

Mist 運用マニュアル

電波干渉 有無の確認手順(拠点単位)

ジュニパーネットワークス株式会社
2021年7月 Ver 1.0

JUNIPER 
driven by Mist AI

はじめに

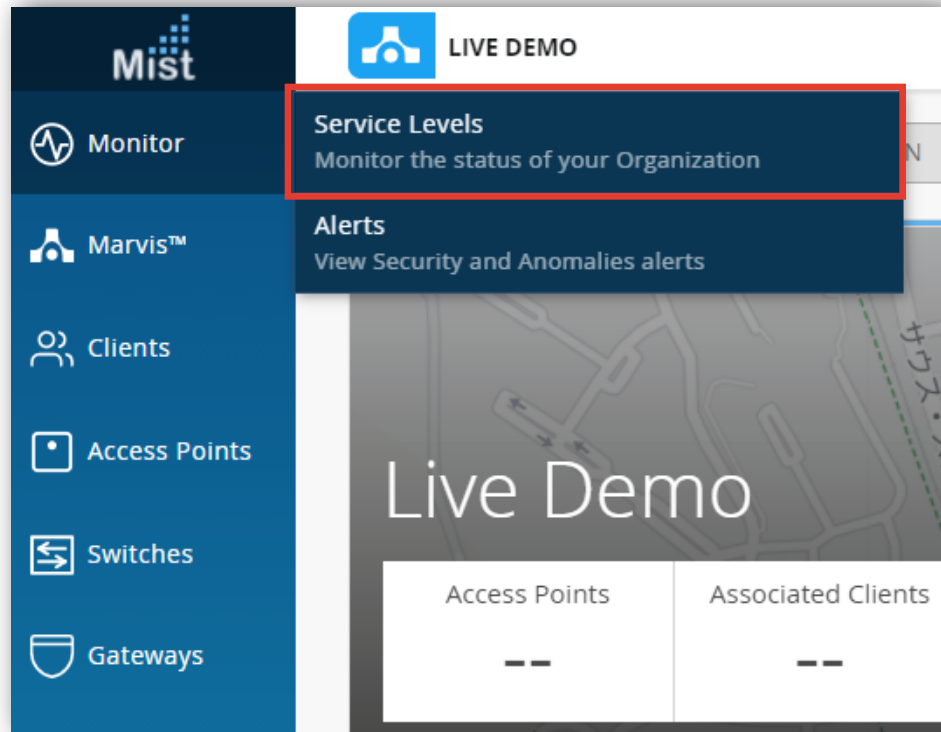
- ❖ 本マニュアルは、『電波干渉 有無の確認手順(拠点単位)』について説明します
- ❖ 手順内容は 2021年7月 時点の Mist Cloud にて確認を実施しております
実際の画面と表示が異なる場合は以下のアップデート情報をご確認下さい
<https://www.mist.com/documentation/category/product-updates/>
- ❖ 設定内容やパラメータは導入する環境や構成によって異なります
各種設定内容の詳細は下記リンクよりご確認ください
<https://www.mist.com/documentation/>
- ❖ 他にも多数の Mist 日本語マニュアルを「ソリューション&テクニカル情報サイト」に掲載しております
<https://www.juniper.net/jp/ja/local/solution-technical-information/mist.html>

■ 運用ケース(例)

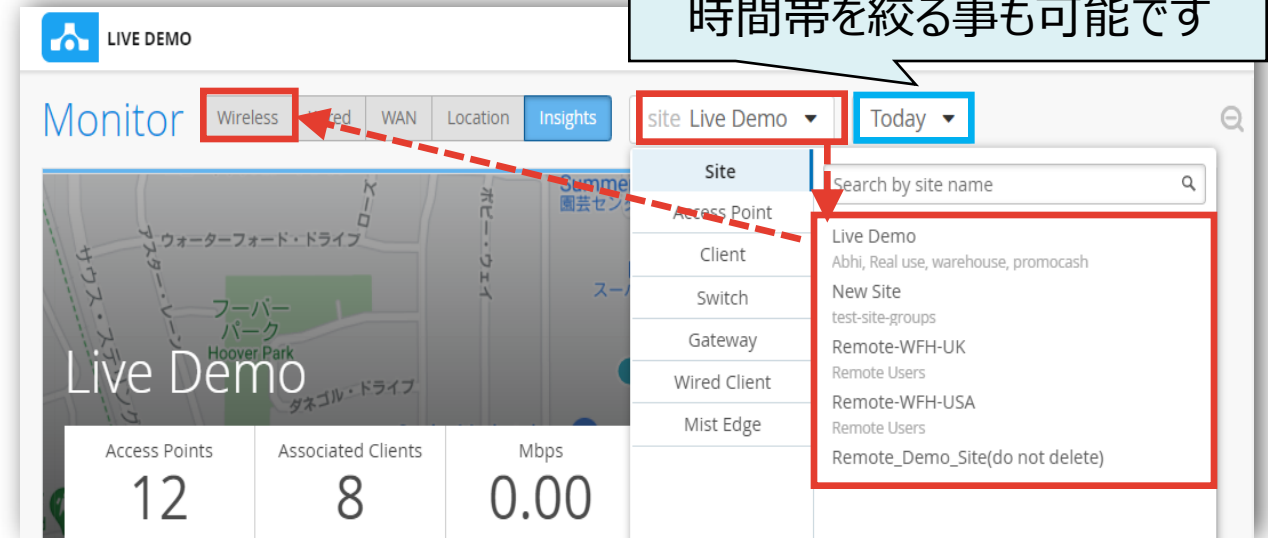
同一拠点の複数のクライアントから不具合の問合せを受領し、
電波干渉の発生有無を確認したい時

対象拠点を選択

1. [Monitor] から [Service Levels]をクリックします



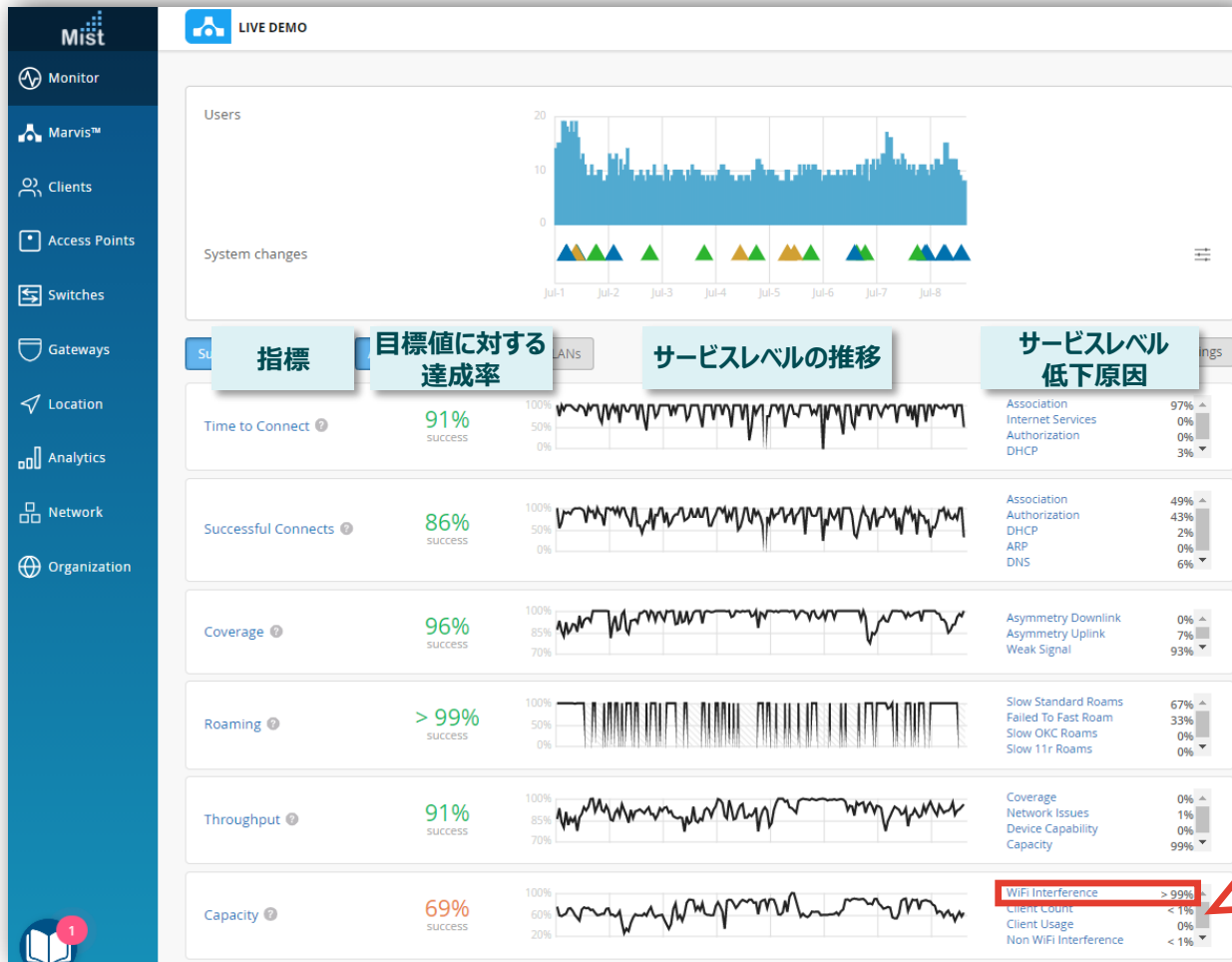
2. [site] から 対象拠点(site name)を選択し、
[Wireless]をクリックします



SLEの達成率、SLEが低い原因を確認

最初に「Wi-Fi干渉」について確認します

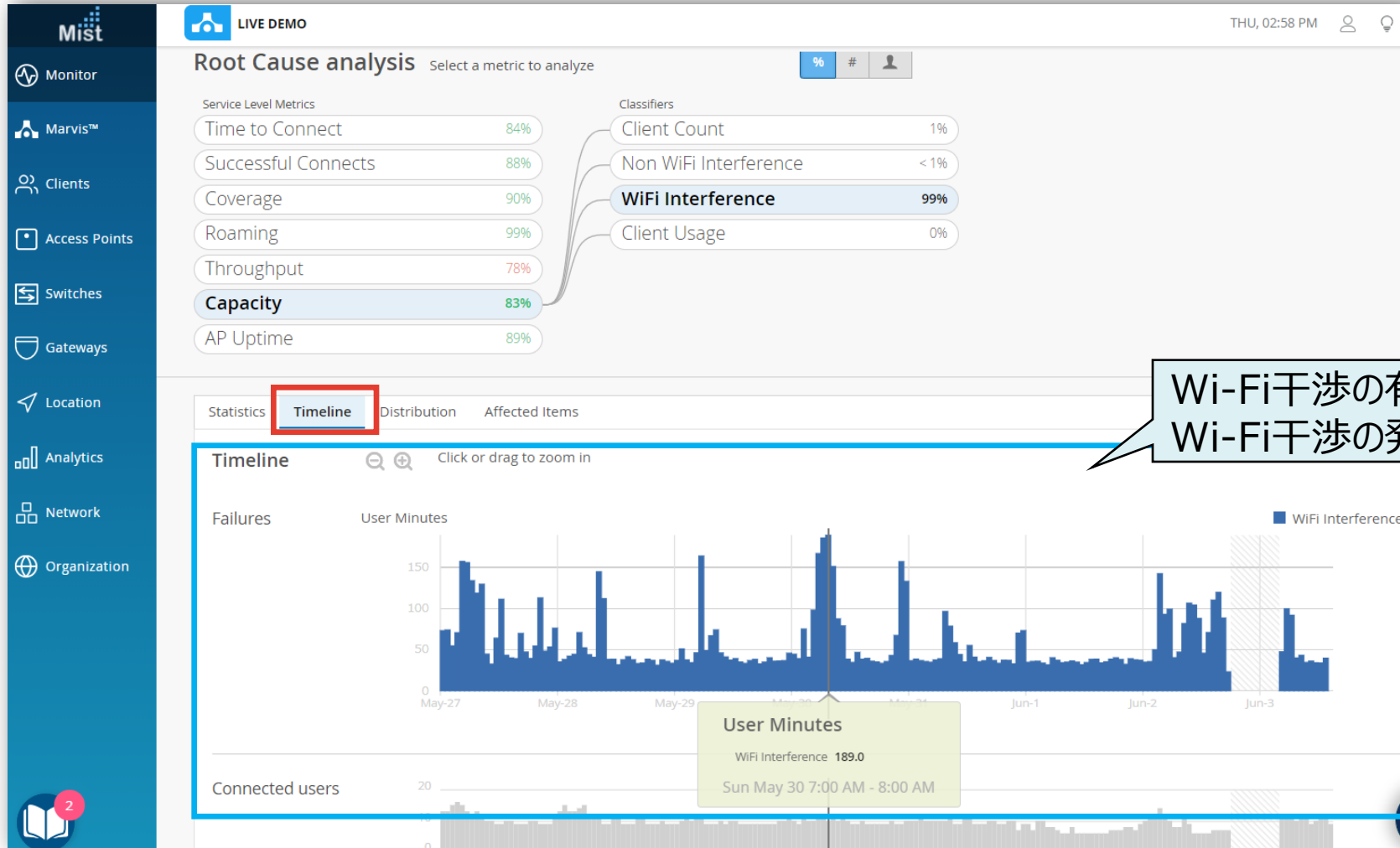
3. [Wi-Fi Interference] をクリックします



WiFi Interference	> 99%
Client Count	< 1%
Client Usage	0%
Non WiFi Interference	< 1%

不具合が発生している時間帯を特定(Wi-fi干渉)

4. [Timeline] をクリックします



Wi-Fi干渉の有無、
Wi-Fi干渉の発生日時を確認出来ます

不具合に関する傾向分析(Wi-fi干渉)

5. [Distribution] をクリックします

The screenshot shows the Mist WiFi Interference dashboard. The 'Root Cause analysis' section displays 'Capacity' at 69% as the primary issue. Below it, the 'Distribution' tab is selected, showing a table of service level failures by attribute. A callout box points to the 'Distribution' tab and the table, explaining that it allows for identifying trends in wireless interference based on various attributes.

Root Cause analysis Select a metric to analyze

Service Level Metrics

- Time to Connect: 91%
- Successful Connects: 86%
- Coverage: 96%
- Roaming: > 99%
- Throughput: 91%
- Capacity: 69%**
- AP Uptime: > 99%

Classifiers

- WiFi Interference: > 99%**
- Client Count: < 1%
- Client Usage: 0%
- Non WiFi Interference: < 1%

Distribution Analyze service level failures by attribute. Attributes are sorted by most anomalous.

Attribute	Name	Overall Impact	Failure Rate	Anomaly
Wireless Bands	2.4 GHz	33%	100%	3.28x
Access Points	5 GHz	67%	23%	0.74x
WLANS				
Device Types				

どのWireless Bands、OS、アクセスポイント、WLAN(SSID)、Device Typesで電波干渉が発生しているか傾向を確認出来ます

影響範囲の調査(Wi-fi干渉)

6. [Affected Items] をクリックします

The screenshot displays the Mist WiFi Interference dashboard. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, Location, Analytics, Network, and Organization. The main content area is titled "WiFi Interference" and includes a "Root Cause analysis" section with a "Select a metric to analyze" dropdown. The "Service Level Metrics" section shows various metrics with their respective percentages: Time to Connect (91%), Successful Connects (86%), Coverage (96%), Roaming (> 99%), Throughput (92%), Capacity (69%), and AP Uptime (> 99%). The "Classifiers" section shows: WiFi Interference (> 99%), Client Usage (0%), Non WiFi Interference (< 1%), and Client Count (< 1%). Below this, the "Affected Items" tab is selected and highlighted with a red box. A callout box points to this tab with the text: "電波干渉により影響が出ているクライアントを把握出来ます". The "Affected items" table lists specific items that failed to meet the service level goal, categorized by Users (35), Access points (11), and Applications (36).

Category	Count
Users	35
Access points	11
Applications	36

Name	Overall Impact	Failure Rate	MAC Address	Device	OS	Last AP	WLAN
mauna-kea	0.14%	< 1%	b8:27:eb:c1:ef:bd	unknown	unknown	LD_Kitchen	Live_demo_only
cphillips-T14	0.09%	2%	4c:79:6e:72:4d:18	unknown	Windows 10	LD_JSW_AP	Live_demo_only
LAPTOP-SVQ6H1EB	3.26%	6%	b8:08:cf:b0:c3:86	unknown	Windows 10	LD_RS_Support	Live_demo_only

不具合が発生している時間帯を特定(非Wi-fi干渉)

次に「非Wi-Fi干渉」について確認します

7. [Non Wi-Fi Interference]から [Timeline] をクリックします

The screenshot displays the Mist network management interface for a 'Live Demo' site. The main view is titled 'Non WiFi Interference' under the 'Wireless / Capacity' section. It features a 'Root Cause analysis' section with two columns: 'Service Level Metrics' and 'Classifiers'. The 'Capacity' metric is highlighted with a red box and a red arrow pointing to the 'Timeline' tab in the 'Statistics' section. The 'Timeline' tab is also highlighted with a red box. A callout box with a red dashed arrow points to the 'Non WiFi Interference' classifier, which is also highlighted with a red box. The callout box contains the text: '非Wi-Fi干渉の有無、非Wi-Fi干渉の発生日時を確認出来ます'.

Service Level Metrics	Value
Time to Connect	90%
Successful Connects	87%
Coverage	90%
Roaming	> 99%
Throughput	94%
Capacity	74%
AP Uptime	93%

Classifiers	Value
Non WiFi Interferen...	< 1%
Client Usage	< 1%
WiFi Interference	99%
Client Count	1%

不具合に関する傾向分析(非Wi-fi干渉)

8. [Distribution] をクリックします

The screenshot displays the Mist dashboard interface for 'Non WiFi Interference' analysis. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, Location, Analytics, Network, and Organization. The main content area shows 'Root Cause analysis' with 'Capacity' selected as the metric to analyze. Below this, 'Service Level Metrics' and 'Classifiers' are listed. The 'Distribution' tab is highlighted, showing a table of anomalies.

Wireless Bands	Name	Overall Impact	Failure Rate	Anomaly	0	1x
WLANs	2.4 GHz	50%	< 1%	7.62x		
Device OSs	5 GHz	50%	< 1%	0.54x		
Device Types						
Access Points						

どのWireless Bands、OS、アクセスポイント、WLAN(SSID)、Device Typesで非Wi-Fi干渉が発生しているか傾向を確認出来ます

影響範囲の調査(非Wi-fi干渉)

9. [Affected Items] をクリックします

The screenshot displays the Mist dashboard interface for a 'LIVE DEMO' site. The main heading is 'Non WiFi Interference'. Under 'Root Cause analysis', 'Capacity' is selected with a 74% metric. The 'Affected Items' tab is highlighted in red, showing a table of affected users. A callout box points to this table with the text: '電波干渉により影響が出ているクライアントを把握出来ます' (You can identify clients affected by radio interference).

Users	1
Access points	1
Applications	34

Name	Overall Impact	Failure Rate	MAC Address	Device	OS	Last AP	WLAN
mauna-kea	100.00%	< 1%	b8:27:eb:c1:ef:bd	unknown	unknown	LD_Kitchen	Live_demo_only

Thank you

JUNIPER
driven by Mist AI 