Chorus is New Zealand’s largest telecommunications infrastructure company. It builds and maintains the country’s fixed line network – a government-regulated, open access network. Multiple phone and broadband providers deliver innovative products and services via this network and serves both business and residential connections. This network acts as New Zealand’s IT backbone.

Case Summary

**Location:** New Zealand

**Vertiv Solution:**

- SmartAisle™

**Critical Needs:**

At present, over 70% of New Zealand corporations have moved away from their own traditional, bricks-and-mortar IT infrastructure. Even though they are in the cloud, they still require independent back-up and disaster recovery locations. This requirement has proven too real, in light of recent earthquakes in Christchurch and Wellington.

Against this backdrop, the real challenge is anticipating what the new world looks like. What physical infrastructure is required to support increasing demand in compute power at the edge of the network?

High-speed connectivity means a whole lot of data needs to be moved around, analysed and stored. As such, fast data communication infrastructure is key. This increase in data traffic requires a consistent, reliable network to be properly managed. In particular, such high speed applications have little tolerance for latency. There was a need for compute power to be at the very edge of the network.

“Finding a solution that’s quick to deploy, scalable and turnkey was critical to our Chorus collocation offering. Underestimating growth risks congestion, performance drops and potential loss of customers; meanwhile, overestimation risks over investment in an ultra-competitive market with razor-thin margins,” explains Shalini Kumar, segment manager - networks, Chorus.
**The Situation**

Chorus's customers are craving for more data and faster broadband speeds. Usage scenarios driving this include High Definition video, online gaming and mobile usage within homes. As a major network provider to the telco industry, Chorus sees significant growth trends in the immediate term. In this regard, Chorus is in the process of installing 20,000 kilometres of fibre optic cable and ducting in New Zealand. This will eventually make up the Ultra-Fast Broadband (UFB) network, which will be available to over 830,000 homes and businesses in the country.

The customer’s network of telephone exchanges offers quite a unique, selling proposition. With over 600 physical exchanges available nationwide, it can offer unparalleled geographic diversity and reduced latency, while retaining customers’ data sovereignty. These exchanges are the logical space to roll out a premium collocation service. The edge-of-network solution has connectivity to nationwide back haul and is a key point to interconnect both copper and fibre networks.

**The Solution**

“We are seeing more and more data coming through the edge. This is changing the way businesses think about how they best manage data across their organisation. It’s all well and good for a company’s primary data centre to be fitted with best-of-breed technology, but what about remote locations such as stores or branch offices?”

“For these locations, relying on a data centre that might be hundreds of kilometres away creates possible latency issues. More importantly, they might lose physical operation - if their connection to their central data centre is lost. One answer to this is the micro or ‘edge’ data centre. This is an increasingly popular solution for many enterprises. These are neat, plug-and-play, enclosed systems that fit into smaller spaces than traditional bricks-and-mortar infrastructures. This makes them a great fit for remote locations and disaster recovery requirements,” explains Robert Linsdell, managing director, Vertiv in Australia and New Zealand.

Vertiv deployed a 16-rack SmartAisle™ solution. The unit contains cooling, UPS back-up power, and monitoring. It’s all housed within the existing Mt. Eden telephone exchange. The SmartAisle contains all the infrastructure expected from a traditional, 1,000 rack build – but without the long design and build time.

The Trellis™ monitoring tools operates within the data centre to monitor all aspects of the data centre, power, cooling, utilisation via secure remote access.

**The Outcome**

Systems Integrator Joel Schluter from Virtis New Zealand worked with Vertiv and Chorus in installing the SmartAisle™ solution. The SmartAisle gave gives Chorus the flexibility to quickly deploy scalable solutions and connect multiple, multi-tenanted data centres. It suits the varying footprints of each exchange. In smaller sites, Vertiv can easily deploy a SmartRow™ or a SmartCabinet™, which allows Chorus to offer the same functionality - with varying investment.

“Our edge of network solution lets our customers differentiate. They can play in the data centre market without worrying about large CAPEX funds or connectivity across New Zealand. But what surprised me the most was the speed of deployment! From ideation to signing our first tenant it took less than 11 months! We’ve removed the CAPEX required for our service providers. They now serve their enterprise clients – bypassing the need to acquire expensive real estate and the high building costs attached. Instead, an enterprise can host their data in a secure, Tier 2 collocated space. Best of all, it easily scales up to grow with their business,” comments Shalini.