Reimagine your cloud for a hybrid IT world.
Close the cloud gap and unlock the benefits of hybrid IT.

Only 3 percent of businesses have optimized their cloud strategy.¹

There’s a gap between what you need to support your applications and what your people, processes, and tools can deliver, and it isn’t always easy to get a subjective view of how your company should fill that gap. Discover what a cloud-intelligent approach to hybrid IT can do for you and what it takes to get there.
Cloud permeates everything we do, powering business transformation. Its impact on customer experiences, business processes and models, and workforce innovations cannot be denied. In every industry, businesses are moving to embrace cloud speed and agility to fuel new capabilities for profitable growth. Organizations are at different stages in their cloud journey, but two things have already become clear.

1. **It’s a hybrid IT world.**

   Organizations must prepare to operate in a hybrid IT environment, seamlessly managing their in-house resources and cloud-based services. In this environment, there is no one answer for how to capitalize on cloud. No single cloud offer that’s right for every business or application. And no way to avoid having to address IT services from all sources, both cloud and noncloud alike.

   - **81%** Enterprises that are evaluating or using public cloud
   - **73%** Enterprises that have a hybrid cloud strategy
   - **84%** Enterprises that are leading the way in cloud adoption will use multiple clouds from multiple cloud providers.

2. **More is better.**

   We know that the more organizations embrace cloud, the greater the benefits. According to a study from IDC and Cisco, those companies with the most advanced cloud adoption (what IDC terms “optimized”) are realizing significant, tangible benefits.

   - **11%** revenue growth
   - **87%** reduced time to provision IT services
   - **77%** IT cost reduction
How close are you?

With those kinds of benefits, you would expect that almost every organization would be well on its way to becoming an “optimized” cloud adopter. But today, just 3 percent of organizations are realizing that kind of cloud value. Most organizations are still attempting to optimize their cloud strategies.

- **No cloud strategy**: 3%
  - Just beginning to explore cloud technology options for immediate needs. It’s not always authorized.

- **Ad hoc**: 22%
  - Experimenting with cloud for short-term improvements in IT, mostly for new solutions or isolated environments

- **Opportunistic**: 19%
  - Just beginning to explore cloud technology options for immediate needs. It’s not always authorized.

- **Repeatable**: 17%
  - Standardizing the way cloud is used, using best practices such as self-service portals to improve access to IT resources

- **Managed**: 11%
  - Driving consistency in cloud with organizationwide best practices and orchestrating service delivery across an integrated set of resources

- **Optimized**: 3%
  - Delivering innovative IT-enabled products and services from internal and external cloud providers and driving innovation through transparent access to IT capacity based on business value and transparent cost measures
CHAPTER 2
The cloud gap

A widening cloud gap

The challenge is the widening gap between what cloud applications and lines of business (LoBs) require and what IT can reliably and confidently support today in terms of its people, processes, and tools.

What triggered this cloud gap in the first place?

It started with the rise of cloud applications. Supported by public cloud infrastructure and services, cloud applications were able to quickly meet the functionality requirements and speed expectations of the LoBs. But today, the vast majority of IT organizations struggle to support the new cloud-based application development models with respect to infrastructure, operations, and governance.

And what’s causing the cloud gap to continue and even widen? Growing IT complexity. The need to build more advanced applications to support new digital requirements has made the underlying infrastructure and processes more and more complex.

1. Organizations used to maintain simpler infrastructures designed to support traditional databases, enterprise resource planning, and office productivity applications.
Over time, more and more applications came on the market, each designed to leverage mobile endpoints, hosting and colocation providers, or public clouds.

This introduced such an enhanced level of innovation that IT organizations started automating their data centers and building private clouds to increase the agility of their own developers and complement public cloud platforms.

And now, the Internet of Things (IoT) is the latest chapter, enabling a new frontier of digital transformation with new applications powered by predictive analytics.
CHAPTER 3
The challenge with hybrid cloud

With such a high degree of diversity in the IT environment, it’s no wonder organizations are looking to a hybrid cloud strategy for the answer. But there’s a catch. If organizations follow the classic approach to hybrid cloud, which focuses on making the "connection" between private and public, then they’re barely scratching the surface of the challenges ahead.

The reality
Discover some of the true hybrid cloud challenges below.

Application management and performance
Applications increasingly live in different physical locations, endpoints, and clouds. How can you ensure consistent management, compliance, and user experience from one environment to another?

Multicloud security
If your data and users are now dispersed among multiple cloud providers and services, how can you enforce strict, uniform security policy everywhere?

New network needs
When you embrace cloud—by using public and private cloud software as a service (SaaS) or infrastructure as a service—traffic patterns across the network can change dramatically. Unless you have a network for the cloud, you may be disappointed with the performance, security, and other aspects of your cloud applications.

IT as a cloud broker
As LoBs demand more cloud applications and services, IT needs to shift its focus to connecting stakeholders with a broad and blended menu of both internal and third-party cloud and noncloud offerings. This is a major change in how IT operates, requiring new tools and skill sets.

DevOps environments
The traditional software release model—where internally built solutions and tools are updated a few times a year—is too slow for many of today’s LoB requirements. But embracing a DevOps model with continuous development and integration requires profound organizational and cultural change.

Data center automation
As data centers evolve to the cloud, the processes used to connect to, secure, manage, and monitor cloud applications must become much more automated, or IT will quickly be overwhelmed and fall behind its stakeholders’ expectations for speed.
The cloud-neutral solution

The true challenges of hybrid cloud are why the cloud gap persists. They are much wider in scope; diverse in nature; and, most difficult of all, often interrelated. As a result, solutions to these challenges cannot be confined just to the private cloud or public cloud, or even any one specific public cloud provider. They can’t even be confined just to the cloud world or technology alone. They have implications for traditional and noncloud environments, for your people (cultural implications and skill-set gaps), and for your processes (governance, automation, IT as a service, and DevOps).

What’s needed is a cloud-neutral approach to help close the cloud gap. That means an approach that is able to:

1. Put the interests and requirements of your organization before those of any single cloud technology, deployment model, cloud type, or public cloud provider.

2. Deliver an application strategy that places your business requirements first around determining how to manage all your applications, instead of the application type, where it lives, or whose connection it may be traveling on.

3. Recognize the fact that the network connects everything, no matter the location, device, or even cloud, and the network is able to make that fact work to your advantage.

The new requirements of a hybrid IT world are hybrid IT operations, risk management, visibility, insights, and secure connectivity. When you reimagine your cloud for a hybrid IT world, you get a cloud that helps you meet the requirements and achieve agility and performance with less risk and cost.
CHAPTER 4
How Cisco helps you close the gap

What’s so special about Cisco?

While other large IT players are trying to extend their proprietary environments or public clouds, which ends up actually generating new point-to-point IT "silos," we do not have a public cloud business. This enables us, in collaboration with our global partner ecosystem, to take a cloud-neutral approach.

We use management, security, and analytics to provide cloud intelligence across your hybrid IT world—from the infrastructure to the application—for the cloud and noncloud alike. That means you can take full advantage of everything that cloud technology and services have to offer. You get ease of management for cloud and noncloud environments, security throughout, exceptional performance, intelligence, and automation for whatever deployment model or cloud works best for your needs.

Our cloud portfolio and partner ecosystem help you simplify, secure, and transform how you work in a hybrid IT world. Explore each of the five cloud solutions in detail below.

Hybrid cloud solutions  Cloud apps  Security everywhere  Network for the cloud  Cloud professional services
Hybrid cloud solutions

In a hybrid IT world, applications matter. And since applications are everywhere, all your clouds matter as well. A true hybrid cloud knows this. You may be challenged by the proliferation of management tools; limited visibility into cloud applications insights; and, making matters even more challenging, dealing with all of this across multiple clouds. It takes more than just connecting clouds together to turn your hybrid clouds into engines for business success.

When it comes to hybrid cloud solutions, where better to start than the brain of hybrid cloud itself: the cloud management and orchestration system. Cisco enables you to use the idea of application profiles to massively simplify the way you manage complex cloud applications. Our solution is infrastructure agnostic and can deal with applications that are based on traditional virtual memory systems, platform as a service, or even containers. It delivers extensive support for the most-used clouds worldwide. And the benefit is straightforward—simplification from the use of an integrated platform to perform most of your application lifecycle management tasks for traditional as well as cloud applications.

And where does the data center come in for this story? The answer is “it depends,” because we believe it’s important to prioritize the solutions in a way that makes sense for your cloud strategy. In some cases, your interest in cloud may be driven primarily by your data center investments and requirements, which brings our data center portfolio front and center. But in other cases, your interest in cloud arises from your pursuit of moving workloads to the public cloud, in which case our solutions (for orchestration, security, analytics, and networking) and services (such as those from our Cisco Powered partners or cloud professional services) become paramount.

But even in these situations, our data center portfolio has an important role to play. Because as soon as you realize that there are some applications that can’t be moved to the public cloud, our ASAP data center architecture is there to help. ASAP is an architecture that supports both legacy applications in your on-premises data centers and the applications residing in your public and private clouds. By focusing on four areas—analytics, simplicity, automation, and protection (ASAP)—organizations simultaneously evolve and navigate digital transformation. What used to be inconsistent application performance, increasing complexity, and limited visibility becomes simplified, visible, and manageable.
As you embrace the hybrid IT world, you’ll consume more of your applications and resources as a service (aaS). Our cloud applications enable us to provide a suite of enterprise-class aaaS capabilities to unleash your productivity, innovation, and IT agility, while keeping everything secure.

We offer industry-leading collaboration-as-a-service applications, comprehensive security capabilities, cloud-based video, and innovative IoT and energy management solutions. We can make private cloud infrastructure simple with a premises-based, behind-your-firewall service. We can make IT simple with cloud management and simplify networking across your organization.

Cloud is not one thing but rather a different consumption model. Solutions from the cloud are just as critical to your organization as solutions for the cloud. So is the quality of those solutions. We understand that. The richness of our cloud offers is, in itself, a testament to our commitment to cloud models.
A fundamental element of any cloud portfolio is security. You may be plagued by countless point solutions and fast-changing threats. But more importantly, you’re facing these issues while your attack surface is expanding exponentially: toward the cloud on one side and an increasingly more-intelligent edge and IoT domain on the other. Consequently, security can’t just be an add-on to your cloud deployment—it should be pervasive across everything you do. As you move into a hybrid IT world, your users, data, and applications will continually move across devices, clouds, and geographies. To succeed, you need security that enables you to securely adopt the cloud.

Cisco offers an industry-leading portfolio of next-generation security solutions built to meet hybrid IT requirements. We combine these with best-of-breed SaaS capabilities, such as cloud-based threat protection for users anywhere and security for any cloud application or platform. We also provide industry-leading secure DNS services that businesses worldwide are using to prevent distributed denial of service attacks every day.
When moving to the cloud, one thing that is often overlooked is the underlying infrastructure that connects users to cloud-based applications. Why? Because traditional network architectures have been designed in discrete silos and lead to poor user experience and greater exposure to security threats. This requires you to fundamentally rethink your network architecture for the cloud, and hence the need for cloud-ready networks. DNA for the cloud is an architectural framework that brings the value of Cisco Digital Network Architecture (DNA), our digital-ready approach to open, software-driven networks, to your branch, campus, colocation centers, and public cloud.

Cisco offers network virtualization functions to simplify your operations, enabling you to roll out new virtual network services in minutes in the branch, help you save time, expand your choices, increase network uptime, and lower your CapEx and OpEx. Our cloud-neutral approach means we can also simplify and secure your extensions into the public cloud, offering routing, security, and network management as cloud services that are infrastructure agnostic and programmable across the LAN and WAN and in the cloud. Cisco enables the network to help you deliver the best application experience regardless of where your users are and where your workloads are placed.
We recognize that making the transformation to hybrid IT involves not only changes to technology stacks but also transforming people and processes. Cisco and our partners can guide customers to an integrated and optimized cloud journey by advising and implementing these changes. Our cloud professional services suite is designed to address not only the technical challenges you face, but also challenges related to cost models, culture, and skill sets.

This involves three primary areas of solutions:

1. **Strategy and change management**
   - Advisory services to help you gain expert cloud and technology guidance when identifying the best mix of private, public, and hybrid clouds.

2. **Multicloud governance and security**
   - Offers to help you streamline your abilities in key focus areas, such as application migration, application management, and multicloud security.

3. **Cloud acceleration**
   - Services to accelerate your time to market and reduce your technology risk.

Our cloud professional services are able to help you simplify, accelerate, and optimize your hybrid IT journey.
The partner connection

A key part of our cloud portfolio is the way we can deliver these services and benefits to best suit your needs through Cisco Powered services and our Partner Ecosystem.

Cisco Powered services

Cisco offers the industry’s broadest ecosystem of partner-delivered aaS capabilities through Cisco Powered services. These partners transform our technology into compelling cloud solutions for your organization. From disaster recovery to contact centers to on-demand infrastructure and more, our leading cloud partners deliver multicloud aaS capabilities that aren’t possible through most public cloud offerings. Through more than 250 cloud providers in 56 countries, our partners help you address local requirements everywhere you operate, while assuring a high quality of experience, fast time to market, and security everywhere.
Cisco Partner Ecosystem

It’s clear that there’s no single “right” cloud answer for all your business needs. Openness and flexibility are a hallmark of being cloud neutral in a hybrid IT world. That’s why our approach works in collaboration with our world-leading Partner Ecosystem. We have a long history of partnering to solve your most pressing challenges, whether the answers are solutions or skills. With our partners, we’re able to provide the software tools you need in the way you need them: easy, fast, and familiar. We can deliver infrastructure solutions that bring you the choice and flexibility necessary to address your specific needs. With our 600+ cloud providers, resellers, and builders across the globe, we provide a global ecosystem of cloud software and tools, infrastructure, cloud application and service providers, resellers, builders, and system integrators. Wherever your business operates and wherever you’re trying to go with cloud, our partners can help you get there with solutions and services.

Software and tools
Infrastructure
600+ cloud providers, resellers, and builders in 56 countries

Seamless with Cisco
Cisco’s cloud portfolio, partners, and expertise span the entire landscape of your business: from the data center to the branch; across private and public clouds; spanning applications, colocation facilities, IoT endpoints, and the network that connects them all. Other vendors might provide great solutions for one piece of the cloud puzzle. Only Cisco addresses the full hybrid IT picture by providing you cloud intelligence based upon management, security, and analytics. From the infrastructure to the application, we take a cloud-neutral approach to your hybrid IT world to help you in closing your cloud gap.
A new world of digital transformation and competitive business advantages awaits—but only if you can bridge the cloud gap. You won’t do it by trying to squeeze all of your business needs into a one-size-fits-all cloud solution, and you can’t do it all if your solutions are optimized for someone else’s cloud. You need a way to choose the best options for your cloud and its applications. And you need a way to ensure consistent management, security, visibility, and performance across all of your locations, devices, applications, and clouds.

Cisco offers a cloud-neutral approach to the entire hybrid IT landscape. Let Cisco help you close your cloud gap with solutions that simplify, secure, and transform how you work.

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Keep pace
with continuous growth in cloud applications and rising stakeholder expectations.

Stay true
to your organization’s broader technology and performance requirements.

Take advantage
of the business benefits that come from adopting both cloud and noncloud services and models.

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Find out more.

Are you ready to take the next step in cloud?

Learn more >

Want to get a customized IDC cloud assessment to understand where your organization ranks in cloud optimization?

Start the assessment >

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