

# UC Berkeley Chooses Trend Micro™ Deep Security for Campus Security Services

Replacing end-of-life Cisco Security Agent simplifies security management and reduces the data center server security footprint.

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- **Blaine Isbelle, Systems Administrator, Information Services Technology**  
University of California Berkeley

## EXECUTIVE SUMMARY

**Customer Name:** University of California Berkeley

**Industry:** Higher Education

**Location:** Berkeley, California

**Number of Employees:** 2,082 (full/part-time)

## CHALLENGE:

- Find a replacement for Cisco Security Agent (end of support next year)
- Maintain protection of server assets and services, but minimize the visible impact on the user base
- Choose an easy-to-manage solution that aligns with managed services delivery model
- Align security with the evolving data center (virtualized servers, private/public clouds).

## SOLUTION:

- Replace Cisco Security Agent with agent-based Trend Micro Deep Security deployment
- Eliminate additional server security solution (antivirus software)

## BUSINESS RESULTS:

- Significantly minimized security footprint
- Easier provisioning and day-to-day management of security
- Fine-grained control of security features
- Ability to customize security for diverse managed services customers, in a simpler fashion compared to previous solutions

## Challenge

The Information Services Technology group at University of California (UC) Berkeley is continually challenged to meet the unique infrastructure requirements of its user base. World-leading innovations, researchers, and educators depend on the central data center, and demand best-in-class solutions and services.

“We are a business within the university,” explained Blaine Isbelle, systems administrator, Information Services Technology (IST), UC Berkeley. “We are self funding—we get paid for services that we offer to our on-campus customers. We compete with public cloud computing services, and we have to offer superior solutions to our community. If we can’t give them what they need, within their budgets, they will go where they get more bang for their buck. Our users are very smart, and they know what they want.”

Virtualization has helped the IST department cost-effectively deliver compute services, and the central data center is almost completely virtualized today. Security has evolved along with UC Berkeley’s VMware environment. For quite some time, the server team has known that they would have to find a replacement solution for its Cisco Security Agent products. The end-of-life announcement and impending end of support (December, 2013) called for an evaluation of alternative security solutions for the university’s servers currently protected by Cisco Security Agents.

## Solution

Cisco simplified the search for the UC Berkeley technology team. The local account team encouraged them to consider Trend Micro Deep Security modules as a replacement for Cisco Security Agent. Last year, a pilot test was carried out on campus, comparing Deep Security and a couple of other competing data center security solutions from other vendors.

“Deep Security definitely stood out from the competition, especially within virtualized environments,” said Isbelle. “Cisco Security Agent was great—it gave us a lot of functionality. But it required a lot of customization for various applications. Deep Security gives us all the functionality we need with more minimal customizations required. Deep Security also allowed us to eliminate another antivirus solution on our servers. No one liked the antivirus client. We always had problems with it. It had consumed a large amount of memory, and generated a lot of CPU churning due to the scans. We haven’t had any of those problems with Deep Security—so far, it has been invisible.”

UC Berkeley has started switching over server protection to Deep Security, and plans to complete the conversion from Cisco Security Agent well before the product’s end-of-support date. They take advantage of all of the Deep Security modules including antivirus, intrusion detection/prevention, web application protection, application control, integrity monitoring, firewall, and log inspection capabilities. The full agent-based solution now occupies a smaller footprint compared to the legacy Cisco solution.

For the team that provides managed services, Deep Security is already saving time. “We can offer Deep Security to our managed services customers, as yet another benefit to them, and we can provision protection on a fairly granular level to meet the various needs of different groups,” said Isabelle. “We like the ease of management of Deep Security and the fact that the client is significantly lighter than the Cisco Security Agent—that’s very nice.”

## Results

Supporting Deep Security requires minimal effort on a day-to-day basis. “When we provision a new server or set up services for a user group, it only requires minimal adjustments of the firewall rules depending on the intended machine use,” said Isabelle. “But that takes very little time. Basically, we just drop in Deep Security and let it go. The routine management is easy.”

The switch to Deep Security has gone so smoothly that the IST group plans to offer Deep Security to its self-supporting customers. “Campus customers can get [another antivirus solution] for free, using the university’s license, but Deep Security is a better solution,” said Isabelle. “It gives us another talking point with our non-managed customers, and increases the value of our organization.”

For the future, UC Berkeley continues to evaluate the potential benefits of public and private cloud services. “Our private cloud drives down the costs for some of our web site services right now, and handles traffic without any spikes disrupting users,” said Isabelle. “We can scale it up, and we are also looking at public clouds for the potential to handle some of our periods of especially high demand such as registration time. Trend Micro security products will help us as we expand our cloud services—we have a good starting point with Deep Security and are optimistic that we can take advantage of agentless protection and other solutions as we evolve our security in pace with our data center compute services.”

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## DEPLOYMENT ENVIRONMENT:

- Main campus data center
- Compute services for faculty, staff, and 36,142 students
- 50 VMware ESX 5.0 hosts; 1,000 virtual machines
- Full VMware suite (vMotion, High Availability, etc.)
- Trend Micro Deep Security 8

## Company Profile:

The University of California was chartered in 1868 and its flagship campus—envisioned as a “City of Learning”—was established at Berkeley, on San Francisco Bay. Today the world’s premier public university and a wellspring of innovation, UC Berkeley occupies a 1,232 acre campus with a sylvan 178-acre central core. From this home its academic community makes key contributions to the economic and social wellbeing of the Bay Area, California, and the nation.

## Trend Micro Products

- **Trend Micro Deep Security**  
<http://www.trendmicro.com/us/enterprise/cloud-solutions/deep-security/index.html>



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