MAXIMIZING ROI FROM YOUR EMS:
Top FAQs for Network Equipment Vendor Executives

With the Nakina Network OS™, it *is* possible to have a market-leading management solution that competitively differentiates your product. This document provides a guide to some of the top questions that come to mind when considering whether to build or buy an OAM solution for your products.

Nakina Systems

1. What are the available options when considering a build-or-buy decision for an OAM solution?

There are many different options available to you when considering OAM solutions, but they generally fall under three categories:

1. The first option is to simply do what many vendors have done in the past – submit multiple EMS/NMS solutions in your RFP response (one for each product). This might include some basic integration in an attempt to meet the RFP's requirements; for example branding OEM products to look like yours and cross-launching the various management applications from a common GUI. This is certainly a quick and inexpensive option, but it doesn't really provide the kind of solution or functionality your customers are looking for. On average, it costs service providers $1-$3 Million to integrate each new EMS into their back office systems – driving the total cost used to evaluate your proposed solution significantly higher. In addition, this doesn't address your problem when there are functional gaps in the various EMS solutions; or where some of your or your partners' products simply don't have an EMS/NMS and a CLI or craft interface is the only option.

2. Your second option is to pick one EMS/NMS solution and try to bring all the other products under your chosen management umbrella. This solution has the potential to better address your customers' requirements, but it takes a significant investment of time (6+ months per NE type) and money to deliver basic FCAPS functionality. And even more to get to your products' differentiated values. An important consideration here is that the fundamental heritage of the network elements could be quite different, with various management interface protocols to be supported, like TL1, SNMP, CLI, etc. It's likely that the chosen solution was originally designed to support a specific product family – not for easy integration of multiple product types or the kind of scalability required to support large carrier networks. Additionally, providing an open management framework to support technology integration and multi-vendor equipment from your partners (or even competitors) is not your core business and doesn't add significantly to your top or bottom line.

3. The third option, one that service providers are increasingly calling for, is the use of a best-in-class, off-the-shelf, multi-vendor, multi-domain management solution, like the one available from Nakina. The Nakina Network OS™ is a scalable, carrier-grade, multi-vendor management solution that collapses the EMS and NMS layers and provides a single point of integration between the network elements and the higher-layer OSS/BSS systems. You gain the benefit of having a world-class, scalable, secure, carrier-grade network operating system with a full set of applications (such as discovery, security, backup and restore, network audit and software delivery, etc.), that allows you to easily integrate all of your products under one system. And with the substantial time and money saved on developing basic FCAPS functionality, you can expedite your time-to-market and focus on delivering the value-added features that will differentiate your whole product offering.

2. What are the significant factors I need to consider in deploying and integrating multiple EMS systems for my customers?

There are five key factors to consider when deploying and integrating multiple EMS/NMS systems:

1. Can your chosen solution actually integrate all the products required? This should cover not only your own portfolio, but also your current business partners' products, as well as potential new ones as they arise. It also needs to include how your solution will cope with integrating and supporting new software releases for each of these systems over their product lifecycles.

2. Does your chosen platform deliver all the functionality you – and your customers – require? This means the solution should provide all the major network management FCAPS applications such as: discovery, security, backup and restore, network audit and software delivery, performance measurement, provisioning, etc. In addition to these, the solution must provide carrier-grade scalability and security.

3. What is the cost and how long will it take to develop and deliver? Large equipment vendors, with dedicated network management R&D teams, estimate that it takes 6 months or more to integrate each different network element type. The associated development costs can easily run into millions of dollars. Smaller equipment vendors may simply not have the in-house capacity to assign resources to this function. In any case, this is a significant project that needs to be well planned, budgeted and staffed, allowing for full development cycles if it is going to successful.

4. How easily can your solution be customized? This is important to enable you to deliver the value-added features that make the most of your product differentiators.

5. Is your solution based on open industry standards? Standards-based solutions simplify development and integration costs for you and your customers – for example, standards-based north-bound interfaces provide easy integration into existing back-office / OSS systems.

3. What are the commercial benefits of using an existing platform like the Nakina Network OS™?

As an equipment vendor, the Nakina Network OS™ provides you with a scalable, carrier-grade, multi-vendor management solution that allows you to quickly and easily integrate all of your (and your partners') products under one network operating system – with full functionality that is common across all the products. The substantial time and money you save on developing basic FCAPS functionality can be used to expedite your time-to-market and to focus on delivering the value-added features that will differentiate your product offerings. Already deployed by some of the world's largest service providers, the Nakina Network OS™ provides a solution that has been pre-integrated into these back office systems, which could even allow you to overcome the additional hurdle and expense associated with your customer's acceptance lab testing.

4. What are the technical benefits of using an existing platform like the Nakina Network OS™?

The Nakina Network OS™ was built on a foundation of four key technical pillars: intelligence, scalability, security and standardization. Each one of these provides multiple benefits to both equipment vendors and service provider customers.

1. Intelligence defines the Nakina Network OS™ as one of the only products on the market that can provide a multi-vendor, multi-domain management solution that delivers full FCAPS functionality at the network, service and element management layers. This intelligence is leveraged by collapsing the EMS and NMS layers into a powerful mediation layer that provides a single point of integration between the network elements and the higher-level OSS/BSS systems.

2. Carrier-class scalability, reliability and availability are key requirements that were designed into the Nakina Network OS™ from day one. Scalability is delivered across multiple dimensions; providing network-wide, multi-vendor coverage for networks from only a few hundred NE's to tens of thousands; and from a handful of users to more than 1,000 concurrent operators. In addition, the product is based on a services-oriented architecture that mitigates single points of failure through clustering and load balancing over a distributed network of carrier-class servers.

3. Security is becoming ever more important in telecom networks and the Nakina Network OS™ delivers the highest-compliance rating in the industry to the ANSI/ATIS T1.276-2003 standard. The Nakina Network OS™ provides a single user interface that can be used to manage passwords across all network elements – dramatically reducing and simplifying security administration. Each operator can be given a unique username and password and be provided with precise privileges in access to commands, applications and network elements, as specified strictly by security administrators. All communication sessions and transactions are authenticated and encrypted with industry standard protocols such as SSL, SSH, HTTPs, sftp, etc. and activities are centrally logged for security tracking and reporting purposes. This enables service providers to enforce rigorous security policies with strong password authentication and regular password changes – on both the NE and operator sides – that can be rolled out easily across the network.

4. Standardization and openness are key elements integrated into the design philosophy of the Nakina Network OS™ that are delivered across multiple dimensions. Firstly, the Nakina solution conforms to important standards initiatives such as NGOSS, OSS/J and ANSI/ATIS T1.276-2003. Secondly, Nakina supports fully open, standards-based, south-bound interfaces (e.g. TL1, SNMP, CLI...) along with published specifications and a SDK that allows rapid development of adapters for new NE types using industry-standard XML and Java®. Thirdly, open north-bound interfaces built on Java® APIs and industry standard machine interfaces (e.g. MTOSI) ensure quick and easy integration into service providers' back-office / OSS systems. Finally, open east- and west-bound interfaces are supported to allow vendors to fully customize the capabilities of the Nakina Network OS™ in handling vendor-specific features and new value-added functionality (and/or extend the Nakina GUI to support customized workflows). The degree of openness of our solution means practically anyone (equipment vendors, service providers, and system integrators) can rapidly create run-time loadable adaptors for new NE-types or customer-specific customizations that enable management consistency across the network and highly creative, scalable and differentiated management applications.

5. How much faster do I get a management solution to market?

Large equipment vendors with dedicated network management R&D teams estimate that it takes 6 months or more just to integrate each different EMS or network element type. This is in addition to the time and cost associated with developing the underlying EMS/NMS solution. Nakina has a wide range of off-the-shelf adaptors available today to support numerous products from many of the industry's leading equipment vendors. Furthermore, given the tiered architecture of the Nakina Network OS™, a new adaptor/device driver for your product can be produced on average in just a few weeks, depending on the functionality to be supported. All the tools required to quickly develop your adaptor are provided in a complete SDK, or optionally, the development can be done by Nakina's professional services group.

6. Don't I lose the ability to competitively differentiate my offering when I use an off-the-shelf solution? Am I stuck with something that can't be customized?

No. In fact standardization and openness are two key design elements and differentiators for our solution. This not only enables you to deliver differentiated management applications on top of our network operating system, but also enables system integrators and your partners to build and deliver highly creative and scalable applications for customers. This frees up your R&D dollars to build value-added applications that take advantage of your products' special features and differentiators.

7. Are there performance trade-offs in using an off-the-shelf solution like Nakina's?

No, in fact it's the opposite. You and your customers will see performance improvements because all Nakina interfaces and processes are workflow-driven (versus equipment-driven) functions that were developed with the combined help of usability experts and service provider operations staff (through exercises like job-shadowing for performance of specific tasks, etc.). By reducing the number of systems requiring access to the network, both performance and security are improved, while costs are reduced. The Nakina Network OS™ has passed acceptance lab testing with some of the world's largest service providers and has been proven in live network deployments to support multiple different vendors, each with many NE types and software versions. It has the ability to provide maximum performance, robustness and scalability to support tens of thousands of nodes.

8. Doesn't using an off-the-shelf solution limit my ability to deliver management software releases that align with my new product releases?

The reality is that you probably already have separate OAM and product R&D teams that work independently today. The Nakina Network OS™ solution provides you with immediate access to a carrier-class, scalable, secure network operating system with a full set of applications. You actually gain flexibility in your delivery schedule because the Nakina solution is built on a services-oriented architecture that enables hot-deployable NE adaptors to be developed independently as plug-ins or device drivers to the main network operating system. This limits the number of changes your OAM development resources need to make and frees up their time to focus on developing the specific features and value-added applications that your new product release delivers - instead of on basic FCAPS functionality.

9. What happens if I decide to OEM products from another company or if we need to integrate product lines acquired though mergers or acquisitions?

By using the Nakina Network OS™ you start with a scalable, multi-vendor, multi-domain solution that gives you a competitive, differentiated, unified management solution with very little effort and time. Its open management framework can support technology integration and multi-vendor equipment from your partners with simple adaptor plug-ins that can developed in just a few weeks as opposed to months.

10. My organization views OAM as an important competitive differentiator. Do I really want to give up control of such a vital development effort?

No, you don't want to give up control - and you don't need to. The real question, however, isn't about control. It's about your ability to focus on your core business and choosing where to best invest your resources for maximum effectiveness and competitive differentiation. With the Nakina Network OS™ solution, you are able to leverage a world-class, well-tested platform while retaining control of the value-added applications that leverage the special features in your networking products that make you unique. It's a win-win business decision that delivers a better solution to your customers in less time and with less cost.

Interested in finding out more? Let's talk >

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