Benefits Administrator Simplifies Security Policies

CareCore National logically separated training servers using Virtual Security Gateway (VSG) for Nexus 1000V Switch.

Business Challenge
CareCore National is a specialty benefit-management company that pioneered evidence-based medicine for treatments. Doctors and nurses access CareCore’s decision-support systems to obtain prior authorization for procedures such as magnetic resonance imaging (MRI). CareCore applications are hosted on a private cloud built with the Vblock Infrastructure Platform, which includes Cisco UCS™ B-Series Blade Servers, Cisco Nexus® 7010 at the backbone, and Cisco® Nexus 1000V Distributed Virtual Switches at the access layer.

The CareCore IT team needed an efficient way to isolate training server VMs from production server VMs. The training VMs and production server VMs belong to the same network domain, so isolating training VMs previously required four pages of security rules, based on source and destination IP addresses. Enforcing firewall security policies based on VM attributes instead of IP addresses would lower management overhead and the risk of configuration error.

Solution and Results
CareCore National significantly simplified firewall security policies by creating logical trust zones using the Cisco Virtual Security Gateway (VSG) for the Cisco Nexus 1000V Switch. “The Cisco VSG met our VM security needs, and its VM-aware rule engine allowed us to re-think the way we write security policies,” says William Moore, executive vice president and chief technology officer for CareCore National.

Benefits of the Cisco Nexus 1000V and VSG in CareCore’s environment include:

- **Simplified security policy:** Three VM context-aware rules have replaced four pages of network access control rules, minimizing management overhead and practically eliminating the risk of configuration errors that could jeopardize production servers.
VM context-aware rules also eliminate the need to define new access control rules when creating new VMs.

- **Flexibility to move training VMs to any physical server:** The Cisco VSG gives CareCore the flexibility to create as many training VMs as needed at a given time without the burden of defining more access control rules. With Cisco Nexus 1000V vPath technology, each VM’s security policies stay with that VM as it moves across servers, enabling consistent enforcement of security policy on any host. Increased VM mobility also helps CareCore maximize utilization of compute resources.

- **Lower server costs:** By decoupling firewall instances from application workloads, Cisco VSG increases the number of VMs that CareCore can implement on each server. Decoupling also enables more accurate CPU capacity planning.

- **Accelerated server deployment for business agility:** One virtual instance of Cisco VSG protects multiple Cisco UCS blade servers. Therefore, to add capacity for more VMs, CareCore only needs to add a new blade server, not another firewall.

- **Separation of duties:** CareCore did not need to change IT team duties. The server team continues to provision and instantiate VMs, while the network and security team configures network and security policies.

CareCore also benefits from the high performance of the Cisco Nexus 1000V Switch. “The Cisco Nexus 1000V provides integrated virtual switching, enabling high-speed communications between virtual machines that wouldn’t be possible with any other solution,” says Matt Cunningham, senior vice president for IT at CoreCore National. “Our ability to route the entire workload inside the Cisco Unified Computing System provides economies of scale and disaster recovery capabilities that a physical switch could not deliver.”

**For More Information**

- To find out more about Cisco Nexus 1000V, visit: [www.cisco.com/go/1000V](http://www.cisco.com/go/1000V).
- To learn more about Virtual Security Gateway, visit: [www.cisco.com/go/vsg](http://www.cisco.com/go/vsg).

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