

# Mist 運用マニュアル

## DHCPエラー 確認手順(拠点単位)

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ジュニパーネットワークス株式会社  
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JUNIPER   
driven by Mist AI

# はじめに

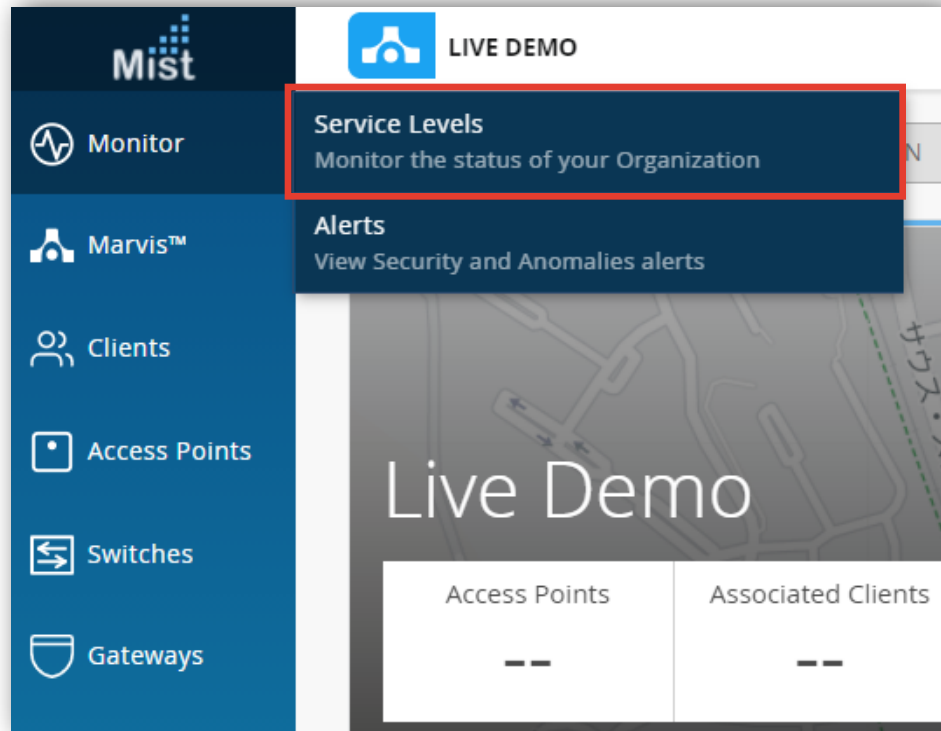
- ❖ 本マニュアルは、『DHCPエラー 確認手順(拠点単位)』について説明します
- ❖ 手順内容は 2021年7月 時点の Mist Cloud にて確認を実施しております  
実際の画面と表示が異なる場合は以下のアップデート情報をご確認下さい  
<https://www.mist.com/documentation/category/product-updates/>
- ❖ 設定内容やパラメータは導入する環境や構成によって異なります  
各種設定内容の詳細は下記リンクよりご確認ください  
<https://www.mist.com/documentation/>
- ❖ 他にも多数の 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)

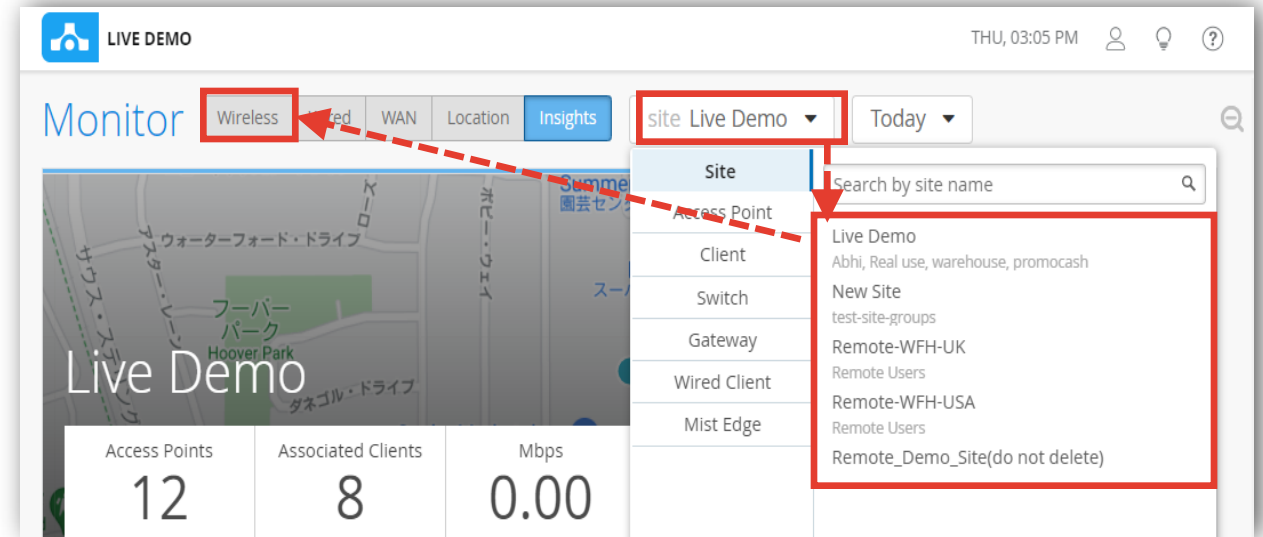
同一拠点の複数のクライアントから「IPアドレスの付与がされない」という問合せを受領した時

# 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

## 3. [DHCP] をクリックします

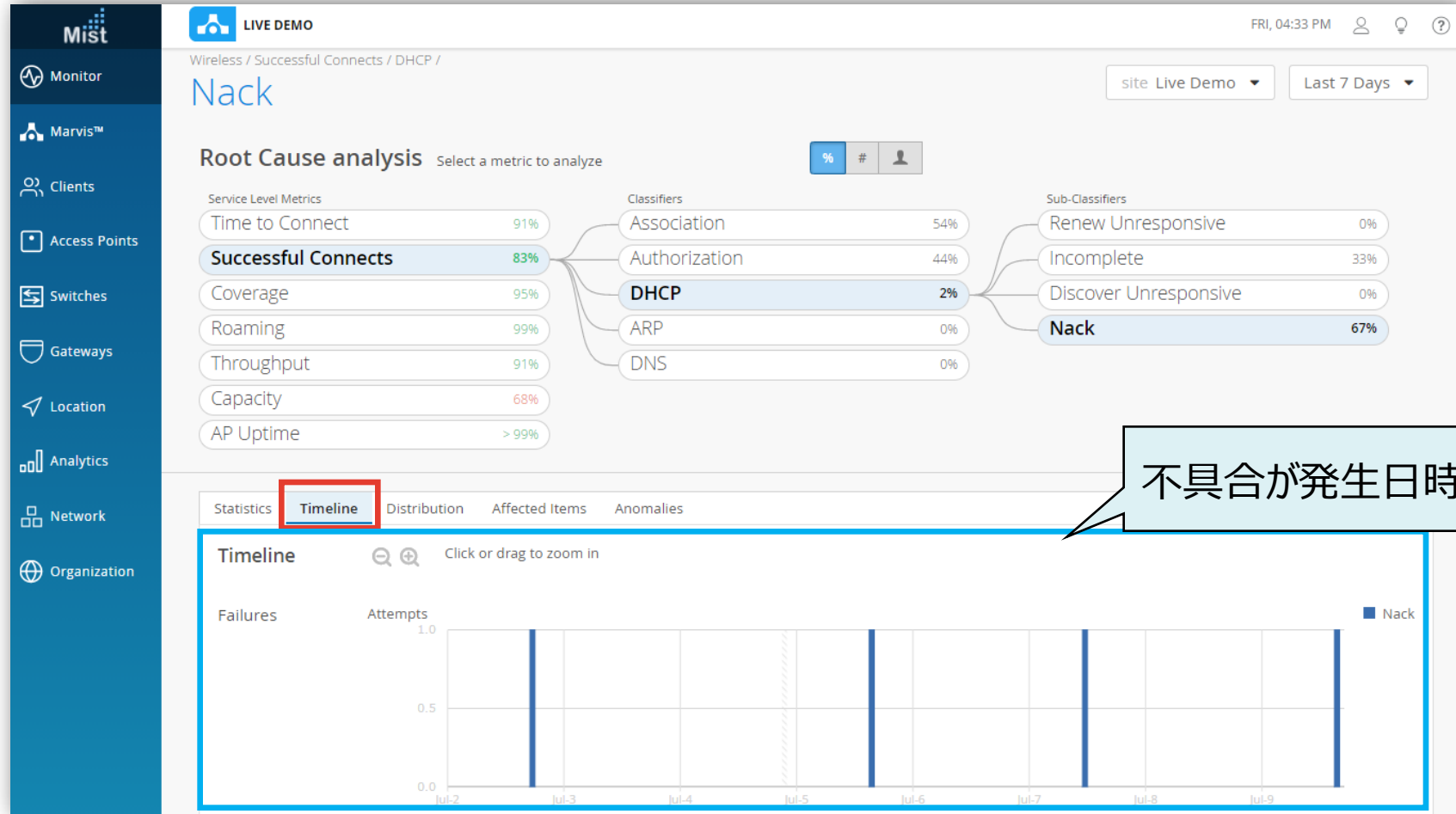
The screenshot shows the Mist network management interface. The 'Monitor' section is active, displaying various performance metrics. A callout box highlights the 'Last 7 Days' time range selector. Another callout box points to the 'DHCP' entry in the 'Service Level' table, which is highlighted in red.

時間帯を絞る事も可能です

Service Level	Percentage
Association	54%
Authorization	44%
DHCP	2%
ARP	0%
DNS	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 dashboard interface. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, Location, Analytics, Network, and Organization. The main content area shows a 'Root Cause analysis' for 'Nack' under the 'Wireless / Successful Connects / DHCP' category. The analysis is broken down into Service Level Metrics, Classifiers, and Sub-Classifiers. The 'Distribution' tab is selected, showing a table of service level failures by attribute.

**Service Level Metrics**

Time to Connect	91%
<b>Successful Connects</b>	<b>83%</b>
Coverage	95%
Roaming	99%
Throughput	91%
Capacity	68%
AP Uptime	> 99%

**Classifiers**

Association	54%
Authorization	44%
<b>DHCP</b>	<b>2%</b>
ARP	0%
DNS	0%

**Sub-Classifiers**

Renew Unresponsive	0%
Incomplete	33%
Discover Unresponsive	0%
<b>Nack</b>	<b>67%</b>

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

Attribute	Name	Overall Impact	Failure Rate	Anomaly
Access Points				
Device Types	LD_Kitchen-2	100%	1%	1.00x
WLANs				
Wireless Bands				
Device OSs				

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 dashboard interface. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, Location, Analytics, Network, and Organization. The main content area shows a 'Root Cause analysis' for 'Nack' under the path 'Wireless / Successful Connects / DHCP /'. The analysis is broken down into three levels: Service Level Metrics, Classifiers, and Sub-Classifiers. 'Successful Connects' is highlighted at 83%, leading to 'DHCP' at 2% in the Classifiers, which further leads to 'Nack' at 67% in the Sub-Classifiers. 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' (You can grasp the clients affected by the issue).

Wireless / Successful Connects / DHCP /

### Nack

site Live Demo | Last 7 Days

#### Root Cause analysis

Select a metric to analyze

Service Level Metrics

- Time to Connect: 91%
- Successful Connects: 83%**
- Coverage: 95%
- Roaming: 99%
- Throughput: 91%
- Capacity: 68%
- AP Uptime: > 99%

Classifiers

- Association: 54%
- Authorization: 44%
- DHCP: 2%**
- ARP: 0%
- DNS: 0%

Sub-Classifiers

- Renew Unresponsive: 0%
- Incomplete: 33%
- Discover Unresponsive: 0%
- Nack: 67%**

Statistics | Timeline | Distribution | **Affected Items** | Anomalies

#### Affected items

Specific Items that failed to meet the service level goal

Users	1	Name	Overall Impact	Failure Rate	MAC Address	Device	OS	Last AP	WLAN
Access points	1	RLDP	100.00%	67%	00:d7:8f:66:8a:7e	unknown	unknown	LD_Kitchen-2	Golden SSID
Applications	36								



# 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

8. [VIEW INSIGHTS] をクリックします

The screenshot shows the Mist dashboard 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 'Nack' and displays a 'Root Cause analysis' section. Under 'Service Level Metrics', 'Successful Connects' is highlighted with a value of 83%. Below this, a table titled 'Affected items' shows the following data:

Category	Count	Name	Overall Impact
Users	1		
Access points	1	RLDP	100.00%
Applications	36		

The screenshot shows the Mist dashboard interface. The left sidebar contains navigation options: Monitor, Marvis™, Clients, Access Points, Switches, Gateways, and Location. The main content area is titled 'Successful Connects' and displays a 'Root Cause analysis' section. The 'VIEW INSIGHTS' button is highlighted with a red box. The 'Service Level Metrics' section shows 'Successful Connects' at 0%. The 'Classifiers' section shows the following data:

Classifier	Percentage
Association	0%
Authorization	0%
DHCP	100%
ARP	0%
DNS	0%

# 不具合時のログ・パケットデータを確認

## 9. Client Eventsの[Bad]タブをクリックする

The screenshot shows the Mist network management interface. The top navigation bar includes 'Monitor', 'Wireless', 'Wired', 'WAN', 'Insights', 'client RLDP', and 'Last 7 Days'. The main content area displays a client profile for '00-d7-8f-66-8a-7e' with a 'Data Rate' graph. Below the graph, a 'Client Events' table is visible, with a '14 Bad' count highlighted in a red box. The table lists several 'DHCP Denied' events. A 'Download Packet Capture' button is highlighted with a blue box. To the right, a detailed view of a DHCP error is shown, including fields like 'DHCP Latency', 'SSID', 'Number of Streams', 'Band', 'Transaction ID', 'Channel', 'RSSI', 'Protocol', 'VLAN', 'Failure Count', and 'Description'.

Event Type	Client	Timestamp
DHCP Denied	LD_Kitchen-2	03:29:34.124 PM, Jul 9
DHCP Denied	LD_Kitchen-2	03:29:34.119 PM, Jul 9
DHCP Terminated	LD_Kitchen-2	02:16:10.666 AM, Jul 8
DHCP Denied	LD_Kitchen-2	11:30:22.910 AM, Jul 7
DHCP Denied	LD_Kitchen-2	11:30:22.903 AM, Jul 7
DHCP Denied	LD_Kitchen-2	11:30:12.127 AM, Jul 7
DHCP Denied	LD_Kitchen-2	11:30:12.127 AM, Jul 7
DHCP Denied	LD_Kitchen-2	03:27:55.290 PM, Jul 5
DHCP Denied	LD_Kitchen-2	03:27:55.285 PM, Jul 5

Field	Value
DHCP Latency	10.87 secs
SSID	Golden SSID
Number of Streams	1
Band	5 GHz
Transaction ID	912827862
Channel	157
RSSI	-77 dBm
Protocol	802.11a
VLAN	1
Failure Count	3
Description	DHCP Nack IP 0.0.0.0

不具合ログを確認出来ます  
※クリップマークがあるログは、パケットキャプチャーが取れております

DHCPエラー発生時の当時の状況・エラー内容を確認出来ます

Wiresharkにて  
DHCPエラー時のパケットを確認出来ます

# Thank you

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