



Federator.ai Release v4.7.2 Quick Start Guide

Federator.ai v4.7.2 Installation Quick Start Guide

Supported Platforms

- Kubernetes: 1.11 ~ 1.22
- Rancher v2.4.8, v2.5.8,v2.5.9
- OpenShift: 4.6~4.8
- Cloud Environment AKS/EKS/GKE

Data Sources

- Datadog
- Sysdig
- Prometheus(Kubernetes, Rancher, OpenShift)
- VMWare vCenter 5.5/6.0/6.5/6.7/7.0
- AWS CloudWatch

Federator.ai Resource Requirements

- Total resource requirements:
 - Request : 5.1 CPU cores (Limit :22 cores)
 - Request : 5.0 GB Memory (Limit : 42GB)
 - StorageClass : 168GB (ReadWriteOnce access mode)
- Resource requirements for AI Engine:
 - There must be at least one worker node with at least 2 CPU(Limit : 8 cores) cores and 1 GB of memory available
 - The 2 CPU cores and 1 GB memory are included in the total 5.1 CPU cores and 5.0 GB memory requirements

Permission Request:

- “Federator-operator” required Kubernetes Cluster Access Management RBAC privilege with Cluster-Full Control (Admin) permission (*Scope-Operation*).
- Federator.ai installation script: The “kubect!” executed host does not require root user login where is to execute “federatorai-launcher.sh” installation script.
- All of Federator.ai image is running as “non-root” user in cluster.

Before You Start:

Step 1: Obtain the credentials needed for connection to your metrics data source.

- For Datadog, the API Key and Application Key of your Datadog Cloud Service account are required. Refer to [Datadog documentation](#) for information about how to obtain the API Key and Application Key.
- For Prometheus (Kubernetes, Rancher), obtain the Prometheus service URL (e.g., `http://<prometheus_svc_name>.<namesapce>:9090`).

```
# Kubernetes Environment
$ kubectl get svc -n monitoring
```

- For Prometheus (OpenShift), obtain the Prometheus route URL and Token.

```
# OpenShift Environment
$ oc get route -n openshift-monitoring
$ oc get-token Prometheus-k8s -n openshift-monitoring
```

- For Sysdig, the Sysdig API URL and API Token are required. Refer to [Sysdig SaaS Regions and IP Range](#) and [Sysdig API Token](#) for information about how to obtain the Sysdig API URL and API Token.
- For VMware vCenter, obtain administrator login credentials and vCenter IP or FQDN.
- For AWS CloudWatch, the Access Key ID and Secret Access Key of your AWS account are required. Refer to [AWS documentation](#) for information about how to obtain the Access Key ID and Secret Access Key. CloudWatch Agent installation on each EC2 instance is required.

Step 2: Confirm that the metrics source agent is installed.

- For Prometheus, install Prometheus using helm charts. (OpenShift is enabled by default.)
- For Datadog, install and configure the Datadog Agent/Cluster Agent if not previously installed. Refer to the Datadog documentation for information about how to install the Datadog Agent and Cluster Agent.
- For Sysdig, install and configure the Sysdig Agent. Refer to the Sysdig documentation for information about how to install the Sysdig Agent.

Installation Procedure for Kubernetes/OpenShift

Step 1: Install Federator.ai.

For an OpenShift environment, log in as admin.

```
$ oc login -u admin
$ curl https://raw.githubusercontent.com/containers-ai/prophetstor/master/deploy/federatorai-launcher.sh | bash
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left    Speed
100 17101  100 17101    0     0  30118      0  --:--:--  --:--:--  --:--:-- 30107
Please enter Federator.ai version tag [default: latest]:
Federator.ai version = v4.7.2-ga
Please enter the path of Federator.ai directory [default: /opt]:
...
...
=====
You can now access GUI through https://federatorai-dashboard-frontend-federatorai.apps.172.31.xx.xx.nip.io The default login credential is admin/admin
...
```

Kubernetes:

```

$ curl https://raw.githubusercontent.com/containers-
ai/prophetstor/master/deploy/federatorai-launcher.sh | bash
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload  Total  Spent    Left  Speed
100 17101  100 17101    0     0  30118      0  --:--:--  --:--:--  --:--:--  30107
Please enter Federator.ai version tag [default: latest]:
Federator.ai version = v4.7.2-ga
Please enter the path of Federator.ai directory [default: /opt]:
...
...
=====
You can now access GUI through https://<YOUR IP>:31012 The default login
credential is admin/admin
...

```

Step 2: Log into the Federator.ai Web UI and follow the Setup Wizard to configure your external metrics data source.

Step 3: Review configuration results in the Federator.ai Web UI.

Refer to the [Federator.ai Installation Guide](#) for more details.