



Achieving secure, scalable virtual workspaces with F5 and Kasm Technologies

Deliver a zero-trust, high-performance virtual desktop access solution perfect for highly regulated industries



Key benefits

Reduce risks

Ensure that only verified users can access Kasm Workspaces, and each session is encrypted for reduced security and compliance risks.

Enhance user experiences

Deliver minimal latency and consistent performance for Kasm Workspaces even during peak loads, regardless of user location.

Deliver impeccable security

Reduce user frustration and bolster security with identity-aware, role-based access control (RBAC).

Improve efficiency

Deliver ultra-secure, reliable desktops and apps quickly without the hassle of complex provisioning.

Your remote workers and workspaces need both secure and reliable access

Organizations like yours are challenged with providing 24/7 reliable access from anywhere and on any device to remote and on-premises workers—while still maintaining the strictest security. An ideal solution is delivering virtual desktops and applications directly through the browser.

This lightweight approach simplifies the user experience and reduces endpoint dependencies. Your employees can access their workspace from any device with a web browser, ensuring flexibility for remote and hybrid work scenarios.

Meet Kasm Workspaces

Kasm Workspaces is a modern platform for streaming desktops, applications, and web services directly to the browser. Built on a container-native architecture, it provides a flexible and secure solution for both on-premises and remote work environments with:

- Isolated, ephemeral sessions for ultimate security
- Scalable deployment across hybrid and multicloud environments
- Rapid provisioning for desktops and applications
- Support for Linux, Windows, and browser-based workloads

While Kasm Workspaces solves many challenges, these remote workspaces still need a reliable, secure-access solution to operate in a zero-trust model. That's why Kasm Technologies and F5 have partnered to deliver zero-trust virtual desktop access.

This integrated solution combines Kasm Workspaces, a modern platform for containerized desktop and application streaming, with F5® BIG-IP® TMOS®, part of the F5 Application Delivery and Security Platform (ADSP). The result is a high-performance, zero-trust solution for remote desktop access that scales seamlessly across hybrid and multicloud environments.

Together, Kasm Workspaces and F5 deliver scalable remote access systems, perfect for:

- **Government:** Secure remote access for distributed teams without exposing internal networks
- **Financial services:** Protection of sensitive financial data with encrypted, authenticated sessions
- **Healthcare:** Compliance with HIPAA and other regulations while enabling access to critical systems
- **Other regulated sectors:** Any environment requiring rigorous access controls and system segmentation

Key features

Deliver zero-trust security

Enforce zero trust network access (ZTNA) policies with SSL offloading, WAF inspection, and identity-aware access controls.

Optimize performance and delivery

Accelerate content delivery with intelligent traffic steering and global load balancing to ensure Kasm Workspaces perform reliably and consistently.

Simplify secure access

Centralize authentication with identity provider integration via SAML, OAuth, and Open ID, implement RBAC, and streamline user logins for containerized desktops and traditional workloads.

Scale deployments easily

Allow for secure and fast provisioning of Kasm Workspaces while managing policy-based routing, distributed denial-of-service (DDoS) mitigation, and network segmentation.

INTRODUCING BIG-IP TMOS:

Accelerating Kasm Workspaces from core to edge

Trusted globally for over two decades, BIG-IP TMOS is a recognized leader for application security and delivery, ensuring applications like Kasm Workspaces meet business demands while remaining protected. BIG-IP TMOS has many capabilities that can benefit an organization's virtual desktop infrastructure (VDI) like Kasm Workspaces:

BIG-IP Local Traffic Manager™ (LTM) delivers Kasm Workspaces to your users in a reliable, secure, and optimized way. Using BIG-IP LTM in conjunction with Kasm Workspaces, you get the extensibility and flexibility of application services like Kasm Workspaces with the programmability you need to manage your cloud, virtual, and physical infrastructure. With BIG-IP LTM, you have the power to scale, automate, and customize access to Kasm Workspaces faster and more predictably through:

- **Load balancing:** Distribute Kasm Workspaces loads across multiple servers and clouds to increase availability
- **Traffic steering:** Intelligently direct Kasm Workspaces traffic to servers and resources for better user experiences
- **Health monitoring:** Verify health and performance to check the status of Kasm Workspaces servers and resources

BIG-IP Access Policy Manager® (APM) enables zero-trust access for Kasm Workspaces by acting as a SAML identity provider, which organizations can integrate with Active Directory or other identity stores. Users can authenticate to Kasm Workspaces using their existing enterprise credentials, and administrators can centrally manage access policies, ensuring a streamlined and secure login experience. With BIG-IP APM, you can deploy zero-trust validation based on granular context, securing every Kasm Workspace access request through:

- **Identity-aware proxy:** Secure access to Kasm Workspaces with a fine-grained approach to user authentication and authorization that enables only per-request, context- and identity-aware access.
- **Single sign-on (SSO) and access federation:** Integrating with existing SSO and identity-federation solutions, users can access all their business apps via a single login, regardless of whether the app is SAML-enabled or not.
- **OAuth 2.0 and OIDC support:** Enable social logins to simplify access authorization from trusted third-party identity providers like Google, LinkedIn, Okta, Azure AD, and others.

By deploying BIG-IP TMOS in front of your Kasm deployment zone to intelligently distribute user sessions across a pool of Kasm container hosts, you can provide secure, uninterrupted access during maintenance windows or server failures while also improving Kasm Workspaces responsiveness while under load. You can also improve your network and Kasm Workspaces performance by moving CPU-intensive SSL/TLS encryption and decryption away from web servers while enhancing your security by centralizing SSL certificate management to reduce risks of misconfigured or expired certificates.

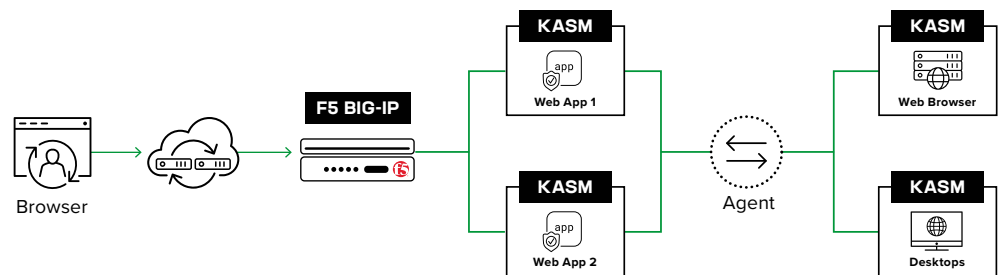


Figure 1: Conceptual architecture of BIG-IP TMOS deployed with Kasm Workspaces.

KASM WORKSPACES ON KUBERNETES:

Near-the-app security and scalability with NGINX

Perhaps you are running Kasm Workspaces on Kubernetes by deploying its containerized workloads pods and services for better scalability and resiliency. NGINX® can assist with fast, reliable, secure Kasm Workspaces connectivity and granular control in diverse environments.

The NGINX Ingress Controller provides secure, scalable, and flexible access to Kubernetes-hosted Kasm Workspaces by managing external traffic and routing it to the appropriate services within the cluster. By acting as a reverse proxy, the NGINX Ingress Controller simplifies exposure of Kasm services without modifying your core Kubernetes configurations.

Using NGINX Ingress Controller, you can implement unified Kubernetes-native API gateways, load balancers, and ingress controllers across hybrid and multicloud Kubernetes environments where Kasm Workspaces are deployed. This prevents downtime and disruptions of your Kasm Workspaces with features like dynamic reconfiguration and circuit breaking, while strong authentication, authorization, and encryption practices protect user identities and data transmission.

Implementing this solution is easy using the provided Helm charts to deploy both Kasm Workspaces and the NGINX Ingress Controller into a Kubernetes cluster.

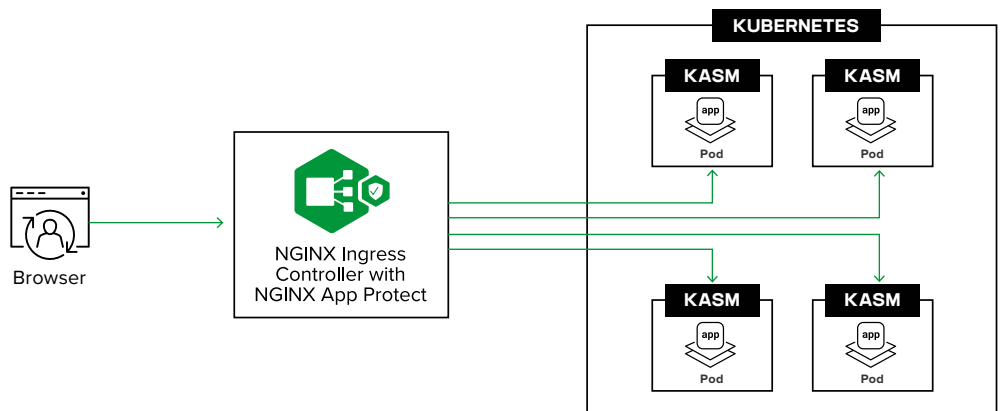


Figure 2: Conceptual architecture of NGINX Ingress Controller deployed with Kasm Workspaces in a Kubernetes cluster.

Delivering unmatched Kasm Workspaces availability with F5 Distributed Cloud Services

Distributed Cloud Services lets you deploy Kasm Workspaces anywhere—whether on-premises, in the cloud, or at colocation facilities with seamless and fast connectivity while unifying your security-policy and application-delivery capabilities.

By deploying Kasm Workspaces in your on-premises data centers and as containers in a public cloud, along with colocation options, you can use a single HTTP load balancer configuration object to deliver Kasm Workspaces so it looks like a single application to the user while ensuring high availability no matter what is happening in your environment.

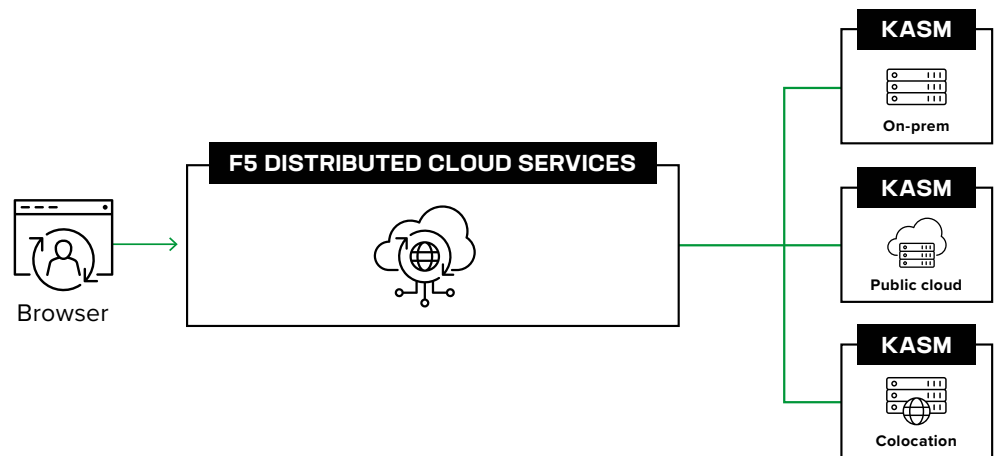


Figure 3: Conceptual architecture of multiple Kasm Workspaces deployments using Distributed Cloud Services.

“As hybrid work becomes the norm, organizations need secure, flexible, and scalable platforms that can adapt to evolving threats and operational requirements. By partnering with F5, we’re combining our cutting-edge container-streaming technology with [F5’s] world-class Application Security and Delivery Platform to help enterprises securely scale their VDI infrastructure.”

Matt McClaskey, Co-Founder of Kasm Technologies

A perfect solution for remote workers and workspaces

Together, Kasm Workspaces and F5 solutions allows organization to deliver secure, reliable, and high-performance access to applications and desktops—anywhere, anytime, and on any device.

By combining Kasm’s flexible, container-streaming technology with the proven F5 ADSP, organizations gain a future-proof, zero-trust solution that’s as adaptable as it is secure. You’ll confidently deliver:

- Secure, remote workforce enablement
- Efficient hybrid and multicloud VDI deployments
- Simplified compliance for regulated industries or government agencies
- Rapid surge capacity for seasonal or crisis needs

Get started today delivering secure, reliable, zero-trust virtual desktop access using Kasm Workspaces and F5.

Find out more about this [Kasm Workspaces](#) partnership or take a [deeper technical dive at F5 DevCentral](#).

Want to chat now? Contact [Kasm Workspaces](#) or [F5](#).

