

Success Story

## Rohwedder AG – Ready for the future with Intel® Itanium® 2-based HP Integrity servers



"Our decision in favor of the HP Integrity server running under Linux has paid off 100 percent. The HP SAP Competence Center team showed incredible commitment in supporting us during our move to the new hardware and software."  
Clemens Schulta, Information Technology Manager, Rohwedder AG



## Rohwedder AG – a leader in automation engineering

Founded in 1956 and based in southern Germany on Lake Constance, Rohwedder AG is an international leader in automation technology. As a full-service supplier, Rohwedder develops and manufactures customized automation systems. Almost every system is unique and tailored to specific customer production requirements. The company provides a full range of services: product development, system design, implementation, commissioning, service and maintenance, as well as modifications and upgrades. Rohwedder employs more than 800 people in 16 companies with locations in Europe, North America, Asia and Australia.



When Rohwedder AG, a market leader in automation engineering solutions, decided to migrate its enterprise software to SAP R/3 and SOMA, a mySAP All-in-One-based mechanical and systems engineering application, the company believed the time was also right to upgrade its computer systems. To master the pioneering project – Rohwedder was the first Linux installation on HP Integrity servers, a platform based on the Intel® Itanium® 2 processor – the HP SAP Competence Center team provided service and support at any time. Now, after having implemented HP Integrity servers, Rohwedder AG is fully prepared for the future with an IT infrastructure capable of meeting the performance demands of the group's subsidiaries around the world.

The impetus for the entire project was the decision by Rohwedder management in 2002 to replace the company's aging Production Planning and Scheduling (PPS) system with SAP R/3 and SOMA, developed by untersee Unternehmensberatung GmbH, a German-based consultancy firm.

The SOMA software, initially developed as a pilot project by untersee in 1995, is now a mature solution based on the requirements of more than 30 major manufacturing companies. SOMA automates specific manufacturing functions ranging from the purchase of replacement parts to more complex functions such as integrated project management or machine repair. With SOMA, the functionality of SAP R/3 is tailored to customers' specific requirements. The easy-to-use templates mean less support is required from the data center, which help reduce costs and improve efficiency.

"During the course of planning the transition to this new software, we also decided to ensure that our complete IT infrastructure was agile enough to meet the challenges of the future," explains Clemens Schulta, Information Technology Manager at Rohwedder.

"An important consideration in this respect was the ability to gradually integrate all of our subsidiaries so that their computing requirements could be handled from a single, centralized computer center, based here in Germany. This would give us the simplicity we were striving for to reduce costs and complexity."

### Easily carrying peak loads

Rohwedder is a state-of-the-art engineering firm with a worldwide reputation as a technology leader in the field of automation. The company develops and manufactures systems for assembly & micro-assembly technology, electronics production, and for plasma, solar and vacuum-coating technology. The Rohwedder product portfolio also includes complementary technologies, such as image processing, handling, robot technology and production engineering. "Our solutions enable our customers to manufacture higher-quality products faster, more economically and – as a result – more competitively," explains Clemens Schulta.

The Rohwedder group consists of 16 companies based in Europe, North America, Asia and Australia that employ more than 800 people worldwide. The headquarters in Bermatingen, south Germany, focuses on developing specialized solutions to meet specific customer needs. "Almost every system we develop and manufacture here is unique," explains Clemens Schulta.

Such services – which encompass everything from complete engineering to tests and modification – do not allow for long-term resource planning. As a result, the IT infrastructure has to be synchronized with business goals to capitalize on change. This entails having a highly scalable and flexible IT foundation to allow the company to meet peak short-term demands. "For us, around-the-clock high availability is not so critical. What is more important is optimum performance during short, intensive bursts of SAP activity," explains Michael John of the Rohwedder AG SAP Competence Center.



### HP's clear 64-bit roadmap

In October 2002, Rohwedder management began planning the migration to the SAP/SOMA software and the upgrade of its hardware to Intel® Itanium® 2 technology. Along with HP, untersee shared a lead role in the implementation of the project. The consultancy firm's experience in Product Life-Cycle Management (PLM), Production Planning (PP), and Project Systems (PS) was important in ensuring the overall success of the project.

When deciding on a computer platform there was no hesitancy on the part of Rohwedder. The company immediately decided for 64-bit technology because, as Clemens Schulta explains, "We wanted a standard infrastructure that would meet our needs well into the future, eliminating the need to upgrade to another platform within a few years."

"The physical limits of 32-bit architecture are too restrictive. Applications that place a massive load on the system, like the SOMA mechanical engineering template with its high level of process automation, push 32-bit machines to their limits. Also, 64-bit technology has an advantage in that several databases can run simultaneously on a single system."

Another decisive factor was the number of users. As Michael John explains: "Some 800 SAP users will work with this system in the future. This means the hardware had to be robust and scalable so that subsidiaries have access to all the resources they need while linked to our computer center."

HP was the only manufacturer that could present a definite roadmap for the implementation of 64-bit computing to Rohwedder. "HP provided a clear roadmap and already had a range of models on offer," recalls Clemens Schulta. In the end, Rohwedder decided on two Intel® Itanium® 2 based computers from HP: the HP Integrity rx2600 server as a test and



development system and the HP Integrity rx5670 server as a production system. Both servers have 12 GB of memory and together offer more than 1 TB of hard-disk capacity.

The team responsible for selecting the operating system decided on Linux. From the viewpoint of Rohwedder, the decision to go with Linux was simple. Because of its standards development and system architecture, a Linux system can be operated for years using a current version without requiring an upgrade or migration. The choice of Linux meant Rohwedder avoided relying on any one vendor and freed itself from operating system update cycles, technology changes and incompatibilities. This decision has also helped deliver an improved total cost of ownership through the elimination of software license fees.

### Infrastructure with performance buffer

The Rohwedder computer center in Bermatingen migrated to the SAP R/3 4.6C and the mySAP modules Web Application Server (WAS), Knowledge Provider Server (KPRO) and Solution Manager on schedule in early 2003. The company was highly impressed with the new software solution. The hardware upgrade was completed in a later phase of the project.

### untersee Unternehmensberatung GmbH

Based in Constance and Kreuzlingen in Germany, untersee is an independent consulting company specializing in the development and support of industry solutions for machine and systems engineering. As an SAP Channel Partner for Sales and Service and the mySAP Business Suite, untersee adds value to SAP's standard software with targeted vertical solutions. untersee's best-known product is the SOMA template for mechanical and systems engineering.

## Challenge

- The decision to switch to SAP R/3 and the mySAP All-in-One-based SOMA template inspired Rohwedder to reorganize its IT organization into a centralized structure
- To achieve this, Rohwedder needed a new IT infrastructure with sufficient headroom to service all domestic and international subsidiaries (a total of 800 SAP users)
- As the manufacture of custom systems is not conducive to predictable long-term resource planning, the IT infrastructure also needed to be highly scalable to handle short-term production peaks
- Rohwedder wanted to protect its investment by ensuring that the IT infrastructure would be capable of handling all challenges well into the future

## Solution

- Two Intel® Itanium® 2-based systems from HP:
  - HP Integrity rx2600 as a test and development system
  - HP Integrity rx5670 as a production system
- 12 GB of memory each and joint hard-disk capacity of more than 1 TB
- Linux operating system: Suse Enterprise Server 8 (SLES8)
- SAP R/3 4.6C and various mySAP applications WAS, KPRO and Solution Manager as well as the mySAP All-in-One SOMA template, a certified industry solution that presents complex mechanical and systems engineering processes as easy-to-understand and practice-oriented procedures
- Support from the HP SAP Competence Center team

## Results

- Integration of the new hardware and software environment successfully completed
- IT infrastructure passed its first scalability test with over 100 Rohwedder Pematech users connected in early 2004
- Significant performance improvement with HP Integrity servers despite doubling of number of users; system easily handles spikes in demand
- Itanium® 2-based Integrity servers from HP offers more than enough headroom to meet the performance demands of all Rohwedder subsidiaries – both domestic and international

“We switched to the HP Integrity servers on 13 January 2004. Our subsidiary Rohwedder Pematech, which has more than 100 users, has also been connected to our computer center since the beginning of the year,” says Michael John, who notes that the system has already passed its first real scalability test.

“The number of users on the system doubled overnight and the system handled it without even the slightest problem.” Rohwedder plans to gradually integrate all German subsidiaries into the solution. When this is completed, the solution will also be rolled out to include foreign subsidiaries – and the company believes all users will experience vastly improved system performance as a result.



However, it's not only Rohwedder experts who are confident of further performance improvements. Stefan Kling of untersee – who has managed the project from the initial planning phase – is also positive. “Operations are running very smoothly – and much, much faster than before. In addition, the server still has plenty of headroom, so the forecasted increase in users will be no problem.”

Clemens Schulta is also happy with the result: “For Rohwedder, our choice of the HP Integrity Server has paid off 100 percent.”

To find out more about the alliance between HP and SAP, visit [www.hp.com/go/sap](http://www.hp.com/go/sap)

