

An abstract graphic featuring a stylized city skyline with four buildings of varying heights, each with a grid of windows. Above the buildings, a large, colorful stream of letters and symbols (A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, and mathematical symbols like +, -, *, /, %) flows upwards and to the right, resembling a fountain or a data stream. The background is a gradient of blue and green, with a green wave-like shape at the bottom. The overall theme is technology and data in the education sector.

Anatomy of Desktop Computer challenges in Education Sector

An Overview

Endpoint Central has developed an approach to meet the unique needs of education. Conceived as an unified endpoint management solution for education institutions, it is designed to be an easily deployed and manageable solution that addresses a variety of system management tasks efficiently.

Endpoint Management's Role in Institutions

Over the past decade, in grade schools and universities, computers and smartphones have become an integral part for staff and students to take education to the next level. The dynamics of desktops and tablets utilization are opening up opportunities for students, teachers and other administrative staff to use technology, which results in a greater dependency on systems to achieve work-related tasks.

Challenges

On the other hand, the IT department faces tremendous challenges to reduce operational costs associated with day-to-day back-end tasks, such as deploying new software, updating software with the installation of the latest patches, troubleshooting systems and increasing consumption of bandwidth among many other things. It's up to the IT department to manage these different systems at a central place and to ensure that all tasks are executed without any disruption to the end-user.

Several challenges come to fruition for IT administrators while managing day-to-day systems management operations such as:

- ① Cumbersome manual maintenance
- ② Multiple tools for a unified systems management
- ③ Lack of immediate on-time assistance to trouble shoot
- ④ Lack of set policies to control a system in the network
- ⑤ Lack of knowledge in utilizing tools
- ⑥ Lack of security control over the desktop and laptops ecosystem
- ⑦ Rising bandwidth and power consumption costs
- ⑧ Managing technology superiority without increasing budget spend

Endpoint Central's Role in the Education Industry

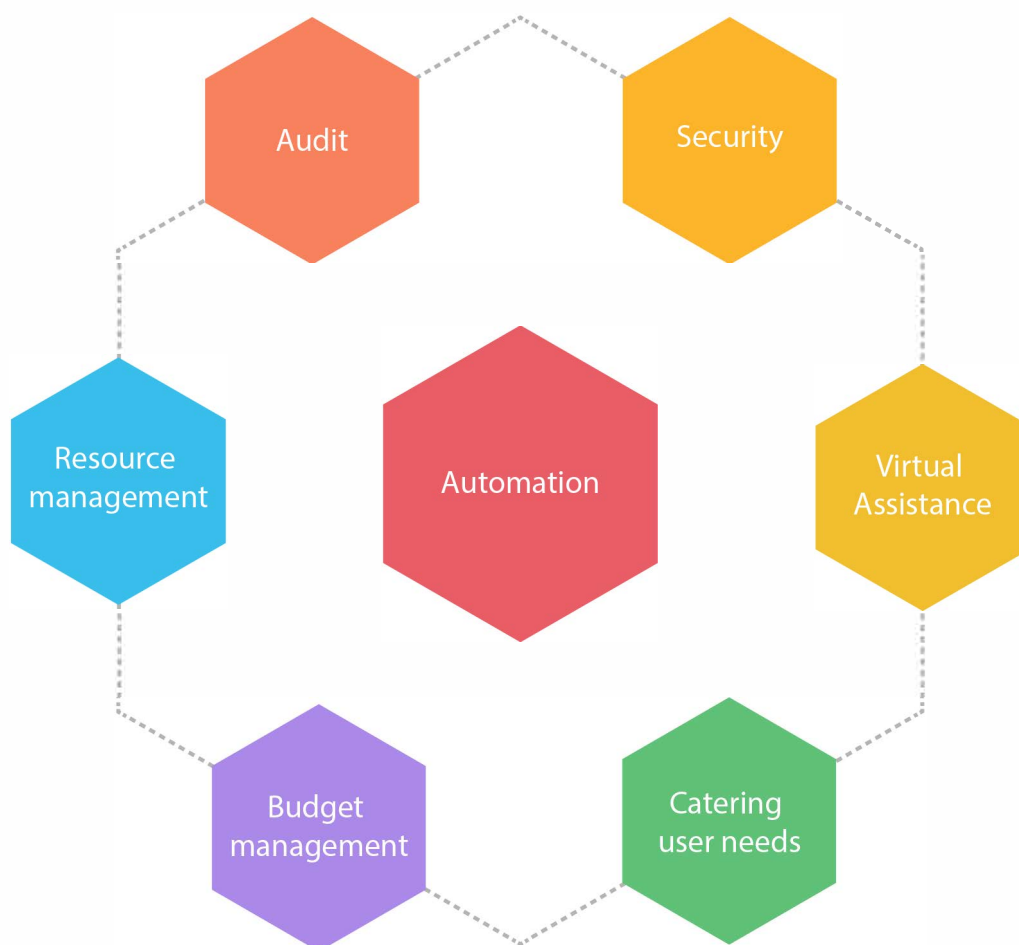
Endpoint Central's recommended strategy for endpoint management in education could be delivered by the series of features in the managing desktop, laptop, server machines, smartphones and tablets. With a single solution for all of its assets, deployments and troubleshooting, an IT department can handle 360 areas related to endpoint management from the centralized point.


Endpoint Central addresses the following categories for institutions:

Automation: Replaces manual work by automating the entire desktop routine tasks by providing features related to managing the network endpoint ecosystem

Security: Update patches for applications in order to protect the system from outside threats, customizing user policy to reduce internal threats.

Virtual Assistance: Remote troubleshooting aims to resolve problems for the users without any physical presence of a technician





Audit: Enables one to analyze and interpret the actions performed by the administrator to help in meeting the requirements of other security and privacy standards.

Catering user needs: Centralized software deployment enables deployment of the latest software to cater to the institution's policy.

Budget management: Enables one to track usage of software and hardware to calculate complete costs incurred.

Resource management: Reduces the bandwidth and power consumption by providing effective multiple settings.

Automation


Schools and universities have a unique challenge in terms of diversity of the users. Meeting the demand of students, teachers and other administrators creates a need for the IT team to manage systems such as desktop, laptop, server machines, smartphones and tablets.

Endpoint Central enables school IT teams to enhance the operational efficiency and security of endpoints by streamlining management tasks. Endpoint Central configuration options give IT teams the ability to provide flexibility in providing a comfortable workspace for each user, group, location and environment. For instance, in schools and universities, the IT team has to work relentlessly to update systems during vacations, and it becomes more significant when the students return from breaks. Endpoints then need to be work-ready, and automating these tasks with the software helps maintain the routine without draining extra resources and spending extra time on weekends.

Security

Threat to data becomes a big concern in the education industry. The repercussions of data leakage can occur in multiple ways such as reputation damage, weakening trust between users and administrative staff and penalties from government. Compliance organizations such as FERPA (Family Educational Rights and Privacy Act) for government funded schools have created more pressure for IT teams to ensure the privacy of data. According to this act, parents will be provided with certain rights with respect to their children's education records. These rights transfer to the student when the respective person reaches the age of 18, or attends a school beyond the high school level.

In order to ensure that schools are complying with regulation acts similar to the one above, IT teams need to make sure that they are upgrading the system security and providing policy-based rights to the end-users by ensuring that confidential information stays within the ecosystem.





Information such as student grades, student records, financial reports, and proprietary research are a few examples that need to be protected. Threats can occur in two different areas of an organization: Internally and externally.

1) External threats:

IT administrators can prevent any sort of external, malicious attacks by updating patches for the application, whether it's Microsoft or commercial ones such as Mozilla or Adobe. Defining system health policy by Endpoint Central enables one to categorize a system as "Healthy, Vulnerable, or Highly Vulnerable," which ultimately aids in securing systems based on the priority. To prevent any security attacks, an agent scans the systems and updates the missing patches which ensures that there is no chance for vulnerability in the applications.


In a recent case at Pearl Public School, the IT director - Kevin Knuckles described his experience pre- and post-Endpoint Central usage in dealing with the patch updates.

“ We needed to ensure that every system is up-to-date with Office 2010, Windows, and Third party software. There was so much time and efforts put in work and there were no proper patch updates, and we had very cumbersome tasks to perform. Now, it is very easy for us to deploy new updates, and the software now frees up from the identical tasks. ”

-Kevin

2) Internal threats:

Users tend to duplicate data such as patented documents and purchased case studies by tapping in to the external hard disks such as USB, CD's or any other hard disk accessory. IT teams have to monitor the movement of sensitive information stored throughout the enterprise down to the end-user systems. Institutions should have a sound solution in place that has the ability to monitor the types of data that is stored in systems and flash drives with in-depth details. These details include usage duration, device instance ID, name of the user, and much more.



In another case, Strathallan's school's number one priority was to maintain security standards. This required a robust system to define security restrictions by segregated user policy for staff.

Virtual Assistance

Remote troubleshooting is one of the most time consuming areas of IT because technicians have to dedicate a large amount of time with these matters. It becomes worse if the number of complaints rises from multiple locations such as a library, a classroom, or a laboratory.

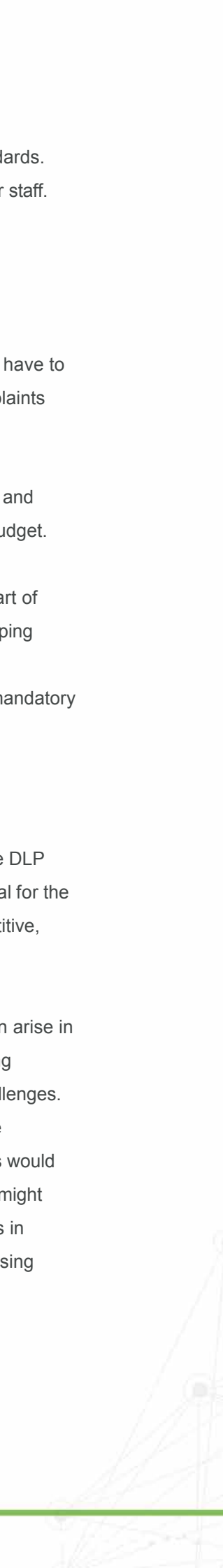
In this event, the IT person has to run between multiple places, which consumes lot of effort and time. This results in investing in more employee resources and burning more of the school budget.

An effective solution would be one that allows technicians to troubleshoot problems in any part of campus from a centralized location. The remote control from Endpoint Central is actively helping schools in performing virtual troubleshooting efficiently to resolve issues by chatting, screen recording, among other things. During emergency situations like examinations, it becomes mandatory for immediate assistance to resolve issues without any hiccups.

Audit

Schools, especially federal funded ones, have to strictly comply with laws that should ensure DLP (Data Leakage Prevention). The primary purpose is to protect the information, which is critical for the business. Institutions maintain various types of information that they must protect for competitive, regulatory and reputational reasons.

IT head needs to tap in on staff productivity and their work purposes. Since any question can arise in regards to security, the IT head will be the sole person responsible. For this purpose, auditing features help to understand the duration and efforts spent by the staff in solving desktop challenges. Tools, such as video and chat conversation recording, help understand the work done by the administrator. Delegating the access to the auditor is very important because few institutions would have a third party auditor who can get access to entire resource. Sensitive information then might land with those third party auditors. With User Access Control from Endpoint Central, it helps in segregating "Who accesses what?" This helps in preventing unauthorized people from accessing confidential data.



Catering User Needs

Applications, such as Microsoft Word, Excel and PowerPoint play a major role for users in educational institutions, as they help perform work-related tasks. As the diversity of the requirements in schools and universities becomes more complex, it becomes more challenging for IT departments to cater to their needs. For instance, 10th grade user accounts would consist of uniform applications that appeals to entire group. On the other hand, universities will have dedicated applications catered to that particular department. Fine Arts will need designer software such as Adobe Photoshop, whereas Engineering would require a technical software such as CAD.

IT departments have to strategically cater to the demand. The story doesn't end there once the application needs are identified. It becomes imperative for IT technicians to install the software package without disturbing the end-user.

One such event took place in Brussels' top research universities, VUB (Vrije Universiteit Brussel), where Mr. Sven Reyniers, IT administrator, was able to accomplish the complicated task of deploying software with Endpoint Central.

“ *Software installation is a herculean task, because for every desktop, IT departments need to ensure that the software is installed as per the university guidelines. Deploying them without disturbing the end-user was a huge challenge.*

After deploying ManageEngine's Endpoint Central, the biggest advantage I have gained is the total control over the IT ecosystem. I don't have to run around to install software locally, which saves me an enormous amount of time ”

-Sven

Budget Management

One of the IT technician's daily tasks is to keep up-to-date information about the software and hardware used across the organization. Tracking and analyzing asset data becomes mandatory when creating obsolete plans, since budget allocation will be partly based on the TCO (Total Cost of Ownership) on hardware and software. Tracking software licenses helps in analyzing and calculating the number of active and inactive licenses. Tracking hardware assets helps in realizing write-offs in the financial budget. Performing this task an inventory tracker should allow one to gather data that includes scanning systems periodically, collecting hardware and software details, managing software licenses, filtering black listed software in the network, analytics on software usage, comprehensive reports on hardware and software inventory.

Kevin Knuckles from Pearl Public School has also benefited from using asset management from Endpoint Central, as it helped manage all the assets in the school's network. Warranty lookup is significant for us because we have a five year obsolescence plan," Kevin said.

“ With the inventory module in Endpoint Central, we can quickly and easily see when a machine was shipped and when its warranty expires. This helps us determine what our computer replacement budget should be for the coming year(s). That is the best part of this module, in my opinion.. ”

Resource Management

Today's economy trend is shifting the focus towards reducing the usage of energy resources especially in education. Power management becomes even more important due to the significant amount of energy being used and the costs associated with that energy use. Typically power management with systems involves four stages: Hibernation, Logoff, Shut Down and Standby. In each state, the energy consumption varies. Hence, a robust policy will be helpful in order to ensure that systems are not draining energy. Creating profiles based on the suitability of the context will help in creating an assertive policy such as:

The Power Management Configuration in Endpoint Central allows the creation of multiple power schemes that can be deployed to multiple computers. This helps standardize the power settings such as creating multiple schemes for various departments, hibernate or standby an idle computer using the remote shut down tool and scheduling systems shut down to happen at a defined interval.

Similarly, bandwidth consumption is one area of concern especially when it comes to performing operations such as updating patches and installing

software during the consumption shoot-up. This kind of scenario takes place when managing systems at different locations. Endpoint Central allows deployment of remote caching servers for all interactions with local client PCs and servers, thus reducing the bandwidth requirements to a very low level, which in turn saves consumption costs.

- ✓ Defining power policy based on user and domain groups
- ✓ Creating tasks to group the computers and specify a time to boot the machines in that task
- ✓ Schedule an automatic wake up of a computer for application installation or update

Conclusion

Though the education industry has a dual challenge, which is to manage technology advancements with a constrained budget, there is a software solution strategy in place that helps manage the higher number of users with a limited IT staff. Endpoint Central helps administrators perform systems management with less manpower. As an easily deployable product, this solution provides institutions the ability to manage the versatile demands from users from a single place that enhances operational efficiency, improves productivity and provides robust security.

Endpoint Central Functionality in a Nut Shell

This solution automates the complete desktop management life cycle, ranging from a simple system configuration to a complex software deployment. It simplifies the IT staff's tasks in performing a range of systems management tasks, while still managing to secure systems in the network. It allows IT administrators to gain sufficient control over the systems and its usage by the users.

It equips administrators with functions like:

- ✔ Automating regular desktop management activities
- ✔ Securing desktops from a wide range of threats
- ✔ Decreasing time for troubleshooting day-to-day problems
- ✔ Generating comprehensive reports to audit IT assets

About ManageEngine

ManageEngine serves more than 70,000 established and emerging enterprises - customers with IT infrastructures that are far more dynamic, flexible, and elastic than ever before. The net result is what ManageEngine calls real-time IT. Real-time IT calls for IT to make the most of today's game-changing technologies and deliver immediate services to organizations that are operating at an ever-increasing pace. It compels IT to operate at the speed of business, leveraging technologies to support new business models and applications.