



Axstores Ensures Performance During Critical Application Migration



“The ExtraHop system does more than just application monitoring—it gives us visibility into core network services that are crucial when optimizing performance.”

—Stefan Pörn, IT Operations Manager, Axstores

CUSTOMER

Axstores is a leading retail group in the Nordic region with over 390 beauty, fashion, home furnishing, and department stores.

CHALLENGE

To support rapid business change, the centralized IT group at Axstores needed a flexible, elegant application performance monitoring solution.

SOLUTION

The ExtraHop system provides a non-intrusive yet powerful monitoring solution that helps Axstores ensure excellent performance for business-critical systems.

BENEFITS

- Gained a holistic view of application infrastructure
- Isolated hard-to-pinpoint performance issues
- Reduced risk for new IT solutions
- Identified TCP, DNS, and IPv6 misconfigurations

Challenge

Each day, more than 300,000 customers walk into an Axstores store in Sweden, Finland, or Norway. The group consists of department store chain Åhléns, beauty retailers Kicks and Esthetique, and the home furnishing chain Lagerhaus.

Axstores operates a shared IT services model to gain efficiencies and more effectively integrate acquired companies. As the group grows in size, the Axstores IT team needs to find ways to deliver better services at lower cost.

“One of the goals of our centralized IT model is to give our companies an edge in IT innovation,” says Stefan Pörn, Operations Manager at Axstores. “At the same time, we continually look for ways to do more with less. We must deliver more IT for every dollar spent.”

These goals drove Axstores to replace some custom-developed business systems with new off-the-shelf solutions. During the testing phase of these projects, Axstores found that its legacy server-monitoring infrastructure did not readily accommodate the new systems.

“When architecting our new solutions, we needed to test different assumptions and see how they affected performance,” says Pörn. “SNMP polling monitored the health of the components but not the application in a holistic manner.”

Solution

Looking for a more modern monitoring solution, Axstores turned to RADPOINT, an application delivery and security integrator that had recently implemented a next-generation firewall for Axstores. RADPOINT recommended the ExtraHop Application Delivery Assurance system, a network-based [application performance management](#) (APM) solution that provides correlated, cross-tier visibility in dynamic and heterogeneous IT environments.

Axstores worked with RADPOINT to deploy the ExtraHop system in their test environment. “I was impressed with the application performance visibility that the ExtraHop system provided out of the box,” says Pörn. “We could immediately see all the devices present on the network and their dependencies, as well as the impact of core network services such as LDAP and DNS on application performance.”

“Previously, we could measure the performance of individual elements of the infrastructure but could not easily isolate the root cause of interrelated problems,” explains Pörn. “The ExtraHop system gave us an excellent top-down view of application performance along with the ability to drill down into detailed transaction metrics.”

The project team used the ExtraHop system to identify several performance bottlenecks for the application:

- Isolated a bug in the application servers that slowed performance for retail stores
- Solved database performance issues related to indexing and poorly written application queries
- Detected TCP timeouts caused by DNS issues and server misconfigurations using IPv6 instead of IPv4
- Optimized HTTP front-end communications with back-end business systems

Axstores plans to use the ExtraHop system to ensure a smooth rollout of the upcoming projects, facilitate testing and deployment of these projects, and support various other IT initiatives.

“We plan to expand our use of ExtraHop to cover all of our applications,” says Pörn. “The value of this solution is so significant that we plan to have it in each of our datacenters.”

ExtraHop Networks provides a passive, network-based approach to application performance management (APM) built to ensure that business-critical transactions do not fail.

To learn more, visit www.extrahop.com or call +1 877-333-9872.

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Benefits

With correlated, cross-tier visibility of application performance, Axstores reduced risk for new rollouts, solved esoteric performance issues, and gained a more flexible monitoring solution.

Reduced Risk for Deployment

The central IT group at Axstores is responsible for supporting ambitious growth plans for the company, including acquisitions such as the 2010 purchase of Esthetique. With real-time, network-based application performance monitoring from ExtraHop, the Axstores IT teams can support rapidly changing business needs.

“We have a number of major IT projects in which the ExtraHop system will play a crucial role,” says Pörn. “The ExtraHop system gives us greater confidence that new applications are developed and deployed correctly. We can verify assumptions and ensure the best result with performance measurements across all the tiers of our application environment.”

Identified Esoteric Performance Issues

Axstores uses the ExtraHop system to identify esoteric, interrelated performance issues and then pinpoint the root cause.

“Whether it is a customer browsing one of our online stores or an employee entering an order at checkout, the success of our business depends on fast and reliable performance,” explains Pörn. “With ExtraHop, we can ensure

that our customers and employees can quickly access information and complete transactions.”

Simple Deployment

Axstores deployed the ExtraHop system in less than an hour and realized value immediately. “We found the network-based approach of ExtraHop to be very refreshing,” says Pörn. “With this model, there are no agents or central server to deploy and nothing to configure or instrument. This simple deployment is incredibly important to our IT group as we look to deliver better services more efficiently. We need solutions like this that just work.”

Easy to Use Across IT Domains

The ExtraHop system provides various Axstores IT teams with visibility into network, web, database, and storage performance. This correlated, cross-tier view has proven valuable to specialist teams at Axstores responsible for various IT domains.

“The ExtraHop system web interface is very clean and presents information in a way that breaks down traditional silos. Everyone has access to the same holistic information. It’s not a niche tool; rather, it looks across the entire application environment,” comments Pörn. “We look forward to implementing this solution widely across our operations.”

TCP Details: By IP					
Connections					
Accepted: 2,954	Connected: 18,370	Closed: 15,088	Expired: 18,102	Established: 292	Established Max: 557
In					
Aborts: 2,428	Resets: 7,219	SYNs Received: 7,314	Stray Segments: 13,512	Dropped Segments: 4,490	
Zero Windows: 0	Retransmissions: 0	Send Window Throttles: 1,036	SYNs w/o Timestamps: 9,331	SYNs w/o ACK: 7,219	
Bad Congestion Control: 28	RTDs: 1,638	PAWS-Dropped SYNs: 0			
Out					
Aborts: 344	Resets: 10,007	SYNs Sent: 60,225	Slow Starts: 4,070	Dropped Segments: 525	
Zero Windows: 46	Retransmissions: 17,760	Send Window Throttles: 0	SYNs w/o Timestamps: 9,331	SYNs w/o ACK: 7,219	
Bad Congestion Control: 40	RTDs: 444	Retransmissions: 2,597	Out of Order: 343	Tinygrams: 720	
Nagle Delays: 517					

Axstores used advanced TCP analysis to help identify and solve interrelated application performance issues.