



The ADIC
Distributed AML Server

**DAS V1.30C12
Release Notes**

 Advanced Digital Information Corp

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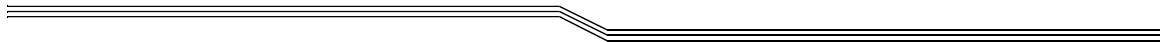
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Contents

Version 1.30C12 DAS Release Notes	5
Requirements	5
Updates	8
Update from UNIX Server DAS 1.x	8
Update from UNIX Server DAS 1.2x	9
Update from OS/2 Server DAS 1.30x	9
DAS Installation and Configuration	9
DAS Server Installation	9
DAS Server Configuration	10
ACI Installation	10
ACI Configuration	10
Changes in Version 1.30C12	11
Changes in Version 1.30C10	11
Changes in Version 1.30C9	11
Changes in Version 1.30C8	12
DAS changes	12
Addressed Problem Logs	12
Changes in Version 1.30C7	13
DAS changes	13
Addressed Problem Logs	13
Generic DAS Server Change	13
Generic ACI Changes	13
Changes in Version 1.30C6	14
DAS changes	14
Changes in Version 1.30C5	14
DAS changes	14
Generic ACI Changes	14
Changes in Version 1.30C3	15
DAS changes	15
Generic DAS Server Change	15
Changes in Version 1.30C2	16
DAS changes	16
Addressed Problem Logs	16



Generic DAS Server Change	16
Changes in Version 1.30CA	17
Configuration Changes	17
Changes in Version 1.30C	17
Addressed Problem Logs	19
Addressed Change Requests	19
Generic DAS Server Changes	22
Known Problems	22

Version 1.30C12 DAS Release Notes

This release note covers the Version 130C12 release of the DAS software. If questions arise about any of these notes, call the ADIC Technical Assistance Center at the appropriate number:

- USA 1-800-827-3822
- Europe/Africa +00-800-9999-3822

Requirements

The diskette of this DAS server is a complete version, which does not require a previous version of DAS software. DAS V1.30C12 can replace all previously installed DAS versions.

One diskette is delivered. The Client (ACI is still unchanged the version 1.30C7).

The following software releases are required:

Table 1-1 Software Release Requirements

Software	Version
IBM OS/2	OS/2 Warp 3.0 or higher
IBM TCP/IP for OS/2	TCP/IP for OS/2 2.0 or higher
IBM DATABASE 2	DB/2 2.1.1 or higher
AMU	2.40K or higher

Client interfaces from earlier ACI revision levels are maintained and supported.

See Table 1-2 for a list of all platforms ACI 1.30C7 can run on.

Table 1-2 Platforms for ACI 1.30C7

Platform	Version
AIX	4.1
AIX	4.14
AIX	4.2
AIX	4.3

Table 1-2 Platforms for ACI 1.30C7

Platform	Version
DECUX	4.0D
HPUX	9
HPUX	10.10
HPUX	10.20
HPUX	11.0
LINUX (RedHat)	5.1
IRIX	5.3
IRIX	6.2
IRIX	6.2 (64 bit)
IRIX	6.4
IRIX	6.5
Sinix (RM200)	5.42
Sinix	5.43
Solaris	2.4
Solaris	2.5
Solaris	2.6
SunOs	4.14
Microsoft Windows NT	4.0
OS/2 Warp Connect	3.0

Refer to Table 1-3 on page 6 for a list of supported media types.

Table 1-3 Supported Media Types

Type	Description	AMU	DAS Type
3480	1/2 inch Tape (different length available)	C0	3480
3490	1/2 inch Tape (different length available)	C0	3480

Table 1-3 Supported Media Types

Type	Description	AMU	DAS Type
3490 E	1/2 inch Tape	C0	3480
3490E D-3	1/2 inch Tape (STK - Redwood)	C0	3490
3590	1/2 inch Tape (NTP => New Tape Product)	C2	3590
4MM-60M	Digital Data Tape (DDS)	V2	4MM
4MM-90M	Digital Data Tape (DDS)	V2	4MM
4MM-120M	Digital Data Tape (DDS)	V2	4MM
4MM-125M	Digital Data Tape (DDS)	V2	4MM
8MM	8 mm Tape (different lengths available)	V1	8MM
8MM-112M	8 mm Tape 112 minutes	V1	8MM
8MM-160M	8 mm Tape 160 minutes	V1	8MM
8MM-54M	8 mm Tape 54 minutes	V1	8MM
Audio - cassette	Standard Audio Cassette	VA	AUDIO-TAPE
BetaCAM-Large	Analog Tape Format	V9	BETACAML
BetaCAM-Small	Analog Tape Format	V8	BETACAM
CD-Caddy	CD with enclosure	C6	CD
D1-M	D1 medium tape	V4	D2
D1-S	D1 small tape	V3	D2
D2-M	D2 medium tape	V4	D2
D2-S	D2 small tape	V3	D2
Digital BetaCAM-Large	Digital Tape Format (like DTF-L)	V9	BETACAML
Digital BetaCAM-Small	Digital Tape Format (like DTF-S)	V8	BETACAM
DLT Tape III XT	Digital Linear Tape	C1	DECDLT
DLT CompacTape-III	Digital Linear Tape	C1	DECDLT

Table 1-3 Supported Media Types

Type	Description	AMU	DAS Type
DLT CompacTape-IV	Digital Linear Tape	C1	DECDLT
DTF-L	DTF-Large tape, (Digital Tape Format)	V7	DTF
DTF-S	DTF-Small tape, (Digital Tape)	V6	DTF
OD-512	Optical Disk 5 1/2	O1	OD-Thick
OD-R	Optical Disk 5 1/2	O0	OD-Thin
SD-3	1/2 inch Tape (STK-Redwood)	C0	3480
S-VHS	Super - Video Home Service	V0	VHS
Sony AIT	8 mm Tape (different lengths available)	V1	8MM
TRAVAN TR-1	Streamer Tape	V5	TRAVAN
TARVAN TR-2	Streamer Tape	V5	TRAVAN
TARVAN TR-3	Streamer Tape	V5	TRAVAN
TARVAN TR-4	Streamer Tape	V5	TRAVAN
VHS	Video Home Service	V0	VHS

Updates

Updates of any of these products should be performed by authorized and trained personnel.

Update from UNIX Server DAS 1.x

The update from UNIX DAS 1.x to DAS/2 1.30C12 may be performed by trained customer personnel. The update requires that the UNIX host DAS server is replaced with OS/2 DAS server software (AMU controller) AMU configuration changes as well as client DAS_SERVER environment variable changes are necessary. The AMU configured DAS host is no longer required.

Update from UNIX Server DAS 1.2x

The update from UNIX DAS 1.2x to DAS/2 1.30C12 may be performed by trained customer personnel. The update requires AMU configuration changes. The AMU configured DAS host is no longer required.

Update from OS/2 Server DAS 1.30x

The update from UNIX DAS 1.30x to DAS/2 1.30C12 may be performed by trained customer personnel. The update does not require AMU configuration changes.

DAS Installation and Configuration

Installation and configuration of the DAS products should be performed by authorized and trained personnel.

DAS Server Installation

Perform the following steps to install DAS

- Step 1** Press <Ctrl> + <TAB> to determine if the DAS Server is running.
- The task list appears. If DAS is running, stop all operations via DAS commands.*
- Step 2** Open an OS/2-window and change to directory `c:\das\bin`. Type `cd c:\das\bin` then <ENTER>
- Step 3** Stop the DAS Server by typing `dasadmin shutdown`.
- Step 4** Insert the DAS diskette into drive A: of the AMU computer.
- Step 5** Change to drive A:. Type `A:` then <ENTER>
- Step 6** Type `dasinst` then <ENTER>
- Step 7** Decide which feature of the installation program to install. Type the corresponding installation option number.
- Step 8** Following the instructions of the installation program

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- Step 9** If DAS is being updated, do not reboot the PC or re-configure DAS.
or
For a new installation, continue with the *DAS Server Configuration* and then reboot the PC.

DAS Server Configuration

For more detailed information about DAS, refer to the *DAS Administration Guide*. Follow the steps for the DAS Server configuration.

- Step 1** The environment variable `DAS_SERVER` must be specified with the hostname or IP-address from the AMU-PC.
Example:`DAS_SERVER=hostname`,
- Step 2** Ensure that the hostnames from the DAS Server and DAS Clients are set in the *hosts* file.
- Step 3** Configure the **clientstatements** in the *DAS config* file.
- Step 4** If necessary, configure the drive to volser attachments in the *DAS config* file.

ACI Installation

Perform the following steps to install ACI on the UNIX platforms.

- Step 1** Copy the ACI tar file in the directory `c:\das` of the AMU PC
- Step 2** Copy the tar file to the client host using **FTP**.
- Step 3** Unpack the tar file using **telnet** or directly at the UNIX host

ACI Configuration

- Set the environment variable `DAS_SERVER` correctly.
- Set the `DAS_CLIENT` environment variable correctly
- Set the `ACI_MEDIA_TYPE` environment variable correctly

Changes in Version 1.30C12

DAS changes

Parameter hostname in DAS\etc\config can set to the keyword „any“, to switch off the IP address check of the given client.

Support of the changed AMU-Log (ASCII-Format)

Changes in Version 1.30C10

DAS changes

Fix of a problem in the generic mount (mount command without drive name)

The drives are not selected correct, if a drive is in cleaning

Changes in Version 1.30C9

DAS changes

Fix of a problem in the generic mount (mount command without drive name)

The drives are not selected correct, if two generic mounts was send parallel to the DAS

Changes in Version 1.30C8

DAS changes

- The possibility to configure whether the client should get a response if eject area is full or not. Therefore a new environment variable for the AMU-PC with the name DAS_EJECTAREAFULL is available

Table 0-1 Behaviour with DAS_EJECTAREAFULL

DAS_EJECTAREAFULL	Description
0	wait for the change of the status of the Eject area (maked empty by operator) and automatic complete the command
1	the request will be break and a response is send to the client if eject becomming full

Addressed Problem Logs

Table 0-2 Problems which solved with DAS 1.30C8

ticket number	Description
GR 3728 GR 3856	No response if eject area is full
GR 3921	No retry of keep from cleaning tape Mount of cleaning tape which is not occupied
GR 3964	Wrong message if inventory sends a negative response

Changes in Version 1.30C7

DAS changes

- A command to send the robot home
- A command to get the status of the robot
- A command to start the robot
- A command to unload a drive which has an unload button
- DAS repeats the command if AMU error 1290 (AMU_ERROR_CMD_CANCELLED) comes up.
- Configurable timeout for eject, insert, mount ,dismount
- Configurable retry counter for dismount

Addressed Problem Logs

Table 0-3 Problems which solved with DAS 1.30C7

ticket number	Description
GR 3739 GR 3787	Repeat if AMU error 1290 comes up
GR 3741	Status of Robot
GR 3744	Status and home of robot
GR 3752	Configurable timeout for mount and dismount
GR 3743	

Generic DAS Server Change

- If error AMU_ERR_MEDIATYPEMISMATCH comes up the eject returns ENOMATCH
- If error AMU_ERR_MEDIATYPEMISMATCH comes up the insert returns ENOMATCH

Generic ACI Changes

- New ACI-functions and dasadmin commands
 - Robot home:
ACI-function ->aci_robhome

dasadmin-command ->robhome

- Robot status:

ACI-function ->aci_robstat

dasadmin-command ->robstat

- Unload of drive:

ACI-function ->aci_unload

dasadmin-command ->unload

Changes in Version 1.30C6

DAS changes

In this version there is implemented a fix which should prevent the increasing of the swapper.dat.

Changes in Version 1.30C5

DAS changes

New command partial inventory.

Generic ACI Changes

- New ACI-functions and dasadmin commands

- Partial Inventory:

ACI-function ->aci_partial_inventory

dasadmin-command ->pinvt

Changes in Version 1.30C3

DAS changes

- New drivestatus command that gives now the status of a maximum of 250 drives
- The generic mount (mount without specifying the drive) returns now the drive which was chosen from DAS.
- A copyright text appears in the OS/2 window for DAS

Generic DAS Server Change

- The insert command returns now more than 12 inserted volsers
- The insert command returns now only the inserted volsers
- If a drive must be cleaned and the cleaning of DAS is activated DAS mount itself a clean-tape into the drive. If the cleaning of tape ended DAS itself dismounts the drive. Sometimes an application also have a look on the drive and recognize whether cleaning ended. If cleaning ended the application dismounts the tape before DAS dismounts it. In this case the dismount from DAS failed and DAS means that the cleaning of the drive failed. DAS mounts a cleaning tape once more. In this case a situation of a loop comes up.
- To avoid that a loop comes up the following change is implemented in DAS 1.30C3 :
- If a dismount of cleaning-tape from DAS failed because the drive is empty, DAS means now that the cleaning was successful.

Generic ACI Changes

- New ACI-functions and dasadmin commands
 - Drivestatus for a maximum of 250 drives:
ACI-function ->aci_drivestatus2
dasadmin-command ->listd2
- The generic mount returns now the chosen drive in the extern variable szRetDrive.

Changes in Version 1.30C2

DAS changes

- Support of hosts with different IP-address but with same hostnames
- Support of media type "Betacam large"
- Copyright-Text in the OS/2-Window after starting of DAS

Addressed Problem Logs

Table 0-4 Problems which solved with DAS 1.30C2

ticket number	Description
GR 2795	The view-command runs in an error when the use-count of the volser was greater than

Generic DAS Server Change

- The command "dasadmin qvolsrange "" count clientname" now with correct messages when there are more datas as the count-paramter specify and in the config-file
- is configured : volumes = ((volser1, volser2, ...))
- The command "dasadmin mount -t DTF volser drivename" now without mismatch between media-types
- The command "dasadmin view -t type volser" now with correct message when type
- in "-t type" not agree with the actual type of volser

Generic ACI Changes

- Support of QNX clients
If the return value of sysconf() in callback_wait() is greater than the maximum, set the return value equal to the maximum
- Correct message mapping in the stl-library with the dismount command
- Support of media-type Betacam-large. Betacam-large and Betacam-small are mapped to ACI-media-type „BETACAM“

Changes in Version 1.30CA

This version is assigned to version 1.30C. The changes are not available at version 1.30C2. First up to version 1.30C3 the changes are available

DAS Changes

- It is possible now to define the clientname with special characters (for example 'AMU-CLIENT')

Configuration Changes

- The ranges in the config file must be wrote with blanks for example : (000001 - 000005)

Generic ACI Changes

- No check of of clientname for special characters

Changes in Version 1.30C

DAS Changes

- Installation Program
- Supporting all media and drives from AMU 2.40_
- Intelligent selfconfiguration between AMU and DAS. No more configuration is required in the AMU for DAS hosts
- Use of the AMU-database over arce:
DAS and AMU are using the same data
- Overworking of the drivecleaning.
 - Used cleamedia are ejected and new one need only be inserted with the old barcode.
 - Parallel cleanrequests are supported
- Overworking of the foreign-handling:
 - The position for the foreign media must be foreign in the AMU-DATABASE.
 - Checking the state of the foreign coordinate (empty, mounted, occupied)
- New commands
 - Query of version
 - Query of volsrange
 - Physical inventory
 - Scratch pool handling

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- Amulog
 - Parameter: see amulog -h
 - Telenet: Amulog can be run in a telnet session. End it with 'q', Ctrl-C or F3
 - RSH: It's also possible to run amulog via rsh (just use this if it is real necessary.
Set RSHD.TIMEOUT.IN.SECONDS to 0 and then invoke rshd.
The OS/2 rshd has a problem with Ctrl-C. So for ending press 'q' +return in the rsh. (Don't use Ctrl-C).

- EIF-Handling:
 - If the EIF is full, a message is displayed in the log.
 - Then just a removing of the medias is necessary but no reply in the log (a with DAS 1.2x)

Addressed Problem Logs

Table 0-5 Problems which solved with DAS 1.30C

ticket number	Description
GR 1879	Only 50 insert areas defined for DAS
GR 2213:	Token buffer overflow
GR 2215:	Audit function -> aci_qvolsrange
GR 2217:	Complete eject function -> aci_complete_eject
GR 2221:	Insert and orphan volsers
GR 2223:	Too many file descriptors
GR 2281:	aci_view is not working with not known volsers
GR 2282:	the nodismount option -> no_dismount
GR 2289:	3590 cleanign cartridge
GR 2290:	Audit, no fork, ALL
GR 2329:	Wrong position of media
GR 2330:	IF ranges. In DAS now ranges can be configured or set to ALL

Addressed Change Requests

Table 0-6 Change requests which solved with DAS 1.30C

ticket number	Description
DR301:	error handling after scanner time-out
DR458:	Client access to drive
DR459:	Dasadmin shortcut ld for listd
DR464:	Client access to drive

Table 0-6 Change requests which solved with DAS 1.30C

ticket number	Description
DR467:	Message is no volser was inserted
DR469:	Error number EDEVEMPTY after retried dismount with no ejected media from drive
DR470:	Error number changed for mount/ dismount AMU error 1162 - >ENOTMOUNTED(23) Dismount with a unknown volser now with correct message
DR473:	Eject and eject total mismatch
DR474:	All complete messages appear with a failure
DR475:	Crash in EIF
DR476:	Eject of a mounted volser -> EINUSE
DR482:	Mountt of a ejected volume -> ENOVOLUME instead of EINUSE
DR483:	Completed succesfully
DR484:	EPROBVOL when crash at drive
DR498:	RMF on a unknown foreign volser
DR467:	Message 'no volser inserted' for insert with no inserted volser
DR493:	The commandcatf with the command -t media_type works not
DR459	dasadmin ld as shortcut for listd

Generic DAS Server Change

- LogMsg DAS4040 now with UP/DOWN info
- LogMsg DAS4xx1 has now the info how it was completed
- 'dasadmin qvolrange' is showing the media and status as text
- os2sleep with correct name
- At timeout a ETIMEOUT will be return to ACI
- dassatart and dasrun for remote start

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- 'dassart' is invoked with 'call' from startup.cmd - see startup.das
 - 'startup.das' is renamed as 'startup.sample'
 - Amulog can also be terminated with the 'q'-key
 - A clean request on more than one drive is using different clean volsers
 - Msg on screen and log if the config-file can't be open
 - For syntax or not exist error with config-file the das/2 window is not closed
 - EUPELSE if DOWN on a drive allocated by another client (DAS4043)
 - With no_avc the mount on a drive in clean is suspended
 - Round Robin for nonspecific mount
 - Cancel also on suspended requests

Generic ACI Changes

- New ACI-functions and dasadmin commands
 - Query of version:
 - ACI-function ->aci_qversion
 - dasadmin-command ->qversion

Query of volsrange:

ACI-function ->aci_qvolsrange
 dasadmin-command ->qvolsrange

Physical inventory:

ACI-function ->aci_inventory
 dasadmin-command ->inventory

Scratch pool handling:

ACI-function ->aci_scratch_get
 aci_scratch_info
 aci_scratch_set
 aci_scratch_unset
 dasadmin-command ->scr_get
 scr_info
 scr_insert
 scr_mount

scr_set

scr_unset

- Overworking of the aci library
 - The use of internal pipe was eliminated and with this and other things the internal datatransfer increase. Different timeout-values for different actions.
 - The same codebase for all supported platforms including OS/2.
 - ETIMEOUT for timeout instead of ERPC
 - Overworking of the dasadmin:
 - ♦ Dasadmin is the only admin command and is available on all supported platforms.

Generic DAS Server Changes

1. Dasadmin qvolsrange is showing the media and attrib as text
2. For aci request timeout, derrno is set to ETIMEOUT
3. For HP the dasadmin is linked static to aci
4. For qvolsrange the mediatype 4mm and 8mm was displayed now correct
5. No negative cleancount
6. No coredump with the command 'dasadmin eject -c volser'
7. The command rmf with the command -t media_type works now (s. DR493)
8. Check of aci parameter being NULL
9. IP adress in correct form - dasadmin show -op
10. Added -lsocket in admin/Makefile.sinix
11. No trap on OS/2 while terminating with Ctrl-C

Known Problems

None