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  *****       2008-07-14
                          -  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;
- SNAP a dump image of nucleus memory.

Note:
Option **R** (Refresh threshold and alert exits) is no longer a functional option.

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  *****       2008-07-14
 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  V8.1.0  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:

```
20:29:38          ***** A D A B A S  BASIC  SERVICES *****          2009-02-02
DBID 1955              -  Display/Modify Environment  -             PACIED2


             ------- Parameters ----------- Status - Executions -
             Extended Error Recovery (SMGT)  ON                0
             Message Buffering .............  ON
             Abnormal Term. Handler .......  ON                0
             Response Code Handler ........  ON                0
             Full System Dump (DUMP) ......  OFF



             ----------- Most Recent Recovery Action -----------
             No error conditions handled




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

The parameters with "ON"/"OFF" values in the Status column can be activated and deactivated by changing the value.

The functions on this screen mirror the error handling operator commands

```
SMGT,{ON | OFF}
SMGT,ABNORMALTERM={ON | OFF}
SMGT,DUMP={ON | OFF}
SMGT,MSGBUF={ON | OFF}
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:

```
09:58:48         *****  A D A B A S   BASIC  SERVICES  *****       2008-07-14
   DBID 105               -  List/Modify Exit Routines  -             PACIEE2

  Mark with 'A' Activate, 'D' Deactivate, 'L' Load, 'C' Critical, 'N' Not Crit
   M  Exit  Program    Status   Critical  M  Exit  Program    Status   Critical
   -  ----  --------  --------  --------  -  ----  --------  --------  --------
   _  SX00  ADASMXIT  Active    Critical  _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _
   _                                      _


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

The exit code, the name of the program invoked by the exit, the current status, and the criticality are listed for each exit. You can change the status and criticality of the exit from this screen.

To change the status and criticality of the exit, enter In the M column next to the selected exit

A	to activate the exit
D	to deactivate the exit
L	to reload the exit program in memory or to load a new exit
C	to make the exit critical
N	to make the exit noncritical

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

These functions are the same as the error handling operator commands

```
SMGT,DISPLAY=EXITS
SMGT,{XACTIVATE | XDEACTIVATE}=exit-code
SMGT,XLOAD=exit-code
SMGT,XLOAD=(exit-code,module-name)
SMGT,{XCRITICAL | XNOTCRITICAL}=exit-code
```

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  *****       2008-07-14
  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  *****       2008-07-14
  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 is no longer a functional option.

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 data set specified in the nucleus.

This function is the same as the error handling operator command

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