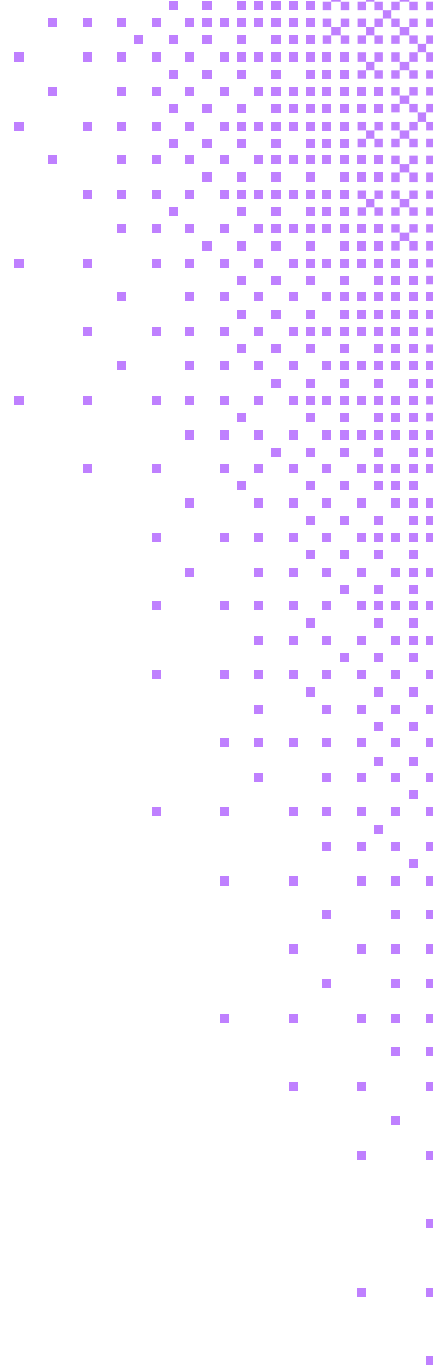# MULTI-CLUSTER MANAGEMENT FOR ENTERPRISE IT

Portainer empowers you to securely manage containerized applications across Docker, Docker Swarm, and Kubernetes, and across Cloud, Hybrid Cloud, On-Premise and/or Data Center.

MANAGING ONE CLUSTER IS RELATIVELY EASY. MANAGING MANY IS NOT.

Portainer lets you centralize the configuration and consumption of your underlying container platforms, regardless of the runtime, distro or location. Whether you run OpenShift Kubernetes, Rancher RKE/K3s, Talos Kubernetes, EKS Anywhere, K0s, MicroK8s, or any "Kubernetes Certified" distribution, Portainer can manage it. Portainer can even manage a combination of Kubernetes and Docker/Podman environments you may run.

In the world of container platforms, there are three elements to consider: Creation, Configuration, and Consumption.

Creation

Creation is the initial creation and management of the clusters themselves (build a cluster, scale a cluster, upgrade a cluster) - this is the realm of dedicated tooling and/or cloud provider KaaS services.
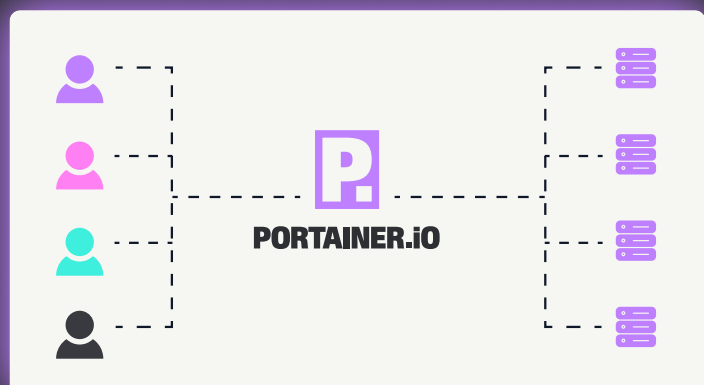
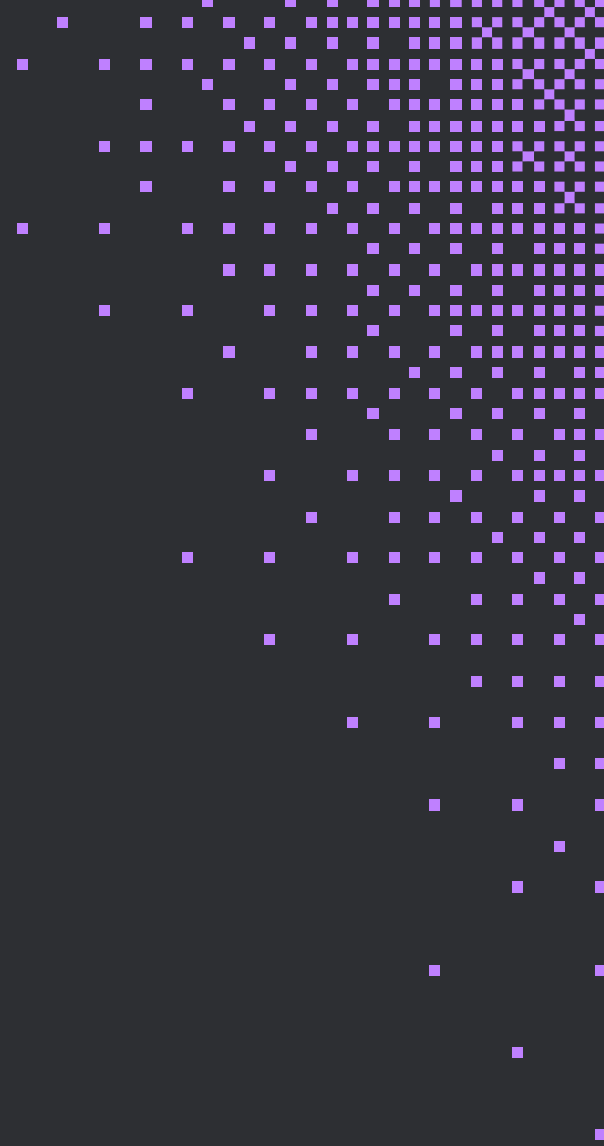Provision a cluster
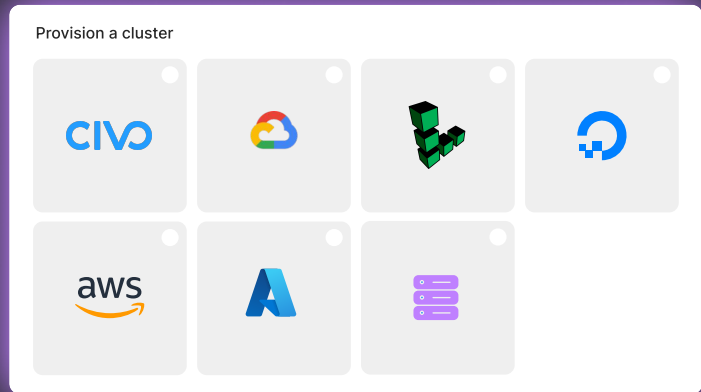
Configuration

Configuration encompasses the unique changes you apply to each cluster to make it production-ready for your specific use case. This includes setting up user authentication and role-based access permissions, defining resource quotas, security policies and controls, setting up namespaces, deploying management applications, and pre-configuring networking elements such as ingress controllers. Multi-cluster management tools allow you to complete this at scale, across many environments.
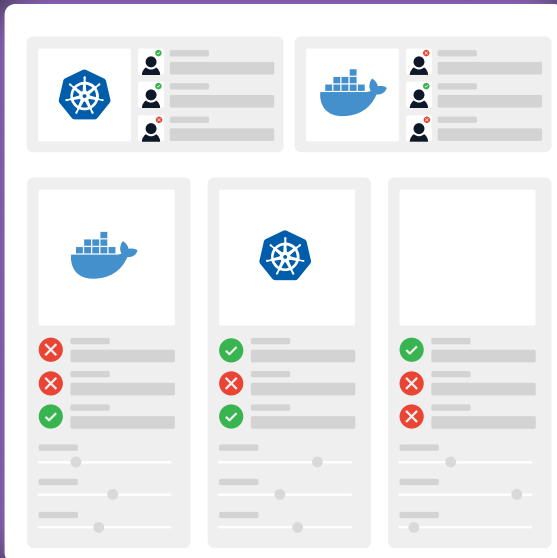
Consumption

Consumption means the mechanism your internal users consume the platform, which translates to "how they deploy and maintain their apps". You can employ a self-service UI to assist those users who need to remain close to the platform, or you can fully abstract the platform through an internal developer platform, such as Backstage.

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