

5.0 Grafana Plugins

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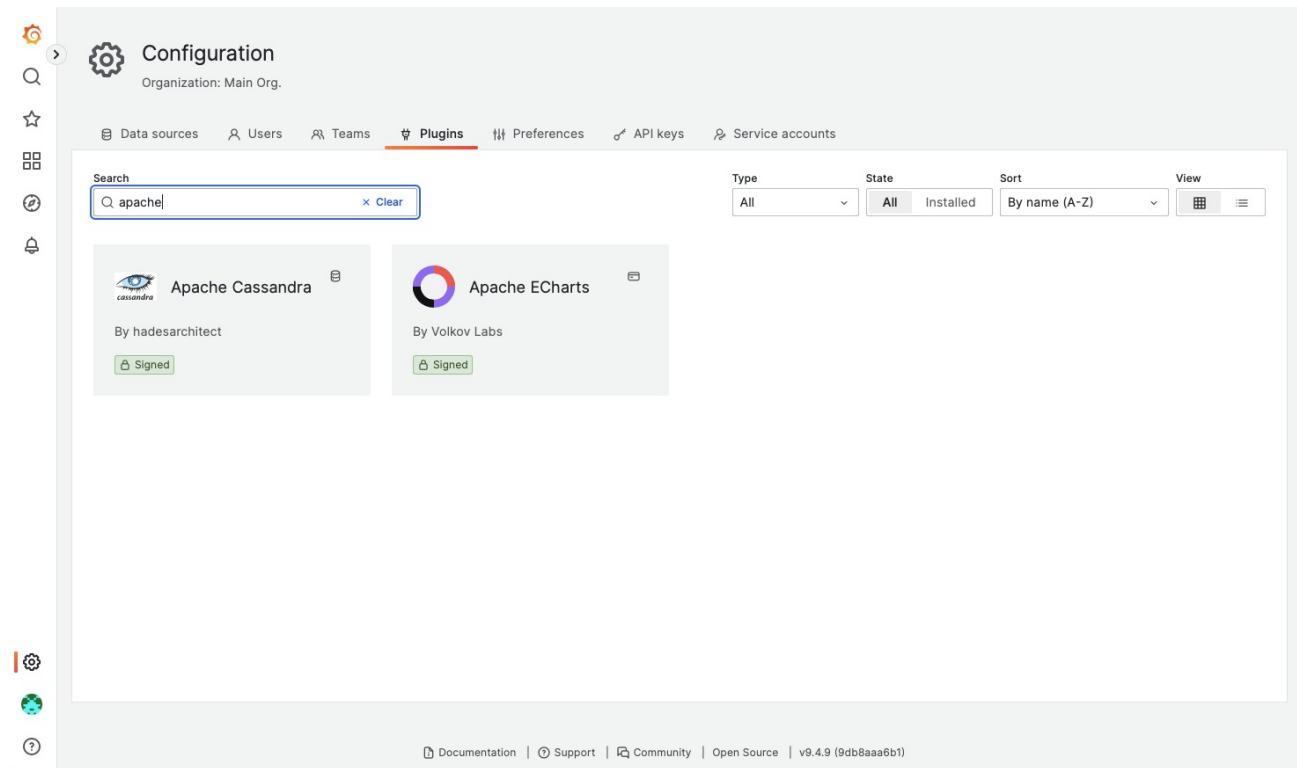
Plugin Installation

Plugins are a great way to extend the features of Grafana, optimising the Grafana experience.

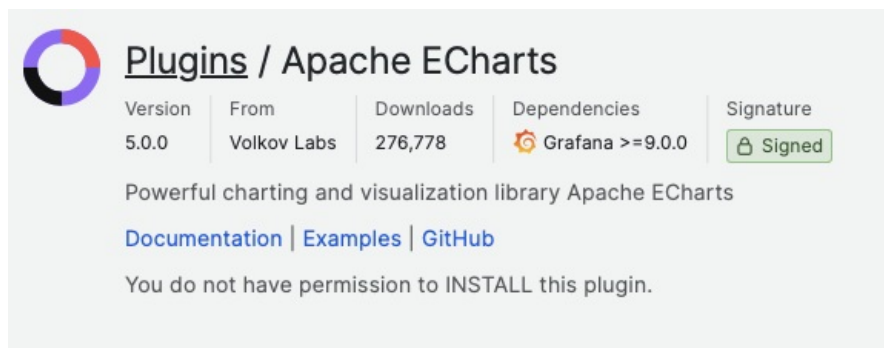
Recommendation is that any installed plugins are signed. All plugins from the built-in search should be approved already, but plugins are available from other sources.

Installation

Plugins are easily searchable through the Grafana Dashboard, via the Configuration tabs



On selecting a plugin though, at the bottom of the description it will indicate necessary permissions are not enabled:



Installation through the Grafana GUI requires a Grafana Admin. FileWave does not allow installation of plugins in this manner. Instead, the command line should be used directly on the server to instal plugins.

Command Line Installation

Scrolling down through the plugin page, there is a section on using command line to instal the plugin, however, this should not be used. It does however highlight the required plugin name to be used in the process.

Taking Apace Charts as an example:

Getting Started

Apache ECharts visualization panel can be installed from the [Grafana Catalog](#) or utilizing the Grafana command line tool.

For the latter, use the following command.

```
grafana-cli plugins install volkovlabs-echarts-panel
```

From the description, the plugin name is:

```
volkovlabs-echarts-panel
```

As such the command to instal this plugin on a FileWave Server would be:

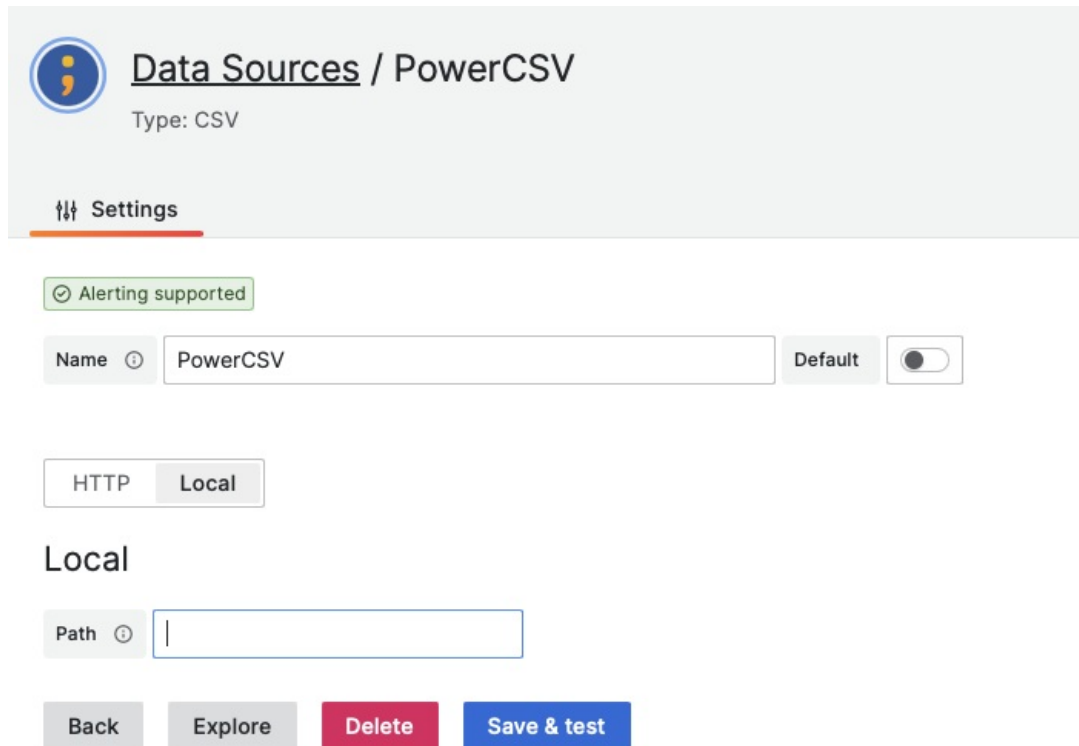
```
/usr/local/sbin/grafana-cli --pluginsDir=/usr/local/filewave/instrumentation_data/grafana/plugins --  
homepath=/usr/local/filewave/grafana plugins install volkovlabs-echarts-panel
```

The process should report success and the plugin should now be available.

Plugin Configuration

Some plugins may require additional configuration, e.g. they require reference to additional files. An example of this is the CSV plugin by Marcus Olsson.

When selecting the CSV Plugin as a Data Source, the path to the CSV file is required, with a choice of HTTP or Local:



The screenshot shows the 'Data Sources / PowerCSV' configuration page in Grafana. At the top, there's a header with the PowerCSV icon and the text 'Data Sources / PowerCSV' and 'Type: CSV'. Below this is a 'Settings' tab. A green box indicates 'Alerting supported'. The 'Name' field is set to 'PowerCSV' and is marked as 'Default' with a toggle switch. Below the name field are two tabs: 'HTTP' and 'Local', with 'Local' being the active tab. Under the 'Local' tab, there is a 'Path' field with a text input box. At the bottom, there are four buttons: 'Back', 'Explore', 'Delete', and 'Save & test'.

Local Data Source

By default, local data sources are not allowed. It is possible to overcome this via the Grafana 'ini' file, however this has limitations.

The FileWave Grafana 'ini' file is defined as:

```
/usr/local/etc/filewave/grafana/conf/filewave.ini
```

Enablement of Local files is achieved by adding the following into this file:

```
[plugin.marcusolsson-csv-datasource]
allow_local_mode = true
```

After doing so, the server service should be restarted:

```
fwcontrol server restart
```

Local files may now be accessed with this plugin. However, the caveat is that this file is overwritten by the FileWave installer on each upgrade. The outcome is the file must therefore be edited on each upgrade attempt.

HTTP Data Source

HTTP Data Source has no similar caveat. If there is already an available HTTP share in-house, this could be utilised. However, the FileWave Server could have the apache configuration adapted to include such files.

Configure Apache

This process will rely on Apache having access to a directory which serves these files. This could either be one that already exists or configuration could be used to add a new directory to serve just the required files.

✓ Recommendation would be to create a new directory.

⚠ This is editing FileWave Server files and folders. FileWave upgrades can overwrite files, folders or expansion of product may include new files and folders. Consider using a directory that is unlikely to clash with future updates.

In this example, the new chosen folder is:

```
/usr/local/filewave/grafana_plugins_custom/csv
```

'grafana_plugins_custom' does not yet exist. Rather than just creating one custom plugin folder for all possible plugin use, in this example a subdirectory for the CSV files has been created. Additional plugins that also required http file shares could use the same parent, but have their own subfolder.

The Apache file that can be edited to create new http file shares is:

```
/usr/local/filewave/apache/conf/httpd_custom.conf
```

As a FileWave Custom file, this will persist with Filewave upgrades.

```
Alias /plugins_custom /usr/local/filewave/grafana_plugins_custom/csv
<Directory "/usr/local/filewave/grafana_plugins_custom/csv">
Options Indexes FollowSymLinks
AllowOverride All
Order allow,deny
Allow from all
</Directory>
```

Full details on each option can be found in the [Apache Documentation](#)

However, to highlight two key aspects.

Directory

This is the newly created directory from which the files may be shared from

Alias

When accessing the files from a URL, this is essentially a shortcut for the URL, which will be redirected internally to this folder on access. In this instance, the alias (shortcut link) is:

```
/plugins_custom
```

❗ Other options should be configured as required.

FileWave Server process should be restarted once configured:

```
fwcontrol server restart
```

Downloading CSV files

Once configured, CSV files may be populated into the newly created document. For example:

```
# ls -l /usr/local/filewave/grafana_plugins_custom/csv
total 184
-rw-r--r-- 1 root _www 14425 Aug  3 17:06 admin.csv
-rw-r--r-- 1 root _www 19364 Aug  3 17:06 data.csv
-rw-r--r-- 1 root _www 36694 Aug  3 17:06 paint.csv
-rw-r--r-- 1 root _www 19345 Aug  3 17:06 video.csv
```

Test download may be achieved by way of the server URL appended with the alias. For example if the server were called 'demo.filewave.ch', then the URL from the above configuration would be:

```
https://demo.filewave.ch/plugins_custom/
```

However, a file should be addressed directly. Taking the paint.csv as an example:

```
https://demo.filewave.ch/plugins_custom/paint.csv
```

Accessing this URL in a browser should show the contents or download the file.

Plugin Data Source

Now an Apache share has been created with populated files, a Data Source may be configured to use HTTP for access to the files.



Data Sources / VideoCSV

Type: CSV

⚙ Settings

✓ Alerting supported

Name ⓘ

PaintCSV

Default



HTTP

Local

HTTP

URL ⓘ



https://demo.filewave.ch/plugins_custom/paint.csv

ⓘ Other Data Source settings should be configured as desired.