

# IX Updates

## Tracking Indian IX Ecosystem

Rahul Makhija - SANOG41 | INNOG7

# \$ whoami?

- Mingling with IP networks for ~20 years
- Building WebApps for ~10 years
- Co-founder & CTO, Esto Media ( AS135817 )
- Director, PeeringDB

I'm either pushing bits, or flipping bits, so in-between the bits all the time.



# What is IX Updates?

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## Quick Facts

- A dashboard to visualise Indian IX ecosystem
- Launched on 2nd July 2022
- Sourcing information from PeeringDB API
- Putting daily view of the ecosystem to persistent

# How to access the project?

**URL Please.**

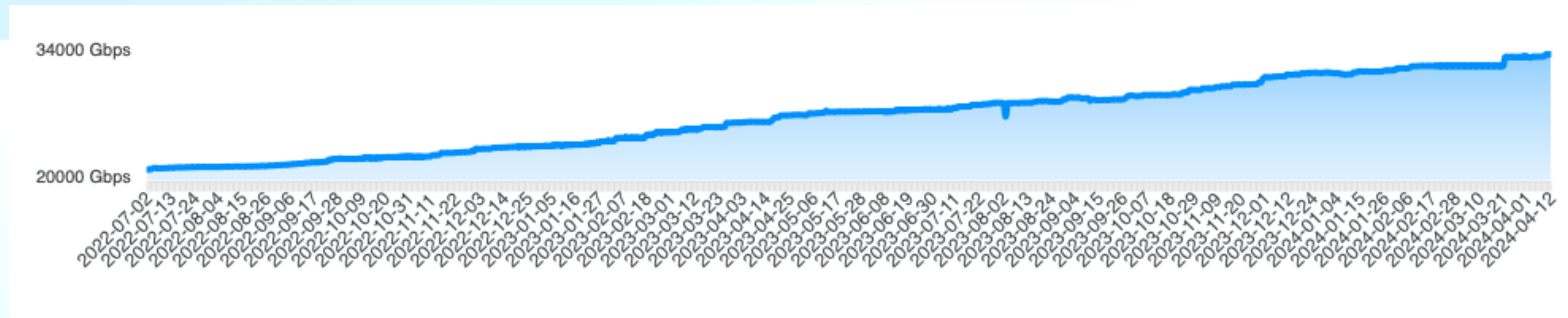
The Dashboard is publicly accessible on:

**<https://ixupdates.abater.io>**

# What is the objective of this project?

## Use Case: 1/n

- Keeps track of growth trends in the industry.
  - How fast the IXP ecosystem in India is growing (or declining for that matter)



\*\*Stats were captured sometime in April 2024

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# What is the objective of this project?

## Use Case: 2/n

- Tells if one IXP, over certain period of time, is attracting more ASNs than the others.

In last 30 days

**8**  
network(s) joined

**0**  
Network(s) Left

NIXI Mumbai

In last 30 days

**15**  
network(s) joined

**5**  
Network(s) Left

Extreme-IX Mumbai

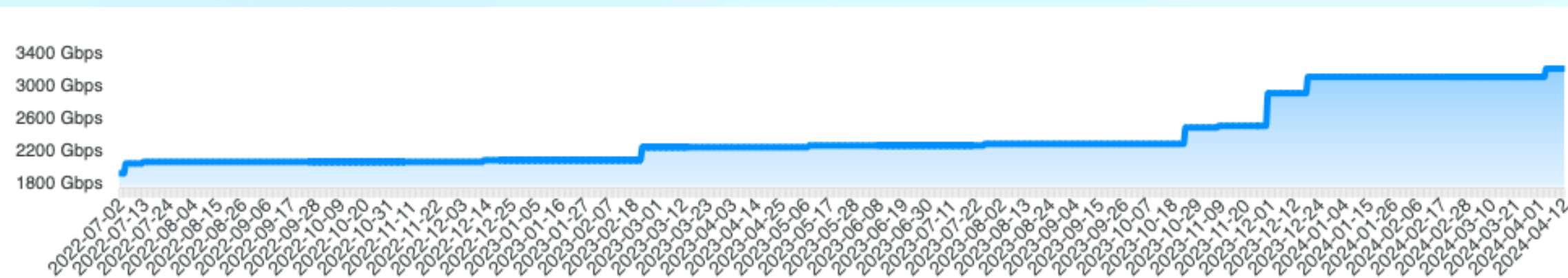
\*\*Stats were captured sometime in April 2024

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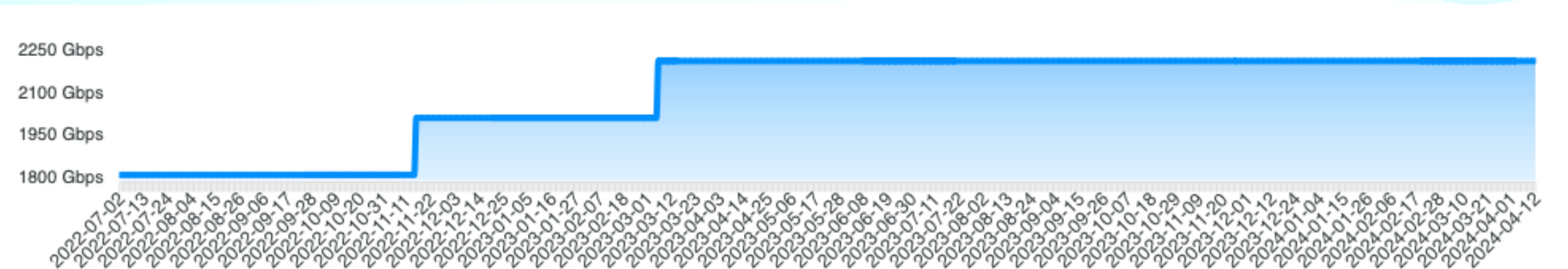
# What is the objective of this project?

## Use Case: 3/n

- Keeps track of how often a CDN (or any other asn) upgrades their capacity
  - Indicates their growth in the country in comparison to other networks.



Meta (AS32934)



Amazon (AS16509)

\*\*Stats were captured sometime in April 2024

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# What is the objective of this project?

## Use Case: 4/n

- Helps ISPs identify an exchange with maximum content available, at a glance



DE-CIX Mumbai



Extreme-IX Mumbai

\*\*Stats were captured sometime in April 2024

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# Where IXPs are present?

## Facilities

147 facilities spread over 71 cities

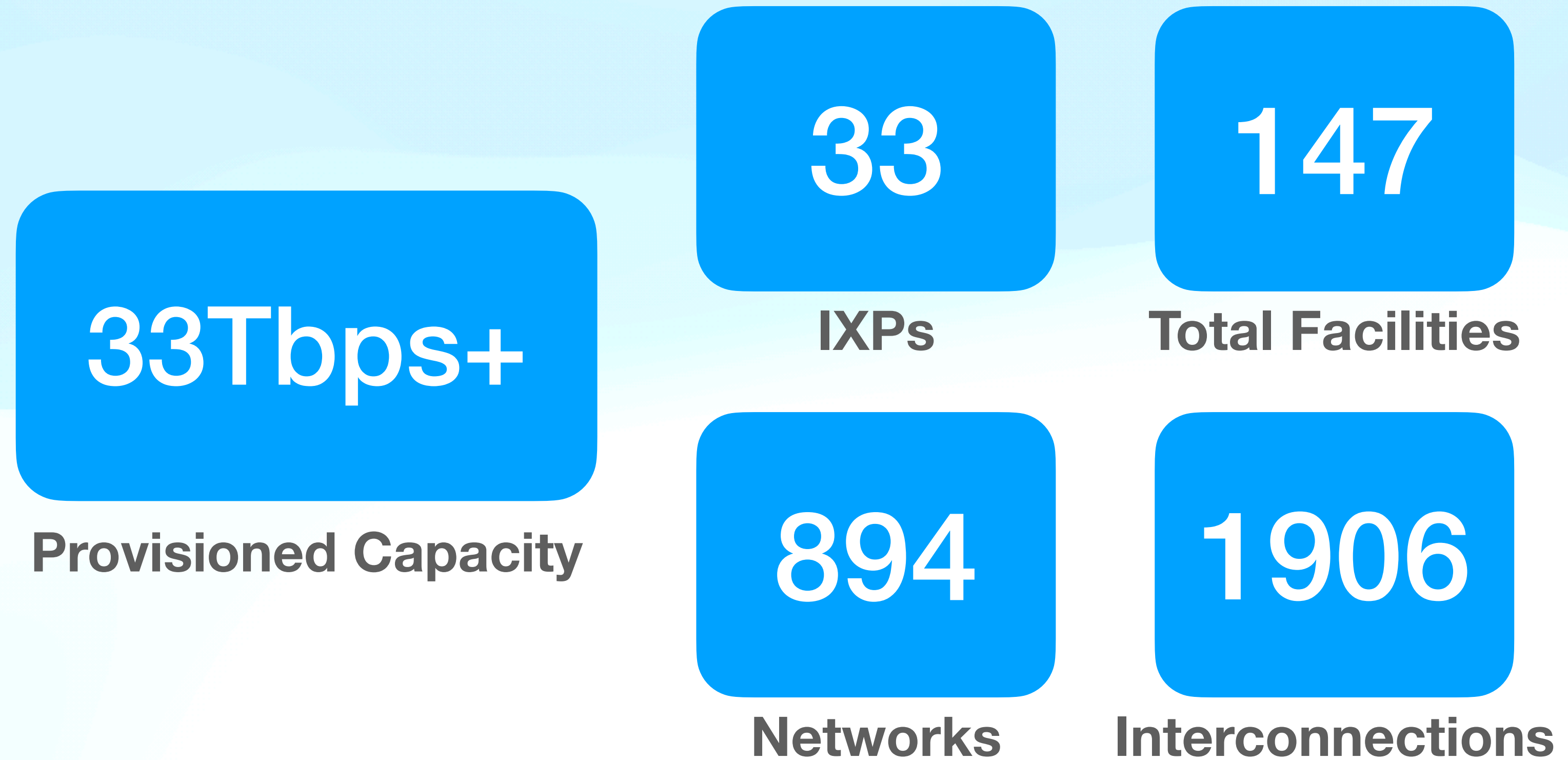


\*\*Stats were captured sometime in April 2024



# How Large is the Ecosystem?

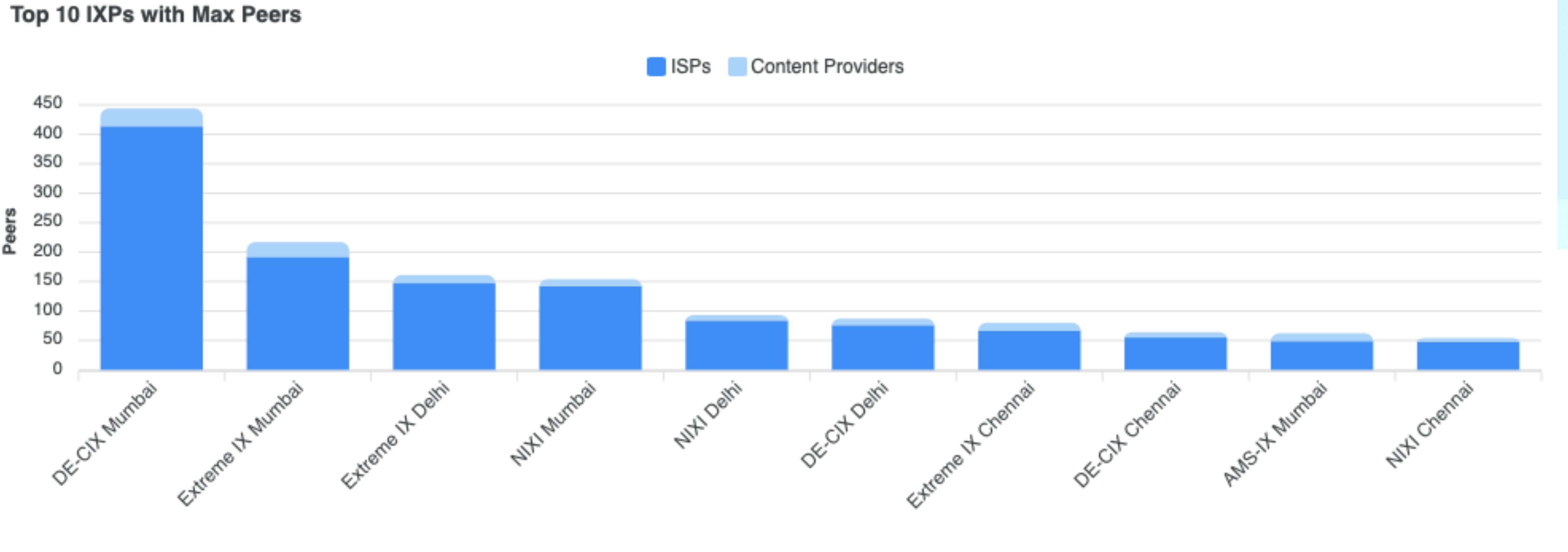
## Present State



\*\*Stats were captured sometime in April 2024

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# Top 10 IXPs by number of peers



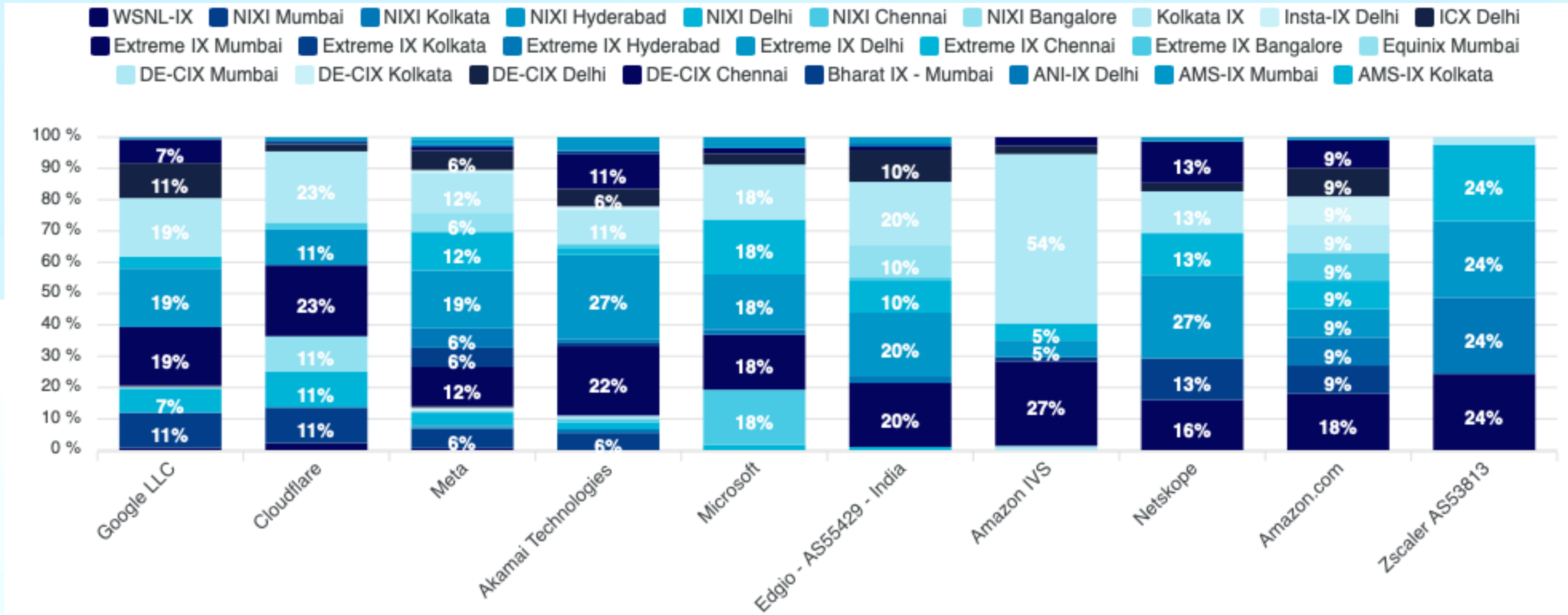
\*\*Stats were captured sometime in April 2024

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# Top 10 ASNs - Capacity across Indian IXPs

## Capacity Distribution

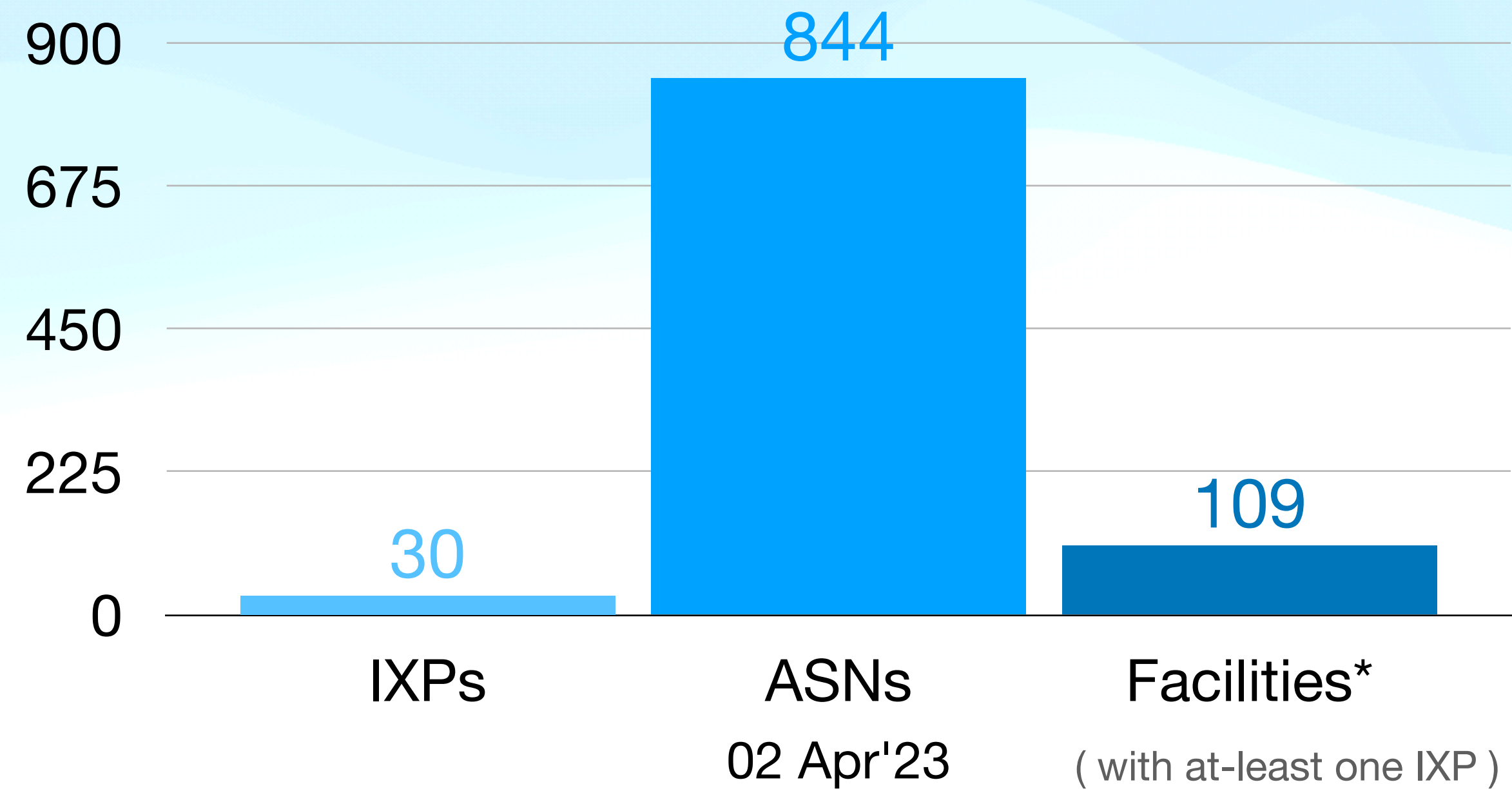
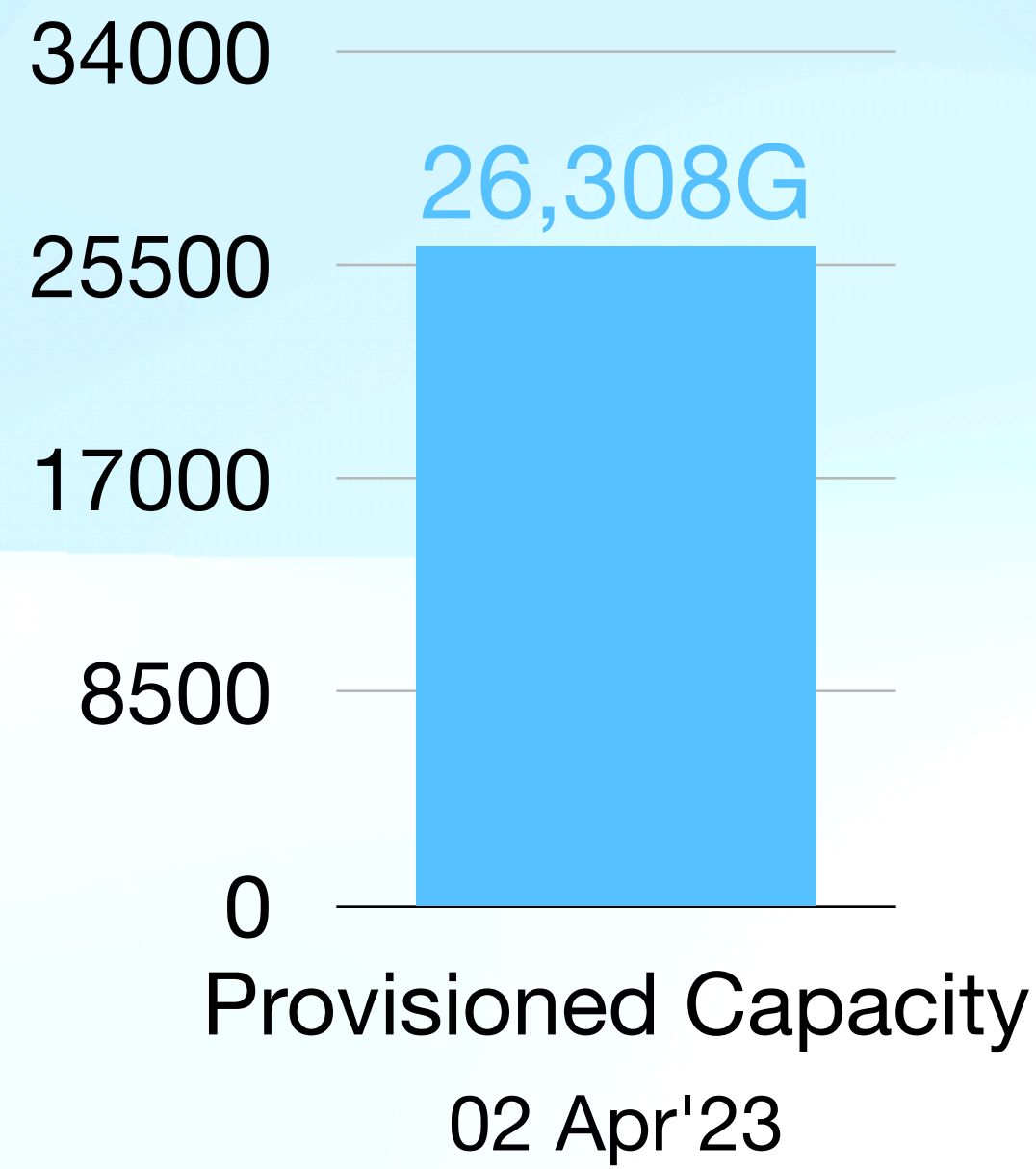


\*\*Stats were captured sometime in April 2023



# How the Ecosystem has Evolved?

April 2023 - April\* 2024



# Key Changes Since April 2023

## Throwing out some numbers

**~7 Tbps**

7 Tbps of additional capacity was provisioned across all IXPs in India

**46 ASNs**

46 new networks have joined the Indian IX ecosystem in last 8 months

**3 IXPs**

3 new IXPs were launched in India

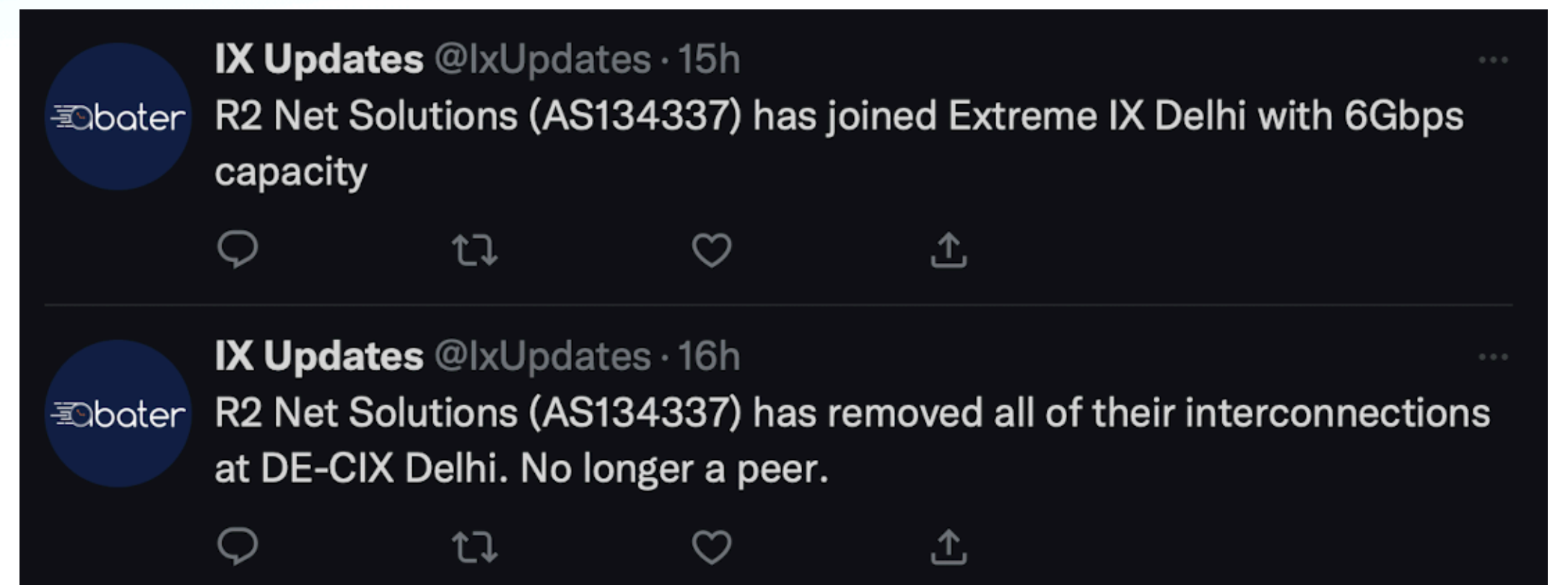
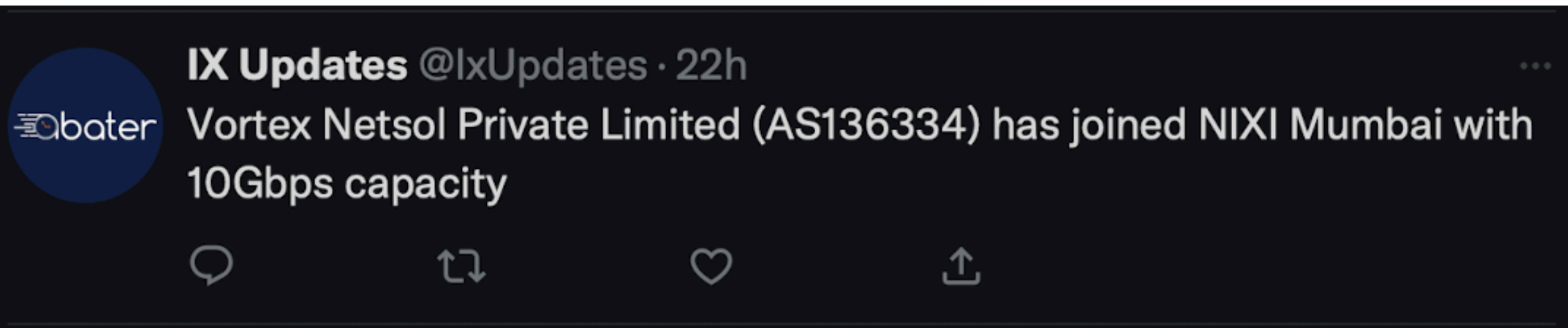
**23 Facilities**

Additional 23 facilities now have one or more IXP present

# @IXUpdates

## The Twitter Bot

Follow @IXUpdates on twitter to be notified whenever an event takes place





# What other information is available?

## Persisted Daily

- Marketshare of each IXP in India
- Capacity share (%) of all ASN at any given IXP
- ASNs peering with route-server
- ASNs joined/left in last 30 days
- If a member ASN is an ISP or a CDN
- Capacity trend for IXPs
- Capacity trend for ASNs
- Capacity share(%) at all of the IXPs an ASN is part of

# Work in progress

## Things we're working on

- Visual representation of the entire ecosystem
- Make the platform multi-tenant.
- Time travel — to go back to any date in the history (not before 2nd July 2022) and see how the ecosystem looked back then

# Thank You

## Feedback / Requests

anything else you would like to see on the portal?

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