

Mist 運用マニュアル 電波の受信強度 問題有無の確認手順 (拠点単位)

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2021年7月 Ver 1.0

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はじめに

- ❖ 本マニュアルは、『電波の受信強度 問題有無の確認手順(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、
電波の受信強度の問題有無を確認したい時

SLEの達成率、SLEが低い原因を確認

3. [Weak Signal] をクリックします

The screenshot shows the Mist Monitor dashboard for a 'Live Demo' site. The 'Last 7 Days' time range is selected. The dashboard displays various performance metrics with their current success rates and trend graphs. A callout box highlights the 'Weak Signal' category under 'Asymmetry Downlink'.

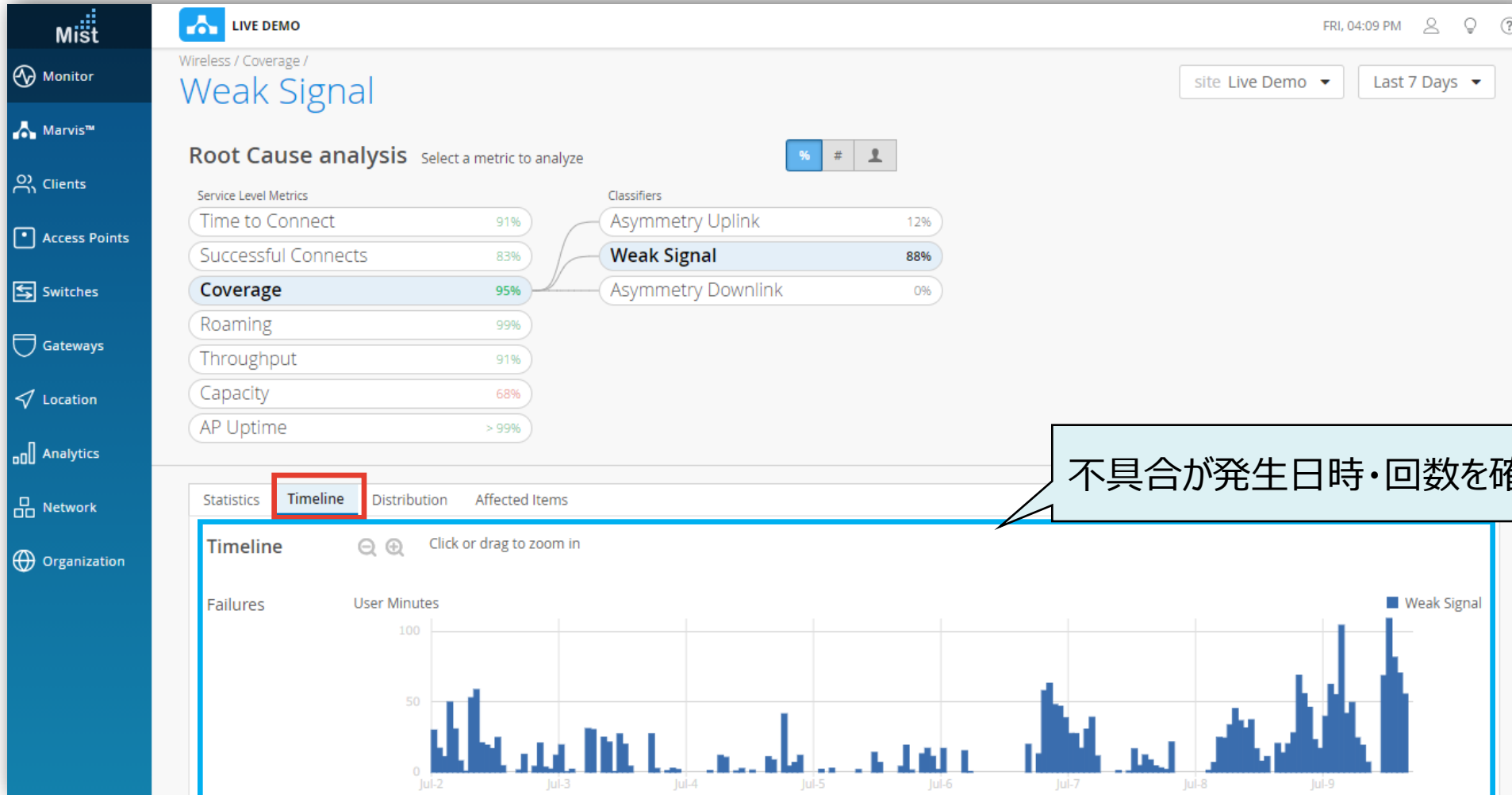
時間帯を絞る事も可能です

指標	目標値に対する達成率	サービスレベルの推移	サービスレベル低下原因
Time to Connect	91% success		Authorization 1% ↑ Internet Services 0% Association 94% DHCP 5% ↓
Successful Connects	83% success		Association 54% ↑ Authorization 44% DHCP 2% ARP 0% DNS 0% ↓
Coverage	95% success		Asymmetry Uplink 12% ↑ Asymmetry Downlink 88% Weak Signal 88% ↓
Roaming	99% success		Slow Standard Roams 100% ↑ Slow OKC Roams 0% Failed To Fast Roam 0% Slow 11r Roams 0% ↓
Throughput	91% success		Device Capability 0% ↑ Coverage 0% Network Issues 1% Capacity 99% ↓
Capacity	68% success		Client Count < 1% ↑ Non WiFi Interference < 1% WiFi Interference > 99% Client Usage < 1% ↓
AP Uptime	> 99% success		AP Reboot 0% ↑ Switch Down 95% AP Unreachable 5% Site Down 0% ↓

Asymmetry Uplink 12% ↑
Weak Signal 88%
Asymmetry Downlink 0% ↓

不具合が発生している時間帯を特定

4. [Timeline] をクリックします



不具合に関する傾向分析

5. [Distribution] をクリックします

The screenshot displays the Mist network management interface. The main heading is 'Weak Signal' under 'Wireless / Coverage /'. The 'Root Cause analysis' section shows 'Coverage' at 95% as the primary issue. The 'Distribution' tab is selected, showing a table of failure rates by attribute. A callout box explains that this view allows for identifying trends in anomalies across various attributes like Wireless Bands, OS, and APs.

Attribute	Name	Overall Impact	Failure Rate	Anomaly
WLANs	Golden SSID	7%	75%	17.07x
Device OSs	Mist_IoT	42%	8%	1.78x
Wireless Bands	Live_demo_only	39%	4%	0.87x
Wireless Bands	Live_demo_do_not_remove	12%	2%	0.39x

どのWireless Bands、OS、アクセスポイント、WLAN(SSID)、Device Typesで不具合が発生しているか傾向を確認出来ます

影響範囲の調査

6. [Affected Items] をクリックします

The screenshot displays the Mist network management interface. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, Location, Analytics, Network, and Organization. The main content area is titled 'Weak Signal' and shows a 'Root Cause analysis' section. Under 'Service Level Metrics', 'Coverage' is highlighted with a 95% value. Under 'Classifiers', 'Weak Signal' is highlighted with an 88% value. Below this, the 'Affected Items' tab is selected and highlighted with a red box. A callout box points to this tab with the text '影響が出ているクライアントを把握出来ます'.

Statistics Timeline Distribution **Affected Items**

Affected items

Specific Items that failed to meet the service level goal

Users	25	Name	Overall Impact	Failure Rate	MAC Address	Device	OS	Last AP	WLAN
Access points	11	r2d2	0.41%	< 1%	dc:a6:32:c7:e8:97	unknown	unknown	LD_Kitchen-2	Mist_IoT
Applications	36	Google-Nest-Hub	0.04%	< 1%	ac:67:84:0e:d4:74	unknown	Linux	LD_Kitchen-2	Mist_IoT
		cphillips-T14	0.12%	< 1%	4c:79:6e:72:4d:18	unknown	Windows 10	LD_JSW_AP	Live_demo_only
		everest	1.38%	1%	50:32:37:e8:72:7e	unknown	unknown	LD_Kitchen-2	Live_demo_do_not_remove

影響範囲の調査

7. 影響が出ているクライアントの詳細を確認したい場合は、対象クライアントのホスト名 or Macアドレスをクリックする

Wireless / Coverage / Weak Signal

Root Cause analysis Select a metric to analyze

Service Level Metrics	Value	Classifiers
Time to Connect	91%	Asymmet
Successful Connects	83%	Weak Sig
Coverage	95%	Asymmet
Roaming	99%	
Throughput	91%	
Capacity	68%	
AP Uptime	> 99%	

Affected items Specific Items that failed to meet the service

Category	Count	Name	Overall Impact	Fail
Users	25			
Access points	11	r2d2	0.41%	< 1
Applications	36	Google-Nest-Hub	0.04%	< 1
		cphillips-T14	0.12%	< 1
		everest	1.38%	1%

8. [VIEW INSIGHTS] をクリックします

Wireless / Coverage

Root Cause analysis Select a metric to analyze

Service Level Metrics	Value	Classifiers
Time to Connect	76%	Asymmetry Downlink 0%
Successful Connects	67%	Asymmetry Uplink 0%
Coverage	99%	Weak Signal 100%
Roaming	100%	
Throughput	99%	
Capacity	53%	

過去の電波強度を確認

9. RSSI画面にて、電波の受信強度を確認出来ます

The screenshot shows the Mist Monitor interface. The top navigation bar includes 'Monitor', 'Marvis™', 'Clients', 'Access Points', 'Switches', 'Gateways', and 'Location'. The main content area displays the 'everest' client details for 'Live Demo - 01 - Office - LD_Kitchen-2'. A dropdown menu is set to 'Last 7 Days'. A callout box points to this dropdown with the text '時間帯を絞る事も可能です' (It is also possible to narrow down the time period). Below the main content, a large blue arrow points to the 'Post-connection' RSSI graph. A callout box points to this graph with the text '過去に遡っての電波受信強度 (最大値、最小値、平均値)を確認出来ます' (You can check the radio reception strength (maximum, minimum, average) going back in time). The RSSI graph shows a significant drop in signal strength between 9:10 am and 9:20 am on June 25th. A callout box points to the data for this period: '25-Jun 9:10 am - 9:20 am: -47 dBm max, -47 dBm avg, -47 dBm min'. To the right of the RSSI graph is a 'TX / RX Bytes' graph showing data transfer over time.

時間帯を絞る事も可能です

以下のRSSI画面まで移動

過去に遡っての電波受信強度 (最大値、最小値、平均値)を確認出来ます

25-Jun 9:10 am - 9:20 am: -47 dBm max, -47 dBm avg, -47 dBm min

Thank you

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