.

Spaces in the Text Code field and in the Text Value field are considered equivalent to underscores and are automatically replaced by them. Lower case letters are replaced by their upper case equivalents in the Text Code field, but not in the Text Value field.

After values have been entered in the four fields, an Add Entry screen appears:

```

23:08:34          ***** PREDICT APPLICATION CONTROL *****          2000-04-03
User SAGU                      - Add Entry -

Table Type ..... STATUS                      Modified:          by:

Text Code ..... CDE
Text Value ..... coding_____
Text Sequence .. ____

Notes: .....
_____
_____
_____

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

```

The values of Text Code and Text Value can be changed from this screen.

A non-zero numerical value of Text Sequence must be entered for the entry to be added. This value will affect an order of maintenance request selection. Input to the Notes field is optional.

Press ENTER to add the entry and return to the Request Table Maintenance Menu.

Press PF3 to return to the Request Table Maintenance Menu without adding the entry.

Display a Table Entry

To display a table entry, enter on the Request Table Maintenance Menu

- Code D (Display Table Entry)
- Table STATUS or ACTION and
- the text code of the entry to be displayed or
- the text value of the entry to be displayed.

If an entry which satisfies the selection criteria is found, it is displayed on a Display Entry screen, which is similar to an Add Entry screen. If such an entry is not found, a message is superimposed on the Request Table Maintenance Menu. Unlike on Add Entry screens on Display Entry screens, all fields except the command line are protected.

Range notation can be used in the Text Code field and the Text Value field. In such a case, a variant of the S(elect) function is applied instead of the specified D(isplay). The variant differs from the normal S(elect) in that any character entered in a C field of the Entry Selection List screen is treated like a D.

Modify a Table Entry

To modify a table entry enter on the Request Table Maintenance Menu

- Code M (Modify Table Entry)
- Table STATUS or ACTION
- the text code of the entry to be modified or
- the text value of the entry to be modified.

If an entry which satisfies the selection criteria is found, it is displayed on a Modify Entry screen, which is similar to an Add Entry screen. If such an entry is not found, a message is superimposed on the Request Table Maintenance Menu.

Range notation can be used in the Text Code field and the Text Value field. In this case, a variant of the S(elect) function is applied instead of the specified M(odify). The variant differs from the normal S(elect) in that any character entered in a C field of the Entry Selection List screen is treated like an M and in that the Text Code column and the Text Value column are unprotected and the values of these fields of the listed entries can be changed immediately without recourse to Modify Entry screens.

Purge a Table Entry

To purge a table entry enter on the Request Table Maintenance Menu

- Code P (Purge Table Entry)
- Table STATUS or ACTION and
- the text code of the entry to be modified or
- the text value of the entry to be modified.

If an entry satisfying the selection criteria is found and there are no maintenance requests with the specified Status or Action value then a Purge Confirmation window appears:

```

23:08:34          ***** PREDICT APPLICATION CONTROL *****          2000-04-03
User SAGU          - Request Table Maintenance Menu -

+-----+
|          --- Purge Confirmation ---          |
| Table .... STATUS                            |
| Code ..... DD                              |
|                                              |
| The Purge option has been invoked.          |
|                                              |
| Enter 'CONFIRM' or press PF5 to Purge or '.' |
| to terminate ... _____                |
+-----+

Code ..... _
Table Type ..... _____
Text Code ..... _____
Text Value ..... _____

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

```

To purge the entry enter or press PF5.

To return to the original screen without purging the entry enter period (.) or press PF3.

If an entry satisfying the selection criteria is found and there are maintenance requests with the specified Status or Action value, a Warning window appears:

```

23:08:34          ***** PREDICT APPLICATION CONTROL *****          2000-04-03
User SAGU          - Request Table Maintenance Menu -

          Code  Sub-Function
          +-----+
          |          --- Warning ---          |
          |                                     |
          | Table ..... STATUS                |
          | Text code ..... I_S               |
          | Text value .... ink-stained        |
          | Sequence ..... 30                 |
          |                                     |
          | 2 Maintenance Requests exist with this code. |
          | Purge cannot be performed until the Requests |
          | have been deleted or Code have been removed  |
          | from Requests via Request Modify function.   |
          |                                     |
Code .....|
Table Type|
Text Code +-----+
Text Value ..... _____

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

```

Press ENTER to return to the original screen.

If no entry satisfying the selection criteria is found then a message is superimposed on the Request Table Maintenance Menu.

Range notation can be used in the Text Code field and the Text Value field of the Request Table Maintenance Menu; in such case a variant of the S(elect) function is applied instead of the specified P(urge). The variant differs from the normal S(elect) in that any character entered in a C field of the Entry Selection List screen is treated like a P.

Select Table Entries

To select table entries enter on the Request Table Maintenance Menu

- Code (Select Table Entry),
- Table or .

The selection can be restricted by specifying additional selection criteria in the Text Code field and the Text Value field; range notation can be used.

If more than one entry satisfying the selection criteria is found then an Entry Selection List screen appears:

```

15:44:10          ***** PREDICT APPLICATION CONTROL *****          2000-04-01
User SAGU          - Entry Selection List -

SELECT  Code * in Table Type STATUS
C   Nr   Text Code   Text Value   Text Seq
-   -   -
_   1    CDE        coding        12
_   2    CLO        Closed         999
_   3    INI        Initial         22
_   4    OPE        Opened          44
_   5    PND        Pending          21
_   6    REV        Review           34

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

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

```

If one and only one entry satisfying the selection criteria is found then the Text Code value and the Text Value value of the entry are put in the respective fields of the Request Table Maintenance Menu.

If no entry satisfying the selection criteria is found then a message is superimposed on the Request Table Maintenance Menu.

The C fields of an Entry Selection List screen can take values D(isplay), M(odify), P(urge), and S(elect). In the first three cases the specified functions as described in the three preceding sections are applied to the marked entries. The marking of an entry with an S results in the Request Table Maintenance Menu being re-displayed with its Text Code and Text Value fields filled with the respective values from the chosen entry.

18

User Profile Maintenance

■ Add User Profile	104
■ Copy User Profile	108
■ Select User Profile from List	109
■ Display User Profile	110
■ Modify User Profile	111
■ Purge User Profile	111

The user profile maintenance facilities allow you to add, copy, modify and purge profiles.

On the Administrator Functions menu, enter Code U (User Profile Maintenance).

The Profile Maintenance Menu appears:

```
16:44:58          ***** PREDICT APPLICATION CONTROL *****          2000-03-10
User SAGU          - Profile Maintenance Menu -

      Code  Sub-Function
      ----  -
      A    Add Profile
      C    Copy Profile
      D    Display Profile
      M    Modify Profile
      P    Purge Profile
      S    Select Profile
      ?    Help
      .    Exit
      ----  -

Code ..... _
User ..... _____
New User .. _____

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

On this screen, you can specify the user ID, whose profile is to be handled, and a new user ID to be given a profile by copying.

This chapter covers the following topics:

Add User Profile

To add a new user profile, enter Code A (Add Profile) and a User ID on the Profile Maintenance Menu. There does not have to a profile for the specified user ID for the add to proceed.

The Add PAC Profile screen appears:

```

16:45:50          **** PREDICT APPLICATION CONTROL ****          2000-03-10
User SAGU          - Add PAC Profile -

User ID .. SAGV                      Modified: 1998-03-10  By: SAGU
Keys ..... ,,,,,,,,,,,,,,,,,,,,,,

User Name ..... _____
Batch User ID ..... _____
Default Keyword ..... _____

List Locked Records ... _

Additional Options ... N

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

```

On this screen, you can enter the name of the user for whom you are making a profile. If you are using Natural Security and the user ID has a security profile, the user name is automatically copied from the security profile.

You can optionally enter a Batch User ID to replace "@USER" in the JCL texts of all batch jobs submitted by the user. You can optionally assign a keyword to the profile. The keyword must be previously defined to PAC.

If you specify Y(es) in the List Locked Records field, a list of the entities locked by the user will be displayed when the user logs on to PAC.

To access an Additional Options window, type Y over the default N in the Additional Options field or press PF4 (Opts).

```

16:45:50          **** PREDICT APPLICATION CONTROL ****          2000-03-10
User SAGU          - Add PAC Profile -

User ID .. SAGV          Modified: 1998-03-10 By: SAGU
Keys ..... ,,,,,,,,,,,,,,

User Name ..... _____
Batch User ID ..... _____
Default Keyword ..... _____

List Locked Records ... _          +-----+
                                   |  -- Additional Options --  |
                                   | * Profile Options ..... N |
                                   | Keys ..... N |
                                   | * Date ..... N |
                                   +-----+

Additional Options ... N

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

```



Note: Profile options are copied from a system default set. If you do not modify them, the copied values will be used.

To access Profile Options, type Y over the first default N in the Additional Options window. You can also press PF7 (Prof) on the Add PAC Profile screen and bypass the Additional Options window.

A Profile Options window appears:


```

08:58:12                                Predict Application Control                2003-10-07
User DBA                                - Modify PAC Profile -

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
|                                     - Profile Options for PAC user DBA -                                     |
|                                                                                                     |
| ----- Functions ----- |
| Administrator ..... Y   Submit Migration Events ..... Y   |
| Authorize Migration Events ... Y   Refresh Migration Events ..... Y   |
|                                                                                                     |
| ----- Maintenance Entities ----- |
| Applications ..... M   Application Status Links ..... M   |
| Statuses ..... M   File Translation Tables ..... M   |
| Jobs ..... M   Keywords ..... M   |
| Maintenance Requests ..... M   Migration Events ..... M   |
| Migration Paths ..... M   |
|                                                                                                     |
| ----- Retrieval Entities ----- |
| Change Control Logs ..... R   Object Versions ..... R   |
|                                                                                                     |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

Help  Menu  Exit  Opts                                Prof                                Canc  ↵

```

Specify the rights of the user.

They are listed under three headings: Functions, Maintenance and Retrieval, Entities.

Functions are either allowed (Y) or not allowed (N) and come in three sets:

■ Administrator

If these are to be allowed for the user, the user ID must also be linked to library SYSPACA.

■ Authorize Migration Events

A Y here is necessary for the user to be allowed to authorize events; the user must also be designated as authorizer in the appropriate migration path record.

■ Submit Migration Events.

■ Refresh Migration Events

Allows the user to issue the direct command Refresh when displaying an already completed migration event.

Maintenance entities are either M (Modify), R (Read), or N (None), and depending on the value specified, PAC builds a dynamic menu for each user. Retrieval entities can either be R (Read) or N (None).

To determine when and by whom the profile was added and last modified, type Y over the third default N in the Additional Options window.

```
15:44:18          ***** PREDICT APPLICATION CONTROL *****          2001-05-03
User UKMJ          - Add PAC Profile -

User ID .. DEMOUSER          Modi +-----+
User Name ..... Demo PAC user | --- Modified --- |
Batch User ID .....          | Date .. 2001-05-03 |
List Locked Records ... N    | Time .. 15:44:15 |
                              | By .... UKMJ      |
                              | TID ... DAEETCD3  |
                              +-----+
                              | --- Added --- |
                              | -- Addit   | Date .. 2001-05-03 |
                              | * Profile 0 | Time .. 15:44:15 |
                              | * Date .... | By .... UKMJ      |
                              |             | TID ... DAEETCD3  |
                              +-----+

Additional Options ... Y

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

Press ENTER to leave the Additional Options window and return to the Add PAC Profile screen.

Press ENTER to add the new profile.

The Profile Maintenance Menu appears, displaying the message "Profile successfully added".

Copy User Profile

To create a user profile by copying an existing one, enter Code C (Copy Profile) on the Administrator Functions Menu; specify the user ID whose profile is to be created in the New User field and the user ID whose profile is to be copied in the User field.

A Copy PAC Profile screen appears:

```

16:53:05          ***** PREDICT APPLICATION CONTROL *****      2000-03-10
User SAGU          - Copy PAC Profile -

User ID .. SAGV                      Modified: 2000-03-10  By: SAGU
Keys ..... ,,,,,,,,,,,,,,,,,,,,,,

User Name ..... SAG User_____
Batch User ID ..... SAGUBAT_
Default Keyword ..... _____

List Locked Records ... N

Additional Options ... N

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

```

Copy PAC Profile screens are similar to the Add PAC Profile screens. See [Add User Profile](#) for more information.

Select User Profile from List

To select a user profile from a list, enter Code S (Select Profile) and specify a range of user IDs in the User Field on the Profile Maintenance Menu. Leaving the User field blank is identical to entering an "*" in it.

A Profile Selection List appears:

```

User SAGU                      - Profile Selection List -                      2000-03-10

SELECT  Profile *
C Nr Profile      User Name                      Batch User
-----
_  1 DBA          Initial user entry
_  2 EDSW          Edmund Swylan                  EDSWBAT
_  3 EDSWBAT       Edmund Swylan                  EDSWBAT
_  4 SACU          Anna Sacukevich                SACUBAT
_  5 SACUBAT       Anna Sacukevich
_  6 SAGU          SAG User                        SAGUBAT
_  7 SAGUBAT       SAG User
_  8 SAGU1         SAG User 1                    SAGU1BAT
_  9 SAGU1BAT      SAG User 1

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

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

```

It is an alphabetical list of user IDs. For each user ID a user name and a batch user ID are displayed.

Select a profile for processing by marking it with either M (Modify) or P (Purge). You can also mark an entry with D (Display) to display the profile.

If an entry is marked with M, a Modify PAC Profile screen appears. It is similar to the Add PAC Profile screen.

If an entry is marked with P, a profile purge confirmation window appears.

If an entry is marked with D, a Display PAC Profile screen appears. It is similar to the Add PAC Profile screen, but most of its fields are protected and its profile cannot be modified.

Display User Profile

To display an existing user profile, enter Code D (Display Profile) and a user ID in the User field on the Profile Maintenance Menu.

A Display PAC Profile screen appears.

It is similar to Add PAC Profile screen, but most of its fields are protected, and its profile cannot be modified. Display PAC Profile screens can also be accessed from Profile Selection List screens by entering D in the C column.

Modify User Profile

To modify an existing user profile, enter Code M (Modify Profile) and a user ID in the User field on the Profile Maintenance Menu.

A Modify PAC Profile screen appears. It is similar to Add PAC Profile screen. Modify PAC Profile screens can also be accessed from Profile Selection List screens by entering M in the C column.

Purge User Profile

To purge an existing user profile, enter Code P (Purge Profile) and a user ID in the User field on the Profile Maintenance Menu.

A Purge Confirmation window appears:

```
16:44:58          ***** PREDICT APPLICATION CONTROL *****          2000-03-10
User SAGU          - Profile Maintenance Menu -

      Code  Sub-Function
      ---  -
      A    Add Profile
+-----+
|          --- Purge Confirmation ---          |
|
| Profile .. SAGV
|
| The Purge option has been invoked.
|
| Enter 'CONFIRM' or press PF5 to purge or '.'
| to exit ... _____
Code .|
User .+-----+
New User .. _____

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

To purge the profile, enter Confirm or press PF5.

Enter a period (.) or press PF3 (Exit) to return to the previous screen without purging the profile.

Purging of a profile can also be invoked from Profile Selection List screens by entering P in the C column.