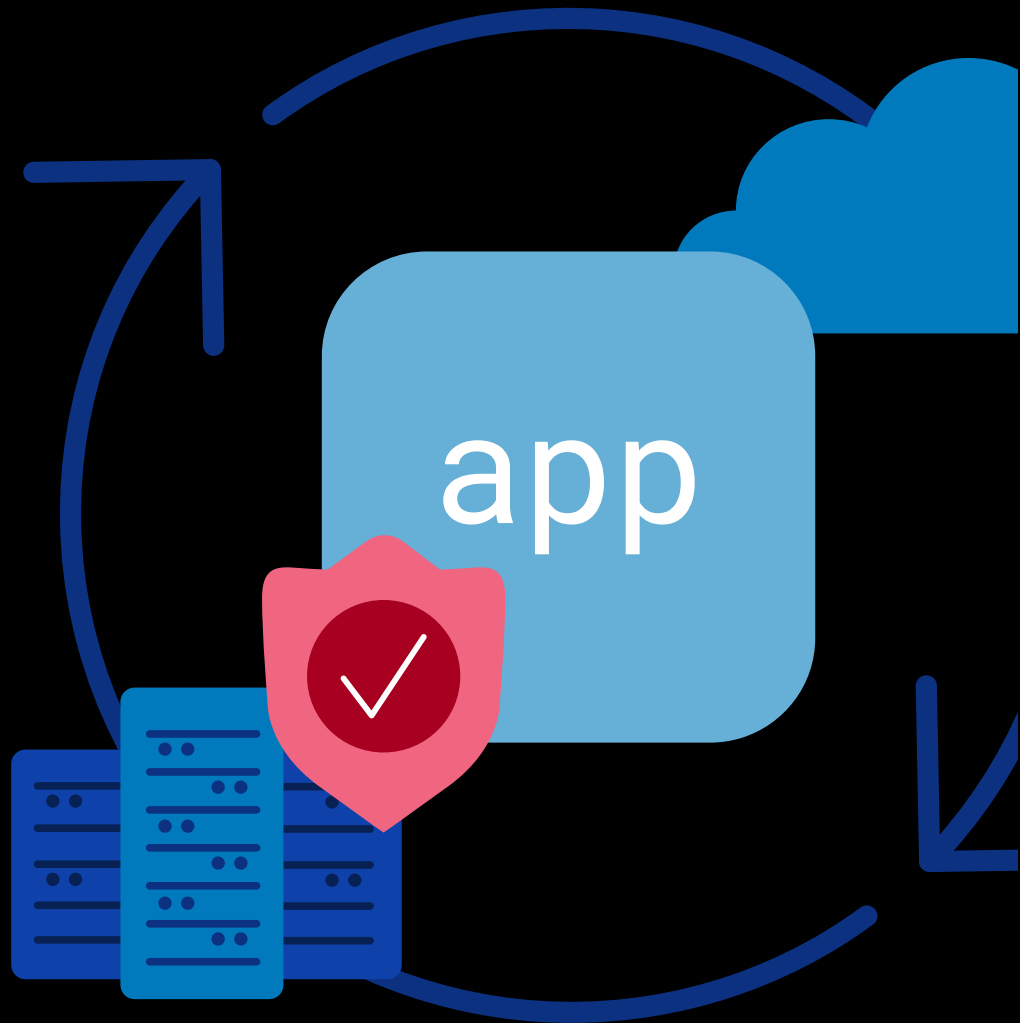


How to Navigate the Complexities of App Migrations

Cloud adoption has prompted many organizations to modernize their infrastructure to improve the customer experience. F5 Distributed Cloud App Connect reduces the time to migrate applications to the cloud or other new platforms while ensuring maximum performance, resilience, and strong, consistent security for apps during the process.



Key Benefits

Comprehensive security

Ensure end-to-end security for your applications during a migration, safeguarding against threats at every stage and across all environments.

Centralized control

Manage your migrations with a single, centralized dashboard, significantly reducing administrative workload and enhancing operational oversight.

Versatile deployments

Increase efficiency in application deployments across both cloud and on-premises environments, utilizing lightweight proxies that streamline the migration process.

Real-time observability and insights

Gain real-time visibility into your migration progress and application performance, enabling quicker issue detection and faster resolution.

Simplified policy management

Leverage your centralized management to simplify administration by establishing consistent policies across both old and new environments, reducing operational complexity.

Reduced risk and downtime

Minimize risk and downtime by gradually routing traffic between environments with custom weighting, ensuring a smooth transition and efficient decommissioning of legacy systems.

Application Migrations Can Be Lengthy and Complex

Application migrations pose significant challenges for modern enterprises, particularly in managing the associated costs and complexities. Whether moving applications from on-premises data centers to the cloud or migrating from strategic platforms and supporting infrastructure, such as hypervisors or application delivery controllers, the process can often take months.

The duration of these migrations depends on several factors, including whether refactoring is necessary and how much of the existing infrastructure can be repurposed or replicated. As the go-live cutover approaches, application and operations teams must perform extensive testing to ensure the new environment is secure, robust, and reliable, which is critical to the success of the migration.

Simplify Policy Controls and Enforcement

With F5® Distributed Cloud App Connect, you can deploy a lightweight reverse proxy across both new and old application environments. This proxy streamlines how policies are administered and enables consistency in services across applications independently of the underlying cloud platform.

A single policy can be authored for implementation to the old and new application environments as you begin transitioning traffic and users, reducing redundancy and complication across environments.

Streamline Rollouts of New App Environments

Transitioning users to a new environment can be stressful and is rarely a complete cutover from old to new. Distributed Cloud App Connect load balances traffic and users between the old and new application environments until you're confident that the new environment can fully support the business and load requirements in production.

Custom weighting enables you to determine how much traffic you would like to direct between environments to minimize the risk of disruption during the migration. Once the new application environment is fully operational, you can begin decommissioning the older environment.

Distributed Cloud App Connect load balances traffic and users between the old and new application environments.

Simplify Troubleshooting

Gain much needed visibility across the old and new application environments to pinpoint any issues users might be experiencing. Get full network and workload health visibility to identify where issues may be stemming from and reduce user disruption.

Distributed Cloud App Connect provides a single dashboard that spans workloads across all environments, making it easier to troubleshoot and remediate security and performance issues during migrations.

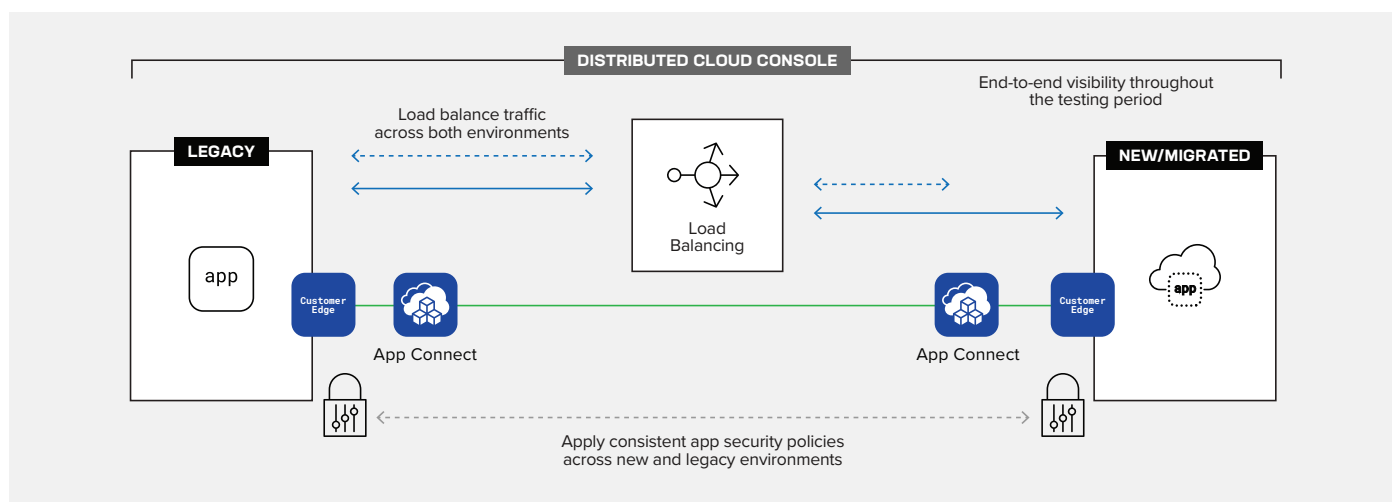


Figure 1: Reduce testing cycles during migrations with Distributed Cloud App Connect.

How App Connect Works

Distributed Cloud App Connect is deployed via a lightweight software reverse proxy called a Customer Edge (CE). A CE can be deployed either in a container or on a virtual machine.

1. **Deploy CEs:** Install the CE software in the new application environment.
2. **Apply policies to the proxy:** Once the CE is implemented, bind policies to the proxy load balancer for each app to ensure consistent enforcement to any app in any cloud or on-premises environment.
3. **Weight traffic and routing:** Route traffic to the new environment without any potential IP address conflicts.
4. **Decommission legacy environments:** Once confident that the new app environment can support the increased traffic and workloads, adjust traffic weighting in the proxy settings and begin decommissioning legacy application environments.

This approach ensures that applications migrate smoothly, with consistent security and minimal downtime.

Key Features

Load-balanced traffic across environments

Deploy a secure lightweight proxy that balances traffic across old and new application environments during the migration.

Centralized policy administration

Leverage management and security policies that can be applied consistently across old and new application environments.

Cloud-agnostic deployments

Use a lightweight proxy in any public cloud or data center to monitor the health of the migration.

Cloud-delivered console

Benefit from the ability to view performance and security threat metrics for app environments during the migration.

Conclusion

Application migration is a critical component of modernizing your enterprise infrastructure, but the process is often fraught with complexities and challenges. F5 Distributed Cloud App Connect is a comprehensive solution that simplifies the deployment of new application environments while ensuring optimal performance, consistent security, and operational efficiency.

By streamlining tasks such as policy enforcement, traffic routing, and load balancing, Distributed Cloud App Connect significantly reduces downtime and resource demands. With these capabilities, enterprises can confidently migrate applications with minimized risk and disruption, enabling a seamless transition and maintaining business continuity throughout the process.

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