

RACKSPACE IPV6 READINESS OVERVIEW

If any part of your business relies on the Internet, you need to prepare for the rise of IPv6 (Internet Protocol version 6) network traffic. An Internet protocol address is what networks, computers, and other connected devices use to communicate over the Internet. For example, when you type in a web address, the network is actually talking to other networks using a unique, numerical IP address; turning rackspace.com into the unique IP address, 173.203.44.122.

Today, IPv4 is the dominant protocol in use, representing approximately 99% of all Internet traffic. February 1, 2011 marked the official depletion of IANA's pool of free IPv4 addresses. IANA (Internet Assigned Numbers Authority) is responsible for the global coordination of IP addressing space. Its depletion leaves the Regional Internet Registries (RIRs), from whom Rackspace receives IP addresses, with a finite number of pre-allocated blocks that many predict will run out at the end of this year. Its replacement, IPv6, represents a new addressing family of around 340 undecillion addresses (i.e. enough to assign eight billion IP addresses to each atom in the body, of the entire population of the world). IPv6 adoption represents an industry-wide challenge to upgrade systems that are compatible with IPv6 protocol. Rackspace continues preparing for IPv6 and wants to make sure you have the information you need to develop an IPv6 action plan.

WHY SHOULD YOU CARE ABOUT IPV6 READINESS?

The challenge is that IPv6 addresses aren't compatible with IPv4 addresses. That means if you don't take the necessary steps to upgrade, you will eventually experience:

- Inability to sell goods or deliver your content to IPv6 users
- Inability to access Internet-based applications, like chat and SaaS apps
- Inability to launch new websites

WHAT IS RACKSPACE DOING TO PREPARE?

Rackspace has been putting measures in place to provide guidance and ease the transition for our customers. Activities include:

- Upgrading our data center networks, product offerings, website, and customer portals to handle both IPv4 and IPv6
- Helping customers upgrade their Rackspace environments to IPv6
- Implementing data center-wide translation devices to allow IPv6 traffic to reach IPv4 systems
- Participating in World IPv6 Day, an event that will bring together major industry entities, like Google, Yahoo, and Akamai, on June 8, 2011 for a 24-hour test of IPv6 implementations. Visit the IPv6 Day link in the sidebar to find out how you can participate too.
- Creating the Rackspace IPv6 Deployment & Readiness Headquarters, an online clearinghouse for industry and Rackspace-specific IPv6 transition news and updates.

WHAT SHOULD YOU DO?

Begin evaluating your Internet-dependent assets and formulating your own IPv6-readiness plan. Here are three areas to start with:

- Construct a list of vendor dependencies for your computing environments and confirm that they are IPv6 ready
- Review the software applications on your websites for IPv6 compatibility and adjust as needed
- Assess your configuration for any hard-coded IPv4 addresses or formats and formulate a plan to replace

From these activities, you can start building a list of required actions and blocking out timeframes for the tasks you'll need to perform to get IPv6 ready.

If you have specific IPv6-related questions, Rackspace customers can contact their Account Manager or send your questions to ipv6@rackspace.com.

IPV6 RESOURCES

- Rackspace IPv6 Deployment & Readiness Headquarters:
www.rackspace.com/whyrackspace/network/ipv6/
- General IPv6 Information:
<http://www.ipv6.com>
- World IPv6 Day:
<http://isoc.org/wp/worldip6day/>

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