at

February, 14th 2025

D

OCUMENT CONTROL

INITIAL DRAFTED BY

Name	Title	Date	Phone	Sign
Muhammad Maulani	Service Point	14 February 2025	082255805085	

REVIEWED BY

Name	Title	Date	Phone	Sign

APPROVED BY

Name	Title	Date	Phone	Sign

BACKGROUND

DESIGN

REQUIREMENT

Hardware Compatibility

Upgrade Path:

AP-ID-JKTPAN01

&

AP-ID-JKTPAN0

2

Minimum Compatible Content and Software Version

EXISTING CONDITION

Device Type	Hostname	Functionality	Serial Number	IP Address	HA Status	Software Version	
						Existing	Suggested
PA-850	AP-ID-JKTPAN01	Firewall	011901065217	10.10.15.70	Active	10.1.11h5	10.1.14h9
PA-850	AP-ID-JKTPAN02	Firewall	011901065221	10.10.15.71	Passive	10.1.11h5	10.1.14h9

PRE-CHECK ACTIVITY

Pre-check Activity	
No **Task**	
PANORAMA	
1	Download PAN-OS	Login to Panorama to download the PAN-OS that needed: Select **Panorama** > **Software** > **Check Now** Locate and download PAN-OS:
2	Capture the General Information & Managed Devices Information	Login to Panorama via GUI (Browser): Select **Dashboard** Capture the output of **General Information** menu & Managed Devices Information menu
3	Capture Managed Devices Summary	Login to Panorama via GUI (Browser): Select **Panorama > Managed Devices > Summary** Capture the output of the **Summary** menu Verify on Managed Devices Summary: Shared Policy in **Synchronized** Template in **Synchronized**
4	Capture the Licenses Menu	Login to Panorama via GUI (Browser): Select **Panorama** > **Licenses**
5	Save a Backup of the Current Configuration File	Login to Panorama via GUI (Browser): Select **Panorama** > **Setup** > **Operations** Click **Export named configuration snapshot** Choose "**running-config.xml**" from dropdown option > click **OK**
6	Generate Tech Support File	Login to Panorama via GUI (Browser): Select **Panorama** > **Support** > **Generate Tech Support File** > Click **Yes**

#	Task	Steps
7	Ensure that Panorama is Running the Latest Content Release Version	Login to Panorama via GUI (Browser): Select **Panorama** > **Dynamic Updates** > **Check Now** and check which **Applications** or **Applications and Threats** to determine which update is Currently Installed. Make sure Panorama are running the latest or minimum version required content release version or a later version required for PAN-OS 1 1 . 1 Locate and Download the desired content release version Install the update on Panorama
8	Verify the Available Disk Space	Login to Panorama via CLI/SSH: Enter command **show system disk-space** Make sure that the minimum available disk space on Panorama is 1154 MB.
9	Verify Connectivity from the Management Interface to the Update Server	Login to Panorama via GUI (Browser): Select **Panorama** > **Managed Devices >** **Troubleshooting** > Choose **Update Server Connectivity** from dropdown option > **Execute**
10	Capture the Device Certificate	Login to Panorama via GUI (Browser): Select **Panorama** > **Setup** Capture **Device Certificate**
Total Duration Pre-Check List		

No	Task	
PALO ALTO		
1	Download PAN-OS	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser) to download the PAN-OS that needed: Select **Device** > **Software** > **Check Now** Locate and download PAN-OS:
2	Check Certificate	Export Certificate and Check certificate minimum requirement RSA 2048 bit or greater /ECDSA 256 bits or greater and Digest of SHA256 or Greater Login to both peers (**PA Primary & PA Secondary** via GUI (Browser): - Select **Device** > **Certificate Management** - **Export Certificate**
3	Capture the General Information	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Dashboard** Capture the output of **General Information** menu & Managed Devices Information menu
4	Capture the High Availability Status	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Dashboard** Capture the output of **High Availability** menu Verify on both peers: **AP-ID-JKTPAN01** as Active-Primary Unit **AP-ID-JKTPAN02** as Active-Secondary unit Running Config is Synchronized App Version, Threat Version, Antivirus Version, PAN-OS Versio n , and GlobalProtect Version status are M atch HA1, HA1 Backup , HA2 , and HA3 status are UP
5	Capture the Licenses Menu	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Licenses**

6	Save a Backup of the Current Configuration File	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Setup** > **Operations** Click **Export named configuration snapshot** Choose " **running-config.xml** " from dropdown option > click **OK**
7	Generate Tech Support File	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Support** > **Generate Tech Support File** > Click **Yes**
8	Ensure that Each Firewall in the HA Pair is Running the Latest Content Release Version	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Dynamic Updates** and check which **Applications** or **Applications and Threats** to determine which update is Currently Installed. Make sure firewalls are running the latest or minimum version required content release version or a later version required for PAN-OS 10.1.14h9 Locate and Download the desired content release version Install the update on both peers
9	Verify the Available Disk Space	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Enter command **show system disk-space** Ensure that both peers have sufficient disk space for optimal performance.
10	Verify Connectivity from the Management Interface to the Update Server	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device > Troubleshooting** > Choose **Update Server Connectivity** from dropdown option > **Execute**
11	Capture the Device Certificate	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Setup** Capture **Device Certificate**
Total Duration Pre-Check List Palo Alto		

ACTIVITY OF CHANGES

UPGRADE PANORAMA PAN-OS FROM 10.1.11h5 to 10.1.14h9

	Activity Of Changes - UPGRADE PANORAMA PAN-OS FROM 10.1.11H5 TO 10.1.14H9	
No	**Task**	
1	Install PAN-OS 10.1.14-H9 on Panorama	Login to the Panorama via GUI (Browser): Select **Panorama** > **Software** Locate **10.1.14-H9** image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Panorama** > **Setup** > **Device Operations** > Click **Reboot Device**
2	Commit Configuration	Login to the Panorama via GUI (Browser): Select **Commit** > **Commit and Push** Push the Panorama managed configuration to all managed devices. Wait until the process is complete d Check **Managed Device > Summary**
	Total Duration of Upgrade Panorama PAN-OS from 10.1.11h5 to 10.1.14h9	

UPGRADE PALO ALTO FIREWALL PAN-OS FROM 10.1.11h5 to 10.1.14h9

Activity Of Changes - UPGRADE PALO ALTO FIREWALL PAN-OS FROM 10.1.11H5 TO 10.1.14H9

No	Task	
1	Makesure and Disable Preemption	Login to the PA Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** On **Election Settings** , d isable (clear) the **Preemptive** setting Click **OK** **Commit**
2	Suspend the Active-Primary HA Peer	*For active/active firewalls, it doesn't matter which peer you upgrade first.* Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Suspend local device for high availability** In the bottom-right corner, verify that the state is **suspended**
3	Verify that Users Able to Access the Internet and Other Applications	Check and make sure that the user can access the internet and other applications that are needed. For example: Do ipconfig, ping and traceroute 8.8.8.8 and access the site *https://whatismyipaddress.com/* Take a screenshot for documentation purposes.
4	Install PAN-OS 10.1.14-H9 on the Suspended HA Peer	Login to the suspended peer via GUI (Browser): Select **Device** > **Software** Locate 10.1.14-H9 image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Device** > **Setup** > **Device** **Operations** > Click **Reboot Device**

5	Verify the Device that Just Upgraded is in Sync with the Peer	Login to the suspended peer via GUI (Browser): Select **Dashboar** **d** Verify:
6	Restore HA Functionality to the Primary HA Peer	Login to the suspended peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Make local device functional for high availability** In the bottom-right corner, verify that the state is **Active-Secondary** Wait for the HA peer running configuration to **synchronize** (In the Dasbhoard, monitoring the Running Config status in the High Availability widget)
7	Suspend the Active-Primary HA peer	Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Suspend local device for high availability** In the bottom-right corner, verify that the state is **suspended**
8	Verify that Users Able to Access the Internet and Other Applications	Check and make sure that the user can access the internet and other applications that are needed. For example: Do ipconfig, ping and traceroute 8.8.8.8 and access the site *https://whatismyipaddress.com/* Take a screenshot for documentation purposes.
9	Install PAN-OS 10.1.14-H9 on the active-primary HA peer	Login to the suspended peer via GUI (Browser): Select **Device** > **Software** Locate 10.1.14-H9 image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Device** > **Setup** > **Device** **Operations** > Click **Reboot Device**

10	Restore HA Functionality to the Active-Secondary HA peer	Login to suspended peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Make local device functional** for high availability In the bottom-right corner, verify that the state is **Active-Secondary** Wait for the HA peer running configuration to **synchronize** (In the Dasbhoard, monitoring the Running Config status in the High Availability widget)
11	Re-enable Preemption on the HA Peer where it was Disabled in the Previous Step	Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** On **Election Settings** , enable (check) the **Preemptive** setting Click **OK** **Commit** Note: <mark>if the previous existing condition was not enabled preemptive setting, then it can be ignored for this step</mark>
12	Verify that Both Peers are Passing Traffic as Expected	Login to the active-primary peer via CLI/SSH: Enter command:
13	Verify Status Palo Alto on Panorama	Login to Panorama via GUI (Browser): Select **Panorama** > **Managed Devices** > **Summary** or **Health**

Total Duration Upgrade PAN-OS from 10.1.11h5 to 10.1.14h9

POST-CHECK ACTIVITY

No	Task Description	Task	PIC	Duration (min)	Service Impact	Expected Result	Actual Time Start	Actual Time End	Remark
1	Re-Apply the Latest Applications and Threats Version	Login to Panorama via GUI (Browser) : Select **Panorama** > **Dynamic Updates** Click **Check Now** Install the available latest **Applications and Threats** version Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Dynamic Updates** Click **Check Now** Install the available latest **Applications and Threats** version	Compnet	10 min	No	The latest Applications and Threats version is installed			
2	Verify that Users are Able to Access the Internet and Other Applications	Check and make sure that the user can access the internet access and other applications that are needed. For example: Do ipconfig, ping and traceroute 8.8.8.8 and access the site https://whatismyipaddress.com/ Take a screenshot for documentation purposes.	Compnet	5 min	No	Users can access the internet and other applications			
3	Capture the General Information	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Dashboard** Capture the output of **General Information** menu	Compnet	2 min	No	General Information was successfully captured			
4	Capture the High Availability Status	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Dashboard** Capture the output of **High Availability** menu Verify on both peers: **PAN-3260-01** as Active- Primary unit **PAN-3260-02** as Active- Secondary Unit Running Config is Synchronized App Version, Threat Version, Antivirus Version, PAN-OS Version, and GlobalProtect Version status are Match HA1, HA1 Backup, HA2, and HA3 status are UP	Compnet	2 min	No	The High Availability status has been successfully captured HA Status in Normal state			
5	Capture the Licenses Menu	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Licenses**	Compnet	2 min	No	License successfully captured			

6	Save a Backup of the Current Configuration File	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Setup** > **Operations** Click **Export named configuration snapshot** Choose " **running-config.xml** " from dropdown option > click **OK**	Compnet	10 min	No	The backup was successfully performed and saved locally		
7	Capture the General Information & Managed Devices Information	Login to Panorama via GUI (Browser): Select **Dashboard** Capture the output of **General Information** menu & Managed Devices Information menu	Compnet	5 min	No	General & Managed Devices Information was successfully captured		
8	Capture Managed Devices Summary	Login to Panorama via GUI (Browser): Select **Panorama > Managed Devices > Summary** Capture the output of **Summary** menu Verify on Managed Devices Summary: Shared Policy in **Synchronized** Template in **Synchronized**	Compnet	5 min	No	Managed Devices Summary has been successfully captured Status Shared Policy & Tempate in Sync		
9	Capture the Device Certificate	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Setup** Capture **Device Certificate**	Compnet	2 min	No	The Device Certificate on both peers are valid status		
Total Duration Post-Check Activity				43 minutes				

TASK	BEFORE	AFTER
Check PAN-OS Version	10.1.11H5	10.1.14H9
Check HA Status	ACTIVE – ACTIVE Running Config is Synchronized App Version, Threat Version, Antivirus Version, PAN-OS Version, and GlobalProtect Version status are Match HA1, HA1 Backup, HA2, and HA3 status are UP	ACTIVE – ACTIVE Running Config is Synchronized App Version, Threat Version, Antivirus Version, PAN-OS Version, and GlobalProtect Version status are Match HA1, HA1 Backup, HA2, and HA3 status are UP
Traffic from User to Internet	NO ISSUE	NO ISSUE
Check status Palo Alto on Panorama	CONNECTED	CONNECTED

DOWNGRADE

PANORAMA PAN-OS FROM

10.1.14H9 TO 10.1.11H5

Activity Of Changes - DOWNGRADE PANORAMA PAN-OS FROM 10.1.14H9 TO 10.1.11H5		
No Task		**Task Description**
1	Save a Backup of the Current Configuration File	Login to Panorama via GUI (Browser): Select **Panorama** > **Setup** > **Operations** Click **Export named configuration snapshot**
2	Install PAN-OS 10.1.11H5 on the Panorama	Login to the Panorama via GUI (Browser): Select **Panorama** > **Software** Locate 10.1.11H5 image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Panorama** > **Setup** > **Device** **Operations** > Click **Reboot Device**
3	Commit Configuration	Login to the Panorama via GUI (Browser): Select **Commit** > **Commit and Push** Push the Panorama managed configuration to all managed devices. Wait until the process is complete d Check **Managed Device > Summary** Makesure Shared Policy & Template in symc
Total Duration Downgrade PAN-OS Panorama from 10.1.14H9 TO 10.1.11H5		

Activity Rollback - DOWNGRADE PALO ALTO PAN-OS FROM 10.1.14H9 TO 10.1.11H5	
No	**Task**
1	Save a Backup of the Current Configuration File	Login to both peers (**PA Active-Primary** and **PA Active-Secondary**) via GUI (Browser): Select **Device** > **Setup** > **Operations** Click **Export named configuration snapshot** Choose " **running-config.xml** " from dropdown option > click **OK**
2	Makesure and Disable Preemption	Login to the PA Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** On **Election Settings** , d isable (clear) the **Preemptive** setting Click **OK** **Commit**
3	Suspend the Active-Primary HA Peer	*For active/active firewalls, it doesn't matter which peer you upgrade first.* Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Suspend local device for high availability**
4	Verify that Users Able to Access the Internet and Other Applications	Check and make sure that the user can access the internet and other applications that are needed. For example: Do ipconfig, ping and traceroute 8.8.8.8 and access the site *https://whatismyipaddress.com/* Take a screenshot for documentation purposes.

5	Install PAN-OS 10.1.11H5 on the Suspended HA Peer	Login to the suspended peer via GUI (Browser): Select **Device** > **Software** Locate 10.1.11H5 image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Device** > **Setup** > **Device** **Operations** > Click **Reboot Device**
6	Verify the Device that Just Upgraded is in Sync with the Peer	Login to the suspended peer via GUI (Browser): Select **Dashboard** Verify:
7	Restore HA Functionality to the Primary HA Peer	Login to the suspended peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Make local device functional for high availability** In the bottom-right corner, verify that the state is **Active-Secondary** Wait for the HA peer running configuration to **synchronize** (In the Dasbhoard, monitoring the Running Config status in the High Availability widget)
8	Suspend the Active-Primary HA peer	Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Suspend local device for high availability** In the bottom-right corner, verify that the state is **suspended**
9	Verify that Users Able to Access the Internet and Other Applications	Check and make sure that the user can access the internet and other applications that are needed. For example: Do ipconfig, ping and traceroute 8.8.8.8 and access the site *https://whatismyipaddress.com/* Take a screenshot for documentation purposes.

10	Install PAN-OS 10.1.11H5 on the active-primary HA peer	Login to the suspended peer via GUI (Browser): Select **Device** > **Software** Locate 10.1.11H5 image version and click **Install** Wait until the installation is complete d If it appears prompted to reboot, click **Yes** If it not appears prompted to reboot, select **Device** > **Setup** > **Device** **Operations** > Click **Reboot Device**
11	Restore HA Functionality to the Active-Secondary HA peer	Login to suspended peer via GUI (Browser): Select **Device** > **High Availability** > **Operational Commands** Click **Make local device functional** for high availability In the bottom-right corner, verify that the state is **Active-Secondary**

12	Re-enable Preemption on the HA Peer where it was Disabled in the Previous Step	Login to the Active-Primary peer via GUI (Browser): Select **Device** > **High Availability** On **Election Settings** , enable (check) the **Preemptive** setting Click **OK** **Commit**
13	Verify that Both Peers are Passing Traffic as Expected	Login to the active-primary peer via CLI/SSH: Enter command:
14	Verify Status Palo Alto on Panorama	Login to Panorama via GUI (Browser): Select **Panorama** > **Managed Devices** > **Summary** or **Health**
Total Duration Downgrade PAN-OS Palo Alto from 10.1.14H9 TO 10.1.11H5		