6 considerations for choosing the right Kubernetes platform

With an integrated Kubernetes platform that comes ready to build and manage applications, you can gain efficiencies quickly without having to create a system from scratch. Opt for an innovative, enterprise-ready solution with thousands of successful use cases in production. Here are six considerations for choosing a Kubernetes platform.

1 Integrate existing systems with cloud-native apps

Your customers rely on the consistent delivery of the current services you provide, while the market demands continual innovation. This has created a growing demand for easy-to-administer development platforms that deliver applications in Kubernetes-managed containers.

▸ Full-scale cloud migration is rare. Choose a platform that allows for a hybrid approach to IT modernization. Move some existing workloads and legacy apps to the cloud and take a cloud-native approach to new applications.

▸ Select a proven platform that leaves your future options open.

2 Use tools that allow for standardized workflows

The next wave of cloud-enabled technologies, like artificial intelligence (AI), machine learning (ML), edge computing, and the Internet of Things (IoT) will push organizations into yet another level of competitiveness. The right application development platform will provide a consistent work environment and act as a foundation for innovation.

▸ Seek out a powerful set of developer resources, integrated tooling, and automation capabilities to set you up for continuous innovation. Look for other time-saving features like intelligent code completion and automated code generation.

▸ Opt for an integrated development environment with common developer tools in a single graphical user interface to expedite set up time.

3 Manage both containers and virtual machines

Many organizations are moving from virtualized infrastructure to containers. To facilitate this transition, find a Kubernetes-based platform that you can orchestrate and manage across both containers and virtual machines.

▸ Expect future return on investment (ROI) to come from microservices-based applications built on open source technology rather than the virtualization of legacy infrastructure.

▸ Provide training in Kubernetes to staff currently focused on virtualization. Look to automation to grow careers and increase ROI for your business.

4 Deploy and manage workloads anywhere in a uniform way

To solve business challenges, organizations need to accelerate and simplify the development and operations of cloud-native apps wherever and however they build and deploy them. With reliable cloud infrastructure in place, business transformation is all about apps.

▸ Choose a flexible platform that lets you work across every environment—from public, private, or hybrid clouds, to datacenter and edge locations.

▸ Bring together new clouds, tools, and integrations to solve your business challenges as you encounter them. What works well today may not be the best solution tomorrow. Choose a flexible platform you can operate consistently across environments.

5 Optimize resources with one complete stack

When you adopt a container platform with Kubernetes at the core, you can complete it by hardening it for enterprise use and adding additional tools to provision, manage, and scale your systems. Avoid commercial distributions of Kubernetes that include open source components but then lock you into a proprietary platform.

▶ Choose a solution powered by the open source community to ensure that all components will remain open, from the Linux® operating system all the way to the server-less dashboard.

▶ Look for a solution that integrates container networking, ingress and load balancing, storage, monitoring, and logging.

6 Benefit from tested, certified, and supported software

The right Kubernetes platform provides the tools you need to operate successfully in a hybrid cloud environment. Build on your platform using trusted cloud providers and software. Look for a platform that connects to an integrated ecosystem of complementary cloud-native tools.

▶ Increase the value you get from your Kubernetes platform by adding tested, certified software to address your unique needs. Omit providers who cannot offer a trusted ecosystem and marketplace.

▶ Use the time savings derived from commercially supported, certified software. Move resources from maintenance to creative activities with revenue potential.

Get started

Speed to market often determines business success. Modernize legacy applications and set up the infrastructure to create new innovations that will shape your future. Read our e-book Gain a competitive edge with your container strategy: How to choose a flexible, efficient, and more secure Kubernetes platform for additional considerations that will inform your selection process.

About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.