

## 4 tips for delivering superior apps

With Red Hat's certified app development ecosystem partners

### 1 Adopt containers and cloud-native development

User demand for new features grows faster than legacy development processes can meet. A new platform, methods, application services, and tools are required to keep up without forcing you to abandon existing apps that run your business. Adopting containers and a cloud-native approach to application development provides these benefits:

- Portability. Ability to decouple applications from infrastructure and run applications on any platform that supports containers.
- **Scalability.** Flexibility to scale up (or down) as needed to respond to demand.
- **Flexibility.** Ability to quickly create testing environments when needed, without tying up resources when not needed.
- **Innovation.** Ability to rapidly incorporate new features and user feedback for continuous improvement.
- Language- and technology-agnostic. Support for a choice of languages, databases, frameworks, and tools.

To start cloud-native app development:

- Move existing applications into containers, either in a cloud environment or on-premise. Update the application with modern runtimes and middleware deployed in containers.
- Implement continuous integration/continuous delivery (Cl/ CD) using build pipelines and rolling deployments to speed delivery.
- Identify portions of existing applications that can be broken out into new microservices or replaced with application services or serverless functions. Speed new development by using the right tool for the right task.
- Use metrics to learn and improve.

### 2 Start with a solid foundation

Cloud-native application development is an approach to building, running, and improving apps using well-known techniques and technologies for cloud computing. Red Hat helps support this journey with platforms that let most organizations begin working with containerized applications as soon as their cluster is up and running.

### **Red Hat OpenShift**

Red Hat<sup>®</sup> OpenShift<sup>®</sup> is a leading application development platform for enterprise Kubernetes. Built around full-stack automated operations and a consistent experience across all environments, it is optimized for developer productivity and team collaboration that lets you innovate without limits. Using Red Hat OpenShift, operations and development teams can work together more efficiently to move ideas from development to production. It includes tools to manage your development life cycle across any deployment platform (e.g., on-site, cloud, edge, etc.).

#### **Red Hat Application Services**

Red Hat Application Services is a comprehensive portfolio for application development that runs on Red Hat OpenShift. It includes frameworks, tools, and solutions for developing, deploying, and scaling applications.

#### **Red Hat Ansible Automation Platform**

Red Hat Ansible® Automation Platform provides an enterprise framework for building and operating IT automation at scale, from hybrid cloud to the edge. The platform allows users across an organization to create, share, and manage automation—from development and operations to security and network teams. Ansible Automation Platform lets you automate your application deployments and make your installations, upgrades, and day-to-day management repeatable and reliable.

# **3** Consider the whole app life cycle

It is important to select solutions for every aspect of developing and running cloud-native apps in production.

- Monitoring and logging. Application monitoring and logging tools allow teams to understand the health, security, performance, and utilization of systems and applications.
- **Development.** Tools, technologies, and environments that help developers and teams create code or services that can be tested.
- **Testing.** Tools to help teams make sure they are building applications that perform and behave in a manner that conforms to the business requirements.
- Continuous integration. Build systems that watch various source control repositories for changes, run any applicable tests, and automatically build the latest version of the application.
- **Code or git repositories.** Web applications that host and archive code, as well as provide version control systems.
- Continuous delivery (CD) and deployment. Tools and technologies to build an environment for experimentation with controlled outcomes without unintended negative consequences.
- Application infrastructure. Software platforms for delivering enterprise applications.

## 4 Choose from a certified ecosystem

Red Hat works closely with its app development partner ecosystem to test, certify, and integrate technologies so you can use the tools of your choosing and focus on creating value for your customers. Ecosystem partners are:

- Curated. Red Hat carefully selects and vets software partners with whom it collaborates to address business challenges and pain points with software that is not only compatible with, as well as written for and optimized to run on, Red Hat infrastructure.
- **Certified.** Certified solutions from app development ecosystem partners are built using Red Hat recommended best practices for Red Hat platforms.
- Supported. Partner solutions are supported by a collaborative effort between the partner, a third-party technical support alliance network (TSANet), and Red Hat.
- Easy to find. Red Hat Marketplace makes it easy to discover, try at no cost, and purchase certified software and Kubernetes Operators for container-based environments. Red Hat Marketplace apps can be instantly deployed on Red Hat OpenShift clusters running in the cloud environment of your choice.

#### Discover how you can benefit from a certified ecosystem

Read additional information about how you can benefit from app development partner ecosystem solutions.



#### **About Red Hat**

Red Hat helps customers standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with award-winning support, training, and consulting services.

 North America 1888 REDHAT1 www.redhat.com Europe, Middle East, and Africa 00800 7334 2835 europe@redhat.com Asia Pacific +65 6490 4200 apac@redhat.com Latin America +54 11 4329 7300 info-latam@redhat.com

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