# 对不加入控制器的AP进行故障排除

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# 简介

本文档介绍Cisco Wireless AireOS控制器中的show ap join stats命令,并演示如何有效使用它们。

# 先决条件

# 要求

本文档没有任何特定的要求。

## 使用的组件

本文档使用Cisco AireOS控制器版本。

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。

### 规则

有关文档规则的详细信息,请参阅 Cisco 技术提示规则。

# 背景信息

本文档提供了有关控制器版本4.2.61.0中新的show ap join stats命令的信息,并演示了如何有效使用这些命令。有关详细信息,请参阅<u>排除轻量接入点无法加入无线LAN控制器的故障</u>,有效地排除接入点(AP)无法加入控制器的故障。如果AP未向控制器发送加入消息,您需要在AP上进行故障排除

本文档适用于从4.2.61版到最新版本7.2.103版的所有控制器(WLC)。

控制器上发生不同错误的一些示例输出位于背景信息和故障排除算法部分之后。

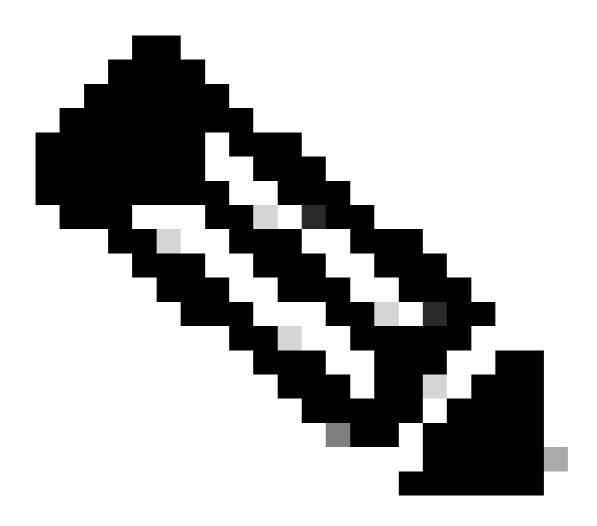
在控制器版本4.2.61.0中,控制器现在跟踪向其发送发现请求的所有AP以及向其发送发现应答的AP。它还跟踪尝试加入控制器的AP以及它们是否成功。控制器上有2个新的CLI(控制台或SSH)命令,可帮助排除AP无法加入控制器的故障:

#### <#root>

show ap join stats summary [all | AP\_Mac\_Address]
show ap join stats detail <AP\_Mac\_Address>

# 故障排除算法

请使用show ap join stats summary all命令查看未加入控制器的AP。控制器收到发现请求后,AP将立即插入show ap join stats列表。



注意:在控制器重新启动之前,控制器绝不会将AP从show ap join stats列表中删除。在某些情况下,失败的AP已尝试加入超过一天或完全离线。使用show ap join stats detail命令找

出上次从AP发送的发现请求和加入请求的时间,以确定AP是否已与控制器失去连接或是否已移动到另一个控制器。

输出提供控制器已收到发现请求的AP总数,然后列出这些AP当前是否已加入控制器。

#### <#root>

获得未加入的AP的MAC地址后,使用show ap join stats summary <mac addr>查找上次加入和失败原因。

#### <#root>

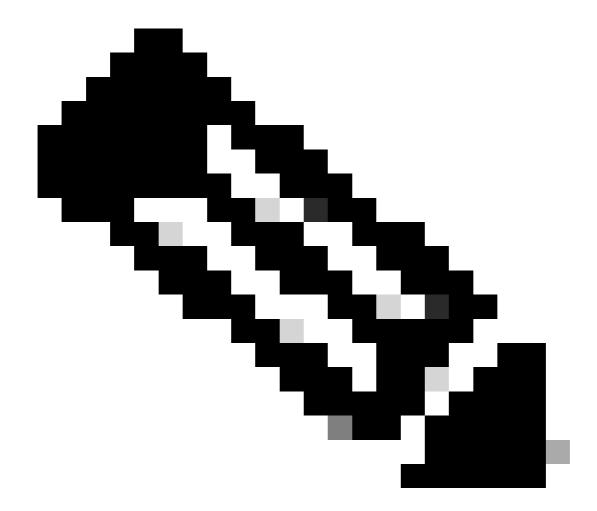
如果您需要有关发现请求、加入请求和配置请求的详细信息,请使用命令show ap join stats detail <mac-address>。 此命令还指示控制器是否只看到来自AP的发现请求,但不看到加入请求。

#### <#root>

- T	ime	24 12:21:20.547 at last unsucces applicable	sful	discovery	attempt			
- J( - S) - U( - R) - T	oin ucce nsuce easc Not ime Jan ime	hase statistics requests receive essful join respo ccessful join req on for last unsuc applicable at last successf 24 12:21:30.669 at last unsucces applicable	nses uest cessf ul jo	sent processing ful join a	 g ttempt			2
- Co - Si - Ui - Ro - Si	onfi ucce nsuce easc Not ucce	uration phase sta iguration request essful configurat ccessful configur on for last unsuc applicable essful configurat 24 12:21:32.414	s rec ion r atior cessf	ceived responses : n request   ful config	sent procession a	 ng attempt.		2
		at last unsucces applicable	sful	configura	tion att	empt		
- R	easc	P message decrypt on for last messa applicable						
- R	easc	P disconnect deta on for last AP co ed out while wait	nnect					
- T;	ype AP <u>c</u> easc Time ime	oin error summary of error that oc got or has been d on for error that ed out while wait at which the las 24 12:21:14.751	curre iscor occu ing f	nnected urred last for ECHO re	esponse	from the	 . AP	

# 示例 1

在这种情况下,控制器上的时间不正确。此错误表示AP证书负载无效。发生此错误是因为控制器上的时间超出了证书有效时间间隔。确保show time命令指示正确的时间。



注意:以下输出中的1993年3月6日时间值。这是未配置NTP的控制器时钟的开始位置。

使用时间戳加入报告统计信息的AP的三个阶段是发现、加入和配置阶段。检查上次错误摘要,找出AP无法加入或断开的原因。

#### <#root>

(Cisco Controller) >

show ap join stats detailed 00:14:1b:5a:40:10

### Discovery phase statistics

- Discovery requests received...... 2
- Successful discovery responses sent...... 1
- Unsuccessful discovery request processing...... 2113123
- Reason for last unsuccessful discovery attempt......

  Discovery request received on unsupported VLAN
- Time at last successful discovery attempt............
  Mar 06 19:03:50.779
- Time at last unsuccessful discovery attempt......

#### Mar 06 19:03:50.782

Join phase statistics	
- Join requests received 1	
- Successful join responses sent 0	
- Unsuccessful join request processing 1	
- Reason for last unsuccessful join attempt	
Certificate payload in join request contains	
invalid certificate	
- Time at last successful join attempt	
Not applicable	
- Time at last unsuccessful join attempt	
Mar 06 19:04:00.810	
Mai 00 13:04:00:010	
Configuration phase statistics	
- Configuration requests received 0	,
- Successful configuration responses sent 0	
- Unsuccessful configuration request processing 0	
- Reason for last unsuccessful configuration attempt	
Not applicable	
- Time at last successful configuration attempt	
Not applicable	
- Time at last unsuccessful configuration attempt	
Not applicable	
Last AP message decryption failure details	
- Reason for last message decryption failure	
Not applicable	
Last AP disconnect details	
- Reason for last AP connection failure	
Not applicable	
NOT applicable	
Last join error summary	
- Type of error that occurred last	
Lwapp join request rejected	
- Reason for error that occurred last	
- Reason for error that occurred rast	
Certificate payload in join request contains invalid	
certificate	
Time of which the last isin some second	
- Time at which the last join error occurred	
Mar 06 19:04:00.810	

# 示例 2

在这种情况下,AP会在管理IP地址VLAN以外的VLAN上发送发现请求。控制器拒绝在管理接口子网上未收到的所有发现请求。

## <#root>

(Cisco Controller) >

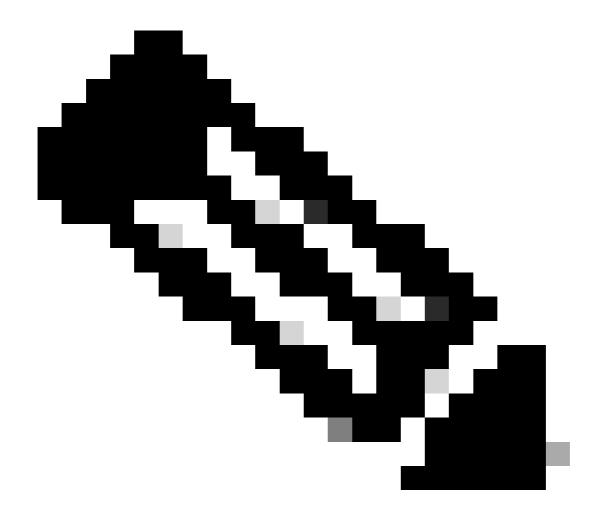
show ap join stats detailed 00:14:1b:5a:40:10

Discovery phase statistics

<ul> <li>Discovery requests received</li></ul>	5
Join phase statistics - Join requests received Successful join responses sent Unsuccessful join request processing Reason for last unsuccessful join attempt Certificate payload in join request contains invalid certificate - Time at last successful join attempt Not applicable - Time at last unsuccessful join attempt Mar 06 19:19:03.345	0
Configuration phase statistics  - Configuration requests received	0
Last AP message decryption failure details - Reason for last message decryption failure Not applicable	
Last AP disconnect details - Reason for last AP connection failure Not applicable	
Last join error summary  - Type of error that occurred last  Failed to send Lwapp discovery response  - Reason for error that occurred last	
Discovery request received on unsupported VLAN	
- Time at which the last join error occurred Jan 30 14:30:12.288	
(Cisco Controller) >	

# 示例 3

在这种情况下,AP从此控制器移至其主控制器。



注意:该错误可能由于多种原因而生成,其中一个原因就是网络中断。

### <#root>

(Cisco Controller) >

show ap join stats detailed 00:14:1b:5a:40:10

buen of Jern Book decarred continuous.	
Discovery phase statistics	
- Discovery requests received	23
- Successful discovery responses sent	23
- Unsuccessful discovery request processing	0
- Reason for last unsuccessful discovery attempt	
Not applicable	
- Time at last successful discovery attempt	
Jan 30 14:39:38.526	
- Time at last unsuccessful discovery attempt	
Not applicable	
Join phase statistics	
- Join requests received	21

<ul> <li>Successful join responses sent</li></ul>	
Configuration phase statistics  - Configuration requests received	21
Last AP message decryption failure details - Reason for last message decryption failure Not applicable	
Last AP disconnect details - Reason for last AP connection failure Timed out while waiting for ECHO response from the AP	
Last join error summary  - Type of error that occurred last	
Timed out while waiting for ECHO response from the AP	
- Time at which the last join error occurred Jan 30 14:40:15.451	

### 示例 4

在这种情况下,AP的自签名证书(SSC)在控制器上不正确。在将请求转发到定义的radius服务器之前,控制器始终检查其本地数据库。因此,当控制器未在本地找到SSC时,会出现"RADIUS authorization pends for AP"错误消息。

#### <#root>

(Cisco Controller) >

show ap join stats detailed 00:13:5f:fa:88:50

### Discovery phase statistics

- Discovery requests received...... 2
- Successful discovery responses sent...... 1
- Unsuccessful discovery request processing...... 2113123
- Reason for last unsuccessful discovery attempt......
  Discovery request received on unsupported VLAN

<ul> <li>Time at last successful discovery attempt</li> <li>Jan 30 14:58:58.070</li> <li>Time at last unsuccessful discovery attempt</li> <li>Jan 30 14:58:58.071</li> </ul>
Join phase statistics - Join requests received
RADIUS authorization is pending for the AP
<ul><li>Time at last successful join attempt</li><li>Not applicable</li><li>Time at last unsuccessful join attempt</li><li>Jan 30 14:59:13.111</li></ul>
Configuration phase statistics  - Configuration requests received
Last AP message decryption failure details - Reason for last message decryption failure Not applicable
Last AP disconnect details - Reason for last AP connection failure Radius authorization of the AP has failed
Last join error summary  - Type of error that occurred last  AP got or has been disconnected  - Reason for error that occurred last
Radius authorization of the AP has failed
- Time at which the last join error occurred Jan 30 14:59:13.117
(Cisco Controller) >
示例 5
<#root>
(Cisco Controller) >
show ap join stats detailed 0026cb8168c0
Discovery phase statistics - Discovery requests received

<ul> <li>Successful discovery responses sent</li> <li>Unsuccessful discovery request processing</li> <li>Reason for last unsuccessful discovery attempt</li> <li>Time at last successful discovery attempt</li> <li>Time at last unsuccessful discovery attempt</li> </ul>	O Not applicable Not applicable
Join phase statistics - Join requests received Successful join responses sent Unsuccessful join request processing Reason for last unsuccessful join attempt Time at last successful join attempt Time at last unsuccessful join attempt	0 0 Not applicable Not applicable
Configuration phase statistics - Configuration requests received Successful configuration responses sent Unsuccessful configuration request processing Reason for last unsuccessful configuration attemptMore or (q)uit - Time at last successful configuration attempt	0 0 Not applicable
- Time at last unsuccessful configuration attempt  Last AP message decryption failure details	
- Reason for last message decryption failure	Not applicable
Last AP disconnect details - Reason for last AP connection failure request received from an unsupported AP	Image data
Last join error summary  - Type of error that occurred last	AP got or
Image data request received from an unsupported AP	
- Time at which the last join error occurred 00:50:16.841	Feb 16
<#root>	
Discovery phase statistics - Discovery requests received	44 0 Not applicable Feb 26 18:36:24.098
Join phase statistics - Join requests received Successful join responses sent Unsuccessful join request processing Reason for last unsuccessful join attempt d from an unsupported AP - Time at last successful join attempt Time at last unsuccessful join attempt	0 44 Join request receive Not applicable

Configuration phase statistics - Configuration requests received
- Time at last successful configuration attempMore or (q)uit t Not applicable
- Time at last unsuccessful configuration attempt Not applicable  Last AP message decrytion failure details
<ul> <li>Reason for last message decryption failure</li></ul>
Last join error summary  - Type of error that occurred last Lwapp join request r
ejected - Reason for error that occurred last
Join request receive d from an unsupported AP
- Time at which the last join error occurred Feb 26 18:36:39.497

# 相关信息

- 排除轻量接入点无法加入无线 LAN 控制器的故障
- 思科技术支持和下载

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