

Session Monitoring

Adabas session monitoring functions display major Adabas resources. These functions are most useful when analyzing system performance or seeking the cause of performance problems.

```

14:38:19          ***** A D A B A S  BASIC  SERVICES *****          2002-05-29
                      - Session Monitoring -                               PAC0002

Code  Service                                           Code  Service
-----
*    Display cluster members                          *    Refresh nucleus statistics
*    Maintain user profiles                            *    Current session statistics
D    Display parameters                                *    Maintain TCP/IP URL
*    Modify parameters                                 U    Display session utilization
Q    Display queues                                    Z    Display maintenance levels
?    Help
.    Exit
-----

Code ..... _
Database ID .. 1955      (WIS1955)                      NucID .. 1022

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

You can use the Session Monitoring environment to monitor the Adabas nuclei in a multiprocessing (Parallel Services or Cluster Services) environment. When the DBID of a Parallel or Cluster Services database is entered on the Session Monitoring menu, subsequent screens include a field to specify the ID of the nucleus in the cluster that you want to monitor.

Each of the functions on the Session Monitoring menu is discussed in the following sections:

Code	Function
D	Display Adabas nucleus (ADARUN) parameters
Q	Display the contents of the hold queue
U	Display session status and thread usage
Z	Display Adabas nucleus modules: maintenance levels and ZAPs applied

This chapter covers the following topics:

- Display ADARUN Parameters
- Display Hold Queue
- Display System Status and Thread Usage

- Display Maintenance Levels

Display ADARUN Parameters

You can view Adabas nucleus (ADARUN) parameters.

To view the parameters, select option D from the Session Monitoring menu.

Three screens are used for displaying parameters:

```

16:33:03          ***** A D A B A S  BASIC SERVICES  *****          1999-01-28
DBID 105          - Display Parameters -          PACP002

Modify parameters below, as required:
----- Pools -----
Sort Area          (LS) .. 19968
Int. User Buffer    (LU) .. 65535
Buffer Pool        (LBP) .. 127936
Format Pool        (LFP) .. 12000
ISN List Table     (LI) .. 10000
Seq. Cmd. Table    (LQ) .. 2500
Work Pool          (LWP) .. 500000
Attached Buffer     (NAB) .. 35
Security Pool      (LCP) .. 10000
UQ-DE Pool         (LDEUQP) .. 5000
Flush I/O Pool     (LFIO) .. 125000
Err. Recovery      (SMGTBUFF) .. 0

----- Queues -----
Command Queue      (NC) .. 100
Hold Queue         (NH) .. 9000
User Queue         (NU) .. 700

----- Time Windows -----
Transaction Time   (TT) .. 300
Max Transaction Time (MXTT) .. 3600
Nonactivity ACC-User (TNA) .. 300
Nonactivity ET-User (TNAE) .. 300
Nonactivity EXU-User (TNAX) .. 300
Max Nonactivity Time (MXTNA) .. 3600
Time Limit Sx-Cmds (TLSCMD) .. 286
Max Time for Sx-Cmds (MXTSX) .. 3600
Command Time       (CT) .. 9000
SYNS60 Interval    (INTNAS) .. 3600

Page 1 of 3
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help          Exit          +          Menu
    
```

```

16:33:03          ***** A D A B A S  BASIC SERVICES  *****          1999-01-28
DBID 105          - Display Parameters -          PACP002

Modify parameters below, as required:
----- Miscellaneous -----
ReadOnly session (READONLY) .. NO
UTI only session (UTIONLY) .. NO
OPEN required    (OPENRQ) .. NO
Ignore DIB Entry (IGNDIB) .. NO
Local nucleus    (LOCAL) .. NO
Number of Threads (NT) .. 4
Non DE Search    (NONDES) .. YES
Log AOS/DBS Update (AOSLOG) .. NO
Batch Support     (BATCH) .. NO
Data Protection Area (LP) .. 500
Ignore Work Part 4 (IGNTPC) .. NO
WORK-Part-4 Area (LTPC) .. 0
WORK-Part-2 Area (LWKP2) .. 0

----- User Specific Limits -----
Hold Queue Limit (NISNHQ) .. 2200
CIDs per User    (NQCID) .. 75
ISNs / TBI Element (NSISN) .. 51

----- Buffer Pool -----
Bufferflush Dur. (TFLUSH) .. 1
Parallel LFIO I/O (FMXIO) .. 60
Async. by Vol-Ser (ASYTVS) .. YES

Page 2 of 3
    
```

```

Modify parameters below, as required:
---- Command Logging ----      ----- Protection Logging -----
Command Logging .. NO          PLOG required          (PLOGRQ) .. NO
LOGCB ..... NO                DUAL PLOG Size        (DUALPLS) .. 0
LOGFB ..... NO                DUAL PLOG Device      (DUALPLD) .. 0
LOGRB ..... NO                ----- Other Services -----
LOGSB ..... NO                Triggers and Procedures (SPT) .. NO
LOGVB ..... NO                Delta Save Facility    (DSF) .. NO
LOGIB ..... NO                Cache Facility         (CACHE) .. NO
LOGIO ..... NO                Transaction Manager    (ATM) .. NO
LOGUX ..... NO                TCP/IP Support         (TCPIP) .. NO
LOGSIZE ..... 8904           Ext. Error Recovery    (SMGT) .. NO
DUAL CLOG Size ... 0         2 Phase Commit Support (TPC) .. NO
DUAL CLOG Dev. ... 0         Review Support         (REVIEW) .. NO

Page 3 of 3
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit

```

Display Hold Queue

Selecting *Queue displays* (option Q) from the Session Monitoring menu displays the following menu:

```

09:00:20          ***** A D A B A S  BASIC SERVICES  *****      1997-01-29
                   - Queue Displays -                               PACQ002

Code  Service
----  -----
*    Display User Queue Elements
*    Display Command Queue
H    Display Hold Queue
?    Help
.    Exit
-----

Code ..... _
Max No. Elements ... 100
Last Activity ..... 0          (elapsed time in seconds)
Selection Criteria
  ET-ID (User-ID) .. _____ User Type ... ____
  Job Name ..... _____
  Terminal ID ..... _____
  Database ID ..... 105        (RD-105)
Command ==>
PF1----- PF2----- PF3----- PF4----- PF6----- PF7----- PF8----- PF12-----
Help                Exit      Clear UID                               Menu

```

Option H displays a list of the ISNs currently in hold status.

If the queue is currently empty, an appropriate message appears.

Display System Status and Thread Usage

Selecting *Resource utilization* (option U) from the Session Monitoring menu invokes the Resource Utilization menu:

```

11:44:10          ***** A D A B A S  BASIC SERVICES  *****          1997-01-30
                   - Resource Utilization -                               PACU002

                   Code      Service
                   -----
                   *        Command usage
                   *        File usage
                   *        High water marks (pools/queues)
                   *        Workpool (LWP) usage
                   *        PLOG status
                   S        System status
                   T        Thread usage
                   *        WORK status
                   ?        Help
                   .        Exit
                   -----

Code ..... _
File Number .. 0
Database ID .. 105      (RD-MPM105)

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

Each option allows you to refresh (PF4) the displayed values, a convenience for long-term monitoring of Adabas system functions.

System Status

System status (option S) displays I/O counts for the ASSO, DATA, WORK, and PLOG data sets; remote and local call distribution; and other current session status information.

```

16:44:13          ***** A D A B A S  BASIC SERVICES  *****          1999-01-28
DBID 105          - System Status -                               PACUS02

                   Physical
                   Reads      Writes      Call Distribution
                   -----
ASSO                132          29      Remote Logical ..... 0
DATA                 3           9      Remote Physical ..... 0
WORK                 4           29     Local Logical ..... 145
PLOG                 0           0      Local Physical ..... 0
Logical Reads ..... 194
Buffer Efficiency ... 1.4
No. of HQEs active ..... 0
No. of UQEs in User Queue .. 2
Format Translations .. 0
No. of CQEs waiting in CQ .. 0
Format Overwrites ... 0
Total intern. Autorestarts . 0
Throw Backs for ISN .. 0
No. of PLOG switches ..... 0
Throw Backs for Space. 0
No. of Bufferflushes ..... 8

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

Thread Usage

Thread usage (option T) displays a table of all defined Adabas threads, the status of each, the command type currently in process in each active thread, and the number of commands processed by each thread in the current session.

```

11:47:18          ***** A D A B A S  BASIC SERVICES *****          1997-01-30
DBID 105          - Thread Status -          PACUT02

  Nr. I Thread Status          I Command Type          I Nr. CMDs I
-----
  1 I Active          I Simple Cmd.          I 18992 I
  2 I Not active          I          I 109 I
  3 I Not active          I          I 0 I
  4 I Not active          I          I 0 I
  5 I Not active          I          I 0 I
  I          I          I I
    
```

Display Maintenance Levels

Selecting *Display maintenance levels* (option Z) from the Session Monitoring menu displays information about the Adabas nucleus modules:

```

13:43:09          ***** A D A B A S  BASIC SERVICES *****          1999-06-09
DBID 105          - Display Maintenance Levels -          DPACZ02

Select Module Name: _____
-----
ADARUN  RUNMVS  Date 1998-10-27, Version 7.1. 0, Zap Base AO10000
          RUNIND  Date 1998-10-27, Version 7.1. 0, Zap Base AI10000
ADATSP          Date 1998-10-30, SM Level 00, Zap Level 0000
          Zaps 0034 0040 0043 0083 0084 0099
ADATCP          Date 1998-10-30, SM Level 00, Zap Level 0000
          Zaps 0136
ADAMSG          Date 1998-10-30, SM Level 00, Zap Level 0000
ADAIOR          Date 1998-10-29, SM Level 00, Zap Level 0000
ADAIOS          Date 1998-10-29, SM Level 00, Zap Level 0000
          Zaps 0001 0003 0004 0005 0007
ADANCO          Date 1998-11-01, SM Level 00, Zap Level 0000
          Zaps 0036

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

Maintenance levels for each module are displayed. Any ZAPs that are applied to the module are also listed.

The list of modules can be limited by entering a specific module name in the Select Module Name field at the top of the screen. A starting value may also be used. For example, specifying ADANC3 displays information for the ADANC3 module only. Specifying ADANC* lists all modules with names that begin with ADANC.