SECURE AND OPTIMIZE ENDPOINTS IN HIGHER EDUCATION WITH IGEL

IMPROVE SECURITY, OPTIMIZE IT BUDGET, AND ENABLE REMOTE LEARNING

By converting compatible x86-64 endpoint devices to IGEL OS, you can quickly extend the life of existing hardware, regardless of manufacturer, or easily assign a license to another device. This reduces both capital expenditure (CAPEX) and operational expenditure (OPEX).

In institutions of higher education, technology innovation is pivotal to the student and faculty experience, directly impacting competitiveness and reputation. Universities, colleges and centers of research and training serve a variety of users, from students and researchers to professors and administrators, offering immediate access to online lessons, tests, labs, and other resources such as e-books and journals for both traditional and online programs. In addition to this, universities also provide a range of on-campus ancillary services such as retail kiosks, stores, and medical care. Oftentimes hindered by a patchwork IT infrastructure, and with geographically dispersed campuses and distant education programs more numerous than ever, maintaining a secure, consistent, and streamlined end user computing environment presents complex challenges for IT teams.

Technology is key in helping higher education institutions meet required standards for data information protection while providing faculty and students access to resources anytime from diverse locations. Faculties and various areas of study requiring course-specific desktop images and access to varying specialized applications further intensifies complexity. An agile yet secure streamlining of this complexity, often requiring rapid deployment during term break, is crucial to maintain continuity and support the educational experience.

Factors like these have led many universities and colleges to embrace Remote Desktop Services (RDS), virtual desktop infrastructure (VDI), and cloud-delivered apps and desktops in an attempt to optimize IT resources while standardizing user desktops. Shifting end-user computing resources to centralized data center or cloud environments reduces endpoint complexity and security exposure, which is a winning formula for diverse and dispersed learning and instruction environments. Faculty, staff and students can enjoy a consistent and responsive experience as they roam between labs, libraries and personal devices, and university IT teams can vastly ease their device management burden while improving their ability to meet strict government and industry regulatory compliance requirements.

Full management and control of remote endpoints with the Universal Management Suite (UMS) and IGEL Cloud Gateway (ICG) centralizes endpoint management and control of devices across campus and off-network locations.

But the benefits of desktop virtualization and cloud workspace technologies can only be fully realized by IT teams that truly achieve simplicity and security at the endpoint. The IGEL approach helps educational institution IT teams maintain the smallest possible "footprint" (size and complexity of code base) on managed endpoint devices that include repurposed laptops, PCs or thin clients, while delivering a high-fidelity and secure desktop experience to students, faculty, and staff.

IGEL's primary technologies — IGEL OS and Universal Management Suite (UMS) — help IT Teams get the most out of any virtualized environment, enabling multiple users on shared devices while reducing IT cost and complexity.

Only IGEL combines powerful, centralized endpoint management and control with purpose-built endpoint operating system software that is:

- An enterprise-class platform, yet simple to use. The IGEL UMS can scale to configure and manage up to 300,000 IGEL OS-powered endpoint devices.

- Platform independent — capable of running on a broad range of x86-64 PC, laptop, and thin client hardware.

- Lightweight, read-only and modular by design, based on a highly secure Linux distribution with a secure browser fortified by the IGEL end-to-end "chain of trust".

- Highly connected: IGEL OS supports over 90 integrations with leading third-party software and hardware technologies for VDI, desktop-as-a-service (DaaS), authentication, single sign-on, and unified communications solutions along with other key peripherals for education.

THE IGEL TECHNOLOGY PARTNER ECOSYSTEM

LEARN MORE ABOUT IGEL IN EDUCATION AND LISTEN TO CUSTOMER STORIES AT:
IGEL.COM/CUSTOMER-STORIES/EDUCATION-RESEARCH/

ADDRESSING HIGHER EDUCATION'S MOST PRESSING CHALLENGES

Let's take a closer look at how IGEL can help overcome many of the traditional obstacles to successful RDS, VDI, and cloud use in higher educational institutions to enable a flexible and secure learning environment.

EDUCATION CHALLENGE	HOW IGEL HELPS
	Enhance Endpoint Security
Strict compliance with GDPR standards to protect personal identifiable information (PII) and intellectual property (IP) is difficult to attain and manage across diverse environments.	IGEL OS does not store any PII or data on the endpoint. IGEL OS is modular by design; unused features can be turned off, keeping endpoints as "lean" as possible to minimize the attack surface. This helps achieve compliance with GDPR and other control objectives.
Vulnerabilities due to multiple users on devices in shared workspaces in labs, workshops, and libraries.	The IGEL OS-powered endpoints are 100% locked down. The read-only file system makes IGEL OS even more tamper-resistant so that users can't move icons about, or introduce malware or viruses to help prevent contamination of data and resources.
	Optimize IT Budget
Endpoint devices require replacement "refresh" every 3 or 4 years, which is extremely costly and disruptive in an education environment.	Out-of-date endpoints can be converted to an IGEL OS-powered endpoint within minutes. IGEL OS runs on any compatible x86-64 device, so endpoint hardware refreshes can be significantly delayed or bypassed altogether. This minimizes disruption, unleashes IT budget, and supports green IT practices.
The popularity and demand from students to access resources from anywhere and from their personal devices makes providing a secure and reliable solution even more challenging.	The IGEL UD Pocket enables a secure BYOD and distance learning experience. Simply insert the UD Pocket into a compatible endpoint device USB port and log in to securely access program resources anytime and anywhere. This reduces the cost of hardware lease and maintenance agreements.
	Simplify Management
Time-consuming administration due to disparate, complex, and slow management tools across a diverse environment with many remote locations.	Quick and easy deployment with IGEL Universal Management Suite (UMS) software makes it possible for one administrator to optimize, image, and control up to tens of thousands of diverse endpoints remotely from a unified, single console.
IT admins have to manage and update images and firmware on many endpoints across diverse locations with variable bandwidth.	IGEL UMS provides zero-touch deployment, drag-and-drop profiling, and a "buddy update" system to reduce bandwidth. IT administrators are spared the time-consuming and error-prone patching typical for many dispersed Windows endpoints.
Temporary but sharp increase in demand for resources for example during examinations places demands on IT admins.	The IT administrator can provision a standard, unified examination setting with different IGEL OS endpoints quickly and remotely with zero-touch deployment via UMS.
	Improve User Experience
IT environments and university campuses vary from libraries to labs, to large lecture halls and more traditional classroom settings. This demands support for a variety of device types, vendors, and form factors.	IGEL OS runs on any compatible x86-64 device and custom partitions enable rapid integration of new partner technologies, expanding endpoint device choice with specialized form factor requirements. The shared workplace feature allows devices that are used by multiple people (e.g. lab workstations) to automatically configure to the user by role or function based on policies.
Virtual client host software and endpoints are not compatible.	Linux-based IGEL OS is updated with new feature releases four times per year with intermittent releases as necessary, ensuring support for the very latest software/firmware updates from Citrix, VMware, Microsoft Windows Virtual Desktop, AWS and others.
Slow log-on times, poor quality audio and unreliable digital signature present difficulties for faculty, staff and students.	IGEL's vast and growing partner ecosystem (90+) includes market leaders in unified communications such as Zoom and Microsoft Teams, single sign-on and digital signature, printer management, performance monitoring and optimization and many more. IGEL OS always stays current with latest protocols, interfaces, and firmware versions from its partners.
Concerns about shifting to a new IT architecture increasing workload during the adoption process.	IGEL OS is customizable. Campus branding, specific imaging or applications can make endpoint devices look and perform exactly as desired in accordance with branding, program of study and regulatory requirements. Students and faculty maintain a consistent user experience throughout the adoption process.
	Sustainability and Green IT
The Green Agenda and environmental policies cause further complexity for IT admins as they strive to provide a sustainable and efficient IT infrastructure with limited resources.	IGEL UD endpoint devices are extremely power-efficient compared to PCs. Convection cooling and no moving parts means they generate significantly less heat and consume less power. In addition, the compact design uses 30% recycled plastics and recycled packaging material. IGEL endpoints last on average three times longer than PCs, evidenced by the extended IGEL warranty of up to 5 years.

"Students were the catalyst for change. Moving to VDI was a big change with many moving pieces. As part of this we needed a thin client platform that 'just works', which IGEL delivers."
**Darryl Meyers,** Saskatchewan Polytechnic's Team Lead Enterprise Desktop Management.

"IGEL offered us more flexibility and allowed us to recycle devices which was what sold us."
Darryl Meyers, Saskatchewan Polytechnic's Team Lead Enterprise Desktop Management.

"Now everything is a lot quicker and the students get the same experience irrespective of the device."
Brad Johnstone, Head of ICT Services at Ayreshire College.

IGEL CHAIN OF TRUST

UEFI → BOOT-LOADER → LINUX KERNEL → IGEL OS PARTITIONS → VDI/CLOUD
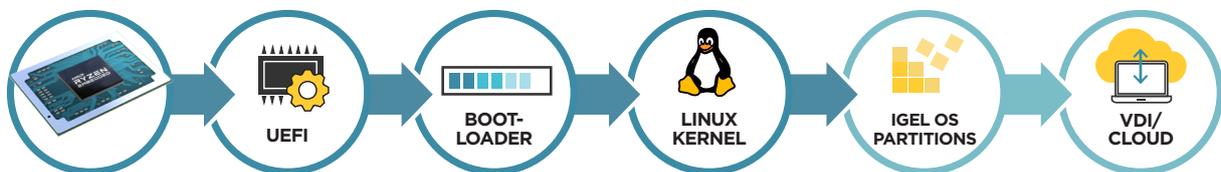
IGEL's chain of trust verifies each step of the boot-up process from the IGEL-branded hardware/UEFI to the destination VDI host or cloud workspace delivered by Citrix, VMware and more. A secure browser can be configured for safe user access to web apps and cloud-based DaaS offers including Amazon Web Services (AWS) and Windows Virtual Desktop (WVD) from the Microsoft Azure cloud.

CONCLUSION:

Lightweight and secure by design, IGEL OS offers a simple, smart, and secure solution that supports the mission-critical functionality and demands of evolving higher educational environments. Students, faculty, and administration can experience rich, productive digital experiences in the lecture hall, classroom, administration building, the dorm room, or at home. Previously complex operational functions are standardized and streamlined. IT managers can shift their focus from ad-hoc issues to strategic plans. By reducing operational and capital expenses, the financial manager can leverage the cost-savings and allocate budget and funding to further IT development projects.

DOWNLOAD IGEL WORKSPACE EDITION TO GET STARTED TODAY

Transform your endpoint management approach with IGEL to reduce costs, streamline operations and staff, and increase user satisfaction.

Are you ready to see the impact that IGEL can make to your IT infrastructure and users? Download IGEL Workspace Edition for free to experience the simplest, most cost-effective, and most secure way to deliver VDI and DaaS desktops.

Your IGEL Workspace Edition download will include IGEL OS licenses and complete access to IGEL UMS for management, all of which are free to use for up to 90 days.

REQUEST A DEMO
IGEL.COM/GET-STARTED/TRY-FOR-FREE/

IGEL
next-gen EDGE OS
for cloud workspaces