

SOP for configuring ntp client with Authentication on Windows Systems

Installation:

1. Check in control panel if " Visual Studio Redistributable " has been installed. If not, then download and install from

<http://www.microsoft.com/en-us/download/details.aspx?id=29>

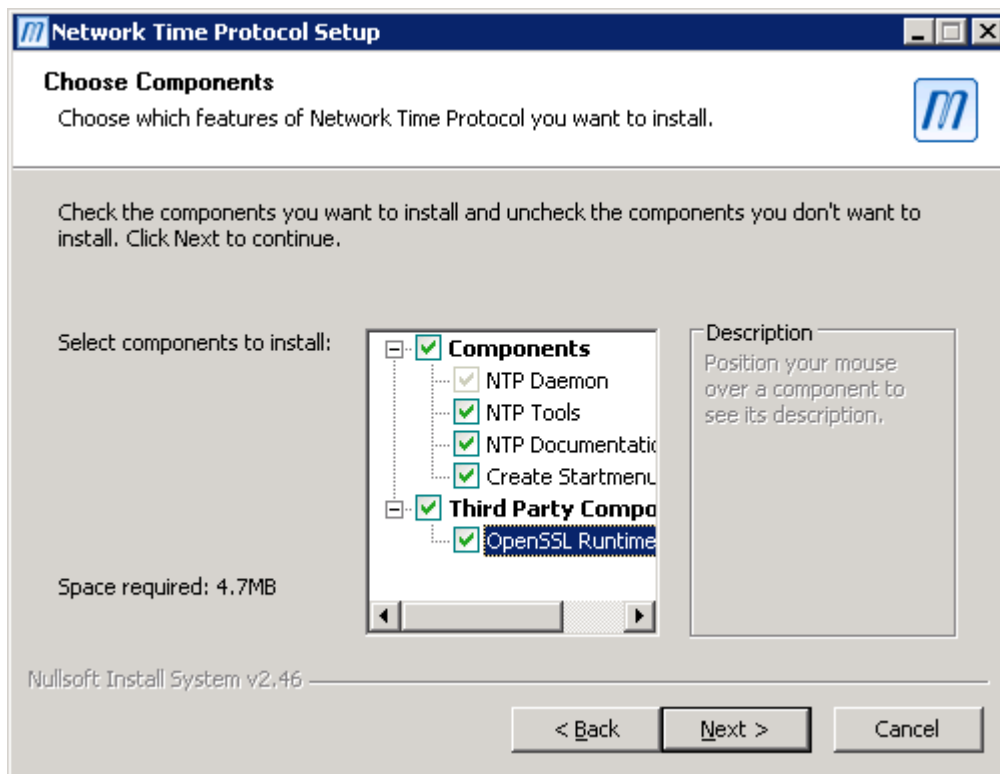
2. Download and install the NTP client for Windows from

<http://www.meinbergglobal.com/download/ntp/windows/ntp-4.2.6p5@london-o-lpv-win32-setup.exe>

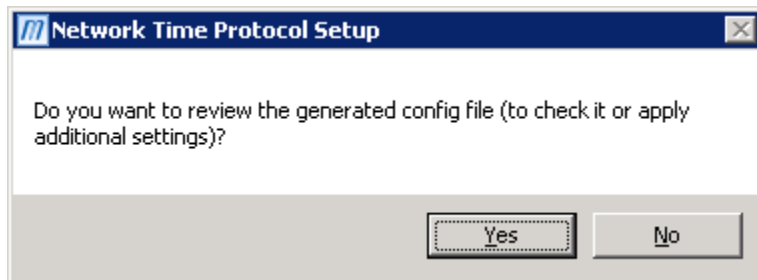
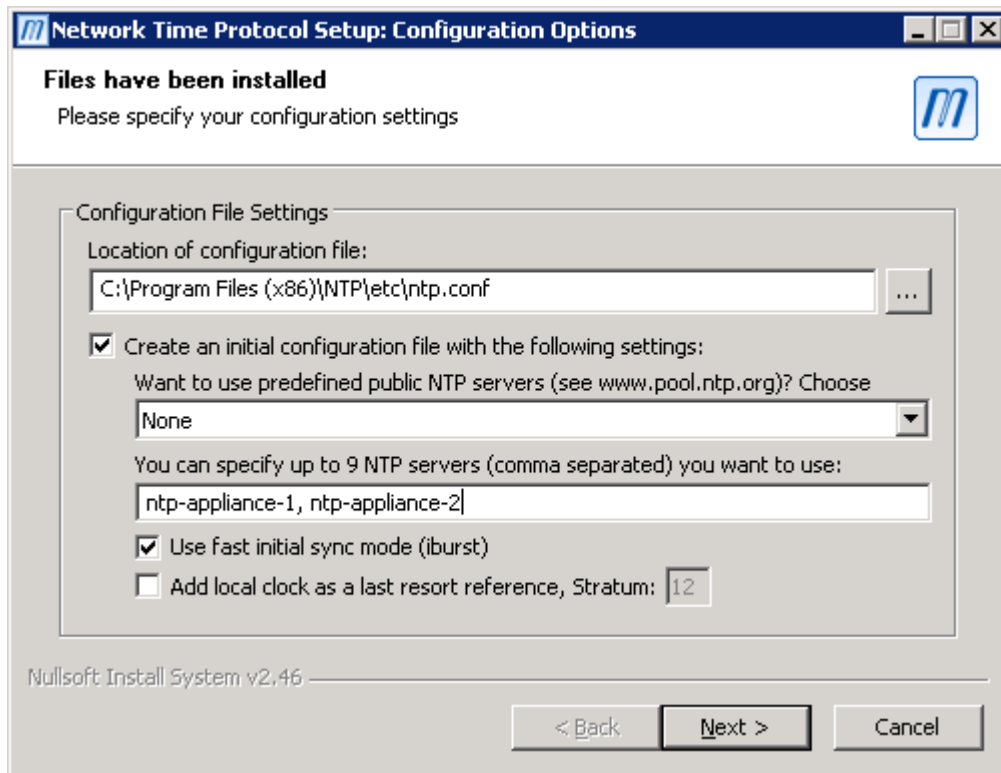
Steps for Installing the ntp client:

Launch the [ntp-4.2.6p5@london-o-lpv-win32-setup.exe](http://www.meinbergglobal.com/download/ntp/windows/ntp-4.2.6p5@london-o-lpv-win32-setup.exe) and Accept the agreement.

Accept the default location for installation



Put the ip address of the time servers as shown below. You can use hostname as well as shown. Make sure that the name can be resolved to ip address using host file



Under NTP service settings select "Create and use a special NTP account "
Select all check boxes.

Network Time Protocol Setup: NTP Service Options

Setting up NTP service
Please specify your service settings

NTP Service Settings

- ☒ Create and use a special NTP account (recommended)
- ☐ Use existing account
- ☐ Use SYSTEM account (not recommended)

- ☒ Start NTP service automatically
- ☒ Disable other Time Services eventually installed (e.g. W32Time, other NTP flavours)
- ☒ Start NTP service right after installation
- ☒ Allow big initial timestep (>1000 secs)
- ☒ Enable Multimedia Timer at startup
- ☒ Check Firewall Settings

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< Back Next > Cancel

Network Time Protocol Setup: NTP Service Account

Setting up NTP service
Enter the user ID and password used for running the service

NTP Service Account

Enter a name for the new NTPD account:

ntp

Enter a password for the new account:

••••••••

Confirm the password:

••••••••

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< Back Next > Cancel

Click Finish

Confirm that the windows time service has been shut down and Network Time Protocol is Started.

Configuration:

1. Open the file **ntp.conf** at C:\Program Files\NTP\etc\

(For 64 bit OS use C:\Program Files (x86)\NTP\etc\)

Delete Keys line entry and add it as following lines

```
keys "C:\Windows\System32\drivers\etc\ntp.key"  
trustedkey 1 2
```

(Also note to modify below line i.e delete iburst word and add key 1 / key 2 as shown below)

Use specific NTP servers

```
server 172.28.124.123 key 1
```

```
server 172.28.124.124 key 2 prefer
```

NOTE: You need to restart ntp service to make this change effective.

2. Go to C:\Windows\System32\drivers\etc

Create a file ntp.key

Add the keys in below format

```
1 M x5fiatBU7Fk(Jw|pty7L  
2 M xSk?Qbhr#nms0UoiFT82
```

NOTE: The existing keys have to be replaced by above mentioned new keys. Ntp service restart is required after doing this change. Without these keys time synchronization will fail. You can confirm if the keys are working as per point 4.

3. Restart the Network Time Protocol service

4. Open command prompt and go to path C:\Program Files\NTP\bin

Issue command **ntpq**

At the ntpq prompt type *associations* as shown below

```
ntpq> associations
```

The output of the command is below

```
ind assid status conf reach auth condition last_event cnt
```

```
=====
```

```
1 42571 c01c yes no bad reject 1
```

```
2 42572 f63a yes yes ok sys.peer sys_peer 3
```

As shown in the second line the output will show Auth as OK if everything is correct and time sync will start. Incase configuration is incorrect output will be as shown in line 1. *Note: Make sure firewall access exists between client and NTP device on UDP 123 port.*

For any queries or support, please contact:

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