cisco Live!
ALL IN

The bridge to possible

Managing devices and maintaining configuration compliance with Cisco Managed Services Accelerator (MSX)

Brian Cox, Cisco Technical Marketing Engineer
Ed Novak, Cisco Technical Marketing Engineer

BRKATO-1000

Cisco Webex App

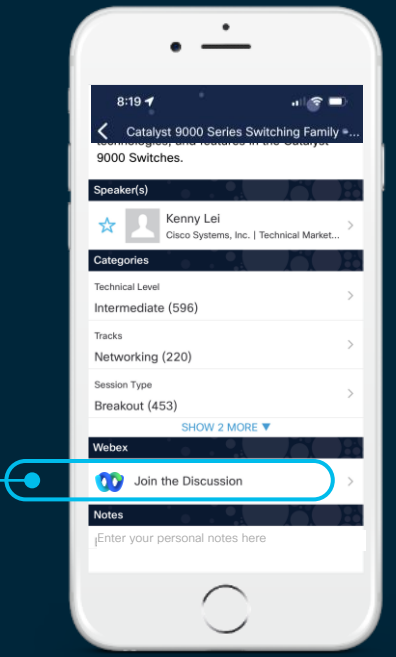
Questions?

Use Cisco Webex App to chat
with the speaker after the session

How

1. Find this session in the Cisco Live Mobile App
2. Click “Join the Discussion”
3. Install the Webex App or go directly to the Webex space
4. Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 17, 2022.



https://ciscolive.ciscoevents.com/ciscolivebot/#BRKATO-1000

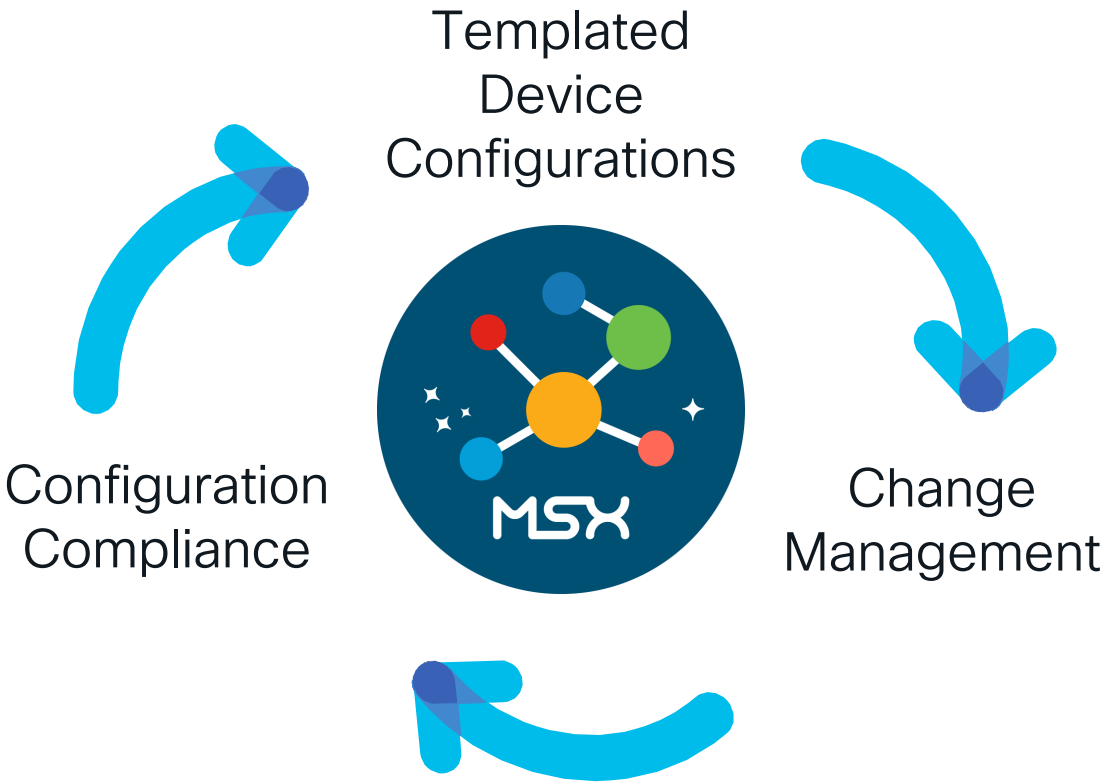
© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Agenda

- Introduction
- What is MSX?
- MSX Managed Device Service
- Demos:
  - Device Onboading
  - Configuration Compliance
  - Configuration Templates
  - Change Management
  - Workflow as Custom Device Action
- Conclusion

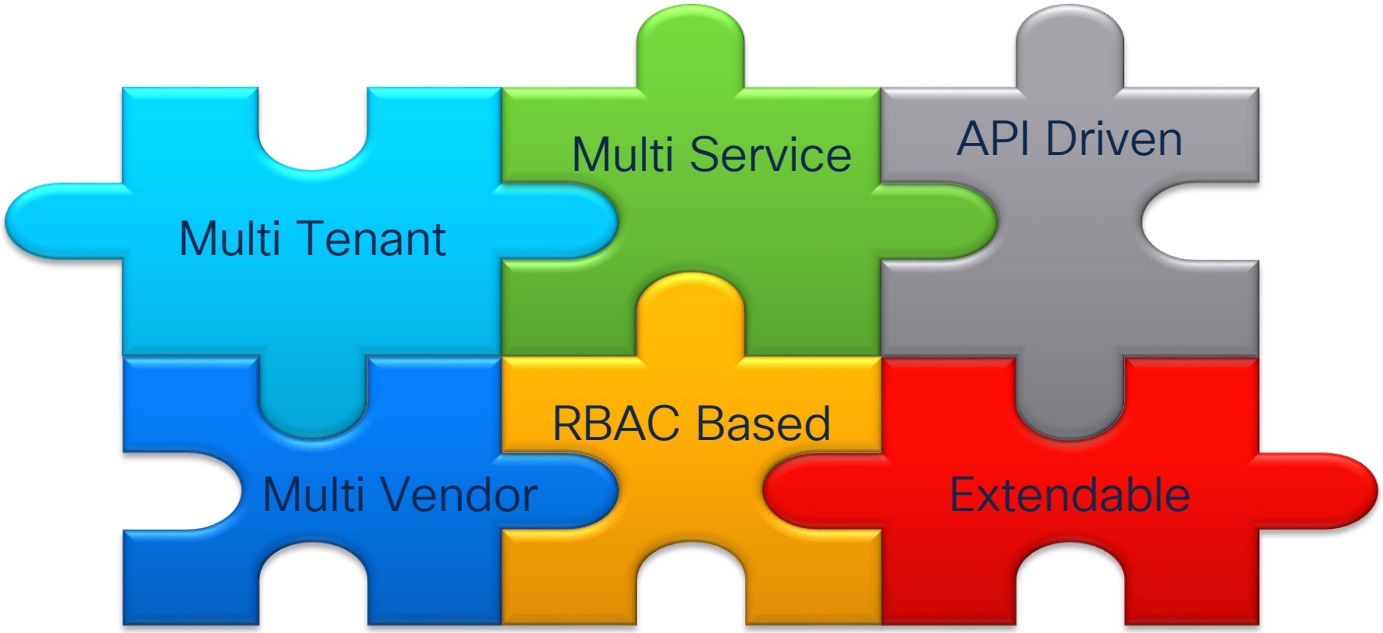
© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Introduction



© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Managed Services Accelerator (MSX) is a:

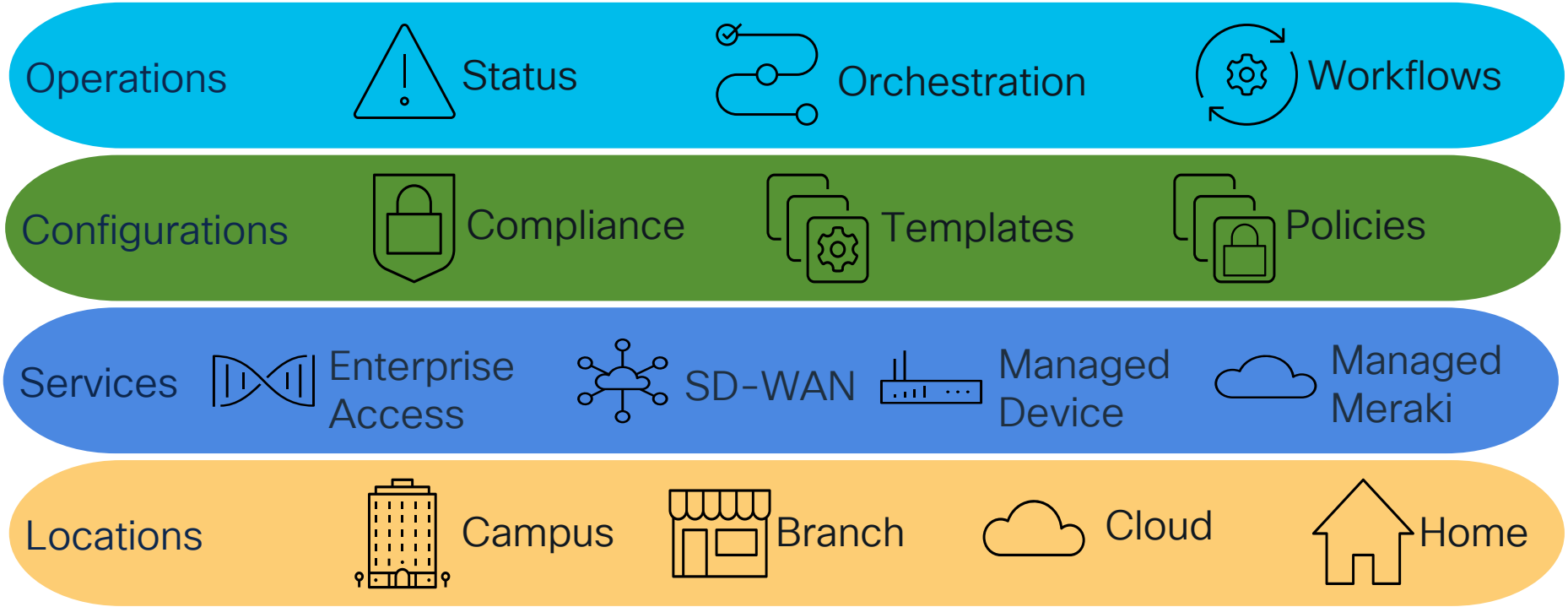


... platform for the development, deployment, and management of managed services.

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

MSX Service Consolidation

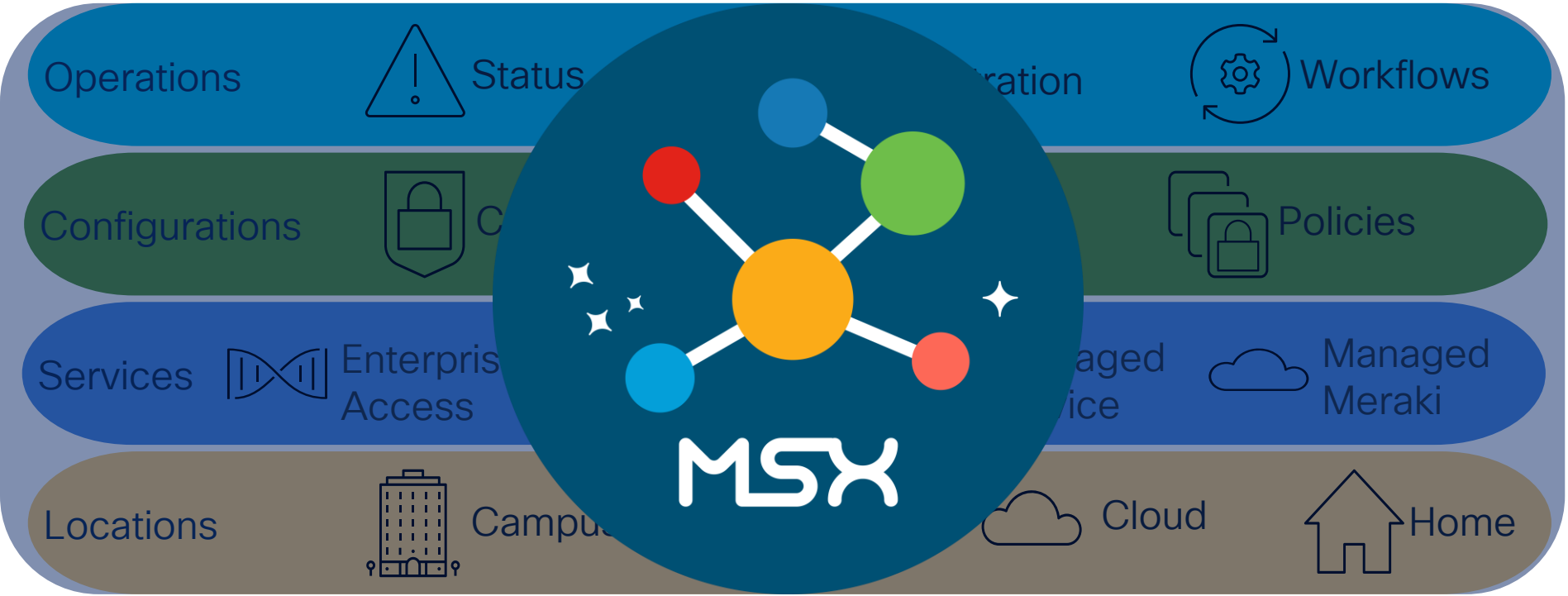
Simplified Multi-Service Networking



© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

MSX Service Consolidation

Simplified Multi-Service Networking



© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

MSX Managed Device Service

MSX Managed Device Service

Managed
Device
Service Pack

- Create a Catalog of Configurations
- Monitor Device Health and Status
- Monitor Device Vulnerabilities
- Manage Device Configuration

Service Outcomes

- Provision Cisco & Third-party devices.
- Organize Devices Under Common Tenancy Model
- Configuration Change Management
- Configuration Compliance Management

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

MSX Vulnerability Detection

Detects and reports vulnerabilities for both Cisco and third-party devices.

Vulnerabilities

100 security vulnerabilities

SEVERITY	CVE ID	PUBLISHED	MODIFIED
High	CVE-2002-2446	10/4/02, 12:00 AM	5/26/21, 1:23 PM
-	CVE-2004-9999	12/31/04, 12:00 AM	5/26/21, 1:25 PM
-	CVE-2004-9999	8/6/04, 12:00 AM	5/26/21, 1:25 PM
Medium	CVE-2003-1605	5/27/03, 12:00 AM	5/26/21, 1:24 PM
-	CVE-2004-9999	12/31/04, 12:00 AM	5/26/21, 1:25 PM
-	CVE-2004-9999	11/23/04, 12:00 AM	5/26/21, 1:25 PM

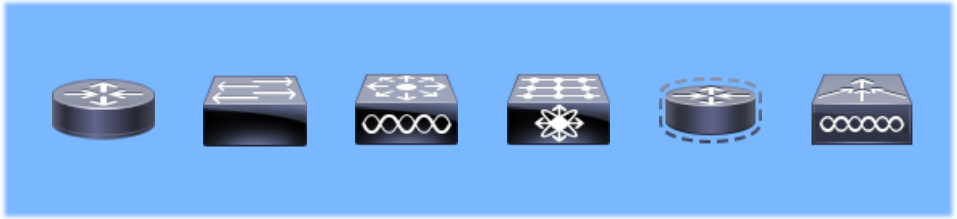
© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Device Onboarding

Adding Devices

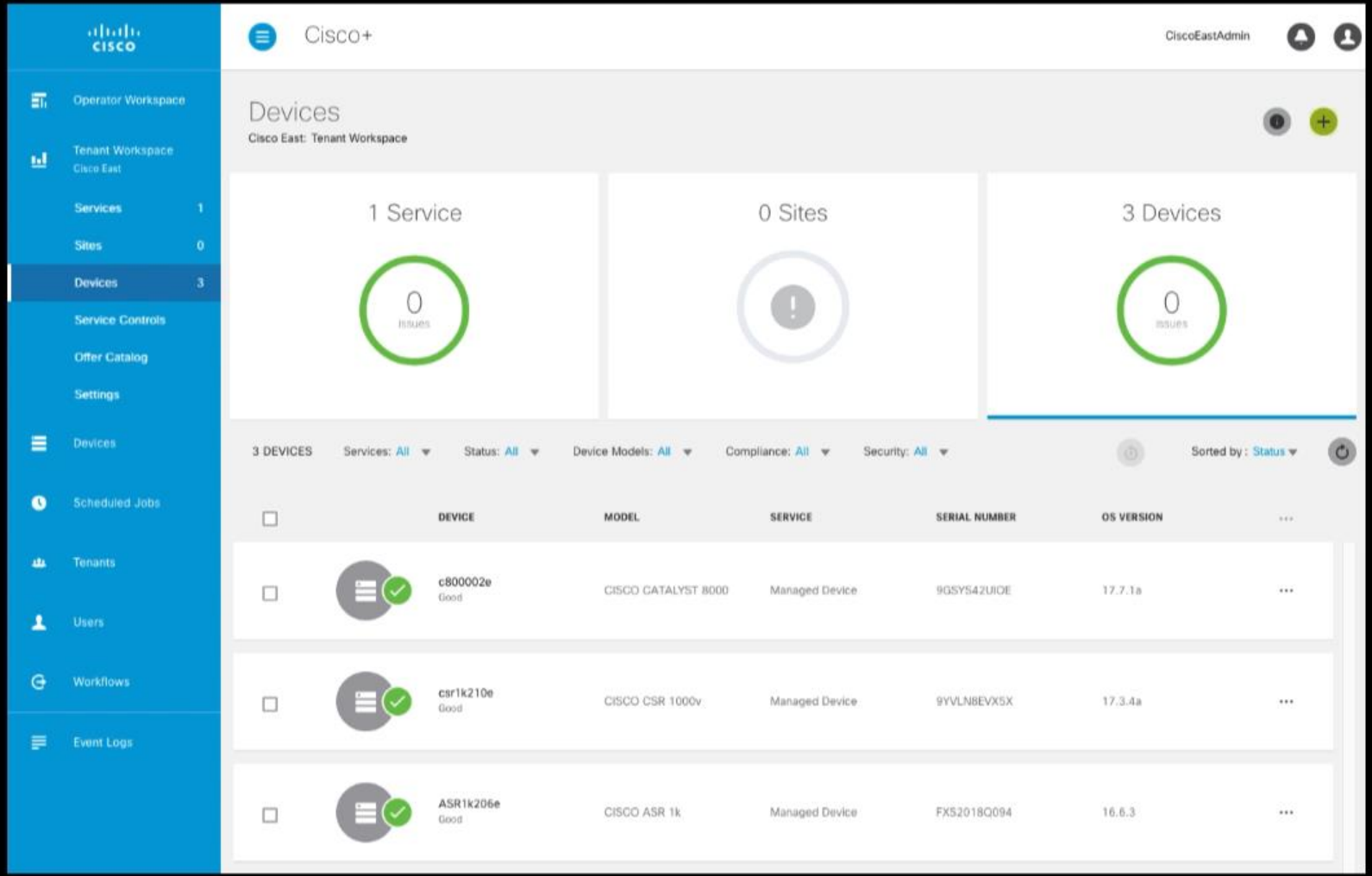
Onboarding

- Zero Touch Provisioning
  - PnP Redirection
- Direct
  - Existing Devices



- Management
  - IPSec
    - Device support
    - Per Device tunnel
    - FW Permissions
  - TLS
    - Gateway Client VM
  - Direct
    - Custom Enterprise VPN

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

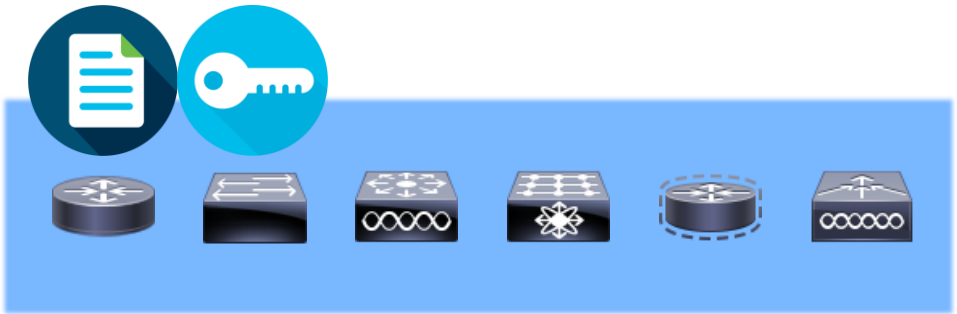

Cisco+
CiscoEastAdmin
Operator Workspace
Tenant Workspace
Cisco East
Services 1
Sites 0
Devices 3
Service Controls
Offer Catalog
Settings
Devices
Scheduled Jobs
Tenants
Users
Workflows
Event Logs
Devices
Cisco East: Tenant Workspace
1 Service
0
Issues
0 Sites
3 Devices
0
Issues
3 DEVICES
Services: All
Status: All
Device Models: All
Compliance: All
Security: All
Sorted by : Status
DEVICE
MODEL
SERVICE
SERIAL NUMBER
OS VERSION
c800002e
Good
CISCO CATALYST 8000
Managed Device
9GSY542UIOE
17.7.1a
csr1k210e
Good
CISCO CSR 1000v
Managed Device
9YVLN8EVX5X
17.3.4a
ASR1k206e
Good
CISCO ASR 1k
Managed Device
FX52018Q094
16.6.3

MSX Compliance

Compliance Options

Templates

- Define configuration segments and values
- Devices monitored for compliance to these templates



Whole Configuration

- Complete device configuration is captured
- Devices monitored for compliance to this captured configuration

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Settings

Cisco West: Tenant Workspace

Compliance and Change Management

Manage device compliance, remediation, and change approval preferences

Define Standard Configuration

Manage Standard Configuration categories, parameters, and templates for device compliance

ServiceNow Settings

Configure external Information Technology Service Management system for Incident creation and Change Management

Meraki Organizations

Attach one or more existing Meraki Organizations by providing an API Access Key

Configuration Template and Change Management

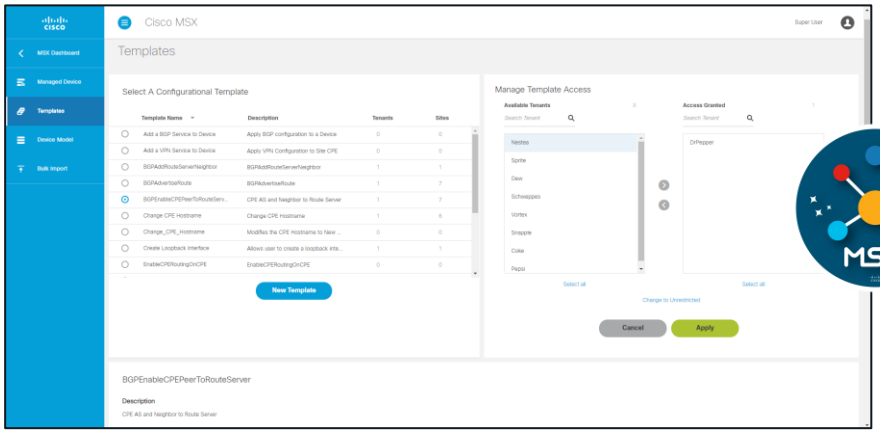
Configuration Templates

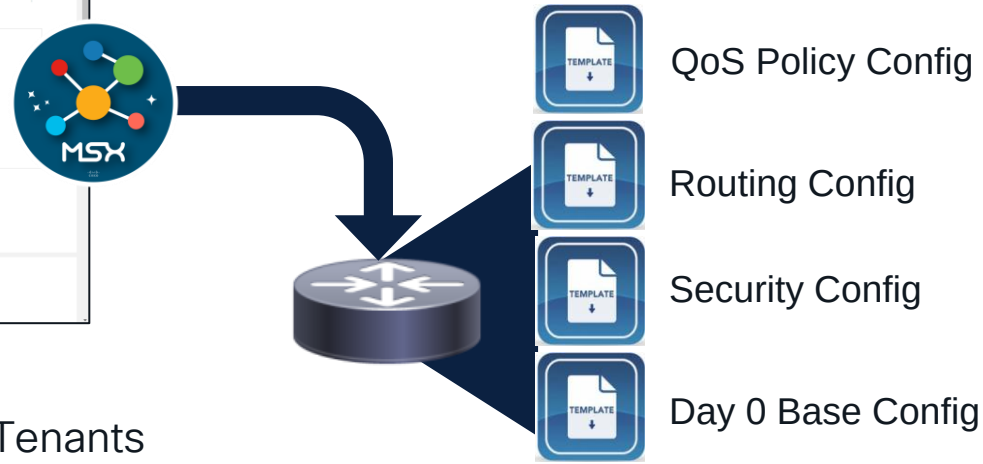
- Auto Generate XML Template from CLI configuration
- Per Tenant Control
- Templates are Stackable
  - Both in adding and removing

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Stacking MSX Templates

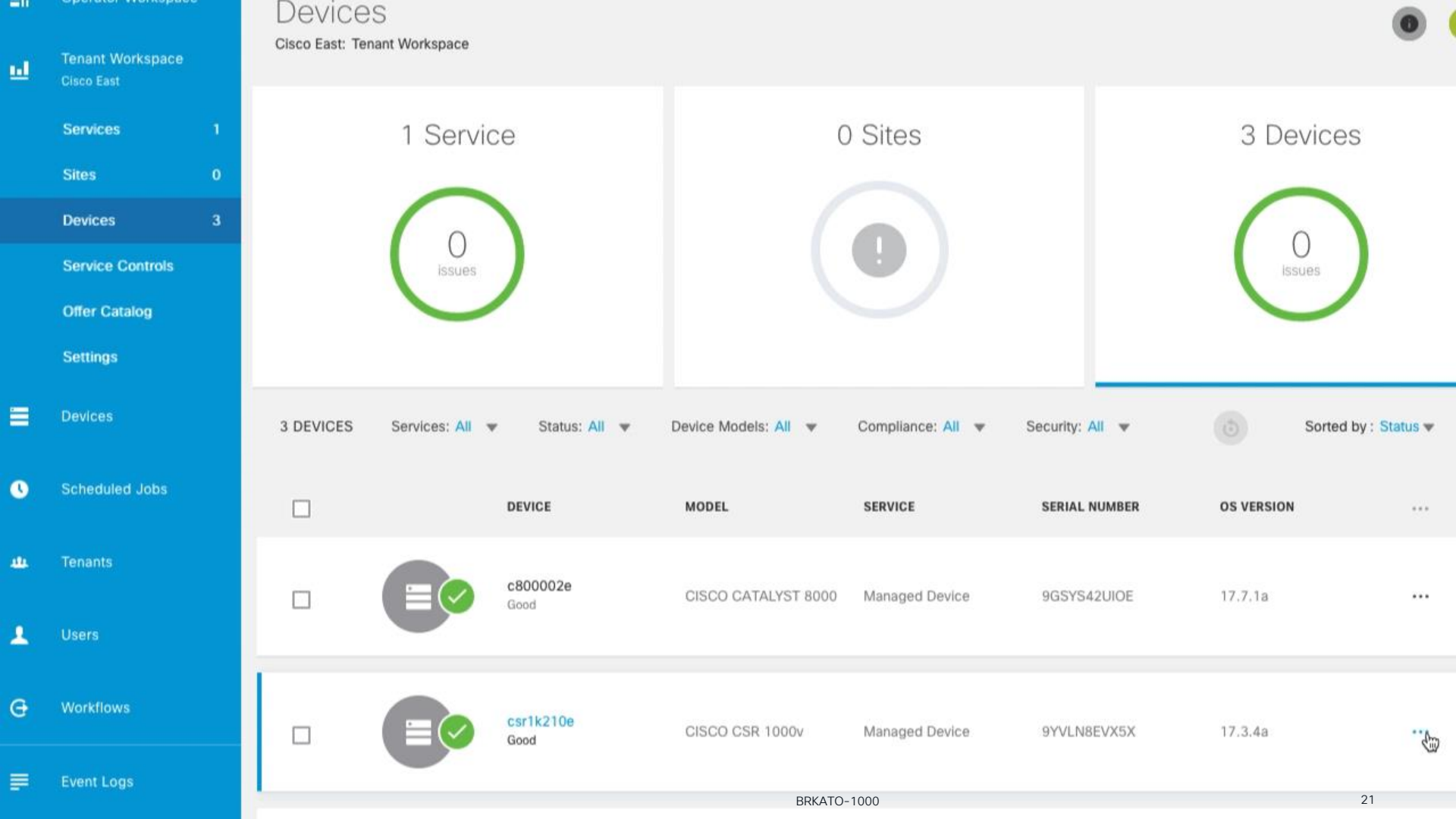
MSX Configuration Template Catalog





Configuration templates assigned to Tenants and applied per device.

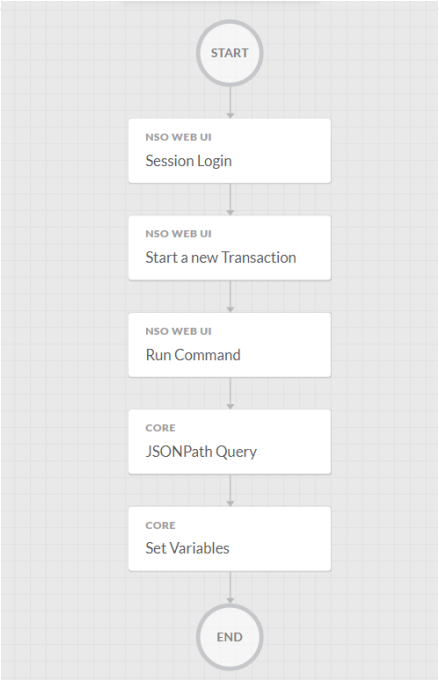
© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

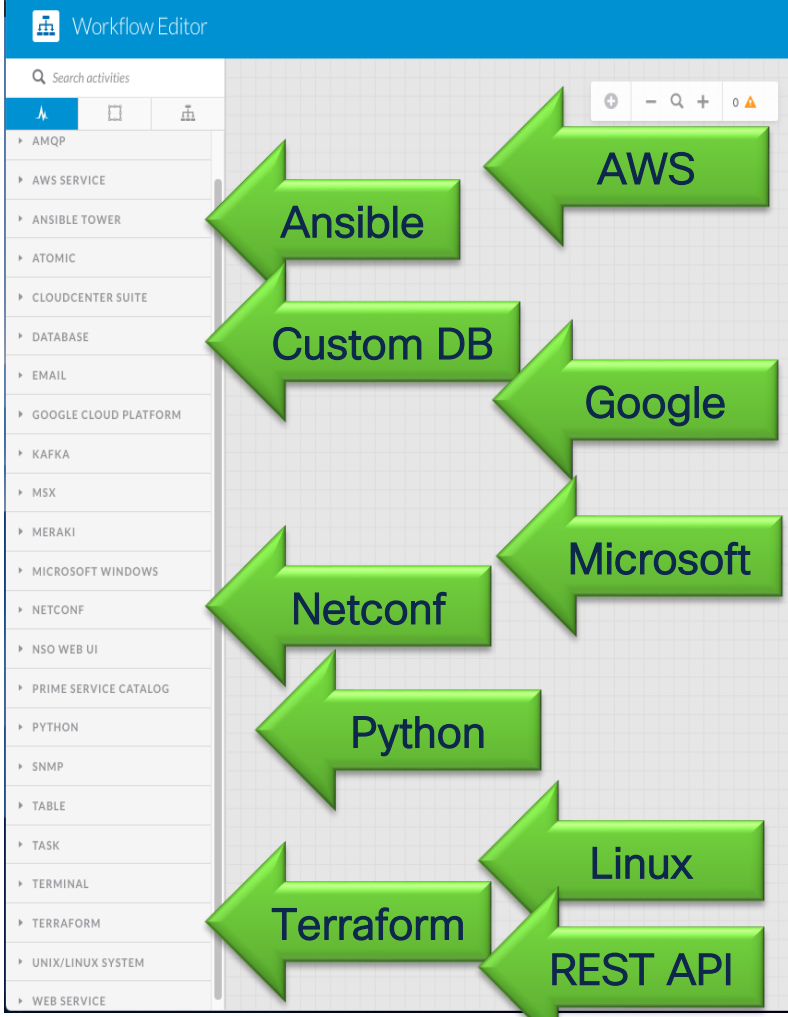

Tenant Workspace
Cisco East
Services 1
Sites 0
Devices 3
Service Controls
Offer Catalog
Settings
Devices
Scheduled Jobs
Tenants
Users
Workflows
Event Logs
Devices
Cisco East: Tenant Workspace
1 Service
0
issues
0 Sites
3 Devices
0
issues
3 DEVICES
Services: All
Status: All
Device Models: All
Compliance: All
Security: All
Sorted by : Status
DEVICE
MODEL
SERVICE
SERIAL NUMBER
OS VERSION
c800002e
Good
CISCO CATALYST 8000
Managed Device
9GSYS42UIOE
17.7.1a
csr1k210e
Good
CISCO CSR 1000v
Managed Device
9YVLN8EVX5X
17.3.4a

Custom Device Actions

Workflow Intro

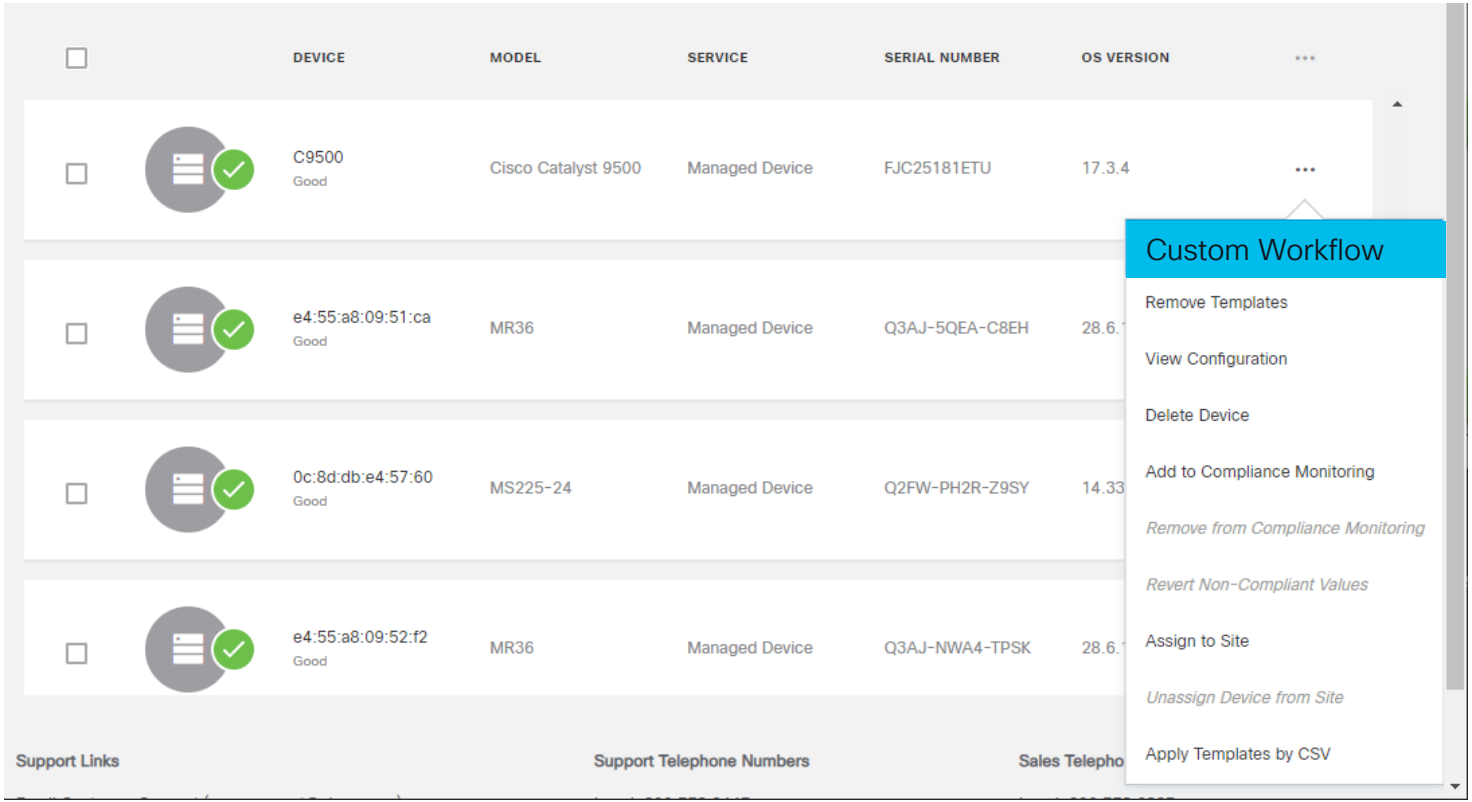
MSX Automation



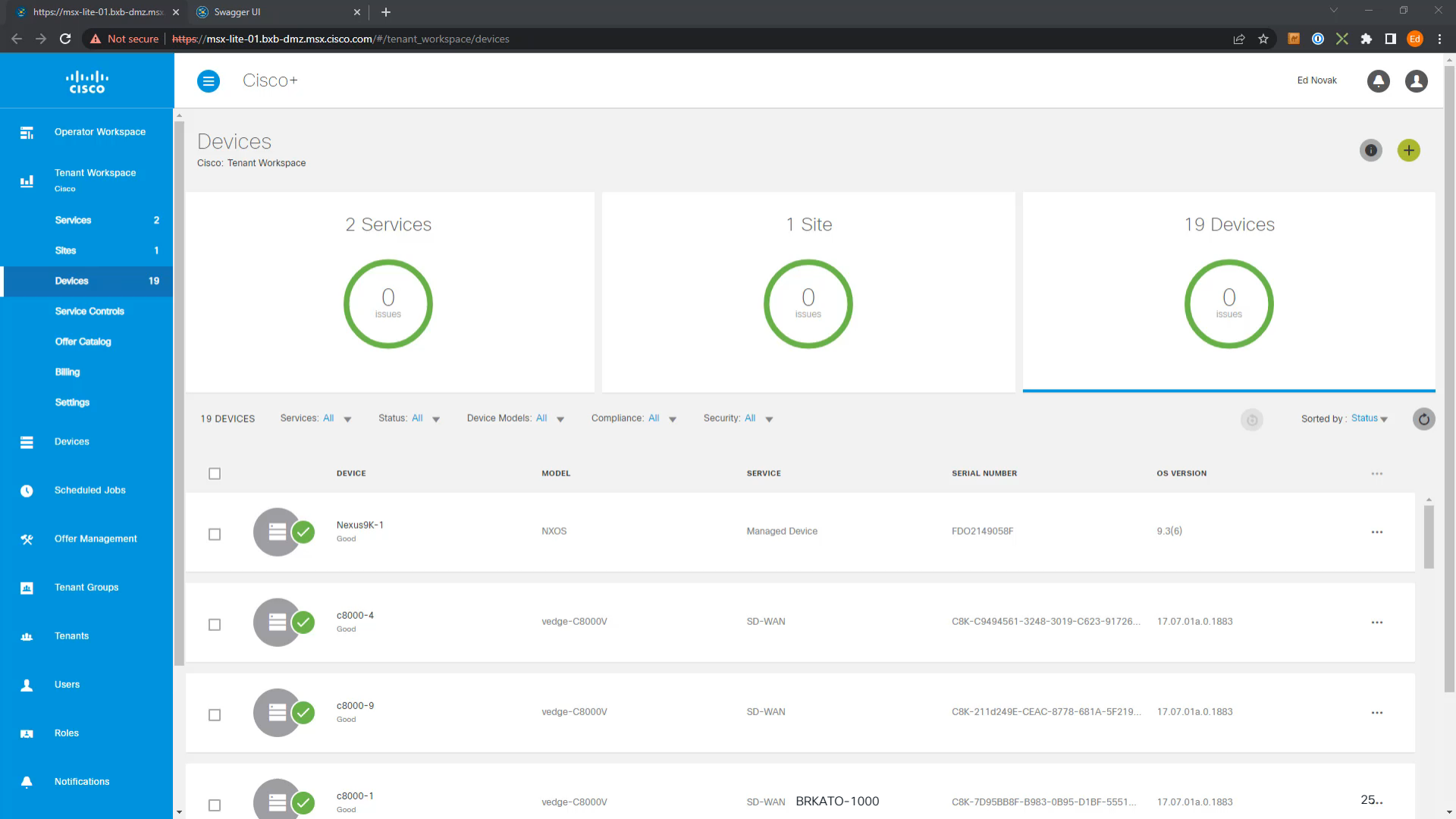


© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

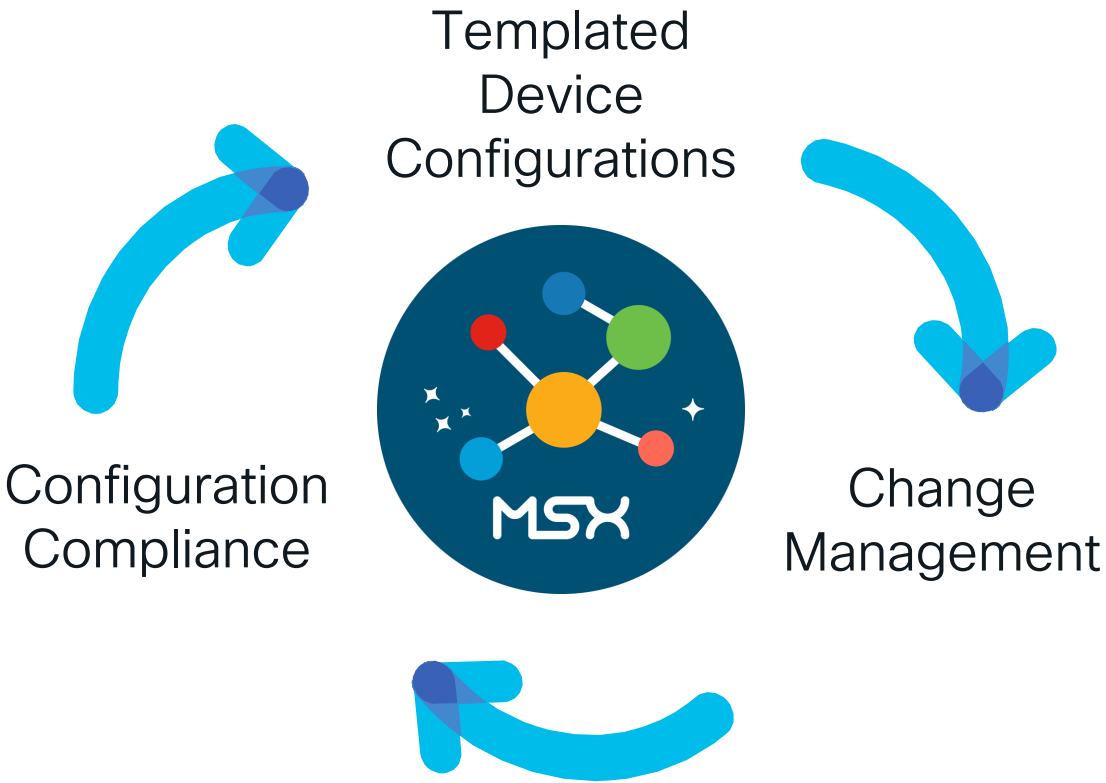
Add any Workflow as a Custom Device Action



© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public


https://msx-lite-01.bxb-dmz.msx
Swagger UI
Not secure | https://msx-lite-01.bxb-dmz.msx.cisco.com/#/tenant_workspace/devices
Cisco+
Ed Novak
Operator Workspace
Tenant Workspace
Cisco
Services 2
Sites 1
Devices 19
Service Controls
Offer Catalog
Billing
Settings
Devices
Scheduled Jobs
Offer Management
Tenant Groups
Tenants
Users
Roles
Notifications
Devices
Cisco: Tenant Workspace
2 Services
0
issues
1 Site
0
issues
19 Devices
0
issues
19 DEVICES
Services: All
Status: All
Device Models: All
Compliance: All
Security: All
Sorted by : Status
DEVICE
MODEL
SERVICE
SERIAL NUMBER
OS VERSION
Nexus9K-1
Good
NXOS
Managed Device
FDO2149058F
9.3(6)
c8000-4
Good
vedge-C8000V
SD-WAN
C8K-C9494561-3248-3019-C623-91726...
17.07.01a.0.1883
c8000-9
Good
vedge-C8000V
SD-WAN
C8K-211d249E-CEAC-8778-681A-5F219...
17.07.01a.0.1883
c8000-1
Good
vedge-C8000V
SD-WAN
BRKATO-1000
C8K-7D95BB8F-B983-0B95-D1BF-5551...
17.07.01a.0.1883

Conclusion



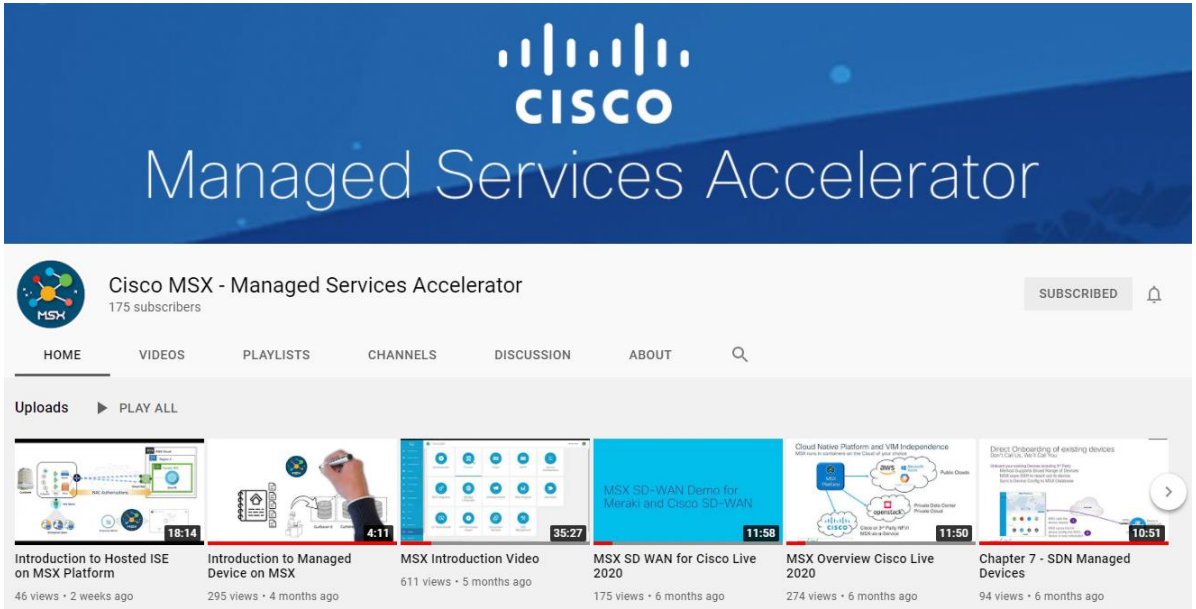
© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Other MSX sessions

Session Type: Interactive Breakout
Session ID: IBOOPS-2254
Session Title: Case Study: How to simplify automation across 2 million devices from disparate technology domains
Date: Tuesday 06/14/22
Start Time: 1:00 PM - 2:00 PM

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

MSX YouTube Channel



cs.co/msx-youtube

- Demos of MSX Services
- Subscribe for Updates!
- New Material constantly being added

Follow #MSX on LinkedIn and Twitter

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Technical Session Surveys

- Attendees who fill out a minimum of four session surveys and the overall event survey will get Cisco Live branded socks!
- Attendees will also earn 100 points in the Cisco Live Game for every survey completed.
- These points help you get on the leaderboard and increase your chances of winning daily and grand prizes.

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Learning and Certifications

From technology training and team development to Cisco certifications and learning plans, let us help you empower your business and career. www.cisco.com/go/certs

Pay for Learning with Cisco Learning Credits

(CLCs) are prepaid training vouchers redeemed directly with Cisco.

Learn

Cisco U.
IT learning hub that guides teams and learners toward their goals

Cisco Digital Learning
Subscription-based product, technology, and certification training

Cisco Modeling Labs
Network simulation platform for design, testing, and troubleshooting

Cisco Learning Network
Resource community portal for certifications and learning

Train

Cisco Training Bootcamps
Intensive team & individual automation and technology training programs

Cisco Learning Partner Program
Authorized training partners supporting Cisco technology and career certifications

Cisco Instructor-led and Virtual Instructor-led training
Accelerated curriculum of product, technology, and certification courses

Certify

Cisco Certifications and Specialist Certifications
Award-winning certification program empowers students and IT Professionals to advance their technical careers

Cisco Guided Study Groups
180-day certification prep program with learning and support

Cisco Continuing Education Program
Recertification training options for Cisco certified individuals

Here at the event? Visit us at **The Learning and Certifications lounge at the World of Solutions**

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Continue your education

- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at www.CiscoLive.com/on-demand

cisco Live!

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Webex App

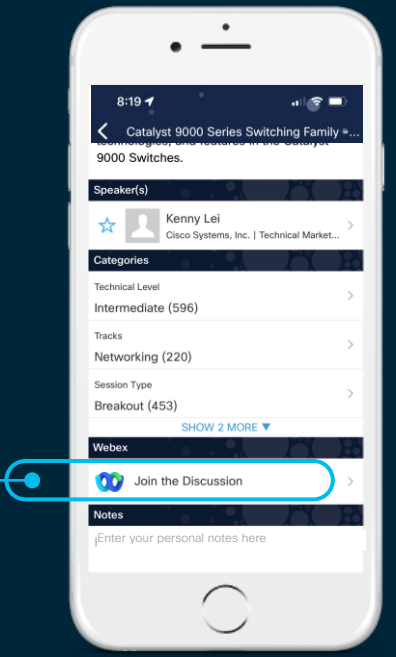
Questions?

Use Cisco Webex App to chat
with the speaker after the session

How

1. Find this session in the Cisco Live Mobile App
2. Click “Join the Discussion”
3. Install the Webex App or go directly to the Webex space
4. Enter messages/questions in the Webex space

Webex spaces will be moderated
by the speaker until June 17, 2022.



https://ciscolive.ciscoevents.com/ciscolivebot/#BRKATO-1000

© 2022 Cisco and/or its affiliates. All rights reserved. Cisco Public

The bridge to possible

Thank you

cisco Live!

cisco Live!
ALL IN