Cisco Data Center

Powered by intent. Informed by context. Delivered across multicloud.

Digital drivers

The cloud has opened our eyes to the possibilities of greater agility, automation, efficiency and simplicity.

These attributes are now being delivered in the data center. It still possesses the crown jewels, but is now more open and connected.

Digitisation, personalisation and real-time contextual connections are driving new and better customer experiences – all delivered by apps. You may have just a few. You may have 100s, or even 1000s. Either way, apps are the lifeblood of your business.

Data is also taking centre stage. How you manage it, your ability to extract intelligence from it, and your ability to act on it in real time are sources of competitive advantage.

Building on quicksand

The pressure is to move to the cloud. Yet not all applications and workloads are suitable. Not all can be migrated.

Legacy apps and those deployed in hybrid and public cloud must all exist in tandem. All the while the IT domain is fragmenting.
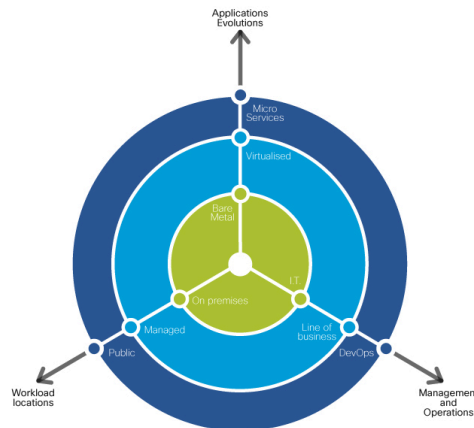
" IT leaders need to rethink in terms of IT as a Service. They must define, offer and orchestrate services for users, not technology silos."

– DHRITIMAN DASGUPTA, VP, CISCO

In the age of software defined networking, customers are at a crossroads in they think about the infrastructure.
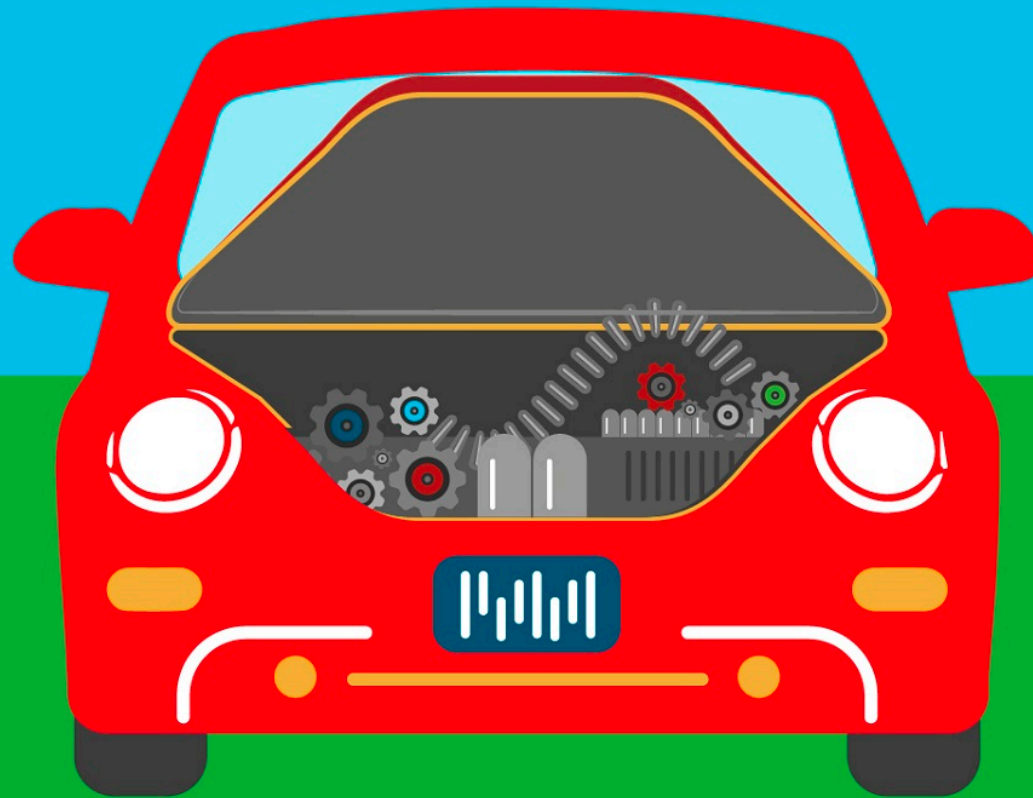
Whatever our customers decide, it can feel like they are building on quicksand. But what if they have a different approach?

Turn the page right to take our quick-fire poll on your top challenges in the data center.

Cisco Data Center
Start your Engines for Digital Transformation

Don't design a destination, equip yourself for a journey

In a world of constant change, you need to equip yourself for an evolving journey. With a vehicle that can be driven wherever you want to go and ability to change direction as often as you like.

This is the rationale behind the intent based data center. Next generation data centre thinking that combines many clouds into a smart, efficient and adaptable architecture.

Conceived for a world of apps that are always in development (e.g. CI/CD). Flexible for your business and the shifting sands of IT. Powering your business with cutting edge technologies and capabilities unique to Cisco.

Move with intent

- Constantly learning with analytics. Analyse every app, every transaction, every packet to provide actionable insights.
- Constantly adapting with automation. Optimize infrastructure resources to instantly respond to changes in application scale, performance & vulnerabilities
- Constantly protecting with policy-driven security. Isolate, segment & conduct forensics to ensure compliance in real-time and protect data, apps, users and devices.

" Intuitive networking or software defined networking was born in the data center..."

– GET THE IDC REPORT

Only Cisco integrates all 3 pillars with a consistent policy to turn your data center into an engine of transformation and provide you with peace of mind

for deploying best Hybrid IT with unparalleled cost, performance and consumption choice.

Why you need to modernize and transform your IT environment

Infrastructure must evolve

The Cisco Data Center architecture empowers users with the flexibility to run any traditional or cloud native app across any environment: on-premises, managed or public clouds.

Explore the technology

Data Center At a Glance
Resolve key challenges using consistent policy across a hybrid cloud.

Analytics

Analyse Everything for Total Visibility

![Cisco logo]

See what's going on inside

Data center environments can be vast, complex beasts. They run such a variety of apps and distributed workloads that it becomes almost impossible to see what's going on inside.

But what if there was a way to:

- Accurately monitor all activity taking place in and around your data centre
- Gather and store historical data and simulate what might happen
- Collect and analyse data in real time using software and hardware sensors
- Understand what apps are dependent on each other
- Deliver actionable app insights, automated policy recommendations and network flow forensics

Game changer

Cisco Tetration Analytics provides true visibility on a scale never seen before. It gathers 1 million events per second, stores up to a year's worth of data and provides actionable insights via easy to understand visuals.


It also has a 'rewind' capability. You can review the past and replay events in real time, freeze time to examine what happened at a specific nanosecond, and plan for the future based on a greater

understanding of the past and present. It´s an open platform that scales easily and integrates seamlessly with any data centre.

Cisco Tetration Analytics, Agile, secure, and compliant apps

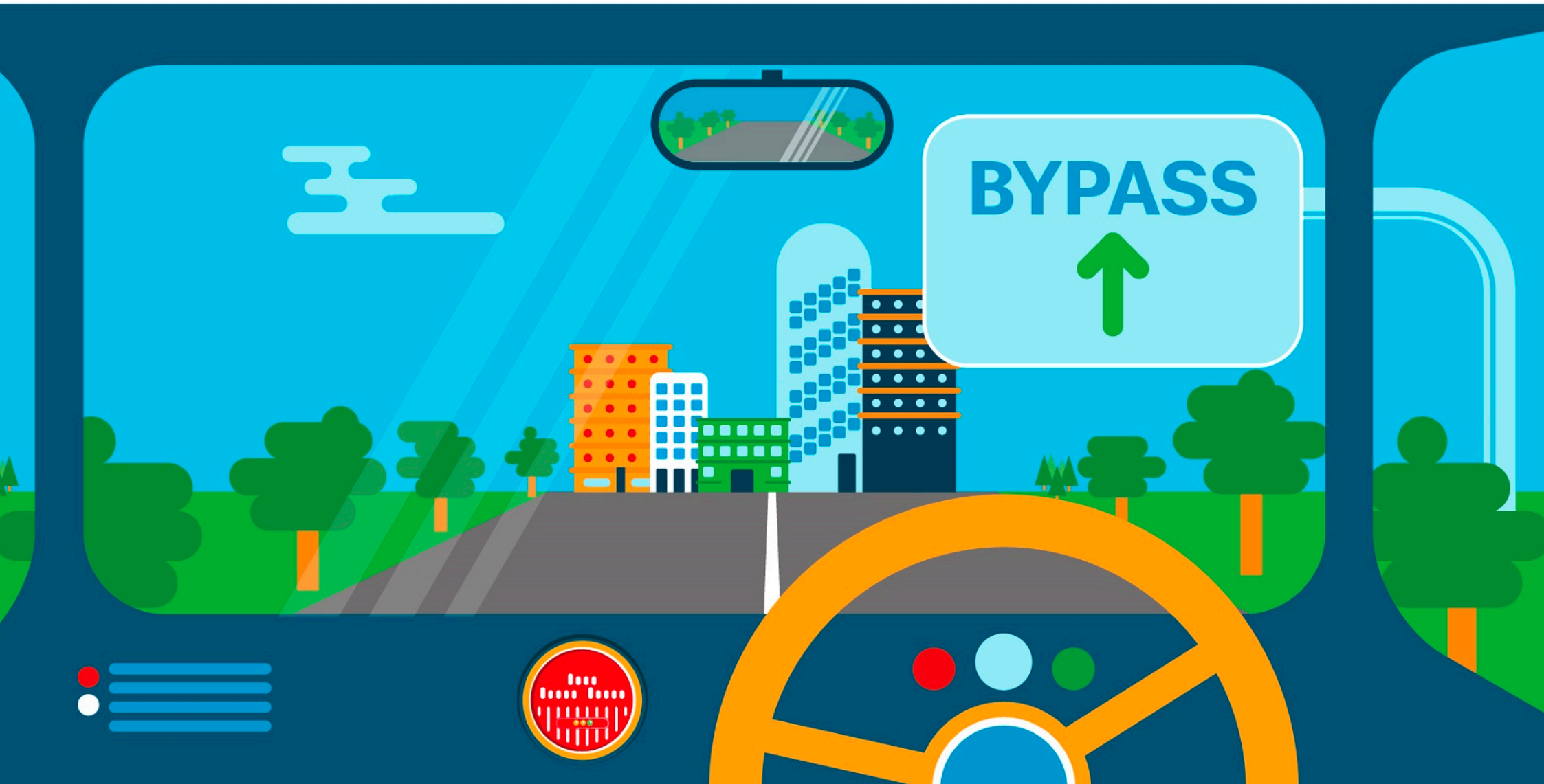Yes, it really is possible. Cisco Tetration Analytics. Is it right for you? Take the quiz
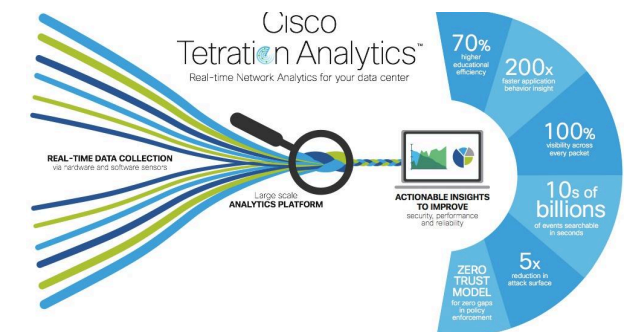
Calculate your cost benefits with Tetration Analytics ROI Tool.

Explore the technology

Tetration Analytics
AppDynamics, now a part of Cisco

Simplify

Avoid Delays and Get to Your Destination Faster

Need to simplify

Most data centers are built in silos of hardware to support a distinct range of applications. This results in a distributed environment that is static and inflexible. One that's also time and resource intensive to deploy, provision and manage

We changed all this with the introduction of the world's first Unified Computing System (UCS) in 2009. It includes a range of integrated system designs and reference architectures. Our fully assembled stacks and appliances come with application preinstalled and are documented as Validated Designs to deliver the best possible performance and flexibility.

UCS was, and still is a game-changer. One that significant others have yet to replicate successfully. **But we didn't stop there...**

Pioneering hyperconverged

We've continued to innovate in the form of HyperFlex. The next generation of hyperconverged infrastructure (HCI). Built on UCS, HyperFlex is the only complete HCI system available today.

Choose wisely...

STEP TWO:
PROVISIONING

It's also a fantastic example of simplicity. The network comes built in (unlike competitors). It's installed in 34 minutes. And it gives blazing fast performance. Ready to jump to hyper-speed?

Does a Data Center in a Box exist?

[Watch the Webinar on demand](#) and learn more.

Cisco UCS makes it simple:

- Choose from a family of solutions designed to work together (not just from us, but trusted vendors too)
- Revolutionise the way you administer your servers with Service Profiles

Explore the technology
[HyperFlex At a Glance](#)
[Download the ESG Validation Report.](#)
[Top 5 Reasons why HyperFlex is right for you](#)

Automate

Replace Manual Tasks and Focus on Adding Value to Your Business

Self
Drive Mode

Automate to move faster

In a world dominated by digital, consumers expect instant access to data, on demand ordering and fast service delivery. You must move from manual processes to automated delivery if enterprise IT is to provide this type of user experience.

Imagine if you could automate at multiple levels of your organisation:

- Across physical and virtual compute, network and storage components
- To replace complex, error prone manual tasks with simple, automated workflows
- Policy – tell your network what to do, rather than a config

Application Centric Infrastructure At a Glance

Programme your information highway

Cisco's vision is a data center defined by apps, driven by policy and delivered as a service.

> How long do network-specific tasks take you? If your answer is "too long," it's time to consider CiscoACI.
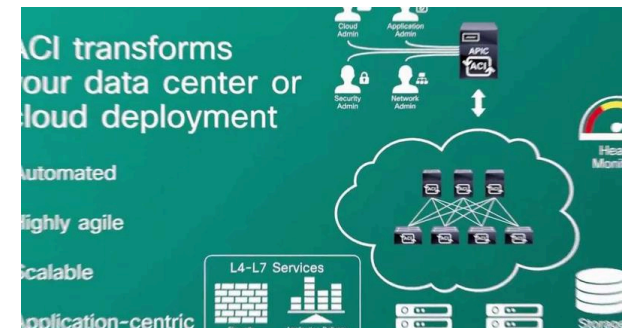>
> – Andreas Tomaselli, Lead Engineer Russmedia

It's one we've been realising for several years with:

- Application centric infrastructure (ACI), our unique approach to software defined networking (SDN)
- Orchestration and automation tools to

simplify and secure your environment
- UCS Director for holistic management

See what ACI does in your Network

Together with UCS servers and Nexus 9000 Series switches, these solutions allow physical, virtual and containerized environments to be combined under one policy model. Only Cisco can do this. You can stand up infrastructure in minutes, reduce cost and error, and deliver IT as a service.

Explore the technology
Application Centric Infrastructure
Cisco UCS Director Solution Overview

Protect

Secure Everything, Everywhere with the Policy Model

Security starts with visibility

What if you are being attacked right now, but you just can't see it? With so much data and distributed workloads, it's difficult to see all threats. So imagine if you could:

- Identify a breach in real-time
- Have visibility of hackers still on your network, exactly what has been taken and any threats left behind
- Combine network firewall with next-genintrusion prevention system and malware protection

Cisco's comprehensive security portfolio includes next generation firewalls, network appliances, security software and threat intelligence services. You can deploy multiple lines of defence holistically to protect every flow and every request within the data centre or the cloud.

Security at the core of your data center

Application Centric Infrastructre gives you centralised security across physical, virtual and containerised resources.

Discover the latest cybersecurity vulnerabilities and see how defenders are improving their ability to detect threats and prevent attacks.
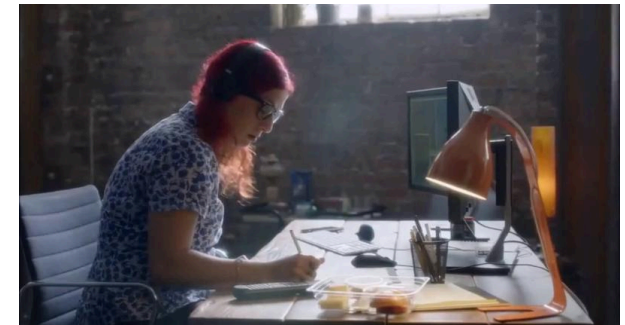
–**Get the full report**

Combine ACI with Tetration Analytics and Cisco Cloud Security to be protected from top to bottom – infrastructure to application, data center to cloud.

What's more, our **unique approach to**

microsegmentation allows you greater flexibility to isolate threats and automates remediation.

See how an attack happens

Explore the technology
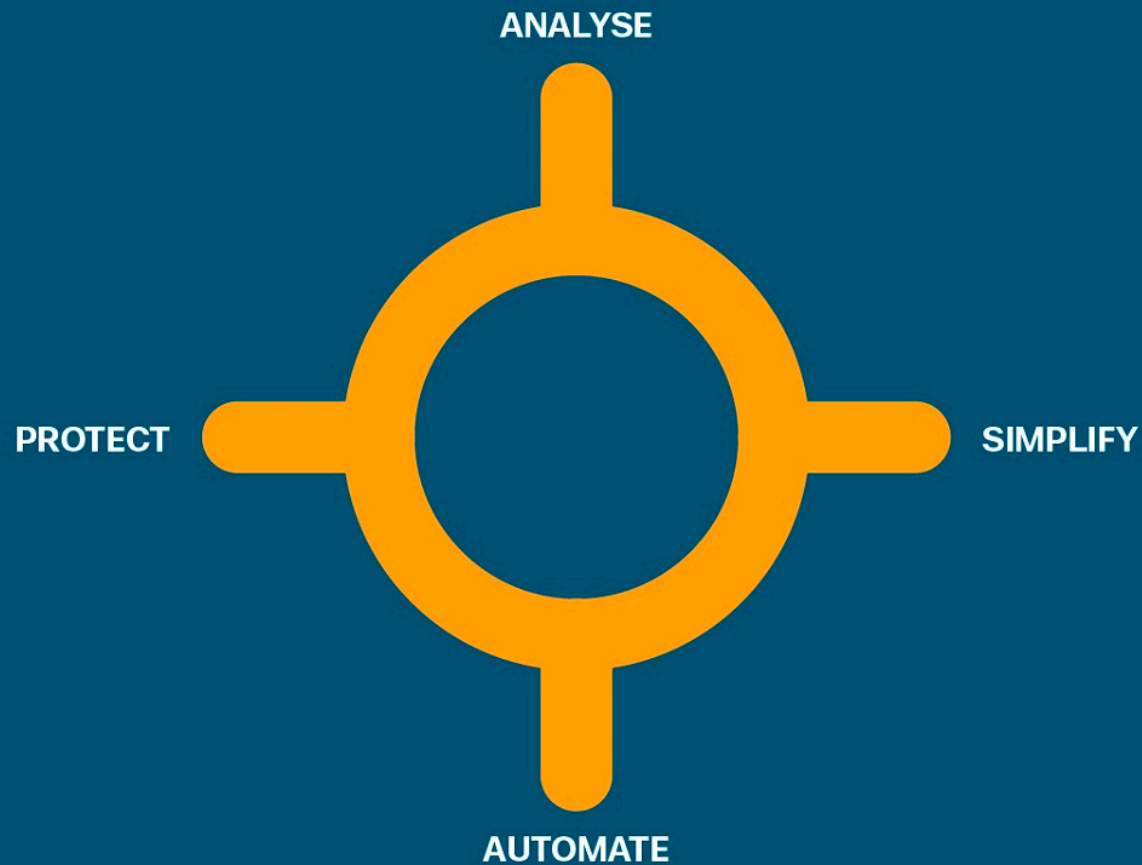
Cisco Secure Data Center
Cisco Cloudlock

Are you secure? Try our free visibility test to find out.

Take the security assessment

Only Cisco Brings IT All Together
Everything You Need for Your Journey

ANALYSE

PROTECT

SIMPLIFY

AUTOMATE

It's a multi cloud world

As priorities shift and companies need to respond to market developments in real time, having the right app in the right location, at the right time will be critical to gaining market advantage. Private clouds and data centers are key elements in this multi cloud world.

Imagine a consumer products company that moves application seamlessly among different clouds to enhance efficiency and service levels.

Customers get the best user experience, while transactions are sent to an on-premises-based app with real-time links to financial, inventory and production systems.

These capabilities put IT firmly back in control, brokering multiple clouds and delivering the speed and agility the business demands.

Realise your Hybrid vision with Cisco

Modern applications need modern IT. This cannot just mean 'stick it in the cloud'. We want you to embrace the notion of cloud-first on your terms.

> " ...As the importance of hybrid cloud increases, so does getting the private cloud—and especially transitions between the two—right."
>
> – READ FORBES INSIGHTS

We're continually innovating to give you the freedom to choose the best models for your business. CloudCenter for example, is an easy way to model, deploy and manage your apps onto any cloud or data centre.

Go fast with Cloud

Cisco and IDC have analyzed how 6159 organizations from 31 countries are using cloud to power their digital transformation. We identified best practices. Answer 15 questions and receive a free personalized report.

Simplicity Fuels Speed

Our solutions allow firms to progress in simple, practical and affordable steps. All with seamless integration across the IT stack and open partner ecosystem.

Only Cisco brings it all together.

Explore the technology

Cisco CloudCenter Solution with ACI
Cisco Cloud Security
Cisco Cloud Solution Overview

What makes Cisco different?

Total Internet video traffic (business and consumer, combined) will be 76% of all Internet traffic in 2021, up from 53% in 2016.

It's no coincidence that more than 85% of the world's Internet traffic touches Cisco technology at some point in its journey.

Organisations of all sizes trust us to consistently lead them through the huge market transitions we've seen.

With digital transformation being the pervasive driver of change, businesses entrust us to move them:

- Beyond automation to a policy driven integrated infrastructure, where policy not only drives automation of the data centre, but can be extended to expansion into the cloud, while supporting application and security requirements

- Beyond just being flexible and accommodating of different consumption models to providing firms with the choice to run their workloads and applications on whatever the right platform or environment is for their needs

- Beyond security to a digital environment where security and analytics are pervasive

Ultimately, choosing Cisco better protects your business with industry-leading technology that's fit for the digital future and secure. With security built into every part of your network you can detect threats, mitigate risk and minimise the impact of attacks.

Make Transformation Happen!

Cisco Data Center – eBook

Find out more: http://cisco.com/go/datacenter