

# Stay ahead of Cybercrime with INVIKTUS™ Zero Trust Technology



## Healthcare organization adopts INVIKTUS™ to protect their network from data breaches and ransomware

### Summary

During the pandemic, ransomware attacks have increased dramatically, and the healthcare sector has been one of the main targets due to telemedicine and remote work. The logic is that hospitals are too busy trying to provide care to their patients to negotiate the amount of ransom attacks. At the same time, digital attackers recognize that hygiene and security protection are not a priority for healthcare organizations. Many of these companies do not have security measures in place, such as two-factor authentication, malware protection, and network scanning. Unfortunately, a cyberattack in this sector can have serious consequences for a hospital, including delayed care, canceled procedures, and even death.

After repeated threats, the CISO approached our cybersecurity experts in search of a solution to prevent cyberattacks and preserve their data. INVIKTUS, a Zero-Trust security solution, was suggested by Network Critical to reduce risk, protect against network breaches, and build robust security in the network infrastructure.

### The Challenge

The initial problem was securing the network from the inside. IoT medical devices such as video cameras and HVAC systems that play a role in healthcare operations are crucial to patient care. Unfortunately, cybercriminals use malware to explore vulnerabilities in network infrastructure to access unmanaged devices, including IoT, IoMT, and OT. Without security measures in place to defend the network from within, a hacker can gain access to patient information, steal identities, or compromise medical devices, endangering patients.

The second problem, and perhaps more critical, is that healthcare institutions lack the financial means to keep up with the new security control measures required to protect patients' Social Security numbers and other information from personal identification (PII). To meet its data recovery demands, this facility turned to cloud-based data storage. The problem was that it was not HIPAA compliant, like many cloud-based alternatives, making the company's systems more vulnerable to hackers.

**“We needed to upgrade our network security but could not afford a very expensive solution, INVIKTUS™ provided us with a very strong security at a fraction of the cost. Now our critical servers are protected from security breaches from within the network.”**

Network Manager, Hospital



**Network Critical**  
The Window to your Network™



**“With Network Critical Zero Trust Security Solution, we are able to protect our sensitive data as well as our patients’ private information.”**

Chief Information Officer (CIO)

### Network Critical Solution

The Information Security Officer recognized Network Critical as a global pioneer in network visibility and security solutions and consulted with our expert team about a zero-trust security solution. After further analysis, Network Critical's expert team advised implementing INVIKTUS as part of a zero-trust network infrastructure. A zero-trust architecture prevents any new connected device from connecting to a network until it's verified and granted access.

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 healthcare facility can continuously block unauthorized 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, minimizing the risk of 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.

By changing to a server-based data storage and placing INVIKTUS™ in front of it, we were able to protect all sensitive information from unauthorized users, and make its location invisible in the network.

### Solution Benefits

Since using Network Critical's zero-trust security solution the healthcare organization has been able to prevent cyber threats, detect and illicit ERP access attempts and quarantine compromised devices, all whilst remaining within budget. While ransomware will never go away, and hospitals will always be among the most vulnerable targets, implementing zero-trust policies on the most critical devices and assets allow organizations to improve their security infrastructure and better protect the patients they serve.

### 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/400G 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.

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 vast range of industries including finance, telecommunications, government, energy, and health care.

**For more information, visit [www.networkcritical.com](http://www.networkcritical.com)**



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