Request Information				
Requestor	Rovie G. Salvatierra			
Implementing Team	Systems and Server Operations			
Ticket Number/s	201915330			
Change Classification		Major	**X**	Minor
After the fact		Yes	**X**	No
Emergency		Yes	**X**	No
Proposed Change Date	May 10, 2019			
Proposed Change Start/End Time	18:00 – 20:00			
Proposed Change Verification Time	20:15			

Objective of the change

To adjust the latency threshold of the following servers in Nagios:

- Batangas (208.74.77.163)
- Coron (208.74.77.164)
- Boracay (208.74.77.172)
- Pampanga (208.74.77.165)
- Rizal (208.74.77.167)

Technical/Operational Impact of the change

Negative:	Beneficial:	Neutral:
No server downtime during the implementation, and no production will be affected.	False positive alerts will be removed, if not, reduced.	The graph will improve, showing the server state to be mostly OK.

Affected IT Infrastructure components

Site	Hostname	IP Address	Function
GL2	JKA-VLIN-NMS01	172.22.9.4	Monitoring server in GL2

Affected Departments and Corresponding Contact Persons

Department	Contact Name	Contact Info
Server Operations	Rovie Salvatierra	0917-627-4325

Test Environment implementation and Verification Summary

We don't have a test environment for this, but we will test it with one CoreSite server, and see how the graph goes for a week.

If latency alert improves during the testing, we will proceed with the rest of the CoreSite servers listed in the Objective section.

1. Log on to Nagios server via SSH at 172.22.9.4 via port 3489, using your own credentials.
2. Switch to the root environment by sending the command **sudo su -**.

```
[Rovver-GS:~ macbookpro$ ssh -l rsalvatierra 172.22.9.4 -p3489
[rsalvatierra@172.22.9.4's password:
 Last login: Tue Apr 16 18:27:00 2019 from 172.18.133.201
[[rsalvatierra@gl2-vlin-nms01 ~]$ sudo su -
[[sudo] password for rsalvatierra:
 Last login: Wed May  1 18:56:33 PST 2019 on pts/0
 [root@gl2-vlin-nms01 ~]#
```

Figure 1

3. Edit the configuration file by entering the command below:
   > vi /nagios_host/windows.cfg
4. Scroll down until you find the list US COLO SERVERS section of the file.

```
macbookpro — root@gl2-vlin-nms01:~ — ssh -l root
############################ US COLO SERVERS ############

define service{
        use                             local-service
        host_name                       MKT-JKA-Batangas
        service_description             PING
        check_command                   check_ping!215.0,5
        }
define service{
        use                             local-service
        host_name                       MKT-JKA-Rizal
        service_description             PING
        check_command                   check_ping!170.0,5
        }
define service{
        use                             local-service
        host_name                       MKT-JKA-Pampanga
        service_description             PING
        check_command                   check_ping!170.0,5
        }

define service{
        use                             local-service
        host_name                       MKT-JKA-Boracay
        service_description             PING
```

Figure 2

5. We will test this initially with Batangas server. Based on the historical data as shown below, the average RTA is 214.11ms, the minimum is 172.69ms, and the maximum is 225.56ms.

04-01-2019 00:00:00	04-02-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.74 ms
04-02-2019 00:00:00	04-03-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.83 ms
04-03-2019 00:00:00	04-04-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 221.17 ms
04-04-2019 00:00:00	04-05-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.67 ms
04-05-2019 00:00:00	04-06-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 225.56 ms
04-06-2019 00:00:00	04-07-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 223.79 ms
04-07-2019 00:00:00	04-08-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.44 ms
04-08-2019 00:00:00	04-09-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.85 ms
04-09-2019 00:00:00	04-10-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 224.20 ms
04-10-2019 00:00:00	04-10-2019 15:09:00	0d 15h 9m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.92 ms
04-10-2019 15:09:00	04-10-2019 15:22:00	0d 0h 13m 0s	SERVICE OK (HARD)	PING OK - Packet loss = 0%, RTA = 173.44 ms
04-10-2019 15:22:00	04-11-2019 00:00:00	0d 8h 38m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 223.37 ms
04-11-2019 00:00:00	04-12-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 221.02 ms
04-12-2019 00:00:00	04-13-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 222.15 ms
04-13-2019 00:00:00	04-13-2019 09:32:09	0d 9h 32m 9s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.70 ms
04-13-2019 09:32:09	04-13-2019 11:20:11	0d 1h 48m 2s	SERVICE OK (HARD)	PING OK - Packet loss = 0%, RTA = 173.57 ms
04-13-2019 11:20:11	04-14-2019 00:00:00	0d 12h 39m 49s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.85 ms
04-14-2019 00:00:00	04-15-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 221.20 ms
04-15-2019 00:00:00	04-16-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.82 ms
04-16-2019 00:00:00	04-17-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.79 ms
04-17-2019 00:00:00	04-17-2019 21:18:35	0d 21h 18m 35s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.85 ms
04-18-2019 00:00:00	04-19-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.84 ms
04-19-2019 00:00:00	04-20-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.04 ms
04-20-2019 00:00:00	04-20-2019 20:17:33	0d 20h 17m 33s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 220.63 ms
04-21-2019 00:00:00	04-22-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.80 ms
04-22-2019 00:00:00	04-23-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.77 ms
04-23-2019 00:00:00	04-23-2019 17:10:48	0d 17h 10m 48s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 219.76 ms
04-23-2019 17:10:48	04-23-2019 17:18:48	0d 0h 8m 0s	SERVICE OK (HARD)	PING OK - Packet loss = 0%, RTA = 173.39 ms
04-23-2019 17:18:48	04-24-2019 00:00:00	0d 6h 41m 12s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.12 ms
04-24-2019 00:00:00	04-25-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.13 ms
04-25-2019 00:00:00	04-26-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.21 ms
04-26-2019 00:00:00	04-27-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.29 ms
04-27-2019 00:00:00	04-27-2019 18:38:59	0d 18h 38m 59s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.39 ms
04-27-2019 18:38:59	04-27-2019 22:40:55	0d 4h 1m 56s	SERVICE OK (HARD)	PING OK - Packet loss = 0%, RTA = 172.69 ms
04-27-2019 22:40:55	04-28-2019 00:00:00	0d 1h 19m 5s	SERVICE CRITICAL (HARD)	CRITICAL - Network Unreachable (208.74.77.163)
04-28-2019 00:00:00	04-29-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.72 ms
04-29-2019 00:00:00	04-30-2019 00:00:00	1d 0h 0m 0s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.31 ms
04-30-2019 00:00:00	04-30-2019 16:16:11	0d 16h 16m 11s	SERVICE CRITICAL (HARD)	PING CRITICAL - Packet loss = 0%, RTA = 213.10 ms
04-30-2019 16:21:07	04-30-2019 16:27:56	0d 0h 6m 49s	SERVICE WARNING (HARD)	PING WARNING - Packet loss = 0%, RTA = 213.20 ms
04-30-2019 16:31:07	05-01-2019 00:00:00	0d 7h 28m 53s	SERVICE OK (HARD)	PING OK - Packet loss = 0%, RTA = 213.21 ms

Figure 3

> press shift + A simultaneously to edit the file, then on the check_command line, edit the check ping value and set the first value to 215.0 and the second value to 225.0

```
service_description             PING
check_command                   check_ping!170.0,50%!180.0,50% -p100
}
```

Figure 4

6. Save the settings by pressing **esc**, then entering the command **:wq!**.
7. Restart the service by entering **service nagios restart**.

Test Environment Results Summary

We are yet to gather the data after we have implemented the testing to Batangas server. We're expecting that the latency graph reports will improve.

Configuration Change Template

Baseline File	3.1.140 JKA-VLIN-NMS01
Baseline Version	3

Baseline File Changes:

Existing Configuration	Proposed Change	Impact	Section
The average threshold is 170.0 and the critical is set to 180.0	Adjust the threshold.	The baseline for all CoreSite servers will be updated.	Configuration tab

Physical Implementation Procedures / Advisory

No physical implementation will be facilitated.

Backup Procedures

1. Log on to 172.22.9.4 via SSH using your own elevated credentials.
2. Switch to the root environment by entering the command **sudo su -**.
3. Navigate to Nagios host by sending the command **cd /nagios_host**.
4. Copy the configuration file to your local folder. See command below:
    - cp /nagios_host/windows.cfg /home/rsalvatierra/windows_mmddyyy.cfg
5. Log on to 172.17.0.1 (Backup storage) via SSH using your own credentials.
6. Switch to the root environment then navigate to the Monitoring database backup folder:
    - cd /four_terra/home/Cacti_DB/
7. Copy the back-up configuration file by sending the command below:
    - scp -P3489 rsalvatierra@172.22.9.4:/home/rsalvatierra/windows_mmddyyy.cfg .

Technical Configuration Procedures

We will only proceed with this when the result of the initial testing is successful.

1. Log on to Nagios server via SSH at 172.22.9.4 via port 3489, using your own credentials.
2. Switch to the root environment by sending the command **sudo su -**.
3. Edit the configuration file by entering the command below:
   > vi /nagios_host/windows.cfg
4. Scroll down until you find the list **US COLO SERVERS** section of the file.
5. Press shift + A simultaneously to edit the file, then on the check_command line, edit the check ping value and set the first value to 215.0 and the second value to 225.0.
6. Save the settings by pressing **esc**, then entering the command **:wq!**.
7. Restart the service by entering **service nagios restart**.

Verification Procedures

1. Log on to //172.22.9.4/nagios using the nagios credentials.
2. From the main page, click on Configuration > Services.
3. Scroll down and check each CoreSite server. The Check Command should show the updated values.

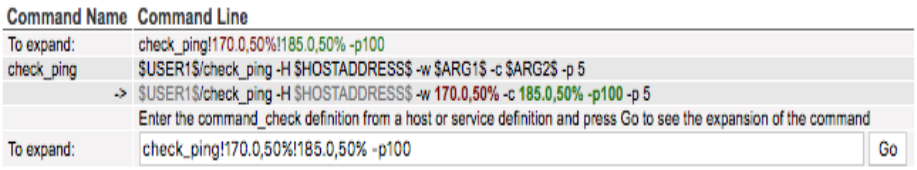

Figure 5

4. Check the latency graph from the Services section. The status should no longer show as critical.

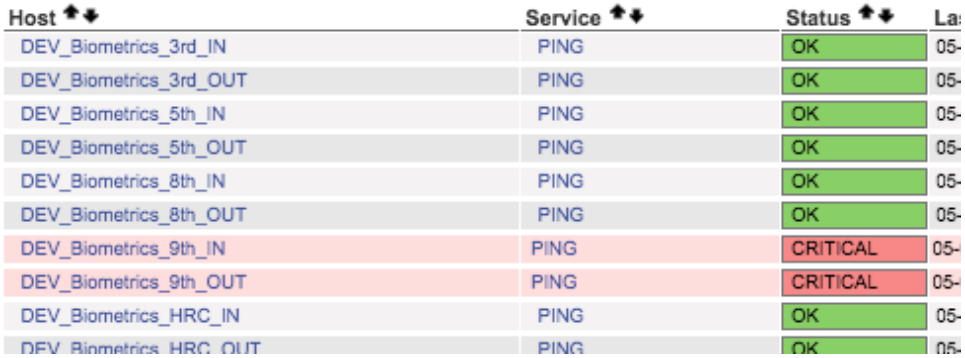

Figure 6

Back-out Procedures

1. Log on to 172.22.9.4 via SSH using your own elevated credentials.
2. Switch to the root environment by entering the command **sudo su -**.
3. Navigate to Nagios host by sending the command cd **/nagios_host**.
4. Copy the back-up configuration file by sending the command below:
   - scp -P3489 username@172.17.0.1: /four_terra/home/Cacti_DB/windows_mmddyyy.cfg .
5. Send the **ls -l** command; you should see windows configuration backup copy.
6. Switch the windows back-up configuration file and the current windows configuration file by entering the command below:
   - mv /nagios_host/windows.cfg /nagios_host/windows_old.cfg
   - mv /nagios_host/ windows_mmddyyy.cfg /nagios_host/windows.cfg
7. Restart the service by entering **service nagios restart**.