Session Monitoring

The Session Monitoring function can be used to obtain information and statistics on all applications being managed by the Adabas System Coordinator.

- Session Monitoring Menu
- Change Information Source
- Display Daemon Group Members
- Display Active Jobs
- Display User Information
- Display General Statistics
- Display Network Information

Session Monitoring Menu

▶ To display the Session Monitoring menu

• Select service 2 from the main menu.

```
17:57:50
            ***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****
                                                              2002-09-09
                     - Session Monitoring -
                                                              C12000M1
Runmode: Local
                                                        Session: Local
                     Code
                            Service
                      ____
                             ------
                      0
                            Change Information Source
                      1
                           Daemon Group Members
                      2
                            Adabas Client Jobs
                      3
                           Memory Pool Statistics
                      4
                             General Statistics
                      5
                             Network Display
                             Exit
                      .
                      _ _ _ _
                             _____
                Code .. _
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
     Help
                Exit
                                                                 Menu
```

From this menu, you can	Service	Cmd
change the information source to be used	0	2.0
display daemon group members	1	2.1
display active jobs	2	2.2
display memory pool statistics	3	2.3
display general statistics	4	2.4
display network information	5	2.5

All session monitoring requests will be directed to the current information source as displayed in the Session field at the top of the screen. By default this will be either your local client session when you are running in Local (non-daemon) mode. If you are running in daemon mode, monitoring requests will be directed to your coordinator daemon.

Change Information Source

This option can be used to route monitoring requests to any active coordinator daemon (see screen below).

To access the Change Information Source screen from the Session Monitoring menu

• Select service 0 or enter the command 0.1 on a command line.

Display Daemon Group Members

To display the daemon group members screen from the Session Monitoring menu

1. Select service 1 or enter the command 2.1 on a command line.

11:50:41 ***** A D A B A S SYSTEM COORDINATOR 7.4.2 ***** 2002-09-09 - Display Daemon Group Members -C12100M1 Start Time <---->Cluster Moves----> Coordinator Name Node System (HH:MM:SS) Users Total Ave.Size 11:40.363011:40.4600 SYSCO33 33 ABCD 0 SYSCO34 34 EFGH 0 End of List Command ==> Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12 Help Exit Refr Menu

The screen shows the daemons that are active in the coordinator group. A coordinator daemon node must be specified for this option because node information is kept in the daemon, not in the local client.

The following information is provided:

Field	Description
Coordinator Name	The name and job number of the coordinator daemon task.
Node	The Adabas Node ID of the coordinator daemon.
System	The operating system ID.
Start Time	The start time of the coordinator daemon.
Users	The number of users currently managed by this coordinator daemon.
Cluster Moves	The number of client sessions that have been routed dynamically to this system, and the average session message size per move. This field is only relevant for clustered applications in a multisystem environment.

Display Active Jobs

- To display the Active Jobs screen from the Session Monitoring menu
 - Select service 2 or enter the command 2.2 on a command line.

18:25:36 ***** A D A B A S SYSTEM COORDINATOR 7.4.2 ***** 2002-09-09 - Display Active Jobs -C12200M1 Runmode: Local Session: Daemon / 36 Start Time Maximum C Service Job Name Job Num. Appl.ID (HH:MM.SS) Users Concurrent _ CICSPOOL CICSP001 C12218 CICSAP1 11:40:36 23 1 _ CICSPOOL CICSP002 C12219 CICSAP2 11:42:45 23 1 Mark with D(etail), S(nap), M(emory Pools), U(sers) End of List Command ==> Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12 Help Exit Refr Menu

This screen shows the TP monitors and other tasks that are currently active and managed by Adabas System Coordinator. The following fields are displayed:

Field	Description		
С	This field can be used to display additional information:		
	• M: display memory pools		
	• U: display user information		
Service	The clustered application service name (if any) used by this job.		
Job Appl. ID	The job name, job number, and Application ID		
Start Time	The start time of the job.		
Users	The number of user sessions active in the job.		
Maximum Concurrent	The number of concurrent threads active. This is a measure of the highest level of concurrent Adabas command throughput		

Display Memory Pools

Selecting Memory Pool Statistics results in the following screen being displayed:

Session Monitoring

12:)6:1	7 ***	** A D A B - Displa	A S SYSTE y Memory	M COORDIN Pool Info	ATOR 7.4.2 * rmation -	: * * * *	2002-09-09 C12400M1
C No 	ode 36 36 36 36 36 36	Job Name CICSP001 CICSP002 CICSP001 CICSP002 CICSP001 CICSP001	Pool Name F7408320 F7408320 PRIVATE PRIVATE PRODCICS PRODCICS	Extents 0 0 0 0 0 0 0	Pool Size(k) 256 256 256 256 50 50	Free Memory (k) 251.5 251.5 209.6 209.6 47.1 47.1	Free Elements 32 32 10 10 1 1 1	Type O P O P O P
<pre>Mark with D(etail), S(nap) End of List Command ==> Enter-PF1PF2PF3PF4PF5PF6PF7PF8PF9PF10PF11PF12</pre>								
1110	H	elp	Exit Refr	115 F	10 117	IIO FFJ	IIIO EI	Menu

This screen shows the memory pools that are used by jobs. The following information is provided:

Field	Description
Pool Name	The PRIVATE pool is allocated in the job's private memory.
	Shared memory pools are always managed by a coordinator daemon.
	Fixed pools are named F <i>vrnnnn</i> where <i>vr</i> is the product version and revision level and <i>nnnnn</i> is the pool element size.
Extents	The number of extents. Performance may be improved by tuning job parameters to eliminate extents.
Free Memory	The amount of free memory available in all extents in the pool.
Free Elements	The number of free elements in the pool.
Туре	Pool type.
	O: The job created and owns the pool
	P: The job has joined a pool that was created by a previous job

Display User Information

See next section Display User Information.

Display User Information

Selecting Display User Information results in the following screen being displayed:

```
12:06:17
                                         ***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****
                                                                                                                                                                                              2002-09-09
                                                                    - Display User Information -
                                                                                                                                                                                                C12230M1
Runmode : Local
                                                                                                                                                                   Session: Daemon / 36
Select Users: ____

        Dormant
        Memory(k)
        Adabas
        Quick

        C Service
        Job Name
        User ID
        Txn
        (HHH:MM.SS)
        Allocated
        Cmds
        Locates
        Typ

        CICSPOOL
        CICSPOO1
        CICSTC01
        N315
        0:00.09
        0.3
        009
        003
        S

        CICSTC04
        N315
        0:00.01
        2.0
        308
        255
        S

        CICSTC03
        N315
        0:00.03
        0.3
        367
        315
        S

        CICSTC04
        N315
        0:00.01
        19.6
        4097
        1211
        S

        CICSTC05
        *timeout
        3:14.18
        0.3
        57
        41
        S

        CICSTC06
        N315
        0:00.09
        0.3
        57
        41
        S

                                                                                                      Dormant Memory(k) Adabas
                                                                                                                                                                                          Quick
Mark with D(etail), S(nap), P(urge)
Top of List
   Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
                                                Exit Refr SortN
                                                                                                                                                  SortT SortU SortO Menu
                Help
```

This screen shows the users that are active in a job managed by the Adabas System Coordinator. The following information is provided:

Field	Description
User ID	The User ID (last 8 characters only). IDs comprised of special characters are normally generated by the system.
Txn	The current or last Transaction ID executed (TP systems only). The value '*timeout' indicates that the inactivity threshold has been reached for this client session.
Dormant	The amount of time since the last user activity.
Memory	The amount of memory allocated by the user.
Adabas Cmds	The number of Adabas commands executed for this user.
Quick Locate	The number of times the coordinator optimized command processing because two or more commands for the same user were executed consecutively.
Туре	Indicates whether or not the user is managed by an Adabas System Coordinator daemon. A value of 'S' indicates that the user is managed by a Adabas System Coordinator daemon.

PF keys can be used to sort the user list in various sequences:

Key	Description
PF5 (SortN)	The list is sorted by User ID.
PF9 (SortT)	The list is sorted in descending time since the user was last active.
PF10 (SortU)	The list is sorted in descending order of the number of Adabas calls issued.
PF11 (SortO)	The list is sorted in descending order of user search optimization. This shows the number of times for each user that an index search was avoided.

Display General Statistics

- To display the General (Cache) Statistics screen from the Session Monitoring menu
 - 1. Select service 4 or enter the command 4.1 on a command line.

```
***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****
11:50:41
                                                                 2002-09-09
                   - Display Cache Statistics - Summary -
                                                                  C12500M1
Node ID: 36
Detail
                                              Detail
 Page
                                               Page
   1 CSCSREADHITC..... 2
                                                4 CSCSXINMINVALC.....: 0
    . CSCSRMDIRHITC..... 2
                                                . CSCSXICMINVALC.....: 0
    . CSCSCASTPITCC..... 2
                                                5 CSCSCASTOUTC....: 0
    . CSCSREFSIGMISSC..... 2
                                                . CSCSREFSIGMISSC....: 0
    . CSCSTMCFULLCLC..... 2
                                                . CSCSTMCFULLC..... 0
   2 CSCSDIRENTRYC....: 2
                                                . CSCSDIRENTRYC..... 0
                                                6 CSCSDATAREAELEC....: 0
    . CSCSWRITCB1C..... 2
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
     Help
                 Exit Refr
                                                        DetL DetF
                                                                   Menu
```

This screen displays the IBM sysplex coupling facility cache memory statistics. The definition of each statistical value is provided on a series of detailed screens, together with a repetition of the value.

Use PF11 to display a series of detail screens. Use PF10 to return to the last screen. You can then use the same PF keys to proceed forward or backward to the desired screen.

Cache statistics are valid only if the coordinator group is defined as type "Sysplex".

Display Network Information

To display the Network screen from the Session Monitoring menu

1. Select service 5 or enter the command 5.1 on a command line.

```
11:50:41
             ***** A D A B A S SYSTEM COORDINATOR 7.4.2 *****
                                                              2002-09-09
                      - Network Display -
                                                               C12600M1
Coordinator Node in view: 36
                                                Local Coordinator: 36
Coord L Last Update Status
Node R (HH:MM.SS)
                         DBID
                              Nuc ID
                  Upds
                                        Type
                                                         A S P F Resp
                                        System Coord
 36 L 11:40:47 2
                               37
                         37
                                                        AS - -
                                        Ada Cluster(L) A S P -
                                1801
                          180
                                        Ada Cluster(L) A S P -
                          180
                                 1802
                                                        A S - -
                          36
                                  36
                                        System Coord
                          199
                                  199
                                        Adabas
                                                        A - p -
                                 151UnidentifiedA - - F37System CoordA S - -
                         151
                                                                 245
                          37
  37 R 11:40:47
                     1
                         180
                                1801 Ada Cluster(L) A S P -
                         180
                                1802 Ada Cluster(L) A S P -
                          36
                                36
                                        System Coord
                                                        A S - -
End of List
 Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
     Help
                Exit Refr
                                                             Prods Menu
```

Each Adabas System Coordinator daemon maintains a list of targets that are or were at one time active. This information is communicated to all daemons in the cluster.

This screen displays the network information of each daemon.