

# Change of IPv4 Address Block IX.br ATM VLAN Rio de Janeiro/RJ

São Paulo, October 21, 2025

## Context and Justification

Currently, the IX.br ATMr4 domain in Rio de Janeiro, RJ, has a block of 1,024 IPv4 addresses (/22) available for allocation. Due to the growth in the number of participants, this address space needs to be expanded. To meet this demand, the current block will be replaced by a new, larger IPv4 block of 2,048 addresses (/21).

## New IPv4 Addressing

A request was made to Registro.br for a new IPv4 block, allocated to IX.br in Rio de Janeiro, RJ, based on the resources reserved for critical Internet infrastructure. The new allocated block is:

**45.68.80.0/21**

## Change in IPs

With this change, it will be necessary to convert the current IPv4 addressing to the new block, following the conversion table below:

Current IP	New IP	New Network mask
45.6.52.xx/22	45.68.80.xx	21 or 255.255.248.0
45.6.53.xx/22	45.68.81.xx	21 or 255.255.248.0
45.6.54.xx/22	45.68.82.xx	21 or 255.255.248.0
45.6.55.xx/22	45.68.83.xx	21 or 255.255.248.0

The new addresses of the Router Servers and Looking Glass will be:

Service	Current IP	New IP
Router Server-1	45.6.52.253	45.68.80.253/21
Router Server-2	45.6.52.254	45.68.80.254/21
Looking Glass	45.6.52.252	45.68.80.252/21

## Conversion examples:

- **Current:** 45.6.53.125/22 → **New:** 45.68.81.125/21
- **Current:** 45.6.55.77/22 → **New:** 45.68.83.77/21
- **Current:** 45.6.52.9/22 → **New:** 45.68.80.9/21

## Migration Schedule

The migration will take place in three stages over three weeks, **starting on November 3, 2025 and ending on November 24, 2025.**

### Stage 1: November 3, 2025

IX.br Responsibilities:	Participant Responsibilities:
Activation of new Route Servers and Looking Glass on the new network:  Looking Glass: 45.68.80.252/21  Router Server-1: 45.68.80.253/21  Router Server-2: 45.68.80.254/21	Add the new IPv4 address as a secondary on the same interface as the current addressing.  Add the new neighbors to your BGP configurations, keeping the same routing policies.  Keep both addresses configured during the transition period to ensure connectivity with participants who have not yet made the change.  Check firewall/filter/ACL settings for suitability for the new network.  Migrate two-way BGP sessions on the ATMv4 public VLAN to the new addresses, if applicable.

### Stage 2: November 10, 2025

IX.br Responsibilities:	Participant Responsibilities:
Deactivation of Old Route Server 1 (45.6.52.253/22).	Continue to keep both addresses configured during the transition period to ensure connectivity with participants who have not yet made the change.

Stage 3: November 24, 2025

IX.br Responsibilities:	Participant Responsibilities:
Deactivation of Old Route Server 2 (45.6.52.254/22)	<div>Remove the old IPv4 address (45.6.52.0/22) from the network interface.</div> <div>Remove all neighbors associated with the old network.</div>