

Japan's Mixi Accelerates Service Development and Deployment with Seamless Connectivity Between Cloud and On-Premise Systems

Summary

Company:

mixi, Inc.

Industry:

Media and Entertainment

Business Challenge:

- Develop and deploy new services quickly
- Connect cloud services and on-premise environments
- Reduce network management overhead requirements

Technology Solution:

- MX480 3D Universal Edge Router
- QFX5100 switches

Business Results:

- Sped up deployment of services
- Lowered management and administrative overhead
- Provided seamless connectivity between cloud services and on-premise systems
- Reduced manpower requirements and human error

Incorporated in 1999, mixi is a Japanese service provider that offers a platform for social networking, communications, entertainment, and gaming. The company's eponymous social network, which launched in 2004, has experienced explosive revenue and traffic growth over the last two years, due in large part to the success of Monster Strike, a smartphone application game that has built a customer base of more than 40 million national and international players since its launch in October 2013. Since then, the company has continued to build up a successful track record in developing and commercializing new services.

Business Challenge

In a real-time, digital society, businesses need to move faster than ever before and be able to respond to change at a moment's notice. For mixi, this translates into the need to develop and deploy new services rapidly. In order to do this, mixi gives its employees the freedom to choose which development environment they prefer to use. A cloud-first approach tapping into offerings such as Amazon Web Services enables the company to expand or reduce resources in response to a service's life cycle and take-up rate. For example, the launch of a new service may be followed by a slow and steady increase in sales or a rapid increase in the number of users over a short period. If a new service proves to be successful, migrating it to an on-premise system with greater capacity and availability may provide a better balance between performance and profitability.

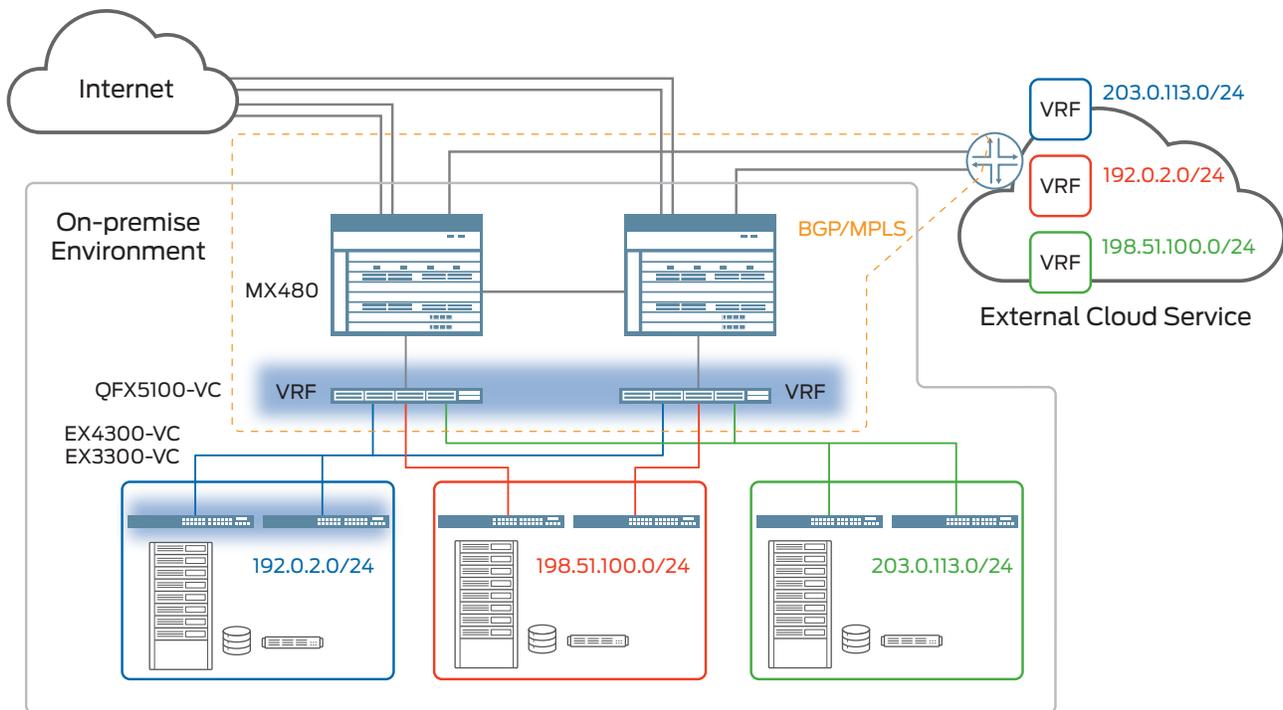
There was, however, a potential bottleneck in this approach due to the need to manage IP address conflicts and access control. Information such as access control lists (ACLs) had to be shared across the various systems while ensuring traffic integrity. Advance negotiations had to be carried out between network managers and project personnel to prevent IP address conflicts. And system managers had to configure detailed ACL settings and closely manage the networks to prevent the mixing of traffic.

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Junpei Yoshino, Senior Network Engineer, XFLAG™ STUDIO

These were onerous tasks, and it became clear that a fundamental resolution was necessary. mixi needed an open, flexible, and secure network as its foundation for success in the digital world.





Technology Solution

After evaluating various approaches, mixi decided to adopt MPLS with virtual routing and forwarding (VRF) technology, using the Juniper Networks® QFX5100 very low latency, high-performance, 10GbE/40GbE data center switch, in conjunction with the Juniper Networks MX480 3D Universal Edge Router.

“One of the key reasons for selecting Juniper Networks was the ease of use of the Junos network operating system,” says Junpei Yoshino, Senior Network Engineer, XFLAG™ STUDIO, mixi Inc.

Juniper Networks Junos® OS integrates network routing, switching, security, and network operating systems to reduce the complexity of a network. “Compared to the products of other companies, we felt that configuration management was much easier,” Yoshino says.

mixi was already using the MX480 router for connecting to the Internet. The addition of the QFX5100 switches deployed in a Virtual Chassis configuration enabled the service provider to go one step further and create an environment where both MPLS and VRF could be used to segment its network for individual projects. Virtual Chassis enables multiple switches to be configured and managed as a single logical entity.

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Junpei Yoshino, Senior Network Engineer, XFLAG™ STUDIO

Business Results

The Juniper Networks suite of products has enabled mixi to create an MPLS/VRF environment, helping to resolve IT address conflicts and link cloud-based services with on-premise systems to achieve rapid provisioning. This solution, which features mature technology and stable operation with minimal network overhead, has also addressed the problem of managing a large number of ACLs.

As Yoshino explains, “With MPLS/VRF, we are able to separate the routing table and provide multitenant support while achieving seamless connectivity to the cloud environment. This makes it possible for mixi to set up a development environment and deploy services very rapidly and is a major benefit to staff members responsible for services and to managers like myself.”

Junos OS also makes it easy for mixi to manage its network environment with lower manpower requirements and at the same time reduce human error. Command inputs for operating details and changes in configuration are standardized, which means that network managers do not have to remember the command input procedures in detail. “This reduces the number of items that need to be confirmed, making it possible to reduce both man-hours and risk,” Yoshino says.

According to Yoshino, since the Juniper Networks equipment was introduced, performance has been very good and the company has not encountered any problems with the network. Operations are also stress-free, requiring only a small number of people to manage the tasks involved. Yoshino also praised Juniper for the “prompt response by the company and its partners and tremendous support during the installation.”

Next Steps

mixi plans to make maximum use of the MPLS/VRF networking environment to enable business evolution from within its data center and rapidly deploy new services in the future. "I believe that in the future, there will be a time when companies do not have on-premise systems and everything makes use of cloud-based services. However, as long as MPLS is available, it will be possible to establish seamless connectivity amongst the various cloud-based services," Yoshino says. "In this regard, I believe that the Juniper Networks technologies and products have incredible future potential in meeting the networking needs of cloud-based services and content players."

For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

About Juniper Networks

Juniper Networks challenges the status quo with products, solutions and services that transform the economics of networking. Our team co-innovates with customers and partners to deliver automated, scalable and secure networks with agility, performance and value. Additional information can be found at Juniper Networks or connect with Juniper on [Twitter](https://twitter.com/juniper) and [Facebook](https://www.facebook.com/juniper).

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