

Why K-12 Schools Need to Automate IT Systems Management

School districts want to provide higher quality learning experiences while cutting costs, saving energy and doing more with less. Automated IT systems management is the ultimate facilitator for achieving these goals... and more.



Kaseya

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Introduction

With educational budgets being slashed and federal stimulus funding drying up, K-12 school districts are forced to do more with less, yet are still expected to provide the highest quality learning experience to students. This tightrope walk is taking its toll on districts, and pushing them to make better use of their IT assets without breaking the budget.

The challenges don't stop there. District IT departments are under more pressure than ever, thanks to expanding government and industry data management regulations; increasingly complex security threats; and growing demand from management and end users for 24/7 uptime and high performance. These hurdles can't be solved by across-the-board budget cuts, and instead require a strategic investment in technologies that boost efficiency, save money and position IT as an integral part of the entire school district's operations.

Automated IT systems management, or IT automation – where software manages the routine, day-to-day tasks of IT maintenance – is helping districts fill these gaps. Equipment and software management, for example, consume large amounts of time and resources. In fact, PC management alone is a major cost center for districts, where IT team members spend an inordinate amount of time maintaining networks and servers, and managing updates, patches and break-fix issues for end users.

IT automation delivers relief from the administration, monitoring and helpdesk chores that eat up time and resources. IT departments reap immediate time and personnel savings, not to mention reduced licensing fees for software maintenance.

Automation also provides improvements in energy efficiency and security, which in turn lower data center costs. These energy savings dovetail nicely with 'green' programs and standards that many K-12 districts are striving for, and help create an environmentally friendly atmosphere for students, teachers and staff.

Getting to the Root of the Problem

Few would argue the merits of automating routine IT tasks that have traditionally been handled on a case-by-case basis by a staff member, yet the switch to an automated environment isn't always an obvious choice for K-12 school districts.

To get a better sense of how K-12 schools view IT automation, Kaseya surveyed IT professionals, administrators and superintendents from 175 districts nationwide, gleaned information from each of them. Survey goals included finding out how deeply automation has penetrated the market, measuring attitudes about automation and determining what percentage of schools are exploring their automation options.

In this paper, we'll explore the results of the survey, focus on the IT concerns expressed and outline why IT automation delivers tremendous benefit for K-12 school districts of all sizes, and across all geographies. We'll also explore the real-world savings and return on investment that schools realize when implementing automated IT systems management solutions.

Survey Findings

School districts have a lot on their agendas right now. When asked about their top goals for 2011, nearly 79 percent cited "providing a higher quality learning experience" as their number one concern.

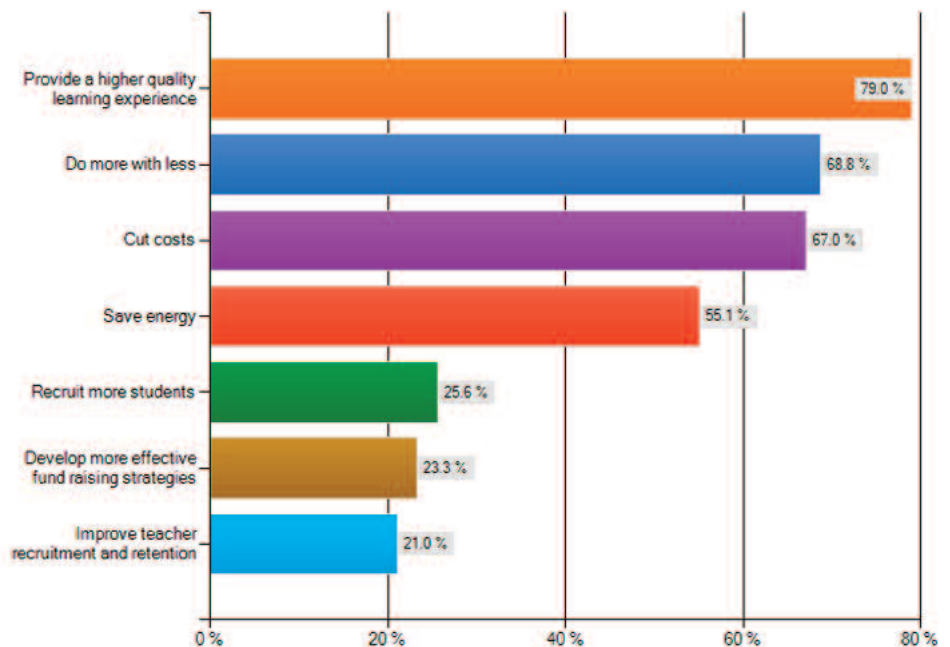
It's interesting that this seemingly basic expectation – for students and teachers to have all of the necessary learning tools in an environment that's conducive to learning – has become a challenge for IT departments, superintendents and staff. Apparently, improving the educational experience isn't as simple as it sounds – all the more reason for districts to consider automation as an effective solution to setting and maintaining superlative service levels.

Districts are concerned about other issues as well. Sixty-nine percent of respondents are focused on getting more done with fewer resources; 67 percent are looking to cut costs; and 55 percent want to save energy. Also of concern is the need to recruit more students (26 percent), develop more effective fundraising strategies (23 percent) and improve teacher recruitment and retention.

Hurdling Tech Challenges

Budgets cuts are top of mind for nearly 69 percent of respondents right now, followed by the need to provide continuous service to end users (43 percent), keeping all equipment online and operating (52 percent) and handling tasks like network security and software patching (40 percent). The fact that security is a concern for such a high percentage of districts is no surprise. End-user systems represent a vulnerable injection point for cyber threats, especially when students, teachers, staff and guests have free rein to surf the web. Monitoring what comes into the network via desktops, laptops and other endpoint devices is just one side of the coin; schools must also pay careful attention to what leaves the network. This is where compliance concerns—especially involving the privacy of sensitive data and/or client records—come into play. Violations of government and industry regulations could result in fines and negative publicity.

Which of these goals are on your school and/or district wish list this year? (Please check all that apply)



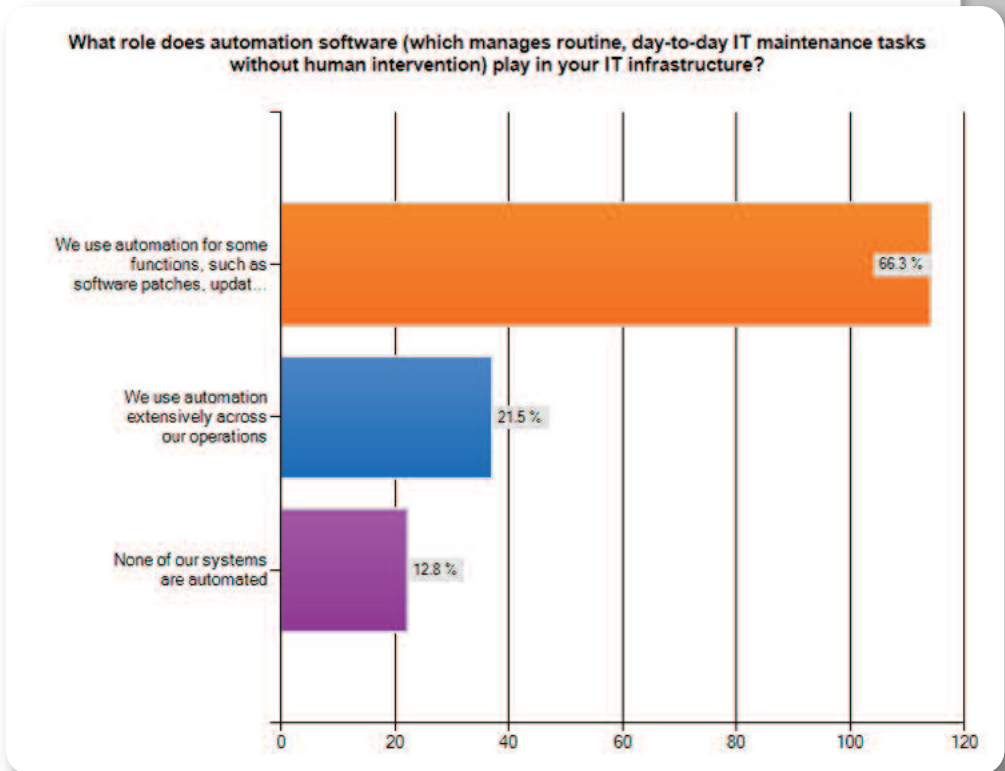
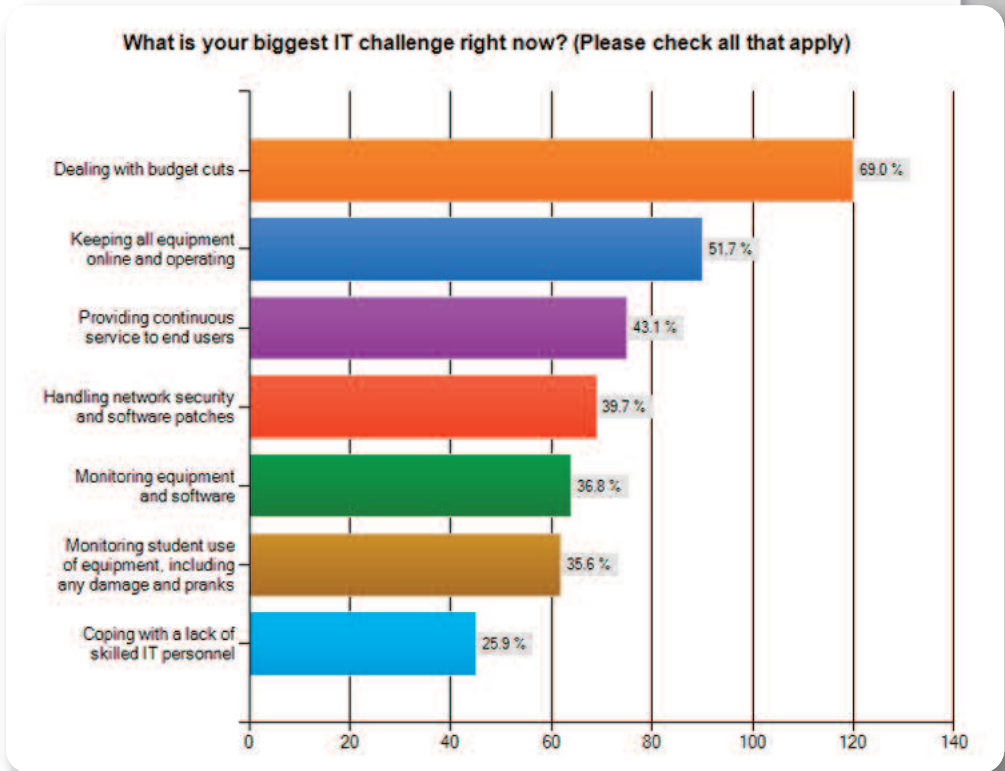
Medium-sized school districts face the biggest challenges when it comes to security. A single school with relatively few systems under management can keep tight control, while an expansive district often has the IT resources to maintain its systems adequately. Those in the middle may have several hundred or over 1000 seats under management, perhaps even in distributed locations, and a limited IT staff and budget to keep all systems all running securely and optimally. IT automation is an effective way to address these concerns.

District IT challenges don't stop there. Thirty-seven percent of districts cited monitoring equipment and software as their biggest IT challenge, followed by supervising student use of equipment, including equipment damage and pranks (36 percent) and coping with a lack of skilled IT personnel (25 percent). Once again, IT automation can serve a true purpose by effectively tackling each of these issues without added personnel or funding.

IT Automation's Critical Role

When asked what role automation software plays in their IT infrastructures, 66 percent of respondents said they used automation to handle some functions, including software patches, updates and computer performance monitoring. Twenty-two percent use automation extensively across their operations, and 13 percent use no form of automation.

As you can see, the majority of districts already automate certain activities, but a small contingency still rely on manual, time-intensive IT processes. Patch and upgrade activities represent the most routine and tedious of IT chores, and, in the case of maintenance, one of the most expensive, in terms of time and human resources. Other tasks are managed, as



well, and more than half of the respondents indicated that they spend too much time managing these multiple solutions because they work independent of one another. An automation platform that enables proactive diagnosis and repair of end systems and touch-free patch and update deployment should be high on every K-12 IT department's wish list.

Streamlined Processes

Next, respondents were asked to select from a list of functions and tell which of them would be best handled by automated systems instead of manual processes. The top candidates for automation included computer backups (78 percent), performance monitoring (62 percent) and software upgrades and patches (76 percent).

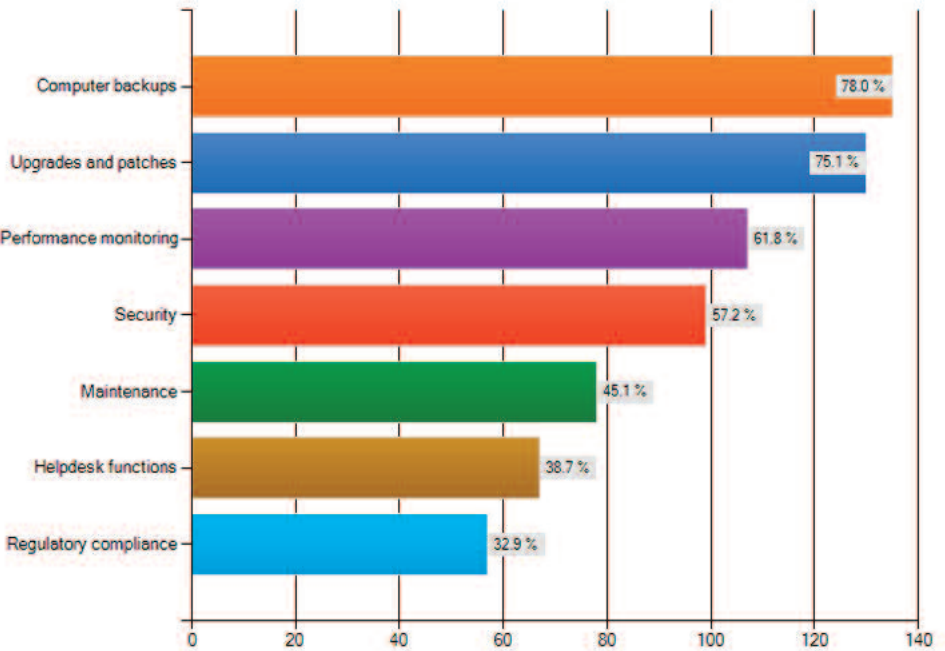
Fifty-eight percent of respondents cited computer security as a good candidate for automation, followed by maintenance (45 percent); helpdesk functions (39 percent); and regulatory compliance (33 percent).

As we pointed out, a fair number of respondents already automate certain tasks, and many others want to. We also asked whether—for each of seven IT tasks—they believe automation is superior to manual management. Across the board, respondents report that automation is the best way, particularly for backup, upgrade/patch, performance monitoring and security.

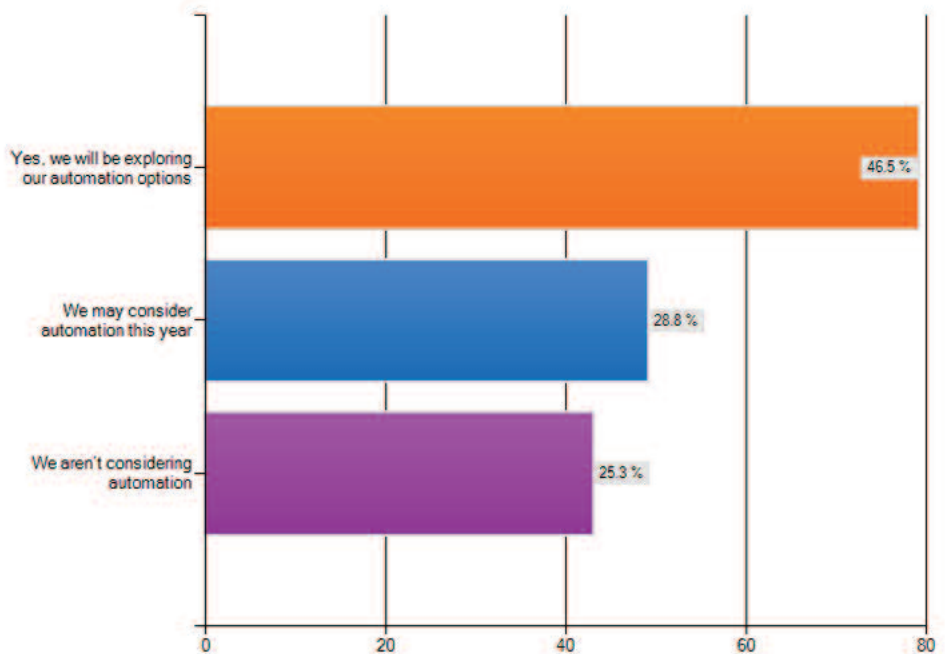
Automation's Crystal Ball

As educational spending tightens, and as IT teams struggle under growing demands, will districts turn to automation as a viable solution? A full 47 percent of respondents answered "yes" to this question, while 29 percent said they may consider automation as an option in 2011.

Which of the following functions to you believe would best be handled by automation, rather than manually? (Please check all that apply)



As educational spending tightens, and as your IT team struggles under growing demands, will you be automating your operations?



Automation is not currently on the radar screen for 25 percent of districts.

It won't be long before the holdouts realize the advantages of automation, and begin to explore their options.

Here are just a few of the benefits that K-12 districts are already reporting from their automation efforts:

- Automated maintenance reduces downtime, increases productivity, reduces costs, and improves satisfaction, and to a slightly lesser degree, enables companies to reduce IT head count. Automated upgrading/patching and backup bring similar results.
- Automated performance monitoring increases productivity and improves user satisfaction (according to the survey, this was a key concern for 33 percent of districts).
- Automated availability tools—aside from the obvious benefits of improving uptime and productivity—also increase user satisfaction.
- Automated endpoint security makes the district's IT infrastructure more secure than manually managed security options.
- Automated maintenance and upgrade/patch increases security levels thanks to the elimination of human intervention, which results in fewer errors and lag time.
- Higher service levels from IT equipment/support staff.
- Improved compliance with regulations (another major concern for 30 percent of school districts that responded to the survey).

These results show that automation is delivering impressive results, addressing the biggest challenges faced by K-12 districts and improving day-to-day operations. It also helps schools achieve two of their most pressing goals for 2011: learning how to do more with less, and effectively dealing with IT budget cuts.

Calculating the ROI of Automation

The benefits of automation are clear, but how do they translate—in hours and dollars saved—in the real world? That's where analyst estimates, return-on-investment (ROI) calculations, and success stories come into play.

According to a survey conducted by Enterprise Management Associates, automation technologies can reduce staffing requirements by 50 percent and reduce complexity, improve response time and decrease the need for 'putting out fires.' ("Data Center Automation: Delivering Fast, Efficient and Reliable IT Services," October 26, 2007).

The study also found that automation reduces the average repair time for system problems by an average of more than 60 percent. This represents an immediate benefit in terms of staff time and operational cost, and a "softer" benefit in terms of improved productivity and uptime.

IT automation's value becomes even clearer when calculated based on time and energy savings. If a support technician charges \$75 an hour, for example, and an automation tool reduces the yearly maintenance and repair workload by a conservative 10 hours per device, a school with 100 PCs will save \$75,000 per year. Multiply these savings across an entire district and it's easy to see how quickly the ROI will add up.

Automation saves more than just service and repair costs. Daily maintenance such as security updates, patch scans and installations, disk defragmentations, application deployments and network monitoring all take a toll on IT resources—even if it's just a few minutes per day or hours per week. That time totals up and adds to the savings generated by automation. For example, in a 2010 internal survey of 100 Kaseya customers, 60% reported that the solution paid for itself within 60 days of purchase.

The following table provides a summary list of the average productivity enhancements gained by these 100 customers:

Productivity enablement / device	Time Saved /Task / Month
Automated backups and backup checks	10 minutes
Automated SW upgrades & patch installs	10 minutes
Automated performance monitoring	5 minutes
Automated endpoint securing management	5 minutes
Automated network availability management	5 minutes
Automated asset/device discovery & audit	5 minutes
Automated systems maintenance	10 minutes
Automated regulatory compliance checks	5 minutes
Total time saved / device / month	55 minutes

Automated power management—where electricity flowing to idle machines is reduced—also generates cost savings while improving energy efficiency. Kilowatt hours of electricity cost from 15 to 20 cents or more, depending on location, and if the power consumption of each device can be adjusted intelligently, districts can see significant savings on their energy bills and prove they’re operating more ‘greenly.’

The same is true for reductions in tech support visits. Automation cuts down on ‘truck rolls’ and travel associated with dispatching technicians to service calls across an entire district, thus reducing the schools’ carbon footprint and conserving resources. Taking the energy and time-savings into account, the average district recoups its investment in automation software within the first quarter or two of deployment.

Automation has matured over the last two years, with K-12 districts seeing real benefits and results from such implementations. Ultimately, automation allows IT directors to do more with less. They spend a smaller amount of time running around campus trying to address issues on a one-off basis, and can instead monitor the entire infrastructure and all software associated with it in a seamless, automated fashion.

A CPU that’s running over capacity, for example, could fester in that state for months under a manual monitoring system. An automated system, on the other hand, will quickly send an alert for that overworked CPU, allowing the IT team to swiftly remediate the problem and bring the machine back to “normal” status with the few clicks of the mouse. No more driving 20 minutes back and forth across town to fix the issue – it’s handled swiftly and easily right from a dashboard on the IT director’s desktop.

IT Automation in Action

It’s clear that automation makes sense on paper, but its benefits have also been proven countless times in the real world. Camden Council is one of many districts that’s seeing significant ROI from its investment in IT automation. The district’s 54 schools rely on more than 2,200 desktops, each of which was previously maintained by Camden Council’s 18-person engineering team.

“While the schools across the Borough are not geographically dispersed, the institutions’ inner city location meant travel to reach schools could take engineers as much as an hour each way for every visit,” said Lee Carn, Technical Team Leader at Camden Council. “Our schools were suffering as we couldn’t attend to their problems as quickly as they needed us to, and engineer productivity was low due to wasted time traveling to sites.”

According to Carn, security threats to the school systems were a primary concern for Camden’s Schools IT support services team. “It’s imperative that we keep the IT networks up and running to ensure productivity in the classroom,” he explained. “We were affected by security breaches and viruses in the past and this resulted in networks being taken offline for as much as a week as engineers traveled between schools, fire-fighting the problem.”

This reactive, 'break/fix' approach to IT support was proving to be both unprofitable and inefficient for Camden Council, which needed a proactive approach to IT support that would ensure potential security breaches and IT issues were identified and handled before they became a problem. The district first went in search of a solution to handle remote patch management, but quickly discovered the Kaseya IT Automation platform could deliver this and a whole lot more.

Today, the automated platform serves as the backbone of Camden Council's Schools IT support service. Through a single, integrated web-based interface, the team can remotely, and simultaneously, manage the entire infrastructure, network components, servers and desktop PCs for 54 schools. The feature-rich platform enables Camden to remotely control, analyze, plan and automate IT tasks and procedures – from asset management and patch management, to network upgrades.

"Our IT support operation has become much more streamlined, as we can carry out maintenance and monitor every network from the comfort of our desks, as if we were there in person," said Carn. "We used to spend half our time waiting for buses to travel to the schools, but what previously needed a half day visit can now be carried out in a matter of minutes."

Camden's team of engineers can now respond to security incidents and emergencies much more effectively. Monitoring features alert engineers to problems before they manifest themselves on-site and issues can be resolved across all education establishments simultaneously, through the integrated web interface.

By adopting a proactive, automated approach to IT service provision, Camden Council's IT services team has been able to build strong relationships with its education customers. Engineers are responding in a more efficient, strategic and controlled manner, and security threats can be handled without resorting to crisis management.

Integrated, Comprehensive Solution

When it comes to automation, Kaseya's tools are the best choice for breadth and depth of services, plus proven success in the field. Regardless of the size of your district, you can experience the rewards in higher operational productivity and improved service levels through IT automation.

By implementing a comprehensive and integrated solution with the power, flexibility, and scalability to meet your needs today and expand as your district grows, IT automation enables a proactive approach to improved operations and end user satisfaction. From software inventory to remote desktop management, Kaseya provides the tools, technology, and resources that make complete IT automation possible.

Our tools are:

- Easy to learn and easy to use: One integrated and consistent web-based interface simplifies the learning curve. Schedule backups, software updates, Antivirus updates and more using a consistent automation platform that simplifies IT service delivery.
- Fast and flexible to deploy: Modular deployment puts you in control. Start with remote control, systems management, backup and disaster recovery, antivirus, audit, discovery, monitoring, or patch management, across your entire network infrastructure.
- Affordable: We offer prices that are very sensitive to the buying needs of education IT leaders and our on-premises or SaaS solutions offers schools the licensing and deployment flexibility they need.

With remote IT capabilities, central management, and automation of routine tasks, Kaseya eliminates the need for additional resources, allowing you to do much more with less.

Using our solution, your district will:

- Save time and money while conserving energy. Save license fees and power consumption and reduce the number of on-site visits. Do it all remotely so you don't need to travel to fix a problem. Reduce your carbon footprint while improving IT service.
- Increase end user satisfaction. Implement a proactive (instead of reactive) service delivery model, and systems run more smoothly, with less downtime, providing you with more time to focus on strategic initiatives.

- Increase security levels. IT automation helps ensure your systems are in compliance with applicable regulations and requirements. They perform better and are more secure.

Kaseya delivers a comprehensive IT automation solution that helps IT managers run entire networks smoothly from one central location. With a powerful, easy to use, web-based platform, Kaseya simplifies delivery of IT services—saving time and money and making systems secure.

The Kaseya IT Automation solution incorporates:

- Automated Systems Management
- Audit and Inventory
- Monitoring
- Service Desk
- Patch and Upgrade Management
- Software Deployment
- IT Management Reporting and Dashboards
- Antivirus and Antimalware
- Desktop Policy Management
- Backup and Disaster Recovery
- Regulatory Compliance

In addition, using Kaseya's tools to automate routine IT tasks helps districts reduce their energy consumption—which conforms with 'green computing' initiatives, as we mentioned, and adds money to the bottom line. Kaseya Desktop Policy Management enables IT professionals to implement out-of-band power management—limiting the electricity flowing to non-essential or idle computing resources, for example—without compromising system management capabilities.

Comprehensive Solution

By automating IT processes and delivering comprehensive remote support capabilities, Kaseya lets school districts leverage all the benefits of automation and operate more efficiently and securely every day.

If you're not on the IT automation bandwagon yet, now is the time to hop aboard. As one IT director phrased it, "I used to be in the dark ages, but thanks to automation, I now see the light."

We couldn't sum it up any better if we tried.

About the Automated IT Systems Management Survey Participants:

As part of an ongoing market research initiative to identify systems management trends and evaluate best practices, Kaseya routinely contacts key IT representatives at a variety of companies located throughout the world. For this specific effort, completed in February 2011, we conducted an online survey of senior IT professionals at public and private K-12 schools in the U.S. Using a sample population of more than 1,000 targets, more than 175 people responded to this survey. Approximately two-thirds of the respondents represented public schools, and more than 50 percent of the respondents are employed by schools with less than 1,000 PCs under management.

Contact Kaseya Today

Remote access and remote control needs to be integrated within a single management framework, allowing you to conduct powerful maintenance on distributed machines without putting the district at risk and without disrupting users. Kaseya provides this level of integration, consolidating remote management on a single pane of glass.

Contact Kaseya today for more information and to request a live demo of our powerful IT Systems Management solution.

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About Kaseya

Kaseya is the leading global provider of IT Systems Management software. Kaseya solutions empower virtually everyone — from individual consumers to large corporations and IT service providers — to proactively monitor, manage and control IT assets remotely, easily and efficiently from one integrated Web-based platform.

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