GSI Site Report
- HEPIX 2007 DESY Hamburg

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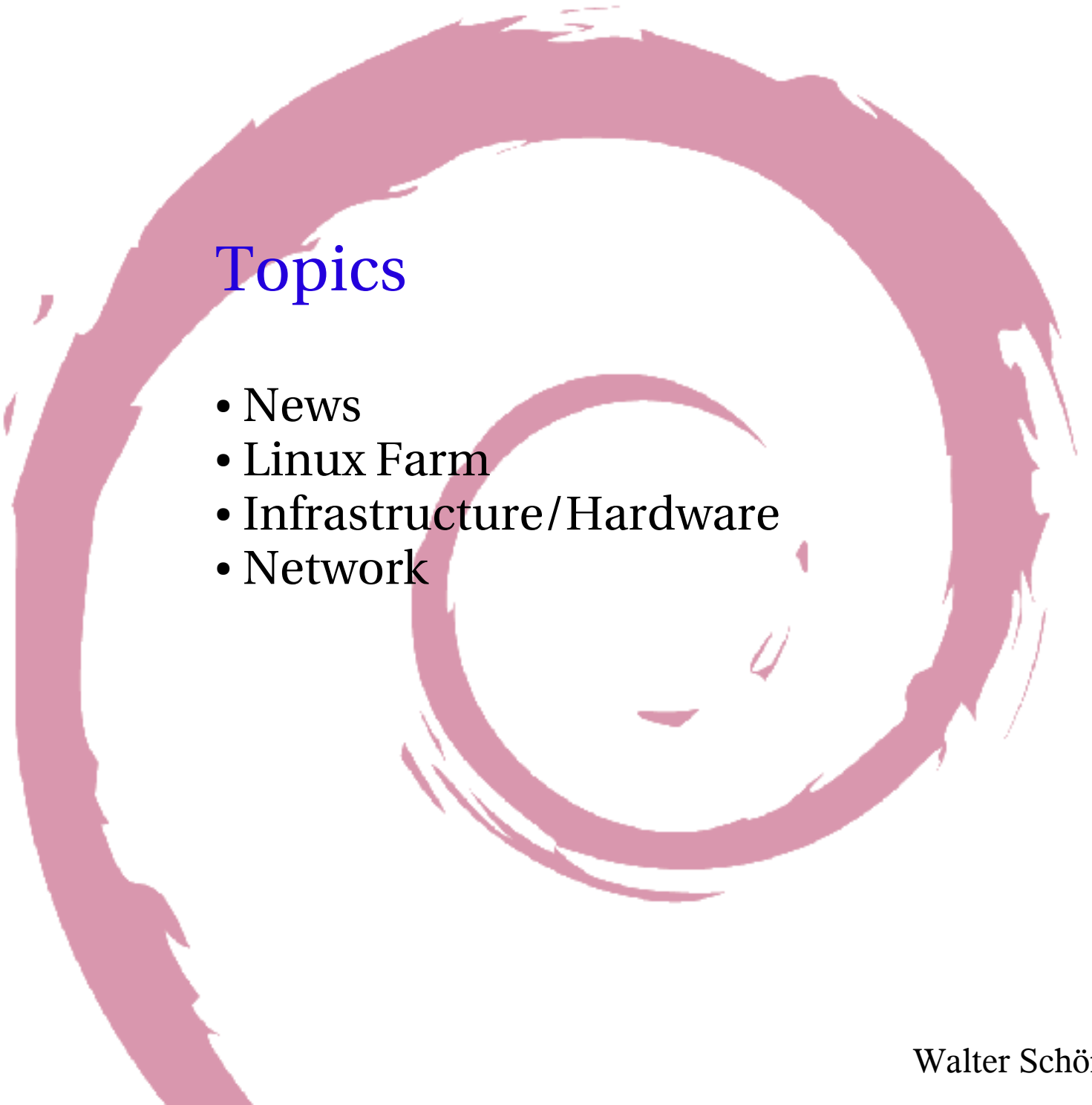

Topics

- News
- Linux Farm
- Infrastructure/Hardware
- Network

News

Sender Policy Framework

- Recommendation for HEPIX institutes: SPF
 => GSI uses SPF values (included in spamassassin tests)
and
 => GSI set DNS entries (neutral mode)

Ticket Request System

- Open Ticket Request System (OTRS) tested by the IT Division
- Ready for “roll out” to whole GSI

Power down of the whole IT for two days ....

- Unfallverhütungsvorschrift BGV A3

Linux Farm

System

- “Standard“ system is Debian/Sarge
  (Grid worker -nodes, Batch-Farm, Desktop boxes .....
- Few Debian/Woddy boxes online (Experiments ..... ;-( )
- Debian/Etch in “testing” status – few boxes in production
  (Experiments ..... :-)) deployment of “Etch” autum 2007

Hardware

- Desktop: Move to DELL boxes with Core Duo CPU
  => join HGF contract (“Rahmenvertrag”) with DELL
  Linux + Windows
- Server: Evaluation in progress .....

IT, electrical equipment and .....the LAW/Insurance

Unfallverhütungsvorschrift

Elektrische Anlage und Betriebsmittel

vom 1. April 1979
in der Fassung vom 1. Januar 1997

Aktualisierte Fassung Januar 2005

4 01/05

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IT, electrical equipment and .....the LAW II

- power down for the whole IT Division
  (this is the easy part :-))
- restart after two days .....
  - with the usual loss of disks, power supplies, computers
  - ... and nervous users asking when the service will be in operation again ..... and how this power failure can happen at all ... :-(

Infrastrucure: Central data center is “full”: Migration of a part of the batch farm to a new location

Infrastructure

- RZ1: no more space left + thermal capacity reached
- RZ2: An additional area in a different building, some 100m distance
  - implications for remote control
  - watercooled racks (limited cooled air capacity in RZ2)
- Short term: All new “number crunchers”
- Mid term: Migration of redundant servers and libraries to enhance the capabilities in a “catastrophy” szenario e.g. burning down RZ1
- long term: A new building with sufficient space is necessary

Infrastructure

Control of remote computers

- power on/off
  - up to now : IPMI modules for HA systems
  - future: IPMI modules for the whole farm
- KVM switches
  - up to now: KVM switches + cyclades KVM over LAN
  - future: Service modules for all boxes
- testing: Service modules with IPMI + KVM over LAN
  - disadvantages: Not yet discovered
  - advantages:
    - good integration to hardware, lots of information
    - web interface + command line interface, snmp, firewall
    - “cheap”

1 HU, 16 cores, 32 GB RAM, service module, 4 HotSwap SATA disks, 8k Euro

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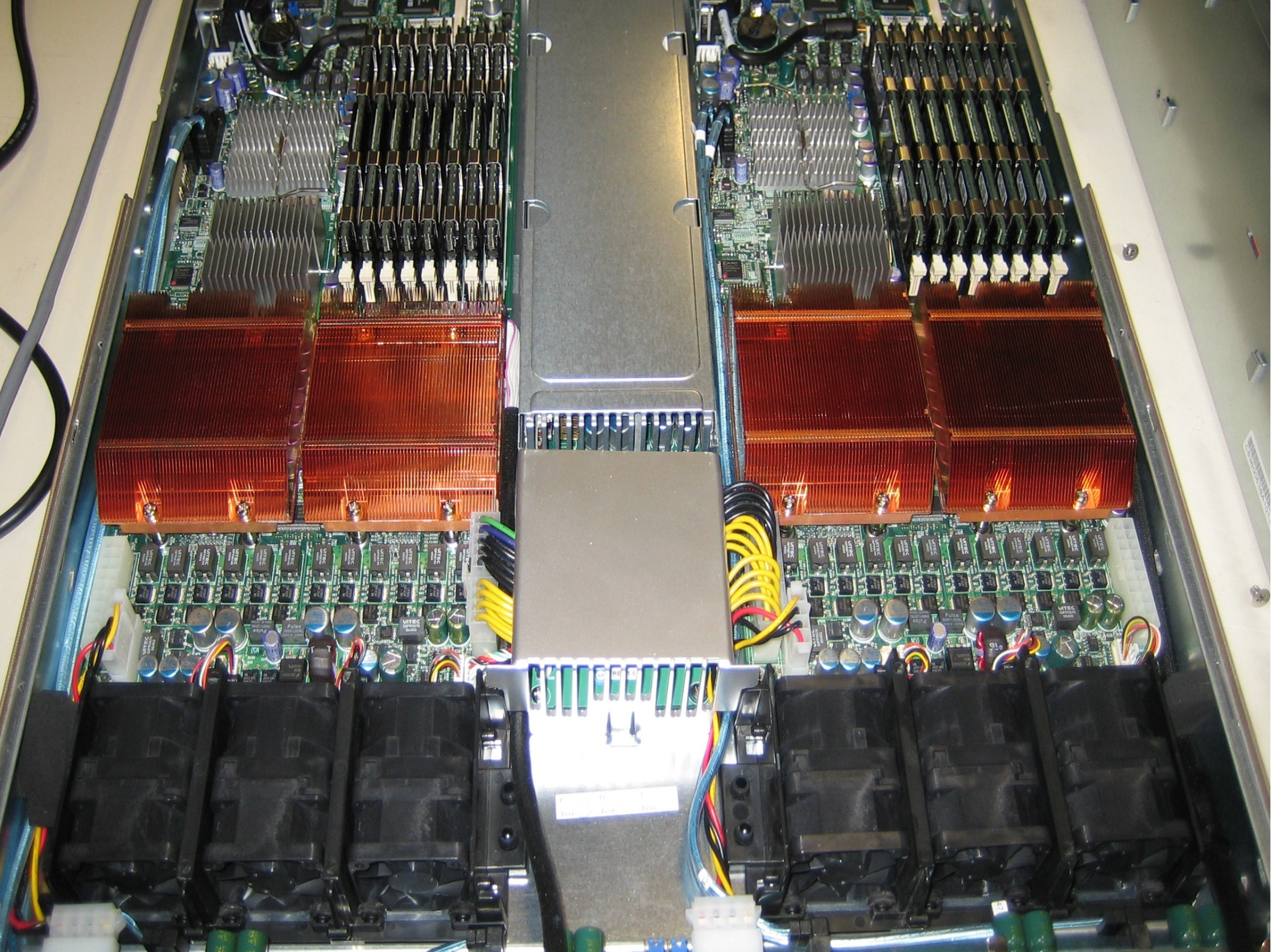
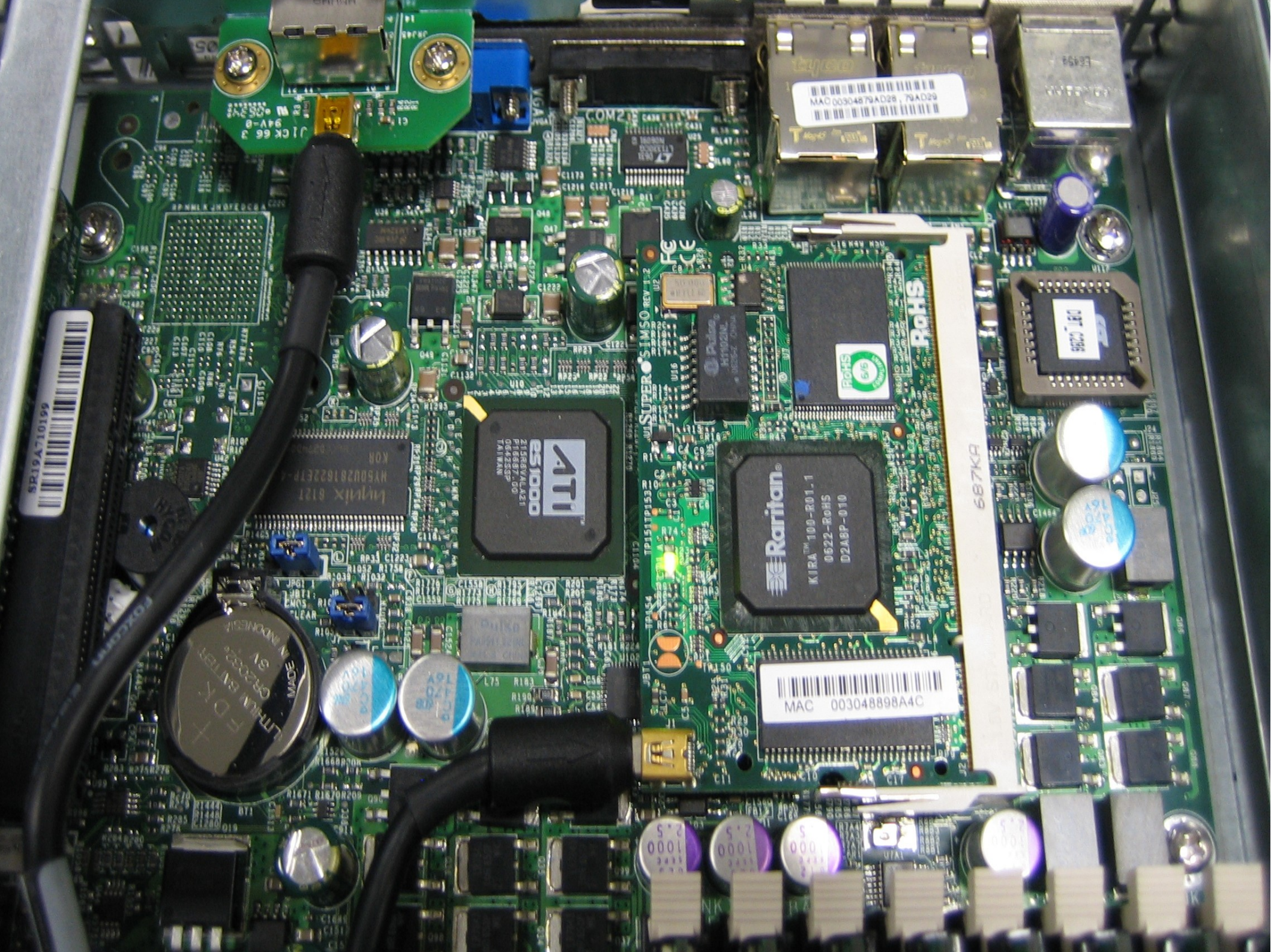



COM2
VGA
ATI
ES1000
Raritan
KIRA 100-R01-1
0622-ROHS
D2A8P-010
SUPERMICRO
RoHS
MAC 003048898A4C
MAC 003048798AD28 , 79AD29

Home - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

https://sm-lxi016/home.asp

Go

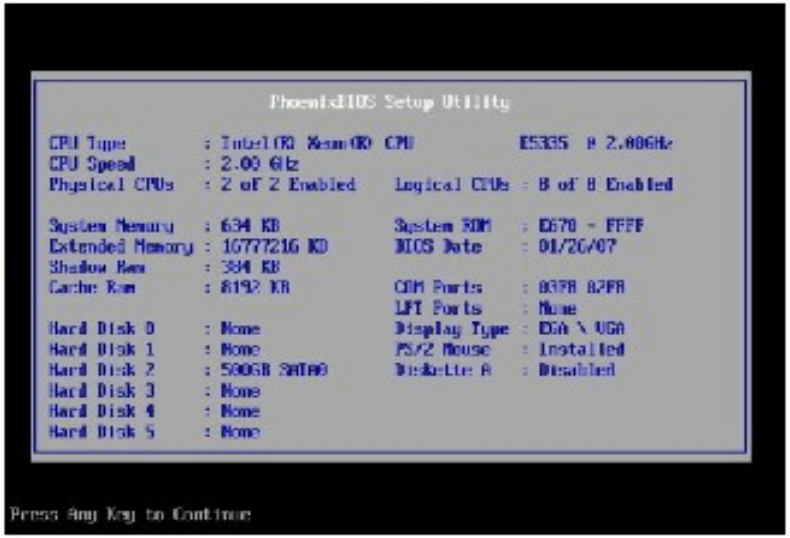
Home Console Logout

Remote Console connected!

- Remote Control
- Virtual Media
- System Health
- User Management
- KVM Settings
- Device Settings
- Maintenance

Remote Console Preview

Click to open



Desktop size: 1024 x 768

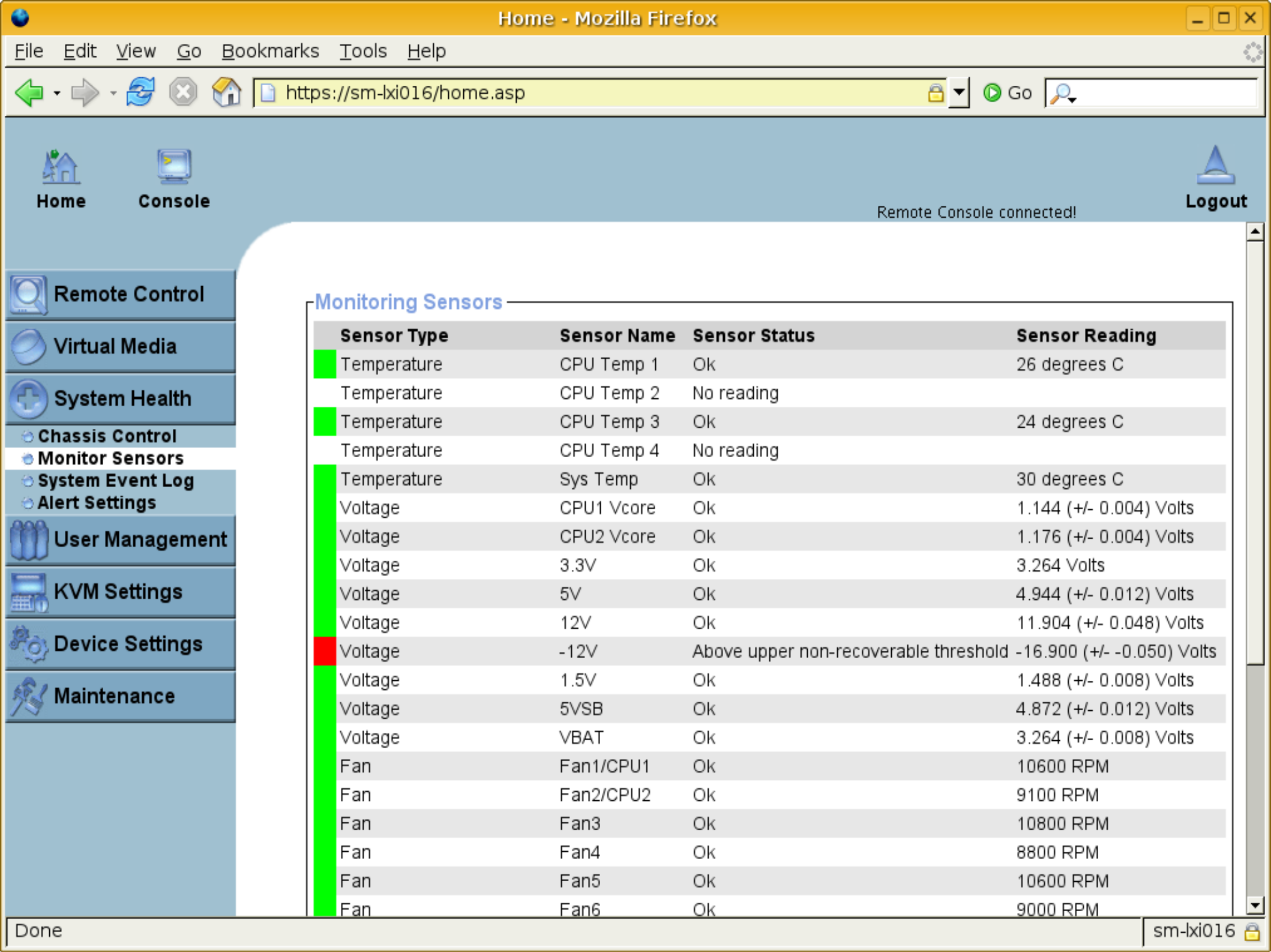
Refresh

Power Control via IPMI

Power On Power Down Reset

Done

sm-lxi016


Home - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
https://sm-lxi016/home.asp
Go
Home
Console
Logout
Remote Console connected!
Remote Control
Virtual Media
System Health
Chassis Control
Monitor Sensors
System Event Log
Alert Settings
User Management
KVM Settings
Device Settings
Maintenance
Monitoring Sensors
Sensor Type | Sensor Name | Sensor Status | Sensor Reading
Temperature | CPU Temp 1 | Ok | 26 degrees C
Temperature | CPU Temp 2 | No reading |
Temperature | CPU Temp 3 | Ok | 24 degrees C
Temperature | CPU Temp 4 | No reading |
Temperature | Sys Temp | Ok | 30 degrees C
Voltage | CPU1 Vcore | Ok | 1.144 (+/- 0.004) Volts
Voltage | CPU2 Vcore | Ok | 1.176 (+/- 0.004) Volts
Voltage | 3.3V | Ok | 3.264 Volts
Voltage | 5V | Ok | 4.944 (+/- 0.012) Volts
Voltage | 12V | Ok | 11.904 (+/- 0.048) Volts
Voltage | -12V | Above upper non-recoverable threshold | -16.900 (+/- -0.050) Volts
Voltage | 1.5V | Ok | 1.488 (+/- 0.008) Volts
Voltage | 5VSB | Ok | 4.872 (+/- 0.012) Volts
Voltage | VBAT | Ok | 3.264 (+/- 0.008) Volts
Fan | Fan1/CPU1 | Ok | 10600 RPM
Fan | Fan2/CPU2 | Ok | 9100 RPM
Fan | Fan3 | Ok | 10800 RPM
Fan | Fan4 | Ok | 8800 RPM
Fan | Fan5 | Ok | 10600 RPM
Fan | Fan6 | Ok | 9000 RPM
Done
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Network

- "bad luck" with our Foundry MG8 switch:
- ordered 2005 as new "strategical" backbone switch
- end of production 2006, no more card available

=> "trade in" with Foundry to exchange MG8 by new Generation RX16 ("100 Gbit ready")

- redundant switch canceled because of budget reasons

- solved: "communication" problems with "nightmare quality" (HEPIX @ JLAB) : *maybe communication between Avaya and Foundry switch?*

=> incompatible Spanning Tree communication
"solved" by building two separated spanning Tree areas
=> long term: exchange of old Avaya switches by Foundry