

Microsoft

# PROWESS DOLL Technologies

# Boost Security and Reduce TCO: An Analysis of Windows Server<sup>®</sup> 2025

Research conducted by Prowess Consulting concludes that Windows Server 2025 delivers superior security capabilities, such as hotpatching, compared to Windows Server 2022. Additional analysis reveals that the OEM-licensed Windows Server 2025 version that comes preinstalled on Dell<sup>™</sup> PowerEdge<sup>™</sup> R770 servers delivers superior licensing costs, deployment time and effort, and technical support compared to the volume-licensed, manually installed version.

In their efforts to stay agile and competitive, small and medium-sized businesses (SMBs) must surmount significant challenges, such as protecting against cyber threats, meeting regulatory requirements, modernizing infrastructure, and lowering total cost of ownership (TCO). Keeping up with modern data security requirements can be particularly challenging for organizations with limited budgets and IT resources. The cost of a security breach or non-compliance can be devastating, with insurance company Coalition citing the average cost of a security breach claim in 2022 to be \$139,000—and this amount has only risen since then.<sup>1</sup>

To investigate how Windows Server<sup>®</sup> 2025 can help SMBs address today's business and operational challenges, Prowess Consulting conducted a study, sponsored by Dell Technologies, to compare the benefits of Windows Server 2025 versus Windows Server 2022. We also did a comparison of OEM licensing preinstalled on Dell<sup>™</sup> PowerEdge<sup>™</sup> R770 servers versus traditional, manually installed volume licensing.

Adopting a zero-trust security model rooted in hardware helps enhance data security and risk mitigation. Windows Server 2025 installed on PowerEdge R770 servers delivers multi-layered, hardware-enforced, and automated security features like hotpatching, which can help enhance your security strategy without requiring specialized expertise. Windows Server 2025 is also designed to facilitate AI adoption, with future-ready features that boost AI and machine learning (ML) performance, help scale infrastructure from edge to cloud, help improve operational efficiency, and help streamline DevOps.

Standardizing your server environment with Windows Server 2025 OEM licensing preinstalled on PowerEdge R770 servers can also help significantly lower TCO. Results of our analysis reveal that, compared to traditional volume licensing, OEM licensing costs less, streamlines software procurement, reduces the need for manual intervention, and accelerates server deployment—leading to significant savings in both capital expenditures (CapEx) and operating expenses (OpEx). We also found that the OEM licensing offered through Dell Technologies includes a superior technical support package compared to traditional licensing.



## **Multi-Layered Security with Hotpatching**

Windows Server 2025 comes with enhanced security capabilities, many of which are enabled by default and do not require thirdparty add-ons. This latest release introduces Microsoft Azure<sup>®</sup> Arc–enabled hotpatching. Hotpatching automatically installs security updates with near zero downtime and minimal staff intervention, reducing attack exposure.

Microsoft-certified secured-core servers, such as the PowerEdge R770 server, enhance Windows Server 2025 security with multi-layered security rooted in hardware. PowerEdge servers deliver a silicon-based mechanism for verifying system integrity from bootup, which can help build your zero-trust environment foundation.

#### **AI-Ready Server Infrastructure**

Windows Server 2025 and the PowerEdge R770 server are designed to help your organization deploy an Al-ready, future-ready infrastructure. This Windows Server platform is optimized for running Al and ML workloads, seamless deployments across edge, hybrid, and multicloud environments, and advanced container management.

Operational efficiency capabilities include GPU partitioning, which helps improve resource allocation, live migration, and failover clustering. Other improvements over Windows Server 2022 include faster operating system (OS) upgrades, support for larger virtual machines (VMs) and more vCPUs, faster container transfers and downloads, and optimized data deduplication and compression.

#### **Time-Saving Server Deployment**

Our analysis shows that using Windows Server 2025 OEM licenses preinstalled on PowerEdge R770 servers enables IT teams to get services up and running faster and with less effort than manually installed traditional licenses. In our research, the preinstalled OEM license used 62% less time and 71 fewer steps to deploy one server compared to the traditional license.<sup>2</sup>

#### **Cost-Saving OEM Licensing**

Windows Server 2025 OEM licenses preinstalled on PowerEdge R770 servers help significantly lower CapEx and OpEx compared to traditional licensing. Windows Server 2025 OEM licensing costs 40% less than traditional volume licensing. We estimate the total cost to deploy 10 servers with traditional licensing, including license purchases and IT labor, is US \$21,849. The total cost to deploy 10 servers with OEM licensing, including license and IT labor, is US \$12,962. In other words, the preinstalled OEM license can deliver savings of up to US \$8,887 per 10 servers.<sup>2</sup>

### **One-Stop Tech Support**

Traditional licensing spreads tech support across multiple vendors, which can be a productivity killer. OEM licensing from Dell Technologies includes Dell ProSupport<sup>™</sup>, a single source of expertise that can significantly reduce administrative time and effort for hardware and software. This end-to-end support includes proactive monitoring, diagnostics, and 24/7 enterprise-grade support for the PowerEdge R770 server and Windows Server 2025.

### Learn More

Get the full story by reading the technical research report, "Testing the Value of Dell™ PowerEdge™ R770 Servers with Preinstalled Windows Server® 2025."

#### Endnotes

<sup>1</sup> Coalition. "Cyber Claims Update: ransomware levels off, risks persist for SMBs." September 2022.

<sup>2</sup> Prowess Consulting. "Testing the Value of Dell™ PowerEdge™ R770 Servers with Preinstalled Windows Server® 2025." Commissioned by Dell Technologies. April 2025.



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