Network Refresh Supports Evolutionary Growth at the Eden Project

ISN employs 'green' thinking and breathes new life into Eden's mission-critical enterprise infrastructure

About the Eden Project

An international visitor attraction, social enterprise and educational charity, the Eden Project is a unique and complex organisation. Nestled within a huge crater in Cornwall, the 35-acre site features massive 'biomes' housing the largest rainforest in captivity, contemporary gardens, exhibitions, restaurants, conference facilities, an education centre and more. Welcoming nearly a million visitors all year round, Eden's up-coming projects include plans for a second Eden Project in China, a new energy-efficient 115-bed eco hotel and - a groundbreaking first for the UK – a geothermal energy plant.

The challenge

Since opening its doors in 2001, Eden's spectacular journey has been fast-paced and transformative. First installed in 2003, the organisation's core Cisco corporate network has had to cope with a rapidly flexing and expanding numbers of devices, users and IP addresses.

During peak periods corporate network user numbers can swell to around 700 as temporary workers almost double the usual on-site personnel count. Eden's mission critical network also handles the organisation's cloud-based point-of-sale and ticketing platform, as well as its site-wide CCTV security system.

With many more major projects on the horizon, the IT department knew a refresh of the primary network infrastructure was long overdue. The escalating number

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of education and research projects, and Eden's ever-expanding roster of project partners meant the speed, reach and performance of the network would need to be future proofed.

"While capacity wasn't an issue, we were starting to experience network outages and performance issues," confirms Nick Argent, Head of ICT at the Eden Project. "As a high profile destination, any downtime clearly has a direct impact on our operational and revenue generation capabilities – and by implication, our brand reputation with visitors."

But that wasn't all. Network configuration challenges were increasingly hampering the team's ability to support and drive the fast-paced and flexible innovation that's become a trademark of the Eden Project.

"Over the years, the organisation has become progressively more complex - and that wasn't going to change anytime soon. We needed to be fleet of foot - and that meant having a network that could handle rapid evolutionary changes with zero impact on performance," continues Nick.

The IT team wanted to work with a partner that was both sensitive to the budgetary challenges Eden faced as a charity - and the green credentials that are core to the organisation's remit. Rather than adopting a high cost, high impact 'rip and replace' strategy, the IT team wanted a more creative and 'green' approach to the upgrade challenge at hand.

The solution

Passionate about Eden's values and its culture in relation to promoting empowerment, ISN was determined to help the IT team extract maximum value from the network while delivering responsive services that met the ever-changing needs of the business.

To help sort the wood from the trees, ISN undertook a detailed survey of the organisation's core infrastructure – mapping the entire network environment, which includes up to 40 edge switches. The aim of the survey was to identify how much kit was still viable, what could be reused, and whether configuration changes would streamline network troubleshooting and management for the IT team.

"ISN were confident they could 'spring clean' our existing environment, initiating an incremental refresh programme that would enable us to reinvigorate the network in a low cost way," says Nick.

It would all begin with the replacement of three core switches and implementation of a new, highly adaptive, firewall appliance. "ISN were diligent in identifying creative procurement options – that included the use of vendor-approved refurbished kit and reuse of the core switch chassis'," confirms Nick. "They totally understood our budgetary and 'green' constraints – and were determined to help us reutilise kit wherever possible."
With the step-by-step refresh programme gearing up,

ISN solution

- Network configuration review
- On-demand support services
- Identification of creative equipment procurement options
- Specialist support for network change projects

Benefits

- Acts as a trusted advisor that combines creativity with a deep understanding of issues, a 'can do' problem solving attitude and reacts at speed – expert at communicating 'the invisible' well.
- Future-proofed network that's being evolved to keep pace with changing business requirements
- More adaptable, flexible configuration supports ease of change or equipment/people additions
- Instant access to technical experts for ad-hoc projects
- Utilisation of a 'green first' approach to network equipment
- Deployment of a 'reuse/redeploy' strategy rather than 'rip and replace'

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the IT team asked ISN to monitor the network environment. As part of this process, they wanted ISN to be on hand whenever needed to offer on-site specialist technical support.

"We've come to view ISN as trusted advisors who respond fast if there's a significant outage – the Eden site experiences regular lightening strikes, for example," explains Nick. "ISN's support credit scheme is ideal for us – it allows us to call down time and resources on an 'as needed' basis to deal with more complex tasks or out-of-hours support if a problem hits."

Results

Thanks to ISN, the simplified configuration has made it easier for the Eden IT team to identify and troubleshoot problems and understand the implications of any planned changes or additions to the network.

Having confirmed that, by and large, the network was largely fit for purpose, ISN helped identify the most cost-effective way to plug the gaps in order to support Eden's ongoing requirements – today and into the future – sourcing equipment in creative ways.

More importantly, ISN's highly flexible and responsive approach to outages and on-site issues has proved a significant advantage for an organisation that needs to tackle problems fast in order to ensure its business as usual visitor operations aren't impacted.

"ISN respond to support issues in a fraction of the time it takes others providers to get on the case. Instead of asking us to jump through hoops - they take our call, talk through the problem, and instantly send an engineer. There are no complex procedural hoops to jump through – their priority is to get us up and running fast after which, once the crisis is over, they sort out the administration side of things. I can't emphasise the huge value that represents for us," explains Nick.

Reviewing what's on the horizon, Eden plans to continue to evolve its core network and integrate new access points and services as the site extends to welcome new alliance programmes. Alongside the new eco hotel and the geothermal energy project, Eden is about to extend its partnership with Plymouth University and extend the range of university-level degrees taught at its world-famous site. That means there will be even more undergraduates joining Eden's unique higher education campus.

"Just 18 months on, I can truly say that ISN feels like part of the family - we wanted a partner, not a supplier, and that's exactly what we've got. They truly collaborate with us and are never precious when it comes to sharing knowledge," says Nick.

"Today ISN give us fast and responsive support and are on hand when we tackle new projects or need to talk through ideas around the best way to handle an upcoming change," he concludes.