Server: Nagios XI CentOS – IP: 172.16.171.150

Mình down phiên bản VMWare NagiosXI, import vào Vmware là chạy ngay

https://www.nagios.com/downloads/nagios-xi/vmware/

Còn ai xài bản Core thì đừng hỏi mình cách sử dụng nhé

Agent: Ubuntu – IP: 172.16.171.160

Mình sử dụng Ubuntu 16.04

1. Kết nối Agent tới Server

Server

Chọn Linux Server

Cấu hình

Step 1: Thiết lập IP của Agent

Configuration Wizard: Linux Server - Step 1

Linux Server Information

IP Address: 172.16.171.160

The IP address or FQDNS name of the Linux server you'd like to monitor.

Linux Distribution: Ubuntu

The Linux distribution running on the server you'd like to monitor.

‹ Back   **Next ›**

Step 2: Cấu hình Agent Name + Download file cài đặt agent

Configuration Wizard: Linux Server - Step 2

Linux Server Details

IP Address: 172.16.171.160

Operating System:

Ubuntu

Host Name: Ubuntu Agent

The name you'd like to have associated with this Linux server.

Linux Agent

You will need to install an agent on the Linux server in order to monitor its metrics.

Agent Download: 📄 **Download Agent**

Agent Install Instructions: 📄 **Agent Installation Instructions**

SSL Encryption: Enabled (Default)

Determines whether or not data between the Nagios XI server and Linux agent is encrypted.
Note: Legacy NRPE installations may require that SSL support be disabled.

Next -> Finish

Copy file cài đặt agent vào máy agent

Agent

```
agent@agent-virtual-machine:~$ cd Desktop/
agent@agent-virtual-machine:~/Desktop$ tar -xzvf linux-nrpe-agent.tar.gz
```

```
agent@agent-virtual-machine:~/Desktop$ cd linux-nrpe-agent/
agent@agent-virtual-machine:~/Desktop/linux-nrpe-agent$ chmod +x fullinstall
agent@agent-virtual-machine:~/Desktop/linux-nrpe-agent$ sudo ./fullinstall
```

```
Allow from:  172.16.171.150
xinetd.service is not a native service, redirecting to systemd-sysv-install
Executing /lib/systemd/systemd-sysv-install enable xinetd
Subcomponents installed OK
RESULT=0

#########################################################
###                                                   ###
###     Nagios XI Linux Agent Installation Complete!  ###
###                                                   ###
#########################################################

If you experience any problems, please attach the file install.log that was just created t
o any support requests.
```

Vào Server: **Home -> Host Status -> Chọn host agent để xem**

Service Status

Host: **Ubuntu Agent**

Host Status Summary

Up	Down	Unreachable	Pending
1	0	0	0
Unhandled	**Problems**	**All**	
0	0	1	

Last Updated: 2018-10-27 11:34:25

Service Status Summary

Ok	Warning	Unknown	Cr
10	1	0	
Unhandled		**Problems**	
2		2	

Last Updated: 2018-10-27 11:34:25

Search… 🔍

Showing 1-12 of 12 total records

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Host	Service	Status	Duration	Attempt	Last Check	Status Information
Ubuntu Agent	/ Disk Usage	Ok	2m 8s	1/5	2018-10-27 11:34:14	DISK OK - free space: / 13940 MB (77.30% inode=84%):
	APT Updates	Critical	20m 31s	1/5	2018-10-27 11:32:50	APT CRITICAL: 324 packages available for upgrade (155 critical updates).
	CPU Stats	Ok	1m 17s	1/5	2018-10-27 11:33:08	CPU STATISTICS OK: user=0.20% system=0.00% iowait=0.00% idle=99.80%
	Cron Scheduling Daemon	Ok	2m 25s	1/5	2018-10-27 11:34:01	active
	Load	Ok	1m 41s	1/5	2018-10-27 11:32:44	OK - load average: 0.28, 0.89, 0.68
	Memory Usage	Ok	1m 11s	1/5	2018-10-27 11:33:14	OK - 416 / 997 MB (41%) Free Memory, Used: 554 MB, Shared: 3 MB, Buffers + Cached: 360 MB
	Open Files	Ok	2m 3s	1/5	2018-10-27 11:34:24	OK: 6784 open files (6% of max 97013)
	Ping	Ok	19m 55s	1/5	2018-10-27 11:34:08	OK - 172.16.171.160: rta 0.370ms, lost 0%
	SSH Server	Ok	1m 51s	1/5	2018-10-27 11:32:34	active
	Swap Usage	Ok	37s	1/5	2018-10-27 11:33:48	SWAP OK - 100% free (1014 MB out of 1021 MB)
	Total Processes	Warning	52s	1/5	2018-10-27 11:33:33	PROCS WARNING: 227 processes
	Users	Ok	1m 24s	1/5	2018-10-27 11:33:01	USERS OK - 1 users currently logged in

Last Updated: 2018-10-27 11:34:25

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2. Cài đặt Plugin để chạy Script trên agent

Step 1: [Agent Side]

        apt-get install -y perl nagios-nrpe-server

        useradd nrpe && update-rc.d nagios-nrpe-server defaults

```
😕⊖⊡ agent@agent-virtual-machine: ~/Desktop
agent@agent-virtual-machine:~/Desktop$ sudo apt-get install -y perl nagios-nrpe-server
[sudo] password for agent:
```

```
agent@agent-virtual-machine:~/Desktop$ sudo useradd nrpe && update-rc.d nagios-nrpe-server defaults
```

Step 2: [Agent Side] Copy script của thầy vào thư mục /usr/lib/nagios/plugins/

```
agent@agent-virtual-machine:/usr/lib/nagios/plugins$ ls NagiosCheckFolder.pl
NagiosCheckFolder.pl
agent@agent-virtual-machine:/usr/lib/nagios/plugins$ chmod +x NagiosCheckFolder.pl
```

Lưu ý: Nagios chỉ cho phép ta print 1 lần – đó chính là status của nó cùng với exit code

        exit(0) = OK

        exit(1) = Warning

```perl
    if ($changed == 1 || $renamed == 1 || scalar(@deletedfiles) != 0 || scalar(@addedfiles) != 0) {
        print "WARNING - Folder has changed!!";
        exit(1);
    }
}
if ($nochange == 0){
    print "OK - Nothing changed!!";
    exit(0);
}
```

Step 3: [Agent Side] Xoá file /etc/nagios/nrpe.cfg và tạo file mới với nội dung

```
agent@agent-virtual-machine:~/Desktop$ sudo rm /etc/nagios/nrpe.cfg && nano /etc/nagios/nrpe.cfg
```

```
  GNU nano 2.5.3                    File: nrpe.cfg

log_facility=daemon
pid_file=/var/run/nagios/nrpe.pid
server_port=5666
nrpe_user=nrpe
nrpe_group=nrpe
allowed_hosts=172.16.171.150
dont_blame_nrpe=1
debug=0
command_timeout=60
connection_timeout=300
include_dir=/etc/nagios/nrpe.d/

command[checkfolder_perl]=perl /usr/lib/nagios/plugins/NagiosCheckFolder.pl
```

Chú thích:

Allowed hosts = Nagios Server IP

Command[checkfolder_perl] = perl /usr/lib/nagios/plugins/NagiosCheckFolder.pl

=> đặt 1 command có tên checkfolder_perl sẽ thực hiện lệnh perl /usr/lib/nagios/plugins/NagiosCheckFolder.pl

Thêm IP của Server vào nrpe.cfg

```
agent@agent-virtual-machine:/etc/nagios$ nano /usr/local/nagios/etc/nrpe.cfg
```

Tìm dòng Allowed_hosts =

```
#
# NOTE: This option is ignored if NRPE is running under either inetd or xinetd

allowed_hosts=127.0.0.1, 172.16.171.150
```

Khởi động lại nrpe

```
agent@agent-virtual-machine:~$ service nagios-nrpe-server restart
```

Step 4: [Server Side]

Cấu hình file commands.cfg

```
[root@localhost ~]# nano /usr/local/nagios/etc/commands.cfg
```

Thêm vào cuối file

```
define command{
        command_name       checkfolder_perl
        command_line       $USER1$/check_nrpe -H $HOSTADDRESS$ -c checkfolder_perl
}
```

Ctrl + X -> Y để save

Thêm service vào host Ubuntu

```
[root@localhost ~]# nano /usr/local/nagios/etc/services/<Agent hostname>.cfg
```

Thêm vào cuối file

```
define service {
        use                        generic-service
        host_name                  Ubuntu Agent
        service_description        [Perl] Check Folder
        check_command              checkfolder_perl
}
```

Thêm IP của Agent vào nrpe.cfg

```
[root@localhost ~]# nano /usr/local/nagios/etc/nrpe.cfg
```

Tìm dòng Allowed_hosts =

```
allowed_hosts=127.0.0.1,::1,172.16.171.160
```

Save file

Khởi động lại nagios và nrpe

```
[root@localhost ~]# service nrpe restart
```

```
[root@localhost ~]# service nagios restart
```

Step 5:

Kiểm tra nrpe đã hoạt động hay chưa

[Server side]

```
[root@localhost ~]# /usr/local/nagios/libexec/check_nrpe -H 172.16.171.160
NRPE v2.15
```

```
[root@localhost ~]# /usr/local/nagios/libexec/check_nrpe -H 172.16.171.160 -c ch
eckfolder_perl
OK - Nothing changed!!
```

[Agent side]

```
agent@agent-virtual-machine:/etc/nagios$ /usr/local/nagios/libexec/check_nrpe -H 172.16.171.150
NRPE v3.2.1
```

Lưu ý: Nếu gặp các trường hợp sau:

1.

```
CHECK_NRPE: Error - Could not connect to 172.16.171.150: Connection reset by peer
```

=> Chưa thêm allowed_host

2.

```
connect to address 172.16.171.150 port 5666: No route to host
connect to host 172.16.171.150 port 5666: No route to host
```

=> bị firewall chặn => fix: iptables -F ở cả Agent và Server

3.

```
NRPE: Command 'check_disk' not defined

NRPE: Command 'check_apt' not defined

NRPE: Command 'check_cpu_stats' not defined

NRPE: Command 'check_init_service' not defined

NRPE: Command 'check_load' not defined

NRPE: Command 'check_mem' not defined

NRPE: Command 'check_open_files' not defined
```

=> Méo biết

=> fix: [Agent Side]

```
agent@agent-virtual-machine:/etc/nagios$ sudo nano /etc/nagios/nrpe.cfg

log_facility=daemon
pid_file=/var/run/nagios/nrpe.pid
server_port=5666
nrpe_user=nrpe
nrpe_group=nrpe
allowed_hosts=172.16.171.150
dont_blame_nrpe=1
debug=0
command_timeout=60
connection_timeout=300
include_dir=/etc/nagios/nrpe.d/

command[checkfolder_perl]=perl /usr/lib/nagios/plugins/NagiosCheckFolder.pl
command[check_users]=/usr/lib/nagios/plugins/check_users -w 5 -c 10
command[check_load]=/usr/lib/nagios/plugins/check_load -w 15,10,5 -c 30,25,20
command[check_swap]=/usr/local/nagios/libexec/check_swap -w 50% -c 20%
command[check_disk]=/usr/lib/nagios/plugins/check_disk -w 20% -c 10% -p /
command[check_apt]=/usr/lib/nagios/plugins/check_apt -U
command[check_cpu_stats]=/usr/local/nagios/libexec/check_cpu_stats.sh -w 85 -c 95
command[check_init_service]=/usr/local/nagios/libexec/check_init_service cron
command[check_mem]=/usr/local/nagios/libexec/custom_check_mem -w 20 -c 10
command[check_init_service]=/usr/local/nagios/libexec/check_init_service ssh
command[check_procs]=/usr/local/nagios/libexec/check_procs -w 150 -c 250
```
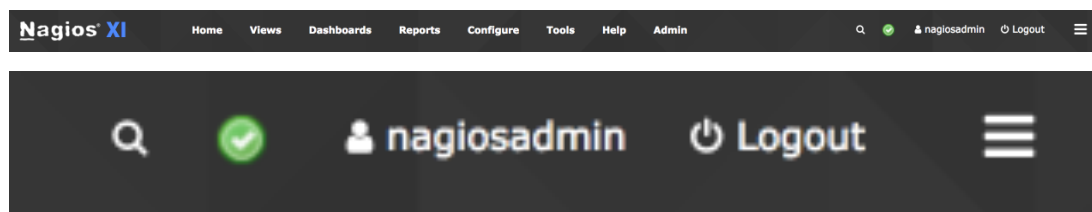
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Dành cho mấy đứa lười ☺

command[checkfolder_perl]=perl /usr/lib/nagios/plugins/NagiosCheckFolder.pl
command[check_users]=/usr/lib/nagios/plugins/check_users -w 5 -c 10
command[check_load]=/usr/lib/nagios/plugins/check_load -w 15,10,5 -c 30,25,20
command[check_swap]=/usr/local/nagios/libexec/check_swap -w 50% -c 20%
command[check_disk]=/usr/lib/nagios/plugins/check_disk -w 20% -c 10% -p /
command[check_apt]=/usr/lib/nagios/plugins/check_apt -U
command[check_cpu_stats]=/usr/local/nagios/libexec/check_cpu_stats.sh -w 85 -c 95
command[check_init_service]=/usr/local/nagios/libexec/check_init_service cron
command[check_mem]=/usr/local/nagios/libexec/custom_check_mem -w 20 -c 10
command[check_init_service]=/usr/local/nagios/libexec/check_init_service ssh
command[check_procs]=/usr/local/nagios/libexec/check_procs -w 150 -c 250

4.
Status bị chấm than đỏ

=> Fix
https://www.linuxincluded.com/nagios-ndo2db-not-running/