

EXTREME NETWORKS

Onboard Mgmt VLAN XIQ-SE workflow

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Onboard Mgmt VLAN XIQ-SE workflow



- Workflow to onboard a VOSS/Fabric Engine switch onto a dedicated switch mgmt VLAN/L2VSN
- Mgmt VLAN / I-SID and IP data 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 8.5 (for mgmt convert support)

Workflow manual execution



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

The screenshot displays the 'Devices' tab in the management interface. A table lists various network devices with columns for Status, Name, Site, IP Address, Poll Status, Poll Details, Device Type, Family, and Firmware. A context menu is open over the table, showing options like FlexView, More Views, Configure..., and Add to Device Group... The 'Add to Device Group...' option is expanded, showing a list of categories: Access Control, Config, Example, Macro, Provisioning, System, and VLAN. The 'VLAN' category is further expanded, showing 'Onboard Mgmt VLAN' and 'onboard CLI', with 'Onboard Mgmt VLAN' highlighted by a red box.

| Status | Name ↑ | Site | IP Address | Poll Status | Poll Details | Device Type | Family | Firmware |
|--------|-------------------------------|---|-------------|-----------------|---------------|-----------------------|----------------|----------|
| ▲ | 5320-16P-4XE-DC-FabricEngi... | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.14 | Available: 1... | Up: 949 Do... | 5320-16P-4XE-DC-F... | Universal P... | 8.8.0.0 |
| ▲ | 5320-24T-8XE-FabricEngine | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.13 | Available: 1... | Up: 949 Do... | 5320-24T-8XE-Fabri... | Universal P... | 8.8.0.0 |
| ▲ | 5420F-48P-4XL-FabricEngine | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.10 | Available: 1... | Up: 949 Do... | 5420F-48P-4XL-Fab... | Universal P... | 8.8.0.0 |
| ▲ | 5420M-24W-4YE-FabricEngine | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.11 | Available: 1... | Up: 949 Do... | 5420M-24W-4YE-Fa... | Universal P... | 8.8.0.0 |
| ● | 5520-24W-SwitchEngine | /World/CTC/Reading/Campus/Universal-Hw-Access | 10.8.3.10 | Available: 1... | Up: 949 Do... | 5520-24W-SwitchEn... | Universal P... | 32.1.1.6 |
| ● | 5520-STK | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.12 | Available: 1... | Up: 949 Do... | Switch Engine ARM ... | Universal P... | 31.7.1.4 |
| ▲ | 5720-24MXW-FabricEngine | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.48.16 | Available: 1... | Up: 949 Do... | 5720-24MXW-Fabri... | Universal P... | 8.8.0.0 |
| ● | CTC-410C-3/45 | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.203.52 | Available: 9... | Up: 948 Do... | XIQ AP | XIQ Native | 10.5r1 |
| ▶ | VSP7448-1 | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.20.76 | Available: 1... | Up: 949 Do... | VSP-7400-48Y-8C | VSP Series | 8.8.0.0 |
| ▶ | VSP7448-2 | /World/CTC/Reading/Campus/Universal-Hw-Access | 20.0.20.77 | Available: 9... | Up: 948 Do... | 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

Devices **Sandbox** Site Summary Endpoint Locations FlexReports

Discover **Actions** VRF/VLAN Topologies Services Port Templates ZTP+ Device Defaults Endpoint Locations Analytics Custom Variables

☒ 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

+ Add Edit - Delete

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

Update Cancel

Onboard Mgmt VLAN 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}

The screenshot shows the workflow editor for '/Workflows/Ludovico/Onboard Mgmt VLAN'. The workflow consists of a 'Start' node, a 'Move to VLAN mgmt IP' activity, and an 'End' node. The 'Details' panel on the right shows the 'Inputs' tab with the following configuration:

- CSV data file:** /root/Ludo/mgmtdata.csv
- Index into CSV file:** Serial Number
- Mgmt VLAN and re-add Site Notes:** Provide new mgmt I-SID, IP, Mask and Default Gateway. The VLAN id is optional and can be omitted. Is not used on DVR Leaf and can be auto-allocated otherwise. The Site to re-add is optional, if not provided the device will get re-added to the same Site.
- Mgmt VLAN ID:** \$<mgmt vlanid>
- Mgmt VLAN I-SID:** \$<mgmt isid>
- Mgmt VLAN IP:** \$<mgmt ip>
- Mgmt VLAN Mask:** \$<mgmt mask>
- Mgmt VLAN Default Gateway:** \$<mgmt gateway>
- System Name to configure on device:** \$<sysname>
- Site to re-add device using mgmt VLAN IP:** \$<site name>

Below the workflow editor is a screenshot of the 'mgmtdata.csv' file in a spreadsheet application. The file contains the following data:

| serial number | mgmt vlanid | mgmt isid | mgmt ip | mgmt mask | mgmt gateway | sysname | site name |
|-----------------|-------------|-----------|-------------|---------------|--------------|-----------|------------------|
| JA092041G-01023 | 209 | 2800209 | 20.0.209.54 | 255.255.255.0 | 20.0.209.1 | 5420-bld1 | /World/building1 |
| TB062139K-H0210 | 209 | 2800209 | 20.0.209.53 | 255.255.255.0 | 20.0.209.1 | 5320-bld1 | /World/building1 |
| TB022131K-H0059 | 209 | 2800209 | 20.0.209.52 | 255.255.255.0 | 20.0.209.1 | 5320-bld2 | /World/building2 |
| JA102040G-00003 | 209 | 2800209 | 20.0.209.55 | 255.255.255.0 | 20.0.209.1 | 5420-bld2 | /World/building2 |

Red arrows indicate the mapping from the workflow inputs to the CSV data: 'CSV data file' points to the file name, 'Index into CSV file' points to the 'serial number' column, and 'Mgmt VLAN IP' points to the 'mgmt ip' column.

Workflow execution



Dashboard Devices Discovered Firmware Archives Configuration Templates Reports **Onboard Mgmt VLAN (26787)**

Summary

| Status | Start Date/Time | Name | Version | Source | # Devices | Started By | End Date/Time | Message | Path |
|--------|-----------------------|-------------------|---------|-----------------------|-----------|------------|-----------------------|--|---------------------------------------|
| ✓ | 9/7/2022 10:32:26 ... | Onboard Mgmt VLAN | 25 | Workflow Designer ... | 1 | Istevens | 9/7/2022 10:32:42 ... | Re-added device using mgmt VLAN IP 20.0.2... | /Workflows/Ludovico/Onboard Mgmt VLAN |

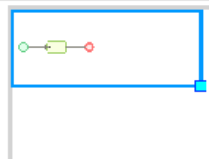
Graph View Table View



Stop Workflow

Show Output

Show Variables



Devices Grid

Show Output

Show Variables

| Status | Device IP | Output Path | Start Date/Time | End Date/Time | Message |
|---------|------------|-------------|------------------|------------------|---|
| SUCCESS | 20.0.48.10 | | 9/7/2022 10:3... | 9/7/2022 10:3... | Re-added device using mgmt VLAN IP 20.0.209.54 on L2 I-SID 2800209 to XIQ-SE Site '/World/CTC/Reading/Campus/Univer |

The following configuration was successfully performed on switch:

```
-> config term
-> mgmt vlan
->   convert i-sid 2800209 ip 20.0.209.54 255.255.255.0 gateway 20.0.209.1 rollback 130
-> config term
-> mgmt convert-commit
-> 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 '20.0.209.54' to XIQ-SE Site '/World/CTC/Reading/Campus/Universal-Hw-
Access' with admin profile 'PoC Profile'
Exit code SUCCESS
```

Close

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