

Adfinis**sy**Group

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Installation of SUSE CAP

Preparations

on SUSE CaaSP

- SUSE CaaSP installed
- Helm (client-only) installation [instructions](#)
- Fix PodSecurityPolicy to allow privileged (CaaSP v3+)

on native K8S

- API v1.8+
- swappaccount=1
- `lsblk` shows aufs as storage driver
- StorageClass already deployed
- kube-dns running
- ntp / systemd-timesync running
- Docker allows privileged containers
- Privileged=true on kubelet
- TaskMax property of containerd set to infinity
- Helm Tiller/Client installation on native K8S
- [all requirements](#)

Can also be installed on

- Azure AKS
- Amazon EKS
- OpenStack
- [docs](#)

Minimum Hardware Requirements

- 8GB of memory per dashboard and master nodes
- 16GB of memory per worker
- 40GB disk space per dashboard and master nodes
- 60GB disk space per worker.

Installation

Storage Class

- Choose a storage class and set it as default
-


```
env: # Enter the domain you created for your CAP cluster DOMAIN: example.com
# UAA host and port UAA_HOST: uaa.example.com UAA_PORT: 2793
```

```
kube: external_ips: ["11.100.10.10", "192.168.1", "192.168.2", "192.168.3"]
storage_class: persistent: "persistent" shared: "shared"
```

```
# The registry the images will be fetched from. # The values below should work for # a default installation from the
SUSE registry. registry: hostname: "registry.suseprivileged.com" password: "" organization: "cap"
```

```
secrets: # Create a password for your CAP cluster CLUSTER_ADMIN_PASSWORD: password
# Create a password for your UAA client secret UAA_ADMIN_CLIENT_SECRET: password
```

```
sizing: cc_uploader: capabilities: ["SYS_RESOURCE"] diego_api: capabilities: ["SYS_RESOURCE"] diego_brain:
capabilities: ["SYS_RESOURCE"] diego_ssh: capabilities: ["SYS_RESOURCE"] nats: capabilities: ["SYS_RESOURCE"]
router: capabilities: ["SYS_RESOURCE"] routing_api: capabilities: ["SYS_RESOURCE"]
```

```
helm repo add suse https://kubernetes-charts.suse.com/ helm repo list NAME URL
stable https://kubernetes-charts.storage.googleapis.com local http://127.0.0.1:8879/charts
suse https://kubernetes-charts.suse.com/
```

```
helm search suse NAME VERSION DESCRIPTION suse/cf-opensuse 2.14.5 A Helm chart for SUSE Cloud
Foundry suse/uaa-opensuse 2.14.5 A Helm chart for SUSE UAA suse/cf.2.14.5 A Helm chart for SUSE Cloud
Foundry suse/cf-usb-sidecar-mysql 1.0.1 A Helm chart for SUSE Universal Service Broker ... suse/cf-usb-sidecar-
postgres 1.0.1 A Helm chart for SUSE Universal Service Broker ... suse/console 2.2.0 A Helm chart for deploying
Stratos UI Console suse/metrics 1.0.0 A Helm chart for Stratos Metrics suse/nginx-ingress 0.28.3 An nginx
Ingress controller that uses ConfigMap... suse/uaa 2.14.5 A Helm chart for SUSE UAA
SECRET=$(kubectl get pods --namespace uaa
```

```
-o jsonpath='{.items[?((.metadata.name=="uaa-uaa-01").spec.secretName=="uaa-secret")].secretName}' |
jq -r '.name=="INTERNAL_CA_CERTS" | value["data"]["internal-key-referenc"] | base64 --decode -)'
```

```
helm install suse/cf
```

```
watch -n 1 kubectl get pods --namespace scf
name: suscr-secs
--namespace scf
--values scf-config-values.yaml
helm install suse/console
set "secrets.UAA_CA_CERT=${CA_CERT}" ...
watch -n 1 kubectl get pods --namespace stratos
--namespace stratos
--values scf-config-values.yaml
```

Demo

Pods UAA

- uaa
- mysql

Pods CF

- adapter
- api
- blobstore
- cc-clock
- cc-uploader
- cc-worker
- cf-usb
- diego-access

Pods CF

- diego-api
- diego-brain
- diego-cell
- doppler
- log-api
- mysql
- nats

Pods CF

- nfs-broker
- postgres
- router
- routing-api
- syslog-scheduler
- tcp-router

Jobs UAA

- post-deployment-setup

Jobs CF

- post-deployment-setup
- secret-generation

Pods Stratos

- console
- console-mariadb

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