AUTOMATIA’S HIGH AVAILABILITY SYSTEMS
KEEP FINLAND’S CASH FLOWING

Case Study

“We rely on the HP Integrity NonStop BladeSystem to process around 160 million ATM withdrawals a year, which ensures that the people of Finland can always gain access to their cash.” Esa Makkonen, chief information officer, Automatia

Objective
Implement new ATM functions and applications while decreasing the price per transaction

Approach
Sought a more powerful solution that could deliver zero application downtime, extreme scalability, business continuity and exceptional security levels

IT improvements
• Simplified the technical architecture, resulting in easier and more cost-effective management and operation
• Achieved 100 per cent uninterrupted application availability meeting service level agreements with banks
• Introduced greater CPU power to support new developments such as self-service deposit terminals

Business benefits
• Lowers operational costs by combining fault tolerant features with the time and energy efficiencies of blades
• Provided a clear five-year technology path to keep pace with budget planning and projected business growth

Instant access to cash is a vital requirement in today’s consumer society and bank customers expect ATMs to be available day and night.

To provide this vital service, banks in Finland decided that instead of each operating their own ATM network, they would replace their expensive, disparate system with a single pooled resource. This led to the launch of the new company, Automatia, which now operates all the country’s ATMs and also manages the delivery of cash to the banks.

Sophisticated systems
Owned by the three largest banks, Nordea Bank, OP-Pohjola Group and Sampo Bank, Automatia operates the nationwide Otto ATM network which serves all Finnish bank customers, as well as foreign Visa and Mastercard users. There are some 1,700 Otto ATMs which provide cash for approximately five million people and process 160 million withdrawals a year.

Despite huge responsibilities, Automatia operates with just 30 employees. Formed in 1994, the company made a strategic decision to outsource IT services rather than run them in-house. Drawing money from a cash point is a simple procedure but behind the scenes it requires highly-sophisticated information systems that meet security requirements while ensuring 100 per cent availability. Automatia required systems that would ensure uninterrupted application availability and could cope with future increases in demand. It also required an outsourcing partner who could carry out regular audits, run quality processes and conduct comprehensive testing.
End-to-end service

Automatia chose Tieto, one of Northern Europe's leading IT service companies, because it could deliver the best solution at the best price. Initially, Tieto provided just the software used to process transactions but its responsibilities have since been extended to include end-to-end service.

When selecting a hardware platform that could cope with the enormous daily volume of transactions, Tieto and Automatia needed servers that were efficient, secure and 100 per cent reliable and could keep pace with its growing business.

In the early days, Automatia outsourced its operation to one of its owner banks which operated an HP environment. Tieto had also been a long-time user of HP NonStop S-series technology. For continuity it was therefore agreed to remain with HP and an HP Integrity NonStop BladeSystem was selected.

Mission critical platform

Tieto has implemented two 16Gb HP Integrity NonStop NB50004c BladeSystems along with an HP Support Plus24 (SP24) critical support service at its data centre in Helsinki, which supports the transaction processing for Automatia’s ATM network.

“We realised that HP Integrity NonStop server blades would allow us to deliver mission-critical transactions at a lower cost,” explains Tieto’s director for banking and insurance, Jaakko Savola. “These HP servers run the transaction processing using Tieto application software. When someone uses an ATM, the request is sent to these host systems and then forwarded to one of the country’s nine issuing banks which handles the necessary verifications and processes the payment.”

Data is transmitted over Datacom 100Mb or 1Gb Ethernet connections and Multiprotocol Label Switching virtual private networks. The processing software is specially tailored for Automatia and is based on HP NonStop system software, such as HP Pathway and HP NonStop Transaction Management Facility (TMF).

Customer at a glance

HP hardware
- HP BladeSystem enclosures
- HP Integrity NonStop NB50004c BladeSystem

HP software
- HP Pathway
- HP NonStop Transaction Management Facility (TMF)

HP services
- HP Support Plus24 (SP24) critical support

“From Tieto’s point of view, we are very pleased with the HP BladeSystem solution,” adds Savola. “The servers have delivered 100 per cent uptime, discounting the once-a-year planned downtime when we update operating systems. Together with HP, we have delivered a good solution for Automatia.

“The upgrade of the HP Integrity NonStop environment has made it possible to simplify the solution and technical architecture. The implementation of more modern system software, as well as support for the Java environment, was key to the success of the project. As a result the whole tailor-made solution is running on the HP Integrity NonStop platform which simplifies the technical architecture as well as increasing the overall uptime of the solution to 100 per cent.

“Because both the upgrade and Automatia’s solution require less infrastructure than the old platform, it will lead to lower infrastructure costs for Automatia. The new environment has four times more capacity than the old one so Automatia has a solid path to increase current volumes and expand its business to new areas.”

Makkonen adds: “the reliability and usability of the servers means that our bank customers are happy with the service we provide and the end result is that the people of Finland can get cash any time they want.”