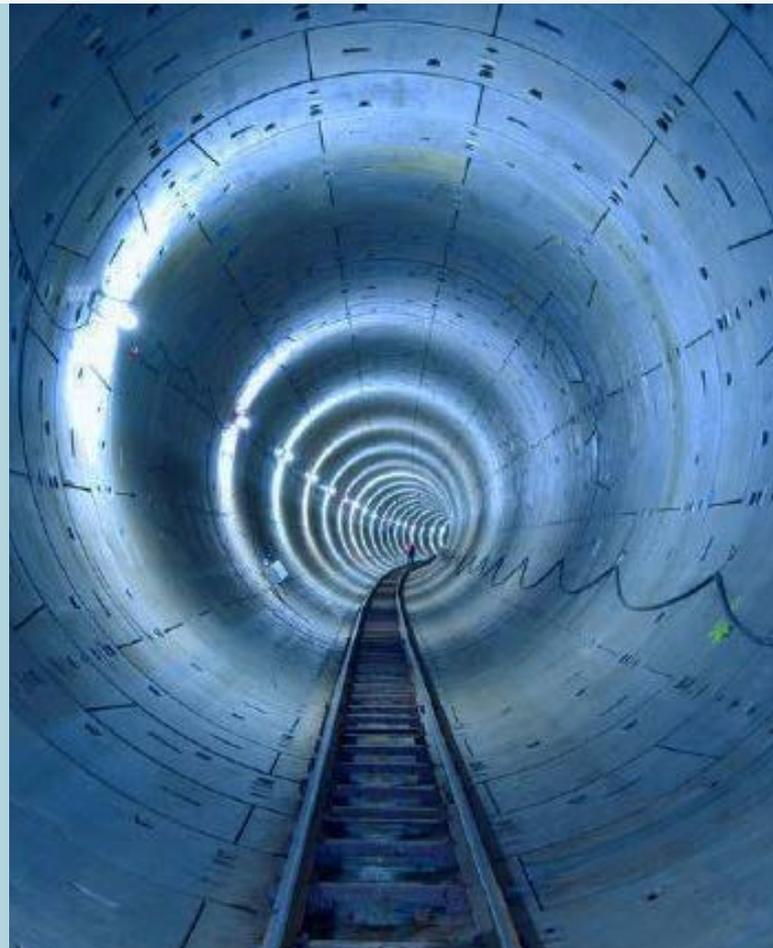


CASE STUDY

# HOCHTIEF significantly improves Microsoft Teams performance with optimized, fast cloud connection via DE-CIX

## About HOCHTIEF

HOCHTIEF is an engineering-led, global infrastructure group with leading positions across its core activities of construction, services, and concessions / public-private partnerships (PPP) with focus on operations in Australia, North America, and Europe.



## The challenge

HOCHTIEF introduced Microsoft 365 in 2019. A modular, phased approach was chosen, initially focusing on Teams, OneNote, and Exchange Online, with further modules such as OneDrive, Stream, Forms, and PowerApps added successively. Since the start of the Covid-19 pandemic in March 2020, the majority of employees have been working from home. The previous switch to Teams immediately turned out to be a stroke of luck, as communication among the staff could be maintained without any problems.

A total of around 3,200 users at 100 locations in various European countries, 70% of the locations being construction sites, are connected via an MPLS-based WAN backbone provided by their partner, ecotel. However, the previous connectivity model with central breakout and routing via the public Internet to the Microsoft SaaS cloud proved to be too runtime intensive. As a result, depending on the location – construction site, office workplace, or staff working from home – numerous IP hops, some of them abroad and back again, were necessary to establish the connection with the Microsoft cloud. With the intensified use of the systems due to the pandemic and also the additional need to connect a VPN tunnel including firewall in the home office and thus another network hop upstream, measures had to be taken to improve performance.

## The implementation

ecotel is now using their new Multi-Cloud-Connect service to connect HOCHTIEF to the 365 cloud via the ecotel data center: The Microsoft Azure Peering Service was developed by Microsoft together with DE-CIX. The service involves a direct connection – in the form of a peering session at a DE-CIX Internet Exchange – from the client to the Microsoft cloud. The connection is isolated from the public Internet and therefore not only achieves a large reduction in latency, but also a greatly increased level of security.

At the time of switching the connection to the Microsoft Azure Peering Service for this joint pilot project, there was no alternative solution on the market – although there are various options and providers for connecting to the Azure cloud via ExpressRoute, a direct connection to the Microsoft 365 SaaS cloud is only possible for end customers via the Microsoft Azure Peering Service.

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**“Our employees on the construction sites, at the office locations and working from home simply have to be able to do their jobs. Technical explanations as to why it doesn’t work now don’t really help. The most important requirement for IT is that the IT systems run smoothly.”**

**Head of Corporate IT at HOCHTIEF**

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## The result

The new “Multi-Cloud-Connect” product option from ecotel was successfully implemented at HOCHTIEF in a short time and includes the Microsoft Azure Peering Service for connecting to the Microsoft 365 cloud via the ecotel data center. The previous connection with central breakout and routing over the public Internet was replaced by a dedicated direct connection. This massively increased performance for users. Measurements have shown, for example, a reduction in latency from HOCHTIEF headquarters in Essen to Microsoft Teams within the 365 cloud from 53 down to 5 milliseconds. The significant improvement in runtime is achieved through direct peering, which ecotel established in collaboration with DE-CIX. As a result, the traffic is no longer routed over the public Internet, but over a private pathway within the ecotel backbone. With direct connectivity from the HOCHTIEF headquarters in Essen to the Microsoft cloud platform via the ecotel data center in Frankfurt am Main.

“Our employees on the construction sites, at the office locations and working from home simply have to be able to do their jobs. Technical explanations as to why it doesn’t work now don’t really help. The most important requirement for IT is that the IT systems run smoothly,” comments Head of Corporate IT at HOCHTIEF. “And with the Microsoft Azure Peering Service, this now works very well – not only when using Microsoft 365, but also when accessing server resources from Microsoft Azure.”

### Advantages

- Greatly reduced latency to Microsoft 365 cloud down to 5ms round trip time.
- Protection of the connection from outside disruptions.
- User satisfaction has increased – noticeable in the reduced number of performance-related help desk tickets.
- The susceptibility of the connection to errors has been reduced.

### What is the Microsoft Azure Peering Service?

- Direct peering with Microsoft 365 at a DE-CIX Internet Exchange.
- Optimal, fast network connection to the nearest edge PoP of the Microsoft network.
- A highly secure, DDoS-free connection.
- Binding SLAs, comprehensive geo-redundancy.

### Find out more



## About DE-CIX

As the leading Internet Exchange operator and interconnection provider, we help companies to realize new opportunities and future-proof their connectivity needs to manage growing data volumes and new applications. From easy and secure cloud connection to creating interconnection ecosystems, we make interconnection easy. Anywhere.

**Find out more at [de-cix.net](https://de-cix.net).**

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