

Keep Expanding Microsoft Azure Peering Service

Internet access to cloud complemented by Liquid

Due to various reasons there is an increasing demand from customers to access Microsoft Cloud using public IP addresses and Internet. Some of the use cases where this trend is more prevalent are;

- Microsoft SaaS e.g. Microsoft 365
- Remote site access to Azure. The number of eyeballs is less in these sites or it's cost prohibitive to use private WAN. The preferred way is to create an IPsec VPN tunnel over the Internet to access Azure.
- Branch offices using internet to connect to the cloud.

Ideal Connectivity to Microsoft over the Internet

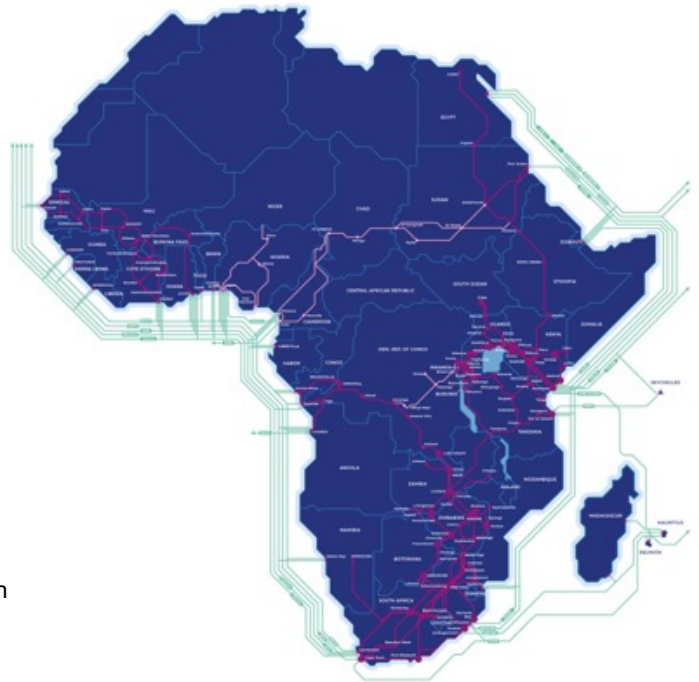
The primary goal when connecting to Microsoft Cloud should be to minimize latency by reducing the round-trip time (RTT) from a user site to the Microsoft Global Network, which is Microsoft's public network backbone that interconnects all of Microsoft's datacenters and multiple cloud application entry points.

Microsoft Global Network has edge locations around the world where it can connect to an end-user via its service provider (SP). Liquid Intelligent Technologies (LIT) is a MAPS partner of Microsoft and is the most peered in Africa.

LIT and Microsoft peering locations are:

- South Africa, Gauteng
- South Africa, Cape Town
- Kenya, Nairobi
- Nigeria, Lagos

Microsoft Global Network will do the optimal routing of end-user's traffic to DCs where their application is located. Further, Microsoft SaaS application such as O365 maintains a highly distributed service front door that are scaled out across more than one hundred locations worldwide. The best user experience is achieved by allowing the end-user to connect to Microsoft Cloud at an edge location which is the closest to the end-user.



What Is Microsoft Azure Peering Service?

Microsoft Azure Peering Service (MAPS) is a partnership program with key service providers, like Liquid, to provide best-in-class public Internet connectivity to their enterprise users. Liquid Intelligent Technologies who is part of the program will have direct, highly available, geo-redundant connections and optimized routing to Microsoft. MAPS is an addition to the Microsoft connectivity portfolio:

- ExpressRoute for private L2 or L3 IPVPN connectivity to IaaS or PaaS resources (support for private IP space)
- IPSEC over the Internet for VPN connectivity to the cloud (Up to 20Gbps)
- SDWAN connectivity with up to 1000 tunnels to Azure via Azure Virtual WAN
- MAPS for best-in-class enterprise access to the cloud over the public Internet. The target segment will be SaaS connectivity, SD-WAN customers willing to do internet breakout at the branch and any customers having a dual strategy MPLS and enterprise-grade Internet.

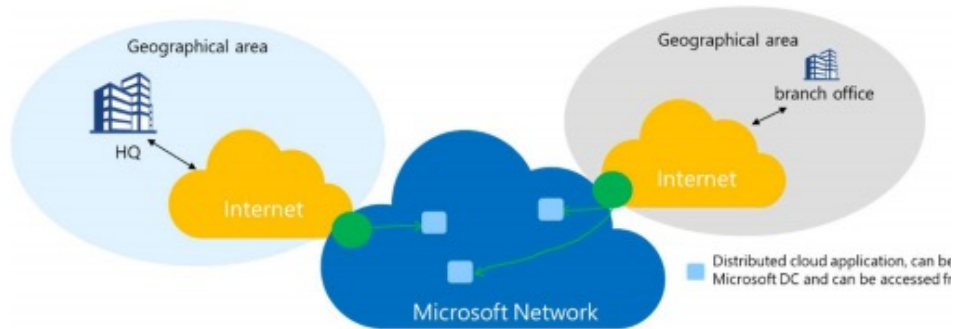
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LIQUID
CLOUD

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Distributed connectivity to Microsoft Cloud



A customer has two sites at two different locations. For the most optimal experience the customer would connect their sites to Microsoft Global Network via their SP at the closet Microsoft edge location to each site.

Features

- Best Internet routing to Microsoft Cloud Services to achieve optimal performance
- Traffic insight such as latency, throughput, packet loss for last mile, mid mile and first mile connectivity
- Route analytics and statistics. Events for route leak/hijack detection or non-optimal routing
- SLA on network-availability and packet-delivery on its network (TBD)

By selecting MAPS, an end-user is selecting a provider like Liquid which is well connected to Microsoft through high capacity connections. These high capacity connections are optimized for high throughput, better latency and at an edge location that is close to the user. Moreover, this high capacity connections are engineered for High Availability (HA) which is necessary for SLA.

FAQs

Who are the target customers?

Enterprises who connect to Microsoft Cloud using Internet as transport.

How can customers enable MAPS?

1. Customer does pre-sales research and selects a carrier on business and operational needs
2. Customer buys/enables the right service from Liquid
3. Customer notifies Microsoft of carrier selection and signs up for MAPS
4. Microsoft and Liquid work together to turn on end-to-end service for the customer

Behind the scenes

Liquid will provide

- Connectivity to Microsoft Cloud at a location nearest to user. Liquid will route user traffic to Microsoft edge closest to user. Similarly, on traffic towards the user, Microsoft will route traffic (using BGP tag) to the edge location closest to the user and Liquid will deliver the traffic to the user.
- Liquid will maintain high available (port redundant), high throughput (PNI as opposed to public exchange peering) geo-redundant connectivity with Microsoft Global Network.

Microsoft will provide

- Traffic prioritization over its global network
- Traffic insights and route analytics

Customer can select a globally preferred ISP. Whenever that ISP is qualified as a MAPS partner for a given geographical region, Microsoft and ISP will automatically turn MAPS service for the customer sites in that region.

Additionally, customer can overwrite and optimize MAPS ISP per geographical region.

Customer can sign up for MAPS using two or more ISP in any geographical region. In such cases customer will buy internet-service from these ISPs.



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FAQs

From customer perspective, what is the benefit for buying Microsoft MAPS from Liquid?

The number one, benefit for customer is that they are assured that they are accessing Microsoft using a carrier which has well established connectivity with Microsoft and the carrier is following Microsoft connectivity guidelines. Many times customer request Microsoft to recommend carriers, or in some cases they request to peer directly. Peering directly has risk to both customer network and to Microsoft. By choosing a MAPS partner they are assured that they are choosing market leaders in their region.

What is the billing model?

Liquid billing - Liquid bills customer for their internet connectivity product and service

Microsoft

- Microsoft bills customer for their products and service
- Networking data transfer bill
- There is no networking data transfer bill for Microsoft SaaS (e.g. O365)

Liquid already offers SLA and enterprise grade Internet – how is this offering different?

Liquid will offer SLA and enterprise grade Internet on their part of the network. In MAPS, Microsoft will offer SLA offer traffic on Microsoft part of the network. By selecting MAPS customer will get end-to-end SLA. SLA from their site to Microsoft edge on ISP network can be covered by the ISP. SLA in Microsoft Global Network from Microsoft edge to end user's application is now covered by Microsoft.

What sort of SLA Microsoft is planning to offer?

- Network availability – 99.95%
 - Packet delivery guarantee – 99.9%
- Service credits can be used towards Azure Internet egress data transfer.

When is Microsoft planning to offer SLA?

Microsoft plans to offer SLA post GA.

Can a customer select unique ISP for their sites per geographical region?

Yes, customer can do so. They can select the ISP per region that suits their business and operational needs.

Can a customer have more than one ISP as part of MAPS connectivity for a site?

Yes. The customer must buy internet connectivity from these ISPs.