



Federator.ai Release v5.1.0

Quick Start Guide

Federator.ai v5.1.0 Installation Quick Start Guide

Supported Metrics Data Sources

- Prometheus
- Datadog
- Sysdig
- VMWare vCenter
- AWS CloudWatch

Supported Platforms

- Kubernetes v1.11.x – 1.22x
- Red Hat OpenShift v4.6-4.9
- Amazon AWS/EKS
- Google GCP/GKE
- Microsoft Azure/AKS
- Rancher v2.4.8, 2.5.8, 2.5.9, 2.6.3
- VMware vCenter 5.5, 6.0, 6.5, 6.7, 7.0

Federator.ai Resource Requirements

- Total resource requirements:
 - Request : 5.1 CPU cores (Limit :22 cores)
 - Request : 5.1 GB Memory (Limit : 42GB)
 - StorageClass : 176GB (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
- Persistent volumes
 - The StorageClass that provides the persistent volumes must support RWO (ReadWriteOnce) access mode.
 - It is recommended to use persistent volumes instead of ephemeral storage to store the data in the production environment. Any data on ephemeral storage will be lost after Federator.ai pods are restarted.

Permission Request:

- “Federator-operator” required Kubernetes Cluster Access Management RBAC privilege with Cluster-Full Control (Admin) permission (*Scope-Operation*).
- Installation scripts do NOT require root permissions to run in the host where “kubectl” command is set up.

- All of Federator.ai pods are 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>.<namespace>: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 = v5.1.0-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/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 = v5.1.0-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.