



## Key considerations for multicluster networking with Submariner

While cloud-native technology continues to evolve, organizations also demand a robust solution that works across different infrastructure providers and network scenarios. They need geo-redundancy, scale, and fault isolation for their applications. Multicluster connectivity is at the core of Red Hat open hybrid cloud strategy. Here are three ways Red Hat® Advanced Cluster Management for Kubernetes can help.



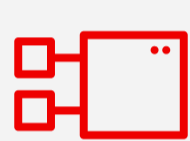
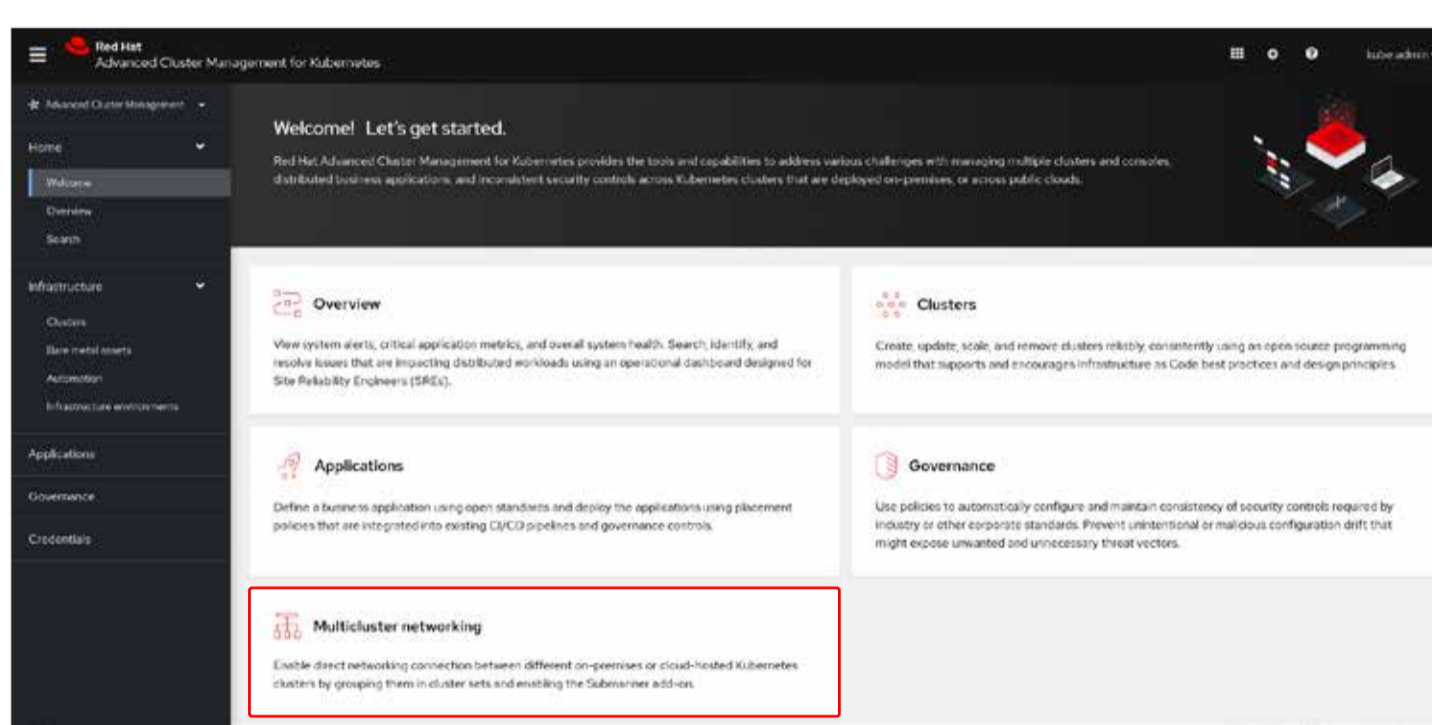
### 1. Allow direct and trustworthy communication between applications

Submariner complements Red Hat Advanced Cluster Management by providing a direct network between pods and services of Red Hat OpenShift® clusters maintained by Red Hat Advanced Cluster Management and deployed either on-premise or in a cloud environment.

Red Hat Advanced Cluster Management helps by offering:

- ▶ **Submariner integration.** Red Hat Advanced Cluster Management reduces the friction to adoption of Submariner, by allowing users to configure and manage Submariner deployment and setup directly from the Red Hat Advanced Cluster Management interface in less time.
- ▶ **Configurable security.** By default, all traffic between clusters is encrypted for the maximum focus on security; if you trust your underlying network infrastructure, Submariner also supports unencrypted connections which gives you the flexibility to adjust the configuration based on your needs.
- ▶ **Extended capabilities.** Besides configuration and management, take advantage of an open source command line utility that is continuously integrated into the console for deeper troubleshooting.

Red Hat Advanced Cluster Management for Kubernetes overview



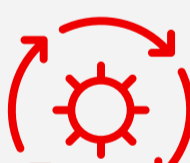
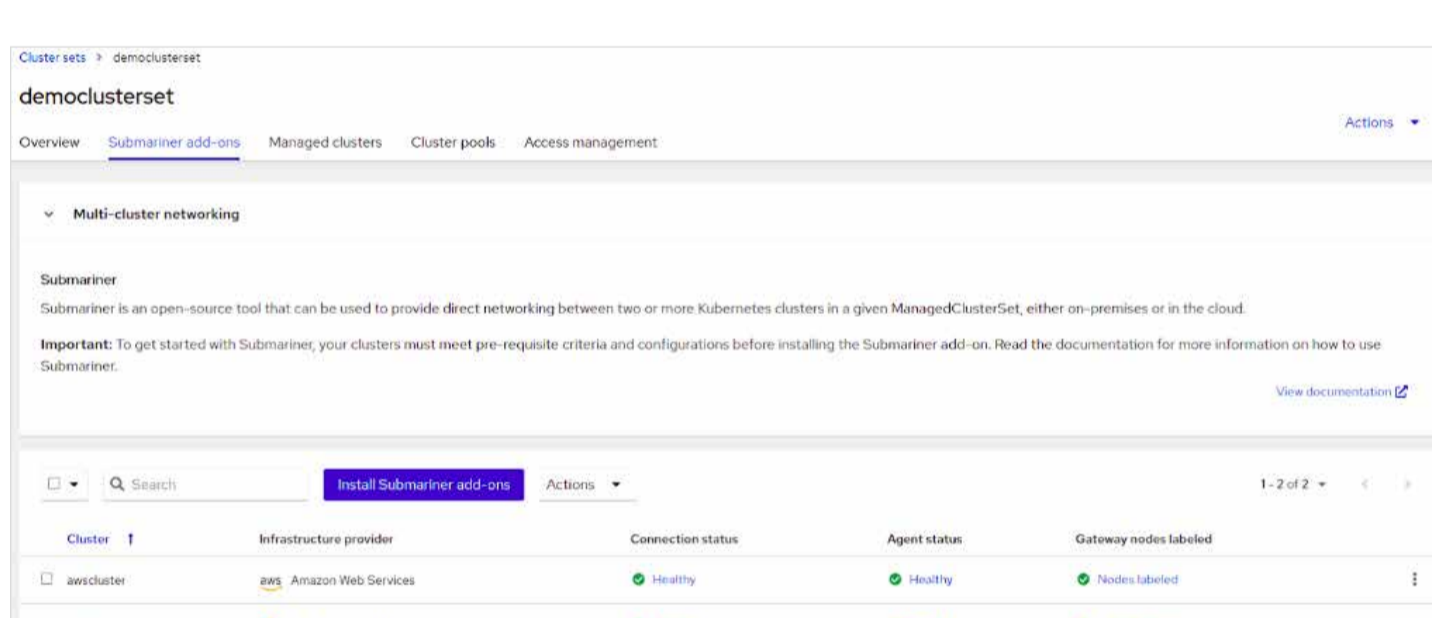
### 2. View microservices-based applications' network behavior

Assess multicluster networking health via visual indicators for behavioral insight, control, and troubleshooting—with increased speed.

Red Hat Advanced Cluster Management helps by providing:

- ▶ **Dataplane transparency.** Supporting all Red Hat OpenShift networking technologies and designed to be adaptable to evolving network plugins.
- ▶ **Cluster sets.** Group and manage clusters with a high degree of trust that shares services with less difficulty.
- ▶ **Deeper observability.** Use existing Submariner network metrics and have the option to integrate it with Red Hat Advanced Cluster Management observability with customized Grafana dashboards.

Submariner add-on overview

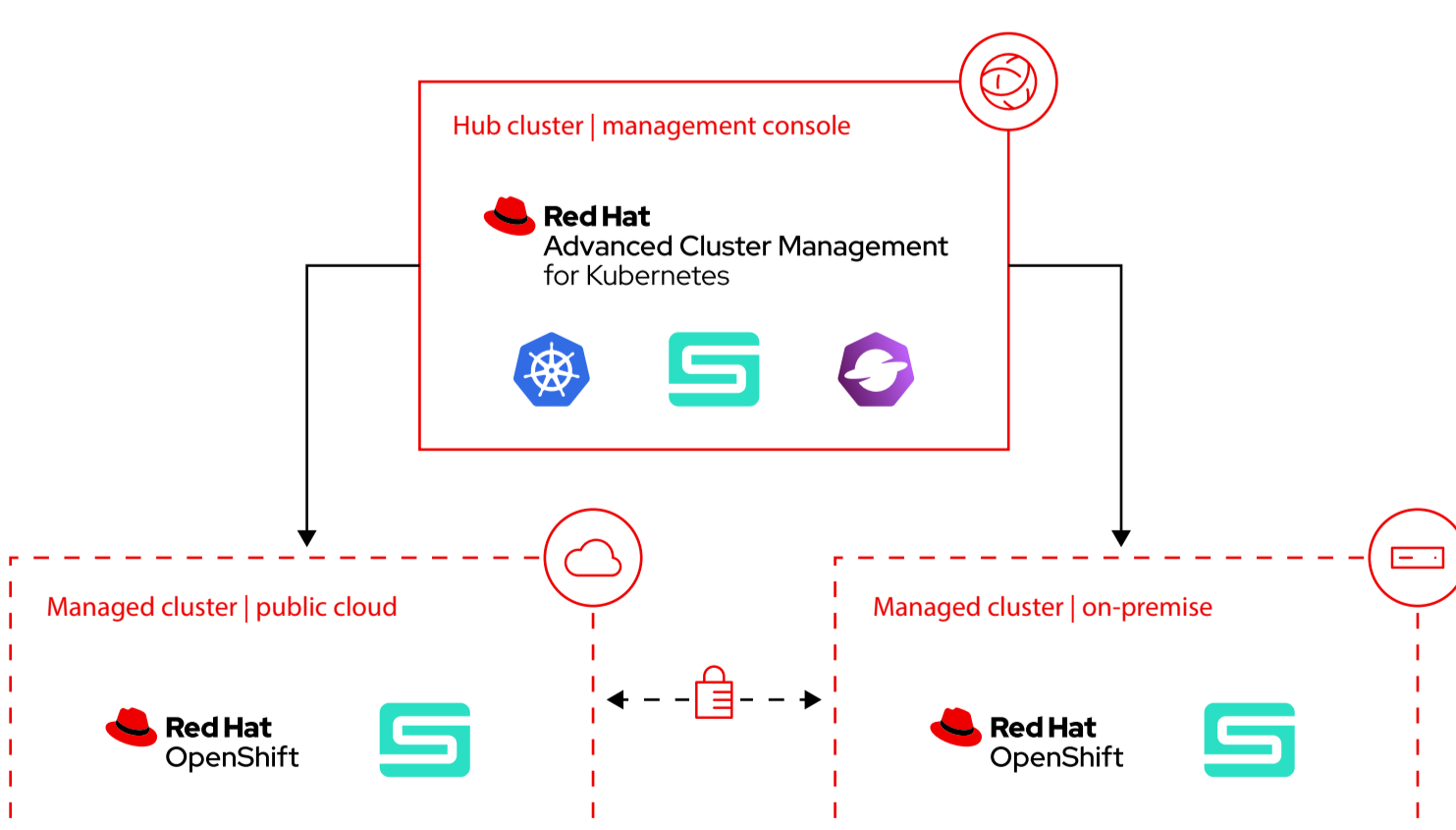


### 3. Deploy services across multiple environments

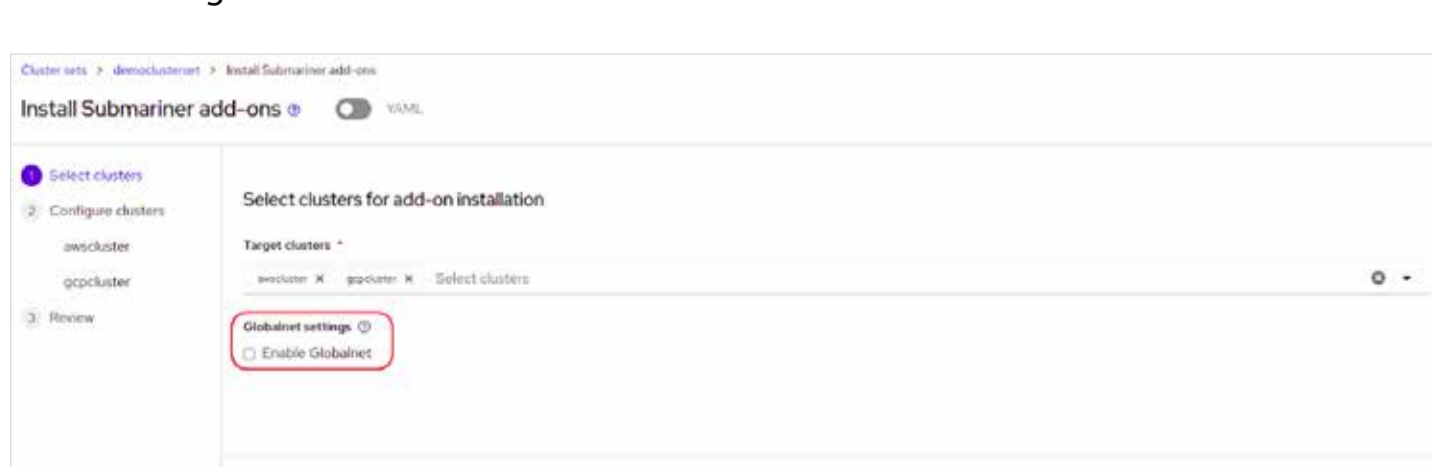
Beyond connectivity, explore service discovery for Kubernetes clusters connected by Submariner in multicluster environments.

Red Hat Advanced Cluster Management helps support:

- ▶ **Pod-to-pod and pod-to-service routing with native performance.** This eliminates the need for proxies, external load-balancers, or ingress for East to West traffic.
- ▶ **Cross-cluster service discovery.** Domain name system (DNS) with both service failover and load balancing across clusters.
- ▶ **GlobalNet.** Supports overlapping classless inter-domain routing (CIDRs), for clusters within a cluster set.



Cluster configuration overview



To learn more about Red Hat Advanced Cluster Management for Kubernetes, visit our webpage.

[Learn more](#)