

# Rapid7 Nexpose Meets Carnegie Mellon University's Requirements for Vulnerability Management, Co-Development and Higher Education Expertise

## Broadening Protection to Ensure Campus-Wide Security

Securing its campus-wide systems and networks is paramount for Carnegie Mellon University, a global research university recognized for its unparalleled technology programs. The organization needed a vulnerability management solution that would scan its assets more broadly and offer centralized control for close monitoring and analysis of security threats. After Carnegie Mellon evaluated several different vulnerability scanning solutions, Rapid7 Nexpose emerged as the best fit.

"We found that the Nexpose development strategy mapped to our needs, which we attributed to Rapid7's responsiveness to our input as well as its experience in the higher education industry," stated Mary Ann Blair, Director of Information Security at Carnegie Mellon. "Nexpose offered what we sought in terms of feature sets, such as support for Linux, a secure Web interface, authentication with Kerberos and the ability to create and export customized reports. Nexpose became even more attractive when Rapid7 introduced its PCI compliance capabilities."

The degree of partnership formed with Rapid7 also made an impression. "We had the option of building our own vulnerability scanning system, but the opportunity to partner was much more important and mutually beneficial," stated Blair. "Rapid7's ability to listen and work with us was a differentiator. They know how to work with higher education and worked diligently to understand it. Rapid7 has helped us build a world-class vulnerability detection system with Nexpose."

The Nexpose features Carnegie Mellon found most prominent during testing are its open API architecture, its asset groupings and the access controls with those assets.

"With the open API, we have the ability to write our own software to manipulate Nexpose and create, for example, auto provisioning accounts and access controls," stated Jason Carr, Security Engineer at Carnegie Mellon. "The asset groups with access control enable us to allow many users to view their machines and reports without having access to other machines they don't own."

**Carnegie Mellon**

**Client**  
Carnegie Mellon University

**Industry**  
Higher Education

**Website**  
[www.cmu.edu](http://www.cmu.edu)

## Case Study Highlights

### Challenge

Carnegie Mellon University needed a vulnerability management solution that would scan its assets broadly and offer centralized control for close monitoring and analysis of security threats, as well as the ability to create and export customized reports.

### Solution

With Nexpose, Carnegie Mellon can now perform extensive vulnerability scanning, conduct more centralized monitoring and effect root cause analysis.

### Understanding And Identifying Security Issues

Since implementing Nexpose, Carnegie Mellon has found it very effective for learning more about its environment. With Nexpose, Carnegie Mellon can now perform extensive vulnerability scanning, conduct more centralized monitoring and effect root cause analysis.

“One big benefit is that we can provide vulnerability and general security data to a wide audience of administrators without committing a significant amount of time and resources to training, documentation, and help interpreting results,” stated Chris Ries, Security Engineer at Carnegie Mellon and the technical lead on the Nexpose implementation.

This benefit is attributed to the Nexpose Web user interface, which has most impressed Carnegie Mellon as the product’s biggest advantage.

“The interface is well-organized and allowed us to rapidly deploy to the diverse set of IT folks on campus without a lot of training,” stated Ries. “Nexpose allows users to easily extract high-level information from their scan results, such as what issues are widespread across our machines, what critical issues exist, and what operating systems and services exist in our environment. Given the decentralized nature of our network, there is not an easy way to obtain this diverse information.

“Since the console can organize results according to IP address, operating system, service type, etc., users can quickly view and interpret relevant results,” added Ries. “For example, they can look at only their critical systems and services, or they can focus on specific operating systems and software. This ability to organize helps them tackle a significant amount of data in a meaningful way.”

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**Mary Ann Blair**

Director of Information Security  
Carnegie Mellon University

#### Benefits

##### Save Time

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Chris Ries, Security Engineer at  
Carnegie Mellon University

### Surmounting Challenges With Expert Support

Because Carnegie Mellon conducted a unique implementation of Nexpose in a complex environment, the organization has experienced a few challenges, which it has overcome with the knowledgeable assistance of Rapid7’s technical support team.

“Rapid7’s support folks are very helpful and responsive, especially in directing us to work-arounds for the problems we’ve had,” stated Blair.

“The support team has done a great job helping us identify and troubleshoot problems. Their responses to emails and phone messages are generally very prompt,” added Ries.