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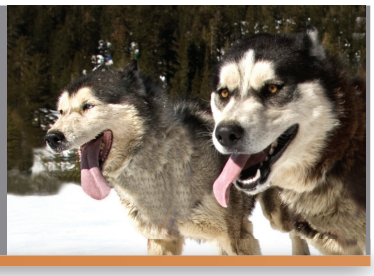
Customer Case Study



Safe NAC Enables Students, Staff to Access Network Using Any Device They Choose

School district's bring-your-own-device policy would not have been possible without security provided by Safe NAC

EXECUTIVE SUMMARY

Firm Overview
Wolf Creek Public Schools

Organization Type
Education, government

Scope
Campus encompasses 5,944 square kilometers, located between Calgary and Edmonton

Size
7,000 students, 1,000 staff

Business Problem
Enable students and staff to bring their own devices while also maintaining a high level of security and integrity to its network

Solution
Safe Network Access Control (NAC), a joint effort by InfoExpress and Alcatel-Lucent

Alberta, Canada-based Wolf Creek Public Schools strives to ensure that all students aren't only successful during their academic studies – but that they also grow to become successful lifetime learners. In fact, each staff member is dedicated to creating powerful learning environments that respect individual needs, tie to the district vision, and are centered on providing an exemplary education.

Increasingly, the way that students embrace mobile technology and social media is central to their individuality and their education. A number of years ago, Wolf Creek provided laptops to every junior high student in two schools as part of a provincial research project. "We see digitally connected devices as essential tools of modern literacy. However in spite of the project's success, we knew it would not be financially possible to provide every student with a laptop. The solution: have students bring and support their own devices," says Wolf Creek Assistant Superintendent, Gary Spence.

However, increased access by students and staff necessitates a renewed focus on responsible use. "For 21st century kids, technology is more than a tool, it's an essential component of everyday life that frames their social world view. For them, being digitally connected is as natural as speaking is to us," says Mark McWhinnie, Director of Technology Integration at Wolf Creek Public Schools. "Yet, young people lack an adult perspective on safety and responsibility. While many laud the advantages of increased connectivity, few seem to take a full 360-degree approach that addresses digital citizenship. At Wolf Creek, we strive to ensure we address the pedagogical needs, the technical needs, and the privacy and safety needs of our students and staff."

Full access brings a slew of potential risks:

"We wanted more than a simple ISP service available to our staff and students. We wanted the experience to be as similar as possible to district device use. We wanted personally-owned devices to be full network citizens with access to all internal resources, and we wanted the experience to be seamless for the end user," says Spence. But it was clear that staff and student devices would pose a significant security risk to the district's networks. When users bring their own systems, they also bring a slew of potential risks – viruses, worms, spyware, botnets, and other forms of malware, which they inadvertently pick up while innocently surfing the web, downloading applications, and opening attachments. If all users aren't diligent about their device security – where they click; what sites they visit; maintaining software patches; keeping anti-virus signatures up to date – their system will become compromised and malware or an attacker will make its way onto the district network.

Therein was the challenge for Wolf Creek: enable students and staff to fully utilize social media and their own devices to support learning while still maintaining a high level of security and integrity to the district network, infrastructure, and data. "All this needed to happen without compromising instructional activities or wasting instructional time. The priority had to be on learning, not on technology," says Spence.

Wolf Creek found a way to do exactly that, when the district turned to Safe Network Access Control (NAC), made possible by a joint effort by InfoExpress and Alcatel-Lucent. The security capabilities of Safe NAC protect the district's distributed core network assets while ensuring 28 schools provide students and staff with secure access to the instructional tools and resources they need.

Safe Network Access Control

Safe NAC is a fully integrated NAC solution, designed for multi-vendor networks equipped with a variety of managed and unmanaged endpoints. Safe NAC provides guest access, host integrity checks, and role-based access control to help organizations ensure compliance. Safe NAC is also backed by a global, highly-experienced multi-vendor capable professional services organization.

Safe NAC reduces costs by automating operational processes and minimizing the need for IT operator intervention during authentication. There also is simplified troubleshooting and reduced help desk costs, which enables a reduction in operational overhead and proactively ensures the health of the network. "While Safe NAC may reduce operational costs, this was never the overall goal for Wolf Creek. Instead the intent was to increase access and embrace the mobile revolution for instructional needs that is increasingly becoming the preferred method of connectivity," says McWhinnie.

> "The vision was to have authenticated access, be able to identify who was using our network and be able to check the integrity of student systems, so we could trust those systems to access network servers and other resources. This is precisely what we've been able to achieve with Safe NAC."
>
> – Mark McWhinnie, Director of Technology Integration at Wolf Creek Public Schools

Safe NAC integrates InfoExpress CyberGatekeeper Network Access Control into multiple Alcatel-Lucent components, including the Alcatel-Lucent OmniSwitch platforms (AOS 6.3.4 and newer), the Alcatel-Lucent VitalQIP, and Alcatel-Lucent OmniAccess wireless platforms.

Safe NAC can detect, quarantine, and remedy unhealthy laptops that are not in compliance with the school's security policy and control access to the network by auditing all devices before granting access to the network. Safe NAC is fully scalable, interoperates smoothly with a wide range of other products, and can be deployed easily in monitor mode, giving organizations the option to remedy endpoints "on the fly" without having to restrict access to users. Also, Safe NAC provides Wolf Creek with a deep level of host-integrity inspection that is easy to use and manage. "The vision was to have authenticated access using any device, be able to identify who was using our network and be able to check the integrity of student systems, so we could trust those systems to access network servers and other resources," says McWhinnie. "This is precisely what we've been able to achieve with Safe NAC," he says.

Safe NAC offers key benefits, including full visibility and control of network activity, protection of network assets and mission critical data, and the ability to enforce user policies in a centralized manner and even to offer guest access. An example would be blocking access to peer-to-to-peer networks and applications such as Skype.

Thanks in large part to the security provided by Safe NAC, Wolf Creek was able to launch a successful bring-your-own device initiative for students and staff. Now they can access the network through their smartphones, tablets, netbooks, and the notebooks of their choice. "No longer do students or staff have to wait for available lab time; students can access educational resources whenever they need them," says McWhinnie.