

Campana paves the way for AAA/CAA auto clubs

HP-UX 11i v3 on HP Integrity servers enhances security and performance at reduced cost



Campana
SYSTEMS INC.

AXIS
Integrated Solutions. Integrated Minds.

“HP-UX 11i v3 has been running beautifully. And like the previous versions, the latest one has an outstanding record of reliability and availability.”

– Paul Haygarth, Technical Services Project Manager, Campana Systems Inc.

HP customer case study:

HP Integrity servers, HP-UX 11i v3, and the HP-UX Host Intrusion Detection System promote security compliance

Industry: Information Technology/
Application Services

Objective

Improve security, compliance, and computing capacity for revenue-generating applications and services

Approach

Migrate to HP-UX 11i v3 and use HP-UX security features on HP Integrity servers

Business technology improvements

- Improved application performance, reliability, and availability
- Certification of AXIS products on HP Integrity servers
- Tailored security policies and surveillance schedules
- Near-real-time detection and alerts
- Dramatically shorter report generation and batch job processing, with 50–60 percent time savings

Business outcomes

- Fulfillment of PCI compliance and cardholder data protection measures
- Price/performance advantages
- Provision of a secure, cost-effective Web-services solution at 36 percent less than competitive Linux- or UNIX®-based solutions
- Simplified security documentation and customer support

Growth potential for the AXIS auto club system

Waterloo, Ontario-based Campana Systems Inc. has been helping auto clubs run their businesses since 1988. Through its AXIS division, Campana provides an integrated information management system for auto clubs to manage member relationships. Auto clubs use AXIS components to provide travel, point-of-sale, membership, and emergency road services to their members. They also employ AXIS Financials to ensure accurate accounting, while improving efficiency and streamlining their operations.

Even with nearly half of the auto clubs affiliated with the American and Canadian Automobile Associations (AAA and CAA) using AXIS, Campana continues to gain market share in the United States. The company recently acquired its largest customer to date—an auto club with more than 4 million members and 700 users of the AXIS travel agency management solution.

Recognized for its vast industry knowledge, Campana engages active user groups and leverages strategic technology relationships, which help to transfer insight and cost efficiencies to its clientele. Campana’s reseller relationship with HP enables it to certify and deliver AXIS on a cost-effective and proven server platform. The company drives its market-leading solutions on HP Integrity servers and Intel® Itanium® processors. Additionally, Campana leverages the newest version of HP-UX 11i with the HP-UX Host Intrusion Detection System (HIDS), which promotes compliance with the Payment Card Industry (PCI) Data Security Standard. Using the HP platform, Campana provides security monitoring, reduces maintenance and support costs, and meets auto clubs’ reliability and performance requirements.

Foremost operating system

The company has enjoyed the robustness of HP-UX 11i for several years. In October 2007, Campana migrated from version 2 to version 3. "One of our customers was buying a new Integrity server and wanted to go with the latest version of HP-UX 11i," explains Paul Haygarth, Technical Services Project Manager. "This customer wanted the enhanced system performance and high levels of system availability, so we tested version 3 in our company first."

Campana system engineers use the auto-tuned kernel parameters in HP-UX 11i v3 to optimize the performance of the UniVerse database for each customer. Auto-tuning parameters also allow the system to monitor usage and automatically reconfigure parameters, which Haygarth says is useful.

"We can create alarms that tell us when we've exceeded certain HP-UX kernel resources and tune the parameters without rebooting the operating system," adds Dave van Nierop, Campana's Manager of Technical Services.

Campana's transition to version 3 did not affect the C language-based AXIS software. Version 3 has binary compatibility with version 2; therefore, Campana did not need to recompile the software. Nor did the upgrade require more training. "Our programs are running fine, and we haven't noticed any problems related to the operating system," says Haygarth.

Roadblock against security breaches

With the HIDS feature of HP-UX 11i, Campana system administrators monitor auto club servers in near real time for signs of potentially damaging intrusions. They configured an HP Integrity rx2620 Server as an HIDS host server and auto club servers as clients. The Campana engineers tailor HIDS detection templates to suit each customer's security policies and surveillance schedules. The base security package offered to auto clubs includes HP-UX Bastille system hardening with HP-UX 11i and HIDS. This approach simplifies the documentation of operating system security and customer support.

"The Host Intrusion Detection System provides the AXIS Technical Services department with distributed monitoring capabilities," explains van Nierop. "If we were to log on to each auto club server and check alerts/log files manually every day, it would become a monotonous, full-time job. HIDS is a valuable tool that should exist in any system administrator's security toolbox. It does a great job of data collection and analysis to keep customer data safe. It also helps our customers satisfy Payment Card Industry (PCI) standards."

The PCI standards include data protection mandates required by Visa, Discover, MasterCard, and American Express. Campana's distributed monitoring system—which watches user and HP-UX kernel activity—helps auto clubs satisfy these standards.

Discovering more in version 3

Campana is working with HP to leverage the security features of version 3 and expand the security options it provides to auto club customers. The staff installed IPFilter to provide system firewall capabilities and the Install-Time Security to gain security profiles. Campana actively connects to the HP website to acquire the latest security-relevant patches via the HP-UX Software Assistant (SWA).

"With the HP-UX Software Assistant, we no longer have to be on top of all the security patches that are out there," says Haygarth. "This time-saving feature lets us know of any patches that are available from HP."

Cost-effective Web services

Along with security features, HP-UX 11i enables Campana to deploy a successful Web-services solution for club data exchange protocol that is up to 36 percent less costly than competitive solutions using Linux or UNIX. Campana's Web services environment incorporates the open source-based AMP + Tomcat (Apache, Perl/PHP) + Tomcat stack. By utilizing the fully supported Apache, Tomcat, and Java™ distributions included with HP-UX, Campana benefits from a secure Web services environment.

Using a virtual private network (VPN) and interfaces that Campana established, auto clubs can verify the status of a member from a different organization. Additionally, system users have ready access to online, context-sensitive help documentation and updates. Through the Apache Web Server with HP-UX 11i, garage contractors can access and update emergency roadside calls online. Auto club agents working in the field can link to the AXIS database via their BlackBerry devices—all in a secure environment.

“The built-in Apache Web Server security features for HP-UX 11i are very helpful,” says van Nierop. “The integration of the Web Server with HIDS, HP-UX Bastille, Secure Shell and stack buffer overflow protection are welcome enhancements. Overall, HP-UX 11i v3 improves the performance of HP-UX Application Server processes.”

Steering services on HP Integrity servers

Campana migrated from HP 9000 servers to Integrity servers in April 2005 to capture cost/performance advantages and recharge the server environment. Pierre Lapalme, Director of Sales and Marketing, says: “We realized we could achieve an attractive cost-performance and that few changes were necessary to make our AXIS products work on HP Integrity servers.” At Campana, an Integrity rx2620 Server supports development, server monitoring, and the UniVerse database.

At customer facilities, Campana engineers install Integrity Business Critical Servers (BCS) and, more recently, Integrity blade servers—some with Dual-Core Intel Itanium processors—as AXIS application servers. “We migrated most of our clubs to Integrity servers. The clubs have been impressed with the performance gains; added memory; and bigger, faster disk drives,” Lapalme says.

For example, a report that previously took hours to generate now takes only minutes on the Integrity server. End-of-day membership processing completes in 30 minutes instead of one hour. Campana has noted impressive performance on Integrity servers in the UniVerse database environments, which function with the AXIS applications.



Adds Haygarth: “Most of our auto clubs choose Integrity mission-critical systems. But some of the auto clubs are considering the new Integrity BL870c Server Blades in tight spaces where they need reliable, energy-efficient systems.”

Making further inroads with superb tools

Campana provides installation and support services to its customers with help from HP Instant Support Enterprise Edition (ISEE), a remote monitoring, fault detection, and notification solution installed on HP systems.

“In a couple of cases, HP technical support has phoned our auto clubs before they were aware of a hardware failure. Campana and our clubs have been very impressed,” acknowledges van Nierop.

Impressing customers is a key to growing high-value relationships. Lapalme concludes, “We attribute our success to our reputation as well as to high-quality product and service solutions. HP technologies are important in how we merge innovative solutions with excellent service.”

Customer solution at a glance:

A strong IT infrastructure and security-hardened operating system supporting application services

Primary applications

- Campana AXIS products and UniVerse database

Primary hardware

Campana's IT environment:

- HP Integrity rx2620 Server (dual-processor)
- 2 HP servers, including an HP 9000 rp5450 server
- 2 HP Surestore 2100 Disk Systems for additional storage capacity
- NetApp iSCSI SAN

Auto clubs' IT environments:

- HP Integrity rx2620, rx4640, rx6600, and rx7620 Servers
- HP 9000 servers (models rp5400–rp7410)
- HP StorageWorks 4000 Enterprise Virtual Array (EVA4000), Surestore 2100 Disk Array, Virtual Array 7100, and other StorageWorks systems

Primary software

- HP-UX 11i v3 and HP-UX Host Intrusion Detection System (HIDS) v4.0
- HP-UX Bastille system hardening
- HP Storage Data Protector
- HP-UX Web Server Suite: HP-UX 11i Apache Web Server and Tomcat Web Servlet Engine
- IBM UniVerse v10.1.16 database (approximately 100 GB at Campana)
- Veritas Volume Manager from Symantec
- Java 2

HP Services

- Three-year onsite hardware warranty
- HP Instant Support Enterprise Edition

To learn more, visit www.hp.com

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