

Best Practices in Lifecycle Management: Comparing KACE, Altiris, LANDesk, and Microsoft SCCM

An ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) White Paper
Prepared for KACE

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Executive Summary

This Enterprise Management Associates (EMA) white paper compares the KBOX family of appliances from KACE with leading competitors Altiris, LANDesk, and Microsoft. It explains key best practices in lifecycle management, uses these as a framework for functional comparison, and includes a cost comparison to determine overall solution value.

EMA has found that for over 35 features across seven key areas—Discovery, Inventory, and Asset Management; Bare Metal Provisioning; Software and Patch Distribution; Endpoint Virtualization; Configuration Compliance and Remediation; Process Automation and Service Desk; and Interfaces and Reporting—KBOX appliances compare well in functionality across most disciplines.

However, KBOX appliances are between \$10,000 and \$50,000 less expensive (based on published list prices), and have negligible infrastructure cost, compared with pricing between \$150,000 and \$250,000 for these competitors (in a 1000-node environment).

With such a strong value proposition, EMA recommends any mid-sized business evaluating solutions for lifecycle management should include KBOX appliances in their product evaluations.

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Best Practices in Lifecycle Management

Lifecycle management involves a number of key disciplines, aimed at achieving efficiency, productivity, and cost reduction within IT and across the business. Key disciplines that EMA recommends when considering a solution for lifecycle management include:

- **Asset Management** – Automatic discovery of hardware and software assets allows organizations to accurately identify the types and locations of devices and software connected to the network. This helps in cost accounting, and feeds accurate planning for provisioning, security, compliance, and more.
- **Inventory Management** – Keeping up-to-date inventory allows businesses to reuse existing systems instead of buying new ones, reduce their hardware inventory software upgrades and license costs, and avoid fines and other penalties by ensuring license compliance.
- **Bare Metal Installation** – Provisioning new software into a system that has no operating system or boot agents installed reduces on-site visits and gets new users and systems up and running faster. EMA research shows that lack of bare metal installation can double or triple the time taken to get users productive.
- **Software Distribution and Provisioning** – Installing software from a central location allows new employees to contribute faster, and ensures existing employees can do their job by having the software they need, when they need it. EMA research has found that centralized management halves the time it takes to provision new applications.

- Endpoint Virtualization – virtualization capabilities to support client-side computing provide flexible access to desktop and application software, often with much lower costs of both hardware and administration. Relevant virtualization technologies include application and desktop virtualization, application isolation, application and OS streaming, and remote control facilities for support.
- Configuration Compliance and Remediation – Centralized maintenance of software versions, settings, patches, etc. helps compliance by detecting, preventing, and removing unauthorized software, malware, pirate software, exposures, and other malicious changes. EMA research shows that it also halves the amount of time it takes to deploy patches, and reduces virus and spyware management by an average of 80%.
- Process Automation – Automating and connecting IT management processes saves time and money. EMA research has shown, for example, that process automation can reduce software deployment time on average by two-thirds, and halve the time taken for patch management.
- Reporting – Reporting on status and activity allows businesses to identify and avoid potential problems, provides the ‘audit and control’ required for compliance to regulations like SOX, HIPAA, GLBA, and NASD, as well as to best practices like ITIL and COBIT.
- Security – Detecting and protecting against security risks at the edge of the network is critical to protecting the network as a whole. Centralized management can prevent potential vulnerabilities such as private FTP or Web servers, unauthorized software, or unauthorized configurations, and detect and quarantine insecure systems out of the network.
- Alerting and Messaging – It is important for administrators to detect and respond quickly to problems, to reduce exposure, cost, and downtime. EMA research shows that it takes an hour on average before an administrator finds out about a critical problem. Automated alerting reduces this delay, and allows administrators to correct problems before end users and customers are even aware of the problem.
- Help Desk/Portal – An integrated mechanism to report problems and service requests improves response to end users and reduces administrative roadblocks. An easy-to-use portal interface to such a system reduces telephone calls, manual intervention, help desk staff costs, and errors, and allows automation to add more value to the process.

Functional Comparison

EMA conducted a short comparison of critical features in several of these main lifecycle management disciplines. While it is not a complete comparison, the following section compares availability of several essential characteristics in available solutions including KBOX, Symantec Altiris, Avocent LANDesk, and Microsoft SCCM.

In order to compare similar capabilities, EMA looked at the functionality available in KBOX appliances from KACE, the Client Management Suite and Server Management Suite from Altiris, the Management Suite and Security Suite from LANDesk, and Systems Center Configuration Manager 2007 from Microsoft. EMA based the evaluation on in-

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formation supplied by KACE, LANDesk, Symantec Altiris, and Microsoft, supplemented with information from available public sources. EMA invited all four vendors to review and comment on the evaluation of both pricing and functionality.

Key

✓ = Yes	✘ = No	○ = Partial
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Discovery, Inventory, and Asset Management

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Bare Metal Discovery (x86)	✓	✓	✓	✓
Windows OS Discovery	✓	✓	✓	✓
Non-x86 System Discovery	✓	✓	✓	✘
Linux OS Discovery	✓	✓	✓	✘
Application Discovery	✓	✓	✓	✓
License Enforcement	✓	✓	✓	✓

This is a core competency for all solutions. Microsoft SCCM is unable to discover non-x86 (switches, routers, Mac, handhelds, etc) and Linux systems natively, but KBOX , Altiris, and LANDesk have many capabilities in this area, including license enforcement, OS and application discovery, and discovery of bare metal devices (by serial number, MAC address, etc.).

Bare Metal Provisioning

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Windows Provisioning	✓	✓	✓	✓
Linux Provisioning	✓	✓	✓	✘
Mac OS Provisioning	✘	○	✓	✘
Virtual Machine Provisioning	✘	✓	✘	✘
UNIX Provisioning	✘	✓	○	✘

KBOX can remotely provision both Windows and Linux without an agent, onto bare metal. Only Altiris is able to provision UNIX or a virtual hypervisor, but it has limited Mac OS/X support (no Intel Mac support). Microsoft SCCM can only provision Windows, and does not support Linux, Mac, or UNIX.

Software & Patch Distribution

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Windows Clients (Desktop and Server)	✓	✓	✓	✓
Linux Clients (Desktop and Server)	○	✓	✓	✗
Apple Mac OS/X Clients	✓	✓	✓	✗
UNIX (HP/UX, Solaris, AIX) Clients	✗	✓	✗	✗
OEM and Custom Application Support	✓	✓	✓	✓

All of these solutions are built for core software distribution and patch management on Windows systems, even for third-party and in-house applications. KBOX has robust software distribution features for Mac and Linux, and also provides patching for Mac. Microsoft SCCM cannot support non-Windows clients at all. Altiris and LANDesk both offer strong platform support. Altiris is the only vendor to support Windows, Mac, Linux, and UNIX.

End-point Virtualization

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
OS Streaming	✗	✗	✗	✗
Application Isolation	✓	✓	✓	✓
Application Streaming	✗	✓	✓	✓
Remote (Server-based) Desktop Virtualization	✗	✗	✗	✓
Local (Client-based) Desktop Virtualization	✗	✗	✗	✓
Remote Control	✓	✓	✓	✓

End-point virtualization¹ in various forms is increasingly an essential part of the desktop lifecycle management arsenal. Businesses should look for a range of virtual deployment options, as well as integration with standard management capabilities (e.g., license, asset, inventory, patch, and other management disciplines). All solutions perform application isolation and remote control. Application streaming is performed natively by Altiris,

¹ For a complete taxonomy of virtualization terminology, see EMA Advisory Note: [Defining Virtualization – A Taxonomy of Virtualization Technologies](#)

LANDesk and Microsoft. Although Microsoft requires added components (including Microsoft Application Virtualization and Microsoft Enterprise Desktop Virtualization) to achieve this functionality, with these additions, Microsoft is also able to achieve local and remote desktop virtualization. KBOX, Altiris and LANDesk can perform remote desktop virtualization through integrations with third party solutions.

Configuration Compliance, and Remediation

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Policy-based Software Configuration Checking, Enforcement, and Remediation	✓	✓	✓	○
Password Enforcement (hard disk, power-on, screen-saver, policy)	○	✓	✓	✓
Administrator-initiated Remediation	✓	✓	✓	✓
Automatic or Scheduled Remediation	✓	✓	✓	✗
Scanning and Quarantine of Non-compliant Systems	✓	○	✓	✗

Monitoring, reporting, and manual remediation for configuration policy is universal in these solutions. However, Microsoft SCCM does not provide automated remediation. KBOX and Altiris both have some password policy enforcement capabilities. KBOX and LANDesk can protect the network by automatically quarantining systems that are out of compliance. Altiris offers similar solutions sold separately.

Process Automation and Service Desk

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Includes Process Automation or Orchestration Capabilities	✓	✓	✓	✓
Wizard-based Scripting	✓	✓	✓	✗
Workflow Connects Directly with Integrated Service Desk	✓	○	✓	✗
Workflow Connects Directly with Third-party Service Desk	✓	✓	✓	○
Integrated Service Ticket Creation, and Tracking	✓	✓	✓	✗

Businesses should look for solutions that support multi-stage workflows, wizard-based scripting, 'learning' abilities, and graphical definitions to make routine tasks faster, easier, and more accurate. All solutions provide some process automation. KBOX, Altiris and LANDesk all include built-in end-to-end service desk automation.

Interfaces and Reporting

Key Feature	KBOX	Altiris	LANDesk	Microsoft SCCM
Web Browser-based Administration GUI	✓	✓	✓	✓
Role-based Administration, with Pre-defined Roles	✓	✓	✓	✗
Pre-defined and Customizable Web-based Reports	✓	✓	✓	✓
Data Export for OEM Reporting	✓	✓	✓	✓
Real-time Alerting	✓	✓	✓	✗

KBOX, Altiris and LANDesk all provide comprehensive administration and reporting capabilities. Only Microsoft SCCM does not provide either role-based access or real-time alerting to ensure prompt response to potential problems.

Financial Comparison

A large proportion of overall cost for a software-based solution goes toward infrastructure. For example, for a 1000-node environment, with 10 locations, the following product costs (approximate list prices, before any volume discount) would apply:

			KBOX	Altiris	LANDesk	Microsoft
Software License(s)			\$58,900	\$94,000	\$80,000	\$41,500
Software Maintenance			\$11,800	\$8,000	\$21,000	\$21,000
Total Software Cost			\$70,700	\$102,000	\$101,000	\$62,500
	Qty	Per ea.				
Central Server - Dell PowerEdge 2950 III	1	\$5,000	-	\$5,000	\$5,000	\$5,000
Remote Servers - Dell PowerEdge 1950 III ¹	10	\$2,500	-	-	-	\$25,000
Windows Server 2008 Standard ²	11	\$1000	-	\$1,000	\$1,000	\$11,000
Windows Server 2008 Client Access License - Pack of 20	50	\$800	-	\$40,000	\$40,000	\$40,000
Microsoft-SQL-Server 2008 Standard 1-Processor ³	11	\$6,000	-	-	\$6,000	\$66,000
Microsoft Software Assurance (25% p.a.)	0.25		-	\$10,000	\$12,000	\$29,000
Total Operating Environment Cost			\$0	\$56,000	\$64,000	\$176,000
Total Solution Cost			\$70,700	\$158,000	\$165,000	\$238,500

Notes:

1. Remote servers not required for Altiris, LANDesk
2. Only 1 license required for Altiris, LANDesk
3. Not required for Altiris; Only 1 license required for LANDesk

EMA research also shows that administrator wage cost averages around \$250 per day, and training costs will cost around \$2500 per day or more. Including on-costs (e.g., cost of benefits, vacation time, payroll tax, etc.) of around 25%, one week of training and a two-week deployment (a very conservative timeframe for most software-based solutions) by two administrators will therefore total over \$20,000 (and probably more if vendor professional services are used).

As an appliance-based solution, however, KBOX incurs no additional hardware or software costs, no procurement delays, and while training is still required, KACE provides 10 hours of Web training for \$4800, which is sufficient for multiple administrators. In addition, on-

going patching and software updates are easier. KBOX automatically downloads updates, and administrators simply press a button to apply patches to all components including the operating system, database, Web server, and application. This is in contrast to software-based solutions where each component must be patched and maintained separately.

EMA Perspective

Since the inaugural edition of this document, KACE has made significant strides in improving functionality to achieve a comprehensive solution on par with Altiris, LANDesk and Microsoft SCCM in critical disciplines, while at the same time managing to actually reduce the cost of its management solution. Despite appreciable cost reductions from both LANDesk and Microsoft and operating environment cost decreases (due to overall reduced hardware and software expenses), KACE still manages to show increased value

– cost vs. performance – over its competitors. As an appliance-based solution, KACE avoids the high hardware and software costs (and related maintenance efforts) required by its major competitors. Factoring in these costs, a KBOX solution can cost as little as one half of its software-only rivals. With its ease of use and fast time-to-value, KBOX appliances present a very attractive alternative to Altiris, LANDesk, or Microsoft SCCM. Mid-sized organizations in particular will appreciate the superior return on investment KACE provides as they are more often challenged with budget constraints and expensive IT business requirements.

With its ease of use and fast time-to-value, KBOX appliances present a very attractive alternative to Altiris, LANDesk, or Microsoft SCCM.

Of course, it is important to note that this evaluation does not provide (or compare) a complete feature listing from any of these four vendors. Available solutions from Microsoft, LANDesk, and Altiris all provide many additional features, many of which are not included in the KBOX. Indeed, all four solutions offer some unique features. As such, this paper should be used as a starting point for IT organizations to evaluate their own specific needs against these offerings, rather than as a definitive and universal recommendation.

Nevertheless, with its ease of use and fast time-to-value, KBOX appliances present a very attractive alternative to Symantec Altiris, LANDesk, or Microsoft SCCM. Enterprise Management Associates recommends organizations needing to achieve comprehensive enterprise-wide systems management goals investigate the KBOX for its excellent balance of broad functionality and cost effectiveness.

About KACE

KACE™ is a leading systems management appliance company. The award-winning KBOX™ family of appliances delivers easy-to-use, comprehensive systems management capabilities. KACE customers usually install in one day and enjoy the lowest total cost compared to software alternatives.

KACE is headquartered in Mountain View, California. To learn more about KACE and its product offerings, please visit <http://www.kace.com> or call 1-877-MGMT-DONE.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst and consulting firm dedicated to the IT management market. The firm provides IT vendors and enterprise IT professionals with objective insight into the real-world business value of long-established and emerging technologies, ranging from security, storage and IT Service Management (ITSM) to the Configuration Management Database (CMDB), virtualization and service-oriented architecture (SOA). Even with its rapid growth, EMA has never lost sight of the client, and continues to offer personalized support and convenient access to its analysts. For more information on the firm's extensive library of IT management research, free online IT Management Solutions Center and IT consulting offerings, visit www.enterprisemanagement.com.

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