

Adabas SAF Security

Adabas SAF Security Online Services

Version 8.3.1

October 2021

This document applies to Adabas SAF Security Version 8.3.1 and all subsequent releases.

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

Copyright © 2021 Software AG, Darmstadt, Germany and/or Software AG USA, Inc., Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA, Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

Use of this software is subject to adherence to Software AG's licensing conditions and terms. These terms are part of the product documentation, located at <http://softwareag.com/licenses/> and/or in the root installation directory of the licensed product(s).

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third-Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at <http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with Software AG.

Document ID: AAF-ONLINE-SERVICES-831-20210928

Table of Contents

1 About this Documentation	1
Document Conventions	2
Online Information and Support	2
Data Protection	3
2 Adabas SAF Security Online Services	5
3 Using Adabas SAF Security Online Services	7
Online Services Main Menu	8
Navigation	10
Using PF Keys	10
Help Information	11
4 System Settings	13
System Settings Menu	15
Configuration File (LFILE 152) Maintenance	16
SAF Security Settings	16
5 System Level Statistics	19
6 SAF User Statistics	23
List of Active SAF Users	24
SAF User ID Statistics	25
SAF User ID Cached Files (for databases)	26
7 Fix Display	27
8 Internal Storage Display	31
9 Server Restart	33
10 System Parameters	35
11 About ADASAF Security Services	39

1 About this Documentation

▪ Document Conventions	2
▪ Online Information and Support	2
▪ Data Protection	3

Document Conventions

Convention	Description
Bold	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

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at <https://documentation.softwareag.com>.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to empower@softwareag.com with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at <https://empower.softwareag.com/>.

You can find product information on the Software AG Empower Product Support website at <https://empower.softwareag.com>.

To submit feature/enhancement requests, get information about product availability, and download products, go to [Products](#).

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the [Knowledge Center](#).

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at https://empower.softwareag.com/public_directory.aspx and give us a call.

Software AG Tech Community

You can find documentation and other technical information on the Software AG Tech Community website at <https://techcommunity.softwareag.com>. You can:

- Access product documentation, if you have Tech Community credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.
- Access articles, code samples, demos, and tutorials.
- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.
- Link to external websites that discuss open standards and web technology.

Data Protection

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 SAF Security Online Services

This section describes the use of the AAF Online Services.

AAF Online Services is provided to help set up and monitor the operation of ADASAF. The administrator can view information about the current parameter settings and resource utilization of ADASAF in a given Adabas nucleus or daemon. Most of the information can also be accessed using ADASAF operator commands.

The information provided is useful for tuning ADASAF. It includes statistics at both the nucleus and user level. A list of maintenance ZAPs that have been applied, as well as diagnostic information, also can be displayed.

Using AAF Online Services	Online Services general use and navigation.
System Settings	Maintain system settings.
System Statistics	Provides statistics at the database or daemon level.
SAF User ID Statistics	Provides active SAF user statistics for a database or daemon.
Fix Display	Display fix information.
Internal Storage Display	Display internal storage areas.
Server Restart	Restart Adabas SAF server.
System Parameters	Display Adabas SAF system parameters.
About SAF Security	Display overview information about Adabas SAF Security.

3 Using Adabas SAF Security Online Services

- Online Services Main Menu 8
- Navigation 10
- Using PF Keys 10
- Help Information 11

Online Services Main Menu

AAF Online Services is available from a Natural application installed in library SYSAAF.



Note: Because of the sensitive nature of ADASAF, you are advised to ensure that the Natural application SYSAAF is well protected using Natural Security. You can protect different functions using SAF Security to control who can administer databases and daemon security services.

> To invoke Adabas SAF Security Online Services

- select Adabas SAF Security (option 9) from the AOS main menu,

Or:

log on to SYSAAF and enter the command MENU.

The Main Menu screen will then appear:

```

10:59:25  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-22
                                     - Main Menu -                               A1MAINM1
      Code  Service
      ----  -
      0     System Settings
      1     System Statistics
      2     SAF User ID Statistics
      3     Fix Display
      4     Storage Display
      6     Server Restart
      8     System Parameters
      9     About SAF Security
      .     Exit
      ----  -
      Code.....: _           You can easily switch around the
      Database ID.: _____ tools for Fastpath, Vista etc by
      NucID.....: _____ use of PF11, or use the codes C0R
System Coordinator Node..: _____ AFP, AVI, AAF, ATM as commands -
      SAF User ID.....: _____ anytime.

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

To select an option, enter a code and a Database ID. To communicate with ADASAF in a particular nucleus running as part of an Adabas Cluster or Parallel Services environment, enter the NucID as well as the Database ID. Alternatively, if you do not know the available NucIDs, enter the Database ID and the node number of the Adabas System Coordinator daemon for that cluster to obtain a list of active NucIDs for the database, from which you may select one.

To communicate with the daemon security service, enter the daemon node as *Database ID*.

For SAF User ID Statistics (option code 2), also enter a SAF User ID if you wish to view statistics for an individual user ID without first displaying the list of active user IDs.

PF12 can be used to display a list of installed versions of SYSAAF. To select the required version, mark it with any non-blank character. The default is to use the latest installed version. The ADASAF demo INPL is supplied with Adabas and is converted to full licensed mode by installing the INPL dataset supplied with ADASAF. If any of the versions on the screen are followed by (D), it indicates that only the demo INPL was installed for that version. The online services version selected will work with the same or later versions of ADASAF in a protected nucleus.

The following options are available:

Option	Description
System Settings	Maintain system settings.
System Statistics	Provides statistics at the system level.
SAF User ID Statistics	Provides statistics for SAF user IDs.
Fix Display	Display fix information.
Storage Display	Display internal storage information.
Server Restart	Restart server.
System Parameters	Display system parameters.
About SAF Security	Display product overview information.



Note: From the Adabas SAF Security main menu, you may switch to the online systems of Adabas System Coordinator, Adabas Fastpath, Adabas Vista or Adabas Transaction Manager by pressing PF11. PF11 cycles in the sequence System Coordinator to Transaction Manager to Fastpath to Vista to SAF Security. You may also switch from any screen with a command line by entering the appropriate three-character code (for example, AVI for Adabas Vista) as a command. You may only switch to the same version of another online system.

Navigation

- [Navigation](#)
- [Entering Commands](#)

Navigation

From the main menu, you enter an option code, an ADASAF-protected Database ID, and an optional user ID. To move from one option to another, you can return to the main menu using PF12, or enter the number of the desired target option in the command line.

Entering Commands

The command line in the SYSAAF screens is useful for jumping quickly from one function to another. For example, entering the value 2 on the command line will invoke the User Statistics option. If you enter an invalid number, you are returned to the main menu.

You can also use the command line to change the ID of the database that you are monitoring without returning to the main menu. Enter the `dbid=nnnnn` (this can be abbreviated to `db=`). For example, `dbid=12345` or `db=12345`. Alternatively, you can change the Database ID by simply overtyping it on any screen.

Any other command is passed to Natural.

Using PF Keys

Throughout SYSAAF, PF1 (Help) provides information about the current function, PF3 is Exit and PF12 returns to the main menu.

In list functions, PF7 (Up) and PF8 (Down) scroll up and down the list, use command m and PF7 or PF8 to scroll to the top or bottom of a list. Those list screens that do not provide a top or bottom option ignore m.

Help Information

➤ **To invoke help information**

- Press PF1.

The help screen that appears applies to the current screen and may comprise several pages. From each help screen, you can access lower level options or return to previous, higher levels.

4 System Settings

- System Settings Menu 15
- Configuration File (LFILE 152) Maintenance 16
- SAF Security Settings 16

This function is used to maintain Adabas SAF Security system settings.

System Settings Menu

➤ To display the System Settings menu:

- Select service 0 from the main menu.

```
17:38:21  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-22
          - System Settings -                               A10000M1

          Code      Service
          ----      -
          1         LFILE 152 Maintenance
          2         SAF Security Settings
          .         Exit
          ----      -

Code..: _

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

Select option 1 to view or modify the current configuration file.

Select option 2 to view or modify the SAF Security settings for SYSAAF when using this configuration file.

Configuration File (LFILE 152) Maintenance

> To customize the use of LFILE 152:

- 1 Select service 1 from System Settings menu or enter the command 0.1 on a command line.

```

17:55:48  ***** A D A B A S  SAF SECURITY SERVICES 8.3.1 ***** 2020-07-22
          - System Settings -                               A10000M1
+-----+
| 17:55:49          LFILE 152 Maintenance          2020-07-22 |
|                                                    U1LFILM2 |
|
| Current Settings for LFILE 152:
|
| Original LFILE = ( 152 , 135  , 157  )
|   Current LFILE = ( 152 , 135__ , 157__ )
|                   (effective only for this Natural session)
|
| Default pop-up settings:
| Do you want to see this window again ?
|                               - for the current SYSAAF session... Y
|                               - for future SYSAAF sessions..... Y
|
|                               PF3 Exit      PF5 Update/Confirm
|
+-----+

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

```

- 2 The LFILE 152 Maintenance window appears.
- 3 In the Original LFILE field, the database and file number are displayed for the configuration file that was allocated to LFILE 152 at the start of your current SYSAAF session.
- 4 These values were allocated to LFILE 152 using the static Natural parameter NTLFILE 152,.. or the dynamic Natural parameter LFILE=(152,..). For more information about specifying LFILE 152, see the installation instructions relevant to your operating system.
- 5 In the Current LFILE field, you can change the database and file number to access a different configuration file. Specify the new configuration file database and file number, if necessary.
- 6 Review the default settings.

The LFILE 152 Maintenance window is displayed whenever an online services function is selected that accesses the configuration file, making it possible for the user to access multiple configuration files from within a single Natural session.

You may choose to deactivate the LFILE 152 Maintenance window and thus the possibility of changing the configuration file for just the current session or for all future sessions.

Regardless of the options you choose, you can always modify those choices by invoking the LFILE 152 Maintenance function from System Settings.

SAF Security Settings

> To customize SAF Security settings:

- 1 Select service 2 from System Settings menu or enter the command 0.2 on a command line.

```

18:39:45 ***** A D A B A S SAF SECURITY SERVICES 8.3.1 ***** 2020-07-22
                                     - Main Menu -                                     A1MAINM1
+-----+
| 18:39:47          SAF Security Settings          2020-07-22          |
|                                                    U1SAFSM1          |
|                                                    |
| Protect SYSAAF with SAF Security: Y (Y/N)          |
| System Coordinator Daemon Group : CORGROUP          |
|                                                    |
| Action if no daemon available (mark one):          |
|   Disallow all functions: _                          |
|   Allow read functions only: _                       |
|   Allow all functions: X                            |
|                                                    |
|                                                    |
|                                                    |
| PF3 Exit      PF5 Update/Confirm                    |
|                                                    |
+-----+
Syste |
Command ==> 0.2
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit                                     Prods Vers

```

- 2 The SAF Security Settings screen appears.
- 3 By default, “Protect SYSAAF with SAF Security” appears as N. To activate SAF protection for SYSAAF:
 - Set “Protect SYSAAF with SAF Security” to Y
 - Specify the name of the System Coordinator group that contains the daemon configured for Adabas SAF Security. The group and daemon must already be defined (see the Adabas System Coordinator documentation section Maintain Daemon Groups).

-
- Select the desired behavior when no daemon is available or the security service in the daemon is not available:
 - Disallow all functions:

SYSAAF cannot be used until a the daemon security service is available
 - Allow read functions only:

SYSAAF activity displays can be used, but functions that require update access, such as server restart, are not allowed
 - Allow all functions:

SYSAAF can be used without restriction.
 - 4 You must restrict who has update access to AAF.SETTINGS. Anyone with update access can deactivate SAF security checking, or switch to a configuration file with no SAF security settings.
 - 5 In an emergency (for example, wrong security definitions or the daemon is unexpectedly unavailable and you selected “Disallow all functions”), you can sign on to Natural as user DBA and set “Protect SYSAAF with SAF Security” to N until the emergency has passed. Security checking of SAF Security Settings is bypassed for user DBA. Obviously you should restrict access to user DBA.

5 System Level Statistics

This option provides statistics at the database or daemon security service level.

Here is an example display for a database:

```
12:18:55  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 ***** 2020-07-22
          - Database Level Statistics -                               A11000M1

          Database: 153__
          Buffer Size(k): 512           Address: 1B792000
          System initialized on: 2020-07-22 at: 10:53:01

SAF Statistics:
Authorization   Check (+ve)  Check (-ve)  Check Saved  Overwrites  Length
ADABAS (Normal)      106         1      10201691      0          17
ADABAS (Xlevel)     104         0         21           0          17

Active SAF Users: 8           Overwrites.: 0           Max.: 8
Free SAF Users..: 443        Allocations: 21

Cached File Area Statistics:
Address.....: 1B691148      High Water.: 1B692258      Max.Used.: 22
First Free..: 1B692328      Last Used..: 1B692258      Curr.Used: 22
Files/entry.: 10           Overwrites.: 0           Saved.....: 10201672

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

Here is an example display for a daemon security service (the Cached File Area Statistics section is not applicable):

System Level Statistics

```

09:41:26  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-23
          -   Daemon Level Statistics   -                               A11000M1

          Daemon: 10005
          Buffer Size(k): 512           Address: 2585F000
          System initialized on: 2020-07-23 at: 09:11:27

SAF Statistics:
Authorization    Check (+ve)  Check (-ve)  Check Saved  Overwrites  Length
ADABAS (Normal)      3           20           162          0           35
ADABAS (Xlevel)     0            0            0            0           26

Active SAF Users: 2           Overwrites.: 0           Max.: 2
Free SAF Users...: 305       Allocations: 2

Cached File Area Statistics:
Address.....: 00000000      High Water.: 00000000      Max.Used.: 0
First Free...: 00000000      Last Used...: 00000000      Curr.Used: 0
Files/entry.: 0             Overwrites.: 0             Saved.....: 0

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

```

The following information is provided:

Field	Description
Database/Daemon	The database or daemon number.
Buffer	The amount of storage (in kilobytes) to be used for caching user information related to the security system. For more information, see the parameter GWSIZE.
Address	Address in memory of the SAF Server cache.
System initialized	Date and time system was last initialized.
SAF Statistics:	Effectiveness of the SAF Server cache. Shows information for normal and cross-level checks:
Authorization	Indicates type of authorization (normal or cross-level).
Check (+ve)	The number of successful authorizations against the external security system.
Check (-ve)	The number of failed authorizations against the external security system (access denied).
Check Saved	The number of times the SAF Server satisfied an authorization request from its cache, without calling the external security system.
Overwrites	The number of times the SAF Server had to overwrite a previously cached authorization request. If this number is high, consider increasing DBNCU and/or NWNCU.
Lngh	The length of the resource profile names.

Field	Description
Active SAF Users	The current number of active SAF users.
Overwrites	The number of active entries that had to be overwritten.
Max.	The maximum number of active SAF users.
Free SAF Users	The number of free user areas.
Allocations	The number of times a user area was allocated.
Cached File Area Statistics	Effectiveness of ADASAF's Cached File Area (CFA)
Address	Address in memory of the CFA.
High Water	The highest used address in the CFA.
Max Used	Maximum used CFA entries.
First Free	Address of first free CFA entry.
Last Used	Address of highest used CFA entry.
Curr Used	Current number of used CFA entries.
Files/entry	Number of files cached in each CFA entry.
Overwrites	The number of times ADASAF had to overwrite a previously cached file. If this number is high, consider increasing MAXFILES.
Saved	The total number of times ADASAF satisfied an authorization request without calling the SAF Server or the external security system.

6 SAF User Statistics

- List of Active SAF Users 24
- SAF User ID Statistics 25
- SAF User ID Cached Files (for databases) 26

This option provides information on active users.

List of Active SAF Users

Selecting code 2 from the main menu causes a list of active SAF user IDs to be displayed (unless a SAF User ID parameter was also specified, in which case the SAF User ID Statistics screen will be displayed).

```

12:26:50   ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-23
           -   SAF User ID List for Database: 153   -   A12000M1

           C   SAF User ID   Date   Time
           -   UKDEV3   2020-07-23   11:32:53
           -   DAEFCODE   2020-07-23   10:53:01
           -   UKSJU   2020-07-23   11:31:23
           -   UKSJU1   2020-07-23   11:30:57
           -   UKDEV2   2020-07-23   11:32:51
           -   UKDEV1   2020-07-23   11:32:50
           -   UKDEV4   2020-07-23   11:32:58
           -   UKDEV5   2020-07-23   11:33:02

Mark with S(tatistics), C(ached Files), R(eset), L(ogoff)
Top of List
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help      Exit  Refr      Menu

```

In the Command (C) column, enter S to view a user ID's statistics, C to view a user ID's cached file details, R to reset that user ID's statistics, or L to log the user ID off from the security system, which will discard the user ID's cached security information.

SAF User ID Statistics

The SAF user ID statistics screen shows the number of times that the security system was called for the selected user ID and gives information on the number of successful and unsuccessful verifications made against the external security system. It also shows the number of verifications satisfied from the resource profile cache, the number of times an entry for this user ID was overwritten, and the current number of cached checks for this user ID.

```
12:29:36   ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-23
           - SAF User ID Statistics for Database: 153           -   A12100M1
```

```
SAF User ID: DAEFCODE
```

```
Initialized from: Adabas Cross-Level           on: 2020-07-23 at: 10:53:01
```

Authorization	Check (+ve)	Check (-ve)	Check Saved	Overwrites	Active
ADABAS (Normal)	0	0	0	0	0
ADABAS (Xlevel)	2	0	21	0	2

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

Pressing PF5 will log this user ID off from the security system and discard associated security information from ADASAF.

SAF User ID Cached Files (for databases)

This screen shows, for a given SAF user ID, the internal communication ID for the Adabas client session, the Cross Level ID under which the client session is operating, the effectiveness of ADASAF's cache for this client session, as well as the cached files and access levels currently held for it.

A SAF user ID may have more than one cache entry, for example when accessing a database from different jobs. PF10 can be used to scroll through all the cache entries for that SAF user ID.

```

12:33:42  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-23
          - SAF User ID Cached Files for Database: 153           -   A12200M1

Communication ID: 000FA10E208600004040404040404000F61380C5D6D9C3F0F14040
SAF User ID.....: UKDEV1
Cross Level ID..: UKDEV1

Saved Checks.....: 599994
Number of Files..: 6
Last File Access: 300
Overwrites.....: 0

File Details
File L      File L
   7 R       11 R       12 R       18 R       78 R       300 R

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

```

7 Fix Display

This option can be used to display a list of applied fixes.

➤ **To display the applied fixes**

- 1 Select option 3 from the main menu.

```
13:05:40   ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-24
           - Fix Display: AAF       Patch:                -       U1FIX0M1
           Local client job running this current session

C Patch Reference Type Description
                                     COR is not installed in the component being displayed ←

Mark with any character for detail

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



```

10:14:54  ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-24 ↵
          -   Fix Display: AAF 8.3.1 Patch: 0000 09/30/20   -   U1FIX0M1
                    Adabas database 153

C   Patch Reference Type Description
_   0000 AX831001  EXE  For example only

Mark with any character for detail

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

```

You can select other display perspectives (for example Adabas System Coordinator daemon or Adabas database) by using PF4. You can also directly list the applied fixes for (if applicable) Adabas System Coordinator, Adabas Fastpath, Adabas Vista, and Adabas Transaction Manager by using PF11 to first select the appropriate product.

8 Internal Storage Display

This option is used to display certain ADASAF internal storage areas. You can scroll the display or position to a given location by entering it in the Address field.

```

09:22:42      ***** A D A B A S SAF SECURITY SERVICES 8.3.1 *****      2020-07-27
                - Display Storage for Database: 153 -                          A14000M1

Address      <-----Memory Contents-----> Offset      Characters
00000000 * 034A5000 I D5C1F2E2 C9C1F3F1 AD1FF257 ADEB7211 I NA2SIA310?2000?
00000010 * 034A5010 I 00003000 034A5000 034A5000 034A8000 I ? ?$& ?$& ?$&
00000020 * 034A5020 I 000A2B00 034A5E28 034A7C64 00000000 I ?? ?$;??$@a
00000030 * 034A5030 I 00000000 00000000 00000000 00000000 I
00000040 * 034A5040 I 00000000 00000000 00000000 00000000 I
00000050 * 034A5050 I 00000000 00000000 00000000 00000000 I
00000060 * 034A5060 I 00000000 00000000 00000000 00000000 I
00000070 * 034A5070 I 410000F2 00000000 01240008 0000000C I [ 2 ?? ? ?
00000080 * 034A5080 I 00040002 00020002 00020001 00000000 I ? ? ? ? ? ?
00000090 * 034A5090 I 00080020 000D0018 00080020 00000000 I ? ? ? ? ? ?
000000A0 * 034A50A0 I 0034004C 0024003C 001C0028 00000000 I ? < ? ? ? ?
000000B0 * 034A50B0 I 00E00114 01600184 01C001DC 02040204 I \???-?d?{?00000000 I ? ?
000000D0 * 034A50D0 I 00000000 00000000 00000000 00000000 I
000000E0 * 034A50E0 I 00000002 00000000 00000000 00000005 I ? ?
000000F0 * 034A50F0 I 00000000 00000000 00000000 00000000 I

Address      :

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


9 Server Restart

This option can be used to restart your security service in the specified nucleus or daemon. All cached security information is discarded and security operation restarted. For a database, the configuration parameters are also re-read, making this option useful if you need to change any security parameters without stopping and restarting the database.

10 System Parameters

This option can be used to display the system parameters in effect for the security service in this database or daemon.

```
09:52:08   ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-27
           - SAF System Configuration Parameters -                   A18000M1

Assembled: 2020-07-27   Version: 08.02.02

Database: 153

Authorization   Class/Type   Universal   Max Kept   SMF Log
ADABAS (Normal) ADASEC      N           20         0
ADABAS (Xlevel) XLVADA      N           20         0

Buffer(k): 512   Message Level..: 3   Caching..: Y   Warn Mode: F
Ciphers...: Y    Cached files...: 10  Xlevel...: 2   ET Data...: Y
Passwords: Y     Max.Cipher/Pwds: 100 Logoff...: T   Remote...: POPUP
ABS.....: 2     DBID/Fnr format: 1   Notoken...: N  ADASCR...: N
PC prot...: N    Hold cmd access: R   LF prot...: Y   Filetab...: FILETAB

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

The following information is provided:

Field	Description
Assembled / Version	The date and time when the parameter module was assembled.
Database	The database number.
Authorization	Indicates type of authorization (normal or cross-level).
Class/Type	The security class being used. For more information, see the parameters DBCLASS and NWCLASS.
Universal	Whether or not universal access is allowed.
Max Kept	The number of files for which security information is to be cached for each user. For more information, see the parameters DBNCU and NWNCU.
SMF Log	Not used.
Buffer	The amount of storage (in kilobytes) to be used for caching user information related to the security system. For more information, see the parameter GWSIZE.
Message Level	The tracing level for database security checks. For more information, see the parameter GWMSG L.
Caching	Indicates whether or not caching of security information is in effect.
Warn Mode	Warn mode (warning or fail).
Ciphers	Indicates whether or not ADASAF should extract Adabas cipher codes from RACF and apply them to the relevant Adabas commands. For more information, see the parameter CIPHER.
Cached Files	The number of files for which security information is to be cached for each user. For more information, see the parameter MAXFILES.
Xlevel	The type of database cross-level security checking to be performed For more information, see the parameter XLEVEL.
ET Data	Indicates whether or not ADASAF should protect commands that access or create ET data. For more information, see the parameter ETDATA.
Passwords	Indicates whether or not ADASAF should extract Adabas passwords from RACF and apply them to the relevant Adabas commands. For more information, see the parameter PASSWORD.
Max Cipher/Pwds	The maximum number of passwords and cipher codes to be extracted from RACF for the current Adabas nucleus. For more information, see the parameter MAXPCC.
Logoff	Indicates when ADASAF should log off users from the SAF security system. For more information, see the parameter LOGOFF.

Field	Description
Remote	<p>The mechanism ADASAF should use to protect calls from remote users.</p> <p>For more information, see the parameter <code>REMOTE</code>.</p>
ABS	<p>The level of Adabas Basic Services protection.</p> <p>For more information, see the parameter <code>ABS</code>.</p>
DBID/Fnr format	<p>The format of the Database ID and file number in resource profiles.</p> <p>For more information, see the parameter <code>DBFLEN</code>.</p>
Notoken	<p>Indicates whether or not calls from unsecured mainframe clients are to be allowed.</p> <p>For more information, see the parameter <code>NOTOKEN</code>.</p>
ADASCR	<p>Indicates whether or not the SAF Userid or Group is used as the ADASCR password.</p> <p>For more information, see the parameter <code>ADASCR</code>.</p>
PC prot	<p>Indicates whether or not PC commands are protected.</p> <p>For more information, see the parameter <code>PCPROT</code>.</p>
Hold cmd access	<p>Indicates whether access commands which place records on hold require read or update security access to the relevant resource.</p> <p>For more information, see the parameter <code>HOLDCMD</code>.</p>
LF prot	<p>Indicates whether or not LF commands are protected.</p> <p>For more information, see the parameter <code>LFPROT</code>.</p>
Filetab	<p>The name of the grouped resource name load module used by this nucleus, or '(none)' if grouped resource names are not in effect.</p> <p>For more information, see the parameter <code>FILETAB</code>.</p>

11 About ADASAF Security Services

This option can be used to display an overview of Adabas SAF Security Services.

```
12:16:43   ***** A D A B A S   SAF SECURITY SERVICES 8.3.1 *****   2020-07-27
           - About Adabas SAF Security -                               A19000M1
```

Welcome to Adabas SAF Security

This Adabas option allows you to integrate Adabas with a central security repository such as RACF, CA-ACF2 or CA-TopSecret.

ADASAF provides all the safeguards you would expect for:

- * Database nuclei
- * Database files
- * Database access/update commands
- * Adabas utilities
- * Console operator commands

In addition ADASAF provides:

- * Optional consideration of the originating job as well as user, known as Cross-level Checking, allowing differentiation between a SAF user running production and that same SAF user running in development
- * Protection of transaction data for ET, RE, OP and CL commands
- * Storing of Adabas passwords and cipher codes in the security repository
- * Adabas Fastpath compatibility and utility sensitivity

Press Enter or any PF Key to continue

