Address Space Managed by the RIPE NCC

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1. Overview

This document details the address space managed by the RIPE NCC and the longest prefixes allocated or assigned from different address ranges.

A list of all IPv4 and IPv6 address space allocated to the RIPE NCC by the IANA is available as a **route-set** object in the RIPE Database.

It can be found on the RIPE NCC website at:

http://www.ripe.net/whois?-rTroute-set+RS-IP-ALLOCATIONS-TO-RIPE-NCC-FROM-IANA

The RIPE whois client can get it with the following command:

```
$ whois -h whois.ripe.net -r -Troute-set RS-IP-ALLOCATIONS-TO-RIPE-NCC-
FROM-IANA
```

2. Special Purpose Ranges

2.a. Internet Exchange Points

Small IPv6 blocks have been assigned to Internet Exchange Points (IXPs) under the IPv6 Address Space Policy for Internet Exchange Points (ripe-256).

All RIPE NCC IPv6 IXP assignments come from the 2001:07F8::/32 range and are registered in the RIPE Database.
A full list of IPv6 IXP assignments can be obtained by querying the RIPE Database for all more specific **inet6num** objects.

This can be done on the RIPE NCC website at:

http://www.ripe.net/whois?-rm+2001%3A07F8%3A%3A%2F32

It is possible to create a list of the IP ranges assigned by the RIPE NCC with a command line query like this:

```
$ whois -h whois.ripe.net -r -m 2001:07F8::/32 | grep ^inet6num
```

2.b. Root Name Servers

IPv6 blocks have been assigned to Root Name Servers under the IPv6 Addresses for Internet Root Servers in the RIPE Region policy (ripe-233). These assignments come from the 2001:7F8::/29 range and are registered in the RIPE Database.

2.c. Address Space Used by Networks in Africa

Between October 2003 and April 2005, IPv4 allocations and assignments to Local Internet Registries (LIRs) and End Users in African countries north of the equator were made from 196.200.0.0/13. This range was part of a /8 also used by the American Registry for Internet Numbers (ARIN) for African allocations. Because the longest prefix ARIN allocated or assigned for 196/8 was /24, this was also the longest prefix the RIPE NCC assigned from 196.200.0.0/13.

2.d. Address Space Assigned for Anycasting TLD Nameservers

Policy proposal 2005-02 was accepted in September 2006 and allowed the RIPE NCC to assign single IPv4 and IPv6 prefixes to Top Level Domains (TLDs) for anycasting DNS. The IPv4 assignments are /24 and are taken from 194.0.0.0/18. The IPv6 assignments are /48 and are taken from 2001:0678::/29.

3. Routing Decisions

Routing decisions are the responsibility of network operators. Network operators taking routing decisions based on prefix length are requested and encouraged to route blocks of sizes corresponding to the longest prefix.

4. Longest Prefix Tables

IPv4 Range	Longest Prefix
62/8	/19
77/8	/21
78/7	/21
80/7	/20
82/8	/20
83/8	/21
84/6	/21
88/7	/21
90/8	/21
91/8	/29
92/8	/21
93/8	/21
94/8	/21
95/8	/21
188/8	/21
193/8	/29
194/7	/29
196.200/13	/24
212/7	/19
217/8	/20

IPv6 Range	Longest Prefix
2001:0600::/23	/64[1]
2001:0800::/23	/32
2001:0A00::/23	/32
2001:1400::/23	/32
2001:1600::/23	/32
2001:1A00::/23	/32
2001:1C00::/22	/32
2001:2000::/20	/32
2001:3000::/21	/32
2001:3800::/22	/32
2001:4000::/23	/32
2001:4600::/23	/32
2001:4A00::/23	/32
2001:4C00::/23	/32
2001:5000::/20	/32
2003:0000::/18	/32
2A00:0000::/12[2]	/32

[1] See Section 2: Special Purpose Ranges.

[2] 2A00::/12 was allocated in October 2006, expanding 2A01:0000::/16 which was allocated in December 2005, which incorporated the previously allocated 2A01:0000::/23.