TATA COMMUNICATIONS

CDN NETWORKS FOR MEDIA DELIVERY AND DISTRIBUTION

TATA COMMUNICATIONS

KEEPING YOUR CONTENT FLOWING

TATA COMMUNICATIONS CDN

Whether you're a Media House or an Enterprise:

- Your content is the most valuable thing your business possesses. However there is little point in creating content if it cannot flow freely
- Its value is only realized when it can be delivered to any user, on any device, in any location, whilst providing a superior experience
- Your CDN should allow your content to flow around the globe at light speed

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YOU WANT YOUR CUSTOMERS TO HAVE AN

UNBEATABLE & SEAMLESS DIGITAL EXPERIENCE

BUT THE WORLD AROUND US IS CHANGING RAPIDLY AND SO IS THE WAY PEOPLE CONSUME CONTENT.

Enterprise 2.0

- VIDEO IS MANDATORY
- WEBSITE IS A GATEWAY TO YOUR BRAND
- BYOD IS NOW THE NORM

Media 2.0

- Any Content, Any Device, Any Location
- Instant Gratification
- Actionable Analytics

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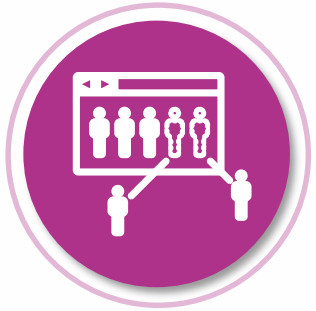
MEDIA CUSTOMER EXPERIENCE

YOUR CUSTOMER IS ENGAGING WITH YOU DIGITALLY



Digital acquisition

Digital engagement

Digital retention

CUSTOMER EXPERIENCE IS CRITICAL

This typically translates to
User Experience

YOU NEED TO KEEP UP WITH THESE

CHANGES WHILE AT THE SAME TIME ENSURE:

1. **Revenue Maximization through:**
   a. Better User Experience
   b. Greater Stickiness
   c. Decreased Abandonment

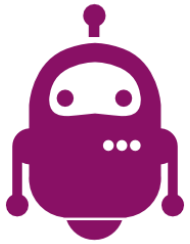
2. **Cost Minimization through**
   a. More efficient infrastructure
   b. Greater Scalability
   c. Improved Origin Server offload

COMPLEXITY IN TECHNOLOGIES AND ENDPOINTS IN PURSUIT OF MAXIMIZING MEDIA EXPERIENCE

Media houses use **many applications** to engage with customers.
Each is increasingly rich and complex

Mobile Networks may be fluctuating and unreliable

The **variety and complexity of devices** to optimize



Security Threats, Content theft , piracy are ever increasing

CREATING, DELIVERING AND
MANAGING THE DIGITAL EXPERIENCE IS NO EASY TASK!
TCL HAS EXTENSIVE CAPABILITIES TO HELP YOU DELIVER
• Any content
• To any device
• Over any connection
• In any location
• No matter how much your traffic spikes
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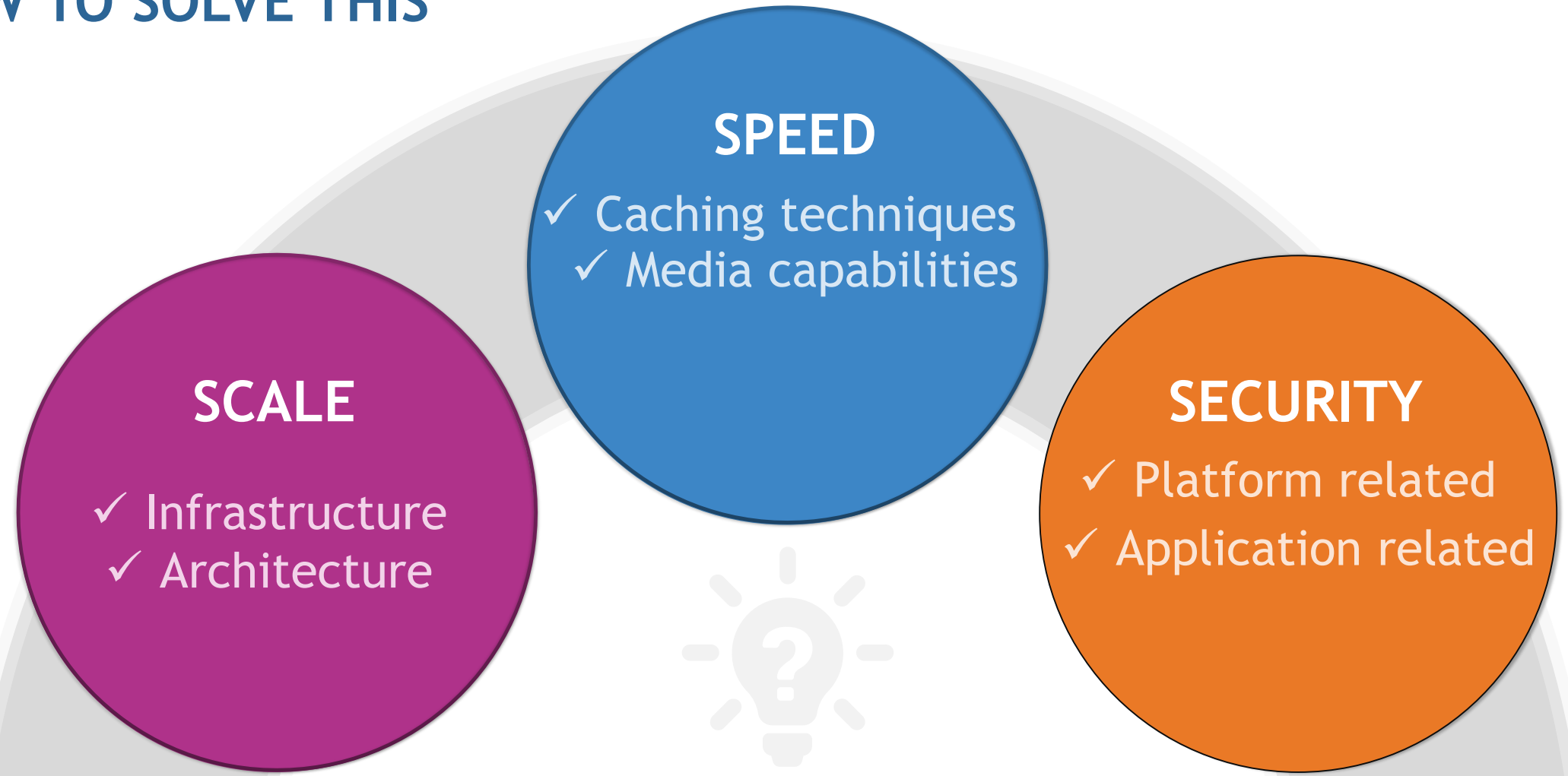
HOW TO SOLVE THIS



INFRASTRUCTURE REQUIREMENTS OF A ROBUST CDN ARCHITECTURE

Super Nodes	A set of super nodes consisting of racks of servers, having HA and redundancy.
Tier 1 ISP	Super nodes riding on a Tier 1 backbone with huge IP capacities
Multi tiered caching	Parent and child tiers to reduce offload
Anycast	Any cast IP leveraging the strength of BGP to resolve closest edges
Integrations	Tightly integrated to security and hosting offerings

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SPEED @ SCALE WITH TATA

TATA CDN

is based on a Tier 1 ISP

is built up of SUPER NODES

has a TIERED ARCHITECTURE

uses ANYCAST

WHY TATA COMMUNICATIONS

We own data centres and colocation centres with over one million sq. ft. of space

Our customers can reach **99.7%** of the global GDP using our network and services

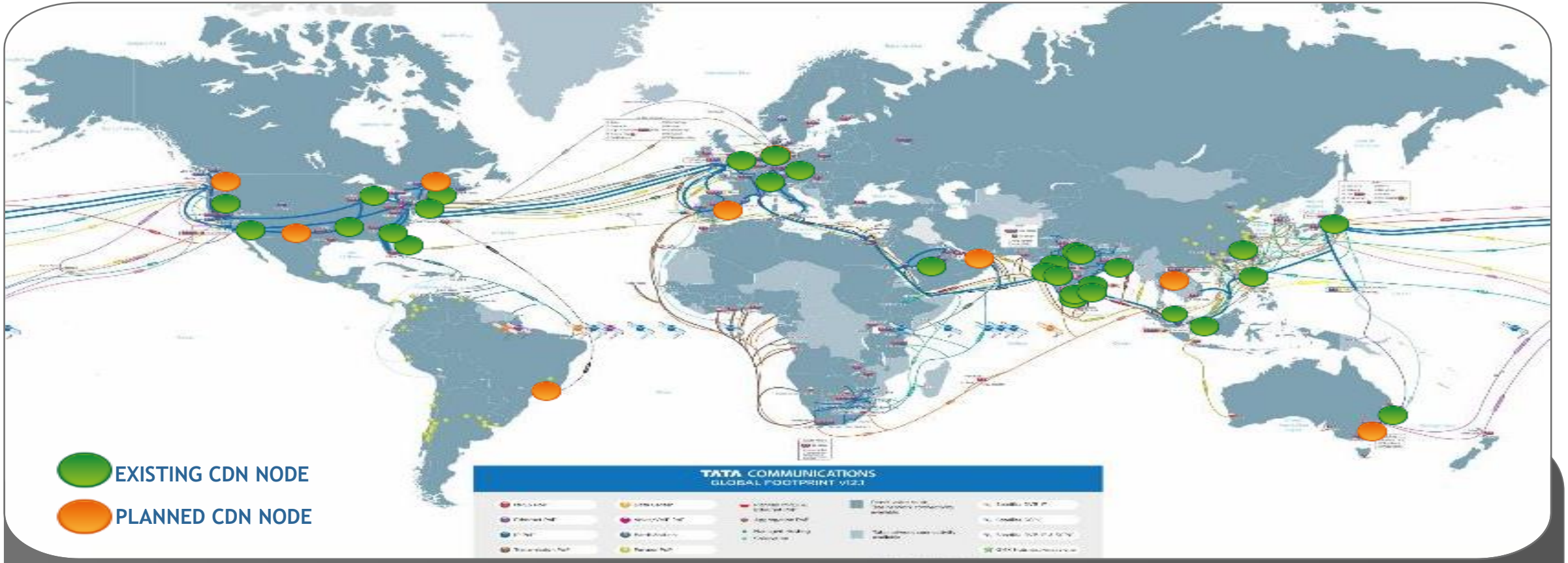
Over **25%** of the world's Internet traffic uses our network

We're the world's **fifth largest** wholesale Internet provider

We've invested **$1.5 bn** Building the only wholly-owned subsea cable network that circles the globe

Close to 100 of the world's mobile network operators use Our network

TCL CDN NETWORK MAP



US, Europe, Middle East, India, APAC

TATA CDN OFFERING

APIs

Live streaming VOD & Downlinking

App delivery and large File downloads

Whole site acceleration

Image optimization and dynamic acceleration

Content security

Multi-screen delivery

Flexible cloud storage

24x7x365 live support

Business intelligence and analytics

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MEDIA OFFERING

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Downlink and Delver

- Downlink feed from World class Teleport Downlink facility
- Do Live Transcoding , transmuxing and delivery
- High Redundancy
- 24X7 Monitoring and Support

Transcoding

- VOD transcoding into various formats
- Multiple Profile based on end user network condition , devices and type of content
- Multiple Protocol supported

DVR & Live Archival

- Seek live content
- Duration is flexible and can be defined as per event
- Archival with scheduling – create VOD from Live

DRM

- Digital Rights Management

DCO – DISTRIBUTED CONTENT ORIGIN

Fast File Upload	• Leveraging Aspera
Enterprise Grade	• Storage Solution from Tata Communications spread across the globe.
Triple Replication	• Automatic Replication Factor x 3 (Original + Two Replicas)
Transfer Protocols	• FTP, SFTP, Rsync, WebDav supported
Multi CDN	• Seamless **Multi CDN integration** possible.

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TATA CDN ARCHITECTURE

SUPER NODES

A set of 30 super nodes each consisting of racks of servers, having HA and redundancy

TIER 1 ISP

Super nodes riding on a Tier 1 backbone with huge IP capacities

MULTI-TIERED CATCHING

Parent and child tiers to reduce offload

ANYCAST

Any cast IP leveraging the strength of bgp to resolve closest edges

INTEGRATIONS

Tightly integrated to security and hosting offerings

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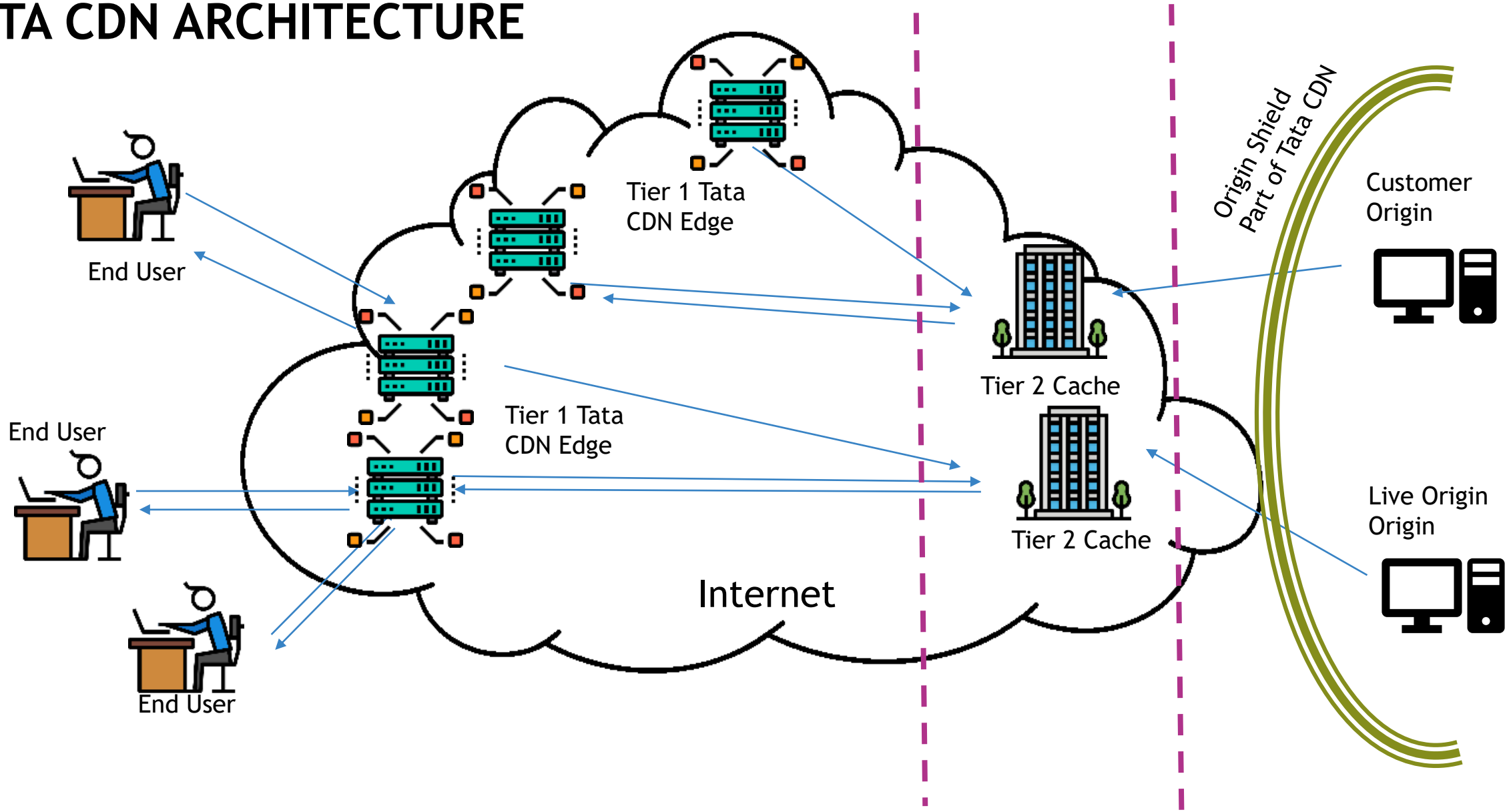
TATA CDN ARCHITECTURE



Thank you

Contact:
abhijeet.pandey@tatacommunications.com

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