

# Creating the Cluster Configuration File

Unit 1.2.3



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The next step is to generate the configuration file that RKE uses to install Kubernetes. This file is called `cluster.yml` by default.

One way to do this is to use the minimal configuration file supplied by Rancher, which shows that you can build a Kubernetes cluster with nothing more than a single node definition that contains an address, a user, and all three roles: `etcd`, `controlplane`, and `worker`.

Technically that makes it a single node cluster.

Because it only has a single node, it's not a *cluster* in the true sense of the word, but it's a full installation of Kubernetes, ready to go.

One of the most amazing things about RKE is its ability to redefine the cluster on the fly. If you start with a single node cluster, you can turn it into a three-node HA cluster by adding two more hosts to the configuration and running `rke up` again.

The other way to generate the RKE configuration is to run `rke config` and follow the walkthrough.

This gives you the option to set public and private addresses, which is necessary if you're deploying a cluster in someplace like AWS, where the nodes don't know their public addresses.

## References

Creating the RKE Configuration File -

<https://rancher.com/docs/rke/latest/en/installation/#creating-the-cluster-configuration-file>