RKE Installation Guide + Rancher Manager on RKE

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1. System Requirements

- Ubuntu 24.04

- 2 CPU, 4GB RAM recommended

- Docker installed

- sudo access

2. Install Docker

```
curl -fsSL https://get.docker.com | sudo sh

sudo usermod -aG docker $USER

newgrp docker
```

3. Download RKE

```
wget https://github.com/rancher/rke/releases/latest/download/rke_linux-amd64

sudo mv rke_linux-amd64 /usr/local/bin/rke

sudo chmod +x /usr/local/bin/rke
```

4. Create RKE Cluster Config

```
rke config --name cluster.yml
```

Single-node cluster.yml example:

```
nodes:
- address: 127.0.0.1
user: ubuntu
role: [controlplane, worker, etcd]
```

5. Deploy RKE Cluster

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rke up --config cluster.yml
```

6. Install kubectl and helm

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sudo snap install kubectl --classic

sudo snap install helm --classic
```

7. Install Cert-Manager

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kubectl create namespace cert-manager

kubectl apply -f
https://github.com/cert-manager/cert-manager/releases/latest/download/cert-manager.yaml
```

8. Install NGINX Ingress

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kubectl create namespace ingress-nginx

helm repo add ingress-nginx https://kubernetes.github.io/ingress-nginx

helm install ingress-nginx ingress-nginx/ingress-nginx -n ingress-nginx
```

9. Install Rancher Manager

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helm repo add rancher-latest https://releases.rancher.com/server-charts/latest

helm install rancher rancher-latest/rancher \

--namespace cattle-system \

--set hostname=rancher.192.168.1.10.nip.io \

--set bootstrapPassword=admin \

--set ingress.tls.source=secret
```

10. Access Rancher

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Open https://rancher..nip.io in browser.

Login: admin / admin.
```