

Continuum Control Plane

How to bring harmony to an increasingly complex cloud estate



The Cloud Contium has fundamentally changed enterprise technology

As just about every business leader can attest, the pace of change in enterprise IT never slows. It's not just that new and more modern technologies are emerging with extraordinary frequency: it's that the whole way we think about designing, architecting, engineering and operating infrastructure and applications is being transformed.

This is what we mean when we talk about the revolutionary power of the Cloud Continuum.

Rather than seeing cloud as a single static destination, leading companies are embracing a much broader range of cloud capabilities — and treating cloud as an integrated and orchestrated set of capabilities ready to unleash new innovation. They're mixing and matching elements of public cloud, multi-cloud, hybrid cloud and edge capabilities, tailoring their infrastructure to enhance agility and best meet their strategic business goals.

Applications are being built to span the entire continuum, leveraging the best of different cloud paradigms to drive new kinds of business value.



What is the Cloud Continuum?

The Cloud Continuum refers to the full spectrum of modern IT capabilities and services across public clouds, private cloud, on-premises infrastructure and edge computing. All of it is seamlessly connected by modern, software-defined networks and supported by advanced cloud management tools and practices.

An opportunity to supercharge the business

For those that are willing and able to capitalize on it, the Cloud Continuum revolution is delivering huge leaps forward in organizational agility, speed and innovation. These are now the critical enablers of customer experience, business performance and competitive differentiation.

As a result, most enterprises are adopting a hybrid and multi-cloud mindset. Recent Flexera research shows that almost nine in every ten organizations now follow a multi-cloud strategy with at least two of the major cloud hyperscalers. And eight in ten have integrated public cloud and private cloud in a hybrid setup.¹

Are the benefits of this approach common among enterprises? Not quite. [Accenture's research](#) has found that 12 to 15 percent of organizations are seeing substantially greater gains than the rest. These Continuum Competitors are using the cloud fundamentally differently to transform everything their business does — from customer interactions to product development to data insight generation and beyond.

As a result, these leaders are seeing significant advantages in IT cost reduction, innovation, sustainability and more.

The implications are clear. Cloud transformation isn't just about the number of workloads you've migrated to a public cloud platform — or how many applications have been modernized in a private cloud. It's about using the full spectrum of Cloud Continuum capabilities to radically enhance the speed, effectiveness and efficiency of IT and the business without compromising security and compliance.



The complexity trade-off you can't ignore

Nothing in life comes for free. And the extraordinary flexibility and power of the Cloud Continuum comes with a key trade-off: it can be vastly more complex to manage.

On the continuum, enterprise applications, services and data no longer necessarily sit in a single data center. Instead, they may reside on and flow seamlessly and securely across a whole range of edge devices, on-prem data centers, private clouds and multiple public clouds.



Think about how this distributed environment changes things like application development, monitoring and patching. How it introduces new security requirements and potential points of failure. How it increases the number of different services — from cloud providers to the open-source community and other vendors — that all need to work together in the most effective way possible.

And that's before you consider how the organization and its people need to continually grasp the array of new cloud services and new IT paradigms that are constantly emerging.

That level of complexity is often overwhelming for any organization. It requires a fundamentally different approach to architecting, engineering and operating infrastructure, applications and services.



Continuum Control Plane

**A way to create harmony
out of complexity**

How can enterprises solve this complexity puzzle while keeping up with the rapid pace of change? The answer is to take advantage of a “control plane” for the entire Cloud Continuum.

A Continuum Control Plane simplifies the complexity of modern IT environments, providing integration across a multi-vendor landscape and giving business and IT Leaders unprecedented visibility throughout the enterprise. It enables a consistent, unified, real-time view into what's working and what's not across the organization.

In this way, the Control Plane is a holistic approach to instilling transparency, orchestrating change, driving innovation, and delivering higher and more cost-effective IT performance — which in turn drives business performance. It encompasses not only hybrid, multi-cloud and edge infrastructure, but also the applications and data that reside across different cloud platforms, the networks that connect it, and the people and processes that develop and operate it.

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A Continuum Control Plane delivers value across the business

By integrating a tailored collection of best-in-breed Cloud Continuum capabilities, a Control Plane transforms the business's relationship with its technology and its people in several important ways:

- It helps leadership **cut through the noise and stay focused** on the most critical aspects and indicators of cloud transformation and business performance.
- It helps IT ensure that the often-underestimated complexities in the interplay of infrastructure, applications, data and business requirements are **tackled holistically**.
- It allows developers and operators to **automate more of their tasks at scale** by bringing together new processes and a more integrated set of tools.
- It helps CFOs **take out a significant proportion of their cloud costs** by applying FinOps tools and practices.
- **It helps security teams better manage risk** in complex distributed hybrid environments by applying thousands of out-of-the-box rules and guardrails at the click of a button.
- It helps people managers attract and **retain the best IT talent** by applying the latest and greatest Cloud Continuum tools and practices — including infrastructure-as-code, DevSecOps, and open-source components.
- And **it does this in a consistent and integrated way** — regardless of the type of cloud.

But what exactly is a Continuum Control Plane?

A Continuum Control Plane is a unified command, control and decision support center providing visibility into critical aspects of the entire business.

But don't think of it as a single tool or a specific platform. Rather, think of it as a way of bringing together a modular collection of best-in-breed tools, services and platforms. These are integrated and abstracted, and amalgamated with new processes, new kinds of automation, and new analytics enabling enterprise IT to run more efficiently, with more agility, security and predictability.

For example, by integrating infrastructure-as-code, workload management, cloud orchestration tools and other capabilities at scale, the Control Plane helps the organization manage and enable its entire hybrid/multi-cloud estate — covering infrastructure, applications, data, networking, people and processes in support of its strategic business objectives.

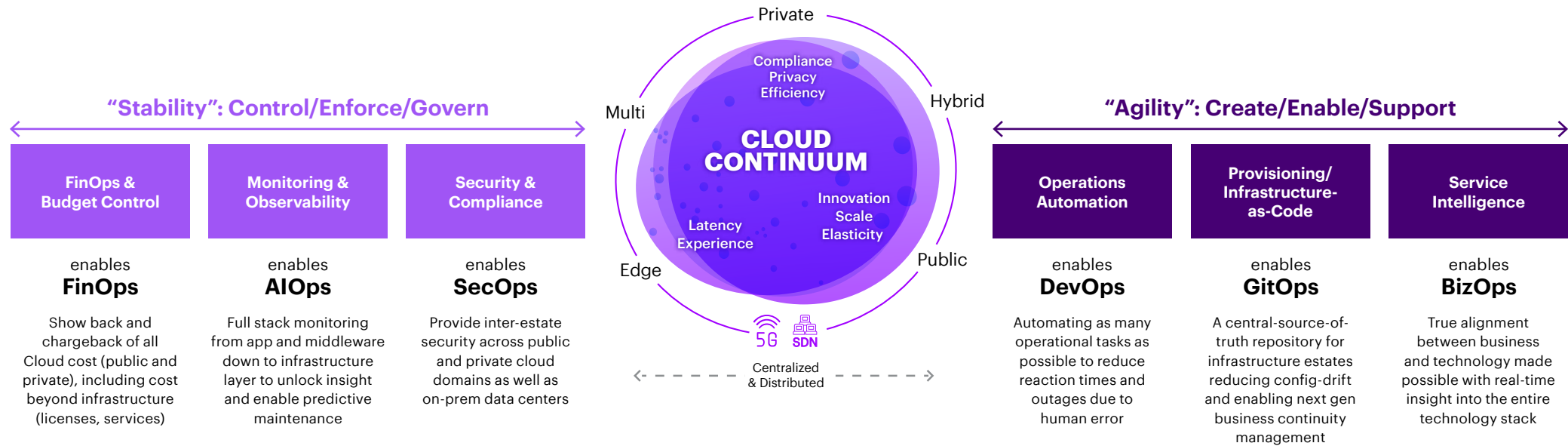
The Control Plane performs an essential orchestration role, bringing harmony to the organizational dissonance that cloud complexity can create.

It's differentiating feature? The extensive use of automation and self-service radically simplifies how organizations build, manage and consume services across the full range of Cloud Continuum infrastructure.



Continuum Control Plane Capability Model

High-level capabilities in Accenture's Continuum Control Plane Framework



Six lenses through which to view performance

A fully fledged and mature Continuum Control Plane consists of six distinct lenses into the performance of enterprise IT and the broader business.

FinOps lens

A FinOps lens provides control over cloud costs, enabling capabilities like show back and chargeback across the hybrid cloud estate. Examples of tools include Cloudability and Cloudhealth.

AIOps lens

An AIOps lens provides critical transparency and monitoring functionality across the whole of the technology stack, from infrastructure through middleware to applications. Example tools include Datadog and Dynatrace.

SecOps lens

A SecOps lens enables the business to apply market-leading security and compliance, both within each cloud estate and, crucially, across the whole enterprise IT environment. Example tools include Prisma Cloud.

DevOps lens

A DevOps lens enables development and operations teams to automate ever greater numbers of tasks, minimizing the potential for human error, reducing outages, and accelerating speed to market. Examples of these tools include AWS Systems Manager Agent (SSM) and Azure DevOps.

GitOps lens

A GitOps lens helps activate automated provisioning and infrastructure-as-code, providing a single source of truth for the infrastructure estate to reduce configuration drift, accelerate time to market, and massively enhance business continuity. Example tools include Ansible and Terraform.

BizOps lens

A BizOps lens provides critical service intelligence, offering real-time insight into the whole of the technology stack. Example tools include Dynatrace and Splunk ITSI.

A way to balance agility with stability

Strong IT management benefits from stability. After all, budgets must always be controlled, spending made transparent, application performance monitored, and the whole system secured. A degree of stability and predictability are the keys to honing the IT estate for ever more efficient, effective and secure performance.



But there's a tension between this need for stability and the need for greater agility. Because IT also needs to help the business innovate quickly with new concepts, business models, products and services. It needs to be able to adapt to new circumstances and adopt new and emerging technologies and services without delay. And it needs to automate more functions to increase speed to market and provide close to real-time insights into technology performance.

This is where a Continuum Control Plane really comes into its own. With the right target architecture, combined with standardized tools and processes, the tension between stability and agility is resolved. On the one hand, the organization can embrace automation and

self-service to secure, operate and govern a distributed hybrid, multi-cloud estate holistically. That delivers on the need for stability.

On the other hand, it can optimize and continuously mobilize innovation across multiple private and public cloud providers as well as on-prem data centers. It means the organization is better equipped to quickly adjust and adapt to the inevitable ups and downs of today's turbulent markets — delivering that critical agility for the business.

In this way, a Continuum Control Plane helps the business realize its future-focused cloud ambitions with greater speed and certainty while simultaneously mitigating risk.



Not just another Cloud Management Platform

What's the difference between a Continuum Control Plane and a Cloud Management Platform?
It's that a Control Plane looks beyond traditional governance, monitoring and compliance tools to the integration, abstraction, and process change that delivers true business agility across the continuum.

How to get started? Most likely you already have.

Embarking on an IT transformation can sometimes feel like climbing a mountain. Each step feels like progress, but the summit always appears far away.



Building a Continuum Control Plane is different.

Why? Because very few businesses will be starting the journey from ground level. In fact, most will already be at Base Camp One. What's more, some may look at their unique business objectives and decide they don't need to get to the summit straight away. It's why flexibility and modularity are baked into the design. There are many paths to the top of the mountain.

For example, many organizations have already implemented FinOps capabilities, AIOps monitoring tools, and elements of security and compliance using standard off-the-shelf products and services.

Others have successfully implemented service intelligence with established platforms. Some have also started to evolve their operating models for the cloud and transform their use of automation.

So building a Continuum Control Plane is typically a question of taking what the business already has, updating it to account for the modern evolution of technologies and practices, and amalgamating it with new cloud capabilities that span the entire Cloud Continuum, in the areas the business most wants to focus on.

The key point: this doesn't need to happen all at once. The organization can evolve its Control Plane capabilities incrementally, focus area by focus area, platform by platform, cloud practice by cloud practice.

Make beautiful music: unify your edge, multi, and hybrid clouds

To truly exploit the opportunities of the Cloud Continuum, a business needs a way to manage the increasingly large number of distributed platforms, tools and devices that make up the modern enterprise IT estate.

A Continuum Control Plane is a way to do this at scale — to create harmony out of the complexity, to create the IT foundation that lets the business rapidly innovate with a culture of continuous reinvention, and to sync everything together to make beautiful music.

A Control Plane-enabled enterprise gains greater visibility, insight and control of the business.

It provides additional tools and processes to inform, enable and optimize business performance and simplifies decision-making by filtering the noise of an increasingly complex environment.

The simple fact is, if you're operating in a multi-cloud, hybrid cloud and edge computing environment, you need to be thinking how to orchestrate your infrastructure, your applications, your data, your network, your people and your processes to deliver both stability and agility.

For that, you need a Continuum Control Plane. Now's the time to start the journey.



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Reference

1 Flexera, State of the Cloud Report, 2022, <https://info.flexera.com/CM-REPORT-State-of-the-Cloud>

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