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 *2026-11-15 17:54*):
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