



# Cutting Edge Wi-Fi Keeps Visitors Connected at the Eden Project

ISN's enterprise-grade network design ensures staff and visitors enjoy a reliable Wi-Fi service, no matter what the scenario

## 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

Easy-to-connect to visitor Wi-Fi is a must for today's public venues. Decent Wi-Fi connectivity not only helps people feel at home the moment they arrive on site - it's also critical for the delivery of site-wide wireless services used by Eden's staff and business partners.

But that's not all. Eden's multi-purpose facilities are available to hire for anything from parties and small business functions to weddings and conferences. Furthermore, each summer the venue's Eden Sessions, a series of live music events, attract around 40,000 concert goers - this year's headline acts included Lionel Richie, Tom Jones, PJ Harvey and the Manic Street Preachers.

Implemented on a limited budget, Eden's aging legacy Wi-Fi infrastructure was beginning to creak at the seams. Its three independently managed networks, set up to support a variety of user profiles - public, corporate, and conference and crews - were complex to manage and offered patchy coverage.

Eden wanted to revitalise its Wi-Fi, implementing an infrastructure that had the capacity to scale rapidly to cope with high demand volumes and was future-proofed to cope with up-coming requirements. The new structure needed to be easy to manage so that Eden's IT team could support the varying demands of users - this was especially important when hosting major events or meetings for corporate and private customers. It also had to deliver bullet-proof and impressive coverage across what is a complex, distributed location.

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- Nick Argent, Head of ICT at the Eden Project

As a charity, Eden knew that achieving this wish list was a tall order. With limited resources, achieving its Wi-Fi vision against a backdrop of complex technical and budgetary constraints would be a tough call.

"We began a series of conversations with ISN, outlining both our ambitions together with the limiting factors we faced as a charity with limited funding," explains Nick Argent, Head of ICT at the Eden Project. "They rolled up their sleeves and said 'let's see if we can do this' and that's how our Wi-Fi journey began."

## The Solution

As a trusted advisor and support provider, ISN had already developed a deep understanding of Eden's values and 'green ethos'. Enabling Eden to deliver great free public Wi-Fi for across

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all its extensive facilities would ensure visitors and music fans would be able to connect with friends, family and social media channels without any disruption – providing additional free promotion of Eden as a destination attraction. It would also give event organisers and stage crews the secure communications channel they need to coordinate and ensure everything runs to plan on the day. It would be a win-win situation for everyone.

Addressing Eden's budgetary issue, ISN was able to draw on its substantial network of contacts to elicit a generous contribution of free wireless access points (APs) from another of their key clients to allow for wider than planned use across Eden's extensive site.

"This was a tremendous coup – ISN was able to match us up with one of their other customers, who was looking to donate equipment surplus to their requirements to a good cause. It's an understatement to say that this got us off to a flying start – and made the upgrade project financially viable for us," confirms Nick.

Next ISN undertook a detailed survey of the entire site to evaluate signal strength and refine the existing AP infrastructure. The new network needed to support up to 5000 concurrent users at any one time.

A detailed plan for the location of additional APs was drawn up. The new infrastructure also featured an on-premise controller that would give Eden's IT team a single management interface to the entire Wi-Fi network.

"ISN rose to the challenge we set them, using their know-how to craft a solution suited to our unique needs – creating a Wi-Fi network design that addresses the complexities of the environment in which we operate," says Nick. "After all, there aren't many concert venues located in the bottom of a disused quarry!"

### ISN solution

- Wi-Fi site audit and infrastructure design that ensures coverage across a diverse and complex site
- On-demand advice and support whenever Eden's IT team plans to expand Wi-Fi service offerings
- Maximised utilisation of existing infrastructure components, eliminating the need for a full 'rip and replace'
- AP controller gives Eden's IT team a single interface to manage its public, corporate and event Wi-Fi networks

### Benefits

- Eden now has a fully 'commoditised' Wi-Fi network that can accommodate the needs of varying users
- A future-proofed Wi-Fi infrastructure that can be evolved with ease
- Adaptable, flexible configuration and visibility of demand usage
- Capacity to support up to 5000 concurrent users during major events and live streaming





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### The Results

Working in close collaboration with Eden’s IT team, ISN was able to apply clever thinking and deep technical knowledge to enable a fast and reliable Wi-Fi service, wherever users may be located on the site.

“Thanks to ISN we were able to implement an enterprise-level network with minimal investment, expanding coverage to areas that previously were ‘in the dark’ from a wireless communications perspective,” explains Nick.

As well as being extensible and highly flexible, the new Wi-Fi infrastructure delivers enhanced intelligence into what’s happening and where – thanks to a powerful on-premise controller – which has helped to simplify day-to-day management of the entire estate for Eden’s IT team.

“We now have visibility of every connection and can see in which locations user demand is highest,” continues Nick. “For example, we were able to see that demand for public Wi-Fi access was higher than expected in our restaurants and food outlets and were able to take steps to address this accordingly.”

The powerful high capacity nature of the new network means that Eden is now able support the live streaming of events like wedding ceremonies – ensuring that those couples that want to make sure friends and family who are overseas, or who can’t make it on the day, can ‘virtually’ join their celebrations.

Bandwidth can be maintained during events like music concerts, when public demand for Wi-Fi access jumps to an all time high. Meanwhile, the IT team is able to provide private secured networks for production crews and artists so that they can connect, communicate and collaborate before, during and after events.

“We’re now able to deploy new Wi-Fi network groups fast – catering to the needs of corporate customers, for example, who request specialist requirements for their conference delegates,” confirms Nick.

With a number of new and exciting projects on the horizon, today the IT team is confident that they have the reliable, future-proofed and extensible Wi-Fi infrastructure they need to support user demands. In the near future, the team will be configuring Wi-Fi services for Eden’s new on-site eco hotel as well as getting ready to provide additional services for a new intake of undergraduates who will be attending Eden’s rapidly expanding education campus.

“ISN are always on hand to provide the design expertise and technical insights needed whenever we tackle another phase in our Wi-Fi service roll-out. It’s refreshing to work with a partner that is able to step in and get creative when it comes to tackling challenges – yet is happy to leave the rest to us when it comes to day-to-day operations,” he concludes.