

# Dell PowerEdge Servers: Bringing AI to Your Data

---



## Introduction

Harnessing the power of artificial intelligence (AI) has become a strategic imperative in today's ever-changing business environment. AI empowers businesses to unlock a wealth of opportunities by analyzing vast datasets, automating complex tasks, and making data-driven decisions at an unprecedented speed and scale. It enables companies to enhance customer experiences, optimize operations, and gain a competitive edge. From predictive analytics to personalized recommendations to Generative Artificial Intelligence (GenAI), AI-driven innovations are reshaping industries, driving efficiency, and fostering innovation.

The emergence of GenAI offers a catalyst to accelerate curiosity for forward-thinking enterprises. While its potential beckons, the journey to its full understanding is complex. At its core, GenAI relies on data to fuel its capabilities. More data could lead to potentially improved insights and value to its users. This reliance on volumes of data could, however, introduce security

challenges - one of which is protecting intellectual property from "shadow" GenAI activities such as unregulated data access, bias and unintended decision making. Dell Technologies PowerEdge servers offers a secure infrastructure to safely process vast amounts of data and provide tailored hardware and solutions for organizations exploring GenAI's potential.

## Simplified Integration Anchored in Empirical Wisdom and Innovative Efficiency

Recent research by McKinsey<sup>1</sup> underscores the competitive advantage of AI, revealing that AI-driven firms are significantly more likely to eclipse their peers in terms of revenue growth. It's not just about understanding GenAI in its entirety, the real challenge is to effectively integrate it into your organizational framework. This is where Dell PowerEdge servers, pursuing cutting-edge solutions will fast forward your innovations.



With an unwavering focus on efficient integration, Dell solutions are thoughtfully engineered to streamline the GenAI adoption journey. Merging breakthrough technologies with fact-based strategies, embarking on the GenAI voyage becomes significantly simplified. For example, the Dell Validated Design for Generative AI (formerly known as Project Helix), stands as a real-world solution revolutionizing model training, onboarding, and refinement for companies to easily deploy generative AI across their organizations.

## Consumption Models: Making it easy to acquire GenAI

Moving forward, Dell is committed to empowering companies to use AI. IDC insights hint at a substantial surge in operational efficiency for organizations integrating tailored AI solutions<sup>2</sup>. Moreover, Gartner's projections around the growing influence of flexible consumption models resonate with Dell's transparent offer strategies<sup>3</sup> to help companies realize the potential value of GenAI sooner. By offering choices in a portfolio of products, services and payment options, Dell paves the way for businesses to easily acquire the right technology to tackle the exciting opportunities and challenges of GenAI.

## Tailored Innovation: The Empirical and Pragmatic Approach to GenAI

Forrester's insights echo the industry's sentiment: tailored AI solutions are the key to a competitive edge, with a significant majority of businesses corroborating this belief that GenAI's true brilliance doesn't lie in generic, off-the-shelf solutions<sup>4</sup>. Instead, it thrives when tailored to align with an organization's unique data landscape and objectives. In essence, bring AI to your data.

Dell dives deeper than just software fine-tuning. We drive "right-sizing" by offering choices from the PowerEdge server family, purpose-built for large language model training and inferencing. Research from Accenture<sup>5</sup> reinforces this perspective, underscoring the potential for businesses to reap threefold returns when they invest in tailored AI solutions. For less-demanding AI training or inferencing operations, customers can choose PowerEdge servers leveraging CPUs for AI operations and scale up to add-in GPUs as generative AI needs grow. By providing a wide variety of strategic configurations, Dell positions companies to make the best choice as visionary builders of their futures.



## Trust and Security: The Pillars of GenAI's Foundation

When using GenAI a leading customer concern is intellectual property (IP) leakage<sup>7</sup>. Knowing GenAI places an unprecedented emphasis on large volumes of data that may include company secrets, Dell's approach is to bring AI capability to this wealth of data behind the safety of company firewalls – bring AI to your data. As highlighted by Statista<sup>6</sup>, the surge in cyberattacks targeting AI systems and operations underscores the pressing need for innovative security solutions. Traditional defense mechanisms are often ill-equipped to counter the unique challenges posed by malicious actors using AI. Enter Dell Technologies PowerEdge servers, which has a modern security system that's been industry tested for years. The globally acclaimed x86 server, bolstered by a robust Zero Trust ecosystem, exemplifies Dell's pioneering approach to data security. It's good to know that Dell works hard to innovate its security platform, making sure the data GenAI uses is protected and the insights delivered are accurate and safe<sup>6</sup>.

## Where should you go next?

As the world stands on the cusp of a GenAI revolution, Dell Technologies [PowerEdge](#) servers, the world's broadest generative AI solutions portfolio from desktop to data center to cloud, carves its niche as a proven solution<sup>8</sup>. Combining leading edge architectures and empirical insights with pioneering innovation and a commitment to tailored solutions, Dell offers businesses a lucid, assured path through the GenAI maze. In collaboration with Dell, organizations can navigate the GenAI frontier with unmatched clarity, unwavering confidence, and the guarantee of transformative outcomes.

[Learn more](#)

## References

1. McKinsey & Company (2021), The State of AI, <https://www.mckinsey.com/capabilities/quantumblack/our-insights>
2. International Data Corporation (IDC). (2022). Edge Solutions Will Continue to Receive Strong Investment Support Over the Next Two Years, <https://www.idc.com/getdoc.jsp?containerId=prUS49009222>
3. Gartner (2023), INFLATION'S PERMANENT IMPACT ON SAAS/SOFTWARE COSTS, COMMERCIALS AND BUSINESS PRACTICES, [https://www.riministreet.com/resources/analyst-research/gartner-predicts-2023-inflations-permanent-impact/?utm\\_source=google&utm\\_medium=cpc&utm\\_term=gartner%20predicts&utm\\_campaign=20204782925&utm\\_adgroup=150985101113&utm\\_content=660109214522&utm\\_id=7014X000002u7cC&gclid=Cj0KCQjw06-oBhC6ARIsAGuzdw35E6rCkXzUu-qXJf8krqsG6wtuNF-N30F-eV4u2u5lYtZL-82\\_IKsaAiglEALw\\_wcB](https://www.riministreet.com/resources/analyst-research/gartner-predicts-2023-inflations-permanent-impact/?utm_source=google&utm_medium=cpc&utm_term=gartner%20predicts&utm_campaign=20204782925&utm_adgroup=150985101113&utm_content=660109214522&utm_id=7014X000002u7cC&gclid=Cj0KCQjw06-oBhC6ARIsAGuzdw35E6rCkXzUu-qXJf8krqsG6wtuNF-N30F-eV4u2u5lYtZL-82_IKsaAiglEALw_wcB)
4. Forrester (2023), Gartner Identifies Top Trends Shaping the Future of Data Science and Machine Learning. <https://www.gartner.com/en/newsroom/press-releases/2023-08-01-gartner-identifies-top-trends-shaping-future-of-data-science-and-machine-learning>
5. Accenture (2022), Accenture to Invest \$3 Billion in AI to Accelerate Clients' Reinvention. <https://newsroom.accenture.com/news/accenture-to-invest-3-billion-in-ai-to-accelerate-clients-reinvention.htm>
6. Statista Research Department (2023), U.S. companies and cyber crime - Statistics & Facts, <https://www.statista.com/topics/1731/smb-and-cyber-crime/>
7. Hacker News (2023), Overcoming Generative AI Data Leakage Risks. <https://thehackernews.com/2023/09/live-webinar-overcoming-generative-ai.html>
8. IDC Semiannual AI Tracker: Worldwide Server and Storage Revenue, 2021 and 2022 H1



Learn more about  
Dell solutions



Contact a Dell  
Technologies Expert



View more resources



Join the conversation  
with #PowerEdge