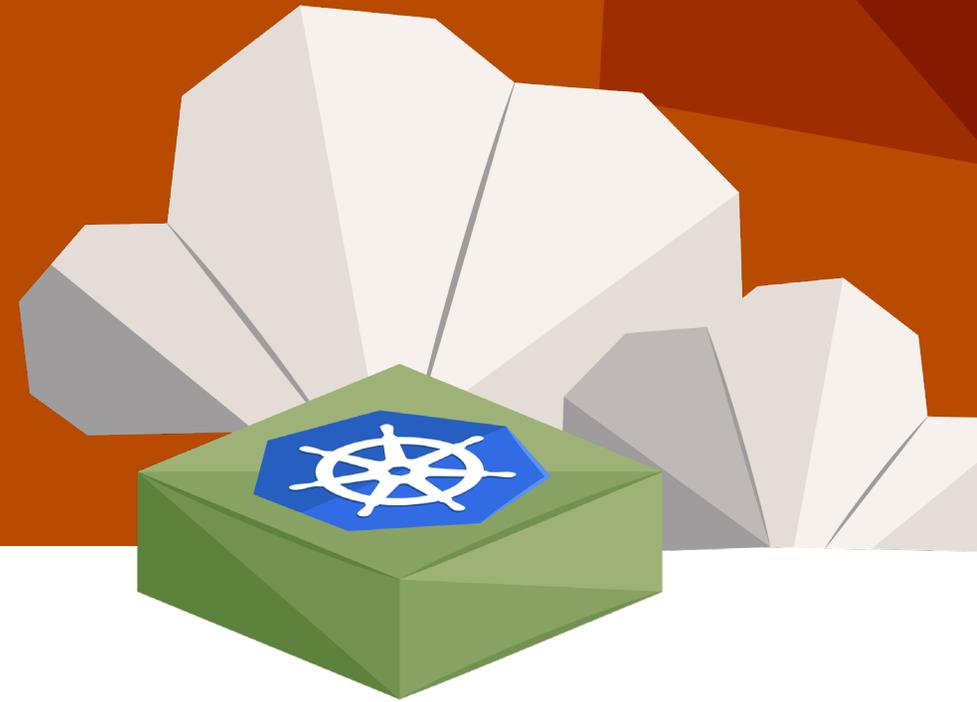# Palette for public cloud Kubernetes

Using cloud infrastructure for your Kubernetes clusters makes a lot of sense, but just because a hyperscaler is running the iron doesn't mean your job is suddenly easy.

In fact, running K8s in the cloud can introduce its own challenges around control and day to day management. Whether you are all-in on one provider or have a multicloud strategy, and whether you use IaaS or cloud-managed K8s services, Spectro Cloud Palette can help you.

What is Spectro Cloud Palette?

Spectro Cloud Palette is an enterprise Kubernetes management platform. Palette makes it easy to build, deploy and manage the complete lifecycle of any full Kubernetes stack in the cloud, at scale.

What can Palette help you do?

Deploy and manage clusters in any cloud

Whatever your cloud strategy, now and in the future, we won't lock you in.

Palette can directly deploy and manage clusters in AWS, Azure and GCP, with more cloud providers being added all the time. And this covers both cloud IaaS services and cloud-managed services like EKS, AKS and GKE, as well as government cloud services in both AWS and Azure.

To make this happen, Palette leverages Cluster API, a highly extensible open source project in the CNCF landscape, meaning there's no vendor lock-in.

We can even import your existing clusters from all the major cloud providers, so Palette can take over monitoring and management.

Go multicluster, multicloud and multi-environment without cluster sprawl

Most enterprises have more than one Kubernetes cluster today, and the trend is only going one way — up. Managing multiple clusters, particularly across multiple cloud regions, can be painful.

Palette is natively multicluster: you can manage multiple clusters in parallel, with high levels of automation. But we go further than that. If you use multiple clouds for your Kubernetes clusters, Palette gives you a single consistent pane of glass to manage all your clusters, wherever they sit.

And if you have Kubernetes clusters in virtualized data centers, **bare metal,** or at the **edge,** Palette can handle those too. It's a truly unified solution for Kubernetes management.

#1
Multicloud strategies are the #1 driver of cluster placement today

>5
The average K8s adopter has clusters in more than 5 different clouds and other environments

41%
41% say that maintaining multi-environment consistency is their biggest K8s challenge

51%
51% of K8s adopters have more than 20 clusters
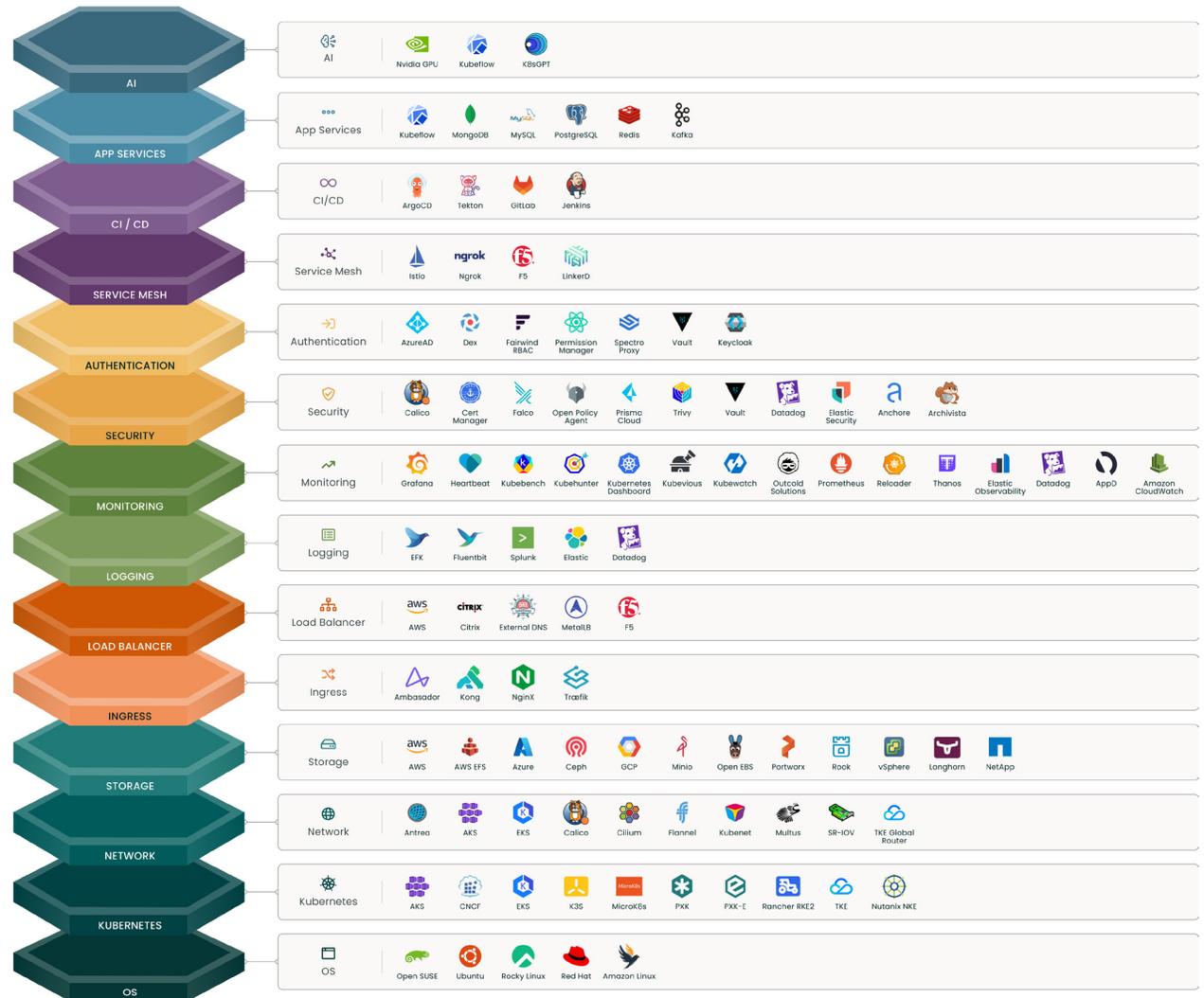
Spectro Cloud

Drive consistency and repeatability to scale with zero configuration drift

At the heart of Palette is the concept of the Cluster Profile: a model or blueprint describing the full stack desired state of your Kubernetes cluster.

Profiles can include everything from OS and Kubernetes distro, to all the integrations on top, such as ingress, security tools, observability, and more.

You can build your perfect stack from a wide choice of supported integrations, both from your chosen cloud provider and best of breed products from the wider cloud-native ecosystem. We give you flexibility to choose from many different operating systems, Kubernetes distributions and destination environments, all supported as first-class citizens within Palette.

You can reuse Cluster Profiles to ensure complete consistency when you build multiple clusters. And from Day 1 on, Palette will use the Profile as the source of truth, automatically enforcing your desired state, eliminating all the problems associated with 'configuration drift' in running clusters.

Layer	Integrations
AI	Nvidia GPU, Kubeflow, K8sGPT
App Services	Kubeflow, MongoDB, MySQL, PostgreSQL, Redis, Kafka
CI/CD	ArgoCD, Tekton, GitLab, Jenkins
Service Mesh	Istio, Ngrok, F5, LinkerD
Authentication	AzureAD, Dex, Fairwind RBAC, Permission Manager, Spectro Proxy, Vault, Keycloak
Security	Calico, Cert Manager, Falco, Open Policy Agent, Prisma Cloud, Trivy, Vault, Datadog, Elastic Security, Anchore, Archivista
Monitoring	Grafana, Heartbeat, Kubebench, Kubehunter, Kubernetes Dashboard, Kubevious, Kubewatch, Outcold Solutions, Prometheus, Reloader, Thanos, Elastic Observability, Datadog, AppD, Amazon CloudWatch
Logging	EFK, Fluentbit, Splunk, Elastic, Datadog
Load Balancer	AWS, Citrix, External DNS, MetalLB, F5
Ingress	Ambasador, Kong, NginX, Traefik
Storage	AWS, AWS EFS, Azure, Ceph, GCP, Minio, Open EBS, Portworx, Rook, vSphere, Longhorn, NetApp
Network	Antrea, AKS, EKS, Calico, Cilium, Flannel, Kubenet, Multus, SR-IOV, TKE Global Router
Kubernetes	AKS, CNCF, EKS, K3S, MicroK8s, PXK, PXK-E, Rancher RKE2, TKE, Nutanix NKE
OS	Open SUSE, Ubuntu, Rocky Linux, Red Hat, Amazon Linux

Spectro Cloud

Get more from your cluster without increasing costs

With Palette Virtual Clusters you can give app developers a new, full-featured K8s cluster, complete with all enterprise guardrails, in just minutes.

Virtual Clusters are a lightweight partition running on a host Kubernetes cluster, similar to how virtualization creates logically isolated virtual machines on top of physical servers, sharing resources from the host cluster. They give you stronger isolation than namespaces, without the overhead of distinct clusters — making them a great solution for multitenancy.

Most importantly, they give users access to a cluster almost instantly (under two minutes), improving developer productivity and reducing costs.

Automate cloud cluster management every day

Using Palette, you have a simple and automated way to tackle many of the most time-consuming and manual day 2 operations tasks that even cloud-managed services don't handle for you beyond the control plane.

With Palette you get out-of-the-box tools to:

- **Scale and reconfigure** your cloud K8s clusters, even across availability zones, and easily manage namespaces, quotas and rolebindings

- **Upgrade/updat**e all elements of your clusters, from OS to K8s, CNI/CSI, and integrations such as ingress, load balancers and monitoring tools, all the way up to the lifecycle of your applications themselves

- **Secure your cluster** with a rich suite of compliance and SBOM scans, granular RBAC, and automated renewal and rotation of certificates and secrets

- **Monitor** cluster health and metrics, including a visual view of your estate with our NOC-style UI, and the ability to track workloads and costs per namespace with native visibility tools

- **Backup and restore** your clusters with a click or on a schedule

The result? Less downtime and fewer incidents because you've avoided human error. Greater responsiveness to your business's needs. And perhaps most importantly, you and your team spend less time on the boring stuff. All without the pain of rolling your own tools.
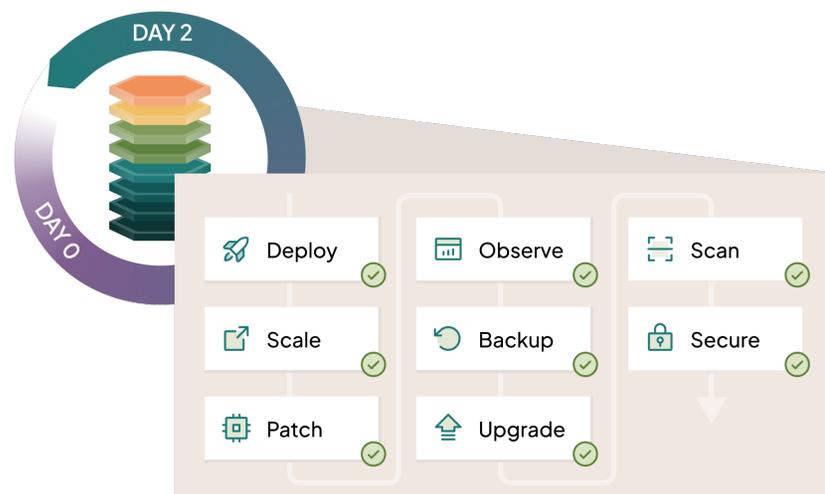
Spectro Cloud

Choose a vendor you can trust

When you choose Palette, you're in safe hands.

Spectro Cloud offers:

- **Award-winning innovation:** Palette has earned recognition from Gartner, GigaOm, Frost&Sullivan, CRN and many more for our technical excellence.

- **Proven enterprise delivery:** Kubernetes pioneers in every industry have battle-tested Palette. Our customers include US Air Force, GE HealthCare, Williams and T-Mobile.

- **Class-leading technical support:** we offer 24×7 solution support for Palette and your Kubernetes stack from veteran engineers

- **A broad partner ecosystem:** we work closely with all the cloud hyperscalers, Kubernetes leaders like Canonical, and many of the world's best system integrators.

The best way to manage Kubernetes in the cloud

Whether you're looking to scale up and diversify your cloud infrastructure, or streamline operations and enforce consistency and governance, Palette is the powerful, simple platform to make it happen.

And best of all, it's easy to get started. With Palette you pay only for what you use, and it's available as a SaaS platform or for you to self-host in your own cloud environment, backed by industry-leading technical support.

To find out more and get started, visit **spectrocloud.com.**