DATA SHEET

Multi-ISP transport layer

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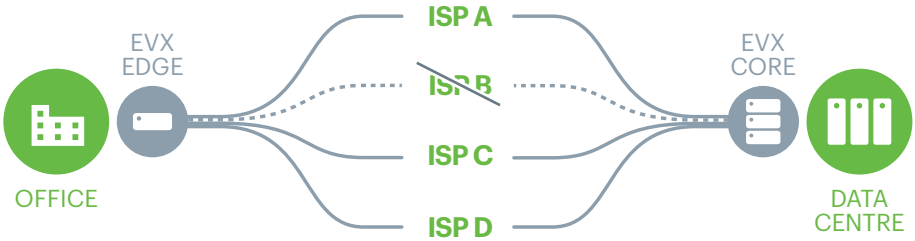
As fibre increasingly replaces copper the physical reliability of the connectivity landscape in the UK is improving, but things can and do still go wrong.

The connection from the Exchange to your premises – regardless of the access technology used – is only one link in the chain, so how do you cope when things go wrong further up that chain?



Multiple carriers simultaneously for resilience

The Evolving Networks SDN Platform sits above any single ISP, routing all our data through the networks of multiple carriers simultaneously for resilience.

Increasingly, the ISP network itself presents the greatest problems in the UK infrastructure. Because no ISP has embraced SDN, the most you can expect (if you're lucky) is for them to have some visibility as far as the BT Exchange, but not through the circuit to your premises. And that won't stop them from having outages or slow downs.

As core networks grow in complexity and scale, they become more difficult to manage, meaning issues of throughput and uptime become increasingly difficult to diagnose and fix.

Routing all our data through the networks of multiple carriers simultaneously for resilience

Connections can survive a total loss of all but one link

Whether it's an ISP's entire LNS going offline, or a complicated high latency issue where multiple engineers are needed to find and fix core router hardware in a datacentre, the Evolving Networks SDN Platform rapidly and automatically vectors traffic away from problems and so smooths out those issues.

Connections can survive a total loss of all but one link from one ISP on each site at a time, creating a level of resilience unheard of in the industry.

This network underlay of circuits via different ISPs, whether Ethernet, FTTx or 4G/5G is fully installed and managed by Evolving Networks under our VNO agreements with the carriers themselves.

Line faults are detected quickly by our advanced telemetry gathering and orchestration systems, triggering automated workflows and remote tasks, reporting through carrier APIs and fixing issues as quickly as possible, whilst keeping end users online.

The Intelligent Network Fabric uses millisecond response times to vector traffic transparently around issues, while our engineers go to work on fixing any line or ISP level faults.

The Intelligent Network Fabric uses millisecond response times to vector traffic transparently around issues

So why don't I just go and get two different ISP circuits myself from two different providers? Won't that be the same?

If it looks too good to be true, then it probably is. Evolving Networks have over a decade of experience, we wear the scars of our failures as we learned the perils of managing connectivity in the UK.

By outsourcing the network underlay to us:

- **You don't** have to manage multiple ISP relationships, diagnose faults, or worry if they all route through the same floor in the same datacentre. We go through a rigorous approval and testing process lasting months before signing off on an ISP partner.
- **You don't** have to try and convince an ISP that your SD-WAN tunnelling software is working correctly, or that the traffic your sending shouldn't be throttled as abusive traffic. Well known big brand carriers have shown they are not compatible with SD-WAN traffic.
- **You don't** have to source and manage broadband modem hardware or ensure its compatible and authorised for use on the Openreach network, keeping firmware remotely upgraded as you go.
- **You don't** have to worry if one or more of your providers starts overselling their network or starts getting Patch Tuesday capacity planning wrong. If an ISP experiences high load, or even just fixes issues too slowly, we move those circuits to a different provider, transparently without you knowing or caring, or doing the hard work of novating contracts.

This is end to end software-defined connectivity. A turn-key product with multiple diverse mobile, broadband and Ethernet platforms, delivered by us as a superior integrated network underlay and overlay solution.

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