

EXTREME NETWORKS

# Onboard Mgmt CLIP XIQ-SE workflow

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September 2022

# Onboard Mgmt CLIP XIQ-SE workflow



- Workflow to onboard a VOSS/Fabric Engine switch onto a dedicated switch mgmt CLIP
- Mgmt CLIP extracted from CSV file previously placed on XIQ-SE
- Ability to change the switch sysname (SNMP and ISIS) at the same time
- Ability to re-add the device into a different XIQ-SE site after the mgmt VLAN IP change
- Ability to launch a follow up workflow once this workflow has finished
- Requires minimum VOSS 8.2 (for segmented mgmt support)

# Workflow manual execution



- Workflow can be manually run against 1 or many switches simultaneously

The screenshot displays the 'Uni-Hw-Campus-map' interface. At the top, there are tabs for 'Devices', 'Uni-Hw-Campus-map', 'Site Summary', and 'FlexReports'. Below the tabs, there are buttons for 'Add Device...' and 'Export to CSV'. The main area contains a table with columns: Status, Name, Site, IP Address, Poll Status, Poll Details, Device Type, Family, and Firmware. The table lists several devices, including 5320-16P-4XE-DC-FabricEngine, 5320-24T-8XE-FabricEngine, 5420F-48P-4XL-FabricEngine, 5420M-24W-4YE-FabricEngine, 5520-24W-SwitchEngine, 5520-STK, 5720-24MXW-FabricEngine, CTC-410C-3/45, VSP7448-1, and VSP7448-2. A context menu is open over the table, showing options like 'FlexView', 'More Views', 'Configure...', 'Compass Search...', 'Rediscover', 'Clear Alarms...', 'Upgrade Firmware...', 'Add to Device Group...', 'More Actions', 'Archives', 'Tasks', 'Maps', 'Network', and 'Policy'. The 'More Actions' option is expanded, showing a list of actions including 'Apply Config Template', 'CLI Custom Action - XOS SSL', 'Deploy Insight VM', 'Fabric Attach Enforce', 'Fabric Connect Enforce', 'Move to CLIP Mgmt IP', 'Onboard Mgmt CLIP', 'Onboard Mgmt VLAN', and 'onboard CLI'. The 'Onboard Mgmt CLIP' option is highlighted with a red box.

Status	Name	Site	IP Address	Poll Status	Poll Details	Device Type	Family	Firmware
▲	5320-16P-4XE-DC-FabricEngine	World/CTC/Reading/Campus/Universal-Hw-Access	20.0.48.14	Available: 1...	Up: 1212 D...	5320-16P-4XE-DC-F...	Universal P...	8.8.0.0
▲	5320-24T-8XE-FabricEngine	us/Universal-Hw-Access	20.0.48.13	Available: 1...	Up: 1213 D...	5320-24T-8XE-Fabri...	Universal P...	8.8.0.0
▲	5420F-48P-4XL-FabricEngine	us/Universal-Hw-Access	20.0.48.10	Available: 1...	Up: 1212 D...	5420F-48P-4XL-Fab...	Universal P...	8.8.0.0
▲	5420M-24W-4YE-FabricEngine	us/Universal-Hw-Access	20.0.48.11	Available: 1...	Up: 1212 D...	5420M-24W-4YE-Fa...	Universal P...	8.8.0.0
●	5520-24W-SwitchEngine	us/Universal-Hw-Access	10.8.3.10	Available: 1...	Up: 1212 D...	5520-24W-SwitchEn...	Universal P...	32.1.1.6
●	5520-STK	us/Universal-Hw-Access	20.0.48.12	Available: 1...	Up: 1213 D...	Switch Engine ARM ...	Universal P...	31.7.1.4
▲	5720-24MXW-FabricEngine	us/Universal-Hw-Access	20.0.48.16	Available: 1...	Up: 1213 D...	5720-24MXW-Fabri...	Universal P...	8.8.0.0
●	CTC-410C-3/45	us/Universal-Hw-Access	20.0.203.52	Available: 9...	Up: 1208 D...	XIQ AP	XIQ Native	10.5r1
▶	VSP7448-1	us/Universal-Hw-Access		Up: 1213 D...		VSP-7400-48Y-8C	VSP Series	8.8.0.0
▶	VSP7448-2	us/Universal-Hw-Access		Up: 1212 D...		VSP-7400-48Y-8C	VSP Series	8.8.0.0

# Workflow automatic execution during onboarding



- Workflow can be automatically run after ZTP+ onboarding, under XIQ-SE Site Actions
- In this case script will always run against 1 switch only, the onboarding switch

The screenshot displays the 'Sandbox' configuration page in the XIQ-SE interface. The 'Actions' tab is selected, showing various configuration options for automatic device addition and data collection. Below these, the 'Custom Configuration' section contains a table for defining workflow tasks.

**Configuration Options:**

- ☒ Automatically Add Devices: Collection Mode: Historical
- ☒ Add Trap Receiver: Collection Interval (minutes): 10
- ☒ Add Syslog Receiver: Map Name: /World/CTC/Reading/Sandbox/Sandbox
- ☒ Add to Archive
- ☒ Add to Map

**Custom Configuration Table:**

Enabled	Vendor	Family	Topology	Task
<input checked="" type="checkbox"/>	Extreme	Universal Platform Fabric Engine	Any	Provisioning/Onboard Mgmt CLIP

Buttons: Add, Edit, Delete, Update, Cancel

# Onboard Mgmt CLIP XIQ-SE workflow inputs



- A CSV file is uploaded to XIQ-SE beforehand
- CSV file has device data which can be device specific
- CSV data is looked up either by device initial (dhcp) IP or Serial Number
- CSV data can be referenced as `$<name>` in workflow inputs
- Site variables can still also be referenced but as `${name}`

Column1	Column2	Column3	Column4
serial number	mgmt clip	sysname	site name
JA092041G-01023	20.0.209.54	5420-bld1	/World/building1
TB062139K-H0210	20.0.209.53	5320-bld1	/World/building1
TB022131K-H0059	20.0.209.52	5320-bld2	/World/building2
JA102040G-00003	20.0.209.55	5420-bld2	/World/building2

Workflow: /Workflows/Ludovico/Onboard Mgmt CLIP

Activities: Start → Move to CLIP mgmt IP → End

Details - Inputs

Manage Inputs...

Inputs below can be set either with absolute values or can be provided as `$(site-custom-variable)` if the workflow is to derive a site specific value for those inputs. The site of the onboarded VSP, and parent sites, will apply. Or alternatively as `$<derived-from-csv>` to derive a device specific value extracted from the supplied CSV file.

**CSV data file:**  
/root/Ludo/mgmtdata.csv

**Index into CSV file:**  
Serial Number

**Mgmt CLIP and re-add Site Notes:**  
Provide new mgmt CLIP and associated VRF. The VRF is optional and can be omitted in which case GRT will apply. It is assumed that initially the switch will have a mgmt IP on the onboarding VLAN; this mgmt VLAN IP can be kept or deleted. A system name can be configured for both SNMP and ISIS at the same time, if provided. The Site to re-add is optional, if not provided the device will get re-added to the same Site.

**Mgmt CLIP VRF:**  
GlobalRouter

**Mgmt CLIP IP:**  
\$<mgmt clip>

**Existing mgmt VLAN IP:**  
Delete

**System Name to configure on device:**  
\$<sysname>

**Site to re-add device using mgmt VLAN IP:**

**Follow on workflow notes:**  
If it is desired to launch another workflow after this one has completed, provide the workflow path/name like for example (without the quotes): "Provisioning/Onboard VSP"

**Follow on workflow to execute:**

# Workflow execution



Summary										
Status	Start Date/Time	Name	Version	Source	# Devices	Started By	End Date/Time	Message	Path	
✓	9/8/2022 9:22:54 AM	Onboard Mgmt CLIP	5	Workflow Designer ...	1	Istevens	9/8/2022 9:23:11 AM	Re-added device using mgmt CLIP 20.0.66.6...	/Workflows/Ludovico/Onboard Mgmt CLIP	

Graph View

Table View

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Stop Workflow Show Output Show Variables

Start

Move to CLIP mgmt IP

End

Devices Grid

Show Output Show Variables

Status	Device IP	Output Path	Start Date/Time	End Date/Time	Message
SUCCESS	20.0.48.10		9/8/2022 9:22:...	9/8/2022 9:23:...	Re-added device using mgmt CLIP 20.0.66.66 to XIQ-SE Site '/World/CTC/Reading/Campus/Universal-Hw-Access'

The following configuration was successfully performed on switch:

```
-> config term
-> mgmt clip vrf GlobalRouter
->   ip address 20.0.66.66/32
->   enable
-> exit
-> config term
-> mgmt vlan
->   no ip address 20.0.48.10
-> exit
-> snmp-server name 5420-bld1
-> router isis
->   sys-name 5420-bld1
-> exit
-> end
-> save config
Deleted IP '20.0.48.10' from XIQ-SE's database
Deleted IP '20.0.48.10' in NAC Engine Group
Added new device IP '20.0.66.66' to XIQ-SE Site '/World/CTC/Reading/Campus/Universal-Hw-Access' with admin profile 'PoC Profile'
Exit code SUCCESS
```

Close

