Internet of Things and Intelligent Edge: Infrastructure

IDC's *Internet of Things and Intelligent Edge: Infrastructure* research analyzes IT and OT infrastructure that is needed to enable edge computing and the Internet of Things (IoT). This includes networking devices and access, computing platforms like edge gateways and servers, real-time and general-purpose operating systems, and data persistence and storage platforms. It analyzes infrastructure requirements specific to IoT implementations across a diverse set of vertical industries, including healthcare, oil and gas, government, automotive, manufacturing, life sciences, and utilities. This research also examines the impact of emerging IoT, edge, and converged IT/OT (software-defined OT) ecosystems along with related business challenges faced by enterprise IT managers within service providers, enterprises, and industry verticals. Specifically, this service takes an end-to-end view of edge IT and IoT-related technologies and business challenges within wired and wireless access, core networking, edge computing, and storage solutions at the core, at the edge, and in the cloud.

MARKETS AND SUBJECTS ANALYZED

- Edge and IoT network connectivity — Low-power wireless access technologies (cellular and noncellular), platforms, gateways, aggregation points, agents, and sensors
- Edge and IoT computing platforms — Both core datacenter and edge computing infrastructure, including gateways
- Edge and IoT storage platforms — Both storage and data persistence in both datacenter and edge infrastructure

CORE RESEARCH

- Edge and IoT Infrastructure (Taxonomy and Definitions)
- Edge and IoT Infrastructure Survey Document
- Converged IT/OT and Software-Defined OT
- IDC PlanScape for Edge and IoT Infrastructure
- Edge and IoT Infrastructure: Networking Storage and Computing Platforms for IoT Market Size and Forecast
- IDC Tech Briefs on Emerging IoT-Specific Networking Technologies
- Edge Gateways and Systems, Industry Specific, Network, and General Purpose
- Cellular and Noncellular LPWAN IoT Strategies

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: Internet of Things and Intelligent Edge: Infrastructure.

KEY QUESTIONS ANSWERED

1. What are the key trends emerging within the edge/IoT infrastructure market?
2. What are the key networking, server, and storage requirements emerging across the edge/IoT ecosystem?
3. How is the edge/IoT infrastructure market related to the Big Data and analytics market opportunity? What edge/IoT-generated data persists over time, where, and how?
4. How will service provider business models evolve for edge/IoT? What are the implications for IT infrastructure?
5. Who are the key players in edge/IoT infrastructure, and where are the opportunities for growth?
6. How will IT/OT convergence and software-defined OT impact edge IT infrastructure?

COMPANIES ANALYZED

This service reviews the strategies, market positioning, and future direction of several providers in the edge/IoT infrastructure market, including:

Amazon Web Services, Apple, ARM, AT&T, Cisco, Cradlepoint, Dell, Deutsche Telekom, Ericsson, Fujitsu, Google, Hewlett Packard Enterprise, Hitachi, Huawei, IBM, Intel, Lumen Technologies, Meta Platforms, Microsoft, Nokia, Oracle, PTC, Qualcomm, Ruckus, Samsung, Sierra Wireless, T-Mobile, Telefónica, Telstra, Verizon, Vodafone, and ZTE.