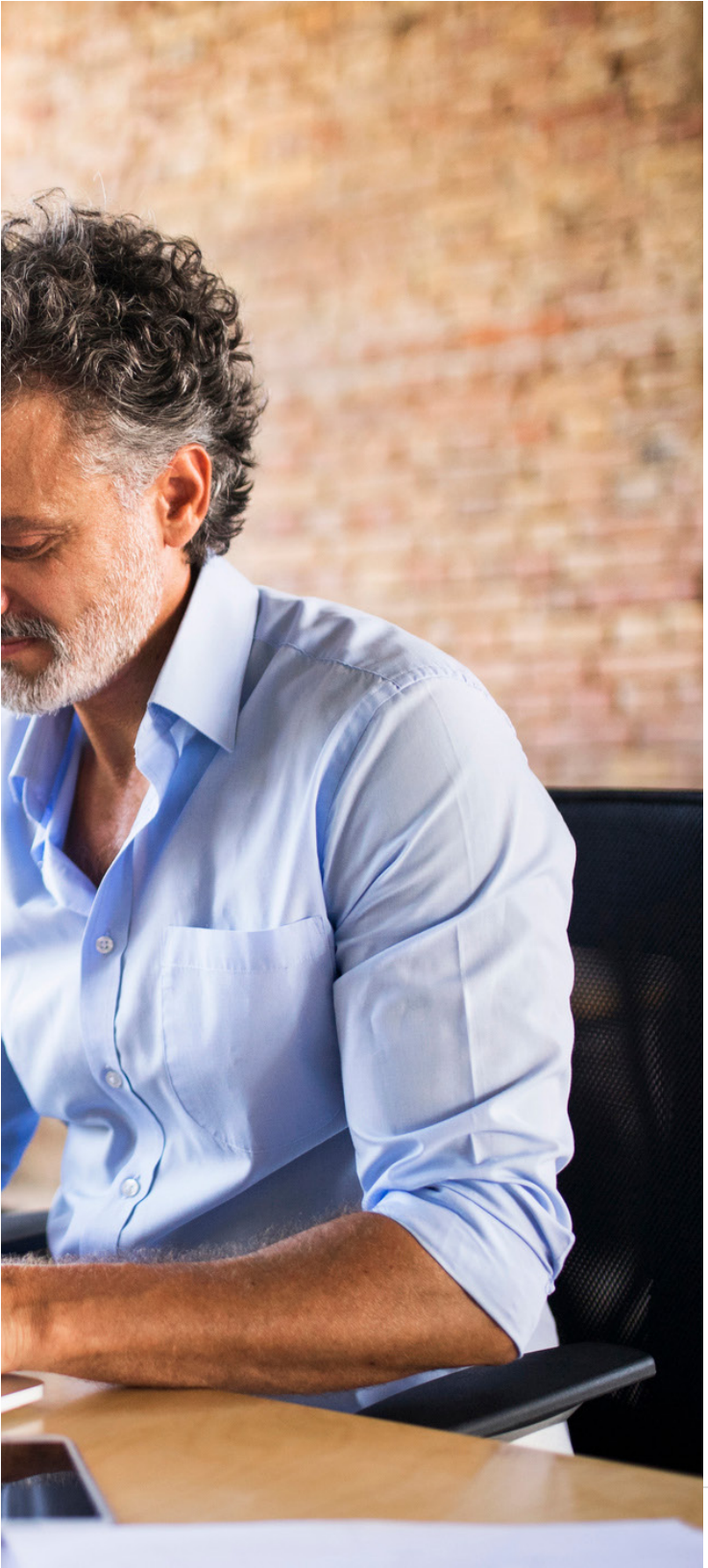
CITRIX®

The ADC Guide to Managing Hybrid (IT and DevOps) Application Delivery



Contents

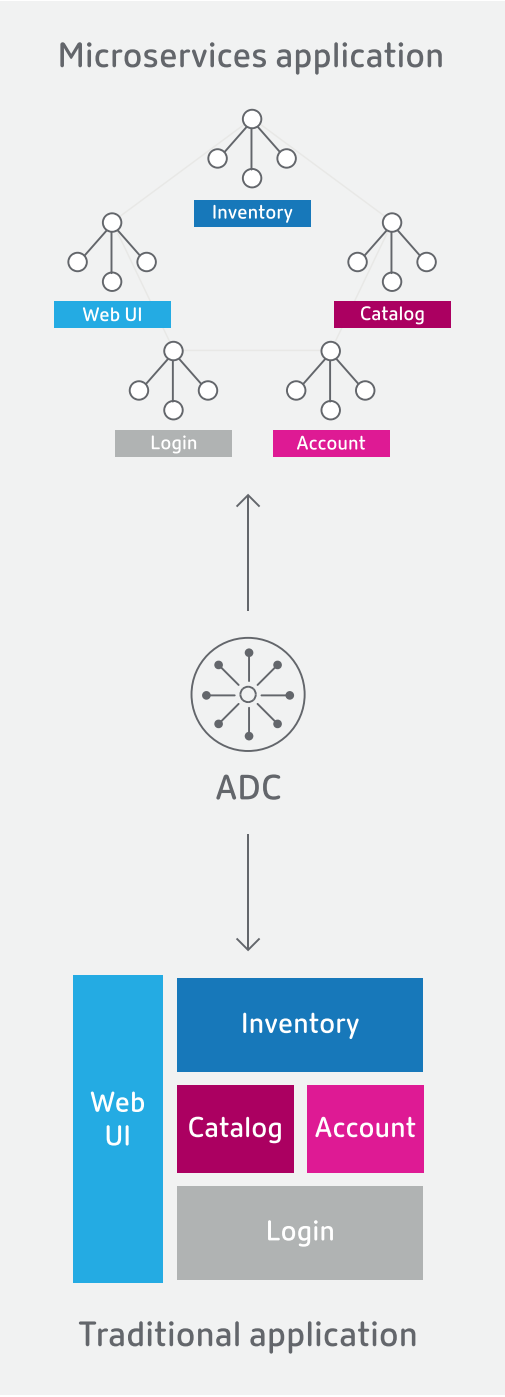
Digital transformation is changing the way that applications are managed and delivered

To meet the growing challenges of a competitive world economy, a digital transformation is taking place in the enterprise. Organizations realize that to be competitive they need to be more agile. They need to reach their customers wherever they are, and they need to be able to scale their applications to meet customer demands.

To meet these challenges, organizations are deploying new microservice applications that are changing the application delivery environment. These applications are agile, configured to enable new features to be added without disrupting applications in production, and designed to automatically instantiate instances in response to increasing user demand. In short, microservices are drastically changing the way that applications are deployed and managed. This introduces a high level of complexity to network infrastructures because traditional applications are not going away. Applications will continue to be designed for both microservices and traditional 3-tier implementations, and organizations will need to maintain traditional IT practices while developing agile practices for newer DevOps microservice applications.

These factors create unique challenges for your application delivery solution and make selecting an ADC platform that can support both traditional and microservice architectures with a hybrid application delivery model, key to bridging the gap between these different modes of app delivery.

This eBook will delve into the primary drivers and implications for a hybrid application delivery infrastructure, and the key capabilities you should prioritize when identifying an ADC to support it.



Primary drivers for a hybrid application delivery infrastructure

To embrace the impact of digital transformation on application delivery, and position IT to manage and deploy newer DevOps applications in parallel with legacy 3-tier applications, businesses are adopting hybrid application delivery infrastructures that can bridge the gap between these two application environments and open up opportunities for innovation.

Some of the key drivers for hybrid application delivery infrastructures include:

1. The adoption of container technology for microservices applications, and management systems for rapid iterative application development and deployment.

2. The deployment of new microservices applications, which require information or functions that reside in legacy client/server or 3-tier web applications.

3. The development of dynamic applications that enable digital interaction and engagement with their stakeholders and customers.

Implications for a hybrid application delivery infrastructure

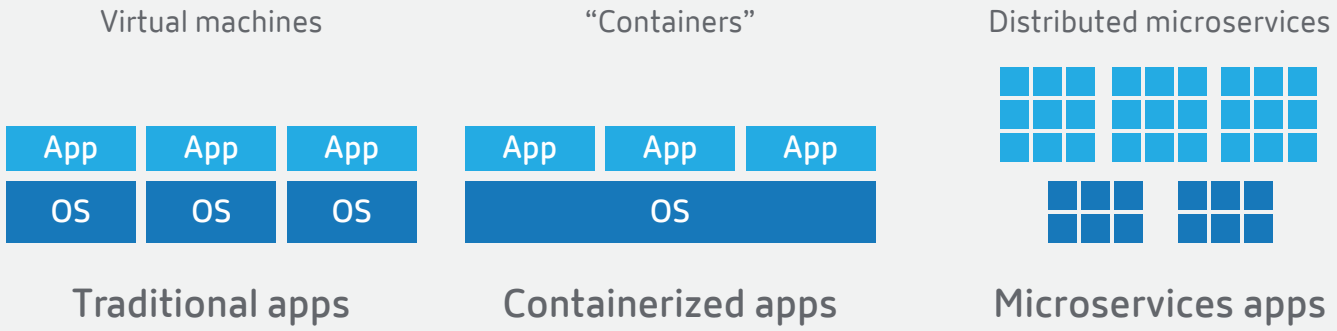
Supporting a hybrid application delivery infrastructure for traditional and microservices application delivery management places unique demands on your ADC due to the diverse qualities of both models.

With microservices application delivery, ADCs are placed in a container and are deployed per microservice, versus in front of the application servers in the case of legacy applications.

Additionally, with microservice applications, up to thousands of ADC's might be deployed to support east-west traffic within the application, versus just a few in front of the application servers for traditional 3-tier applications.

These differing structural characteristics create a large management challenge that must be overcome to support both traditional and microservices applications in parallel. As a product, your ADC must have certain capabilities to help overcome these challenges and bridge the gap.

Hybrid application delivery infrastructure



Three things to look for in an ADC to bridge the gap between traditional and microservice app delivery with a hybrid infrastructure

1. Support for multi-form factors →
2. A centralized management system →
3. Integration with automation and orchestration systems →

Support for multi-form factors

You need an ADC with form factors for each position in the application environment, including physical, virtual, and containerized—with consistent features across all platforms. This ensures that no matter where you deploy your ADC, you can depend on the same code base and characteristics being available.

A centralized management system

Your ADC should have a management system that can support ADCs in all environments, from a single console, to help troubleshoot and tune performance. This Management System should give you the ability to configure, monitor, and perform analytical analysis of your application delivery infrastructure across your environment—from the local data center to the cloud.

Integration with automation and orchestration systems

Your ADC needs to integrate with cloud orchestration systems for virtualized environments and container orchestration and management systems for microservices applications. This enables your ADC to be instantiated to support new application instances that are dynamically deployed—regardless of the environment.

Support for multi-form factors

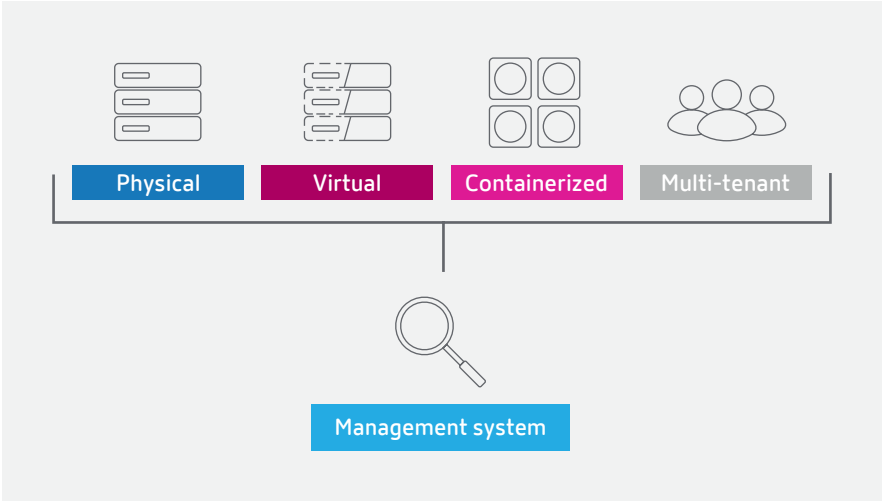
You need an ADC with form factors for each position in the application environment, including physical, virtual, and containerized—with consistent features across all platforms. This ensures that no matter where you deploy your ADC, you can depend on the same code base and characteristics being available.

A centralized management system

Your ADC should have a management system that can support ADCs in all environments, from a single console, to help troubleshoot and tune performance. This Management System should give you the ability to configure, monitor, and perform analytical analysis of your application delivery infrastructure across your environment — from the local data center to the cloud.

Integration with automation and orchestration systems

Your ADC needs to integrate with cloud orchestration systems for virtualized environments and container orchestration and management systems for microservices applications. This enables your ADC to be instantiated to support new application instances that are dynamically deployed—regardless of the environment.



Support for multi-form factors

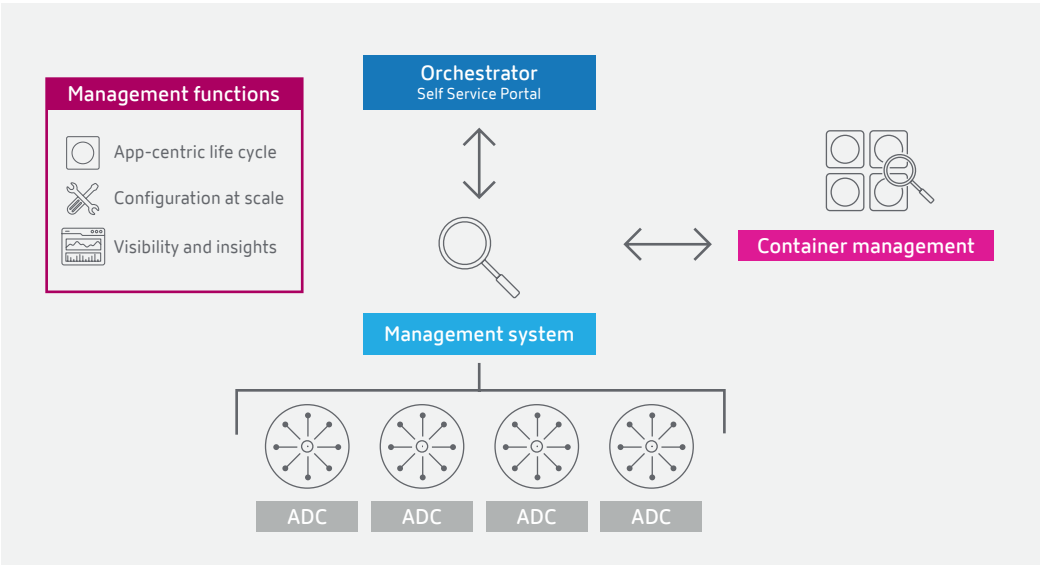
You need an ADC with form factors for each position in the application environment, including physical, virtual, and containerized—with consistent features across all platforms. This ensures that no matter where you deploy your ADC, you can depend on the same code base and characteristics being available.

A centralized management system

Your ADC should have a management system that can support ADCs in all environments, from a single console, to help troubleshoot and tune performance. This Management System should give you the ability to configure, monitor, and perform analytical analysis of your application delivery infrastructure across your environment—from the local data center to the cloud.

Integration with automation and orchestration systems

Your ADC needs to integrate with cloud orchestration systems for virtualized environments and container orchestration and management systems for microservices applications. This enables your ADC to be instantiated to support new application instances that are dynamically deployed—regardless of the environment.

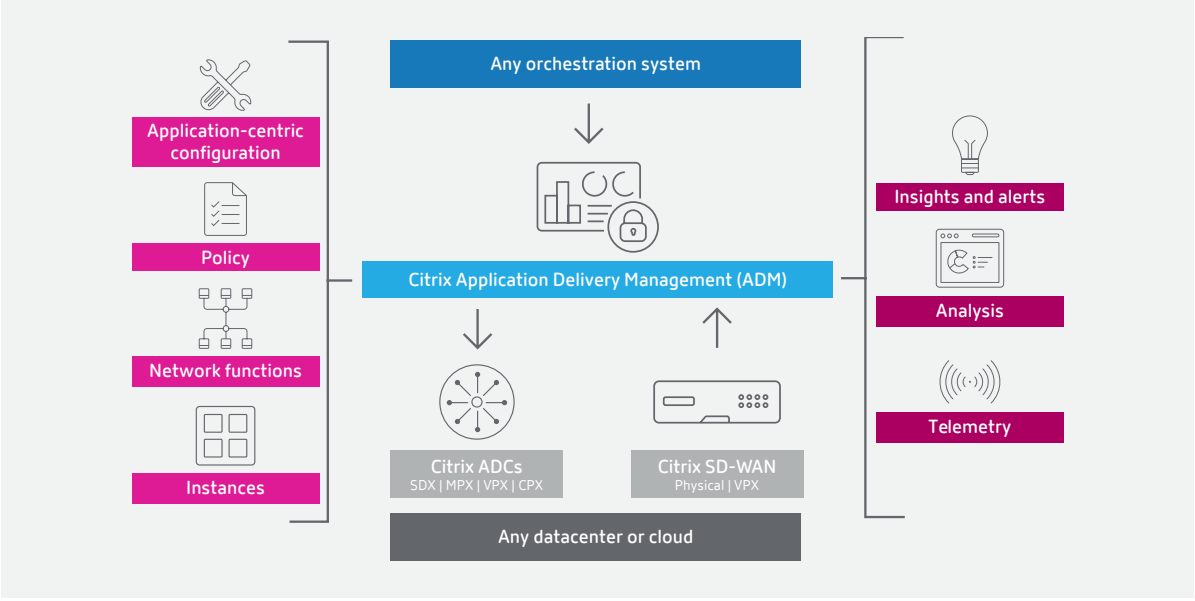


You need an ADC with these key features to overcome the challenges presented in managing a hybrid application delivery infrastructure and effectively bridge the gap between traditional and microservices app delivery.

Meet Citrix ADC: Redefined for both 3-tier and DevOps application delivery

With Citrix ADC you get the only application delivery controller designed to handle all application environments—physical, virtualized, and containerized—with consistent features and code base. This enables our software-first ADC solution to support your application architectures, from 3-tier to microservices applications, as a unified environment, from a single console.

Additionally with Citrix Application Delivery Management (ADM), you can manage, monitor, and troubleshoot all of your application services together to bridge the gap between traditional and microservices applications, and ensure better performance, availability, and security. In result, operations are simplified by providing enterprise-wide application visibility and automation of management jobs that need to be executed across multiple instances.



Together, Citrix ADC and Citrix ADM help IT identify faults across all of your ADC environments, enabling you to utilize the data center resources that you need so that you can maintain application performance—and keep costs down.

In addition, Citrix ADC provides integration with automation and cloud orchestration systems to support application rollouts with self-service capabilities. These developer-friendly tools and platforms enable a self-service format that meets security and compliance requirements for application deployment. Organizations can even share scripted templates across teams to build automation into enterprise infrastructure and processes to expedite service delivery and ticket closure.

Citrix ADC is the only one that gives you the flexibility you need to simplify traditional and new application delivery with a hybrid app delivery infrastructure—so you can say yes to the future of application delivery and innovation.

To learn more, visit:

citrix.com/products/citrix-adc