software AG

Adabas SAF Security

Adabas SAF Security Resource Names

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ADABAS & NATURAL

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Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
`Monospace font`	Identifies service names and locations in the format *folder.subfolder.service*, APIs, Java classes, methods, properties.
Italic	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 (...).

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2 Adabas SAF Security Resource Names

This document describes the SAF Security Resource Names.

Resource Name Maximum Lengths

The following tables show the various configuration options which affect the length of resource names and the corresponding resource name maximum length based on those options.

⚠ **Important:** The resource class/type must support the maximum length defined in these tables before the appropriate configuration parameter is activated.

Adabas Resource Names

AAFPRFX	XLEVEL=3	DBADMIN=Y	Maximum Length
N	N	N	17
Y	N	N	26
N	Y	N	26
Y	Y	N	35
Y or N	Y or N	Y	64

Adabas Utility Resource Names

UTI	AAFPRFX	Maximum Length
1	N	17
1	Y	26
2	Y or N	64
3	Y or N	64

Entire Net-Work Resource Names

AAFPRFX	NETADMIN=Y	Maximum Length
N	N	17
Y	N	26
Y or N	Y	64

Resource Names

This section describes the resource names used by Adabas SAF Security.

Resource Names for Adabas Nucleus Start-up

When starting an Adabas nucleus, Adabas SAF Security will check that the starting User ID has access to a resource name of the following format:

```
NUCddddd.SVCsvc
```

When starting a batch job in single-user mode, Adabas SAF Security will check that the starting User ID has access to a resource name of the following format:

```
USRddddd.SVCsvc
```

When starting ADACOM, Adabas SAF Security will check that the starting User ID has access to a resource name of the following format:

```
COMddddd.SVCsvc
```

where

Value	Description
ddddd	is the Database ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
SVC*svc*	is the characters SVC followed by the 3-digit decimal number of the Adabas SVC.

Refer to Nucleus Start-up in the Operations section for additional information and examples.

Resource Names for Adabas Files

Adabas SAF Security authorizes use of Adabas data by building a resource name to represent the file being used. The format of the resource name differs depending on the `DELIM` configuration parameter as follows:

*lvlddddd*FIL*nnnnn*	if `DELIM=N`
CMD*ddddd*.FIL*nnnnn*	if `DELIM=Y`

where

Value	Description
lvl	is the required access level (ACC for access-type commands and UPD for update-type commands)
ddddd	is the Database ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
nnnnn	is the file number, specified in the format defined by the setting of the `DBFLEN` configuration parameter.

Refer to Adabas and Natural Commands in the Operations section for general information on protecting Adabas files.

As an alternative to the above format, the use of AAFFILE to define grouped resource names may also be used. Refer to **Grouped Resource Names for Adabas Files** for more information.

Resource Names for Adabas Operator Commands

This section describes the formatting of the resource name when an Adabas operator command is issued to any of the following jobs:

■ Adabas nucleus

■ Adabas utility

When processing an operator command, Adabas SAF Security will check that the User ID *under which the Adabas job is executing* has read access to a resource name of the following format:

```
OPRddddd.command
```

where

Value	Description
ddddd	is the Database ID, specified in the format defined by the setting of the DBFLEN configuration parameter.
.	is an optional delimiter character, depending on the setting of the DELIM configuration parameter.
command	is the operator command. **Note:** For Adabas SAF Security operator commands refer to *Resource Names for Adabas SAF Security Operator Commands*.

Refer to Adabas Nucleus Operator Commands in the Operations section for general information on protecting Adabas operator commands.

As an alternative to the above format, the use of ADAEOPTB enables operator command grouping, resulting in resource names of the following format:

```
OPRddddd.groupname
```

where

Value	Description
groupname	is the group name associated by ADAEOPTB to the operator command being processed.

Refer to **Grouped Resource Names for Adabas Operator Commands** for more information on grouped resource names using ADAEOPTB.

Resource Names for Adabas Nucleus Administration Functions

The protection of Adabas nucleus administration functions is controlled by the DBADMIN configuration parameter.

ADASAF SAF Security first establishes a user's right to perform administration against an Adabas nucleus by verifying that the user has read access to the resource:

```
ADANUCddddd.UTILITY
```

Adabas SAF Security then authorizes the use of Adabas nucleus administration functions by verifying the user has read access to a resource name representing the function being executed. The format of this resource name depends on whether the administration function is file-related and if the FILE option of the DBADMIN configuration parameter is specified, as indicated by this table:

File-related function	DBADMIN=	Resource Name
No	Y,NOFILE	ADANUC*ddddd.function*
No	Y,FILE	ADANUC*ddddd.function*
Yes	Y,NOFILE	ADANUC*ddddd.function*
Yes	Y,FILE	ADANUC*ddddd.function*.UFL*fnr*

where

Value	Description
ddddd	is the Database ID, specified in the format defined by the setting of the DBFLEN configuration parameter.
.	is an optional delimiter character, depending on the setting of the DELIM configuration parameter.
function	is the administration function being processed. Refer to **Adabas Administration Functions** for a list of all applicable functions.
.	is an optional delimiter character, depending on the setting of the DELIM configuration parameter.
UFL*fnr*	is the characters UFL followed by the file number, specified in the format defined by the setting of the DBFLEN configuration parameter.

Refer to Adabas Nucleus Administration Functions in the Operations section for general information on protecting Adabas nucleus administration functions.

As an alternative to the above resource name format, the use of Adabas administration function and file grouping enables resource names to be constructed with the following format:

```
ADANUCddddd.functiongroupname
```

```
ADANUCddddd.functiongroupname.filegroupname
```

where

Value	Description
functiongroupname	is the group name associated by the AAFNUCTB function grouping table to the nucleus administration function being processed.
filegroupname	is the group name associated by the UFT*nnnnn* file grouping table to the file number specified for the nucleus administration function being processed. (where *nnnnn* is the database ID against which the nucleus administration function is being processed.)

Refer to **Grouped Resource Names for Adabas Administration Functions** for more information on the use of Adabas administration function and file grouping.

Adabas Administration Functions

The following table lists the administration function name used in the formatting of the resource name, it's description, and **whether or not** it is file-related (and therefore subjected to the FILE setting of the DBADMIN configuration parameter):

Function	Description	File-related
ADD	Add database extent	No
ADDCLOG	Add CLOG data sets	No
ADDPLOG	Add PLOG data sets	No
ADMIN_CACHE	Manage Cache Facility resources	No
ADMIN_DSF	Manage Delta Save Facility resources	No
ADMIN_SMGT	Manage Smart Management resources	No
ADMIN_SPT	Manage Stored Procedure and Trigger resources	No
ADMIN_TCPIP	Manage TCP/IP resources	No
ALLOCATE	Allocate file extent	Yes
ANALYTICS	Manage Analytics file resources	Yes
ANSERVER	Manage Analytics Server resources	No
CATCH_RSP	Force dump on specific response codes	No
CHANGE	Modify field length/format	Yes
CVOLSER	Display file extents on a given volume	No
DCLOGSTATUS	Display CLOG status	No
DDURATION	Display nucleus duration	No
DEALLOCATE	Deallocate file extent	Yes
DECREASE	Decrease last ASSO/DATA data set size	No
DEFINE_FDT	Define new FDT	Yes
DEFINE_FILE	Define file	Yes
DELCLOG	Delete CLOG data sets	No
DELCP	Delete checkpoint records	No
DELDE	Logically delete a descriptor	Yes
DELETE	Delete file	Yes
DELFN	Logically delete fields	Yes
DELPLOG	Delete PLOG data sets	No
DFILE	Display file information	Yes
DIDT	Display ID Table	No
DMAINTENANCE	Display maintenance levels	No
DMODULE	Display contents of a loaded module	No
DPLOGSTATUS	Display PLOG status	No

Function	Description	File-related
DPRODUCTS	Display installed products	No
DRABN	Display RABN information	No
DSREUSE	Modify DSREUSE file status	Yes
DTIMEZONE	Display time zone	No
DVOLSER	Display VOLSER table	No
DWORKSTATUS	Display WORK status	No
ENCODEF	Modify file encoding	Yes
ETDATA_DELETE	Delete ET-data record	No
EXPFILE	Insert/Remove file from Expanded File chain	Yes
FILEREADONLY	Modify FILEREADONLY status	Yes
FORCE_ETBT	Terminate PET user heuristically	No
INCREASE	Increase last ASSO/DATA data set size	No
INSERT	ADASCR: Insert/Update password/permission levels	Yes
ISNREUSE	Modify ISNREUSE file status	Yes
LOG_RSP	Log calls with specific response codes	No
MIXDSDEV	Modify MIXDSDEV file status	Yes
MODFCB	Modify file parameters	Yes
MUPEX	Modify MUPEX file status	Yes
NEWFIELD	Add new field	Yes
ONLADD	Add ASSO/DATA data sets dynamically	No
ONLINCREASE	Increase last ASSO/DATA data set size dynamically	No
ONLINVERT	Start online invert process	Yes
ONLREORFASSO	Start online reorder ASSO for files	Yes
ONLREORFDATA	Start online reorder DATA for files	Yes
OPERCOM_ADAEND	Terminate nucleus session normally	No
OPERCOM_ALOCKF	Lock file in advance	Yes
OPERCOM_AOSLOG	Modify AOSLOG parameter	No
OPERCOM_ASSOSPACEWARN	Modify ASSOSPACEWARN parameter	No
OPERCOM_ASYTVS	Modify ASYTVS parameter	No
OPERCOM_AUDITLOG	Modify AUDITLOG parameter	No
OPERCOM_AUTOINCASSOSIZE	Modify AUTOINCASSOSIZE parameter	No
OPERCOM_AUTOINCASSOTHRESHOLD	Modify AUTOINCASSOTHRESHOLD parameter	No
OPERCOM_AUTOINCASSOTOTAL	Modify AUTOINCASSOTOTAL parameter	No
OPERCOM_AUTOINCDATASIZE	Modify AUTOINCDATASIZE parameter	No
OPERCOM_AUTOINCDATATHRESHOLD	Modify AUTOINCDATATHRESHOLD parameter	No

Function	Description	File-related
OPERCOM_AUTOINCDATATOTAL	Modify AUTOINCDATATOTAL parameter	No
OPERCOM_BATCH	Batch thread support	No
OPERCOM_CANCEL	Cancel nucleus session immediately	No
OPERCOM_CLOGMRG	Modify CLOGMRG parameter	No
OPERCOM_CLUFREEUSER	Delete leftover cluster user table elements	No
OPERCOM_CLUPUBLPROT	Modify CLUPUBLPROT parameter	No
OPERCOM_CT	Modify CT parameter	No
OPERCOM_DATASPACEWARN	Modify DATASPACEWARN parameter	No
OPERCOM_DAUQ	Display most recently active user queue elements	No
OPERCOM_DCMDSTAT	Display command usage	No
OPERCOM_DCQ	Display all command queue elements	No
OPERCOM_DDIB	Display DIB information	No
OPERCOM_DDSF	Display DSF status	No
OPERCOM_DDURATION	Display nucleus duration	No
OPERCOM_DFILES	Display user type by file	Yes
OPERCOM_DFILESTAT	Display command statistics by file	No
OPERCOM_DFILUSE	Display file command count	Yes
OPERCOM_DHQA	Display all hold queue elements	No
OPERCOM_DLOCKF	Display locked files	No
OPERCOM_DMEMTB	Display MEMSTATE table	No
OPERCOM_DNC	Display no. of selectable command queue elements	No
OPERCOM_DNFV	Display NFV	No
OPERCOM_DNH	Display no. of ISNs in the hold queue	No
OPERCOM_DNU	Display no. of current users	No
OPERCOM_DONLSTAT	Display online reorder/invert status	No
OPERCOM_DPARM	Display nucleus session parameters	No
OPERCOM_DPPT	Display PPT	No
OPERCOM_DRES	Display nucleus resource usage	No
OPERCOM_DRPLPARM	Display replication-related parameters	No
OPERCOM_DRPLSTAT	Display replication-related statistics	No
OPERCOM_DSPACE	Display ASSO/DATA space statistics	No
OPERCOM_DSTAT	Display nucleus operating status	No
OPERCOM_DTH	Display thread status	No
OPERCOM_DUQ	Display user queue element(s)	No
OPERCOM_DUUQE	Display utility user queue element(s)	No

Function	Description	File-related
OPERCOM_DVOLIO	Display ASSO/DATA I/Os by VOLSER	No
OPERCOM_DXCACHE	Display cache-related statistics	No
OPERCOM_DXFILE	Display cache-related file statistics	Yes
OPERCOM_DXLOCK	Display lock-related statistics	No
OPERCOM_DXMSG	Display messaging statistics	No
OPERCOM_DXWORK	Display WORK I/O statistics	No
OPERCOM_DZSTAT	Display zIIP-related statistics	No
OPERCOM_FEOFCL	Force a CLOG switch	No
OPERCOM_FEOFPL	Force a PLOG switch	No
OPERCOM_FMXIO	Modify FMXIO parameter	No
OPERCOM_HALT	Stop nucleus session	No
OPERCOM_INDEXCROSSCHECK	Modify INDEXCROSSCHECK parameter	No
OPERCOM_LICREFRESH	Refresh the license file	No
OPERCOM_LOCKF	Lock file	Yes
OPERCOM_LOCKU	Lock file for non-utility use	Yes
OPERCOM_LOCKX	Lock file for non-EXF/EXU users	Yes
OPERCOM_LOGALL	Log all commands	No
OPERCOM_LOGCB	Start logging the Adabas control block	No
OPERCOM_LOGFB	Start logging the Adabas format buffer	No
OPERCOM_LOGGING	Start command logging	No
OPERCOM_LOGIB	Start logging the Adabas ISN buffer	No
OPERCOM_LOGIO	Start logging Adabas I/O activity	No
OPERCOM_LOGRB	Start logging the Adabas record buffer	No
OPERCOM_LOGSB	Start logging the Adabas search buffer	No
OPERCOM_LOGUX	Start logging user data	No
OPERCOM_LOGVB	Start logging the Adabas value buffer	No
OPERCOM_LOGVOLIO	Start logging the extended I/O list	No
OPERCOM_LOGWARN	Modify CLOG/PLOG status check frequency	No
OPERCOM_LS	Modify LS parameter	No
OPERCOM_LU	Modify LU parameter	No
OPERCOM_MXCANCEL	Modify MXCANCEL parameter	No
OPERCOM_MXCANCELWARN	Modify MXCANCELWARN parameter	No
OPERCOM_MXMSG	Modify MXMSG parameter	No
OPERCOM_MXMSGWARN	Modify MXMSGWARN parameter	No
OPERCOM_MXSTATUS	Modify MXSTATUS parameter	No

Function	Description	File-related
OPERCOM_MXWTOR	Modify MXWTOR parameter	No
OPERCOM_NISNHQ	Modify the NISNHQ parameter	No
OPERCOM_NOLOGCB	Stop logging the Adabas control block	No
OPERCOM_NOLOGFB	Stop logging the Adabas format buffer	No
OPERCOM_NOLOGGING	Stop command logging	No
OPERCOM_NOLOGIB	Stop logging the Adabas ISN buffer	No
OPERCOM_NOLOGIO	Stop logging Adabas I/O activity	No
OPERCOM_NOLOGRB	Stop logging the Adabas record buffer	No
OPERCOM_NOLOGSB	Stop logging the Adabas search buffer	No
OPERCOM_NOLOGUX	Stop logging user data	No
OPERCOM_NOLOGVB	Stop logging the Adabas value buffer	No
OPERCOM_NOLOGVOLIO	Stop logging the extended I/O list	No
OPERCOM_NONDES	Modify NONDES parameter	No
OPERCOM_NQCID	Modify NQCID parameter	No
OPERCOM_NSISN	Modify NSISN parameter	No
OPERCOM_ONLRESUME	Resume a suspended online reorder/invert	No
OPERCOM_ONLSTOP	Stop online reorder/invert	No
OPERCOM_ONLSUSPEND	Suspend an online reorder/invert	No
OPERCOM_RALOCKF	Remove advance lock on file	Yes
OPERCOM_RALOCKFA	Remove advance lock on all files	No
OPERCOM_RDUMPST	Reset online dump status	No
OPERCOM_READONLY	Modify READONLY parameter	No
OPERCOM_REFSTPRT	Modify REFSTPRT parameter	No
OPERCOM_REVIEW	Modify REVIEW parameter	No
OPERCOM_REVFILTER	Modify REVFILTER parameter	No
OPERCOM_RFDUMPST	Reset file online dump status	No
OPERCOM_RNFV	Refresh NFV	No
OPERCOM_RPLCHECK	Perform replication cross-check function	No
OPERCOM_RPLCLEANUP	Clean up interrupted replication job	No
OPERCOM_RPLREFRESH	Refresh replication parameters	No
OPERCOM_RUFT	Refresh UFT	No
OPERCOM_SECUID	Modify SECUID parameter	No
OPERCOM_STOPF	Stop users using a file	Yes
OPERCOM_STOPI	Stop inactive users	No
OPERCOM_STOPSU	Stop user by security user id	No

Function	Description	File-related
OPERCOM_STOPSUR	As above but with response code notification	No
OPERCOM_STOPU	Stop user by Adabas-assigned user id or job name	No
OPERCOM_STOPUR	As above but with response code notification	No
OPERCOM_SYNCC	Force resynchronization of all ET users	No
OPERCOM_TFLUSH	Modify TFLUSH parameter	No
OPERCOM_TLSCMD	Modify TLSCMD parameter	No
OPERCOM_TNAA	Modify TNAA parameter	No
OPERCOM_TNAE	Modify TNAE parameter	No
OPERCOM_TNAX	Modify TNAX parameter	No
OPERCOM_TT	Modify TT parameter	No
OPERCOM_UNLOCKF	Unlock file	Yes
OPERCOM_UNLOCKU	Unlock file for non-utility use	Yes
OPERCOM_UNLOCKX	Unlock file for non-EXF/EXU users	Yes
OPERCOM_UTIONLY	Modify UTIONLY parameter	No
OPERCOM_ZIIP	Modify ZIIP parameter	No
PASSWORD_CHANGE	ADASCR: Change password	No
PASSWORD_DELETE	ADASCR: Delete password	No
PFIELDS	ADASCR: Modify field protection/permission levels	Yes
PFILES	ADASCR: Modify file protection/permission levels	No
PROFILE_CHANGE	Modify user profile	No
PPW	ADASCR: Request security information	No
PRIORITY	Modify user priority	No
PROTECT	ADASCR: Define field/file protection levels	Yes
REACTLOG	Reactivate command logging	No
READ_STATISTICS	Display statistics	No
RECORDSPANNING	Modify record spanning file status	Yes
RECOVER	Recover space	No
REFRESH	Refresh file	Yes
REFRESHSTATS	Reset statistical values	No
RELEASE	Release descriptor	Yes
REMOVE	ADASCR: Remove all field/file protection levels	No
RENAME	Rename database	No
RENAME	Rename file	Yes
RENUMBER	Renumber file	Yes
REPLICATION	Activate or Deactivate replication	Yes

Function	Description	File-related
`REPTOR`	Manage Event Replicator resources	No
`RESETDIB`	Reset active utility list (DIB)	No
`SBYVALUE`	ADASCR: Define security-by-value criteria	Yes
`START_STATISTICS`	Start statistics	No
`TRANSACTIONS`	Suspend/Resume update transaction processing	No
`UNCOUPLE`	Uncouple files	Yes
`UNDELDE`	Logically undelete descriptors	Yes
`UNDELFN`	Logically undelete fields	Yes
`UNUSED_FILE`	Display unused file number	No
`USERISN`	Modify USERISN file status	Yes
`ZAP_MODULE`	Zap loaded module	No

Resource Names for Adabas Nucleus Cross-Level Security

Cross-level security checking is controlled by the `XLEVEL` configuration parameter.

For the simple cross-level security checks (`XLEVEL`=1 and `XLEVEL`=2), the same resource names are used as described in **Resource Names for Adabas Files**.

For more complex cross-level security checks (`XLEVEL`=3), Adabas SAF Security will check that the User ID has access to a resource name of the following format:

`uuuuuuuu.dddddddd.ffffffff`

where:

uuuuuuuu	is the User ID of the originating job
dddddddd.ffffffff	is the standard resource name as described in **Resource Names for Adabas Files**.

Refer to Cross-Level Security Checking in the Operations section for additional information and examples.

Resource Names for Adabas Utilities

Adabas Utility protection is controlled by the UTI configuration parameter which provides three levels of protection; name-level, function-level and function/file-level.

- Name-level protection
- Function-level protection
- Function/File-level protection
- Utility Functions
- Resource Names without Database ID

Refer to Utility Start-up in the Operations section for additional information and examples.

Name-level protection

For name-level protection (UT1=1, the default), resource names have the following format:

pppddddd.SVC*svc*

where:

Value	Description
ppp	is the last three characters of the program name specified by the ADARUN PROG= parameter. For example, CMP for the ADACMP utility or SAV for the ADASAV utility.
ddddd	is the Database ID, specified in the format defined by the setting of the DBFLEN configuration parameter.
.	is an optional delimiter character, depending on the setting of the DELIM configuration parameter.
SVC*svc*	is the characters SVC followed by the 3-digit decimal number of the Adabas SVC.

Refer to Utility Start-up in the Operations section for general information on protecting Adabas utilities.

Function-level protection

For function-level protection (UTI=2), resource names have the following format:

ppppppddddd.*function*

where:

Value	Description
pppppp	is the six character name of the program specified by the `ADARUN PROG=` parameter. For example, `ADACMP` or `ADASAV`.
ddddd	is the Database ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter. **Note:** *ddddd* may not be present for certain utility/functions where the database ID has no significance. See **Resource Names without Database IDs** for further information.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
function	is the utility function being executed. Refer to **Utility Functions** for applicable utility functions.

Refer to Utility Start-up in the Operations section for general information on protecting Adabas utilities.

As an alternative to the above resource name format, the use of utility function grouping enables resource names to be constructed with the following format:

`pppppppddddd.functiongroupname`

where:

Value	Description
functiongroupname	is the group name associated by the AAFUTITB function grouping table to the utility function being processed.

Refer to **Grouped Resource Names for Adabas Utilities** for more information on the use of utility function grouping.

Function/File-level protection

For function/file-level protection (`UTI=3`), resource names have the same base format as function-level but include an extra qualifier for those utility functions that are file-related:

File-related function	Resource Name
No	*pppppppddddd.function*
Yes	*pppppppddddd.function*.UFL*fnr*

where

Value	Description
pppppp	is the six character name of the program specified by the `ADARUN PROG=` parameter. For example, `ADACMP` or `ADASAV`.
ddddd	is the Database ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter. **Note:** *ddddd* may not be present for certain utility/functions where the database ID has no significance. See **Resource Names without Database IDs** for further information.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
function	is the utility function being executed. Refer to **Utility Functions** for applicable utility functions.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
UFL*fnr*	is the characters UFL followed by the file number, specified in the format defined by the setting of the `DBFLEN` configuration parameter.

Refer to Utility Start-up in the Operations section for general information on protecting Adabas utilities.

As an alternative to the above resource name format, the use of utility function and file grouping enables resource names to be constructed with the following format:

```
ppppppddddd.functiongroupname
```

```
ppppppddddd.functiongroupname.filegroupname
```

where:

Value	Description
functiongroupname	is the group name associated by the AAFUTITB function grouping table to the utility function being processed.
filegroupname	is the group name associated by the UFT*nnnnn* file grouping table to the file number specified for the utility function being processed. (where *nnnnn* is the database ID against which the utility function is being processed.)

Refer to **Grouped Resource Names for Adabas Utilities** for more information on the use of utility function and file grouping.

Utility Functions

The information in the following table is applicable only to the use of UTI configuration parameter options 2 and 3.

The table describes the utility functions used in the formatting of the resource names for Function-level protection (UTI=2) and Function/File-level protection (UTI=3) of utilities. In addition, each entry in the table is identified as being file-related or not.

If a utility/function is file-related and Function/File-level protection is active, the resource name will include an additional qualifier identifying the appropriate file number.

Utility	Function	File-related
ADACDC	-	Yes
ADACHK	-	No
ADACMP	COMPRESS	Yes
	DECOMPRESS	Yes
ADACNV	-	No
ADADBS	ADD	No
	ADDCLOG	No
	ADDPLOG	No
	ALLOCATE	Yes
	CHANGE	Yes
	CVOLSER	No
	DEALLOCATE	Yes
	DECREASE	No
	DELCLOG	No
	DELCP	No
	DELDE	Yes
	DELETE	Yes
	DELFN	Yes
	DELPLOG	No
	DEVENTLOG	No
	DSREUSE	Yes
	ENCODEF	Yes
	EXPFILE	Yes
	INCREASE	No
	ISNREUSE	Yes
	MODFCB	Yes
	MUPEX	Yes

Utility	Function	File-related
	NEWFIELD	Yes
	ONLADD	No
	ONLINCREASE	No
	ONLINVERT	Yes
	ONLREORFASSO	Yes
	ONLREORFDATA	Yes
	ONLREORFILE	Yes
	OPERCOM_ADAEND	No
	OPERCOM_ALOCKF	No
	OPERCOM_ASSOSPACEWARN	No
	OPERCOM_AUDITLOG	No
	OPERCOM_AUTOINCASSOSIZE	No
	OPERCOM_AUTOINCASSOTHRESHOLD	No
	OPERCOM_AUTOINCASSOTOTAL	No
	OPERCOM_AUTOINCDATASIZE	No
	OPERCOM_AUTOINCDATATHRESHOLD	No
	OPERCOM_AUTOINCDATATOTAL	No
	OPERCOM_CANCEL	No
	OPERCOM_CLOGMRG	No
	OPERCOM_CLUPUBLPROT	No
	OPERCOM_CT	No
	OPERCOM_DATASPACEWARN	No
	OPERCOM_DAUQ	No
	OPERCOM_DCMDSTAT	No
	OPERCOM_DCQ	No
	OPERCOM_DDIB	No
	OPERCOM_DDSF	No
	OPERCOM_DFILES	No
	OPERCOM_DFILESTAT	No
	OPERCOM_DFILUSE	No
	OPERCOM_DHQA	No
	OPERCOM_DLOCKF	No
	OPERCOM_DNC	No
	OPERCOM_DNH	No
	OPERCOM_DNU	No
	OPERCOM_DONLSTAT	No

Utility	Function	File-related
	OPERCOM_DPARM	No
	OPERCOM_DRES	No
	OPERCOM_DRPLSTAT	No
	OPERCOM_DSPACE	No
	OPERCOM_DSTAT	No
	OPERCOM_DTH	No
	OPERCOM_DUQ	No
	OPERCOM_DUUQE	No
	OPERCOM_DVOLIO	No
	OPERCOM_DXCACHE	No
	OPERCOM_DXFILE	No
	OPERCOM_DXLOCK	No
	OPERCOM_DXMSG	No
	OPERCOM_DXSTAT	No
	OPERCOM_DXWORK	No
	OPERCOM_DZSTAT	No
	OPERCOM_FEOFCL	No
	OPERCOM_FEOFPL	No
	OPERCOM_HALT	No
	OPERCOM_INDEXCROSSCHECK	No
	OPERCOM_LOCKF	Yes
	OPERCOM_LOCKU	Yes
	OPERCOM_LOCKX	Yes
	OPERCOM_LOGCB	No
	OPERCOM_LOGFB	No
	OPERCOM_LOGGING	No
	OPERCOM_LOGIB	No
	OPERCOM_LOGIO	No
	OPERCOM_LOGRB	No
	OPERCOM_LOGSB	No
	OPERCOM_LOGUX	No
	OPERCOM_LOGVB	No
	OPERCOM_LOGVOLIO	No
	OPERCOM_LOGWARN	No
	OPERCOM_MXCANCEL	No
	OPERCOM_MXCANCELWARN	No

Utility	Function	File-related
	OPERCOM_MXMSG	No
	OPERCOM_MXMSGWARN	No
	OPERCOM_MXSTATUS	No
	OPERCOM_MXWTOR	No
	OPERCOM_NOLOGCB	No
	OPERCOM_NOLOGFB	No
	OPERCOM_NOLOGGING	No
	OPERCOM_NOLOGIB	No
	OPERCOM_NOLOGIO	No
	OPERCOM_NOLOGRB	No
	OPERCOM_NOLOGSB	No
	OPERCOM_NOLOGUX	No
	OPERCOM_NOLOGVB	No
	OPERCOM_NOLOGVOLIO	No
	OPERCOM_ONLRESUME	No
	OPERCOM_ONLSTOP	No
	OPERCOM_ONLSUSPEND	No
	OPERCOM_RALOCKF	Yes
	OPERCOM_RALOCKFA	No
	OPERCOM_RDUMPST	No
	OPERCOM_READONLY	No
	OPERCOM_REVIEW	No
	OPERCOM_RPLCHECK	No
	OPERCOM_SECUID	No
	OPERCOM_STOPF	Yes
	OPERCOM_STOPI	No
	OPERCOM_STOPSU	No
	OPERCOM_STOPSUR	No
	OPERCOM_STOPU	No
	OPERCOM_STOPUR	No
	OPERCOM_SYNCC	No
	OPERCOM_TNAA	No
	OPERCOM_TNAE	No
	OPERCOM_TNAX	No
	OPERCOM_TT	No
	OPERCOM_UNLOCKF	Yes

Utility	Function	File-related
	OPERCOM_UNLOCKU	Yes
	OPERCOM_UNLOCKX	Yes
	OPERCOM_UTIONLY	No
	OPERCOM_ZIIP	No
	PRIORITY	No
	REACTLOG	No
	RECORDSPANNING	Yes
	RECOVER	No
	REFRESH	Yes
	REFRESHSTATS	No
	RELEASE	Yes
	RENAME	Yes
	RENUMBER	Yes
	REPLICATION	Yes
	REPTOR	No
	RESETDIB	No
	RESETPPT	No
	SPANCOUNT	Yes
	TRANSACTIONS	No
	UNCOUPLE	Yes
	UNDELDE	Yes
	UNDELFN	Yes
	DEFINE	No
ADADEF	MODIFY	No
	NEWWORK	No
ADADRU	-	No
	ASSOFRM	No
	ASSORESET	No
	CLOGFRM	No
	DATAFRM	No
	DATARESET	No
ADAFRM	DSIMFRM	No
	DSIMRESET	No
	PLOGFRM	No
	RLOGFRM	No
	SORTFRM	No

Utility	Function	File-related
	TEMPFRM	No
	WORKFRM	No
	WORKRESET	No
ADAINV	COUPLE	Yes
	INVERT	Yes
ADALOD	LOAD	Yes
	LOAD_CHECKPOINT	Yes
	LOAD_LOB	Yes
	LOAD_REPLICATOR	Yes
	LOAD_SECURITY	Yes
	LOAD_SLOG	Yes
	LOAD_SYSFILE	Yes
	LOAD_TRIGGER	Yes
	UPDATE	Yes
ADAMER	-	No
ADAORD	REORASSO	No
	REORDATA	No
	REORDB	No
	REORFASSO	Yes
	REORFDATA	Yes
	REORFILE	Yes
	RESTRUCTUREDB	No
	RESTRUCTUREF	Yes
	STORE	Yes
ADAPLP	IPLOGPRI	Yes
	PLOGPRI	Yes
	SPLOGPRI	Yes
	WORKPRI	Yes
ADAPRI	ASSOPRI	No
	CLOGPRI	No
	DATAPRI	No
	DSIMPRI	No
	PLOGPRI	No
	RLOGPRI	No
	SORTPRI	No
	TEMPPRI	No

Utility	Function	File-related
	WORKPRI	No
ADARAI	-	No
ADAREP	REPORT	Yes
	CPLIST	Yes
	CPEXLIST	Yes
ADARIS	-	No
ADARES	BACKOUT	Yes
	CLCOPY	No
	COPY	No
	MERGE	No
	PLCOPY	No
	REGENERATE	Yes
	REPAIR	No
ADARPE	EXTRACT	No
ADARPL	REPLAY	Yes
	REPLAY_ORIGIN	Yes
	REPLAY_PLOG	Yes
ADARPP	-	No
ADASAV	MERGE	No
	RESTONL	Yes
	RESTONL_GCB	Yes
	RESTORE	Yes
	RESTORE_GCB	Yes
	RESTPLOG	Yes
	SAVE	Yes
ADASCR	PASSWORD_CHANGE	No
	PASSWORD_DELETE	No
	INSERT	Yes
	PFIELDS	Yes
	PFILES	No
	PPW	No
	PROTECT	Yes
	REMOVE	No
	SBYVALUE	Yes
ADASEL	SELECT	Yes
ADAULD	UNLOAD	Yes

Utility	Function	File-related
ADAWRK	-	No
ADAZAP	-	No
ADAZIN	-	No

Resource Names without Database ID

Utilities for which a database ID has no significance do not include the database ID in the resource name.

The following table lists those utility/functions that do not include the database ID in the resource name:

Utility	Function
ADACMP	COMPRESS (with no FDT=)
ADACMP	DECOMPRESS (with no INFILE=)
ADAFRM	All functions
ADAMER	All functions
ADAPLP	All functions
ADAPRI	All functions
ADARPE	All functions
ADARPP	All functions
ADASEL	All functions
ADAZIN	All functions

Resource Names for Adabas Basic Services

Adabas Basic Services protection is controlled by the `ABS` configuration parameter.

Adabas SAF Security authorizes the use of Adabas Basic Services by building a resource name to represent the function being used, as follows:

```
ABSddddd.function
```

where

Value	Description
ddddd	is the Database ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
function	is the administration function/subfunction being processed. See the table below for a list of all applicable functions.

The following tables define the subfunctions for each Adabas Basic Services function, together with the resource name that is checked (assuming `DBFLEN=1`, and `DELIM=Y`).

Before checking any of the individual resources, ADASAF establishes a user's right to use Adabas Basic Services against this nucleus by verifying that the user has read access to the resource:

```
ABSddddd.GENERAL
```

> **Note:** The Subfunction Profile (listed in the following tables) is used only when ABS=2 (subfunction protection).

Session Monitoring Function

Function:	Session Monitoring
Function Profile:	ABS*ddddd*.SESSION

Subfunction	Subfunction Profile*	Access
Display Cluster Members	ABS*ddddd*.CLUSTER	Read
Display Installed Products	ABS*ddddd*.DISINST	Read
Maintain User Profiles	ABS*ddddd*.USER	Read
Display Parameters	ABS*ddddd*.PARM	Read
Modify Parameters	ABS*ddddd*.PARM	Update
Display Queues	ABS*ddddd*.QUEUES	Read
Refresh Nucleus Statistics	ABS*ddddd*.REFSTATS	Read
Current Resource Statistics	ABS*ddddd*.STATS	Read
Maintain TCP/IP URL	ABS*ddddd*.TCPIP	Read
Display Interval Utilization	ABS*ddddd*.RESUTIL	Read
Display Maintenance Levels	ABS*ddddd*.ZAPS	Read
Display Event Log Buffer	ABS*ddddd*.EVENTLOG	Read
Replicator Management	ABS*ddddd*.REPLMGMT	Read
Display Session Utilization	ABS*ddddd*.SESSUTIL	Read
Cluster Usage	ABS*ddddd*.CLUSTUSE	Read

*Used only when `ABS=2` (subfunction protection)

Checkpoint Maintenance Function

Function	Checkpoint Maintenance
Function Profile	ABS*ddddd*.CHECKP

Subfunction	Subfunction Profile*	Access
List Checkpoints	ABS*ddddd*.CHECKP	Read
Delete Checkpoints	ABS*ddddd*.CHECKP	Update

*Used only when `ABS=2` (subfunction protection)

FILE Maintenance Function

Function	File Maintenance
Function Profile	ABS*ddddd*.FILE

Subfunction	Subfunction Profile*	Access
Define/Modify FDT	ABS*ddddd*.FDT	Read
Release Descriptor	ABS*ddddd*.REL	Read
Delete File	ABS*ddddd*.DEL	Read
Define New File	ABS*ddddd*.DEF	Read
Modify File Parameters	ABS*ddddd*.MOD	Read
Reorder File Online	ABS*ddddd*.ORD	Read
Refresh Rile to Empty	ABS*ddddd*.REF	Read
Allocate/Deallocate File Space	ABS*ddddd*.ALL	Read
Maintain Expanded Files	ABS*ddddd*.EXP	Read
Logically Delete/Undel Descriptor	ABS*ddddd*.LOGDDESC	Read

*Used only when `ABS=2` (subfunction protection)

Database Maintenance Function

Function	Database Maintenance
Function Profile	ABS*ddddd*.DBMAINT

Subfunction	Subfunction Profile*	Access
Add New Dataset to Asso/Data	ABS*ddddd*.ADD	Read
Increase/Decrease Asso/Data	ABS*ddddd*.INCREASE	Read
List/Reset DIB Entries	ABS*ddddd*.DIB	Read
Recover Unused Space	ABS*ddddd*.RECOVER	Read
Uncouple Two Adabas Files	ABS*ddddd*.UNCOUPLE	Read

*Used only when `ABS=2` (subfunction protection)

Session Opercoms Function

Function	Session Opercoms
Function Profile	ABS*ddddd*.OPERCOMS

Subfunction	Subfunction Profile*	Access
Extended Error Recovery	ABS*ddddd*.ERROR	Read
Force Dual Log Switch	ABS*ddddd*.LOG	Read
Lock/Unlock Files	ABS*ddddd*.LOK	Read
Reset Online Dump Status	ABS*ddddd*.RDUMPST	Read
Stop User(s)	ABS*ddddd*.STOPU	Read
Termination Commands	ABS*ddddd*.TERM	Read
Manage Online Utilities	ABS*ddddd*.UTILS	Read
Allocation/deallocation of CLOGs/PLOGs	ABS*ddddd*.LOGALLOC	Read
User Table Maintenance	ABS*ddddd*.USERTAB	Read
Issue Reactivate CLOG Command	ABS*ddddd*.REACCLOG	Read
Replicator Management	ABS*ddddd*.REPLMGMT	Read

*Used only when `ABS=2` (subfunction protection)

Database Report Function

Function	Database Report
Function Profile	ABS*ddddd*.REPORT

Subfunction	Subfunction Profile*	Access
List Files with Critical Extents	ABS*ddddd*.EXTENTS	Read
Display Field Description Table	ABS*ddddd*.DFD	Read
Display File	ABS*ddddd*.DIF	Read
General Database Layout	ABS*ddddd*.LAYOUT	Read
List VOLSER Distribution	ABS*ddddd*.VOLSER	Read
Display Asso/Data Block	ABS*ddddd*.DRABN	Read
Display Unused Storage	ABS*ddddd*.UNUSED	Read
Display Used Storage (DSPACE)	ABS*ddddd*.DSPACE	Read

*Used only when `ABS=2` (subfunction protection)

Space Calculation Function

Function	Space Calculation Report
Function Profile	ABS*ddddd*.SPACE

The Space Calculation function has no subfunction profiles.

Resource Names for Adabas System Coordinator Administration Services

Adabas SAF Security authorizes the use of Adabas System Coordinator Administration Services by building a resource name to represent the function being used.

The following table shows the online administration functions for which READ access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	COR.SETTINGS	Display system settings.
Client Runtime controls	COR.CLIENT.type.name	Display, expand, list overrides, copy, display site info for a runtime control. type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS

Function	Resource Name	Notes
		TIAM MULTITCB SINGLTCB MISCDTR SPATS
Daemon Group Parameters	COR.GROUP.name	Display, copy or expand a group. name is the name of the group.
Current Activity Displays Adabas Client Job Information	COR.ACTIVITY.jobname	Informational functions. jobname is the name of the selected job.
Current Activity Displays Network Discovery	COR.ACTIVITY.DMN*nnnnn*	Informational functions. nnnnn is the node-id of the selected daemon.
Special Services (Fix Display)	COR.SPECIAL.jobname	jobname is the name of the client job for which fixes are to be displayed.
	COR.SPECIAL.DMN*nnnnn*	*nnnnn* is the node number of the daemon for which fixes are to be displayed.
	COR.SPECIAL.DB*nnnnn*	*nnnnn* is the database id of the database for which fixes are to be displayed.

The following table shows the online administration functions for which UPDATE access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	COR.SETTINGS	Change system settings.
Client Runtime controls	COR.CLIENT.type.name	Add, modify, purge or rename a runtime control (or one of its overrides, or its site info). type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB

Function	Resource Name	Notes
		MISCDTR SPATS
Daemon Group Parameters	COR.GROUP.name	Display, copy or expand a group. name is the name of the group.
Current Activity Displays Adabas Client Job Information	COR.ACTIVITY.jobname	Operational functions. jobname is the name of the selected job.
Current Activity Displays Network Discovery	COR.ACTIVITY.DMN*nnnnn*	Operational functions. *nnnnn* is the node-id of the selected daemon

Resource Names for Adabas Fastpath Administration Services

Adabas SAF Security authorizes the use of Adabas Fastpath Administration Services by building a resource name to represent the function being used.

Function	Resource Name	Notes
System Settings	AFP.SETTINGS	Display system settings.
Buffer Parameters	AFP.BUFFER.name	Display, copy or list files of a buffer. Name is the name of the buffer.
File Parameters	AFP.FILE.DB*nnnnn*.FNR*fffff*	Display or copy a file. *nnnnn* is the database id and *fffff* is the file number.
Client Runtime controls	AFP.CLIENT.type.name	Display, expand, list overrides, copy, display site info for a runtime control. type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
Buffer Information	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
Database and File Information	AFP.ACTIVITY.DB*nnnnn* AFP.ACTIVITY.DB*nnnnn*.FNR*fffff*	*nnnnn* is the id of the selected database . For files, *fffff* is the file number.

Function	Resource Name	Notes
Optimized Job Information	AFP.ACTIVITY.jobname	Detail. jobname is the name of the selected job.
System Job Information	AFP.ACTIVITY.jobname	jobname is the name of the selected job.
Buffer History	AFP.HISTORY.name	name is the name of the selected buffer.
Asynchronous Buffer Services	AFP.ACTIVITY.DMN*nnnnn*	Informational functions (ABM Information). *nnnnn* is the node-id of the target daemon.
Database Component Services	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the target database.
Local SYSAFP Services	AFP.ACTIVITY.jobname	Informational functions (Connection Information and Job Statistics). jobname is the name of the job.
AFPLOOK Services	AFP.LOOK.DB*nnnnn*	AFPLOOK file and summary displays. *nnnnn* is the id of the target database.
Fix Display	AFP.SPECIAL.jobname	jobname is the name of the client job for which fixes are to be displayed.
	AFP.SPECIAL.DMN*nnnnn*	*nnnnn* is the node number of the daemon for which fixes are to be displayed.
	AFP.SPECIAL.DB*nnnnn*	*nnnnn* is the database id of the database for which fixes are to be displayed.

The following table shows the online administration functions for which UPDATE access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	AFP.SETTINGS	Change system settings.
Buffer Parameters	AFP.BUFFER.name	Add, modify, purge or rename a buffer. name is the name of the buffer.
File Parameters	AFP.FILE.DB*nnnnn*.FNR*fffff*	Add, modify or purge a file. *nnnnn* is the database id and *fffff* is the file number.
Client Runtime controls	AFP.CLIENT.type.name	Add, modify, purge or rename a runtime control (or one of its overrides, or its site info). type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM

Function	Resource Name	Notes
		TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
Buffer Information	AFP.ACTIVITY.DMN*nnnnn*	Operational services (Restart, Stop, Newcopy, Snap and Log). *nnnnn* is the node-id of the target daemon.
Database and File Information	AFP.ACTIVITY.DB*nnnnn* AFP.ACTIVITY.DB*nnnnn*.FNR*fffff*	Operational services (Start and Stop). *nnnnn* is the id of the selected database. For files, *fffff* is the file number.
Optimized Job Information	AFP.ACTIVITY.jobname	Services. jobname is the name of the job.
Asynchronous Buffer Services	AFP.ACTIVITY.DMN*nnnnn*	Operational functions (Restart, Stop, Newcopy, Snap and Log). *nnnnn* is the node-id of the target daemon.
Local SYSAFP Services	AFP.ACTIVITY.jobname	Operational functions (Reconnect, Disconnect and Newcopy). jobname is the name of the job.
AFPLOOK Services	AFP.LOOK.DB*nnnnn*	AFPLOOK operational functions (Start, Freeze/Pause, Release). *nnnnn* is the id of the target database.

AFPCMD and the online Printing Facility are also subject to SAF Security, as shown in the following table:

Function	Object	Resource Name	Notes
LIST	JOB	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
LIST	DATABASE	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
LIST	FILE	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
LIST	SET	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
LIST	SUMMARY	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
DISPLAY	JOB	AFP.ACTIVITY.jobname	jobname is the name of the job.
DISPLAY	DATABASE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
DISPLAY	FILE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
DISPLAY	SET	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
DISPLAY	BUFFER	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
DISPLAY	AFPLOOK	AFP.LOOK.DB*nnnnn*	*nnnnn* is the id of the selected database.
DISPLAY	ALL		Resource profiles for individual resources are checked as necessary.

Function	Object	Resource Name	Notes
DISPLAY	SUMMARY	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
PARMS	BUFFER	AFP.BUFFER.name	name is the name of the buffer.
PARMS	JOB	AFP.CLIENT.type.name	type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
PARMS	FILE	AFP.FILE.DB*nnnnn*.FNR*fffff*	*nnnnn* is the database id and *fffff* is the file number.
STOP	BUFFER	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
STOP	JOB	AFP.ACTIVITY.jobname	jobname is the name of the job.
STOP	DATABASE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
STOP	FILE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
RESTART	BUFFER	AFP.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
START	JOB	AFP.ACTIVITY.jobname	jobname is the name of the job.
START	DATABASE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.
START	FILE	AFP.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the selected database.

LIST, DISPLAY and PARMS functions require READ access to the resource.

STOP, RESTART and START require UPDATE access.

Resource Names for Adabas Vista Administration Services

Adabas SAF Security authorizes the use of Adabas Vista Administration Services by building a resource name to represent the function being used.

Function	Resource Name	Notes
System Settings	AVI.SETTINGS	Display system settings.
File Partitioning	AVI.PARTFILE.DB*nnnnn*.FNR*fffff*	Display, copy or expand a partitioned file and its partitions. *nnnnn* is the source database id. *fffff* is the source file number.
File Translation	AVI.PAGE.name	Display, copy or expand a page and its translation rules. name is the page name.
Client Runtime controls	AVI.CLIENT.type.name	Display, expand, list overrides, copy, display site info for a runtime control. type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
Current Activity Displays	AVI.ACTIVITY.jobname	jobname is the name of the current job.
Special Services (Fix Display)	AVI.SPECIAL.jobname	jobname is the name of the client job for which fixes are to be displayed.
	AVI.SPECIAL.DMN*nnnnn*	*nnnnn* is the node number of the daemon for which fixes are to be displayed.
	AVI.SPECIAL.DB*nnnnn*	*nnnnn* is the database id of the database for which fixes are to be displayed.
AVILOOK	AVI.LOOK.DB*nnnnn*	AVILOOK file statistics. *nnnnn* is the id of the target database.

The following table shows the online administration functions for which UPDATE access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	AVI.SETTINGS	Change system settings.
File Partitioning	AVI.PARTFILE.DB*nnnnn*.FNR*fffff*	Add, modify or purge a partitioned file and its partitions. *nnnnn* is the source database id. *fffff* is the source file number.
File Translation	AVI.PAGE.name	Add, modify or purge a page and its translation rules. name is the page name.
Client Runtime controls	AVI.CLIENT.type.name	Add, modify, purge or rename a runtime control (or one of its overrides, or its site info). type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
AVILOOK	AVI.LOOK.DB*nnnnn*	AVILOOK operational functions (Activate, Pause, Reset, Delete). *nnnnn* is the id of the target database.

Resource Names for Adabas Transaction Manager Administration Services

Adabas SAF Security authorizes the use of Adabas Transaction Manager Administration Services by building a resource name to represent the function being used.

Function	Resource Name	Notes
System Settings	ATM.SETTINGS	Display system settings.
Client Runtime controls	ATM.CLIENT.type.name	Display, expand, list overrides, copy, display site info for a runtime control. type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE

Function	Resource Name	Notes
		CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR SPATS
Transaction Manager Information	ATM.ACTIVITY.DMN*nnnnn*	*nnnnn* is the node-id of the target daemon.
Special Services (Fix Display)	ATM.SPECIAL.jobname	jobname is the name of the client job for which fixes are to be displayed.
	ATM.SPECIAL.DMN*nnnnn*	*nnnnn* is the node number of the daemon for which fixes are to be displayed.
	ATM.SPECIAL.DB*nnnnn*	*nnnnn* is the database id of the database for which fixes are to be displayed.

The following table shows the online administration functions for which UPDATE access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	ATM.SETTINGS	Change system settings.
Client Runtime controls	ATM.CLIENT.type.name	Add, modify, purge or rename a runtime control (or one of its overrides, or its site info). type is the job type and name is the name, without *s (so *DEFAULT is checked against DEFAULT). Valid types are: API-1 API-2 BATCH COMPLETE CICS-DTR CICS IMS UTM TSO CMS TIAM MULTITCB SINGLTCB MISCDTR

Function	Resource Name	Notes
		SPATS

Resource Names for Adabas SAF Security Administration Services

Adabas SAF Security authorizes the use of Adabas SAF Security Administration Services by building a resource name to represent the function being used.

Function	Resource Name	Notes
System Settings	AAF.SETTINGS	Display system settings.
System Statistics	AAF.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.
SAF User ID Statistics	AAF.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.
Fix Display	AAF.SPECIAL.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.
Storage Display	AAF.SPECIAL.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.
System Tracing	AAF.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.
System Parameters	AAF.ACTIVITY.DB*nnnnn*	*nnnnn* is the id of the database or daemon for which information is requested.

The following table shows the online administration functions for which UPDATE access to the indicated resource is required:

Function	Resource Name	Notes
System Settings	AAF.SETTINGS	Change system settings.
SAF User ID Statistics	AAF.ACTIVITY.DB*nnnnn*	Required to reset or logoff a SAF user. *nnnnn* is the id of the target database or daemon.
Server Restart	AAF.SPECIAL.DB*nnnnn*	*nnnnn* is the id of the target database or daemon.

Resource Names for Adabas SAF Security Operator Commands

This section describes the formatting of the resource name when an Adabas SAF Security operator command is issued to any of the following jobs:

- Adabas nucleus

- Adabas utility

- Entire Net-Work

When processing an operator command, Adabas SAF Security will check that the User ID *under which the job is executing* has read access to a resource name of the following format:

```
OPRddddd.SPECAL
```

where

Value	Description
ddddd	is the node ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
SPECAL	is the substituted command used for all Adabas SAF Security operator commands.

Refer to *Adabas SAF Security Operator Commands* in the Operations section for general information on Adabas SAF Security operator commands.

Resource Names for Entire Net-Work Start-up

When starting Entire Net-Work, Adabas SAF Security will check that the starting User ID has access to a resource name of the following format:

```
NETddddd.SVCsvc
```

where

Value	Description
ddddd	is the target ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
SVC*svc*	is the characters SVC followed by the 3-digit decimal number of the Adabas SVC.

Refer to *Entire Net-Work Start-up* in the Operations section for additional information and examples.

Resource Names for Entire Net-Work Administration Functions

The protection of Entire Net-Work administration functions is controlled by the `NETADMIN` configuration parameter.

Adabas SAF Security authorizes the use of Entire Net-Work administration functions by verifying the user has read access to a resource name representing the function being executed. The format of this resource name is as follows:

```
NETWRKddddd.category
```

where

Value	Description
ddddd	is the target ID, specified in the format defined by the setting of the `DBFLEN` configuration parameter.
.	is an optional delimiter character, depending on the setting of the `DELIM` configuration parameter.
category	is the category of the administration function being processed. See the tables below for a list of all applicable functions and their respective category.

Refer to *Entire Net-Work Administration Functions* and *Entire Net-Work Operator Commands* in the Operations section for general information on protecting Entire Net-Work administration functions and operator commands.

The following function tables describe the administration function name, description, and respective category used in the formatting of the resource name:

- Main Functions
- CTCA/FCTC Driver Functions
- TCPI Driver Functions
- TCPI Link Functions
- TCPX Driver Functions
- TCPX Link Functions
- VTAM Driver Functions
- VTAM Link Functions
- XCF Driver Functions
- XCF Link Functions

> **Note:** The information in these tables is applicable regardless of whether the administration function is requested by a console operator command or by the Programmable Command Interface.

Main Functions

Main Functions	Description	Category
DISPLAY ALINKS	Display active links	DISPLAY
DISPLAY CPU	Display CPU usage	DISPLAY
DISPLAY CQ	Display command queue	DISPLAY
DISPLAY CQE	Display command queue element	DISPLAY
DISPLAY CSCI	Display CSCI information	DISPLAY
DISPLAY DETAIL	Display detailed target information	DISPLAY
DISPLAY LINKS	Display links	DISPLAY
DISPLAY LOGGING	Display log settings	DISPLAY

Main Functions	Description	Category
DISPLAY NODES	Display nodes	DISPLAY
DISPLAY PATHS	Display paths	DISPLAY
DISPLAY STATS	Display statistics	DISPLAY
DISPLAY TARGETS	Display targets	DISPLAY
DISPLAY UBQ	Display UB queue	DISPLAY
DISPLAY ZAPS	Display zap list	DISPLAY
DISPLAY ZSTATS	Display zIIP statistics	DISPLAY
CONSOLE	Return log buffer contents (PCI only)	DISPLAY
SET CQTIMER	Modify CQTIMER	MODIFY
SET DUMP	Specify data areas to be dumped	MODIFY
SET LOG	Modify log setting	MODIFY
SET LOGBUF	Turn buffered logging on/off	MODIFY
SET LOGBUFSZ	Modify buffered logging buffer size	MODIFY
SET MAXPATH	Modify MAXPATH	MODIFY
SET MSGFORM	Modify MSGFORM	MODIFY
SET PASSWORD	Modify password (PCI only)	MODIFY
SET REMCMD	Allow/disallow remote PCI calls	MODIFY
SET REPLYTIM	Modify REPLYTIM	MODIFY
SET SNAPERR	Modify errors to be snapped	MODIFY
SET TRACE	Modify trace setting	MODIFY
SET TRON	Modify trace setting	MODIFY
SET TROFF	Turn tracing off	MODIFY
SET UCMSG	Modify UCMSG setting	MODIFY
SET ULINK	Modify unique link setting	MODIFY
SET ZIIP	Activate/deactivate zIIP processing	MODIFY
ADAEND	Terminate session normally	CONTROL
END	Terminate session normally	CONTROL
HALT	Terminate session normally	CONTROL
NETEND	Terminate session normally	CONTROL
STOP	Terminate session normally	CONTROL
TERMINATE	Terminate session normally	CONTROL
DUMP	Snap storage and terminate normally	CONTROL
CLOSE	Close driver	CONTROL
OPEN	Open driver	CONTROL
START	Open a driver	CONTROL
CONNECT	Connect a link	CONTROL

Main Functions	Description	Category
DEFINE LINK	Define a new link	CONTROL
DISABLE	Disable a link	CONTROL
DISCONNECT	Disconnect a link	CONTROL
ENABLE	Enable link	CONTROL
RESUME	Resume link	CONTROL
SUSPEND	Suspend a link	CONTROL
LOGDON	Activate driver logging	CONTROL
LOGDOFF	Deactivate driver logging	CONTROL
LOGTON	Activate target logging	CONTROL
LOGTOFF	Deactivate target logging	CONTROL
CLOSE NETPRNT	Close NETPRNT file	CONTROL
OPEN NETPRNT	Open NETPRNT file	CONTROL
TRANSLAT DEFINE	Add a translation definition	CONTROL
TRANSLAT ADD	Add a translation definition	CONTROL
TRANSLAT DELETE	Delete a translation definition	CONTROL
TRANSLAT REMOVE	Delete a translation definition	CONTROL
TRANSLAT DISPLAY	Display a translation definition	CONTROL
TRANSLAT LIST	Display a translation definition	CONTROL
HELP	Show help information	CONTROL
LICREFRESH	Redo license check	CONTROL
PROBE	Send probe to node	CONTROL
SNAP	Issue a snap of data areas	CONTROL
VERIFY	Verify a target	CONTROL

CTCA/FCTC Driver Functions

CTCA/FCTC Driver Functions	Description	Category
SHOW	Display link configuration	CTC_DISPLAY
SNAP	Dump link control blocks	CTC_DISPLAY
STATS	Display link statistics	CTC_DISPLAY
STATUS	Display link status	CTC_DISPLAY
TRACE	Display link trace table	CTC_DISPLAY
ALTER IORETRY	Number of I/O operation retries	CTC_MODIFY
ALTER MAXIOTIM	Maximum I/O completion time	CTC_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	CTC_MODIFY
ALTER RCVBLKCT	Number of receive buffers	CTC_MODIFY

CTCA/FCTC Driver Functions	Description	Category
ALTER RCVBLKSZ	Block size of receive buffers	CTC_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	CTC_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	CTC_MODIFY
ALTER SAF	NETSAF (WAF) point-of-access verification	CTC_MODIFY
ALTER SNDBLKCT	Number of send buffers	CTC_MODIFY
ALTER SNDBLKSZ	Block size of send buffers	CTC_MODIFY
ALTER STATINT	Print/Reset statistics time interval	CTC_MODIFY
ALTER TRACESIZ	Size of trace table	CTC_MODIFY
ALTER UNIT	Unit address of the CTCA link	CTC_MODIFY
ALTER UNITREAD	Unit address used to read data	CTC_MODIFY
ALTER UNITWRT	Unit address used to send data	CTC_MODIFY
ALTER WEIGHT	Path selection weighting	CTC_MODIFY
ALTER ZEDC	zEnterprise Data Compression (zEDC)	CTC_MODIFY
ALTER ZEDCLOG	zEDC compression trace data level	CTC_MODIFY
CLOSE	Close link	CTC_MODIFY
CONNECT	Connect link	CTC_MODIFY
DISC	Disconnect link	CTC_MODIFY
OPEN	Open link	CTC_MODIFY
RESET	Reset Statistics	CTC_MODIFY
RESUME	Resume link	CTC_MODIFY
SUSPEND	Suspend link	CTC_MODIFY

TCPI Driver Functions

TCPI Driver Functions	Description	Category
SHOW	Display driver configuration	TCPI_DISPLAY
SNAP	Dump driver control blocks	TCPI_DISPLAY
STATS	Display driver statistics	TCPI_DISPLAY
STATUS	Display driver status	TCPI_DISPLAY
TRACE	Display driver trace table	TCPI_DISPLAY
ALTER ACCEPTUI	Accept requests from undefined systems	TCPI_MODIFY
ALTER ALLOWIP6	Attempt IPv6 communications	TCPI_MODIFY
ALTER API	Name of the TCP/IP API being used	TCPI_MODIFY
ALTER CONNQUE	Number of connect queue entries	TCPI_MODIFY
ALTER DRVCHAR	Driver/Link designated special character	TCPI_MODIFY
ALTER DRVNAME	Driver name	TCPI_MODIFY

TCPI Driver Functions	Description	Category
ALTER EXIT	User exit name	TCPI_MODIFY
ALTER KEEPALIV	Maintain connections when no traffic	TCPI_MODIFY
ALTER MULTSESS	Multiple connection requests	TCPI_MODIFY
ALTER NODELAY	Use IBM socket option TCP-NODELAY	TCPI_MODIFY
ALTER OPTIONS1	API-specific options	TCPI_MODIFY
ALTER OPTIONS2	API-specific options	TCPI_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	TCPI_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	TCPI_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	TCPI_MODIFY
ALTER SERVERID	Port number used by Entire Net-Work	TCPI_MODIFY
ALTER STATINT	Print/Reset statistics time interval	TCPI_MODIFY
ALTER SUBSYS	Subsystem name for communications	TCPI_MODIFY
ALTER TRACE	Activate/deactivate tracing	TCPI_MODIFY
ALTER TRACELEV	Tracing levels	TCPI_MODIFY
ALTER TRACESIZ	Size of trace table	TCPI_MODIFY
ALTER USERID	User ID	TCPI_MODIFY
CLOSE	Close driver	TCPI_MODIFY
OPEN	Open driver	TCPI_MODIFY
RESET	Reset statistics	TCPI_MODIFY

TCPI Link Functions

TCPI Link Functions	Description	Category
SHOW	Display link configuration	TCPI_DISPLAY
SNAP	Dump link control blocks	TCPI_DISPLAY
STATS	Display link statistics	TCPI_DISPLAY
STATUS	Display link status	TCPI_DISPLAY
TRACE	Display link trace table	TCPI_DISPLAY
ALTER ACQUIRE	Attempt automatic connection	TCPI_MODIFY
ALTER ADJHOST	Internet host name for a node	TCPI_MODIFY
ALTER ADJNODE	Node name	TCPI_MODIFY
ALTER COE	Client Only Element	TCPI_MODIFY
ALTER EXIT	User exit name	TCPI_MODIFY
ALTER INETADDR	Remote host IPv4 address	TCPI_MODIFY
ALTER KEEPALIV	Maintain connections when no traffic	TCPI_MODIFY
ALTER MULTSESS	Multiple connection requests	TCPI_MODIFY

TCPI Link Functions	Description	Category
ALTER NODELAY	Use IBM socket option TCP-NODELAY	TCPI_MODIFY
ALTER PORT	Port numbers	TCPI_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	TCPI_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	TCPI_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	TCPI_MODIFY
ALTER SAF	NETSAF (WAF) point-of-access verification	TCPI_MODIFY
ALTER SENDTIME	Maximum send completion time	TCPI_MODIFY
ALTER SERVERID	Port number used by Entire Net-Work	TCPI_MODIFY
ALTER STATINT	Print/Reset statistics time interval	TCPI_MODIFY
ALTER TRACESIZ	Size of trace table	TCPI_MODIFY
ALTER V6IPADDR	Remote host IPv6 address	TCPI_MODIFY
ALTER WEIGHT	Path selection weighting	TCPI_MODIFY
ALTER ZEDC	zEnterprise Data Compression (zEDC)	TCPI_MODIFY
ALTER ZEDCLOG	zEDC compression trace data level	TCPI_MODIFY
CLOSE	Close link	TCPI_MODIFY
CONNECT	Connect link	TCPI_MODIFY
DISCONNECT	Disconnect link	TCPI_MODIFY
OPEN	Open link	TCPI_MODIFY
RESET	Reset statistics	TCPI_MODIFY
RESUME	Resume link	TCPI_MODIFY
SUSPEND	Suspend link	TCPI_MODIFY

TCPX Driver Functions

TCPX Driver Functions	Description	Category
SHOW	Display driver configuration	TCPX_DISPLAY
SNAP	Dump driver control blocks	TCPX_DISPLAY
STATS	Display driver statistics	TCPX_DISPLAY
STATUS	Display driver status	TCPX_DISPLAY
TRACE	Display driver trace table	TCPX_DISPLAY
USERS	Display active user information	TCPX_DISPLAY
ALTER ACCEPTUI	Accept requests from undefined systems	TCPX_MODIFY
ALTER ADI	Use Adabas Directory Server (ADI)	TCPX_MODIFY
ALTER ADIHOST	Hostname of ADI	TCPX_MODIFY
ALTER ADIPART	Partition name for use with ADI	TCPX_MODIFY
ALTER ADIPORT	Port number of ADI	TCPX_MODIFY

TCPX Driver Functions	Description	Category
ALTER ALLOWIP6	Attempt IPv6 communications	TCPX_MODIFY
ALTER API	Name of the TCP/IP API being used	TCPX_MODIFY
ALTER CONNQUE	Number of connect queue entries	TCPX_MODIFY
ALTER DRVCHAR	Driver/Link designated special character	TCPX_MODIFY
ALTER DRVNAME	Driver name	TCPX_MODIFY
ALTER KEEPALIV	Maintain connections when no traffic	TCPX_MODIFY
ALTER MULTSESS	Multiple connection requests	TCPX_MODIFY
ALTER NODELAY	Use IBM socket option TCP-NODELAY	TCPX_MODIFY
ALTER NUMUSERS	Max. no. of concurrent clients	TCPX_MODIFY
ALTER OPTIONS1	API-specific options	TCPX_MODIFY
ALTER OPTIONS2	API-specific options	TCPX_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	TCPX_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	TCPX_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	TCPX_MODIFY
ALTER SERVERID	Port number used by Entire Net-Work	TCPX_MODIFY
ALTER STATINT	Print/Reset statistics time interval	TCPX_MODIFY
ALTER SUBSYS	Subsystem name for communications	TCPX_MODIFY
ALTER SUPMSGS	Suppress NETP818I, NETP819I messages	TCPX_MODIFY
ALTER TRACE	Activate/deactivate tracing	TCPX_MODIFY
ALTER TRACELEV	Tracing levels	TCPX_MODIFY
ALTER TRACESIZ	Size of trace table	TCPX_MODIFY
ALTER USERID	User ID	TCPX_MODIFY
ALTER WCPPART	Alias of ADIPART	TCPX_MODIFY
CLOSE	Close driver	TCPX_MODIFY
OPEN	Open driver	TCPX_MODIFY
RESET	Reset statistics	TCPX_MODIFY

TCPX Link Functions

TCPX Link Functions	Description	Category
SHOW	Display link configuration	TCPX_DISPLAY
SNAP	Dump link control blocks	TCPX_DISPLAY
STATS	Display link statistics	TCPX_DISPLAY
STATUS	Display link status	TCPX_DISPLAY
TRACE	Display link trace table	TCPX_DISPLAY
USERS	Display active user information	TCPX_DISPLAY

TCPX Link Functions	Description	Category
ALTER ACQUIRE	Attempt automatic connection	TCPX_MODIFY
ALTER ADJHOST	Internet host name for a node	TCPX_MODIFY
ALTER INETADDR	Remote host IPv4 address	TCPX_MODIFY
ALTER KEEPALIV	Maintain connections when no traffic	TCPX_MODIFY
ALTER MULTSESS	Multiple connection requests	TCPX_MODIFY
ALTER NODELAY	Use IBM socket option TCP-NODELAY	TCPX_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	TCPX_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	TCPX_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	TCPX_MODIFY
ALTER SAF	NETSAF (WAF) point-of-access verification	TCPX_MODIFY
ALTER SENDTIME	Maximum send completion time	TCPX_MODIFY
ALTER SERVERID	Port number used by Entire Net-Work	TCPX_MODIFY
ALTER STATINT	Print/Reset statistics time interval	TCPX_MODIFY
ALTER TRACESIZ	Size of trace table	TCPX_MODIFY
ALTER V6IPADDR	Remote host IPv6 address	TCPX_MODIFY
ALTER WEIGHT	Path selection weighting	TCPX_MODIFY
CLOSE	Close link	TCPX_MODIFY
CONNECT	Connect link	TCPX_MODIFY
DISCONNECT	Disconnect link	TCPX_MODIFY
OPEN	Open link	TCPX_MODIFY
RESET	Reset statistics	TCPX_MODIFY
RESUME	Resume link	TCPX_MODIFY
SUSPEND	Suspend link	TCPX_MODIFY

VTAM Driver Functions

VTAM Driver Functions	Description	Category
SHOW	Display driver configuration	VTAM_DISPLAY
SNAP	Dump driver control blocks	VTAM_DISPLAY
STATS	Display driver statistics	VTAM_DISPLAY
STATUS	Display driver status	VTAM_DISPLAY
TRACE	Display driver trace table	VTAM_DISPLAY
ALTER ACCEPTUI	Accept requests from undefined systems	VTAM_MODIFY
ALTER APPLID	Application name	VTAM_MODIFY
ALTER AUTHPATH	Use VTAM Authorized Path	VTAM_MODIFY
ALTER EXIT	User exit name	VTAM_MODIFY

VTAM Driver Functions	Description	Category
ALTER MAXBLK	Receive buffer size	VTAM_MODIFY
ALTER MAXRU	Receive buffer size	VTAM_MODIFY
ALTER PASSWORD	APPLID associated password	VTAM_MODIFY
ALTER RECVRPLS	Number of receive RPLs to be kept active	VTAM_MODIFY
ALTER RESTART	Reconnect retry interval and no. of retries	VTAM_MODIFY
ALTER SLEEPTIM	Retry time interval	VTAM_MODIFY
ALTER TPNAME	Transaction program name definition	VTAM_MODIFY
ALTER TRACESIZ	Size of trace table	VTAM_MODIFY
CLOSE	Close driver	VTAM_MODIFY
OPEN	Open driver	VTAM_MODIFY
RESET	Reset statistics	VTAM_MODIFY

VTAM Link Functions

VTAM Link Functions	Description	Category
SHOW	Display link configuration	VTAM_DISPLAY
SNAP	Dump link control blocks	VTAM_DISPLAY
STATS	Display link statistics	VTAM_DISPLAY
STATUS	Display link status	VTAM_DISPLAY
TRACE	Display link trace table	VTAM_DISPLAY
ALTER ACQUIRE	Attempt automatic connection	VTAM_MODIFY
ALTER APPLID	Application name	VTAM_MODIFY
ALTER ASSOCLU	LU6.2 partner's Receive LU	VTAM_MODIFY
ALTER BLOCKMSG	Message blocking	VTAM_MODIFY
ALTER COMPRMSG	Compress message duplicate characters	VTAM_MODIFY
ALTER CRYPT	Request the use of encryption/decryption	VTAM_MODIFY
ALTER DEFRESP	Request definite response	VTAM_MODIFY
ALTER EXIT	User exit name	VTAM_MODIFY
ALTER LOGMODE	Logmode table name	VTAM_MODIFY
ALTER LUNAME	LU name	VTAM_MODIFY
ALTER MAXBLK	Send buffer size	VTAM_MODIFY
ALTER MAXRU	Send buffer size	VTAM_MODIFY
ALTER MINCMP	ALTER MINCMP Minimum length for compression	VTAM_MODIFY
ALTER MODEENT	Logmode table entry name	VTAM_MODIFY
ALTER NETID	Partner's VTAM network ID	VTAM_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	VTAM_MODIFY

VTAM Link Functions	Description	Category
ALTER RESTART	Reconnect retry interval and no. of retries	VTAM_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	VTAM_MODIFY
ALTER SAF	NETSAF (WAF) point-of-access verification	VTAM_MODIFY
ALTER SNDTMOUT	Maximum send completion time	VTAM_MODIFY
ALTER STATBLK	Accumulate message blocking statistics	VTAM_MODIFY
ALTER STATCMP	Accumulate data compression statistics	VTAM_MODIFY
ALTER STATINT	Print/Reset statistics time interval	VTAM_MODIFY
ALTER TRACESIZ	Size of trace table	VTAM_MODIFY
ALTER WEIGHT	Path selection weighting	VTAM_MODIFY
ALTER ZEDC	zEnterprise Data Compression (zEDC)	VTAM_MODIFY
ALTER ZEDCLOG	zEDC compression trace data level	VTAM_MODIFY
CLOSE	Close link	VTAM_MODIFY
CONNECT	Connect link	VTAM_MODIFY
DISCONNECT	Disconnect link	VTAM_MODIFY
OPEN	Open link	VTAM_MODIFY
RESET	Reset statistics	VTAM_MODIFY
RESUME	Resume link	VTAM_MODIFY

XCF Driver Functions

XCF Driver Functions	Description	Category
SHOW	Display driver configuration	XCF_DISPLAY
SNAP	Dump driver control blocks	XCF_DISPLAY
STATS	Display driver statistics	XCF_DISPLAY
TRACE	Display driver trace table	XCF_DISPLAY
ALTER ACCEPTUI	Accept requests from undefined systems	XCF_MODIFY
ALTER EXHS	Use extended handshakes	XCF_MODIFY
ALTER GROUP	XCF group name	XCF_MODIFY
ALTER LARGEMSG	Minimum size of a large message	XCF_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	XCF_MODIFY
ALTER RCVBFNUM	No. of entries in the receive buffer table	XCF_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	XCF_MODIFY
ALTER SMALLMSG	Maximum size of a small message	XCF_MODIFY
ALTER STATINT	Print/Reset statistics time interval	XCF_MODIFY
ALTER TRACESIZ	Size of trace table	XCF_MODIFY
HELP	List available functions	XCF_MODIFY

XCF Driver Functions	Description	Category
RESET	Reset statistics	XCF_MODIFY

XCF Link Functions

XCF Link Functions	Description	Category
SHOW	Display link configuration	XCF_DISPLAY
SNAP	Dump link control blocks	XCF_DISPLAY
STATS	Display link statistics	XCF_DISPLAY
TRACE	Display link trace table	XCF_DISPLAY
ALTER ADJHOST	Internet host name for a node	XCF_MODIFY
ALTER EXHS	Use extended handshakes	XCF_MODIFY
ALTER PSTATS	Print interval statistics to DDPRINT	XCF_MODIFY
ALTER RSTATS	Reset statistics at STATINT intervals	XCF_MODIFY
ALTER SAF	NETSAF (WAF) point-of-access verification	XCF_MODIFY
ALTER STATINT	Print/Reset statistics time interval	XCF_MODIFY
ALTER WEIGHT	Path selection weighting	XCF_MODIFY
ALTER ZEDC	zEnterprise Data Compression (zEDC)	XCF_MODIFY
ALTER ZEDCLOG	zEDC compression trace data level	XCF_MODIFY
HELP	List available functions	XCF_MODIFY
RESET	Reset statistics	XCF_MODIFY

Grouped Resource Names

This section describes those resource names which can be subjected to grouping in order to simplify the administration of the required security resources.

- Grouped Resource Names for Adabas Files
- Grouped Resource Names for Adabas Operator Commands
- Grouped Resource Names for Adabas Administration Functions

■ Grouped Resource Names for Adabas Utilities

Grouped Resource Names for Adabas Files

The AAFFILE macro is supplied on the ADASAF source library and is used to create a load module which defines prefixes, major nodes and/or minor nodes for file numbers or ranges of file numbers. You choose what mixture of prefixes, major and minor nodes you wish to use and for which files. Having created the load module, you identify it to ADASAF using the FILETAB configuration parameter to specify the load module name. The module must be available in an APF-authorized step library of the Adabas nucleus . At initialization, ADASAF attempts to load the nominated module. If the load fails, ADASAF issues message AAF004 and instructs the Adabas nucleus to terminate.

AAFFILE Parameters

AAFFILE has 3 parameters as described in the table below:

Parameter Syntax	Eplananation
`TYPE={PREFIX|MAJOR|MINOR|FINAL}` ↵	`TYPE=FINAL` must be the last statement before the END and generates the load module contents, based on the previous AAFFILE statements. `TYPE=PREFIX|MAJOR|FINAL` defines a name of 1 to 8 characters and a list of file numbers or ranges for which that name is to be used as the prefix, major node or minor node.
`NAME=1 to 8 characters`	Specifies the name to be used. The name must conform to the resource naming conventions of your security system.
`FILES={(nnnnn,nnnnn-nnnnn…)|ALL}`	Specifies a list of files or ranges of files for which this name should be used. `FILES=ALL` denotes that this name will be used for all files.

A sample assembly and link job is provided in SAGI055 in the JOBS installation dataset.

AAFFILE Parameter Examples

Example 1

```
AAFFILE TYPE=PREFIX,NAME=TEST,FILES=ALL
AAFFILE TYPE=MAJOR,NAME=ACCOUNTS,FILES=(1,5,11-20,251-300)
AAFFILE TYPE=MAJOR,NAME=HR,FILES=(101-200)
AAFFILE TYPE=MINOR,NAME=SALARY,FILES=(1,11,251)
AAFFILE TYPE=FINAL
END
```

Assuming `DBFLEN=1` together with the above AAFFILE statements, the following resource names will be used for accesses to files on database 153:

File Number	Resource Name (DELIM=Y)	Resource Name (DELIM=N)
1	TEST.ACCOUNTS.SALARY	TEST.ACCOUNTSSALARY
38	TEST.CMD00153.FIL00038	TEST.ACC00153FIL00038
200	TEST.HR.FIL00200	TEST.HRFIL00200
299	TEST.ACCOUNTS.FIL00299	TEST.ACCOUNTSFIL00299

Example 2

```
AAFFILE TYPE=PREFIX,NAME=ACCOUNTS,FILES=(1,5,11-20,251-300)
AAFFILE TYPE=MAJOR,NAME=PAYMENTS,FILES=(1,5,11-20)
AAFFILE TYPE=MAJOR,NAME=HR,FILES=(101-200)
AAFFILE TYPE=MINOR,NAME=SALARY,FILES=(1,11,251)
AAFFILE TYPE=FINAL
END
```

Assuming `DBFLEN=1` together with the above AAFFILE statements, the following resource names will be used for accesses to files on database 253:

File Number	Resource Name (DELIM=Y)	Resource Name (DELIM=N)
1	ACCOUNTS.PAYMENTS.SALARY	ACCOUNTS.PAYMENTSSALARY
38	CMD00253.FIL00038	ACC00253FIL00038
200	HR.FIL00200	HRFIL00200
299	ACCOUNTS.CMD00253.FIL00299	ACCOUNTS.ACC00253FIL00299

As these examples show, you have complete flexibility in using grouped and standard database/file-specific resource names in any combination.

You will usually need to create a different load module for each database where grouped resource names are to be used, because different databases are likely to have different file grouping requirements.

Grouped Resource Names for Adabas Operator Commands

An operator command grouping table is available which enables sites to influence the construction of resource names by changing the default operator command name to site specific names.

This grouping table is available for Adabas operator commands issued against any of the following jobs:

- Adabas nucleus
- Adabas utility

A sample source member, ADAEOPTB, is provided which defines operator commands to one of three groups, namely DISPLY, MODIFY and SPECAL. The choice of group names and how commands are grouped is decided on site and determines which Adabas operator commands may be entered from a z/OS console. When adding or modifying an entry in ADAEOPTB, specify the operator command (if longer than 8 characters, only provide the first 8 characters) and grouping requirement, for example:

```
ENTITY NOLOGGIN,SPECAL          /*  prevent command logging  */
```

associates the `NOLOGGING` operator command with the group SPECAL.

You must also relink ADAIOR to include ADAEOPTB. For more information, refer to ADASAF installation procedure, step 7.

The following is a sample grouping as supplied in the ADAEOPTB source library member. The following list is not restricted to the commands shown here and can be added to or subtracted from, depending on installation requirements. For more information about Adabas operator commands, see the *Adabas Operations* documentation.

The display-type Adabas commands are:

CSTAT	DHQ	DONLSTAT	DUQE
CSUM	DHQA	DPARM	DUUQE
DAUQ	DLOCKF	DPPT	DXCACHE
DCQ	DMEMTB	DRES	DXFILE
DDIB	DNC	DSTAT	DXLOCK
DDSF	DNFV	DTH	DXMSG
DFILES	DNH	DUQ	DXSTAT
DFILUSE	DNU	DUQA	

The modify-type Adabas commands are:

ADAEND	CDATAHSP	CFILE	RESUME
CANCEL	CDATAL64	CFSTAT	REVIEW
CASSODSP	CDATAMAX	CINCLUDE	TNAA
CASSOEXT	CDATAV64	CLOGMRG	TNAE
CASSOHSP	CDELETE	CPARM	TNAX
CASSOL64	CDEMAND	CRETRY	TT
CASSOMAX	CDISABLE	CT	MXCANCEL
CASSOV64	CDISPSTAT	DUMP	MXMSG
CBUFNO	CENABLE	FEOFCL	MXMSGWAR
CCHANGE	CEXCLUDE	FEOFPL	MXWTOR

CCTIMEOUT	CFDELETE	FMXIO	
CDATADSP	CFDISABLE	HALT	
CDATAEXT	CFENABLE	RDUMPST	

The special Adabas commands are:

ALOCKF	LOGRB	NOLOGVB	SMFRECNO
AOSLOG	LOGSB	NOLOGVOLIO	SMFSUBSYS
ASYTVS	LOGUX	NWCONNECT	SGMT
CLUFREEUSER	LOGVB	ONLRESUME	STOPF
DELUF	LOGVOLIO	ONLSTOP	STOPI
DELUI	LOGWARN	ONLSUSPEND	STOPU
LOCKF	NOLOGCB	RALOCKF	SYNCC
LOCKU	NOLOGFB	RALOCKFA	TCPIP
LOCKX	NOLOGGING	READONLY	TM
LOGCB	NOLOGIB	REVIEWHUBID	UNLOCKF
LOGFB	NOLOGIO	SMFDETAIL	UNLOCKU
LOGGING	NOLOGRB	SMFDETAILADD	UNLOCKX
LOGIB	NOLOGSB	SMFDETAILDEL	UTIONLY
LOGIO	NOLOGUX	SMFINTERVAL	

Grouped Resource Names for Adabas Administration Functions

Aadministration function and file grouping tables are available which enable sites to influence the construction of resource names by changing the default administration function and file names to site specific names.

These grouping tables are available for administration functions performed against any of the following jobs:

- Adabas nucleus

Administration function grouping table (AAFNUCTB)

A sample source member is provided (AAFNUCTB) which associates each of the Adabas administration functions to a specific function group name. This function group name then replaces the administration function name in the resource name.

The supplied function group names in AAFNUCTB are samples only - sites may define their own function group names and choose which of the administration functions are associated to a particular function group.

By way of an example, the table below shows the resource names constructed when an administrative request to delete file 18 is processed with and without the availability of AAFNUCTB (using the definitions in the sample AAFNUCTB).

DBADMIN	With AAFNUCTB	Without AAFNUCTB
(Y,NOFILE,WARN|FAIL)	ADANUC*ddddd*.UTIFUP	ADANUC*ddddd*.DELETE
(Y,FILE,WARN|FAIL)	ADANUC*ddddd*.UTIFUP.UFL00018	ADANUC*ddddd*.DELETE.UFL00018

For more information, refer to the sample member AAFNUCTB provided in the SRCE installation library. A sample assembly and link job is provided in SAGI065 in the JOBS installation library.

Administration file grouping table (UFTnnnnn)

A sample source member is provided (AAFFILTB) which has examples of how to associate a file group name to one or more files using the AAFFILE macro with TYPE=MINOR. This file group name then replaces the file number in the resource name.

The supplied file group names in AAFFILTB are samples only - sites should define their own file group names and choose which file numbers are associated to a particular file group.

By way of an example, the table below shows the resource names constructed when an administrative request to delete file 18 is processed with and without the availability of AAFFILTB (using the definitions in the sample AAFFILTB), and, for completeness, with and without the availability of AAFNUCTB (using the definitions in the sample AAFNUCTB).

> **Note:** This file grouping option only applies to DBADMIN=(Y,FILE,WARN\|FAIL).

AAFFILTB	With AAFNUCTB	Without AAFNUCTB
Not Available	ADANUC*ddddd*.UTIFUP.UFL00018	ADANUC*ddddd*.DELETE.UFL00018
Available	ADANUC*ddddd*.UTIFUP.INVOICE	ADANUC*ddddd*.DELETE.INVOICE

For more information, refer to the sample member AAFFILTB provided in the SRCE installation library. The assembly and link job SAGI055 in the JOBS installation library may be used to create the nucleus administration file grouping table.

> **Notes:**

1. The resulting load module must be called UFT*nnnnn* where *nnnnn* is the 5 character numeric database ID (with leading zeros as appropriate) against which the Adabas administration function is being processed.

2. A UFT*nnnnn* module must be made available to the corresponding Adabas job if file grouping is to be enabled.

3. If a UFT*nnnnn* module created for Adabas administration file grouping is made available to Adabas utilities and the SAFCFG parameter `UTI=3` is defined (for utility file-level protection),

then the file grouping defined by this module will also be enabled for utility operations against the database ID denoted by *nnnnn*.

Grouped Resource Names for Adabas Utilities

Utility function and file grouping tables are available which enable sites to influence the construction of resource names by changing the default utility function and file names to site specific names.

Utility function grouping table (AAFUTITB)

A sample source member is provided (AAFUTITB) which associates each of the utility functions to a specific function group name. This function group name then replaces the utility function name in the resource name.

The supplied function group names in AAFUTITB are samples only - sites may define their own function group names and choose which of the utility functions are associated to a particular function group.

By way of an example, the table below shows the resource names constructed when an ADASAV SAVE FILES=18 is executed with and without the availability of AAFUTITB (using the definitions in the sample AAFUTITB).

UTI	With AAFUTITB	Without AAFUTITB
UTI=2	ADASAV*ddddd*.UTIFAC	ADASAV*ddddd*.SAVE
UTI=3	ADASAV*ddddd*.UTIFAC.UFL00018	ADASAV*ddddd*.SAVE.UFL00018

For more information, refer to the sample member AAFUTITB provided in the SRCE installation library. A sample assembly and link job is provided in SAGI065 in the JOBS installation library.

Utility file grouping table (UFTnnnnn)

A sample source member is provided (AAFFILTB) which has examples of how to associate a file group name to one or more files using the AAFFILE macro with TYPE=MINOR. This file group name then replaces the file number in the resource name.

The supplied file group names in AAFFILTB are samples only - sites should define their own file group names and choose which file numbers are associated to a particular file group.

By way of an example, the table below shows the resource names constructed when an ADASAV SAVE FILES=18 is executed with and without the availability of AAFFILTB (using the definitions in the sample AAFFILTB), and, for completeness, with and without the availability of AAFUTITB (using the definitions in the sample AAFUTITB).

> **Note:** This file grouping option only applies to UTI=3.

AAFFILTB	With AAFUTITB	Without AAFUTITB
Not Available	ADASAV*ddddd*.UTIFAC.UFL00018	ADASAV*ddddd*.SAVE.UFL00018
Available	ADASAV*ddddd*.UTIFAC.INVOICE	ADASAV*ddddd*.SAVE.INVOICE

For more information, refer to the sample member AAFFILTB provided in the SRCE installation library. The assembly and link job SAGI055 in the JOBS installation library may be used to create the utility file grouping table.

📄 **Notes:**

1. The resulting load module must be called UFT*nnnnn* where *nnnnn* is the 5 character numeric database ID (with leading zeros as appropriate) of the database in which the file numbers defined in the file grouping table reside.

2. A UFT*nnnnn* module must be made available to the corresponding Adabas utility job if file grouping is to be enabled.

3. If a UFT*nnnnn* module created for utility file grouping is made available to Adabas nucleus jobs and the SAFCFG parameter `DBADMIN=(Y,FILE,WARN|FAIL)` is defined (for nucleus admin-istration file-level protection), then the file grouping defined by this module will also be enabled for nucleus administration functions within the database ID denoted by *nnnnn*.