Configuring collectd for your instance

In this article

To gain insight into GitHub Enterprise Server's performance, you can review data from `collectd` on your instance, or optionally send the data to an external `collectd` server.

About collectd for GitHub Enterprise Server 🔗

`collectd` is a service that runs on your GitHub Enterprise Server instance to gather and provide metrics about the system's performance. Common metrics that `collectd` gathers includes CPU utilization, memory and disk consumption, network interface traffic and errors, and a system's overall load. You can also forward the data to another `collectd` server. For more information see the collectd wiki.

Your instance uses metrics from `collectd` to display graphs in the Management Console's monitor dashboard. For more information, see "Accessing the monitor dashboard."

You can review a list of the metrics that `collectd` gathers on your GitHub Enterprise Server instance. For more information, see "collectd metrics for GitHub Enterprise Server."

Set up an external `collectd` server 🔗

If you haven't already set up an external `collectd` server, you will need to do so before enabling `collectd` forwarding on your GitHub Enterprise Server instance. Your `collectd` server must be running `collectd` version 5.x or higher.

1. Log into your `collectd` server.

2. Create or edit the `collectd` configuration file to load the network plugin and populate the server and port directives with the proper values. On most distributions, this is located at `/etc/collectd/collectd.conf`

An example *collectd.conf* to run a `collectd` server:

```
LoadPlugin network
...
...
<Plugin network>
    Listen "0.0.0.0" "25826"
```

```
        </Plugin>
```

Enabling collectd forwarding on GitHub Enterprise 🔗

By default, `collectd` forwarding is disabled on GitHub Enterprise. Follow the steps below to enable and configure `collectd` forwarding:

1. From an administrative account on GitHub Enterprise Server, in the upper-right corner of any page, click 🚀.

2. If you're not already on the "Site admin" page, in the upper-left corner, click **Site admin**.

3. In the "🚀 Site admin" sidebar, click **Management Console**.

4. Below the log forwarding settings, select **Enable collectd forwarding**.

5. In the **Server address** field, type the address of the `collectd` server to which you'd like to forward GitHub Enterprise appliance statistics.

6. In the **Port** field, type the port used to connect to the `collectd` server. (Defaults to 25826)

7. In the **Cryptographic setup** dropdown menu, select the security level of communications with the `collectd` server. (None, signed packets, or encrypted packets.)

8. Under the "Settings" sidebar, click **Save settings**.

   > **Note:** Saving settings in the Management Console restarts system services, which could result in user-visible downtime.

9. Wait for the configuration run to complete.

Exporting collectd data with `ghe-export-graphs` 🔗

The command-line tool `ghe-export-graphs` will export the data that `collectd` stores in RRD databases. This command turns the data into XML and exports it into a single tarball (`.tgz`).

Its primary use is to provide the [GitHub Enterprise Support](#) team with data about a VM's performance, without the need for downloading a full Support Bundle. It shouldn't be included in your regular backup exports and there is no import counterpart. If you contact us through [GitHub Enterprise Support](#), we may ask for this data to assist with troubleshooting.

Usage 🔗

```
ssh -p 122 admin@[hostname] -- 'ghe-export-graphs' && scp -P 122
admin@[hostname]:~/graphs.tar.gz .
```

Troubleshooting 🔗

Central collectd server receives no data 🔗

GitHub Enterprise ships with `collectd` version 5.x. `collectd` 5.x is not backwards compatible with the 4.x release series. Your central `collectd` server needs to be at least version 5.x to accept data sent from your GitHub Enterprise Server instance.

For help with further questions or issues, visit [GitHub Enterprise Support](#).

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