



TECHNOLOGY AUDIT

Kaseya IT Automation Framework

Kaseya

SUMMARY

IMPACT

IT automation is becoming a vital element for the delivery of a proactive results-based IT service delivery model. At a time when enterprises are attempting to cope with the increasingly dynamic and real-time demands of IT management, the need for workload automation is stronger than ever. The Kaseya IT Automation Framework is purpose-built for this “next era of computing”, with a comprehensive feature set for the automation of the IT tasks needed to manage and maintain an organization’s complex infrastructure of systems and devices. All capabilities are delivered from a single code-base/platform. The addition of ITIL-aligned IT service management capabilities makes Kaseya’s IT Automation Framework a compelling set of IT management capabilities.

- Kaseya IT Automation Framework can help to streamline IT support services to provide a low-cost solution for managing, controlling, analyzing, planning, and administering IT operations.
- Kaseya’s agent-based technology is a strong alternative to multiple domain-based offerings.
- The ITIL-aligned IT service management capabilities make it a well-rounded IT management solution.

KEY FINDINGS

Strengths:	<ul style="list-style-type: none"> ✓ Monitoring and management of the entire infrastructure through a single interface. ✓ Integration of IT service management and infrastructure management capabilities. ✓ Different solutions meet the needs of differently sized and focused organizations. ✓ Kaseya Live Connect delivers remote assistance to provide support in real time.
Weaknesses:	<ul style="list-style-type: none"> ✗ The Kaseya system server is limited to a Microsoft environment. ✗ The IT service management elements are still maturing (ITIL v2 processes).
Key Facts:	<ul style="list-style-type: none"> i There are optional integrated add-ons to further expand capabilities. i For service provider customers, Kaseya offers a “many-to-one” license that allows a single installation to support multiple customers, thereby increasing price flexibility.



OVUM VIEW

IT automation is becoming increasingly critical to the delivery of high-quality and cost-effective IT services. With budget restraints and limited resources, the ability to maintain the availability and integrity of IT systems is hinging on a robust automation-backed support line. For IT organizations the increased adoption of automation allows them not only to reduce the cost of delivery but also improve the service levels that clients receive. Importantly, automation can improve incident management, the bane of IT operations, in three ways. It can reduce the time to resolution, proactively identify and address issues before they become incidents (or problems), and reduce the volume of incidents caused by change-related human error.

This is where Kaseya and its automation solution portfolio, the Kaseya IT Automation Framework, stand out. K2, the platform enabling Kaseya's second generation of IT automation offerings, builds automation into the systems deployment and management process. It mirrors the best practice associated with the provisioning of services and automates repetitive work through machine-driven tasks and processes that allow remote monitoring, proactive management and maintenance of distributed IT infrastructure through an integrated web-based platform

Kaseya's IT systems management capabilities include remote access and troubleshooting for support and remediation, proactive IT service delivery, and complete IT automation. The solution is available for IT solutions providers and public and private-sector IT organizations, and Kaseya says it has more than 5,000 customers with over 5 million installed endpoints. Kaseya's K2-supported product line is available in two on-premises versions: the Enterprise Edition (EE) and the Master IT Services Edition (MITSE). These are covered in this Technology Audit.

In the second iteration of its IT Automation Framework, Kaseya has refreshed the interface, added functionality and features, and expanded its array of systems management modules. With the K2 platform, it has also added a software-as-a-service (SaaS) model to its on-premises offerings. The inclusion of SaaS puts Kaseya in a better position to meet the needs and preferences of service provider that offer remote support, troubleshooting, and managed services. The SaaS model can also be seen as a low-risk, low-cost entry-level option for smaller organizations looking for a more proactive approach to IT management.

Kaseya has been growing at a rapid pace in the past couple of years. Since 2007 it has doubled its revenue every year and it is now a \$100 million company. It is a privately held global company and has more than 450 employees in 17 offices worldwide.

Recommendations

- Kaseya's IT Automation Framework is suited to IT organizations and solution providers that are looking to manage the complexity of their existing and future IT infrastructures.
- Kaseya's products typically replace a non-automated and reactive IT-support model or various point-solution products.
- The combination of infrastructure management and IT service management capabilities make the Kaseya offerings highly suitable for organizations looking for a more complete IT-management solution from an ease-of-use perspective.
- The SaaS model can be considered as a low-risk, low-cost entry option for smaller organizations looking for a more proactive approach to IT management.



FUNCTIONALITY

SOLUTION OVERVIEW

The Kaseya IT Automation Framework core and add-ons allow integration and automation of all basic IT tasks including systems management, patch management, IT asset management, software deployment, data protection, compliance, endpoint security, and service desk. Scalability is a key component of the Kaseya K2 platform and the product allows extensibility through multiple platform support and integration with third-party applications. With MITSE and EE, Kaseya has also included enhancements to the application set that include patch management, agent procedures, monitoring, desktop-policy management, and desktop migration.

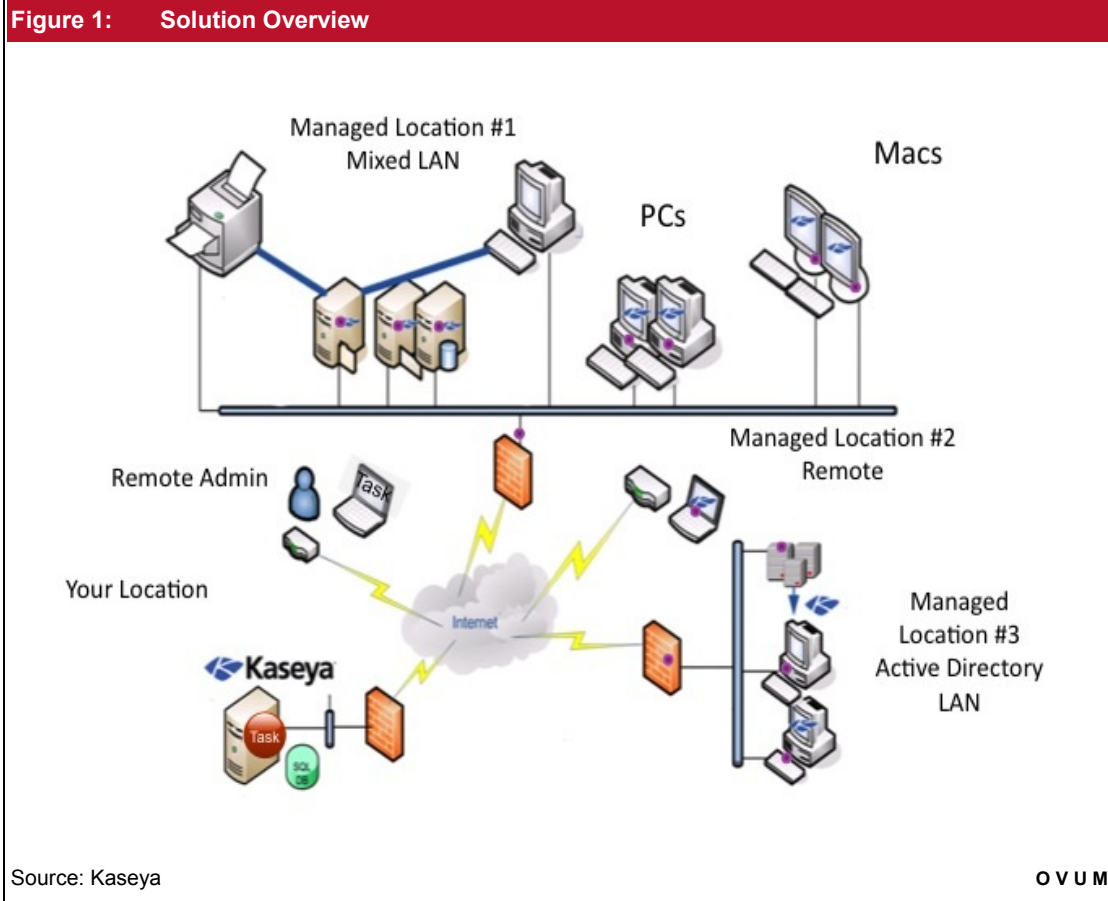
New add-on applications and capabilities include:

- A configurable policy-driven service desk that supports ITIL-based processes. It can follow the flow of incidents, problems, and changes to help facilitate true IT service automation in the integrated platform.
- Live Connect, a proprietary application that offers instant access to and visibility of remote systems. It includes a video chat function to better connect support people and end users.
- A discovery application that in addition to basic SNMP monitoring of devices finds IP-based systems and devices on the network.

The core of Kaseya's IT Automation Framework is the Virtual System Administrator (VSA), which provides real-time web-based IT task and process management. Kaseya has enhanced the integrated functionality of the VSA through:

- New web-service APIs for integration with third-party applications, allowing users to augment their ability to manage their IT infrastructure.
- An organizational structure for different users, roles, and overall system-security preferences to better define responsibilities and functions for multiple users.
- A streamlined user interface for better navigation and organization.
- An upgraded scheduler and wake-on-LAN for increased automation flexibility.
- Enhanced reporting services.

The framework nature of Kaseya provides the core set of functions that are frequently required, and increases the depth and breadth of the functionality offered, including deployment, configuration, execution, updates, logging, reporting, monitoring, and remediation. It also allows for the augmentation and expansion of service offerings, wrapping other technologies within Kaseya for the extension of features and functions or the creation of new capabilities. An overview of Kaseya's architecture is shown in Figure 1.



Kaseya's architectural framework comprising the Kaseya Agent and Kaseya Server is central to providing connectivity and security. The server is responsible for maintaining a database of client configurations and holding schedules of pending tasks (called Agent Procedures in Kaseya) for the agents. The agent is responsible for communicating system information and status back to the server, and for actually executing the tasks (Agent Procedures) locally and delivering IT services as defined by the company's service-level standards. Each managed system has the lightweight agent installed (1.3MB), which initiates all communications back to the server via an outbound stateful connection.

The agent-based architecture delivers a number of advantages over domain-bound, outbound, and LAN-based technologies. While such technologies are practical in a single network where the resources are directly visible on the corporate LAN/WAN, this approach typically consumes too many resources to operate effectively across low-bandwidth VPNs, dedicated connections, or the Internet. Kaseya's agent-based technology, however, offers a lightweight alternative, forming a secure TCP connection with the server and eliminating the need for address management, the implementation of port mapping schemes at each site, or VPNs. This model also supports roaming users.



SOLUTION ANALYSIS

Core automation capabilities: deployment, configuration, execution, and update

Agent Procedures (formerly called Scripts)

Kaseya provides Agent Procedures for automating tasks such as agent control, configuration changes, clean-up and maintenance, disk management, and network testing. Kaseya also provides sample default templates and template sets for servers (SQL, Citrix, and Terminal), workstations, Microsoft Exchange, and BlackBerry devices out of the box, and many more via professional services engagement.

Agents

Kaseya provides proactive service delivery capabilities, with procedures scheduled for and executed by the agent without end-user intervention. All steps are logged and can be reported on at any time. Services can also be scheduled and template agents can be pre-configured with services and schedules prior to being deployed. Deployed agents can therefore be managed according to policy guidelines with no further input required, reducing the cost of service delivery in the organization.

Desktop Policy Management

The Desktop Policy Management module provides automated desktop management and the definition and deployment of group profiles. It allows organizations and managed service providers to remotely deploy customizations and maintain consistency across the organization for the enforcement of corporate standards. Desktop Policy Management works with all Windows environments and does not require Active Directory or domains. Coverage includes power settings, printer and drive mappings, and defining and managing standard desktop settings. File access policies allow file-type restrictions on specific applications, and policies can be applied to all groups or specific computers. Similarly, policies can be defined for network and application access. The network-access policies are most useful when used in conjunction with Kaseya's Audit and Inventory module.

Patch Management

Kaseya provides a comprehensive patch-management module that covers activities ranging from simple fully automated patch deployment to script-based automation for a customized deployment. The module does not require any software to be installed. Instead the Kaseya server transparently and automatically installs the required software components. The module also scans the networks for installed and missing security patches, helping to maintain patch compliance for the entire enterprise. Because the patch module is based on Kaseya's agent technology, it does not require dedicated patch servers and is aware of the patches and security holes residing on each system. There is also the ability to approve or deny selected patches.

Desktop Migration

This module automates the backup and collection of user settings for deployment to replacement desktops. It allows the collective migration of settings to groups of users as well as the scheduling of regular backups of settings. In doing this it allows the specification of system settings, applications settings, and the files to be backed up.



Core management capabilities: monitoring, remediation, logging, and reporting

Audit and Inventory

This is a core feature of Kaseya's IT Automation Framework, allowing accurate and up-to-date audit and inventory of the IT infrastructure including computers, servers, and mobile devices. Because the module is built on Kaseya's core framework it allows the discovery and auditing of new systems, and the logging of any hardware, software, or system changes. Kaseya provides a centralized inventory repository where all data is stored with the ability to review changes against the baseline and generate reports. Being agent-based, there is real-time access to computer information independent of location or online status. Audit also allows the discovery of software details such as application executable name, description, version, manufacturer, directory path, file size, and the last modified date as well as detailed license information.

System Monitoring

Kaseya's System Monitoring module monitors services, events, and performance states on agent-installed machines, and uses SNMP to monitor other devices. It provides user-defined monitoring with instant notification of issues or changes such as low disk space, processor spikes, and memory issues. Kaseya also provides log monitoring that allows the monitoring of events in log files. There is the ability to create an alarm summary for all machine IDs that match the machine or group ID filter, and notes can be added to alarms. Alarms can also be suppressed for specified time periods, such as recurring time periods to allow upgrade and maintenance activity to take place without the generation of alarms or affecting SLA metrics. In these cases, the agent still collects the data for information purposes. Alarms can also be bypassed and information sent directly to the Ticketing or Service Desk modules, as well as being used to trigger the Agent Procedures for automated remediation.

Service Desk and Ticketing

Kaseya provides a web-based helpdesk environment that is directly integrated into MITSE and EE. Service desk and Ticketing are two separate and mutually exclusive modules – ticketing is built into the core and Service Desk is optional in most cases. From an ease-of-use perspective, being able to seamlessly start diagnosis or resolution from within the incident ticket is an obvious advantage.

The Kaseya Service Desk is an ITIL-aligned and fully configurable IT service management solution that provides features such as incident tracking and knowledge management. The service desk includes multiple templates based on ITIL standards, and service desks can be configured with differing responsibilities. Because the service desk module is built on the core framework, it can create tickets based on alarms, assign priority to tickets and route them via escalation points, report on ticket statistics, and use email to update end users and receive feedback. The built-in knowledge base allows IT staff to quickly find related known error data, resolutions, and workarounds. There is also the ability to convert tickets into knowledge base articles and to link articles to tickets.

Additional IT-management capabilities

Remote access

MITSE and EE now have a new feature called Live Connect for remote access and control, which works behind firewalls as well as NAT by using a peer-to-peer connection. It offers procedure history, audit information, a drag-and-drop file manager for transferring files to and from the agent, command-prompt support, a remote registry editor similar to the Windows regedit tool, and a task manager to oversee running processes and resource consumption.



It also provides Windows services management (stop, start, restart services), log off, reboot and shutdown machines, and the ability to see logged-in-user sessions. This all happens in the background without disturbing the user using the system account, and is therefore not affected by the rights of the logged in user.

Live Connect has a customizable home screen framed by a header with system information including current user, domain, operating system and version, RAM and CPU usage, and a live desktop thumbnail of the endpoint. Because it is part of the Kaseya IT Automation Framework, IT departments can build Agent Procedures and make them available to the end user or specific administrator groups through Live Connect so that they can be run on a single machine. The Agent Procedures can also gather information or automatically run checks at the time an issue is reported and resolution commences.

Backup

Backup provides real-time automated disk remote backup, disk imaging, file-level remote backup, and bare-metal restore for Windows servers and workstations. It integrates with the Kaseya systems management framework with central web-based administration of all features including event-scheduling, remote backup status, and reporting. Systems can be configured globally according to group (policies can be customized to include location, business unit, OS type, or brand), or locally by individual servers or workstations. The remote backups can be completely automated and left unattended to recover lost files.

Security/Antivirus

Kaseya provides an industry-standard scanning engine with the centralized management of definitions and profiles. Functions include real-time protection, on-demand scans, anti-spyware, and an email scanner. As an integrated component of the Kaseya IT Automation Framework, the Kaseya Anti-Virus scanning engine can be configured, deployed, and managed from the standard Kaseya interface. Updates are handled automatically and all activity and information detected is logged and stored in the Kaseya database and made available for executive summary and detailed management reporting. It provides support for Microsoft Exchange, and if Exchange is detected on installation the plug-in for email protection is automatically installed with administrator permission.

Ease of use and reporting

The Info Center module includes a dashboard that provides a view of the total system's status, highlighting the machine IDs and tasks that require action. Each of the dashboard views contains one or more panes of monitoring data. There is comprehensive integrated reporting for all data collected and stored in the system, and the out-of-the-box management reports can be customized using report parameters, and filtered by organization, machine group, machine ID, or view definition. Reports can be exported to PDF, HTML, or Excel formats, and can be scheduled to run automatically and on a recurring basis. The reports cover common IT statistics including hardware and software inventory, complete computer changes, disk utilization, license usage and compliance, network usage and statistics, server and workstation uptime history, helpdesk trouble tickets, and computer logs and status to name a few. The reports can be scheduled for automatic distribution via email and provide for an approval process to check reports before they are forwarded on to management or client recipients. The Info Center also provides a Scheduled Reports page that presents a personal list of the published reports and the report sets the user is authorized to view.



SOLUTION STRATEGY

The key market opportunity for Kaseya is the continued need for efficiency in IT operations against a backdrop of budget cuts, with IT typically being asked to “deliver more with less”. Kaseya has a wide target market for its solution, encompassing many organizations irrespective of company size, industry sector, and geographical region. For IT service providers, Kaseya provides solutions across break/fix, remote support/troubleshooter, managed service provider, and master managed service provider business models. Kaseya offers the solutions through a wide-ranging portfolio to suit the IT functionality, budget, and services requirements of the IT service provider regardless of the size and scope of its business.

For MITSE and EE, Kaseya does not use a distribution channel. However, qualifying IT Service Provider customers that are using MITSE are able to sell the EE product, but everyone else must buy directly from Kaseya. This is changing with the SaaS products as these will be delivered via a set of selected reseller partners. To support its solution Kaseya has developed a partnership program called the Kaseya Technology Alliance Program. This strives to improve customer service and support by collaborating with select IT service companies and ISVs to provide and expand complementary software integration, while ensuring interoperability. Kaseya’s technology partners include AutoTask, Catbird, Connectwis, Tigerpaw, and Untangle.

Licensing and payment options include both perpetual and subscription-based license types. The usage metrics for perpetual licensing include per-server, per-administrator for some modules, and per-endpoint for the core product. The usage metrics for subscription licensing include per-functionality, per-administrator, and per-month/year. Perpetual and subscription licensing are available on a free 30-day trial basis and Kaseya also offers “freemium”-based versions of its software. Pricing for “paid for” Kaseya starts at \$1.50 per device per month for SaaS-based models, through to hundreds of thousands of dollars for larger implementations (tens or hundreds of thousands of seats) of the top-end on-premises products.

Future developments for the solution follow Kaseya’s guiding philosophy for all its applications and services: to deliver a unified, fully integrated, and consistent platform for the management and delivery of IT services. Kaseya plans to continue to build an extensive application stack on top of the platform and share a roadmap of upcoming product and services releases with its customers. Kaseya already leverages third-party modules and has plans to introduce more in 2011.

IMPLEMENTATION

The deployment options available for Kaseya include on-premises, on-premises (managed), and SaaS. The managed on-premises deployment is offered as part of an overall solution with Kaseya NOC services. The ease of deployment and implementation is a primary competitive advantage, with both deployment and subsequent configuration able to be completed quickly. Typical small and medium-sized deployments can be accomplished with one IT administrator in one day, while a large deployment with more than 500 users typically requires about three days. For the deployment, the Kaseya Server requires a Microsoft Windows Server operating system and a Microsoft SQL Server database. The client operating systems supported include Windows, Mac OS, and Linux.

Kaseya offers web-based support through the Kaseya Customer Portal, which is available 24x7. Once a ticket has been logged, Kaseya provides follow-the-sun telephone-based support with a commitment to provide a suggested resolution (or a request for additional information) within one business day. The requirement for web-based support includes customers being current on upgrade and maintenance, and this costs 20% of the paid annual licensing cost based on current licenses.

The Kaseya Knowledge Base is free of charge to customers. It includes articles and information to help in the installation and usage of the Kaseya IT Automation Framework. Kaseya Education Services include free access to computer-based training (CBT) via an online option in addition to technical education via workshops held both online and at the customer's location.

DEPLOYMENT EXAMPLES

Liverpool Women's NHS Foundation Trust

The Liverpool Women's NHS Foundation Trust needed a solution that would reduce the length of time taken to resolve business-affecting IT issues. Specific requirements included remote patch-management and the remote and simultaneous monitoring and management of the entire infrastructure including network components, servers, and desktop PCs. The trust felt that the Kaseya IT Automation Framework could outperform rival products in terms of both functionality and pricing, and was well-suited to the trust's small public-sector business model. Kaseya says its Kaseya IT Automation Framework has allowed the trust to move away from an inefficient "break/fix" model to a more proactive approach by providing real-time IT management and support for users.

Royal Brompton and Harefield (RBH) NHS Trust

The result of a merger between two different hospitals, the RBH NHS Trust was faced with the challenge of unifying two discrete and different IT infrastructures. The trust was also looking to implement a single unified web-based PAS (patient administration system) and needed to ensure the readiness of all PCs to accommodate the new system. It needed an IT solution that would allow it to centrally deploy changes to the IT infrastructure in a controlled and time-efficient manner. Although Kaseya was initially chosen to deliver against a very specific need, the trust has since started to use Kaseya for other services including pushing out scripts automatically.

Green Fields Technology

London-based Green Fields Technology offers technology and managed IT support services to more than 200 businesses across the South East of England. Its range of services includes disaster recovery, business continuity, web hosting, help desk, and 24-hour IT support. Green Fields wanted to improve its business in three key areas: customer growth and new revenue streams, delivering high standards of service, and driving greater efficiencies into its operation. However, the company did not want to increase the number of engineers and associated operating costs. Green Fields rolled out Kaseya Master IT Service Edition across its business, enabling its team to centrally and concurrently monitor and manage the complete infrastructure, network components, servers, and desktop PCs for every client. It is now using Kaseya to monitor and maintain more than 2,500 end points across 20 cities, remotely and securely monitoring, managing, and supporting 80 per cent of all client systems in real time. This includes software and hardware troubleshooting, centralized software deployment, patch management, application configuration, virus cleaning, and implementation of local security restrictions.



Mirus IT Solutions

Mirus IT Solutions is a managed services provider that aims to transform IT into a competitive edge for SMBs. The company wanted to grow its business, take on more customers, and maintain high levels of customer satisfaction but without increasing headcount and overhead costs. Mirus deployed the Kaseya Managed IT Services Edition to deliver proactive, fully-managed IT support services to its client base and the platform is now enabling it to centrally and concurrently manage over 7,000 individual machines for more than 400 customers through a single, web-based interface. Kaseya says that Mirus has increased first time remote case resolution from 40% to 85% and has doubled engineer productivity.

Table 1: Contact Details	
<p>Kaseya UK 110 St. Martin's Lane London WC2N 4BA UK Tel: +44 (0)870 042 2360 www.kaseya.co.uk</p>	<p>Kaseya US 800 Brickell Avenue Suite 1100 Miami, FL 33131 USA Tel: +1 (415) 694 5700 www.kaseya.com</p>
Source: Kaseya	OVUM

Headquarters	Australian Sales Office	End-user Sales Office (USA)	Important Notice
Shirethorn House, 37/43 Prospect Street, Kingston upon Hull, HU2 8PX, UK Tel: +44 (0)1482 586149 Fax: +44 (0)1482 323577	Level 46, Citigroup Building, 2 Park Street, Sydney, NSW, 2000, Australia Tel: + 61 (02) 8705 6960 Fax: + 61 (02) 8705 6961	245 Fifth Avenue, 4th Floor, New York, NY 10016, USA Tel: +1 212 652 5302 Fax: +1 212 202 4684	This report contains data and information up-to-date and correct to the best of our knowledge at the time of preparation. The data and information comes from a variety of sources outside our direct control, therefore Ovum cannot give any guarantees relating to the content of this report. Ultimate responsibility for all interpretations of, and use of, data, information and commentary in this report remains with you. Ovum will not be liable for any interpretations or decisions made by you.

For more information on Ovum's Subscription Services please contact one of the local offices above.

