# EQUINIX CUSTOMER SUCCESS STORY - EE



Equinix LD5 Data Centre supports the delivery of the UK's first 4G network with EE

## The Challenge

With 27 million customers, EE is the UK's largest mobile operator and it is the first to offer 4G. EE was created following a merger between T-Mobile and Orange in the UK.

"One of the key drivers for the merger was the synergies and cost savings we could get from removing duplication of our data centres," said Matt Stagg, Senior Manager of Network Strategy at EE. "This included looking at our Internet Points of Presence (PoP) – Orange and T-Mobile each had two. We needed to consolidate these four existing PoPs into two data centres with connectivity for Internet transit, private peering and public peering."

EE was looking for a data centre that would support its 4G network and enable it to scale as demand accelerated for mobile data and video.

### **The Solution**

EE undertook an extensive request for proposals (RFP) process over a period of several months and analysed responses from the major UK data centres.

It chose two facilities, through which it now routes all mobile broadband traffic: Equinix's LD5 Internet Business Exchange (IBX) in Slough, to the west of London, and another site in London's Docklands. The traffic includes web browsing, video, file downloading and peer-to-peer.

#### Why Equinix

"We chose LD5 because it's a state-of-the art data centre – which we needed to run our state-of-the-art 4G network – with high resilience," said Stagg. "LD5 provides us with all the connectivity and expansion potential we need at a suitable cost and in a good location outside London. Equinix can move at the same speed as EE as we roll out our 4G network."

EE runs its two PoPs in a resilient 1+1 configuration, which means that the two data centres are connected in an active-active arrangement. In the event of an outage at either data centre, all of the traffic will failover and run through the other site - LD5 or Docklands.

"Resilience is important to EE. We want people to trust us with their digital lives and have spent billions on our robust mobile network, so we need that same robustness from our Internet connectivity," said Stagg. "We can't afford to be let down by our data centre – the PoP is where we hand over our traffic, and we need our provider to treat the traffic with as much importance as we do."

#### Well Connected

"As a 4G operator, we need to be able to connect directly with our most popular content providers, either via direct peering or via the London Internet Exchange (LINX)," said Stagg. "Direct connectivity is primarily needed to lower our latency - since connecting with our content providers in LD5 we have saved a minimum of 20ms on the round trip - thus maintaining the user experience.

## Results

Equinix provides one of two UK data centres that EE uses to support the mobile internet. The highly resilient configuration of both data centres means one is able to handle all of EE's UK traffic if required.

Equinix LD5 data centre's ecosystem of network carriers and content generators enables lower latency and enhanced performance to deliver a higher quality 4G user experience.

Equinix delivers direct connectivity and a dense cloud ecosystem to enable EE to connect to its most popular content providers, content delivery networks, transit providers, the London Internet Exchange and fibre routes in a location outside of London.

EQUINIX



"The speed with which we're rolling out 4G in the UK means we needed a data centre provider capable of moving at the same pace. We rely on Equinix to help us support the exponential growth rate of mobile data and video."

Matt Stagg, Senior Manager of Network Strategy, EE

"Equinix attracts content providers to its data centres. Our most important content providers are either already in LD5, or we can access them via our transit providers, all of whom have good connectivity with Equinix."

The latency of 4G is so low that any additional latency in the PoP has a significant impact on the customer experience, especially for real-time services like video calling. Stagg commented: "The low latency of Equinix's infrastructure – both within LD5 and on to content providers – is extremely important so we can give customers the performance they expect from 4G."

"One of the reasons we chose Equinix was because it has strong relationships with the content delivery networks (CDNs), the transit providers and the content generators that we need," said Stagg. "This gives us access to our top content providers, and enables us to expand quickly."

"As well as excellent direct connectivity to content providers and CDNs within the data centre, LD5 has great connectivity with multiple dark fiber providers connecting to America, main land Europe and the Docklands with independent, diverse fibre capacity."

According to Stagg, being in LD5 also provides EE with more than 90 networks to route traffic to outside of the UK, due to Equinix's fibre connections in Slough – the network hub is west of London.

#### Video Drives Mobile Growth

With mobile video predicted to be over 65 per cent of Internet traffic by 2017, EE is looking for innovative ways to provide a high quality user experience and handle the massive volumes of data required.

"In 2017, 4G will be predominately a video distribution network – globally, a billion gigabytes will go across mobile networks each month," said Stagg. "Strategically, we need to have a data centre provider that can connect to the main video providers, that understands this growth, and has a roadmap to support it – Equinix meets this need."

EE and Equinix are also working together as the co-founders of the Mobile Video Alliance, a knowledge-sharing group for mobile, content and digital media providers. The alliance members will co-operate in overcoming technological challenges and capitalising on new opportunities.

"We see Equinix as a neutral venue for collaboration, in order to enable innovation and ensure that the mobile video industry continues to thrive," said Stagg. "Customer experience on 4G is of paramount importance to EE, and Equinix understands and supports us in maintaining the best quality."

"As video traffic grows, the Mobile Video Alliance will help us to deliver the high quality service, connectivity and products that users expect," said Stagg. "Equinix is a long-term strategic choice for EE that will help us to meet customers' demands for mobile video."

#### About EE

EE is the most advanced digital communications company in Britain, providing mobile and fixed-line services to 27 million customers, and is the first company in the UK to provide 4G mobile services alongside fixedline fibre. EE is the company that runs the Orange, T-Mobile and EE brands in the UK. For more information see www.ee.co.uk.

#### **About Equinix**

Equinix, Inc. (Nasdaq: EQIX), connects more than 4,000 companies directly to their customers and partners inside the world's most networked data centres. Today, enterprise, cloud, networking, digital media and financial services companies leverage the Equinix interconnection platform in 31 strategic markets across the Americas, EMEA and Asia-Pacific. By connecting directly to their strategic partners and end users. customers are forming dynamic ecosystems inside Equinix. These interconnected ecosystems enable companies to optimize the performance of their content and applications and protect their vital digital assets. www.equinix.co.uk info@eu.equinix.com 0845 373 2900