

SEPTEMBER 2023

# Gain Agility and Achieve Business Results Faster With Dell APEX Cloud Platform for Microsoft Azure

Scott Sinclair, Practice Director; and Monya Keane, Senior Research Analyst

**Abstract:** Many organizations are facing an urgent need to establish a more consistent hybrid and multi-cloud experience. The Dell APEX Cloud Platform for Microsoft Azure is an optimal way to achieve that consistency for organizations that are using Microsoft Azure cloud services. But Dell's and Microsoft's contributions do not end there. In addition to reducing the complexity of an IT environment, this solution also helps to accelerate organizations' time to business value, and it boosts their business agility overall.

## Overview

Today, a typical organization owns and manages a diverse application deployment environment that spans on-premises data centers, edge locations, public cloud infrastructures, and colocation facilities. Application deployments on public cloud infrastructures are growing, but these deployments often result in a hybrid cloud environment that is too complex to achieve the goal of accelerating business and IT operations. Complexity is also counterproductive to digital transformation initiatives, which are designed to pull organizations into modern levels of business agility.

Such digital transformation initiatives often involve investing in on-premises infrastructure modernization. Organizations making these kinds of on-prem investments should consider the [Dell APEX Cloud Platform](#) for Microsoft Azure, which simplifies and accelerates IT operations while providing advantages tied to use cases such as:

- Hybrid cloud IT.
- Application modernization.
- Workload placements and migrations.
- Edge computing.

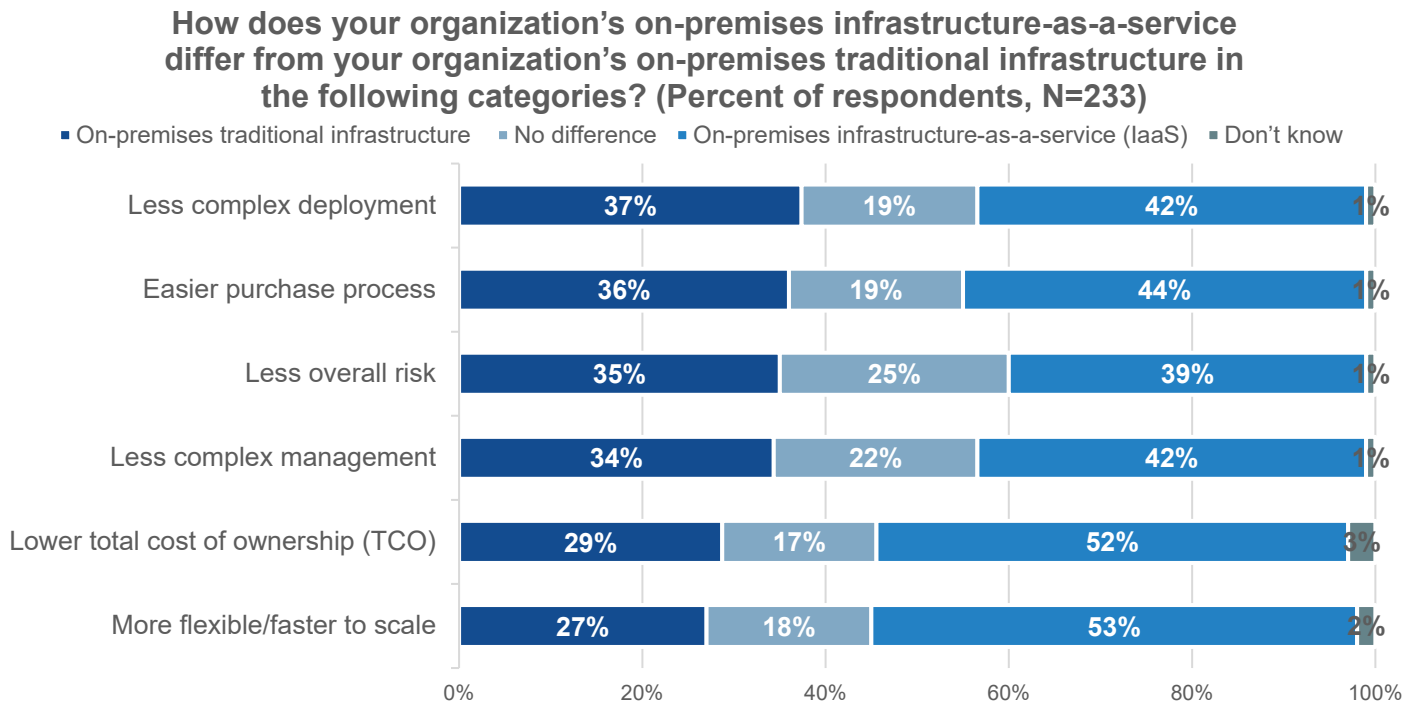
Research by TechTarget's Enterprise Strategy Group shows that, when it comes to designing a modernization strategy for their on-premises data center environments, nearly half of organizations are working toward a goal of improving connectivity to and interoperability with public cloud infrastructure.<sup>1</sup>

Modernized on-premises cloud services, ones that simplify interoperability with public cloud providers, offer transformational benefits to hybrid cloud operations, reducing risk, simplifying management, and lowering TCO (see Figure 1).<sup>2</sup>

<sup>1</sup> Source: Enterprise Strategy Group Complete Survey Results, [Distributed Cloud Series: The State of Infrastructure Modernization Across the Distributed Cloud](#), August 2023.

<sup>2</sup> Source: Enterprise Strategy Group Research Report: *Distributed Cloud Series: Understanding Buyer and Influencer Personas*, to be published.

Figure 1. On-premises IaaS-based IT Offers Business Advantages



Source: Enterprise Strategy Group, a division of TechTarget, Inc.

## Dell APEX Cloud Platform for Microsoft Azure

The Dell APEX Cloud Platform for Microsoft Azure is an on-premises infrastructure platform that is the outcome of extensive engineering collaboration between Dell and Microsoft to extend and optimize the Azure hybrid cloud experience.

This turnkey platform provides deep integrations and intelligent automation between the layers of the Dell Technologies and Microsoft technology stack, accelerating a business's time to value by radically reducing complexity and boosting IT agility and productivity. It is designed to automate all aspects of management—from deployment to continuous lifecycle management—and ultimately help simplify Azure hybrid cloud operations.

The platform helps to accelerate application modernization efforts and simplify operations across locations by optimizing the delivery of Azure Kubernetes Services and Azure Arc-enabled services as well. Additionally, it can mitigate potential security and compliance risks through its integration with Azure management and governance services.

## Use Cases for the Dell APEX Cloud Platform for Microsoft Azure

Here's a closer look at some of the key use cases for the Dell APEX Cloud Platform for Microsoft Azure.

### Simplifying the Hybrid Cloud Experience

Enterprise Strategy Group research reveals that much of the complexity stemming from the use of hybrid or multi-cloud environments is tied to differing management processes and the varying capabilities of cloud services. Consider that when Enterprise Strategy Group asked IT decision makers to identify the most difficult challenges they face related to application management across multi-cloud environments:

- **31%** of the respondents identified meeting security expectations as a challenge.
- **25%** identified meeting performance expectations as a challenge.
- **23%** identified meeting availability expectations as a challenge.
- **23%** identified ensuring proper coordination across cloud and IT functional teams as a challenge.<sup>3</sup>

Again, these issues are due to differences across clouds—differences that are adding complexity and burdening operations.

The good news is that organizations that have standardized on Azure and are looking to extend their Azure public cloud operations on-premises have a way to solve this problem. They can deploy the Dell APEX Cloud Platform, which is the first offering in the Microsoft Premier Solutions for Azure Stack HCI category, as it could provide them with several vital capabilities. The Platform:

- Offers advanced, full-stack lifecycle management, including Microsoft and third-party components.
- Is first to perform continuous joint CI/CD testing with Microsoft, enabling instantaneous availability and seamless lifecycle management of Microsoft updates.
- Extends the Azure cloud on premises with hybrid Azure Arc-enabled data, application, and platform services, including offering centralized Azure management and governance.
- Provides integration and full-stack manageability through the Windows Admin Center (WAC) and Azure portal.
- Will use a common storage fabric, based on Dell's enterprise software-defined storage, on premises and in the Azure public cloud, which will result in simpler application management, easier data mobility, and the ability to optimize SLAs for a broad set of workloads.

## Accelerating Application Modernization

Enterprise Strategy Group research has found that 29% of IT decision-makers believe integrating with the CI/CD application development framework is one of their most difficult challenges related to application management across multi-cloud environments.<sup>4</sup> This is somewhat concerning since consistency across locations and seamless integration are essential for organizations as they attempt to modernize applications, especially when they are leveraging cloud-native technologies.

However, organizations that are looking to adopt agile, containerized, microservices-based application architectures and are using Microsoft cloud services, platforms, and applications will find that the Dell APEX Cloud Platform provides some key capabilities:

- It supports Hyper-V VMs alongside containers to provide a common platform for modernization.
- It offers consistent Azure Arc services across locations to help accelerate application modernization with consistent Azure Kubernetes Service and Arc-enabled on-demand application and data services.
- It will provide a common storage fabric on premises and in the Azure cloud, which allows IT teams to develop and deploy modern apps anywhere and migrate those applications more easily later, as needed.
- It is engineered with an automated DevOps and app workflow using rich APIs. The APIs and PowerShell support are designed to simplify IT, application, and DevOps workflows by easily integrating this platform with those processes.

---

<sup>3</sup> Source: Enterprise Strategy Group Complete Survey Results, [Distributed Cloud Series: The State of Infrastructure Modernization Across the Distributed Cloud](#), August 2023.

<sup>4</sup> Ibid.

## Optimizing Workload Placement

Enterprise Strategy Group research reveals that a large majority of organizations (86%) regularly change workload placements over time. Despite broad agreement that multi-cloud IT is beneficial, app and data migrations remain intricate processes that are still far from being “plug-and-play” in terms of deployment. For example, 82% of organizations said they struggle to properly size workloads for the optimal infrastructure environment, regardless of whether that ideal environment is located on or off premises.<sup>5</sup>

For organizations using Microsoft cloud services that are looking to build agile, adaptable workload placements across their on-premises locations, including optimizing requirements related to compliance, security, and application SLAs, the Dell APEX Cloud Platform can provide notable benefits:

- Unconstrained workload placement with consistent Azure operations.
- Coming soon, a common storage fabric on premises and in the Azure cloud that offers easy mobility for adaptable workload placement. Dell’s software-defined storage is designed to optimize workload SLAs, whether in the public cloud or on premises. This gives the IT organization predictable outcomes regardless of where apps are deployed, so it can focus on other considerations, such as compliance, cost, and security.

SDS offers independent linear scaling and the ability to address diverse workload performance profiles. Dell can optimize workload placement for various governance and data gravity needs with an on-prem infrastructure, and/or when specific workloads have unpredictable scale requirements.

- It will offer the ability to extend Azure to the edge with specialized node configurations.
- A full-stack, intrinsic approach to security, which eliminates the need for application teams to utilize insecure and/or non-compliant locations for their dev/test activities.

## Optimizing Edge Environments

Organizations increasingly are deploying applications to the edge to gain real-time business insights from the data generated there. According to Enterprise Strategy Group research, 94% of respondents called edge computing one of their organization’s top 10 IT priorities, with 20% citing it as their top priority overall.<sup>6</sup>

For organizations interested in collecting, analyzing, and uncovering insights from data at their smaller and distributed locations (i.e., locations other than core data centers), the Dell APEX Cloud Platform provides the following capabilities:

- The ability to extend Azure to the edge, with new power, space, and cost-efficient nodes based on the Dell PowerEdge XR-4000 server platform.

### Notable Characteristics of Dell SDS

Dell software-defined storage:

- Helps address a broad set of workloads with diverse performance profiles.
- Allows independent scaling of storage.
- Delivers enterprise SLAs, leading I/O and throughput performance, linear scalability to 100s of nodes, and extreme resilience with a self-healing architecture.
- Will be tightly integrated with APEX Cloud Platform management through familiar tools (i.e., Windows Admin Center and Azure portal), providing simplicity.

<sup>5</sup> Source: Enterprise Strategy Group Research Report, [Multi-cloud Application Deployment and Delivery Decision Making](#), June 2023.

<sup>6</sup> Source: Enterprise Strategy Group Research Report, [The State of Digital Ecosystems at the Edge](#), September 2022.

- Centralized management and governance through Azure portal to provide simpler manageability along with better data collection, improved data security, and ensured data compliance.
- Hybrid on-demand Arc-enabled services with Dell validated solutions to simplify application environments at the edge.
- Less infrastructure buildout at the edge, with switchless configurations and cluster sizes as small as one node.

## Conclusion

This is a classic “better together” solution—an on-premises infrastructure platform that Dell and Microsoft created to extend and optimize organizations’ Azure Cloud experience, both in the data center and at the edge.

Essentially, Dell has combined its leadership in HCI, especially around management and orchestration, with Microsoft’s leadership related to cloud-based services. Dell APEX Cloud Platform for Azure is tightly integrated across the entire technology stack—from the latest-generation Dell server/storage hardware, to the firmware, to the Azure software and APEX Cloud Platform Foundation software—culminating in a comprehensive solution offering easy lifecycle management and an overall simpler operational experience for any organization leveraging Azure hybrid cloud IT.

Additionally, Microsoft and Dell are just getting started. APEX Cloud Platform for Azure is the first offer in the market for Premier Solutions for Microsoft Azure Stack HCI, reflecting an improved operational experience, faster time to value, and better quality of service—integrated and validated for Azure. Upon release, Dell APEX Cloud Platform for Azure will be the only offer in the Microsoft Premier Solutions for Azure Stack HCI category to support linear scaling of storage resources independently from Microsoft S2D storage resources. It will therefore be ideal for workloads with unpredictable performance and scale requirements.

Dell is excited about these developments, and it should be. This collaboratively engineered solution means that Dell can offer Azure-using businesses a considerably higher level of seamless integration, above and beyond what those businesses could get from any other “integrated” systems available today.



©TechTarget, Inc. or its subsidiaries. All rights reserved. TechTarget, and the TechTarget logo, are trademarks or registered trademarks of TechTarget, Inc. and are registered in jurisdictions worldwide. Other product and service names and logos, including for BrightTALK, Xtelligent, and the Enterprise Strategy Group might be trademarks of TechTarget or its subsidiaries. All other trademarks, logos and brand names are the property of their respective owners.

Information contained in this publication has been obtained by sources TechTarget considers to be reliable but is not warranted by TechTarget. This publication may contain opinions of TechTarget, which are subject to change. This publication may include forecasts, projections, and other predictive statements that represent TechTarget’s assumptions and expectations in light of currently available information. These forecasts are based on industry trends and involve variables and uncertainties. Consequently, TechTarget makes no warranty as to the accuracy of specific forecasts, projections or predictive statements contained herein.

Any reproduction or redistribution of this publication, in whole or in part, whether in hard-copy format, electronically, or otherwise to persons not authorized to receive it, without the express consent of TechTarget, is in violation of U.S. copyright law and will be subject to an action for civil damages and, if applicable, criminal prosecution. Should you have any questions, please contact Client Relations at [cr@esg-global.com](mailto:cr@esg-global.com).

### About Enterprise Strategy Group

TechTarget’s Enterprise Strategy Group provides focused and actionable market intelligence, demand-side research, analyst advisory services, GTM strategy guidance, solution validations, and custom content supporting enterprise technology buying and selling.

✉ [contact@esg-global.com](mailto:contact@esg-global.com)

🌐 [www.esg-global.com](http://www.esg-global.com)