

msg systems ag

msg systems ag is one of the 25 largest IT consulting and systems integration firms in Germany and has more than 20 years of experience in developing and implementing comprehensive application solutions. More than 1,800 employees develop both complex individual application systems based on specific client requirements as well as standard software. Within the framework of its consulting and development partnership with SAP AG, msg systems provides its clients with support during the introduction of SAP products and develops software solutions for the SAP R/3 environment.

With numerous locations in Germany, Austria, Switzerland and the USA, msg systems ensures that its clients always have the best on-location service. Centers of competence in the areas of financial services, health care, insurance and IT technology guarantee up-to-date specialist and industry know-how. msg systems has observed quality management certified under DIN EN ISO 9001 since 1996.

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When the printer is 5000 miles away ...

MTU Maintenance recentralized their IT infrastructure – the Vancouver location is connected to HQ in Hanover by a 2 MBit line – ThinPrint .print enables compression and bandwidth control for print data transmission

MTU Aero Engines GmbH is Germany's leading engine manufacturer. They develop, produce, and service civil and military engines for airplanes and helicopters as well as stationary industry gas turbines. With their daughter company – the MTU Maintenance Group – the corporation is the world's largest independent service provider in the field of maintenance for civil engines. MTU Maintenance is represented worldwide with locations in Munich, Hanover and Berlin-Brandenburg in Germany, Vancouver in Canada, Zhuhai in China, Sao Paulo in Brazil, and Kuala Lumpur in Malaysia.

Out of economic considerations, the decision was made in 2003 to reduce the number of system administrators and support staff in Vancouver from 12 to 2, and to recentralize the previously independent, decentralized IT infrastructure. To attain this, Citrix servers in Hanover/Langenhagen, Germany would provide the Canadian company with all applications.

Bandwidth control and compression enable transmission of print data across a 2 Mbit connection

The solution was planned and implemented with the ThinPrint Premium Partner, msg systems ag, one of Germany's largest IT consultancy and system integration companies. Because the Canadian subsidiary is connected by a 2 Mbit line, a bottleneck was already clear in the planning phase. Above all, the large print files created when printing documents or price quotes with embedded images would not be able to be transmitted across the fluctuating, low-bandwidth connection without seriously disrupting work for the 170 employees in the daughter company. What Citrix MetaFrame offered for printing problems did not constitute an adequate solution. Bernd Schiecke, Team Leader of the Services Department at MTU Maintenance Hanover, therefore followed the recommendation of the experts at msg systems to implement ThinPrint .print. The deciding factors were the

bandwidth control and the print data compression. "Our tests showed 60–90% less print data volume, but the connection-specific bandwidth control from ThinPrint was the deciding argument," explains Schiecke. The recentralization project with ThinPrint was implemented from July to September 2003 by msg systems and the IT experts at MTU.





Print data decompressed by SEH print server boxes

.print Server Engine Terminal Services was run on three Citrix MetaFrame XP 1.0 FR3 servers. Data rendered by the ThinPrint system is decompressed by a SEH ISD200 print appliance, which is equipped with a preconfigured, ready-to-use ThinPrint .print Client. For the purpose of redundancy, two of these Linux based print servers were deployed. "These print servers were ideal for this application scenario because of their stability, high-performance, ease to administration, and fast boot time of 5 seconds," reports Jörg Mecke, Chief

IT Systems Specialist and responsible for the msg side of project implementation. There is a positive side effect as well: the IT staff in Vancouver do not need to install clients; the project startup was pretty much plug-and-play.

In the beginning, a timeout problem with a Postscript printer arose occasionally, but after a firmware update, this issue was also resolved. After installation, no other difficulties have emerged. Bernd Schiecke states, "It was the way it should actually always be with software. We installed ThinPrint .print, and that was that." Jörg Mecke summarizes, "The use of ThinPrint .print is always problem-free if a clean concept has been prepared beforehand. It was like that with MTU." Plans are now being made to connect the Chinese location to the terminal servers in Hanover at the beginning of 2005. Here again, states Schiecke, ThinPrint .print is planned for use.

ThinPrint GmbH

High-performance, consistent infra-structures for printing and distributing information in serverbased computing environments and via the mobile internet are the focus of the product portfolio of ThinPrint GmbH. A significant pillar of the company is the .print technology, basis for the software print solutions developed for server based, web based, and mobile computing. These solutions are being successfully applied around the world.

Previously the company has made its name mainly in the Citrix MetaFrame and Microsoft Terminal Services arena, but has been marketing its products increasingly and equally as successfully for distributed networks, web applications, and mobile applications. New innovations from the successful IT manufacturer are the product families Content Beamer, a plug-and-play solution for mobile internet access, and Public Printing for printing at public locations.

More than 500 renowned distributors and resellers in 48 countries currently market the products of the German software manufacturer with branch offices in USA and Australia. Thanks to strategic partnerships, the client components of the patent pending .print technology are integrated in a multitude of terminals, print boxes, PDAs, and mobile telephones from leading hardware manufacturers.

Facts	
Customer	MTU Maintenance
Field	Aviation industry
Responsible for Project	msg systems ag
Project	Recentralization, reduction of administrators in remote offices
Number of users	170
Project Timeframe	2 months
Server	Windows Server 2003 Standard; Citrix MetaFrame XP 1.0 FR3; .print Server Engine Terminal Services 6.0
Client	SEH ISD200 print appliances with integrated .print Client

