

# How to solve monitoring problems with Nagios

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# Introduction & Agenda

- Different aspect of essence of monitoring
- Trick to make a plugin pass through firewall
- Overview of NSClient++ config file
- Monitoring usage of Windows cluster shared disk



# Essence of monitoring

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# Essence of monitoring

A brief definition:

To alert you something abnormal you care

# Essence of monitoring

Let's try to imagine:  
a beautiful girl.....



# Essence of monitoring

What do we learn from contacting this girl?

Connection should be built first.

More trust more information.

The effects of different languages may differ.

# Essence of monitoring

To some degree, to establish host and service monitoring is similar to contact a girl.

- To build connection or even trust before monitoring.
- To evaluate different ways of connection
- To ask right questions:

Detective Spooner: Is there something you want tell me?

Dr. Lanning: I'm sorry. My responses are limited. You must ask the right questions.

# Something to remember

- Nagios Exchange - a treasury
- Try to search with different key words combination:

Nagios ABC

Nagios monitor ABC

monitor ABC

“other tool” ABC

(anything about) ABC

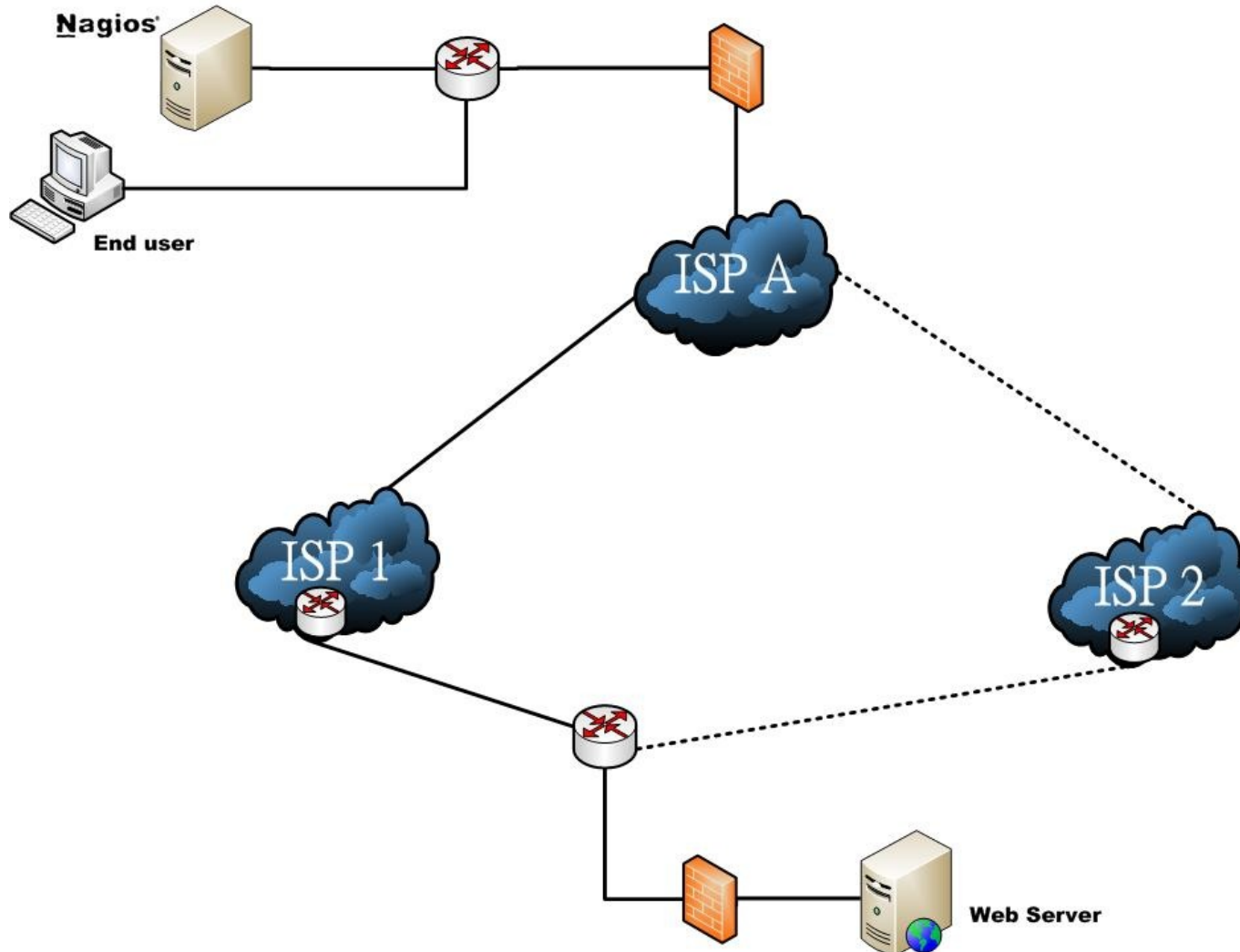
.....



Make a plugin to pass through  
firewall

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# Make a plugin to pass through firewall



# Start to think

Can Nagios monitor this?

How can we monitor this with Nagios?



# Start to think more

- How can we find ISP switching?
- Is there any plugin in Nagios exchange able to do this?
- When plugin is blocked, what can we do?
- Let's imagine again!

# Tweak the plugin

Original script:

```
#!/bin/bash  
PROG="/usr/bin/traceroute -n"  
GREP="/bin/egrep"  
HOST=$1  
FILE=/tmp/check_tracert-`date +%N`.txt  
START="$2"  
LAST="$3"
```

# Tweak the plugin

Modified script:

```
#!/bin/bash  
PROG="sudo /usr/bin/traceroute -n -T"  
GREP="/bin/egrep"  
HOST=$1  
FILE=/tmp/check_tracert-`date +%N`.txt  
START="$2"  
LAST="$3"
```



# Modify /etc/sudoers

To grant root privilege and avoid requiretty error:

```
nagios ALL=(ALL) NOPASSWD: /usr/local/nagios/libexec/check_2hoptraceroutetcp.sh  
.....  
#Defaults requiretty
```

# Quote for you

“An idea is nothing more or less than a new combination of old elements.”

~James Webb Young

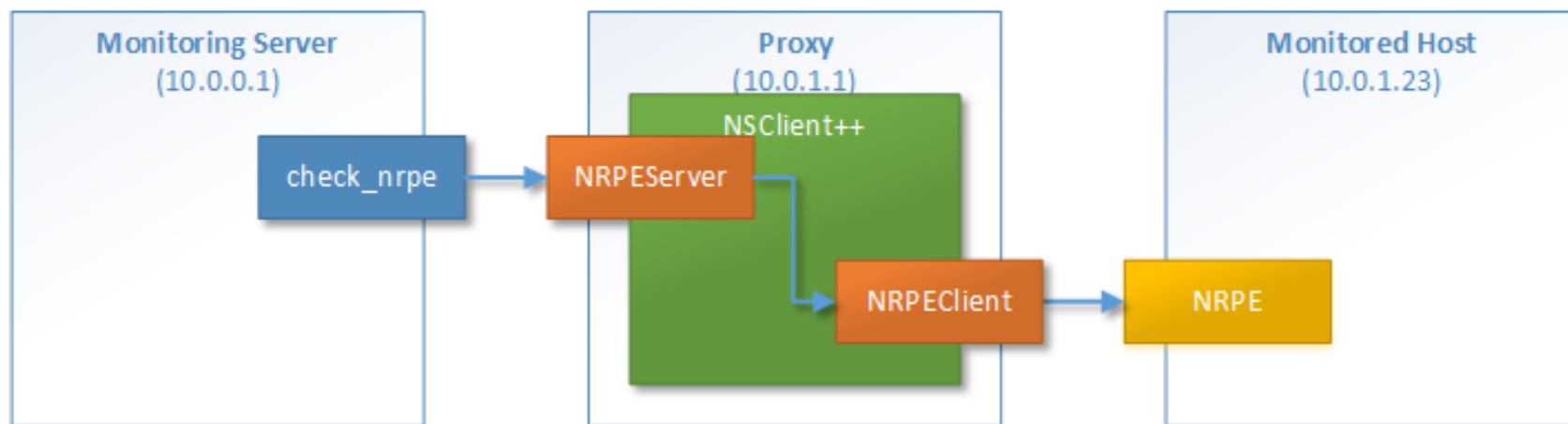
# Overview of NSClient++ config



# Overview of NSClient++ config

- The structure of nsclient.ini
- Enable module + finish the setting for individual module + define command or script + restart NSClient++ daemon
- `check_nrpe -H 10.1.2.3 -p 5666 -c command` (we define at nsclient.ini)

# “Indirect check” with NSClient++: to build a Windows proxy



- Enable NRPEServer and NRPEClient module
- Allow Nagios access at `[/settings/NRPE/server]`
- Define the command at `[/settings/external scripts/scripts]`
- `check_abc=nscpp nrpe -H [remote host IP] -P 5666 -c get_cpu [remote command]`

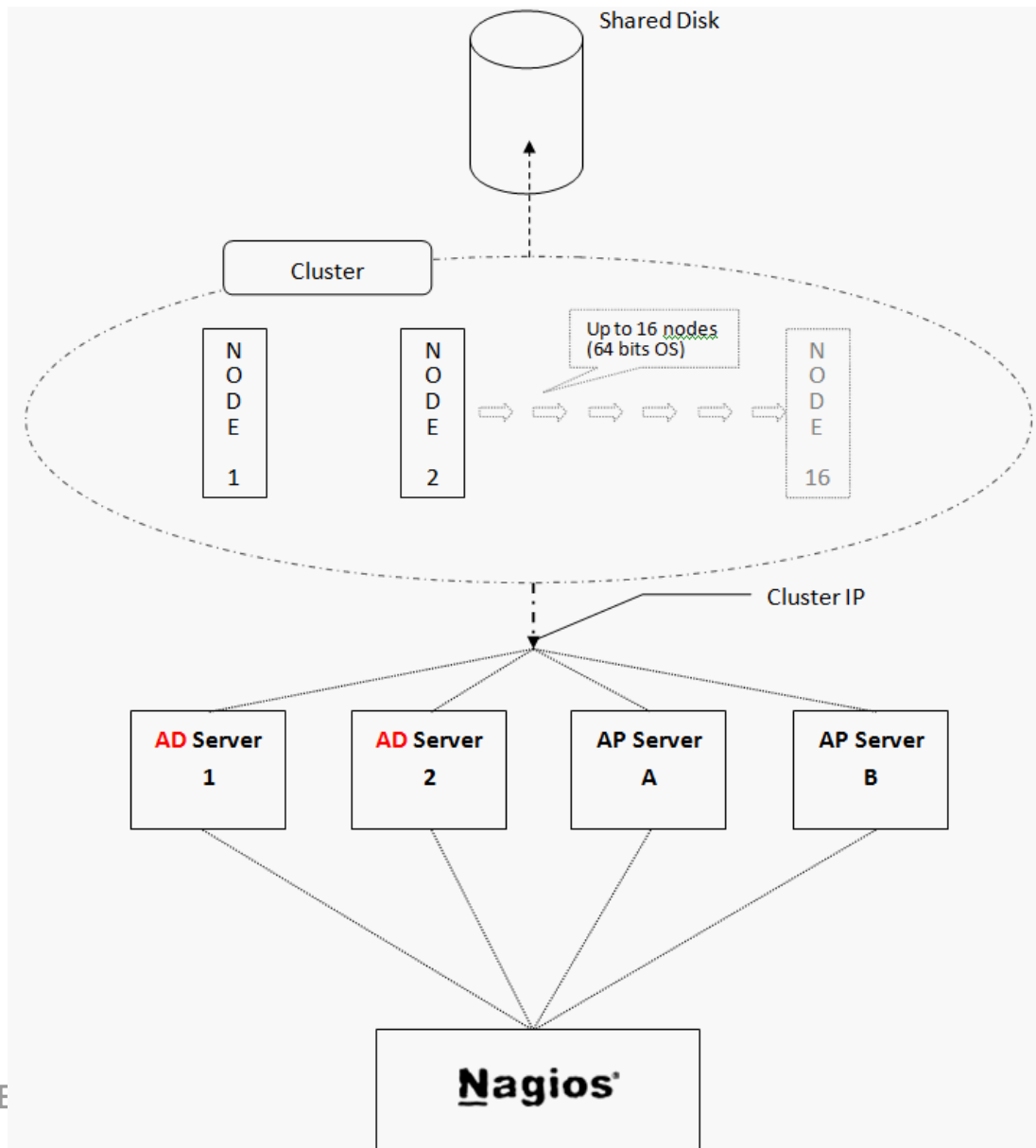
# Monitoring usage of Windows cluster shared disk



# Monitoring usage of Windows cluster shared disk

- Scenario
- Problems of traditional monitoring way

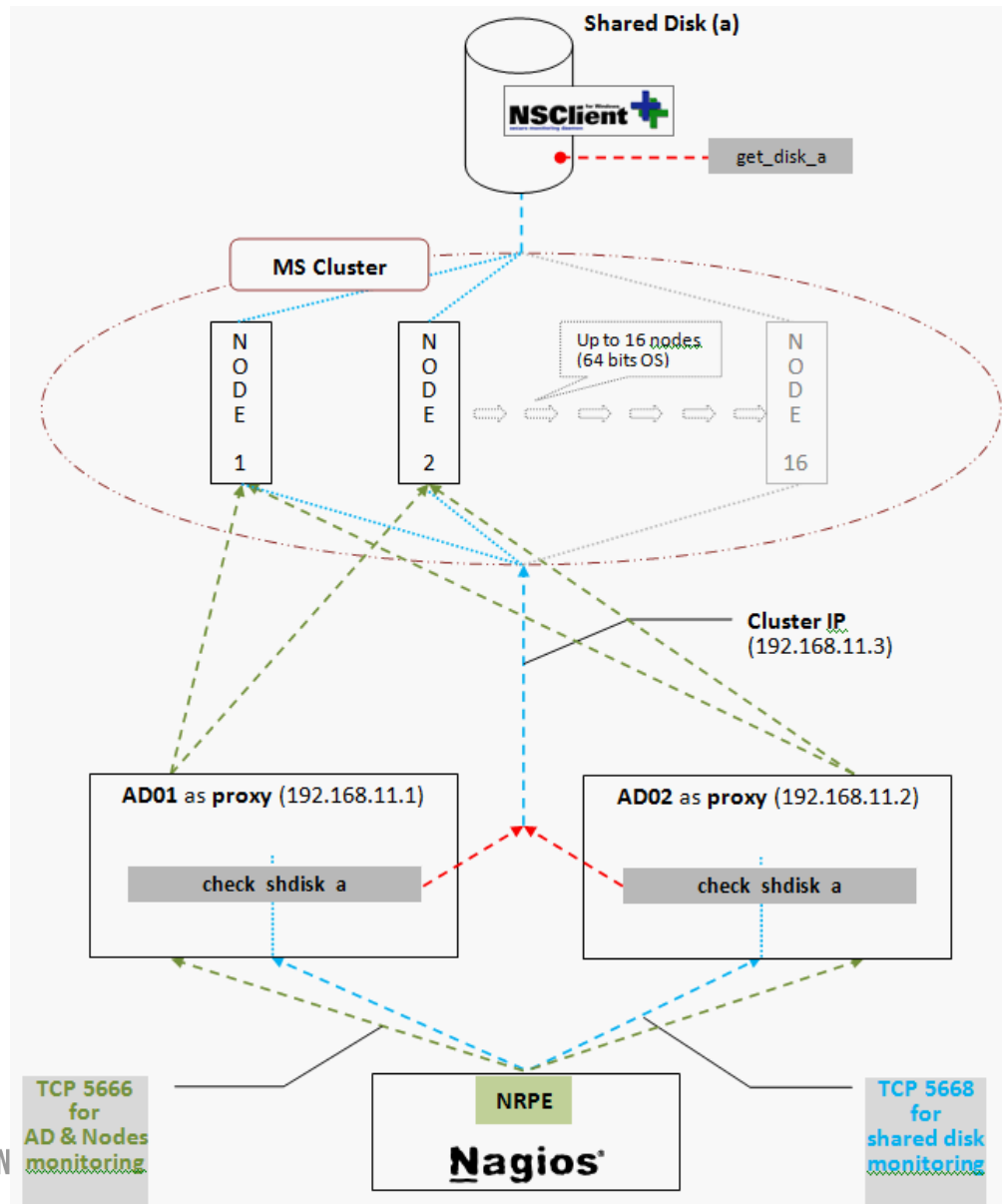
# Monitoring usage of Windows cluster shared disk - Scenario/Traditional ways/Problems



# Monitoring usage of Windows cluster shared disk - Better solution

- What we hope our solution can do:  
automatic
- What are the pieces required for this puzzle?
  - \* NSClient++ located at proxy, nodes, and shared disk
  - \* NSClient++ daemon as a part of Windows cluster resource

# Monitoring usage of Windows cluster shared disk





# Config on nsclient.ini

- Config at Windows proxy
- Config at Nodes
- Config at shared disk

# Make NSClient++ daemon be a part of Windows cluster resource

- At C:\Program Files of any cluster node, copy the NSClient++ folder to the shared disk.
- How to make NSClient++ daemon be a part of Windows cluster resource (step by step)

# Sample command on Nagios

```
define command{  
    command_name check_nrpe_drivesize  
    command_line /usr/local/nagios/libexec/  
check_nrpe -H $HOSTADDRESS$ -p 5666 -c  
check_shared_drive  
}
```



# Sample service on Nagios

```
define service {  
    use                generic-service  
    host_name          ms_cluster_host_01  
    service_description Shared Disk Usage  
    check_command      check_nrpe_drivesize  
    servicegroups      windows  
}
```

# What do we learn?

- A different aspect to watch essence of monitoring
- Trick to make a plugin pass through firewall
- NSClient++ config file
- How to monitor Windows cluster shared disk via proxy

# Conclusion

- Keeping gathering and masticating materials for your Nagios monitoring
- Learn from anything to enhance your monitoring capacity.
- To solve problems is like to collect jewels needed to make a necklace.
- Nagios is the most essential jewel to make your own necklace!



# The End

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