



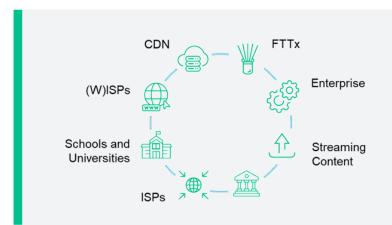
# **OPTIMIZING YOUR NETWORK WITH SBA EDGE**

#### An internet exchange point (IXP) functions like a digital highway intersection.

At a physical location with high-speed network switches, internet service providers (ISPs), content delivery networks (CDNs), Enterprise, Government, Education and other internet players interconnect. This creates a Layer 2 local area network (LAN) where members exchange internet traffic directly. By agreeing to exchange traffic, IXP participants avoid relying on transit providers and keep data flowing locally. This translates to lower latency, improved performance and overall better internet experiences for end users.

SBA Edge offers carrier-grade interconnection at our network-neutral peering fabrics in Chicago (UIX) and Jacksonville (JXIX). We utilize the latest technologies to create efficient and reliable IXPs. Upholding neutrality and transparency are core values at SBA Edge. We only charge port fees to members who directly benefit from our services. These fees cover our operational costs and ensure we can maintain our high-quality Layer 2 interconnection fabric for the regions we serve.

#### **IXP ECOSYSTEM**







### **BENEFITS FOR SERVICE PROVIDERS**

Internet exchange points (IXPs) offer several advantages for internet service providers (ISPs), making them a key part of delivering good service to their customers. Here are some of the main benefits:

- **Reduced Costs:** Instead of paying transit fees to send traffic through another provider's network, ISPs can directly exchange traffic with other members of the IXP at a lower cost, or even for free through peering agreements. This can lead to significant savings, especially for ISPs with a lot of local traffic.
- **Lower Latency:** By keeping traffic local within the IXP, ISPs can reduce the distance data has to travel. This translates to faster loading times for websites and smoother streaming for users.
- **Improved Performance:** Reduced latency and a more efficient traffic flow contribute to an overall better internet experience for the ISP's customers. This can lead to higher customer satisfaction and less churn.
- **Increased Reliability:** IXPs often have multiple redundant connections between members. This means that if one connection goes down, traffic can be rerouted through another, minimizing downtime and disruptions for users.
- Improved Content Delivery: Many content delivery networks (CDNs) are also members of IXPs. This allows ISPs to directly connect to these CDNs, ensuring faster delivery of popular content like videos and social media to their customers.



## **BENEFITS FOR CONTENT PROVIDERS**

Content providers like streaming services, social media platforms and websites also reap significant benefits from internet exchange points (IXPs). Here's how IXPs help them:

- **Improved User Experience:** By having a presence at an IXP, content providers can connect directly with a large number of ISPs. This keeps traffic local and reduces latency, leading to faster loading times and smoother streaming for end users. Satisfied users are more likely to stay engaged and consume more content.
- **Reduced Costs:** Similar to ISPs, content providers can bypass expensive transit fees by peering directly with other IXP members. This can lead to significant cost savings on content delivery, especially for providers with a large user base.
- **Wider Reach:** IXPs often connect multiple geographic regions. This allows content providers to reach a wider audience without needing to establish individual connections with every ISP in each region.
- **Increased Reliability:** The redundant connections within IXPs offer greater reliability for content delivery. If a connection goes down, content can be rerouted through another path, minimizing downtime and ensuring users have consistent access.
- **Improved Content Caching:** Many CDNs are also IXP members. This allows for more efficient content caching, meaning frequently accessed content is stored closer to users, further reducing latency and improving user experience.

