pSmall Quick Start Guide

Introduction

This guide should get you started with a typical installation and deployment of the GÉANT perfSONAR small node: **pSmall**.

perfSONAR is a well-known monitoring and measurement platform in the global community that enables seamless troubleshooting over multiple domains. We present here 4 easy steps to enable perfSONAR on low cost hardware i.e. small and inexpensive devices.

More information

For more information visit **http://docs.perfsonar.net** and **http://www.perfsonar.net/**. Or send your queries to GÉANT perfSONAR support mailing list at:

perfsonar-smallnodes@lists.geant.org

Content

Initial password settings

user: `psudouser`
password: `oki:ager5`

user: `pswebadmin`
password: `psWeb$dm!n`

Step 1: Connecting the node to the network

The instructions in this section assume you connected the perfSONAR small node to the network with 1Gb/s Ethernet interface.

We require to use static IPs. Use the CLI to configure network settings. The following example shows the necessary options that need to be configured in the interface configuration file in order to set up IPv4 and IPv6 connectivity. Please use the network parameters corresponding to your environment and when asked provide appropriate `psudouser` password.

Note: By default the node is set to use DHCP and `root` SSH login is disabled. In order to perform the initial configuration access the node locally with keyboard and display directly attached and login as `psudouser` or initially use statically assigned DHCP and access the node remotely with SSH. If you would like to access the node remotely use `psudouser` account. Use credentials provided here and change them later.

```
$ sudo vi /etc/sysconfig/network-scripts/ifcfg-eth0
DEVICE="eth0"
BOOTPROTO="none"
BROADCAST="10.10.10.255"
DNS1="10.20.20.20"
GATEWAY="10.10.10.254"
IPADDR="10.10.10.1"
IPV6INIT="yes"
IPV6ADDR="2001:808:2:1000::2/64"
IPV6_DEFAULTGW="2001:808:2:1000::1"
NETMASK="255.255.255.0"
ONBOOT="yes"
```

When done restart network service with the following command:

`$sudo service network restart`

Ensure that the IP addresses are reachable from the Internet. After you confirm the network settings, the perfSONAR node is ready for initial configuration. You'll configure the basic node settings in the next procedure.

Note: It is preferable to have a valid and descriptive DNS entry for the node. It will help to easily recognize the node.

Step 2: Basic perfSONAR configuration

After the first step you should be able to remotely access the node Web interface. In order to finish the configuration perform the following steps:

1.   Launch a Web browser from another PC and open http://<IPaddress> where <IPaddress> is the IP address of your pSmall node

2.   In the main page click **Edit** and login as your `pswebadmin` user. Edit the **Administrative Information** which will describe your node (see also http://docs.perfsonar.net/manage_admin_info.html)

- Organization Name
- City
- Country
- State/Province
- ZIP/Postal Code
- Administrator Name
- Administrator Email
- Lat/Long or Autofill

3.   Click **Save** to save the changes

4.   Then go to **Host** tab and edit NTP details to choose the best servers

5.   Run **Select the closest servers** or add from list (see also http://docs.perfsonar.net/manage_ntp.html)

6.   Click **Save** to save the changes.

Step 3: Contacting GÉANT perfSONAR support team

When finished with initial configuration it is required to send information about the node IPv4 and IPv6 addresses to **perfsonar-smallnodes@lists.geant.org** in order to allow GÉANT perfSONAR support team to add the node to the mesh and dashboard configurations. The support team will also verify configuration correctness.

Step 4: Accessing central monitoring dashboard

As soon as your node is configured and added to the mesh the results of measurements will be available on the central dashboard:

http://pserfsonar-smallnodes.geant.org/maddash-webui/

Please note that it may take some time (up to 24h) until the regular measurement results are available and the node is visible in the global directory system.