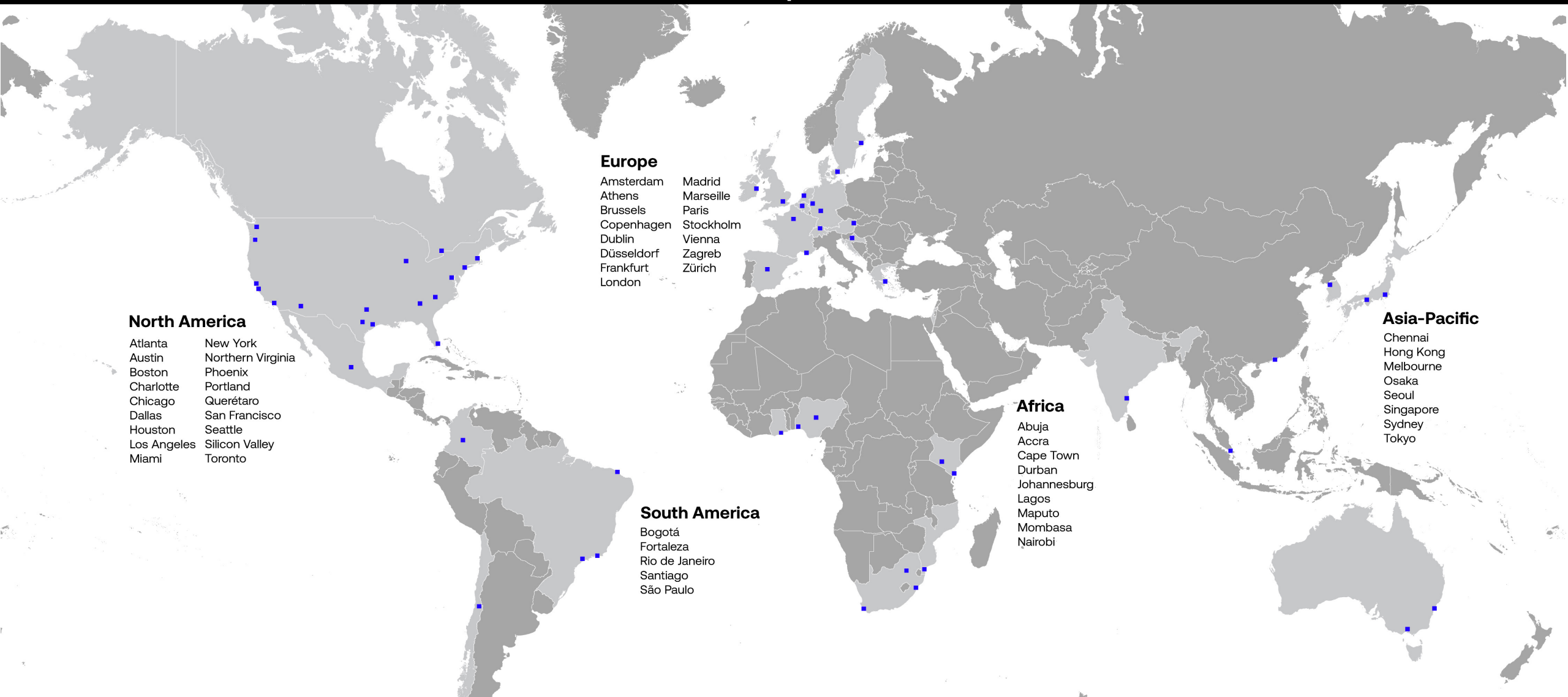


What to expect in the peering landscape

LINX120 16-17 Nov 2023

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Meet our team



Andreas
Polyrakis

Director, Business
Development,
Network Service
Providers



Enrico
Vallicelli

LINX Global Account
Manager



Darren
Chan

Solutions Architect,
Programmes &
Campaigns

The digital landscape is changing

Cloud Computing & CDNs

- Traditionally located at the “core”, to take advantage of infrastructure and economies of scale
- Now being pushed closer to the edge, at regional or city level, to address sovereignty, latency, availability and performance requirements
- Hybrid cloud and multi-cloud
- Affect infrastructure development
 - Terrestrial and subsea cables
 - Data centres and IXPs

Edge Computing

- Distributed processing and storage, for bandwidth-hungry and latency-sensitive applications
- Further pushes cloud & CDN towards the edge
- Need for edge-to-core and edge-to-edge connectivity and distributed peering

AI

- A huge surge in processing and storage requirements is foreseen
- Core + Edge upgrades
- Will stress connectivity, too:
 - Capacity (access, backbone)
 - Optimised, low latency peering
 - Robust

Efficient, distributed, secure and robust peering becomes increasingly important

How are IXPs affected?

The moving edge

- Need for denser IXP coverage, including smaller countries or secondary cities

Competition is growing

- Competition is growing, even in markets with well established players

Stretched peering LANs & Remote Peering

- Disconnected, connected or stretched peering LANs? The paradigm is shifting.
- Remote peering is here to stay

Need for resilience & diversity

- IXPs are critical infrastructure. Officially identified as such by NIS/NIS2!
- Increased SLA requirements
- One per country / market may no longer be enough

Cooperation is growing, too

- to address increased peering needs
- to defend against competition

New Services, extended audience

- Cloud is affecting IXPs: Cloud connectivity & MAPS
- Direct or indirect turn to enterprises
- Ideas for new services

How are IXP members affected?

- IXPs act as catalysts for internet growth, esp. in highly regulated or monopolised markets
- IXP competition improves options, services and pricing
- Denser peering decreases internet costs and improve network quality and resilience

But..

- Too many IXPs in an area might lead to segregation
- Networks might need to join more IXPs
- Routing challenges: same networks through multiple IXPs, remote peering, hot potato routing, etc.

Your tools: Documentation, Sources of Truth, BGP automation, BGP monitoring, Antispoofing/ MANRS, RPKI.



Digital Realty's IXP strategy

- 1 Focus on our core business
- 2 Recognise the value of IXPs
- 3 Collaborate with IXPs
- 4 Maintain neutrality
- 5 Help the Internet grow by fostering IXPs





LINX & Digital Realty

- Excellent, long-standing relationship
- Mutual respect for each other's neutrality
- Digital Realty strongly appreciates the direct and indirect role of LINX in the growth of the Internet in London, the UK and globally

LINX & Digital Realty

1. LINX presence at Digital Realty Data centres

LINX LON1 & LON2

<https://www.peeringdb.com/ix/18>
<https://www.peeringdb.com/ix/321>

Digital Realty Central London Campus (LON1-3, LHR18) & East London Campus (LHR19, LHR20, LHR21)

LINX-NOVA

<https://www.peeringdb.com/ix/777>

Digital Realty Ashburn ACC2, ACC3, ACC4, ACC5, ACC6, ACC7, ACC9

LINX Nairobi

<https://www.peeringdb.com/ix/4231>

icolo.io Nairobi One (NBO1)

2. LINX and Digital Realty cooperate on Cloud Connectivity

3. LINX partners with Digital Realty to expand its colocation services for its customers

Posted On: **19th April 2023** | By **Lynsey Buckingham**



Digital Realty extends partnership with **London Internet Exchange**

[Read more](#)



Digital Realty ([NYSE: DLR](#)), the largest global provider of cloud- and carrier-neutral data center, colocation, and interconnection solutions, and the London Internet Exchange (LINX), today announced an extended partnership that will see Digital Realty's leading colocation services made available to LINX's expanding membership community.

As a reseller of Digital Realty's data center services, LINX – a mutually governed Internet Exchange Point (IXP) – provides its members with access to a wide range of colocation and connectivity solutions, including direct connections to major cloud providers such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud. As a result, customers will benefit from low latency, secure access to some of the world's leading cloud providers, helping to reduce costs and improving efficiency.



Questions?



Scan to contact us





Thank you!

Andreas Polyrakis

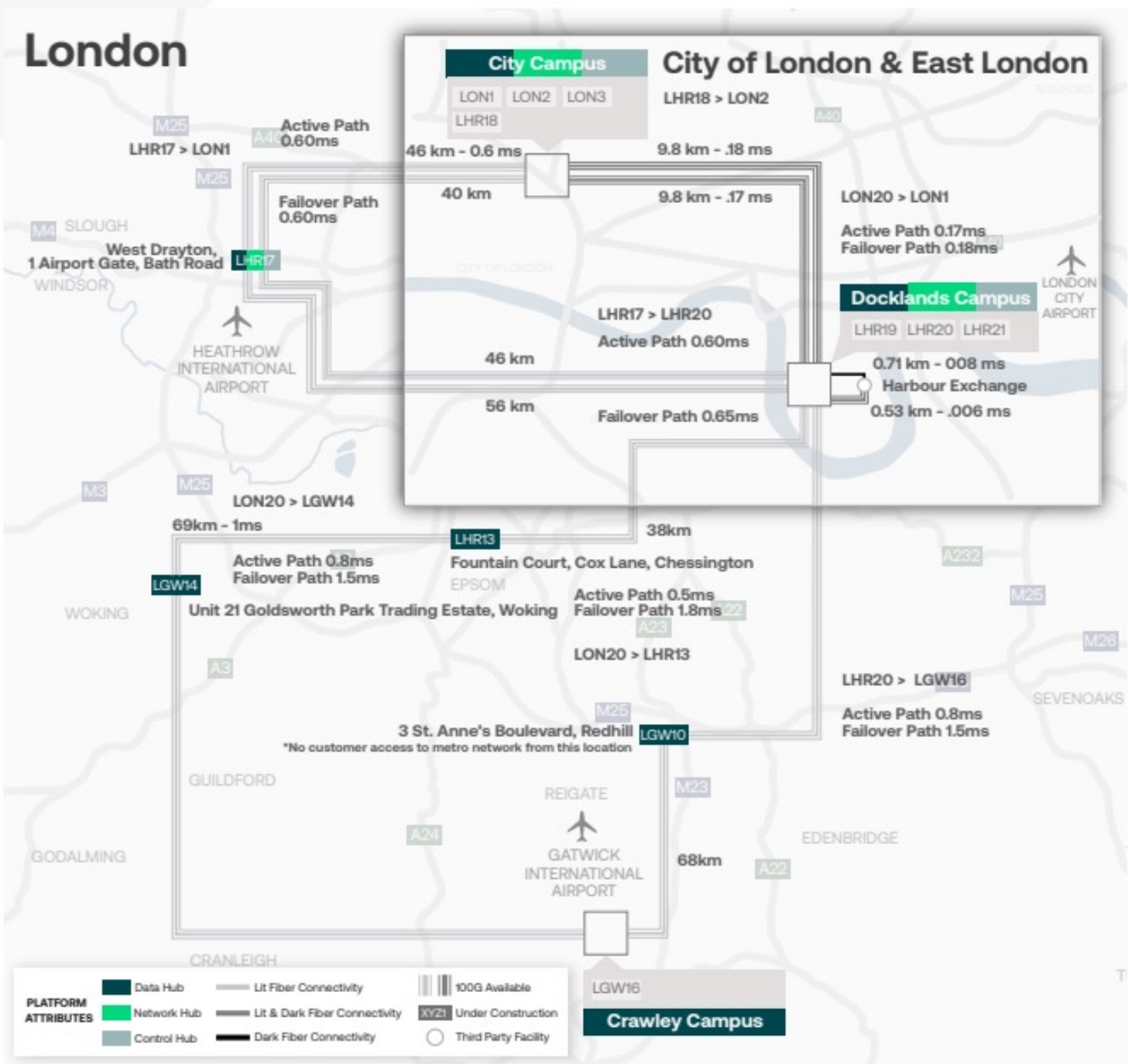
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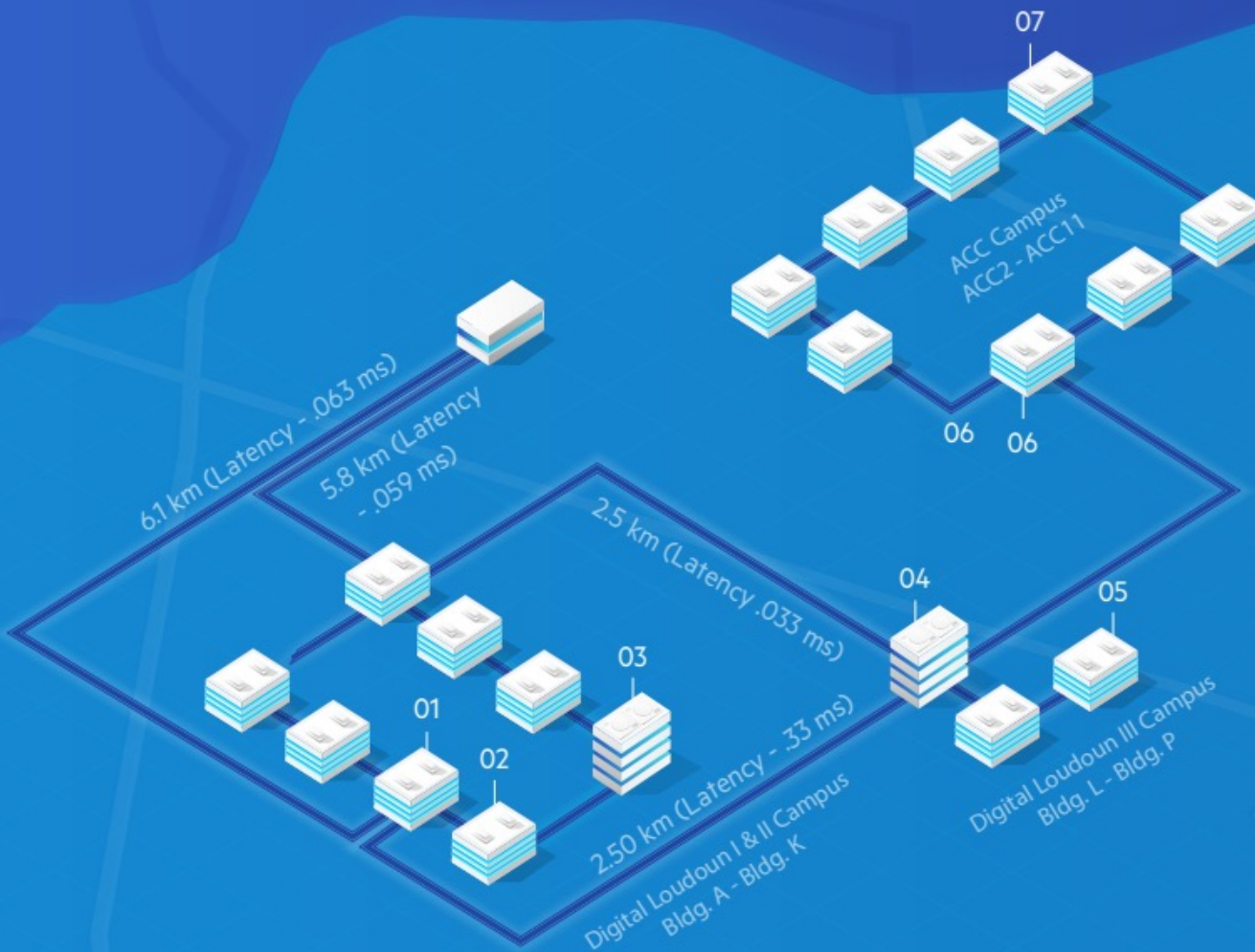
Digital Realty London Metro Map



Digital Realty Ashburn Metro Map



01	02	03	
43940 Digital Loudoun Plaza (Bldg. G) Ashburn, VA	44060 Digital Loudoun Plaza (Bldg. K) Ashburn, VA	44100 Digital Loudoun Plaza (Bldg. J) Ashburn, VA	
04	05	06	07
44274 Round Table Plaza (Bldg. L) Ashburn, VA	44751 Round Table Plaza (Bldg. P) Ashburn, VA	44521 Hastings Drive (ACC5) Ashburn, VA	44480 Hastings Drive (ACC4) Ashburn, VA



Ashburn Connected Campus

Customer Ecosystem

Segment	Unique Customers
Cloud	25+
Content	15+
Enterprise	10+
Financial	15+
Information Technology	15+
Network	25+
Total	205+

Connectivity

Blended Bandwidth <ul style="list-style-type: none">IP Bandwidth Connect	Direct Cloud Access <ul style="list-style-type: none">AWS Direct ConnectIBM Direct LinkOracle FastConnect
Multi Cloud Access <ul style="list-style-type: none">Service Exchange	Internet Exchange Access <ul style="list-style-type: none">DRIXLINXMega-IX

Capabilities

Cages, Cabinets & Private Suites	Lit Connectivity
Private Suites	Dark Fiber Connectivity
Cages & Cabinets	Lit & Dark Connectivity
Non-Digital Realty Facility	

est. RTD = estimated Round Trip Delay