



---

# HITACHI

## Inspire the Next

---

vxAG CASE STUDY

## Hitachi Ltd.

---

**Hitachi Ltd's Federated Cloud allows enterprises to seamlessly integrate their private clouds, partners' clouds\*, and Hitachi Ltd's managed cloud. Array's vxAG virtual secure access gateway supports secure and convenient remote access services for the Federated Cloud environment.**

---

### Background

Seeing the demand for cloud resources continually increasing and services becoming more diverse, Hitachi, Ltd. launched a strategic project to include not only its own managed cloud but also to collaborate with other companies' cloud products and services, such as AWS and Azure, as well as private clouds. This culminated in Hitachi's Federated Cloud, launched in 2015.

Spanning private, partner, and managed cloud resources based on the needs of users, the Federated Cloud provides a portal that unifies their operation and management. Customers are not limited to Hitachi's products but can choose to use a variety of services and

### Industry:

Cloud Service

### Challenges:

Providing large-scale remote access services

Reducing lead time to service for users

Implementing two-factor authentication to increase access security

### Solution:

Array's vxAG SSL VPN remote access solution (L3 VPN) as a virtual secure access gateway, with device ID authentication, endpoint security, and DesktopDirect secure remote desktop access

### Benefits:

Secure, scalable and extensible remote access as a service

Ability to extend the solution beyond administrative access to new applications

Potential as a collaboration solution with VDI (virtual desktop integration) to address the needs of SMEs

\* Partners' Cloud represents the services provided by partners of Hitachi, such as Amazon Web Services (AWS), Microsoft Azure, and Salesforce.

products from other companies as required to meet their business needs.

"Security services in the Federated Cloud have been made into an easy-to-understand menu, allowing selection of services that best correspond to one's objectives," says Taisuke Nemoto, of Cloud Platform Service Department 1, Service Platform Development, IoT&Cloud Services Division, Hitachi, Ltd. The "Remote Access Environment Offering Service" based on Array's vxAG is one of those services.

## Challenges

The remote access service Hitachi was providing with its managed cloud was limited to user-companies' IT system administrators. One of the goals of the Federated Cloud was to expand that scale and application to allow any employee at a user-company to securely and directly access services on the Federated Cloud from anywhere, at any time for greater productivity and efficiency.

A virtual appliance was a requirement for the service, as virtual appliances have a close affinity with cloud platforms, and the lead time for service provisioning is a fraction of the time required for a hardware appliance. Additionally, no labor is required to deal with failure of a physical device.

Furthermore, performance and scalability could not be compromised for large-scale users. In order to accomplish authentication for a large number of users, collaboration with specific authentication services was thus required. Hitachi also sought to simplify management of remote devices, which typically require an administrator to set the ID and password for each individual device.

In addition, two-factor identification was required to further increase security. Hitachi also envisioned a service that is easy to manage from a proprietary security portal for customer administrators. Full

integration with the portal as well as granular settings for administrator rights and permissions were essential.

## Solution & Results

After evaluating multiple products, Array's vxAG emerged as the only product that satisfied all requirements. Nemoto noted, "It conformed well with the service requirements that we had originally envisioned."

---

***"By being able to use remote access with high security, the security level can be raised throughout the company even with a small investment. I think that sort of use will expand in the future,"***

**Taisuke Nemoto**  
Cloud Platform Service Department 1, Service Platform Development, IoT&Cloud Services Division, Hitachi, Ltd.

---

Since the vxAG is a virtual appliance, a small-scale start is possible and it can flexibly support an increase or decrease in user numbers. Moreover, the virtual appliance can be managed from the portal, and coordinate with Active Directory for authentication of the ID and password. The vxAG can also collaborate with external authentication protocols such as RADIUS and LDAP. Collaboration with 3rd party multifactor authentication services has been achieved relatively easily. In addition, when the device ID originally provided by the vxAG is also used, authentication is further strengthened.

Array Networks' ability to respond quickly to development needs also influenced the adoption of the vxAG. After receiving feedback of test results from Hitachi, Array responded

to needs such as performance improvements and implementing expanded functionality for administrator rights. Array also established a monthly license sales structure to accommodate Hitachi's business model, and created a menu of the vxAG security services.

"Some customers are reluctant to invest in security where it can be hard to see the benefit. So we wanted to create a menu of security functions that would allow customers to be able to use, as necessary, a combination of what they felt was needed. By implementing a monthly fee structure, it has become easier to recommend [vxAG-based] "Remote Access Environment Offering Service" to customers, and this has become a plus for Hitachi as well," said Nemoto.

The vxAG delivers additional customer benefits as well. By using the endpoint security functions, clients can be quarantined and only those that meet defined security specifications are allowed access. Also, users who choose the DesktopDirect option can provide their employees with safe VDI desktop access from a remote or mobile location.

## Benefits

"Users of Federated Cloud have been steadily increasing since its release, and there are more than a few users who have selected the vxAG-based "Remote Access Environment Offering Service." Initially, it was a service intended for large companies who wanted all employees to use remote access, but Nemoto felt that there were also needs among small to mid-size companies with fewer employees. Rather than each employee storing data on a terminal, having employees use the company's data through a virtual desktop on a thin client lowers the risk of malfunction in the terminal or infection from viruses or malware.

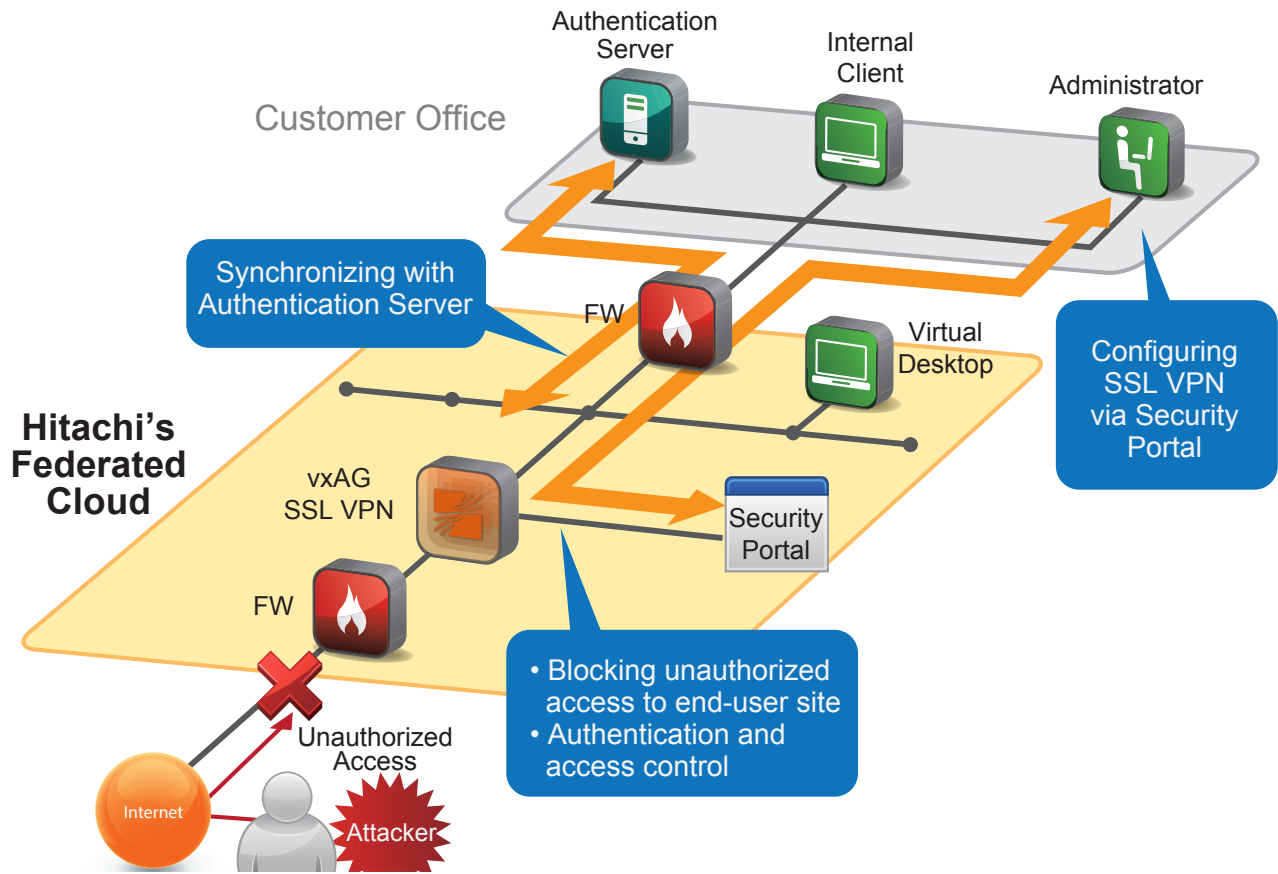
Management and security measures also become easier to implement. With a combination of Array vxAG and DesktopDirect, Hitachi can provide that mechanism as a package.

"By being able to use remote access with high security, the security level can be raised throughout the company even with a small investment. I think that sort of use will expand in the future," said Nemoto.

## Summary

The Federated Cloud's "Remote Access Environment Offering Service" enables use of remote access by a large number of people and companies, and contributes not only to more efficient business operations but also provides both high security and flexibility, such as support for two-factor authentication and access controls for each device, endpoint security and remote desktop access.

Array's vxAG provides rapid service delivery, outstanding performance and scalability, flexible authentication functionality, and the unique DesktopDirect feature module. In addition, Array Networks' speedy response to the needs that arose during development has contributed significantly to the development of Hitachi's Federated Cloud.



Overview of "Remote Access Environment Offering Service" in Hitachi's Federated Cloud