

Process Owner: IT Operations	FORM	F-CMG-3.1
	Configuration Change Request	

Request Information				
Requestor	Maurice Mendoza			
Implementing Team	Network Operations			
Ticket Number/s	201917653			
Change Classification	X	Major		Minor
After the fact		Yes	X	No
Emergency		Yes	X	No
Proposed Change Date	July 217, 2019			
Proposed Change Start/End Time	6:00 PM – 9:00 PM			
Proposed Change Verification Time	7:00 PM			

Objective of the change
To upgrade the current firmware of FortiGate Thor from 6.0 to 6.2.1 as advised by Fortinet support. This is regarding the memory leak issue on the current firmware that overutilizes the memory and causes the unit to go Conserve mode.

Technical/Operational Impact of the change		
Negative: Thor will be unavailable during the upgrade.	Beneficial: This will fix the current memory leak issue.	Neutral: Rerouting of all the traffic of Jaka to G2.

Affected IT Infrastructure components			
Site	Hostname	IP Address	Function
JAKA	THOR	172.17.3.101	Site Firewall
JAKA	ZEUS	172.17.3.106	Core switch

Affected Departments and corresponding contact persons		
Department	Contact Name	Contact Info
IT	Rynel Yanes	09178535630
Network Operations	Maurice Mendoza	09176328103

Test Environment implementation and Verification Summary
Since a test environment is not available, refer to the Fortinet Cookbook instead: <a href="https://docs.fortinet.com/document/fortigate/6.0.0/cookbook/761847/upgrading-fortigate-firmware">https://docs.fortinet.com/document/fortigate/6.0.0/cookbook/761847/upgrading-fortigate-firmware</a>

Test Environment Results Summary
For the testing, UAT will be conducted after the upgrade. This includes the testing of all the tools that the campaigns in JAKA are using and it should be accessible as usual.

Process Owner: IT Operations	FORM	F-CMG-3.1
	Configuration Change Request	

### Configuration Change Template

Baseline File	3.1.401
Baseline Version	April 18, 2019

#### Baseline File Changes:

Existing Configuration	Proposed Change	Impact	Section
Current firmware version of FortiGate is 6.0	To upgrade the current firmware of FortiGate Thor from 6.0 to 6.2.1.	Firewall Firmware version	3.1.401

#### Physical Implementation Procedures / Advisory

No physical changes for this change.

"Everyone,

We will be having Network Maintenance and testing this coming Saturday, July 27 between 6 pm - 9 pm. Possible 1 to 5 seconds of downtime but not expected.

After the upgrade, all campaigns are requested to have a UAT. The IT team will be on standby for support.

For any concerns please email us at [itgroup@openaccessmarketing.com](mailto:itgroup@openaccessmarketing.com) or call us at 4034.

Thank you.

Regards,"

#### Backup Procedures

Access FortiGate Thor via Web and Zeus via SSH.

Backup the configurations files using the naming conventions:

BACKUP\_DEVICENAME\_DATE.cfg

Example: BACKUP\_THOR\_7272019.cfg

BACKUP\_DEVICENAME\_DATE.cfg

Example: BACKUP\_ZEUS\_7272019.cfg

Process Owner: IT Operations	FORM	F-CMG-3.1
	Configuration Change Request	

#### Technical Configuration Procedures

1. Access Zeus via SSH/CLI.
2. Reroute all Jaka traffic to G2 by applying the commands below:

```
no ip route 0.0.0.0 0.0.0.0 172.16.1.2
ip route 0.0.0.0 0.0.0.0 172.22.0.1
```

3. Access Fortigate Thor via Web.

#### FortiOS Version Upgrade Path

Current Product:

FortiGate-501E

Current FortiOS Version:

6.0.4

Upgrade To FortiOS Version:

6.2.1

Upgrade information for older FortiOS versions (before 5.2.9) can be found [here](#).

GO

#### Recommended Upgrade Path

Following is the recommended FortiOS migration path for your product.

Version	Build Number
6.0.4	0231
6.2.1	0932

4. Go to System > Firmware, Select browse then select the file **FGT\_501E-v6-build0932-FORTINET.out** located at [\\172.17.0.124\it\NetworkOps](#). This will upgrade the current firmware to 6.2.1 build 0932.
5. Wait for the upgrade to finish then proceed with the UAT.
6. For the UAT, use then apply the commands below to Zeus. Make sure to do the commands below per campaign before proceeding to the next.

#### CirclesLife

```
access-list 20 permit 172.18.36.0 0.0.0.255
route-map CL permit 10
match ip address 20
set ip next-hop 172.16.1.2
int vlan 36
ip policy route-map CL
```

#### Mous

```
access-list 21 permit 172.18.35.0 0.0.0.255
route-map Mous permit 10
match ip address 21
set ip next-hop 172.16.1.2
```

Process Owner: <b>IT Operations</b>	<b>FORM</b>	<b>F-CMG-3.1</b>
	<b><i>Configuration Change Request</i></b>	

int vlan 35  
ip policy route-map Mous

**SheerID**

access-list 22 permit 172.18.32.0 0.0.0.255  
route-map SheerID permit 10  
match ip address 22  
set ip next-hop 172.16.1.2  
int vlan 32  
ip policy route-map SheerID

**Marketing**

access-list 23 permit 172.18.31.0 0.0.0.255  
route-map Marketing permit 10  
match ip address 23  
set ip next-hop 172.16.1.2  
int vlan 31  
ip policy route-map Marketing

**Postmates**

access-list 24 permit 172.18.137.0 0.0.0.255  
route-map Postmates permit 10  
match ip address 24  
set ip next-hop 172.16.1.2  
int vlan 137  
ip policy route-map Postmates

7. After the UAT, route back the traffic to Jaka.

no ip route 0.0.0.0 0.0.0.0 172.22.0.1  
ip route 0.0.0.0 0.0.0.0 172.16.1.2

**Verification Procedures**

1. Check each tools of campaigns that are in Jaka, they should be accessible.
2. Check with Postmates if there are any issues regarding Ring Central and Voice.
3. Check if the Fortigate Firmware has been upgraded to the latest available.
4. Check the current memory usage of Thor then compare it to the upcoming week.
5. Check and verify the HA Slave if it acquired the same upgrade as well.

Process Owner: IT Operations	FORM	F-CMG-3.1
	Configuration Change Request	

Back-out Procedures
<ol style="list-style-type: none"> <li>Go to System &gt; Firmware, Select browse then select the file <b>FGT_501E-v6-build0231-FORTINET.out</b> located at <a href="\\172.17.0.124\it\NetworkOps">\\172.17.0.124\it\NetworkOps</a>. This will downgrade the current firmware to 6.0.4 build 0231.</li> <li>Access Zeus via SSH/Console, then copy and paste the commands below: <p><b>CirclesLife</b></p> <pre>int vlan 36 no ip policy route-map CL no route-map CL permit 10 no access-list 20 permit 172.18.36.0 0.0.0.255</pre> <p><b>Mous</b></p> <pre>int vlan 35 no ip policy route-map Mous no route-map Mous permit 10 no access-list 21 permit 172.18.35.0 0.0.0.255</pre> <p><b>SheerID</b></p> <pre>int vlan 32 no ip policy route-map SheerID no route-map SheerID permit 10 no access-list 22 permit 172.18.32.0 0.0.0.255</pre> <p><b>Marketing</b></p> <pre>int vlan 31 no ip policy route-map Marketing no route-map Marketing permit 10 no access-list 23 permit 172.18.31.0 0.0.0.255</pre> <p><b>Postmates</b></p> <pre>int vlan 137 no ip policy route-map Postmates no route-map Postmates permit 10 no access-list 24 permit 172.18.137.0 0.0.0.255</pre> </li> </ol>