



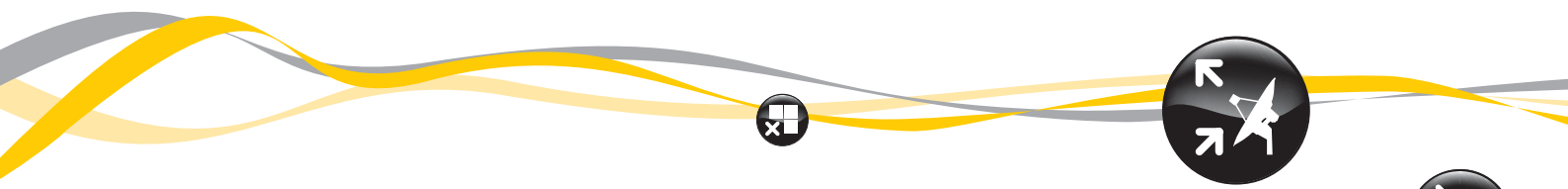
Case Study

Clever Cost therapy from IGEL
improves health of hospital IT.

Continuous modernization of server-based computing architecture ensures lasting cost savings for the Munich Schwabing Hospital, Germany.

Business Solutions from
IGEL Technology





Strategic transformation of IT.

Munich Schwabing Hospital is the largest hospital in the Bavarian capital. The unique atmosphere of the academic teaching hospital with 26 divisions and over 1,200 beds combines the traditional with the modern, offering patients the best possible care enabled, in part, by the latest thin client technology from IGEL.

The theme of continuous modernization is reflected in the management of the IT department, which was seeking to operate more efficiently and more cost-effectively. The computing center, converted to a server-based computing architecture in 2001, has been continually expanding. Old workplace PCs have been functioning as terminals in order to avoid additional costs, while high maintenance PC parts, such as drives, were removed from most of the units. The units boot up an image from the terminal server using PXES software and now run as legacy clients. For the SAP R/3 front end, which functioned as a centrally available solution, the converted PCs had been sufficient. Since 2003, however, the hospital has also made office applications available to its employees via server-based computing. In order to satisfy increasing demands, the hospital is gradually migrating to upgraded thin clients from IGEL.

Kosmas Schütz, director of service center information systems at Schwabing, notes that thin clients are currently available to 20 percent of the hospital's end users, and the impact is already being felt.

The customer

- Largest hospital in Munich
- 1200-bed hospital
- 600 employees using the thin client network

The challenge

- Replace a PC-based client-server structure with 19 central terminal servers using Citrix Metaframe XPe
- Digitalize radiology
- Integrate various transmission methods to link remote hospital units

"The approximately 250 units, comprised of IGEL-416 Winestra and IGEL-332 LX Compact products are significantly less problematic, more dependable and more cost effective than earlier PCs. This is attributable to a simple and robust construction, fewer components and server-based computing."

Thin clients simply exchange display and routing data with central servers, dramatically reducing the need for computational power. The result is lower energy consumption and higher reliability. "In contrast to the private sector, we essentially have longer investment cycles in the public domain," says Schütz. "The terminal lifespan of six to eight years is critical to the implementation of the IT strategy." Furthermore, thin clients thwart the installation of unauthorized applications, leading to malfunctions or viruses that can compromise network security. If a thin client malfunctions, the IT team can easily replace the smaller, lower-priced unit on the spot. The affected workplace is immediately ready for operation again. "This way we can concentrate on our core duties and main mission: treating patients, not repairing defective hardware."

Support and price/performance are key

"Choosing IGEL and its thin clients is based partially on recommendations from other hospitals, but mainly on my own due diligence," notes Schütz. "I was convinced primarily by the successful blending of product and service with good price-performance." This contrasts Schütz's dissatisfaction with units initially acquired from an IGEL competitor. Today, these thin clients run with an internal IGEL PROM (Programmable Read Only Memory). The memory chip, uniquely programmed for Schwabing, provides performance we need. "IGEL also impressed us with their development know-how, which made it possible for us to continue to operate the existing thin clients with new efficiency and productivity."



Some hospital areas still use PCs – most notably where special local applications have unique hardware requirements, where there are only a few users, or in places that cannot be connected to terminal servers. “When our migration is complete, only about 20 percent of our workplace will be equipped with PCs,” estimates Schütz.

Supporting branch-specific applications creates a further argument for IGEL. For example, the hospital uses Cherry keyboards with integrated chip card interfaces for reading health insurance cards.

Flexible printer support was also a great advantage in the choice of IGEL. Thanks to integrated print servers, networked printers can be enabled directly via USB or a parallel port. In addition, Schwabing uses the integrated ThinPrint client that optimizes bandwidth printing available through IGEL server software.

Feeling Good about Price-Performance

With a “clever” migration strategy, Schütz has ensured high levels of user acceptance for the new terminals. The thin clients are connected to a TFT monitor, making change more acceptable for employees. This change was perceived very positively based upon ergonomic advantages. According to Schütz, “99 percent of employees are not interested in what type of computer stands next to or under the monitor, as long as the same user interface appears after they turn it on, and they can work the way they are used to.”

In October 2003, hospital management confirmed the approved migration strategy with the decision to establish the IGEL thin client and TFT monitor as the new workplace standard. For Schütz, price arguments were particularly crucial. “In order to justify the replacement investments, the acquisition costs of a thin client plus Citrix licenses had to be comparable to those

of a PC. For about two years now, both cost factors are at very attractive levels. So when you consider long-term savings, there is no doubt about the new IT strategy.”

Currently, IGEL thin clients can be found in all branches of the hospital, including administration, ambulances, reception and the library. The units are also installed in the OP, where they are hygienically protected. “The protective thin client casings are smaller and technically less complex than PCs, enabling further cost savings.”

20 percent lower long-term service costs

The total migration to IGEL thin clients should be completed by 2008. Currently, about 600 employees use the server-based computer network that was built on a Citrix base. The current number of 13 application servers should be expanded in the near future to make even more applications available, and to accommodate more than 800 users. Schütz then anticipates the need for 700 to 750 thin clients for a 70 to 80 percent migration. “The initial investment of about \$500,000 USD for entrance into server-based, thin client computing paid for itself within four years. And the move was a strategic move for the future,” explained Schütz. “Including migration to IGEL thin clients, we will save up to 20 percent in service costs in the long-term.”

The solution

- 13 servers and 250 IGEL thin client models IGEL-416 Winestra and IGEL-332 LX Compact
- 20% reduction in service costs
- No time-consuming training required
- Increase in penetration to 80% using thin clients

Germany (HQ)

IGEL Technology GmbH
Schlachte 39/40
28195 Bremen
Germany
Tel +49 (0) 421 1769 240
Fax +49 (0) 421 1769 302

United Kingdom

IGEL Technology Ltd
1210 Parkview
Arlington Business Park
Theale · Reading · Berkshire
RG7 4TY · UK
Tel +44 (0) 870 351 4522
Fax +44 (0) 870 351 4523

United States

IGEL Technology Inc.
5353 NW 35th Avenue
Fort Lauderdale
FL 33309 · USA
Tel +1 954 739 9990
Fax +1 954 739 9991
Toll Free (US only): +1 877 GET
IGEL

Singapore

IGEL Technology
Care of: C. Melchers GmbH & Co.
Singapore Branch
101 · Thomson Road
24-01/05 United Square
Singapore 307591
Tel (65) 6259 9288
Fax (65) 6259 9111

Hong Kong

IGEL Technology
Care of: Melchers (H.K.) Ltd.
1210 Shun Tak Centre
West Tower
168-200 Connaught Road C.
Hong Kong
Tel +852 25469069
Fax +852 25596552

