Federator.ai Release v4.7.2
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 “kubectl” 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

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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]:

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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.