

Transaction Manager Daemon Information

This function can be used to obtain Adabas Transaction Manager daemon information.

- Daemon Information Menu
- Select Different Transaction Manager
- Display Users and Transactions
- Display Known Databases
- Display Partner Transaction Managers
- Transaction Manager Database Functions
- Display Daemon Statistics
- Display Zap Information

Daemon Information Menu

▶ To display the ATM Daemon Information menu

- Select option 2 from the Online Services main menu. The following menu will appear:

```

15:25:58      ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****      2004-03-05
                - Transaction Manager Daemon Information -                      T12000M1

TM Node: 7064                                     Terminal: E001

                Code      Service
                ----      -
                1      Select a different Transaction Manager
                2      Global User Queue
                3      Active Global Transactions
                4      Display known Databases
                5      Display Partner Transaction Managers
                6      Transaction Manager Database Functions
                7      Daemon Statistics
                8      Display Zap Information
                .      Exit
                ----      -
                Code .: _      E <== List Format - C(ommunication ID) or E(TID)
                New TM Node: _____

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

```

From this menu, you can	Code	Command
select a different transaction manager	1	2.1
display global user queue	2	2.2
display active global transactions	3	2.3
display known databases	4	2.4
display partner transaction managers	5	2.5
invoke transaction manager database functions	6	2.6
display daemon statistics	7	2.7
display zap information	8	2.8

The Node ID of the ATM daemon you are currently working with is displayed on this screen and on most screens in this part of the application.

You can use PF2 to issue ATM operator commands to the current ATM node. If you omit the command prefix TM, SYSATM supplies it for you. For example, if you enter the command NOLOG, it will be changed to TM NOLOG. The text you enter on the command line is not validated before the command is issued, except to check whether the command will terminate the ATM daemon. If you enter the command TM HALT or TM END (or simply HALT or END), a window appears asking you to confirm your intention to close down the ATM daemon. See section Operator Commands for a completion description of all operator commands.

Select Different Transaction Manager

If your system contains more than one operating system image and Entire Net-Work is being used to connect them, you may wish to work with a transaction manager daemon that is executing in a different operating system image. In this case, select option 1 and enter the Node ID of the transaction manager daemon in the field New TM Node.

Note:

Running more than one SVC in the same system with Entire Net-Work providing the connection between users of each SVC is equivalent to executing across different operating system images.

Display Users and Transactions

- Display Users and Transactions
- Display Detail Information for a User
- Display Error Information

- Stop User
- Display ET Data

Display Users and Transactions

Option 2 provides information from the global user queue (GUQ) for all users currently known to the transaction manager, including those with no transaction in progress.

Option 3 provides a list of currently incomplete transactions and their owners.

The display format is the same for either option. You can obtain a list showing Communication ID or ETID/Client ID by entering C or E in the field List Sequence.

The list by Communication ID correlates the Communication ID and the ETID/Client ID:

```

15:27:09          ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****          2004-03-05
                                - Global User Queue -                                T12200M1

TM Node: 7064                                          Terminal: E001

C L/R <-----Communication ID-----> ETID/TCID
_ L   000F7100 20640000 B902BE37 DE383581 00000001 C3C9C3E2 C5F0F0F1 TM ?q ?
_ L   000F7100 20640000 B902C0D2 914965A2 00000001 C3C9C3E2 C5F0F0F2 PD03

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

The following information is provided:

Field	Description
C	Enter a non-blank character and press Enter to obtain more detailed information about a particular user. See Display Detailed Information for User.
L/R	Indicates whether the user is local to (L) or remote from (R) the ATM daemon; that is, whether or not the user is executing in the same operating system instance.
Communication ID	The user's Communication ID in hexadecimal format.
ETID/TCID	The user's ETID or Client ID in character format.

The list by ETID provides more information:

```

15:50:34          ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****          2004-03-05
                  - Global User Queue -                                          T12300M11

TM Node: 7064                                          Terminal: E001

          <-----ETID/TCID----->
C  CLT  Char          Hex          Jobname  Status  Tx. Start  Last  Act
_  LE   PD03         D7C4F0F340404040  DAEFCI18  GT OPEN  0305 15:48  0305 15:48  2  1
_  LT   TM ?q ? E3D4401B98000001  DAEFCI18  GT          0305 15:50

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

```

The following information is provided:

Field	Description
C	Enter a non-blank character and press Enter to obtain more detailed information about a particular user. See Display Detailed Information for User.
CLT	<p>C: Contains one of the following transaction coordinator values:</p> <ul style="list-style-type: none"> ● P: transactions controlled by another ATM daemon. ● C: transactions controlled by a client-side transaction coordinator. ● H: transactions controlled by the host system transaction coordinator. ● blank: if the user has a global transaction open, a blank indicates that the user's transactions are controlled by the current ATM daemon; otherwise, a blank has no significance. <p>L: Indicates whether the user is local to (L) or remote from (R) the ATM daemon; that is, whether or not the user is executing in the same operating system instance.</p> <p>T: Contains one of the following values:</p> <ul style="list-style-type: none"> ● E: Indicates presence of an ET Data ID (ETID). ● T: Indicates presence of a TM Client ID (TCID). A user who did not open with an ETID is represented by a unique, reusable identifier known as a TM Client ID (TCID).
Char	The user's ETID or TCID in character format.
Hex	The user's ETID or TCID in hexadecimal format.
Jobname	The name of the job under which the user is executing.
Status	A summary description of the user's current status. See Display Detailed Information for User for more information.
Tx.Start	The time at which the user's most recent transaction began; that is, the time of the transaction's first change-type command. Blanks in this column indicate that the user currently has no transaction in progress. In the above example, only user PD03 has a transaction open.
Last Act	The time at which the ATM daemon was last asked to perform some action on behalf of the user. For example, when the user's transaction changed another database.
DBs	The number of databases that have been changed by the user's current transaction. Blanks indicate that the user has no transaction in progress.
TM	The number of remote ATM daemons that are involved in the user's current transaction. Blanks indicate either that the user has no transaction in progress or the current transaction has not changed any remote databases.

Display Detail Information for a User

Detail information for a user can be obtained by marking the C column in the Global User Queue screen.

The following screen will appear:

```

15:53:21          ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****          2004-03-05
                  - User Details (Daemon) -                                     T12310M1

TM Node: 7064                                           Terminal: E001

User Type: 8C - LOCAL      ETID/TCID: PD03          D7C4F0F340404040      Jobname: DAEFCI18
Status: 8000100000 - GT OPEN Co-ordinator: THIS ATM      PRR ISN: 00000000
CommID: 000F7100 20640000 B902C560 B53A6482 00000001 C3C9C3E2 C5F0F0F2
  XID: C1C4C101 00000050 00000002 1B98000F 71002064 0000B902 C560B53A 64820000
      0001C3C9 C3E2C5F0 F0F2D7C4 F0F34040 4040C4C1 C5C6C3C9 F1F8B902 C6B15FFB
      76610000 00000000 00000000 00000000 00000000 00000000 00000000 C2D80000
      00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
  Start: 03/05 15:53.13      Tx Timeout: 15:59.24      N/A Timeout: 16:03.42
Last Act: 03/05 15:53.13      UAB: 1B0287B8      GUQE: 1A9C3840
      Pending Response: 000      Sub Code: 0000
<-----CHANGED DATABASES----->      |      <---PARTICIPATING ATMs-->
DBNo. TM Node      Status      Resp/subcode      |      TM Node      Status      Err
47163 7066      0021 CHANGED      0      0      |      7066      0020 BRANCH      -
7161      0021 CHANGED      0      0

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr Stop ET Top      ErrI      Menu

```

The following information is provided:

Field	Description
User Type	The type of user in hexadecimal format followed by an indication of whether the user is local to or remote from the ATM daemon.
ETID/TCID	The ETID or TCID in character and then in hexadecimal format.
Jobname	The name of the job under which the user session is executing.

Field	Description
Status	<p>The user's status codes in hexadecimal followed by an indication of the most important element of the status code in character format. Possible character indicators are:</p> <ul style="list-style-type: none"> ● GT: no transaction is in progress for this user ● GT OPEN: this user has started a global transaction ● IN PREP: the transaction for this user is in the prepare phase ● PREPARED: the transaction for this user completed the prepare phase ● IN CMIT: the transaction for this user is in the commit phase ● IN BKOUT: the transaction for this user is being backed out ● BKD OUT: the user's most recent transaction was backed out ● MIXED: the user's most recent transaction completed with mixed committed and backed out status ● BR OPEN: the user's transaction is a branch of a transaction owned by another ATM daemon
Coordinator	<p>The transaction coordinator that has control of the global transaction. Possible values are:</p> <ul style="list-style-type: none"> ● THIS ATM: the ATM daemon indicated in the TM Node field (top left of screen) has control ● OTHER ATM: the ATM daemon <i>nnnnn</i> has control ● CLIENT TC: the user's client-side transaction coordinator has control ● HOST TC: the host system transaction coordinator has control
PRR ISN	<p>The ISN of the recovery record for the current user's Communication ID. The ISN is located in the ATM recovery record (PRR) file. This field will normally contain zeros until the transaction reaches prepared status.</p>
UAB	<p>This field contains internal information which might be useful to Software AG's support staff in problem resolution.</p>
GUQE	<p>This field contains internal information which might be useful to Software AG's support staff in problem resolution.</p>
CommID	<p>The user's 28-byte Adabas Communication ID.</p>
XID	<p>The Transaction ID of the current global transaction. This field contains binary zeros if the user has no transaction is progress.</p>
Start	<p>The start time of the user's most recent transaction. The date has the format MM/DD.</p>

Field	Description
Tx Timeout	The time at which the user's current transaction will reach the global transaction time limit. This field is blank if the user has no transaction in progress.
N/A Timeout	The time at which the user will reach the global non-activity time limit.
Last Act	The time at which the ATM daemon was last asked to perform some action on behalf of the user. The date has the format MM/DD.
Pending Response and Sub Code	The response code and subcode that ATM will return to the user when the opportunity arises. These fields normally contain zeros.

For a user with an open transaction, the remainder of the screen displays

- a list of databases changed by the current transaction;
- a list of remote ATM daemons that are responsible for remote branches of the current transaction.

If one or both of the lists is too long to fit on the display, "More" appears at the foot of the screen. Use PF7 to return to the top of the list and PF8 to scroll down the list.

Changed Databases

Field	Description
DBNo.	Database ID of the changed database.
TM Node	The Node ID of the remote ATM daemon executing in the same system image as the database. If the database is executing in the same system as the current ATM daemon, this field contains blanks.
Status	The status of the database with respect to the current transaction, followed by a summary value. Possible summary values are: <ul style="list-style-type: none"> ● CHANGED: the transaction updated this database ● IN PREP: the database was asked to prepare the transaction ● PREPARED: the database prepared the transaction ● IN CMIT: the database was asked to commit the transaction ● COMMITTD: the database committed the transaction ● IN BKOUT: the database was asked to back out the transaction ● BKD OUT: the database backed out the transaction ● HEURIST: a heuristic decision was taken ● PND FRG : "forget" pending
Rsp and Sub	Any response code and subcode that the database returned to the ATM daemon for the transaction.

Participating ATMs

Field	Description
TM Node	The Node ID of the ATM daemon participating in the current transaction.
Status	The status of the ATM daemon with respect to the current transaction, followed by a summary value. Possible summary values are: <ul style="list-style-type: none"> ● BRANCH: a transaction branch was created ● IN PREP: the daemon was asked to prepare the transaction ● PREPARED: the daemon prepared the transaction ● IN CMIT: the daemon was asked to commit the transaction ● COMMITTD: the daemon committed the transaction ● IN BKOUT: the daemon was asked to back out the transaction ● BKD OUT: the daemon backed out the transaction ● HEURIST: a heuristic decision was taken
Err	Enter a non-blank character and press Enter to display details of any errors recorded in an ATM's feedback block. See Display Error Information.

Host TC Token Display

If the transaction is under the control of the host system transaction coordinator (HOST TC), PF9 at the foot of the screen is labeled "HstTC". Pressing PF9 invokes the Host TC Token Display window showing the identifiers used by the host transaction coordinator for the transaction.

Display Error Information

ATM records the details of errors in a feedback block in the user's global user queue entry (GUQE).

If the error occurs while processing a request from a TM proxy or remote ATM daemon, the feedback block is returned to the component that issued the request; otherwise, it remains intact in the GUQE.

To display the feedback block for a user, press PF10 on the User Details screen.

To display the feedback block of a remote ATM daemon participating in a transaction, type a non-blank character next to the ATM daemon entry in the Participating ATMs list and press Enter.

The error information is displayed in a window with the following layout:

```

14:40:30          ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****          2004-03-05
                  - User Details (Daemon) -                                     T11310M1

          +-----+
          ! 15:21:34 ERROR INFORMATION 2004-03-05 !
          !                                     TIERRIM1 !
          !                                     !
          ! ERROR CODES -          PRIMARY: 00204 !
          !                                     SECONDARY: 00204 !
          !                                     QUEUEING: 00000 !
          !                                     DATABASE NO.: 111 !
          !                                     COMMAND CODE: ET !
          !          RESPONSE/SUB-CODE: 022 / 0021 !
          !                                     !
          ! AUTO-BACKOUT -          RETURN CODE: 00000 !
          !                                     DATABASE NO:          !
          !                                     COMMAND CODE:          !
          !          RESPONSE/SUB-CODE: 000 / 0000 !
          !                                     !
          !                                     PF3 EXIT          !
          !                                     !
          +-----+

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12
      Help      Exit Refr Stop ET Top          ErrI      Menu

```

The following information is provided.

Field	Description
ERROR CODES	<p>Describes one or more errors that occurred during user processing.</p> <p>The meaning of the error code in the fields Primary and Secondary can be found in the the section Messages and Codes.</p> <p>In the example, an ET command was issued to database 111 on behalf of the user, and a response code 22 (subcode 21) was returned. This response and subcode were returned to the user in the supplied Adabas control block.</p>
AUTOBACKOUT	<p>If an error caused ATM to attempt an autobackout, this field provides details of any error that occurred during the autobackout process.</p> <p>The meaning of the error code in the Return Code field can be found in the section Messages and Codes.</p>
Err	<p>Enter a non-blank character and press Enter to display details of any errors recorded in an ATM feedback block.</p>

Stop User

This function can be used if it becomes necessary to stop a user because of a problem with a current or incomplete user transaction. For example, a user has abended without completing a transaction and it is necessary to free its resources. It can also be used to remove inactive users from the ATM daemon's global user queue.

To invoke this function, press PF5 on the User Details (Daemon) screen.

The following window will appear:

```

15:53:21      ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****      2004-03-05
              - User Details (Daemon) -                                T11310M1

              +-----+
              ! 15:54:15      Stop Users      2004-03-05 !
              !
              ! WARNING: Transaction Integrity could be lost !
              !   Select one of the following functions:   !
              !     _ Stop a user                          !
              !     _ Stop all users in same service       !
              !     _ Stop all users                       !
              !
              !   Select additional options as required:   !
              !     _ Close GUQE                           !
              !     _ Transfer to STJ and force close      !
              !
              !
              !     PF1 Help  PF3 Exit  PF5 Confirm        !
              +-----+

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

Mark one of the following functions:

Function	Description
Stop a user	Stop the user for which detail information is being displayed.
Stop all users in the same service	<p>Stop the user for which detail information is being displayed and all other users in the same address space who have incomplete global transactions.</p> <p>This option can be used, for example, to stop all users in a given CICS region.</p> <p>When this option is invoked, a console message is issued so that the event can be audited.</p>
Stop all users	<p>Stop all users who currently have incomplete global transactions.</p> <p>When this option is invoked, a console message is issued so that the event can be audited.</p>

Caution:

If you stop a GUQE that represents either a transaction branch or a part of a transaction that is controlled by an external transaction coordinator, only the local branch or local part of the transaction is affected. This could compromise the integrity of the global transaction as a whole.

By default, ATM attempts to complete (back out or commit) any incomplete transaction within the specified scope of the stop user request, according to its current status. The GUQE for each affected user remains and correctly reflects the status of the user after the attempted completion. ATM will not, by default, attempt to complete a transaction or branch that is controlled by another ATM daemon or by an external transaction coordinator, if this transaction or branch has reached the prepared state, unless ATM is certain of the intended outcome.

You can optionally increase the severity of the action to be applied to the selected users and their incomplete transactions by marking one of the following options:

Option	Description
Close GUQE	Following ATM's attempt to complete the indicated users' transactions, it will terminate any of these users who are now at global transaction (GT) status by releasing their GUQEs. If for some reason (for example, a target database is inactive) a transaction cannot be completed, the GUQE remains.
Transfer to STJ and force close	This option causes the same processing as the Close GUQE option. Additionally, any of the selected GUQEs that then remain (because their transactions could not be completed) are copied to the suspect transaction journal (STJ) and removed from the GUQ, without regard to the status of the transaction. Messages are written to the console giving details of the operation. Caution: When this option is used, global transaction integrity is likely to be lost for the affected users. This option is provided for emergency use only.

Display ET Data

Pressing PF6 from the Global Transaction Details screen will display a user's pending ET data if the transaction is partially through the commit process.

The ET data is displayed in hexadecimal and character format:

```

17:31:51      ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****      2004-03-05
                - ET Data Display -                                     T1ETDTM1

TM Node: 7064

Offset      <----- Memory Contents ----->      <--Characters-->
00000000    C9E2D640 00010266 00000000 00000000      ISN ???
00000010    40404040 40404040 40404040 40404040
00000020    40404040 40404040 40404040 40404040

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

```

Display Known Databases

Selecting option 4, Display Known Databases, from the Transaction Manager Daemon Information menu will display a list of all databases in the network that are known to this ATM. The list includes all databases that are enabled for two-phase commit processing; that is,

- all local databases that are running with ADARUN DTP=RM, and
- all remote databases that are running with ADARUN LOCAL=NO and have been identified to ATM by remote ATM daemons.

Other databases may appear in the list, depending on the way they are used. The display has the following format:

```

15:57:30 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
                - Display Known Databases -                                T12400M1

TM Node: 7064

C   DB No.    TM Node    DTP      Usage      Date/Time
_   _         _         _         _         MM/DD HH:MM.SS
_   131       7064       N         _         _
_   135       7064       N         _         _
_   161       7064       Y         2         03/05 10:32.42
_   7161      7064       Y         1         03/05 14:28.32
_   7169      7066       Y         2         03/05 15:49.27
_   7170      7066       Y         _         03/05 15:49.30
_   47163     7064       E         1         03/05 15:49.27

Mark with L(ist) or Q(uiesce)

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

```

The following information is provided.

Field	Description
C	<p>Command input field. The following options are provided:</p> <ul style="list-style-type: none"> ● L: list active global transactions that involve the selected database <p>The format of the list is identical to that displayed using option 3 (active global transactions).</p> <ul style="list-style-type: none"> ● Q: quiesce all global transactions that involve the selected database <p>ATM attempts to complete (commit or back out) any global transactions that involve the selected database, depending on the status of the transaction.</p> <p>If the ATM daemon is managing transaction branches that involve the selected database, it asks the ATMs that own those transactions to complete them (that is, commit them or back them out), as appropriate.</p> <p>This option does not prevent new transactions from changing the selected database.</p>
DB No.	The normal Database ID.
TM Node	The Node ID of the database's local ATM daemon.
DTP	Indicates whether the database is running DTP=RM (Y), DTP=NO (N), or DTP=ET (E). If a DTP=ET database is not currently involved in any global transaction, the value N might be shown.
Usage	The number of open global transactions that involve the database.
Date/Time	The time at which the database's local ATM daemon became aware that the database was active. This can be either the time at which the database was started or the time at which its local ATM daemon started.

Display Partner Transaction Managers

Option 5, Display Partner Transaction Managers, on the Transaction Manager Daemon Information menu displays a list of remote ATM daemons in the network that are known to this ATM.

```

16:01:49  ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
          - Display Partner ATMs -                                           T12500M1

TM Node: 7064
  ATM Session: 140      COR Group: CORATMGP                                Date/Time

TM Node   Jobname      Status      Session      MM/DD HH:MM.SS      Host TC
 7066     ATM7066      80 ACTIVE      65           03/05 15:49.27      N

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

```

The following information is provided.

Field	Description
ATM Session	The ATM Session field above the table on this display indicates the number of the current session of the ATM daemon identified by the TM Node field above it. Session numbers begin with 1 when the ATM daemon is first started and increase by 1 each time ATM is restarted.
COR Group	This field above the table of partner ATM daemons displays the name of the Adabas System Coordinator group with which the local ATM daemon and its partner ATM daemons are associated.
TM Node	The remote ATM daemon's Database ID.
Jobname	The name of the ATM daemon job.
Status	The latest known status code for the remote ATM daemon, together with a summary interpretation. Possible values are: <ul style="list-style-type: none"> ● ACTIVE: the ATM daemon is active ● TM DOWN: the ATM daemon is not available ● DB RSTRT: a database that is local to this ATM daemon has restarted; restart processing is required for any work involving this database ● PND RSTT: the local ATM daemon must perform restart processing for work involving this remote ATM daemon
Session	The number of the current session of the partner ATM daemon. Session numbers begin with 1 when an ATM daemon is first started and increase by 1 each time it is restarted.
Date/Time	The time at which the remote ATM daemon was started.
Host TC	Indicates whether the remote ATM daemon is interfacing to its local host transaction coordinator. Only RRMS under z/OS or OS/390 is currently supported as a local host transaction coordinator for an ATM daemon.

Transaction Manager Database Functions

This option can be used to list recovery records, to browse the suspect transaction journal, and to display migrated transaction records.

Selecting option 6, Transaction Manager Database Functions, from the Transaction Manager Daemon Information menu displays the following menu:

```

17:37:38 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
                - Transaction Manager Database Functions -                    T12600M1

TM Node: 7064

                Code Service
                -----
                1 List Recovery Records
                2 Browse Suspect Transaction Journal
                3 List Migrated Transaction Records
                . Exit
                -----

Code .: _

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

```

Displaying Recovery Records and Suspect Transactions

Select code 1 or 2 to list recovery records or browse the suspect transaction journal (STJ). The order in which recovery records are displayed is not significant. STJ records appear in chronological order.

For both options, the resulting list has the following layout; only the subheading differs:

```

16:04:01 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
                - Suspect Transactions -                    T12610M1

TM Node: 7064                                           Terminal: E001

C L/R <-----Communication ID-----> ETID/TCID
_ L   000F7100 20640000 40404040 40404040 00F1E100 B8E5C585 C647B560 TM ?q ?
_ L   000F7100 20640000 40404040 40404040 00F71380 B8E71F47 3206D801 TM ?q
_ L   000F7100 20640001 40404040 40404040 00F24880 E4D2D7C4 404040F2 TM ?q ?
_ L   000F7100 20640000 40404040 40404040 00F11B80 B8EFAAF9 6445FE42 TM ?q
_ L   000F7100 20640000 B8F9938D 47175901 00000001 C3C9C3E2 C5F0F0F0 03
_ L   000F7100 20640000 B8F99907 AC956D22 00000001 C3C9C3E2 C5F0F0F0 33

Mark with D(isplay) or P(urge)

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

```

The fields on this screen are described in the section Display Users and Transactions.

For a more detailed display of an item, type D in the C column next to the item and press Enter. The resulting display has the same layout as the User Details screen.

To delete a record from the STJ or the recovery record file, type P in the C column next to the selected item and press Enter. You are prompted to confirm that the record should be deleted.

Caution:

The purge function is provided for housekeeping of the STJ file. If you use it to delete a record from the recovery record file, you could compromise the integrity of the related global transaction, and results are unpredictable. Therefore, for audit purposes, a console message is issued when a recovery record is deleted.

List Migrated Transaction Records

To list migrated transaction records, enter code 3. If a user executes in an environment in which dynamic transaction routing can take place, and the user's session is migrated from one system image to another while the user has a global transaction in progress, a migrated transaction record (MTR) is created. An MTR is deleted when the transaction finally terminates. MTRs are stored, not in the ATM daemon's database, but in a central file store that is provided for the Adabas System Coordinator daemons in the associated COR group.

```

16:04:01 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
                                     - Migrated Transactions -                    T12630M1

TM Node: 7064                                Terminal:TCX5

C      <-----Communication ID----->   TM Node
_      000F7100 20640000 40404040 40404040 00F71380 B8E71F47 3206D801   7066

Mark with Display) or P(urge)

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

```

The following information is provided.

Field	Description
C	<p>Command input field. The following options are provided:</p> <ul style="list-style-type: none"> ● D: display the selected record <p>The resulting display is described below.</p> <ul style="list-style-type: none"> ● P: purge the record <p>This function is provided for housekeeping by the administrator in exceptional cases. Normally, records are deleted automatically when the associated transaction completes.</p> <p>Caution: If you purge a record, it is possible that ATM will be unable to resolve the associated transaction with integrity.</p>
Communication ID	The user's 28-byte Adabas Communication ID.
TM Node	The Node ID of the ATM daemon that is currently local to the user who owns the transaction.

The Display function produces a display with the following format:

```

16:04:01   ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
              - Migrated Transaction Details -                                T12631M1

TM Node: 7064                                          Terminal:TCX5

CommID: 000F7100 20640000 40404040 40404040 00F71380 B8E71F47 3206D801
  XID: C1C4C101 00000050 00000002 1B98000F 71002064 00004040 40404040 404000F7
      1380B8E7 1F473206 D801D7C4 F0F34040 4040C4C1 C5C6C3C9 F1F8B902 C6B15FFB
      76610000 00000000 00000000 00000000 00000000 00000000 00000000 C2D80000
      00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000

CICS URID: 0000000000000000      Appl ID:                TRUE:
RRS  URID:  0000000000000000000000000000000000000000000000000000000000000000

Owning ATM daemon:  7066

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

```

The following information is provided.

Field	Description
CommID	The 28-byte Adabas Communication ID of the user who owns the transaction.
XID	The ID of the transaction.
CICS URID	If the transaction is controlled by the CICS syncpoint manager, the CICS URID might be displayed.
Appl ID	If the transaction is controlled by the CICS syncpoint manager, the CICS applID might be displayed.
TRUE	If the transaction is controlled by the CICS syncpoint manager, the name of the CICS Task Related User Exit might be displayed.
RRS URID	If the transaction is controlled by RRMS, the RRS URID might be displayed.
Owning ATM daemon	The Node ID of the ATM daemon that is currently local to the user who owns the transaction.

Display Daemon Statistics

This option provides access to current statistics maintained by the ATM daemon, and allows the administrator to reset statistical counts to zero.

Selecting option 7, Daemon Statistics, from the Transaction Manager Daemon Information menu displays the following menu:

```

10:24:20  ***** A D A B A S TRANSACTION MANAGER 7.5.1      *****      2004-03-05
          - Transaction Manager Statistics Functions -          T12700M1

                Code      Service
                ----      -
                1      Current Statistics
                2      Transaction Times
                3      High-water Marks
                .      Exit
                ----      -
Code..: _

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

Current Statistics

This function displays statistical information about transactions and clients for which this ATM daemon has done work. The display has the following format.

```

10:32:47 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****      2004-03-05
          - Current Statistics -                                     T12710M1

TM Node: 7064

          Transactions  Commits      Tran      Nonact      Heur-      Client
          -----      -
          only          235         227         2          0          0          0
Extrn.          1311         1307
          -----      -
Total          1546         1534         2          0          0          0
          -----      -
Open           0
HWM            19
          -----      -
                                22
                                53
          -----      -

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

```

The following information is provided.

Field	Description
Transactions	<p>The number of transactions, or branches, processed by this ATM daemon appears on the line that begins “Total”. This figure is broken down on the preceding lines into transactions that were controlled only by ATM daemons (“ATM-only”), and transactions that were controlled by an external transaction coordinator, such as the CICS syncpoint manager or RRMS (“Extrn.”).</p> <p>“Open” indicates the number of global transactions, or branches, that are currently open and that involve this ATM daemon.</p> <p>“HWM” indicates the high-water mark for global transactions; that is, the highest number of transactions, or branches, that have been in progress at the same time, involving this ATM daemon.</p>
Commits	<p>This column indicates how many of the transactions, or branches, that this daemon has processed were committed. The total is broken down into those that were controlled solely by ATM daemons, and those that were controlled by an external transaction coordinator.</p>
Tran timeout	<p>This column indicates how many of the transactions, or branches, that this daemon has processed were backed out because the global transaction time limit was exceeded. The total is broken down into those that were controlled solely by ATM daemons, and those that were controlled by an external transaction coordinator.</p>
Nonact timeout	<p>This column indicates how many of the transactions, or branches, that this daemon has processed were backed out because the global nonactivity time limit was exceeded. The total is broken down into those that were controlled solely by ATM daemons, and those that were controlled by an external transaction coordinator.</p>
Heuristic	<p>This column indicates how many of the transactions, or branches, that this daemon has processed, have had some degree of heuristic termination, either by an ATM daemon or by a database. The total is broken down into those that were controlled solely by ATM daemons, and those that were controlled by an external transaction coordinator.</p>
Client sessions	<p>The line beginning “Open” indicates the current number of users who are currently known to the ATM daemon; that is, the current number of global user queue elements.</p> <p>The line beginning “HWM” indicates the high-water mark for global user queue elements; that is, the highest number of elements that have existed at the same time in this ATM daemon’s global user queue.</p>

Transaction Times

This function displays timing statistics for transactions (or branches) managed by the daemon. The display has the following format.

```

10:33:22 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****      2004-03-05
          - Transaction Times -                                     T12720M1

TM Node: 7064

          Upper
          bound
          (secs.)      Tran count      Committed      Backed out
          -----
             0.50          1432          1422           10
             1.00           112           108            4
             2.00            4             4             0
             5.00            0             0             0
            10.00            2             0             2
             300             0             0             0
             600             1             0             1
          9999999          0             0             0
          -----
          Total:          1551          1534           17
          -----

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

```

The following information is provided.

Field	Description
Upper bound (secs)	The transaction time ranges for which the ATM daemon maintains counts. The first row, for example, represents transactions that were completed within 0.5 seconds. The final row represents transactions that took longer than 600 seconds to complete.
Tran count	The number of transactions, or branches, processed by this ATM daemon, that completed within the time range indicated by the left-most column.
Committed	The number of transactions, or branches, committed by this ATM daemon, that completed within the time range indicated by the left-most column.
Backed out	The number of transactions, or branches, backed out by this ATM daemon, that ended within the time range indicated by the left-most column.

High-Water Marks

This function can be used to monitor the use of the ATM daemon's resources, including its main storage areas.

The information provided can be used to determine if the settings for the ATM parameters TMDRQ and TMDYNTCIDS are satisfactory.

```

10:35:56 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****                2004-03-05
                - High-Water Marks -                                         T12730M1

TM Node: 7064

      Item              Max      HWM      Hits      First Hit

TMABA                    37        4        4        03/05 09:54
TMDRQ                    10         0         0
TMRQ2                     2         1         1        03/05 09:54
TMDYNTCIDS             10000        13         2        03/05 09:51
TMGUQ                    53         1         1        03/05 09:55
TMGTQ                    19         3         3        03/05 09:54
TMNODES                 191         3         1        03/05 09:41
TMTARGETSG              191         3         4        03/05 09:45
TMTARGETST              191         2       1058        03/05 09:50
TMs/tran                191         2        331        03/05 09:49

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

Most entries in the list on this screen do not relate directly to any parameter, but are included for information. The following is a brief summary of the items listed:

Item	Description
TMABA	Adabas buffer areas.
TMDRQ	Deferred request queue (ADARUN parameter).
TMRQ2	Internal request queue.
TMDYNTCIDS	Count of dynamic Client IDs (ADARUN parameter).
TMGUQ	Global user queue.
TMGTQ	Global transaction queue. This is a subset of the global user queue. A global user queue element belongs also to the global transaction queue, if and only if it is associated with a currently open global transaction or branch.
TMNODES	Number of remote ATM daemons.
TMTARGETSG	Number of databases.
TMTARGETST	Number of databases in a single transaction.
TMs/tran	Number of remote ATM daemons in a single transaction.

Display Zap Information

This function can be used to determine the zaps that have been applied to the ATM kernel module that is being used by the ATM daemon with which you are working.

This function is invoked by selecting option 8, Display Zap Information, on the Transaction Manager Daemon Information menu. The following screen will appear:

```
16:07:35 ***** A D A B A S TRANSACTION MANAGER 7.5.1 *****          2004-03-05
                - Display Zap IDs (ATvrlnnn) -                          T1ZAPDM1

04/16/04 7064 ATMZ          Version: 7.5.1          Job Name: ATM7064
-----
                5  ----- 7  -----
-----
-----
-----

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

The number displayed represents the last 3 digits of the actual zap number with leading zeros suppressed. In the example, zap AT751005 appears as 5 and zap AT751007 appears as 7.