



MODERN INFRASTRUCTURE AND MULTICLOUD

The Edge: Where Innovation Thrives

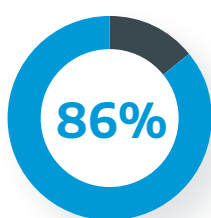


Edge computing has rapidly emerged as a business imperative for modern technology companies. As data volumes explode and the need for real-time decision-making accelerates, organizations will shift processing power closer to where data is generated. This shift to edge processing enables faster insights, enhanced agility, and more resilient operations. Edge computing is increasingly powered by AI, incorporating machine learning and embedded AI to boost efficiency and create next-generation customer experiences.

The bulk of applications and data will reside outside of clouds and data centers by 2027, elevating the importance of an edge strategy.¹ Enterprises are acknowledging this paradigm shift and actively carving out an edge management and orchestration strategy for their organizations.

Why Edge, Why Now?

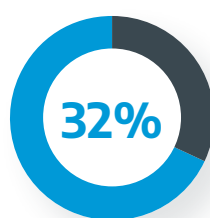
75% of enterprise data will be processed outside traditional data centers/clouds by **2025**—a sizable increase from **less than 10% in 2019**.²



of respondents report considering moving away from the public cloud.³



of respondents report running workloads in a multicloud or multiple clouds.³



used a hybrid or a combination of cloud and on-premises resources.³

Double-digit Growth Forecast

15.4% increase in worldwide spend on edge computing, totaling an expected \$232 billion in 2024, and \$350 billion in 2027.⁴



What's Driving the Shift?

IoT Growth

Influx of 18.8 billion smart devices globally.⁵

Real-time Demands

Need for low latency is growing.⁶

AI and 5G Synergy

Edge powers instant insights via AI.⁷

Security

Localized processing minimizes exposure.⁸

AI at the Edge

60% of edge deployments will use composite AI (predictive and generative) by 2029—up from less than 5% in 2023.⁹

Business Benefits

- **Faster Decisions**—Data processed instantly at the source.
- **Less Bandwidth**—No need to send everything to the cloud.
- **Modular Scalability**—Deploy edge nodes wherever needed.
- **Improved Resilience**—Keep systems running even if disconnected.



Users of the Dell NativeEdge platform experienced on average:¹⁰



22x faster lifecycle management



11x faster security management



Major Growth Ahead

2x growth in four years: By 2026, the installed base of data at edge locations is expected to surge to **2,763** exabytes, up from **895** exabytes in 2022.¹¹



But Security Challenges Come with Growth

81% of organizations recognize that emerging technologies such as AI, IoT, and edge computing present significant data protection challenges.¹¹

77% of hacking-related breaches relate to stolen credentials. The FIDO Alliance seeks to boost security across environments by eliminating passwords.¹²

How Connection Can Help

Connection is your partner for modern infrastructure and cybersecurity solutions and services. From hardware and software to consulting and customized solutions, we're leading the way in infrastructure modernization.

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Contact an Expert

1.800.998.0067

Sources:

¹ Gartner, 2023, Gartner Says 50% of Critical Enterprise Applications Will Reside Outside of Centralized Public Cloud Locations Through 2027

² Gartner, The Convergence of Edge and Cloud: How Edge Computing Enhances Capabilities, 2025

³ Parallels, The State of Cloud Computing in 2025 and Beyond - Survey Report

⁴ Future CIO, Edge Computing Investments Will Reach \$232 Billion in 2024

⁵ IoT Analytics, State of IoT 2024: Number of connected IoT devices growing 13% to 18.8 billion globally, 2024

⁶ Compunnel, Edge Computing in 2024: Accelerating Data Processing Capabilities

⁷ Mishandohler, The Synergy of AI in Elevating 5G Edge Computing, October 2024

⁸ Suse, The Relationship Between Edge Computing and Cloud Computing, 2024

⁹ VMware, Edge AI Success Demands Technology Curated for the Edge, 2024

¹⁰ Dell Inc., Dell NativeEdge: Accelerate AI Innovation at the edge, 2024

¹¹ Dell Inc., Dell NativeEdge - Security Solution Brief, 2024

¹² Fido Alliance, Passkey Pledge 2025