

# Red Hat Advanced Cluster Management for Kubernetes

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## Product overview

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**Question:** What is Red Hat® Advanced Cluster Management for Kubernetes?

**Answer:** Red Hat Advanced Cluster Management for Kubernetes provides end-to-end management visibility and control to manage your cluster and application life cycle, along with security and compliance of your entire Kubernetes domain across multiple datacenters and public clouds.

It provides a single view to manage your Kubernetes clusters—from Red Hat OpenShift® deployed on-prem, in public clouds, and in clusters from public cloud providers like Amazon Web Services (AWS), Microsoft Azure, Google, and IBM.

**Question:** What are the key use cases of Red Hat Advanced Cluster Management?

**Answer:** Unified multicluster management

- Centrally create, update, and delete Kubernetes clusters across multiple private and public clouds
- Search, find, and modify any Kubernetes resource across the entire domain
- Quickly troubleshoot and resolve issues across your federated domain

Policy-based governance, risk, and compliance

- Centrally set and enforce policies for security, applications, and infrastructure
- Quickly visualize detailed auditing on configuration of applications and clusters
- Built-in continuous improvement software (CIS) compliance policies and audit checks
- Immediate visibility into your compliance posture based on your defined standards

Advanced application life-cycle management

- Easily deploy applications at scale
- Deploy applications from multiple sources
- Quickly visualize application relationships across clusters and those that span clusters

**Question:** How does Red Hat Advanced Cluster Management extend the value of Red Hat OpenShift Container Platform?

**Answer:** OpenShift Container Platform is the proven Kubernetes platform. Red Hat Advanced Cluster Management adds more value to OpenShift Container Platform by extending your OpenShift Container Platform applications into a multicluster environment. OpenShift Container Platform and Red Hat Advanced Cluster Management deliver the platform and capabilities that are critical to addressing the challenges organizations face as they work across a range of environments, including multiple datacenters and private, hybrid, and public clouds.

OpenShift focuses on the single cluster application model and provides an excellent framework for continuous integration/continuous delivery (CI/CD). Red Hat Advanced Cluster Management models applications for multicluster deployment with enterprise features that help ensure both the rapid deployment of an application and the resilience of your infrastructure. Stand up new clusters and let the subscription framework handle the continuous delivery of your applications across all your environments.

## Packaging

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**Question:** Is Red Hat Advanced Cluster Management included as part of the OpenShift Container Platform subscription?

**Answer:** It is not part of the OpenShift Container Platform subscription. It is offered separately via standalone SKU.

**Question:** Will it be bundled with other subscriptions from Red Hat?

**Answer:** It is not bundled with any other subscriptions at this time.

**Question:** What is the pricing for Red Hat Advanced Cluster Management subscriptions?

**Answer:** Pricing uses the same metric as OpenShift Container Platform, per core pair, and, similarly, only the worker nodes are licensed. For example, if a client is buying 2,000 core-pairs of OpenShift Container Platform, adding Red Hat Advanced Cluster Management to the entire fleet requires 2,000 core-pairs of Red Hat Advanced Cluster Management. The same concept applies to renewals.

**Question:** When can I purchase Red Hat Advanced Cluster Management subscriptions?

**Answer:** Red Hat Advanced Cluster Management is now generally available. Please contact your account representative for more information. You can also [request an evaluation copy](#) of Red Hat Advanced Cluster Management for Kubernetes.

## Technical details

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**Question:** Does Red Hat Advanced Cluster Management run as a service (e.g., cloud.redhat.com) or on-premise?

**Answer:** Red Hat Advanced Cluster Management installs and runs on OpenShift, so customers can take advantage of it wherever they run their OpenShift clusters.

**Question:** How is Red Hat Advanced Cluster Management deployed?

**Answer:** Red Hat Advanced Cluster Management is deployed via an operator and runs on OpenShift Container Platform 4.3.x–4.5.x and manages 3.11 and 4.3.x–4.5.x.

**Question:** What are the technology specs for installing Red Hat Advanced Cluster Management?

**Answer:** Hub cluster

- Operator-based installation
- Available on OperatorHub.io
- Requires OpenShift Container Platform 4.3.x–4.5.x.

#### Managed clusters

- OpenShift Container Platform 3.11, 4.1.x–4.5.x
- Limited life-cycle support for third party Kubernetes clusters:
  - Amazon Elastic Kubernetes Service (EKS)
  - Azure Kubernetes Service (AKS)
  - IBM Cloud Kubernetes Service (IKS)
  - Google Kubernetes Service (GKE)
- Red Hat Advanced Cluster Management provides observability, application, and policy-based management of imported managed clusters.
- Red Hat Advanced Cluster Management provides full cluster life-cycle management (create, upgrade, destroy) with additional security compliance capability for OpenShift Container Platform clusters.

#### High availability

- Supports OpenShift Container Platform availability zone
- Limitation for search component based on RedisGraph

#### Resource requirements

- 3 masters, 3 infrastructure nodes, 6v4CPU, and 16 GB RAM

**Question:** Can Red Hat Advanced Cluster Management compare app versions across different clusters and environments?

**Answer:** Yes, using app topology view, customers can compare application resources using introspection provided by WeaveScope. For example: How an app is configured in Development/Cluster A, compared to quality assurance /Cluster B.

**Question:** Will Red Hat Advanced Cluster Management work in a disconnected environment?

**Answer:** Yes, Red Hat Advanced Cluster Management runs as an operator on OpenShift and can be deployed wherever OpenShift runs.

**Question:** Can Red Hat Advanced Cluster Management run behind an HTTP proxy (i.e., not disconnected but connected to the internet via a proxy)?

**Answer:** Generally, customers will configure a global load balancer that may incorporate the proxy configuration therein.

**Question:** Are Red Hat OpenShift managed services (Red Hat OpenShift Dedicated, Microsoft Azure Red Hat OpenShift) supported as well?

**Answer:** Yes they are—Red Hat manages OpenShift and not any of the underlying infrastructure.

**Question:** Does Red Hat Advanced Cluster Management support any Kubernetes cluster, even those not based on OpenShift Container Platform?

**Answer:** In this release, we can support the import and management of non-OpenShift Container Platform clusters like IKS, AKS, EKS, GKE. We can create, upgrade, and destroy OpenShift Container Platform clusters on IBM, AWS, Google, Microsoft Azure, and bare metal.

**Question:** Does the interface support role-based access control (RBAC) and filtered views? (e.g., split environments into different groupings and the ability to allow a specific user or group of users to manage those objects, and only those objects.)

**Answer:** We are backed by OpenShift Container Platform on RBAC. Any permissions set through OpenShift Container Platform will cascade down to Red Hat Advanced Cluster Management.

**Question:** Red Hat Advanced Cluster Management will also cover multicluster life-cycle management, including cluster installation. What, if any, role will Apache Hive play? Or will this product replace Hive?

**Answer:** [Hive](#) is the application programming interface (API) that Red Hat Advanced Cluster Management will include and use for deployment of OpenShift Container Platform clusters on infrastructure—Amazon EC2, Google Cloud, Microsoft Azure, bare metal.

**Question:** Does Red Hat Advanced Cluster Management have the ability to discover what a cluster looks like and take control of its resources? Or must everything always be deployed, controlled, and managed from Red Hat Advanced Cluster Management?

**Answer:** Yes, you can import existing clusters, and Red Hat Advanced Cluster Management has the capability to discover everything needed. There is no need to sync or update a managed cluster—the spoke controllers run automatically to ensure the state is always fresh on the hub.

**Question:** What is the deployment model of Red Hat Advanced Cluster

**Answer:** We do not run Red Hat Advanced Cluster Management on anything other than OpenShift Container Platform. We can run on a 3 master, 2 worker cluster with nodes sized 16/128GB for production and 6/16GB for demo.

Management on top of OpenShift Container Platform or Kubernetes public? What is the additional infrastructure that my customer must add?

**Question:** Considering deployment architecture, will Red Hat Advanced Cluster Management need to exist in a central cluster? Or can it be deployed in 2 or 3 different sites and clustered so that it withstands any disruption to one cluster?

**Answer:** Hub can be high availability and disaster recovery with a minimum of 3 masters.

**Question:** How easy is it to install and configure Red Hat Advanced Cluster Management?

**Answer:** You can complete an end-to-end install in about 8 minutes as an operator on top of Red Hat OpenShift 4.3.x–4.5.x.

**Question:** What about connectivity? What is needed?

**Answer:** Red Hat Advanced Cluster Management uses an https-based web interface. The remote managed clusters (spokes) speak up to the hub in a Transport Layer Security (TLS) secured channel in its own namespace with its own certificates.

**Question:** Where do I go for more information on Red Hat Advanced Cluster Management?

**Answer:** To learn more about Red Hat Advanced Cluster Management and request access for tech preview, visit our website at [redhat.com/clustermanagement](https://redhat.com/clustermanagement).

### 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.



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