

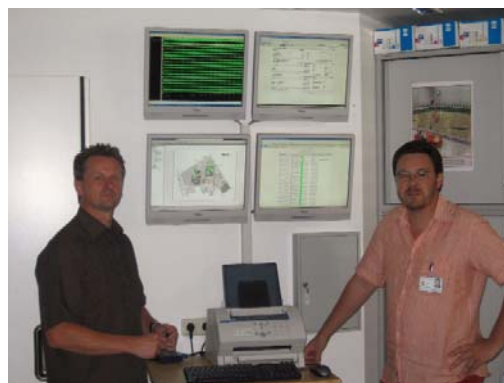
# VIRTUAL EMPLOYEE SUPPORTS IT TEAM AT LINZ GENERAL HOSPITAL (AKH LINZ)

## Case study

**Company:** Allgemeines Krankenhaus Linz GmbH (Linz General Hospital, Ltd), employs around 2,300 staff members, 1,000 beds, and 55,000 inpatient admissions each year.

**Business Challenge:** Monitoring network components and physical parameters.

**The Outcome:** Installation of WhatsUp Gold, gradual integration of the corresponding medical segments' network components, and integration of the physical parameters for the server rooms.



Providing high-quality service is a huge challenge for a small team such as the IT team at Linz General Hospital (Allgemeines Krankenhaus Linz/AKH Linz). From the very beginning, it has had to ensure the availability of the network infrastructure with only rudimentary IT support. Up until now, the physical monitoring of the server rooms was done manually. However, Ipswitch's WhatsUp network monitoring has provided Linz with a helping hand.

At the beginning of 2006, Linz General Hospital (Allgemeines Krankenhaus Linz) – which treats around 55,000 inpatients and some five million outpatients each year– was spun off from the municipal administration and is now a wholly owned subsidiary of the city. Now, the 2,300 employees of the newly established limited liability corporation must strive for economic efficiency while increasing the quality of the services they provide. This requirement also applies to the 1,000-bed hospital's medical IT team. In order to be in a better position to ensure the availability of the network infrastructure and to facilitate faster monitoring of the distributed server rooms, Linz General Hospital decided to invest in Ipswitch's award-winning network monitoring tool WhatsUp Gold. Since the summer of 2006, WhatsUp has been supporting the ongoing operations of the medical facilities and devices, as well as doing an unpredicted job of monitoring the physical parameters of the server rooms spread throughout the hospital.

Already feeling it was at capacity, the team of five in the IT department of Linz General Hospital's data processing department, used to have to carry out on-the-spot monitoring of the power supply and temperature in the server rooms, "In practice, this meant we spent hours poring over log files," says Linz General Hospital Medical IT Department Head Andreas Stiglbauer. "Work that was not only time-consuming, but also potentially critical. Because, in a hospital, more devices than you might want to imagine are dependent on network availability. Magnetic resonance imaging systems, computer tomography, laboratory systems, angiography equipment and X-ray equipment all are equipped with computer systems. They are all part of the network infrastructure. In addition, the numerous medical facilities and devices that have to be monitored are spread all over the hospital."

### Simple and fast

A solution was needed. One that could be implemented quickly, would be cost-effective and would offer the option of expanding the installation easily. At the beginning of 2006, the team headed by Andreas Stiglbauer awarded a contract to Lenz IT & NetWorking Solutions – a long-standing systems and network integrator for the Medical IT Department at Linz General Hospital – to test various products and to come up with a solution. They quickly outlined the required specifications for a software package that could support the IT team: the Medical IT Department needed an easy-to-operate solution offering network mapping and monitoring, error reporting and performance monitoring. It didn't take Lenz IT long to find a suitable solution: "We had already successfully

10 Maguire Road  
Lexington, MA 02421  
(781) 676-5700

Zekeringstraat 17  
1014 BM Amsterdam  
The Netherlands

Minami-Azabu  
T&F Building 8th Flr.  
4-11-22 Minami-Azabu  
Minato-ku, Tokyo 106-0047  
03-6826-5720

installed Ipswitch's WhatsUp in other projects," explains Werner Lenz, the Managing Director of the eponymous IT service provider.

According to Werner Lenz, a major reason for using WhatsUp was its mapping capabilities, ranging from a general overview to a detailed representation of individual components, using the "drill down" feature. The subsystems to be monitored are distributed throughout the entire hospital. WhatsUp gave employees in the "Operating" area the ability to quickly evaluate and pinpoint malfunctions and to consolidate the different, smaller monitoring tools being used into one centralized solution. "The basic edition of WhatsUp has relatively low license fees and offers a wide array of pre-defined testing options that use standard tools to cover most needs," says Lenz, explaining his confidence in the product.

"WhatsUp was the first and only choice and provided an immediate fit."

#### **Gradual implementation**

Before installing the solution, the IT team worked through a design and structuring phase to determine which parameters should be used to monitor which systems. The IT team also defined the relevant warning chains and discussed graphical processing of the data. This step of the project involved taking an inventory of the systems and defining the mapping as well as the physical and logical views. Following this design work, which took less than two weeks, Stiglbauer and his team found they could define the monitoring scenarios for all the hardware and software components in use in under a week.

Werner Lenz and the Medical IT Department were able to merge the first hospital departments during the summer of 2006, and have been continually integrating system components from new 'medical segments.' "The installation is a dynamic project and you could say that WhatsUp is growing along with it," explains Lenz.

#### **Server rooms physically monitored**

In addition to WhatsUp monitoring the main computer systems and network components, a well-thought-out warning system has been set up.: "Depending on the type of event, WhatsUp informs the appropriate Medical IT Department employees. Less critical events are reported by secure email – or, in the event of emergencies, quickly via SMS," explains Lenz.

To accomplish this, the IT team uses WhatsUp's reporting functions. "The Medical IT Department compiles regular reports indicating what events occurred involving which monitoring components," explains Stiglbauer. An overview page then provides a quick look at the current system status. "This report makes it possible to be proactive, instead of reactive," says the Department Head. In the future, it will be possible to pre-emptively fix errors in specific systems and network components beforehand."

The fact that Linz General Hospital is also deploying WhatsUp to handle physical monitoring demonstrates that it knows how to take advantage of the software's capabilities: "With WhatsUp's help, we can measure fluctuations in the power supply and temperature in server rooms that are spread all over the hospital," explains Stiglbauer. "Since it creates a record of anyone entering a room, we can even use it to control access – WhatsUp is like a virtual employee, assisting us wherever possible."

#### **Accomplishing a lot for little money**

Ipswitch's WhatsUp runs on a Hewlett Packard Proliant series server, using Windows Server 2003 Enterprise as the operating system. According to Lenz, the system and its implementation cost around 16,000 Euros. Of this, only 50 percent was for WhatsUp, the Service Agreement, server hardware and the operating system and two client workstations.

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Andreas Stiglbauer  
Medical IT Department Head  
Linz General Hospital

10 Maguire Road  
Lexington, MA 02421  
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The Netherlands

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