Business Continuity in Times of Crisis – Why it Matters and How to Achieve it
by Alan Stewart–Brown, VP of EMEA at Opengear

Due to the pandemic, many businesses around the world are having to provide remote access and IT support for all their employees to be able to work from home. This is putting IT staff under extra pressures, all the while managing their own worries and concerns about the current situation.

Mistakes and misconfigurations are inevitable and that will potentially give hackers opportunities to exploit. At the same time, with the network under growing strain from increased traffic and surges in demand, the potential for outages to occur is also increasing.

If outages do happen in such crises, businesses may find getting the network up and running even more complex. With travel restricted, sending engineers out to remote sites to address downtime issues and resolve network faults may risk compromising their health and safety and therefore will not be realistic.

For organisation operating today, keeping the business up and running is likely to be a key concern and has therefore increased the need for network resilience. When network disruptions occur, companies must be prepared and have a plan that enables quick recovery. The current crisis may have focused minds within networking teams and senior leadership to carry out risk analysis and put measures in place to reduce those risks. But what is clearly required is a new approach that goes beyond simply adding redundancy or even improving uptime to add a layer of intelligence.

That is because for organisations that need to ensure business continuity today, network resilience is key. In ‘Resilience and survivability in communication networks: Strategies, principles, and survey of disciplines’ ComNet Journal 2010, by JP Sterbenz et al., network resilience is defined as ‘the ability of the network to provide and maintain an acceptable level of service in the face of various faults and
challenges to normal operation’. One way of measuring it is how quickly the business can get up and running again at normal capacity following an outage.

True network resilience is not just about providing resilience to a single piece of equipment whether that be a router or a core switch for example; in a global economy it is important (especially given today’s circumstances) that any such solution can plug into all of the equipment at a data centre or edge site, map it and establish what is online and offline at any given time and importantly wherever in the world it is located.

That enables a system reboot to be quickly carried out remotely. That’s especially beneficial at the moment while engineers and other workers are often unable to travel to either the data centre or edge location due to lockdowns and everything has to be done from afar.

**Alternative arrangements**

If the remote reboot does not work, it might be that an issue with a software update is the root of the problem. With the latest Smart Out-of-Band devices this can be readily addressed, because an image of the core equipment and its configuration can be retained, and the device rebuilt remotely without the need for sending somebody on site. In the event of an outage, it is therefore possible to deliver network resilience via failover to cellular, while the original fault is being remotely addressed, enabling the business to keep running even while the primary network is down.

Building in resiliency through the Out-of-Band (OOB) approach does cost money but it also pays for itself: over the long-term and often also in just a one-off instance, depending on the outage and associated costs. You might only use this resiliency a couple of times a year, say – but when you need it, you really need it.

**Why prevention is better than cure**

When network outages occur, the damage is cumulative, so businesses need to pre-plan and ensure that they are putting in place network resilience as a preventative rather than a reactive approach. Organisations often defer discussions around network resilience based on the optimistic hope that a network outage never happens to them. In fact, network resilience should be built into the network from the outset.
Anyone that has just suffered a network outage will understand the benefits of Out-of-Band, as a way of keeping their business running in what is effectively an emergency, but as referenced above it is likely to be much better to plan for resilience from the word go. After all networks are the ‘backbone’ to almost every organisation today, and many businesses will benefit from bringing network resilience into the heart of their approach from the outset.