

3 Drawbacks Of Connecting To Microsoft Cloud Services Via The Public Internet And How To Overcome Them



Today, Microsoft's suite of cloud services, such as Microsoft 365, Microsoft Dynamics and Microsoft Azure, is the go-to productivity and collaboration software provider, with over a million companies using them worldwide.

Connecting to Microsoft's cloud services via the public internet is a popular choice for enterprises due to its simplicity and cost-efficiency. However, relying solely on the public internet comes with its drawbacks and risks.

In this ebook, we share the key risks to consider, and how to overcome them with [Microsoft Azure Peering Service \(MAPS\)](#), a direct and robust peering path to Microsoft's cloud services.



Microsoft



Microsoft



epsilon
a kt company

linx



The Microsoft Cloud Boom

Almost

70%

of organisation worldwide have used Microsoft Azure for their cloud services

31%

revenue growth of Microsoft Azure in Q1'23, and projected to continue growing

1M+

companies worldwide used Microsoft 365

Source: SignHouse, Statista

Key Drawbacks of **Public Internet** Connectivity

Microsoft's suite of cloud services are optimised to be used over the internet due to Microsoft's globally distributed architecture. Nevertheless, there are still 3 common challenges faced by all enterprises, resulting in the search for alternative solutions.



Performance

High latency and best-effort internet connectivity often result in inconsistent, poor user experience, and limits an organisation's productivity.



Security

The public internet is not secure, and enterprises can fall victim to data breaches, DDoS attacks, man-in-the-middle attacks and a range of other cyber threats.



Availability

There are no guarantees or end-to-end Service Level Agreements (SLAs). This challenges enterprises to ensure business continuity and uptime.



An unreliable network can impact your business.

\$5,600 per minute
is the average cost of network
downtime for a business

Source: Gartner

Options for Connecting to Microsoft Services

Reducing your reliance on the public internet is the most significant step to take towards improving your latency and performance. But, what should you switch to? Here are some options:

- 1 Direct Connectivity via ExpressRoute** – ExpressRoute Direct enables users to connect privately and directly into the Microsoft global network at peering locations around the world.
- 2 Peering at an Internet Exchange Point (IXP)** – Organisations can peer with Microsoft's global network (AS8075) and exchange internet traffic with world-leading IXPs.
- 3 Microsoft Azure Peering Service (MAPS)** – MAPS is an IP-based service that uses the public internet to offer optimal and reliable routing to the Microsoft cloud over the public network.

Note: This solution is not designed to fulfil the requirement of a geographically dispersed design that is recommended for cloud solutions like Microsoft 365. This hub-and-spoke design results in end users' traffic being centralised into a single egress.

Note: This solution is only good for very large enterprises that have the traffic volumes necessary to fulfill the minimum levels required.

Note: This solution is great for enterprises looking for internet-first access to the cloud, but still requires robust, reliable, and high-performing internet connectivity. Organizations operating in heavily regulated industries like finance or healthcare, along with those that prioritize security and depend heavily on Microsoft's SaaS applications, may find MAPS to be an attractive solution.

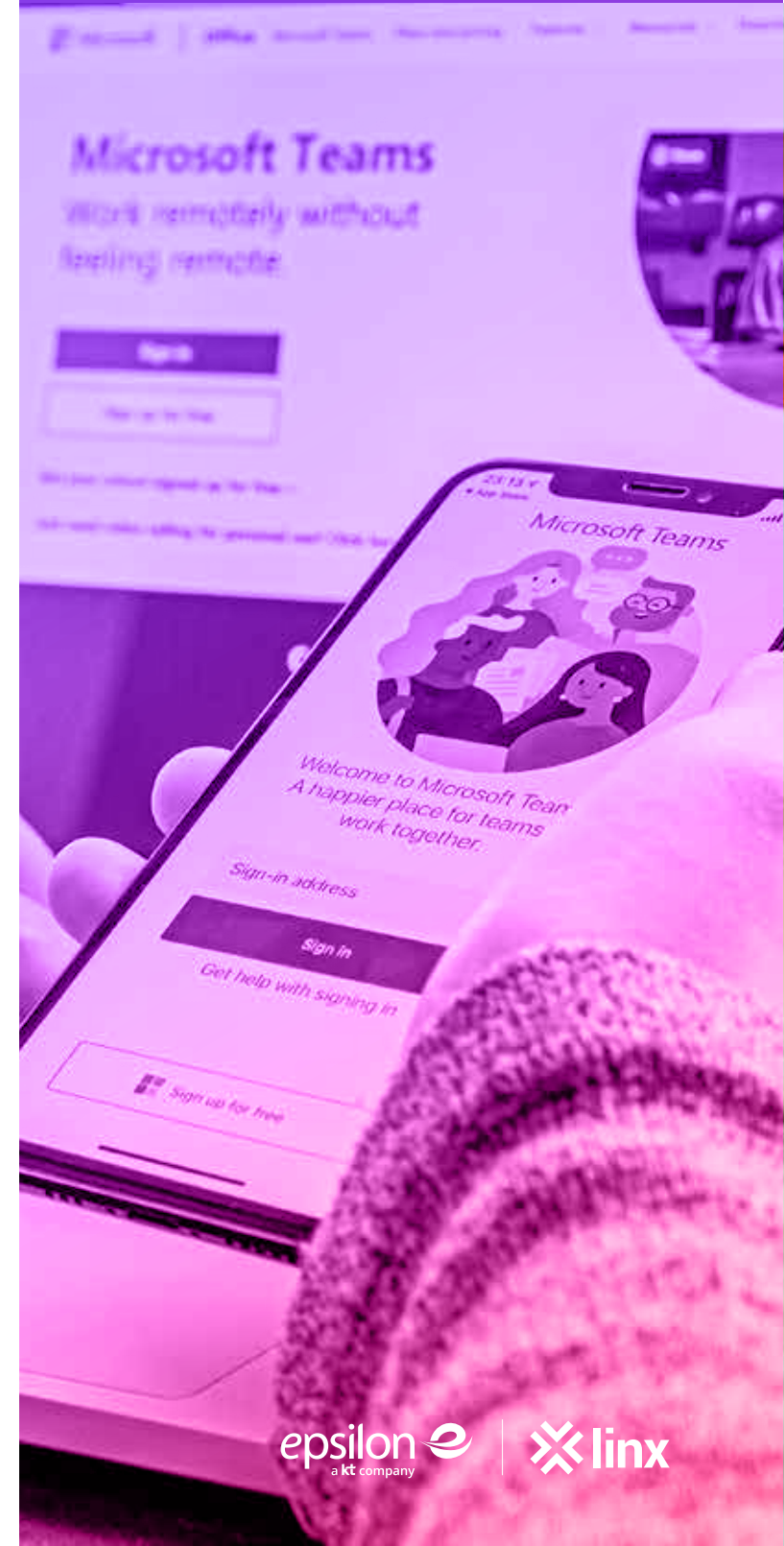
Microsoft Azure Peering Services (MAPS)

The ideal connectivity option to Microsoft Azure and Software as a Service (SaaS) applications.

What is MAPS?

Microsoft Azure Peering Service (MAPS) is a partnership program between Epsilon and Internet Exchange (IX) partners, such as LINX, to provide best-in-class public internet connectivity to their enterprise users by offering direct, highly available, geo-redundant connections and optimised routing to Microsoft services.

Epsilon partners with key service providers across the region to offer a one-stop MAPS in Europe, the USA and Asia.



How it Works

Microsoft Azure Peering Service (MAPS) with Epsilon improves user experiences for enterprises connecting to Microsoft SaaS by reducing the round-trip time (RTT) from a user's site to the Microsoft Global Network.

What is Microsoft Global Network?

It is Microsoft's public network backbone that interconnects all of Microsoft's data centres and multiple cloud application entry points.

What is Round-trip Time (RTT)?

It measures the time taken for the data to leave a starting point (the browser) and return to that very same point in milliseconds. It is a key metric used to measure network latency, page loading times, and the overall quality of a network



Local and Geographic Redundancy

MAPS uses two types of redundancy to ensure maximum availability. Failover is supported with interconnections across multiple Microsoft Edge Point of Presence (PoP) locations. If an Edge node has poor performance, traffic is routed to and from Microsoft via different locations to ensure connectivity even in the event of a local or widespread outage.

Optimal Routing

Microsoft ensures that enterprise traffic stays on the Microsoft global network until it is as close to the destination (i.e., users) as possible. Reducing the number of network hops from Microsoft ensures low-latency and ultra-reliable connectivity.

Visibility Into Traffic and Routing

Enterprise traffic and routing is analysed via Microsoft's service monitoring platform. It provides latency reporting, as well as detection and alerting of any Border Gateway Protocol (BGP) route anomaly events like route hijacks to the customer prefixes. This helps enterprises make more intelligent and informed decisions for their network moving forward.

Control Over Preferred Paths

Enterprises can control traffic routing and define preferred paths with MAPS. Microsoft guarantees that traffic will be routed via preferred paths, ensuring that connections to Microsoft services are always high-quality, reliable, and secure via the most suitable routes.

Key Benefits of Epsilon's MAPS



Lower Latency

Experience low latency connectivity to any public Microsoft cloud service through direct connections to leading peering infrastructure providers on our global network fabric.



Service Monitoring

Traffic insights and route analytics efficiently identify and rectify any anomaly in internet BGP routes or latencies in different locations.



Optimised Traffic

Faster connectivity and better application performance as traffic to and from Microsoft is routed via the shortest internet path.



Security Assurance

Be assured of complete data protection with our private, secure connectivity that comes with advanced security.



Superior Customer Support

24/7 technical and operational support for reliable uptime of your business-critical applications.



Cost-efficiency

Enhanced connectivity to the Microsoft network without the need for a costly private connection.

We Interconnect Your World

Epsilon Telecommunications

Epsilon is a leading global software-defined network provider that provides a comprehensive suite of end-to-end connectivity and communication solutions to hundreds of organisations, including some of the world's largest carriers and businesses. We are constantly innovating, and partner technology leaders to enhance our services with complementary capabilities for our customers' success.

With Infiny, our proprietary award-winning Network as a Service (NaaS) platform, procure, manage and optimise your global interconnectivity on-demand. Combined with a high-performance and far-reaching global network that spans across Europe, the Middle East, the United States, and Asia including mainland China and Korea, we empower you with complete agility and reach, truly interconnecting your digital world.

LINX

LINX is a world-leading interconnectivity partner with over 950+ members spanning major cloud, data communications, telecommunications, financial, and enterprise companies across more than 85 countries. They provide robust, low latency peering services and cloud access to thousands of organisations, interconnecting partners, suppliers, and customers efficiently for improved control and performance.

Ready to discuss about MAPS ?

[Talk To An Expert →](#)

GLOBAL HQ

New Tech Park,
151 Lorong Chuan
#06-01A
Singapore 556741

LONDON

Telephone House
69-77 Paul Street
EC2A 4NW,
United Kingdom

SOFIA

Business Center Rubix
8 Dimitar Mollov Str.
1750 Sofia, Bulgaria