Proximity Tracing using Aruba Central and Aruba AirWave



a Hewlett Packard Enterprise company

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The following table lists the revisions of this document.

Table 1: Revision History

Revision	Change Description
03	Updated the Data Sent by AirWave to Central section.
02	Updated the Prerequisites, Configuring the Aruba Central Details in AirWave, Licensing for AirWave Customers, and Data Sent by AirWave to Central sections.
01	Initial Publication

Aruba has introduced a new feature in the Aruba Central platform to perform queries for contact and location tracing. Aruba customers can use these features to complement a host of other tools/techniques to address their overall preparedness for return to work initiatives during the ongoing COVD-19 pandemic. The list of contacts and locations provided by this feature will ultimately be used by human contact tracers to interview persons of interest and to prioritize areas for disinfection and deep cleaning.

Aruba AirWave

AirWave is a network management platform that provides a single console where you can monitor, analyze, and configure wired and wireless networks. Irrespective of whether the network is simple, large, complex, or a multi-vendor installation, AirWave makes it easy to monitor the network using features like AppRF, Clarity, and VisualRF.

Aruba Central supports Contact and Location Tracing (CLT) analytics for Campus Wi-Fi customers using AirWave. This feature requires users to sign up for Aruba Central, and then use the AirWave Command-Line Interface to configure the CLT feature to send information to the Central cloud.

This document provides guidelines for setting up an account in Aruba Central, proximity tracing feature in Central, the necessary configuration on AirWave, data sent from AirWave, and firewall requirements. It is a companion document to the Wi-Fi-Based Contact / Location Tracing in Aruba Central. Refer to the Proximity Tracing using Aruba Central tech note for more details on usage of the feature, export options, third-party integrations with BI tools, Exit out features, Privacy Considerations, and Frequently Asked Questions.

Prerequisites

Aruba AirWave version 8.2.10 or higher



Aruba AirWave 8.2.11.2 supports CLT feature natively. Contact Aruba TAC to apply a patch, if you require support for CLT feature in Aruba AirWave 8.2.10, 8.2.10.1, 8.2.11, and 8.2.11.1 versions.

- Bidirectional access on tcp port (443) for the following URLs:
 - cltanalytics.s3-us-west-2.amazonaws..com
 - nookgw.netinsight.arubanetworks..com

Important Note

The following important points should be taken into consideration before configuring the Contact/Location tracing feature:

• The data from all AirWave customers first comes to S3 buckets in an AWS data center in the US West. The data is rendered in a .csv file and is stored in Aruba's Data Lake platform (S3 buckets on AWS). It is not

associated with Central clusters.

- The data is then converted to the parquet format and sent to the customer-specific home Central clusters
 distributed across the globe. The data is only temporarily received in S3, and is converted to a format that is
 amenable to further processing, prior to shipping to the respective Central clusters.
- The data from AirWave is sent daily at midnight (AirWave server time) to the Data Lake server and is processed within 4 hours in the respective Central cluster. The data will be available in Central for 21 days and the first set of data will be deleted only after 21 days. Central will have the data for 21 days for Proximity Tracing.
- AirWave customers will use the Central cluster regionally closer to them (NA customers will use US-2).
- All the processing and storing of data for querying purposes is done in the local Central clusters.
- If your country or organization has restrictions in sending data to the US, it is recommended to contact the
 respective accounts team for details.
- You need to sign up for this feature in Aruba Central, as the CLT configuration steps in AirWave, requires that you enter the customer ID, e-mail address, and the secret key used in Central.
- Central-on-premises (COP) is not a supported platform.

Steps to Configure Contact and Location Tracing

Listed below are the steps to set up contact and location tracing: <u>Creating an Evaluation Account in Aruba Central</u> <u>Setting up AirWave connection in Aruba Central</u> <u>Configuring the Aruba Central Details in AirWave</u> The following section describes how to create an evaluation account in Aruba Central :

1. Open the Aruba Networks website, <u>https://www.arubanetworks.com/</u> and click on **Try Central**.

Figure 1 Try Central

\leftrightarrow \rightarrow C ($$ arubanetworks.com	프 ☆ 😘 🛛 🦹 🛊 원
HPE HPE GREENLAKE ARUBA HPE FINANCIAL SERVICES DISCOVER VIRTUAL EXPERIENCE	
aruba	SEARCH Q ENGLISH (US) > LOGIN > CONTACT US > TRY CENTRAL
Enterprise company	Products Solutions Services Support Community

2. The page then navigates to **Try Aruba Central**. Scroll down to **Get started on Aruba Central** and **click Got an Aruba AP ? Start your trial here**.

Figure 2 Get Started on Aruba Central

Get started on Aruba Central.

In the video, Anthony explains it all. With Aruba cloud-managed networking solution, you have found the simple, smart, and secure way to manage your network. Learn how smart cloud-managed networking can change everything.

🕑 Watch video

🕣 Got an Aruba AP? Start your trial here

- You will be redirected to the Sign Up for Aruba Central page.
- 3. Enter a user name and password and fill in the details under **Customer Details** section. If you are already a Central user, it is recommended to use the same account.
- 4. If you are a Central user for branch office networks (IAP), but an AirWave user for Data center (Controller based and IAP), create a new account for AirWave as both the data sources are different.

Figure 3 Customer Details Section

SIGN UP FOR ARUBA CENTRAL

Aruba Central is a cloud-native network operations and assurance solution for wired, wireless, and SD-WAN networks. Central unifies traditional management with Al-based network and user insights, and IoT device profiling in a single interface for simplified and secure management and control.

ACCOUNT DETAILS	(All field	(All fields are required		
email address username@gmail.com				
PASSWORD	CONFIRM PASSWORD	0		
Use 8 or more characters with a mix of letters, nur	nbers & symbols			
CUSTOMER DETAILS	(All field	ls are required)		
FIRST NAME	LAST NAME			
COMPANY NAME	COUNTRY	~		
ADDRESS		+ ADD LINE		
CITY	STATE	~		
ZIP CODE	PHONE NUMBER			

- 5. Select a Central server based on your region.
- 6. Select Network Operations for Interested Apps.
- 7. Click I agree to the Terms and Conditions.

Figure 4 Server Details

JS-2 China-1 VPAC-1		
APAC-EASTT APAC-SOUTH1 SU-1 Canada-1	Δ	
Network Operations	ClearPass Device Insight	

Email Phone

For more information on how HPE manages, uses and protects your information please refer to HPE Privacy Statement. You can always withdraw or modify your consent to receive marketing communication from HPE. This can be done by using the opt-out and preference mechanism at the bottom of our email marketing communication or by following this link.



8. Click Sign Up.

Figure 5 Verification Mail

ONE LAST STEP.

We have sent you an e-mail to validate your account. Please click the link in the e-mail to register and start using our services.

Resend Verification Email

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9. An email is sent to the registered email address . Click **Activate your account here** or click the URL provided to activate the account.

Need help?Contact Support

Figure 6 Account Activation

١	Nelcome to Aruba Central
(Gowri,
ii a	We're excited to let you know your Aruba Central account is all set to go. Simply follow the activation nstructions at the link below to start managing your wired, wireless, and WAN infrastructure from anywhere in the world, all through a best-in-class cloud-based service.
,	Activate your account <u>here</u> .
ľ	f the link does not work, please copy and paste the following URL in the address bar of your browser:
1	The above link expires on Aug 07 2020
F	Please contact us with any questions. We're here to help ensure a great setup and overall experience.
E	Enjoy!
٦	The Aruba Central Team

Once the account is verified you will be redirected to the Aruba Central page.

10. Select US-2 as server for NA customers and other respective Central servers based on your region.

The data will be first sent to the Data Lake server in the US and then the processed and packaged data will be sent to the respective regional servers that were chosen while creating the account.



Aruba Central Login



EMAIL

CONTINUE

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EMAIL siva_36@rediffmail.com



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11. Log in with the registered credentials, you will be redirected to Aruba Central. Select **Evaluate Now.**

Figure 9 Evaluate Now to Continue Trial



WELCOME TO ARUBA CENTRAL





• A 90-day evaluation key will be created . Refer to the <u>Licensing</u> section for more details. The account will be created with a Customer ID.



Make note of the customer ID as it is required for AirWave configuration.

 Customer ID is also available under the profile section on the top right corner of the Aruba Central home page.

Figure 11 Customer ID

⑦ Ⅲ Å						
siva_306@rediffmail.com						
ArubaNetworks						
Customer ID: 1fc072aae56142239862c572a4cce172						
My Zone: US-2						
Switch Customer						
Change Password						
Terms of Service						
Logout						

The following section describes how to set up an AirWave connection in Aruba Central:

- 1. Log in to Aruba Central.
- 2. In the **Network Operations** app, set the filter to **Global**. The dashboard context for the selected filter is displayed.
- 3. Under **Analyze**, click **Tools > Proximity Tracing**.

Figure 12 Analyze > Tools > Proximity Tracing

	aruba Central		Q Search or ask Aruba	۹	0 11	ል
ĝ	Global	Network Check	co Proximity Tracing			
— M	anage	NETWORK CHECK				
88	Overview	Select device type & test, set pa	rrameters and run the test			
٥	Devices	DEVICE TYPE Currently, there are no available sources	TEST T			
Lo	Clients	Devices which are already run	ining commands shall not execute newly added commands			
8	Guests	Output history of device with	buffer space issues shall be automatically cleared			
	Applications					
0	Security					
83	Network Services	DEVICE OUTPUT				
— Ar	alyze —	DEVICE	E Output for the device:	Q	⊻ ⊻	
¢	Alerts & Events					
Z	Audit Trail					
Z,	Tools					
Û.	Reports					
— M	aintain					
٢	Firmware					
iavaso	rint:void(0)					



For AirWave customers where Central is not the Network Management System (NMS) tool, all other tabs except **Proximity Tracing** do not populate data as device data is not available.

4. Click the config icon.

Figure 13 Proximity Tracing Tab

		Q Search o	or ask Aruba				۹	o 🛯 🖁				
🗟 Global 📀	Network Check	⇔ Proximity Tracing						List Config				
— Manage ————												
B Overview	TRACE CONTACT CLIE	INTS										
Devices	⑦ Attention!	② Attention!										
Clients	A query can be perfo	rmed for up to a duration o	of any 14 days within the	last 21 days.								
😩 Guests	Username	MAC Address	Start Date		End Date	Ē						
Applications												
Security												
% Network Services												
- Analyze												

- The **Proximity Tracing** tab displays the following tabs:
 - Opt-Out Clients
 - Airwave Connection

Figure 14 Opt-Out Clients and AirWave Connection Tabs

	aruba	71 days left Central				Q Search or ask A	ruba			۹	0 #	• A
ক্র	Global	0	Network Health	Q WAN Health	III Summary	ी Wi-Fi Connectivity	Q Al Insights	∽ Proximity Tracing			i≣ List	ැටි Config
- Ma	nage Overview		OPT-OUT C	LIENTS AIRWA	AVE CONNECT	лог						
0	Devices		OPT-OU	CLIENTS								
LD	Clients		⑦ Atte	ntion!		- 6 - + - +		in Description Test also				
ŝ	Guests		Opted-	out clients will	not be part	or stats, visualizatio	ins and tables	in Proximity Tracin	g application.			
88	Applications		No file up	loaded (text file c	only) BR	OWSE & UPLOAD	Download Fil	e				
0	Security											
జి	Network Serv	vices										

5. Click the **Airwave Connection** tab. Initially, the **Status** of **Provision** and **Connection** will be displayed in red. The **Data Access** is enabled by default and cannot be modified while provisioning.

0 II A O Sear := List (Config Network Check Commands Proximity Tracing ଜ୍ମି Global OPT-OUT CLIENTS AIRWAVE CON B Overview Devices AIRWAVE CONNECTION <u>∟</u>a Clients This settings section is for existing AirWave customers only. Read More ② Attention! 🖧 Guests Applications STATUS CONNECTION
Not Connected Security PROVISION Not Provisioned DATA ACCESS & Network Services CONNECTION SETTINGS Customer ID a8ca12fd7f14413d89f579ac5e57 ☆ Alerts & Events 🗷 Audit Trail 🖏 Tools Secret GENERATE 🔝 Reports Firmware

Figure 15 AirWave Connection Tab

- 6. The **Customer ID** and **Email address** are auto populated and are not editable. The details will be taken from the logged in user/admin.
- 7. The **Secret Key** can either be entered or generated.
- The option to **Cancel** or **Save** is available when all the required field details are entered. It is recommended to save the combination securely as it will be used during the AirWave CLI Configuration.
- Copy to Clipboard allows you to copy and save the secret key.



Secret key is not viewable after the information is saved.



aruba Centr	al				Q Search or ask A	ruba				Q	0	" A
硷 Global	0	Network Health	으 WAN Health	I Summary	ন্থ Wi-Fi Connectivity	Q Al Insights	∞ Proximity Tracing				List	Config
— Manage —		OPTOUT			ON							
器 Overview												
Devices		AIRWAV	CONNECTIO	N								
⊡ Clients		⑦ Atte	ention!									
ஃ Guests		This se Read M	ttings section i fore (Opens a	s for existing modal)	Airwave customer	s only.						
Applications												
Security		STATU		PROVISION	rovisioned		CONNECTION		DATA ACCESS			
🗞 Network Services												
Analyze		CONNE	CTION SETTI	NGS								
🋕 Alerts & Events		1419de1	588e445d09ed5									
🗷 Audit Trail		Email Addre	55									
🖏 Tools		gaurav.q										
🔝 Reports		IS7YSMU	66D			G	ENERATE COPY TO C	LIPBOARD				
- Maintain												
Firmware										CANCEL		
										S. HIVEL		

- The page is refreshed after clicking **Save**. The status of **Provision**, **Connection**, and **Data Access** changes to **Provisioned**, **Not Connected** and **Enabled** respectively.
 - The status of the **Connection** will be displayed as **Not Connected** until AirWave is configured to send data to Central.
 - Use the **Data Access** toggle switch enable/disable data collection. If **Data Access** in disabled, then Central will stop getting the latest data from AirWave for proximity tracing.

Figure 17 AirWave Connection Status

AIRWAVE CONNECTIO	N			
⑦ Attention! This settings section is Read More (Opens a	for existing Airwave customers modal)	s only.		
STATUS	PROVISION Provisioned	CONNECTION	DATA ACCESS	
CONNECTION SETTI Customer ID 1419de1588e445d09ed57	NGS b9db2e84e74			
Enable Regenerate Key Email Address gaurav.quasar@gmail.com				
Security Key		REGENERATE COPY TO CLIPBOA		



Figure 18 Disabling Data Access

Figure 19 Prompt when Data Access is Disabled

SS cess	UPDATE CONNECTION SETTINGS X	
ERVEF	A Warning! Disabling data access will stop Proximity Tracing from getting latest data.	
	CANCEL SAVE	
	No data to display	

 Use the Enable Regenerate Key toggle switch to enable the option to change the Secret key and Email address after the initial provisioning. However, this will require an update on all AirWave servers which were already configured to send data. Unless the email address used during original provisioning belongs to an ex-employee, it is recommend to use the same email address during key regeneration.

Figure 20 Enable Regenerate Key

CONNECTION SETTINGS Customer ID 1419de1588e445d09ed57b9db2e84e74	
Enable Regenerate Key Email Address gaurav.quasar@gmail.com	
Security Key ******	REGENERATE COIL OF CHURDON CO

FOR ARUBA AIRWAVE CUSTOMERS* ONLY X
Aruba AirWave is a scalable, full featured on-premise management solution for multi-vendor wired and wireless networks. If you would like to connect your AirWave servers to Central, to use the proximity tracing feature, please configure your Central account now to enable this connection. The Secret entered or generated during setup will be unavailable to view or save after it is Submitted, please save/copy before continuing. *Non-AirWave customers do not require any configuration.
CLOSE

Figure 22 Update Connection Settings

UPDATE CONNECTION SETTINGS	×
Warning! Changing Secret will require you to Re-Configure and Update All previously of Servers.	Configured Airwave
Data access will not be enabled till you Save. Secret will not be updated till you Save.	
CAN	ICEL SAVE

Figure 23 Status of the Connection Settings

514105	PROVISION Provisioned	CONNECTION	ected	DATA ACCESS	
CONNECTION SETT	INGS				
Enable Regenerate Key	•				
Email Address					
gaurav.quasar@gmail.co	m				
Security Key					
XO3DG9GXN4		REGENERATE	COPY TO CLIPBOARD		
DATA ACCESS					
Enable Data Access 🛛	•				
AIRWAVE SERVERS					C 🕂
				1= Last Data	

To de-provision an AirWave server, click **Remove Airwave Connection.** After de-provisioning, the original provisioning information will be available for a maximum of 24 hours before it gets auto de-provisioned. During this time, the AirWave servers will be able to fetch the information that the Customer ID is de-

provisioned and will clean up their own state.

• If the AirWave server was accidentally de-provisioned , it is recommended to wait for at least 24 hours before provisioning the server again and this should be followed by AirWave CLI configuration.

Figure 24 Remove AirWave Connection



• The **Remove AirWave Connection** prompt is displayed.

Figure 25 Remove AirWave Connection Prompt

Awarning! Removing AirWave connection will stop Proximity Tracing from getting data. Auto De- Provisioning of AW8 Servers can take up to 24 hours.	,
CANCEL REMOVE AIRWAVE CONNECTION	

The following section describes the steps to configure Aruba Central details in AirWave:

- 1. Log in to Aruba AirWave CLI using ampadmin credentials.
- 2. In the CLI menu, enter 3 to access **Configuration** and enter 6 for **CLT** configuration.

Figure 26 CLI Configuration



- 3. Enter 1 to configure CLT.
- 4. Enter the customer ID, email address, and the secret key.

AirWave is configured to send data to Central.

Figure 27 CLT Configuration

```
CLT
  1 Configure CLT
  2 Reconfigure CLT
  3 Remove CLT
  4 Test CLT GW connectivity
  b >> Back
[Your choice: 1
Running Configure CLT
Before configuring AW8 for CLT, you are required to Sign Up on Central first.
You will require Customer ID, Email and Secret used on Central during SignUp.
You will also need to allow access from AW8 to
  https://nookgw.netinsight.arubanetworks.com/ on tcp-port 443.
  https://cltanalytics.s3-us-west-2.amazonaws.com on tcp-port 443.
For more details, please refer to Installation Documents or contact your local SE.
Would you like to continue? (y/N) : y
Enter your Customer ID: 2ad1befa3a344ca5a06e698e071f0478
Enter your CLT email ID: siva_306@rediffmail.com
Secret:
```

The following table describes the other options available for CLT configuration.

Table 2: CLT Options

Options	Function
2	Reconfigures the Central communication with customer ID, email address, or secret key. For example, refer <u>Appendix A</u> .
3	Removes the CLT configuration and the Central settings from AirWave. For example, refer <u>Appendix B</u> .
4	Assists in determining the reachability status of the AirWave server to Central.

Following is the snippet of the connectivity test from AirWave to Central:

```
Running Test CLT GW connectivity
This will just establish a TCP connection with https://nookgw.netinsight.arubanetworks.com.
Response helps you to identify any firewall issue in reaching it which will in-turn affect
functioning of CLT.
Do you want to proceed with test (y/N) : y
curl -v https://nookgw.netinsight.arubanetworks.com
% Total % Received % Xferd Average Speed Time
                                                      Time Time Current
Dload Upload Total Spent Left Speed
* About to connect() to nookgw.netinsight.arubanetworks.com port 443 (#0)
  Trying 54.201.191.140...
*
* Connected to nookgw.netinsight.arubanetworks.com (54.201.191.140) port 443 (#0)
* Initializing NSS with certpath: sql:/etc/pki/nssdb
  CAfile: /etc/pki/tls/certs/ca-bundle.crt
*
CApath: none
* SSL connection using TLS ECDHE RSA WITH AES 128 GCM SHA256
* Server certificate:
       subject: CN=nookgw.netinsight.arubanetworks.com
       start date: Jun 16 00:00:00 2020 GMT
       expire date: Jul 16 12:00:00 2021 GMT
*
       common name: nookgw.netinsight.arubanetworks.com
*
       issuer: CN=Amazon,OU=Server CA 1B,O=Amazon,C=US
> GET / HTTP/1.1
> User-Agent: curl/7.29.0
> Host: nookgw.netinsight.arubanetworks.com
> Accept: */*
>
< HTTP/1.1 200 OK
< Date: Mon, 29 Jun 2020 15:46:53 GMT
< Content-Length: 0
< Connection: keep-alive
< Vary: Accept-Encoding
<
* Connection #0 to host nookgw.netinsight.arubanetworks.com left intact
Hit return to continue ...
```

The connectivity test from AirWave CLI performs a curl command only to nookgw.netinsight.arubanetworks.com. The connectivity check to cltanalytics.s3-us-west-2.amazonaws.com is not a part of the connectivity test menu in the current AirWave version.

It is planned for future AirWave versions. It is important to ensure that AirWave can reach both the URLs mentioned in prerequisites section. To check the connectivity to both the URLs, Aruba TAC can assist by logging in to the CLI shell and run the curl commands.

When the AirWave connection to Central is established, the status of the **Connection** changes to **Connected** in the **Proximity Tracing** tab. The status might change only after 24 hours since Airwave communicates with Central only at midnight (AirWave server time).

ගු GLOBAL	% NETWORK CHECK ⊕ COMMANDS ∞ PROXIMITY TR	ACING		:=	\$
- MANAGE	OPT-OUT CLIENTS AIRWAVE CONNECTION				
E OVERVIEW					
DEVICES	AIRWAVE CONNECTION				
CLIENTS	Attention! Attention!				
APPLICATIONS	Read More				
SECURITY					
& NETWORK SERVICES	PROVISION	CONNECTION	DATA ACCESS		
- ANALYZE	Provisioned	⊘ Connected	Enabled		
	CONNECTION SETTINGS				
AUDIT TRAIL	Customer ID				
🖏 TOOLS					
REPORTS	Enable Regenerate Key				
- MAINTAIN	arijeet.vaau@gmail.com				
FIRMWARE	Secret				
ង ORGANIZATION	******				

Figure 28 Connection Status in Proximity Tracing Tab

The list of available AirWave servers is displayed in the **AirWave Servers** table.

Figure 29 List of AirWave Servers

AIRWAVE SERVERS (1)					C a
CATIONS SERVER NAME	1=	FIRST DATA	1=	LAST DATA	1
amp=amp160.arubathena.com		Aug 7, 2020, 12:03PM		Aug 12, 2020, 01:05PM	
SERVICES					
VENTS					
/ENTS					
/ENTS					
REMOVE AIRWAVE CONNECT	ION				
	ION				

The following section describes how to use the proximity feature. Refer to the Proximity Tracing using Aruba Central tech note for more details.

- 1. Log in to Aruba Central.
- 2. In the **Network Operations** app, set the filter to **Global**. The dashboard context for the selected filter is displayed.
- 3. Under Analyze, click Tools > Proximity Tracing.

Figure 30 Analyze > Tools > Proximity Tracing

aruba Central		Q Search or ask Aruba	۹	0 11	ሐ
全 Global 〇	Network Check	co oximity Tracing			
- Manage	NETWORK CHECK Select device type & test, set para	meters and run the test			
Devices	DEVICE TYPE Currently, there are no available sources	Y TEST Y			
⊑ a Clients	Devices which are already runni	ng commands shall not execute newly added commands			
2. Guests	Output history of device with bu	ffer space issues shall be automatically cleared			
Applications					
Security					
🗞 Network Services	DEVICE OUTPUT				
— Analyze ———	DEVICE	E Output for the device:	Q	⊠ ±	
Alerts & Events					
🛛 Audit Trail					
🖏 Tools					
Reports					
— Maintain ————					
Firmware					
iavascrint:void(0)					



Other tabs are present, however the tabs will not populate data as the devices are not present on Aruba Central but on Aruba AirWave.

The data from AirWave is sent daily at midnight (AirWave server time) and is processed within 4 hours in Central and the data is available in Central for 21 days.

 Enter the Username, MAC Address, Start Date, and End Date. Click Trace Contact Location. The Contact Usernames table on the page refreshes to display the names of the contact users and the shared minutes, sorted in descending order of shared minutes.



oruba Central			G Search or ask A						۹	Q	0 11
Global	Network Health WAN Health Summary V	/i-Fi Connectivity Al Ins	ights Proximity Tracing								
anage											
Overview											
Devices	TRACE CONTACT CLIENTS										
61	lebald	MAC Address		7/1/2020	6	7/14/2020	6				
Clients											
Guests											
Applications											
Security	CONTACT USERNAMES			1	LOCATIONS						1
Natural Candens	CLIENT NAME	11 OVERL	AP TIME (MINS)	17	LOCATION NAME		11- 01	VERLAP TIME (MINS)			17
Network Services	qHew+Dk0XdQRh2rEevYcnBh98Y=				RWka1yg/R99cTkY0jHjLQkjemxg						
lyze	+N4PT7CLCDVw41ebgrW7+GyE0Ms	547									
Alerts & Events	anticestic to puzze and a second	521									
Audit Trail	BRSIxd0C52awa8v42a5zdrCK1F=	430									
Tools	vhpHv4T60ruv8QVv4C2I2bDatVE=	452									
2000	KPUj6TkxRvtzOy1vguQs47o0kPQ=	418									
Reports											
				CL	EAR						
Firmware											
Organization											

5. Click the download icon to download the proximity tracing details.

The following information is sent as individual csv.tar.gz files:

- AP table for AP details including AP name, Mac Address, model etc.
- ap_discovery_event table which includes the AP RN neighbor information
- ap_folder table for AP to site/folder relation in AirWave
- ap_radio table for AP radio information for the enabled radios on the AP.
- BSSID table for BSSIDs of the APs.
- Client table for client information of iusername, MAC address etc
- client_first_last which includes data of the client session information and connection details.
- client_historical for historical client session information
- VisualRF tables for campus, building and floor information for location tracing and information. VisualRF data is currently sent but it is not displayed in this release. However, future releases will use the following VisualRF information:
 - visualrf.building
 - visualrf.campus
 - visualrf.floor
 - visualrf.floor_managed_device.
 - visualrf.managed_device

The raw data that drives the tracing applications in Aruba Central is taken from the access points that are managed in AirWave platforms. This data contains information related to client association history, AP neighbor and VisualRF data. The previous day AirWave data will be available at noon next day in tenant timezone for query. This data will be refreshed on a daily basis. Data will be available for query with a delay of 4 hours. For example, hour_0 (going from hour_0_min_00 through hour_0_min_59) will be available at the beginning of hour_5.

If the tables do not have data, the proxmity tracing feature in Central will display only emplty feilds as it received empty data from AirWave. Hence, it is important to ensure that AirWave has related data for contact and location tracing.

The contact tracing details will be displayed in Central only if client and AP tables in AirWave have data including AP neighbor information. If the data for AP neighbors is not sent by AirWave, then the information will not be present in Central. Poll local controllers for improved Rogue location has to be enabled in the RAPIDS Setup page for AirWave to display the AP neighbor information. This setting helps to get the AP's RF neighbor information.

If the AP name is the MAC address of the AP or if any other name other than what is being configured on AirWave is used as AP name, it is possible that AirWave did not learn the AP name. This also applies to other fields like location. Hence, it is recommended to contact Aruba TAC to check why data is not populated.

If the ap_discovery_event table is missing, IDS profile on controller might not have the **Ap Neighbor Message** enabled. Hence, ensure to enable ap state in the AMON profiles of the controller.

The AirWave Connections tab in Aruba Central displays the list of tables not populated in AirWave server. Download the AirWave connections table before calling technical support to submit a case.

Data Output for AirWave in Central

CT CSV File Columns - AirWave

The following information is displayed:

- Input_User
- Input_Device_MAC
- Contact_User
- Contact_Device_MAC
- Contact_Device_Type
- Campus_Name
- Building_Name
- Floor_Name
- Access_Point_Name
- Contact_Duration
- Date_Hour
- Time_EPOCH

Backend DB field

- username1_imputed
- stamac1
- username2_imputed
- stamac2
- device_type2
- site_imputed
- building_name_imputed
- floor_name_imputed
- apname_imputed
- contact_minutes
- date_hour
- ts_bin

Third-Party Devices on AirWave

Though AirWave supports third-party devices, Aruba doesn't claim to test the third-party devices with proximity tracing in Aruba Central. However, Aruba Central displays the data sent by third-party devices on AirWave. The data can be queried and exported for further use.

As an AirWave customer, you can continue to use your on-prem AirWave deployments for NMS features and use Central exclusively for proximity tracing. Since none of your Aruba devices are managed by the Central NMS app, you can sign up for Central using a 90-day trial license. You can continue to use Aruba Central even after the license expiry. Logging in to your Central account will not be affected by the expiry of the 90-day evaluation license.

You do not need to contact anybody at Aruba TAC or PLM or Sales team to extend access to the proximity tracing feature as it is set to function beyond the initial 90-day evaluation license period. It will continue to work indefinitely as there is a free access to this feature during the COVID-19 pandemic crisis.

If you use AirWave and Central for different networks, it is required to create an additional Central account to us the proximity tracing feature for AirWave data. Central account can be used for proximity tracing for devices managed by Central. For example, if you use Central for IAP management and AirWave for controller monitoring, you can use your existing Central account for proximity tracing feature for IAP data. Create a new evaluation Central account to send data from AirWave and avail the proximity tracing feature for controller-based APs (network).

If AirWave is used for monitoring IAPs and/or Campus APs and Central is not used for IAP monitoring, then a single evaluation Central account will suffice to send data from AirWave.



Central CIDs with existing IAP infrastructure does not support AirWave proximity tracing feature.

Initially if Proximity Tracing is configured for AirWave and when IAPs are added later to the same account, AirWave connection under Proximity Tracing feature will not be available. Ensure to create an additional account to monitor IAPs.

Chapter 8 Frequently Asked Questions

- Is this feature available for all Central and AirWave customers?
 Yes, but note the restrictions of the data sent in the Prerequisites section of this document.
- 2. Which ArubaOS versions are required for this feature? Both ArubaOS 6.x and ArubaOS 8.x versions are supported. The solution supports Aruba Wi-Fi access points/controllers that are managed by the respective AirWave and Central platforms.
- Does this feature support both Instant and Campus Access Points? Yes, both are supported.
- What is the amount of data transmitted for this solution?
 It is in the order of 5-10 Kbps per AP. It is difficult to fix the overall size of data transferred from AirWave to Central, as it depends on number of APs and clients connected to each AP.
- 5. If AirWave is the only solution currently deployed, is there any benefit in moving to Central? Yes. Central data will be processed more frequently and for a more near real-time.
- 6. Is Central a multi-tenant environment? Who has access to the data? Will the data be used for any other purpose other than this solution?

Yes, Central is a multi-tenant environment hosted in Aruba Cloud. Aruba Engineers working on this solution will have access to data and the data will not be used for anything other than this solution.

7. Can I choose to opt out of this feature?

Yes, you can choose to opt-out of all Wi-Fi related tracing features in both Central and AirWave. However, all Wi-Fi users are opted-in by default.



This solution does not store any health-related information. Also, it does not keep a track of the past queries.

The email address and the secret key used for CLT feature can be changed any time and it has to be applied on all AirWave servers. The reconfiguration option changes either the email address or the secret key. If the customer ID changes, then remove the CLT configuration (Refer Appendix B) and then configure CLT again. In the AMP CLI Menu, navigate to Option 6 (CLT) > option 2 (Reconfigure CLT)

CLT

1 Configure CLT
2 Reconfigure CLT
3 Remove CLT
4 Test CLT GW connectivity
b >> Back
Your choice: 2
Running Reconfigure CLT
Reconfigure is only for the configured Customer ID. For any other Customer ID, please remove
and configure again.
Do you want to proceed with reconfigure (y/N) : y
Enter your customer ID: a83db6a008a74fd6b471def39a006876
Enter your CLT email ID: arijeet.ghosh@hpe.com
secret:
CLT reconfigured successfully.
Hit return to continue ...

The following error message is displayed if an incorrect customer ID is entered:

Do you want to proceed with reconfigure (y/N) : y Enter your customer ID: 1c55f76eea6546daab3c3e667bd40859 Entered customer ID does not match the configured customer ID. Hit return to continue ...

The **Remove CLT** option is based on the already registered customer ID. In the AMP CLI menu, select Option 6 (CLT) and then option 3 to remove an existing CLT:

CLT

- 1 Configure CLT
- Reconfigure CLT
 Remove CLT
- J IVENIOVE CTT

4 Test CLT GW connectivity b >> Back Your choice: 3 Running Remove CLT Do you want to proceed with remove (y/N) : y Enter your customer ID: a83db6a008a74fd6b471def39a006876 CLT configurations removed successfully. Hit return to continue ...

The following error message is displayed if an incorrect customer ID is entered:

Running Remove CLT Do you want to proceed with remove (y/N) : y Enter your customer ID: 1c55f76eea6546daab3c3e667bd40859 Entered customer ID does not match the configured customer ID. Hit return to continue ...