

AI ドリブン エンタープライズ Tech Roundup Q1-2022

ジュニパーネットワークス株式会社

技術統括本部

JUNIPER
NETWORKS

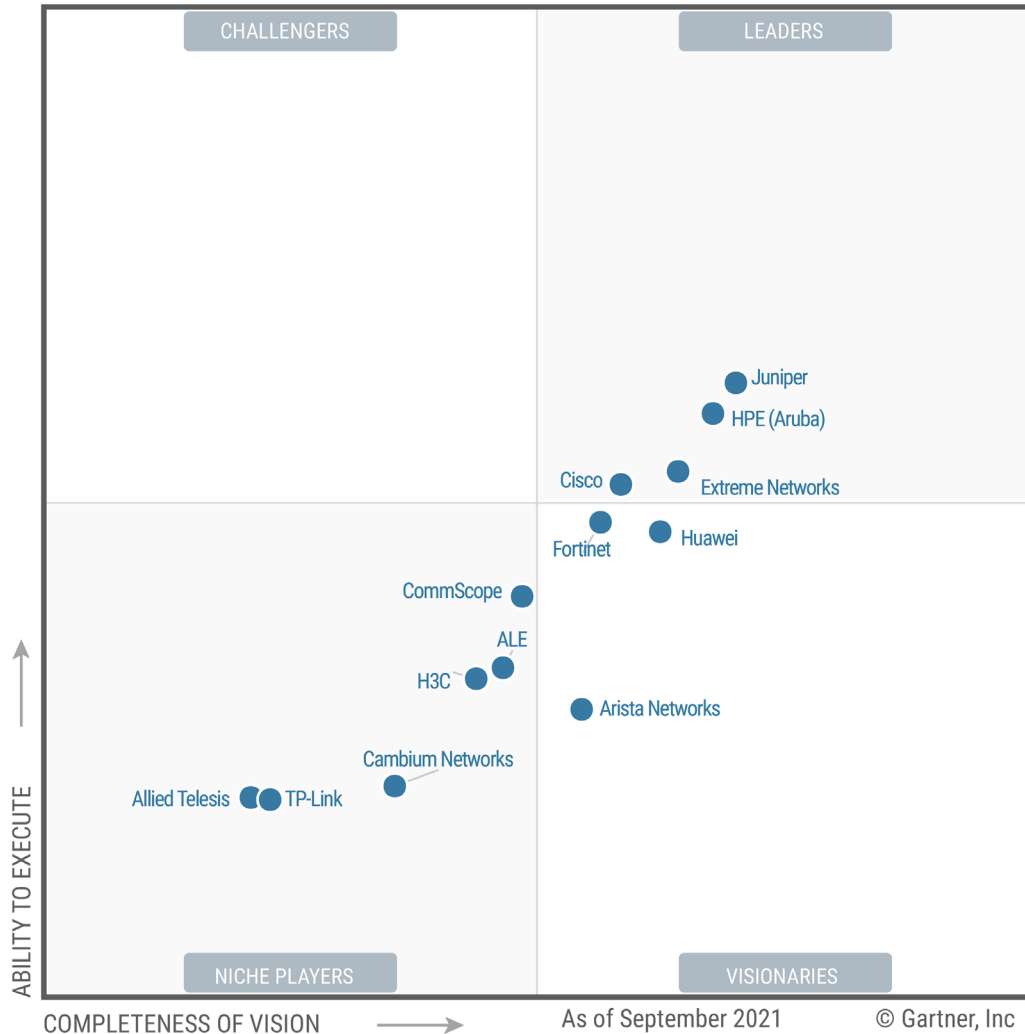
Driven by
Experience™



Agenda

- AI ドリブン フルスタック アップデート
(WAN Assurance)
- Mist MSP の新機能
- Wi-Fi 6E AP

Figure 1. Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure



Source: Gartner (November 2021)

ジュニパーネットワークスは
 ガートナー®マジック・クアドラント™による
 2021年エンタープライズ向け
 有線/無線 LAN インフラストラクチャ分野で
 リーダーの評価を獲得

ジュニパーは2年連続で
 同市場のリーダーに選出

ジュニパーは実行能力とビジョンの完全性の
 両面で、どのベンダーよりも高い位置を保持



Gartner Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure, Mike Toussaint, Christian Canales, Tim Zimmerman, 15 November 2021. GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the US and internationally and is used with permission. All rights reserved. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from Juniper Networks.

2年連続のリーダー選出
 実行能力とビジョンの完全性で高く評価

Figure 1: Magic Quadrant for Indoor Location Services, Global



ジュニパーネットワークスは
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 2022年屋内位置情報サービス分野で
 リーダーの評価を獲得

ジュニパーは同市場のリーダーに選出

ジュニパーは、ビジョンの完全性で
 どのベンダーよりも高い位置を保持

無料レポートはこちら



Source: Gartner (February 2022)

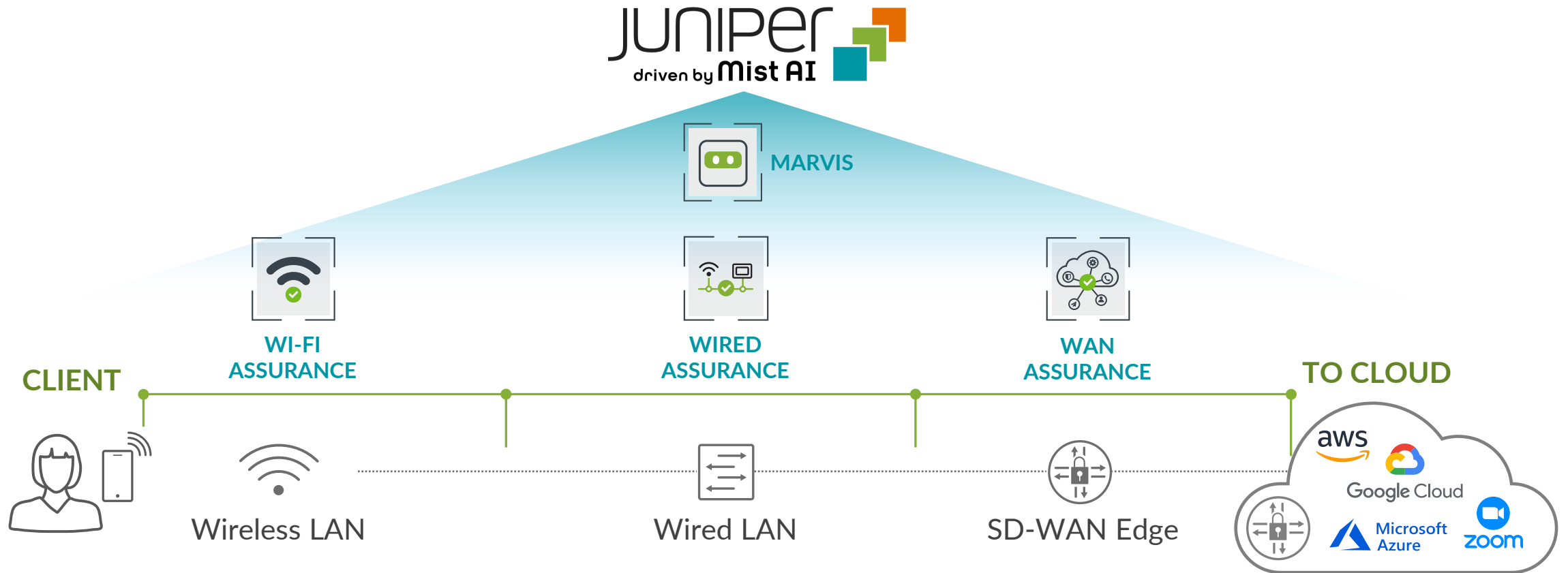
リーダーとして選出
 ビジョンの完全性で高く評価

Gartner Magic Quadrant for Indoor Location Services, Tm Zimmerman, Annette Zimmermann 23 February 2021. Gartner and Magic Quadrant are registered trademarks of Gartner, Inc. and/or its affiliates in the U.S. and internationally and is used herein with permission. All rights reserved. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose. This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from Juniper Networks.



AI ドリブン フルスタック アップデート (WAN Assurance)

Client から Cloud への自動化とインサイト



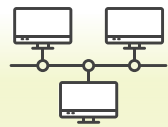
クラウドネイティブ、AI ドリブン、セッションスマート

業界唯一のフルスタックブランチ

Wireless



Wired



WAN



Mist

LIVE DEMO MON, 11:22 AM

Monitor Wireless Wired WAN Location Insights site Live-Demo Today

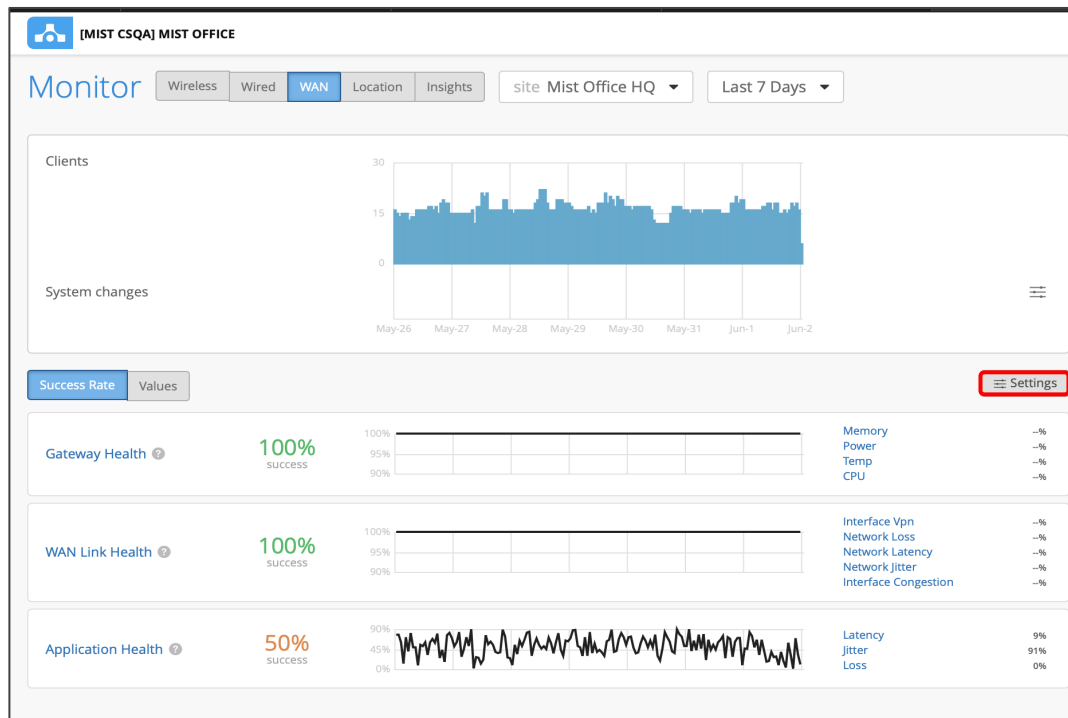
Live-Demo

Access Points	Associated Clients	Mbps
11	13	0.02

12:00 AM Dec 13 - 11:21 AM Dec 13 (drag an area of interest to Zoom In) Site Events

WAN Assurance & クラウド管理型 SD-WAN

SLE 指標の App Experience を Application Health に更新、アプリケーションのパフォーマンスを監視可能



The 'Customize Service Levels' dialog box allows users to select service metrics to display. The 'Application' metric is highlighted with a red box. The list of applications includes: Atlassian, Microsoft Teams, Office365, Slack, Webex, Youtube, and covid.com. There is an 'Add Application' button at the bottom.

The screenshot shows the same dashboard as the left image, but with a 'System Changes' dialog box open. The dialog box allows users to choose which system changes to display, with options: WAN Health, BGP Peer State Changed, IPsec VPN DOWN, IPsec VPN UP, OSPF Neighbor Down, and OSPF Neighbor UP. The 'Application Health' metric in the dashboard below is now highlighted with a red box.

WAN Assurance & クラウド管理型 SD-WAN

SD-WAN への対応として…

Marvis Action の Gateways に Bad cable, Negotiation mismatch, Bad WAN Uplink の追加
Organization に Networks, Overlay, Services, WAN Edge Templates の追加

BAD WAN LINK

RECOMMENDED ACTION
The following uplink interfaces have been experiencing issues & are unhealthy. Please check their connection.

Site	Gateway	Details	Date
<input type="checkbox"/> 57b2f891-09c1-4dcc-8ff1-2f9fb3ff7d39	fc334262ef00	Port ge-0/0/0	Apr 1, 2021 02:23 AM

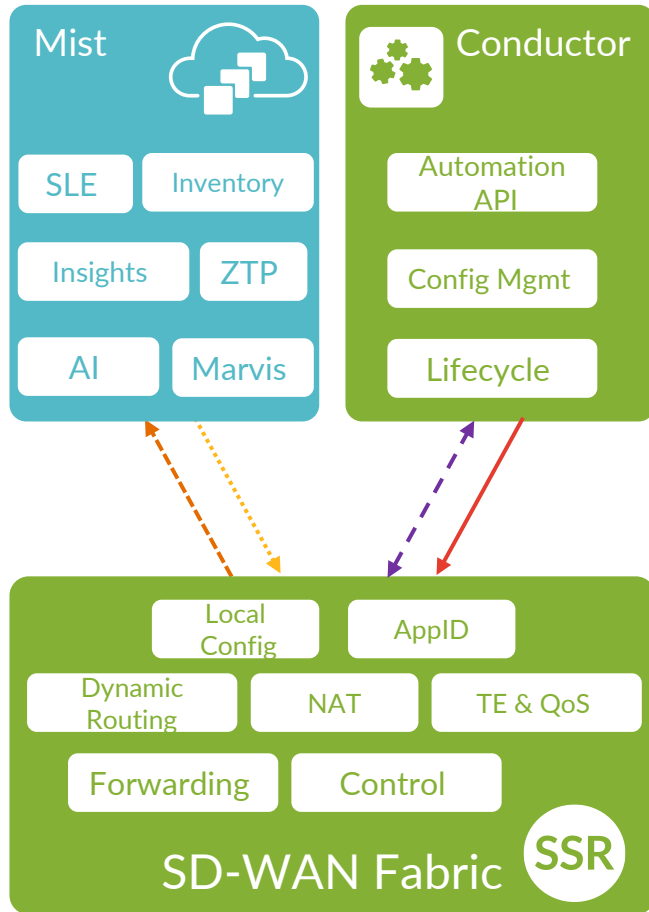
▼ STATUS

WAN Edge Templates

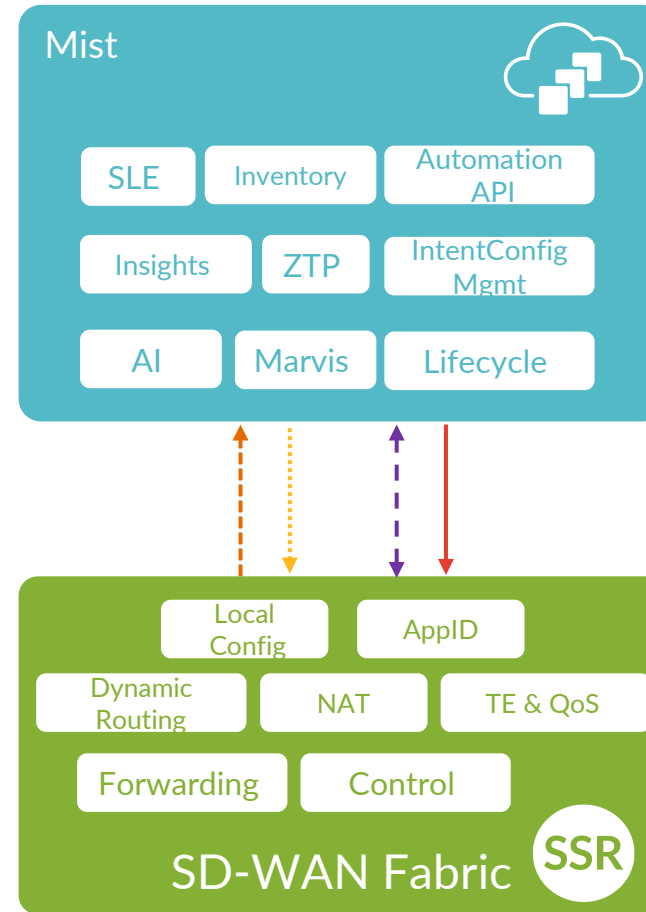
TEMPLATE	SITES	GATEWAYS
Cupertino	1	1
Sunnyvale	1	1
Woodford	1	1

Navigation menu items: Admin, AP Port Templates, Insight, Wireless, Wired, WAN, Networks, Overlays, Services, WAN Edge Templates, EVPN BETA, Switch Templates, Config Templates, Device Profiles, Labels, Mist Edges, Mist Tunnels, Pre-shared Keys, RF Templates, Site Configuration, Subscriptions, Inventory, Audit Logs, Network Topology, Mobile SDK, Settings, Network.

SSR マネジメントモデル



Hybrid Cloud + Prem*



Cloud**

- Cloud
- Premise
- Telemetry
- ZTP
- Lifecycle
- Config

*1H'22

**1H'22

Mist フルスタックデプロイメント



<https://www.youtube.com/watch?v=LWbfH5vb-tk>

- Mist Cloud からの円滑なデプロイメントエクスペリエンス
- フルスタックによる完全なサイト ZTP
- WAN を含む
Wireless と Wired で実証済み
 - SSR または SRX の WAN エッジデバイスをサポート
- オンサイト技術者の専門知識を最小限に
- テンプレートを使用したスケーラブルな WAN 設計と実装
- ロールアウトの手間を省く





Mist MSP の新機能

MSP Dashboard のアップデート

MSP 1.0から2.0への機能拡張により、1ページで管理下の Org, Site, AP, SW, GW の数、 Subscription を可視化

The screenshot displays the Mist MSP dashboard interface. The top navigation bar includes the Mist logo, 'Organization', and 'MSP' tabs. The main content area is titled 'THE MIST DEMO MSP' and features a 'Organizations' section with a red-bordered 'Inventory' tab. Below this, there are two summary cards: '26 Organizations' and '32 Active Sites (Devices Claimed)'. To the right, a 'DEVICE INVENTORY' section shows counts for APs (58 / 59 in use), Switches (21 / 22 in use), and Gateways (33 / 33 in use). A 'SUBSCRIPTIONS' section shows counts for Orgs with Active Subscriptions (5), Orgs with Expired Subscriptions (4), and Orgs with Exceeded Subscriptions (2). Below these are buttons for 'Create Organization' and 'Transfer Subscriptions'. A table lists individual organizations with columns for Organization, Active Sites, APs, Switches, Gateways, Labels, Created, and Subscription Status. The table includes rows for Mesh Test, Glaser Home, Oportun Test, 128 Technology, Mist-KRaj, Live Demo, Kyle Juniper Org, Varian Biz, Test 2, and Test.

Organization	Active Sites	APs	Switches	Gateways	Labels	Created	Subscription Status
Mesh Test	4	19 / 19 in use	0 / 0 in use	0 / 0 in use		Mar 29, 2018	1 Expired
Glaser Home	1	2 / 2 in use	0 / 0 in use	0 / 0 in use	Personal Orgs	Jan 8, 2018	1 Expired
Oportun Test	3	3 / 3 in use	2 / 2 in use	0 / 0 in use	UMSP_Demo	Feb 7, 2019	1 Active, 3 Exceeded, 3 Expired
128 Technology	11	4 / 4 in use	2 / 2 in use	14 / 14 in use		Oct 26, 2020	2 Active, 3 Exceeded, 2 Expired
Mist-KRaj	2	3 / 3 in use	0 / 0 in use	0 / 0 in use		Aug 13, 2018	8 Active
Live Demo	4	25 / 25 in use	15 / 15 in use	7 / 7 in use	MistDemoEnv, UMSP_Demo	Aug 30, 2016	16 Active
Kyle Juniper Org	5	1 / 1 in use	1 / 2 in use	11 / 11 in use		Feb 8, 2021	11 Active
Varian Biz	0	0 / 0 in use	0 / 0 in use	0 / 0 in use		Apr 26, 2021	
Test 2	0	0 / 0 in use	0 / 0 in use	0 / 0 in use	test	May 25, 2021	
Test	0	0 / 0 in use	0 / 0 in use	0 / 0 in use	test, test	May 25, 2021	

MSP Dashboard のアップデート

管理下にある Organization の SLE 情報を一元表示

THE MIST DEMO MSP

Organization **Service Levels** The table below shows SLE metrics within the last 7 days

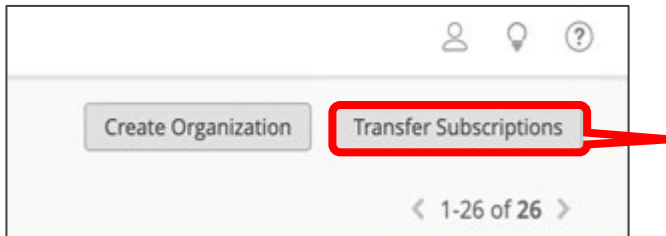
Create Organization Transfer Subscriptions

Filter 1-26 of 26

Organization ²⁶	Active Sites	Marvis Actions	WIRELESS ^{<}								WIRED ^{<}	
			Overall Service	Time to Connect	Successful Connect [⚙]	Coverage	Roaming	Throughput	Capacity	AP Uptime	Overall Service	Switch Health
Live Demo ^{>}	4	32	78%	90%	40%	91%	98%	50%	86%	95%	83%	100%
Mesh Test ^{>}	4	1	85%	90%	92%	50%	74%	100%	86%	100%	--	--
Kyle Juniper Org ^{>}	5	1	93%	75%	94%	86%	--	100%	100%	100%	86%	100%
Oportun Test ^{>}	3	1	83%	64%	95%	48%	84%	100%	100%	88%	98%	100%
Glaser Home ^{>}	1	0	95%	97%	99%	76%	93%	100%	99%	100%	--	--
Mist-KRaj ^{>}	2	0	94%	98%	99%	86%	76%	100%	100%	100%	--	--
128 Technology ^{>}	11	0	98%	99%	99%	98%	91%	100%	100%	100%	99%	100%
Alitron ^{>}	0	0	--	--	--	--	--	--	--	--	--	--
ASK4-MSP-Client1 ^{>}	0	0	--	--	--	--	--	--	--	--	--	--
Clone Example1 ^{>}	0	0	--	--	--	--	--	--	--	--	--	--

MSP Dashboard のアップデート

Organization 間の Subscription 割り当てもボタン1つで可能



Transfer Subscriptions

Source Organization: Mist-KRaj

Destination Organization: Live Demo

Hide non-transferable subscriptions

Filter

Subscription Type	Transferable Quantity	Subscription Quantity	Order ID	Claimed Org	Current Org	Subscription ID	Expires	Quantity
Asset Visibility	10	10	00000000	Mist-KRaj	Mist-KRaj	AST-00000342	Dec 31, 2022	<input type="text" value="0"/>
Marvis for Wireless	10	10	00000000	Mist-KRaj	Mist-KRaj	VNA-00000658	Dec 31, 2022	<input type="text" value="0"/>
Mist Edge	10	10	00000000	Mist-KRaj	Mist-KRaj	ME-00000189	Dec 31, 2022	<input type="text" value="0"/>
vBLE Engagement	8	10	00000000	Mist-KRaj	Mist-KRaj	ENG-00000343	Dec 31, 2022	<input type="text" value="0"/>
WiFi Management and Assurance	7	10	00000000	Mist-KRaj	Mist-KRaj	MAN-00000402	Dec 31, 2022	<input type="text" value="0"/>
Wired Assurance 12	10	10	00000000	Mist-KRaj	Mist-KRaj	EX12-00000324	Dec 31, 2022	<input type="text" value="0"/>
Wired Assurance 24	10	10	00000000	Mist-KRaj	Mist-KRaj	EX24-00000124	Dec 31, 2022	<input type="text" value="0"/>
Wired Assurance 48	10	10	00000000	Mist-KRaj	Mist-KRaj	EX48-00000228	Dec 31, 2022	<input type="text" value="0"/>

Total 0



Agenda

Wi-Fi 6E に対応した新製品

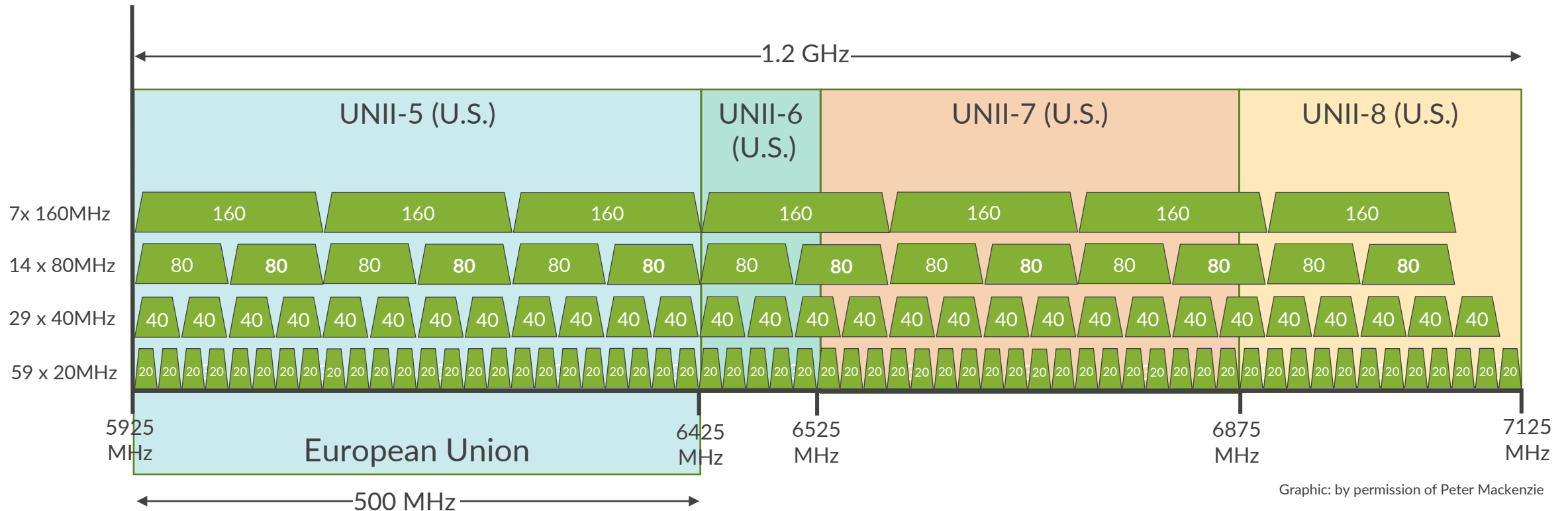
AP45 / AP34



Wi-Fi 6E とは？

Wi-Fi 6E は、Wi-Fi 6 (通称802.11ax) を拡張し、6GHz 帯での機器運用を可能にする規格

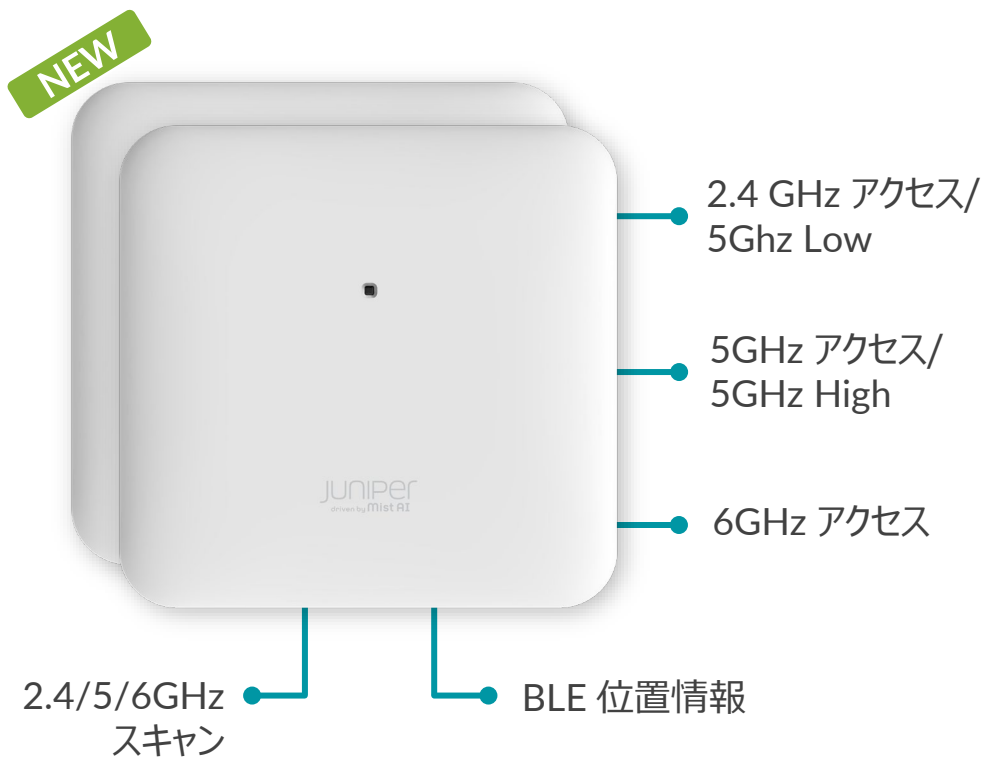
- Wi-Fi の周波数不足に対応し、ネットワーク容量と効率性の向上
- 最大で1200 MHz の周波数帯を追加で提供



Graphic: by permission of Peter Mackenzie

Wi-Fi 6E(6GHz) 対応の新製品

Wi-Fi 6E に対応した Mist AP45 と AP34



1

クアッド無線 – 全てのAPは内蔵または専用センサー

- AP45: 4x4:4SS
- AP34: 2x2:2SS

2

トライバンドアクセスポイント

- AP45: 2.4GHz/5GHz/6GHz帯域クアッド無線
- AP34: 2.4GHz/5GHz/6GHz帯域クアッド無線

3

Bluetooth LE 5.1による位置情報

- AP45: 特許取得済 16素子 vBLE アレイ
- AP34: 無指向性 BLE

4

マルチギガビットイーサネットのサポート (802.3bz) 5 Gbps PHY

5

AI for 6E

より良いユーザーエクスペリエンスを提供
IT運用を簡素化し、パフォーマンスを最適化

AI ドリブン ポートフォリオの拡充

1. Wi-Fi 6E driven by Mist AI™
2. IoT Assurance Service

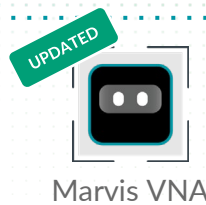


AI-Driven Cloud Services

Virtual Network Assistant

Marvis

- AIによる問題解決
- 会話型アシスタント



Marvis Actions

- プロアクティブなネットワークの洞察と改善
- 包括的なネットワークの可視化

Wi-Fi Assurance

Premium Analytics

User Engagement

Asset Tracking

IoT Assurance

Wired Assurance

WAN Assurance

Wireless Infrastructure

Mist Edge

AP12 AP32 AP33 AP34 AP43 AP45 AP63 (outdoor) BT11 (BLE)

NEW **NEW**

Wired Infrastructure

EX4600/4650 EX4400 EX3400

EX4300 QFX 5110/5120 EX2300

WAN Infrastructure

SRX **SSR** Session Smart Routers



Thank you

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