

System Status

Adabas Manager System Status provides a comprehensive overview of Adabas operation.

Note:

A number of information displays are only available for mainframe databases. These are **Installed Products, Nucleus File Status, Online Status, PPT, Resource Statistics, User Profiles, Work Status** and **Work Pool Usage**.

This chapter covers the following topics:

- Reviewing General System Status of Databases
- Resetting the System Status for Mainframe Databases
- CLOG/PLOG Statistics
- Reviewing Command Queue
- Reviewing Command Usage
- Reviewing File Usage
- Reviewing High Water Marks
- Reviewing Hold Queue
- Installed Products
- Reviewing Nucleus File Status
- Reviewing Online Status
- Reviewing PPT (Parallel Participant Table) Status
- Reviewing Resource Statistics
- Reviewing Thread Status
- User Profiles
- User Queue and User Queue Elements (UQEs) for Databases
- Reviewing Work Status
- Reviewing Work Pool Usage

Reviewing General System Status of Databases

 To review the general system status of an Adabas database:

1. Select an Adabas database in tree-view and expand it.
2. Select **System Status** in tree-view.

The system status information for the database is displayed in tables on the **System Status** panel in detail-view.

Read about *Database Monitoring and Tuning* in the *Adabas DBA Tasks* documentation for detailed information about system status statistics.

The system status information for a database is provided in sections, as described in this section:

- Physical I/O Table
- General Statistics Table
- Pool and Queue Statistics Table

Physical I/O Table

The physical I/O table is the first section on the **System Status** panel. It displays the number of physical reads and writes executed during the session to the Associator (ASSO), Data Storage (DATA), and Work (WORK) data sets. In addition, it displays the number of physical writes during the session to the data protection log (PLOG).

General Statistics Table

The general statistics table is the second section from the top of the **System Status** panel. It lists the following information about the database:

Property	Explanation
Logical Reads	The number of logical reads issued for the buffer pool.
Buffer Efficiency	The number of logical reads divided by the number of ASSO and DATA reads. The higher the value for buffer efficiency, the more efficient is buffer pool usage. If the value is less than 10, you may want to increase the size of the Adabas buffer pool (see the ADARUN LBP parameter).
Format Translations	Adabas read and update commands require a format buffer that specifies the fields to be read or updated. Adabas interprets the format buffer and translates it into an internal form and stores it in an internal format buffer pool. The internal format buffer is identified by a combination of user ID/ command ID. Format buffer translation is CPU-intensive.
Format Overwrites	When the internal format buffer pool becomes full, an existing entry must be overwritten to accommodate a new entry. If you have an excessive number of format overwrites, you may need to increase the size of the internal format buffer pool (see the ADARUN LFP parameter).

Property	Explanation
Throwbacks	The number of times a command could not be executed because the Adabas nucleus was waiting for an available ISN or Adabas work pool space. In these cases, the command is thrown back into the command queue for processing at a later point in time.
Thread Switches	The number of times in this session that a thread was automatically switched by Adabas during the processing of a single command. A thread switch occurs if I/O activity suspends command processing in an active thread. Ideally, each command should be processed to completion without a thread switch. The count of thread switches is thus an indication of the balance between the size of the I/O buffer and the number of threads allocated.
Number of Calls	Total number of calls issued to Adabas during the session.
Internal Autorestarts	The number of autorestarts performed during the session.
PLOG Switches	Applies only when dual protection logging is in effect; when one dataset is full, Adabas switches automatically to a second dataset and continues writing protection log records. In the meantime, data in the first dataset is copied off using ADARES PLCOPY to a sequential file, either manually or under the control of user exit 2, so that the dataset can be safely overwritten when the second dataset becomes full and Adabas switches automatically back to the first dataset. The system is most efficient when sufficient time is available to copy a full protection log off to the sequential dataset before the other protection log dataset becomes full. Protection logs are sized using the DUALPLD parameter to specify the device and thus the block size and the DUALPLS parameter to specify the number of blocks allowed in a log.
Buffer Flushes	The number of times the buffer pool has been flushed to Data Storage during the session. The buffer pool contains the most frequently used ASSO and DATA blocks and its purpose is to minimize physical I/O activity. The buffer pool should be as large as possible without causing undue paging by the operating system.

Pool and Queue Statistics Table

The pool and queue statistics section of the table is a high-water mark display. It shows the usage statistics and graphs the highest percentage used of selected pools and queues in the current session, as well as the date and time when the high point was reached. Values are displayed for the:

- user, command, and hold queues

- ISN list and sequential command tables
- format, redo, security, user file list, DTP transaction ID, unique descriptor, and work pools
- attached buffers.

In addition, the units and defined settings of the ADARUN parameters associated with establishing the sizes of these queues and pools is also listed in the table.

The high-water values are a good starting point when looking for a problem with limited buffer, pool, or queue space, or if you are looking for unused storage resources.

Resetting the System Status for Mainframe Databases

You have the following options for resetting the system status for mainframe databases:

▶ To reset the pool and queue statistics display:

1. Select an Adabas database in tree-view and expand it.
2. Select **System Status** in tree-view and right-click it.
3. Select **Reset Pool** on the drop-down menu.

The counters in the pool and queue statistics table are reset to zero.

▶ To reset the counter:

1. Select an Adabas database in tree-view and expand it.
2. Select **System Status** in tree-view and right-click it.
3. Select **Reset Counter** on the drop-down menu.

The counters in the general statistics table are reset to zero.

▶ To reset all:

1. Select an Adabas database in tree-view and expand it.
2. Select **System Status** in tree-view and right-click it.
3. Select **Reset All** on the drop-down menu.

All counters in the **System Status** tree are reset to zero.

CLOG/PLOG Statistics

▶ To review the CLOG/PLOG statistics:

1. Select an Adabas database in tree-view and expand it.
2. Select **CLOG/PLOG Statistics** in tree-view under the expanded **System Status**.

Two tables are displayed in the detail-view panel; in the first table the following command log properties are shown:

- the name of the CLOG that the nucleus is currently writing
- the size of a CLOG area in blocks
- the number of the last block written
- the percentage of the last block that was written (in graph form)
- the number of dual log switches since the nucleus started; and
- the date and time of the last CLOG switch

In the second table the following protection log properties are shown:

- the name of the PLOG that the nucleus is currently writing
- the size of a PLOG area in blocks
- the number of the last block written
- the percentage of the last block that was written (in graph form)
- the number of dual log switches since the nucleus started; and
- the date and time of the last PLOG switch

Forcing CLOG/PLOG

Using this option, you can immediately switch (by forcing an end-of-file) between dual or multiple command log (CLOG) or protection log (PLOG) files. Switching (that is, "togglng") changes from one CLOG or PLOG file to another.

To force a CLOG/PLOG switch:

1. Select an Adabas database in tree-view and expand it.
2. Select **CLOG/PLOG Statistics** in tree-view under the expanded **System Status**.

Two tables are displayed in the detail-view panel, showing the command/protection log properties. If dual logging is active, **Force CLOG Switch** and **Force PLOG Switch** are displayed.

3. Click the action you want to perform.

Reviewing Command Queue

▶ To review the command queue:

1. Select an Adabas database in tree-view and expand it.
2. Select **Command Queue** in tree-view under the expanded **System Status**.

A list of the current commands in the queue and their status are listed.

Reviewing Command Usage

▶ To review command usage:

1. Select an Adabas database in tree-view and expand it.
2. Select **Command Usage** in tree-view under the expanded **System Status**.

A table is displayed in detail-view showing the total and average execution time of each Adabas command type issued during the current session and processed by the Adabas nucleus, and the total of all Adabas commands issued.

The following commands are listed:

Command	Description
A1/4	Update Existing Records
BT	Backout Transactions
CL	Close User Session
ET	End Transaction
E1/2	Delete Records
L1/4	Read by ISN
L2/5	Read Physical
L3/6	Read by Descriptor
L9	Read Descriptor
LF	Read Field Definition
N1/2	Add Records
OP	Open User Session
UC	Utility Commands
RC	Release Command id's
RE	Read ET User Data
REST	Other Commands
S1/4	Find Records
S2	Find records sorted
S5	Find Coupled ISN
S8	Process ISN List
S9	Sort ISN List
YCAL	Internal Communication
V1 to V4	Internal Communication
UCAL	Utility Commands

With Adabas version 8.2, statistics for the internally-used Y* and V* commands are also included in the **Command Usage** display. These commands are used internally by Adabas and Adabas add-on products and should not be used in direct calls in your applications because their use will result in errors.

 **To reset the command usage status display:**

1. Right-click **Command Usage** under **System Status**.
2. Select **Reset** on the drop-down menu.

The counters in the command usage status table are reset to zero.

Note:

Selecting **Reset All** on the drop-down menu will reset all counters in the **System Status** tree to zero.

Reviewing File Usage

▶ **To review file usage for mainframe databases:**

1. Select an Adabas database in tree-view and expand it.
2. Select **File Usage** in tree-view under the expanded **System Status**.

A table is displayed in detail-view showing the total number of accesses for all files of the database used during the current session is displayed.

▶ **To reset the file usage status display for mainframe databases:**

1. Right-click **File Usage** under **System Status**.
2. Select **Reset** on the drop-down menu.

The counters in the file usage status table are reset to zero.

Note:

Selecting **Reset All** on the drop-down menu will reset all counters in the **System Status** tree to zero.

▶ **To review file usage for open systems databases:**

1. Select an Adabas database in tree-view and expand it.
2. Select **File Usage** in tree-view under the expanded **System Status**.
3. In detail-view, click **Define Files**.
4. Enter your selection of files in the **Enter File List** box and click **OK**.

A table is displayed in detail-view showing the total number of accesses for all files of the database used during the current session is displayed.

Reviewing High Water Marks

▶ **To review high water marks:**

1. Select an Adabas database in tree-view and expand it.
2. Select **High Water Marks** in tree-view under the expanded **System Status**.

A table is displayed in detail-view showing the maximum percent of use of selected pools and queues in the current session, and the date and time when the high point was reached.

Values are displayed for the user, command, and hold queues; the ISN list and sequential command tables; the format, security, and work pools; and the attached buffers (NAB).

With Adabas version 8.2, the **High Water Marks** display includes data for Work parts 1, 2, and 3. This allows you to monitor the use of the Work data set.

These values are a good starting point when looking for a problem with limited buffer, pool, or queue space, or if you are looking for unused storage resources.

Reviewing Hold Queue

▶ To review the hold queue:

1. Select an Adabas database in tree-view and expand it.
2. Select **Hold Queue** in tree-view under the expanded **System Status**.

A list of ISNs currently in hold status is displayed along with the file in which it occurs, the related TID, CPU-ID, VM-ID and OPSYS-ID.

▶ To stop a user:


1. Click in the check box for the user you want to stop until a check mark appears.
2. Click **Stop User** to confirm your selection.

Filtering the Hold Queue Display

You can filter the hold queue display by file number or name and User ID.

Once you have specified a filter for the hold queue display, it remains in effect for all databases registered until you turn it off.

▶ To filter the hold queue display:

1. Access the hold queue display and in the upper left corner of the display, click the **Filter** button ().

The **Hold Queue** filter panel appears.


2. Enter the file name or number and/or the TID you want to filter the hold queue for. You can use an asterisk (*) as a wildcard character.
3. Verify that the **Turn Off Filter** check box does not have a check mark in it. If it does, click in the check box until the check mark is gone.
4. When all filters have been specified, click **OK** to save the filters or click **Cancel** to cancel the filter settings and revert to the prior settings (if any).

When you refresh the hold queue display, the filters are applied to the hold queue display.

▶ **To stop a user:**

1. Select the user you want to stop from the resulting list and click **Stop User**.

▶ **To clear all filters on the hold queue display:**

1. Access the hold queue display and in the upper left corner of the display, click the **Filter** button ().

The **Hold Queue** filter panel appears.

2. Click in the **Turn Off Filter** check box until a check mark appears.
3. Click **OK** to save the filters or click **Cancel** to cancel the filter settings and revert to the prior settings (if any).

Installed Products

▶ **To review the installed products associated with the database:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Installed Products** in tree-view under the expanded **System Status**.

The products associated with the database are displayed in detail-view.

Reviewing Nucleus File Status

▶ **To review the nucleus file status of a mainframe database:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Nucleus File Status** in tree-view under the expanded **System Status**.

The nucleus file status of the database is displayed in a table in detail-view.

The following information is listed:

Property	Explanation
File Number	The Adabas file number.
Locking Nucleus ID	In an Adabas cluster environment, the file may be locked for exclusive use by another cluster nucleus. If this is the case and the file is in the nucleus file status table, this column for the file shows the ID of the nucleus that has exclusive control.
Access Count	Display the number of access users, respectively, that refer to the specified file in their user queue elements (UQEs). These users either have specified the file in an OP command with R-option or are using the file in an as yet incomplete transaction.
Update Count	Display the number of update users, respectively, that refer to the specified file in their user queue elements (UQEs). These users either have specified the file in an OP command with R-option or are using the file in an as yet incomplete transaction.
Status	Indicates when the file is used for access only or for access and update. The Status column field indicates to what extent a nucleus can use a file on its own. If the requested use exceeds the given state, the nucleus must first communicate with the other nuclei in the cluster in order to upgrade the state.

Reviewing Online Status

The **Online Status** panel displays the online utility processes (inverting files, reordering files) currently in the database nucleus. For details on how to start the online utilities, see sections Inverting Files and Reordering Files.

 **To review the online status of a mainframe database:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Online Status** in tree-view under the expanded **System Status**.

The online status of the database is displayed in a table in detail-view.

The following information is listed:

Property	Explanation
ET-ID	The logical user ID assigned by the ADALOD LOAD parameter ETID (which defines owner IDs to all records being loaded into a multiclient file).
Process Type	The current process type.
Status	The current status.
File Number	The Adabas file number.
Reorder Type	The reorder type set for the file.
Current RABN	The RABN assigned for the file.
Current ISN	The ISN allocated for the file.
Number of Throwbacks	The number of commands in the command queue for processing at a later point in time.

Reviewing PPT (Parallel Participant Table) Status

The parallel participant table (PPT) located in a database's Associator tracks all active Adabas nuclei in the cluster and displays additional information about a nucleus.

The information about each Adabas nucleus maintained in the PPT is used when ADARES PLCOPY is copying and merging all active protection logs in the cluster. It is also used during nucleus initialization to ensure that the dataset information required for autorestart and PLOG merge is available:

- If the previously used Work dataset and PLOG datasets are already in use by another nucleus, the nucleus will not start.
- If a different Work dataset is provided and the previously used Work dataset contains autorestart information, the nucleus will start but a warning will be printed.
- If different PLOGs or no PLOGs are provided and the previous session had PLOGs still to be copied, the nucleus will not start until those PLOGs have been copied/merged if PLOGRQ=FORCE is specified. If PLOGRQ=FORCE is not specified, the nucleus will start but a warning will be printed.

To review the PPT of a mainframe database:

1. Select an Adabas database in tree-view and expand it.
2. Select **PPT** in tree-view under the expanded **System Status**.

The table in detail-view displays a list of nuclei participating in the cluster and information about the current status of each nucleus.

3. Click a nucleus ID in the table to display additional information about a nucleus.

For an Adabas cluster nucleus that has a nonzero nucleus ID, its entry in the PPT is displayed in the detail-view panel.

Reviewing Resource Statistics

Resource statistics provide information about file and command use either for all currently active users (general statistics) or for a single user (user statistics). The statistics are collected by starting a sampling period for which you have specified a time period in seconds (duration).

▶ **To obtain statistics for all currently active mainframe users:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Resource Statistics** in tree-view under the expanded **System Status**.

The **Resource Statistics** panel is displayed in detail-view.

3. Specify the duration period in seconds (default is 60 seconds) and click **Start General Statistics**.

The **General Statistics** collection is started.

4. After the specified duration, click **Read General Statistics**.

The following command usage information for all currently active users is displayed in the detail-view panel:

- the total number of commands
- the command type
- the number of commands
- the number of commands (%)
- the average duration (milliseconds)

The following commands are listed:

Command	Description
A1/4	Update Existing Records
BT	Backout Transactions
CL	Close User Session
ET	End Transaction
E1/2	Delete Records
L1/4	Read by ISN
L2/5	Read Physical
L3/6	Read by Descriptor
L9	Read Descriptor
LF	Read Field Definition
N1/2	Add Records
OP	Open User Session
UC	Utility Commands
RC	Release Command id's
RE	Read ET User Data
REST	Other Commands
S1/4	Find Records
S2	Find records sorted
S5	Find Coupled ISN
S8	Process ISN List
S9	Sort ISN List
YCAL	Internal Communication
V1 to V4	Internal Communication
UCAL	Utility Commands

5. Choose **Files** in the selection box in this panel to display the file usage information for all currently active users.

The resulting table provides the following file usage details:

- the file number
- the number of commands
- the number of commands (%)

Click **Back** to return to the **Resource Statistics** panel.

▶ **To obtain statistics for a single mainframe user:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Resource Statistics** in tree-view under the expanded **System Status**.

The **Resource Statistics** panel is displayed in detail-view.

3. Click **Select**.

The **User Queue** panel is displayed in detail-view.

4. Select a user ID to retrieve statistics for that user. This will return you to the **Resource Statistics** panel.
5. Specify the duration period in seconds (default is 60 seconds) and click **Start User Statistics**.
6. After the specified duration, click **Read User Statistics**.

The following command usage information for the user you selected is displayed in the detail-view panel:

- the total number of commands
- the command type
- the number of commands
- the number of commands (%)
- the average duration (milliseconds)

The following commands are listed:

Command	Description
A1/4	Update Existing Records
BT	Backout Transactions
CL	Close User Session
ET	End Transaction
E1/2	Delete Records
L1/4	Read by ISN
L2/5	Read Physical
L3/6	Read by Descriptor
L9	Read Descriptor
LF	Read Field Definition
N1/2	Add Records
OP	Open User Session
UC	Utility Commands
RC	Release Command id's
RE	Read ET User Data
REST	Other Commands
S1/4	Find Records
S2	Find records sorted
S5	Find Coupled ISN
S8	Process ISN List
S9	Sort ISN List
YCAL	Internal Communication
V1 to V4	Internal Communication
UCAL	Utility Commands

7. Choose **Files** in the selection box in this panel to display the file usage information for this user.

The resulting table provides the following file usage details:

- the file number
- the number of commands
- the number of commands (%)

Click **Back** to return to the **Resource Statistics** panel.

Reviewing Thread Status

▶ To review threads:

1. Select an Adabas database in tree-view and expand it.
2. Select **Threads** in tree-view under the expanded **System Status**.

The threads are listed along with their status (active or not active), the command type currently in process in each active thread, and the number of commands processed by each thread in the current session.

▶ To reset the thread status display:

1. Right-click **Threads** under **System Status**.
2. Select **Reset** on the drop-down menu.

The counters in the thread status table are reset to zero.

Note:

Selecting **Reset All** on the drop-down menu will reset all counters in the **System Status** tree to zero.

User Profiles

Adabas allows you to retain user-related information from session to session in a user profile table. For each user, you can maintain

- a user priority to add "weight" to the normal, built-in priorities of Adabas commands issued by a specific user when they contend with other commands for Adabas database priority. The effect is to change the user's database access priority.
- nonactivity timeout values for access-only users (TNAA), ET logic users (TNAE), and EXU users (TNAX).
- transaction time limits for ET Logic users (TT).
- a time limit for executing a database query (Sx) command (TLSCMD).
- the number of ISNs allowed per TBI element (NSISN).
- the number of records that can be placed in hold status at one time (NISNHQ).
- the number of active command IDs allowed (NOCID).
- an owner ID for multiclient support.

▶ To review the mainframe user profiles:

1. Select an Adabas database in tree-view and expand it.

2. Select **User Profiles** in tree-view under the expanded **System Status**.

The user profiles are displayed in a table.

▶ **To modify a user profile:**

1. In the **User Profiles** table displayed in detail-view, click the user ID for which you want to modify the profile.

The profile table for the user is displayed.

2. In the resulting profile table, enter the values you require in the text boxes.
3. Click **Modify** to confirm your changes or **Cancel** to return to the **User Profiles** table without modifying the profile.

▶ **To delete a user profile:**

1. In the **User Profiles** table displayed in detail-view, click the user ID you want to delete.

The profile table for the user is displayed.

2. Click **Delete** to delete the user ID or **Cancel** to return to the **User Profiles** table without deleting the profile.

Creating New User Profiles

In addition to modifying or deleting existing profiles, you can also add new user profiles.

▶ **To create a new mainframe user profile:**

1. Select an Adabas database in tree-view and expand it.
2. Select **System Status** in tree-view and right-click it.
3. Select **New Profile** on the drop-down menu.

A user profile table appears in detail-view.

4. Enter the user ID for the new profile and allocate the values you require in the text boxes (as default the boxes show the active parameter values).
5. Click **OK** to confirm the new user profile or **Cancel** and return to the **User Profiles** table.

The new user profile is now displayed in the table.


User Queue and User Queue Elements (UQEs) for Databases

Each user who calls Adabas is assigned a user queue element (UQE). The user queue stores the UQEs for all users of a given database.

This section covers the following topics:

- User Queue
- User Queue Element (UQE)
- Filtering the User Queue Display

User Queue

 **To review the user queue for a database:**

1. Select an Adabas database in tree-view and expand it.
2. Select **User Queue** in tree-view under the expanded **System Status**.

The user queue for the database appears on the **User Queue** panel in detail-view.

The user queue information is displayed in a table that provides the following information:

Statistics	Description
TID	The unique internal identifier assigned to the user.
ET-ID	Logical user ID assigned by the ADALOD LOAD parameter ETID (which defines owner IDs to all records being loaded into a multiclient file).
Job Name	The job name associated with the user.
User Type	The user type. Possible values include: <ul style="list-style-type: none"> ACC access-only user AOS AOS/AMA user ET ET user EXF exclusive file control access user EXU exclusive file update user UTI utility update control user
Status	The user status. Possible values include: <ul style="list-style-type: none"> ET The user is in "End Transaction" state. T-OUT The user has been timed out. TRANS The user is in "Open Transaction" state.
Last Activity	Period of inactivity (in seconds).
Files	The file numbers of the Adabas files currently in use by the user. Note that no file list is provided for ET users.

You can stop a specific user, all users from a specific job, all users using a specific file, or all inactive users. Any open transactions of the stopped users are backed out. You can also request that the stopped users be deleted. Note that EXF and UTI users are not stopped or deleted.

 **To stop specific users:**

1. Click in the check boxes for all users you want to stop until check marks appear.
2. Click **Stop User** to confirm your selection.

Caution:

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), stop specific users only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

3. Click **Yes** to confirm or **No** to cancel. Both will return you to the previous panel.

The nucleus backs out any open transactions of the selected users and deletes them (purges the user queue elements).

▶ **To stop users using a specific file number:**

1. Right-click **User Queue** under the expanded **System Status**.
2. Select **Stop Users Using File** on the drop-down menu.

The **Stop Users using File** panel is displayed in detail-view.

3. Enter the file number for which you want users stopped.
4. If you want the stopped users deleted (if you want to purge their user queue elements), check the **Purge User Queue Elements** check box.

Caution:

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), stop users with **Purge User Queue Elements** checked only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

5. Click **OK** to confirm or **Cancel**. Both will return you to the previous panel.

The nucleus backs out any open transactions of the affected users. If **Purge User Queue Elements** is checked, the nucleus also deletes the users (purges their user queue elements).

▶ **To stop inactive users:**

1. Right-click **User Queue** under the expanded **System Status**.
2. Select **Stop Inactive Users** on the drop-down menu.

The **Stop Inactive Users** panel is displayed in detail-view.

3. Enter the inactivity time interval (in seconds). Users who have not executed a command during this time limit will be stopped.
4. If you want the stopped users deleted (if you want to purge their user queue elements), check the **Purge User Queue Elements** check box.

Caution:

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), stop users with **Purge User Queue Elements** checked only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

- Click **OK** to stop the users or click **Cancel**. Both will return you to the previous panel.

The nucleus backs out any open transactions of the affected users. If **Purge User Queue Elements** is checked, the nucleus also deletes the users (purges their user queue elements).

▶ **To stop users by jobname:**

- Right-click **User Queue** under the expanded **System Status**.
- Select **Stop Users by Jobname** on the drop-down menu.

The **Stop Users by Jobname** panel is displayed in detail-view.

- Enter the name of the job whose users you wish to stop.

Caution:

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), stop users by jobname only if you are certain that the users to be deleted are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

- Click **OK** to stop the users or **Cancel**. Both will return you to the previous panel.

The nucleus backs out any open transactions of the affected users and deletes them (purges their user queue elements).

User Queue Element (UQE)

▶ **To review the user queue element for a specific user:**

- Select an Adabas database in tree-view and expand it.
- Select **User Queue** under the expanded **System Status**.

The user queue for the database appears on the **User Queue** panel in detail-view.

- On the **User Queue** panel in detail-view, click the TID of the user whose user queue element you want to review.

The UQE information is displayed in several tables that provide the following information.

Statistics	Description
TID	The unique internal identifier assigned to the user.
User ID	The Adabas-assigned user ID, if available.
Job Name	The job name associated with the user.

Statistics	Description												
User Type	The user type. Possible values include: <table border="0" style="margin-left: 20px;"> <tr> <td>ACC</td> <td>access-only user</td> </tr> <tr> <td>AOS</td> <td>AOS/AMA user</td> </tr> <tr> <td>ET</td> <td>ET user</td> </tr> <tr> <td>EXF</td> <td>exclusive file control access user</td> </tr> <tr> <td>EXU</td> <td>exclusive file update user</td> </tr> <tr> <td>UTI</td> <td>utility update control user</td> </tr> </table>	ACC	access-only user	AOS	AOS/AMA user	ET	ET user	EXF	exclusive file control access user	EXU	exclusive file update user	UTI	utility update control user
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Status	The user status. Possible values include: <table border="0" style="margin-left: 20px;"> <tr> <td>ET</td> <td>The user is in "End Transaction" state.</td> </tr> <tr> <td>T-OUT</td> <td>The user has been timed out.</td> </tr> <tr> <td>TRANS</td> <td>The user is in "Open Transaction" state.</td> </tr> </table>	ET	The user is in "End Transaction" state.	T-OUT	The user has been timed out.	TRANS	The user is in "Open Transaction" state.						
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Last Activity	The date and time activity last occurred by the user.												
CPU ID	The CPU ID of the user (a component of the Communication ID).												
VM ID	The VM ID of the user (a component of the Communication ID).												
OPSYS ID	The operating system ID of the user (a component of the Communication ID).												
User ID	The user ID (a component of the Communication ID).												
Communication ID (hexadecimal)	The 28-byte hexadecimal communication ID of the user. Note: CPU ID, VM ID, OPSYS ID and User ID are all components of the <i>Communication ID</i> and guarantee its network-wide uniqueness even in heterogeneous environments. The individual IDs are dependent on the operating system the <i>Adabas</i> call has been issued from.												
Hold Queue Limit	The maximum number of held ISNs the hold queue can contain from one user. For detailed information about the NISNHQ parameter, see the <i>ADARUN Control Statement</i> in the <i>Adabas Operations</i> documentation.												
Max. parallel CIDs per User	The total number of CIDs (command IDs) allowed per user, and therefore the maximum number of table elements the user has available at any point in time. For detailed information about the NQCID parameter, see the <i>ADARUN Control Statement</i> in the <i>Adabas Operations</i> documentation.												

Statistics	Description
Max. ISNs per TBI Element	The maximum number of ISNs kept in a TBI (table of ISNs) element in memory (list of resulting ISN lists). For detailed information about the NSISN parameter, see the <i>ADARUN Control Statement</i> in the <i>Adabas Operations</i> documentation, .
Max. Time of Nonactivity	The maximum length of time, in seconds, that the user can be inactive before inactive processing occurs. For more information about Adabas timeouts, refer to your Adabas documentation.
Time Limit for Sx Commands	The maximum length of time, in seconds, permitted for Sx commands by this user.
No. of ISNs currently held	The number of ISNs currently held by the user.
No. of CIDs currently in use	The number of CIDs (command IDs) currently in use. For detailed information about the NQCID parameter, see the <i>ADARUN Control Statement</i> in the <i>Adabas Operations</i> documentation.
No. of Calls	The number of calls issued by the user during the user session.
No. of I/Os	The number of I/Os initiated by the user during the user session.
Priority from ET/CP File	The priority of the user.
Start Session	The start time of the user session.
Start Transaction	The start time of the transaction.
File List	The file numbers of the files currently in use by the user. Note that no file list is provided for ET users.

You can return to the **User Queue** panel by clicking **Back** or you can stop this user. When users are stopped, they are deleted. Any open transactions of the stopped/deleted users are backed out. Note that EXF and UTI users are not stopped or deleted.

Caution:

If Adabas is running with ADARUN OPENRQ=NO (specifying that users are not required to issue an OP as the first command of the session), stop them only if you are certain that the users to be deleted (stopped) are no longer active. If a user with an open transaction is deleted, but then returns (by sending a command), no indication is given about the transaction backout. If the user continues the transaction, logical inconsistencies in the database could occur.

To stop this user:


1. Click **Stop User**.

Filtering the User Queue Display

You can filter the user queue display by last activity (elapsed time in seconds), ET-ID, user type, job name and user ID.

Once you have specified a filter for the user queue display, it remains in effect for all databases registered until you turn it off.

▶ **To filter the user queue display:**


1. Access the user queue display and in the upper left corner of the display, click the **Filter** button ().
The **User Queue** filter panel appears.
2. Enter the values you want to filter the user queue for. You can use an asterisk (*) as a wildcard character.
3. Verify that the **Turn Off Filter** check box does not have a check mark in it. If it does, click in the check box until the check mark is gone.
4. When all filters have been specified, click **OK** to save the filters or **Cancel** to cancel the filter settings and revert to the prior settings (if any).

When you refresh the user queue display, the filters are applied to the file list display.

▶ **To stop a user:**

1. Select the user you want to stop from the resulting list and click **Stop User**.

▶ **To clear all filters on the user queue display:**

1. Access the user queue display and in the upper left corner of the display, click the **Filter** button ().
The **Hold Queue** filter panel appears.
2. Click in the **Turn Off Filter** check box until a check mark appears.
3. Click **OK** to save the filters or **Cancel** to cancel the filter settings and revert to the prior settings (if any).

Reviewing Work Status

▶ **To review the work status:**

1. Select an Adabas database in tree-view and expand it.
2. Select **Work Status** under the expanded **System Status**.

Work Status displays the WORK area sizes (in blocks) for the

- data protection area (Work part 1; ADARUN LP parameter)
- area used for intermediate ISN lists (Work part 2; ADARUN LWKP2 parameter)

- area used for resulting ISN lists (Work part 3)
- distributed transaction processing area (Work part 4; only available if Adabas Transaction Manager is installed on a separate nucleus in your system)

Reviewing Work Pool Usage

To review the work pool:

1. Select an Adabas database in tree-view and expand it.
2. Select **Work Pool Usage** under the expanded **System Status**.

Work pool statistics are displayed including the total length set in the ADARUN parameter LWP, the length of the used and unused parts of the pool, and the length of the longest single unused part. These numbers can be used to tune the work pool length for the next session.