

Where Will My Cluster Live?

Unit 3.1.1



Cluster Locations

Rancher's up. You're ready to deploy a Kubernetes cluster with it. The first question to answer is where your cluster will live.

Hosted / Infrastructure Provider

Rancher can deploy clusters into a hosted provider's solution, such as EKS, AKS, or GKE. It can also deploy cloud infrastructure and then deploy Kubernetes into it.

In both cases it does full lifecycle management of the resources, which means you can add and remove nodes from the Rancher UI, and if you delete the cluster in Rancher, Rancher will delete the infrastructure components out in the provider.

Custom Provider

If you do your provisioning with Terraform, Ansible, Puppet, Chef, Cloud Init, Shell scripts, autoscaling groups, or anything else, you can use the Custom driver to build those nodes into a Kubernetes cluster.

As you already saw with the Intro to RKE, the only software requirement on the host is a supported version of Docker.

The Custom driver gives you a `docker run` command that is unique for the cluster you're creating. You can add it to the end of your provisioner, and when you deploy new hosts, they'll automatically join the cluster.

Imported Clusters

Finally, if you already have Kubernetes clusters running out there, or if you're using something like K3s, you can import those clusters into Rancher.

Rancher will give you a `kubectl apply` command to run against that cluster. This will install the Rancher agent and connect it back to the

Rancher server, and that cluster will be available for Rancher to manage.

References

Setting Up Kubernetes Clusters in Rancher -

<https://rancher.com/docs/rancher/v2.x/en/cluster-provisioning/>