

Significance of an Interconnection Platform

By
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Chief Business Officer, DE-CIX India

DE-CIX at a glance



DE-CIX Global:

50
Internet Exchanges
Cloud Exchanges

3000+
Connected Networks

1000+
Data Centers

DE-CIX India:

World's Fastest Growing Interconnection Platform

5
Internet Exchanges
Cloud Exchanges

600+
Connected Networks

35
Data Centers
(19 - DE-CIX and 16 - Lightstrom)

DE-CIX Mumbai:

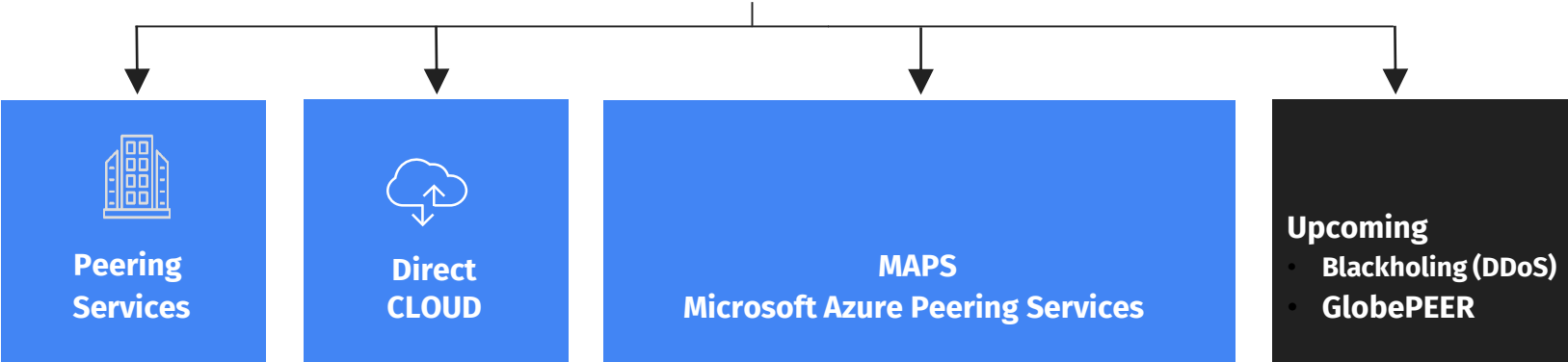
Asia Pacific's **No. 1** Interconnection Platform Amongst
153 Exchanges in 29 Countries.



*A new era
of digitally-
enabled
business &
private life*

*Digital
Everywhere,
for Everything,
& Everyone*

 **ONE MANY** Access
Interconnection Services



“Interconnection Platform Powers Digitalisation and Optimises your Network Infrastructure”

DE-CIX Single Access Port Service

A direct connection to network and cloud with the lowest possible latency

Low Latency



DirectCLOUD



- Simple and fast setup, flexible contract terms and avoiding multiple vendors.
- Cloud Exchange with 4 Cloud Service Providers which covers 90% of Indian Market.
- Secure because of Private/Direct connection bypassing the Internet.
- Competitive prices in Telecom Industry
- Available as White Labelled Services.

MAPS



- Secure 365 workloads (security, performance).
- MAPS reduces complexity in securing your 365 workloads.
- Customer does not need a DDoS mitigation service when using MAPS.
- Reduction in 50% trouble tickets and One-stop shop for support in case of issues.
- End to end traffic view, loss, latency.
- Multi-level redundancy: primary and failover location definition for MAPS.

Security & Stability

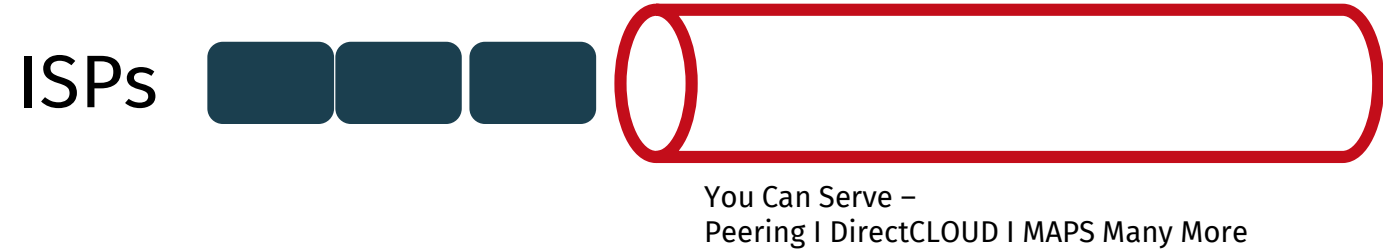


- Cloud connections bypassing the public Internet
- Underlying high- performance Internet Exchange infrastructure

Scale up Flexibility

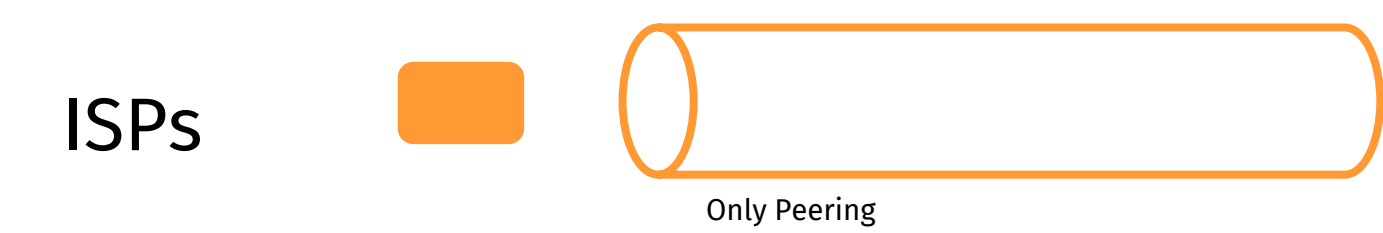


Easy scalability and complete flexibility to scale up and down services on a daily basis



Enhances Business viability
due to Multiple revenue
Growth

Traditional



Hamper
Scalability

Our Presence

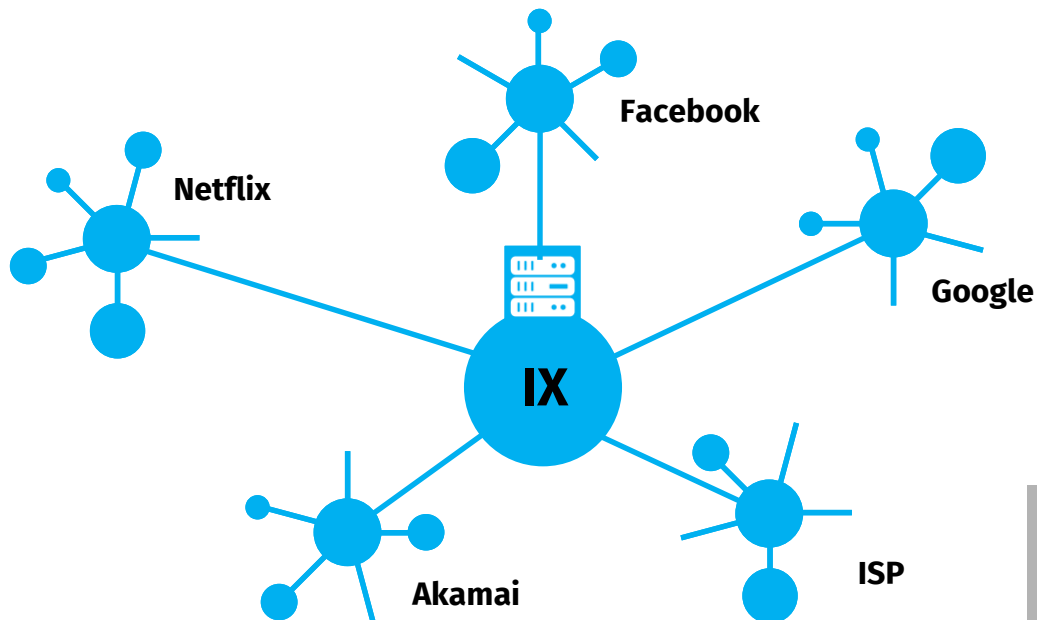


DECIX MUMBAI	DE-CIX DELHI	DE-CIX CHENNAI	DE-CIX Hyderabad	DE-CIX KOLKATA
<ul style="list-style-type: none">• Sify Rabale• Web Werks DC2• NTT DC5• NTT DC6• NTT DC7• Equinix Mumbai• Equinix Mumbai 2• ST Telemedia DC• Yotta NM1	<ul style="list-style-type: none">• ST Telemedia Banglasahib• ST Telemedia G K1• Sify Greenfort - Noida• Web Werks - Noida• NTT Noida	<ul style="list-style-type: none">• Bharti Airtel Santhome• ST Telemedia Chennai• Sify Tidel Park	<ul style="list-style-type: none">• STT Hyderabad	<ul style="list-style-type: none">• ST Telemedia Kolkata

Access to an additional 16 DC unique Partnership with Lightstrom.

35

GOLD Standard PoPs



Peering is the one-hop low latency high performance no public internet direct interconnection.

7 Benefits of Connecting

Get better control over your Traffic Routing.

1

Improve Latency to Indian Eyeballs.

2

Connect with 450+ Networks including CDN's, DNS Root Servers, Cloud and DC providers etc.

3

Reduced Network Costs.

4

Connect with leading National and International Networks

5

Create a better Internet Experience for your customers

6

Direct Peering with CDN's, OTT's and Content Providers

7



DE-CIX DirectCLOUD
Your Dedicated Connection into the Cloud
Fast, Simple, Stable, and Secure.

DE-CIX DirectCLOUD in a nutshell

- The connection is established via SDWAN, which is transported from you to DE-CIX.
- DE-CIX extends this SDWAN to the cloud.
- Everything is part of our cloud ecosystem for end-to-end cloud connectivity, where you can select your preferred partners.

How does DirectCLOUD benefit you?



Additional Revenues from Single Access Services



Competitive prices in Telecom Industry



Customers Stickiness' and Migrate New Customers



Secure and Sustainable Business Expansion Module

DirectCLOUD Eco System

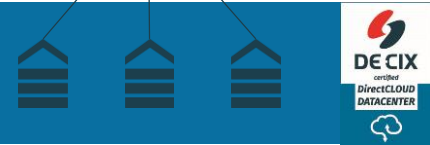
Enterprise Customers



Content Providers



Cloud Providers



Data Centers



What is DirectCLOUD

With DE-CIX DirectCLOUD, you can offer your customers a direct connection to cloud providers; secure and with guaranteed bandwidth.

DirectCLOUD offers you

- A single connection that gives you access to multiple cloud providers.
- A secure connection that bypasses the Internet; protected against DDoS attacks
- Guaranteed SLAs
- Measurable quality
- Stable packet routes

- MultiService Provisioning over existing access port.
- Works on Transfer Price Model

What is MAPS

Microsoft Azure Peering Service

Get an **SLA-backed, DDoS-free direct connection to Microsoft 365**. The service, developed together by DE-CIX and Microsoft, provides highly reliable and optimised Internet connectivity to Microsoft's cloud services. Improve user experience by offering the shortest network path from your premises to the nearest edge PoP in the Microsoft network.

Benefits

Lowest Latency.

Guaranteed high-performance connectivity with the **lowest possible latency**.

DDoS-free

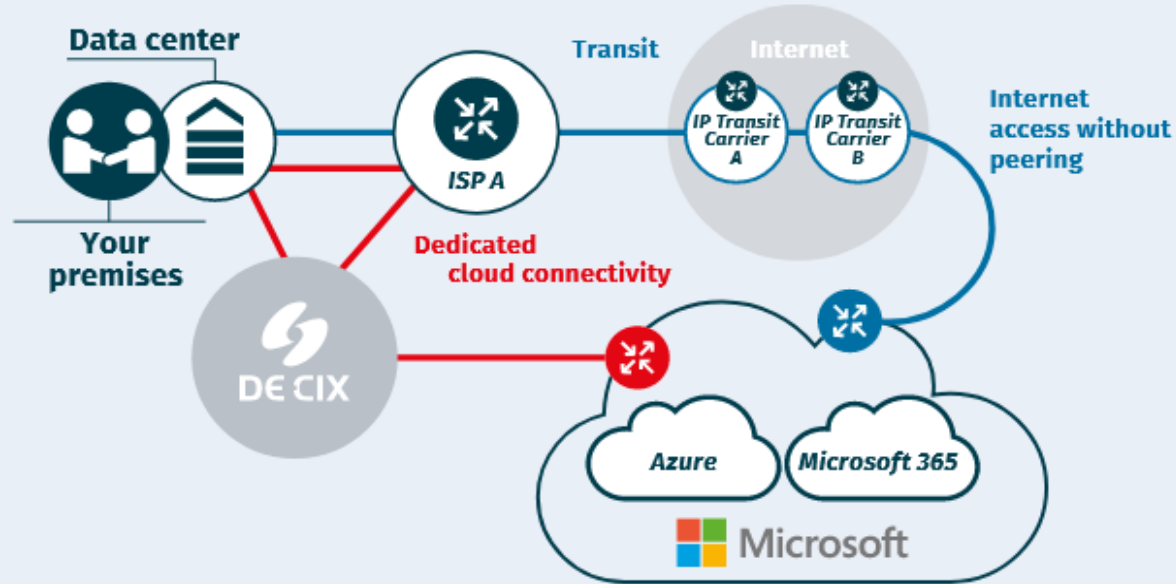
A guaranteed **DDoS-free connection** even for the smallest bandwidths.

SLAs

Binding SLAs and **supported by Microsoft**.

What is “MAPS”

Microsoft Azure Peering Service – the fastest connection to Microsoft



What Can We Learn From DE-CIX Germany and Microsoft Seattle's Successful Collaboration?



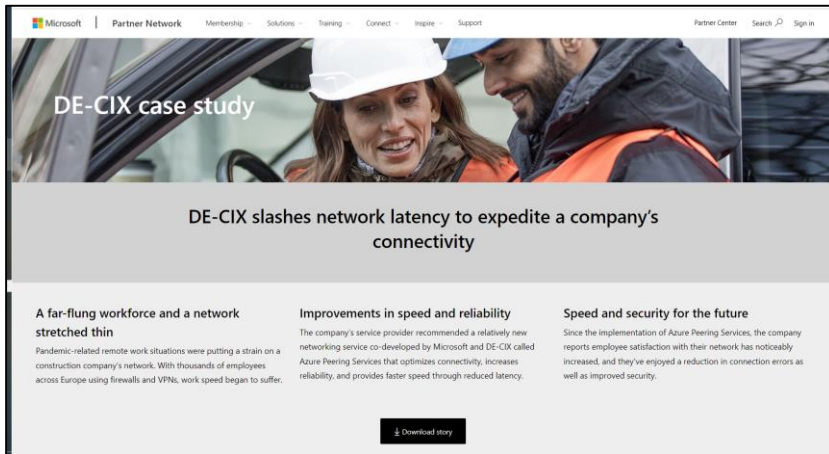
"Our employees on the construction sites, at the office locations and working from home simply have to be able to do their jobs. Technical explanations as to why it doesn't work now don't really help. The most important requirement for IT is that the IT systems run smoothly," comments Dirk Steffen, Head of Corporate IT at HOCHTIEF. "And with the **Microsoft Azure Peering Service**, this now works very well – not only when using Microsoft 365, but also when accessing server resources from Microsoft Azure."

The result

The new "Multi-Cloud-Connect" product option from ecotel was successfully implemented at HOCHTIEF in a short time and includes the **Microsoft Azure Peering Service** for connecting to the Microsoft 365 cloud via the ecotel data center. The previous connection with central breakout and routing over the public Internet was replaced by a dedicated direct connection. This massively increased performance for users. Measurements have shown, for example, a reduction in latency from HOCHTIEF headquarters in Essen to Microsoft Teams within the 365 cloud from 53 down to 5 milliseconds. The significant improvement in runtime is achieved through direct peering, which ecotel established in collaboration with DE-CIX. As a result, the traffic is no longer routed over the public Internet, but over a private pathway within the ecotel backbone. With direct connectivity from the HOCHTIEF headquarters in Essen to the Microsoft cloud platform via the ecotel data center in Frankfurt am Main.

DE-CIX becomes global launch partner for new business class connectivity to Microsoft Services

<https://www.de-cix.net/en/about-de-cix/media/press-releases/de-cix-becomes-global-launch-partner-for-new-business-class-connectivity-to-microsoft-services>



Microsoft | Partner Network | Membership | Solutions | Training | Connect | Inspire | Support | Partner Center | Search | Sign In

DE-CIX case study

DE-CIX slashes network latency to expedite a company's connectivity

A far-flung workforce and a network stretched thin
Pandemic-related remote work situations were putting a strain on a construction company's network. With thousands of employees across Europe using firewalls and VPNs, work speed began to suffer.

Improvements in speed and reliability
The company's service provider recommended a relatively new networking service co-developed by Microsoft and DE-CIX called Azure Peering Services that optimizes connectivity, increases reliability, and provides faster speed through reduced latency.

Speed and security for the future
Since the implementation of Azure Peering Services, the company reports employee satisfaction with their network has noticeably increased, and they've enjoyed a reduction in connection errors as well as improved security.

[Download story](#)

<https://partner.microsoft.com/en-us/case-studies/decix>

Microsoft Teams Goes Down for 6 Hours

By Kurt Mackie | 07/21/2022

Microsoft Teams and other Microsoft 365 apps went down for some users on Wednesday night, lasting maybe six hours.

Update 7/22: Exoprise, a company that offers performance-monitoring software, estimated that the July 20 outage lasted for three hours, per [this blog post](#).

The July 20 outage was brief, according to Microsoft in [this Twitter post](#). The outage occurred because of "a broad-based outage of storage service." The outage affected services with Teams integration, including Office Online and SharePoint.

Microsoft hit by global outage with users unable to access services

Comment

Anugraha Sundaravelu
Wednesday 25 Jan 2023 8:10 am

Share



Teams, Outlook, and Microsoft 365 are affected (Picture)

Microsoft has been hit by an outage leaving users unable to access services like MS Teams, Outlook, and OneDrive.

Microsoft 365 down for thousands of users

Reuters • Last Updated: Jun 05, 2023, 09:05 PM IST

Synopsis
Microsoft services have faced at least three outages since the beginning of the year.



Microsoft Corp's product suite that includes Word and Excel was down for more than 15,000 users on Monday, according to outage tracking website [Downdetector.com](#).

"We're investigating an issue with accessing Outlook on the web," Microsoft tweeted.

The company did not immediately respond to a Reuters request for comment on the outage reports on Microsoft 365.

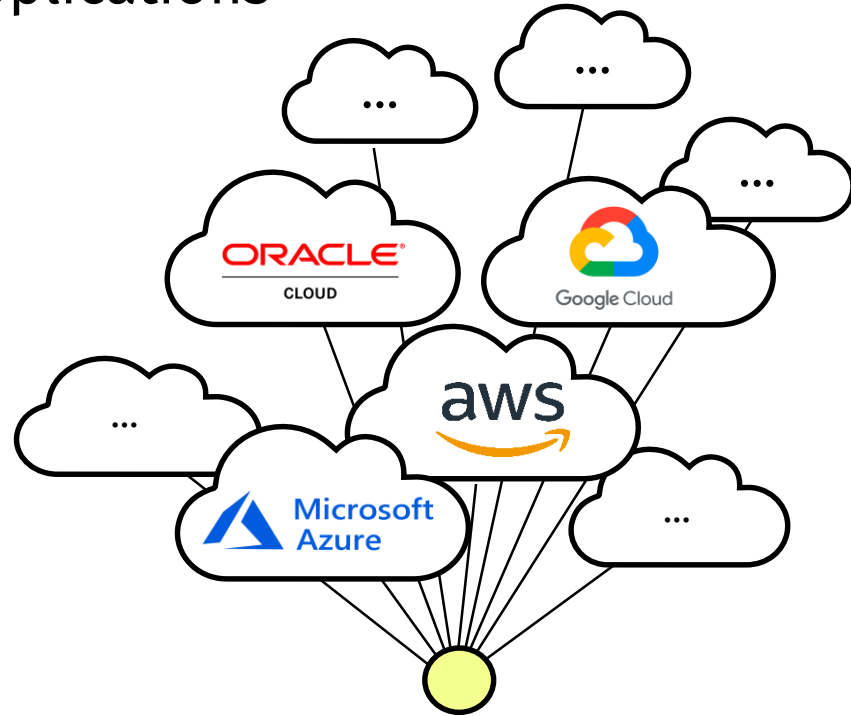
Microsoft services have faced at least three outages since the beginning of the year.

Downdetector tracks outages by collating status reports from several sources including users.

Diversification of the Interconnection Services

Interoperability of Digital Applications

Covers
90%
Indian Market

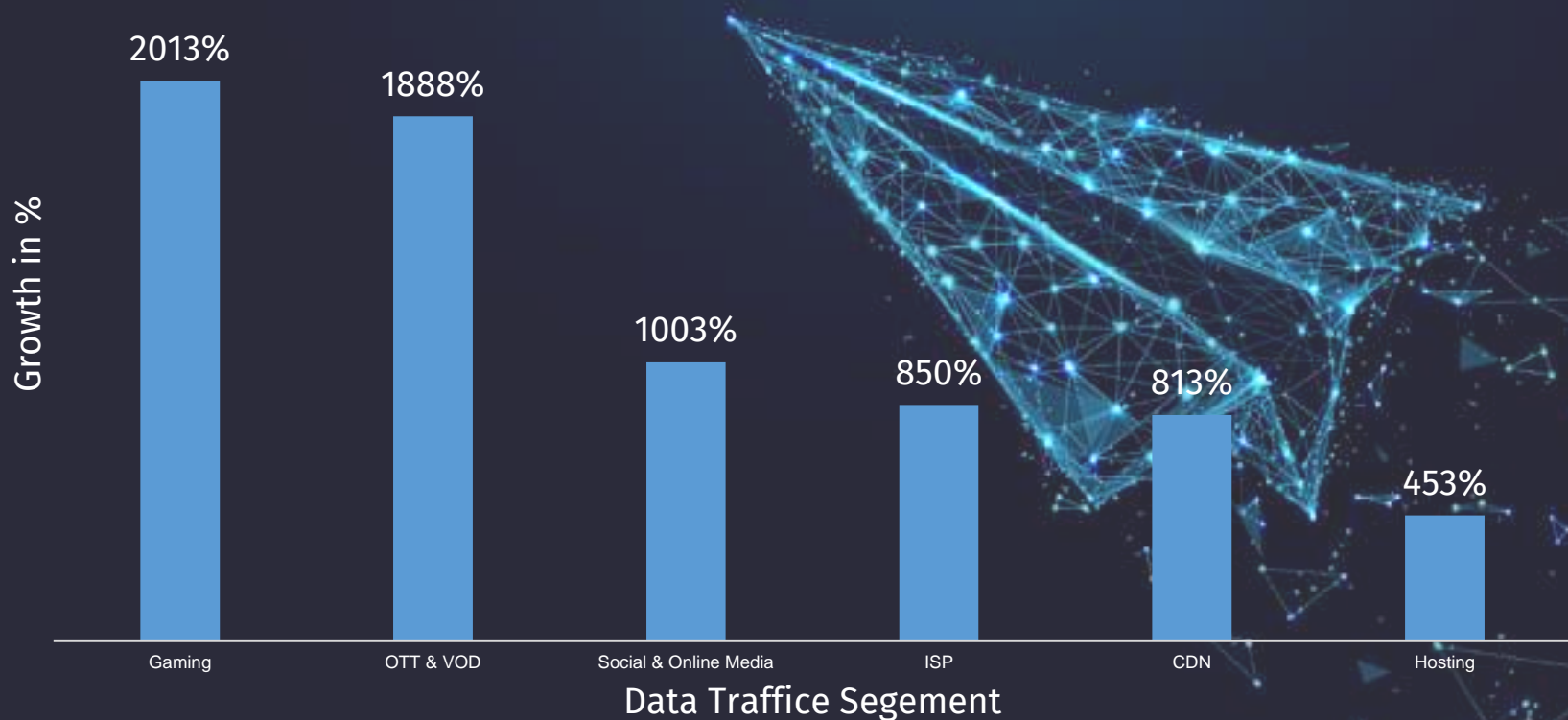


**4 Cloud Service Providers
reached with 1 access**

DE-CIX India Interconnected Networks – Growth in Traffic



DE-CIX India SegmentWise Growth
18 month (Apr'22-Sep'23)



The Next- Big Leap



Interconnected
ISP



Traditional
ISP



India Digital Public Goods

179% Growth



Active Internet Users

FY'22

759 Mn

Expected 2025

900 Mn

5,248 Mn Learning Sessions

61,259 Mn minutes of usage.

DIKSHA
DIGITAL INFRASTRUCTURE FOR KNOWLEDGE SHARING

478 Mn New Bank Accounts in 9yrs. Since launched 2014

Mn = Million

India's Digital Standing

Globally

No.1 Position

YouTube Views, WhatsApp Users, Facebook Users, and Instagram Users.

Globally

No.2 Position

LinkedIn Users

Globally

No.2 Position

Internet Users.

Data Consumption'2015 per month/per user

0.8G

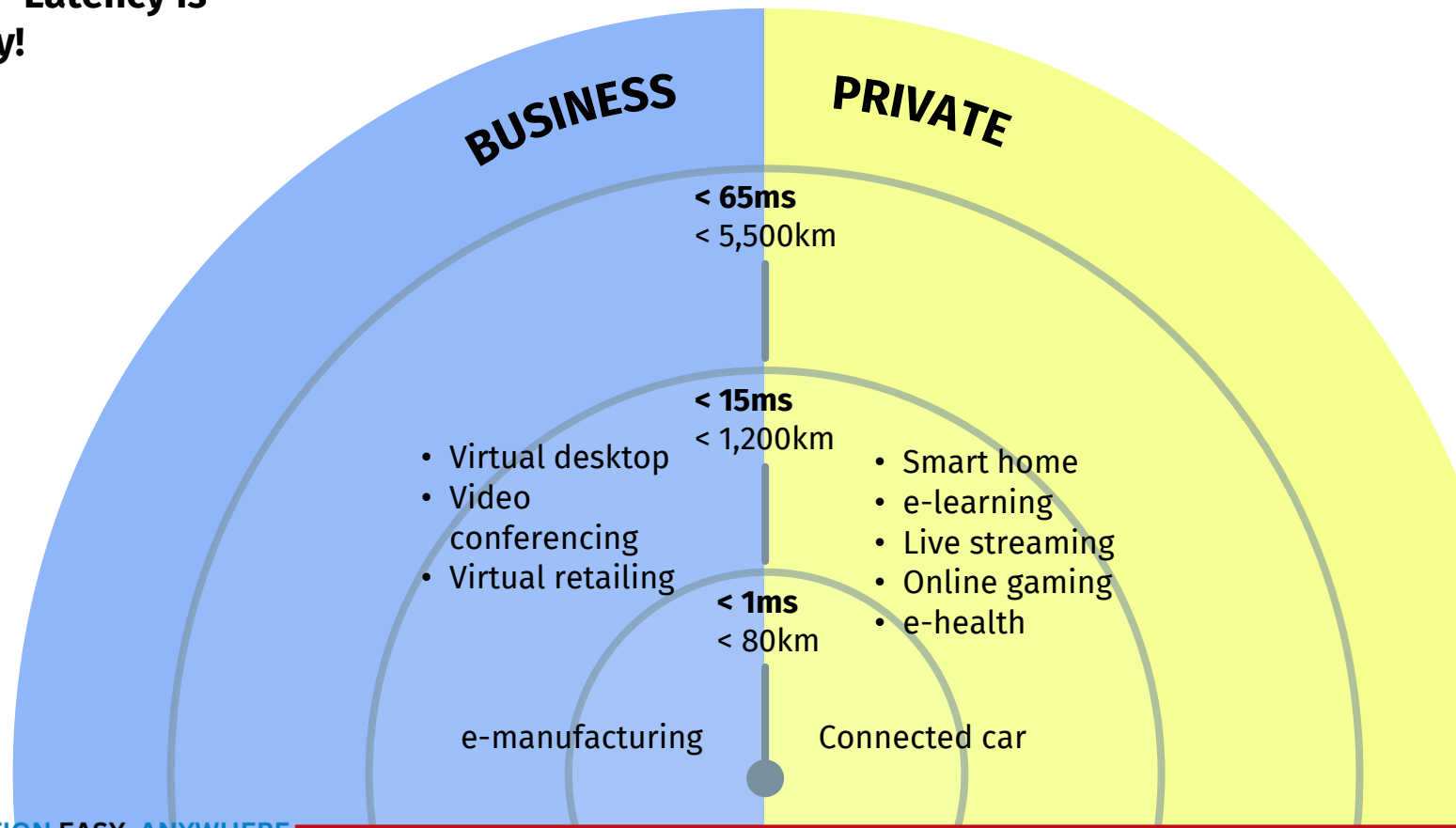
Data Consumption'2022 per month/per user

19.5G

Colossal Growth 2438% In 7years



User experience – Latency is The New Currency!



A light gray world map is centered in the background of the slide.

Latency
is the
new currency

Challenges



High deployment & implementation
CAPEX/Cost.

A graphic consisting of a yellow gear with a grey center, partially obscured by a grey horizontal bar. A blue screwdriver is positioned as if turning the gear.

Traffic Growth / Scalability

A graphic consisting of a yellow gear with a grey center, partially obscured by a grey horizontal bar. A blue screwdriver is positioned as if turning the gear.

Content Delivery

A graphic consisting of a yellow gear with a grey center, partially obscured by a grey horizontal bar. A blue screwdriver is positioned as if turning the gear.

Security Concerns

A graphic consisting of a yellow gear with a grey center, partially obscured by a grey horizontal bar. A blue screwdriver is positioned as if turning the gear.

Consumer Expectations

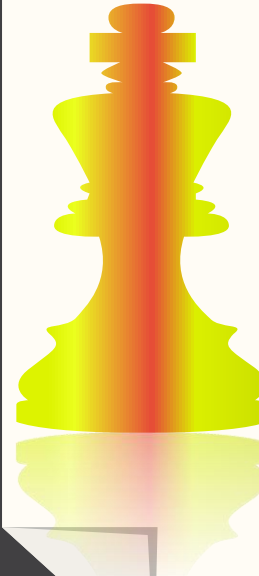
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Regulatory Compliance

A graphic consisting of a yellow gear with a grey center, partially obscured by a grey horizontal bar. A blue screwdriver is positioned as if turning the gear.

Why Interconnection Platform

1. Saving 80-90 percent of their Total Bandwidth Costs.
2. Re-invest a significant portion of their CAPEX savings in tech adoption or New VAS additions
3. DirectCLOUD and MAPS is a good income strategy for ISPs earn additional revenue from Enterprises, SMEs and SMBs



Internet Exchange will assist you in saving money and redeploying your investments to expand your business, where as

Cloud Exchange and Microsoft Azure Peering Service will assist you by creating a delivery model that is profitable in terms of margin, as a result of which as an Exchange we are not only able to assist you in saving money and redeploying but also making money

Global Infrastructure for the Next Generation Internet



Edge –
IoT / 5G / AI



Cloud



LEO Satellite



Augmented &
Virtual Reality



Metaverse



20ms



13ms



0,5ms



New Services and Business models integrating multiple technologies...
all running at the speed of human perception. DE-CIX India Already in discussion with
SpaceX for multiple 100G Ports.

Our Customers



Deutsche Bahn AG



Apple



facebook



PORSCHE



NETFLIX



Google



Intime Netralaya



TATA TELESERVICES LIMITED

verizon

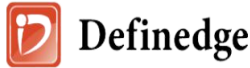


Subspace



DAIMLER TRUCK

GODFREY PHILLIPS
—INDIA LIMITED—



S&P Global



Tencent



WE MAKE INTERCONNECTION EASY. ANYWHERE

Solve your Interconnection Requirements For Tomorrow, Today.

DE-CIX India offers a comprehensive interconnection solution. As a comprehensive solution for Peering, Cloud Connectivity, and Private Network Interconnects with a Single Contract and Complete Flexibility.

CONNECT with Us at

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+91 8067788888/ marketing@de-cix.in

