

# RBAC - Logging in

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Starting in CaaSP v2, downloading the kubeconfig file from Velum is not enough to use `kubectl`. The downloaded kubeconfig file is just a template used for locating your CaaSP cluster and does not contain any authentication information.

To login to a RBAC-enabled CaaSP cluster, you must use the CaaSP CLI.

CaaSP CLI is available in the Open Build

Service: <https://build.opensuse.org/package/show/devel:CaaS:Head:ControllerNode/caasp-cli>

Install the RPM for your distribution.

If you have downloaded a kubeconfig template from Velum, `caasp-cli` can read the root CA certificate from the kubeconfig template.

```
caasp-cli login -s=<CaaS MASTER URL> -u=<USERNAME> -p=<PASSWORD>
```

If you have not downloaded the kubeconfig template, you will need to specify the root CA certificate on the command line:

```
caasp-cli login -s=<CaaS MASTER URL> -r=<ROOT CA FILE> -u=<USERNAME> -p=<PASSWORD>
```

This will write / update your `$KUBECONFIG` file, which defaults to `$HOME/.kube/config`.

After logging in, you can use `kubectl` like you would normally use it.

Your CaaSP server URL is based on the FQDN specified in Velum during bootstrap. If your FQDN is `caasp.example.org`, your CaaSP server URL would be `https://caasp.example.org:6443`

## KUBECONFIG variable

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`kubectl` uses an environment variable named `KUBECONFIG` to locate your kubeconfig file. If this variable is not specified, it defaults to `$HOME/.kube/config`. The CaaSP CLI uses this variable to locate your kubeconfig in the same manner.

## Obtaining the root CA certificate

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You can obtain the root CA certificate from any node in your cluster via SCP:

```
scp NODE:/etc/pki/trust/anchors/SUSE_CaaSP_CA.crt .
```

This is the root CA certificate you should either trust on your machine, or provide to the CaaSP CLI.