

Extended Error Recovery

Selecting option "E" (Extended Error Recovery) from the Session Opercoms menu displays the Extended Error Recovery menu:

```

09:31:57          ***** A D A B A S  BASIC SERVICES  *****          2005-11-24
                                - Extended Error Recovery -                                PACIE02

          Code      Service
          ----      -
          B          Display message buffer
          D          Display/modify environment
          E          Display/modify Exit routines
          M          Add/Delete PIN modules
          P          Display/modify PIN routines
          R          Refresh threshold and alert exits
          S          SNAP a nucleus dump
          ?          Help
          .          Exit
          -----

Code ..... _
Start Address .. _____ End Address ... _____
Database ID .... 105      (RD-MPM105)

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Menu

```

From this menu you can

- display the message buffer
- display or modify the parameters controlling the extended error handling environment;
- display or modify parameters for invoking the error handling exits;
- add or delete PIN modules;
- display, activate, or deactivate specific PIN routines;
- refresh the ADATHRSH and ADALERTX exit modules loaded in memory;
- SNAP a dump image of nucleus memory.

This chapter covers the following topics:

- Display Message Buffer
- Display/Modify Environment
- Display/Modify Exits

- Add/Delete PIN Modules
- Display/Modify PIN Routines
- Refresh Threshold and Alert Exits
- SNAP a Nucleus Dump

Display Message Buffer

Selecting option "B" (Display Message Buffer) from the Extended Error Recovery menu displays the contents of the message buffer:

```

09:38:27          ***** A D A B A S  BASIC SERVICES  *****      2005-11-24
DBID 105          - Display Message Buffer -                          PACIEB2

Select starting message _____
Msg Num   Time   Msg ID           Message
-----
   2 09:15:11 ADAN5A FILES modified during AUTORESTART:
   3 09:15:11 ADAN5A NONE
   4 09:15:11 ADAN19 BUFFERFLUSH is  A S Y N C H R O N O U S
   5 09:15:11 ADAN8Y FILE-LEVEL CACHING INITIALIZED
   6 CWARN-140, FILE CACHING PARAMETER ERROR; Invalid FILE NUMBER
   7 09:15:11 ADAN80 ADABAS DYNAMIC CACHING ENVIRONMENT established.
   8 09:15:11 ADAN01 A D A B A S  V7.1.0  is active
   9 09:15:11 ADAN01 MODE = MULTI
  10 09:15:11 ADAN01 Running without RECOVERY-LOG
  11 09:45:23 ADAN8U ESP 64001 (WRK2)  Enabled on Demand.
  12 09:45:23 ADAN8U ESP 64002 (WRK3)  Enabled on Demand.
  13 09:45:23 ADAN8U FNR 00050 (BOTH)  Enabled on Demand.

Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit       Latest           -             +             Menu

```

Press PF4 to refresh the screen and show the latest messages added to the buffer.

The Msg Num column contains the sequential record number for each item in the message buffer. Enter a record number in the field Select starting message to position the display to a particular record.

These functions are the same as the error handling operator commands

```
SMGT,DISPLAY=MSGBUF
```

Display/Modify Environment

Selecting option "D" (Display/Modify Environment) from the Extended Error Recovery menu displays the current setting of several extended error handling parameters:

```

09:46:13          ***** A D A B A S  BASIC  SERVICES  *****          2005-11-24
DBID 105          - Display/Modify Environment -          PACIED2

----- Alert Limits -----          --- Parameters ----- Status - Executions -
User Queue ..... 85          Smart Management (SMGT) ON          3
Command Queue ..... 80          Message Buffering ..... ON
Threads ..... 75%          Abnormal Term. Handler. ON          0
Hold Queue ..... 500          Response Code Handler . ON          0
Data Blocks ..... 80%          Heartbeat Subtask ..... ON
Asso Blocks ..... 90%          Full System Dump (DUMP) OFF
Flushes/Interval ... 40          Threshold Interval .... 30
Format Overwrites .. 1

          ----- Most Recent Recovery Action -----
          Last error occurred on 2005-11-24 09:11:45
          Condition: Rsp 017 Location: * N/A *

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help      MsgBuf      Exit                                  Menu

```

If the heartbeat subtask is inactive or if the ADATHRSH module is not installed, the Alert Limits and the threshold interval values are blank.

The parameters with "ON"/"OFF" values in the Status column can be activated and deactivated by changing the value. The threshold interval parameter and the threshold levels displayed in the Alert Limits column cannot be changed in Adabas Online System. See the *Adabas DBA Reference* documentation for more information.

The functions on this screen mirror the error handling operator commands

```

SMGT,{ON | OFF}
SMGT,ABNORMALTERM={ON | OFF}
SMGT,DUMP={ON | OFF}
SMGT,HEARTBEAT={ON | OFF}
SMGT,MSGBUF={ON | OFF}
SMGT,DISPLAY=THRESHOLD
SMGT,DISPLAY=LAST

```

Display/Modify Exits

Selecting option "E" (Display/Modify Exits) from the Extended Error Recovery menu displays the status of the exits currently loaded:

Add/Delete PIN Modules

Selecting option "M" (Add/Delete PIN Modules) from the Extended Error Recovery menu displays a list of currently available PIN modules:

```

10:02:45          ***** A D A B A S  BASIC  SERVICES  *****          2005-11-24
DBID 105                - Add/Delete PIN Modules -                          PACIEM2

Mark entries with 'A' to Add or 'D' to Delete:

      M  Module      Description      Message
      -  - - - - -  - - - - - - - - - - -  - - - - -
      -  ADAMXY     Standard Nucleus PIN Routines
      -  PINAAF     SAF Security
      -  PINAFP     Adabas Fastpath
      -  PINATM     Adabas Transaction Manager
      -  PINAVI     Adabas Vista
      -  PINRSP     Adabas Response Code Handler
      -  PINUES     Universal Encoding Support

```

▶ To load a PIN module into memory

1. Enter "A" in the M column next to the module name.

This command is successful only if the exit module exists in a library accessible to the Adabas nucleus.

▶ To remove a PIN module from memory

1. Enter a "D" in the M column next to the module name.

When deleting a PIN module from memory, all related PIN routines are also removed.

These functions are the same as the error handling operator commands

```
SMGT,{ADDPIN | DELPIN}=module-name
```

Display/Modify PIN Routines

Selecting option "P" (Display/Modify PIN Routines) from the Extended Error Recovery menu displays a list of PINs currently loaded in memory:

```

10:08:49          ***** A D A B A S  BASIC  SERVICES  *****          2005-11-24
DBID 105          - List/Modify PIN Routines -          PACIEP2

Mark entries with 'A' Activate, or 'D' Deactivate:          Total Pins: 012

 M  Condition          Error Location          Status  Uses  Module  Message
-  - - - - -          - - - - -          - - - - -  - - - - -  - - - - -  - - - - -
_  000C1000  All Locations          Active   0    ADAMXY
_  000C2000  All Locations          Active   0    ADAMXY
_  000C3000  All Locations          Not Act  0    ADAMXY
_  000C4000  All Locations          Active   0    ADAMXY
_  000C5000  All Locations          Active   0    ADAMXY
_  000C6000  All Locations          Active   0    ADAMXY
_  000C7000  All Locations          Not Act  0    ADAMXY
_  000C8000  All Locations          Active   0    ADAMXY
_  000C9000  All Locations          Active   0    ADAMXY
_  000CB000  All Locations          Active   0    ADAMXY
_  000CF000  All Locations          Active   0    ADAMXY
_  00047000  All Locations          Active   0    ADAMXY

PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Refr          --          -          +          Menu
    
```

For all PIN routines on the list, the screen indicates the conditions that cause them to be executed, the current status, the number of times they have been used, and the module in which they are located.

To change the status of the PINs from this screen, enter in the M column next to the PIN number

A	to activate a PIN
D	to deactivate a PIN

After changes have been made, use PF4 to refresh the screen.

These functions are the same as the error handling operator commands

```

SMGT,DISPLAY=PINS
SMGT,{ACTPIN | DEACTPIN}=pin-number
    
```

Refresh Threshold and Alert Exits

Selecting option "R" (Refresh Threshold and Alert Exits) from the Extended Error Recovery menu loads the ADATHRSH and ADALERTX modules into memory.

The following confirmation screen is displayed:

```

10:10:02          ***** A D A B A S  BASIC SERVICES *****          2005-11-24
                      - Extended Error Recovery -                      PACIE02

          Code      Service
          -----
          D          Display/modify environment
          E          Display/modify Exit routines
          M          Add/Delete PIN modules
          P          Display/modify PIN routines
          R          Refresh threshold and alert exits
          S          SNAP a nucl
          ?          Help
          .          Exit
          -----
Code ..... r
Start Address .. _____
End Address .... _____
Database ID .... 105 (RD-MPM105)
EACIEP1 : Display/Modify PINS functio
Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          Menu

```

These modules can be refreshed only if the heartbeat subtask is active and the module being refreshed exists in a library accessible to the Adabas nucleus. Both modules can be refreshed at one time.

Note:

Option "R" is only valid for pre-741 versions of Adabas. When running against an Adabas version 741 database, you will receive a message stating that it cannot be accessed.

▶ To refresh a module

1. Enter "YES" in the input field following the module name.

This deletes the module from memory and reloads a new copy.

These functions are the same as the error handling operator commands

```

SMGT, REFRESHTHRESHOLDS
SMGT, REFRESHALERTXIT

```

SNAP a Nucleus Dump

Selecting option "S" (SNAP a Nucleus Dump) from the Extended Error Recovery menu generates a formatted dump of the nucleus without error diagnostics.

▶ To generate a dump of the whole nucleus

1. Leave the Start Address and End Address fields on the menu blank.

To generate a SNAP dump of only a range of addresses, enter hexadecimal addresses in the Start Address and End Address fields on the menu.

The formatted dump is written to the DDPRINT dataset specified in the nucleus.

This function is the same as the error handling operator command

```
SMGT,SNAP[(start,end)]
```