perfSONAR Dashboard Creation & Configuration
April 1st 2016

1. Introduction

These instructions will prepare a host to run the perfSONAR dashboard software. In addition to the dashboard, the host will serve a JSON configuration file that measurement hosts will consume. These instructions assume CentOS 6, or perfSONAR Toolkit version greater than or equal to 3.5.1.

2. Software Preparation

Run the following steps to get the necessary software (note: your system may have some of these steps already, but repeating them will cause no harm):

```
sudo rpm -hUv https://dl.fedoraproject.org/pub/epel/6/x86_64/epel-release-6-8.noarch.rpm
sudo rpm -hUv http://software.internet2.edu/rpms/el6/x86_64/main/RPMS/Internet2-repo-0.6-1.noarch.rpm
yum clean all
yum install perfsonar-centralmanagement
```

3. Manage JSON File from Configuration File

Copy the JSON file (MESH.json) to a readable URL location so clients can consume it. E.g. if you are using a toolkit:

```
cp MESH.json /usr/lib/perfsonar/web-ng/root
```

If you are using a standard CentOS installation:

```
cp MESH.json /var/www/html
```

This should now be visible via the web server, e.g.: http://HOST/MESH.json

Using WGET or CURL, try to download this file from one of the other hosts, just to be sure they can see it.

4. Initially Configure Maddash Software

Make a backup of the `/etc/maddash/maddash-server/maddash.yaml` file. Delete all content from the original file, and add only these lines (note, you may need to edit this file using '`sudo`'):

```
##
# Set the directory where the database will be stored
database: /var/lib/maddash/

##
# Set the host where the REST server listens
serverHost: "localhost"

##
# Activate http and set the port where it listens
http:
    port: 8881
```

This will 'reset' the dashboard configuration to a default state. The next couple of steps will allow us to configure the dashboard to use the JSON configuration, which will dictate which dashboards are shown.

5. Configure the GUI Configuration Agent

There will be a configuration file that needs to be changed, edit (using 'sudo' if necessary):

```
/etc/perfsonar/meshconfig-guiagent.conf
```

add the following to the bottom:

```
<mesh>
    configuration_url            http://HOST/MESH.json
</mesh>
```

The file may have another 'configuration_url' already, pointing to something default. If this is the case, comment this out using a '#'. It is possible for this file to read multiple JSON files and participate in multiple dashboards.

Run a script to regenerate the YAML file you changed above:

```
sudo /usr/lib/perfsonar/bin/generate_gui_configuration
```

6. Set Default Dashboard (optional)

Edit /etc/maddash/maddash-webui/config.json and set defaultDashboard to a value from the configuration file.

7. Restart the Software

```
sudo /etc/init.d/maddash-server restart
```

8. Verify the Configuration

Open the maddash web page in your browser at the following URL (replace MYHOST with the name of your host): http://MYHOST/maddash-webui

You should now be able to view the results of the checks being run.