Address Space Managed by the RIPE NCC

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

A whois client can get it with the following command:

```
$ whois -h whois.ripe.net ' -rTrs 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.
All RIPE NCC IPv6 IXP assignments come from the 2001:7f8::/32 range and are registered in the RIPE Database.

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. 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 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 2001:678::/29.

2.e. IPv6 PI Address Space

Policy proposal 2006-01 was accepted in April 2009 and allowed the RIPE NCC to assign IPv6 Provider Independent (PI) prefixes. The IPv6 PI assignments are taken from 2001:678::/29.

3. Address blocks transferred to the RIPE NCC

During various transfer activities some legacy address blocks, issued by the InterNIC and other entities to users inside the RIPE NCC service region in the past, were transferred under the RIPE NCC administration. Also some blocks from /8 allocations from the IANA to the RIPE NCC were later transferred to other RIRs.

As a result, RIPE NCC maintains only part of address space mentioned in the “Longest Prefix Tables” below.

4. 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 at least blocks of sizes corresponding to the longest prefix and larger.

5. Longest Prefix Tables

The following table shows longest prefixes allocated or assigned by the RIPE NCC for each listed range.

IPv4 Range	Longest Prefix
2/8	/21
5/8	/21
24/8 [i]	/29
31/8	/21
37/8	/21
46/8	/21
62/8 [i]	/21
77/8 [i]	/21
78/7	/21
80/7 [i]	/21
82/8 [i]	/21
83/8 [i]	/21
84/6 [i]	/21
88/7	/21
90/8	/21
91/8	/29
92/6	/21
109/8	/21
128/6 [i]	/29
132/8 [i]	/29
134/7 [i]	/29
136/6 [i]	/29
140/7 [i]	/29
143/8 [i]	/29
144/4 [i]	/29

160/5 [i]	/29
168/6 [i]	/29
176/8	/21
178/8	/21
185/8	/22
188/8	/21
192/6 [i]	/29
196/8 [i] [ii]	/24
198/7 [i]	/29
212/7 [i]	/21
217/8 [i]	/21

IPv6 Range	Longest Prefix
2001:600::/23 [ii]	/64
2001:800::/23	/32
2001:a00::/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::/18	/32
2a00::/12 [iii]	/32

i Not all address space in this block is managed by the RIPE NCC.
ii See Section 2: Special Purpose Ranges.
iii 2a00::/12 was allocated in October 2006, expanding 2a01::/16 which was allocated in December 2005, which incorporated the previously allocated 2a01::/23.