IBM Customer Reference

Magna Steyr Fahrzeugtechnik

Synopsis:	*An Austrian business that provides solutions for the automotive manufacturing industry delivers high availability, high performance access to its Oracle database and saves 44 percent over its original solution when it selects IBM Global Services - Integrated Technology Services to oversee its transition to a new high-availability solution built with IBM eServer xSeries servers and the Red Hat Linux operating environment*
Location:	Graz Austria
Industry:	Automotive
Focus Area:	Business Continuance, Supply Chain Management
URL:	http://www.magnasteyr.com

Customer Background:

As a strategic partner of vehicle manufacturers, Magna Steyr Fahrzeugtechnik commands all aspects of automobile production, providing automotive manufacturers with turnkey solutions from concept development to volume production. The Austrian company's competencies include project management, manufacturing engineering, procurement, logistics and metal forming. The company is highly flexible and uniquely positioned for the serial production of niche vehicles and derivatives of high-volume vehicles.

Magna Steyr holds a leading market position, particularly in the field of all-wheel-drive technology. Its Driveline Group has not only participated in the growth of this segment, but has used its all-wheel-drive and complete vehicle expertise to create leading-edge four-wheel-drive solutions for volume vehicles. For example, the company developed the first four-wheel-drive system adapted to a car with a transverse engine.

Magna Steyr is recognized for its quality standards, which meet the highest requirements for technology and reliability. The company partners with DaimlerChrysler in fabrication of the Chrysler Voyager and to some extent for the PTCruiser. It also works with BMW in fabrication of the X3
and with Mercedes for the four-wheel-drive Puch G. Many other four-wheel-drive cars include components or engineering from Magna Steyr.

Over the years, Magna Steyr's name and ownership have evolved due to various mergers and restructuring processes. For example, the company has past ties to Puch, Steyr, Daimler and MAGNA. Considering its eventful past, Magna Steyr knows that the only way to be successful is to join forces and strategically develop goals with others in the industry.

Business Need:

Magna Steyr needed to build a high-availability computing environment for its database and electronic data interchange (EDI) applications at a lower cost than was possible with commercial UNIX platforms such as Sun Solaris, SGI IRIX and IBM AIX. Most of the company's smaller database and EDI applications were currently running with high availability clustering. The business was already running:

- Sun Solaris systems, mainly as Oracle database servers
- IBM AIX on IBM eServer pSeries (IBM RS/6000) servers
- IRIX software, used mainly for floating point intensive computations.

Magna Steyr wanted to create an environment with 24x7 availability in order to support EDI applications used in its global supply chain management processes. This would avoid problems like hardware or line failures that can significantly impact these critical business applications.

Solution:

After comparing several options, Magna Steyr selected IBM Global Services - Integrated Technology Services to oversee its transition to a new high availability solution for supply chain management. Integrated Technology Services:
- Managed the entire sales and delivery process
- Demonstrated solutions during a workshop
- Resold Steeleye Lifekeeper licenses and its support contract
- Handled planning and onsite implementation (which was completed in three days)
- Closed the project.

The solution included monitoring software from Steeleye, a non-exclusive IBM Business Partner. Steeleye Lifekeeper software is either resold through IBM Global Services, or is sold as an option together with IBM eServer xSeries servers. The software monitors availability of resources, such as total machines and disks, and monitors processes involving the Oracle database, EDI transactions and Internet Protocol (IP) addresses. In the event of failure, it takes necessary actions to restart a process, move an IP address or restart the whole application on the surviving node.

The new environment includes six xSeries servers running Red Hat Enterprise Linux Version 2.1 and Lifekeeper for Linux high availability clustering software. The xSeries servers were sourced through IBM Business Partner ACP. A combination of two xSeries 440 servers and two xSeries 360 servers are handling EDI transactions. The two xSeries 342 servers serve as Oracle database servers. The solution also includes four groups of customer-developed EDI software. Integrated Technology Services Onsite Services handled installation, configuration, testing and education for the Linux high availability clustering solution. The Linux environment is used for:
- An SAP R/3 enterprise resource planning application
- An Apache Web server
- Sendmail and SAMS
- Oracle 8i and 9i databases
- Informix software
- MySQL, postgreSQL
- DB2 software
- Print services
- IP recovery services
- An NFS server
- Network attached storage (NAS) recovery
- SAMBA.

Benefits of the Solution:

The new IBM and Linux solution offers high-availability, high-performance access to the company's Oracle database at a fraction of the original cost. The new high availability cluster required 44 percent less investment than the previous solution. Magna Steyr is pleased with the flexible, high-performance computing options that Linux delivers at low cost. With the new solution:
- Systems are very stable, with 24x7 operations for EDI and Oracle applications
- Performance is high
- The hardware scales to meet the company's needs
- Administration for the Linux platform and high availability cluster is simple
- Computational power for the xSeries servers is higher than for the UNIX systems, and is less costly
- Applications have high availability and are easier to modify due to the open-standards-based Linux platform.