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IP Address Policy

Summary

The purpose of this document is to specify the guidelines and procedures employed by Onvoy in managing the use of Internet Protocol (IP) addresses. This document is shaped by the policies set forth by the American Registry for Internet Numbers (ARIN), which is the agency responsible for assigning IP address space to Onvoy and other ISPs in North America, and by IETF RFC 2050, which is the Internet's framework for rules governing the allocation and assignment of all IP addresses. Onvoy's policy is designed to help Onvoy's customers understand and effectively deal with these rules, and to ensure Onvoy's compliance with them so that current and future address space allocations are not jeopardized. This, in turn, ensures that Onvoy and its customers can effectively grow their networks and their businesses.

Options for Obtaining IP Addresses

Customers who connect to Onvoy's network have two options for obtaining addresses to use on their equipment:

1.) The most common option is to have the upstream service provider (Onvoy) provide a block of addresses, since these addresses will appear as part of the upstream provider's overall block, thereby simplifying the routing tables of that provider and its peers. The efficient assignment and ongoing management of address blocks in this case is the principal goal of this document.

2.) The second option available to customers is to petition the organization which assigns IP Addresses to the backbone service providers, in order to obtain an independent block for the customer's own use. The process for doing this is specified in ARIN's operating rules, and is readily available on their web site at http://www.arin.net. At some point, customers' requirements for address allocations may grow beyond Onvoy's ability to satisfy, and the customer may be ultimately forced to establish a relationship with ARIN, and obtain allocations directly from that organization. If client's needs require an IP address block that is larger than a /21 (eight class C address blocks) a direct relationship with ARIN would be required.

Responsibility and Authority

The assignment and management of IP addresses is the responsibility of the Onvoy Hostmaster. Hostmaster will be charged with obtaining addresses (referred to as blocks) from the organization(s) who dispense them to backbone service providers. This organization is the *American Registry for Internet Numbers (ARIN)* in North and South America. Addresses for Europe and Asia are dispensed by separate organizations in accordance with RFC 2050 and the Internet Assigned Numbers Authority (IANA). Hostmaster will work with the Engineering Departments to provide suitable blocks for assignment to customers. Hostmaster will then break the larger blocks into smaller blocks for assignment to individual customer circuits, consistent with the guidance from Engineering Departments and the requests from the Sales Department.

Onvoy reserves the right to conduct audits of all Onvoy address blocks, including subnets provided to customers to ensure efficient usage of assigned addresses. These audits shall be executed utilizing, but not limited to, ping sweeps, DNS lookups and periodic review of customer IP/justification requests.

Onvoy may reclaim any address block that it deems as not being efficiently utilized, provided a thirty-day written notice is given to the Client by Onvoy.

It should be understood that Onvoy assigned IP addresses are not "sold" to the Client, they are assigned to an organization for its exclusive use for the duration of contracted services with Onvoy. It should also be understood that IP address allocations are made to organizations, not to individuals representing those organizations.

Justification of Need

The principal element in determining the size of the block that will be assigned is justification of need. This involves identifying how many unique addresses are required to number the customer's network, allowing for some conservative growth room in the near future. Onvoy must sensibly police the requests of its customers to be sure that their needs are also properly justified and are consistent with the guidelines that Onvoy is subjected to.

Customers that order Broadband Internet or Web Services will be allocated an IP address block at the time of install of said service. This allocation will be calculated and administered by the Engineer leading the install, and will be based on the client's justification. As a rule of thumb, Onvoy has historically applied the following formula, to calculate justification, when a Client requests a specified number of IP addresses:

25% immediate utilization rate and 50% utilization rate within 1 year

For Example: If the Client requests a /24(full Class C), they must have an immediate need for 64 addresses and 128 addresses within 12 months.

Limitations on Address Allocations

Onvoy will assign customers no less than one /32 and no more than eight /24's. Eight /24's is the equivalent of a /21-size allocation. Once the Client reaches that size and requires more addresses, Onvoy requires the Client to transition to a relationship directly with ARIN. Also, customers are encouraged to plan carefully for this transition, so that they do not temporarily "run-out" while waiting for ARIN to process their request and set up the new relationship for direct allocations. Onvoy recognizes a sixty-day transition period for current Clients to transition to a relationship with ARIN. Client must submit a request in writing to Onvoy if an extension is requested past sixty days.

The process of establishing the relationship with ARIN is discussed in great detail on ARIN's web site, at http://www.arin.net. While Onvoy strives to be a "customer-focused" service provider, it is not Onvoy's obligation to provide the engineering consultation necessary to accomplish the transition to an ARIN-direct relationship. Onvoy will provide the necessary engineering consultation to accomplish the abovementioned transition as consulting, provided the customer signs a Consulting Services Addendum.

Return of Address Space

The Client's IP address block ("IP Address Allocation") is owned by Onvoy and is assigned to a Client in good standing for

Client's exclusive use for the duration of contracted services with Onvoy. Client may not sell, transfer or assign their interest in the IP Address Allocation to any other organization or persons. Clients who are Internet Service Providers ("ISP"), that have been assigned IP Addresses by Onvoy, may re-assign those IP Addresses ("Secondary IP Allocation") to their customers. All Primary and Secondary IP Allocation will be returned to Onvoy upon the earlier of, disconnection of service or expiration or termination of the contracted services with Onvoy.

Onvoy reserves the right to reclaim any IP Allocation at any time, for any reason upon 30-day written notice to the Client."

Requirements for Requesting Additional Allocations
Current customers that wish to request a new IP address block may submit a request by filling out the form entitled, *Onvoy ARIN IP Request Form* at https://hostmaster.onvoy.com. The Client's justification will be taken into consideration and confirmation or denial will be sent via electronic mail.

IP Addresses and the Onvoy Product Lines
Broadband Internet: Onvoy will provide as many IP addresses as the Client needs, contingent on the justification provided by the Client. IP address is directly correlated to the Clients Justification.

Web Services:
A. Shared Web Services:
   1. One-star Shared: Onvoy provides one IP address that is shared among Clients on a particular server.
   2. Two-star Shared: Onvoy Provides one static IP address that is assigned to a particular Client
   3. Three-star Shared: Onvoy Provides one static IP address that is assigned to a particular Client
   4. Four-star Shared: Onvoy Provides one static IP address that is assigned to a particular Client
   5. Five-star Shared: Onvoy Provides one static IP address that is assigned to a particular Client

B. *Managed Web Services:* Onvoy will provide as many IP addresses as the Client needs. It is the Client's responsibility to justify the need for said IP addresses

C. *Colocated Web Services:* Onvoy will provide as many IP addresses as the Client needs. It is the Client's responsibility to justify the need for said IP addresses.

ISDN and Modem Dialup Services: All single-user dial-up customers may be assigned an IP address dynamically each time they connect to Onvoy. Onvoy does offer static IP's for single-user dialup accounts. Subscribers may request additional (static) IP addresses by contacting the Onvoy Sales Department at 763.230.4000

Access to Onvoy's value-added services, such as Usenet news, SMTP mail, DNS, etc, will only be accessed via circuits provisioned by Onvoy.