6 must-haves for hybrid, multi-cloud app delivery
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Introduction

As organizations continue down the path of digital transformation, the move to the cloud has become a given, and hybrid and multi-cloud environments have become the solutions of choice. But while this brave, new multi-cloud world offers the portability, flexibility, and security enterprises desire, it has also made application delivery much more complicated.

To regain control of the applications at the heart of your business — and unlock the true economic benefits of the cloud — you need an application delivery controller (ADC) along with a management and orchestration platform that provides complete visibility into your entire application infrastructure.

Read on to discover the top six requirements for facilitating a holistic approach to application delivery that extends seamlessly from your data center(s) out to the public cloud and across the WAN to your branch offices and remote sites.

By 2020, over 90% of enterprises will use multiple cloud services and platforms.

IDC FutureScape: Worldwide Cloud 2018 Predictions
End-to-end network visibility

All of the scalability and flexibility enabled by the cloud are wasted if your applications fail to perform optimally or your data security is breached. To ensure application performance and security, you need an ADC that integrates with a management platform so you can view and manage all of your ADC devices from a single console — whether the application is local or hosted in the cloud.

"To address the operational challenges of this hybrid multi-cloud reality, organizations need the ability to visualize resources and manage performance across environments. Only then... can the organization’s infrastructure be used as a competitive advantage rather than a liability."

Forbes.com
With applications residing in the local data center as well as in the cloud — and users accessing them via whatever device they choose — troubleshooting network performance can present an enormous challenge. To ensure application optimization and uptime, your ADC needs to integrate with a real-time analytics platform that provides actionable intelligence from across your hybrid or multi-cloud environment. This way, you get immediate feedback in the form of alerts, and your data is transformed into insights that can be applied to application performance management, troubleshooting, and security threat mitigation.
“Too often, network performance is presumed to be sufficient, unless something breaks. Enterprises have to know what their current use is and how well it’s performing. That can help them understand trends and plan capacity.”

Eric Hanselman
Chief Analyst, 451 Research
As applications continue to move to the cloud, the automation of supporting services is becoming increasingly important. For this reason, you need to select an ADC that integrates with a workflow management system to automate tasks such as lifecycle management and provisioning. By doing so, you will enable your IT team to work faster while eliminating errors and reducing costs.

Why smart organizations are choosing cloud deployment

- **35%** Enhanced business agility
- **51%** Faster deployment of apps and services
- **37%** Reduced costs through competitive cloud pricing
On-demand scaling

Workloads are not constant. They can spike or plummet if it’s the end of the month, a special event, or a specific season. Your application delivery infrastructure needs to scale accordingly (based on user-defined conditions) so that you can apply cloud capacity where it’s most needed for your business.

To do this, your ADC must have an auto-scaling capability that provides two-way signaling between the application or virtualization layer and the ADC.

Orchestration for the cloud

As the data center continues to move towards a software-defined model, networking services need to be orchestrated so that your application infrastructure can be deployed on demand. To handle this task, your ADC must be API-driven so that it can integrate seamlessly with orchestration platforms and leverage their automation power inside and outside the enterprise perimeter.
“The beauty of the modern cloud and data center architecture is that you can create intelligent network and management policies that scale on-premises systems and into the cloud. This kind of seamless cloud delivery allows the user to be continuously productive.”

DataCenter Knowledge.com
Flexible license management

Because most ADC devices employ permanent static licenses that allow a specified throughput, under-utilization of certain devices and under-licensing of others can occur.

To get the required flexibility, scalability, and resiliency from your hybrid or multi-cloud environment, you need to purchase licensed capacity as a pool. This way, you can easily apply license capacity to an under-utilized device whether it’s in the local data center or the cloud.

Why a holistic app delivery approach is the right approach for your hybrid and multi-cloud environment

In a recent IDC-conducted survey, organizations listed the following as the top five benefits of a holistic app delivery strategy for hybrid and multi-cloud environments: 2

- Lower IT costs
- Increased IT efficiency
- Reduced risk
- Shift in IT focus to strategic initiatives
- Improved customer engagement
The time is now for optimizing app delivery from the cloud

With an overwhelming majority of enterprises already re-architecting their network infrastructures to optimize application delivery from their hybrid and multi-cloud environments, any organization that fails to do so risks getting left behind by the competition.
Learn more about how you can employ Citrix application delivery controller and Citrix application delivery management to optimize application performance, improve user experiences, and increase employee productivity.

Visit Citrix.com/ADC

Sources:
   Hybrid-cloud-mainstream-but-seamless-operations-hard-to-achieve
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3. IDC, “Application Delivery in a Hybrid and Multi-Cloud World,” April 2018