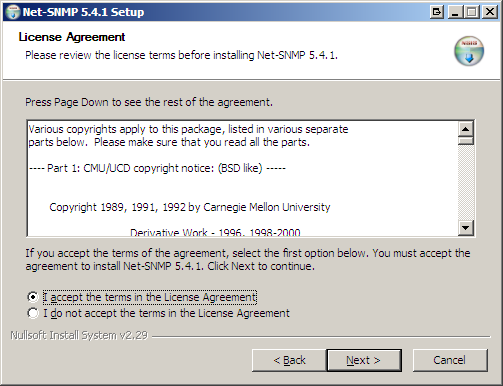
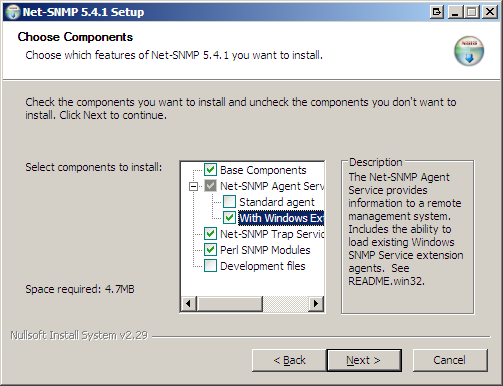
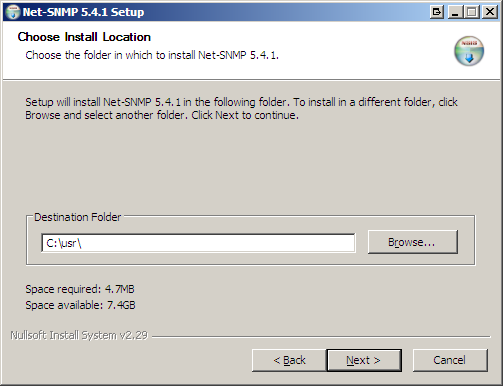
Install and configure the Net-SNMP agent for Windows

* Version 0.2 (03/06/2008) : added a note about snmpd.conf file creation
* Version 0.1 (03/04/2008) : intial release

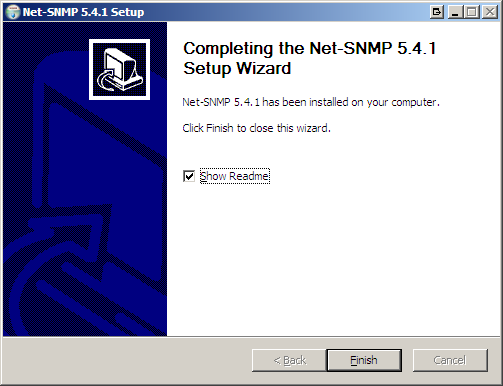
This HowTo will explain how to install and configure the [Net-SNMP](http://net-snmp.sourceforge.net) agent for Windows, as a "**subagent**" of the Microsoft SNMP agent, to **graph the output of custom scripts**.  
  
Chapter I: Getting Net-SNMP binaries  
  
Net-SNMP 5.4.1 for Windows can be downloaded [here](http://downloads.sourceforge.net/net-snmp/net-snmp-5.4.1-3.win32.exe?modtime=1191512906&big_mirror=1).  
  
Once the file is downloaded, you just have to run the installer :  
  
You then have to accept the license :  
  


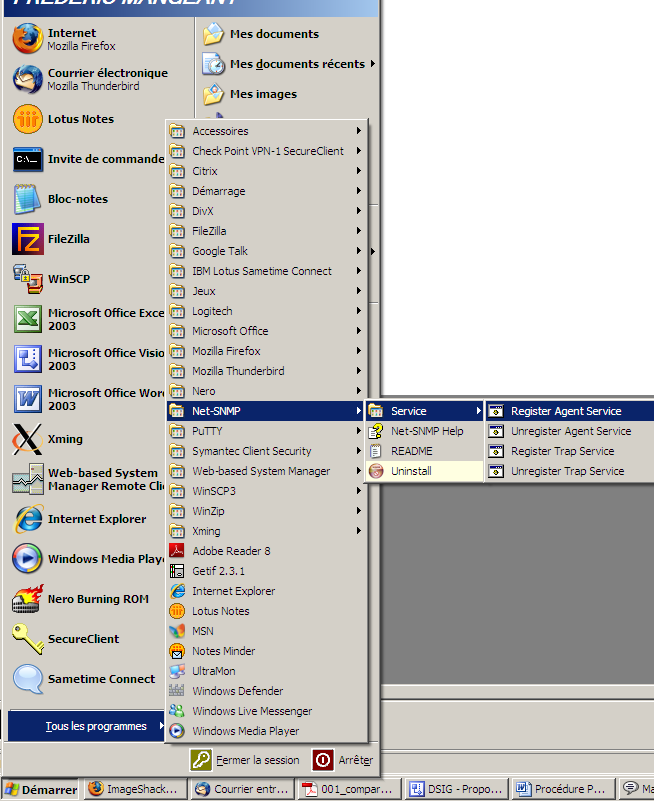
Next, you have to choose which type of agent you want to run :

* as a standard agent
* as a "subagent" of the Microsoft SNMP agent

Select the second option :  
  
  
Next, choose an installation directory (C:\usr by default) : it is better to create a Directory **C:\Net-SNMP**  


Next, select an existing or a new Start menu folder :

The installer then copies the files :  


Once installed, you have to register the Net-SNMP service  
  
  
  
  
Chapter II: Configuring the Net-SNMP agent  
  
The Windows SNMP service must be installed, but the service must be disabled.  
  
Depending on where you've installed Net-SNMP, the main configuration file (snmpd.conf OR snmptrapd.conf) will be located in <path>\etc\snmp (by default, C:Net-SNMP\usr\etc\snmp).  
The snmpd.conf OR snmptrapd.conf has to be created.

SOS!!!   
  
**Please note that you need to restart the "Net-SNMP Agent" service whenever you modify snmpd.conf !**  
  
The minimum configuration is this one :

**Code:**

### rocommunity public

Start then the "Net-SNMP Agent" service, and query it :

**Code:**

### C:\Net-SNMP \usr\bin>snmpwalk.exe -v 1 -c public localhost sysdesc SNMPv2-MIB::sysDescr.0 = STRING: Hardware: x86 Family 6 Model 9 Stepping 5 AT/AT COMPATIBLE - Software: Windows 2000 Version 5.1 (Build 2600 Uniprocessor Free)

This OID got an anwser from the Microsoft SNMP service, whereas

**Code:**

### C:\Net-SNMP \usr\bin>snmpwalk.exe -v 1 -c public localhost versiontag UCD-SNMP-MIB::versionTag.0 = STRING: 5.4.1

got an answer from the Net-SNMP agent.  
  
**At this point, you can use the "Windows XP/2000/2003" host template in Cacti, to graph CPU usage, disk drives usage, network bandwidth, etc.**  
  
  
  
Chapter III: Extending the Net-SNMP agent  
  
A great functionnality of Net-SNMP is that you can "extend" it.  
  
Let's run the C:\temp\foo.cmd script :

**Code:**

C:\temp\foo.cmd

123

Now put this in **snmpd.conf** :

**Code:**

### exec foo c:\temp\foo.cmd

The result of your script will be accessible under the *ucdavis.extTable.extEntry* tree :

* output of the script : *ucdavis.extTable.extEntry.extOutput*
* exit status : *ucdavis.extTable.extEntry.extResult*
* command : *ucdavis.extTable.extEntry.extCommand*

You can check the result with this SNMP query :

**Code:**

### C:\temp>snmpwalk.exe -v 1 -c public localhost exttable UCD-SNMP-MIB::extIndex.1 = INTEGER: 1 UCD-SNMP-MIB::extNames.1 = STRING: foo UCD-SNMP-MIB::extCommand.1 = STRING: c:\temp\foo.cmd UCD-SNMP-MIB::extResult.1 = INTEGER: 0 UCD-SNMP-MIB::extOutput.1 = STRING: 123 UCD-SNMP-MIB::extErrFix.1 = INTEGER: noError(0) UCD-SNMP-MIB::extErrFixCmd.1 = STRING:

*extOutput* translates to .1.3.6.1.4.1.2021.8.1.101   
As "foo" is our first *exec* directive, add ".1" at the end of the OID.   
  
In Cacti, use the "SNMP - Generic OID Template" like this :   
  
Voila ! Result of the C:\temp\foo.cmd script is now graphed in Cacti.

Chapter IV: Configure Net-SNMP agent for TUC

Copy PowerNet-MIB.txt to c:\Net-SNMP\usr\share\snmp\mibs\

Insert to C:\Net-SNMP\usr\etc\snmp\snmpd.conf OR snmptrapd.conf

### traphandle PowerNet-MIB::gracefullShutdown c:\Net-SNMP\usr\etc\shutdown.cmd

and the file will like this :

### disableAuthorization yes

### # Generic SNMP Traps

### traphandle SNMPv2-MIB::coldStart c:\Net-SNMP\usr\etc\foo.cmd cold

### traphandle SNMPv2-MIB::warmStart c:\Net-SNMP\usr\etc\foo.cmd warm

### traphandle IF-MIB::linkDown c:\Net-SNMP\usr\etc\foo.cmd down

### traphandle IF-MIB::linkUp c:\Net-SNMP\usr\etc\foo.cmd up

### # Enterprise specific traps

### #Trap from the DATA CENTER

### traphandle PowerNet-MIB::gracefullShutdown c:\Net-SNMP\usr\etc\shutdown.cmd

there are two files that will execute **foo.cmd** and **shutdown.cmd.**

**foo.cmd** will execute when a Generic SNMP Trap will accorded.

**Shutdown.cmd** will execute when a DATA CENTER SNMP trap accoreded.

**Please note that you need to restart the "Net-SNMP Agent" service whenever you modify snmpd.conf !**

Modify the c:\Net-SNMP\usr\etc\shutdown.cmd:

### echo %date%-%time%-Shutdown >> c:\net-snmp\usr\etc\hello.txt

### c:\net-snmp\usr\etc\ShutDownSERVERS.bat

in the file ShutDownSERVERS.bat you will find a example of shutdown procedure how to shutdown a server(windows or linux) from windows Server