

Server-based Computing at EPO



SBC – 'Temporary solution' develops into a strategic IT environment

CLIENT
European
Patent Office

REQUIREMENTS
Implementation
of WTS
(Windows
Terminal Server)
in OS/2
environment

Every year approximately two thousand researchers at the European Patent Office (EPO) are faced with the tremendous challenge of judging over 120,000 applications on their merits. Before a patent can be issued, however, the researchers have to run through numerous files stored in the huge EPO archives. With a growing number of applications requiring specific 32-bit Windows software, for instance in the field of bio-chemistry, the OS/2 operating system in use at EPO turned out to be outdated and more and more unfit for its purpose.

Switching from OS/2 to a Windows environment all at once was not only impossible, but would also make a number of applications completely useless. At first, EPO solved the problem itself by using Citrix technology and creating its own Windows Terminal Server system. As this solution soon turned out to be very promising the EPO decided to turn it into a robust and high-performance architecture and a request was sent to several IT companies in 1998 for proposals to set up this new WTS infrastructure. In the end, COMPAREX was awarded the assignment, with its Dutch office as main contractor and its German office as sub-contractor.

International know-how

The fact that COMPAREX had already provided EPO with a number of storage solutions was not entirely

irrelevant but certainly not decisive. Each project within EPO is submitted to the same standard decision-making process which, in the case of Server-based Computing, means that COMPAREX was just 'one of the candidates'. According to project manager P. Niles, who coordinated the entire project on behalf of EPO, it was especially the expertise of COMPAREX as leading system integrator that gave them an advantage over other competitors. "We were actually quite impressed by the 'temporary' solution COMPAREX had already implemented at a very early stage. There are not really that many companies that can deal with these very complex matters. And complex it was, with no less than 28 applications, varying from financial to biochemical, to be transformed from OS/2 to Windows and all requiring the same reliability! The fact that COMPAREX was able to manage and maintain the entire implementation all by itself, both in The Netherlands and in Germany and including the supply of hardware and software, was of vital importance, simply because the systems in Munich and Rijswijk had to be completely identical."

TCO visibly reduced

While the applications still run under OS/2, the programs appear on the familiar user interface (Windows). The COMPAREX solution consists of two identical server farms, one in Germany and another in

SUCCESS

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The Netherlands, each farm containing three servers. With two additional test servers, one for each location, a total of eight servers was delivered, as well as all relevant Microsoft and Citrix licences. Though the implementation may appear to be expensive, costing EPO nearly EUR 1 million, it saves EPO a considerable amount of money that would otherwise need to be spent on a second desktop for each user. As the WTS implementation is basically a form of Server-based Computing, it will also reduce the TCO (Total Cost of Ownership). Both software and hardware can now be administered and configured from a central point. There is no longer any need to maintain large numbers of different installations and program versions or to carry out the time-consuming administration work locally. This enables savings to be made on support, maintenance and licences. In addition, the new system is extremely fast and much more efficient than before, thanks to caching and load balancing.

SERVER-BASED COMPUTING

Server-based Computing involves the centralised installation and administration of operating systems and application software on central servers. All applications run on the servers. The clients linked to these servers provide only the screen information and transfer user inputs. As a result, SBC leads to more efficient management and control. Thanks to SBC, applications can also be deployed and made accessible to users much faster and more efficiently. In addition, it not only allows the use of thin clients instead of regular desktop units, but also allows older PCs to remain in use much longer, thus reducing the investment costs of a company's ICT infrastructure and its Total Cost of Ownership (TCO). Finally, SBC provides a multi-platform desktop which can be used to run all kinds of application, regardless of whether these are Windows, UNIX, Java or state-of-the-art web-based applications.

EUROPEAN PATENT OFFICE (EPO)

Both private individuals and companies in Europe can turn to their respective national patent offices to register and protect their inventions. To qualify for protection, these inventions need to be new, innovative and fit for industrial production. To protect a concept or product throughout all European countries, applications must be submitted to the European Patent Office (EPO). In addition to its Munich headquarters, EPO has several offices in a number of European countries. With approximately 2,500 employees from 20 different countries, the Dutch office in Rijswijk (near The Hague) is undoubtedly one of the largest. In addition, EPO has smaller offices in Vienna (80 employees) and Berlin (150 employees) which are connected to Munich and Rijswijk by a WAN (Wide Area Network). In order to adequately judge all 140,000 applications that are filed each year, the 2,500 research workers at EPO have access to an extensive archive containing no less than thirty million patent files, divided into 120,000 categories, which it has also been possible to access through the Internet since the middle of 1998.

Commitment every step of the way

Niles is also very pleased about the cooperation during the duration of the project. "The people at COMPAREX have put a lot of effort in the WTS implementation and have proven to be very reliable.

The WTS system has been operational in The Netherlands since the end of 2000 and in Germany since March 2001, allowing a total of one hundred users at each location to work with the solution simultaneously. "What was meant as a temporary solution, has resulted in a stable and strategic IT environment. Recently, we even installed SAP GUI software, which runs smoothly too. In 2002 we will switch to Windows 2000. Several of our core applications still have to be adjusted, however, as have a number of Windows applications. In other words, we will still be working with COMPAREX for some time to come", says the Swedish project manager.

