

SEPTEMBER 2023

## Dell APEX Cloud Platform Family

Scott Sinclair, Practice Director

**Abstract:** Contemporary business is multicloud. IT operations and application development must work effectively across on-premises and public cloud environments to stay competitive, with the latest tools and technologies to run workloads anywhere. With its APEX Cloud Platform family, Dell Technologies is delivering the ability to leverage organizations' choice of cloud experience across both on- and off-premises infrastructure, simplifying operations for both IT and development teams, accelerating initiatives and innovation.

### Overview

It is imperative for organizations to expedite operations, streamline processes, and embrace efficiency-enhancing strategies in order to innovate and stay competitive in an interconnected global marketplace.

Unfortunately, a multicloud environment can be fraught with complexity as organizations seek these benefits. This pursuit demands a strategic balance between harnessing multiple cloud environments and managing the intricacies of integration, security, and optimization.

The distribution of applications across diverse platforms and environments continues to increase, driving the urgency for organizations to modernize. These modernization efforts should include seamless interactions, heightened security, and optimized performance across the entire application ecosystem. Organizations also use multiple Kubernetes distributions across their distributed production and non-production application environments, further adding to complexity and inconsistencies.

In the distributed cloud environment, the need for flexibility and adaptability is key to the movement of data and applications. This drives the importance of robust architectures capable of accommodating both deliberate transfers and unforeseen transitions seamlessly.

The Dell APEX Cloud Platforms deliver innovation, automation, and integration across cloud ecosystems that include Microsoft Azure, RedHat OpenShift, and VMware vSphere by extending the on-premises experience.

### Organizations Do Not Default to Cloud for New Application Deployments

Research from TechTarget's Enterprise Strategy Group shows that 47% of organizations said they have a cloud-first policy when it comes to deploying new applications. Most other organizations are split between a hybrid approach (27% said they equally consider public cloud and on-premises options) and an on-premises-first strategy (26%).<sup>1</sup>

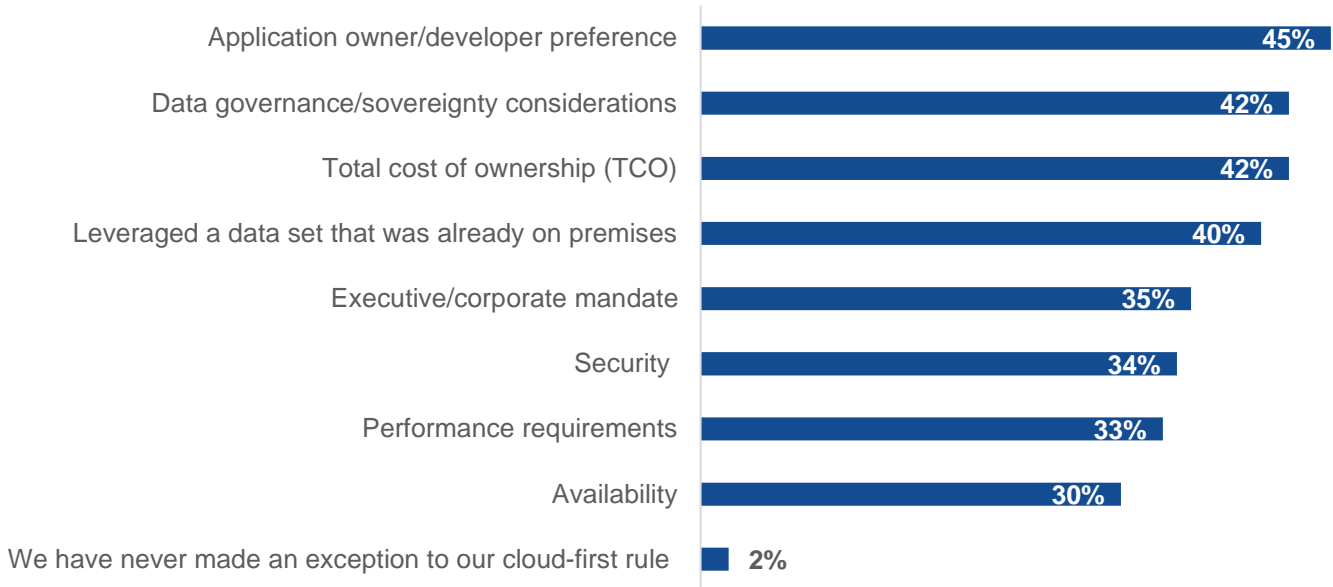
Figure 1 shows that the most common reason respondents provided for making an exception to deploy a net-new application on premises is the application owner's or developer's preference to have that application on premises

<sup>1</sup> Source: Enterprise Strategy Group Research Report, [Multi-cloud Application Deployment and Delivery Decision Making](#), June 2023. All Enterprise Strategy Group research references and charts in this showcase have been taken from this research report, unless otherwise noted.

(45%), followed by data governance or sovereignty considerations (42%), TCO (42%), and the fact that the application leveraged a data set that was already on premises (40%).

**Figure 1.** Cloud Deployment Barriers Reveal Crucial Justifications for On-premises Infrastructure

**You indicated your organization has a cloud-first application deployment strategy. Have any of the following factors created an exception that led your company to deploy a net-new application on-premises? (Percent of respondents, N=165, multiple responses)**



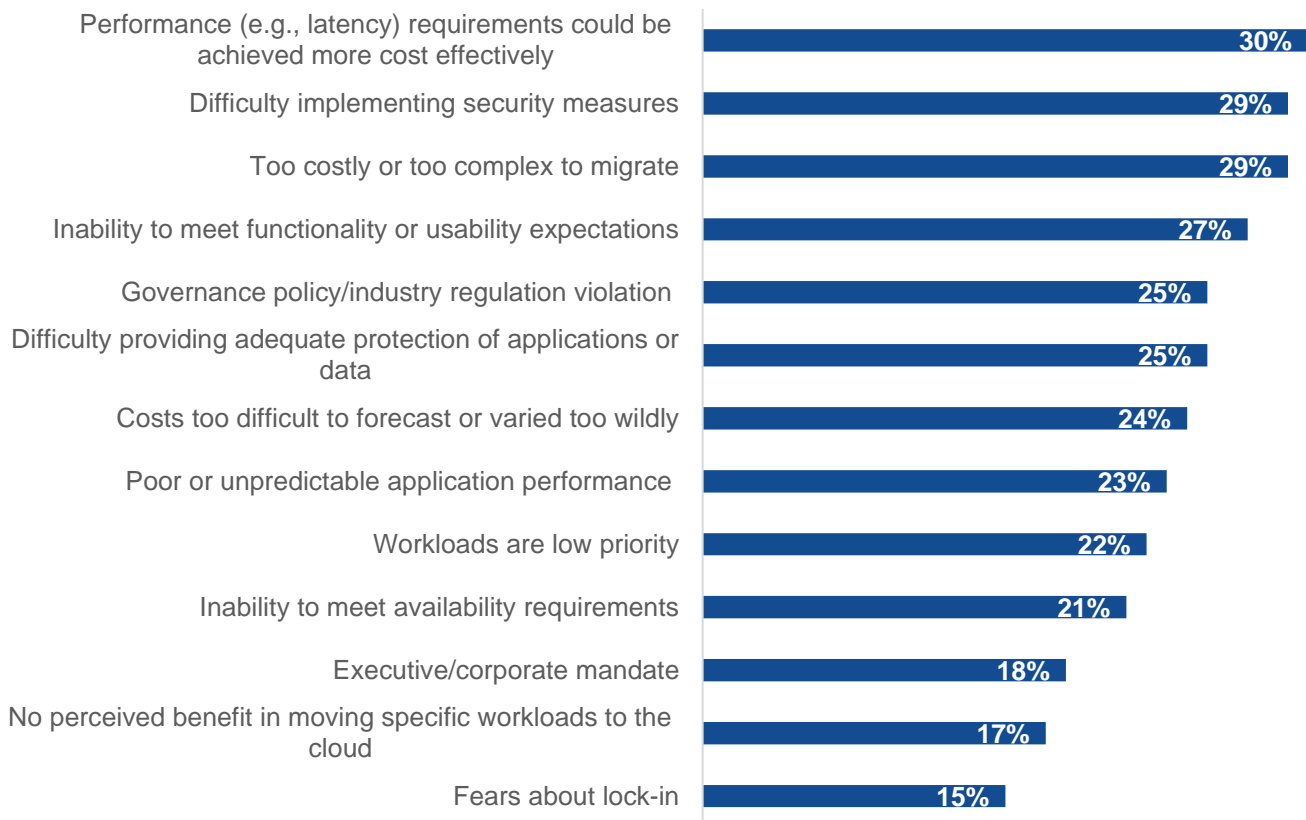
Source: Enterprise Strategy Group, a division of TechTarget, Inc.

## Cloud Migration for Existing Applications Continues but Is Not All-encompassing

Organizations remain at least partly grounded in on-premises deployments. Figure 2 shows that the most commonly cited reasons that some of organizations' applications and workloads are not candidates for deployment on public cloud are the recognition that performance requirements could be achieved more effectively on-premises (30%), difficulty implementing security measures (29%), costliness/complexity of the migration (29%), and an inability to meet expectations for functionality or usability (27%).

**Figure 2.** Performance, Security, and Costs Drive Decisions Not to Migrate Applications

**You indicated that some of your organization’s applications or workloads are not candidates for deployment on public cloud. Why not? (Percent of respondents, N=304, multiple responses accepted)**



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

In addition, according to Enterprise Strategy Group research, 54% of organizations say they have had to move workloads back on-premises from the public cloud due to unforeseen circumstances. The rationale for the move back on premises includes new management requirements that certain applications/workloads must operate on premises, on-premises infrastructure served as a temporary staging area for an application/workload moving from one public cloud service to another, regulatory compliance issues, limited access to new technologies, and data security issues.<sup>2</sup>

## Dell APEX MultiCloud Strategy

Dell Technologies recently announced new Dell APEX offerings across cloud platforms, public cloud storage software, client devices, and compute. Specifically, they expanded APEX capabilities from data centers to public cloud and client devices. These new offerings enhance operations through improved management and mobility of applications and data.

Dell has categorized them as a ground-to-cloud and cloud-to-ground strategy. Dell has also expanded the APEX as-a-service and subscription portfolio by bringing these services to the entire portfolio.

<sup>2</sup> Source: Enterprise Strategy Group Complete Survey Results, [Distributed Cloud Series: The State of Infrastructure Modernization Across the Distributed Cloud](#), August 2023.

From a ground-to-cloud perspective, Dell is providing a whole new catalog of products called APEX Storage for Public Cloud. Specifically, they are taking their block, file, object, and data protection storage offering and making it available on the public cloud of customers' choosing.

From a cloud-to-ground perspective, Dell is partnered with the leading cloud and Kubernetes providers, the first of which include Microsoft Azure, Red Hat OpenShift, and VMware vSphere, to deliver the cloud experience on premises.

## Dell APEX Cloud Platforms Overview

The Dell APEX Cloud Platforms are a family of turnkey systems integrating Dell infrastructure, Dell's full-stack management and orchestration software, and Dell's software-defined storage, with leading cloud operating stacks. The Platforms deliver consistent multicloud operations by extending cloud operating models to on-premises and edge environments. Some key benefits include the ability to:

- Utilize common building blocks (e.g., node hardware based on PowerEdge next-gen servers featuring Intel Xeon 4th Gen scalable processors), which provides investment protection and flexibility by providing opportunities to repurpose and reconfigure hardware across ecosystem stacks.
- Deliver consistent cloud operations across on-premises and public cloud environments for the ecosystem of choice, which provides organizations cloud-like agility and productivity on premises.
- Achieve operational excellence with fully integrated automation and orchestration software—Dell APEX Cloud Platform Foundation Software—that delivers consistent outcomes regardless of ecosystem.
- Accelerate productivity and reduce training and operational costs with consistent, familiar operational and developer experiences and streamlined operations.
- Simplify application and data mobility, whether between on-premises Dell APEX Cloud Platforms or between on-premises and public cloud deployments. This is enabled by a common storage fabric, based on Dell's enterprise software-defined storage (SDS) that connects these diverse and dispersed deployments.
- Extend data and applications across multicloud environments and accommodate diverse workload requirements across edge and core data center locations.
- Enforce consistent cloud governance and compliance across on-premises and public cloud environments, enabling organizations to optimize workload placement across multicloud environments.

## Dell APEX Cloud Platforms Ecosystem Partners

As mentioned above, Dell is partnered with the leading cloud and Kubernetes providers to deliver the cloud experience on premises. Here is an overview of the current ecosystem partners.

**The Dell APEX Cloud Platform for Microsoft Azure** is collaboratively engineered with Microsoft for optimizing Azure hybrid cloud operations and providing a consistent experience across IT environments. The platform helps IT organizations simplify application modernization and accelerate DevOps via integrations and automation. The platform also enhances Azure operations by providing consistent management and operations with centralized Azure tools. In addition, the platform mitigates security and compliance risks, extending Azure governance across all deployment environments.

**The Dell APEX Cloud Platform for Red Hat OpenShift** is jointly engineered with Red Hat to optimize and extend OpenShift deployments on premises with an integrated operational experience. The platform provides integrations and automation between layers of Dell and OpenShift technology stacks to help accelerate deployment and simplify management. In addition, the platform delivers the performance, predictability, and linear scalability needed to meet an organization's mission-critical SLAs.

**The Dell APEX Cloud Platform for VMware** is built on a common set of infrastructure blocks, integrated with VMware tools and based on Dell's PowerEdge servers. Their Dell APEX Cloud Platforms Foundation Software provides seamless operations across multicloud ecosystems, automating deployment, configuration, and full-stack lifecycle management. In addition, their SDS, which is shared between private and public cloud deployment, provides data mobility and consistent enterprise SLAs in the cloud and on premises.

## Dell APEX Cloud Platforms Capabilities and Benefits

Dell APEX Cloud Platforms is designed to extend familiar cloud experiences to on-premises operations so that IT staff doesn't have to learn multiple ways to do the same tasks across different deployment locations. The solution also extends infrastructure management with user interfaces that provide a consistent and familiar management experience and consistent operational outcomes, regardless of ecosystem, including the flexibility and investment protection the common building blocks provide. In addition, the platform provides consistency between the software running across private cloud, public cloud, and edge locations.

Dell APEX Cloud Platforms also provides workload placement flexibility along with automation. The solution does this by having the same data services across a multicloud environment, which enables workload movement without the need to refactor applications and data.

Dell APEX Cloud Platforms integrates hardware and software to help eliminate siloed security enforcement and streamline the update process to avoid out-of-compliance situations. The platforms provide an automated lifecycle management process with advanced capabilities that ensure the whole technology stack remains compliant and any drifts are rapidly identified and mitigated. They also provide software policy management to help eliminate security silos and enable the implementation of consistent policies across private and public clouds. The solution also provides common storage software across private and public cloud locations so that data layer policies such as access, encryption, and retention can be enforced in a consistent manner.

Dell APEX Cloud Platforms enables organizations to extend the ecosystem of their choice on premises, including Microsoft Azure, Red Hat OpenShift, and VMware vSphere.

## Conclusion

Organizations need a platform for application development and hosting that works effectively across on-premises and public cloud environments. In addition, management complexity, skills gaps, and security and compliance challenges make it difficult for organizations to realize the benefits of a multicloud environment.

The Dell APEX Cloud Platforms family is designed to provide automation and integration across cloud ecosystems, helping organizations overcome the challenges of multicloud environments. The Dell APEX Cloud Platforms family provides an on-premises infrastructure platform with consistent full-stack integration for cloud ecosystem software. Initially, Dell APEX Cloud Platforms cloud ecosystem partners include Microsoft, Red Hat, and VMware, with more to come. These ecosystem operating environments can be configured to connect to the corresponding public cloud implementation of their respective ecosystems. This provides organizations easy access to multiple deployment options with the security, flexibility, efficiency, and control of an on-premises solution.

Any organization that is struggling with multicloud complexity should be looking at the Dell APEX Cloud Platforms family of offerings.

©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)