

Case Study

Endpoint Protection

Agentless security wiped away the concern around performance and security faced on their initial stage in VDI transition



NTT-Neomeit Corporation
<http://www.ntt-neo.com/>

Adopted Products/Solutions

Trend Micro Deep Security Virtual Appliance™

Challenges

- Traditional security solution which required agents on each virtual PC were selected at their initial VDI system. Performance decreased due to the overconcentration of workload over storage during virus scanning and pattern file updates
- The management workload of security solution also increased. Additionally, the possible system overload prevent them from completing system wide security, thus the customer had a concern that their security was insufficient

Results

- The agentless security solution “Trend Micro Deep Security Virtual Appliance™” reduced the workload over storage by 70%
- Since there was no more concern about system overload, the customer could apply the appropriate security solution over the entire system

BACKGROUND OF IMPLEMENTATION

Implementing a VDI to strengthen security The workload and performance deterioration from virus scanning became an issue

As a subsidiary of the NTT-West group, NTT-Neomeit is responsible for the construction of the information communication infrastructure in western Japan as well as its operation and maintenance. The company also uses the technological strength that it has fostered through its past achievements and provides a diverse range of ICT services based on the ‘AQStage’ brand for those inside and outside the group.

The company is at present actively promoting the implementation of VDI (Virtual Desktop Infrastructure) as part of those services and provides this as a cloud service for the Western Japan area at the same time as putting it to practical use in the company itself. “Our goal was to strengthen information security and governance. However, we were confronted with some large problems while advancing this initiative,” explains NTT-Neomeit’s Mr. Katsuya Yoneda.

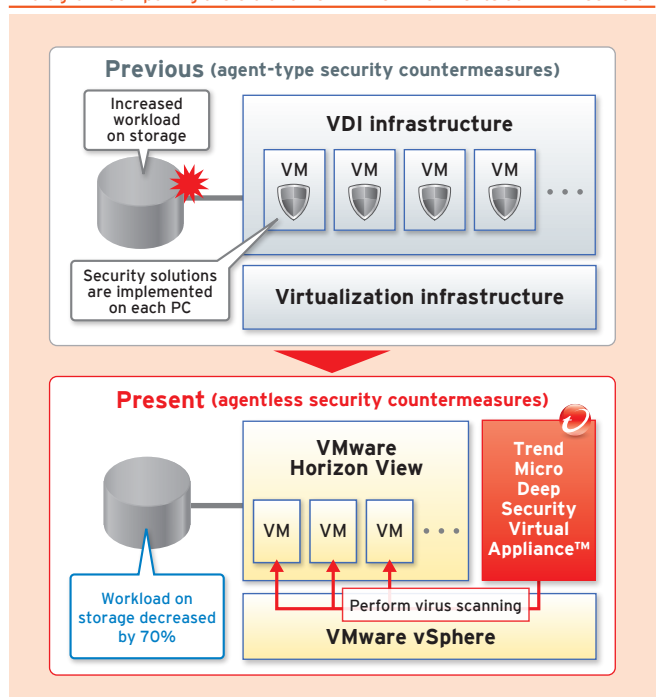
Specifically, the problems concerned performance and stability as well as security. Initially, with the VDI product that was implemented, some applications did not work properly. On top of this, the time for log-in was excessively long and there were some complaints from users. Additionally, because there were problems of reliability and stability, the operational management workload also increased. “Every morning, failures with uncertain reason invariably occurred in a number of virtual PCs. Before the users came in to work, an operator needed to identify the machines which had failed and had to manually reboot them,” says the company’s Mr. Tadamune Nakai.

What’s more, there were also problems in terms of security countermeasures. Because the implementation and management of antivirus solution were all up to the user company, the VDI administrator could not control the timing of virus scanning and

pattern file update which gave an impact on infrastructure. Thus, there was a serious impact on user response on the same storage when these operations occurred simultaneously.

To cope with that problem, the company had to create schedules on spreadsheet and, at the same time, needed to manage that schedule manually so that each virus scanning and updates did not clash. Even so, due to the worries about the workload on infrastructure,

A diagram comparing the old and new VDI environments at NTT-Neomeit



resource intensive operations such as full scanning over the entire system couldn't be performed and as a result there were anxiety that the security level of the entire system could not be constantly maintained.

"Although we were encountering several problems, the support from the vendor was not adequate and we were unable to find a path to a solution," says Mr. Yoshimasa Okimura, looking back the situation.

IMPLEMENTATION PROCESS

Aiming for load reduction and performance improvement through agentless security solution

To solve these issues, the company embarked on a reconstruction of the VDI. At the same time, it was decided to reconsider the security solution.

Therefore, the company adopted VMware's 'VMware Horizon View' as its new VDI foundation as well as 'Trend Micro Deep Security Virtual Appliance™(hereafter, DSVa)' for security solution.

This combination realizes "agentless" security countermeasures which do not require agents to be installed on each virtual PC. Specifically, operations which place a heavy load on the system such as virus scanning and pattern file updates were offloaded from each virtual PC to virtual machines with DSVa. It has become possible to control the load which occurred before due to a large volume of virtual PCs.

This reduces the load on storage. By improving system performance together with implementing the appropriate security countermeasures, it has become possible to maintain security.

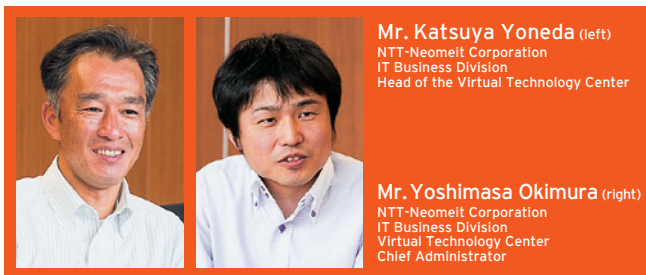
"At that reconstruction, we thought that we wanted to aim for an environment which we could 'control'. Agentless security solutions with DSVa were extremely attractive in terms of realizing this," says Mr. Okimura.

RESULTS AFTER IMPLEMENTATION

A 70% reduction of the workload over storage drive the business which offers this solution to general customers

The new VDI environment which hosts the 6000 people within the company has solved all the problems they had.

For example, the workload on storage has been reduced by the



agentless security countermeasures of DSVa. On top of achieving better performance, stability and security, it has also led to an optimization of storage costs.

"The load on storage has been reduced by 70% and we no longer have the performance decreases and storage sizing and tuning required to cope with a problem like we had in the past. Logging-in process and applications' performance are fast enough and users have been very happy with saying that the response is fast now. The virus scanning that couldn't be done in the past can now be easily performed and the malware detection rate has further improved as well. We can establish the situation where we can implement the latest security solution with ease and we can use our system with peace of mind," says NTT-Neomeit's Mr. Hideaki Maeno.

The support service from Trend Micro which helped the implementation has also been well received. "This was the first time for our company to adopt the agentless security. Although there are a lot of things that we are not used to, we have been able to advance the project smoothly thanks to solid support we have received from Trend Micro from implementation to configuration," says Mr. Okimura.

The company is also considering utilizing DSVa for a different purpose.

"Our company also provides services such as IaaS (Infrastructure as a Service). DSVa also provides IPS/IDS functions which implement countermeasures for the vulnerabilities of server environments via virtual patches feature. We would like to actively put these features to use, too." (Mr. Nakai)

In the future, the company will expand the areas to roll out the new VDI environment. Within year 2013, it plans to provide approximately 30,000 virtual desktop environments for the Western Japan area.

"The charm of virtual desktops is that they can be used anywhere, any time. We would also like to utilize them for the work-style innovation within the group. Moreover, there is also a plan to add virtual desktops as part of the AQStage lineup. There aren't any examples of an implementation of virtual desktop systems as big as this one within Japan. We want to use this experience to help our great number of clients to solve the problems," says Mr. Yoneda finally, speaking of his ambitions.

Company Profile

Company name : NTT-Neomeit Corporation

Location : 2-2-5 Uchihonmachi, Chuo-ku, Osaka-shi, Osaka

Founded : 31 October, 2001

Capital : ¥100,000,000

Number of employees : 6,300 (as at 01 July, 2013)

Business Scope : Construction, maintenance and operation of the information communication infrastructure of western Japan as well as IT solutions



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Contacts: