Case Study:
Autoliv

Critical Issue

For Autoliv, downtime can result in missed delivery requirements and measurable revenue losses. The company contracts with nearly every automaker in the world, and some contracts even specify a fine for late shipments. Every effort is made at Autoliv to reduce both planned and unplanned downtime.

The Challenge

Autoliv System Administration Supervisor Mark Christensen, his IT team and the management of Autoliv know first-hand the value of reliable high availability (HA) software. Autoliv relies on its JD Edwards ERP applications for financial, inventory, customer service, and purchasing functions for 13 manufacturing facilities worldwide. These applications run on an IBM® System i server with an eight-way processor that holds nearly a terabyte of data while processing as many as 70 million daily transactions.

Autoliv sells to virtually every automaker in the world, and the company is required to meet stringent on-time-delivery requirements with these automakers. When on-time delivery requirements aren't met, Autoliv can incur measurable revenue losses. In fact, many suppliers are evaluated on a regular basis for timeliness of deliveries and quality of product. Some contracts specify that a supplier can be fined for each shipment that is delivered late. That's why every effort is made at Autoliv to reduce both planned and unplanned downtime.

Company Name
Autoliv

Headquarters
Stockholm, Sweden

Industry
Automotive safety

Business Size
42,000

Business Environment
- Global leader in automotive safety
- Customers include all of the major automobile manufacturers in the world
- Must adhere to stringent on-time delivery requirements with automakers
- Pioneer in seatbelts and airbags also manufactures anti-whiplash systems, safety electronics, rollover-protection systems, steering wheels with airbags, and child seats
- Services its customers from 80 subsidiaries and joint ventures in 28 countries
- Tests automakers' cars and products at 20 crash test tracks in 12 countries

Precisely Product
Assure iTERA HA

Solution

When the Autoliv ERP team began looking for a superior yet cost-effective HA product, they learned about Assure iTERA HA from Precisely. As they looked more closely and talked to several Assure iTERA HA customers, they found that latency—even at high transaction levels—was rare because the product uses remote journaling.

In addition, Christensen's team learned that Assure iTERA HA customers regularly test and use the role-swap process because it's so simple to execute. But what locked the decision to choose Assure iTERA HA was the price, according to Christensen.

After Assure iTERA HA was installed, the benefits were immediately apparent. First, as promised, the apply-latency problem nearly disappeared; second, once the product was fully installed and configured, it took significantly less time to monitor and manage.

The real test of its high availability solution came just six weeks after installation when Autoliv's production System i had a sudden and critical system failure. IBM determined that the backplane had failed. A replacement part would be put on a flight from San Diego within the next couple of hours. At 11:30 p.m., Christensen received bad news: the part could not be flown out of San Diego due to major wildfires burning in the area.

At this point, Autoliv's IT team decided to initiate a failover, which would make the mirrored backup machine the temporary production machine, and all users, processes, and interfaces shift to this system. Upon contacting Precisely 24/7 support team, Christensen was guided through the process, and it was completed in minutes. Afterwards, all business-critical applications were fully functional on the backup machine.

"With Assure iTERA HA, the two machines were entirely in sync when the failure occurred," related Christensen. The final result: not one customer shipment was late and no transactions were lost. Autoliv truly knows the value of a reliable high availability solution.

Results

- Planned and unplanned downtime reduced to assure that on-time delivery requirements are met.
- Monitoring and management of the HA system reduced significantly.
- When a system failure occurred just six weeks after installation, Assure iTERA HA proved its value and no shipments were late and no transactions were lost.

Technologies

- Assure iTERA HA
- Two IBM® System i servers
- JD Edwards® from Oracle® ERP software

"It's essential that our HA solution will role swap smoothly and data is complete on the backup when we need it most. When we saw the performance of Assure iTERA HA and then the price, it was a very easy choice."

– Mark Christensen,
  System Administration Supervisor,
  AutoLiv