

Dell APEX Cloud Platforms

Gain the multicloud ecosystem flexibility that accelerates delivery of modern applications

Dell APEX Cloud Platforms

Table of Contents

Operating in the Multicloud World	3
What is an APEX Cloud Platform?	5
The Benefit of Commonality	6
Removing Barriers to Multicloud	7
Dell Technologies Services	8
Modern Cloud-like OPEX Consumption	11
Find the Best Solution for your Business	12
APEX Cloud Platform for Microsoft Azure	13
APEX Cloud Platform for Red Hat OpenShift	14



Operating in the Multicloud World

You require a platform that meets tomorrow's needs, whatever they may be

In today's tech landscape, businesses appreciate the simplicity of the cloud, but they seek more flexibility in choosing where to run their workloads – whether in the cloud or on-premises. With businesses being asked to develop applications faster while also supporting new and emerging workloads they are looking to the edge and multicloud for assistance in gathering and processing data.

Application Owner Preference:

App owners and development teams may feel more comfortable housing a specific application on-premises for performance, scalability, and security requirements.

Governance and Sovereignty Rules:

Government, industry and security regulations may dictate the application placement be on premises.

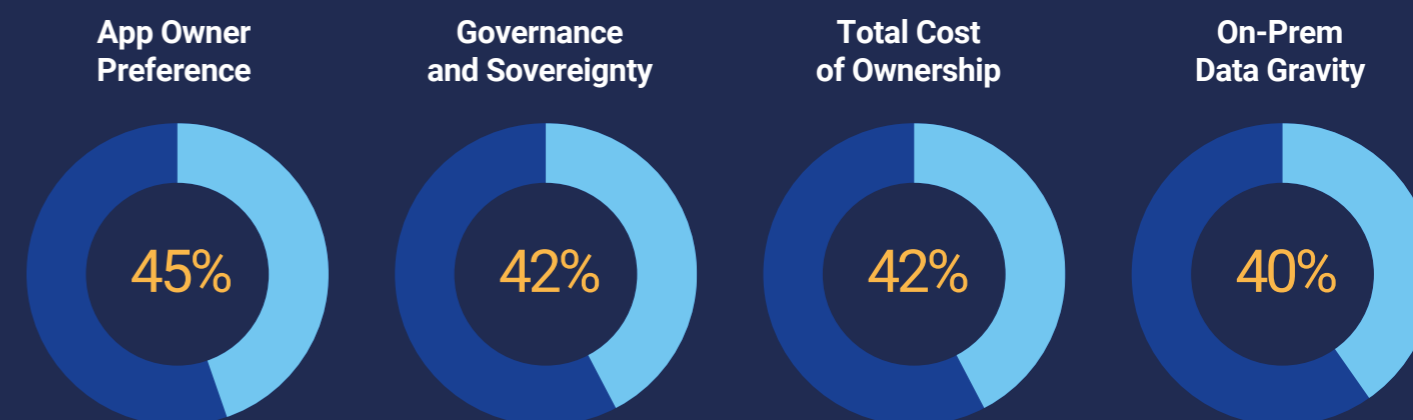
Total Cost of Ownership:

Public cloud infrastructure requires higher levels of TCO compared to on-premises infrastructure in the long term. Additionally, there are incremental costs with moving data in and out of the public cloud.

Data Gravity:

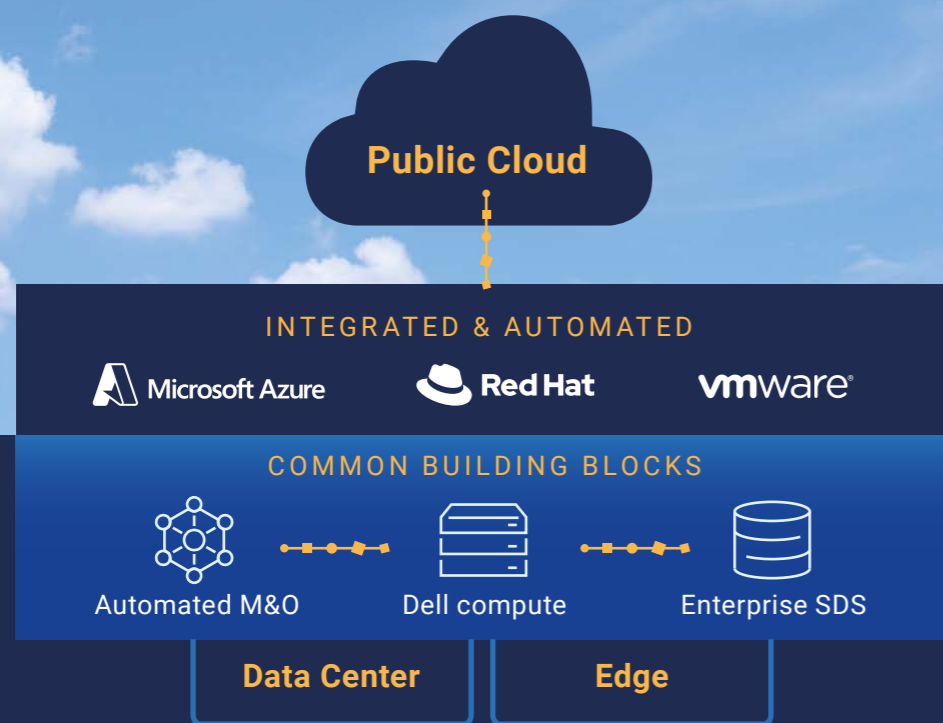
With lots of data being created at the edge and locally, more businesses are looking to utilize that data on-premises.

Why do cloud-first customers deploy apps on-prem?



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

Businesses need solutions that provide **choice, consistency, and control.**



Choice

Extend and optimize your choice of cloud ecosystem on premises while accelerating productivity with familiar operational and developer experiences

Consistency

Achieve operational excellence with extensive and unique automation that flexibly extends data and applications across multicloud environments

Control

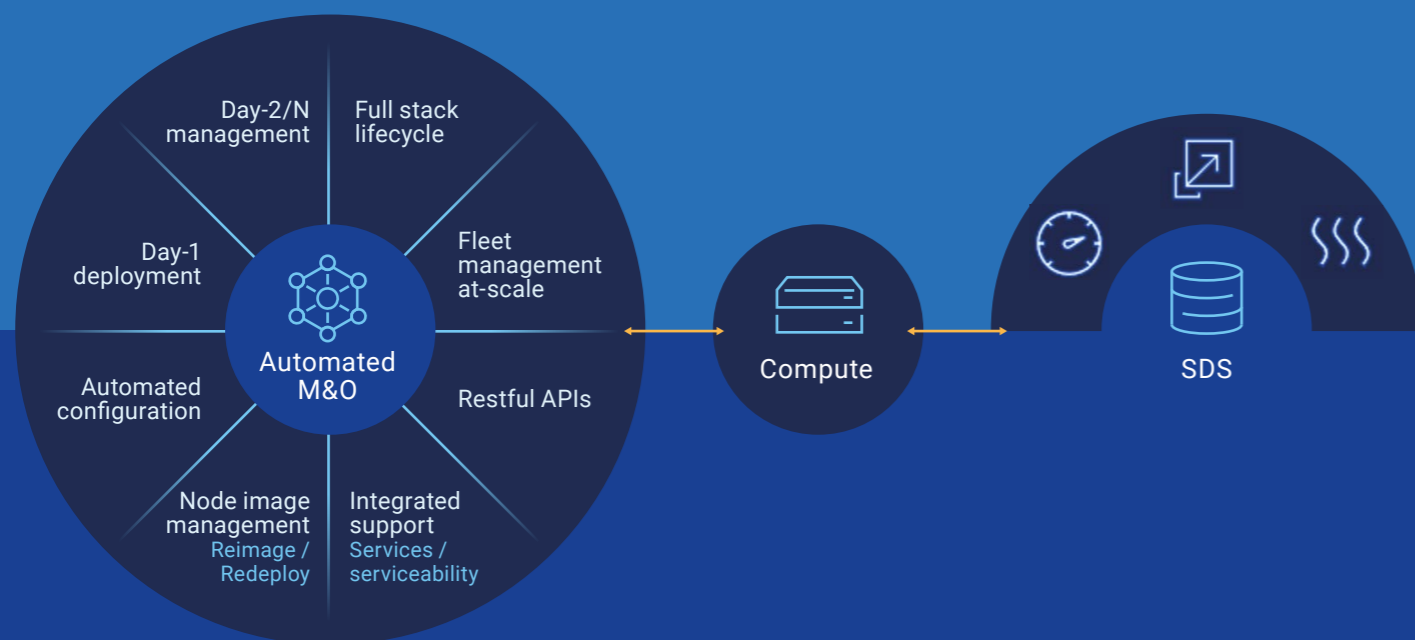
Enforce consistent cloud governance and compliance on premises while optimizing workload placement to meet enterprise SLAs



What is an APEX Cloud Platform?

Dell APEX Cloud Platforms are a family of turnkey, automated on-premises infrastructure solutions that remove the complex barriers of multicloud by seamlessly connecting your public and private clouds while also optimizing delivery of a broad set of Kubernetes distributions.

Simply and rapidly connect modern cloud and Kubernetes ecosystems – Microsoft Azure, Red Hat OpenShift, and VMware vSphere – to on-premises environments.



APEX Cloud Platforms leverage Dell's proven and market-leading IP from its HCI and SDS offerings and are built collaboratively with our ecosystem partners - Microsoft, Red Hat, and VMware - to deliver a new generation of infrastructure that offers businesses extreme flexibility and investment protection over time.

APEX Cloud Platforms utilize common building blocks across ecosystems

APEX Cloud Platform Foundation Software

Automated Management and Orchestration of the complete technology stack, delivering a wide range of value-added and unique capabilities

Enterprise Software-Defined Storage

Open ecosystem **enterprise class software-defined storage** that delivers linear scalability and resilience

Next Generation PowerEdge infrastructure nodes

Server nodes with Intel Xeon 4th Gen processors as the compute or storage node hardware that underpins these offers

The Benefits of Commonality

INTEGRATED & AUTOMATED



Automated M&O



Compute



SDS

Commonality delivers compelling benefits to businesses in terms of consistency, flexibility, investment protection and simplicity.

APEX Cloud Platforms deliver consistent M&O outcomes regardless of ecosystem. Businesses can **freely choose the environments that best meets their needs** without having to make tradeoffs based on operational considerations.

The common building blocks also enable enterprises to **run bare-metal containers and virtual machines on a common infrastructure**. This helps **reduce silos, improve utilization and simplify app modernization initiatives**, with a common platform for the modernization journey.

Commonality also provides **investment protection** for businesses by providing the potential for **interchangeability of node hardware** between operating environments.

The common SDS in the APEX Cloud Platform is based on the same universal storage layer in our public cloud storage offers, enabling **easy movement of data and apps** across these environments for **optimal and agile workload placement**.

Lastly, by leveraging our **next-gen PowerEdge** node hardware, the platforms **accelerate Zero Trust adoption** irrespective of operating environments.



Removing Barriers to Multicloud



Simplify Multicloud

Extend cloud ecosystem of choice on-prem

- Consistent operational outcomes across ecosystems
- Manage cloud and on-prem infrastructure through single interface



Accelerate application delivery

Develop anywhere, deploy everywhere

- Broad cloud/container ecosystem support
- Extensive automation toolsets for simpler DevOps



Optimize workload placement

Agile, adaptable workload placement

- Simple app mobility across the universal storage layer
- Stringent SLA adherence with Dell's enterprise software-defined storage



Dell Technologies Services

Services focused on the Dell APEX Cloud Platform Infrastructure

- Maximize your APEX Cloud Platform on day one with ProDeploy Infrastructure Suite, delivering practical choices for hardware and software with versatile delivery options to fit every budget and operating model. From planning to production accelerate deployments through our best practices at the edge, the core, and the cloud.
- Get the most value from your APEX Cloud Platform investment by leveraging groundbreaking support expertise and AI-powered insights. The ProSupport Infrastructure Suite does much more than just extend your IT organization. It offers the flexibility to choose the right support based on the criticality of systems, a single source of solution-level support, and a consistent experience regardless of where you are located or what language you speak.
- Focus on your business while leaving operational concerns to us with Managed Services for the APEX Cloud Platforms. More accurately budget and control costs, reduce the complexity of managing your IT environment and leverage skilled experts. Dell Managed Services offers 24/7 support, flexible consumption options and comprehensive IT management based on automated, AI-enabled delivery best practices.



Service outcomes to build the cloud you need on APEX Cloud Platform for Microsoft Azure

There are many considerations when adding a new cloud platform into your existing multicloud environment. Consulting services experts will work with you to ensure your IT and development teams are aligned to your business goals for Microsoft Azure. Sample outcomes focused on people, processes and workloads include:

- Defining your Microsoft Azure hybrid cloud strategy and roadmap
- Defining your application and data strategy for Microsoft Azure
- Optimizing how IT operates in an Azure hybrid cloud model
- Providing a production grade Kubernetes platform with Azure Kubernetes Services
- Efficiently moving applications and workloads to Apex Cloud Platform for Microsoft Azure
- Increasing the speed and security of your application and data pipelines
- Accelerating SQL Server modernization and providing the management and services capabilities of Microsoft Azure Arc for SQL
- Measuring and proving key success criteria for business/cloud stakeholders

Services to accelerate the adoption of APEX Cloud Platform for Red Hat OpenShift

IT organizations are seeing increased business requests requiring them to support complex and mission-critical IT delivered services for containerized platforms. Dell APEX Cloud Platform for Red Hat OpenShift, combined with Dell Services, will help organizations accelerate their adoption of DevOps methodologies and cloud-native application architectures at scale, with the control and consistency of an on-premises infrastructure.

With the Dell Services focus on the people, processes and workload aspects to containerization on multicloud, your developers will have the freedom to innovate and scale applications with minimum friction, reducing the operations cost of applications. Benefiting both IT Operations and development organizations, Dell will help you identify, modernize and migrate the optimum application mix to the new container platform and simultaneously integrate Kubernetes into any DevOps culture.



Modern Cloud-like OPEX Consumption

Dell APEX Flex on Demand (FOD) and Dell APEX Data Center Utility (DCU) deliver a modern, pay per use commerce experience which allows you to acquire the technology you need to support your changing business needs, while paying for the capacity you use over time.

Today's fast-moving business environment drives customers to have immediate, on demand access to the technology solutions that advance their organization's goals. This forces many customers to buy excess capacity upfront, requiring them to pay for technology they don't immediately use. This ties up precious capital that cannot be used for other critical projects. FOD and DCU are innovative programs which allow you to pay for technology as you use it over time, providing on demand access to deployed buffer capacity as needed. Your payments automatically adjust to match your actual usage.

Additional Resources APEX Cloud Platform for Red Hat OpenShift

- [Learn more about Dell APEX Flex on Demand](#)
- [Learn More about Dell APEX Data Center Utility](#)

Manage Costs Proactively

With FOD and DCU organizations can now tie their spending to their business outcomes. Customers commit to a monthly fee based on the solution and the amount of capacity they needed today. The rest of the capacity provided is treated as a reserve or buffer, which is only billed as it is used. Pricing for the buffer capacity is charged at the same agreed upon rate as the committed capacity. Customers also get the advantage of avoiding large upfront capital outlays, payments are spread out evenly throughout the subscription term. With APEX Flex on Demand, Dell maintains ownership of the underlying asset, so customers don't have to maintain large capital assets on their books. At the end of the subscription term, Dell will pick up and securely dispose of the assets.

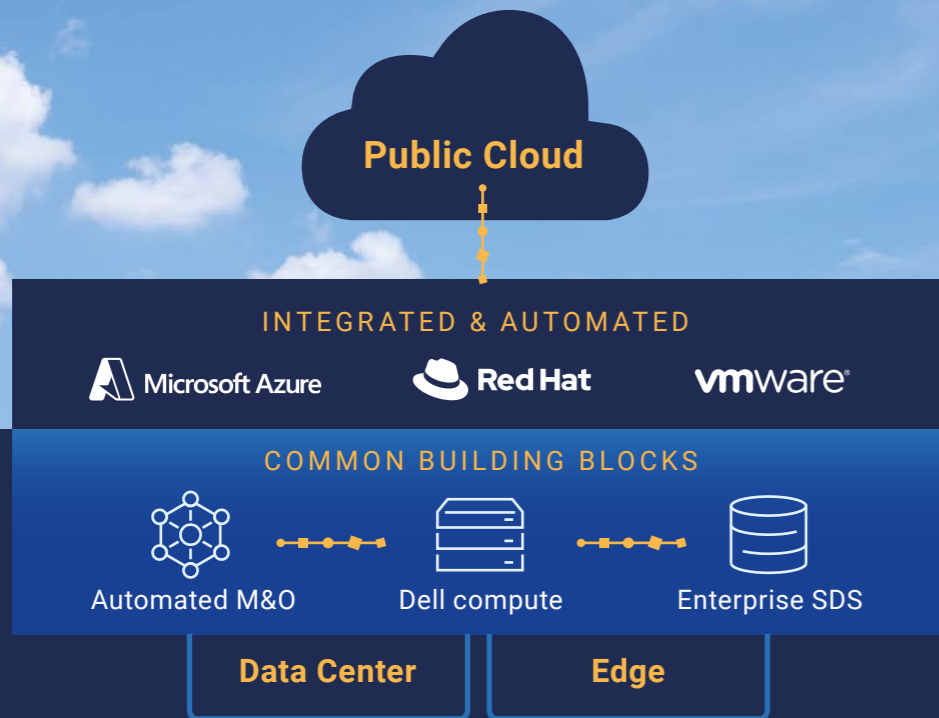
You Drive the Contract

Dell does not take a cookie cutter approach to delivering its products and services. We customize the solution to meet your business needs. You get the latest, most powerful server, hyper-converged, and storage systems with flexible one to five year payment terms. You can extend the term or expand capacity as needed throughout the subscription. Support & Professional services can also be included in the subscription.

The subscription model enables companies to improve cash flow and capital. The service also features a billing cap, so customers are guaranteed that pricing will not exceed preset levels, even if the buffer usage is high. The end result? A highly flexible solution which can help lower your total cost of ownership.

Find the Best Solution for Your Business

Multicloud is here to stay, but it doesn't have to be complex. Dell APEX Cloud Platforms family delivers the choice, consistency, and control you need as you adopt multicloud approaches to accelerate application delivery.



APEX Cloud Platform Family Assets

- [Overview Video](#)
- [Solution Brief](#)
- [Top Reasons](#)
- [Web Page](#)
- [Video - The Future of Multicloud Lands Now](#)
- [Video - Optimize your cloud-native operations](#)
- [451 Research Business Impact Brief](#)
- [ESG Analyst Showcase Paper](#)



APEX Cloud Platform for Microsoft Azure focused workloads

Extend and optimize Azure experience everywhere

Hybrid and multicloud deployments often lead to management complexity and inconsistent operations. **With Dell APEX Cloud Platform for Microsoft Azure**, you can simplify these environments and deliver consistent operations by extending Azure public cloud on premises.

APEX Cloud Platform is the first offer in the Premier Solutions for Microsoft Azure Stack HCI category collaboratively engineered with Microsoft to optimize Azure hybrid cloud deployments. It empowers organizations to unlock innovation with a consistent Azure experience across their IT environments. Through extensive integrations and numerous automations, APEX Cloud Platform empowers IT organizations to simplify app modernization and accelerate DevOps.

Additional resources for APEX Cloud Platform for Azure

- [Overview Video](#)
- [Solution Brief](#)
- [Spec Sheet](#)
- [Top Reasons](#)
- [Silicon Angle Interview](#)
- [ESG Analyst Showcase Paper](#)
- [Product Details Page](#)

This turnkey platform provides:

- Deep, cross-layer integrations and intelligent automation that simplify initial deployments and cluster creation, in addition to ongoing operations across the complete technology stack.
- Support for virtualized and modern apps, accelerating app modernization by optimizing delivery of Azure Kubernetes Service on-premises. Azure Arc-enabled on-demand application and data services simplify application environments and accelerate app modernization.
- Flexibility to utilize Microsoft Storage Spaces Direct (S2D) as well as Dell's enterprise block Software-Defined Storage, helping enterprises address a broad set of workloads.



Accelerate time to value with 88% reduction in deployment steps*



Stay current with 4 hour availability of updates**

APEX Cloud Platform nodes are optimized for a variety of workloads, including:



VDI with Azure virtual desktops



Transactional Database Applications



AI/ML analytics



Cloud Native /Container Apps



Extending Azure to the Edge

*Compared to manual deployment. Based on internal analysis. Results may vary. September 2023
 **Based on continuous joint CI/CD testing with Microsoft. Results may vary. September 2023.

APEX Cloud Platforms for Red Hat OpenShift

Containerized, cloud-native applications need the agility of public cloud and the performance, predictability, and security of on-premises infrastructure. Now your containerized workloads can have both with **Dell APEX Cloud Platform for Red Hat OpenShift**.

Dell APEX Cloud Platform for Red Hat OpenShift is on-premises infrastructure jointly engineered with Red Hat to accelerate time to value, simplify management, and ensure a more secure environment for OpenShift deployments. The APEX Cloud Platform integrates the data and app planes, so the solution can be deployed and managed as one unified application delivery platform, simplifying how IT teams manage different layers of the stack while ensuring optimal application outcomes.

Infrastructure for mission-critical outcomes

- [Overview Video](#)
- [Solution Brief](#)
- [Spec Sheet](#)
- [Top Reasons](#)
- [Silicon Angle Interview](#)
- [Product Details Page](#)

This turnkey platform provides:

- Deep integrations and intelligent automation between layers of Dell and OpenShift technology stacks, accelerating time-to-value and eliminating the complexity of management using different tools in disparate portals.
- A bare metal architecture that delivers the performance, security, and linear scalability needed to meet even the most stringent SLAs.
- Intrinsic multi-layer security, rapid availability of patches and updates, and centralized OpenShift governance to help enterprises maintain a strong security posture.



90 % faster upgrades with advanced, Automated, full-stack LCM*



90 % faster deployment with automated, wizard-based deployment**



Over **21,000** hours of interoperability testing per major release ***

Performance and scale for any workload



AI/ML analytics



High performance computing



Transactional Database Applications



Web & application server



Cloud Native / Container Apps

*Based on Dell internal testing, actual results may vary. September 2023

**Based on Dell internal testing, actual results may vary. August 2023

***Based on Dell internal analysis. October 2023



Copyright © 2023 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell, EMC, Dell EMC and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners.