Are You Ready for the Azure Hybrid Cloud of the Future?

Solutions that reduce complexity, improve manageability and optimize costs are the next step in cloud adoption.

The IT landscape for enterprise organizations presents unprecedented levels of complexity in today's fast-paced business world. Organizations are generating, storing and analyzing data across diverse locations within their operational footprints, including core data centers, branch offices, satellite facilities, distribution centers and points of purchase.

This phenomenon is happening because organizations need to provide new and innovative applications and services quickly to optimize operations, be more agile and gain a competitive edge. In essence, organizations need to effectively use the full potential of their data, wherever it's located. Many have adopted containerization and DevOps methodologies that can accelerate the delivery of new applications and capabilities.

As a result, enterprises are increasingly embracing a multicloud strategy as they seek to harness the benefits of cloud computing both on premises and off premises, including at edge locations. With this strategy, organizations can utilize public cloud and on-premises resources flexibly to support their application needs. This helps ensure operational efficiency and enables organizations to navigate rapid development and deployment cycles with ease. By taking these approaches, organizations can achieve agility, efficiency and responsiveness to meet their dynamic business demands.

Enterprises Seek a Simplified Solution

Customers who turn to Dell Technologies and Microsoft for their expertise and strategic solutions in the data center can continue to rely on their solutions to manage and optimize Microsoft Azure hybrid cloud environments. Microsoft's leadership in cloud services and enterprise applications, together with Dell Technologies' expertise in delivering integrated infrastructure platforms and software-driven management and orchestration automation, allows these companies to deliver turnkey solutions that can help enterprises increase the simplicity, agility and control of their Azure hybrid cloud environments.

Microsoft and Dell Technologies collaborated to build Dell APEX Cloud Platform for Microsoft Azure to help their joint customers optimize Azure hybrid cloud operations. The solution empowers organizations to unlock innovation with a consistent Azure experience across all their IT environments. Through extensive integrations and numerous automations, the platform empowers IT organizations to simplify app modernization and accelerate DevOps.
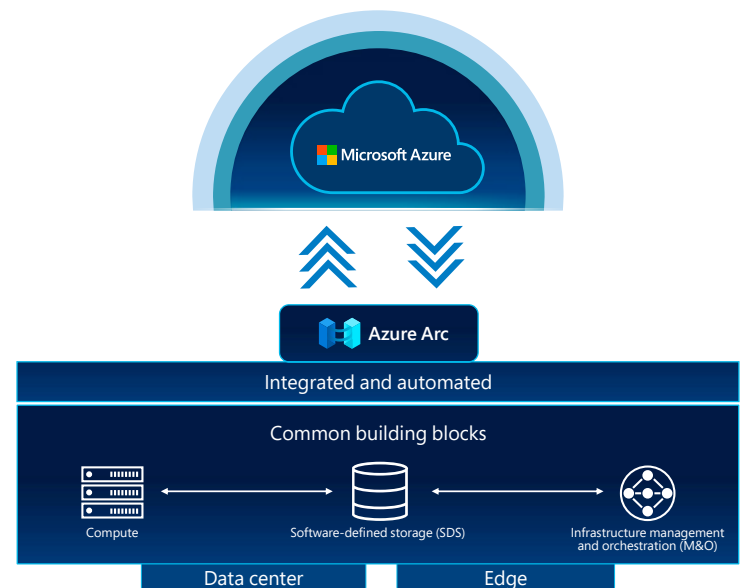

Figure 1. Dell APEX Cloud Platform for Azure is the first cloud platform collaboratively built to optimize the Azure hybrid cloud experience

The platform enhances Azure operations by providing consistent management and operations with centralized Azure tools (see Figure 1). And the platform mitigates security and compliance risks with an intrinsic approach to security that extends Azure governance across all deployment environments.

Bridge the Cloud Divide

Dell APEX Cloud Platform Foundation Software serves as the cornerstone of Dell APEX Cloud Platform for Azure. This proven management and orchestration software gives organizations a consistent and unified experience across their Azure deployments.

Dell APEX Cloud Platform Foundation Software provides deep, cross-layer integrations and intelligent automation, promoting efficiency and enhancing overall performance. The software automates initial node discovery and deployment with cluster creation and network setup, accelerating time to value. Additionally, the software offers extensive automation and advanced capabilities for ongoing operations, including full-stack lifecycle management (LCM). The advanced LCM capabilities include prechecks, ensuring a continuously validated state across the complete technology stack, rapid support of new patches and updates, skip-level upgrades and offline updates to name a few. Dell APEX Cloud Platform Foundation Software automates initial node discovery and deployment with cluster creation and network setup. The capabilities enabled by this software help ensure that the full technology stack always remains in compliance and up to date.

The software also deeply integrates infrastructure management and governance with Windows Admin Center and the Azure portal to manage, monitor and secure distributed Azure deployments in a streamlined and consistent way. The ability to use these familiar tools with a simple and intuitive interface helps reduce the learning curve, bridge the skills gap and improve operational efficiency. With Dell APEX Cloud Platform Foundation Software, organizations benefit from a consistent operational experience across their IT footprints.

Unleash Application Value

The platform empowers enterprises to unleash their application value and innovate faster by boosting DevOps productivity and IT agility with a responsive cloud operational model delivered on premises. Designed to support containerized apps alongside virtualized workloads, the platform accelerates app modernization and DevOps initiatives by optimizing delivery of Azure Kubernetes Service (AKS) and other Azure Arc–enabled app and data services on premises. Furthermore, the platform offers API-driven programmability, enabling simpler DevOps and application workflows. Lastly, the platform offers broad resource configuration choices and node options optimized for both data center and edge use cases, so IT organizations can confidently execute workloads with diverse requirements wherever they need to. The footprint-, cost- and power-optimized nodes suitable for edge deployments can help reduce cost and complexity at edge locations. Combining these benefits with centralized management and governance through the Azure portal enables IT organizations to innovate freely, wherever it makes the most sense for them.

Harden Security and Governance

Dell APEX Cloud Platform for Azure helps mitigate potential security and compliance risks effortlessly by integrating with Azure management and governance services. IT admins can enforce consistent security and compliance policies across distributed locations through the centralized Azure portal. The platform also provides an intrinsic approach to security with sophisticated controls and multilayered protection from threats, embedding the security capabilities of both Dell Technologies' and Microsoft's security stacks. Examples of these capabilities include Secured core, infrastructure lock, role-based access control (RBAC) and multi-factor authentication (MFA). Lastly, the advanced full-stack capabilities offered by the platform help ensure the infrastructure always remains in compliance, mitigating potential security and compliance risks.

With these security and governance capabilities, organizations gain the freedom to pursue business-boosting innovations without putting systems, users and data at risk, all while maintaining compliance with regulatory requirements.

A Hybrid Cloud Platform for a Variety of Use Cases

Dell APEX Cloud Platform for Azure can help organizations reach their business and operational goals in a variety of ways:

Modernize infrastructure. Organizations can update and refresh hardware with a modern, standards-based infrastructure that supports both virtual machines (VMs) and containers.

Accelerate app modernization. Azure Arc–enabled services, combined with extensive automation capabilities, empower IT to simplify DevOps and accelerate container adoption.

Optimize data-intensive workloads. Supercharge the workloads that power your enterprise. With a solution that delivers outstanding transactional and throughput performance that scales linearly, IT can optimize workloads ranging from traditional and cloud-native databases to modern AI, machine learning (ML) and analytics apps.

Gain data insights faster. IT teams can help customers get insights from data faster with AI/ML through centralized management, scalable throughput and input/output (I/O) performance and broad graphics processing unit (GPU) support, which help enhance infrastructure performance.

Simplify virtual desktop infrastructure (VDI) management. The turnkey solution optimizes the delivery of the Azure Virtual Desktop service on premises, enabling IT organizations to simplify their VDI initiatives and enhance data security.

Gain insights from the edge. With consistent delivery of Azure Arc–enabled services, centralized management and governance through the Azure portal and node configurations optimized for edge deployments, IT can uncomplicate the edge and ensure operational simplicity.

Solution Benefits

Dell APEX Cloud Platform for Azure is particularly beneficial for organizations who are on an app-modernization journey and seeking ways to improve business agility and financial outcomes. The benefits such companies can experience include:

- Consistent operational experience and use of familiar and centralized tools like Windows Admin Center and the Azure portal across distributed Azure hybrid cloud deployments.
- Extensive automation that accelerates time to value and drastically reduces overhead for common IT operations and LCM tasks.
- Simplified application rollout, accelerating time-to-value with the hybrid AKS and Azure Arc–enabled app, data and platform services enabled by Dell APEX Cloud Platform for Azure.
- Flexibility to move applications and data across Azure public cloud, on-premises data center and edge locations.
- Support for both virtual and container workloads on the same infrastructure, without creating app or data silos. This support can help simplify and expedite procuring, deploying and supporting an Azure hybrid cloud environment.
- Edge-optimized, small node configurations that can help reduce edge cost, complexity and footprint.
- Reduced risks for security, compliance and availability.

Unified Support Experience

Organizations adopting Dell APEX Cloud Platform for Azure can get unified support from Dell ProSupport. ProSupport helps maximize productivity and minimize disruptions with assistance from Dell Technologies experts, providing a single point of contact for both hardware and software components.

Accelerate Your Azure Hybrid Cloud with Dell Technologies and Microsoft

Dell APEX Cloud Platform for Microsoft Azure is a turnkey platform that is a result of extensive engineering collaboration between Dell Technologies and Microsoft. The platform provides deep integrations and intelligent automation between layers of the Dell Technologies and Microsoft technology stack, accelerating time-to-value, simplifying ongoing operations and accelerating app modernization initiatives, all while hardening security and governance.

Get started at www.dell.com/APEX-cloud-platforms.

Microsoft Azure

Bring the cloud to your on-premises environment with Azure Stack HCI.

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