How Content Providers and CDNs Use BGP Peering to Reach Indian Users Faster

As Indians become increasingly digitally aware, they demand uninterrupted video streaming, fast loading of websites, and responsiveness in their online applications. It is not only about having sufficient server space; efficient routing of the network plays an equally significant role in meeting these demands. Peering through BGP allows networks to share traffic between each other, ensuring the efficiency of the content delivery process.

What Is BGP Peering?

BGP is the routing protocol that enables independent networks to exchange information about the IP addresses they can reach. It helps networks determine how traffic should travel between different autonomous systems on the internet.

BGP peering allows two networks to exchange routing information and send traffic directly between them, subject to their routing policies and peering arrangements. Instead of relying entirely on third-party transit providers, participating networks can establish more direct paths for data exchange.

The process becomes easier due to the presence of Internet Exchange Points (IXPs) where ISPs, CDNs, and content providers have an opportunity to interconnect.

The Process Through Which Content Providers and CDNs Deliver Content Fast

CDNs store copies of digital content on several servers located at various places. In case a user requests videos/images/pages, the CDNs will be able to deliver them from a relevant cache near them instead of delivering them from far-away origin servers.

This is facilitated through peering, which helps in improving the connection between the CDN and the access network through improvement of routes through which data flows.

The benefits for Indian consumers may include improved web page load times, improved streaming experience, and improved application response times, subject to certain conditions.

Importance of Local Peering in India

The varied terrain and growing number of internet users in India make local peering extremely significant. An individual trying to access a website from Mumbai will find it advantageous to have an ISP that has a good route to the network.

DE-CIX India provides Internet Exchange facilities in the cities of Mumbai, Delhi, Chennai, Kolkata, Hyderabad, and Bangalore. The peering environment of DE-CIX India facilitates efficient traffic exchange among the ISPs, CDNs, and other networks.

Establishing peering at appropriate exchange points is beneficial for content providers targeting Indians in terms of making traffic more reachable and offering better control over its ingress to participating networks.

Public and Private Peering

Peering can take place differently for content networks based on the amount of data traffic generated.

- **Public Peering:** Network connections take place through the switching facilities of an Internet Exchange. The use of route servers can simplify the exchange of routing data.

- **Private Peering:** This is where two networks form a connection exclusively between them.

Both techniques can provide efficient content delivery if developed on the basis of traffic, reachability, and resilience considerations.

DE-CIX India: The Building Block for a Better Internet Experience

Efficient peering helps content providers and CDNs optimize the routing process while keeping their costs low in transit. With the increasing demand from India for services such as streaming and cloud services, good interconnection will always be important.

The Internet Exchange of DE-CIX India enables connections between networks and CDNs/content providers in major parts of India. It is essential for companies that aim to improve their connectivity and reach customers effectively to consider a proper peering approach.