EXTREME NETWORKS

Onboard VSP XIQ-SE workflow

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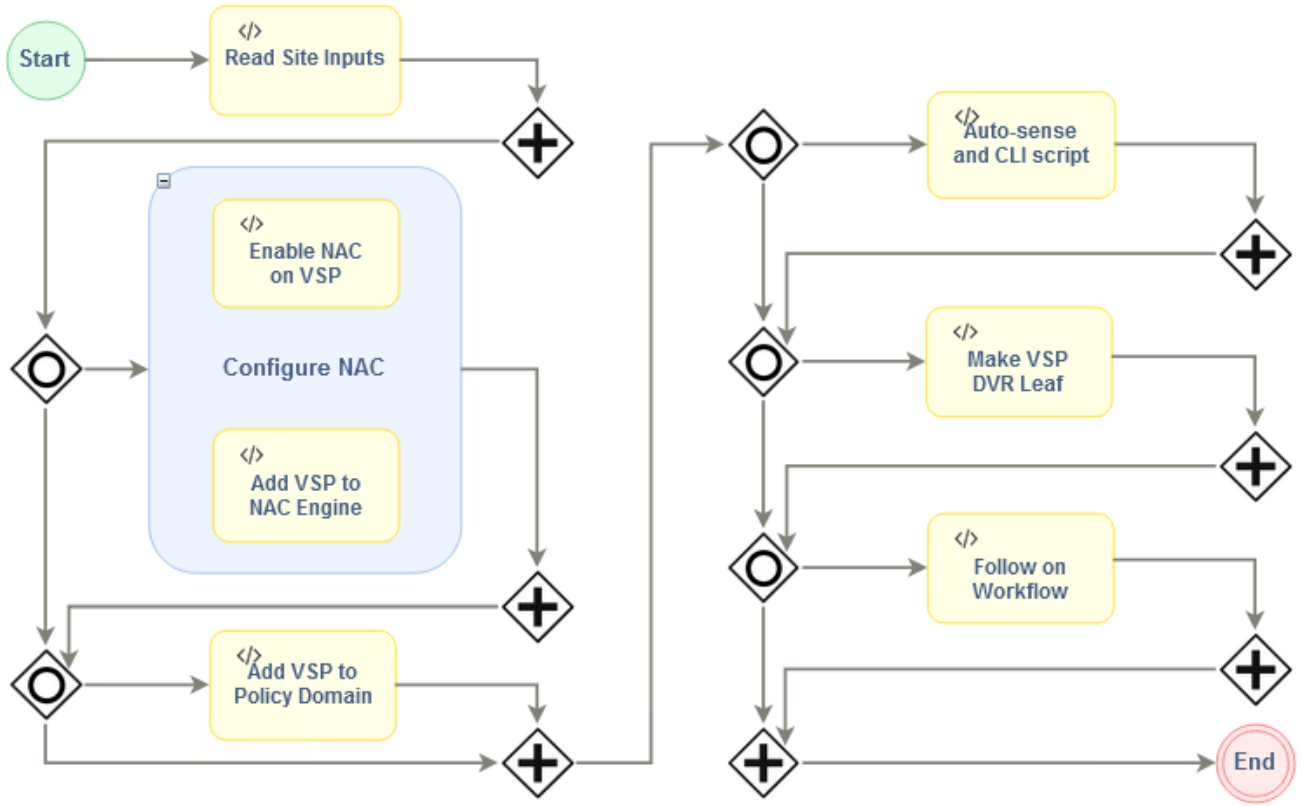
ADVANCE WITH US

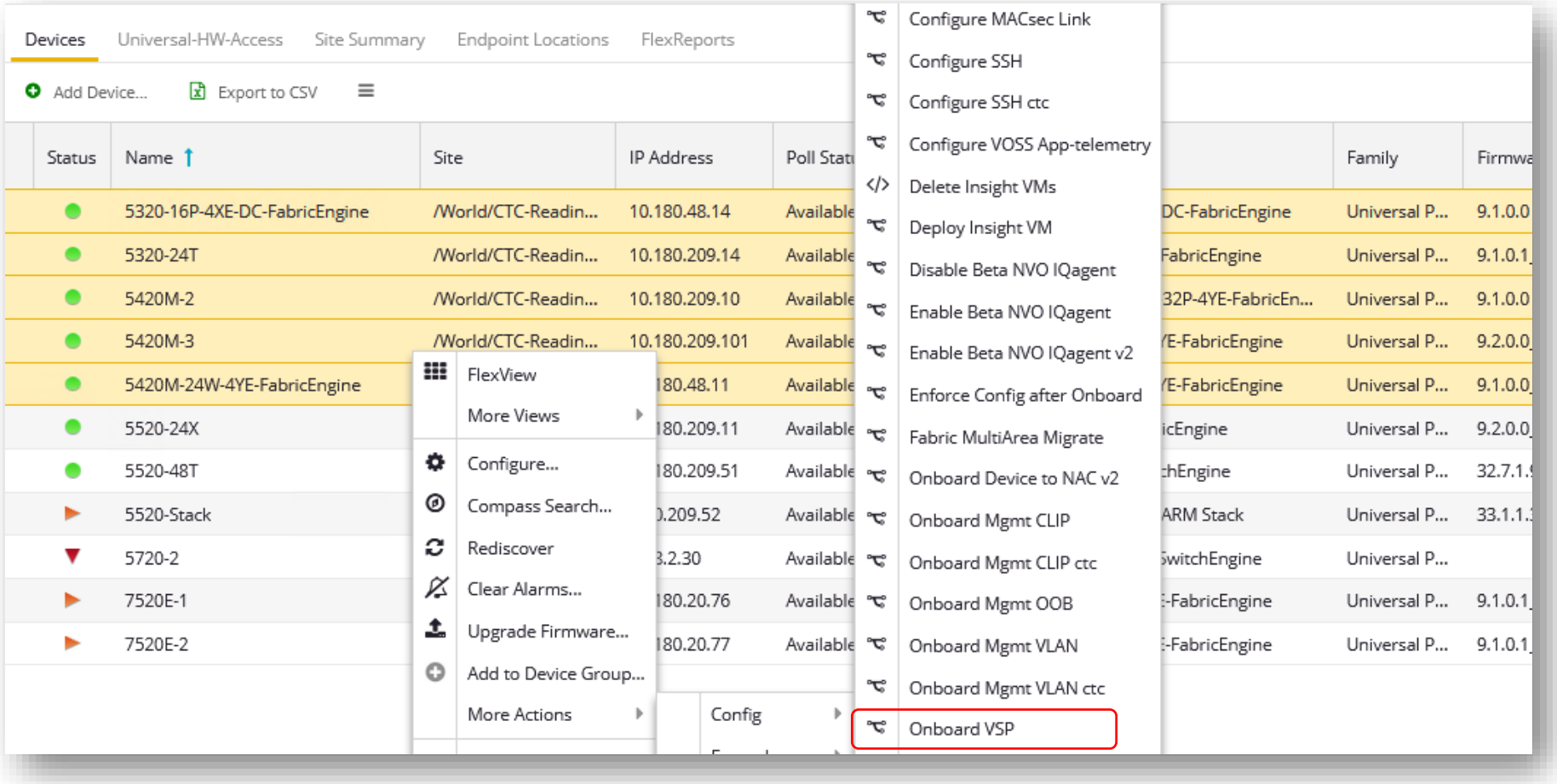
Onboard VSP XIQ-SE workflow

- This workflow can do any of the following
- Add switch to XIQ-SE Control + configure RADIUS on switch
- Add switch to Policy domain, including to VLAN Island topology
- Configure any of the global auto-sense parameters
- Convert the switch into a DVR-Leaf
- Execute a custom CLI script with variables & logical operators
- Launch another workflow on completion
- All inputs can make use of site variables, csv variables, eval variables and emc_vars variables



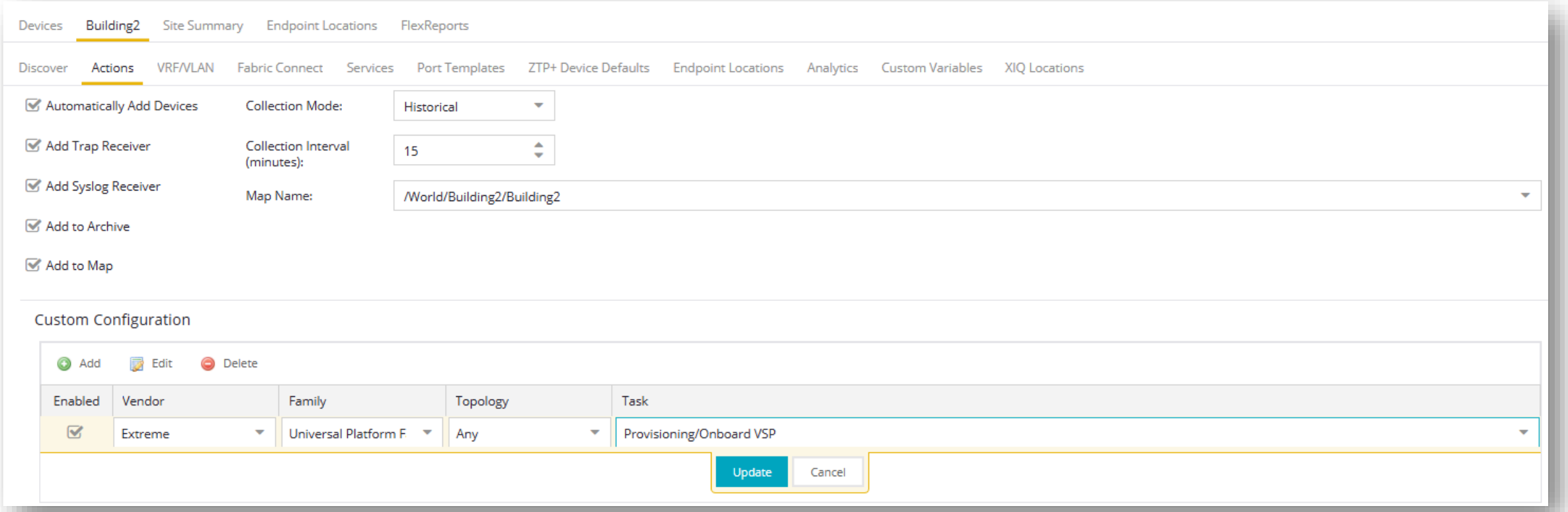
Workflow manual execution

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



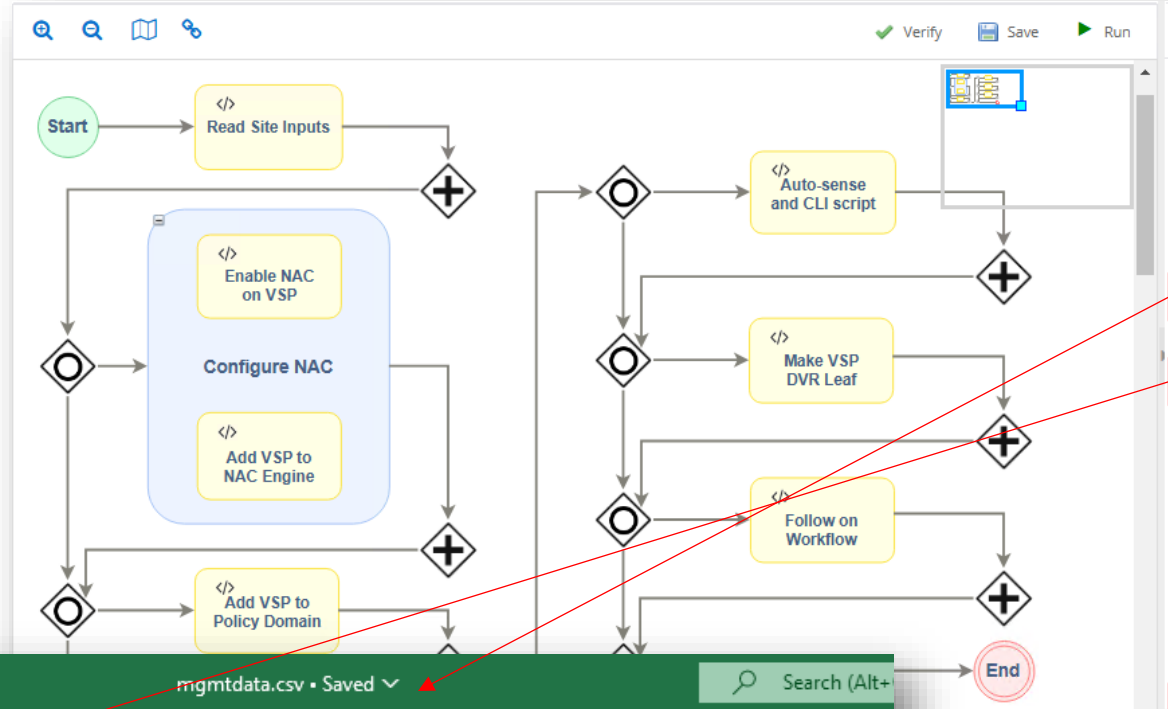
Workflow automatic execution during onboarding

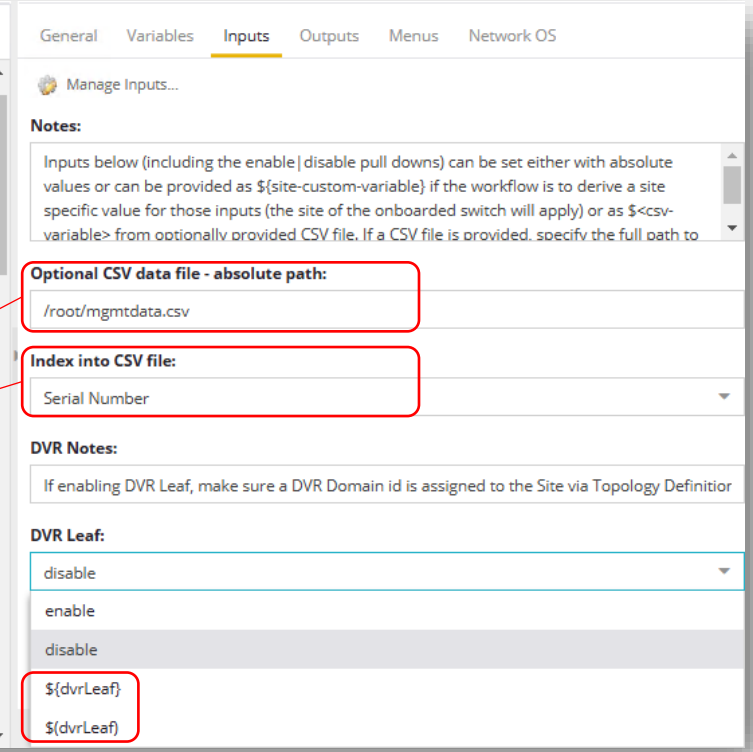
- Workflow can be automatically run after ZTP+ onboarding, under XIQ-SE Site Actions
- In this case script will always run against 1 switch only, the onboarding switch

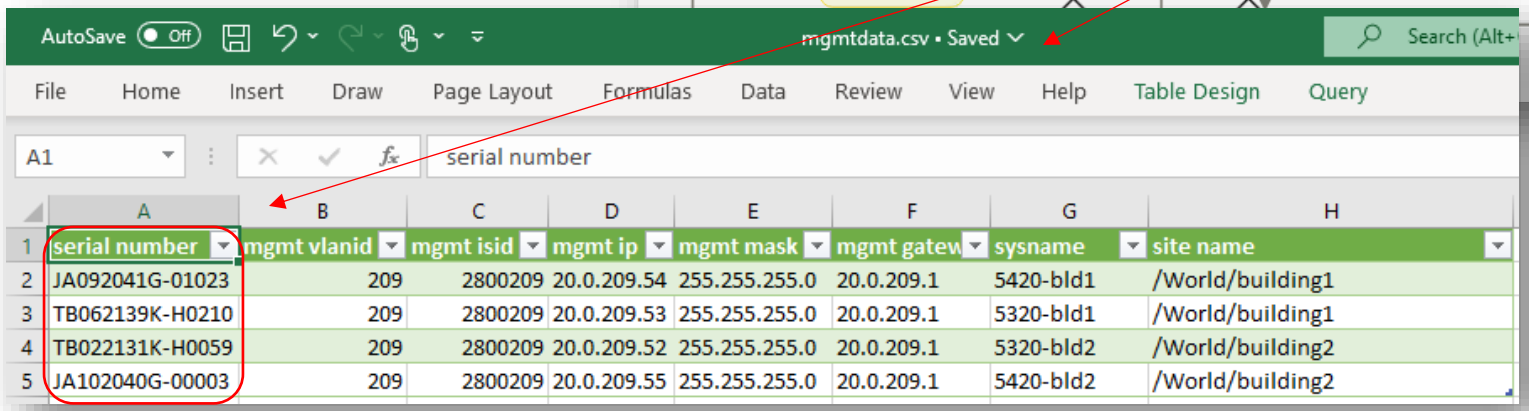


Onboard VSP XIQ-SE workflow inputs

- Optionally, 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 or MAC Address
- CSV data can be referenced as $<name> or $(name) in workflow inputs
- Site variables can still also be referenced but as ${name}
- The CSV variable names are case sensitive







	A	B	C	D	E	F	G	H
1	serial number	mgmt vlanid	mgmt isid	mgmt ip	mgmt mask	mgmt gatew	sysname	site name
2	JA092041G-01023	209	2800209	20.0.209.54	255.255.255.0	20.0.209.1	5420-bld1	/World/building1
3	TB062139K-H0210	209	2800209	20.0.209.53	255.255.255.0	20.0.209.1	5320-bld1	/World/building1
4	TB022131K-H0059	209	2800209	20.0.209.52	255.255.255.0	20.0.209.1	5320-bld2	/World/building2
5	JA102040G-00003	209	2800209	20.0.209.55	255.255.255.0	20.0.209.1	5420-bld2	/World/building2

- If your XIQ-SE was installed without “root” access, place the CSV file here instead: `/usr/local/Extreme_Networks/NetSight/appdata/logs/scripting/NetSight_Server`

CSV data file input

Optional CSV data file - absolute path:

/root/mgmtdata.csv

- Available path variables: **%rootDir%, %sitePath%, %siteName%**
  - %rootDir% by default is /root/; can be changed via workflow variable const_ROOT_PATH_VAR
  - %sitePath% and %siteName% are set based on site path of device; e.g. if device is in "/World/CTC-Reading/VSP Sandbox“ then %sitePath% = “World/CTC-Reading” and %siteName% = “VSP Sandbox”
- Can use these to have different CSV per site

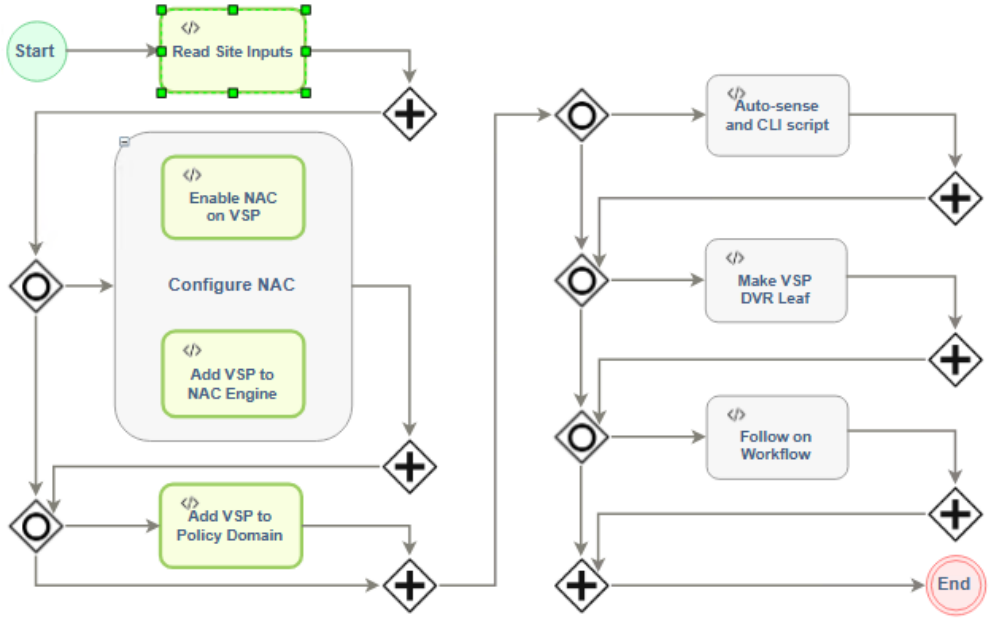
Workflow execution

Summary

Status	Start Date/Time	Name	Version	Source	# Devices	Started By	End Date/Time	Message	Path
✔	2/7/2025 4:14:26 PM	Onboard VSP	155	Northbound Interfa...	1	NetSight Server	2/7/2025 4:15:01 PM	Added device 10.9.193.133 to Policy Domain...	/Workflows/Onboard VSP

Graph View | Table View

Stop Workflow | Show Output | Show Variables



Devices Grid

Show Output

Status	Device IP	Output Path	Start Date/Time	End Date/Time	Message
SUCCESS	10.9.193.133		2/7/2025 4:14:...	2/7/2025 4:14:...	Validated i...

Output - 10.9.193.133

```
Activity: ReadSiteInputs_01
Input Data:
 - VSP switch IP = 10.9.193.133
 - Selected Switch Serial Number = SB012050G-00079
 - Selected Switch MAC Address = F0:64:26:A8:E4:00
 - Input CSV file =
 - Key to CSV data =
 - DVR Leaf = disable
 - DVR Domain Id = None
 - Network Access Control (NAC) = enable
 - NAC Engine Group name = Default
 - NAC Load Balancer enabled = 0
 - NAC Load Balancer IP list = []
 - NAC Engine IP list = [u'10.9.203.6']
 - RADIUS Server ordered IP list = [u'10.9.203.6']
 - RADIUS Client unordered IP list = [u'10.9.203.6']
 - RADIUS Attributes template name = Extreme VOSS - Per-User ACL Org
 - RADIUS Shared Secret = radius
 - Create RADIUS Server for = eapol
 - Location Group name =
 - Add to Policy = enable
 - Policy Domain = Default Policy Domain
 - Policy VLAN Island Topology = Building1
 - Auto-sense Voice I-SID =
 - Auto-sense Voice VLAN-id =
```

Close

Additional CLI commands input / sample ➔

Additional CLI commands:

```
#No need to start with enable, config term; commented lines are ignored
#clock time-zone US Eastern
#snmp-server location $<location>
#snmp-server contact "Master of Disaster!"
```

```
#No need to start with enable, config term; commented lines are ignored
clock time-zone US Eastern
snmp-server location $<location>
snmp-server contact "Master of Disaster!"
no snmp-server community-by-index first
no snmp-server community-by-index second
router isis; spbm 1 multicast enable; exit
auto-sense eapol voice lldp-auth
ip dhcp-snooping enable
web-server password ro user // password // password
web-server password rwa admin // password // password
#if    ("5520-24" in ${deviceType} or "5420-24" in ${deviceType})
                interface gigabitEthernet 1/1-1/24
                   no snmp trap link-status
                   slpp-guard enable timeout 0
                   spanning-tree bpduguard enable timeout 0
                   eapol re-authentication enable re-authentication-period 36000
                exit
#elseif("5520-48" in ${deviceType} or "5420-48" in ${deviceType})
                interface gigabitEthernet 1/1-1/48
                   no snmp trap link-status
                   slpp-guard enable timeout 0
                   spanning-tree bpduguard enable timeout 0
                   eapol re-authentication enable re-authentication-period 36000
                exit
#end
```

- The additional CLI commands input can make use of the following variables:
  - Site variables **${var}**: Useful to apply same values to all devices in same XIQ-SE Site. Or to apply same values to all devices in same sub-Sites
  - **Emc_vars** ${deviceIP}: Useful to feed some of these values into the same space as Site variables
  - CSV variables **$<var>**: Useful to provide device specific values
  - Eval variables **$[var]**: Useful to compute new values within the template file and be able to store and re-use these values via a variable
- The additional CLI commands input can make use of the following pragmas
  - **#if/#elseif/#else/#end, #error fail|stop|continue, #eval / #eval <varname>=(), #sleep, #last**
  - but not: #block start|execute
- Please refer to documentation of the Apply Config Template workflow here:
  - https://github.com/extremenetworks/ExtremeScripting/blob/master/XMC_XIQ-SE/oneview_workflows/xwf/Apply_Config_Template_Workflow.pdf