

TWCloud and Cassandra Node

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- [Install Telegraf](#)
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Required *.json file:

- [Teamwork_Cloud_Dashboard.json](#)

The following components are deployed on each TWC/Cassandra node:

- Telegraf - system metrics collector
- Dropwizard metrics-graphite-3.1.2.jar - metrics publishing agent for Java

Install Telegraf

1. Install Telegraf in the TWCloud/Cassandra node
 - a. If you have not created the **influxdb.repo** as in step 1a of the [Monitoring Mode](#), do so at this time.
 - b. Install with the command:

```
sudo yum install telegraf
```

- c. Edit `/etc/telegraf/telegraf.conf` as follows
 - i. Locate the section titled "[[outputs.influxdb]]"
 - ii. Edit the line with the **urls = tag** as follows:

```
urls = ["http://monitoringnode_ip:8086"] where monitoringnode_ip is the IP address of the
node where influxdb is installed (if it is located on the same machine, you may use
127.0.0.1).
```

- d. Enable the Telegraf service on startup:

```
sudo systemctl enable telegraf
```

- e. Start the Telegraf service:

```
sudo systemctl start telegraf
```

2. Restart the Teamwork Cloud service:

```
sudo service twcloud-svc restart
```

3. Modify Cassandra to allow remote monitoring

- a. Download `metrics-graphite-3.1.2.jar` from <http://central.maven.org/maven2/io/dropwizard/metrics/metrics-graphite/3.1.2/metrics-graphite-3.1.2.jar>
- b. Change permissions to allow execution:

```
sudo chmod 755 metrics-graphite-3.1.2.jar
```

- c. Copy `metrics-graphite-3.1.2.jar` to `/usr/share/cassandra/lib/`
- d. Edit `/etc/cassandra/default.conf/cassandra-env.sh`, adding the following at the bottom:

```
# Enable metrics reporting to InfluxDB using the yammer library
METRICS_REPORTER_CFG="metrics-reporter-graphite.yaml"
JVM_OPTS="$JVM_OPTS -Dcassandra.metricsReporterConfigFile=$METRICS_REPORTER_CFG"
```

- e. Create a file `/etc/cassandra/default.conf/metrics-reporter-graphite.yaml` with the following content:

```
graphite:
  -
    period: 30
    timeunit: 'SECONDS'
    prefix: 'HOST_NAME'
    hosts:
      - host: 'IP_ADDRESS'
        port: 2003
    predicate:
      color: 'white'
      useQualifiedName: true
    patterns:
      - '^org.apache.cassandra.+ '
      - '^jvm.+'
```

i. Replacing **HOST_NAME** with the Cassandra node's hostname, and **IP_ADDRESS** with the IP address of the monitoring node (where Influxdb is installed)

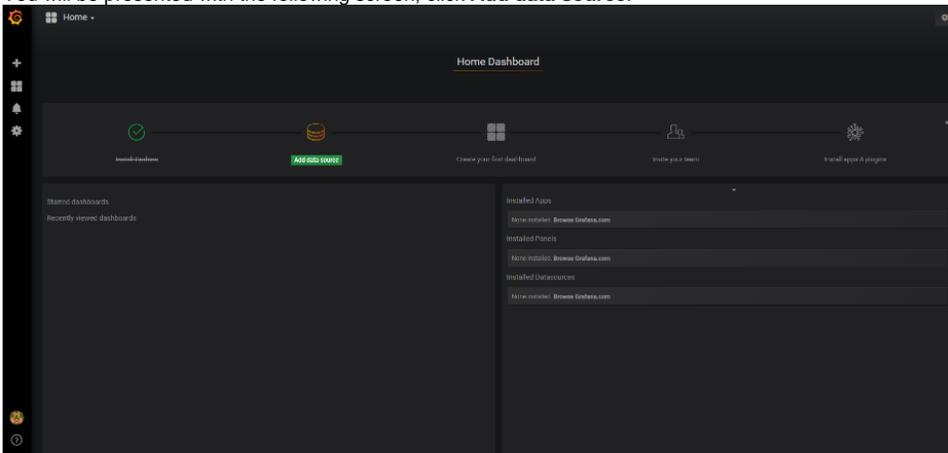
f. Restart Cassandra:

```
sudo service cassandra restart
```

Configure Grafana

4. Configuring Grafana monitoring dashboard:

- Log into http://MONITORINGNODE_IP:3000 - you will be displayed the Grafana Login Screen - default credentials are admin/admin. Upon logging in, you will be prompted to change the admin password.
- You will be presented with the following screen, click **Add data source**:



- Create the data sources, enter the information as in the following screenshots, and press **Save & Test** for each. After the data source gets created, click the **Data Sources** link to continue adding data sources.



Data Sources / New

Type: InfluxDB

Settings

Name ⓘ Default

Type

HTTP

URL ⓘ

Access ⓘ Help ▶

Auth

Basic Auth With Credentials ⓘ

TLS Client Auth With CA Cert ⓘ

Skip TLS Verification (Insecure)

Advanced HTTP Settings

Whitelisted Cookies ⓘ

InfluxDB Details

Database

User Password

Database Access

Setting the database for this datasource does not deny access to other databases. The InfluxDB query syntax allows switching the database in the query. For example: `SHOW MEASUREMENTS ON _internal` or `SELECT * FROM "_internal"."database" LIMIT 10`

To support data isolation and security, make sure appropriate permissions are configured in InfluxDB.

Min time interval ⓘ

[Save & Test](#)

[Back](#)

Data Sources / Cassandra

Type: InfluxDB

Settings

Name: Default

Type:

HTTP

URL:

Access: [Help](#)

Auth

Basic Auth With Credentials

TLS Client Auth With CA Cert

Skip TLS Verification (Insecure)

Advanced HTTP Settings

Whitelisted Cookies

InfluxDB Details

Database:

User: Password:

Database Access

Setting the database for this datasource does not deny access to other databases. The InfluxDB query syntax allows switching the database in the query. For example: `SHOW MEASUREMENTS ON _internal` OR `SELECT * FROM "_internal"."database" LIMIT 10`

To support data isolation and security, make sure appropriate permissions are configured in InfluxDB.

Min time interval:

Data source is working

Configuration

Organization: Main Org.

Data Sources | Users | Teams | Plugins | Preferences | API Keys

Filter by name or type

INFLUXDB



Cassandra
<http://localhost:8086>

Data Sources / Telegraf

Type: InfluxDB

Settings

Name: ⓘ Default

Type:

HTTP

URL: ⓘ

Access: Help ▶

Auth

Basic Auth With Credentials ⓘ

TLS Client Auth With CA Cert ⓘ

Skip TLS Verification (Insecure)

Advanced HTTP Settings

Whitelisted Cookies ⓘ

InfluxDB Details

Database:

User: Password:

Database Access

Setting the database for this datasource does not deny access to other databases. The InfluxDB query syntax allows switching the database in the query. For example: `SHOW MEASUREMENTS ON _internal OR SELECT * FROM "_internal".."_database" LIMIT 10`

To support data isolation and security, make sure appropriate permissions are configured in InfluxDB.

Min time interval: ⓘ

Data source is working

Configuration

Organization: Main Org.

Data Sources | Users | Teams | Plugins | Preferences | API Keys

Filter by name or type

INFLUXDB

 **Cassandra**
<http://localhost:8086>

INFLUXDB

 **Telegraf**
<http://localhost:8086>

The screenshot shows the configuration interface for a data source named "Teamwork Cloud". The page is titled "Data Sources / Teamwork Cloud" and "Type: InfluxDB". A "Settings" tab is active. The configuration includes:

- Name:** Teamwork Cloud (with an info icon and a "Default" checkbox that is unchecked).
- Type:** InfluxDB (selected in a dropdown menu).
- HTTP:**
 - URL:** http://localhost:8086 (with an info icon).
 - Access:** Server (Default) (with a dropdown arrow and a "Help" link).
- Auth:**
 - Basic Auth:** **With Credentials:** (with an info icon).
 - TLS Client Auth:** **With CA Cert:** (with an info icon).
 - Skip TLS Verification (Insecure):**
- Advanced HTTP Settings:**
 - Whitelisted Cookies:** Add Name (with an info icon).
- InfluxDB Details:**
 - Database:** twcloud
 - User:** (empty field) **Password:** (empty field)

A blue informational box titled "Database Access" contains the following text:

Setting the database for this datasource does not deny access to other databases. The InfluxDB query syntax allows switching the database in the query. For example: `SHOW MEASUREMENTS ON _internal` or `SELECT * FROM "_internal"."database" LIMIT 10`

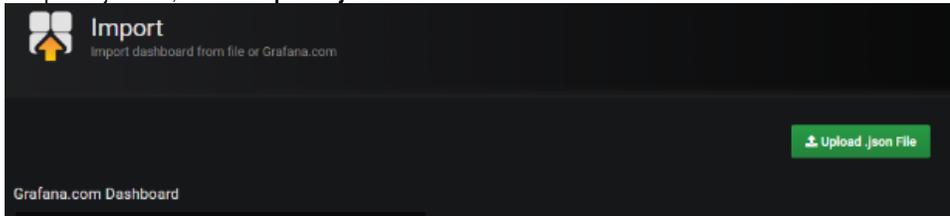
To support data isolation and security, make sure appropriate permissions are configured in InfluxDB.

At the bottom, there is a "Min time interval" set to 10s (with an info icon), a green status box that says "Data source is working", and three buttons: "Save & Test", "Delete", and "Back".

d. Now that the data sources have been added, select the option to import a dashboard:

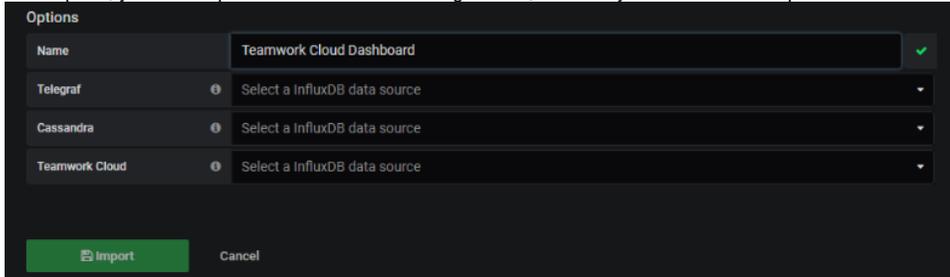
The screenshot shows the Grafana dashboard menu. The "Home" button is at the top. Below it is a "Create" button with a plus sign. A dropdown menu is open, showing three options: "Dashboard", "Folder", and "Import". At the bottom of the menu, there is a green checkmark icon and the text "Install Grafana".

- e. To upload .json file, click the **Upload .json File**:

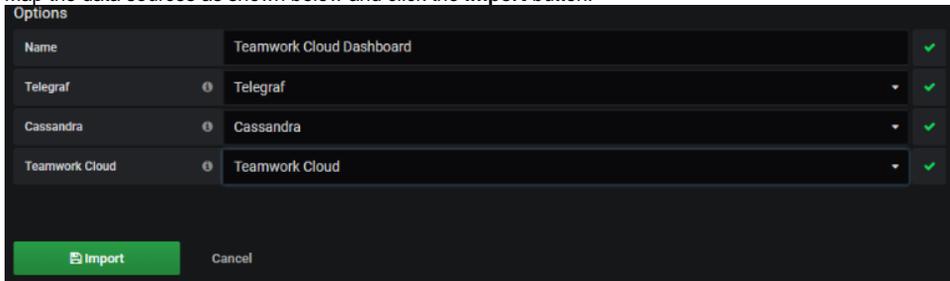


- i. Select the provided [Teamwork_Cloud_Dashboard.json](#).

- f. At this point, you will be presented with the following screen, in which you will need to map the data sources:



- g. Map the data sources as shown below and click the **Import** button:

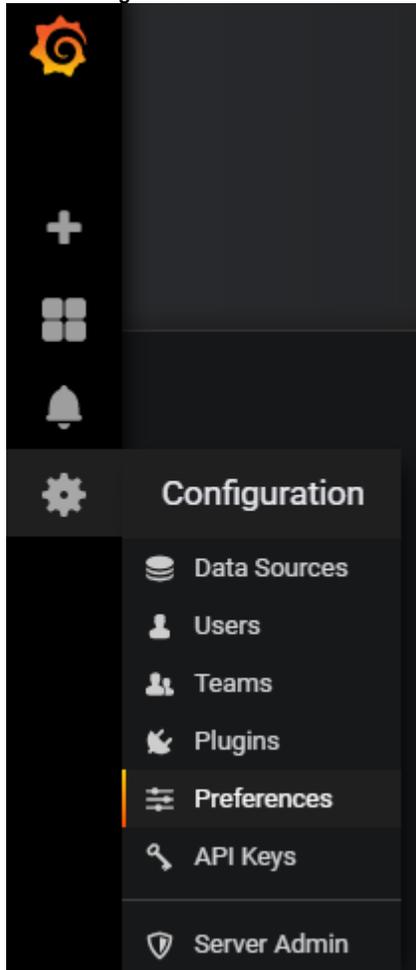


- h. To make the Teamwork Cloud dashboard your home dashboard, perform the following steps:

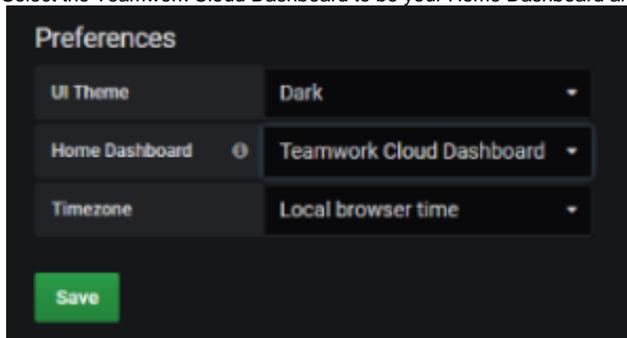
- i. Mark the Teamwork Cloud Dashboard as a favorite:



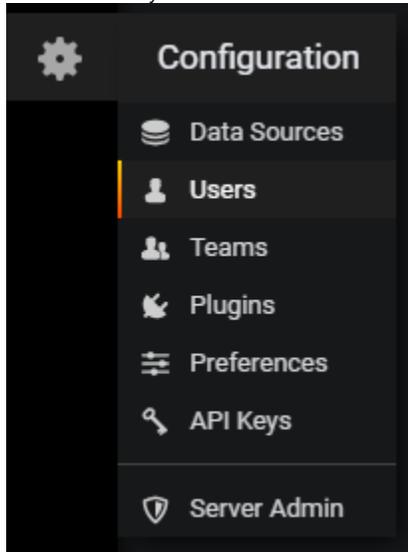
ii. Select **Configuration > Preferences**



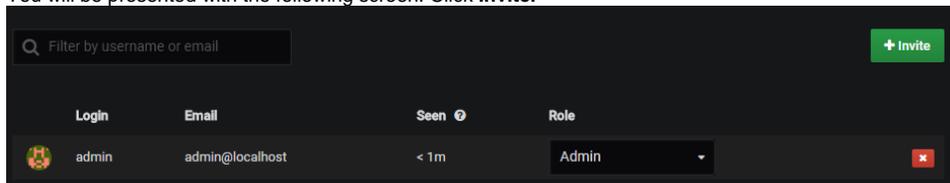
iii. Select the Teamwork Cloud Dashboard to be your Home Dashboard and click **Save**.



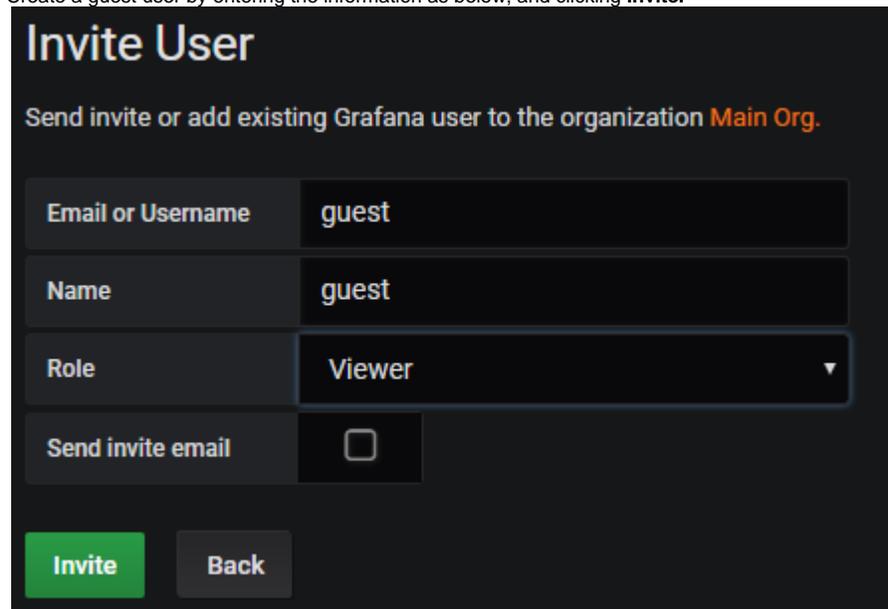
- iv. The admin user has permissions allowing full access. Create a limited access user who will be allowed to view the dashboard without the ability to make modifications. Click **Users**.



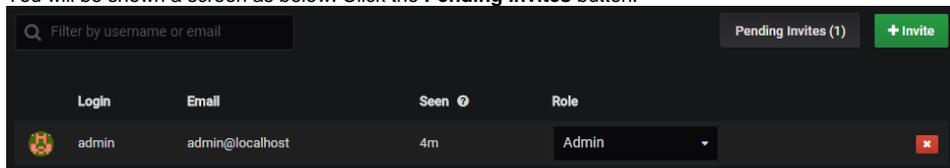
- v. You will be presented with the following screen. Click **Invite**.



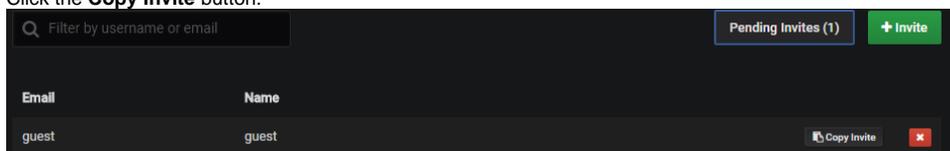
- vi. Create a guest user by entering the information as below, and clicking **Invite**.



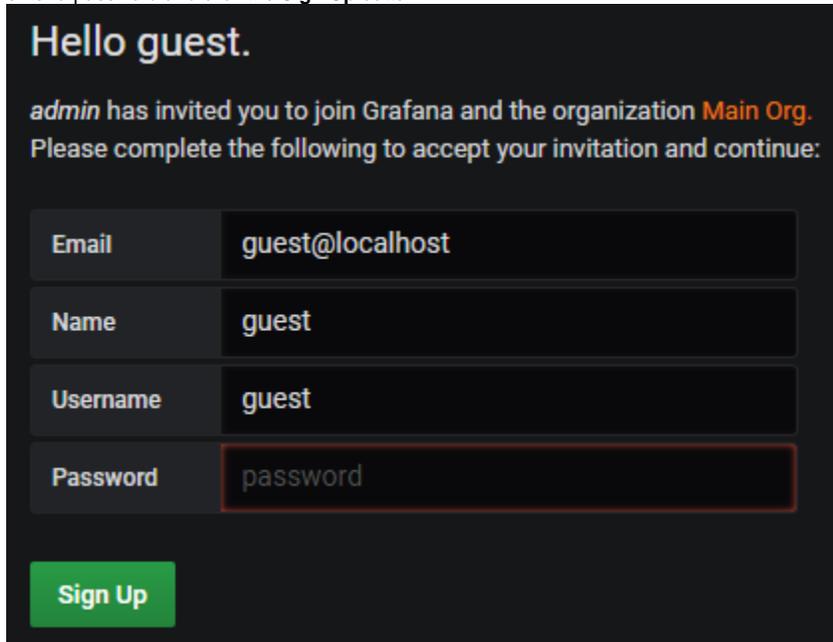
- vii. You will be shown a screen as below. Click the **Pending Invites** button.



- viii. Click the **Copy Invite** button.



- ix. Paste the link which was copied to your clipboard on a new browser window, and replace "localhost" with the IP address of the monitoring node. You will be presented with the following screen. Change the email field from "guest" to "guest@localhost", enter a password and click the **Sign Up** button.



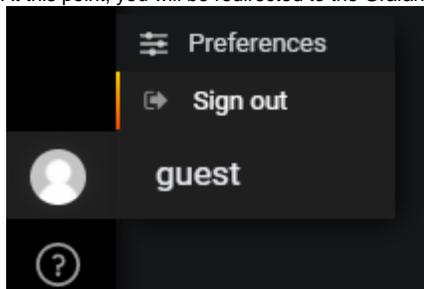
Hello guest.

admin has invited you to join Grafana and the organization **Main Org**. Please complete the following to accept your invitation and continue:

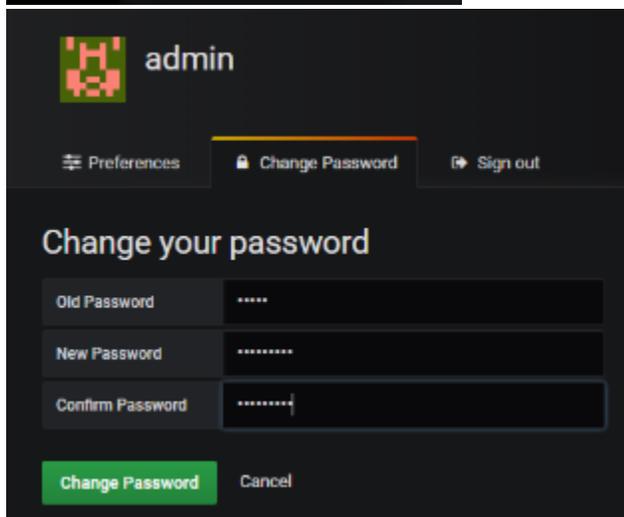
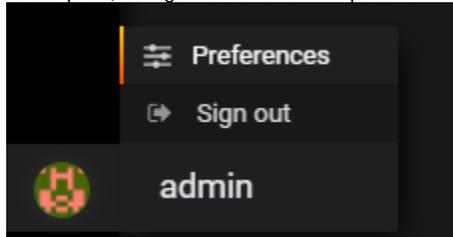
Email	guest@localhost
Name	guest
Username	guest
Password	password

Sign Up

At this point, you will be redirected to the Grafana dashboard under the new login. Sign out, and sign back in as admin.



- x. At this point, change the default admin password.



admin

Preferences Change Password Sign out

Change your password

Old Password	*****
New Password	*****
Confirm Password	*****

Change Password Cancel

