D-Link

Case Study

Business Class Firewall

# NTT Communications chooses D-Link DFL series devices in corporate system initiatives to address selective firewall logs output with scheduled PPPoE connections and disconnections

Customer Profile:
NTT Communications Corporation
1-1-6 Uchisaiwai-cho, Chiyoda-ku,
Tokyo 100-8019, Japan

NTT Communications Corporation is a global IP solution company that has overcome the restrictions on voice and data processing and provides the necessary infrastructure and solutions for all conceivable forms of information communication. NTT offers their clients solutions that implement communication infrastructure vital on both the domestic front and the global business scene. As a leading IP solutions company, NTT Communications is actively engaged in researching solutions for issues related to next-generation technologies and current problems.

*"Since we had to construct more than 100 physically separate networks at the same time, we chose to use the DFL Series. Its 'fanless design' means it is easy to put on your desk."*

- Keiichi Yokoyama
NTT Communication Corporation
Enterprise Sales Division II
Department of Engineering
Technological Support Division
Security Technologies Section
Project Manager

## Background

In the autumn of 2006, Mr. Yokoyama of NTT Communication's Enterprise Sales Division II was investigating on integrating a firewall solution into a corporate system. The D-Link DFL series firewall solution was chosen because it is equipped with "state full inspection" and other functions designed to protect the boundaries of corporate network. The DFL series appliance boasts of advanced capabilities, such as router functions, PPPoE session management and NAT, VPN connection functions such as IPsec, and even invasion detection functions. As UTM firewalls, the devices in the DFL Series lineup include the DFL-210, DFL-800, DFL-1600 and the DFL 2500 models, that have the Kaspersky Lab's antivirus engine installed, while the DFL-260 and DFL-860 provide highly advanced security, allowing the selection of specific product need according to desired throughput level and the scale of network.

Mr. Yokoyama, in explaining his decision, said:
"Since we had to construct more than one hundred physically separate networks at the same time, we chose to use the DFL Series. Its 'fanless design' means it is easy to put on your desk."

## Challenge

The project Mr. Yokoyama was in charge of had several requirements to be met. Among them, two points were considered most difficult to implement. First was the need for scheduled automatic PPPoE connections. Second was the need for the system to be able to collect session information transmitted by the WAN while PPPoE sessions were being established. These mean the need to establish a system where WAN-PPPoE sessions could be

**DFL Series integrated with the system**

connected and disconnected at designated times, and a device that would allow selective output of logs, as extracting specific required information from all of the firewall logs would have been extremely inefficient. However, at that time, no vendors had a firewall or router products equipped with all of these functions.

## Solution

In considering these requirements, D-Link decided to embark upon efforts to upgrade the firmware of the DFL Series and in co-operation with NTT Communications, performed tests after tests to complete the new firmware in the shortest time before its implementation. These efforts made it possible to connect and disconnect PPPoE sessions at settings down to the minute. Vast logs were also categorized into more than a thousand types, making it possible to selectively output the specific required items to the SYSLOG server. In addition, support for device settings in the form of settings templates was provided after the system construction.

Mr. Yokoyama said the following about D-Link's response to SI:
"If D-Link had not responded, we would have had to

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## Business Class Firewall


PRODUCT FEATURES:

A Security firewall compatible with SOHO systems and small-scale enterprises to core lines

All-in-one business-class security solution

Multi-User configurable interfaces

High-speed Gigabit ports for flexible, bottleneck-free network deployments

Remotely manageable via web

Monitor and maintain healthy and secure network

ZoneDefense: A mechanism to quarantine infected computers on the network and prevents them from flooding the network with malicious traffic

## CASE OBJECTIVE

1. Adoption of high security, high cost-performance DFL Series.
2. Rapid integration of additional requirements for PPPoE Scheduling and Log Filtering functions.
3. Equipped with UTM utility for real time anti-virus protection and other advanced security functions.
4. SI support available during device setup when constructing your system.

integrate all of these items on the system side. We were extremely fortunate because we couldn't find any devices equipped with the ability to output logs selectively".

### Conclusion

The new system was implemented in February 2007. When asked about his plans for the future, Mr. Yokoyama said:

"I am waiting for D-View, the comprehensive management software, to become compatible with the DFL Series so that I can build an even more effective operations management system."

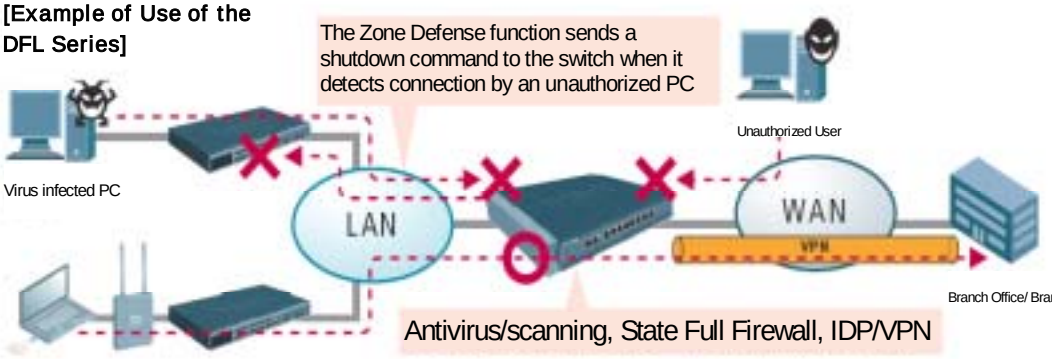
D-View is a software tool used to integrate the management of D-Link products, which offers the ability to unify the management of routers, switches and security products on the network. Application of the same policies across an entire system, and the consolidation of user information management are also possible, thus increasing the overall efficiency of the network, while at the same time making operations as secure as possible.

Mr. Yokoyama, who is also a visiting researcher at the Institute of Information Security, said he holds the DFL Series and the efforts being made by D-Link in the area of Unified Endpoint Security Solutions in high regard.

Mr. Yokoyama said:

"We now understand the significant role that the network endpoint can play. In order to avoid security risks such as this, the ideal is to create a system where the switches, wireless switches, wireless AP and firewalls connected to the network edges are equipped with integrated security capabilities".

**[Example of Use of the DFL Series]**






For more information, please contact your D-Link authorized reseller or visit us at:

**www.dlink-intl.com**