

Preventing Cyber Threats with Zero Trust Network Security



Renowned university chooses Network Critical Zero Trust Technology to protect their network infrastructure

Summary

Academic institutions are targets for cyberattacks because their data is sensitive and valuable. Not only does the personal data of students and staff that universities hold provide opportunities for ransom attacks, but on top of that latest research findings can become a target for international espionage. Moreover, a large number of user accounts change every term, making unused accounts vulnerable to hacking. It is also important to note that students do not always have the best cybersecurity practices and training.

Despite making a significant investment in security systems to detect malware, the institution was nevertheless a victim of cyberattacks. Therefore, Network Critical recommended INVIKTUS™ after a thorough review of their choices. This Zero Trust cybersecurity solution helped preserve data, prevent future cyber threats, and stay within budget.

The Challenge

The surge in security concerns is not limited to a single department but affects the entire organisation. This means that everyone in the company must be concerned about security. Many sophisticated and complicated types of malware are constantly phishing for credit card numbers, employee data, security codes, and other company confidential information. And even if there are more advanced security devices that can forecast and identify traffic anomalies and help root out malware before damage is done, they are too expensive and can't guarantee 100 percent network protection.

The challenge is to prevent unauthorised users and devices from entering the network on a budget. And to restrict access within the network to only the data that each user needs to access. The client had already spent a great deal of money on security tools to detect traffic irregularities that compromise network security, however, at the same time, they needed a security measure that would help prevent malicious actors from even breaking into the network and gaining access to important data.

Our challenge was how we can provide free wifi to our students and at the same time protect our vital systems from being compromised.

INVIKTUS™ provided us with a unique way to provide only access to our vital systems for our staff that needed access and at the same time keep the servers invisible for our students.

Security Manager, University



Network Critical
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INVIKTUS™ provided us with the missing security layer to prevent security breaches from within our network, now we can fully control who has access to our vital systems and who does not.

Network Engineer

Network Critical Solution

Recognizing Network Critical as a global leader in network visibility and security solutions, the CISO consulted with our experts about the different options available to prevent cybercrime. After thorough research of their network, the team suggested a Zero trust approach. Placing INVIKTUS™, Network Critical's latest cybersecurity solution, in front of the server where the sensitive data is.

INVIKTUS™ is zero trust security technology based on the concept "Trust No-one" requiring the organization to validate and provide access to all users, applications, and devices whether they are inside or outside the organization's network. With a policy-based configuration, the University can continuously block unauthorised users but will also allow the IT team to map out a specific path for users so they are completely unaware of secure and sensitive content in the network. They will have ONE path and the rest of the network will be INVISIBLE, minimising the risk to vulnerabilities and cyber threats.

INVIKTUS™ is the strongest low-level security layer for your critical network by NEVER allowing the threat to have access to secured areas in the network. Also, as it has no IP or MAC address it remains completely transparent in the network and works in full-line rate performance. Last and not least,

INVIKTUS™ has a Lock & Leave functionality, allowing the entity to program it, lock the policies, and leave it to run in the background with minimal maintenance.

Solution Benefits

The education industry has been increasingly affected by cybercrime in the last two years.

One of the reasons is that universities and colleges have libraries with huge amounts of non-public research information. Criminals can get into a research network and see what's going on, what's being tested, and how those tests are going. Not only is this kind of data useful to governments for espionage, but it also has an economic value. Let's say for example researchers are working on a drug trial. Criminals entering the institution's network will be able to see if the trial is going well or not and this information could be used for insider trading. Also, the personal data of students and staff that universities hold provide opportunities for ransom attacks.

Being able to control who has access to their network and to what data, minimises the risk for internal threats and prevents cybercrime from ever happening. Network Critical's unique cybersecurity solution provides reassurance to students, staff, and companies that you are protecting their data but also is a competitive advantage that attracts brand awareness, loyalty, and profitable partnerships.

About Network Critical

Network Critical is an industry leader in network access technology, continually innovating and adapting technology to be at the forefront of market needs. Our 1/10/25/40/100G quality modular TAP and Packet Broker solutions ensure our customers have continuous network visibility. Network Critical products eliminate any downtime issues, and our unique scale-out capabilities allow for simple, cost-effective expansion as network and port density requirements increase.

On the other hand, the health of your network is always secure with Network Critical products. Our wide range of solutions not only provides 100% network visibility without packet loss. But in addition, it protects network infrastructures with the latest generation Zero Trust technology.

With over 20 years of experience, many industry "firsts" and a reputation for excellent customer service, Network Critical solutions are widely used in global networks in a wide range of industries including finance, telecommunications, government, energy, and health care.

For more information, visit www.networkcritical.com



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