

Creating a Web Server Monitoring Service

Before we start the demonstration of monitoring Apache HTTP service on remote client make sure that you have gone through the Nagios installation process. This demonstration documentation is the continuation of the NAGIOS INSTALLATION.

Commands with green font represents master, white font terminal represents slave.

Step 1: Install apache web server on the client machine.

ubuntu@ip-172-31-26-104: ~

```
ubuntu@ip-172-31-26-104:~$ sudo apt update
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic InRelease
Hit:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu bionic-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu bionic-security InRelease
Reading package lists... Done
Building dependency tree
Reading state information... Done
120 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-26-104:~$
```

Step 2: Run the following two commands after that.

ubuntu@ip-172-31-26-104: ~

```
ubuntu@ip-172-31-26-104:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  ...
```

Step 3: Now, check if the web server is up and running.

You can add passwords and enter the user information as shown below.

ubuntu@ip-172-31-26-104: ~

```
ubuntu@ip-172-31-26-104:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
  Drop-In: /lib/systemd/system/apache2.service.d
           └─apache2-systemd.conf
   Active: active (running) since Mon 2019-01-07 12:37:40 UTC; 2min 19s ago
     Main PID: 17663 (apache2)
        Tasks: 55 (limit: 1152)
      CGroup: /system.slice/apache2.service
              └─17663 /usr/sbin/apache2 -k start
                └─17666 /usr/sbin/apache2 -k start
                  └─17667 /usr/sbin/apache2 -k start

Jan 07 12:37:40 ip-172-31-26-104 systemd[1]: Starting The Apache HTTP Server...
Jan 07 12:37:40 ip-172-31-26-104 systemd[1]: Started The Apache HTTP Server.
ubuntu@ip-172-31-26-104:~$
```

Looks fine!

Step 4: Run the following commands to complete the user adding process.

```
ubuntu@ip-172-31-26-104: ~
```

```
ubuntu@ip-172-31-26-104:~$ sudo systemctl start apache2
ubuntu@ip-172-31-26-104:~$
```

Step 5: Open browser and enter the following URL.



Add the service definitions in the master machine

Step 6: Add the service definitions in the host configuration file.

ubuntu@ip-172-31-18-63: ~

```
ubuntu@ip-172-31-18-63:~$ sudo nano /usr/local/nagios/etc/servers/MyHost01.cfg
ubuntu@ip-172-31-18-63:~$
```

ubuntu@ip-172-31-18-63: ~

```
GNU nano 2.9.3 /usr/local/nagios/etc/servers/MyHost01.cfg

max_check_attempts      2
check_interval          2
retry_interval          2
check_period            24x7
check_freshness         1
contact_groups          admins
notification_interval    2
notification_period     24x7
notifications_enabled    1
register                1
}

define service {
    use         generic-service      ; Inherit default values from a template
    host_name   Linux_Host_001
    service_description HTTP
    check_command check_http
}

#####
# END OF FILE
#####
```

Step 7: Check the nagios configuration file status before starting nagios again.

ubuntu@ip-172-31-18-63: ~

```
ubuntu@ip-172-31-18-63:~$ sudo /usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg

Nagios Core 4.4.2
Copyright (c) 2009-present Nagios Core Development Team and Community Contributors
Copyright (c) 1999-2009 Ethan Galstad
Last Modified: 2018-08-16
License: GPL

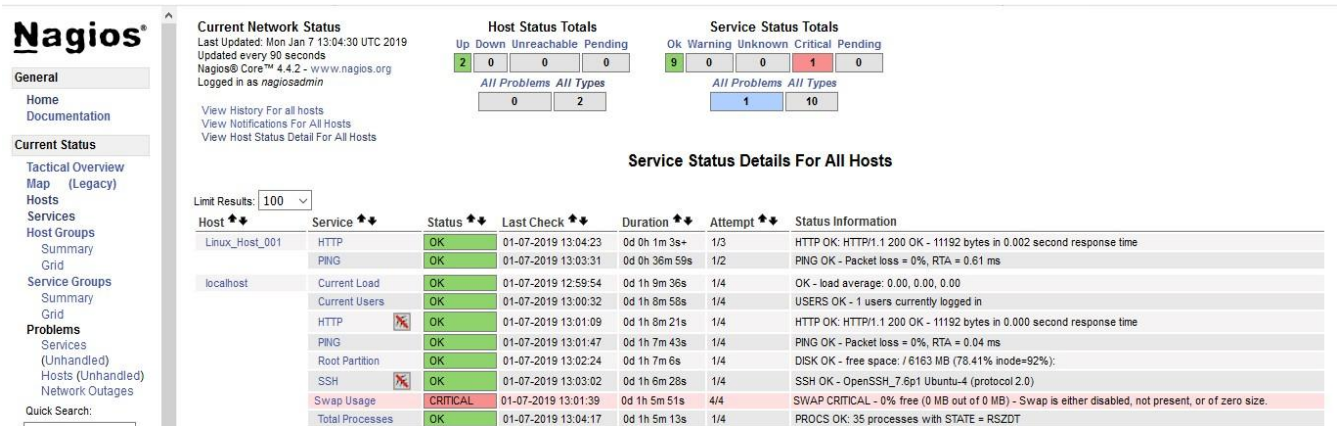
Website: https://www.nagios.org
Reading configuration data...
  Read main config file okay...
  Read object config files okay...
```

Step 8: Now with the given command make the required configurations.

ubuntu@ip-172-31-18-63: ~

```
ubuntu@ip-172-31-18-63:~$ sudo service nagios restart
ubuntu@ip-172-31-18-63:~$
```

Step 9: Now go to browser, enter <http://masterIP/nagios/>. There click on **Services**. You can see a new **HTTP service** added with our last **PING service** in the **Linux_Host_001** client.



Nagios®

Current Network Status
 Last Updated: Mon Jan 7 13:04:30 UTC 2019
 Updated every 90 seconds
 Nagios® Core™ 4.4.2 - www.nagios.org
 Logged in as nagiosadmin

Host Status Totals

Up	Down	Unreachable	Pending
2	0	0	0

Service Status Totals

Ok	Warning	Unknown	Critical	Pending
9	0	0	1	0

Service Status Details For All Hosts

Limit Results: 100

Host	Service	Status	Last Check	Duration	Attempt	Status Information
Linux_Host_001	HTTP	OK	01-07-2019 13:04:23	0d 0h 1m 3s+	1/3	HTTP OK: HTTP/1.1 200 OK - 11192 bytes in 0.002 second response time
	PING	OK	01-07-2019 13:03:31	0d 0h 36m 59s	1/2	PING OK - Packet loss = 0%, RTA = 0.61 ms
localhost	Current Load	OK	01-07-2019 12:59:54	0d 1h 9m 36s	1/4	OK - load average: 0.00, 0.00, 0.00
	Current Users	OK	01-07-2019 13:00:32	0d 1h 8m 58s	1/4	USERS OK - 1 users currently logged in
	HTTP	OK	01-07-2019 13:01:09	0d 1h 8m 21s	1/4	HTTP OK: HTTP/1.1 200 OK - 11192 bytes in 0.000 second response time
	PING	OK	01-07-2019 13:01:47	0d 1h 7m 43s	1/4	PING OK - Packet loss = 0%, RTA = 0.04 ms
	Root Partition	OK	01-07-2019 13:02:24	0d 1h 7m 6s	1/4	DISK OK - free space: / 6163 MB (78.41% inode=92%):
	SSH	OK	01-07-2019 13:03:02	0d 1h 6m 28s	1/4	SSH OK - OpenSSH_7.6p1 Ubuntu-4 (protocol 2.0)
	Swap Usage	CRITICAL	01-07-2019 13:01:39	0d 1h 5m 51s	4/4	SWAP CRITICAL - 0% free (0 MB out of 0 MB) - Swap is either disabled, not present, or of zero size.
	Total Processes	OK	01-07-2019 13:04:17	0d 1h 5m 13s	1/4	PROCS OK: 35 processes with STATE = RSZDT

Congratulations! You have successfully added a Web Server Monitoring Service in your Client machine.