



Highly efficient monitoring of critical IT systems

"It is crucial for us that the CapMon monitoring system is developed by a Danish company, who could ensure that the implementation and various adjustments for your specific monitoring needs would be carried out in a close personal dialogue. CapMon has given us a stable and secure IT-infrastructure with increased uptimes", says Claus Bugge, IT specialist with Aarhus Universitetshospital in Skejby.

"We have chosen CapMon as the best tool to monitor all the many critical hardware and software devices that we have here at Aarhus University Hospital, and it has given us increased reliability, so we now have fewer operating problems and fewer alarms than before" So says Claus Bugge, who works as an IT specialist in the large central IT department at Aarhus Universitetshospital Skejby, and is co-responsible for the monitoring and operations of servers and central IT systems in the hospital.

Claus Bugge was a member of the task force back in 2009, who thoroughly investigated on various monitoring tools and finally decided on implementing CapMon as the hospital's new, central monitoring tool in replacement of the existing inadequate and confusing system monitoring tool.

During the first three months CapMon was set up to handle the hospital's most critical IT-infrastructure, including hardware, software, and network. Today, all business critical servers, IT systems, and a network with 150 switches and 8000 ports are monitored by CapMon. Among the various monitoring tasks are:

- Surveillance of operational load on all critical servers, applications, and network units.
- 24/7 status reporting to servicedesk on operational situation of all IT systems that they support.
- Graphical display with status on all units (green, yellow, red - acc. to status).
- Passing on alerts to the relevant people responsible for taking action on the incidents in the right order.
- Proactive detection of errors that could affect the future operation.
- Ongoing collect operating statistics on servers and network and selectively presenting these data with CapMon's Alert View module.
- Statistics data is also used to demonstrate the operational quality delivered to the various units and agreed on in a number of service agreements (SLAs).
- Monitoring of all access points in the hospital's wireless network.
- Monitoring of vital critical medical equipment at the OR's.

All units are prioritized

When implementing CapMon all IT systems and servers at the hospital were given a priority from 1 to 5 depending on business criticality, i.e. priority 1 is the highest priority (operations and 24/7/365 monitoring). Priority 5 is the lowest priority. IT systems and servers below that because of their low importance have not been set up in CapMon.

Claus Bugge explains this in a few words: "We have carried through a detailed and thorough systematic prioritizing of both surveillance and alert categorising. I.e. incidents on priority 1 units trigger emergency alarm but not on priority 5 units. It is vital that we prioritize very precisely, as typically, you do not have the resources to monitor everything. The CapMon consultants have assisted in anchoring our priority systems, and defining alarm workflows etc. in the IT organisation."

>>

cap:mon
THE MONITORING COMPANY



Claus Bugge therefore describes the main benefits with CapMon monitoring as follows: "We now have a more secure and stable operation with even higher uptime than we had before, and if operational problems occur, we often discover them so quickly that we can manage to solve them before users are affected by them. It may be a disc that is running full, or a CPU-unit that is about to reach its maximum performance. "

Another benefit that Claus Bugge mentions is that employees in the IT service desk who support several thousands of IT users now have a far better overview of consequences caused by any IT problems, as well as who will be affected by them.

Danish supplier - a benefit

CapMon was clearly the best solution and it was first selected after a thorough process, emphasizes Claus Bugge:

"We had made a requirements specification, and compared several monitoring programs, and CapMon lived very well up to the requirements both seen from a functional and an economic perspective.

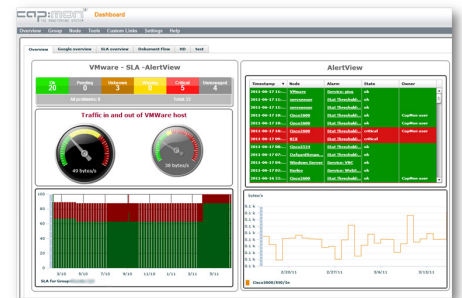
Another important benefit was that it came from a Danish provider who could ensure that implementation and any modifications to special needs were made in a close and personal dialogue. Such tasks can often be a challenge with major foreign suppliers. "

Finally, the possibilities of monitoring a broad spectre of IT equipment were important.

Aarhus Universitetshospital has signed a support- and maintenance agreement with CapMon to ensure continuous contact, fast troubleshooting and support.

About Aarhus Universitetshospital

Aarhus Universitetshospital Skejby is one of the largest hospitals in Denmark, employing approx. 3500 people. The huge IT-installation comprises more than 300 different application programmes in a network with 150 Cisco switches and a total of 8000 ports.



Monitor the IT infrastructure

CapMon monitors and collects information from infrastructure and applications and do not require installation of extra software on other units in the network.

The system uses certain functionalities from the Open Source product Nagios, a.o. for server and network monitoring purposes.

Control of CapMon is performed via a web based user interface ensuring quick and easy access to