GroveStreams

Platform GroveStreams is cloud-based solution for analytics of data from multiple sources. It uses a REST API and JSON data format. GroveStreams is an open platform, in the cloud, that any organization, user or device can take advantage of. GroveStreams is free for small users. Large users will only be billed for what they use.

GroveStreams website guide:

- 1. Sign-in
- 2. Click on your name in the top right corner and choose the **Profile**



• How to Create a Blueprint

- 1. Create a GroveStreams organization
- 2. Model your environment within your organization by creating all of the entities you would like to include in your blueprint such as:
 - a. Component Templates
 - b. Components
 - c. Units
 - d. Time Filters
 - e. Dashboards
 - f. Maps
- 3. After you have created your organization and tested it, you can create the blueprintby choosing the menu item**Admin -Organization Create Blueprint**
 - a. The blueprint is exported as a text file and is downloadedto your local computer
- 4. The blueprint can be used when creating new organizations by selecting **Advanced** and choosing **Create with a custom blueprint**. Select the custom blueprint file and then click **Create Organization**

• Testing Your Blueprint

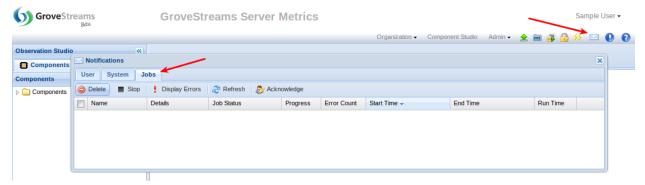
- 1. Create a new organization with your new blueprint
- 2. Point your devices to your new organization. This is typically done by changing the organization and API key tokens within your device that is uploading into GroveStreams.
- 3. Test that your components auto-register and that you can view them in your dashboards and maps within the organization that was created with the blueprint.

• Jobs

GroveStreams is designed for small and large customers. Large customers may need extremely largeamounts of processing power for certain processes. GroveStreams can auto-detect

if a process request is too large to run on one server. If it is too large then the process willrunas a Job. A Job will break the request into smaller tasks that run on many servers at the same time in an attempt to complete the job as fast as possible.

Jobs can be monitored and canceled from within the Notifications viewer.



• File Imports

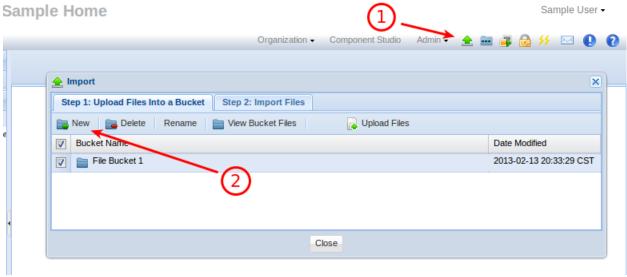
GroveStreams supports the importing of stream data via one or more text files.

The size of the import can vary from one file with oneline, one file with manylines, to thousands of files. All files within the selected file bucket will be imported during a single import. Large imports will automatically be run as Jobs across many servers.

Import information can be saved as an Import Profile so that the same import information does not have to be re-entered each time an import is executed.

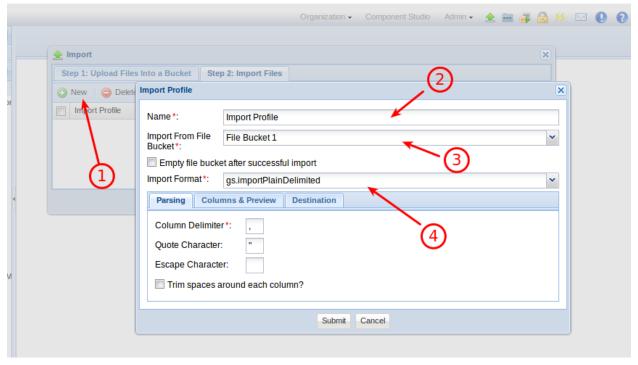
Import Profiles can be scheduled to run periodically with the GroveStreams scheduler (see below). To import one or more files:

- 1. Create a file bucket
 - 1. Open the Import Window: Click the **Import**button or select **Admin -Import**
 - 2. Create a file bucket if you haven't done so already. Select **New**and give your file bucket a name



- 2. upload one or more files into the File Bucket
- 3. Create an Import Profile
 - 1. Select the **Import Files**tab and click the **New**button

- 2. Enter an Import Profile name
- 3. Select the File Bucket to import from
- 4. Choose the Import Format (more about formats below)
- 5. Click Submit



Execute the Import Profile by clicking Run Import Profile.

• Searching for Components

- 1. Click the **Search**toolbar icon within the Observation Studio component browser. Wild card '*' and '?' characters are supported.
- 2. Click the **Search**button.
- 3. A list of component results is returned.

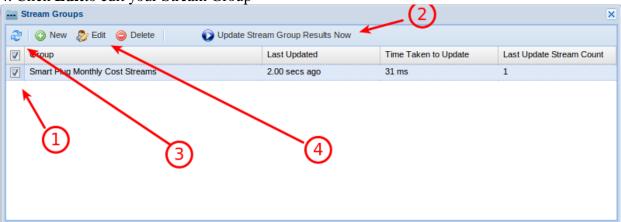


• Stream Groups

To create a Stream Group, click the **Stream Group**button within the studio toolbar:

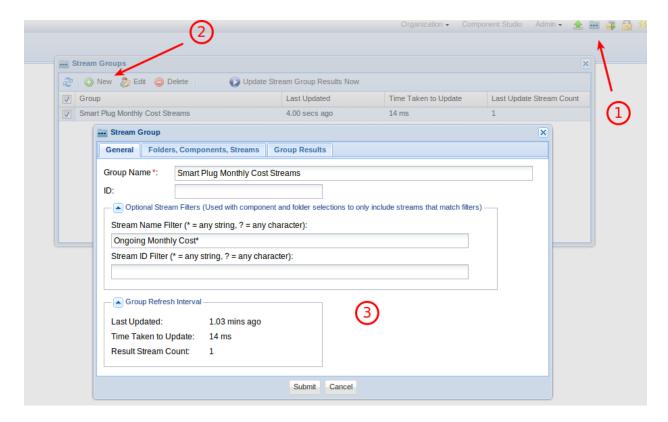
- 1. Select the Stream group
- 2. Click **Update Stream Group Results Now** to include streams within the group
- 3. Click the **Refresh**button to see how long it took to run the update and to see how many streams now belong to the group

4. Click Editto edit your Stream Group



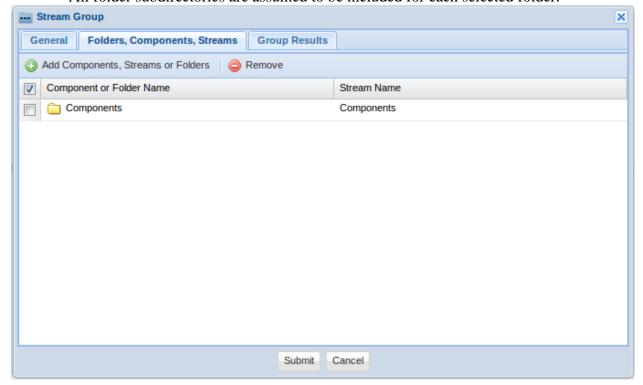
To create a new Stream Group:

- 1. Click the **Stream Groups**toolbar button
- 2. Click the **New**button
- 3. Enter General Information:
 - Group Name: The name of the Stream Group
 - ID (Optional): The ID of the Stream Group. Mainly usedfor API purposes
 - ° Stream Name Filter (Optional): Enter the name of streams that will be added to this group. Wildcards are supported. Enter '*' for any string. Enter '?' for any character. For example, if you would like to include any strings that have a name that starts with "light" you would enter "light*".
 - Stream ID Filter (Optional): Enter the ID of streams that will be added to this group.



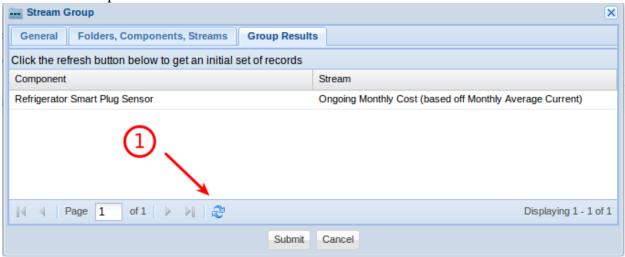
On the Folders, Components, Streams tab:

- Add Components, Stream, and Folder that you would like to restrict the search to.
- All folder subdirectories are assumed to be included for each selected folder.



Group Results Tab:

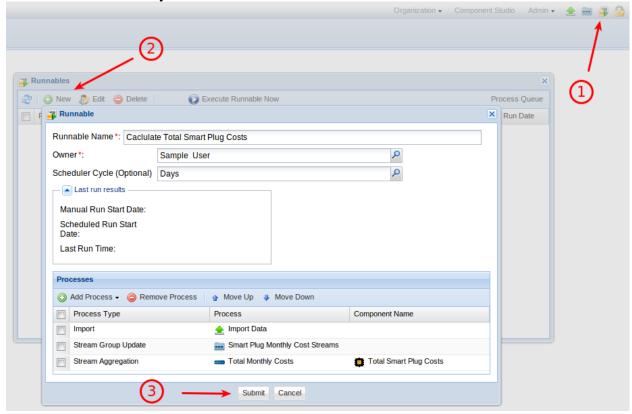
1. Click the **Refresh**button at the bottom of the tab to see a list of streams that currently belong to the Stream Group.



Runnables, Processes, and the Scheduler

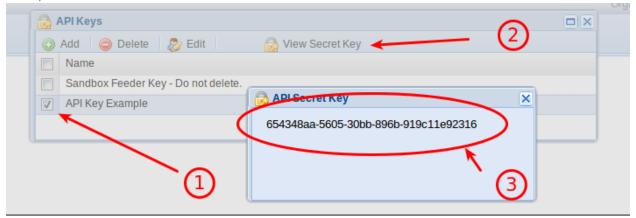
Any errors that occur during processing are delivered as System notifications.

- 1. Click on the **Runnables**button within a studio toolbar to create a runnable
- 2. Click **New**to create a new Runnable
- 3. Click **Submit**to save your new Runnable



• Viewing an API Secret Key

- 1. Select an API Key
- 2. Click View Secret Key
- 3. Select and copy your secret key to the clipboard (ctrl-c) and use it on your device, embeddable chart, or RSS feed

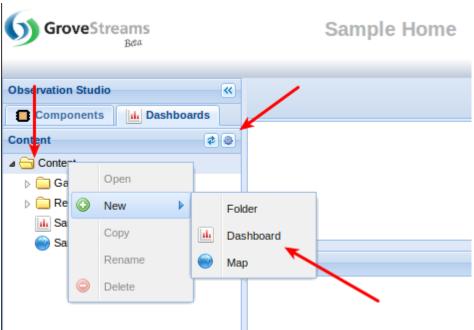


Dashboards

Dashboards allow stream data or component locations to be viewed in near real-time.

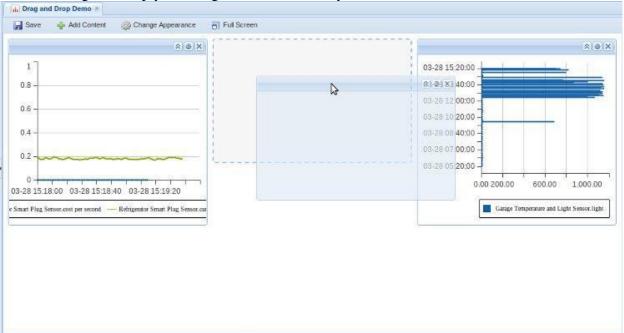
To create a dashboard:

- 1. Login and enter an organization
- 2. Within Observation Studio, right click a folder on the Dashboards tab and select **New Dashboard**. If your viewer does not support right clicks, then select a folder and click the cog icon to get the menu to appear.
- 3. Give your Dashboard a name



- Click **Add Content**to add chart, grid, RSS or map widgets.
- Click Change Appearance to adjust the number of columns.

• Drag and drop your widgets to the location you would like them:



GroveStreams provides a mobile application too. The mobile application requires that your mobile device have an Internet connection and a browser that supports HTML 5.

The mobile application displays component, stream, and notification information in views that are compatible with mobile devices.

Open your browser and navigate to the www.grovestreams.comand click on the Mobile **site** link at the top of the page to use the mobile application on your mobile device.