



Case Study:  Colby-Sawyer College

The section header includes the text "Case Study:" in orange, followed by a circular blue logo of a white building with a steeple, representing Colby-Sawyer College. The text "Colby-Sawyer College" is also in orange. The background of this section features faint, light blue versions of the Nitrosecurity network icon.

## About Colby-Sawyer College

Colby-Sawyer is a dynamic and innovative liberal arts and sciences college located in the scenic Lake Sunapee Region of central New Hampshire. The Colby-Sawyer College story began back in 1837, when local citizens gathered to create a coeducational secondary academy on a hill in lovely New London, N.H. The school evolved into a junior college for women in 1928, before becoming the comprehensive liberal arts college for men and women that it is today.

Colby-Sawyer has since become a rising star among comprehensive baccalaureate colleges in the North, recognized for its low student-to-faculty ratio, small classes, closely knit community and personalized quality of education Colby students enjoy many benefits, including access to pre-professional internship programs, small class sizes, and a fully wireless campus that embraces new technologies.

## Security Demands

Embracing new technology, of course, means that the campus network must securely deliver that technology. The network interconnects approximately 800 college-owned PCs and laptops and 1000 student computers, using both wired and wireless access. A central server infrastructure both physical and virtual servers, with common SAN storage. The network is designed around a central core switch, with all buildings connected via 100Mbps optical fiber. Server farms are connected to the core with multiple gigabit Ethernet links; the servers being divided between multiple server rooms.

Student network activity varies from Internet access to college-hosted services, and there is a constant battle to protect the network from the introduction of malicious code and malevolent activity. While faculty and staff generally connect to server resources via a Citrix session, security concerns in these core areas also exist, requiring that both the network edge and core server farms be protected. In addition, monitoring network activity through the collection and analysis of flow data is critical in a mobile, largely wireless campus environment.



**“ ... since the implementation of the IPS solutions there hasn't been a single virus that has made it onto the network.”**

## Network Protection with NitroSecurity's NitroGuard IPS

Colby-Sawyer College was actively looking for ways to manage and mitigate intrusion attempts both into our network as well as within our network. The goal was to shield the network and infrastructure from attacks which could cripple the network. Due to the open nature of a college network environment it was necessary to implement multiple layers of security devices to protect valuable assets.

Colby-Sawyer college currently uses the NitroGuard Intrusion Prevention System (IPS) both at the network edge (the demarcation between the college network and the Internet), and the core server farms. Multiple NitroGuard IPS devices are used, operating in both IPS and IDS mode, depending on both the device's location in the network, and the specific signatures being used for a specific security profile. A tuned signature profile is used to provide active protection, immediately blocking high-risk activity, while alerting on a broader set of less critical signatures. All activity from the NitroGuard IPS is available for later security analysis.

The synergy between the NitroSecurity solution and Bradford Networks' Campus Manager allowed Colby-Sawyer to combine intrusion prevention, security information and event management, and identity-based network access control, providing best-practice security while simplifying operations. NitroSecurity worked with NitroConnect partner Classic Networking ([www.classicnetworking.com](http://www.classicnetworking.com)) to provide professional services through all phases of the implementation.



**“At Classic Networking we focus on solutions that integrate well with the customer’s IT infrastructure. We integrated NitroGuard IPS with Campus Manager from Bradford Networks. Combining Network Access Control with Intrusion Prevention provides a very valuable security solution for Colby-Sawyer College. We appreciate a powerful IPS with integration partnerships.”**

**“ The database engine and the ability to handle and process as many flows as the IPS can handle is incredible! An IPS that can use signature and behavioral anomaly techniques as efficiently as Nitro makes proactively protecting the campus infrastructure possible.”**