**Kubernetes**

**Prerequisites:-**

Tokens and permissions required:-

* See [Support lifecycle for Kubernetes](https://www.dynatrace.com/support/help/technology-support/support-model-for-kubernetes" \o "Read how Dynatrace supports Kubernetes versions) or [Support lifecycle for OpenShift](https://www.dynatrace.com/support/help/technology-support/dynatrace-support-model-for-openshift" \o "Read how Dynatrace supports Red Hat OpenShift versions) for supported versions and minimum version requirements.
* Pods must allow egress to your Dynatrace environment or to your Environment ActiveGate in order for metric routing to work properly.

[Create a Dynatrace Operator token (former API token)](https://www.dynatrace.com/support/help/get-started/access-tokens" \l "create-api-token" \o "Learn the concept of an access token and its scopes.) and enable the following permissions.

* Access problem and event feed, metrics, and topology (DataExport)
* PaaS integration - Installer download (InstallerDownload)
* Create ActiveGate tokens[1](https://www.dynatrace.com/support/help/setup-and-configuration/setup-on-container-platforms/kubernetes/get-started-with-kubernetes-monitoring" \l "fn-1-1-def) (activeGateTokenManagement.create)
* Read entities[2](https://www.dynatrace.com/support/help/setup-and-configuration/setup-on-container-platforms/kubernetes/get-started-with-kubernetes-monitoring" \l "fn-1-2-def) (entities.read)
* Read settings[2](https://www.dynatrace.com/support/help/setup-and-configuration/setup-on-container-platforms/kubernetes/get-started-with-kubernetes-monitoring" \l "fn-1-2-def) (settings.read)
* Write settings[2](https://www.dynatrace.com/support/help/setup-and-configuration/setup-on-container-platforms/kubernetes/get-started-with-kubernetes-monitoring" \l "fn-1-2-def) (settings.write)

Limitations: There’s a startup dependency between the container in which OneAgent is deployed and application containers to be instrumented (for example, containers that have deep process monitoring enabled). The OneAgent container must be started and the oneagenthelper process must be running before the application container is launched so that the application can be properly instrumented.

Dynatrace Operator manages classic full-stack injection after the following resources are deployed.

OneAgent, deployed as a DaemonSet, collects host metrics from Kubernetes nodes. It also detects new containers and injects OneAgent code modules into application pods.

Dynatrace Activegate is used for routing, as well as for monitoring Kubernetes objects by collecting data (metrics, events, status) from the Kubernetes API.

Dynatrace webhook server validates Dynakube definitions for correctness.

Note: Classic full-stack injection requires write access from the OneAgent pod to the Kubernetes node filesystem to detect and inject into newly deployed containers.