

Executive Summary

According to a report titled “Aggregation and Provisional Calculation of Internet Traffic in Japan,” which was published by the Ministry of Internal Affairs and Communications on April 3, 2015, as of November 2014 the overall download traffic of broadband subscribers was estimated to be 3.6 Tbps. This is a 37.5% increase compared to the same month the previous year. The number of broadband subscribers remained almost flat during this period, showing only a slight increase, which means the shift towards users consuming larger-scale content is progressing.

Also, while the volume of mobile user download traffic was still comparatively small at 758 Gbps, it increased by 45.5%, which is higher than the overall increase rate. In the future it is likely that the growth of mobile traffic will be a driving factor in the growth of overall traffic volumes.

Meanwhile, major U.S. video streaming service Netflix has announced that it will launch a service in Japan this fall. It is thought that companies including Hulu and domestic operators such as acTVila and Hikari TV that have already entered the Japanese market will invest in their services to vie for customers, so the Internet-based online video streaming market is expected to see a major boost towards the latter half of this year. In the coming months there is likely to be a major upheaval in the state of Internet usage from a traffic perspective.

This report discusses the results of the various ongoing surveys and analysis activities that IJ, as a service provider, carries out to support the Internet and cloud infrastructure, and enable our customers to continue to use them safely and securely. We also regularly present summaries of technological development as well as important technical information.

In the “Infrastructure Security” section, we give a month-by-month chronological summary of major incidents observed during the three months from January 1 to March 31, 2015, and report on the results of our statistics gathering and analyses for the entire period. We also present our focused research for this period, including a look at analysis results for PUA (Potentially Unwanted Programs) as well as discussion of the techniques used. In addition, we examine malware that reprograms HDD firmware, and continue our report on ID management technology from the previous volume.

In the “Messaging Technology” section, we report on our analysis of spam trends for the 52 weeks between March 31, 2014, and March 29, 2015, while also looking at long-term trends from IIR Vol.1 (June 2008). In our discussion of email technologies, we examine the DMARC technology for which an RFC was authored in March 2015, and discuss the creation of an environment for using it. In addition, we look at the email ecosystem, including domain reputation and feedback.

In the “Web Traffic Report” section, we analyze the logs of all delivery servers for the live streaming delivery of video for the National High School Baseball Championship at Koshien Stadium held in August 2014, which resulted in a peak traffic of 108 Gbps, and a total of approximately 1.9 billion requests. We also examine differences in access trends due to access scale and device type that were revealed through the results of this analysis.

Through activities such as these, IJ continues to strive towards improving and developing our services on a daily basis while maintaining the stability of the Internet. We will keep providing a variety of solutions that our customers can take full advantage of as infrastructure for their corporate activities.

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President and CEO, IJ Innovation Institute Inc. President and CEO, Stratosphere Inc. Mr. Asaba joined IJ in its inaugural year of 1992, becoming involved in backbone construction, route control, and interconnectivity with domestic and foreign ISPs. He was named IJ director in 1999, and executive vice president in charge of technical development in 2004. When the IJ Innovation Institute Inc. was founded in June 2008, Mr. Asaba became its president and CEO. When Stratosphere Inc. was founded in April 2012, he also became president and CEO of that organization.