Running SlapOS Slave Node on your Computer

by SlapOS Team.
▼ Details

The goal of this tutorial is to walk you through the first run of your freshly installed SlapOS Slave node.

If you didn't install a SlapOS node, please do so by following the tutorial on installing SlapOS.

As a general convention, commands prepended with $ might be run as ordinary user whereas commands prepended by # require superuser privileges.

Agenda

- Get Token from SlapOS Master
- Register your server
- Network Configuration
- Run

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Get token from SlapOS Master

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Before proceeding further, we need to register your server to https://slapos.org or https://slapos.vifib.com community Cloud. By doing so, we will obtain X509 certificate and key which are later needed for the configuration process.

Step 1: Register and obtain a Computer security Token

Go to imtweb.tl.teralab-datascience.fr, register if not already done, go to My Account and click on **Generate a Computer Secuity Token**:

Step 1.5: Save the New Token

- As soon as you click on the button a new token will be generated. Save this token for future use on this tutorial.

IPv6

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This section is intended for those who do not have native IPv6 or not reliable IPv6. We will explain how to use an IPv6 tunnel.

Luckily, IPv6 is increasingly available worldwide thanks to companies such as Free or Biglobe. If your Internet service provider or hosting provider does not provide native IPv6, simply complain and remind him that 80% of worldwide IPv6 traffic in 2011 comes from France thanks to innovative companies such as Free and OVH. Strongly complain that due to their conservatism, they are putting the whole country lagging behind and prevent innovation to happen in local startup companies. If this is not sufficient, consider complaining to regulation authorities. No technical reason justifies the absence of IPv6 nowadays.

If your network does not provide global, routable IPv6 adresses, you will need to setup an OpenVPN. In order to you have IPv6 everywhere is quite easy with Re6st Server or OpenVPN server provided by slapos.org:

- Learn How can you have IPv6...

Selecting the IPv6 interface

During your configuration file you are going to select the appropriate IPv6 interface you configured (consider eth0 as your internet interface):

- For re6st uses include "ipv6_interface = lo" above "interface_name = eth0"
- If your eth0 has IPv6 include only "interface_name = eth0"
- For tapVPN uses include "ipv6_interface = tapVPN" above "interface_name = eth0"

Step 2: Run slapos node register

Run slapos command below, to create the configuration files, when asked please input the Token Saved on Step above.

- # slapos node register --interface-name lo --partition-number 20 COMPUTER_NAME

This command will generate several files at:

- /etc/opt/slapos/slapos.cfg: The configuration of your SlapOS Node
- /etc/opt/slapos/ssl/certificate : Your server SSL Cetificate
- /etc/opt/slapos/ssl/key: Your server SSL Private Key

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Everything is set. It is now time to prepare your computer for slapos.

First Run

Now run slapos for the the first time for finish configuration:

```
# slapos node format --alter_user=True --now
```

Next

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It is now time to discuss what to do next with SlapOS now that we have an idea of its architecture and of the practical installation process. Experimenting with more machines, in different places of the world, with different CPU architecture and network is a great source of innovation. You should also have a look at the tutorial which explains how to install SlapOS on a USB key. It is much faster and efficient, but does not teach so well the internals of SlapOS as what we just did.

Where to go next?

- Contribute documentation
- IPv6 Support
- System permissions
- Follow other SlapOS tutorials

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If you wish to contribute, to SlapOS and to this tutorial, here is a list of possible topics. First, this documentation needs peer review and improved explanations. Seconds, the different approachs to setup an IPv6 networks needs to be extended. We need good tutorials to explain how to achieve this in different environments (routable IPv6, non routable, protocol 41 tunnelling, use of tinc or OpenVPN to provide IPv6, etc.). And we need more precisions on system permissions for the different directories of SlapOS. Those are already defined in the USB Key setup (Kiwi configuration file) but more documentation is needed.