

# Global alliance with clear customer benefit: HP and Oracle implement new SAP infrastructure at the GEA Group AG



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Rolf Parschau, chief information officer,  
GEA Group AG

The GEA Group logo is shown in a light grey color. It features the letters 'GEA' in a bold, sans-serif font with a horizontal line through the middle of the 'E', followed by the word 'Group' in a lighter, sans-serif font.



Mixing, separating, drying, cooling, heating: businesses involved in these or other process engineering operations on an industrial scale, are familiar with the GEA Group AG (Global Engineering Alliance), specialists in the construction of process engineering components and machinery, as well as large-scale plant construction. As market leader, the group employs around 17,000 staff and in 2004 they achieved sales of around €4,100 million. Core markets include food, pharmaceutical and petrochemical industries.

#### **A 'global player' with decentralised structure**

The structure of the GEA Group is unusual for an enterprise of this size, as it is deliberately kept decentralised, thereby aiming to ensure that each and every one of its 200 plus subsidiaries acts with flexibility in the market place. Using this strategy, the GEA Group operates successfully throughout the world.

A further strength is that the individual organisations are freed from administrative tasks to focus on key market activities.

#### **IT Services for the entire GEA Group**

IT functions are managed by GEA IT Services GmbH, which makes the ERP systems, among others, available to the group organisations. Eight of the 50 members of staff of GEA IT Services are exclusively responsible for the SAP systems, which are used by 3,500 staff in eight business divisions. Three further divisions use Axapta as the ERP system.

As far back as 2001, the hardware necessary for the operation of the SAP systems was concentrated in Oelde/Westfalen due to the consolidation of its systems. The systems were then distributed throughout the world and a new infrastructure, containing eight HP N-class servers, was installed at Oelde, the group's biggest site with 2,000 staff, and a well-developed computing centre structure with potential for growth.

The decentralised organisation is reflected, however, in the hardware and software structure. Rolf Parschau, chief information officer of the GEA Group AG said: "For each division which uses SAP we operate a dedicated system, which can be individually tailored to the respective requirements."

In late 2004, the GEA Group began preparations to invest in new hardware. The aim was to implement a new infrastructure for the SAP systems based on the latest technology and to achieve cost savings through further consolidation of the systems. The impetus for this was provided by the planned switch to mySAP Business Suite, the expansion of the SAP system to provide for additional users, and the limitation of the existing Informix databases in terms of Unicode-capability.

#### **HP and Oracle with joint solution**

The GEA Group was now facing a very important decision - and one of considerable investment volume. Towards the end of the selection procedure, two vendors were still in the running; a hardware supplier that proposed its own database as the solution, and HP, which had resolved at an early stage to work together

with Oracle and had delivered a joint tender, with HP taking the lead during the discussions.

The fact that GEA ultimately - and following intensive rounds of negotiation - plumped for the HP and Oracle solution, had largely to do with the positive experiences previously enjoyed with HP. In the Oelde computing centre, HP servers and storage systems have been in use for years; moreover, HP and GEA are closely connected by a Mission Critical Partnership. The assigned HP account team comprises technical specialists and a support account manager. This is in addition to six hours hardware recovery time and the reactive and proactive support advisory services, which guarantee high-level availability.

There have since been no significant operating breakdowns. "HP's support service, together with the reliability of HP technology, has contributed greatly towards the fact that we are regularly able to hit our



customer service levels," stresses Parschau. A further important criterion was Oracle's Unicode-capability, which Informix was unable to offer. Parschau continued: "Unicode is important for us, because our Asian trade is enjoying disproportionate growth."

#### **High-level availability**

In June 2005, HP installed the new hardware using three HP Integrity rx8620 servers with 24 Intel Itanium processors running HP-UX 11i v2. The Integrity server technology won favour here with a good price/performance ratio. Manfred Stratmann, responsible at GEA Information Systems for the management of the SAP systems said: "From the capacity aspect, two servers with additional processors would also have sufficed, but three servers fit better into our computing centre concept. The main computing centre is divided into two separate sections and part of the hardware is in a backup computing centre in the

company grounds." A server was thus installed in each of the (sub-)computing centres, guaranteeing business continuity even in the event of a catastrophe.

As storage systems for the Oracle databases, two HP StorageWorks XP12000 disk arrays are used. In the backup computing centre, an HP StorageWorks EVA 5000 system was installed, so that each server is assigned a high-capacity storage system. The backup is carried out by an HP StorageWorks ESL712e tape library. The machines are linked via HP ProCurve networking switches, which are impressive not only because of their functionality, but also by virtue of the low procurement costs and lifetime guarantee.

As a result of the worldwide operation of GEA IT Services, weekend maintenance activities are now very rare. It was therefore crucial to ensure a simple and swift changeover of the infrastructure to the new technology, as well as the migration of the databases. The Integrity servers offers the advantage that the SAP systems can continue to run under HP-UX 11i without delays. The entire database migration from Informix to Oracle will be carried out by HP and Oracle.

#### **Software for management and data protection**

The GEA Group is also investing in HP solutions for their management software. Via HP Serviceguard, GEA IT Services controls the cluster and the load distribution and is therefore continually able to offer in-house customers optimal use of the resources. Stratmann said: "We run all 15 productive systems on one partition to enable us to make optimal use of the hardware. Moreover, we achieve such adaptivity that the load peaks of the different systems cancel each other out and we are able to provide sufficient capacity at all times. This also applies to a system failure. For additional short-term capacity demand, we have installed instant capacity CPUs from HP."

For data protection in the computing centre, as well as at 42 other decentralised sites where essential file servers are installed, GEA uses HP OpenView Data Protector, and HP OpenView is used to monitor the SAP environment.

#### **Graduated storage solution**

With the new infrastructure the GEA Group has taken an important step into the future. Parschau said: "The SAP system data sets which need to be filed are constantly growing, especially as we will certainly be operating more than 15 productive systems in the future. With top-performance HP StorageWorks XP12000 and HP StorageWorks EVA 5000, we are now using a graduated storage solution with different disk types. This means we can store the data at the lowest possible cost, with the highest possible capacity. The new technology, together with the management software and the mission critical service, ensure 24-hour access - a crucial factor for us, since the users of the SAP systems which operate in Oelde, are scattered throughout the world."

#### **Division of labour brings success**

Around 3,500 users worldwide now access the HP Integrity servers and the two HP StorageWorks XP12000 disk arrays; in addition, the Axapta data is also stored in the HP StorageWorks XP12000 system. The migration of the databases will take place gradually over the coming months. From GEA's viewpoint, it proved to be a wise decision to employ HP and Oracle. As far as HP and Oracle are concerned, the close collaboration has brought not only success, but also a bonus for the user as they have configured a system that is perfectly tailored to the application and which enables hardware and software to interact perfectly. The GEA, or 'Global Engineering Alliance', has worked together successfully with the 'Global Information Alliance' of HP and Oracle.



## Challenge

- Configuration of an effective and scalable infrastructure solution using latest technology for the next four years.
- Storage and backup solution at the lowest possible cost and with the highest possible capacity.
- High-level availability requirements.
- Replacement of the Informix databases with a modern Unicode-capable database solution.
- Simple migration concept for changeover to new infrastructure and database technology.

## Solution

- HP partnered with Oracle to provide the solution.
- 3 HP Integrity rx8620 servers with HP-UX 11i v2.
- 2 HP StorageWorks XP12000 disk arrays as central storage systems.
- Oracle9i database.
- HP StorageWorks EVA 5000.
- Close collaboration of HP and Oracle, complete migration of all databases from Informix to Oracle by HP and Oracle.
- HP StorageWorks ESL712e tape library.
- HP ProCurve switches.
- HP OpenView and HP Serviceguard management software.
- HP OpenView Data Protector 5.1 as backup and recovery software.
- Mission critical services.

## Results

- Effective hardware and software infrastructure for mySAP Business Suite.
- Extremely high availability.
- Scalable solution.
- Automatic load distribution.
- Fast and simple transition to latest technology.

## Customer at a glance

- **Industry sector:** Manufacturing
- **Company:** GEA Group AG
- **Headquarters:** Bochum, Germany
- **Number of employees:** 17,000
- **URL:** [www.gea-ag.com](http://www.gea-ag.com)

## Why HP?

- Previous experience
- Partnership with Oracle to offer complete solution

## Hardware

- 3 x HP Integrity rx8620 servers with HP-UX 11i v2
- 2 x HP StorageWorks XP12000
- HP StorageWorks EVA 5000
- HP StorageWorks ESL712e tape library
- HP ProCurve switches

## Software

- Oracle9i database
- HP OpenView and HP Serviceguard management software
- HP OpenView Data Protector 5.1

## HP Services

- Mission critical services

For more information on how working with HP can benefit you, please contact your local HP sales representative or reseller, or visit [www.hp.com](http://www.hp.com).

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