

# **Adabas Auditing on z/OS**

## **Adabas Auditing Administration (SYSALAA)**

Version 2.2.2

October 2022

This document applies to Adabas Auditing for z/OS Version 2.2.2 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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## Adabas Auditing Administration (SYSALAA)

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The Adabas Auditing Administration provides an online interface to communicate with an Adabas Audit Server, or an Adabas nucleus running with the ADARUN parameter `AUDITING=YES`, enabling the following services to be provided:

- Display of status and statistical information from Audit Servers and Adabas nuclei running with `AUDITING=YES` (equivalent to the DAUDSTAT operator command).
- Display of parameter information from Audit Servers and Adabas nuclei running with `AUDITING=YES` (equivalent to the DAUDPARM operator command).

<b>Adabas Auditing Administration Overview</b>	Provides an overview of Adabas Auditing Administration.
<b>Audit Server Administration</b>	Gives information about performing administration against an Adabas Audit Server.
<b>Nucleus Audit Administration</b>	Gives information about performing administration against an Adabas nucleus running <code>ADARUN AUDITING=YES</code> .

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# 1

## About this Documentation

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## Document Conventions

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Convention	Description
<b>Bold</b>	Identifies elements on a screen.
Monospace font	Identifies service names and locations in the format <i>folder.subfolder.service</i> , APIs, Java classes, methods, properties.
<i>Italic</i>	Identifies:  Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies:  Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the   symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

## Online Information and Support

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### Product Documentation

You can find the product documentation on our documentation website at <https://documentation.softwareag.com>.

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### Product Training

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- Ask questions and find answers in our discussion forums.
- Get the latest Software AG news and announcements.
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- Download products, updates and fixes.
- Search the Knowledge Center for technical information and tips.
- Subscribe to early warnings and critical alerts.
- Open and update support incidents.
- Add product feature requests.

## Data Protection

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Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.



## 2      **Adabas Auditing Administration Overview**

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You can access the Adabas Auditing Administration as follows:

Within Natural, logon to the SYSALAA library by entering:

```
LOGON SYSALAA
```

And enter the following command:

```
MENU
```

The Adabas Auditing Administration main menu appears.

This document covers the following topics:

## The Adabas Auditing Administration Main Menu

---

From the main menu of the Adabas Auditing Administration screens, you can select options that allow you to display statistical information and parameter information from an Adabas Audit Server and from an Adabas nucleus running with ADARUN AUDITING=YES.

```
20:16:17          ***** A D A B A S  AUDIT Administration *****          2021-01-12
Vers 2.2.1                      Administrator Functions                      M-AUMAIN
```

Code	Function
----	-----
A	Audit Server Administration
N	Nucleus Audit Administration
U	Adabas Auditing Configuration
?	Help
.	Exit
----	-----

```
Code ... _
Database ... _____
```

Command ==>

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

The following table describes the options on this menu. To select an option, enter its associated code in the `Code` field on the screen.

Code	Allows you to:
A	Perform administration against an Adabas Audit Server. <b>Note:</b> Specify the database ID of the Adabas Audit Server in the <code>Database</code> field.
N	Perform administration against an Adabas nucleus running <code>ADARUN AUDITING=YES</code> . <b>Note:</b> Specify the database ID of the Adabas nucleus in the <code>Database</code> field.
U	Exit Adabas Auditing Administration (SYSALAA) and enter Adabas Auditing Configuration (SYSALA).
?	Get help on this menu.
.	Exit Adabas Auditing Administration.

## Getting Help

Online help is provided for every Adabas Auditing Administration screen and message that appears in Adabas Auditing Administration. This section covers the following topics:

- [Getting Screen-Level Help](#)
- [Getting Help for Messages](#)

### Getting Screen-Level Help

➤ To get screen-level help for any Adabas Auditing Administration screen:

- Be sure the screen you want help for is displayed. You may have to navigate to it.

Press the PF1 key to display the help screen.

### Getting Help for Messages

➤ To get help for Adabas Auditing Administration messages:

- At the Command prompt enter:

```
msg nnn
```

where *nnn* is the valid two- or three-digit message number. Omit the leading zeros when referencing the message number. For example, to get help on message ALA00245, you would enter:

```
msg 245
```

---

## Using Function Keys

The following table describes the general function keys available while using the Adabas Auditing Administration screens. Note that not all function keys are available on all screens, and some PF keys represent a command only on specific screens.

Function Key	Display Title	Description
PF1	Help	Provides help on the current screen.
PF3	Exit	Exits the current screen without saving any changes you might have made. If the current screen is the Main Menu, this function key has no effect.
PF4	Add	Displays a screen that allows you to add a definition.
PF5	Save	Saves the changes you have made.
PF7	-	Scrolls backwards through the data on a screen.
PF8	+	Scrolls forward through the data on a screen.
PF12	Menu	Returns to the Adabas Auditing Administration main menu.

---

## Leaving the Adabas Auditing Administration Screens

To leave the Adabas Auditing Administration screens, press PF12 from any screen. If you are on a menu screen in the Adabas Auditing Administration, you can select the dot (.) option to leave.



**Note:** When you leave the Adabas Auditing Administration screens, any modifications to fields on the screen since the last save will not be stored.

# 3      **Audit Server Administration**

---

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To use Adabas Auditing Administration to perform inquiries against an Adabas Audit Server, select option A from the Adabas Auditing Administration Main Menu. The Audit Server Administration screen appears as follows:

```

20:22:59          ***** A D A B A S  AUDIT Administration *****          2021-01-12
Auditing Server          Audit Server Administration          M-AU0010

          Code      Function
          ----      -
          P      Audit Server Parameters
          S      Audit Server Statistics
          ?      Help
          .      Exit
          ----      -
Code ... _
Database ... 1956_   WIS1956

Command ==>

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

```

The following table describes the options on this menu. To select an option, enter its associated code in the **Code** field on the screen.

Code	Allows you to:
P	Perform inquiries against the selected Audit Server pertaining to parameter status and structure.
S	Perform inquiries against the selected Audit Server pertaining to statistical information.



**Note:** From this screen you can choose a different Audit Server by specifying its database ID in the **Database** field. If you specify a database ID that is not an Audit Server, you will be returned to the main menu.

This document covers the following topics:



## Audit Server Parameters

To perform inquiries against an Adabas Audit Server pertaining to parameter status and structure, select option P from the Audit Server Administration screen. The Audit Server Parameters screen appears showing all available inquiry options.

```

17:21:10          ***** A D A B A S  AUDIT Administration *****      2021-08-04
Auditing Server          Audit Server Parameters                          M-AU1000

          Code      Function
          ----      -
          A          Global
          D          Destinations
          F          Filters
          G          Format buffers
          S          Subscriptions
          T          Act/Deact/Open/Close/Connect
          V          Database information
          X          Display Adabas Parameters
          Y          Modify Adabas Parameters
          ?          Help
          .          Exit
          ----      -

          Code ... _
          Database ... 56          ADA56

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

```

The following table describes the options on this menu. To select an option, enter its associated code in the **Code** field on the screen.

Code	Allows you to:
A	Display the Global definitions by which the specified Audit Server is currently executing.
D	Display the Destination definitions by which the specified Audit Server is currently executing.
F	Display the Filter definitions by which the specified Audit Server is currently executing.
G	Display the Format Buffer definitions by which the specified Audit Server is currently executing.
S	Display the Subscription definitions by which the specified Audit Server is currently executing.
T	Activate/Deactivate Destinations and Subscriptions, and Open/Close Destinations.
V	Display Audit Server database information.
X	Display Audit Server Adabas parameters.
Y	Modify Audit Server Adabas parameters.

This document covers the following topics:

- [Display Global Definitions](#)
- [Display Destination Definitions](#)
- [Display Filter Definitions](#)
- [Display Format Buffer Definitions](#)
- [Display Subscription Definitions](#)
- [Activate/Deactivate/Open/Close Functions](#)
- [Display Database Information](#)
- [Display Adabas Parameters](#)
- [Modify Adabas Parameters](#)

Display Global Definitions

In order to display Global definitions currently in use by the selected Audit Server, enter A on the Audit Server Parameters screen. The Audit Global Definitions screen appears:

```
17:33:02          ***** A D A B A S  AUDIT Administration *****          2021-09-14
DBID 1956                      Audit Global Definitions                      M-AU1100
Auditing Server

Global definitions -----
Number of subtasks .....          3  Open at start .... YES
Subtask activation wait time .          10  Open retry count .          10
Maximum output msg size ..... 100,000  Open retry intrvl.          0
Destination full delay .....          60  Audit admin cmds . NO
Warning increment .....          10  Log input ..... NO
Warning message interval .....          60
Warning message limit .....          5
Warning percent .....          0
Connect count .....          0
Connect interval .....          0

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

The following table describes the fields on this screen.

Refer to the chapter *Adabas Audit Configuration* > section *Maintaining Global Definitions* for more information about these fields.

Field	Description
Number of subtasks	The number of subtasks in the Audit Server.
Subtask activation wait time	The number of seconds that can be used to override the default waiting time for a subtask to initialize and to activate.
Maximum output msg size	The maximum output message size for Adabas Auditing.
Destination full delay	The number of seconds between retry attempts when resending auditing data to a defined destination.
Warning increment	The increment (in percent of auditing pool usage) at which auditing pool warning messages should be written.
Warning message interval	The interval (in seconds) during which auditing pool usage warning messages are suppressed on the console.
Warning message limit	The number of auditing pool usage messages that may be written before these messages are suppressed.
Warning percent	The percent of auditing pool usage at which auditing pool warning messages should be written.
Connect count	The number of connection attempts of an Adabas nucleus to the Audit Server, should the first attempt fail.
Connect interval	The interval (in seconds) between connection attempts, should the first attempt to connect to an Audit Server by an Adabas nucleus fail.
Open at start	Indicates whether or not destinations with Open at Start set to 'G' in their definitions should be opened at Audit Server start-up.
Open retry count	Global open retry count.
Open retry intrvl	Global open retry interval.

## Display Destination Definitions

To display Destination definitions currently in use by the selected Audit Server, enter D on the Audit Server Parameters screen. The Audit Destination Definitions screen appears listing all in use Destination definitions.

20:33:38		***** A D A B A S AUDIT Administration *****					2021-01-12
DBID 1956		Audit Destination Definitions					M-AU1200
Auditing Server							
Mark	ID	Type	Op/Cls	Act/Inact	Logging	Allow	Logging
-	-----	-----	-----	-----	-----	---	
-	AUDIT1	Audit	Open	Active	Inactv	Yes	
-	AUDIT2	Audit	Open	Active	Inactv	Yes	
-	DESTXYZ	Audit	Open	Active	Inactv	Yes	
-	INPL1	Null	Open	Active	Inactv	Yes	
-	INPL2	Audit	Open	Active	Inactv	Yes	
-	NULL1	Null	Open	Active	Inactv	Yes	
-	NULL2	Null	Open	Active	Inactv	Yes	
-	TESTDAY1	Audit	Open	Active	Inactv	Yes	
-	TESTNUL2	Null	Open	Active	Inactv	Yes	

```

-
-

Enter (S)elect (A)ctivate (O)pen (I)nactivate (C)lose

Destination
Totals
9 of 9

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Renew                -      +                        Menu  ←

```

Use PF7 and PF8 to page forwards and backwards through the list of Destination definitions.

The following table describes the fields on this screen.

Refer to the chapter *Adabas Audit Configuration > Maintaining Destination Definitions* for more information about these fields.

Field	Description
Destination ID	Displays the Destination definition ID.
Destination Type	Displays the Destination type.
Open/Closed	Displays whether the Destination is open or closed.
Active/Inactive	Displays whether the Destination is active or inactive.
Logging	Displays whether logging is active or inactive.
Allow Logging	Displays whether logging is allowed for this Destination.

The following table describes the options on this menu. Enter the option alongside the required Destination.

Code	Allows you to:
S	Select the Destination to display additional information.
A	Activate the Destination.
O	Open the Destination.
I	Inactivate the Destination.
C	Close the Destination.
<b>PF Key</b>	<b>Allows you to:</b>
PF4	Refresh the information on the screen.

Specifying S against a Destination will display the Selected Destination Definition screen:

```

20:43:48          ***** A D A B A S  AUDIT Administration *****          2021-01-12
DBID 1956                      Selected Destination Definition                      M-AU1210
Auditing Server

-----
Destination name / type .... AUDIT1      /      Audit
Active/Inactive ..... Active
Open/Closed ..... Open
Allow logging ..... Yes
Logging ..... Inactive
SLOG status .....
Commit threshold ..... 0
Maximum message size ..... 0

Press 'Enter' to exit

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
```

The following table describes the fields on this screen.

Field	Description
Destination ID	Displays the Destination definition ID.
Destination Type	Displays the Destination type.
Active/Inactive	Displays whether the Destination is active or inactive.
Open/Closed	Displays whether the Destination is open or closed.
Allow Logging	Displays whether logging is allowed for this Destination.
Logging	Displays whether logging is active or inactive.
SLOG Status	Displays the status of Subscription Logging for this Destination.
Commit Threshold	Displays the Commit threshold for this Destination.
Maximum Message Size	Displays the maximum message size for this Destination.

## Display Filter Definitions

To use Adabas Auditing Administration to display Filter definitions currently in use by the selected Audit Server, enter F on the Audit Server Parameters screen. The Audit Filter Definitions screen appears listing all in use Filter definitions.

```

21:50:53          ***** A D A B A S  AUDIT Administration *****      2021-01-12
DBID 1956                      Audit Filter Definitions                      M-AU1500
Auditing Server
Mark  ID
-  -----
-  FILTER1
-  FILTFLD
-
-
-
-
-
-
-
-
-
-
-
-
-

Enter (S)elect                                     Filter
                                                    Totals
                                                    2 of 2

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
          Help          Exit          -      +          Menu      ↵

```

Use PF7 and PF8 to page forwards and backwards through the list of Filter definitions.

Select a filter ID with S to display the Audit Filter Displayed screen.

```

22:00:21          ***** A D A B A S  AUDIT Administration *****      2021-01-12
DBID 1956                      Audit Filter Displayed                      M-AU1510
Auditing Server
Filter ID .... FILTER1      Include records      Press 'Enter' to continue

-  ID -  -----  Source  -----  -----  Target  -----
Mk Grp Cnd Field  PE      MU Image Cond Field  PE      MU Image Value
-  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -  -
-  1   1   AA           AI    EQ           ABC
-
-
-
-
-
-

```

```

-
-
-
-
-
-
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit              -      +                      Menu  ←

```

Use PF7 and PF8 to page forwards and backwards through the list of Filter conditions.

Refer to *Adabas Audit Configuration (SYSALA) > Maintaining Filter Definitions* for more information about these fields.

Field	Description
ID Grp	Group number.
ID Cnd	The number of conditions in the Group.
Source Field	The two-byte Adabas field code for the field to be compared.
Source PE	The index number (occurrence) of the periodic group (PE) to which the condition relates if the Source Field is a PE field.
Source MU	The index number of the multiple-value field (MU) to which the condition relates if the Source Field is an MU field.
Source Image	The state of the record's Source Field: after image (AI) before image (BI) default image
Cond	The condition operator code for the filter.
Target Field	The two-byte Adabas field code for the field with which the Source Field will be compared.
Target PE	The index number of the periodic group (PE) to which the condition relates if the Target Field is a PE field.
Target MU	The index number (occurrence) of the multiple-value field (MU) to which the condition relates if the Target Field is an MU field.
Target Image	The state of the record's Target Field: after image (AI) before image (BI) default image
Target Value	A value against which the Source Field will be compared.





```

22:01:34          ***** A D A B A S  AUDIT Administration *****          2021-01-12
DBID 1956          Audit Subscription Definitions          M-AU1400
Auditing Server
Mark  ID          Status  Destinations          DBid/File          DBID/File
-    -          -      -          -          -
_    ALLINPL1    Active  NULL2          1955      1
_    TESTDAY1    Active  TESTDAY1       1957      1
_    TEST1       Active  AUDIT1         1955      1
_
_
_
_
_
_
_
_
_
_

Enter (S)elect (A)ctivate (I)nactivate          Subscription
                                                Totals
                                                3 of 3

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Renew          -      +          Menu  ↵

```

Use PF7 and PF8 to page forwards and backwards through the list of Subscription definitions.

The following table describes the fields on this screen.

Refer to *Adabas Audit Configuration > Maintaining Subscription Definitions* for more information about these fields.

Field	Description
ID	Displays the Subscription definition ID.
Status	Displays the Subscription status.
Destinations	Displays up to 2 of the defined Destinations for this subscription. This assists in selecting the correct subscription for the inquiry of statistics.
DBid/File	Displays up to 2 of the defined DBID/FNR entries for this subscription. This assists in selecting the correct subscription for the inquiry of statistics.

The following table describes the options on this menu. Enter the option alongside the required Destination.

Code	Allows you to:
S	Select the Subscription to display additional information.
A	Activate the Subscription.
I	Inactivate the Subscription.
PF Key	Allows you to:
PF4	Refresh the information on the screen.

Specifying S against a Subscription will display the Selected Subscription Definition screen.

```

22:06:16          ***** A D A B A S  AUDIT Administration *****          2021-01-12
DBID 1956          Selected Subscription Definition                          M-AU1410
Auditing Server

-----
Subscription ID ..... ALLINPL1      Status .... Active
Last audit item event time . N/A
Local time of last commit .. N/A
Destination(s)--- -----
NULL2

                                           File entries
                                           1 of      1
-----
DBid  File      Data buffer Request  Client  FB
1955  1          S D I U BI  S D I U  S D I U  S I U
          Y Y Y Y N   Y Y Y Y   Y Y Y Y   Y Y N

Data Format Buffer ID ..... FB1          Client filter ....
Data Filter ID ..... FILTER1          Client FB ID ....
Data Filter FB ID .....              Request filter ...
                                           Request FB ID ....

Press 'Enter' to continue

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

```

The following table describes the fields on this screen.

Field	Description
Subscription ID	Displays the Subscription definition ID.
Status	Displays the Subscription status.
Last audit item event time	Displays the time of the last audit event for this subscription. If none, N/A is shown.
Local time of last commit	Displays the time of the last commit for this subscription. If none, N/A is shown.
Destination(s)	Displays all Destinations defined to the Subscription.

Field	Description
DBid / File	Displays the first File definition for the Subscription.  <b>Note:</b> Press Enter to scroll through all File definition for the Subscription.
Data buffer	Indicates the setting (Y/N) of the option for the delivery of this item when an audit event occurs for the subscription. S(elect), D(elete), I(nsert), U(pdate), BI(before image)
Request	Indicates the setting (Y/N) of the following options for the delivery of this item when an audit event occurs for the subscription. S(elect), D(elete), I(nsert), U(pdate)
Client	Indicates the setting (Y/N) of the following options for the delivery of this item when an audit event occurs for the subscription. S(elect), D(elete), I(nsert), U(pdate)
FB	Indicates the setting (Y/N) of the following options for the delivery of this item when an audit event occurs for the subscription. S(elect), I(nsert), U(pdate)
Data Format Buffer ID	If specified, indicates the Format Buffer which will be applied to an audit event for the subscription.
Data Filter ID	If specified, indicates the Filter which will be applied when an audit event occurs for the subscription.
Data Filter FB ID	If specified, indicates the Filter for the Format Buffer which will be applied when an audit event occurs for the subscription.
Client Filter	If specified, indicates the Filter for the Client information which will be applied when an audit event occurs for the subscription.
Client FB ID	If specified, indicates the Format Buffer the Client information which will be applied when an audit event occurs for the subscription.
Request Filter	If specified, indicates the Filter for the Request information which will be applied when an audit event occurs for the subscription.
Request FB ID	If specified, indicates the Format Buffer for the Request information which will be applied when an audit event occurs for the subscription.

### Activate/Deactivate/Open/Close Functions

To use Adabas Auditing Administration to perform Activate/Deactivate/Open/Close functions against appropriate Audit definitions, select option T from the Audit Server Parameters screen. The Audit Server Act/Deact/Open/Close screen appears showing all available functions.

```

17:32:30      ***** A D A B A S  AUDIT Administration *****      2021-08-04
Auditing Server      Audit Server Act/Deact/Open/Close/Connect      M-AU1010

          Code      Service
          ----      -
          B      Activate Subscription
          D      Activate Destination
          F      Open Destination
          R      Deactivate Subscription

```

```

      S      Deactivate Destination
      Y      Close Destination
      U      Force Connection
      ?      Help
      .      Exit
-----
Code ..... _
Subscription .. _____

Database ..... 56      ADA56
Connect To .... _____
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit                                     Menu
```

The following table describes the functions available on this menu. To select an option, enter its associated code in the Code and press Enter to perform the function against the Audit Server.

Code	Allows you to:
B	Activate a Subscription. Specify the Subscription to be activated in the Subscription field.
D	Activate a Destination. Specify the Destination to be activated in the Destination field.
F	Open a Destination. Specify the Destination to be activated in the Destination field.
R	Deactivate a Subscription. Specify the Subscription to be deactivated in the Subscription field.
S	Deactivate a Destination. Specify the Destination to be deactivated in the Destination field.
Y	Close a Destination. Specify the Destination to be activated in the Destination field.
U	Connect the Auditing Server to an Adabas w/ AUDITING=YES. Specify the DBID to be connected in the Connect To field.

Display Database Information

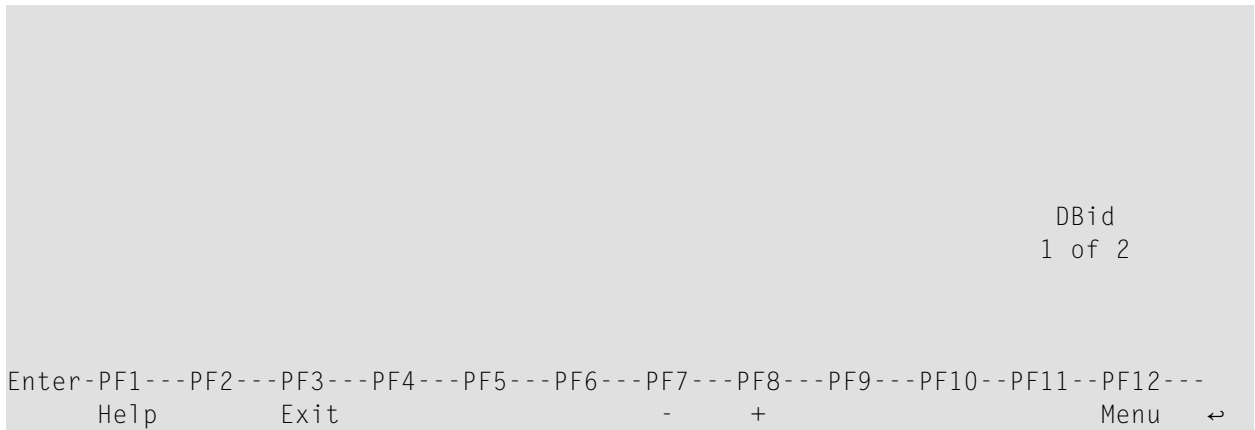
To use Adabas Auditing Administration to display information relating to those databases which are currently in use by the selected Audit Server, enter V on the Audit Server Parameters screen. The Audit DB Display screen appears.

```

22:53:02      ***** A D A B A S  AUDIT Administration *****      2021-01-12
DBID 1956      Audit DB Display      M-AU1900
Auditing Server

Audit Server has -----
DBid attached .. 1955
Status ..... Active

File numbers .. 1
```



Use PF7 and PF8 to page forwards and backwards through the list of DBIDs (and their associated file lists) attached to the Audit Server.

The following table describes the fields on this screen.

Field	Description
DBID attached	Shows if the specified Database ID: <ul style="list-style-type: none"> <li>■ is running with ADARUN AUDITING=YES.</li> <li>■ is specified in a Subscription definition.</li> <li>■ is currently connected to the Audit Server.</li> </ul>
Status	Specifies whether auditing is currently Active or Inactive for this database.
File numbers	Shows the list of database files, known to the Audit Server.

### Display Adabas Parameters

To use Adabas Auditing Administration to display Adabas parameters in use by the selected Audit Server, enter X on the Audit Server Parameters screen.

The Display Adabas parameters screen is identical to that displayed in the Adabas Online System (AOS) when displaying parameters used by an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

Modify Adabas Parameters

To use Adabas Auditing Administration to modify Adabas parameters in use by the selected Audit Server, select option Y from the Audit Server Parameters screen.

The Modify Adabas parameters screen is identical to that displayed in the Adabas Online System (AOS) when modifying parameters used by an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

Audit Server Statistics

To use Adabas Auditing Administration to perform inquiries against an Adabas Audit Server pertaining to statistics, enter S on the Audit Server Administration screen. The Audit Server Statistics screen appears showing all available inquiry options.

```
17:09:54          ***** A D A B A S  AUDIT Administration *****      2021-01-13
Auditing Server          Audit Server Statistics                          M-AU2000

      Code      Function
      ----      -
      A      Global
      D      Destination
      S      Subscription
      T      Subtasks
      U      Interval High Water Marks
      W      Session High Water Marks
      ?      Help
      .      Exit
      ----      -

      Code ... _
      Database ... 1956      WIS1956

Command ==>

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

The following table describes the options on this menu. To select an option, enter its associated code in the Code field on the screen.

Code	Allows you to:
A	Display the Global statistics for the selected Audit Server.
D	Display the Destination statistics for the selected Audit Server.
S	Display the Subscription statistics for the selected Audit Server.
T	Display the Subtask statistics for the selected Audit Server.
U	Display the interval high water marks for the selected Audit Server.
W	Display the session high water marks for the selected Audit Server.

- [Display Global Statistics](#)
- [Display Destination Statistics](#)
- [Display Subscription Statistics](#)
- [Display Subtask Statistics](#)
- [Display Interval High Water Marks](#)
- [Display Session High Water Marks](#)

## Display Global Statistics

To use Adabas Auditing Administration to display Global statistics for the selected Audit Server, enter A on the Audit Server Statistics screen. The Audit Global Statistics screen appears.

```

17:56:38          ***** A D A B A S  AUDIT Administration *****          2021-08-04
DBID 1956                      Audit Global Statistics                      M-AU2100
Auditing Server

Global statistics -----
Total input items ..... 0
Pending input items ..... 0
Total output items ..... 5
Pending output items ..... 0
Total messages sent ..... 5
Total message bytes sent ... 640
Items de-logged ..... 0
Items logged ..... 0
Items on SLOG ..... 0
Input items de-logged ..... 0
Input items logged ..... 0
Input items on SLOG ..... 0
FCB/FDT items on SLOG ..... 0
Items rejected for errors .. 0

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

```

## Display Destination Statistics

To use Adabas Auditing Administration to display Destination statistics for the selected Audit Server, enter D on the Audit Server Statistics screen. The Audit Destination Statistics screen appears.

```

17:28:57          ***** A D A B A S  AUDIT Administration *****      2021-01-13
DBID 1956                      Audit Destination Statistics                      M-AU2200
Auditing Server

Destination statistics -----
Destination ID      ..... AUDIT1
Total items ..... 1
Pending items ..... 0
Time last item processed ... 2021/01/12 15:28:05

Number of commits ..... 1
Time last committed ..... 2021/01/12 15:28:05

Total messages sent ..... 0
Output message byte count .. 0
Pending messages ..... 0
Pending message byte count . 0

Items de-logged ..... 0          Destination
Items logged ..... 0             Totals
Items on SLOG ..... 0             1 of 9

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      -      +      Menu  ↵

```

Use PF7 and PF8 to page forwards and backwards through the list of Destinations and their corresponding statistics.

## Display Subscription Statistics

To use Adabas Auditing Administration to display Subscription statistics for the selected Audit Server, enter S on the Audit Server Statistics screen. The Audit Subscription Statistics screen appears.

```

18:02:34          ***** A D A B A S  AUDIT Administration *****      2021-08-04
DBID 1956                      Audit Subscription Statistics                      M-AU2300
Auditing Server

Subscription statistics -----
Subscription ID ..... SUBSYS1
Output items ..... 0
Input items ..... 0
Time last item processed ... N/A
Event time of last item .... N/A

```



```

Items rejected for error ... 0
DBID / File ..... 1958 / 1 DBID / File
Request items ..... 0 Totals
Client Info ..... 0 1 of 1
Insert ..... 0
Delete ..... 0
Update ..... 0
Select ..... 0
Format buffer ..... 0
Search buffer ..... 0
Value buffer ..... 0

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

```

Use PF7 and PF8 to page forwards and backwards through the list of Subscriptions and their corresponding statistics.

### Display Subtask Statistics

To use Adabas Auditing Administration to display Subtask statistics for the selected Audit Server, enter T on the Audit Server Statistics screen. The Audit Subtask Statistics screen appears.

```

17:33:56      ***** A D A B A S  AUDIT Administration *****      2021-01-13
DBID 1956      Audit Subtask Statistics      M-AU2400
Auditing Server

Subtask statistics -----
Subtask number ..... MAIN
Total items ..... 5
Total messages ..... 0

Subtask
Totals
1 of 4

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      -      +      Menu      ↵

```

Use PF7 and PF8 to page forwards and backwards through the list of Subscriptions and their corresponding statistics.

### **Display Interval High Water Marks**

To use Adabas Auditing Administration to display the interval high water marks for the selected Audit Server, enter U on the Audit Server Statistics screen.

The Display Interval High Water Marks screen is identical to that displayed in the Adabas Online System (AOS) when displaying interval high water marks for an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

### **Display Session High Water Marks**

To use Adabas Auditing Administration to display the session high water marks for the selected Audit Server, enter W on the Audit Server Statistics screen.

The Display Session High Water Marks screen is identical to that displayed in the Adabas Online System (AOS) when displaying session interval high water marks for an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

# 4      Nucleus Audit Administration

---

■ Nucleus Audit Parameters .....	31
■ Nucleus Audit Statistics .....	36

To use Adabas Auditing Administration to perform inquiries against an Adabas nucleus, select option N and specify an Adabas nucleus in the Database field (which must be running with ADARUN AUDITING=YES) from the Adabas Auditing Administration Main Menu.

The Nucleus Audit Administration screen appears as follows:

```
17:47:39          ***** A D A B A S  AUDIT Administration *****          2021-01-13
Audit database          Nucleus Audit Administration          M-AU0020

          Code      Function
          ----      -
          P      Nucleus Audit Parameters
          S      Nucleus Audit Statistics
          ?      Help
          .      Exit
          ----      -


          Code ... _
          Database ... 1955_   WIS1955

Command ==>

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

The following table describes the options on this menu. To select an option, enter its associated code in the Code field on the screen.

Code	Allows you to:
P	Perform inquiries against the selected Adabas nucleus pertaining to parameter status and structure (with reference to the ADAANP input statements for that nucleus).
S	Perform inquiries against the selected Adabas nucleus pertaining to statistical information.

 **Note:** From this screen you can choose a different Adabas nucleus running with ADABAS AUDITING=YES by specifying its database ID in the Database field. If you specify a database ID that is not an Adabas nucleus running with ADABAS AUDITING=YES, you will be returned to the main menu.

## Nucleus Audit Parameters

To use Adabas Auditing Administration to perform inquiries against an Adabas nucleus running with ADARUN AUDITING=YES pertaining to parameter status and structure, select option P from the Nucleus Audit Administration screen.

The Nucleus Audit Parameters screen appears showing all available inquiry options.

```

17:39:00          ***** A D A B A S  AUDIT Administration *****          2021-08-04
Audit database          Nucleus Audit Parameters          M-AU3000

                                Code      Function
                                ----      -
                                A      Nucleus Global Parameters
                                F      Nucleus File Parameters
                                T      Act/Deact Auditing for Files
                                U      Force Connection Attempt
                                X      Display Adabas Parameters
                                Y      Modify Adabas Parameters
                                ?      Help
                                .      Exit
                                ----      -

      Code ... _
Database ... 1955      WIS1955

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

```

The following table describes the options on this menu. To select an option, enter its associated code in the Code field on the screen.

Code	Allows you to:
A	Display the auditing Global parameters by which the specified Adabas nucleus is currently executing.
F	Display the auditing File parameters by which the specified Adabas nucleus is currently executing.
X	Display Adabas parameters for the specified Adabas nucleus.
T	Activate or Deactivate Auditing for files by which the specified Adabas nucleus is currently executing.
U	Force a connection attempt to an Auditing Server.
Y	Modify Adabas parameters for the specified Adabas nucleus.

- [Display Nucleus Global Parameters](#)
- [Display Nucleus File Parameters](#)

- [Activate/Deactivate Auditing for Files](#)
- [Force Connection Attempt](#)
- [Display Adabas Parameters](#)
- [Modify Adabas Parameters](#)

Display Nucleus Global Parameters

To use Adabas Auditing Administration to display Global parameters currently in use by the selected Adabas nucleus (running ADABAS AUDITING=YES), select option A from the Nucleus Audit Parameters screen. The Nucleus Global Parameters screen appears.

```
17:58:53          ***** A D A B A S  AUDIT Administration *****          2021-01-13
DBID 1955                      Nucleus Global Parameters                      M-AU3100
Audit database

Nucleus Global Parameters  -----

GAPWARNINCREMENT .....          10      Warning increment
GAPWARNMESSAGELIMITsize ...          5      Warning message limit
GAPWARNPERCENT .....          50      Warning percent
GAPWARNINTERVAL .....          60      Warning interval
GCONNECTCOUNT .....          0      Connect count
GCONNECTINTERVAL .....          0      Connect interval

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

The following table describes the fields on this screen.

Refer to the chapter *Adabas Audit Reference > Adabas Nucleus Auditing Parameters > section Global Auditing Parameters* for more information about these fields.

Field	Description
GAPWARNINCREMENT	Specifies the increment, in percent of Auditing pool usage (ADARUN LAP=), at which auditing pool warning messages should be written.
GAPWARNMESSAGELIMIT	Specifies the number of Auditing pool usage (ADARUN LAP=) messages that may be written before these messages are suppressed.
GAPWARNPERCENT	Specifies the threshold, in percent of Auditing pool usage (ADARUN LAP=), at which auditing pool warning messages should be written.
GAPWARNINTERVAL	Specifies the interval (in seconds) during which Auditing pool usage (ADARUN LAP=) warning messages are suppressed on the console.
GCONNECTCOUNT	Specifies the number of connect attempts for an Adabas nuclei (running ADARUN AUDITING=YES) when the first attempt to connect to an Audit Server fails.
GCONNECTINTERVAL	Specifies the interval (in seconds) between connection attempts when the first Adabas nuclei (running ADARUN AUDITING=YES) attempt to connect to an Audit Server fails.

### Display Nucleus File Parameters

To use Adabas Auditing Administration to display File parameters currently in use by the selected Adabas nucleus (running ADARUN AUDITING=YES), select option F from the Nucleus Audit Parameters screen. The Nucleus File Parameters screen appears.

```

18:00:43          ***** A D A B A S  AUDIT Administration *****          2021-01-13
DBID 1955                      Nucleus File Parameters                      M-AU3200
Audit database
File   Audit Server id
-----
      1   1956                      File Settings for

Select      Delete      Insert      Update
FACCACBX ... Y      FDELACBX ... N      FINSACBX ... N      FUPDACBX ... N
FACCDS ..... N      FDELDS ..... N      FINSDS ..... N      FUPDAI ..... N
FACCINFO ... N      FDELINFO ... N      FINSINFO ... N      FUPDBI ..... N
FACCFB ..... N      FINSFB ..... N      FUPDINFO ... N
                                      FUPDFB ..... N

Select fields ..

Update fields ..

                                      File
                                      Totals
                                      1 of 2

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit      -      +      Menu      ↵

```

Use PF7 and PF8 to page forwards and backwards through the parameter screen for each file.

The following table describes the fields on this screen.

Refer to chapter *Adabas Audit Configuration > Adabas Nucleus Auditing Parameters > section File Auditing Parameters* for more information about these fields.

Field	Description
FACCACBX	Collects ACBX data for an access command.
FACCDSD	Collects the data storage image for an access command.
FACCINFO	Collects client info for an access command.
FACCFB	Collects format buffer for an access command.
FDELACBX	Collects ACBX data for a delete command.
FDELDSD	Collects the data storage image for a delete command.
FDELINIO	Collects client info for a delete command.
FINSACBX	Collects ACBX data for an insert command.
FINSDS	Collects the data storage image for an insert command.
FINSINFO	Collects client info for an insert command.
FINSFB	Collects format buffer for an insert command.
FUPDACBX	Collects ACBX data for an update command.
FUPDAI	Collects the after image of data storage for an update command.
FUPDBI	Collects the before image of data storage for an update command.
FUPDINFO	Collects client info for an update command.
FUPDFB	Collects format buffer for an update command.

### Activate/Deactivate Auditing for Files

Use the codes displayed below, together with a file number, to do the following:

- Activate auditing for a file under the current DBid.
- Deactivate auditing for a file under the current DBid.
- Inquire to the auditing status of a file.

The Act/Deact Auditing for Files screen appears as follows:



```

17:45:45          ***** A D A B A S  AUDIT Administration *****      2021-08-04
Audit database          Act/Deact Auditing for Files                      M-AU3300

                                Code      Function
                                ----      -
                                A        Activate Auditing for file
                                D        Deactivate Auditing for file
                                I        Inquire Auditing status of file
                                ?        Help
                                .        Exit
                                ----      -

      Code ... _
      File ... _____
Database ... 1955      WIS1955

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

```

### Force Connection Attempt

Specify “U” and the DBid of an Auditing Server that the Adabas should attempt a connection to.

The Force Connection Attempt screen appears as follows:

```

17:51:06          ***** A D A B A S  AUDIT Administration *****      2021-08-04
Audit database          Nucleus with Auditing Connection                  M-AU3400

                                Code      Service
                                ----      -
                                U        Force Connection
                                ?        Help
                                .        Exit
                                ----      -

      Code ..... _
Database ..... 1955      WIS1955
Connect To .... _____

Command ==>

```

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---

HelpExitMenu

Display Adabas Parameters

To use Adabas Auditing Administration to display Adabas parameters in use by the specified Adabas nucleus (running ADARUN AUDITING=YES), select option X from the Nucleus Audit Parameters screen.

The Display Adabas parameters screen is identical to that displayed in the Adabas Online System (AOS) when displaying parameters used by an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

Modify Adabas Parameters

To use Adabas Auditing Administration to modify Adabas parameters in use by the specified Adabas nucleus (running ADARUN AUDITING=YES), select option Y from the Nucleus Audit Parameters screen.

The Modify Adabas parameters screen is identical to that displayed in the Adabas Online System (AOS) when modifying parameters used by an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

Nucleus Audit Statistics

To use Adabas Auditing Administration to perform inquiries against an Adabas nucleus (running with ADARUN AUDITING=YES) pertaining to statistics, select option S from the Nucleus Audit Administration screen.

The Nucleus Audit Statistics screen appears showing all available inquiry options.

18:18:11\*\*\*\*\* A D A B A S AUDIT Administration \*\*\*\*\*2021-01-13

Audit databaseNucleus Audit StatisticsM-AU4000

Code	Function
A	Nucleus Global Statistics
F	Nucleus Files Statistics
U	Interval High Water Marks
W	Session High Water Marks
?	Help
.	Exit

```

      Code ... _
Database ... 1955   WIS1955

Command ==>

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

```

The following table describes the options on this menu. To select an option, enter its associated code in the **Code** field on the screen.

Code	Allows you to:
A	Display the Global statistics for the selected Adabas nucleus.
F	Display the File statistics for the selected Adabas nucleus.
U	Display the interval high water marks for the selected Adabas nucleus.
W	Display the session high water marks for the selected Adabas nucleus.

- [Display Nucleus Global Statistics](#)
- [Display Nucleus File Statistics](#)
- [Display Nucleus Interval High Water Marks](#)
- [Display Nucleus Session High Water Marks](#)

## Display Nucleus Global Statistics

To use Adabas Auditing Administration to display Global statistics for the selected Adabas nucleus, select option A from the Nucleus Audit Statistics screen. The Nucleus Global Statistics screen appears.

```

18:20:40          ***** A D A B A S  AUDIT Administration *****          2021-01-13
DBID 1955                      Nucleus Global Statistics                      M-AU4100
Audit database

Nucleus Global Statistics -----

Total audit items .....                                0
Pending audit items .....                                0
Incomplete audit items ....                              0

```

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

The following table describes the fields on this screen.

Field	Description
Total audit items	The total count of audit items in the selected Adabas DBid executing with AUDITING=YES.
Pending audit items	The total count of pending audit items in the selected Adabas DBid executing with AUDITING=YES.
Incomplete audit items	The total count of incomplete audit items in the selected Adabas DBid executing with AUDITING=YES.

Display Nucleus File Statistics

To use Adabas Auditing Administration to display File statistics for the selected Adabas nucleus, enter F on the Nucleus Audit Statistics screen. The Nucleus File Statistics screen appears.

```
18:29:53          ***** A D A B A S  AUDIT Administration *****          2021-01-13
DBID 1955                      Nucleus File Statistics                      M-AU4200
Audit database

File Statistics -----
File ..... 1
Total items ..... 0
Pending audit items ..... 0
Incomplete audit items ... 0

File
Totals
1 of 15
```

```

Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit              -      +                      Menu  ↵

```

Use PF7 and PF8 to page forwards and backwards through the list of Files.

The following table describes the fields on this screen.

Field	Description
File	The file number for the statistics given.
Total items	The total count of audit items for the selected Adabas DBid / File.
Pending audit items	The total count of pending audit items for the selected Adabas DBid / File.
Incomplete audit items	The total count of incomplete audit items for the selected Adabas DBid / File.

### Display Nucleus Interval High Water Marks

To use Adabas Auditing Administration to display the interval high water marks for the selected Adabas nucleus, enter U on the Nucleus Audit Statistics screen.

The Display Interval High Water Marks screen is identical to that displayed in the Adabas Online System (AOS) when displaying interval high water marks for an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

### Display Nucleus Session High Water Marks

To use Adabas Auditing Administration to display the session high water marks for the selected Adabas nucleus, enter W on the Nucleus Audit Statistics screen.

The Display Session High Water Marks screen is identical to that displayed in the Adabas Online System (AOS) when displaying session interval high water marks for an Adabas database.

Refer to the *Adabas Online System* documentation for an explanation of the content of this screen.

