

AlterPoint: Changing the Game in Network Configuration Management with a Move to Open Source

Abstract

AlterPoint, one of the leaders in network change and configuration management, has recently announced sponsorship of ZipTie, the first open source community specifically targeting network configuration management. ZipTie complements other areas of product investment – such as extended inventory management, CMDB capabilities, and advanced analytics – as a way for AlterPoint to further differentiate itself, while extending and broadening its overall industry position. However, ZipTie is also unique in leveraging an open source community of contributors that may come from a variety of backgrounds, including IT organizations, network device manufacturers, systems integrators and service providers, and enterprise management vendors. This report addresses the ZipTie project in context with broader industry trends in configuration and change management, as well as in context with AlterPoint’s requirements to balance vertically enriched product functionality with horizontally expansive mediation capabilities through a new open source community.

Network Change and Configuration Management (NCCM)

That network change and configuration has become one of the most critical areas of industry investment is no longer seriously open to debate. Data from two EMA industry reports serves to confirm this. The first, Figure 1, shows the importance of network configuration information in populating a Configuration Management Database (CMDB) based on a survey done in Q2 of 2006 of 156 respondents within the U.S.

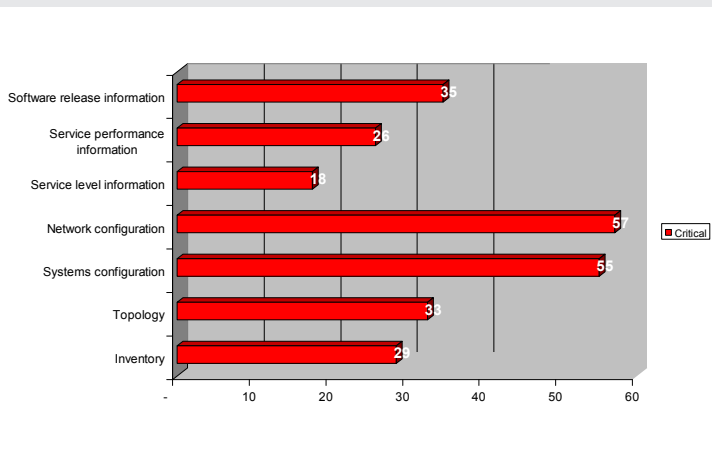


Figure 1: Network configuration data is the top priority for populating CMDB's

In parallel, network configuration, followed closely by systems and application configuration, is also the number one priority for diagnosing problems associated with application performance across a networked infrastructure – based on a survey done for EMA in Q3 of 2006.

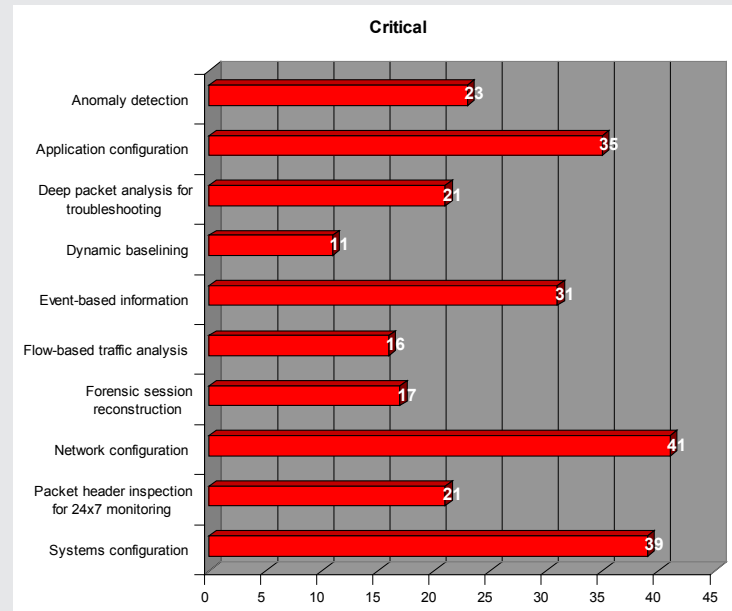


Figure 2: Network configuration is the preferred source of diagnostic information in supporting application performance over the network

These two figures serve to emphasize several points. The first, of course, is that network configuration is critical in support of IT Service Management. The second point is that the value of network configuration management, and configuration management in general, is multi-faceted. It is not only critical for change and configuration, but also central in diagnosing problems with managing application performance over the network – as well as paramount in supporting inventory and asset management (including life cycle requirements for retiring assets), compliance and security issues, as well as service planning and service provisioning.

Ironically, this versatility has created challenges in capturing and promoting NCCM as a market in itself. The very richness of functionality has often caused buyers to deliberate in toolset adoption priorities, which are almost categorically driven by one or two initiatives (e.g. asset and change management), rather than by the seven key values that define NCCM.



Figure 3: Key values of Network Change and Configuration Management Investments

In part, because of this multi-faceted value proposition, NCCM vendors are beginning to differentiate in a variety of ways to affirm a more central position in IT buyer investment priority. And while the NCCM market has begun to pick up significantly in the last 12 months, rapid acceleration is coming from deliberate investments targeting one or multiple areas within these seven pillars of value.

AlterPoint and DeviceAuthority

AlterPoint, with DeviceAuthority, is one of the leaders in the NCCM market. It is growing at well into double-digit rates, with a strong showing in attracting new accounts. It has targeted primarily enterprise IT organizations, and has one of the most versatile solutions in the market.

AlterPoint has also defined a clear path for differentiation – focusing on optimizing the investments made in network infrastructure by creating an accurate network CMDB and building advanced analytics. AlterPoint is leveraging these strengths to provide a greater business focus, with superior integration capabilities, beyond the strategic initiatives across much of the existing NCCM market. These include inventory visibility, change automation, and policy/governance, including compliance support for requirements such as Sarbanes Oxley, the Gramm-Leach-Bliley Act, The Health Insurance Portability and Accountability Act (HIPAA), and National Security Agency (NSA) best practices for security audits.

AlterPoint is also making active investments in analytics, supporting correlators, anomaly detection, object-based modeling, as well as data warehousing and OLAP. While the full value of these investments will emerge over time, DeviceAuthority is already capable of leveraging these advanced analytics investments to answer such questions as: “what hardware chassis network card(s)/interface(s)/is/are most frequently failing within the network?” and “what types of changes most often result in network outages?”

Finally, AlterPoint has made a significant investment in CMDB-related technology, to support what it calls a “network CMDB,” in which layer 2 and 3 topology can be imported from sources of record (SORs) or trusted sources, and integrated into DeviceAuthority’s detailed configuration information. This will promote both localized centers of value for network managers, while enabling a more fluid and high-performing CMDB system when integrated with larger, core CMDB solutions. AlterPoint’s integrations with BMC, EMC/SMARTS, Entuity, BladeLogic, and Skybox Security, among others, all support AlterPoint’s role as a provider of an effective network CMDB offering that can dialog with other system solutions.

AlterPoint and ZipTie

AlterPoint’s initiatives to sponsor an open source community, ZipTie, for network configuration need to be understood in the context of AlterPoint’s active investments in differentiation. ZipTie will enable AlterPoint to focus its internal development in vertical capabilities (e.g. analytics, advanced reporting, advanced integration through CMDB systems) while promoting a community approach to tackling the thorny challenges of effective horizontal reach across a multiplicity of device brands and models. These will span the network device types supported by DeviceAuthority today: LAN and WAN switches, load balancers, firewalls, wireless access points, VPN concentrators and UPS systems.

In deference to this horizontal focus, ZipTie (www.ziptie.org) is defined as a “framework for network inventory management” designed to expand device coverage by offering a single common language for controlling the configuration of any network device regardless of manufacturer. ZipTie is designed to promote a community of contributors that, in working together, will eliminate the hodgepodge of homegrown scripts and applications and third-party point tools that still plague network configuration management, even in the face of a growing number of solid, multi-vendor solutions on the market today.

The ZipTie open source software provides a client-side application that can be downloaded to a Windows or Linux system for developing software that supports:

- Discovery, backup and restoration of network device configurations
- Comparisons of network device configurations across devices over time
- Detection of configuration changes
- Active distribution of configuration changes (i.e. ITIL release management)
- Extensible tool set – for multi-brand device administration

As such, ZipTie will support network engineers and operations teams, as well as network device vendors seeking to streamline management requirements through participation in an open source community, and EMS vendors seeking to embed ZipTie functionality into their products. The program uses the Mozilla Public License, which allows for vendors to build on top of an open-source product, as long as they provide “conspicuous acknowledgement” of the open-source components. In this way, AlterPoint can expect to get some visibility, even when ZipTie is leveraged by its competitors.

AlterPoint has contributed significant technology and resources to ZipTie. These resources include committed support from its engineering team and a dedicated product manager. AlterPoint will also be watching the feedback from the community and building the first community relationships to help gauge the success of the program. Nevertheless, AlterPoint anticipates that the ZipTie community will take responsibility for maintaining the code to talk to multiple devices, as is the case across most open source communities.

AlterPoint is also providing ZipTie with some definite structure and milestone objectives. These are on its ZipTie website, but a partial summary below provides some insight into overall scope and direction:

- Milestone 1 – local repository for devices and configurations, hierarchical device organization, credentials and protocol backup, software update facility, basic tools – ping, traceroute, DNS lookup, SNMPwalk, and port mapping – credentials and protocol management
- Milestone 2 – configuration, device attributes and script versioning, configuration comparisons, configuration restore, integration with a Web browser, scheduler, integrated log capture

- Milestone 3 – auto-discovery, network resource modeling and extensible schema, model-based device grouping, reporting, extensible syntax checker library, NMS connectors for inventory and credentials

ZipTie is also affiliated with Nagios (<http://nagios.org>), the Open Management Consortium (<http://open-management.com>), the Eclipse Foundation (www.eclipse.org), and utilities such as MRTG, TACACS+, and Snort. In other words, AlterPoint’s clear intention is to mainstream ZipTie within the broader open source universe.

EMA’s Perspective

EMA believes that the ZipTie program is a bold and positive stroke for AlterPoint. AlterPoint’s vision seems to be clear – it is willing to make serious personal investments in supporting the ZipTie community in the hopes of seeding an effective approach for expanding the horizontal reach of network configuration management. Even if it catches on primarily among AlterPoint customers and partners, the ZipTie program is likely to benefit AlterPoint sufficiently to justify its investment in human resources and in marketing visibility. Should ZipTie catch on to become a truly broad industry initiative, as AlterPoint hopes, the values should be even greater – allowing AlterPoint to focus its development on vertical values in CMDB system evolution, analytics and reporting, while riding atop an expanding base for device control.

EMA also views AlterPoint’s ZipTie launch as relatively balanced and effective. AlterPoint has clearly stated its commitment to promoting and supporting the program. Less defined at present, however, are processes by which AlterPoint may wish to certify ZipTie developed solutions for full product support in the field, as well as discussions of revenue sharing across the ZipTie community.

The flexibility and speed to development that successful open source communities have brought to areas such as Nagios and Linux, and to utilities such as MRTG – speaks well for the future of ZipTie. Should ZipTie become a true industry-wide force, it will also alter the face of the NCCM market by allowing multiple vendors, including AlterPoint competitors, to focus on more advanced features of differentiation, rather than on horizontally scaling to support an ever-widening and ever-more-complex base of eclectic network device brands and models.



**ENTERPRISE MANAGEMENT
ASSOCIATES®**

Phone: 303.543.9500, Fax: 303.543.7687
www.enterprisemanagement.com

1229.010807