



Important Information Regarding Your IP Address Assignment

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1 Status of Assigned IP-Addresses

Any IP addresses assigned to you will have the status PA (Provider Assigned) and can be used whilst you purchase an eligible Internet Service from Arelion that entitles you to public IP address space. This is according to RIPE policies, which can be found [here](#).

As the IP address assignee, you also need to be aware of the following:

- The assigned address space must be returned to Arelion when the eligible service connection is terminated.
- The address space cannot be taken over by another operator.
- The address space cannot be used, transferred, or given away to any third party/other organization.

As public IPV4-addresses are a limited resource, operators have to be restrictive when it comes to assigning these to customers according to RIPE rules and regulations.

NOTE: assigned IP-addresses can only be used in AS1299

2 DNS Announcement

All public IP-addresses should be announced on the Internet. This works through reverse lookup. Reverse lookup is the way a host verifies that the visiting computer, the IP address trying to connect to you, is valid. The host verifies the IP Address, using a DNS server, which confirms that the IP address the visiting computer communicates is valid. The confirmation is received from the computer hosting the IP-Address through so called announcement.

IPv4: Standard announcements provided for IPv4. When you are being assigned public IPv4 addresses from Arelion, you IP addresses will be default be announced with standardized names.

IPv6: Standard announcement is not provided for IPv6.

3 Reverse Lookup. IN-ADDR.ARPA for IPv4 Subnets

IF you have been assigned a smaller subnet your configuration needs to follow the example below:

You have been assigned a network with 128 addresses. Eg. 192.36.73.0 – 192.36.73.128. The subdomain is then 0-25.73.36.192.in-addr-arpa, where 0 is the start address for the assigned range (0=127) and 25 is the number of ones in the subnet mask.

You should create a zone file for 0-25. 73.36.192.in-addr.arpa and enter NS and PTR-records as follows:



0-25.73.36.192.in-addr.arpa. IN NS dns.doman.com.
0-25.73.36.192.in-addr.arpa. IN NS dnsX.telia.com.
1.0-25.73.36.192.in-addr.arpa. IN PTR host1.domain.com.
2.0-25.73.36.192.in-addr.arpa. IN PTR host2.domain.com.
3.0-25.73.36.192.in-addr.arpa. IN PTR host3.domain.com.
4.0-25.73.36.192.in-addr.arpa. IN PTR host4.domain.com.

And so on...

4 Subnet Masking

Prefix	No Of Addresses	Useable Addresses	Subnet Mask
/30	4	2	255.255.255.252
/29	8	6	255.255.255.248
/28	16	14	255.255.255.240
/27	32	30	255.255.255.224
/26	64	62	255.255.255.192
/25	128	126	255.255.255.128
/24	256	254	255.255.255.0
/23	512	510	255.255.254.0
/22	1024	1022	255.255.252.0
/21	2048	2046	255.255.248.0
/20	4096	4094	255.255.240.0
/19	8192	8190	255.255.224.0
/18	16384	16382	255.255.192.0
/17	32768	32766	255.255.128.0
/16	65536	65534	255.255.0.0

5 IPv6

As default, a /48 network is assigned. This can be divided into 65536 /64 networks.