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#### CUSTOMER SUCCESS

## Avago Technologies

### Preventing Workflow Disruptions with Security Solutions from Symantec and Imperium

For over 40 years, Avago has created innovative technology, with more than 6,500 patents and a record for best on-time delivery. To uphold this legacy, the company needed a cost-effective security solution to prevent viruses and workflow disruption for about 3,500 users. Avago turned to Symantec solutions to achieve fivefold faster patching and updating, a 67 percent reduction in staff time for patching and updating, no disruption from malicious code since deployment, and endpoint management capabilities that are transparent to users.

#### A legacy of innovation

In an industry where the only stability is constant change, Avago Technologies has a long lineage most companies would covet. Starting life as the semiconductor division of Hewlett-Packard, then Agilent Technologies, Avago was one of the largest privately held semiconductor companies in the world until it went public in August, 2009. Today, Avago has employees across 22 sites in 13 countries on the continents of Europe, Asia, and North America.

Avago Technologies (Nasdaq: AVGO) is a leading designer, developer and global supplier of a broad range of analog semiconductor devices with a focus on compound III-V semiconductor-based products. We differentiate ourselves through our high performance design and integration capabilities. Our product portfolio is extensive and includes over 6,500 products in four primary target markets: wireless communications, wired infrastructure, industrial and automotive electronics, and consumer and computing peripherals. Applications for our products in these target markets include cellular phones, consumer appliances, data networking and telecommunications equipment, enterprise storage and servers, factory automation, displays, optical mice and printers. With more than 6,500 patents, Avago has a 40-year legacy of innovation, and in 2009 the company won a CIO 100 award from cio.com for demonstrating excellence and achievement in IT.

An IT staff of 20 people oversee IT operations scattered across the globe, aided by support from a managed IT services provider. Those 20 wanted to gain enhanced visibility and centralized control. They also wanted to spend less time discovering and repairing security-related failures. "We have PCs all over the world, but we didn't have a way to manage them all from one console," explains Stanley Toh, Avago's infrastructure manager of end-user operations. "We were using a virus protection suite, but we had no visibility, so we would have to track down the machine with the virus and update and fix that machine."

#### ORGANIZATION PROFILE

**Website:** [www.avagotech.com](http://www.avagotech.com)

**Industry:** Manufacturing

**Headquarters:** Singapore and San Jose, California, U.S.

**Employees:** 3,500

#### SYMANTEC SOLUTIONS

Endpoint Security

Endpoint Management

IT Compliance

#### Why Symantec?

- Expertise in security
- Ability to reclaim productivity
- Capability to gain visibility across entire network

## Viral growth

The solution was costing Avago thousands of hours of productivity each week. “Our virus scanning would start running at noon on Wednesdays, and all of our employees would have to take a long lunch until it finished scanning,” recalls Toh.

In order to stay ahead of the curve, meet customer demand, and unite its operations Avago needed a total endpoint management solution to gain control of its widespread IT environment. “We were having problems with reporting on our inventory,” says Toh. “We need to know what’s going on in our 22 remote sites—which applications are installed, what machine the user has. Reporting helps us assess our environment, and without that, we might not know what’s wrong until it’s too late.”

Finding out too late is an experience Toh and his team don’t want to repeat anytime soon. Not long after the company split off from Agilent, Avago’s environment was compromised. “We got hit by a virus from the Philippines and it exploited a weakness in our system,” Toh remembers. “It was really painful.”

Avago knew it needed a better way to assess security vulnerabilities and determine hardware needs and availability. “One of our most important criteria in choosing a solution is the provider’s reputation and how that provider has evolved with times,” Toh explains. “You don’t want to invest in a company that is always following the leaders. You want to be with the leader. That was one of the reasons that we selected Symantec.”

## Deploying faster with Symantec

To automate its software delivery company-wide and protect and visualize all its assets, Avago chose Altiris™ Client Management Suite and Symantec™ Endpoint Protection. “Our major success story was the Altiris deployment in early spring of 2009.”

To deploy the solution, Avago turned to Symantec Consulting Services and Imperium Solutions, a Symantec partner. “Thanks to Symantec and Imperium, the entire process

## SOLUTIONS AT A GLANCE

### Key Challenges

- Create accurate reporting
- Gain flexibility and control of end-point resource consumption
- Minimize IT staff time dedicated to backups and restores
- Streamline inventory asset management

### Symantec Products

- Altiris™ Client Management Suite
- Symantec™ Endpoint Protection
- Symantec™ Enterprise Security Manager

### Symantec Services

- Symantec Consulting Services
- Symantec Basic Maintenance Services

### Symantec Partner

- Imperium Solutions  
(www.imperium.com.sg)

### Technology Environment

- Applications: Google Enterprise
- Databases: Oracle

## BUSINESS RESULTS AND TECHNICAL BENEFITS

- Fivefold faster patching (two days down from two weeks)
- 67% head-count reduction for software patching (three down to one)
- No significant disruption from malicious code since deployment
- Faster than expected Altiris deployment
- Invisible to end-users, no intrusion in work flow

only took three months from decision to deployment,” recalls Toh. “We first considered Altiris in January, we started the installation in February, and in March we turned on the switch.”

Symantec Consulting Services helped Avago develop scripted solutions for the Altiris migration. “It was painless,” Toh says.

## Reclaiming 3,500 hours of productivity each week

Now when the team needs to run a virus scan using Symantec Endpoint Protection, employees can continue working without disruption. “Now we are able to define the resource consumption on the end user,” Toh says. “We have a choice—we can run the full-scale fastest scan, or we can run it in the background so our employees’ work schedule isn’t interrupted.”

With its earlier solution, Avago was losing an hour of productivity per employee during the weekly scan. “With Symantec Endpoint Protection, we’re reclaiming 3,500 hours of work each week across the company.”

“With Altiris Client Management Suite, patching is fully automated in just a few clicks. Now we can have the whole process overseen by a single technician.”

### Dereth Tang

Client Security Manager  
Avago Technologies

“Thanks to Symantec and Imperium, the entire process only took three months from decision to deployment.”

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Infrastructure Manager, End-User Operations  
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Avago Technologies

**Patching fivefold faster**

Keeping endpoints up to date with virus definitions and software patches is now faster and more accurate. “With Altiris Client Management Suite, we’re now able to get better than 95 percent patching success rate in two days—it used to take us two weeks,” Toh reports.

The automated, remote process has also reduced staff time needed for the task by two-thirds. “Patching used to take three staff members,” recalls Toh. “With Altiris Client Management Suite, patching is fully automated in just a few clicks. Now we can have the whole process overseen by a single technician.”

Server compliance monitoring and patching is made easier by Symantec™ Enterprise Security Manager, a software solution that automates the discovery of vulnerabilities and deviations in the security policies of mission critical e-business applications and servers. It can perform up to 1,500 kinds of security checks across the company, all from a single location. “We’ve used it for years to report on our server environment and enhance compliance,” says Lim Chengkeat, IT manager at Avago.

**Minimizing vulnerabilities**

By enhancing security automation, Avago is reclaiming not just employee productivity but peace of mind. “Since implementing Symantec Endpoint Protection, we’ve been able to stop many more viruses, spyware, and malware—whatever was previously running amok on our network,” says Dereth Tang, client security manager for Avago. “We found a number of types of malware our previous solution had missed.”

Now the Avago team has a better chance of keeping viruses under control by preventing them from entering the system. “With the device control feature of Symantec Endpoint Protection, we can block users from connecting a USB device, and stop spyware from getting in through that pathway,” Tang says.

Weekly reporting from Symantec Endpoint Protection helps IT staff pinpoint vulnerabilities. “The reports show us which endpoints might have missed updates, or failed an integrity test,” Tang says. “We can pass the report to our managed IT services provider for remediation, or remediate the endpoint ourselves from remote using Altiris Client Management Suite.”

**Flexibility for the future**

Recently, Avago switched to a new provider of managed IT services and wanted to retain the flexibility of its environment without sacrificing control. “Independence is another reason we invested in Altiris,” Toh explains. “We own the software licenses. We own the infrastructure on the server. So if we ever change outsource vendors again, this infrastructure will remain. We can make the transition easily and enable the pieces we need with minimum disruption; we’re not stuck with a set menu.”

Avago also benefits from the solution’s lean learning curve—engineers don’t need intensive training to operate the features within Altiris. “A consultant from Symantec trained two of our engineers in less than a week, and now they’re running the services. It’s hands-on and effective,” Toh recalls.

And with Altiris, the team is ready to meet its challenges with confidence it won’t be blindsided by another outbreak. “Altiris is a comprehensive product with the capabilities we need. And its proactive approach, combined with Symantec Endpoint Protection, stops intrusions much faster. We’ve run Altiris for over six months now, and end users don’t even know it’s on their PCs.”