The ADIC
Distributed AML Server

DAS V3.01
Release Notes

Advanced Digital Information Corp

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Version 3.01 DAS Release Notes

This release note covers the Version 3.01 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 and client version is a complete version, which does not require a previous version of DAS software. DAS V3.01 can replace all previously installed DAS versions.

Three diskettes are delivered. One is the OS/2 DAS Server and the OS/2 DAS client and the other two are the clients (ACI) for UNIX or NT platforms.

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 AMS	3.0 or higher

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

See Table 1-2 for a list of all platforms ACI 3.01 can run on.

Table 1-2 Platforms for ACI 3.01

Platform	Version
HPUX	10.1
HPUX	10.2
HPUX	11.0

Table 1-2 Platforms for ACI 3.01

Platform	Version
AIX	4.1
AIX	4.2
AIX	4.3
OSF1	4.0
IRIX	5.3
IRIX	6.2
IRIX	6.2 (64 bit)
IRIX	6.4
IRIX	6.5
Sinix	5.42
Sinix	5.43
Solaris	2.4
Solaris	2.5
Solaris	2.51
Solaris	2.6
Solaris	7.0 (added)
Reliant Unix	5.43
Reliant Unix	5.44
Reliand Unix	5.45 (added)
SunOs	4.14
Linux Red Hat	5.1
Linux Red Hat	6.0 (added)
Microsoft Windows NT	4.0
OS/2 Warp Connect	3.0

Refer to Table 1-3 on page 7 for a list of supported media types.

Table 1-3 Supported Media Types

Type	Description	AMS	DAS Type
3480	1/2 inch Tape (different length available)	C0	3480
3490	1/2 inch Tape (different length available)	C0	3480
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 Audio Tape (DAT)	V2	4MM
4MM-90M	Digital Audio Tape (DAT)	V2	4MM
4MM-120M	Digital Audio Tape (DAT)	V2	4MM
4MM-125M	Digital Audio Tape (DAT)	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

Table 1-3 Supported Media Types

Type	Description	AMS	DAS Type
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
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	SONY_AIT
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 3.0 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 AMS configuration changes as well as client DAS_SERVER environment variable changes are necessary. The AMU AMS configured DAS host is no longer required.

Update from UNIX Server DAS 1.2x

The update from UNIX DAS 1.2x to DAS/2 3.0 may be performed by trained customer personnel. The update requires AMU AMS configuration changes. The AMU AMS 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 3.0 may be performed by trained customer personnel. The update does not require AMU AMS 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 AMS 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

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 For DUALDAS, the environment variable DAS_SERVER must be specified with the hostname or IP-address from one of the AMU-PC and, separated by a comma, the hostname or IP-address from the other AMU-PC.

Example: DAS_SERVER=activehostname, passivehostname

— or —

DAS_SERVER=passivehostname, activehostname

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.

It is possible to configure in the DAS configuration file a relation between drives and volsers in the following syntax:

DriveToVol drive = DriveName,
volsers =((Volserrange1)|(Volser), (
(Volserrange2)|(Volser)) ,...)

For each drive that should have an attachment, a DriveToVol statement must be configured as above.

This means that only the specified volsers can be mounted into drive Drive1

When no relation for a drive in the configuration file exists, each volume of the correct type can be mounted into the drive.

The statement is optional.

Step 5 If using DUALDAS, ensure that the port 5000 is not being used by another application. If the port is in use, change the port in the Server statement of 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. If using DUALDAS, the variable contains both DAS Server
- Set the DAS_CLIENT environment variable correctly
- Set the ACI_MEDIA_TYPE environment variable correctly

New Features in Version 3.01

The following is a list of new featuresin this release of the DAS.

- New drivestatus command which gives the physical status of a drive
  - ACI function aci_drivestatus3
  - dasadmin command listd3
- Support of the SONY AIT media (sony_ait)

- New server configuration parameter that configures which DAS commands should not write log messages. Currently this is only possible for the drivestatus commands (listd, listd2 and listd3)
- Switch the barcode reading by the robot either ON or OFF
  Switch barcode: on or off
  - ACI function aci_barcode
  - dasadmin command barcode
- Completely shutdown the AMU PC
  Computer shutdown:
  - ACI function aci_killamu
  - dasadmin command killamu
- Support for the CLEANMANAGER in the AMU 3.0
  Clean Drives:
  - ACI function aci_cleandrive
  - dasadmin command clean
  - Mount a cleantape from a cleanpool to a drive
  - Insert cleantapes from IE facility to a cleanpool
  - Eject cleantapes from a cleanpool to IE facility
- New insert command that returns more information about inserted tapes
  Insert Cleantapes:
  - ACI function aci_insert2
  - dasadmin command insert2
- New eject command that returns more information about ejected tapes
  Eject Cleantapes:
  - ACI function aci_ejectcl
  - dasadmin command ejectcl

  Eject2:
  - ACI function aci_eject2
  - dasadmin command eject2
- Switch the passive AMU and DAS to the active AMU and DAS
  Switch the AMU
  - ACI function aci_switch
  - dasadmin command switch
- Set the drives force UP and DOWN
- Support HICAP

- Support DUAL DAS as a redundant interface for Unix to Hosts interface that use TCP/IP
- Support a command to flip a volume from side A to B or side B to A in a drive
  Flip volumes
  - ACI function aci_flip
  - dasadmin command flip
- Support volser attachment to either side A or side B
  Get volser attachment to side
  - ACI function aci_getvolsertoside
  - dasadmin command getvoltoside
- Support a new drive access to allocate a drive with *exclusive* status
  Get volser to drive attachment
  - ACI function aci_getvolsertodrive
  - dasadmin command getvolsertodrive

  Exclusive driveaccess
  - ACI function aci_driveaccess
  - dasadmin command allocd
- Support a command to allocate volsers
  Volseraccess
  - ACI function aci_volseraccess
  - dasadmin command allocv

  Volserstatus
  - ACI function aci_volserstatus
  - dasadmin command istv
- Support the possibility to define a volser attachment to a drive in the *config* file
- Support Log ID (1 .. 9999) for mount and dismount
- Support a Server Statement in the configuration file to configure:
  - Port for DUALDAS
  - Retry for dismount
  - Timeout for mount and dismount
  - Timeout for insert and eject

It is possible to configure a serverstatement in the following syntax in the DAS configuration file:

server	dualdas_port = port number, retry_keep = retry number, timeout_move = timeout value, timeout_ei = timeout value

Parameter	**Value**
dualdas_port	port number (5000)
retry_keep	retry number (xx .. yy)
timeout_move	timeout move (xx .. yy) in seconds for mounts and dismounts
timeout_ie	timeout move (xx .. yy) in seconds for insert or eject requests

For each change of timeout, also set the timeout in the environment variable at the aci to the same value.

timeout_move	ACI_TIMEOUT_MOVE environment variable
timeout_ei	ACI_TIMEOUT_EI environment variable

- If error AMU_ERR_MEDIATYPEMISMATCH comes up the eject returns ENOMATCH
- If error AMU_ERR_MEDIATYPEMISMATCH comes up the insert returns ENOMATCH
- Additional return values:

ESWITCHINPROGRESS	A request was issued during a switch
EHICAPINUSE	A request was issued during a HICAP request
ENOPOOL	The specified cleanpool doesn't exist
EAREAFULL	The eject area is full (eject cleantapes)
ENODOUBLESIDE	The volser does not have two sides
EEXUP	The drive is *EXUP* for another client
EPROBDEV	The robot has a problem with handling the device
ECOORDINATE	One or more coordinates are wrong
EAREAEMPTY	Area that is to be ejected is already empty.
EBARCODE	Barcode read error.

EUPDOWN	Client tried to allocate volsers that are already allocated.
EDATABASE	There was an error during reading and writing of the database.
ENOROBOT	The robot is not configured.
EINVALIDDEV	The device is invalid.

DAS 3.01.2 Fixpack

The following improvements have been made to DAS version 3.01:

- Improved error mapping between AMU and DAS. See Table 1-4.

Table 1-4 Error Mapping

Error Code	Define Statement	d_error
1331	AMU_INF_DUAL_DUMMY_1331	EAMUCOMM
1332	AMU_INF_DUAL_DUMMT_1332	ESWITCHINPROG

- Improved logging regarding DUAL DAS and DUAL AMU
- Improved logging regarding scratch handling
- Support of two additional notifications from AMU
  - **NTFY1336**: Switching ADS failed
    DAS starts roll back and does not continue the switch process
  - **NTFY1337**: Device (robot, tower) not ready, but switching succeeded
    DAS continues the switch process

Generic DAS Server Changes

During startup, an error is reported if the environment HOSTNAME environment variable is not defined on OS/2.

Generic ACI Changes

None

Addressed Problem Logs

None

Addressed Change Requests

None

Problems Fixed in Version 3.01

Special characters in the hostname **pr 3825**

ENOMATCH error is returned instead of Error ENOVOLUME error when the media type is wrong in the **view** command **pr 3827**

Known Problems

None