MN-IX Route Servers

MN-IX offers networks connected to the Peering LAN the opportunity to peer via its route servers. On our route servers, peers can filter based on IRRDB objects, as well as on predefined BGP communities. Therefore, members/customers can peer with the route servers while maintaining their own peering policy.

Introduction

Normally, you would need to maintain separate BGP sessions to each of your peers' routers. With a route server you can replace all or a subset of these sessions with one session towards each route server.

The goal of MN-IX's Route Server Project is to facilitate the implementation of peering arrangements. We aim to lower the barrier of entry for new participants on the peering platform.

The route servers do not participate in the forwarding path, so they do not forward any traffic. And peering with a route server does not mean that you must accept routes from all other route server participants.

Why would you use the route servers?

Let's make it easy

*Simplify the needed configuration to reach as many networks as possible on the MN-IX platform by configuring just two BGP sessions. With the large amount of connected parties, it can be a full-time task to manage separate BGP sessions. In addition, whenever a new party connects to the route servers, you will be able to automatically exchange prefixes with it (depending on yours/their filters).

*Manage only your most important peers, let the route server do the rest

You probably want to exchange as much traffic as possible through the exchange, but setting up a peering takes time and effort. So only set up peering sessions with your most important peers - let the route server do the rest!

*Send and receive routes from day one

Once you are connected to the route servers you will start exchanging routes immediately. The route servers are a good way to get started on the exchange.

*Use it as a backup

When your BGP session to a party becomes inactive, there is a possibility that you can still connect to them via the route servers. So the use of the route servers can lead to a more stable platform.

*Maintain your peering policy

The route server has built in filters that allow you to maintain your peering policies. For more information, please read the filtering topic.

Route server details

RS	Route Server 1	Route Server 1
FQDN	rs1.MN-IX.net	rs2.MN-IX.net
ASN	209752	209752
IPv4	77.69.248.251	77.69.248.252
Platform	bird	bird

When peering with the route servers, it is mandatory that routers are set up to connect to both route servers and advertise the same amount and length of prefixes for resilience.

Please note that the route servers are set to passive mode and will never initiate a BGP session. You should make sure that your equipment does so, i.e. connects to our TCP port 179 and that your inbound filtering/ACL rules permit established sessions with the route servers.

Prefix propagation and Max-Prefix Advisory

The route servers hold around 210K IPv4 prefixes and 35K IPv6 prefixes in the master table. These prefixes are the best routes that Bird's BGP algorithm has selected among all received routes from all the established BGP feeds. But the number of prefixes that each member receives from the route servers varies and depends of the following factors:

* Your peering policy that is expressed in RPSL format in the IRR database.

* The filtering mode that you selected and sanitizes the prefixes being announced to you (by default we apply the "default" mode to your BGP feed).

* The peering policy of other MN-IX members in which they can decide to announce prefixes via MN-IX route servers to specific peers.

With the current peering policies and convergence of BGP algorithm, we observe that the average amount of prefixes being received by our members with "default" filtering option is around 100K for IPv4 and 19K for IPv6. However, we advise our members to configure a max-prefix of 260K for IPv4 and 50K for IPv6 due to the following reasons:

* We calculate the limit based on the maximum number of valid prefixes that exist in the master table and can be potentially provided to a singe BGP feed.

* MN-IX expects future prefix growth as a result of a dynamic platform where more and more networks get connected. Thus, we raise the limit by 25% in order accommodate this growth.

We recommend using the MN-IX Looking Glass (members only) for more up-to-date information about announced prefixes.

Want to participate?

Many unique ASNs participate in the route server project, representing tens of thousands of prefixes. For more information about who is participating, see the Connected Parties page.

If you would like to peer with the MN-IX route servers, please login to our customer portal, and enable it in the configuration page of your respective connection (Connections -> Show -> Disable/Enable Peering with route-server).

Need support to enable peering with route server? CONTACT US

MN-IX Route Servers are MANRS (Mutually Agreed Norms for Routing Security) compliant.

Read more - https://www.manrs.org/participants/ixps/