



Unified Management. Today.

Dell's new, simple approach to systems management.

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Introduction

In the past year Dell has been actively engaged in creating a systems management strategy which will close the gap with the competition. In Dell's recent analysis of the marketplace, they have found that the existing systems management landscape requires customers to use multiple products with different agents, consoles, and data stores to manage their various devices. There are lots of choices when it comes to choosing products, but customers are required to manage them all separately, which can prove to be difficult and costly in today's environment. This approach seemed confusing and ineffective to Dell, despite the possible initial perception that customers can assemble their own 'best-of-breed' set of tools.

As Dell examined their competitors' strategies, Dell concluded that they were going to take the opposite approach. Dell's competitors promote one set of proprietary tools forcing their customers to standardize on one very complex solution with a weighty architecture. While this eliminates the multiple tools and multiple consoles approach, it is a rigid offering, it doesn't allow for choice and it comes with an even heavier price tag. Given Dell's research and examination of the landscape today, Dell began defining what it felt was the "ideal solution."

The Ideal Solution

First and foremost, the solution must be simple. All management solutions must be able to be monitored with one console and all share the same database (called a Change Management Database or "CMDB"), the same management infrastructure, and the same user interface.

Secondly, the tool must be unified. The ideal solution would consist of one suite of tools for all hardware and software management.

Next, the solution must be modular and open. All management solutions—from server hardware management to service desk and asset management to security compliance—must be able to simply snap into the management architecture. Customers should be able to start by outfitting themselves with sufficient capability to produce the outcomes they're seeking in the near term and easily adopt additional capability—and the associated benefits—when they are ready to take the next step.

Finally, the ideal solution must be affordable. No matter if this is a new investment or an additional purchase to support an existing infrastructure, customers must have an affordable choice which will allow them to budget and plan for future investments.

A New Direction for OpenManage

Dell is announcing a unique management strategy that combines simplicity, modularity and customer choice. In the new OpenManage model, customers can build out their management strategy over time using Dell's own modular management approach, leverage their investment in existing management tools—or a combination of both. Both paths reduce complexity while at the same time promoting customer choice.

Path 1: Modular Management – “Pay as You Go”

As part of the new strategy, going forward, Altiris will be the foundation for Dell's enterprise console products, which manage servers, clients, storage, printers, etc. This approach will provide many benefits for Dell customers and is the foundation of a differentiated model that positions Dell competitively in the systems management market. The modular management architecture, unlike competing models, combines simplicity, modularity and customer choice, today.

Simple. The OpenManage model is simple because all management solutions share the same database (called a Change Management Database or “CMDB”), the same management infrastructure, and the same management console.

Modular. The OpenManage model is modular because management solutions—from server hardware management to service desk and asset management to security compliance—simply snap into the modular management architecture. Customers can start by outfitting themselves with sufficient capability to produce the outcomes they're seeking in the near term and easily adopt additional capability—and the associated benefits—when ready to take the next step.

Customer Choice. The OpenManage model is also an open model for three primary reasons. First, at the model's foundation are standards-based hardware interfaces and protocols that enable management systems and tools of all kinds to manage Dell hardware. Second, pre-existing and custom connectors can be used to connect the unified management framework to existing systems and tools. Finally, the modular architecture is open to other management solution providers. Dell is partnering with many such providers so that customers have a choice of Dell or “name brand” management solutions to snap into their unified management architecture.

The Evolution and Future of the OpenManage Management Model

The Dell management strategy is not entirely new. Dell has been a long time champion and supporter of open standards and Dell has been building Dell-specific hardware management solutions on the Altiris modular management platform since April 2002. What is new is that Dell is now formally adopting this approach as a go-to-market strategy due to the strong support for it voiced by Dell customers.

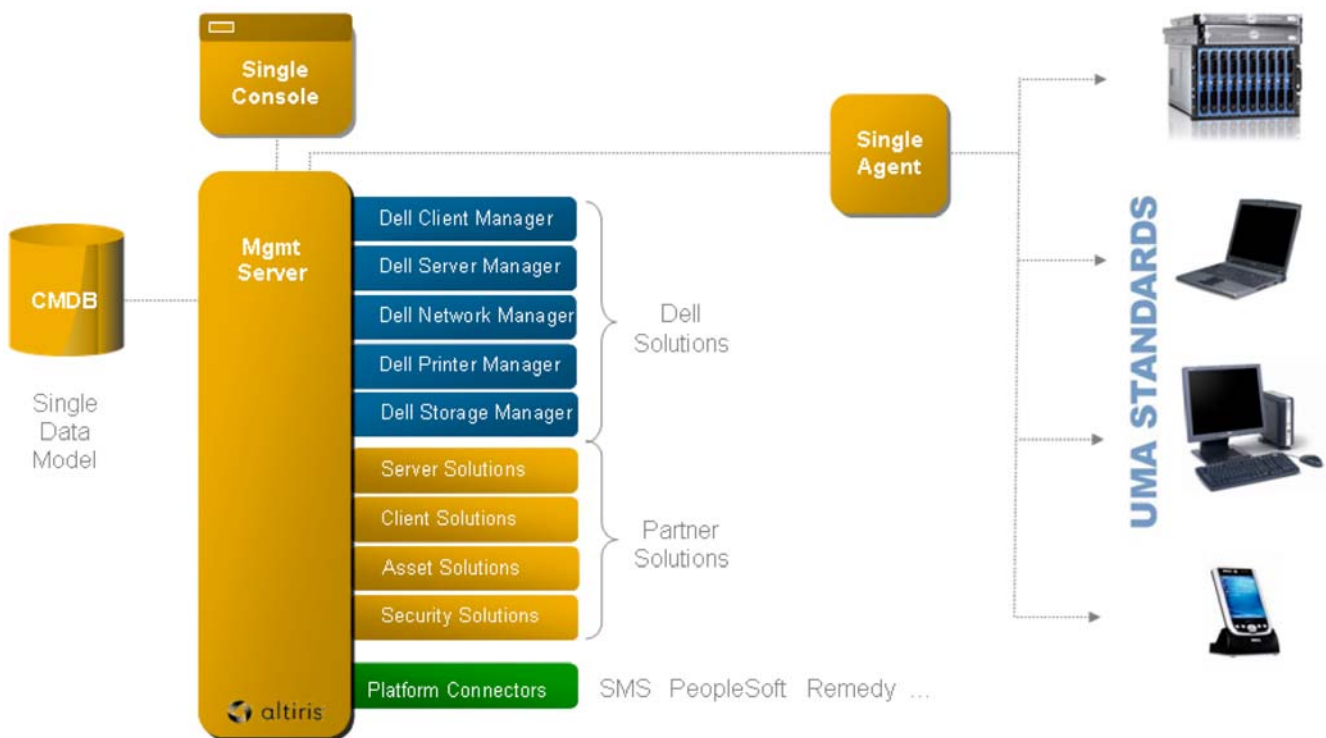
A recent and prominent example of the modular management model being implemented is Dell Client Manager 2.0, released in October 2006. The “Standard” version of this offering is free and it represents the first OpenManage solution to release on the Altiris management platform, called Notification Server.

The Dell Client Manager 2.0 release is significant not only because it represents the first in a series of Altiris-based OpenManage tools, but it also shows a significant and well-received consolidation of Dell's previous generation of client management tools. Prior to the Dell Client Manager, customers had to use the Dell Client Configuration Utility (DCCU), Dell OpenManage Client Instrumentation (OMCI), the Dell OpenManage Client Connector (OMCC) and Dell's IT Assistant to fully manage Dell client hardware.

Now, Dell Client Manager provides all the capabilities of these former utilities and it adds entirely new features into one simple console. Because it leverages the Altiris platform, this console is extensible. As new Altiris-based, Dell OpenManage solutions for server, printer and network switch management become available, they also can be snapped into the management platform alongside the Dell Client Manager tool that is shipping today, all sharing the same user interface, change management database, and management console. Other for-charge Altiris/Dell solutions and 3rd party solutions built using the Altiris Software Developer's Kits (SDKs) can also be snapped in alongside the Dell Client Manager as needs evolve. At no point does the customer have to abandon the original installation of the Altiris platform or add additional, complex infrastructure.

Path 2: Leverage Your Investment – “Keep What You Have”

At the heart of the new strategy is a Dell initiative to drive standards-based interfaces and protocols called the Unified Management Architecture. Not only will these standards benefit adopters of the Dell modular architecture, but it will also enable customers who have adopted other management systems to be able to manage their Dell hardware with those systems.



Conclusion

In summary, Dell's unique approach to systems management gives customers a simplified path to integrated enterprise systems management without compromising any control. Dell hardware will be the easiest to manage in the industry. Dell's collaboration with partners to combine software and hardware management on a single console using OpenManage toolkits gives granular control over Dell hardware from industry leading systems management applications and make Dell hardware the easiest to manage in the industry. This approach enables customers to build best in class, integrated management capability, minimizing the management tools required to deploy, monitor and update their enterprise infrastructure, reducing cost and simplifying operations.

Dell and Altiris have extended their partnership to co-build the next generation of Dell OpenManage applications. The result will be a single console for increased hardware and software control directly integrated into industry leading management applications customers already use. Advanced management is available in "pay as you go" upgrades, giving customers increased control and choice compared to proprietary offerings. This eliminates the expensive forklift customers have had to do in the past when upgrading to software management.

Appendix A: Dell's Modular Management Architecture – Powered by Altiris

Most leading management vendors today agree on the need to reduce complexity and simplify operations by focusing on the alignment between IT and business needs. Many even claim to offer a unified or open approach as well. Given these common objectives, the measure of effectiveness quickly becomes how well a vendor can deliver a compelling ROI against these criteria.

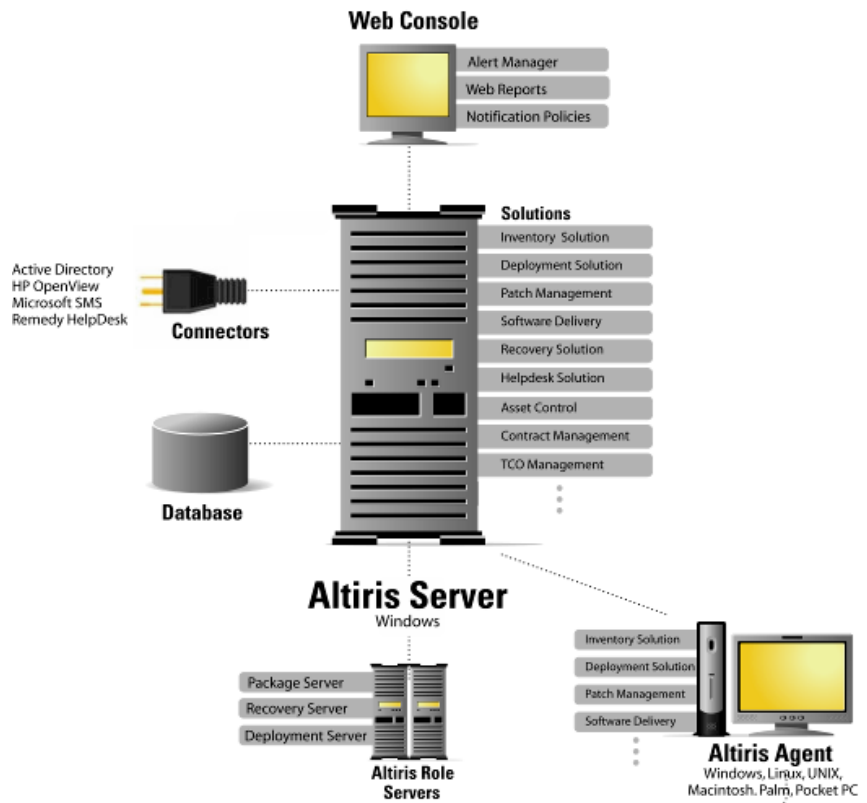
Delivering a strong ROI for any management software is heavily dependent on how well its architecture aligns the people, technology, information and processes necessary to produce significant and measurable business results. This is where the real differentiation between management solutions becomes apparent.

Altiris uniquely delivers a truly unified architecture that is driving the convergence of automated systems management, IT Service Management (ITSM), enforceable security and virtualization management. The Altiris platform provides significant customer choice and unprecedented flexibility for a fully integrated “pay as you grow” model.

Dell and many other 3rd party ISVs recognize these advantages of the Altiris architecture and have adopted it to offer their customers many benefits including:

- A unified data model. One CMDB, one console, one extensible agent that supports many different operating systems and hardware form factors.
- Extensibility/modularity. Snap in only what you need when you need it. Start with free Dell & Altiris solutions and add other Dell, Altiris and 3rd party solutions as needs and budgets allow—without ever having to abandon one architecture or installation of another.
- Openness. Use Altiris connectors to interoperate with other, pre-existing solutions.
- “Full stack” management. Complete hardware, OS and application management in one tool.
- Heterogeneous management. Manage mixed-OS environments.

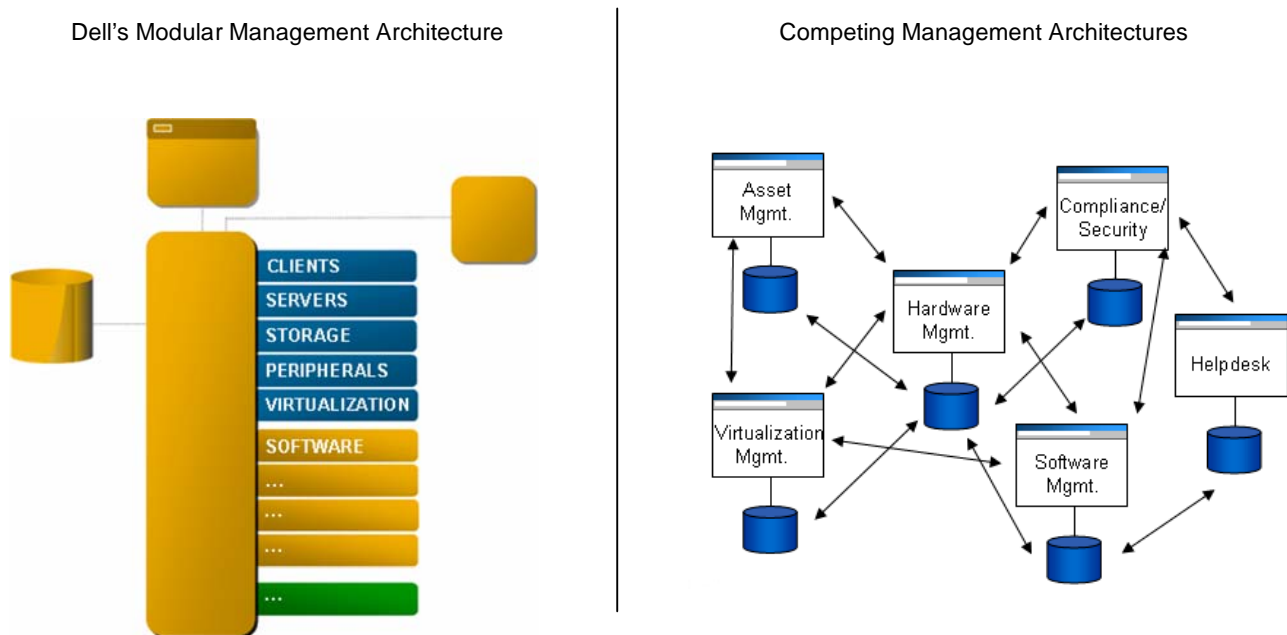
Figure 2: Altiris Architecture



- “Built-in” asset management. Any Altiris-based solution automatically publishes its data to the entire system enabling improved/integrated policy definition, extended asset information/identification/tracking/reporting, and improved association mapping to understand dependencies between resources.
- Integrated Compliance/Security enforcement. Identify and remediate problems to ensure compliance with industry standards (SOX, FISMA, HIPPA, etc.)
- Industry-Leading, standards-based technology (ASF, NAC, Intel vPro, SNMP, etc.)
- Internationalization
 - 6 console languages - English, French, Spanish, German, Chinese, Japanese (simply setting the language context in the web browser can display the Altiris console in different languages all from a single installation of the product.)
 - 17 agent languages
 - Unicode support

By leveraging Altiris, Dell customers gain these significant benefits compared to other management offerings that do not provide a truly unified architecture. The result is a dramatically reduced ROI via reduced cost and complexity with significantly more opportunities for automating IT tasks.

Figure 3: Comparison of Management Architectures



Appendix B: Common Questions

Who Is Responsible For What?

Dell is fully committed to expanding its OpenManage toolset with industry leading tools for the management of Dell hardware. As previously stated, the Dell Client Manager is only the first in a series of OpenManage tools that will dramatically lower the cost and complexity of managing Dell systems.

These new tools will be built by Dell. Dell is NOT outsourcing development of OpenManage to Altiris. Instead, Dell is leveraging the recently announced Altiris SDK so that their solutions will run on top of Altiris Notification Server – the free infrastructure server required by Altiris solutions. This provides customers numerous benefits in terms of extensibility, flexibility, and openness – all core tenants of Dell's Scalable Enterprise model. It's Dell's vision and Dell's tools – powered by Altiris.

The Altiris SDK program has positioned the Altiris Notification Server as a management platform that Dell and other ISVs are adopting. Building on the Altiris platform allows 3rd party management vendors to simultaneously leverage the Dell and Altiris customer base and provide value-add extensions to Altiris' existing portfolio of solutions. Dell is the largest partner to date to adopt the Altiris platform and provide their customers the improved ROI of a consolidated toolset, and unified data model.

What's Free?

Altiris Notification Server is FREE. Altiris charges for optional individual solutions or solution suites that run on top of Altiris Notification Server. Opening up Altiris Notification Server via the SDK provides 3rd parties the opportunity to seamlessly plug their software into the Altiris framework thereby extending its overall capabilities while keeping customer operational costs low (less to learn, license, use due to a common framework). These 3rd parties can choose to either charge for their solutions or make them available for free.

Dell will continue to provide FREE OpenManage solutions on top of the FREE Altiris Notification Server. Basing future Dell solutions on the Altiris platform provides customers the option to start simple with the free Dell and Altiris solutions. Customers then have the option to add additional free or for charge Dell, Altiris or other 3rd party solutions later. The previous Dell OpenManage architecture did not provide customers this kind of extensibility.

In addition to Altiris, Dell and other 3rd party solutions, customers can leverage Altiris connectors to exchange data between Altiris Notification Server and other popular tools such as Microsoft SMS, BMC Remedy, Oracle/Peoplesoft, HP OpenView, etc.

This integration allows customers to adopt as much or as little of the Altiris platform as they would like. Customers can choose to stay with just the free Altiris-based Dell solutions for their hardware management while using connectors to share that data with whatever management tools they are using today. Additionally, those customers who want to eventually adopt the larger Altiris solution set can leverage this interoperability with other tools to begin a phased transition that offers increasing levels of integration until the migration to Altiris is complete. Even though Dell has released only Dell Client Manager Standard and Plus on the Altiris platform to date, customers can begin implementing the Altiris platform now to beginning positioning for upcoming solutions. The platform is designed to allow for this kind of extensibility over time.