

The Growing Interconnect Ecosystem in Africa

Oluwasayo Oshadami

Head, Technical Solutions and Managed Networks

AfPIF 2023

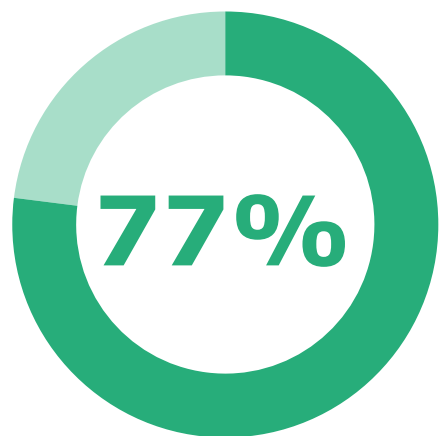
MainOne
An Equinix Company

Looking back – Africa a decade ago



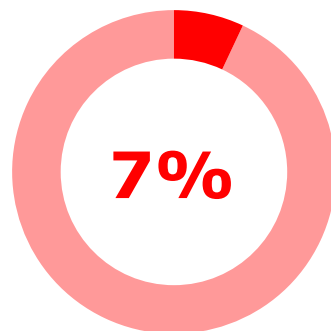
41%

of the world's households were connected to the Internet

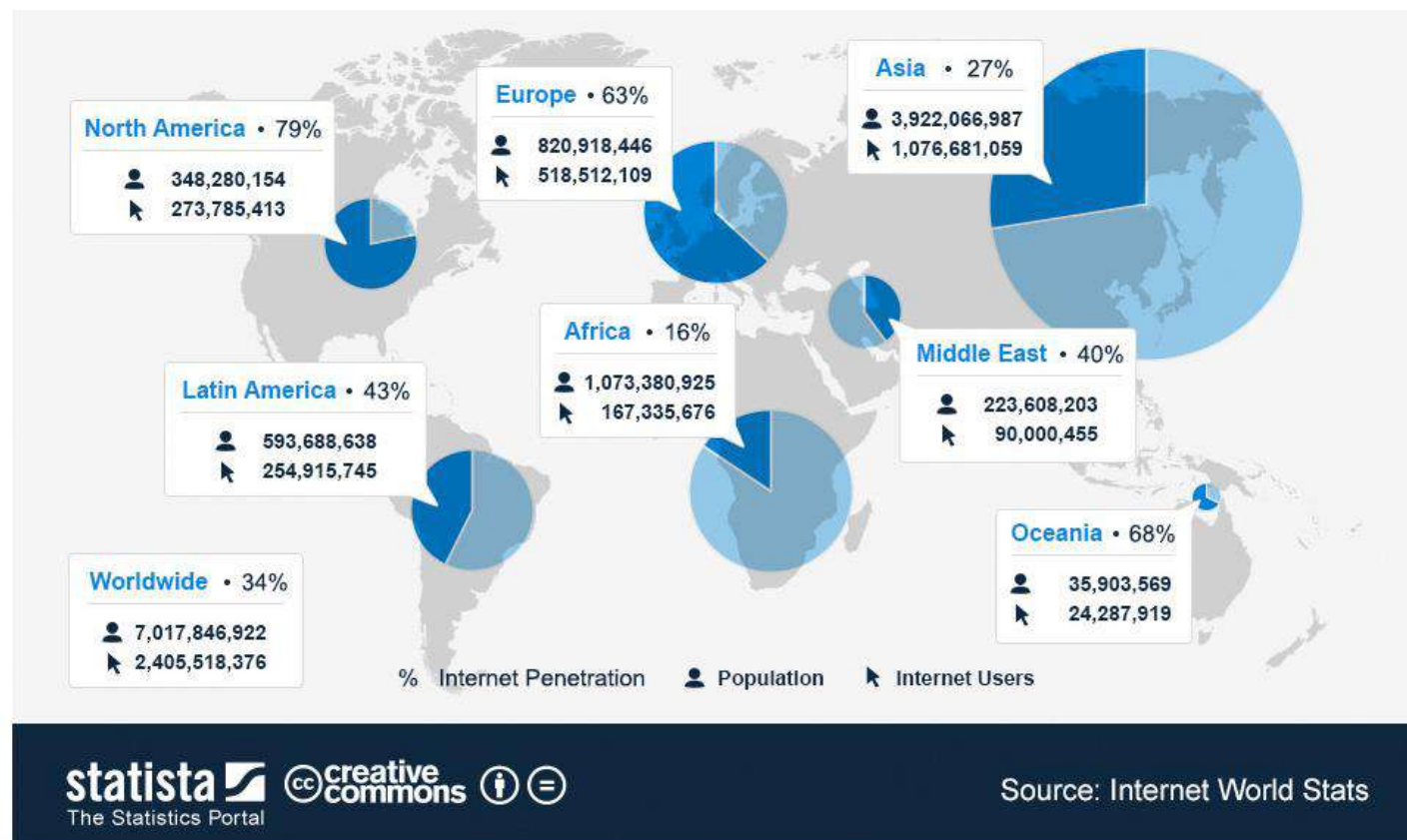


Level of household internet penetration in Europe (2013)

Level of household internet penetration in Africa (2013)



Source: Mobile economy sub-Saharan Africa 2023, statista, ITU world



Growth in Africa from a decade ago



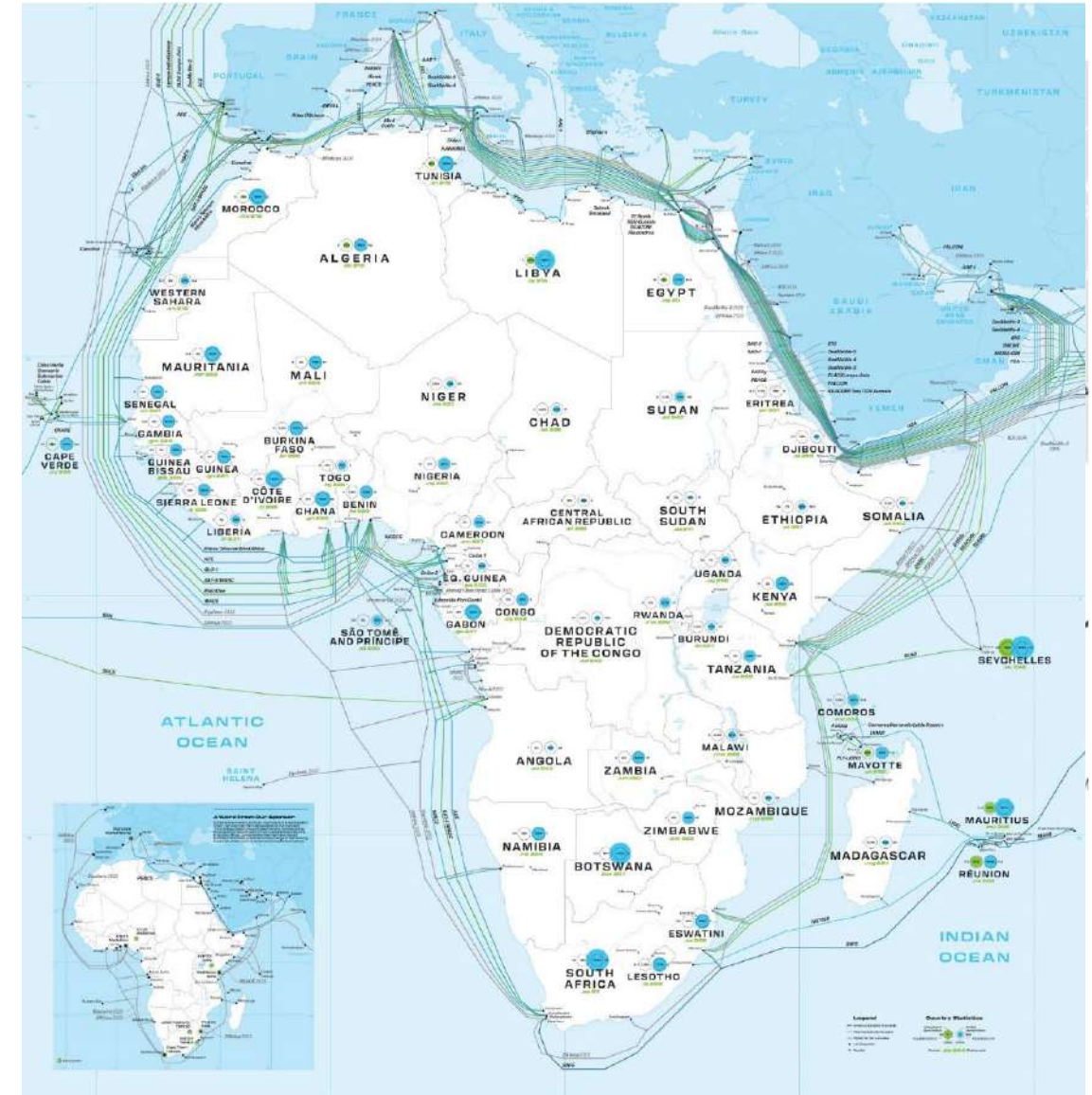
Submarine Cable Connectivity – Africa today

Among the 54 African countries recognized by United Nations, there are 38 countries that have seashore.

Out of these 38 countries that have seashore, **37 countries** have at least one submarine cable landing

Africa's total inbound
international Internet
bandwidth
(2022)

**26.9
Tbps**



Source: stats.afrinic.net, [internetworldstats](https://internetworldstats.com), NAPAfrica, Regional Internet Registries Statistics

Interconnection and Terrestrial Reach

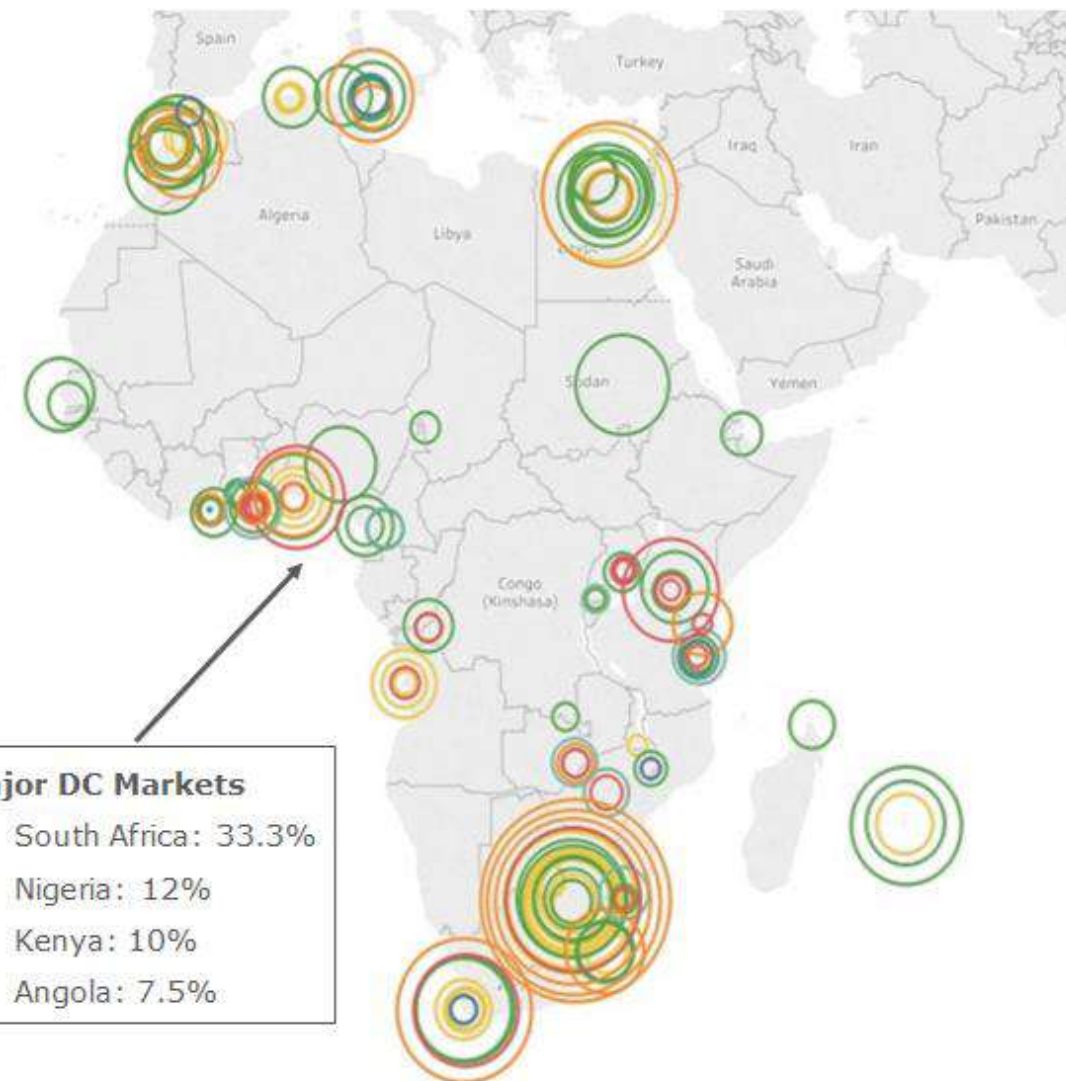
| | No. of Data Centers | DC Size (MW) | Average MW per DC |
|----------------------|---------------------|--------------|-------------------|
| South Africa | 25 | 196 | 7.8 |
| Rest of South Africa | 31 | 15 | 0.5 |
| North Africa | 36 | 48 | 1.3 |
| East Africa | 32 | 21 | 0.7 |
| West Africa | 34 | 70 | 2.1 |

In **South Africa**, the average data centre size (as of the end of 2022) was 7.8 Megawatts.

This is more than three-times (3x) the size of the next largest region – **West Africa**.

There is a substantial difference in scale between South Africa and the other regions based on current installed base.

The gap in scale is projected to narrow within the next decade as more wholesale capacity is being planned across all regions.



Interconnection and Terrestrial Reach



South Africa Region



Use Case: South Africa



Population

60 million



NAPAFRICA (JB, CT & DB)

500+

ASN

Connected networks

1,540+

Connected Ports

3000
Gbps

Peak traffic

West Africa Region



Use Case: Nigeria



Population

221 million



Internet Exchange Point of Nigeria

122+

ASN

Connected networks

188

Connected Ports

+500
Gbps

Peak traffic

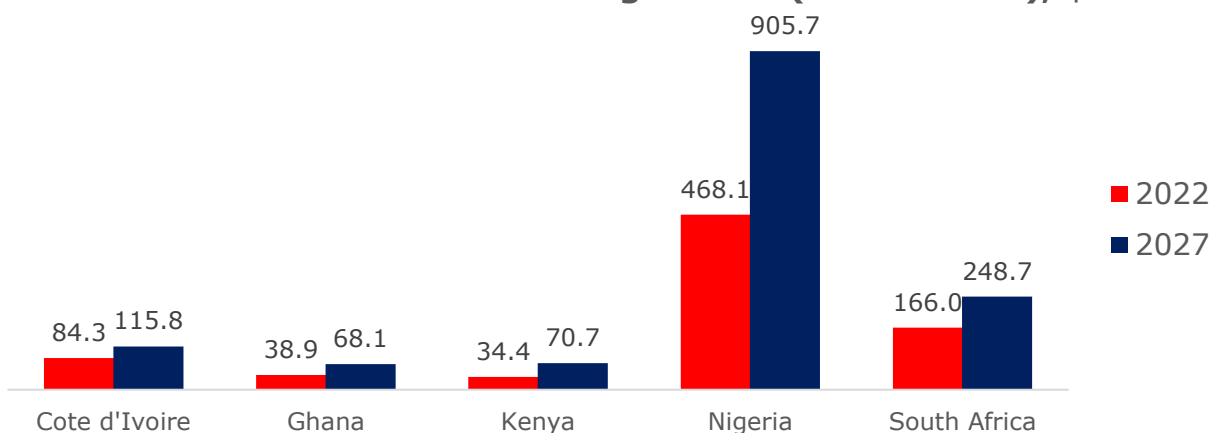
Why Africa? Interconnection Drivers



Content Demand

- Public peering capacity has grown at a CAGR of 67% since 2017 across major markets in Africa.
- Top CDNs and content origins (Akamai, Netflix, Fastly, Edge, etc) will also increasingly roll out in new regions or scale up existing deployments to meet demand for content.
- Emergence of new local African content producers and distributors (Iroko TV, Filmhouse, Nollywood etc.)

Forecasted Video Streaming Market (2022 - 2027), \$m



Source: Statista, Africa News, Peering DB, World Bank, GSMA



Cloud Entry

- AWS, Google and Microsoft have announced or rolled out regions in African markets
- Multiple cloud players have begun peering and leasing small amounts of space in select African markets
- As the African market continues to evolve, deployment size and peering capacities would increase

| | Public Peering (Tbps) | Peering Growth ('17 – '22) | Cloud players (Azs) | Cloud On-Ramps |
|--------------|-----------------------|----------------------------|---------------------|----------------|
| Accra | 0.16 | 177% | 0 | 1 |
| Nairobi | 0.68 | 77% | 1 | 0 |
| Lagos | 1.17 | 72% | 2 | 0 |
| Cape Town | 6.64 | 71% | 3 | 2 |
| Johannesburg | 17.57 | 64% | 2 | 3 |
| Cairo | 0.14 | 82% | 0 | 0 |

Growth Forecast – West Africa

The African fiber market has witnessed significant infrastructure build over the past decade.

25

since 2010

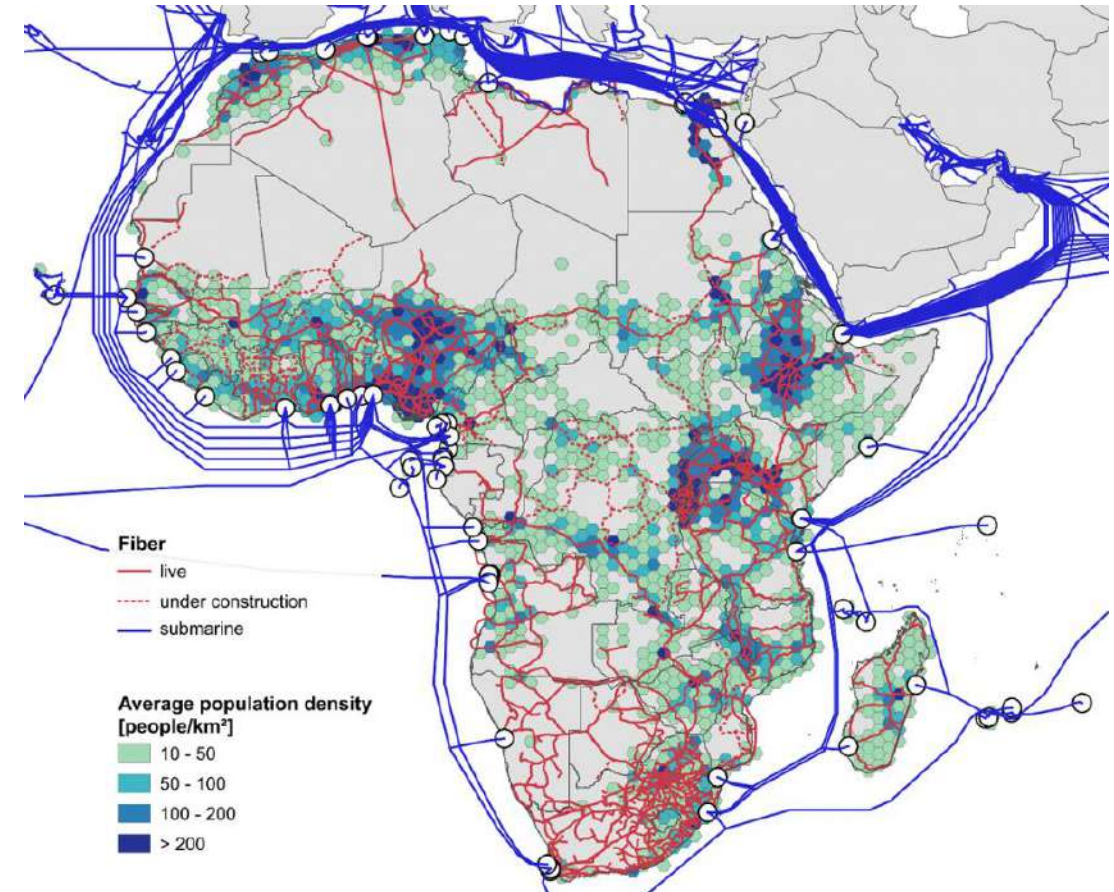
Africa-focused
Submarine cables

More than **500 Tbps** of potential international capacity brought in

Enabling growth in the region requires:

- **Investments in terrestrial fiber infrastructure**
- **Policies that foster intra-regional interconnections**
- **Data Center and Regional IXP investments**

Source: CBRA Africa Market Report 2022



Growth Forecast – West Africa

There is a substantial difference between South Africa and other regions based on current infrastructure.

Between 2022 – 2027, there is a forecasted increase in wholesale capacity across other regions

The introduction of new wholesale data centers in **West Africa** are substantially responsible for the forecasted increase in capacity, growing to over 1GW.

The regions have advertised powers ranging from **25MW** to **64MW** or more per wholesale data center.



Source: CBRA Africa Market Report 2022



Hyperscale Demand

It is only a matter of time before the large hyperscale users invest in new cloud regions outside South Africa – West and East Africa.



Regulation and data sovereignty

Government interventions will spur the use of domestic cloud in the larger data center markets in West Africa.



Acceptance of Latency

Cloud regions would be set up in regions with better latency for connections between Africa and Europe.

Equinix IBX Colocation & Interconnection

1,000

On-net customers

7,000 KM

Subsea Cable

+1,200 KM

Metro Fibre Network

Peering

AMS-IX, Lagos

Peering

IXPN, Lagos

Peering

LINX, London

Peering

AMS-IX, Amsterdam

Peering

DE-CIX, Lisbon

Peering

GIX Ghana and
CIVIX, CIV



**MainOne Terrestrial
& Subsea Network**

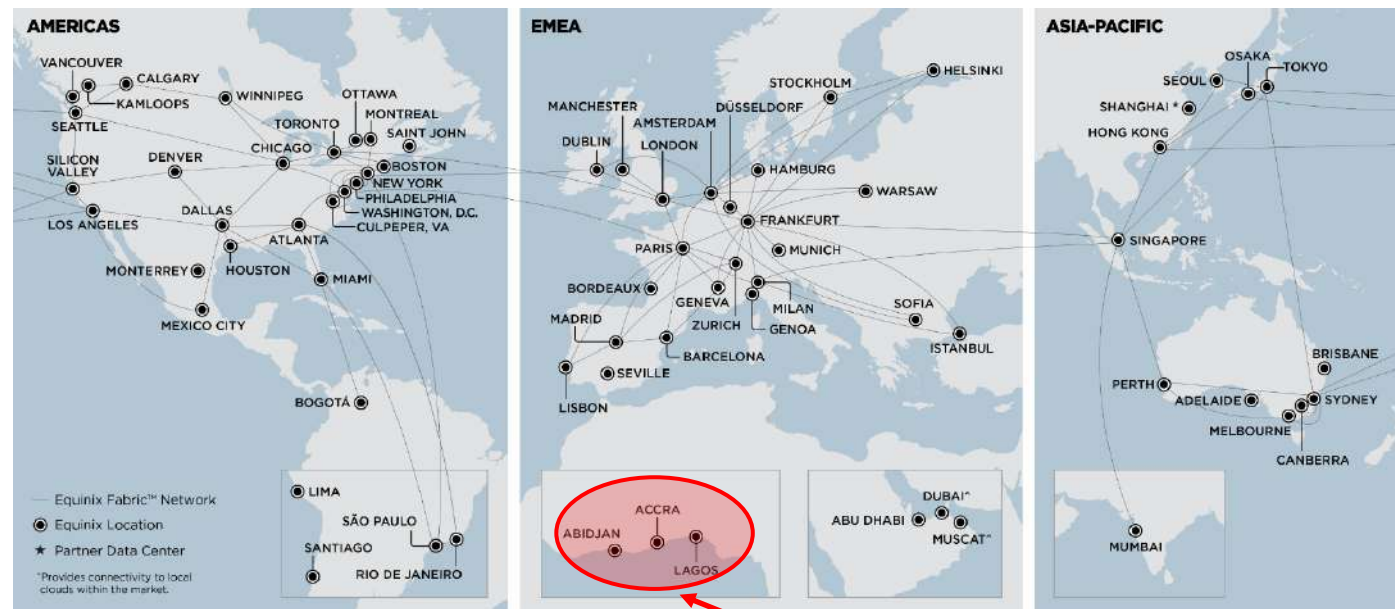
10,000
Customers

240+
Data Centers

71
Metros

32
Countries

>99.9999%
Uptime Record



LG1, LG2, LG3, AP1, AC1



49+
Network Services



9+
Content & Media



2+
Cloud Services



25+
Financial Services



20+
Enterprises

Thank you

Oluwasayo Oshadami

Email: Oluwasayo.oshadami@mainone.net



www.mainone.net



Not for further distribution