

A partner's guide to building and refining multicloud strategies

Navigate the complex world of multicloud environments with Dell Technologies and Intel[®], and deliver custom, easy-to-use solutions that give your customers the flexibility and control they seek.



Table of contents

The current state of multicloud platform adoption Figure: Number of application deployment locations currently in use	<mark>03</mark> 03
Enable organizations to thrive with Dell APEX multicloud by design solutions	04
How to build winning multicloud strategies	04
Understanding the challenges of multicloud environments	05
What organizations want from multicloud environments	06
What organizations want from a multicloud provider Why organizations use more than one public cloud provider	07 07
Understanding each customer's unique requirements Critical questions to ask when designing a multicloud solution	08 09
Establishing the right multicloud strategy for each customer	11
Mapping workloads to services	12
Multicloud architecture design considerations Table: Pros and cons of IT deployment environments	13
Ensuring consistent operations from ground-to-cloud and cloud-to-ground with Dell APEX Figure: Dell APEX solutions are multicloud by design	15
Extend on-premises systems to the cloud Figure: Add public cloud as a seamless extension of on-premises environments with Dell APEX Multicloud versus hybrid cloud solutions	16
Extend cloud software stacks to on-the-ground systems Figure: Deliver modern cloud software stacks in on-premises environments Figure: Facilitating a seamless cloud-to-ground database with Dell APEX solutions	17
Why build multicloud strategies with Dell APEX?	19
Figure: Benefits of using Dell APEX	19
Computacenter uses Dell APEX to improve cost controls and application latency	20
How to use Dell APEX to drive growth	21
Dell APEX as-a-Service model	21
Dell APEX pay-per-use model Figure: Gain flexibility and reduce risk with Dell APEX consumption-based options	22
What is Dell APEX Subscriptions? Table: Experience unparalleled simplicity, agility, and control with Dell APEX Subscriptions	23
What is Dell Data Center Utility?	23
Redesign uses Dell APEX to deliver cost-effective data centers — faster	24
Constor Solutions uses Dell APEX to provide secure, affordable custom cloud environments Multicloud versus hybrid cloud solutions	25

Your next steps

The current state of multicloud platform adoption

Most businesses already operate in multicloud environments. In 2023, The Wall Street Journal reported that "as much as 85% of businesses are using two or more cloud platforms, and 25% are using at least five."¹ Despite the widespread adoption of multicloud architectures, many organizations are struggling with complexity and issues involving security, technology integration and user experience. That's because they've adopted cloud solutions without first establishing a long-term multicloud strategy that aligns with their business and IT requirements.

After investing significant time and money into piecemeal multicloud strategies, organizations may believe it's easier to stay with the solutions they have. However, if they don't invest thought and money into crafting a purposeful, adaptable multicloud infrastructure, any technology-related issues that they're already experiencing will likely increase in severity as their existing architectures expand to include more sites, services, data and users. And most organizations expect increased architectural sprawl. A 2023 ESG survey of IT professionals at North American organizations reveals that "87% of organizations agree that their application environment will become distributed across more locations over the next two years."²

In addition to selecting the right mix of public and private cloud services, organizations are also exploring as-a-Service and pay-per-use consumption models to gain the flexibility and cost-efficiency they need. Despite the widespread adoption of multicloud architectures, many organizations are struggling with complexity and issues involving security, technology integration and user experience.



Number of application deployment locations currently in use³

1. The Wall Street Journal, "Above the Clouds: Taming Multicloud Chaos," January 2023.

2. Enterprise Strategy Group by TechTarget, "<u>Multi-cloud Application Deployment and Delivery Decision Making</u>," February 2023. 3. Ibid

Enable organizations to thrive with Dell APEX multicloud by design solutions

As a technology partner, you can help organizations establish and refine their multicloud strategies in a way that improves their security, operational efficiency and employee experience as well as business resilience with Dell APEX multicloud by design solutions. This white paper equips partners like you with tactical information for building thoughtfully architected multicloud environments with Dell APEX that meet customers' unique needs so they can thrive today and well into the future.

"From storage to data protection to client to compute, Dell APEX is now the world's most comprehensive as-a-Service and multicloud portfolio."⁴

Chuck Whitten Co-Chief Operating Officer, Dell Technologies

How to build winning multicloud strategies

Partners play a pivotal role in demystifying multicloud solutions and making customers' innovation goals a reality. After all, anyone can research available offerings and their capabilities. To choose the right mix of cloud solutions that meet each customer's unique requirements, it's important to understand:

- Challenges involving multicloud environments.
- What organizations expect from their multicloud solutions and partners.
- Your customers' unique requirements including goals, industry regulations, business use cases and risk tolerance.
- The pros and cons of running workloads on premises, at the edge and in the cloud.
- What kind of innovation is possible with multicloud solutions.



"67%

of organizations say they have yet to realize substantial ROI from cloud investments."⁵

Dell Technologies, <u>"The Strength and Simplicity To Fulfill Promise Of Technology</u>," May 2023.
 KPMG, <u>"2022 KPMG U.S. Technology Survey Report</u>," 2022.

Understanding the challenges of multicloud environments

One of the most common causes of multicloud solution complexity and poor ROI is choosing to simply lift and shift existing systems and services to a public cloud. By not considering the pros and cons of retaining traditional application designs or of refactoring them to be cloud-native, organizations can fail to realize the full benefits of cloud services, including faster application performance, easier lifecycle management and lower operational costs. Lift-and-shift scenarios can also create costly and chaotic IT environments, along with risky, potentially ungoverned attack surfaces. IT staff may find themselves spending even more time than they did previously meeting application SLAs and complying with business and industry regulations.

Other multicloud challenges stem from rapid public cloud adoption, which makes it all too easy to miss issues like vendor lock-in. Hyperscalers' closed-cloud ecosystems can be difficult to integrate with other third-party services. As a result, organizations end up with siloed stacks of incompatible public cloud platform services that limit choice and innovation opportunities. Shadow IT in public clouds, provisioned by staff without corporate insight and governance, can also create unknown silos that lead to significant security threats.

Struggles with multicloud solutions, including high costs and governance issues, are significant enough that trends show an increase in cloud repatriation.⁶ However, the reality is that most organizations will require private and public cloud solutions. That's because a private cloud on its own often can't deliver the agility and flexibility needed to meet today's rapidly changing expectations. Private cloud platforms can also introduce CapEx challenges, lifecycle management issues involving a lack of staff expertise, and slow provisioning and deployment timelines.



"32%

of organizations said that multicloud usage was the result of shadow IT, and 23% pointed to retaining preferences tied to mergers and acquisitions, suggesting that even though multicloud may be strategic, the adoption of particular clouds can be unplanned."7



of 139 IT decision-makers who repatriated workloads or applications cited cost efficiency as the top benefit of their efforts."8

6. Forbes, "<u>The Rise of Cloud Repatriation: Why Companies Are Bringing Data In-House</u>," April 2023. 7. Enterprise Strategy Group by TechTarget, "<u>Multi-cloud Application Deployment and Delivery Decision Making</u>," February 2023.

What organizations want from multicloud environments

You can help organizations address their multicloud challenges by providing as-a-Service and pay-per-use models that offer the flexibility to scale resources up and down based on actual usage – without cost overruns and vendor lock-in. To establish trust, build effective long-term relationships and maximize retention, it's important to understand what organizations expect from cloud service providers.

Our research reveals common thoughts and expectations when it comes to multicloud solutions. Across industries, IT leaders:

- Love the ease and agility of the cloud.
- Want to provision services quickly and scale resources up and down on demand.
- Want to save money with as-a-Service and pay-per-use OpEx payment models where possible.
- Expect to take advantage of multicloud service capabilities everywhere — in data centers, at the edge, from offices, in homes and on the go.
- Believe multicloud environments can reliably support missioncritical operations.
- Don't want to be locked into any single cloud provider or any one approach. They want best-of-breed capabilities to achieve differentiated outcomes and the flexibility to choose the right path to meet their objectives.
- Are anxious and daunted by multicloud platforms and see their complexity as a risk to ROI and what can be achieved.
- Want to maintain control of their on-premises environments to meet security and governance requirements.



What organizations want from a multicloud provider

As a technology partner, it's also important to know that organizations looking for help with multicloud solutions prefer vendors who:

- Clarify the requirements, drawbacks, and benefits of lifting and shifting applications to a public cloud and re-architecting those same applications to be cloud-native.
- Demonstrate that they can craft a custom multicloud strategy that aligns with the organization's goals, industry requirements, business use cases and risk tolerance.
- Explain the business outcomes and strategic successes enabled by their proposed multicloud solution to business executives, without getting into the weeds of technology specifics.
- Provide technical decision-makers with a deep-dive explanation about the technologies and strategies selected for workload placement, data protection, intercloud communication, identity and access management, and other requirements as needed.

While most organizations agree that multicloud strategies are critical, ESG research shows that they have different reasons for using more than one public cloud provider.

"88%

of organizations agree that using multiple public cloud providers delivers strategic benefits for their organization."9

Why organizations use more than one public cloud provider¹⁰



35%

Performance flexibility

32%

Shadow IT led to multicloud usage



Avoid vendor lock-in



30%

Teams can use

clouds they want

Reliability (e.g., backups on multiple providers)

Storage/capacity flexibility

Cost flexibility

33%

Data compliance requirements

0.00/

Retain merger/ acquisition preference

r ZZ70 Location/geographic requirements

Understanding each customer's unique requirements

Designing a multicloud strategy that meets each organization's needs and objectives requires an in-depth understanding of its existing infrastructure and workloads, security and administrative requirements, and short- and long-term business objectives.

In your initial conversations about any new multicloud solution, it's helpful to ask the types of questions outlined below. The best approach for asking these questions will vary based on the relationship you already have with your customer and the openness of the team you're interacting with. Ideally, you'll go over these questions in a meeting with business and IT leaders so you can immediately address follow-up questions. However, some organizations may prefer to review these questions independently and share written responses. Either way, the amount of information you collect will directly impact the quality of the solution you can design.

"82% of organizations struggle to properly size workloads for the optimal infrastructure environment."¹¹

11. Enterprise Strategy Group by TechTarget, "Multi-cloud Application Deployment and Delivery Decision Making," February 2023.



Critical questions to ask when designing a multicloud solution

1. What are your core business challenges and requirements?

- a. To help meet emerging requirements, what do you need your IT teams, developers and business employees to spend more time on?
- b. What obstacles are limiting the time your IT teams, developers and business employees have to focus on strategic priorities?

2. Please describe your organization's fiveyear roadmap:

- a. What are your key business goals?
- b. How do you expect your business to grow and scale?
 - i. What are your innovation and product launch plans?
 - ii. Are you working on business partnerships?
 - iii. What changes do you foresee in your workforce including on-site and remote-work arrangements?
- c. What are your top concerns in meeting your goals?

3. Have you identified the top three challenges that you first want to address with a multicloud strategy?

- 4. What investments do you currently have in data centers, colocation facilities and public cloud services?
- 5. How do you currently forecast for future IT needs?



6. What technologies do you currently use to support your key business and IT workloads?

- a. Please provide an overview of your on-premises systems and cloud services including laaS, PaaS and SaaS.
- b. Which workloads are supported by integrated systems and services, and where do these systems currently run – on premises and/or in the cloud?
- c. Which systems and services are you looking to integrate?
- d. What technologies do you use for identity and access management, disaster recovery and endpoint security?
- 7. On a scale of 1–10, with 10 being the highest, how open are you to adopting newer models for on-premises infrastructure, including as-a-Service consumption?

8. What are your security concerns?

- a. On a scale of 1–10, with 10 being the highest, how would you rate your risk tolerance?
- b. How do you expect your business to grow and scale?
 - i. Do you have internal policies governing the use of third-party technologies including cloud services?
- c. What security strategies do you currently use or want to adopt? For example, do you have a Zero Trust model already in place?

9. What challenges are your IT teams facing, especially when it comes to cloud adoption?

- a. What silos do you manage across different cloud platforms?
- b. Do you have centralized insights and controls over your public and private cloud platforms?
- c. What governance and compliance challenges are you struggling to manage on your multicloud platforms?

10. Do you have concerns or issues around the elasticity of your capacity?

a. Do want or need to meter capacity and bill by average or actual usage?

11. What lifecycle management services do you want to adopt or offload?

- a. Which workloads do you manually manage?
- b. Which workloads are you looking to automate?
- c. What new technologies, software versions, or workflows are you currently adopting or looking to adopt, and what challenges are you facing as a result?

12. On a scale of 1–10, with 10 being the highest:

- a. What is your IT team's level of multicloud strategy experience?
- b. How much availability does your IT team have for learning and implementing new technologies?
- c. How much availability does your IT team have for managing software updates and monitoring systems?
- d. How would you rate employees' perceptions of current systems?

13. On a scale of 1–10, with 1 being completely resistant and 10 being completely open, how would you rate your:

- a. Organization's readiness to change?
- b. Employees' trust in new IT initiatives?

14. Are there any technologies or cloud platforms that you're not willing to use? If so, what are your reasons?

Establishing the right multicloud strategy for each customer

Once you understand your customer's existing IT design, challenges, and goals as well as their current and long-term business requirements, you can establish an effective multicloud strategy that meets them all. While every organization's multicloud solution plan and design is unique, it's critical to:



Establish where the primary point of control and expansion will be: on the ground or in the cloud.



Design an environment that improves security, protects technology choice, simplifies IT lifecycle management and delivers measurable ROI.



Understand if and why a flexible consumption model is needed.

"We believe that if you get your handling of the data right, everything else — from access to tools [and] choice of cloud to your ability to control and manage your costs — becomes far more achievable."¹²

> Jeff Clarke Vice Chairman and Chief Operating Officer, Dell Technologies



Mapping workloads to services

Choosing the right location and service for every workload is the most challenging aspect of multicloud solution designs. As a best practice, evaluate each workload's requirements for:



Compute and storage performance including latency, throughput, processor cycles and accelerators — today and into the future.



Compute, storage and bandwidth scalability to meet anticipated user demand – today and into the future.



Growth, change, data accessibility and data mobility.



Data security, data privacy, data protection, and governance, including business and industry requirements.



Policy and regulatory compliance, including limitations for using certain types of public cloud services.



Availability, reliability and the impact of both on the customer's ability to operate.



Running in a traditional environment versus a cloud-native environment — and the pros and cons of both approaches.



ROI, including factors such as existing contracts and investments in data centers, colocation facilities and public cloud services.



Interdependencies between applications and datasets, such as applications that run in the public cloud but use data that's on premises.



Cost alignment, analysis and tracking capabilities.



Migration feasibility and the level of effort required to move the workload to another environment or refactor it to run as a cloudnative application.

Multicloud architecture design considerations

The following table provides useful guidance in determining whether workloads should run in self-owned data centers, at colocation facilities, at the network edge or in public clouds.

Pros and cons of IT deployment environments¹³

IT environment	Pros	Cons	Suitable for (workloads)
Edge locations (traditional IT or dedicated cloud environments)	 Close to data creation/ action Low latency Low round-trip time Real-time processing capabilities 	 Typically, no on-site technical support Can be costly to maintain/ upgrade Dependence on bandwidth for integration into centralized workflows Limited support for infrastructure footprint 	 Workloads for which real- time data processing is critical Real-time analytics Operational workloads
Colocation facilities (traditional IT or dedicated cloud environments)	 Data center support and management cost savings Enhanced physical security Control over compute/ storage infrastructure Cloud adjacency reducing latency Data fabrics simplifying access to multiple cloud providers 	 IT typically not on-site to support infrastructure No control/flexibility in choosing data center components 	 Non-mission-critical workloads as an alternative to running own data center Data persistence (storage) layer supporting compute layers running in public cloud for low latency and control of egress/ingress costs



<u>Learn more</u> about how Dell Technologies and Intel work together to ensure optimal performance across a broad range of workloads.

Pros and cons of IT deployment environments (cont.)

IT environment	Pros	Cons	Suitable for (workloads)
Self- owned/ operated data centers (traditional IT or dedicated cloud environments)	 Full control of infrastructure decisions and technical characteristics Control over security IT governance control Flexible consumption/ as-a-Service consumption models for compute and storage, bringing a cloud-like experience and providing relief to capital investments and infrastructure management 	 Data center and infrastructure capital and operating costs System infrastructure upgrades that lag behind workload needs Shortage of IT skill sets is a growing issue Longer cycles for launching new workloads 	 Workloads with high levels of bandwidth consumption and high data-transfer needs Workloads with predictable and stable compute and storage needs Workloads that are subject to regulatory requirements that limit public cloud usage
Public clouds (shared cloud environments)	 As-a-Service consumption, offering relief in data center and infrastructure management Access to service catalog/ adjacent services Geographically distributed access Faster workload deployment Easy scaling up or down of resource usage Short-term resource provisioning (cloud bursting) Agility Industry-specialized clouds offering unique benefits Sovereign cloud services for meeting regulatory requirements 	 Costs associated with data transfer/movement, even within a singular cloud Impact of workloads scaling on costs Cost tracking Security/data privacy/ regulatory concerns Potential bandwidth limitations Upskilling internal staff to leverage public cloud Governance (shadow IT) Interoperability/ application dependency considerations – cross-cloud and between public cloud and on-premises environments 	 All types of workloads, especially those that have spikes in performance/ storage needs Non-mission-critical workloads Pilot workloads



Learn more about how Dell Technologies and Intel work together to ensure optimal performance across a broad range of workloads.

Ensuring consistent operations from ground-to-cloud and cloud-to-ground with Dell APEX

To meet customers' diverse requirements and enable operational consistency, it's helpful to establish a common storage layer, or data substrate, that connects one source of data with multiple clouds and any number of workloads. You don't have to design this multicloud framework from scratch. Dell APEX is a multicloud by design solution that provides a portfolio of ground-tocloud, cloud-to-ground, pay-per-use, and as-a-Service options that include storage, data protection, compute, hyperconverged infrastructure, cloud platforms and client solutions. By facilitating a unified multicloud experience that gives customers the agility of a public cloud and the control of a private cloud, Dell APEX drives consistency across the IT enterprise.

With Dell APEX multicloud by design solution options, you can remove guesswork and complexity and instead rapidly deliver seamless, consistent operational experiences across an open ecosystem. Your customers can enjoy the ease and agility of cloud experiences while maintaining centralized control over their environment.

Dell APEX solutions are multicloud by design





BRING TOGETHER THE BEST OF BOTH WORLDS

Extend on-premises systems to the cloud

With the Dell APEX multicloud by design approach, you can develop ground-to-cloud strategies that bring familiar best-of-breed software from on-premises Dell infrastructure to the public clouds. As a result, your customers can gain the same enterprise-class functionality, performance and resilience they already trust from their on-premises systems with the public cloud as well — and manage their on-premises and cloud resources as a seamless solution, using the same tools. As a result, they can enjoy greater data mobility and operational consistency across environments, and boost their IT teams' efficiency by easily using public cloud services without additional training.

For example, with Dell APEX Storage for Public Cloud, your customers can centrally manage on-premises storage hardware and extend that same storage architecture into a public cloud such as AWS or Microsoft Azure. By retaining consistency across hardware and management tools, your customers can use the same skills, APIs, data-protection features, and configuration settings from the ground to the cloud – saving time, increasing insight and control, and reducing risk.

With Dell APEX Backup Services you can provide an all-in-one, ground-to-cloud data protection solution that includes backup, long-term data retention and disaster recovery capabilities. From one console, your customers can protect their on-premises and cloud-based endpoints, SaaS applications, and hybrid cloud workloads, including virtualized environments, databases, file servers and network-attached storage.



"Organizations say the No. 1 challenge complicating the adoption of digital technologies is talent shortages."¹⁴



Add public cloud as a seamless extension of on-premises environments with Dell APEX

Multicloud versus hybrid cloud solutions

While a multicloud architecture includes solutions from two or more public cloud providers, a multicloud architecture may not include a private cloud. A hybrid cloud includes a private cloud and services from at least one public cloud provider.

Extend cloud software stacks to on-the-ground systems

Cloud-to-ground approaches enable customers to extend cloud platforms and container orchestration ecosystems to their on-premises environments. With this approach, customers can run cloud-native applications on premises to help meet security, compliance and performance requirements. For example, with Dell APEX Cloud Platforms, your customers can seamlessly extend their Kubernetes orchestrations as well as Microsoft Azure, Red Hat and VMware vSphere cloud ecosystems to trusted Dell infrastructure on the ground by using:

- Dell APEX Cloud Platform for Microsoft Azure
- Dell APEX Cloud Platform for Red Hat OpenShift



Deliver modern cloud software stacks in on-premises environments

A popular cloud-to-ground strategy leverages Microsoft Azure Arc-enabled SQL Server and on-the-ground, payper-use storage via Dell APEX Subscriptions for Storage. With this Dell APEX solution, customers gain a SQL Server environment that seamlessly spans across the same type of infrastructure in Microsoft Azure and on premises. They can manage their cloud-based and on-premises Azure Arc-enabled SQL Server databases using familiar, centralized tools in their Azure portal. And customers can consume their cloud and on-the-ground storage via pay-per-use Dell APEX Subscriptions for Storage.



Facilitating a seamless cloud-to-ground database with Dell APEX solutions



Why build multicloud strategies with Dell APEX?

There's no need to design a multicloud environment from scratch and expect your teams and your customers to master steep learning curves. With Dell APEX, you can:

- Take advantage of a proven, ready-to-go multicloud solution.
- Choose best-of-breed technologies to achieve differentiated outcomes without incurring unnecessary complexity.
- Unify your customers' operations across their private and public cloud environments to simplify transformation.
- Use familiar Dell Technologies solutions in a public cloud, on premises as-a-Service or in a flexible consumption model.

- Easily migrate workloads and connect data while avoiding vendor lock-in.
- Quickly provision services and scale resources.
- Gain financial flexibility with transparent costs and monthly payments.
- Put data in the right place at the right time for optimum performance.
- Protect against cyberattacks and unplanned downtime.
- · Simplify regulatory compliance.

Benefits of using Dell APEX



Simplify the way your customers consume technology.



Scale up your customers' environment when needed and reduce over-provisioning, which may cut emissions and resource usage. \$

Unlock your own new recurring revenue streams.



Streamline your as-a-Service portfolio and deliver a simplified experience.

\$

hil

Enjoy lucrative financial incentives and benefits on Dell APEX deals.

Help customers match

IT spend to forecast

use for reliable

business results.



Leverage flexible IT to scale solutions swiftly to meet market demand.



Differentiate your offer by focusing on higher-value services that boost profitability.

Computacenter uses Dell APEX to improve cost controls and application latency

Computacenter is a leading independent technology and services provider. Through its strategic partnership with Dell Technologies, Computacenter leverages Dell APEX to provide its global customers with an on-premises cloud infrastructure that:

- Allows more control with lower upfront costs and predictable pay-as-you-go operating expenses.
- Provides competitive advantage with agility and increased speed to market.
- Delivers more security via a hybrid cloud approach.
- Enables low-latency access to data.
- Limits spending to cover only the capacity that's actually used.

"In a technology-driven world focused on cost savings, efficiency and innovation, a multicloud strategy is key to gaining a competitive advantage ... Our customers enjoy only paying for what they use, with immediate access to the resources that they need."¹⁵

Scott Ward

Senior Vice President, North American Technology Sourcing Operations Business, Computacenter

Dell

How to use Dell APEX to drive growth

Traditional technology procurement often requires organizations to forecast future workloads and infrastructure needs, leading to challenges with over-provisioning or under-provisioning. Overprovisioning results in wasted resources and capital, while underprovisioning can lead to unplanned downtime and increased operating costs. Dell APEX gives you options for overcoming these challenges with its as-a-Service and pay-per-use offerings.

Dell APEX as-a-Service model

Organizations continue to rely on dedicated infrastructure in on-premises environments because not all applications and data are suitable for public cloud implementation. Nonetheless, the cloud operating model enables rapid technology deployments, flexible scalability, and payment choices such as subscriptions and cost controls.

With Dell APEX as-a-Service, which includes PC-as-a-Service, you can provide customers with the benefits of on-premises solutions along with the ease and agility of cloud experiences. Your customers have control of their environment so they can meet their objectives. At the same time, they can streamline infrastructure lifecycles — from deployment and support through decommissioning — with optional managed services. By reducing IT workloads and accelerating deployments and maintenance, your customers' IT teams can dedicate more time to urgent priorities. Customers can also decrease operating costs and ensure secure, sustainable management of end-of-life assets.



Dell APEX pay-per-use model

With the Dell APEX pay-per-use consumption model, customers pay only for the resources they consume at a consistent, predictable rate. Customers' pay-per-use offerings include infrastructure with highly elastic buffer capacity. They can scale their usage up or down within that capacity, paying only for the capacity they use at one consistent rate with no overage fees.

As a technology partner, it's also important to know that organizations looking for help with multicloud solutions prefer vendors who:

- Eliminate over-provisioning and the associated waste of ٠ capital and resources.
- Reduce the risk of under-provisioning and unplanned downtime.
- Gain the ability to rapidly scale capacity to meet changing business demands.
- Simplify budgeting and forecasting with transparent, consumption-based pricing.
- Shift from a CapEx to an OpEx model by not paying the large upfront investments associated with traditional infrastructures.

"We've completely eliminated our capital costs. Instead, we pay operational expenses based on what we actually use, similar to the public cloud."16

Tahir Ali CTO and CISO, Montage Health



Gain flexibility and reduce risk with Dell APEX consumption-based options

Dell APEX pay-per-use models include:

- **Dell APEX Subscriptions**
- Dell APEX Data Center Utility ecosystems

What is Dell APEX Subscriptions?

Dell APEX Subscriptions is a pay-per-use model that customers consume via subscription options.* You can design Dell APEX Subscriptions solutions that meet customers' requirements using any of the products and solutions in the Dell Integrated Services Group broad portfolio of offerings, including those offered by Dell Technologies and from our worldwide partner network. All solutions are provided to customers preconfigured, fully integrated, on schedule and in alignment with the customers' subscription terms.*

Experience unparalleled simplicity, agility, and control with Dell APEX Subscriptions

Simplicity	Agility	Control
 Take advantage of cloud experiences everywhere and enjoy: Convenience Streamline technology procurement through a modern consumption experience. 	 React quickly and capture new opportunities by gaining: Freedom Free teams to shift their focus to urgent priorities through as-a-Service options. 	 Minimize risk and maximize performance by managing: Security Refresh regularly to stay up-to-date and securely sanitize data at the end of subscription terms.
 Choice Customers can subscribe to the product and services they need with greater ease and optionality. Consistency Manage all products, subscriptions and payments through a unified SaaS portal. 	 Adaptability Provision resources, scale capacity and refresh technology to meet demand. Predictability Gain financial flexibility with predictable pricing and payments that align with requirements. 	 Sustainability Reduce environmental impact and contribute to the circular economy. Performance Configure services at a granular level to meet performance requirements.

What is Dell APEX Data Center Utility?

Dell APEX Data Center Utility is a pay-per-use offering that provides a consumption-based cloud environment that you create for your customers and deploy at their sites. Customers' solutions can include any offering in the Dell Integrated Services Group solution portfolio — from Dell Technologies or our worldwide partner network. Customers can choose to consume their APEX Data Center Utility as a pay-per-use subscription and manage it themselves, or they can consume their data center as a usage-based utility ecosystem that you manage for them.

Redesign uses Dell APEX to deliver cost-effective data centers — faster

Redesign is a global technology and cybersecurity consulting firm that builds modern data center architectures with Dell APEX so that its customers can:

- Gain cloud solutions that cost one-third of similar public cloud implementations.
- Realize time to value in as little as weeks.
- · Benefit from fast data center deployments.
- Consolidate on-premises and cloud infrastructure.
- Streamline operations.
- Shift from an upfront CapEx to a recurring OpEx model.

"We've done numerous TCO analyses for our customers – comparing on-premises or public cloud solutions to a dedicated private cloud. We consistently see significant cost savings running on a hosted infrastructure using Dell APEX."¹⁷

Phil Sanginario

President, Redesign

Constor Solutions uses Dell APEX to provide secure, affordable custom cloud environments

Constor Solutions is a Dell Technologies Titanium Partner that often recommends a ground-tocloud strategy that's built with Dell APEX Flex on Demand. By doing so, Constor Solutions enables its customers to:

- Cut operating costs in half with a hybrid cloud versus a cloud-first strategy.
- Maintain the control that comes with on-site operations and the flexibility of being able to scale to the cloud when and if required.
- Control costs via consumption-based services.
- Improve agility to better manage new workloads.
- Acquire near real-time access to buffer capacity if needed.
- Scale seamlessly with business growth.
- Deliver technology solutions tailored to specific business needs.
- Simplify IT infrastructure for streamlined operations.
- Decrease IT management resources.

Multicloud versus hybrid cloud solutions

While a multicloud architecture includes solutions from two or more public cloud providers, a multicloud architecture may not include a private cloud. A hybrid cloud includes a private cloud and services from at least one public cloud provider.



"Critical data security is a top concern. With APEX Flex on Demand, critical data is located in the on-prem solution, so it's secure."¹⁸

Suman Ramesh Babu

Founder and Technical Director, Constor Solutions

Your next steps

Selling future-proof multicloud and hybrid cloud solutions that simplify transformation is easier with strategic partners. Dell Technologies provides the leading solutions and services you need to create a multicloud strategy and environment that's tailored to optimally meet your customers' diverse business needs and requirements. By delivering modern multicloud experiences with Dell APEX, you can offer your customers:

- As-a-Service simplicity, including fully managed infrastructure and software lifecycles.
- Pay-per-use subscriptions on their choice of Dell infrastructure products.
- Dramatic cost optimizations and utilization efficiencies that come with pay-as-you-go models.
- More choice in where their workloads run.
- On-demand scalability using a mix of on-premises and thirdparty services that seamlessly work together to meet demand.
- Greater control over data in multicloud environments by enforcing consistent governance controls.
- The same or better enterprise-class functionality, performance and resilience as on-premises environments.
- Simplified IT management experiences that involve almost no learning curve.
- Peace of mind in knowing they won't be locked into a cloud platform.
- The simplicity and time savings realized with fully managed as-a-Service infrastructure and software.

For more information, please refer to the following resources:

- Learn more about Dell APEX solutions.
- Learn more about workload-centric IT strategies.
- Learn more about the Dell Technologies Partner Program.
- Learn more about becoming a Dell Technologies Partner.



This white paper is for informational purposes only and may contain typographical errors and technical inaccuracies. The content is provided as is, without express or implied warranties of any kind.

Copyright © 2024 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners. Intel, the Intel logo and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.



