MANAGING THE RESILIENCE AND SUSTAINABILITY MONITORING REQUIREMENTS FOR EDGE DATA CENTRE

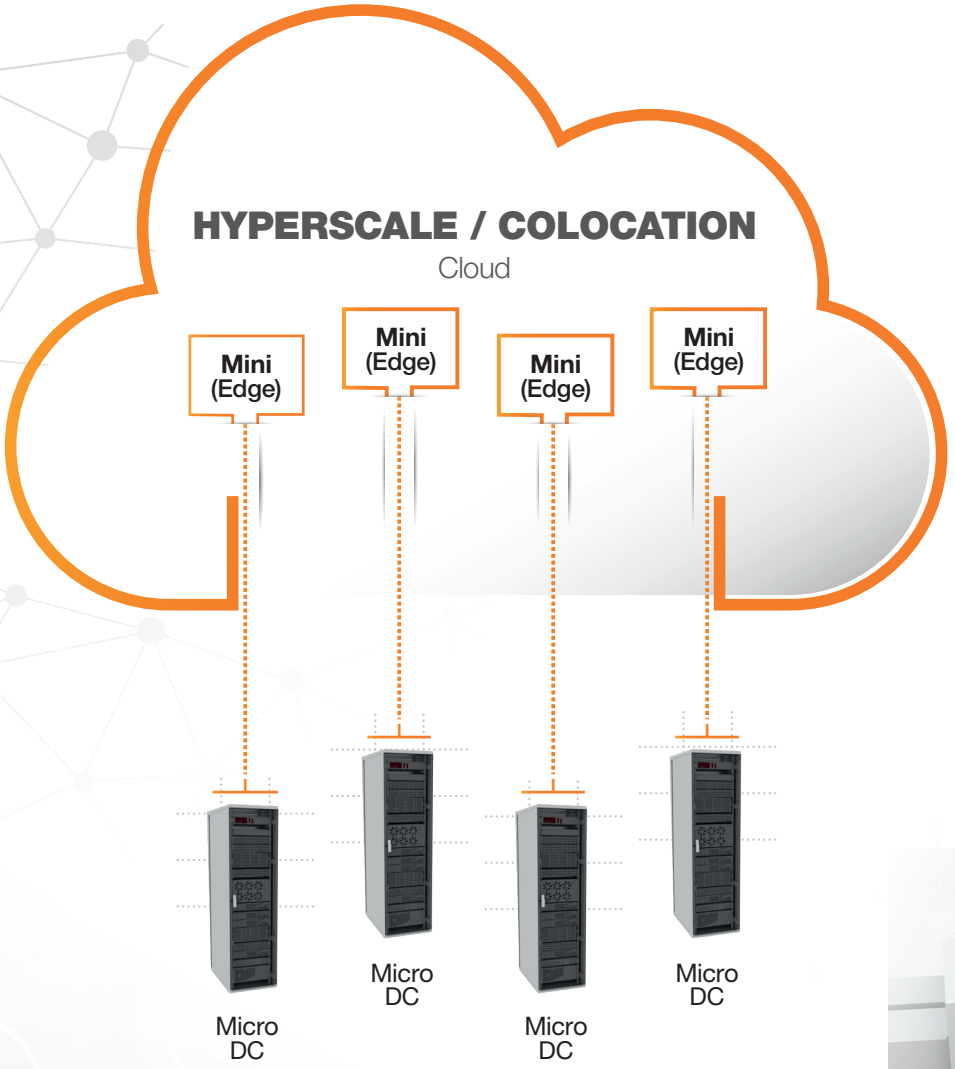
For data centres, uptime and business continuity are huge concerns. The most effective solutions can vary widely depending on your specific needs. There are also general strategies to consider for each size of data centre.

TREND

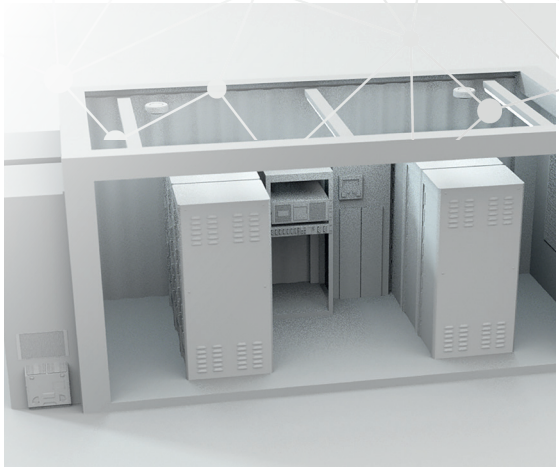
WHAT IS AN EDGE DATA CENTRE?

Edge data centre's are typically compact in size, located closer to the point of use, and used to reduce latency.

They are commonly referred to as Micro, modular or Mini Edge Data Centres, and their data is shared with larger colo or hyperscale DC's.



Micro data centres are compact enough to fit in a small room or office space, but they can process data locally without needing to communicate with the cloud or centralised servers.



Companies are increasingly using micro data centres to meet demand for low-latency service at the edge. Speed processing of some applications demands growth of edge computing.

TREND

WHAT DO WE OFFER FOR EDGE/MICRO DATA CENTRE?

Solutions that are quick to deploy, easy to integrate - enabling computing power to remain closer to the point of use.

- Edge computing brings fast processing and low latency closer to their sources. Accordingly, edge data centres are turning to innovative solutions like software-defined networking.

- To speed up deployment at the edge, our systems are modular and agile by design, helping you achieve more consistent operational standards with minimum engineering effort.

- Instead of relying on physical hardware to manage IT infrastructure, a software-defined data centre employs virtualisation to manage network resources.

- Modern solutions for micro data centres tend to use remote monitoring and energy management tools. These tools use targeted maintenance to improve engineering resource efficiency.

- Similarly, our platforms can provide a virtualised view of system performance with 24/7 diagnostics and early fault detection.

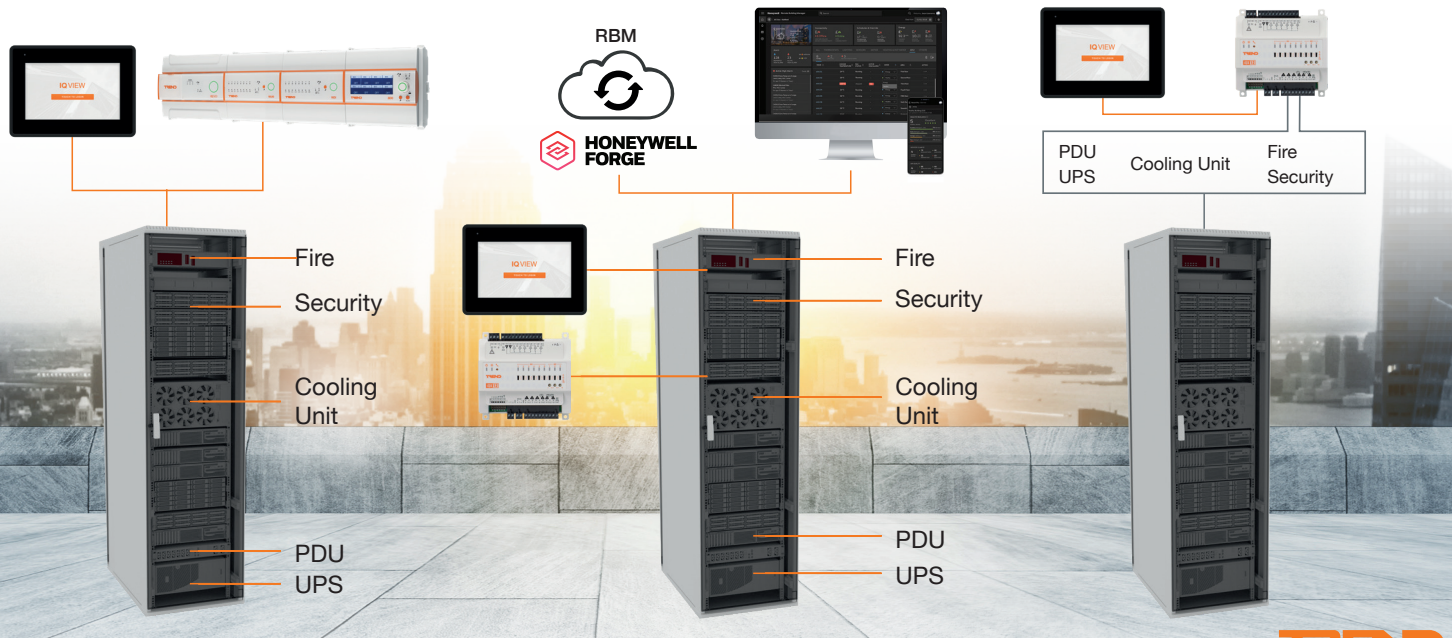
- IQ supervisor software can put energy management on cruise control, tracking real-time data and warning against system inefficiencies. In turn, you can focus on the areas that can improve site-wide efficiency.

All DC systems are monitored via local BMS controllers and shared with other systems (if required).

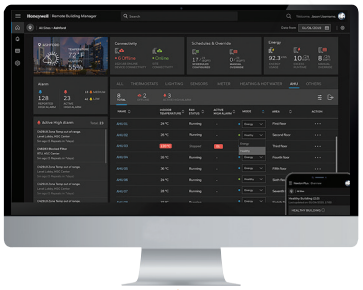
Trend BEMS system using the IQVISION Supervisor is based on the powerful Niagara 4 Framework™ to provide an Open-Multiprotocol Supervisor.

The various HVAC systems can be controlled by one local BMS control panel.

The following systems are typically connected via an approved high-level interface: Electrical switchboards (MV & LV); Transformers; ATS and STS; UPS; Battery Monitoring Systems; PDU, RPP and panel boards; CRAC or CRAH units; Fire detection and Vesda alarms; Metering (Water, Gas, Electric, Heat); DX and VRF systems; MVHR and Heat Recovery units.



MICRO DC EDGE



RBM

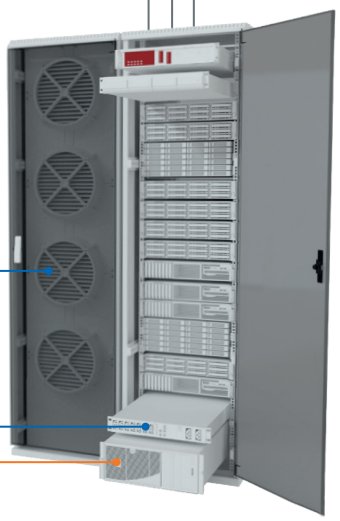
HONEYWELL FORGE

IT Network

On-premise

IT Network

Fire and Security- Hardwired



Cooling Unit- Modbus IP

PDU- SNMP

UPS- Modbus RS485

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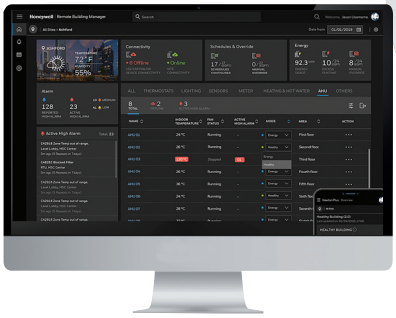
MINI DC EDGE

RBM

HONEYWELL FORGE



DC systems monitored via local BMS controllers and shared with other system (if required)

COOLING

SECURITY

FIRE ALARM

METERING

PDU

UPS

ENVIRONMENT

TREND

Trend Control Systems
Tel: +44 (0)1403 211888 trendcontrols.com

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