ADLINK
SEMA 3.0

SEMA Dashboard Installation Guide

Platforms:

Windows 8.1 x64

Ubuntu 12.04.5 x86_64 LTS

CentOS 7 x86_64

(rev. 1.01)

Manual Rev.: 1.01

Revision Date: December 11, 2015

Part No.: 50-10032-1010

Revision History

Revision	Date	Changes
1.00	2015/12/01	Initial release
1.01	2015/12/11	Procedure for Linux CentOS added

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1 Prerequisites

- Set up your network.
- Download installation programs:

Windows

- install.bat
- semamgr-3.0-X-x64.exe

Linux Ubuntu

- install.sh
- semamgr-3.0-X_ubuntu_amd64.deb

Linux CentOS

- install_centos.sh
- semamgr-3.0-X.el7.centos.x86_64.rmp

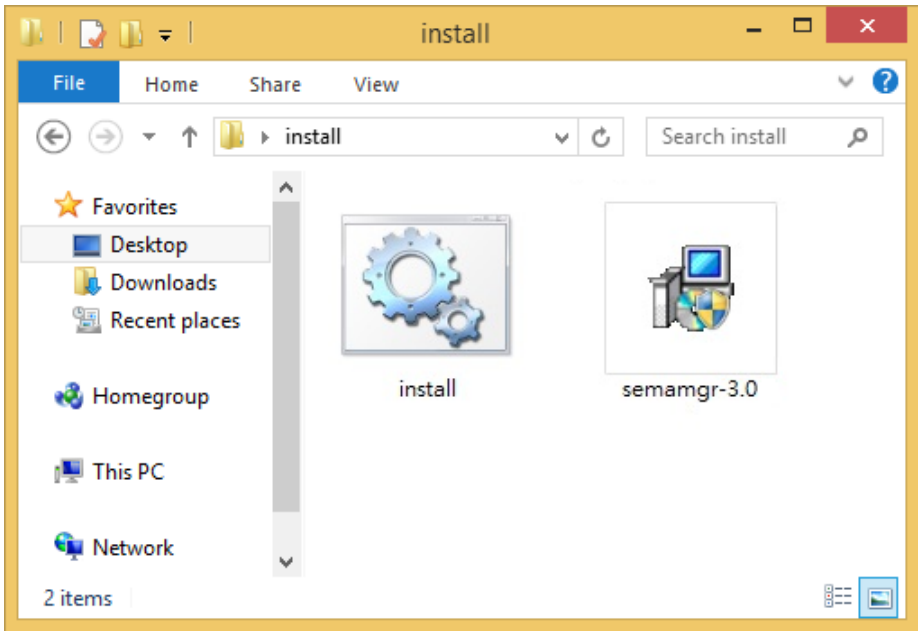
Note: Make sure the package update tool has been stopped in the background before you install the Linux package.

2 Executing Installation Program

2.1 Windows

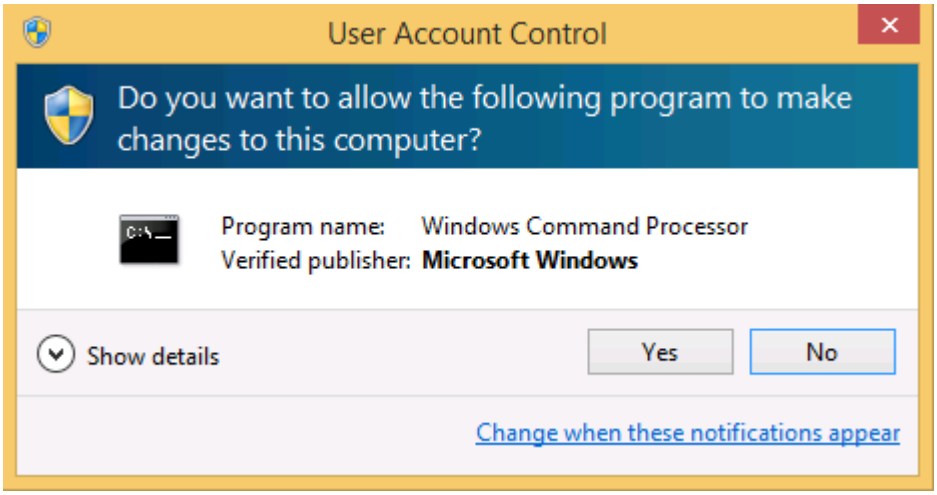
Step 1

Prepare related installation file (containing *semamgr-3.0-X-x64.exe*, *install.bat*).



Step 2

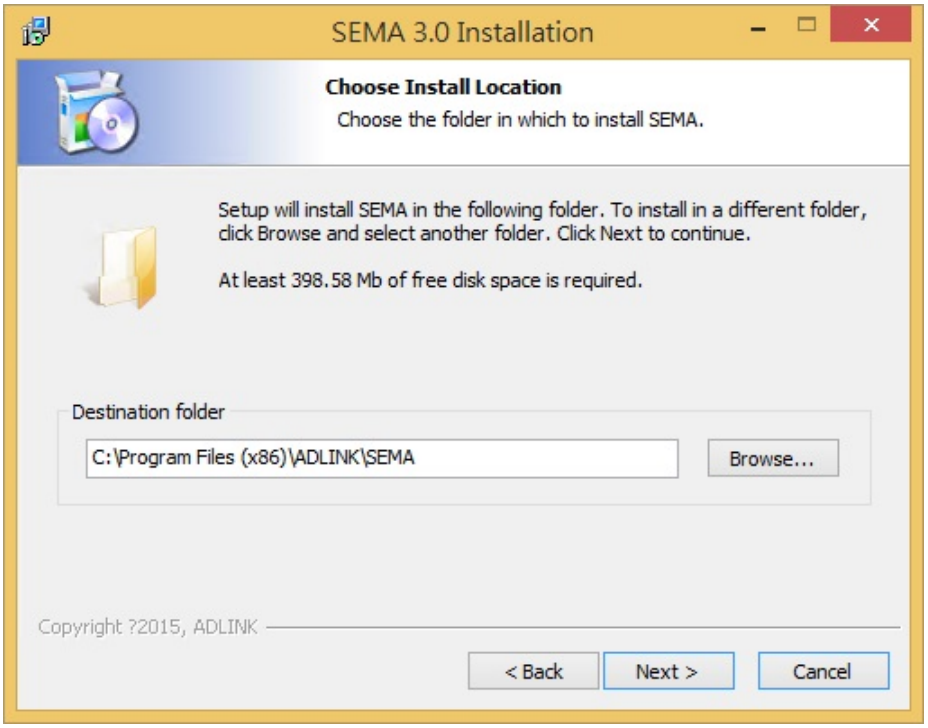
Execute *install.bat* to start the installation. Click *Yes* in *User Account Control* window allow installation continue.



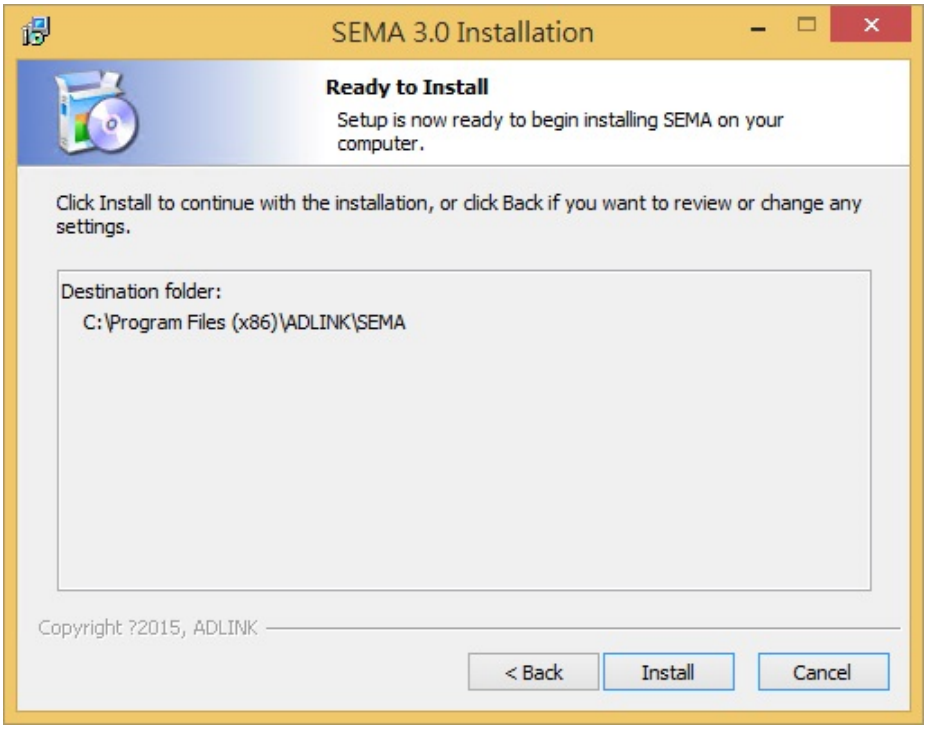
Step 3

Click *Next* to the destination path page.

Do not change the default path and click *Next*.

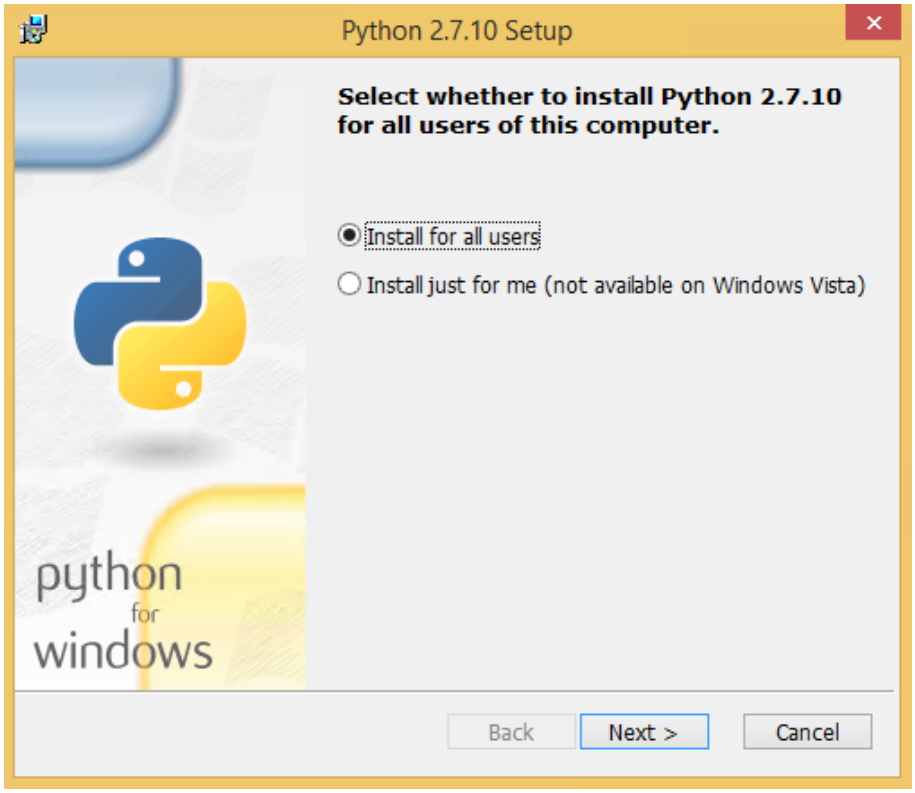


Click *Install* to start up installation.



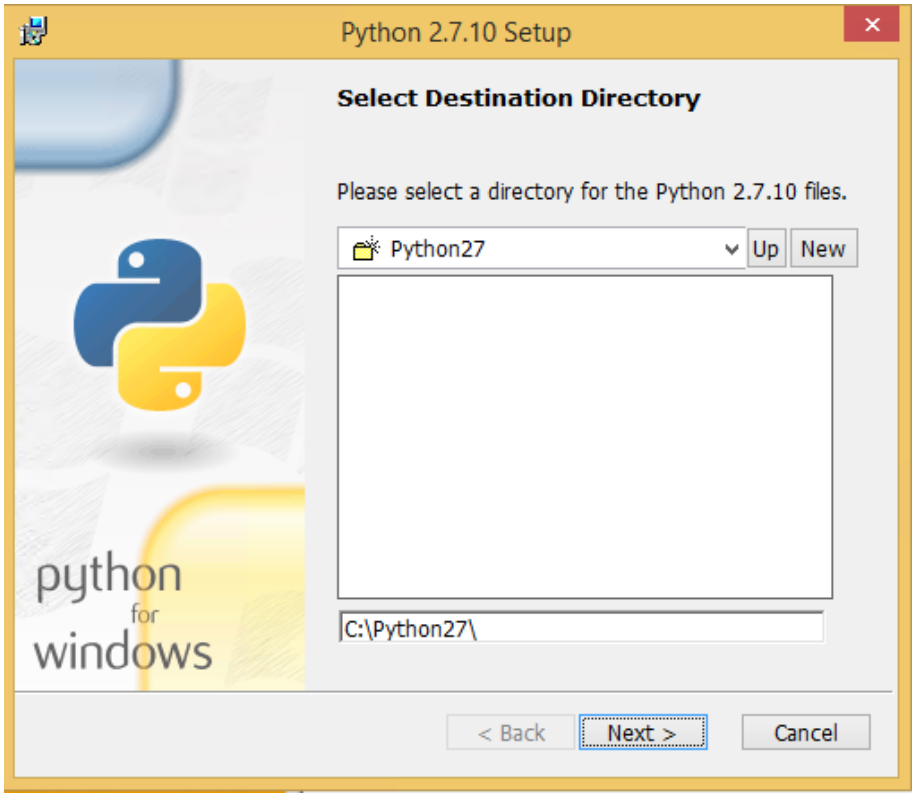
Step 4

Install Python. Select *Install for all users* and click *Next*.


Python 2.7.10 Setup
Select whether to install Python 2.7.10 for all users of this computer.
Install for all users
Install just for me (not available on Windows Vista)
python
for
windows
Back
Next >
Cancel

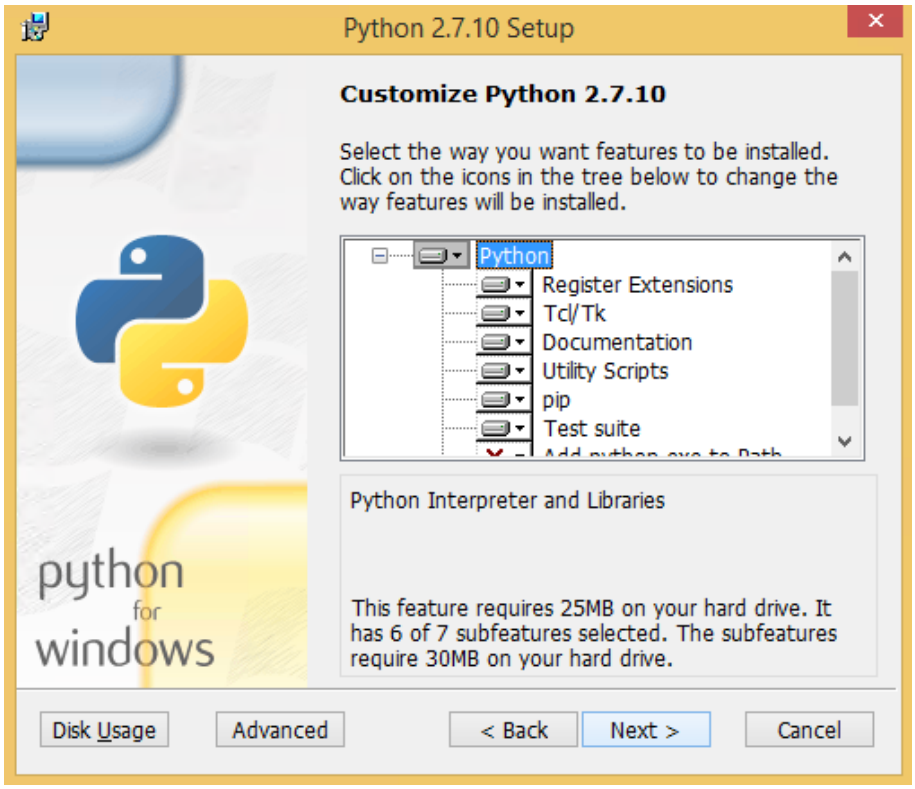
Step 5

Do not change default setting and click *Next*.



Step 6

Do not change default setting and click *Next*.

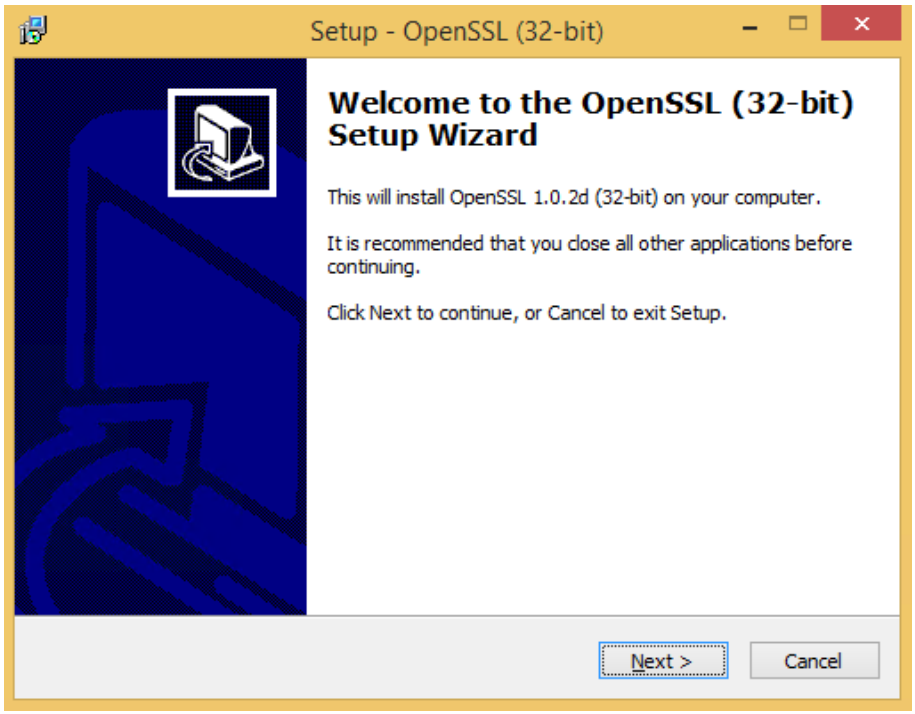


Step 7

Click *Finish*.

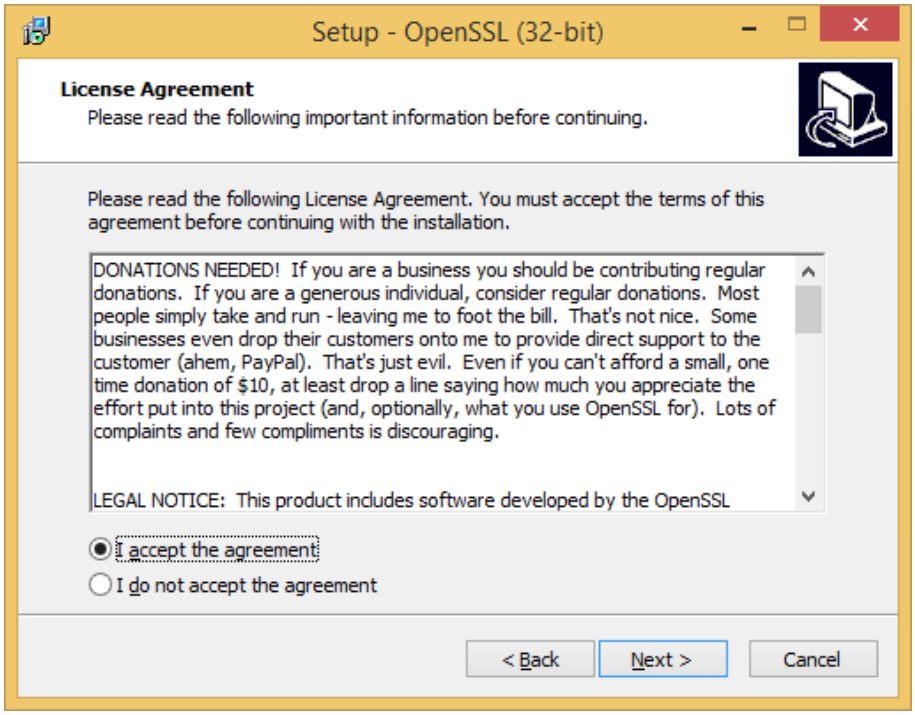
Step 8

Click *Next*.



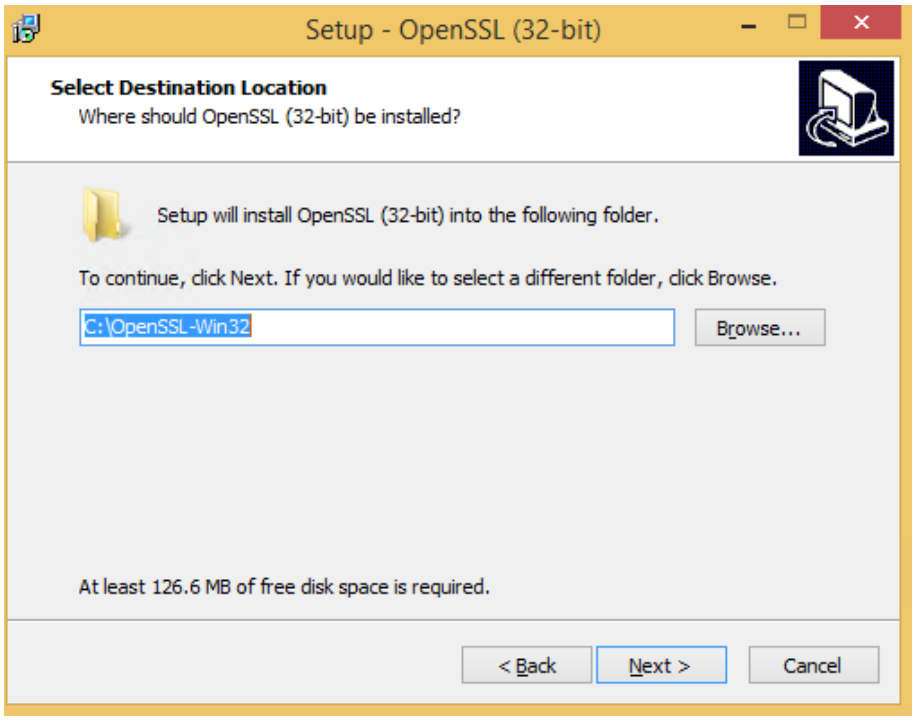
Step 9

Select *I accept the agreement* and click *Next*.



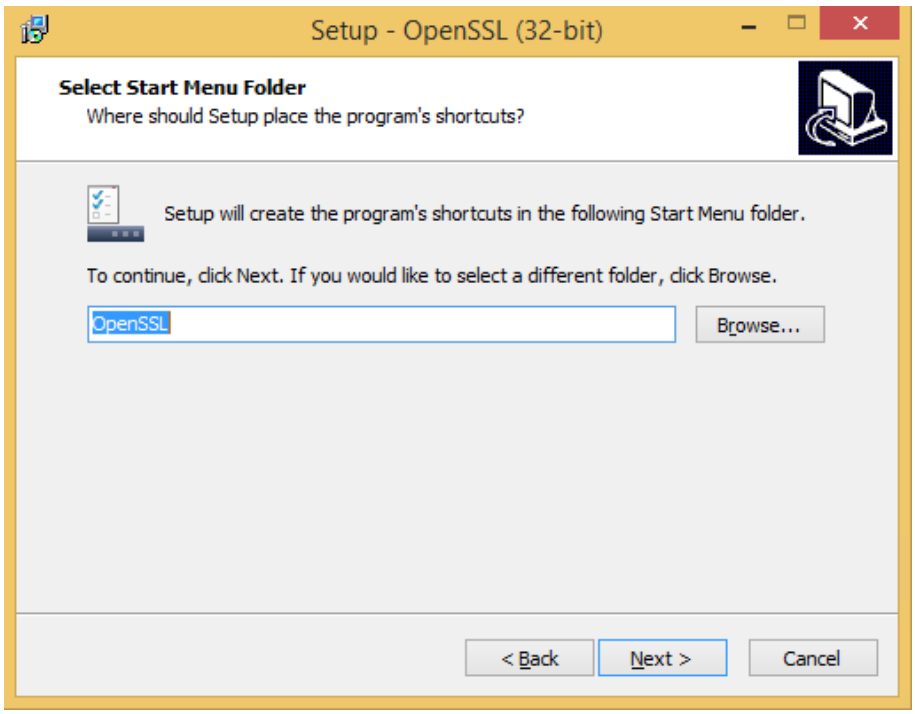
Step 10

Do not change default setting and click *Next*.



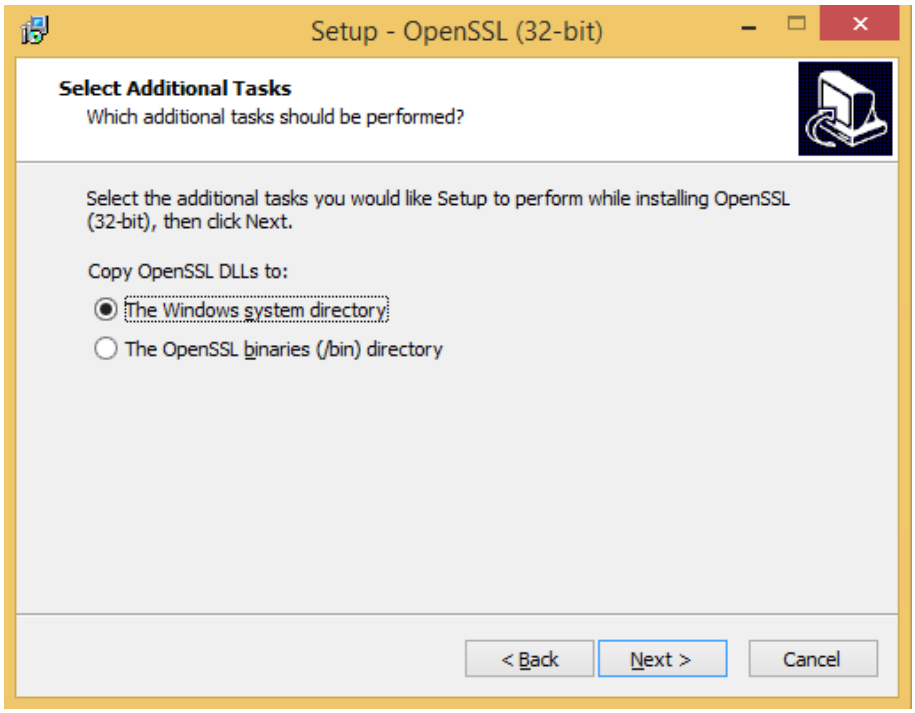
Step 11

Do not change default setting and click *Next*.



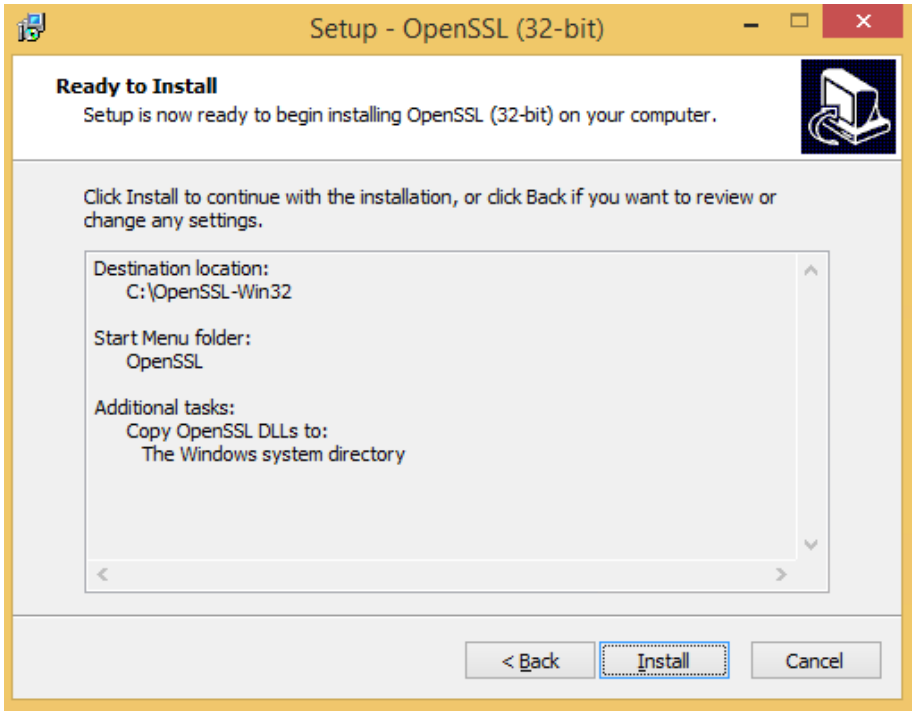
Step 12

Do not change default setting and click *Next*.



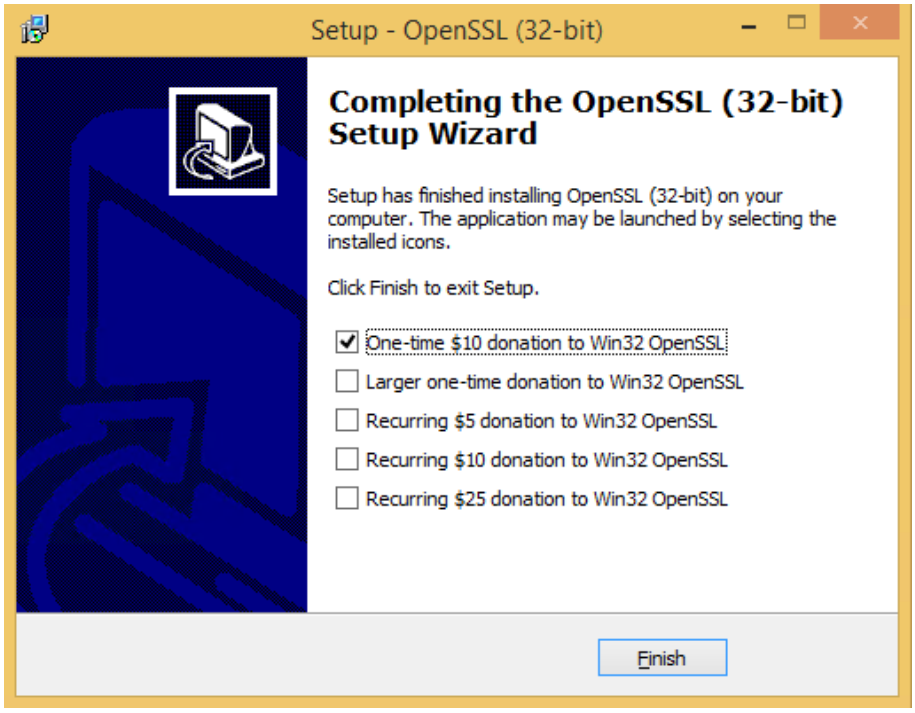
Step 13

Click *Install*.



Step 14

Disable default selection (*One-time $10 donation to Win32 OpenSSL*) and click *Finish*.

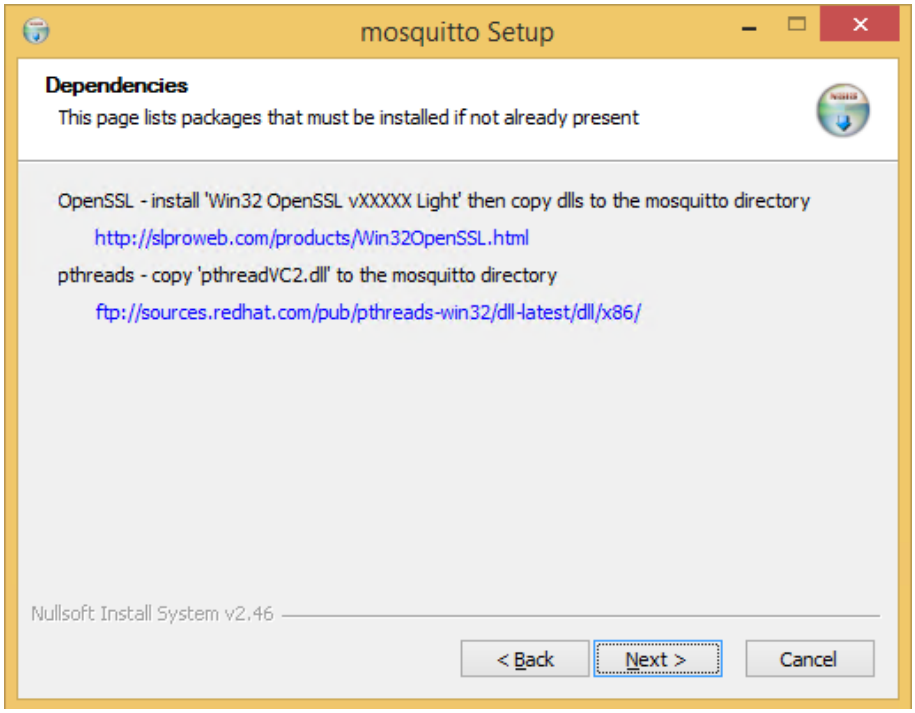


Step 15

Click *Next*.

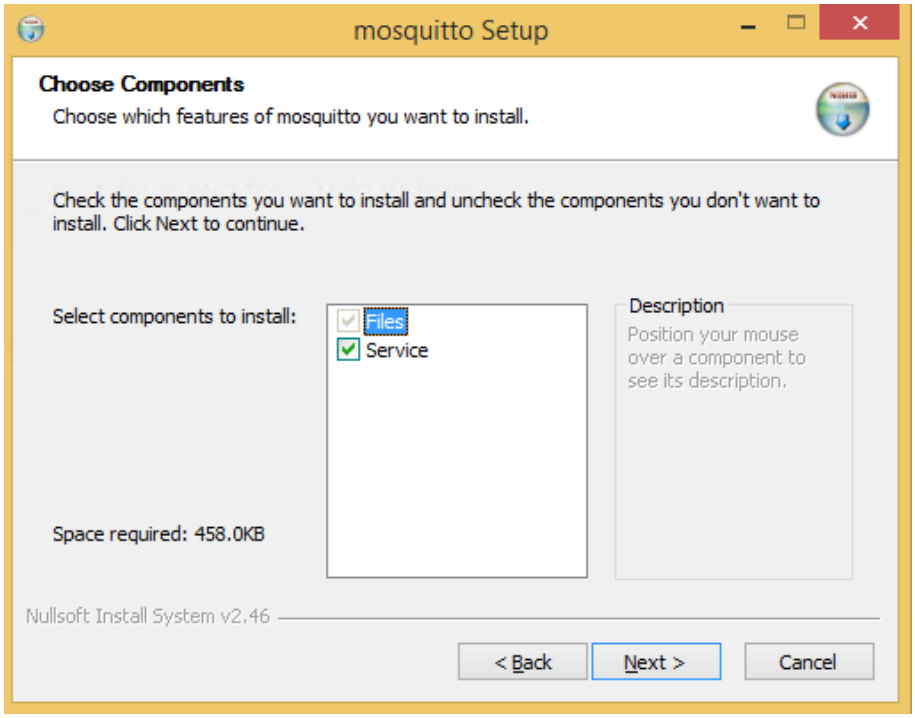
Step 16

Click *Next*.



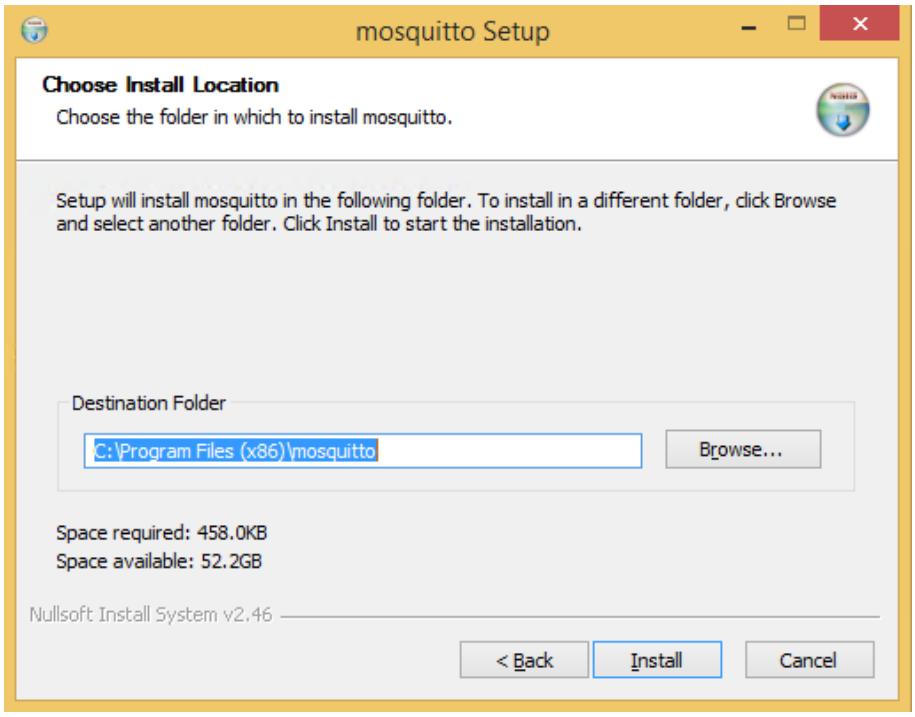
Step 17

Do not change default setting and click *Next*.



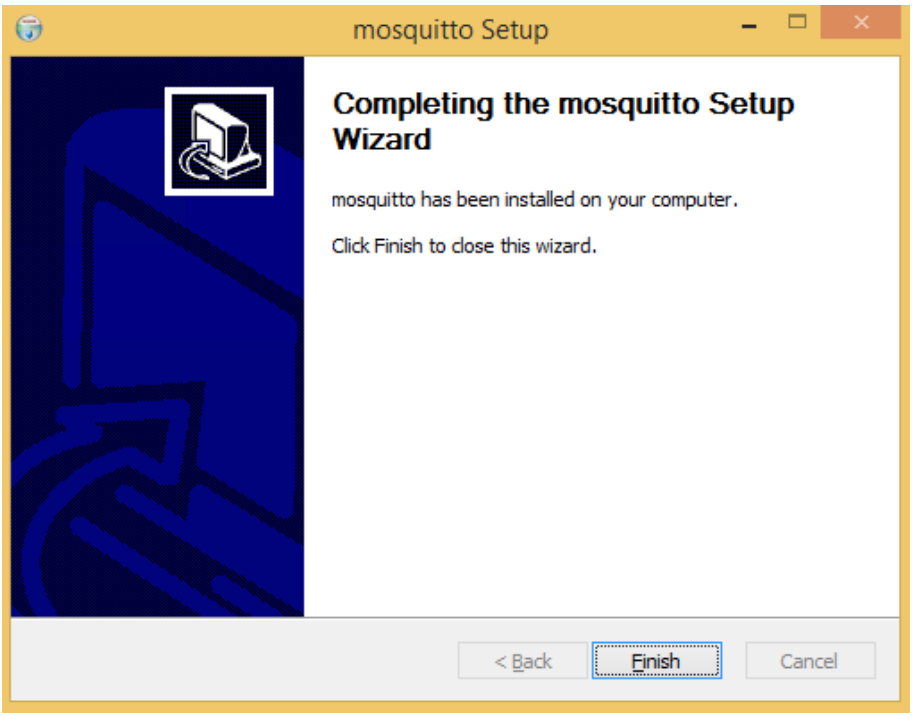
Step 18

Do not change default setting and click *Install*.



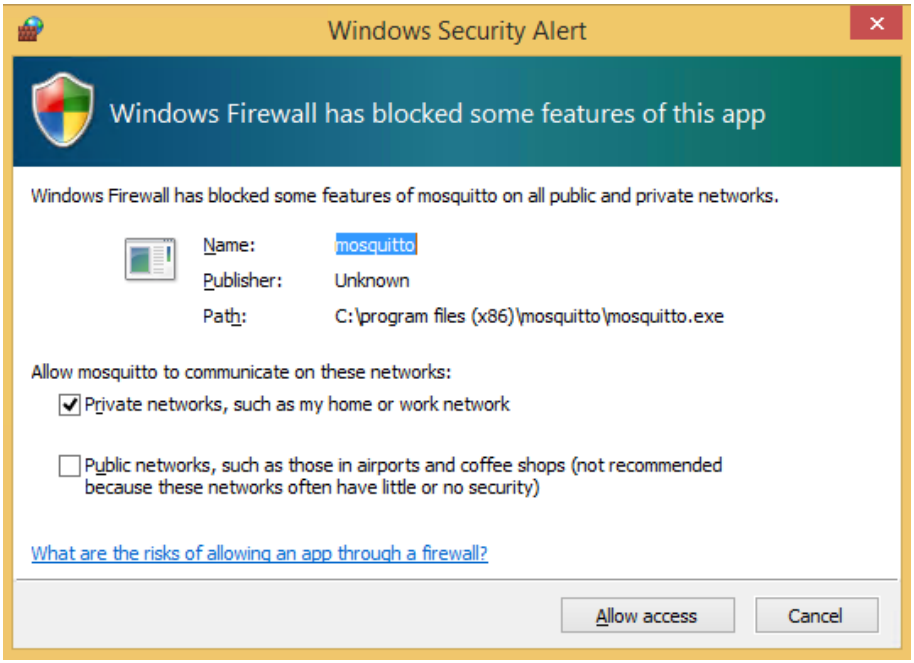
Step 19

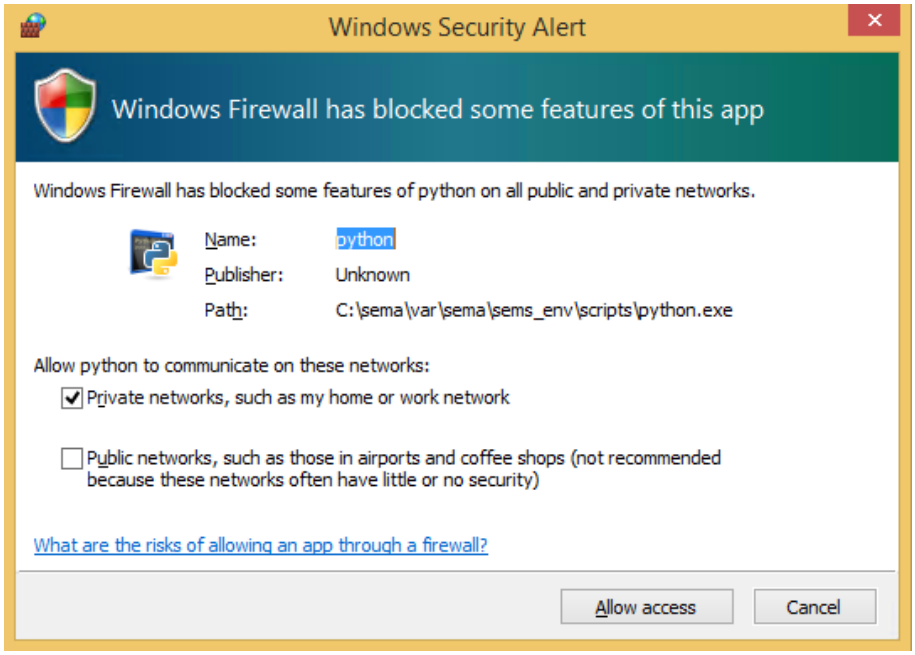
Click *Finish*.

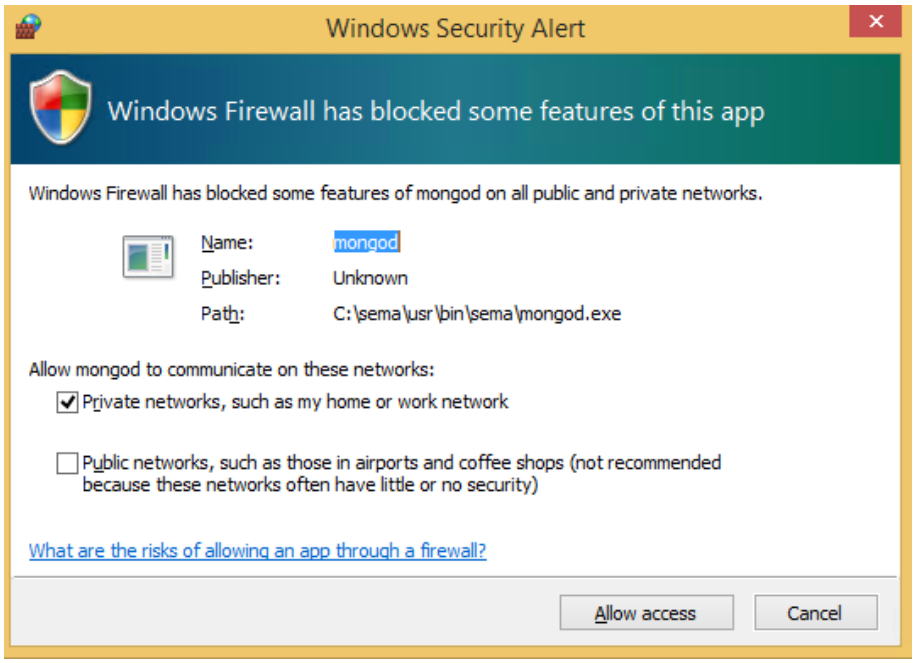


Step 20

Depending on server firewall settings, you may see *Windows Security Alert* windows. If alert windows are shown, do not change the default setting and click *Allow access*.




Windows Security Alert
Windows Firewall has blocked some features of this app
Windows Firewall has blocked some features of python on all public and private networks.
Name: python
Publisher: Unknown
Path: C:\sema\var\sema\sems_env\scripts\python.exe
Allow python to communicate on these networks:
Private networks, such as my home or work network
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)
What are the risks of allowing an app through a firewall?
Allow access
Cancel


Windows Security Alert
Windows Firewall has blocked some features of this app
Windows Firewall has blocked some features of mongod on all public and private networks.
Name: mongod
Publisher: Unknown
Path: C:\sema\usr\bin\sema\mongod.exe
Allow mongod to communicate on these networks:
Private networks, such as my home or work network
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)
What are the risks of allowing an app through a firewall?
Allow access
Cancel

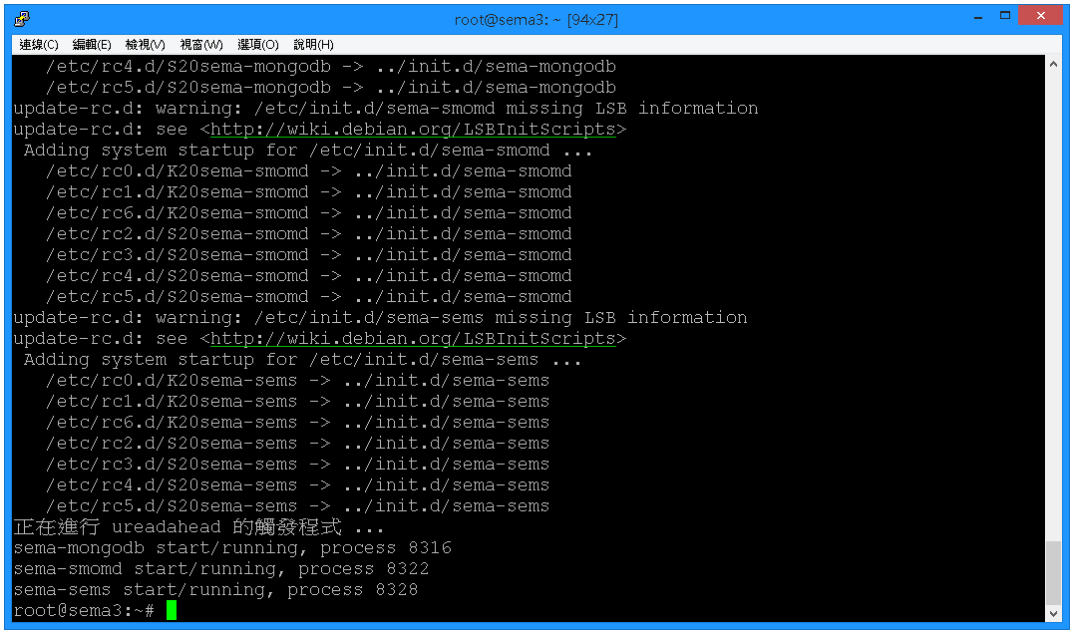
2.2 Linux Ubuntu

First, make the install script install.sh executable:

chmod +x install.sh

Then run the install script as root:

sudo ./install.sh semamgr-3.0-X-ubuntu_amd64.deb



The installation program will also create a Mongo DB on port 29017. The whole process takes about 30 minutes, please wait patiently.

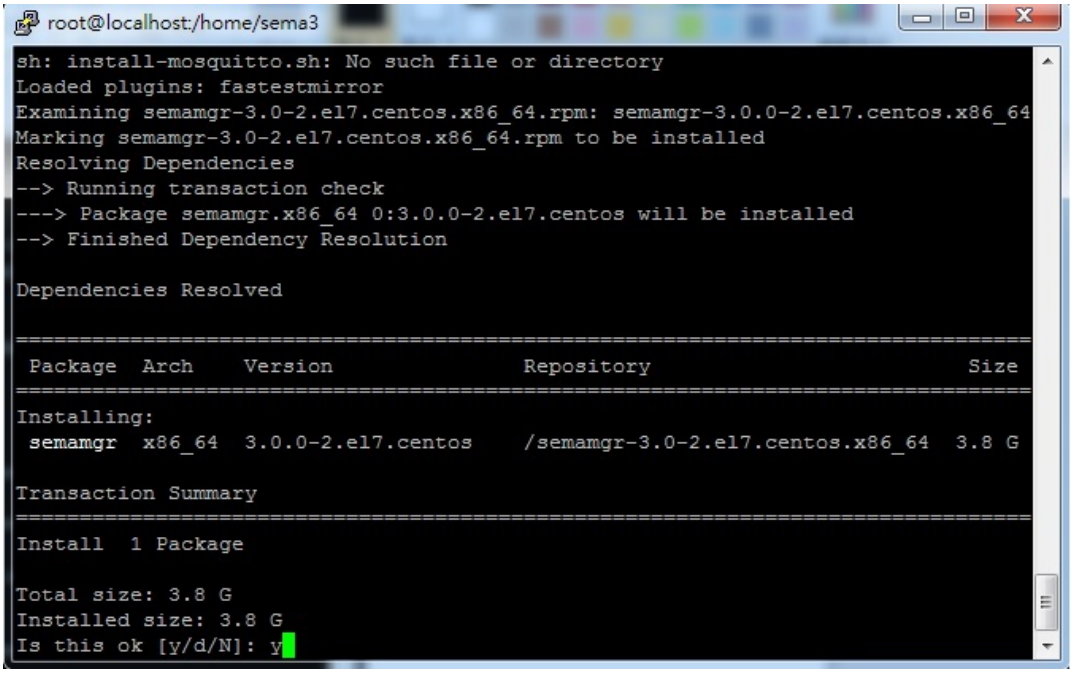
2.3 Linux CentOS

First, make the install script centos.sh executable:

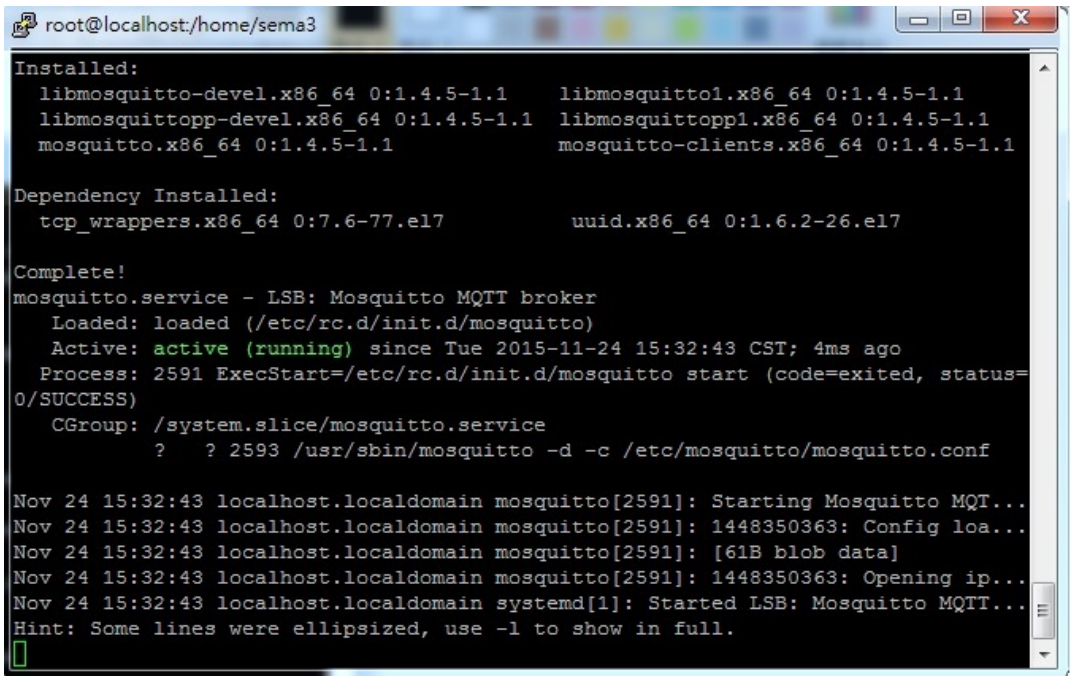
chmod +x install_centos.sh

Then run the install script as root:

sudo ./install_centos.sh semamgr-3.0-X.el7.centos.x86_64.rpm



When installation program prompts, please input “y” to continue the installation process.



When installation has been completed, the system will reboot automatically. If you use a terminal to run the install script, connection will be lost after rebooting, so you need to re-connect to server again.

3 Login to SEMA Dashboard

Open the following URL on the server with an Internet browser, such as Mozilla Firefox or Google Chrome:

http://127.0.0.1:8080

Or find out the IP address of the server:

1.1 The command on Windows server

ipconfig

1.2 The command on Linux server

ifconfig

Then open the following URL from a PC:

http://x.x.x.x:8080

where *x.x.x.x* is the IP address of the server.

4 Configure SEMA Dashboard

There are 6 user configurable items in the system configuration file:

(1) Push interval

The default value of push interval for a newly added thing, i.e. the time interval between two consecutive uploads. The default value of this item is 60 seconds.

(2) Time zone:

The default timezone of the server. The default value of this item is UTC.

(3) Language:

The default UI language of the server. The default value of this item is English

(4) Default thing definition:

The default thing definition for a newly added thing. The default settings for this item are: Small graphs, Top tab display, History, 24 hours, properties include CPU Temperature, System Temperature, CPU Fan Speed and System Fan 1 Speed.

(5) E-mail relay:

Settings for the Email server, including IP address, TCP port number, TLS, acount and password.

(6) SMS provider:

Settings for the SMS broker, including URL, account, password and other parameters.

To change configuration settings, open the file *C:\SEMA\var\sema\sems\sems\settings.py* and find the *DEFAULT_SETTING* section (near the end of the file), an example is given as:

```
DEFAULT_SETTING={
    "Timezone":"UTC",
    "Language":"eng",
    "record_unit" : "Seconds",
    "record_rate" : 60
    }
```

To configure push interval, modify the *record_unit* and *record_rate* fields. The *record_rate* field specifies the numeric value of the push interval. The *record_unit* field specifies the unit of the push interval. Valid units are Seconds, Minutes, Hours and Days. Push interval shall not be set to less than 20 seconds.

To configure time zone, modify the *Timezone* field. Valid values for the time zone field can be found here:
http://en.wikipedia.org/wiki/List_of_tz_zones_by_name

To configure language, modify the *Language* field. Currently, *eng* (for English) is the only valid value for this item.

To configure default thing definition, find the *DEFAULT_THING_DEFINITIONS* section (near the end of the file, after the *DEFAULT_SETTING* section). An example is given as:

```
DEFAULT_THING_DEFINITIONS={
 "dd_id" :"Default7c65b92bcac1498fb7dd32917" ,
 "data":{
    "dd_create_date" : "1420070400",
    "dd_creator" : "admin",
    "dd_graph_option" : "Small graphs",
    "dd_id" : "Default7c65b92bcac1498fb7dd32917",
    "dd_name" : "Default",
    "dd_period" : "24",
    "dd_period_unit" : "hours",
```

```
        "dd_properties" : [
            "CPU Temperature",
            "System Temperature",
            "CPU Fan Speed",
            "System Fan 1 Speed"
        ],
        "dd_series" : "history",
        "dd_update_date" : "1420070400",
        "dd_updater" : "admin",
        "dd_view_option" : "Top tab display"
        }
}
```

To configure Email relay, find the *EMAIL_RELAY* section, an example is given as:

```
EMAIL_RELAY = {
        "ip_address": "smtp.shinewave.com.tw",
        "login_account": "",
        "login_password": "",
        "enable_tls": False,
        "port": "25"
}
```

For ordinary Email server using SMTP protocol, replace *ip_address* by the IP address of the Email server, leave *enable_tls* false and *port* 25.
For Gmail, replace *ip_address* by *smtp.gmail.com*, set *enable_tls* true and *port* 587.

To configure SMS provider, find the *SMS_PROVIDER* section, an example is given as:

```
SMS_PROVIDER = [{
        "id": 0,
        "name": "Bulksms",
        "url": "http://bulksms.vsms.net:5567/eapi/sub/sms/",
        "username_field": "username",
        "username": "shinewave",
        "password_field": "password",
        "password": "123456",
```

"message_field": "message",
"receiver_field": "msisdn",
"receiver_separator": ",",
"extra_params": ""
}, {
"id": 1,
"name": "SMS Get Paid",
"url": "http://business.smsgetpaid.com/api_send.php",
"username_field": "username",
"username": "shinewave",
"password_field": "password",
"password": "123456",
"receiver_field": "phone",
"receiver_separator": ',',
"extra_params": "method=1"
}]
SELECTED_SMS_PROVIDER=1

The system supports only SMS provider who has a REST API such as http://business.smsgetpaid.com/api_send.php?username=shinewave&password=123456&phone=0987654321,0988776543&method=1

Getting Service

Contact us should you require any service or assistance.

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