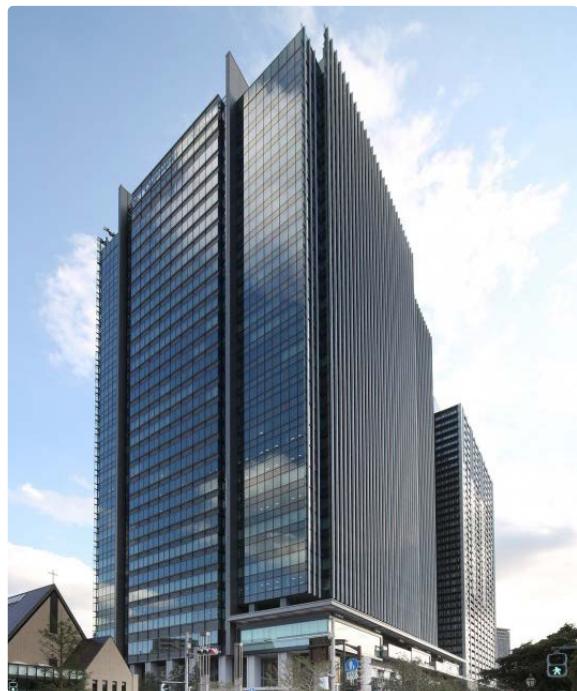# MOVING TO THE EDGE

TELECOM CASE STUDY

IIJ
Internet Initiative Japan

ZELLA DC

BACKGROUND

Founded in 1992, IIJ (Internet Initiative Japan) was Japan's first Internet service provider. IIJ is now one of Japan's leading Internet-access and comprehensive network solutions providers. IIJ and its group of companies provide total network solutions that mainly cater to high-end corporate customers.

IIJ has built one of the largest Internet backbone networks in Japan that is connected to the United States, the United Kingdom and Asia. IIJ was listed on the First Section of the Tokyo Stock Exchange in 2006.

CHALLENGE

In 2021 IIJ started to develop a MEC solution to complement the 5G roll-out in Japan. 5G and MEC technologies are ideal for applications that require low latency, efficient and reliable communication as well as security.

Traditional, centrally-located data centres don't have the underlying infrastructure necessary for end to end 5G technology to work. 5G technology relies on edge micro data centres located at the source, by the 5G antennas. Often the data centre needs to be placed outdoors, in remote locations or even on the roof of buildings.

IIJ realised they needed to implement an edge strategy however, they encountered some initial challenges:

> Limited understanding of edge infrastructure

> Need for a standardised, indoor and outdoor solution

> Customer concerns regarding data security

> Need for real-time processing at the kerbside

MEC AND 5G

MEC (Multi-access Edge Computing) is a technology framework that brings computing and storage resources closer to the end-users and devices at the edge of the network. Traditionally, computing tasks and data processing have been done in centralized data centres, which can introduce latency and increase network traffic.

MEC aims to address these challenges by decentralising computing resources and pushing them closer to the point of data generation and consumption, which is often referred to as the "edge" of the network. MEC reduces latency, improves response times, and enhances the overall user experience for applications and services that require real-time data processing.

MEC leverages the capabilities of 5G networks by deploying computing resources at the edge of the 5G network infrastructure.

This integration enables a wide range of applications and services that require low latency and high bandwidth, such as augmented reality (AR), virtual reality (VR), autonomous vehicles, smart cities, industrial automation, and more.

SOLUTION

IIJ have now developed DX edge, a flexible edge data centre solution that provides the IT and digital infrastructure of edge computing. It is not only an edge computing platform with high agility and scalability that supports the speed of business transformation, it is also ideal as an on-site IT platform. Our products are ideal for IIJ's edge strategy:

INDOOR. OUTDOOR. ANYWHERE.

Our range of indoor, outdoor, and containerised data centres allows businesses to implement a standardised edge strategy across different environments.

OUTDOOR

The Zella Hut outdoor data centre is water proof, dust proof, and UV resistant - it can be placed just about anywhere.

SECURITY

All our products have robust physical and cyber security measures to protect data, infrastructure, and uptime.

SUSTAINABILITY

All our products are highly energy efficient, designed to reduce power bills as well as carbon emissions.

Zella DC deployed its first outdoor Zella Hut for IIJ in October 2021 as part of a demonstration of DX edge at the Shiroi Data Centre Campus.

At the beginning of 2021 Tokyo was hit by an unusual snow storm that affected many businesses and operations. The Zella Hut was not affected by the snow, the storm, or the low temperatures.

ZELLA Hut
OUTDOOR MICRO DATA CENTRE

An alternative to containerised data centres, the Zella Hut is a stand alone outdoor micro data centre, built on the time proven Zella Pro series.

Available in three sizes, Zella Hut has all the same features as Zella Pro, with the added benefit that it can be placed outdoors.

The Zella Hut range has been designed with the edge in mind - built to protect your assets and IT infrastructure no matter where they are located.

Ready to be deployed at the Edge.

Empowered by
ZELLA Sense
Advanced Intelligence and Automation

ZELLA DC

Your data centre, anywhere

Zella DC is a market leader in edge-enabling solutions. With a comprehensive range of indoor and outdoor Micro Data Centres and scalable Containerised Data Centres, Zella DC offers a standard turn-key configuration ready for swift deployment and installation, enabling secure, reliable, and controlled environments for IT and OT equipment anywhere.

With expertise gained over the past decade, Zella DC has deployed Micro Data Centre solutions worldwide, meeting diverse requirements across numerous industries and environments. Zella DC excels in overcoming the unique challenges associated with edge and distributed deployments, providing standardisation and proven solutions.

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