

Mist Wired Assurance

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Engineering
Simplicity

Agenda

- Wired Assurance とは
- Basic Wired Assurance
- Advanced Wired Assurance

- 参考資料 管理画面例

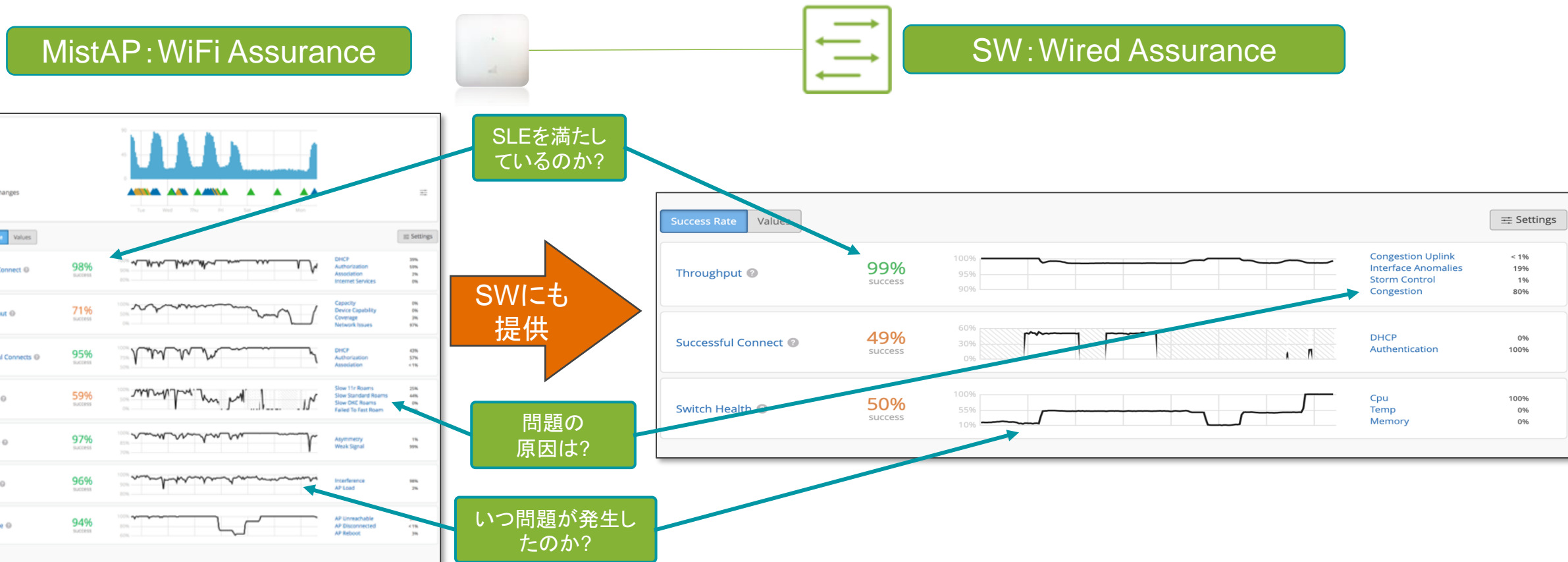


Wired Assurance とは



Wired Assuranceとは

AIで現状のWi-Fi環境を解析し、視覚的に**クライアントの体感を数値化**するMist 特有機能を**スイッチ(有線)にまで拡大**して提供するものです。



Basic Wired Assurance



Basic Wired Assurance – Open - Across all vendors

Mistは**全てのベンダーのスイッチ**について、AIドリブンのインサイト情報を提供：

- **Switch Firmware Compliance**
 - 異なるファームウェアを実行しているスイッチの検出
- **Switches –AP Affinity**
 - 接続できるAPの最大数のルールに違反したスイッチの検出
- **Power Compliance**
 - 802.3atで給電されていないAPの検出
- **Inactive Wired VLANs**
 - 設定されていないVLANの検出
- **Switch outage blast radius to mobile users**
 - スwitchの停止により影響を受けるワイヤレスユーザーの特定



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NETWORKS



CISCO



CISCO
Meraki



Hewlett Packard
Enterprise



aruba
a Hewlett Packard
Enterprise company

Basic Wired Assurance を利用するためには Marvis Virtual Network Assistant ServiceとMist APが必要

Advanced Wired Assurance



NEW

Advanced Wired Assurance service for junos

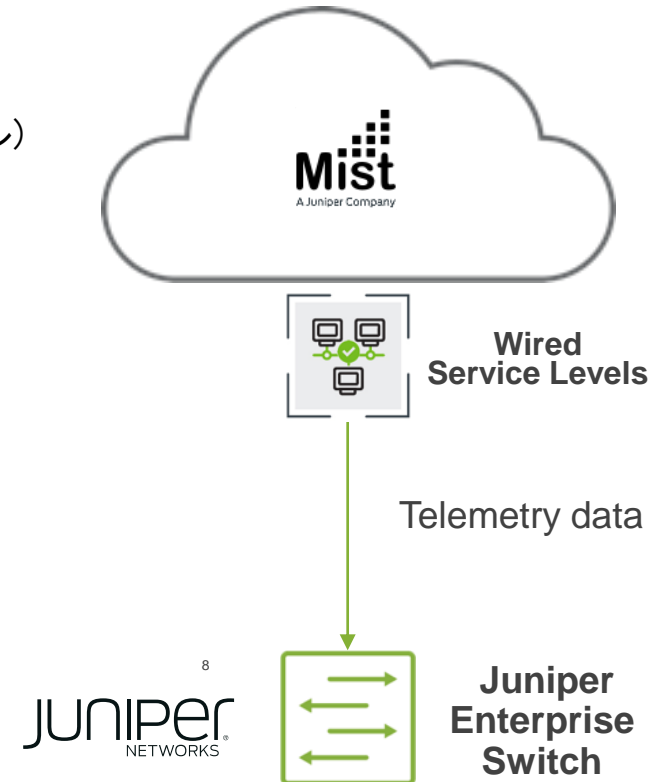
Basic wired assurance のインサイト情報に加え、**Juniper EX-SWを対象に拡張機能を提供**：

Mist Wired Assurance

- Wired Assurance with Wired Service Levels
 - Wired User Service Level Expectations (SLE)
 - Throughput – AI-Driven Switch Insights (スイッチ及びポートレベル)
 - CPU、メモリ、温度、インタフェース等
- Wired Switch Events – 相関
 - 設定変更、システムアラート

Mist Marvis
for switching

- Advanced Marvis wired capabilities
 - クエリー：
 - What is wrong with switch?
 - How is my wired network?
- Marvis Actions for Switching



Advanced wired assuranceを利用するためにはWired Assurance ServiceとJuniper EXが必要

參考資料 管理畫面例



MistCloud - Switches

Mist

Monitor

Marvis™

Clients

Access Points

Switches

Location

Analytics

Network

Organization

THE TRUE MIST OFFICE [PRODUCTION]

MON, 05:33 PM
👤
💡
?

12
Switches
[beta]

site Office [PRODUCTION]
 ▼

List
Topology
Location

🔍
☰
🔄

12
switches
20
access points
63
clients
421 W
total AP power

100%
Switch-AP Affinity

95%
PoE Compliance


100%
VLANs

20%
Version Compliance


> 99%
Switch Uptime

Name	IP Address	⤴ APs	Clients	Model
sw087001	--	1	0	--
UBNT	--	1	5	USW-24P-250
CORP-A-DIST-SW	10.2.10.113	2	4	C2960S-UNIVERSALK9-M
CORP-D-SW-2	10.2.11.250	1	2	C2960S-UNIVERSALK9-M
Juniper48MP-NearPrinter	10.2.15.239	2	12	Juniper Networks EX2300-48MP
ap7532-160168	192.168.1.100	1	0	--
CORP-D-SW-2	INV_IPV4	5	17	C2960S-UNIVERSALK9-M
HP-2530-48G-PoEP	INV_IPV4	1	6	2530-48G-POEP
CORP-A-DIST-SW	INV_IPV4	1	5	C2960S-UNIVERSALK9-M
Juniper48MP-NearPrinter	INV_IPV4	1, 2	5	Juniper Networks EX2300-48MP
CiscoSwitch1FrontRoom.mist.local	INV_IPV4	1	0	C3560E-UNIVERSALK9-M
CORP-C-SW-1.mist.local	INV_IPV4	1	7	C2960S-UNIVERSALK9-M

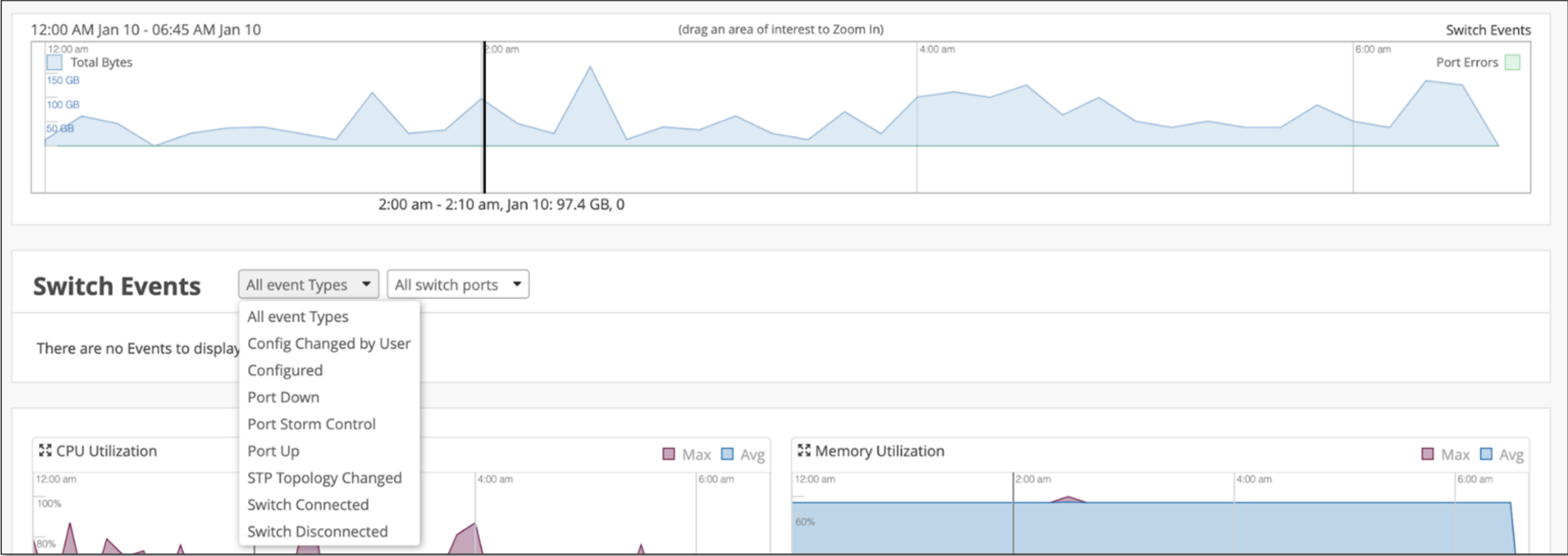
Switch詳細



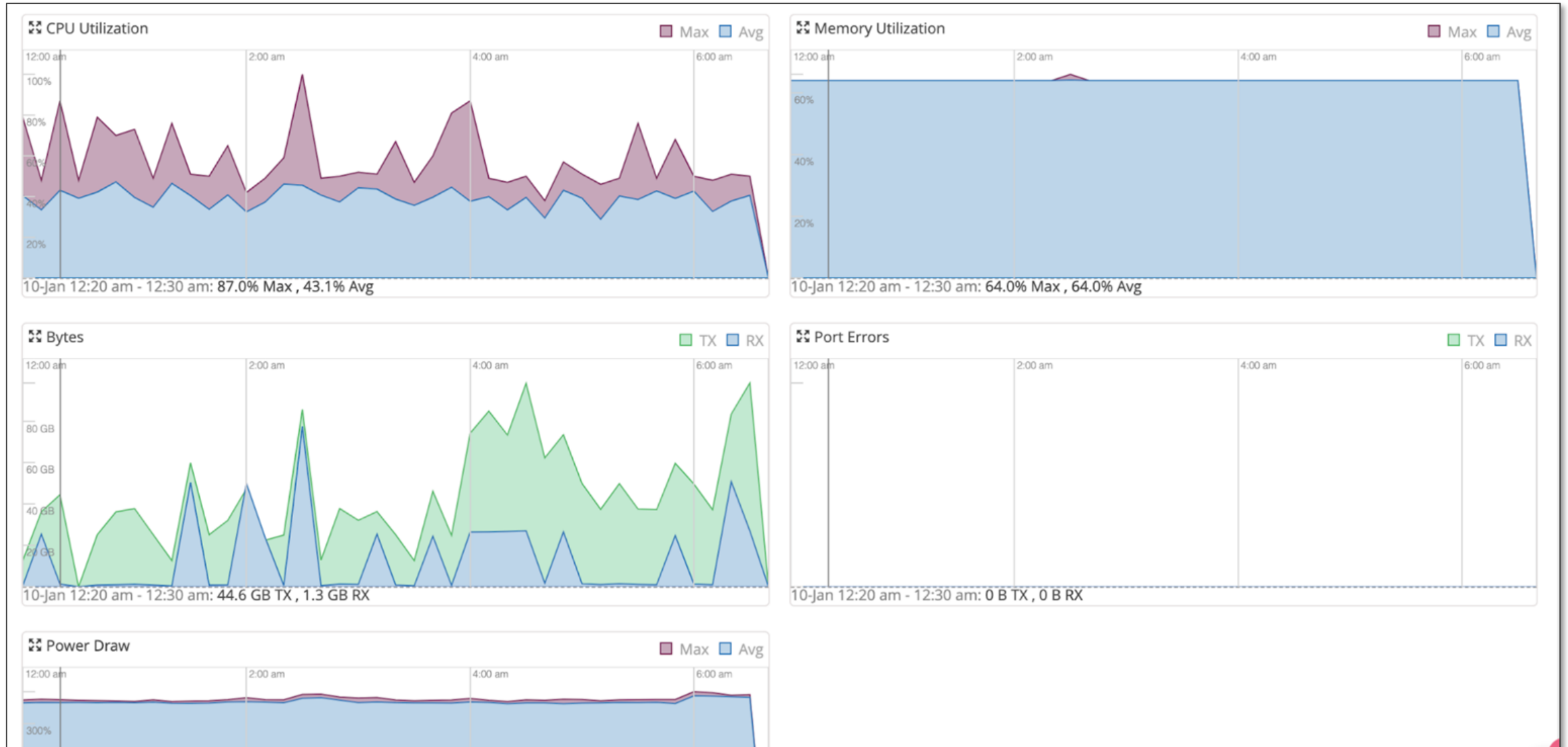
Properties	
Insights	Switch Insights
MAC Address	f0:4b:3a:a7:0c:20
Model	EX4300-48P
Version	18.1R3-S6.1

Statistics	
Status	 Connected
IP Address	172.23.34.26
Mist APs	0
Wireless Clients	0
Total Power Draw	0.00 W
Uptime	92d 12h 31m
Last Seen	06:39:51 AM, Jan 10

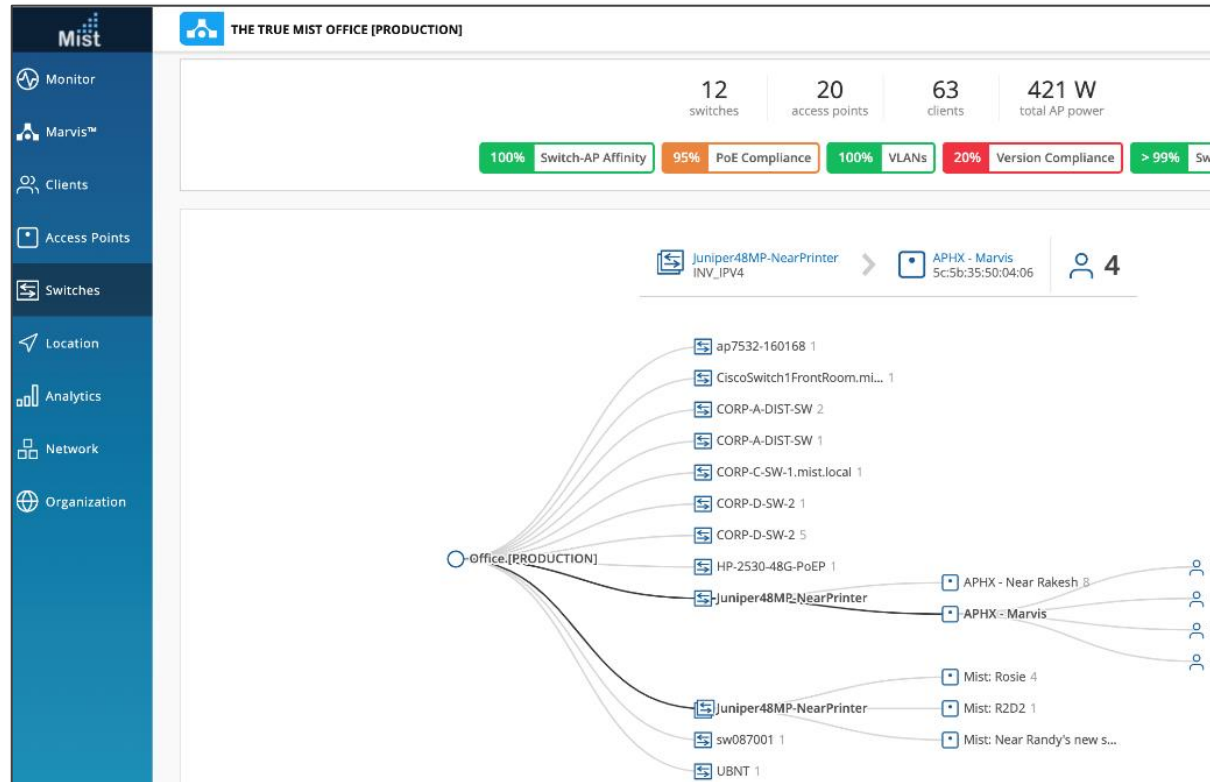
Switch Insights (イベント一覧)



Switch Insights (CPU/メモリ/消費電力)

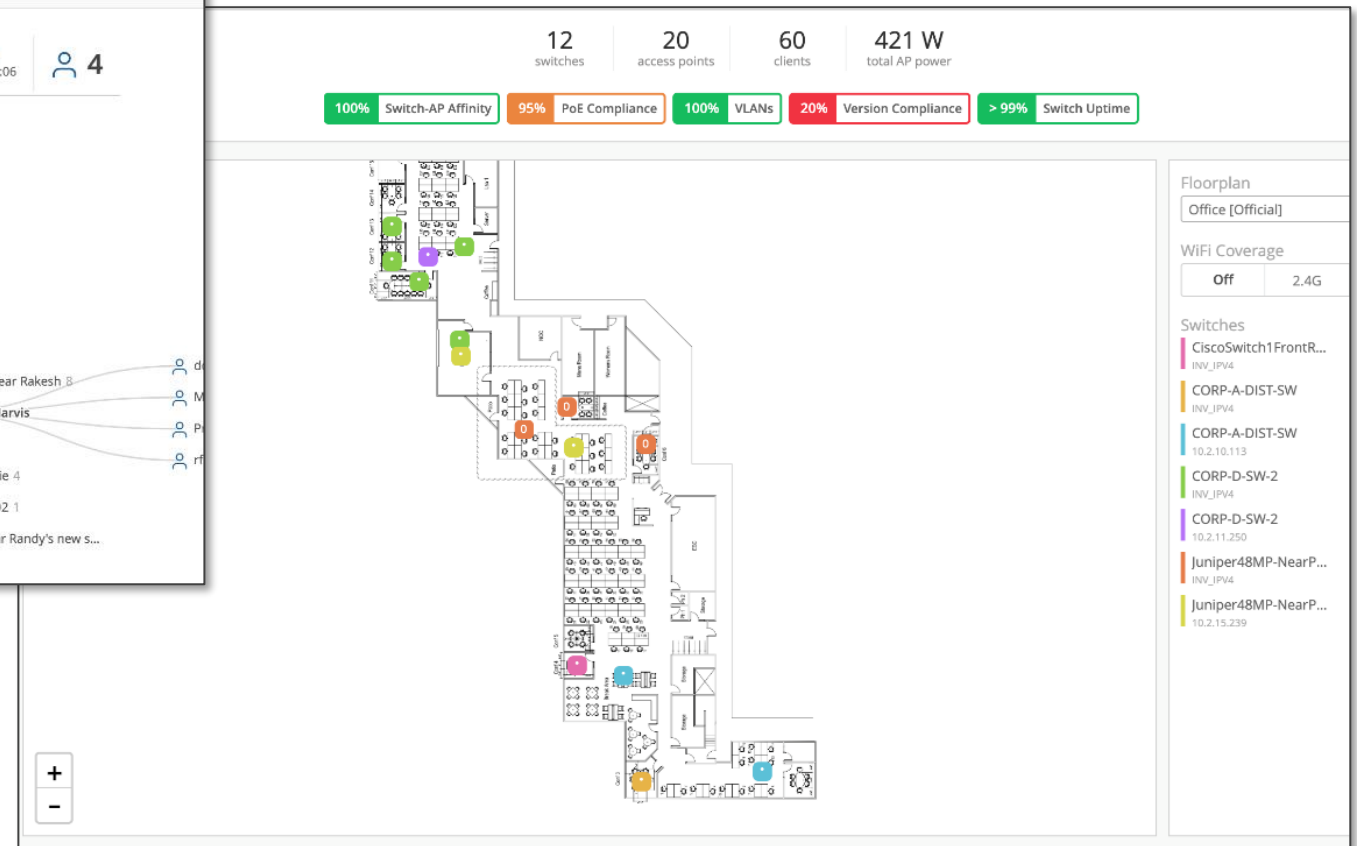


Wired Visibility with Wireless endpoints



アクセスネットワークを完全に可視化

PoEスイッチの障害で影響を受けるAPを可視化



Wired SLE

Success Rate

Values

Settings

Throughput ?

99%
success



Congestion Uplink	< 1%
Interface Anomalies	19%
Storm Control	1%
Congestion	80%

Successful Connect ?

49%
success



DHCP	0%
Authentication	100%

Switch Health ?

50%
success



Cpu	100%
Temp	0%
Memory	0%

Throughput SLE

Wired Network /

Throughput

Root Cause analysis Select a metric to analyze

%

#

Service Level Metrics

Throughput 99%

Successful Conn... 49%

Switch Health 50%

Classifiers

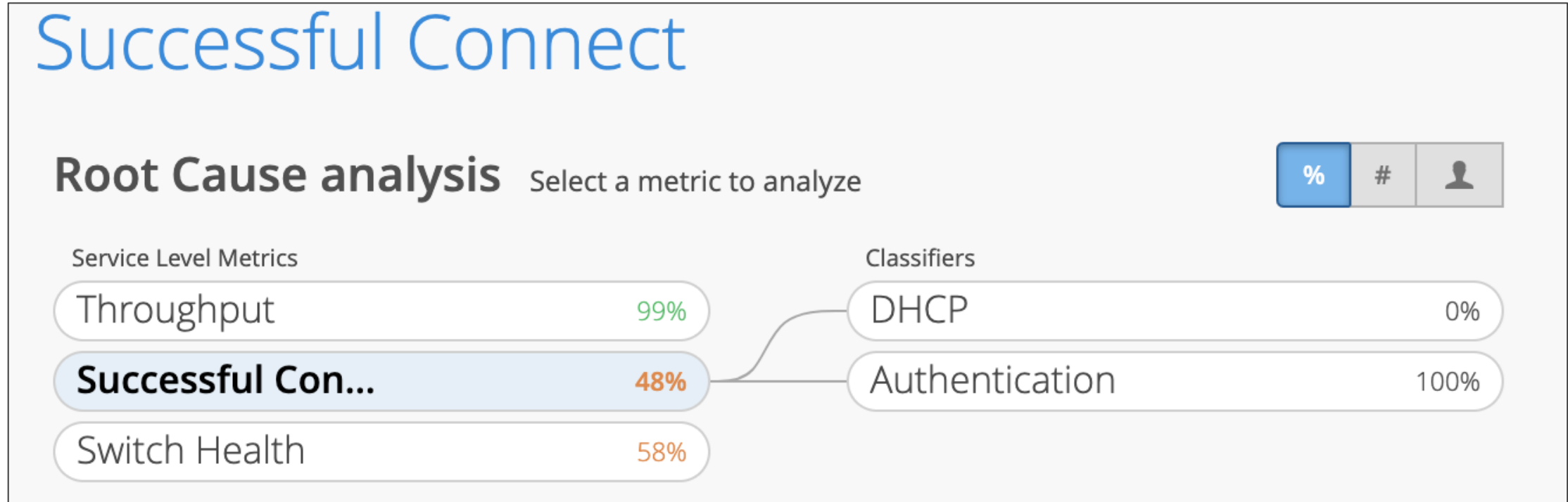
Congestion Upli... < 1%

Interface Anom... 19%

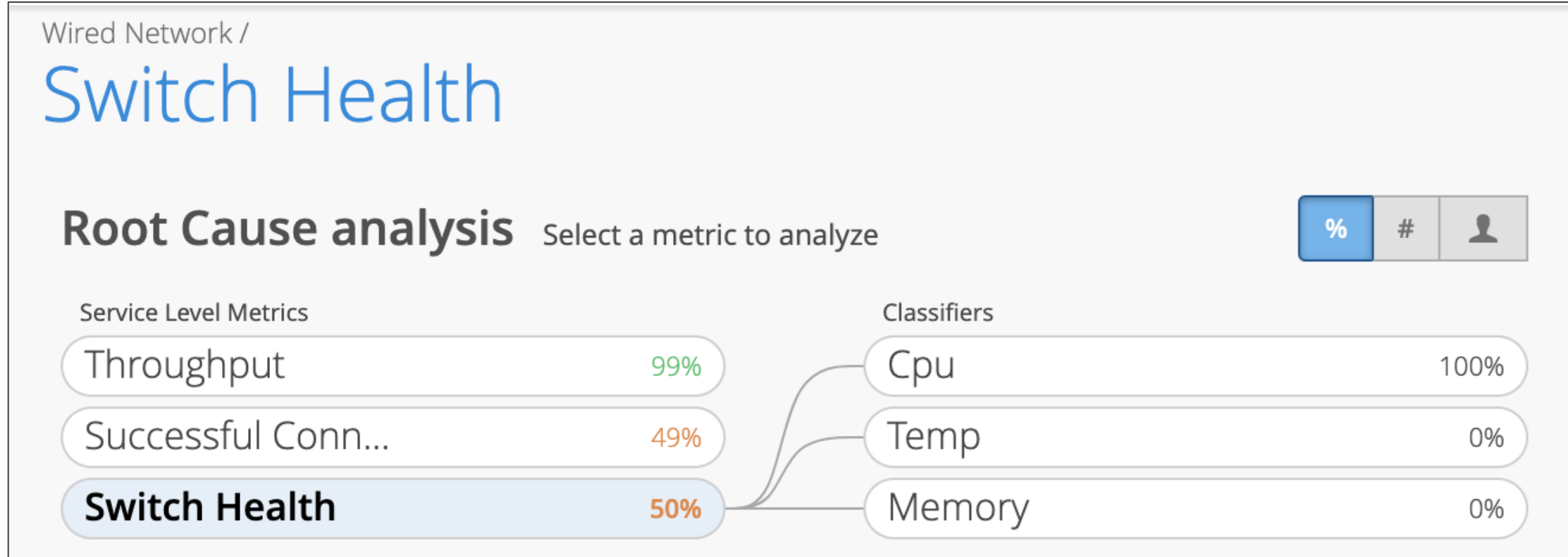
Storm Control 1%

Congestion 80%

Successful Connect SLE



Switch Health SLE



現状SLEのしきい値は固定

-CPU CPU使用率 90%

-Memory メモリ使用率80%

-Temp 動作温度 0°C~45°C



Thank you

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