

Case study | Virtual1

Enhancing service delivery at Virtual1

Virtual1 was founded by Tom O'Hagan in 2007 to create a new, innovative UK carrier that benefits the telecommunications market by increasing the range of connectivity vendors, enhancing price competition, and raising the standard of service UK businesses can—and should—expect from their provider.

In 2016 the company made the decision to transition from a London-based operator and network aggregator to a UK-wide carrier with the ambition to become the largest, most advanced wholesale-only network in the United Kingdom.

To deliver on this promise, in April 2017, Virtual1 announced the rollout of its high-speed fibre services, the UK's first fully Software Defined Network (SDN). The buildout was completed in February 2018 and Virtual1 now delivers cutting-edge fibre connectivity services to over 180 towns and cities, covering over 75% of UK businesses. Their network spans nearly 7 million premises and a quarter of street cabinets.

A key factor in this rapid network expansion was the capabilities provided by PacketFront's network orchestrator BECS, which allowed Virtual1 to scale the network quickly and efficiently. With high levels of automation required, the network expansion was deployed entirely by Virtual1's engineering and systems development teams avoiding high consultancy and hiring costs.

The impact of PacketFront automation

The UK connectivity market has long been dominated by a handful of carriers and thus, was prime for both disruption and innovation—particularly amidst high market costs, long lead times, lack of transparency, poor service levels and no direct control for carriers and consumers.



Virtual1 has demonstrated a 20% average annual partner growth, 8 consecutive years of 20%+ CAGR increase and has become the 5th largest UK telecoms carrier.

Virtual1's introduction of automation to cover tasks such as network build-out, service delivery and troubleshooting has enabled significantly lower operating costs than traditional networks while bringing sustainable, disruptive competition, in combination with an improved service experience.

Virtual1's automation savings

- Reduced manual line configuration efforts by 80%
- Delivers business connectivity up to 12 days quicker than the industry
- Saves over 30 minutes per service installation with core network configured automatically
- Service modification lead times, like increased and decreased bandwidth, reduced from 5+ working days to around 40 seconds

As an example, Virtual1 now delivers services on average 10-12 days faster than their competition (Source: Ofcom). Hardware is shipped out with identical configuration and, once connected, dials back and downloads the full configuration from BECS. This means less time is spent preparing and shipping hardware, saving time and money, and driving the partner's customer experience.

Even the core network is configured dynamically when the customer device is turned on. This means that service delivery starts in seconds and without any manual labour.

Not only has automation made Virtual1's services faster and more cost efficient but, using a network orchestrator, Virtual1 have enhanced the integrity of their offering.

Last year the customer **base grew by 16%**, but the resources to support them was **reduced by 22%**.



Maintaining security of networks today is increasingly important so the orchestrator can detect and roll back any irregularities, restoring the configuration to its original settings. At the same time, it makes the configuration consistent and repeatable, and removes the potential for human error. It also means that every service delivery is automatically documented, providing an accurate view of the network and making sure that information, such as billing records, is always correct.

Even the network operations organisation has been able to enjoy benefits of the automation. As the automation has eliminated manual errors, the number of trouble tickets has reduced dramatically.



Another important factor reducing the workload has been the introduction of the 1Portal troubleshooting view enabling partners to check the network health. This has eliminated unnecessary tickets and reduced overall trouble shooting time.

Benefits to partners:

Automation has helped Virtual1 kickstart a service revolution to the benefit of the IT & telecoms sectors. As the network is software defined from the core, to edge devices, it puts direct, real-time control between end customers and the partner for the very first time.

This means Virtual1 has helped channel partners to differentiate in a market dominated by price and commoditisation. The nature of the network has meant Virtual1 can both automate change across the network, and integrate that control into partner-facing systems, as changes can be done online or via APIs. This brings connectivity in line with the as-a-service models prevalent across the IT portfolio.

Partners have real time control of 35+ network features online (including VLAN resigning, Quality of Service, BGP configuration & IP addressing changes)



Partners can use this control to construct their own disruptive service offerings to drive additional revenue, such as charging for enhanced service packages with a shorter SLA, or charging a premium to flex bandwidth on demand. This helps partners build revenue and profit back into a highly commoditised marketplace.

Plus, due to Virtual1's unparalleled service delivery times, partners can deliver highly competitive services, more accurately than the wider market, and with better service throughout the lifecycle.

As an example, Virtual1 has supported a number of initiatives to target particular verticals, such as seasonal coastal resorts across the south of England, who can now deliver the connectivity experience their customers expect, without carrying the premium price year-round.

The benefit to end customers:

Due to network flexibility, customers can enjoy a large variety of SLAs and customisations at a lower cost than typically associated with bespoke service delivery. At the same time, end customers benefit from faster installation and fewer complications, even if the solution evolves during the project.

All these benefits contribute to peace of mind for the customer throughout the lifecycle of the solution, which has been recognised in Virtual1's customer satisfaction measurements. By introducing network orchestration, the award-winning customer interface 1Portal and increased partner empowerment means that Virtual1's NPS score has increased to 67, where 50+ is considered excellent, and 70+ world class.

Learn more about the impact of automation at Virtual1 – [visit our page](#).



A Virtual1 partner has taken highly targeted campaigns to market, delivering flexible bandwidth to seasonal businesses, 20 new logos and over £100k additional revenue.

About PacketFront:

Founded in 2001, PacketFront delivers efficient network automation solutions for telecom operators, city carriers and enterprises in more than 20 countries. Packetfront has worked with Virtual1 – a UK-wide carrier with the fifth-largest UK network – for a number of years.

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