• Address Iidabashi Grand Bloom, 2-10-2 Fujimi, Chiyoda-ku, Tokyo 102-0071, Japan

## For Immediate Release

# IIJ to Launch SEIL/x86 Ayame, a High-Performance Software Router that Supports 10-Gigabit Connections

TOKYO—December 19, 2019—Internet Initiative Japan Inc. (IIJ, TSE1: 3774), one of Japan's leading Internet access and comprehensive network solutions providers, today announced the addition of the new, 10-gigabit-compatible SEIL/x86 Ayame router, an upgrade to its high-performance software router series, SEIL/x86.

IIJ has offered its proprietary SEIL (pronounced "zail") enterprise router series since 1998. As of September 30, 2019, the series has shipped nearly 170,000 units in total. SEIL/x86 is a software router that provides the same functionality as the hardware in the SEIL series, and IIJ has sold more than 10,000 licenses for the SEIL/x86 series since its release. By installing SEIL/x86 on PCs or virtual servers, users can employ the software as a central VPN router or a cloud platform gateway.

The new SEIL/x86 Ayame has dramatically improved performance and includes support for multicore CPUs, making it a central VPN router solution that can accommodate large, multi-node networks. Allocating CPU cores in virtual environments allows for improved processing performance, leading to high network node capacity. IIJ plans to implement support for multicloud administration, so SEIL/x86 Ayame will meet user needs as a gateway router that links corporate networks with several cloud platforms.

The new software router has the following primary features:

### Enhanced performance

With support for 10 Gigabit Ethernet and multicore CPUs (up to eight cores), the software functions as a central router with the capacity for a large number of nodes. It also supports SR-IOV(\*1) and PCI passthrough(\*2), technologies that allow for high-speed data throughput for devices in virtual environments, thereby reducing the overhead of running network interface cards (NICs) installed in physical machines and significantly improving performance through the use of services that include Intel® QuickAssist Technology, a cryptographic accelerator.

- (\*1) SR-IOV: An abbreviation of Single Root I/O Virtualization, this technology supports PCI device-side virtualization.
- (\*2) PCI passthrough: A framework for accessing PCI devices in physical machines from guest OSs installed in virtual machines.

#### Licensing options for consumers and enterprises

SEIL/x86 Ayame is available in two licenses: "Standard Edition," with limited functionality for consumers, and "Enterprise Edition." IIJ plans to have the Enterprise Edition promote validation with bare metal provisioning (physical servers with no OS installed), while providing the functions central routers need for large WAN applications, including support for multicore CPUs and I/O acceleration technologies.

## Support for Service Adaptor Control Manager (SACM)

SACM is a centralized network device management service that IIJ developed in-house, based on its patented SMF v2(\*3) technology. Users can remotely auto-configure settings and manage operations for

devices just by connecting them to the network. SACM is available for devices with SEIL/x86 Ayame installed, just as it is for the existing SEIL series, allowing users to easily manage and administer systems remotely.

(\*3) SMF v2 is the next stage in the development of SMF, IIJ's network service operating system that enables automatic connections and the unified management of devices. In February 2010, IIJ acquired patents for SMF v2 in Japan (patent no. 4463868) and the US (patent no. 7660266).

### Pricing and Availability

Service Name	Price (after tax)	Availability
Enterprise Edition	JPY 275,000	December 19, 2019
Standard Edition	JPY 5,500	Release on Amazon by January,
		2020

IIJ continues to expand its product lineups that support its users' networking platforms by leveraging the advanced technology and knowledge it has cultivated through many years as an ISP.

#### **About IIJ**

Founded in 1992, IIJ is one of Japan's leading Internet-access and comprehensive network solutions providers. IIJ and its group companies provide total network solutions that mainly cater to high-end corporate customers. IIJ's services include high-quality Internet connectivity services, systems integration, cloud computing services, security services and mobile services. Moreover, IIJ has built one of the largest Internet backbone networks in Japan that is connected to the United States, the United Kingdom and Asia. IIJ was listed on the First Section of the Tokyo Stock Exchange in 2006. For more information about IIJ, visit the IIJ Web site at https://www.iij.ad.jp/en/.

The statements within this release contain forward-looking statements about our future plans that involve risk and uncertainty. These statements may differ materially from actual future events or results.

## For inquiries, contact:

IIJ Corporate Communications

Tel: +81-3-5205-6310 E-mail: press@iij.ad.jp

https://www.iij.ad.jp/en/

<sup>\*</sup>All company and service names used in this press release are the trademarks or registered trademarks of their respective companies.