Customer BGP IP filter policy

Dear customer,

Console Connect applies inbound filters for our customers' BGP sessions. These inbound filters accept all IPv4 and IPv6 prefixes that customers are allowed to announce to the internet, either directly or on behalf of their own customers. They are based on IRR databases and RPKI ROAS and are updated at the start of every hour.

To ensure your BGP announcements are accepted by our network, please follow these steps:

1. Register your **as-set** and **route** objects in one of the IRR databases listed in this document.
   In doing so, please ensure you meet the following requirements:
   · Include all of your ASNs and downstream customers' ASNs in your **as-set**.
   · Do not include your other transits and peers in your **as-set**.
   · Create **route** objects for all of your IPv4 and IPv6 address space resources.
   · If any downstream customers are in your **as-set**, make sure **route** objects for those resources exist as well.

2. In order to further improve security, please also consider creating RPKI ROAs with the same records.
   · If you've created RPKI ROAs, please make sure maxlength attribute is correct and the ASNs in the ROAs match with the origins in the **route** objects.

IRR databases

Console Connect makes use of **as-set** and **route** objects to filter BGP announcements sent by our customers.

Here is a list of the mirrored IRR databases along with their supported objects:

Database	As-set	Route	Route object preference	Mirrored every
RPKI ROAs		✓	900	30 mins
RIPE	✓	✓	900	30 mins
ARIN	✓	✓	900	30 mins
APNIC	✓	✓	900	30 mins
LACNIC	✓	✓	900	30 mins
JPIRR	✓	✓	900	30 mins
IDNIC	✓	✓	900	30 mins
AFRINIC	✓	✓	800	30 mins
ALTDB	✓	✓	200	30 mins
RADB	✓	✓	100	30 mins
NTTCOM	✓	✓	100	30 mins
RIPE-NONAUTH		✓	100	30 mins

Route object preference

IRR Databases are sorted by preference. In the case of overlapping **route** objects, those with higher preference are mirrored and the others discarded. For example, if two **route** objects for the same prefix exist in AFRINIC (preference 800) and RADB (preference 100), those from AFRINIC's database are mirrored and the others are discarded.

In the case of databases with the same preference, none of the overlapping **route** objects are discarded.

RPKI ROAs

Console Connect discards inbound BGP announcements from customers and peers that are considered INVALID by the RPKI framework. This filtering takes place BEFORE those built on top of the IRR databases. This means that INVALID advertisements get discarded regardless of any **route** objects created by the user. No action is enforced by the RPKI filter for VALID or UNKNOWN announcements, which are accepted or rejected depending on IRR database lookup.

Console Connect mirrors RPKI ROA repository systems every 30 minutes.