# Fasthosts automates U.K. data centre with intent-based networking

Fasthosts, a major UK hosting provider in the IONOS group, is seeing strong business growth as SMBs expand their digital presence and adopt cloud-based applications to fuel sales and productivity. To deliver fast and reliable web, productivity, and cloud services, the group opened a state-of-the-art data centre in Worcester, England.

The hosting group's newest data centre is designed for scalability, fflexibility, and availability. The facility is the first Tier IV data centre in the UK and includes a 30,729-square-foot technical space as well as providing expansive offce space. A modular architecture allows resources to be dedicated to customers of Fasthosts and other IONOS brands. In addition to running on 100% renewable energy, the data centre generates up to 525kW of power from photovoltaic panels on the building roof.

# fasthosts

#### **OVERVIEW**

Company Industry Products Used Region Fasthosts Internet Cloud Provider Juniper Apstra EMEA

The data centre hosts one of the largest cloud platforms in Europe, providing customers of Fasthosts and IONOS' other brands with fast, reliable, and secure websites, email, servers, storage, and digital marketing tools. Customers can meet their U.K. data privacy mandates by storing their data within the country. And they can feel good about running their digital operations in an environmentally friendly data centre.

#### CUSTOMER SUCCESS AT-A-GLANCE

#### 85%

Faster to provision network services with Juniper Apstra **99.995%**Expected uptime in a

30,000+ sq. ft. data center

Renewable energy runs the data center

100%

Tier IV certified data center in UK

1st

CHALLENGE

# SMBs are accelerating digital transformation initiatives

"We faced the challenge of migrating our cloud hosting platforms to our flagship new data centre, and took this as a perfect opportunity to consolidate our network designs into a modern network fabric," says George Daly, Network Architect at Fasthosts.

"Networks tend to increase in complexity over time to support new products and features. This increased complexity can result in a fragile network that is hard to reliably operate. As a network architect, managing the tension between providing functionality while maintaining simplicity is a constant challenge," he says.

"We were totally committed to ensuring that our new data centre network was built from the ground up with the scalability and reliability as primary concerns, providing an extensible standards-based network to service our hosting products, while avoiding bespoke solutions."

"Our technology teams collaborated on the best approach to migrate over 30,000 virtual machines and several thousand bare metal servers from our previous sites to the new data centre while minimising any customer downtime. As you can imagine, this has been a huge undertaking!"



### SOLUTION

## A simpler way to manage the data centre fabric

Fasthosts evaluated commercial and open-source software solutions for managing the data centre fabric. After extensive testing they selected Juniper Apstra, which automates and validates the design, deployment, and operation of data centre networks, including EVPN-VXLAN and other IP fabrics. Today, Apstra supports more reliable data centre operations, reduces deployment times, and lowers the risk of an outage.

"Moving away from legacy network protocols and towards an EVPN-VXLAN fabric provides us with the reliability of a rock solid IP underlay network, and the scalability of VXLAN virtual overlays" says George Daly.

"Stitching together the networks in our old data centre to the Apstra operated fabric in our new data centres provides a network interconnect over which we can live migrate our virtual machines with minimal downtime and no change in IP address. This seamless host mobility capability is key in our migration project."

Flexibility in hardware vendor selection was also a major factor in Fasthosts decision making.

"Avoiding vendor lock-in is key for us," says George Daly. "Now we can use a different switch vendor without having to rewrite a lot of our code, because the vendor-specific details are handled by Apstra. This is particularly important in the era of excessive hardware delivery delays".

Apstra provides a single source of truth, powerful analytics, and root-cause identification tools to help the IT team pinpoint and resolve issues more quickly.

"As well as providing a management interface for the network fabric and handling the complex orchestration that comes along with EVPN-VXLAN fabrics, Apstra provides an API that enables us to integrate the software into our internal provisioning and development systems," says George Daly. "This enables an infrastructure-as-code approach, where network provisioning, operations and visibility is no longer restricted to the network team".

### OUTCOME

# Powering SMB customers' digital expansion

Automating the configuration and management of the data centre fabric has freed up the network operations team. The company estimates that Apstra has saved 85% compared with manual provisioning. Beyond supporting more reliable, automated data centre operations, Apstra's multivendor software gives the IT team the freedom to choose the best-fit switch platforms for their business needs now and in the future.

#### "With Apstra, we have significantly improved network visibility and our agility to improve services and deploy new networks."

George Daly Network Architect, Fasthosts, IONOS Group

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