Achieving Zero Infection to Provide Top-Class Education Services

Trend Micro’s wide range of agentless security solutions provide optimal protection from potential threat attacks in a virtualized IT environment.

Overview

Atma Jaya Catholic University of Indonesia was founded in 1960 by Atma Jaya Foundation. The university currently runs eight faculties, seventeen undergraduate courses, and seven graduate courses.

“We were one of the first educational institutions to implement an online academic system in the early 90’s in Indonesia. Our academic system was initially built as part of our intranet system, which then became a web-based version in early 2000,” says Danny Natalies, Head of IT, Atma Jaya Catholic University of Jakarta.

Challenge

The growing number of students, staff, and partners increased the complexity of administrative tasks within the university’s IT environment. The amount of data traffic rose and the data was scattered. The urgency for a new IT infrastructure to handle the process became apparent.

In addition, Microsoft’s early announcement to stop support for Windows XP in April, 2014 forced the university to implement a new IT security solution to protect their systems and academic data.

Solution

In order to fit with the requirement of a lightweight server based security solution for virtualization in the data center, the university deployed

Business Benefits

- Trend Micro Deep Security: proven to give maximum protection with minimum impact on server performance. The agentless security increase the flexibility in system implementation.
- The number of infection and threat are decreasing. Atma Jaya Catholic University of Jakarta manages to achieve zero infection in 2014 upon the implementation of Trend Micro’s end-to-end security solution.
- The integration of VMware Horizon (with View) and Trend Micro Deep Security solutions can offload heavy processes, such as virus scans to virtual machines therefore the so-called ‘agentless security’ in the university’s IT system with increased ROI can be realized.

Atma Jaya Catholic University of Indonesia

Industry: Education

Founded in 1960 by Atma Jaya Foundation, Universitas Katolik Atma Jaya Jakarta is a higher education institution with eight faculties, seventeen undergraduate courses, and seven graduate courses.

Region

Jakarta, Indonesia

Trend Solutions

- Trend Micro Deep Security
- Trend Micro Deep Discovery
- Trend Micro OfficeScan
- ScanMailSuite
- Trend Micro SafeSync for Enterprise

VMware Solutions

- VMware vSphere 5.0
- VMware Horizon View

VMware Horizon View

With a new virtualized environment in place, the university needed to address additional security concerns. In the past, the university relied only on Internet and Intranet firewall for network security. In order to enhance system protection, they installed antivirus (AV). The average number of viruses quarantined in each server reached 40-200. With AV agents installed on every virtual machine and simultaneous AV updates on a regular basis, it resulted in an overall deterioration of performance for the servers. This primarily affected the virtual servers.

With the larger number of in-house applications that developers were highly dependent on, the system was open to vulnerabilities. IT operators were required to perform server patching on a regular basis. With many tailored applications running in the system, server patching was not an easy task to perform. Operators had to run tests every time they performed server patching, but to schedule patching tasks for 72 physical and 121 virtual servers was a mission impossible.

The university quickly became aware that the growing complexity of its IT management put it at risk for targeted attacks. The institution demanded a multi-layered security system that could enhance the capability to detect, analyze, and block threats with high visibility of malicious activity both in the host and network levels.

“Unlike solutions which install agents on individual virtual PCs, Trend Micro Deep Security is agentless and can offload processes such as virus scans to virtual machines through the integration with VMware Horizon View. No server overload occurred when virus scans were performed upon simultaneous access, and when pattern files were updated. What amazes us is that we can directly patch all vulnerabilities from the servers virtually,” says Natalies.

The institution also implemented Trend Micro™ Deep Discovery™, which uniquely detects and identifies evasive threats in real time, and then provides in-depth analysis and relevant actionable intelligence to assess, remediate, and defend the system against targeted attacks.

“Trend Micro Deep Discovery allows our IT team to monitor unusual data traffic in real-time, reducing the number of security breaches and illegal access to a minimum level. Our IT team receives an alert and instant notification for every potential threat running within the system. The solution significantly reduces our operational efforts and allows us to spend more time in other areas. We no longer need to run back and forth to help every user with potential threats,” says Natalies.

Atma Jaya Catholic University of Jakarta also benefits from the implementation of Trend Micro SafeSync to protect file exchange between users. With the ongoing trend of internal file exchange, users are able to exchange valuable data safely under the protection of Trend Micro SafeSync.

“The number of data exchanges in the university is high and growing. We have many committees that consist of lecturers and students who regularly and actively exchange data with each other. To prevent data loss and illegal access, we protect our users with Trend Micro SafeSync for Enterprise. We are currently setting up SafeSync for 30 users and plan to extend the implementation in the future,” says Natalies.

Moreover, following the end of support for Windows XP, Trend Micro is fully committed to extending support for Windows XP until January 30, 2017. Atma Jaya Catholic University of Jakarta will be able to take full advantage of Trend Micro’s virtual patching solution which will protect critical systems until a patch is available and deployed.

**Results**

Trend Micro’s end-to-end security solution has proven to be the best solution to meet the requirement of Atma Jaya Catholic University of Jakarta’s IT environment.

“Trend Micro Deep Security with agentless technology is the perfect fit for our virtualized data center. Since the first implementation in 2013, we have not seen any server performance issues. One major breakthrough is that 100% of threats have been detected and blocked upon the implementation. Deep Security also allows us to do virtual patching on our in-house applications with ease,” says Natalies.

Deep Security is lightweight and the agentless feature has been proven to deliver maximum protection with minimum impact on server performance.

The flexibility of Trend Micro’s security solution for many operating systems and in-house applications has also proven to be a positive factor for the implementation within the university’s IT ecosystem. IT Team is now able to upgrade workstations periodically without having to worry about potential threats and malware coming in during the process.

“We have managed to achieve zero infections in all workstations connected within our IT ecosystem, and all security threats have been detected and blocked. With the presence of agentless security technology, IT support and maintenance resources have been decreased to a minimum level. Our IT team can now focus on other projects,” says Natalies.

Trend Micro Deep Security solutions can offload heavy processes, such as virus scans to virtual machines with the so-called ‘agentless security’ in the university’s IT system, while enabling regulatory compliance and accelerating ROI of IT investment.

Trend Micro uses leading and innovative methods behind each and every security solution to predict relatively unknown potential threats by analyzing system and user behavior.

“We are more than happy with the great support given by Trend Micro’s Indonesia team. Every support request has been handled professionally with fast response times. We often get same-day solutions by Trend Micro’s Indonesia support team, which is by far the best customer service we have ever experienced. We are glad to choose Trend Micro as our only security solution supplier and look forward to a long lasting partnership.”

---

Danny Natalies
Head of IT, Atma Jaya Catholic University of Indonesia, Jakarta

**For More information**
Go to: [www.trendmicro.co.id](http://www.trendmicro.co.id)