



IXP Association of Namibia

IXPs: The Backbone of Digital Transformation

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Introduction to IXPs

What is an IXP?

- IXP (Internet Exchange Point) is a physical infrastructure (Routers, Switches and Servers) where Internet Service Providers (ISPs) and Content Delivery Networks (CDNs) exchange internet traffic between their networks.
- The primary purpose of an IXP is to allow networks to interconnect directly, via the exchange, rather than through one or more third-party networks

Functions

- Traffic Exchange: Facilitates the direct exchange of internet traffic between peering networks.
- Cost Reduction: Reduces the costs associated with traffic transit through third-party networks, i.e International Bandwidth.
- Performance Improvement: Enhances internet performance by reducing latency.
- Redundancy: Provides alternative paths for data transmission, enhancing the robustness of the internet.

IXPs and Internet Speed and Reliability

- Lower Latency
 - Reduced Latency: IXPs provide direct, shorter paths for data packets.
 - Local Traffic: Enables local internet traffic to be exchanged locally and not to be routed through distant peering points.
 - Enhanced User Experience: Faster load times and reduced latency enhance the end-user experience.
 - In general, an IXP improves access to data and services for all locally hosted internet services in a country, i.e. Banking and Government Services, In-Country Data Centers and Cloud Services
- Resilience
 - Fault Tolerance: Provides alternative routes, reducing the impact of faults and improving service continuity.
 - Traffic Management: Helps manage internet traffic efficiently during peak hours.

IXPs and Data Localization

Data Sovereignty

- **Compliance:** IXPs can help in adhering to data localization laws by facilitating local data exchange and storage.
- **Local Data Routing:** Enables data intended for local users to be routed and exchanged within the same geographic location.

Economic Implications

- **Support Local Industry:** Boosts the local internet and data center industry by retaining more traffic within the region.
- **Cost Management:** Reduces the costs associated with international data transit and enables better control over local data traffic.

Privacy and Security

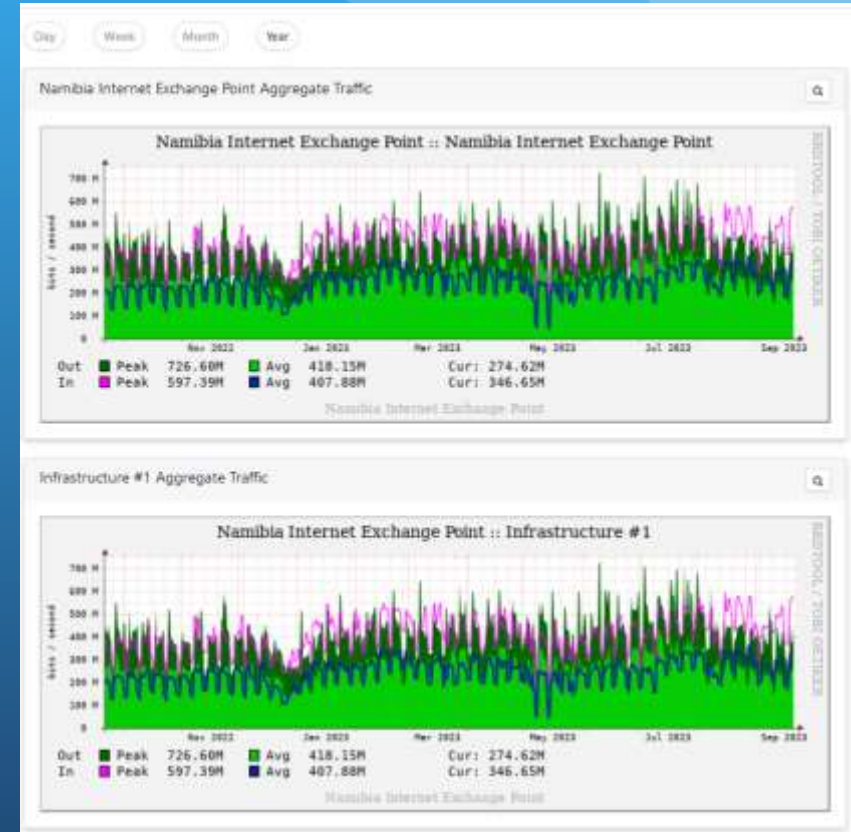
- **Control Over Data:** Facilitates better control and oversight over data transmission and storage.
- **Data Protection:** Ensures that data is subjected to the legal and regulatory frameworks of the local jurisdiction.

The Namibia Internet Exchange Point

- Established 7th of March 2014
- African Union Commission (AUC & Facilitated by MICT)
- Licensed from CRAN in 2019
- The operations and functionality of the IXP is administered by the Internet Exchange Point Association of Namibia
 - non -profit entity registered under section 21 of Companies Act Namibia
- Operating from Windhoek
- Hosted at Telecom Namibia Data Centre Open for ISP's, Educational & Financial Institutions to peer with each other to exchange their local traffic
- The Namibia IXP does not provide any telecommunications services or create any of its own IP traffic
- Neutrality - no discrimination on who can connect to an IXP

The Namibia Internet Exchange Point

- 13 Peering Members
- 1 Active Point of Presence (WGG)
- PPK Point of Presence currently being deployed
- 1Gbps and 10Gbps Peering Options
- Average 400mpbs traffic



IXP Members



How can you support the IXP?

Peering Member: Any Organisation with an AS Number can become a peering member should they wish to peer at the Namibia IXP Points of Presence

Associate Member: Any entity and/or persons having an interest in Information and Communication Technology.

Executive Committee: Volunteer your time to service on the Board of the Namibia IXP

Technical Committee: Volunteer your time to assist in building and maintaining the IXP Points of Presence

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