As New Business Models

With the Internet playing such an important role in people’s lives, companies are taking advantage of the technology by developing entirely new business models capable of leveraging the power of the Web to its full extent. The video gaming industry is a great example of this growth. DFC Intelligence forecasts that the global market for video games is expected to grow from $67 billion in 2012 to $82 billion in 2017. Mobile and online gaming formats will fuel this growth, allowing customers to take advantage of wider, faster, and more mobile Internet access.

Innova is a pioneer in the Russian online entertainment industry. Founded in 2006, the company has taken an active role in developing the Russian massively multiplayer online (also called MMO and MMOG) market by delivering high quality services and famous game titles. An MMO is a multiplayer video game which is capable of supporting hundreds or thousands of players simultaneously. By necessity, these video games are played on the Internet. The company’s portfolio includes established games such as Aion, Lineage 2, Point Blank, Atlantica Online, and other well-known games enjoyed by players all over the world. Innova provides a full range of game publishing services, from a unified community platform, to over two million active users.

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\textbf{Roman Elokhin}, Head of Network Administration, Innova

Innova at the Forefront

Importance of network infrastructure

The entire Innova business is built around network infrastructure, and the company’s business success, to a large extent, is dependent on it. The main objective is to ensure continuous client access for millions of gamers in Russia and around the world. With a data throughput of hundreds of gigabits per second (Gbps) and a traffic capacity of 6 million packets per second, there is no room for error. Full system redundancy has to be guaranteed, and security is of the utmost importance. Security concerns range from the network perimeter, to secure remote access, interoffice and inter-platform firewalls, and routing protocol security.
As a fast growing organization, Innova’s network also needs to be fully scalable and capable of growing with the business. Currently, Innova operates two main data centers, one in Moscow and the other in Luxembourg. However, with ambitious expansion plans, it is important that the infrastructure is designed in a consistent and simple manner, allowing for easy central management and control.

Designing the “Ideal” Network

Innova has put a lot of research into a network design which will work for them around the world. Roman Elokhin, head of network administration, explains what Innova means by the “ideal” network: “To us, the infrastructure needs to meet all requirements of modern network architecture and security. It needs to be absolutely reliable, give us great scalability, provide all of the services we need in a secure manner, and be easy to use as well as manage and administer. We realize that we are striving for perfection with this vision, but see no reason not to do so.” With this in mind, the search was on for the right network technology provider.

“The Juniper Networks technology is as close to our ‘ideal’ network as we could hope to be. We also found it by far the most cost-effective solution when we researched the market place. We are very pleased with our choice and look forward to growing our business with Juniper Networks at its core.”

Roman Elokhin, Head of Network Administration, Innova

Juniper Networks – Scalability as Standard

Since availability, reliability, and ease of management are such vital requirements, Innova was very interested in solutions that included clustering technology. Juniper’s unique Virtual Chassis technology, available on the Juniper Networks® EX Series Ethernet Switches, allows multiple interconnected devices to operate and be managed as a single, logical unit, reducing operational expenses and eliminating the need for protocols such as Spanning Tree.

Innova made the decision to deploy Juniper Networks technology in its two data centers. The EX8200 Ethernet Switch is used as a central part of the network stack, deployed in a Virtual Chassis configuration for maximum redundancy and scalability. The

Juniper Networks MX480 3D Universal Edge Router is used to terminate BGP sessions with providers and create the necessary links with autonomous systems (AS). Juniper Networks SRX Series Services Gateways are used in a cluster configuration as a firewall as well as the IPsec VPN network between the data centers and the offices. In addition, these systems are deployed as an intrusion protection system (IPS) to protect all of the game services from public Internet attacks.

“We felt the SRX Series Services Gateways cluster consolidation capability really set Juniper Networks apart from other vendors,” Elokhin said. “We like that it is based on Juniper Networks Junos® operating system, which we found to be well-designed with a very user-friendly interface. It allows us to simplify configuration and create groups of users who access the same functionality. Scalability comes as standard with Juniper Networks, and we felt very confident that our choice would see us far into the future.”

Elokhin adds: “In our data center in Luxembourg, we added a number of 10GbE ports and increased our total capacity by 400 percent. The Virtual Chassis and cluster technologies provided by Juniper Networks have allowed us to plan ahead like this.”

Ease of Use and Design Simplicity

Juniper has helped Innova build a simple yet cleverly designed network which is ready to scale to any level. It is easy to manage and administer and only consists of a small number of main devices, rather than many small ones, simplifying management and lowering costs. It is reliable and secure for its millions of users, and it offers industry-leading performance.

Next Steps and Lessons Learned

“The Juniper Networks technology is as close to our ‘ideal’ network as we could hope to be,” Elokhin concludes. “We also found it by far the most cost-effective solution when we researched the marketplace. We are very pleased with our choice and look forward to growing our business with Juniper Networks at its core.”

For More Information

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

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at [www.juniper.net](http://www.juniper.net).