Meraki无线接入点中的DFS事件日志和警报故障 排除

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简介

本文档介绍如何解决Meraki无线接入点中的动态频率选择(DFS)事件日志和警报。

先决条件

要求

Cisco 建议您了解以下主题:

- •了解基本的Meraki软件定义的广域网(SD-WAN)解决方案
- 了解基本无线技术

使用的组件

本文档不限于特定的软件和硬件版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

问题

DFS使用通常为雷达保留的5 GHz Wi-Fi频率,例如军用雷达、卫星通信和天气雷达。DFS渠道因国

家/地区而异。使用DFS信道的主要优点是增加Wi-Fi信道的数量。

任何Meraki接入点都使用触发警报的DFS通道 Meraki MR接入点上的DFS事件日志和警报。请参阅 设备上显示的警报的截图:



配置

网络图



网络图

验证与故障排除

1. DFS通道设置验证

可以验证DFS通道设置 路径中取决于Meraki接入点配置。

导航至 Meraki Dashboard > Meraki (选择配置了无线接入点的任何站点网络或配置模板,在其中完成无 线接入点配置),然后导航至 Wireless > Radio Setting > RF Profile (选择连接到无线接入点或网络的配 置文件)。导航至 5 GHz Radio Setting > Channel Assignment Method 如图所示.

disdi Meraki							Q Search Dashboard	10.
e ⁰ e MCD Dortal	This network is acting as the co							
* ₀ * mor Portai	Radio settings							View old version
Organization				Basic Indoor Profile	DE	FAULT INDOOR		
Natwork					2.4 GHZ	5 GHZ		
Small_Site ~				Channel assignment	Auto	Auto		
Network-wide		New Profile		AutoPower max	30	30		
Security & SD-WAN				AutoPower min	5	8		
W Security a 55 min				Min. bitrate	12	12		
Switching				Channel width		Auto		
후 Wireless	Configure			CHANGE DEFAULT PROFILE	COPY	✓ EDIT		
. Organization	Access control Firewall & traffic shaping	DEFAULT	OUTDOOR	Profile_18Mbps_40MHz				
	Splash page	2.4 GHZ	5 GHZ		2.4 GHZ	5 GHZ		
	SSID availability	Auto	Auto	Channel assignment	Auto	Auto		
	Radio settings ✓	30	30	AutoPower max	30	30		
	Hotspot 2.0	5	8	AutoPower min	5	8		
	Air Marshal	12	12	Min. bitrate	18	18		
	STREET PRACT		Auto	Channel width		40		
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验证DFS设置1

dialti cisco Meraki										C	Search Dashb	pard	1	0	۰
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🗢 Wireless	Radio trans (dBm)	smit powe	er range	Transmit s	horter distance			Transmit farther							
					1 5 6 7 8 9 10	11 12 13 54 15 58 17	18 19 20 21 22 23 24	25 28 27 28 29 30							Feeting

验证DFS设置2

2. DFS事件模式警报验证

DFS事件模式警报可以在显示的路径中验证。导航至 Meraki Dashboard > Network (选择任何带有无线 接入点的站点网络)。导航至 Wireless > Access Points.

🗆 # Name		Connectivity	Alerts	Channels	Configuration status	Model	Status 🛛 🔻	×
□1	AP3		DFS event pattern	1, 128	Up to date	MR56	•	
2	AP4		DFS event pattern	11, 116	Up to date	MR56	•	
□ 3	<u>-AP1</u>		DFS event pattern	6, 116	Up to date	MR56	•	Paint T De

3. DFS事件检测到的日志验证

可以在显示的路径中验证DFS事件检测日志 Meraki Dashboard > Network (选择任何带有无线接入点的 站点网络),然后 Network-Wide > Event Log.

' Meraki					Q Search Dashboard	1 3)
MSD Portal	This network is bound to t	the configuration template Small_Site					
	Event log for acc	ess points +					
Organization	Access point: Any	Client: Any	efore: 01/19/2023 01:53	(CST)			
	Event type include:	DFS event detected x	Event type ignore: None				
the terms of the							
Network	Search Reset filter	5					
Network-wide	Download as -	<u>5</u>				<u>« newe</u>	
letwork-wide	Search Reset filter Download as Time (CST)	Access point	53ID Client	Event type	Details	<u>« newer</u>	
letwork-wide	Search Roset filter Download as Time (CST) Jan 19 01:45:54	S Access point -AP1	\$\$ID Client	Event type DFS event detected	Details channei: 116, radio: 1	<u>« newer</u>	
letwork-wide	Search Reset.filter Download as - Time (CST) + Jan 19 01:4554 Jan 19 01:2537	5 Access point -AP1 -AP3	\$\$iD Client	Event type DFS event detected DFS event detected	Details channel: 116, radio: 1 channel: 128, radio: 1	<u>* newer</u>	2
letwork-wide	Search Reset/filter Download as - - Time (CST) + - Jan 19 01:45:54 - Jan 19 01:26:37 - Jan 19 01:21:55 -	5 Access point -AP3 -AP3 -AP4	SSID Client	Event type DFS event detected DFS event detected DFS event detected	Details channel: 116, radio: 1 channel: 128, radio: 1 channel: 116, radio: 1	<u>« newer</u>	c
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Network-wide Switching Wireless Organization	Search Reset (ilter Download as • Jan 19 01:4554 Jan 19 01:4555 Jan 19 01:21:55 Jan 19 01:21:55 Jan 19 00:51:37 Jan 19 00:51:37 Jan 19 00:51:37	5 Access point -AP1 -AP3 -AP3 -AP1 -AP1 -AP1 -AP1 -AP1 -AP1 -AP1 -AP1	SSID Client	Event type DFS event detected DFS event detected DFS event detected DFS event detected DFS event detected DFS event detected	Details channel: 118, radio: 1 channel: 128, radio: 1 channel: 116, radio: 1 channel: 116, radio: 1 channel: 118, radio: 1 channel: 118, radio: 1	<u>« newer</u>	r :
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Network-wide Switching Wireless Organization	Search Reset Alter Download as - Time (57) + Jan 19 0124554 Jan 19 012455 Jan 19 012455 Jan 19 012455 Jan 19 0035137 Jan 19 005137 Jan 19 005137 Jan 19 002100 Jan 19 002150	5 Access point -AP3 -AP3 -AP4 -AP3 -AP3 -AP3 -AP3 -AP3 -AP3 -AP3 -AP4	SSID Client	Event type DFS event detected DFS event detected	Details channet: 116, radio: 1 channet: 116, radio: 1	* newer	E

4. DFS事件故障排除

DFS Pattern Detected Alert和DFS Event Detected Log已进行故障排除,无线接入点的无线电配置 文件中的配置已更改。请参阅所示路径。

导航至 Meraki Dashboard > Network (选择具有无线接入点的任何站点网络或配置模板,在其中完成无线 接入点配置),然后 Wireless > Radio Setting > RF Profile (选择连接到无线接入点或网络的配置文件) > 5 GHz Radio Setting > Channel Assignment Method.

diuli Meraki							Q Search Dashboard	100
e ⁰ e MSP Dortal	This network is acting as the co	nfiguration template for <u>196 n</u>	etworks.					
Organization	Radio settings							View old version
				Basic Indoor Profile	DE	FAULT INDOOR		
Network					2.4 GHZ	5 GHZ		
Small_Site ~				Channel assignment	Auto	Auto		
Network-wide		New Profile		AutoPower max	30	30		
Security & SD-WAN				AutoPower min	5	8		
III Security & SD-WAR				Min. bitrate	12	12		
Switching				Channel width		Auto		
🗢 Wireless	Configure SSIDs			CHANGE DEFAULT PROFILE	Сору	✓ EDIT		
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	Splash page	2.4 GHZ	5 GHZ		2.4 GHZ	5 GHZ		
	SSID availability	Auto	Auto	Channel assignment	Auto	Auto		
	Radio settings	30	30	AutoPower max	30	30		
	Hotspot 2.0	5	8	AutoPower min	5	8		
	Air Marshal	12	12	Min. bitrate	18	18		
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DFS取消选择设置1

diala cisco Meraki					- 100. -		عالمس									O Se	arch Dashl	ooard	2	Ø	۰
	General															×					
•ु• MSP Portal			U	INII-1		UNII-2	U	JNII-2-Extended		Weather Radar				UN	11-3	ISM					
Organization		20 MHz	36 40	44 48	52 8	6 60	64	100 104 108 11	2 11	6 120 124	128	132 136 140 144	149	153	157 1	61 165					
		40 MHz	38	46	54	62		102 110		118 12	6	134 142	_	151	159	_					
				42		58		106	Color	122	-	138		10	55						
Network Small_Site ~								DFS channels	Selec	t DFS channels	1										
Network-wide	_														Cancel	Done					
Security & SD-WAN																					
Switching	Channel a	issignment	method	Unless	manually e.channe	r overridde Is used by	n, Auto AutoCh	Channel will assign r hannel	adios t	to channels with	low is	nterference.									
🗇 Wireless	Radio tran	nsmit powe	er range	Transmi	t shorter dis	tance						Transmit farther									
	(aBm)				4 5 6	7 8 9	9 10 11	1 12 13 14 13 16	17 18	10 20 21 22 23	24	25 26 27 28 29 30									Palation

DFS取消选择设置2

相关信息

- <u>Meraki无线动态频率选择(DFS)</u> <u>特尼cal 支持和文档 Cisco Systems</u>

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