Daiwa Institute of Research Improved Network Security

Japanese think tank deployed Akamai Guardicore Segmentation to enhance security and network management

Enhanced network visibility | **Better intrusion prevention** | **Easier network access control**

Providing essential backbone services and systems

Daiwa Institute of Research (DIR) is a think tank that provides research, consulting, and systems services for Daiwa Securities Group and a wide range of clients outside the group. As a leading provider of backbone systems for Daiwa Securities Group companies, DIR delivers high-quality, reliable systems services that support the core part of their businesses.

As cybersecurity attacks grew more sophisticated and access control requirements associated with Zero Trust became more complicated, long-time Akamai customer DIR chose to deploy Akamai Guardicore Segmentation. By doing so, it enhanced security and simplified access control management for itself and its clients.

Facing cybersecurity and network management complexities

As a company at the forefront of technological trends, DIR began introducing Zero Trust security solutions in 2019. However, this introduced access control challenges. Moreover, DIR needed to take additional measures as cybersecurity attacks became increasingly sophisticated with the advent of technologies like generative AI.

As Yoko Yamano, Deputy Director, Digital Solutions Research and Development Department at DIR, explained, there is risk in the supply chain. "Are devices lent to employees or outsourced companies being managed properly? If a device becomes infected with malware, it could spread due to communication between devices, leading to unexpected information leaks," she said.

大和総研
Daiwa Institute of Research

Location
Tokyo, Japan
www.dir.co.jp

Industry
Financial Services

Solution
Akamai Guardicore Segmentation

Because of this, DIR saw a growing need for advanced defense and enhanced visibility at the network level. "Many of our clients are financial institutions and companies designated as critical infrastructure in Japan. Our mission is to ensure their security and eliminate any concerns," continued Yamano.

As it considered options, DIR also needed to address the additional network management complexity its in-house team faced. The team manages networks on multiple layers, including on-premises and cloud, network access control list settings, and device settings. "Even if you are shown a list of IP addresses, visualizing the network is a major challenge. This makes investigating and managing networks extremely complicated and time-consuming," explained Yamano.

Taking advantage of flexible microsegmentation

Combined, these challenges drove DIR to investigate microsegmentation, which provides better visualization and granular access control. After researching agent-based microsegmentation products, DIR decided to run a proof of concept (PoC) of Akamai Guardicore Segmentation. Using software-based segmentation to prevent attackers from reaching a company's most sensitive information, Akamai Guardicore Segmentation provides the visibility and control needed to enforce Zero Trust principles.

Enhancing visibility and access control

As Yamano said, "[Akamai] Guardicore Segmentation very effectively improved our security. It provides excellent visibility, making it very easy to see and understand what is happening, while giving us the ability to stop unwanted behavior, such as malicious lateral movement, which in turn, reduces the internal attack surface."

Whether for internal development or to support customers, DIR's network team carries out configuration to satisfy requirements, such as: "Allow [or deny] this communication between these servers." With Akamai Guardicore Segmentation, Yamano and her team can easily see whether communications are occurring according to the requirements.

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Akamai Guardicore Segmentation provides value when it comes to granular network visibility and access control, allowing you to take measures that reduce the internal attack surface.

– Yoko Yamano
Deputy Director,
Digital Solutions Research and Development Department

Akamai Guardicore Segmentation's label function makes details clearly visible, such as "this communication was necessary" or "this communication was not necessary." In fact, DIR assigned labels so it could visually check communications among its multiple data centers at the process, protocol, and port level.

At the same time, the PoC confirmed that Akamai Guardicore Segmentation can be used for client access control. With the solution, DIR could flexibly grant individual access rights to each system directly from the settings screen — and to do so much more easily than using traditional methods. "For example, we can allow outsiders to access a specific system but not provide them access to file servers or the ability to browse the internet," Yamano continued.

Continually advancing security

Going forward, Daiwa Securities Group has established a plan for DIR to advance security in three areas: advanced technical measures, enhanced governance, and resilience. Yamano expects Akamai to help address these needs.

"Akamai's products have already played a crucial role in addressing our security challenges, particularly in DDoS mitigation and CDN services, accelerating business for us and for our clients. Moving forward, we expect to increasingly adopt Akamai's solutions in areas such as microsegmentation and cloud computing to further advance our business," she concluded.

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> Akamai Guardicore Segmentation was extremely useful for visualizing the network, preventing intrusions before they occur, and immediately blocking unwanted communications.
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> – Yoko Yamano
> **Deputy Director,
> Digital Solutions Research
> and Development Department**

About Daiwa Institute of Research

Daiwa Institute of Research has helped numerous clients come up with the solution for a broad range of objectives. Our specialists in research, consulting, and information technology work with clients to create the future by fully employing our expertise in technology and our quality service to support clients' business. With these core competencies, we are and we will be the go-to partner, the clients' best choice.

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