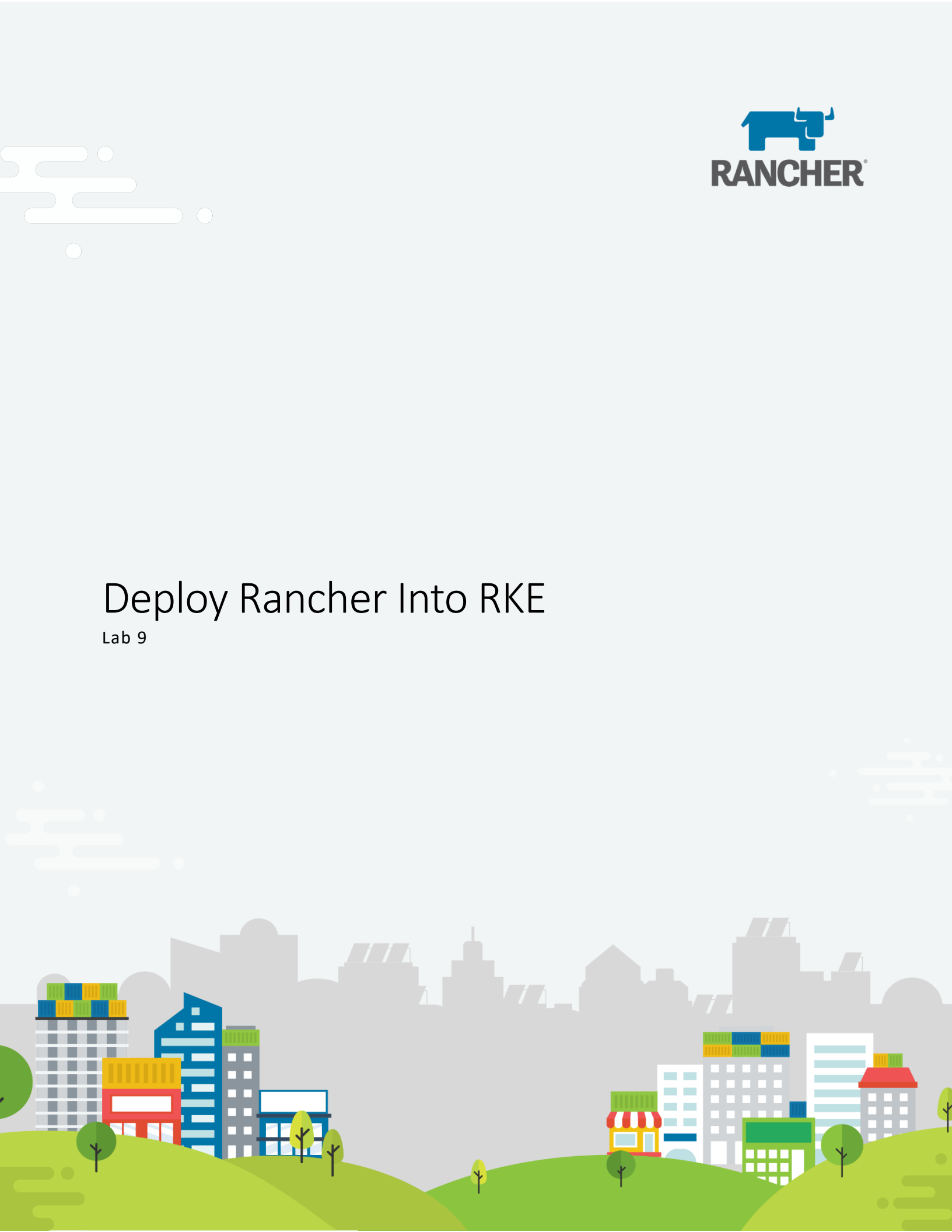


Deploy Rancher Into RKE

Lab 9

What are you Learning?

In this lab you'll install Rancher into RKE. This environment will be the foundation of the remaining labs, so put this onto nodes that will be available until the end of the class. You may use the RKE cluster you created and modified in labs 1-5. Or you may create a new environment. Review the previous subsection labs to setup an environment, if you so desire. You may use a single-node RKE cluster if you wish to keep costs down.

Why is it important?

Rancher is the industry's most widely adopted Kubernetes management platform. The product is 100% open source and has more than 100M downloads. It enables production quality Kubernetes everywhere, enabling, consistent cluster operations, secure user management, and rich eco-system of valuable open-source tools.

It is Kubernetes distribution agnostic and will managed clusters, applications, and users regardless of where the cluster resides or what distribution of Kubernetes is running.

Deploy Rancher Into RKE

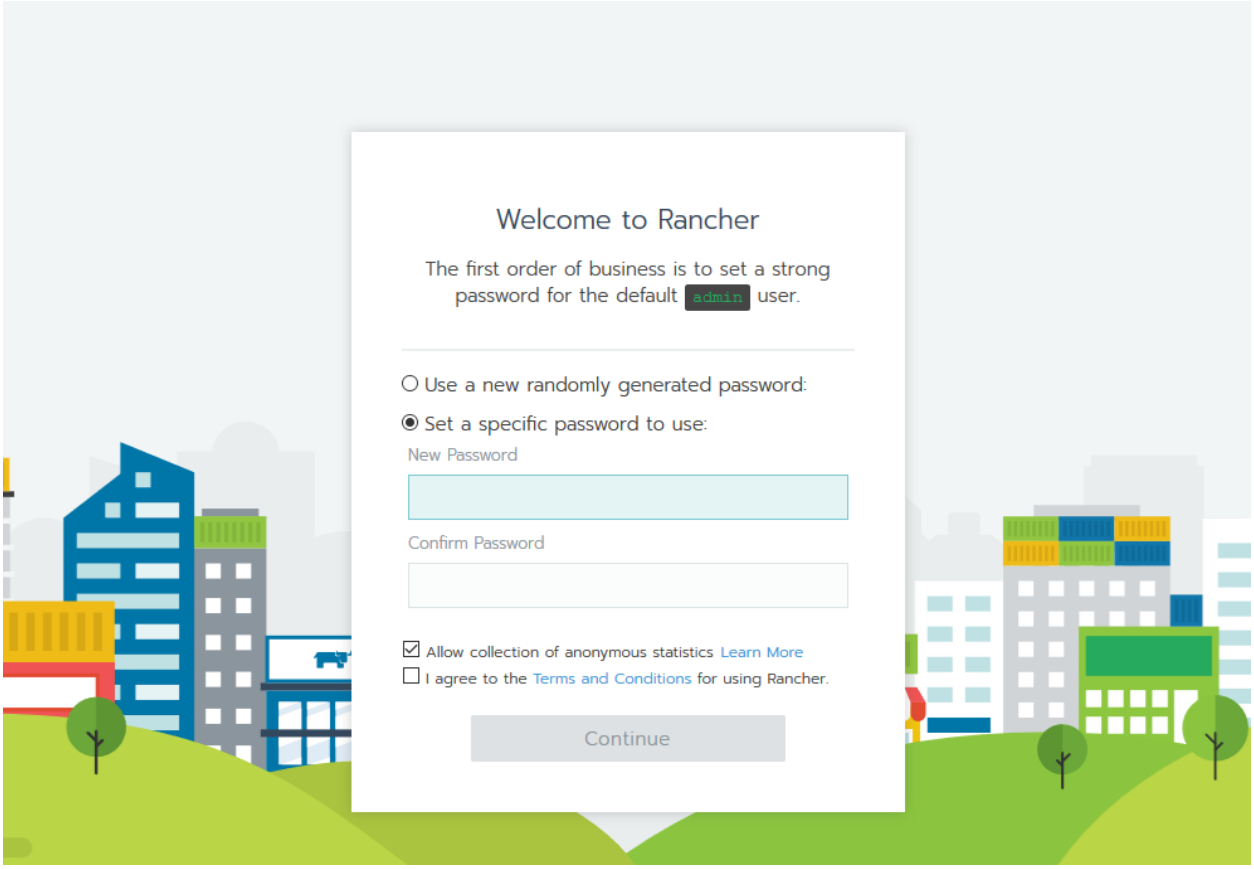
Remember if you're creating a new cluster, don't use ephemeral environments like an EC2 spot instances as you will need these machines and this environment for future labs. Also, configure your infrastructure so that your nodes meet the RKE prerequisites.

1. Use the Rancher's GitHub Repository to see the latest release. You want to use 1 version back in this exercise, as you'll upgrading Rancher in a future lab.
2. Make sure the port requirements have been met for RKE.
3. For this lab you won't have to setup a load balancer or DNS, but do know you'll want these option for a production-grade cluster.
4. If you're starting with a fresh cluster, setup the RKE cluster where Rancher will run.
    a. Don't forget to backup the cluster.yml, kubeconfig, and cluster state file. You'll need those to manage this RKE cluster in the future.
5. Now you're ready to install Rancher

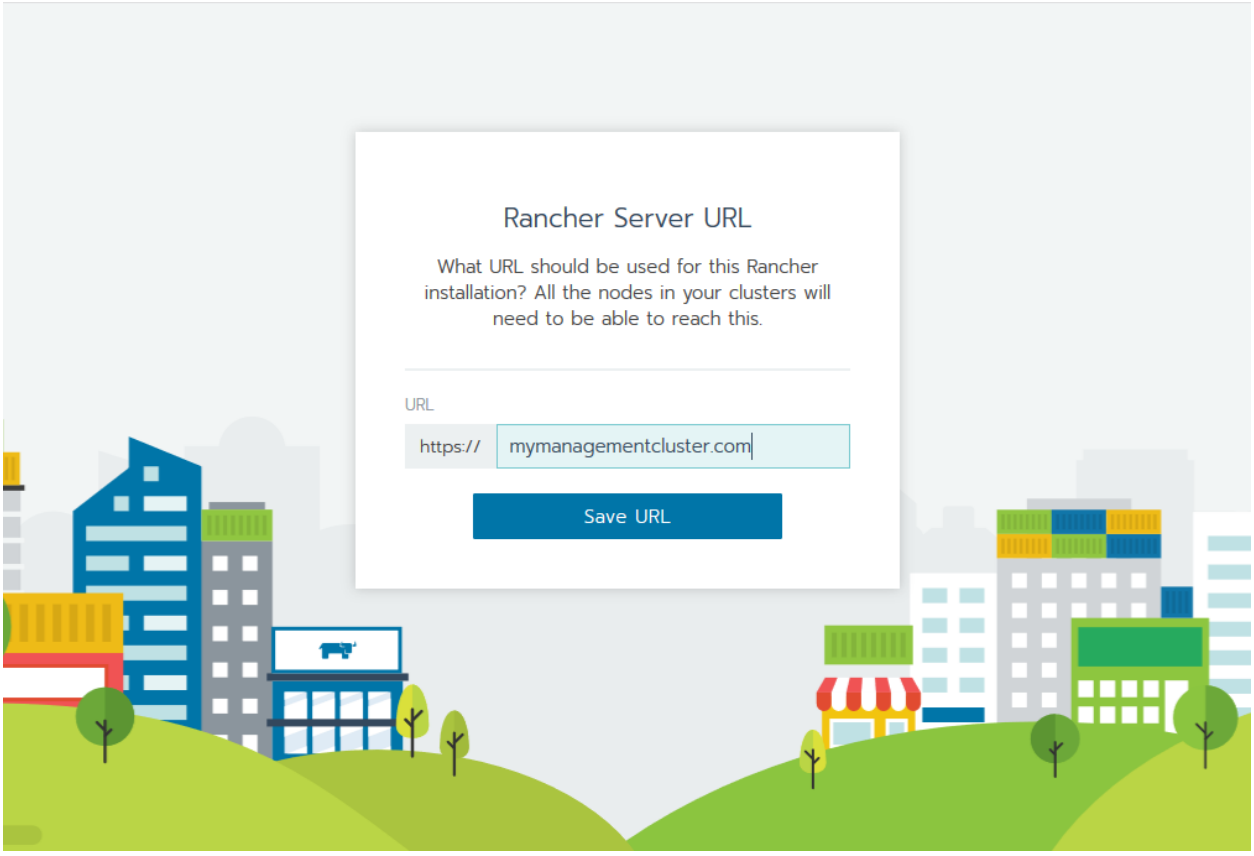
Testing That It Works

1. You should be able to navigate to the Rancher cluster in a browser, via the machine's public IP address, or a DNS address if you set one up.

2. Feel free at this time to setup an admin password.



3. When setting the URL for the Rancher environment, keep in mind that this URL must be resolvable, and reachable an any cluster that will be managed by Rancher.



References

- Spot Instances - https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-spot-instances.html
- RKE Requirements - https://rancher.com/docs/rke/latest/en/os/
- Rancher/Rancher Relases - https://github.com/rancher/rancher/releases
- Install Docker - https://rancher.com/docs/rancher/v2.x/en/installation/requirements/installing-docker/
- Setup a Kubernetes Cluster - https://rancher.com/docs/rancher/v2.x/en/installation/k8s-install/kubernetes-rke/
- Install Rancher - https://rancher.com/docs/rancher/v2.x/en/installation/k8s-install/helm-rancher/