Adaptec - снимаем информацию с RAID-контролера

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В одном из обслуживаемых серверов, согласно выводу **dmesg**, установлен **RAID**-контроллер **Adaptec**, который **FreeBSD** распознала как **aac0**. Выборка из **dmesg**:

```
# cat /var/run/dmesg.boot | grep RAID
 aac0: Adaptec RAID controller, aac driver 2.1.9-1
aacd0: <RAID 1 (Mirror)> on aac0
```

Для работы с этим контроллером воспользуемся возможностями утилиты **arcconf**. **Arcconf** - утилита для работы с контроллерами **RAID** из командной строки. С ее помощью можно получить детальную информацию о контроллере и созданных массивах.

Установку, как всегда, выполним из системы портов:

```
# cd /usr/ports/sysutils/arcconf && make install clean && rehash
```

Размер дистрибутива "порадовал" - 99 MB. Хорошо, что сервер отдавал дистрибутив на скорости около 20 Mbps. А установка вообще заняла несколько строк. Собственно:

```
# cd /usr/ports/sysutils/arcconf && make install clean && rehash
 => asm_freebsd_x86_v7_30_18837.tgz doesn't seem to exist in /usr/ports/distfiles/.
=> Attempting to fetch
http://download.adaptec.com/raid/storage_manager/asm_freebsd_x86_v7_30_1... [1]
asm_freebsd_x86_v7_30_18837.tgz          100% of   99 MB 2641 kBps 00m00s
===> Extracting for arcconf-v7.30.18837
=> SHA256 Checksum OK for asm_freebsd_x86_v7_30_18837.tgz.
===> Patching for arcconf-v7.30.18837
===> Configuring for arcconf-v7.30.18837
===> Installing for arcconf-v7.30.18837
===>  Generating temporary packing list
===> Checking if sysutils/arcconf already installed
install  -s -o root -g wheel -m 555 /usr/ports/sysutils/arcconf/work/freebsd8/cmdline/arcconf
/usr/local/sbin
install  -o root -g wheel -m 555 /usr/ports/sysutils/arcconf/work/410.status-aac-raid
/usr/local/etc/periodic/daily
===>  Registering installation for arcconf-v7.30.18837
===> Cleaning for arcconf-v7.30.18837
```

После установки утилиты ознакомимся с ее возможностями. Для вывода "хелпа" запустим утилиту без указания ключей:

```
# arcconf
```

```
    | UCLI |  Adaptec by PMC uniform command line interface | UCLI |  Version 7.30 (B
18837) | UCLI |  (C) Adaptec by PMC 2003-2011 | UCLI |  All Rights Reserved

 ATAPASSWORD              | Setting password on a physical drive COPYBACK
    | toggles controller copy back mode CREATE              | creates a logical
device DATASCRUB          | toggles the controller background consistency check
 mode DELETE              | deletes one or more logical devices FAILOVER
      | toggles the controller automatic failover mode GETCONFIG          | p
rints controller information GETLOGS          | gets controller log informati
on GETSMARTSTATS          | gets the SMART statistics GETSTATUS          | dis
plays the status of running tasks GETVERSION          | prints version informati
on for all controllers IDENTIFY          | blinks LEDS on device(s) connected
to a controller IMAGEUPDATE          | update physical device firmware KEY
          | installs a Feature Key onto a controller MODIFY          | p
erforms RAID Level Migration or Online Capacity Expansion RESCAN          |
checks for new or removed drives RESETSTATISTICSCOUNTERS | resets the controller sta
tistics counters ROMUPDATE          | updates controller firmware SAVESUPPORTAR
CHIVE    | saves the support archive SETALARM          | controls the contro
ller alarm, if present SETCACHE          | adjusts physical or logical device
cache mode SETCONFIG          | restores the default configuration SETMAXCACHE
          | adjusts MaxCache settings for physical or logical device SETNAME
          | renames a logical device given its logical device number SETNCQ
          | toggles the controller NCQ status SETPERFORM          | changes adap
ter settings based on application SETPOWER          | power settings for contr
oller or logical device SETPRIORITY          | changes specific or global task pr
iority SETSTATE          | manually sets the state of a physical or logical de
vice SETSTATSDATACOLLECTION  | toggles the controller statistics data collection mod
es TASK          | performs a task such as build/verify on a physical or l
ogical device
```

Проверим состояние массива (он у меня под номером 1):

```
# arcconf GETCONFIG 1


Controllers found: 1----------------------------------------------------------
------Controller information--------------------------------------------------
-------------   Controller Status              : Optimal   Channel descri
ption              : SCSI   Controller Model              : PERC
3/Di   Controller Serial Number          : 202020D3   Installed memory
          : 128 MB   Copyback              : Disabled   B
ackground consistency check          : Disabled   Automatic Failover
      : Enabled   Stayawake period              : Disabled   Spinup l
imit internal drives          : 0   Spinup limit external drives          : 0
  Defunct disk drive count          : 0   Logical devices/Failed/Degraded
    : 1/0/1   ---------------------------------------------------   Controlle
r Version Information  -------------------------------------------------   B
IOS              : 2.8-0 (6095)   Firmware
      : 2.8-0 (6095)   Driver              : 2.1-9 (1)
  Boot Flash              : 0.0-0 (0)   -------------------------
-------------------------- Controller Battery Information  -----------------
-------------------------------------- Status              : O
ptimal   Over temperature              : No   Capacity remaining
      : 0 percent   Time remaining (at current draw)          : 0 days, 0 hou
rs, 0 minutes


--------------------------------------------------------------------Logical device
 information---------------------------------------------------------------Lo
gical device number 0   Logical device name              : centr   RAID leve
l              : 1   Status of logical device              : Deg
```

```
raded   Size                                           : 69998 MB   Write-cache mode
                         : Not supported   Partitioned                          : Yes
    Protected by Hot-Spare                      : No   Bootable
         : Yes   Failed stripes                           : No   Power settings
                    : Disabled   -------------------------------------------------
-----   Logical device segment information   ------------------------------------
----------------   Segment 0                              : Missing   Segment 1
                         : Present (Controller:1,Channel:0,Device:2) 3HW1MXFH

----------------------------------------------------------------Physical Devic
e information-----------------------------------------------------------------
   Channel #0:      Transfer Speed                     : Ultra160      Initiator a
t SCSI ID 7      Device #0          Device is a Hard drive         State
          : Ready         Supported                            : Yes        Tr
ansfer Speed                     : Ultra160         Reported Channel,Device(T:L)
    : 0,0(0:0)         Vendor                            : IBM-ESXS        Model
                    : MAS3735NC      FN        Firmware
      : C901         Serial number                      : 05000G1K         Size
                    : 70006 MB         Write Cache                       : Unk
nown         FRU                                 : 32P0737         S.M.A.R.T.
              : No         S.M.A.R.T. warnings                 : 0         Device #2
        Device is a Hard drive          State                          : Online
       Supported                          : Yes         Transfer Speed
        : Ultra160         Reported Channel,Device(T:L)         : 0,2(2:0)         Vend
or                         : SEAGATE          Model
: ST373453LC         Firmware                          : DX10         Serial number
                    : 3HW00XFH         Size                          : 70007
MB         Write Cache                       : Unknown         FRU
              : None         S.M.A.R.T.                          : No         S.M.A.
R.T. warnings                    : 0         Device #6          Device is an Enclosure
    Type                          : SAF-TE         Vendor
     : PE/PV         Model                               : 1x5 SCSI BP         Firmw
are                         : 1.1         Status of Enclosure         Temperatu
re status                    : Normal   Channel #1:      Transfer Speed
     : Ultra160         Initiator at SCSI ID 7        No physical drives attached

Command completed successfully.
```

Как оказалось, один из дисков "вылетел" из массива. Скорей всего кто-то выдернул диск на работающей системе, тоесть "вгорячую". Необходимо пересобирать массив, но это уже тема для отдельной статьи ;)

Источник (получено *2026-05-16 17:59*):
http://muff.kiev.ua/content/adaptec-snimaem-informatsiyu-s-raid-kontrolera

Ссылки:
[1] http://download.adaptec.com/raid/storage_manager/asm_freebsd_x86_v7_30_18837.tgz