

Address Space Management (IPAM)

NOC is an mature open-source IP Address Management (IPAM) solution, organizing the process of IP address space tracking. Distinctive features of NOC's IPAM are:

- Multi-VRF: NOC can handle unlimited number of independent, possible overlapping, address spaces
- IPv4 and IPv6 management
- Classless allocation
- Allocated prefixes are organized in tree-fashion
- Optimized for speed
- Clean web interface
- Different kinds of blocks and IP addresses can be marked with distinctive visual styles
- Hierarchical access delegation. NOC supports up-to-down access delegation, permitting to allocate larger blocks at the upper level, and fully delegate the management of smaller blocks to appropriate business units
- DNS integration
- Quick online pinging of selected prefix, directly showing hosts availability in the hosts list
- Automatically searching of free IP addresses
- Quick view of free addresses in the block
- Free blocks suggestion during block allocation
- [VC Management](#) integration
- [Service Activation](#) integration
- Support for temporary allocations, offering to reclaim the resources that considered to be freed upon a time
- Reporting tools
- Scripting for enterprise workflow integration

NOC's IPAM is successively used in large ISP networks, datacenters and in high-load online projects.

The screenshot displays the NOC web interface for 'Assigned Addresses'. The left sidebar shows a navigation tree with 'Address Space Management' selected. The main content area shows the 'Assigned Addresses' page for the 'Root' VRF. A table lists allocated prefixes with columns for Prefix, State, Project, VC, Description, TT, and Tags. The table contains 10 rows of data, all with a state of 'ALLOCATED'.

Prefix	State	Project	VC	Description	TT	Tags
10.0.0.0/8	ALLOCATED					
27.20.121.0/30	ALLOCATED			UPSTREAM-MEGAFON-1		
17.100.0/24	ALLOCATED			PEERING_YARTT		
46.10.21.129/28	ALLOCATED			PEERING_YARIX		
46.140.0/29	ALLOCATED			10.0.0.0/24 - reserved		
16.140.0/28	ALLOCATED			10.0.0.0/24 - reserved		
10.0.0.0/30	ALLOCATED			BGW01_ae2.436_CSW10		
10.0.0.0/30	ALLOCATED			BGW01_ae3.437_CSW20		
10.0.0.0/30	ALLOCATED			BGW01_ae3.438_CSW20		