

[B]³
2025

BRASIL
BOLSA
BALCÃO



B3 Week

Co-location Infrastructure

Raul Chavarria – Head IT Products & Services

Eduardo Kashiwakura – Head of Co-location

Adeilson Rateiro – Head of HFT Infrastructure and Trading Network Strategy



Raul Chavarria

Associate Director for Datacenter&Co-Lo, Digital Workplace,
IT Services



Eduardo Yukio Kashiwakura

Head of Datacenter and Co-location Services



Adeilson Rateiro

Head of HFT Infrastructure and Trading Network Strategy

CO-LOCATION

Co-Location Expansion



Data Center B3 Overview





Co-Location in numbers

New network scenario

~3μs

Market Data
Network
Latency

~5μs

Order Entry
Network
Latency

98%

NPS

+1.000 km

New optic fibers
installed

252

Racks

104

Clients

12,5MW

B3 substation
Energy capacity

100%

Hydroelectric
Energy



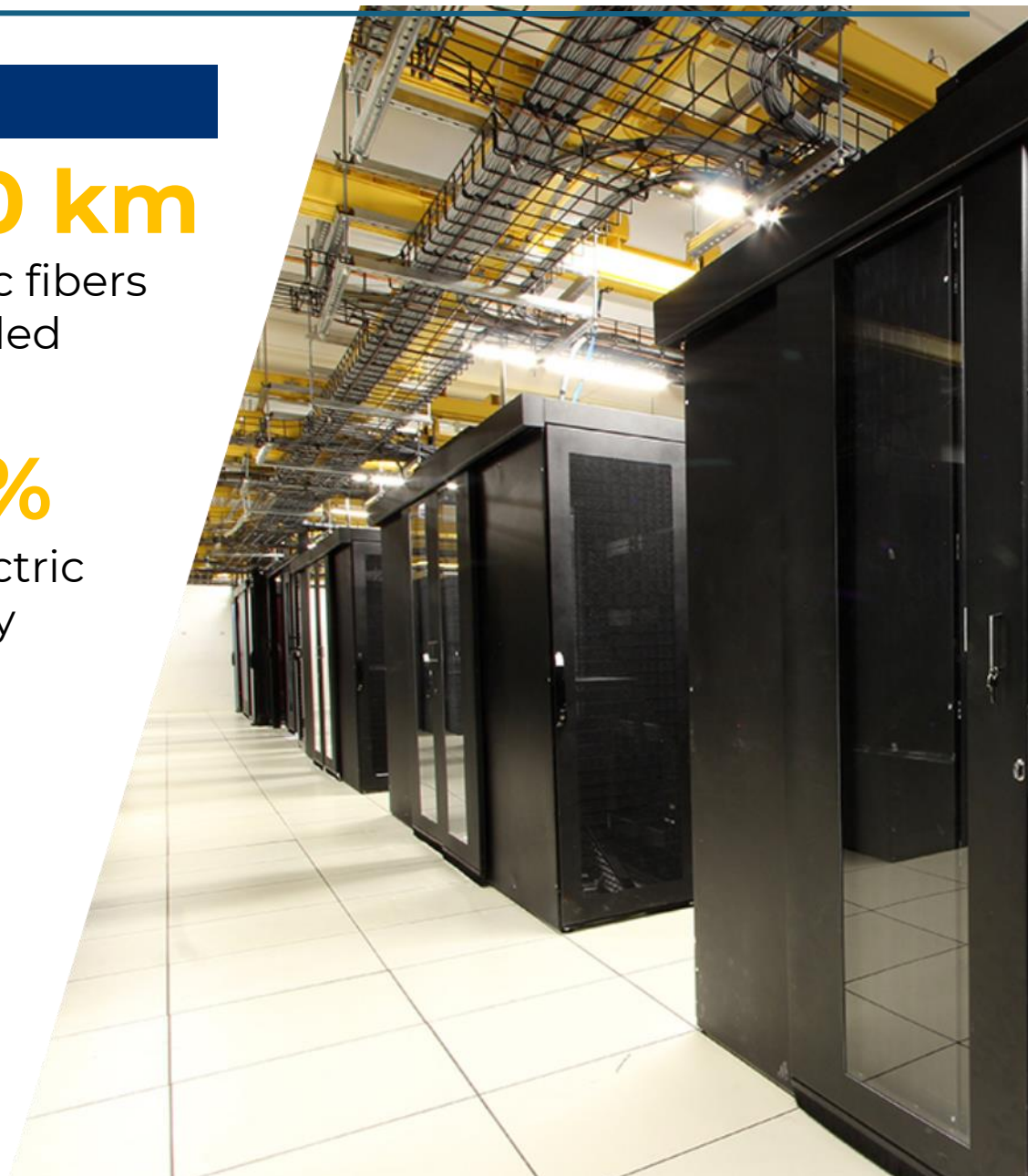
salesdatacenter@b3.com.br



+55 11 2565-5140



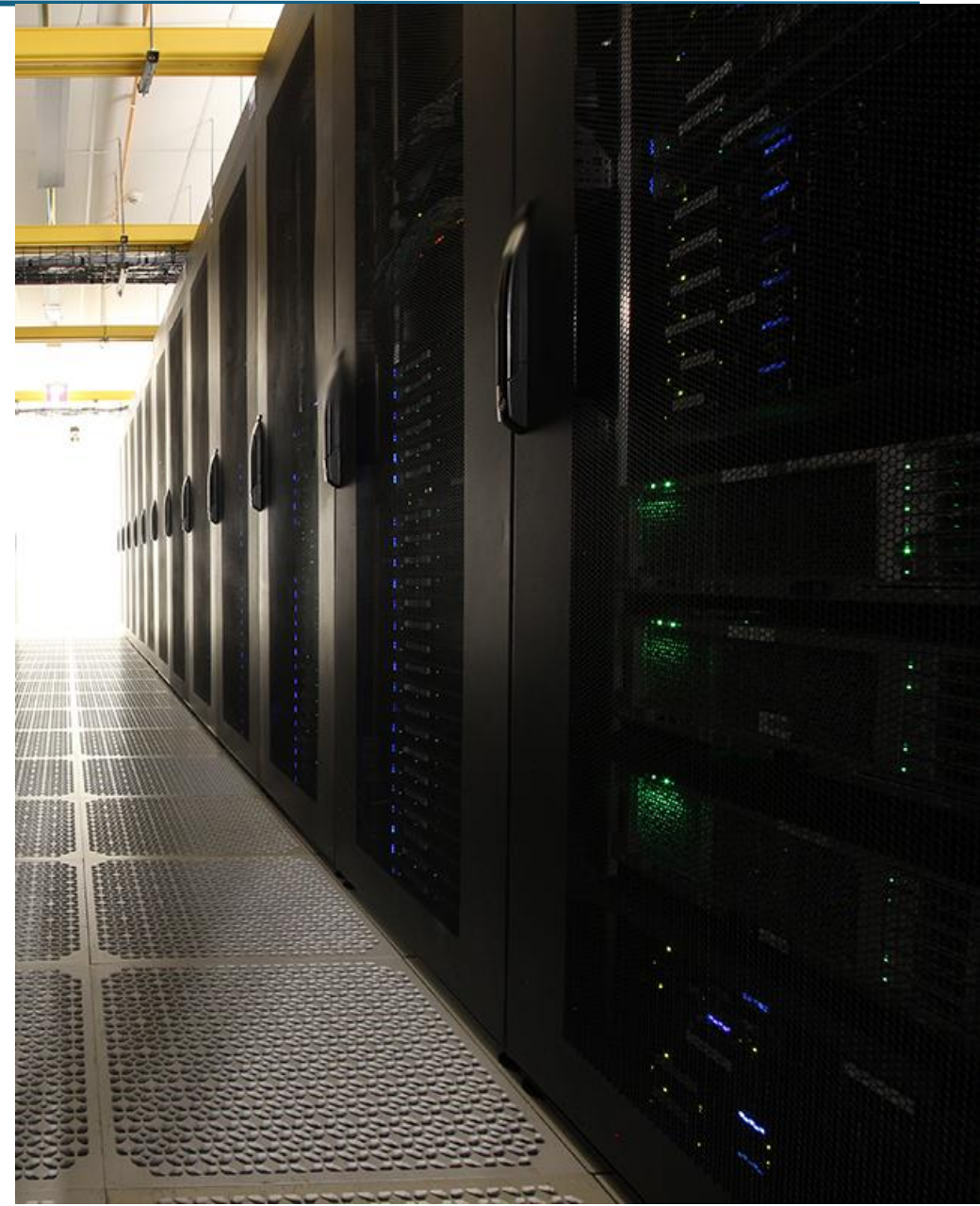
More info:



Co-Location Expansion

High Density Racks

- ✓ **Improved Rack Capacity with 15kW**
 - ✓ More servers within the same space (~30 ME Servers)
 - ✓ Compact infrastructure without increasing physical space.
- ✓ **Accelerate trading strategies with scalable infrastructure**
 - ✓ Handle power-intensive tasks
 - ✓ Ideal for advanced trading algorithms and ultra low latency-sensitive applications.
- ✓ **Scalable, Future-Ready Infrastructure**
 - ✓ Scalable setup, accelerating trading strategies through greater throughput and responsiveness
- ✓ **Availability**
 - ✓ Phase 6 : 39 HD Racks
 - ✓ Reach us!

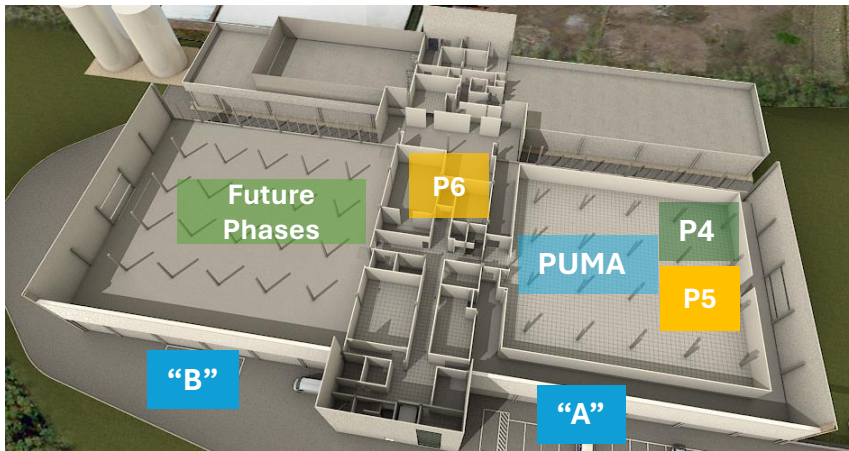


NEW CO-LO NETWORK PROJECT

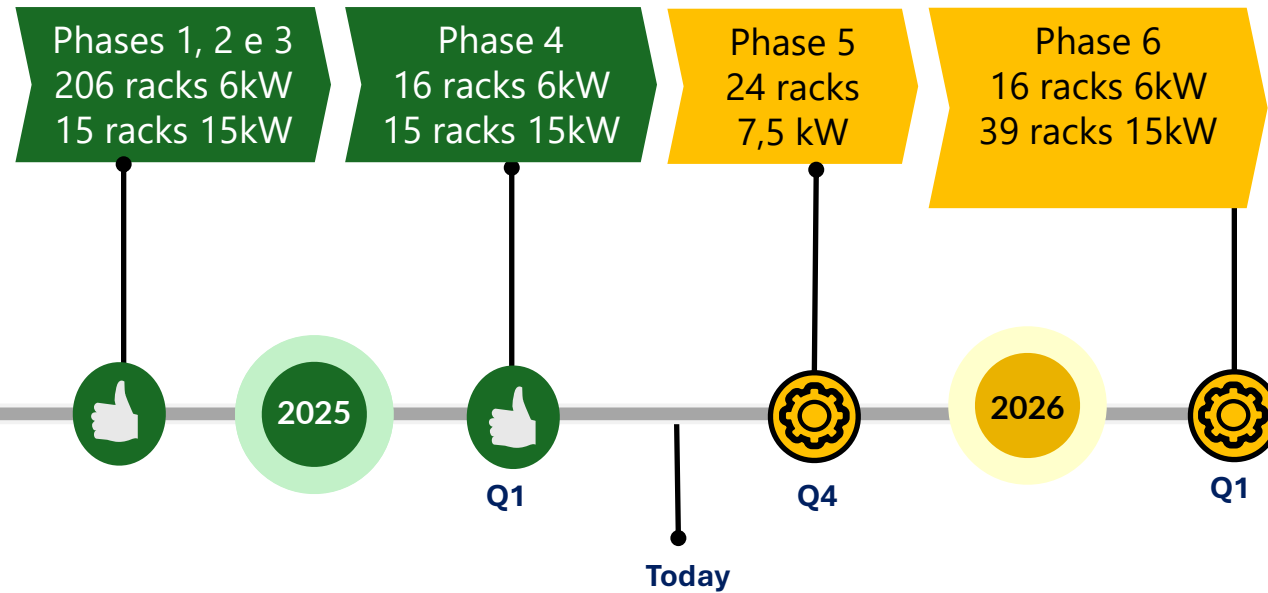
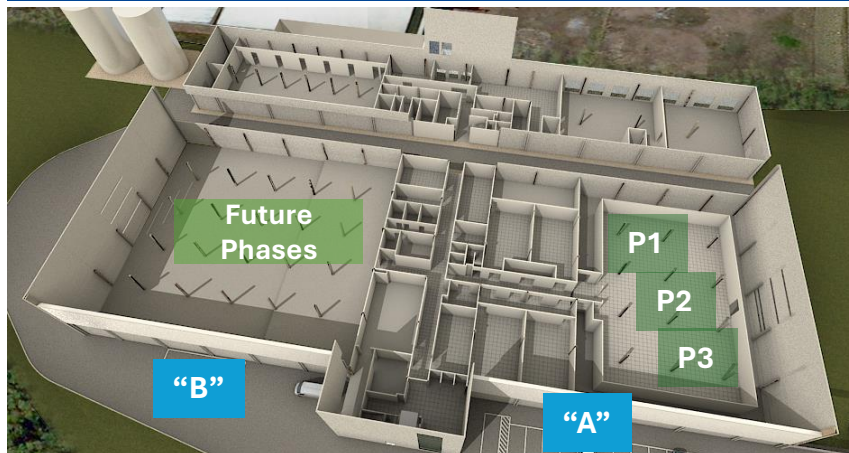
Expansion Co-location

- Offering a greater increase of high-density racks – Phase 6

First Floor



Ground Floor



221

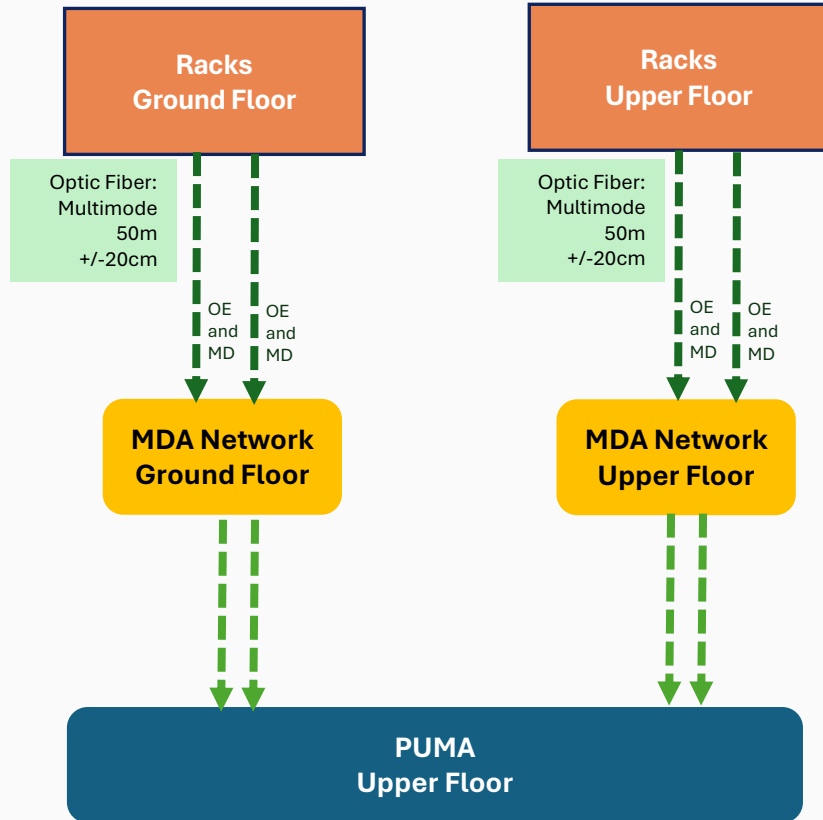
252

276

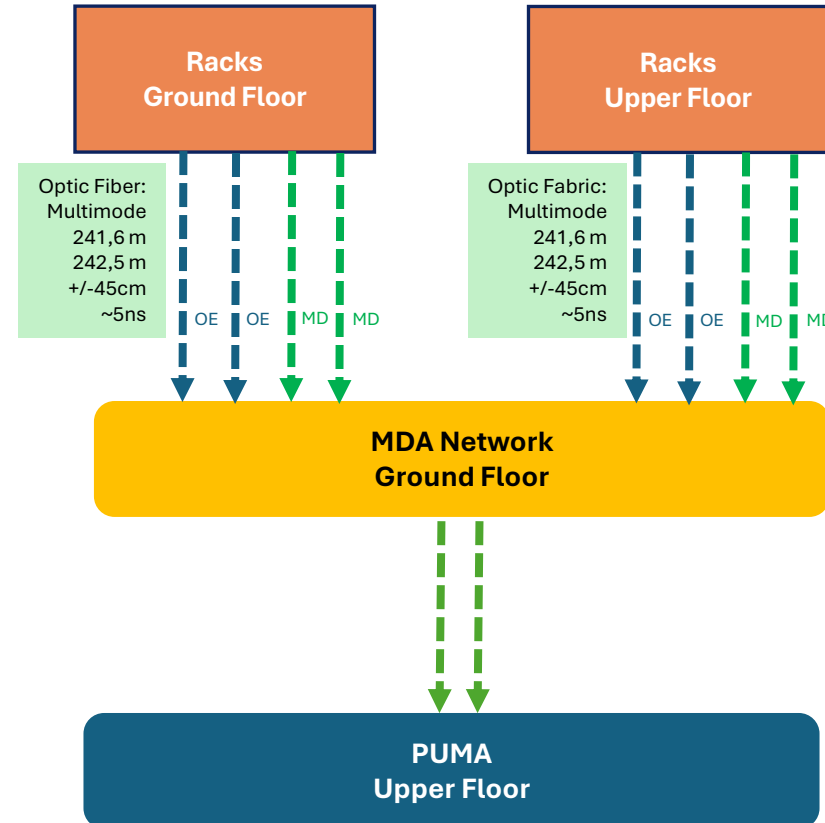
331

Total rack

Current – Decentralized Switches



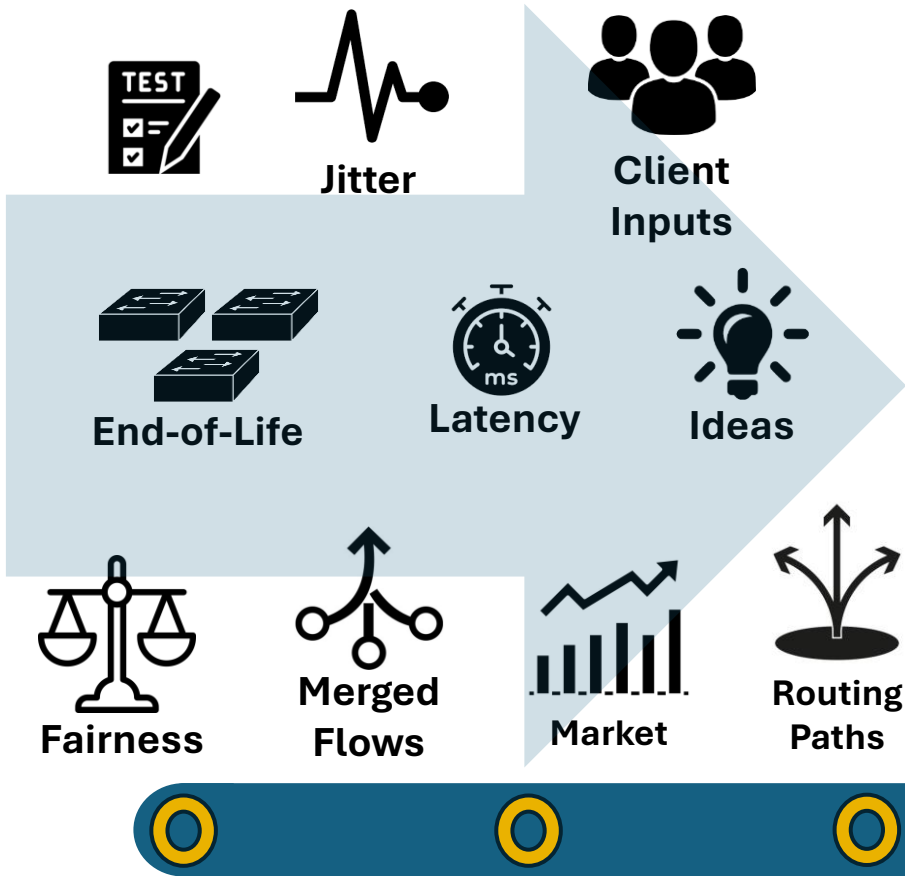
Future – Centralized Switches



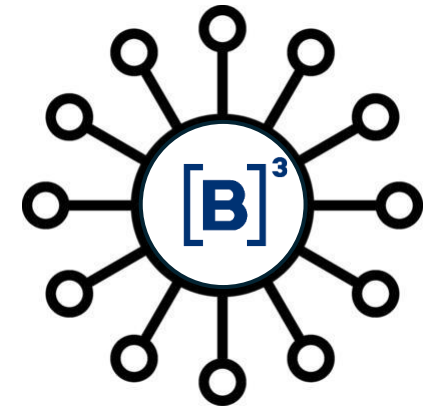
Updates:

- ✓ Edge Switches upgrade and centralized network area
- ✓ New cabling equalization.
- ✓ Network traffic splitted
 - ✓ MD Cross Connect
 - ✓ OE Cross Connect
- ✓ Trading rack includes:
 - ✓ 1x pair of connections OE
 - ✓ 1x pair of connections MD

CURRENT NETWORK



NEW NETWORK



Network Improvements

Traffic Isolation

- ✓ Dedicated paths for multicast and unicast
- ✓ Reduced contention and clearer monitoring baselines (*Flow Interference*)

Determinism

- ✓ More predictable and consistency network behavior
- ✓ Lower overtaken probability for client **entry message orders**
 - *No overtaking occurs at the edge beyond ~4ns*

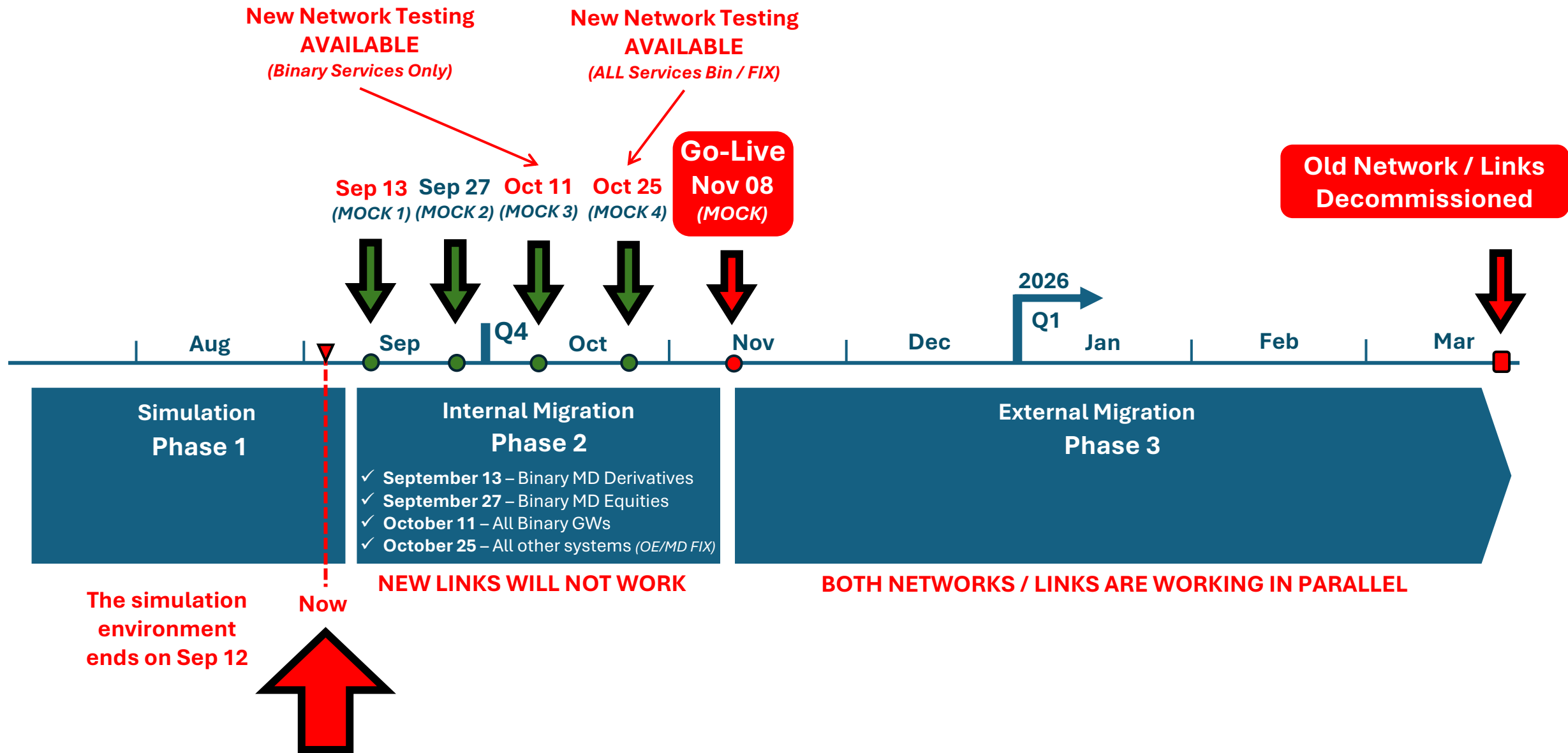
Lower Latency & Reduced Jitter

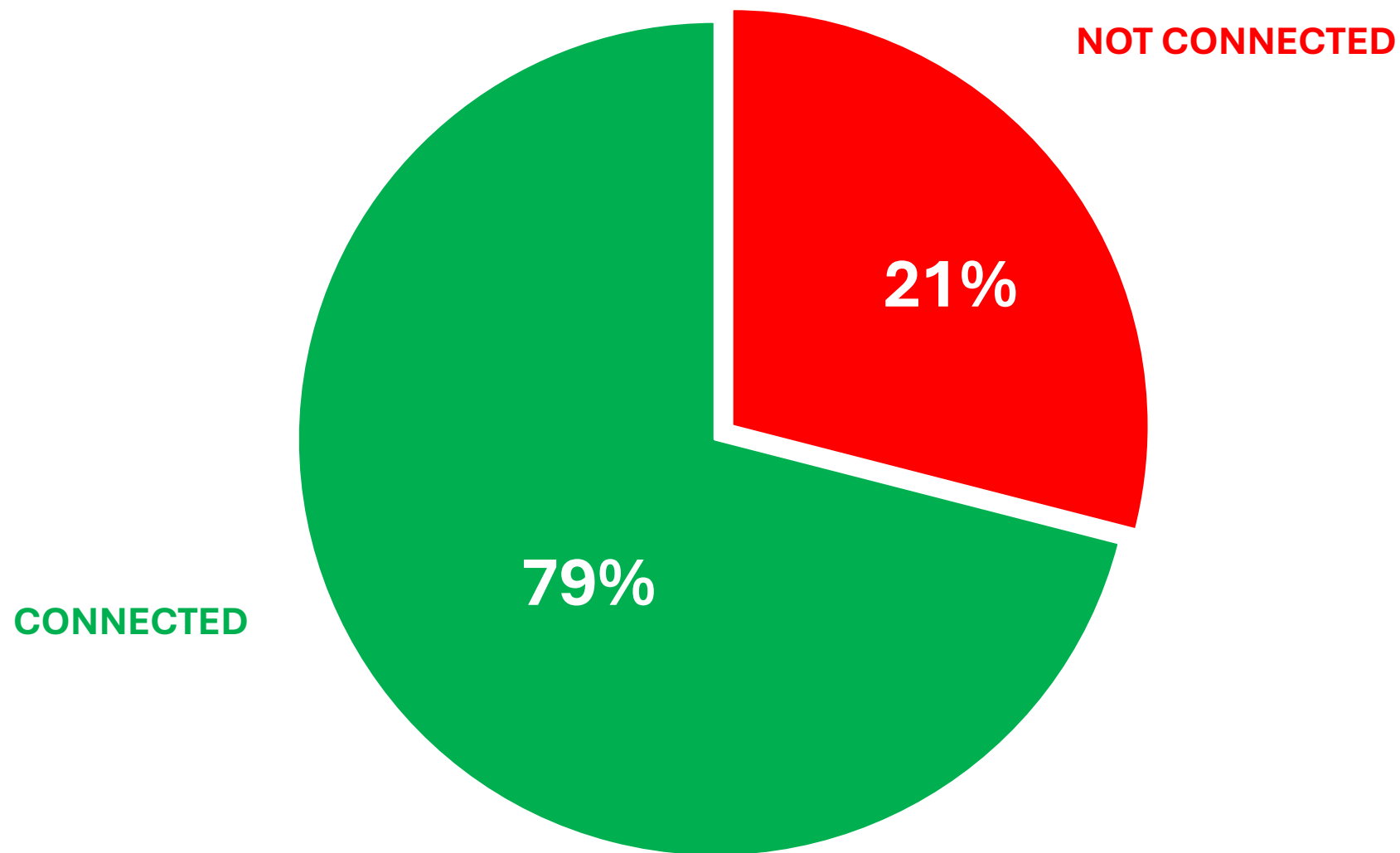
- ✓ Faster delivery of market data and order entry
 - *OE from ~22μs to ~10μs (RTT)*
 - *MD from ~11μs to ~3μs*
- ✓ More stable and uniform packet timing

Fairness

- ✓ Equal delivery of **market data** across clients
- ✓ Minimal port-to-port skew
 - *Same switch = ~1ns*
 - *Different switches = ~10ns*

Project Timeline





What should we expect from you?

✓ Stay in Touch

- Continue communicating with us
- Stay tuned for our *“News and Updates”*

✓ Continue Sharing Your Ideas

- We greatly value your input, and it has been very helpful to us

✓ Resource Availability

- Designate the appropriate individual to support and discuss project activities
- Ensure this person has read the documentation and is well-informed about the project

Q&A

colocation@b3.com.br

Check out some questions and other details in our FAQ or in our manual (*Connectivity*) posted in:

<https://clientes.b3.com.br/en/w/news-update-notes-new-co-location-network>

THANK YOU!

