Kaseya White Paper

Complete and Integrated Remote Control

It's one thing to have the ability to remote in to a distributed system, what's important is what you are able to do when you get there. Especially for Education IT.

Kaseya

Our Automation. Your Liberation.™

www.kaseya.com

Managing IT systems in education environments is akin to walking a tightrope a hundred feet off the ground in front of thousands of spectators, anxiously anticipating a wrong step that could lead to disaster.

On one side, you have the need to provide students, faculty and researchers the intellectual freedom to explore their academic interests in an open and independent learning environment. On the other side, you have the responsibility to protect the school's networks from internal and external threats and keep thousands of systems up and running optimally in the face of heavy, eclectic use. In the middle of it all, you have users who are acutely aware of every step you take and every policy put into place. They are dubious about your role within the academic environment, often seeing you as an inhibitor to the open and independent academic process. To make matters worse, you likely do not the staffing or resources to conduct regular on-site maintenance of machines spread out over your large or distributed campus environment.

The Kaseya IT Automation Framework gives you the ability to remote in and conduct regular maintenance on distributed systems, allowing you to sustain a healthy and open IT environment without disrupting users or even letting them know you are there. Tasks like patch management, desktop policy management, monitoring, virus protection and system updates are conducted remotely in the background from a central Web-based management console by your dedicated IT administrators.

Kaseya's remote control functionality is the key to walking that line between giving users what they want and protecting them from their own computing habits.

What they don't know, can't hurt them, can it?

This white paper will educate you on:

- Using remote control to meet the needs of education IT environments
- The shortcomings of current remote control solutions
- How Kaseya enables powerful management of distributed systems
- Four tips and tricks that our engineers have collected to help you with specific remote control tasks

Using Remote Control to Meet the Needs of Education IT Environments

Education IT environments are unique. Systems are likely spread over a large geographic area. Users have varying levels of computing needs and experience. Students, faculty and researchers require the intellectual freedom to explore their academic interests in an open and independent learning environment. Scores of unprotected and unmanaged student systems are constantly logging onto networks. These IT pain points make it difficult to implement a consistent IT systems management strategy.

Education IT environments are also growing. According to EDUCAUSE, an association of IT professionals in higher education, the number of systems deployed on education networks is outpacing growing enrollments and funding.[1] In addition, schools are replacing systems faster

[1] Arroway, Davenport, Xu et al. EDUCAUSE Core Data Service, FY 2009 Annual Report. October 2010.

"Education IT environments are also growing. According to EDUCAUSE, the number of systems deployed on education networks is outpacing growing enrollments and funding."

"...schools are replacing systems faster than ever before – now as soon as every three years..."

Kaseya

Our Automation. Your Liberation.™

than ever before – now as soon as every three years [2] – making infrastructures more fluid and dynamic. This fluidity is making it difficult to keep up with and implement IT systems management policies and procedures that are complete and consistent across the entire IT environment.

Remote access provides the visibility and control you need to implement a cost-efficient and proactive IT systems management strategy. This allows you to apply consistent service levels, policies and controls across the board without requiring costly and time-consuming on-site maintenance. However, the actions you are able to take once you remote into distributed machines—and the level of automation you are able to achieve—will really determine the success of your strategy. It's not just the ability to remotely access systems that is critical. It's what you are able to do to the machines when you get there that is important.

Dealing with the Shortcomings of Current Remote Control Solutions

Current remote control solutions are mainly point products that require complex configuration for full integration. For example, many administrators use separate tools to remotely access Windows servers, Windows PCs, Linux machines and Mac desktops. They have to toggle between tools and conduct manual one-machine-at-a-time maintenance. Patches, for example, would have to be applied separately per platform, dragging out the process and putting waiting systems at risk.

These tools also do not provide the level of integration necessary to implement full remote control of distributed machines. Imagine if the service desk was automatically populated with auditing information about machines needing remediation. The system administrator would have all the pertinent hardware, software and operating system information available as well as recent maintenance logs, backup status and security scan schedules. When issues need to be addressed quickly, integration between these disparate management functions can cut minutes off time to resolution and help prevent some issues from occurring in the first place.

The efficiencies created by remote control are erased due to complexity, repetition and manual maintenance. There has to be a better solution, one that enables remote maintenance on the same level as on-site maintenance, automates many of the repetitive processes associated with IT systems management and integrates all management data and functionality on a single dashboard.

Kaseya Enables Powerful Management of Distributed Systems

The Kaseya IT Automation Framework integrates disparate management functions on a single dashboard with "one button" remote control capabilities. This allows administrators to automate repetitive tasks through Kaseya's web-based dashboard. Tasks such as pushing out a patch, updating software and conducting image backups can be conducted remotely and automatically to individual systems or groups of machines. All the management functions an administrator can do on-site, can now be conducted remotely through a single, consolidated Kaseya dashboard.

Sometimes, administrators need to conduct basic maintenance or view a machine that is already in use by a user. Instead of kicking off the user, Kaseya's Live Connect! web-based dashboard allows administrators to make changes to the remote machine in the background without taking full control of the system. Transfer files, view a thumbnail of the desktop, access the task manager, resolve registry issues or open the command line—all while users continue working without being aware maintenance is taking place on their machines.

Kaseya's remote capabilities also enable faster resolution times since all management data, functionalities, maintenance logs and auditing information is integrated through the service desk. An administrator looking to troubleshoot a server that is in danger of crashing can view CPU usage data, confirm the operating system version and check the last time a spyware scan was conducted—all done remotely from a single pane of glass.

Kaseya isn't simply a management tool, either. Users can log on through Kaseya's self-service End User portal to check email, access files and run applications on their remote desktops and laptops.

[2] Arroway, Davenport, Xu et al. EDUCAUSE Core Data Service, FY 2009 Annual Report. October 2010.

> "Remote access provides the visibility and control you need to implement a cost-efficient and proactive IT systems management strategy."

> "The Kaseya IT Automation Framework integrates disparate management functions on a single dashboard with "one button" remote control capabilities."

Kaseya

Our Automation. Your Liberation.™

Best of all, Kaseya's agent-based architecture includes a single light-weight agent that enables these remote management functions—regardless of platform, operating system or physical location. By consolidating dozens of remote management tools in a single solution, continuous monitoring, regular maintenance and quick remediation can go on in the background with little disruption to users. In fact, most won't even know the maintenance is being conducted.

As a result, education IT administrators can keep up with the monitoring and maintenance of their wide-open, dynamic IT infrastructure without putting the district at risk and without the fear of disrupting users. Systems can be better protected, optimized to run more efficiently and kept open for students and faculty to use as they see fit within the confines of basic security policies and procedures.

Specific Tips and Tricks from Kaseya

The following pages present some tips and tricks you can use with Kaseya to streamline remote systems management. We just ask that you be responsible by using this information for good and not for evil.

Tip One Patch Management

The Problem:
It's Tuesday, and Microsoft releases a major patch update of Windows XP, Windows Vista, Windows 7, Windows Server 2003 and Office. Some of the patches are labeled critical, so speed is essential as unpatched systems pose a gigantic risk to the district. Downed systems could mean a loss of productivity for students, faculty and researchers, preventing homework, grading and special projects from getting done. Unfortunately, your team manages more than 4,000 systems across campus with varying platforms, operating systems, security policies and authentications.

The Current Solution:
Administrators use separate remote access tools to download, install and test the patch on each system. With 4,000 systems in the environment, it will take weeks to identify and update each computer. And even then, every system that needs the patch is not assured of being updated.

The Kaseya Approach:
A single administrator logs into the Kaseya system and accesses a pre-populated patch policy that was customized months before. Executing the command with the press of a single button, the administrator is able to download the patches once from Microsoft's website, install them on a test machine and test for compatibility issues when running other applications.

Once certified, Kaseya automatically checks inventory information for systems with the affected software, wakes them up, checks their readiness and pushes the patches out to waiting machines. Any system that lacks the required specifications is identified, taken offline and automatically flagged by the service desk for later remediation.

The patches are then automatically installed on each waiting machine, and the systems are rebooted as necessary. The final step is to monitor performance and availability data and flag systems that are inhibiting strange behavior. The single administrator can then access a report identifying systems that did not receive the patch for one reason or another and remotely access the systems for further remediation.

Integrated Management Functions:
- Patch management
- Auditing
- Agent procedures
- Wake on LAN (with Intel VPro technology)

"As a result, education IT administrators can keep up with the monitoring and maintenance of their wide-open, dynamic IT infrastructure without putting the district at risk and without the fear of disrupting users."

"Downed systems could mean a loss of productivity for students, faculty and researchers, preventing homework, grading and special projects from getting done."

Kaseya
Our Automation. Your Liberation.™

Benefits:
Software patches can now be issued all at once at the push of the button. Kaseya ensures that every machine that needs the patch is identified and updated and systems that are not updated are flagged for remediation. A management task that used to take days now takes minutes, and it's done more completely and consistently across the entire IT environment.

Tip Two Live Connect!

The Problem:
A server in the multi-media lab is constantly on the fritz. At least once a week, it crashes in the middle of a class, preventing students from completing an assignment on time. The professor has made it clear that a long-term, permanent solution needs to be found. His ability to teach the class depends on reliable availability of a multi-media application that runs on the affected server.

The Current Solution:
Every time the server crashes the professor logs onto the network and creates a ticket which is routed to the help desk. It's not a critical system, so the ticket is sent to the back of the queue where it sits there for several hours. By the time an administrator remotes into the system, the class is long over and the professor had to postpone the assignment. Troubleshooting the system doesn't go over very well either. The administrator remotely logs into the server and finds that the CPU was past 80 percent utilized at the time of the crash. He clears the task bar and reboots the server. It's back up and running until a week later when the professor issues another ticket with the same problem.

The Kaseya Approach:
Kaseya continuously monitors every system on the network and automatically alerts a help desk administrator when CPU utilization gets over 50 percent. A ticket is automatically created and escalated to the proper technician attached with pertinent auditing information to the ticket for the technician to analyze as he remediates the issue.

As he remotely accesses the server through Kaseya's Live Connect!, the administrator calls up performance data that includes CPU usage, available memory at the point in time the CPU spike occurred along with the operating system version and other pertinent information. He then calls up the system's task manager and sees that a printing procedure is spinning its wheels. Further analysis shows that the printing command is coming from a desktop in the lab. A quick scan of that system shows that it is infected with dangerous spyware. The administrator quickly cleans the system and clears the server's task bar before utilization reaches a critical point.

Integrated Management Functions:
- Live Connect!
- Kaseya Antivirus and Antimalware
- Agent Procedures
- Monitoring
- Service Desk Procedures

Benefits:
Proactive and remote management of distributed systems prevents the server from crashing. As problems occur—such as an over-utilized CPU—Kaseya automatically alerts administrators and issues a ticket. Integrated management functionality allows remediation to be done quickly and in the background without users even aware there is a problem. The server remains online and operates optimally, allowing the class to resume its in-class work without interruption.

"Kaseya continuously monitors every system on the network and automatically alerts a help desk administrator when CPU utilization gets over 50 percent."

"The server remains online and operates optimally, allowing the class to resume its in-class work without interruption."

Kaseya
Our Automation. Your Liberation.™

Tip Three User Self-Service

The Problem:

A graduate student wakes up Saturday morning in a cold sweat. Laying in bed, suddenly wide awake, she realizes she forgot to email a spreadsheet to her research partner the day before. They have a deadline on Monday and her partner needs the Excel file to finish their research report. Unfortunately, the spreadsheet is stored on a desktop in the Astronomy lab, a thirty-minute walk across campus.

The Current Solution:

The graduate student jumps out of bed, throws on some clothes and sprints across campus to the Arts and Sciences building. However, the door of the lab is locked, preventing her from accessing the lab and the desktop where the file is stored. She spends 45 minutes roaming the building trying to find a janitor who can let her in. When she finally finds someone with keys, she's told that only professors have authorization to unlock the door. Nervously, the graduate student calls her faculty advisor who is at brunch with his family to come and unlock the door. Once inside the graduate student boots up the desktop and emails the file four hours after recognizing her mistake.

The Kaseya Approach:

Without getting out of bed, the graduate student boots up her laptop and logs into Kaseya's End User Portal. She finds the desktop on her list of authorized machines and remotely accesses the machine's desktop. She's able to effortlessly put the final touches on the Excel document and emails it to her research partner with an apologetic note. Within minutes, her partner responds saying everything is all set and the research report will go out by the end of the day. The graduate student yawns, closes her laptop, rolls over and falls into a heavy, satisfying sleep.

Integrated Management Functions:

- End User Portal

Benefits:

Users can remotely access their computers from anywhere with an Internet connection. This allows users to check email, access and edit files and run applications remotely. Productivity soars and deadlines are met without excuses.

Tip Four Domain Name Change

The Problem:

After 18 months of planning, deploying and configuring a new network infrastructure, the new architecture is finally going online. Finally, students using the school's ten main computer labs are going to be able to save, access and share files on centrally-located file servers housed in the newly-built, state of the art data center. All files stored on the old servers have been migrated to the new machines. All that needs to be done now is to point the 400 public desktops in the labs to the new network domain.

The Current Solution:

Administrators remotely log into each distributed workstation one-by-one and change the domain configuration. It takes only five minutes to reconfigure each machine, but with 400 desktops that need the change, it takes more than 30 hours to complete the simple operation. At about the seven-hour mark, you really start to rethink your decision to go into systems administration.

Once you are done and the new network goes online, you realize that in your haste, your team missed several desktops in each lab, each being found by a user who couldn't access the network and had to issue a ticket. Days later, you finally get all systems up and running and pointing to the correct network.

> "Users can remotely access their computers from anywhere with an Internet connection. This allows users to check email, access and edit files and run applications remotely."

> "A single administrator logs into the Kaseya framework and automatically changes the domain configuration of all 400 desktops at the press of a single button."

Kaseya

Our Automation. Your Liberation.™

The Kaseya Approach:

A single administrator logs into the Kaseya framework and automatically changes the domain configuration of all 400 desktops at the press of a single button. The agent procedure came preloaded with the Kaseya software and required only a few minutes of custom configuration. Within ten minutes, every workstation in the ten labs is identified, reconfigured and brought back online. The labs reopen that very day.

Integrated Management Functions:

- Agent Procedures
- Live Connect!

Benefits:

Upgrades to network infrastructure is completed on time and isn't held back because of a simple configuration issue. The process to manually make the change on all machines is automated through Kaseya and is assured of identifying and updating every machine that needs to be redirected.

> "Within ten minutes, every workstation in the ten labs is identified, reconfigured and brought back online."

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.

www.kaseya.com | facebook.com/KaseyaFan

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.

Kaseya

Our Automation. Your Liberation.™

www.kaseya.com