

Honeywell

Voice Log Analyzer

User Guide

Disclaimer

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For patent information, please refer to www.hsmpats.com.

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INTRODUCTION

The Honeywell Log Analyzer is an application that extracts and displays information from device logs. The logs are from supported devices listed below. The extracted data is visualized through graphs, tables, and lists for ease of understanding and interpreting results. The log analyzer uses an online graphical user interface (GUI) with user authentication.

The main functions are:

- Upload and save logs. These logs are uploaded and stored on the Honeywell Operational Intelligence servers.
- Generate PDF summaries for the customer's technical staff with information such as host communication data, signal strength, signal quality, etc.
- Filter data by values such as log name, date, AP, etc.
- Export data in Excel format.

Supported devices:

- Android devices running applications based on DevKit x.x or later, GWS Connector App recommended for highest level of compatibility
- A700x with VoiceCatalyst 4.3.1 or later
- A700 with VoiceCatalyst 2.3.1 or later
- A700 with VoiceClient 3.8.3 or later

Access Log Analyzer

There are two methods of accessing the Log Analyzer.

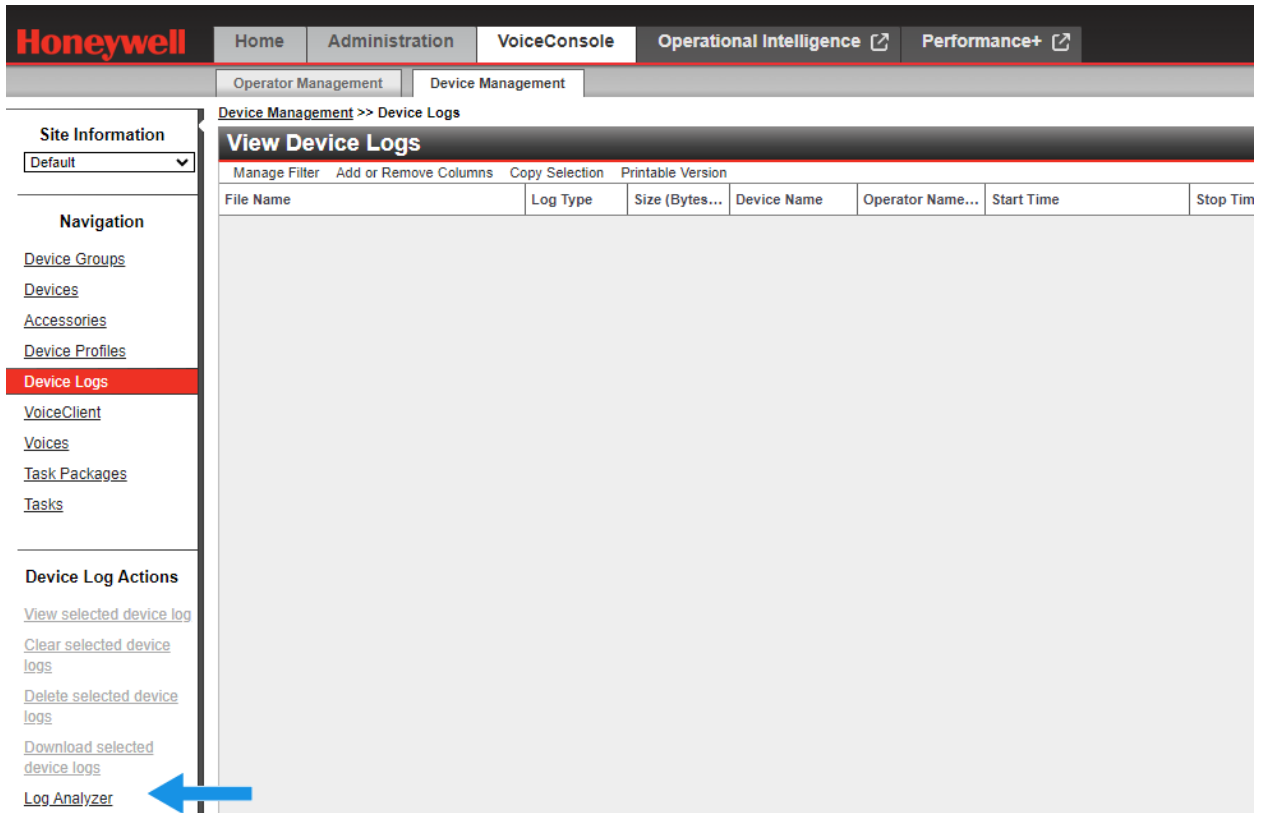
- [Access Log Analyzer from VoiceConsole](#) - This method must be used if you do not have Operational Intelligence tenant access.
- [Access Log Analyzer from Operational Intelligence](#) - This method can be used if you have Operational Intelligence tenant access.

NOTE

Operational Intelligence tenant access means the email you are using to access the Log Analyzer is associated with an organization within Operational Intelligence.

Access Log Analyzer from VoiceConsole

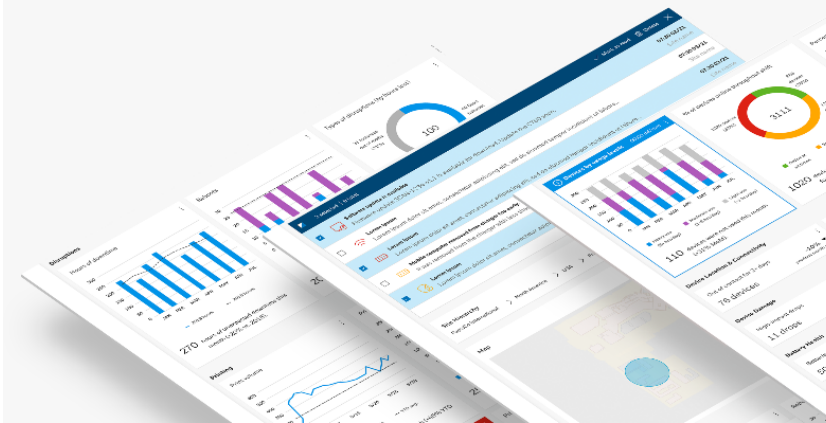
1. Open VoiceConsole.
2. Access the Log Analyzer from within VoiceConsole by selecting **Device Management > Device Logs > Log Analyzer**.



3. Login with your email address.

Operational Intelligence

A cloud-based solution that is transforming businesses through data-driven insights, simplifying lifecycle management of mobile assets, increasing productivity, and lowering costs.



Login using your organization email

4. If you are an existing user, you are directed to the sign on page and then the Operation Intelligence home page. Otherwise you must register.
 - a. The following screen is displayed if you are not a registered user.

SIGN ON

Invalid Username / Email



[CREATE AN ACCOUNT](#)

- b. Click Create an Account.


Account Registration

Enter the details to create your Honeywell ID.

First Name

Last Name

Email

Password 

Confirm Password

I agree and consent to [Honeywell's Terms & Conditions](#)

I have read and understood [Honeywell's Privacy Statement](#)

SEND VALIDATION CODE

- c. Click **Send Validation Code**.

Validation Code Sent




You have successfully sent your validation code to your email address. This code is only valid for 15 minutes.



OK

- d. Click **OK** to dismiss. When the validation code email is received, enter it at the bottom of the screen.

Confirm Password

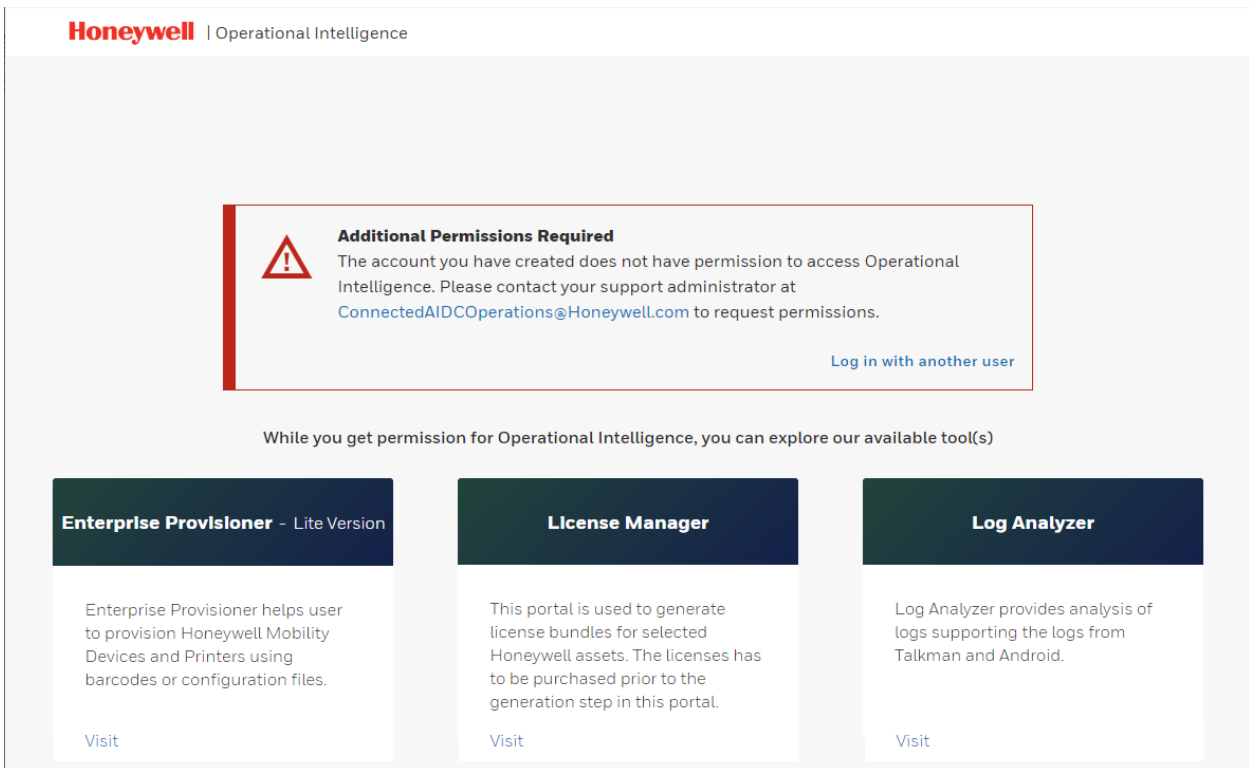
 

Validation Code

CREATE ACCOUNT

[RESEND VALIDATION CODE](#)

- e. Click **Create Account** If the validation code is not received, use the link to resend the code or review the screen for additional help.
- 5. Return to the Operational Intelligence login page and login.
- 6. The Operational Intelligence landing page opens.



Honeywell | Operational Intelligence

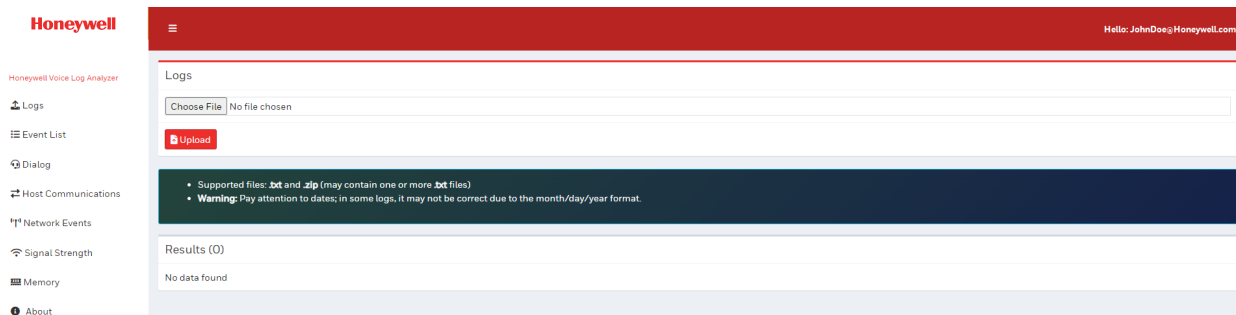
Additional Permissions Required
The account you have created does not have permission to access Operational Intelligence. Please contact your support administrator at ConnectedAIDCOperations@Honeywell.com to request permissions.

[Log in with another user](#)

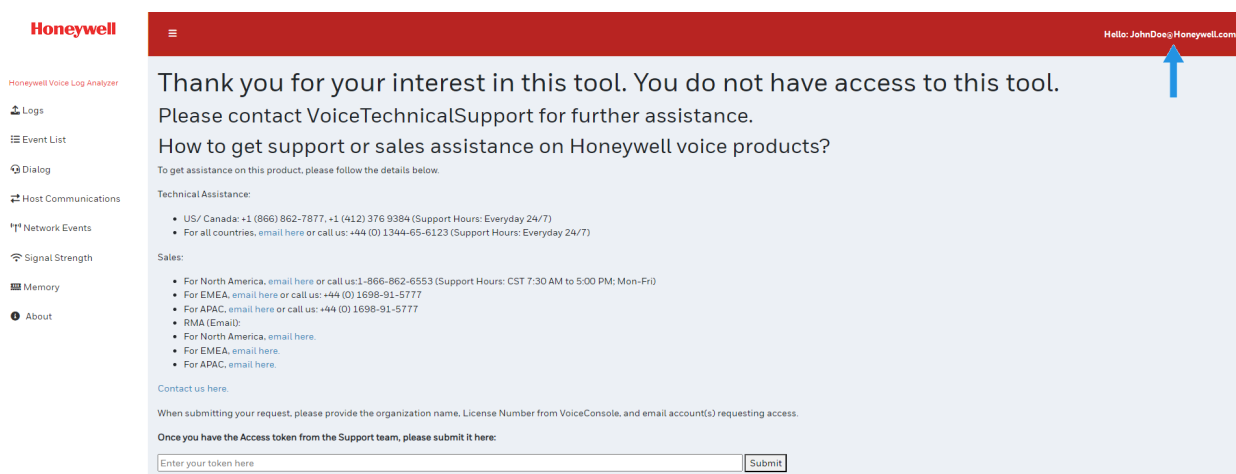
While you get permission for Operational Intelligence, you can explore our available tool(s)

- Enterprise Provisioner - Lite Version**
Enterprise Provisioner helps user to provision Honeywell Mobility Devices and Printers using barcodes or configuration files.
[Visit](#)
- License Manager**
This portal is used to generate license bundles for selected Honeywell assets. The licenses has to be purchased prior to the generation step in this portal.
[Visit](#)
- Log Analyzer**
Log Analyzer provides analysis of logs supporting the logs from Talkman and Android.
[Visit](#)

- 7. Click **Visit** under Log Analyzer.
- 8. If you have a valid license (and token) the Log Analyzer opens.



9. If not, the following screen is presented.



10. Click the **Contact us here** link. and provide the requested information displayed on the screen.

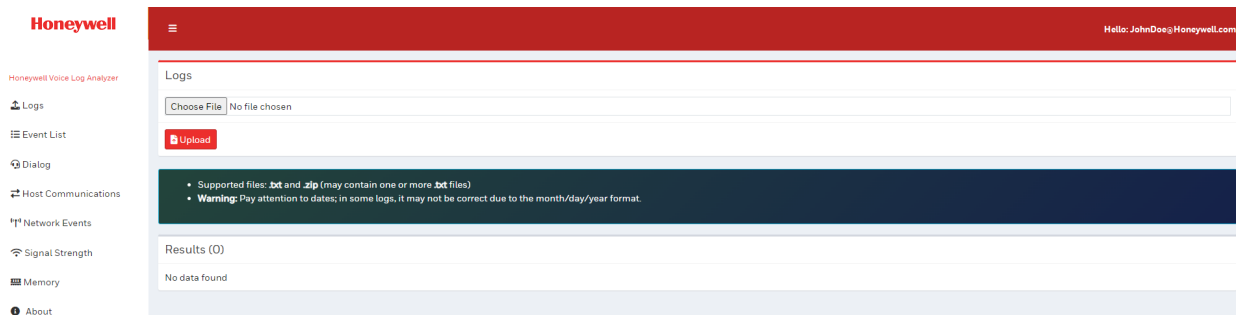
IMPORTANT

When providing the information to request the token, the email is case sensitive. The email must match the case used when registering with Operational Intelligence. You can view the email as shown in the screen above. If this user requests a token based on johndoe@honeywell.com the token issued does not allow access.

11. When the token is provided via email, copy the token and paste into the screen above.

12. Click **Submit**.

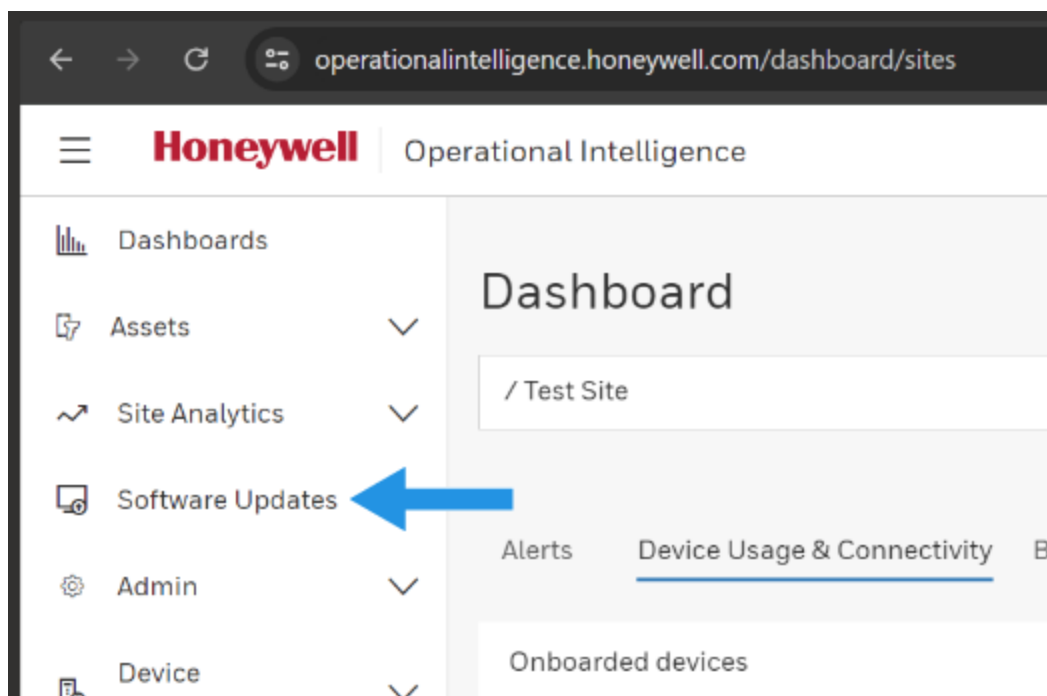
13. The Log Analyzer home page opens.



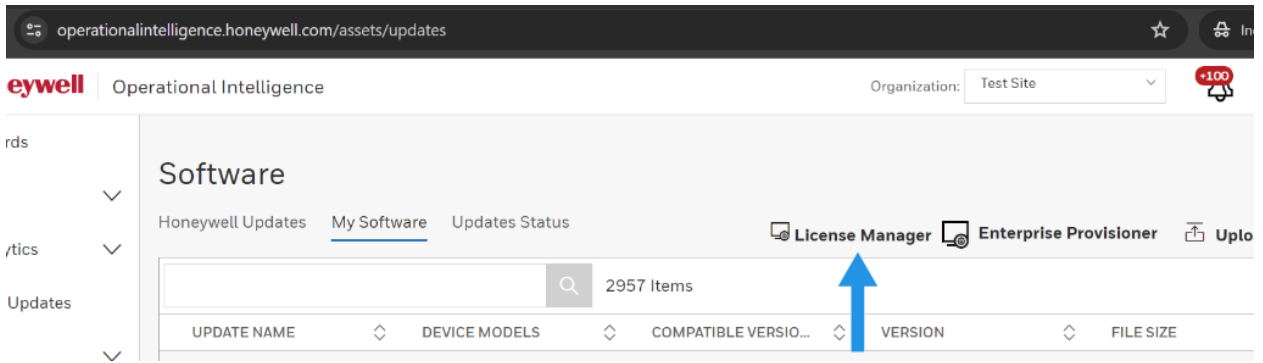
Access Log Analyzer from Operational Intelligence

The Log Analyzer is not automatically shown from the Operational Intelligence dashboard. It is necessary to follow the workaround below.

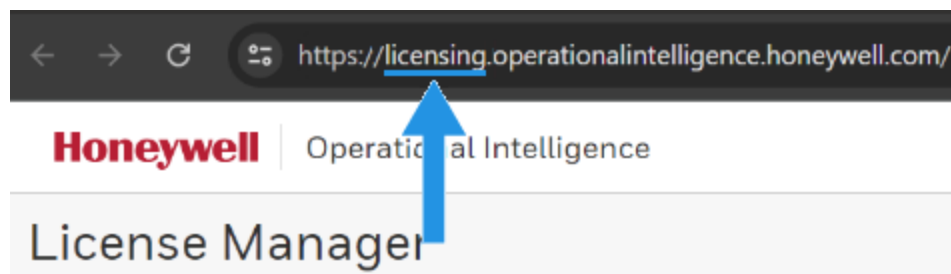
1. Access Operational Intelligence at this link: www.operationalintelligence.honeywell.com.
2. Click on the **Software Updates** menu.



3. Click on **License Manager**.



4. Edit the path in the browser bar. Replace **licensing** with **loganalyzer** in the UR. and access the new link.



5. Log Analyzer is launched.

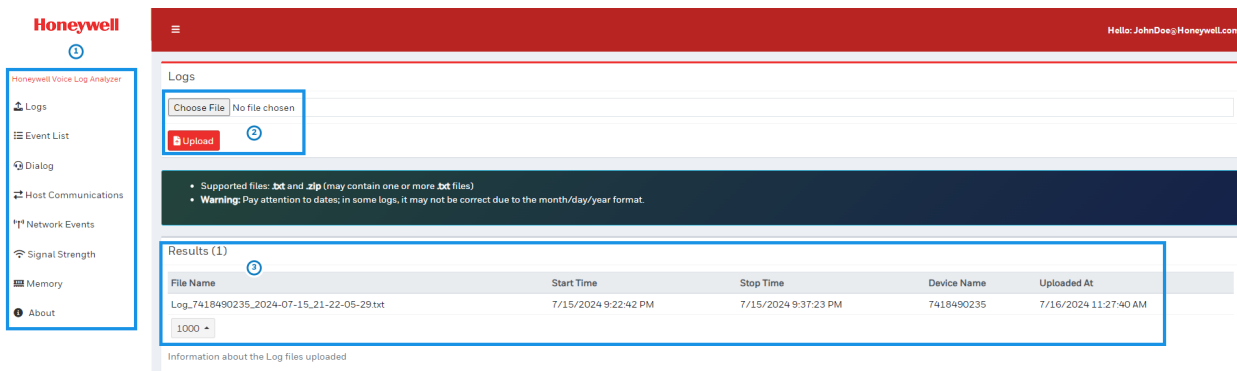
IMPORTANT

Log Analyzer uses a token for the session. When the token for the session expires, it is necessary to repeat the process above.

Organization

The application has three main sections.

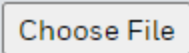
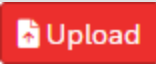



1. On the left side, a navigation panel shows navigation links to the available functions. The hamburger menu button is used to collapse or expand this panel.
2. At the top to the right of the navigation panel are buttons to perform actions. Available actions depend on the page selected,
3. The core section below the buttons shows the content area. The content area displays the selected and filtered data in tables, lists, or graphs.






App Structure

Application Buttons

The following buttons are used in various places within the tool.

Button	Function
	Browse for and choose a log file to be uploaded to the tool.
	Upload the chosen log file.
	Save the current log file as a PDF.
	Delete the current log file from the Voice Log Analyzer tool.
	Apply the selected filters to the log file.

Button	Function
	Clear the filters.
	Save the log data to a Microsoft Excel spreadsheet. If a filter is applied, only the filtered data is saved to the spreadsheet.
	Select the number of entries to display per page. The default is 1000.

Limitations

NOTE

Not all device logs may be handled as customizations may affect the ability to process the files.

The following limitations are observed with the 1.0.0.31 LA release:

- The signal strength display is not configurable for how the tool colors good or bad connections. Users must adjust their review to their own signal strength surveys to ensure a healthy network connection.
- File sizes are limited to 20 MB. Keep log files compressed help avoid exceeding the size limit. To review log files greater than 20 MB, modify the device log files to capture the desired timeframes. This can make GWS log analysis more difficult as these logs can get large very quickly. Keep files compressed to help avoid this issue.
- This tool only analyzes Device Logs. Application logs and logs generated via the "report problem" feature (such as the syslog or VocollectVoicelogs) are not supported.
- It is recommended to share the OpIntel Base URL:
<https://operationalintelligence.honeywell.com/> only and not share any other URLs.

Customer Support

Find most Honeywell Voice technical documentation at www.help.honeywellaidc.com.

If you need assistance installing or troubleshooting your device, please contact us by using one of the methods below:

Honeywell Voice Reseller Services

If you purchased equipment or services through a Honeywell Voice reseller, please contact your reseller first for support or to purchase a support plan.

Honeywell Voice Technical Support

To report Voice system support incidents or related technical issues, contact the Honeywell Technical Support Center at:

Technical Support Email: voicetechnicalsupport@honeywell.com

Technical Support Phone (US): +1 866 862 7877

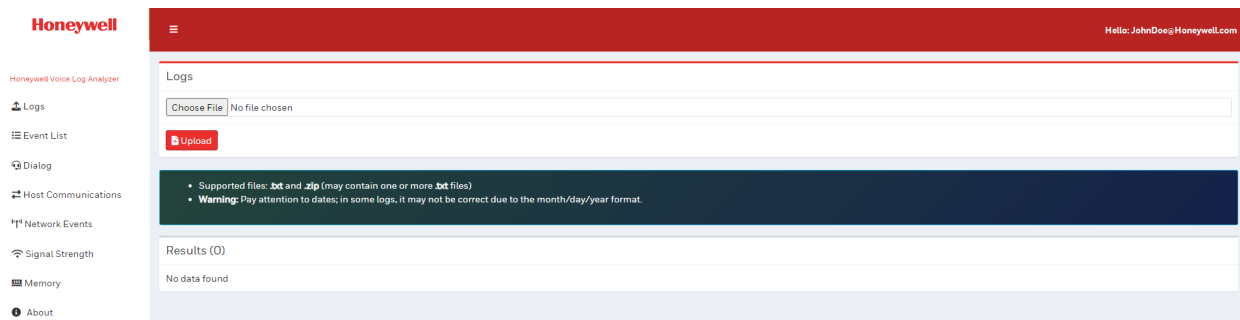
Technical Support Phone (Rest of the World): +1 412 376 9384

Technical Support Phone (EMEA): +44 (0) 1344 65 6123

For assistance on all other matters, contact your Honeywell Certified Reseller or Honeywell directly at www.sps.honeywell.com.

LOG ANALYZER FUNCTIONS

This section details the pages for uploading and displaying data extracted from device logs. Select a function from the left panel.



Log Analyzer Main Screen

Upload Device Log

Upload a log from the **Logs** page by choosing a log file and clicking the **Upload** button. Supported formats are txt or zip format. Uploaded logs appear below in a row-by-row list of results.

You can choose a log file by:

- Clicking on the **Choose File** button to browse and select a file
- Using file explorer to drag and drop a file in the **Chose File** text box

The success or failure message is displayed in the upper right corner of the screen.

☰
Log_7621450180_2023-08-24_10-08-42-389.txt
✕

Logs

Choose File | Log_7621450180_2023-08-24_10-08-42-389.txt

Upload

• Supported files: .txt and .zip (may contain one or more .txt files)
• Warning: Pay attention to dates, in some logs, it may not be correct due to the month/day/year format.

Results (8)

File Name	Start Time	Stop Time
Log_7621450180_2023-08-24_10-08-42-389.txt	8/24/2023 8:16:55 AM	8/24/2023
Log_7619192265_2023-09-26_14-45-19-900.txt	9/26/2023 12:40:56 PM	9/26/2023
Log_7423100665_2023-06-13_09-58-21-326.txt	6/13/2023 7:06:12 AM	6/13/2023
Log_6319300303_2024-01-18_10-59-47-657.txt	1/18/2024 9:38:09 AM	1/18/2024
Log_7622020110_2023-08-24_10-09-00-889.txt	8/24/2023 10:07:37 AM	8/24/2023
Log_7520299596_2024-01-15_16-55-49-69.txt	1/15/2024 3:38:52 PM	1/15/2024
Log_148_2023-09-14_12-86-05-198.txt	9/14/2023 12:27:45 PM	9/14/2023
Log_7520299596_2024-03-14_17-40-57-590.txt	3/14/2024 5:40:49 PM	3/14/2024

Upload Log

Select a log from the list to delete or click on the log for further basic information such as Serial Number, IP Address, Firmware Version, etc. A summary shows the Host Communication errors, the number of beeps registered, the number of roaming associations (Associations), the successful roaming events (Roaming Events), and the co-channel interferences. This information can be exported in PDF format.

📄 Log_667429657_2024-05-11_13-10-12-338.txt
✕

🗑️ 📄

Serial Number	IP Address	Firmware Version
7421380162	10.10.10.10	VCL-20210423193357-001-ECS_V4.3.1.en_US_12
Terminal Sub Type	Bluetooth Address	Console URL
A710x	60:00:00:00:00:00	http://10.10.10.1:9090/VoiceConsole/Tmgr/1
Radio MAC Address	Radio Firmware Version	Radio Driver Version
60:00:00:00:00:01	15.68.7.p175	C3X15C536-GPL-(FP68)-EMY023

Host Communications Failed	BEEPS	Roaming Events	Associations	Co-Channel Interferences
1	4	10	10	0

Summary for Log Event file

Log Summary

Log File Summary

The summary contains helpful information on the device. Refer to the upper portion for device identification details such as device type, IP and MAC addresses, and firmware versions.

The indicators for Host Communication Failed, Beeps, and Co-Channel interference are coded red, yellow, or green for an indication of possible issues.











Click the PDF icon to generate and save a PDF summary of the log file.

Event List

The **Event List** page displays a list with a set of events classified into the following types:

- [Survey events](#)
- [Roaming events](#)
- [Dialog events](#)
- [Transferred Data events](#)
- [Host Communications events](#)
- [Device Status events](#)
- [SRX Status events](#)

Each event type is shown with a different row color and icon for easier identification.

	2024-07-15 21:22:42.068	RingBufferModule::initialize()
	2024-07-15 21:22:42.426	Mac: 4c:71:00:00:00:00 Channel: 60 RSSI: -56 Co-channel interference: False
	2024-07-15 21:22:42.427	To 4C:71:00:00:00:00
	2024-07-15 21:22:42.469	Device connected to: 4C:71:00:00:00:00
	2024-07-15 21:22:42.469	Signal Strength: 49 %
	2024-07-15 21:22:42.779	Please wait. Loading task list.
	2024-07-15 21:22:42.821	No task list file found. Task unchanged.
	2024-07-15 21:22:44.228	Good night.
	2024-07-15 21:23:08.505	Mic boom flipped horizontally, send a message to dialog to stop discarding recognitions
	2024-07-15 21:23:18.498	Mic boom flipped vertically, send a message to dialog to discard recognitions

Event List

The list is ordered by date and can be filtered by date or event type.

List Filter

File Name:

Start Time:

End Time:

- Survey
- Roaming
- Dialog
- Transferred Data
- Host Communications
- Device Status
- SRX Status


List Filter Panel

In the **List Filter** section, set the filters by:

- checking one or more desired items in the list
- entering local dates and times

Next click the **Find** button or press Enter.

Filters can be removed by clicking the **Clear** and **Find** buttons in that order.

Click the  icon to save the log file as a Microsoft Excel spreadsheet.

TIP

Apply any desired filters before exporting, as only the filtered data is exported.



By default, all log events are displayed.

Survey Event List



This icon identifies all survey entries. Survey entries are one of two types:

- Access Point (AP) ID (MAC address)
- AP Signal Strength

Time	Info
 2024-07-15 21:22:42.469	Device connected to: 40:00:00:00:00:00
 2024-07-15 21:22:42.469	Signal Strength: 45 %

Event List Filtered by Survey

TIP



Combining Survey and Roaming events provides a view of both the signal strength and AP information.

Roaming Event List



This icon identifies all roaming entries. This is a summary of the roaming events between the device and local APs. Details include:

- MAC address of the AP
- Channel
- RSSI
- Co-channel interference

Time	Info
 2024-07-23 12:54:04.560	Mac: dc:20:20:20:20:20 Channel: 3 RSSI: -70 Co-channel interference: False
 2024-07-23 12:54:04.560	To DC:20:20:20:20:21

Event List Filtered by Roaming

TIP

Combining Survey and Roaming events provides a view of both the signal strength and AP information.

Dialog Event List

This details communication between the operator and the system. There are four types of entries:



This icon identifies dialog from the device.



This icon identifies ignored or rejected dialog.



This icon identifies dialog from the operator.



This icon identifies dialog from the system.

You can further filter the Dialog Events by the above categories on the [Dialog Filter](#) page. The Dialog Filter page includes additional details including recognition level and microphone status.

Time	Info
2023-12-14 15:13:11.594	password?
2023-12-14 15:13:14.241	<sil>
2023-12-14 15:13:14.263	5
2023-12-14 15:13:14.286	1
2023-12-14 15:13:14.308	3
2023-12-14 15:13:14.328	9
2023-12-14 15:13:14.349	<sil>
2023-12-14 15:13:19.062	BEEP (400,2)
2023-12-14 15:13:23.115	WM Mobile

Event List Filtered by Dialog

Transferred Data Event List

This details data interchanged with the host server.



This icon identifies data sent to the server.



This icon identifies data received from the server.



This icon identifies an informational entry.

Time	Info
→ 2024-06-08 15:38:59.976	prTaskLUTCoreConfiguration(06-08-24 15:38:59.010;'7418200121';sg1234;'en_US';Default;'CT-43-03-001')<CR><LF><LF>
← 2024-06-08 15:39:00.018	Vocollect.sg1234,0,0,<CR><LF>
← 2024-06-08 15:39:00.018	<LF><LF>
📌 2024-06-08 15:39:00.018	Records Received: 1. Bytes Received: 25

Event List Filtered by Transferred Data

Host Communications Event List



This icon identifies all host (TCP socket) communications, showing when device connections are opened and closed.

More detailed information can be found on the [Host Communications Filter](#) page.

	Time	Info
📶	2018-11-19 15:39:00.032	Connecting
📶	2018-11-19 15:39:00.070	Connected
📶	2018-11-19 15:39:00.185	Connection Closed

Event List Filtered by Host Communications

Device Status Event List



This color icon identifies all device status entries.

The entries may vary depending on device type and may include events such as button presses and scans.

For the Talkman entries, the battery icon serves as a visual indicator of the approximate battery charge. Additionally the following information is presented:

- Minutes of battery life remaining (TTE)
- Percentage of battery charge remaining
- Energy consumption rate
- Internal temperature

	Time	Info
🔋	2024-07-23 08:02:55.490	RingBufferModule::initialize()
🔋	2024-07-23 08:05:35.898	[TTE (min): 662], [PercentCharge: 94%], [Volts: 3.995], [EnergyConsumption: -18 mAh], [Temperature: 28.2deg C]
🔋	2024-07-23 12:56:53.441	[TTE (min): 620], [PercentCharge: 88%], [Volts: 3.902], [EnergyConsumption: -12 mAh], [Temperature: 20.2deg C]
🔋	2024-07-23 16:52:34.285	[TTE (min): 253], [PercentCharge: 45%], [Volts: 3.655], [EnergyConsumption: -108 mAh], [Temperature: 31.8deg C]
🔋	2024-07-23 23:17:13.823	[TTE (min): 144], [PercentCharge: 24%], [Volts: 3.44], [EnergyConsumption: -50 mAh], [Temperature: 28.3deg C]

Event List Filtered by Device Status

SRX Status Event List



These entries show the SRX3 headset flip-to-mute status and can be used to monitor operator habits:



This icon indicates the headset microphone boom is flipped up (microphone is muted).



This icon indicates the headset microphone boom is flipped down (microphone is active).

Time	Info
 2024-07-15 21:23:08.505	Mic boom flipped horizontally, send a message to dialog to stop discarding recognitions
 2024-07-15 21:23:18.498	Mic boom flipped vertically, send a message to dialog to discard recognitions

Event List Filtered by SRX Status

Dialog Filter

The **Dialog** page displays all prompts and responses, along with microphone events.

NOTE

Only the text of the dialog is displayed. The tool does not support record and playback functions.

The page includes a table showing a summary for each word recognized, number of times each was accepted or rejected, and the confidence.

Dialog can be filtered by date, event type (discarded, speak by device, recognized by device or microphone events), and word.

TIP

The most common filters to use would be Speak by Device and Recognized by Device when investigating recognition issues. Filter by start and stop time or a particular word for more granularity.

The screenshot shows the 'Dialog Filter' interface. It includes a 'File Name' dropdown menu with the value 'Log_7622020110_2023-08-24_10-09-00-889.txt'. There are checkboxes for 'Discarded', 'Speak by Device', 'Recognized by Device', and 'Microphone Events', all of which are checked. On the right side, there are input fields for 'Start Time' and 'End Time', both containing the placeholder 'dd/mm/yyyy --:--'. Below these is a 'Word' input field with the placeholder 'Word'. At the bottom left, there are 'Find' and 'Clear' buttons.

Dialog Filter Panel

The table below provides a summary of words spoken by the operator during the workflow. This summary by word shows the accepted and rejected occurrences along with confidence values.

Word	Accepted	Rejected	Avg. Confidence	Min. Confidence	Max. Confidence
<garbage>	0 (0 %)	1 (100 %)	-1	-1	-1
<sil>	0 (0 %)	101 (100 %)	-1	-1	-1
<swc>	0 (0 %)	11 (100 %)	-1	-1	-1
0	8 (88 %)	1 (11 %)	2,04	-0,25	3,97
1	4 (80 %)	1 (20 %)	1,97	-0,71	3,31
2	12 (100 %)	0 (0 %)	3,99	1,75	7,39
3	7 (100 %)	0 (0 %)	4,99	3,78	6,92
4	4 (80 %)	1 (20 %)	1,43	-0,86	3,41
5	7 (87 %)	1 (12 %)	2,12	-0,04	6,23
6	9 (90 %)	1 (10 %)	3,04	-3,14	7,03
7	4 (100 %)	0 (0 %)	2,2	0,58	3,8
8	2 (66 %)	1 (33 %)	2,32	-0,02	5,06
9	3 (100 %)	0 (0 %)	2,24	0,96	4,2
say again	0 (0 %)	1 (100 %)	-0,71	-0,71	-0,71
VSIGNOFF	2 (66 %)	1 (33 %)	1,29	-0,46	2,44

Summary Table for Dialog Events

The table below displays the data used to generate the summary above.

Events are indicated by the following colors and icons.



This icon identifies dialog from the device.



This icon identifies ignored or rejected dialog.



This icon identifies dialog from the operator.



This icon identifies dialog from the system.

Date	Word	Confidence	Status
29/04/22 13:04:01.398	The current operator is John Doe.		
29/04/22 13:04:01.982	Please do not speak for a few seconds.		
29/04/22 13:04:02.039	Mic boom flipped horizontally, send a message to dialog to stop discarding recognitions		
29/04/22 13:04:02.521	Good night.		
29/04/22 13:04:47.396	Mic boom flipped vertically, send a message to dialog to discard recognitions		
29/04/22 13:04:48.386	Mic boom flipped horizontally, send a message to dialog to stop discarding recognitions		
29/04/22 13:04:48.424	Please do not speak for a few seconds.		
29/04/22 13:04:52.074	Please speak.		
29/04/22 13:04:53.028	0		
29/04/22 13:04:54.682	1		
29/04/22 13:04:59.071	2		
29/04/22 13:05:00.615	Associate 192, Refrigerated, 32 lines		
29/04/22 13:05:08.272	<sil>	-1	
29/04/22 13:05:08.537	VCONFIRM	6,43	
29/04/22 13:05:08.842	Open pallet, 32 lines left		
29/04/22 13:05:13.067	<sil>	-1	
29/04/22 13:05:13.089	VCONFIRM	1,37	
29/04/22 13:05:13.226	Container type?		
29/04/22 13:05:13.227	<sil>	-1	IGNORING
29/04/22 13:05:15.408	<sil>	-1	
29/04/22 13:05:15.696	0	7,65	
29/04/22 13:05:15.978	1	5,98	
29/04/22 13:05:16.023	roll pallet?		
29/04/22 13:05:16.024	<sil>	-1	IGNORING
29/04/22 13:05:17.451	<sil>	-1	
29/04/22 13:05:17.876	VYES	5,04	

Dialog List

In the **Dialog Filter** section, set the filters by:

- checking the desired items in the list
- entering local dates and times

Next click the **Find** button or press Enter.

Filters can be removed by clicking the **Clear** and **Find** buttons in that order.

Host Communications Filter

The **Host Communications** page displays communication with the host server (LUTs/ODRs). The page includes the following information.

Connection Establishment Graphs

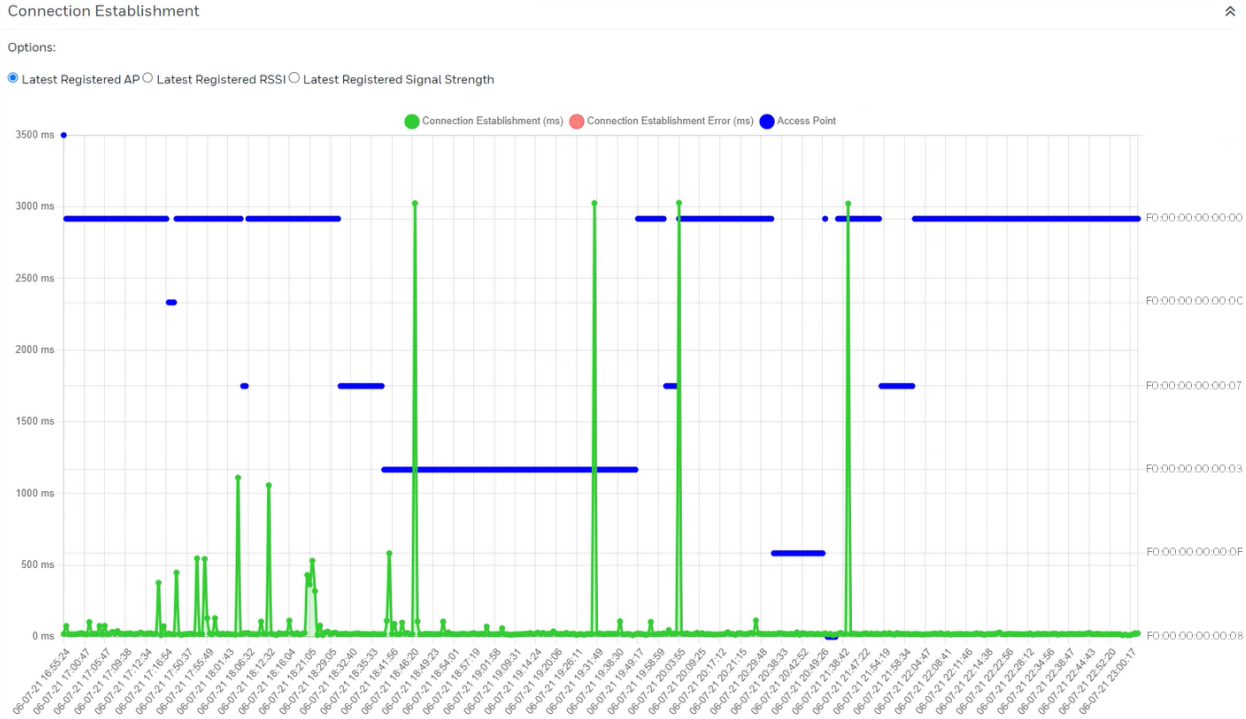
These graphs display the host connect timeline on the horizontal axis.

The left vertical axis displays the connection accomplishment time in milliseconds. The connection establishment graph is made up of a green (success) and red (error) indicators.

Additional data is shown depending on the option selected.

Latest Registered AP

The MAC address of the AP is displayed. The right vertical axis shows the registered AP over time shown with blue indicators for the time connected to that AP.



Connection Establishment Graph with Registered AP

NOTE

Logs from DevKit apps do not contain information about Connection Establishment, so the graph only depicts Data Transmission, which also includes the time to create a connection and to transmit the data.

Latest Registered RSSI

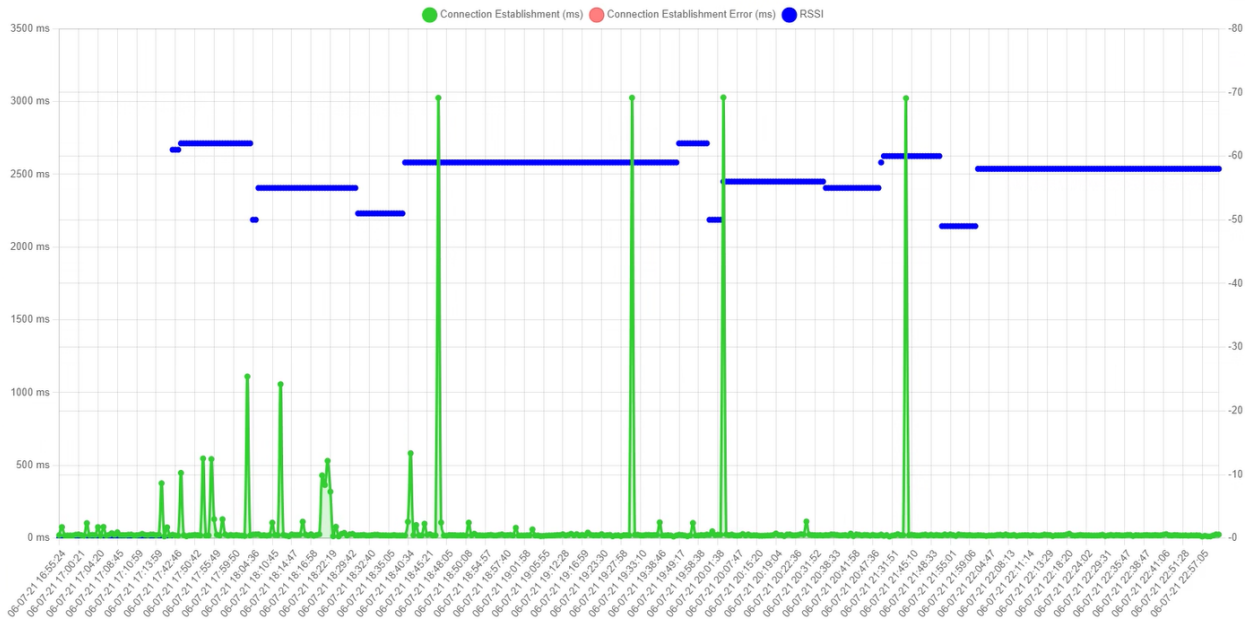
The right vertical axis shows the registered RSSI over time shown with blue indicators.

Connection Establishment



Options:

Latest Registered AP Latest Registered RSSI Latest Registered Signal Strength



Connection Establishment Graph with RSSI

NOTE

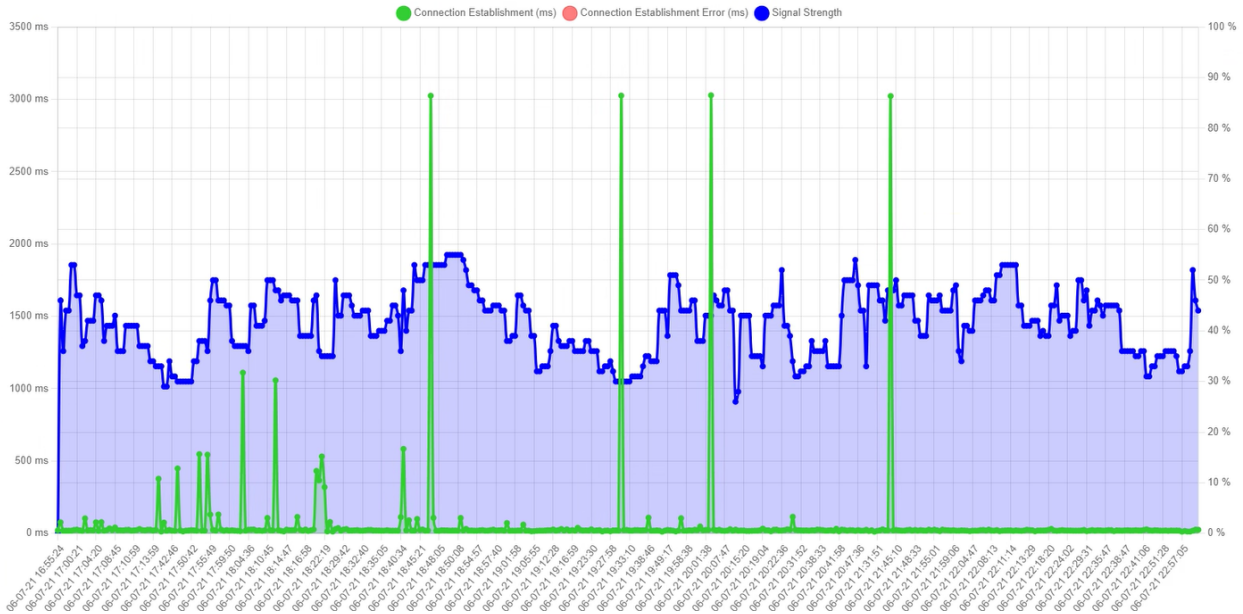
Logs from DevKit apps do not contain information about Connection Establishment, so the graph only depicts Data Transmission, which also includes the time to create a connection and to transmit the data.

Latest Registered Signal Strength

The right vertical axis shows the registered signal strength as a percentage over time shown with blue indicators.

Options:

Latest Registered AP Latest Registered RSSI Latest Registered Signal Strength



Connection Establishment Graph with Signal Strength

NOTE

Logs from DevKit apps do not contain information about Connection Establishment, so the graph only depicts Data Transmission, which also includes the time to create a connection and to transmit the data.

Data Transmission Graph

This graph displays the data transmission timeline on the horizontal axis.

The left vertical axis displays the data transmission time in milliseconds. The data transmission graph is made up of an orange (success) and red (error) line.

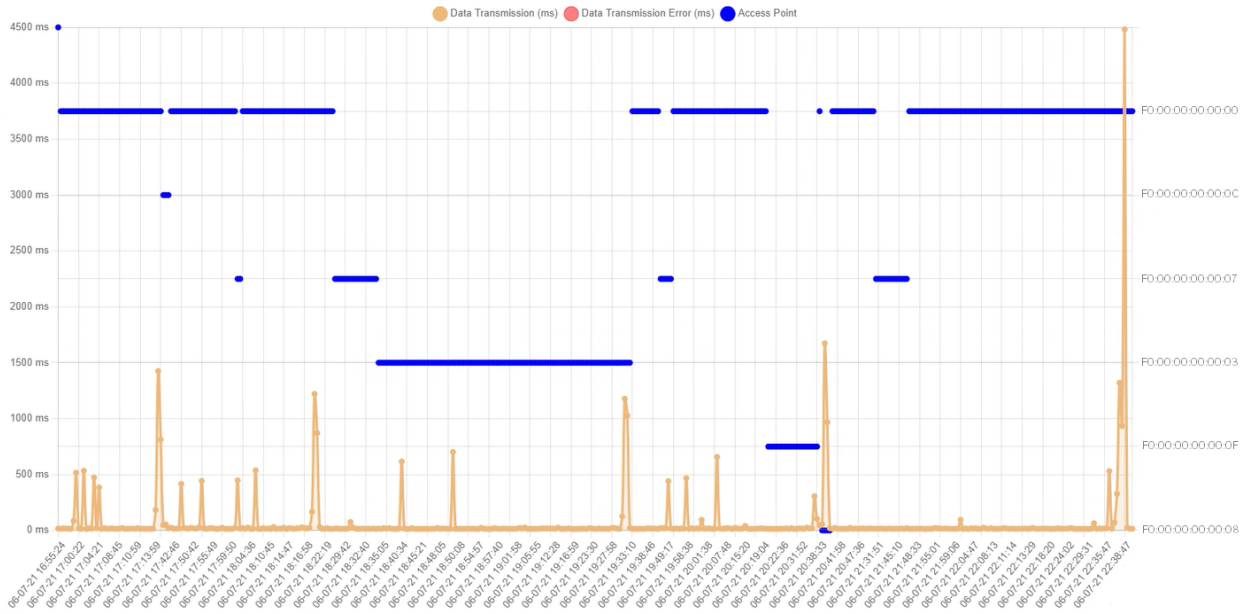
Additional data is shown depending on the option selected.

Latest Registered AP

The MAC address of the AP is displayed. The right vertical axis shows the registered AP over time shown with blue indicators for the time connected to that AP.

Options:

Latest Registered AP Latest Registered RSSI Latest Registered Signal Strength



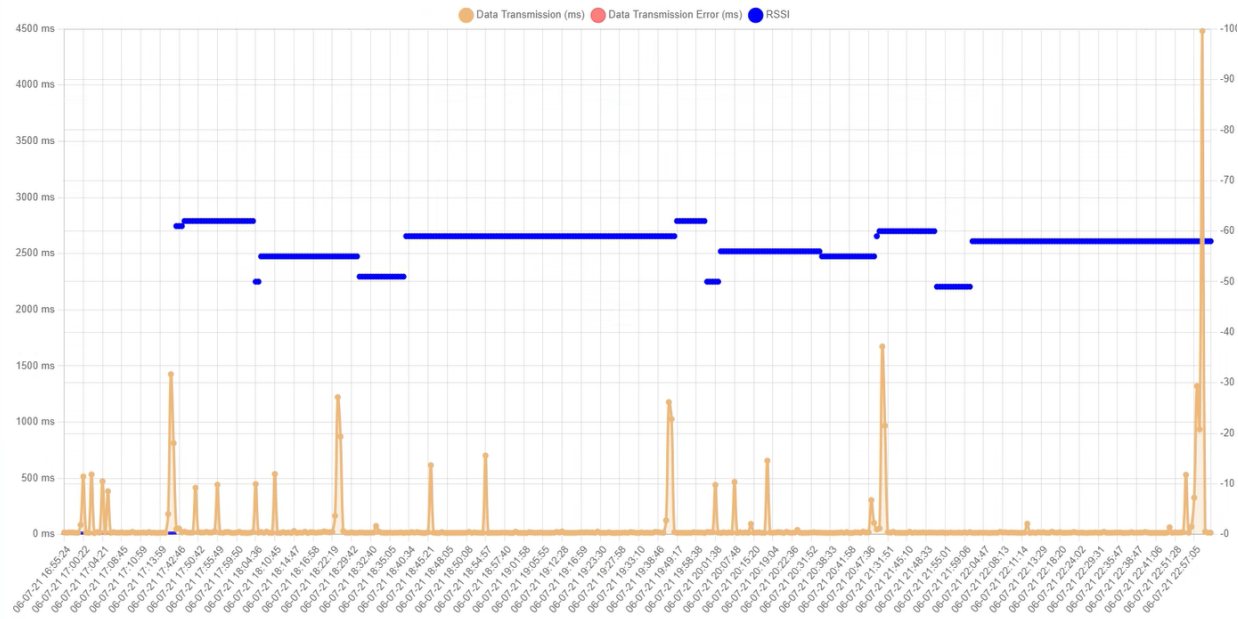
Data Transmission Graph with Registered AP

Latest Registered RSSI

The right vertical axis shows the registered RSSI over time shown with blue indicators.

Options:

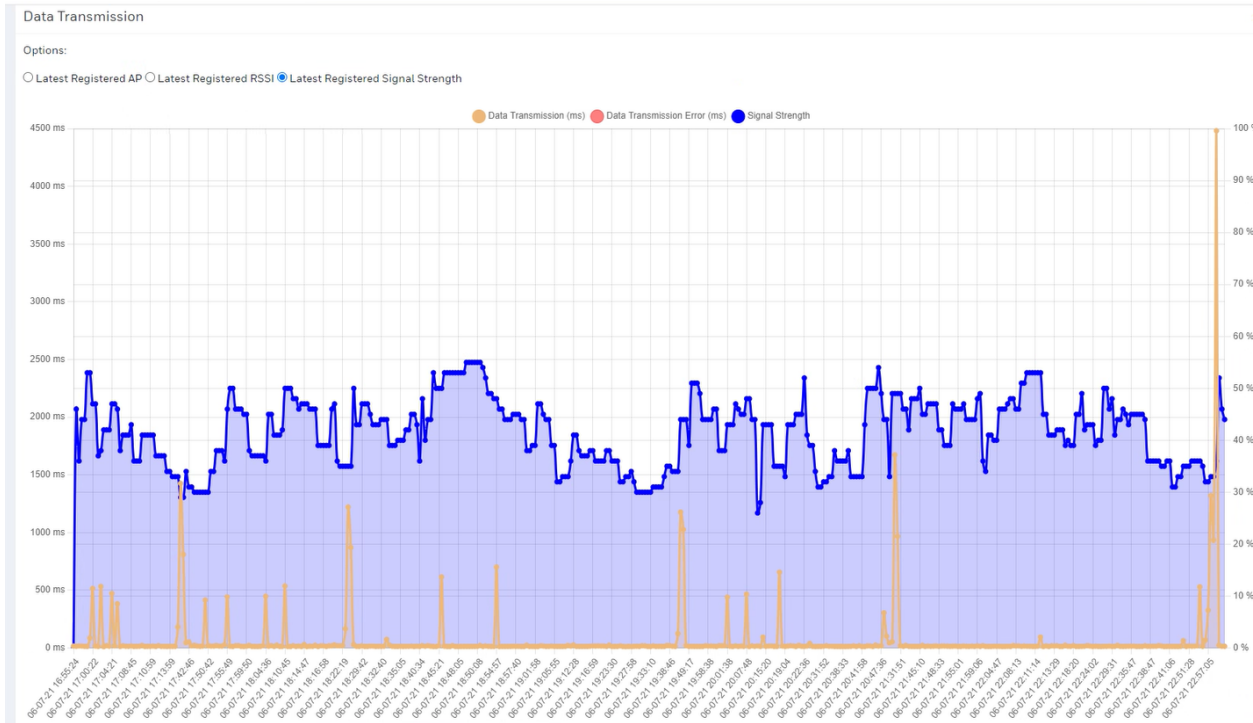
Latest Registered AP Latest Registered RSSI Latest Registered Signal Strength



Data Transmission Graph with RSSI

Latest Registered Signal Strength

The right vertical axis shows the registered signal strength as a percentage over time shown with blue indicators.



Data Transmission Graph with Signal Strength

Total Host Communications Table

This table displays a summary for the host connection and transmission events.

Total Host Communications: 62

Type	Successful	Failed	Avg.	Std.	Max.	Min.	RSSI (avg.)	Signal Strength (avg.)
Connection Establishment	0	0	1500.4 ms	2769.59 ms	11846 ms	19 ms	-67.76	31.72 %
Data Transmission	62	0	401.03 ms	1207.09 ms	8895 ms	22 ms	-67.66	31.72 %

Summary Table for Host Communication Events

Connection Events List

This list displays all registered host connection events ordered on the timeline with data about: Status, Latest Registered Signal Strength/AP/RSSI, Timeout Established, Connection/Error counts, and the Host and Port to which the device attempts to connect.

Time	Status	Latest Registered Signal Strength	Latest Registered AP	Latest Registered RSSI	Host	Port	Timeout Established	Connection Count	Error count	Elapsed Time (ms)
2023-09-14 12:30:12.374	Connecting	36 %	28.00.00.00.00.00	-50	30.200.200.200	15004	20	46	0	-
2023-09-14 12:30:12.414	Connected	36 %	28.00.00.00.00.00	-50	30.200.200.200	15004	20	46	0	40
2023-09-14 12:30:16.405	Connection Closed	36 %	28.00.00.00.00.00	-50	30.200.200.200	15004	20	46	0	3931
2023-09-14 12:31:07.660	Connecting	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	47	0	-
2023-09-14 12:31:07.699	Connected	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	47	0	39
2023-09-14 12:31:10.392	Connection Closed	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	47	0	2593
2023-09-14 12:31:17.637	Connecting	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	48	0	-
2023-09-14 12:31:17.678	Connected	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	48	0	41
2023-09-14 12:31:21.728	Connection Closed	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	48	0	4030
2023-09-14 12:31:21.796	Connecting	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	49	0	-
2023-09-14 12:31:21.841	Connected	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	49	0	45
2023-09-14 12:31:24.731	Connection Closed	40 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	49	0	2890
2023-09-14 12:31:49.563	Connecting	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	50	0	-
2023-09-14 12:31:49.602	Connected	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	50	0	39
2023-09-14 12:31:53.601	Connection Closed	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	50	0	3939
2023-09-14 12:31:53.612	Connecting	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	51	0	-
2023-09-14 12:31:53.650	Connected	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	51	0	38
2023-09-14 12:31:56.361	Connection Closed	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	51	0	2711
2023-09-14 12:32:07.977	Connecting	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	52	0	-
2023-09-14 12:32:08.017	Connected	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	52	0	40
2023-09-14 12:32:12.035	Connection Closed	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	52	0	4014
2023-09-14 12:32:12.129	Connecting	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	53	0	-
2023-09-14 12:32:12.193	Connected	48 %	00.00.00.00.00.80	-50	30.200.200.200	15004	20	53	0	62

Connection Events List

Host Communications Filter

File Name <input type="text" value="Log_148_2023-09-14_12-86-55-198.txt"/>	Conn. Time Min (ms) <input type="text"/>	Trans. Time Min (ms) <input type="text"/>	RSSI Min. <input type="text"/>	Start Time <input type="text" value="dd/mm/yyyy --:--"/>
Access Point <input type="text" value="00:00:00:00:00:00"/>	Conn. Time Max (ms) <input type="text"/>	Trans. Time Max (ms) <input type="text"/>	RSSI Max. <input type="text"/>	End Time <input type="text" value="dd/mm/yyyy --:--"/>

Host Communications Filter Panel

In the **Host Communication Filter** section, select the filters by:

- entering maximum or minimum values for connection or transmission times
- minimum or maximum RSSI
- entering local dates and times
- entering the MAC address for an Access Point

Next click the **Find** button or press Enter.

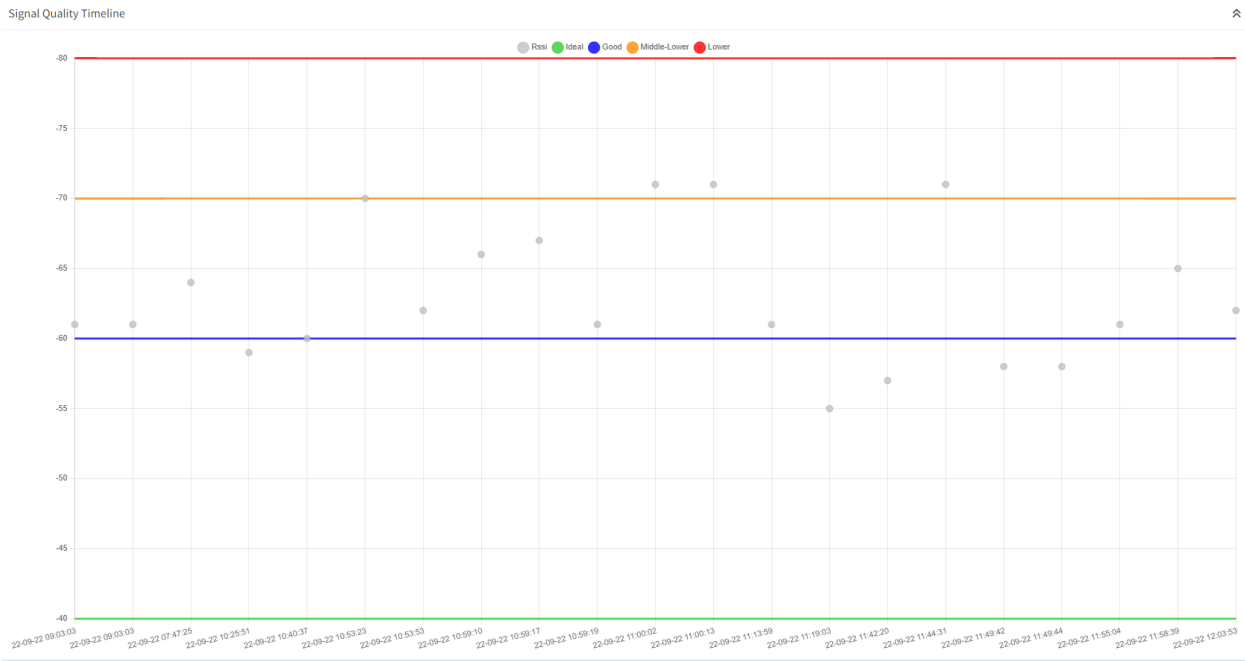
Filters can be removed by clicking the **Clear** and **Find** buttons in that order.

Network Events

The **Network Events** page displays the signal quality and roaming events. The page includes the following information:

Signal Quality Timeline Graph

In this graph, view the RSSI value within the timeline, with horizontal color lines to separate the quality group classification (Ideal, Good, Middle-Lower, Lower). Values are here represented by a scale from 0 to -80 RSSI -it should be noted that the range of values represented may vary between different device manufacturers and are not completely standardized:



Signal Quality Timeline Graph

Signal Quality Summary Table and Graph

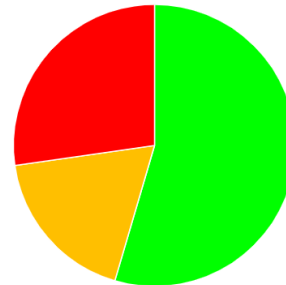
This graph shows the summarized info from the previous graph:

Signal Quality Summary

Description	Value	%
Roaming Events	11	-
Associations	11	-
Co-Channel Interferences	0	-
Avg. RSSI	-65.45	-
Not Available	0	0 %
Perfect signal (RSSI equals to 0)	0	0 %
Ideal signal (RSSI between -81 and -40)	6	54 %
Good signal (RSSI between -71 and -60)	0	0 %
Middle-lower signal (RSSI between -81 and -70)	2	18 %
Lower signal (RSSI less than -80)	3	27 %

Summary table for Signal Quality events

● Perfect signal (RSSI equals to 0) ● Ideal signal (RSSI between -81 and -40) ● Good signal (RSSI between -71 and -60)
● Middle-lower signal (RSSI between -81 and -70) ● Lower signal (RSSI less than -80)



Signal Quality Summary Table and Graph

Signal Quality Summary per AP

A table displays each roamed Access Point with a signal quality average value and the number of samples used to calculate it:

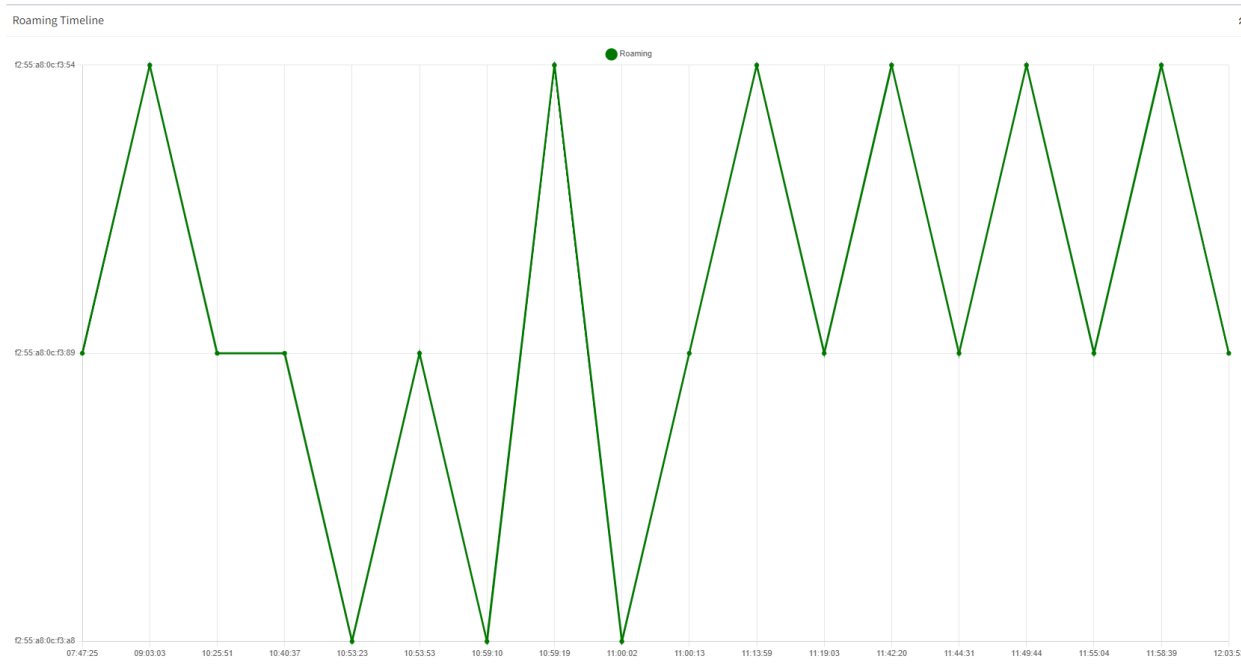
Signal Quality Summary per AP

AP	Rssi Avg. (%)	Samples
f2:00:00:00:a8	-69	3
f2:00:00:00:89	-63	9
f2:00:00:00:54	-61	9

Signal Quality Summary Table

Roaming Timeline Graph

This graph shows the roaming events in a timeline:



Roaming Timeline Graph

Roaming List

This list shows all registered network events ordered on the timeline, showing the network event date and time, status, destination AP, channel, and RSSI value for each event. Depending on the event, the Status shown in the list can be:

- **Associating Status:** This information indicates that the device is attempting to associate with another AP, with the indicated RSSI channel and signal strength (white lines in the roaming list).
- **Connected Status:** This information indicates that the device has successfully connected to a new Access Point (green lines in the roaming list).
- **Errors:** Point out whether errors have been detected in the roaming process (red lines in the roaming list).
- **Co-Channel interferences:** If there are two or more attempts to connect to different Access Points (APs) using the same channel within a time frame of 2 seconds or less, these lines are shown as red lines. This indicates the presence of co-channel interference.

Results (42)

Date	Status	AP	Channel	Rssi
22/09/22 09:03:03.463	Associating	55:00:00:00:54	11	-41
22/09/22 09:03:03.463	Association Failed, status code = 1, error = 0xffff, a_id = 0xffff			
22/09/22 09:03:03.466	Associating	55:00:00:00:54	11	-41
22/09/22 09:03:03.467	Connected	55:00:00:00:54		
22/09/22 07:47:25.293	Associating	55:00:00:00:89	1	-44
22/09/22 07:47:25.293	Connected	55:00:00:00:89		
22/09/22 10:25:51.755	Associating	55:00:00:00:89	1	-59
22/09/22 10:25:51.756	Connected	55:00:00:00:89		
22/09/22 10:40:37.987	Associating	55:00:00:00:89	1	-49
22/09/22 10:40:37.987	Connected	55:00:00:00:89		
22/09/22 10:53:23.698	Associating	55:00:00:00:a8	11	-76
22/09/22 10:53:23.698	Connected	55:00:00:00:a8		
22/09/22 10:53:53.047	Associating	55:00:00:00:89	1	-42
22/09/22 10:53:53.047	Connected	55:00:00:00:89		
22/09/22 10:59:10.713	Associating	55:00:00:00:a8	11	-46
22/09/22 10:59:10.713	Connected	55:00:00:00:a8		
22/09/22 10:59:17.642	Associating	55:00:00:00:54	11	-47
22/09/22 10:59:18.644	Association Failed, status code = 1, error = 0xffff, a_id = 0xffff			
22/09/22 10:59:19.449	Associating	55:00:00:00:54	11	-41
22/09/22 10:59:19.452	Connected	55:00:00:00:54		
22/09/22 11:00:02.029	Associating	55:00:00:00:a8	11	-71
22/09/22 11:00:02.029	Connected	55:00:00:00:a8		
22/09/22 11:00:13.052	Associating	55:00:00:00:89	1	-71
22/09/22 11:00:13.153	Connected	55:00:00:00:89		
22/09/22 11:13:59.334	Associating	55:00:00:00:54	11	-41
22/09/22 11:13:59.434	Connected	55:00:00:00:54		

Roaming List

In the **Network Events Filter** section, select the filters by:

- entering local dates and times

Next click the **Find** button or press Enter.

Filters can be removed by clicking the **Clear** and **Find** buttons in that order.

Network Events

File Name: Log_6214150044_2024-03-20_16-47-48-835.txt

Start Time: dd/mm/yyyy --:--

End Time: dd/mm/yyyy --:--

Find Clear

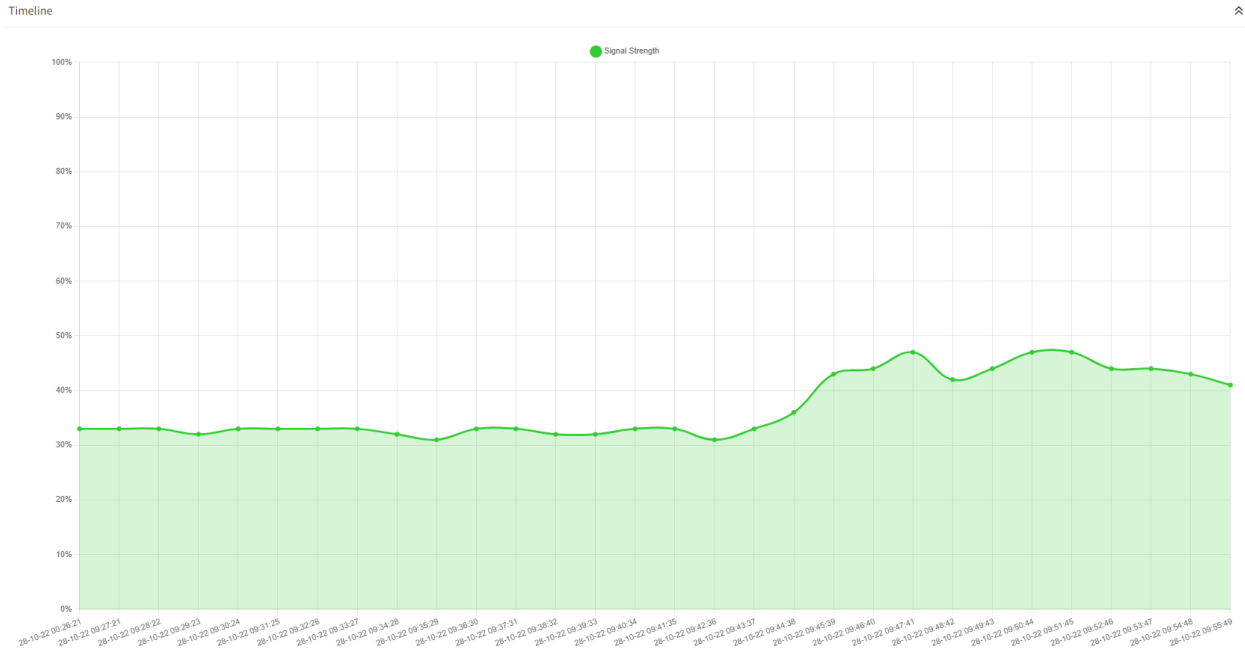
Network Events Filter Panel

Signal Strength

The **Signal Strength** page shows information about signal strength events. The page includes the following information:

Timeline graph

The graph displays signal strength values on the timeline for the selected log:



Timeline Graph

Summary Table

The table displays summarized info based on the previous graph:

Summary	
Description	Value
Average	36,93 %
Standard Deviation	6 %
Max	47 %
Min	31 %

Summary Table

Summary per AP Table

This table displays the signal strength average value and number of samples used to calculate it for each AP.

Summary per AP		
Access Point	Signal Strength	Samples
A0:00:00:00:00:D3	26	5
A0:00:00:00:00:13	36	4

Summary per AP Table

In the **Signal Strength Filter** section, select the filters by:

- entering local dates and times

Next click the **Find** button or press Enter.

Filters can be removed by clicking the **Clear** and **Find** buttons in that order.

Signal Strength Filter

File Name: [LogX].txt

Start Time: dd/mm/yyyy --:--

End Time: dd/mm/yyyy --:--

Find Clear

Signal Strength Filter Panel

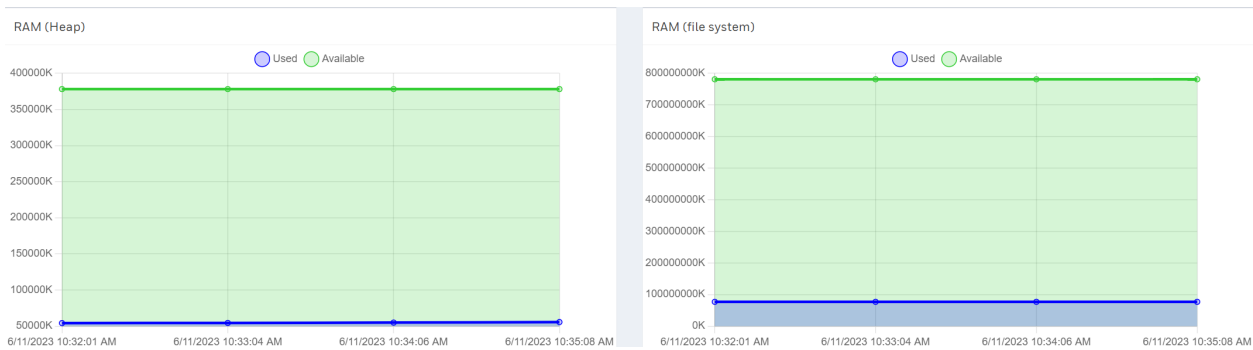
Heap/Memory Usage

The **Heap/Memory usage** page shows all information related to memory in the device. Used memory and remaining available memory are shown on the graph. The sum of used and available memory represents the total memory.

RAM

This page includes the following information:

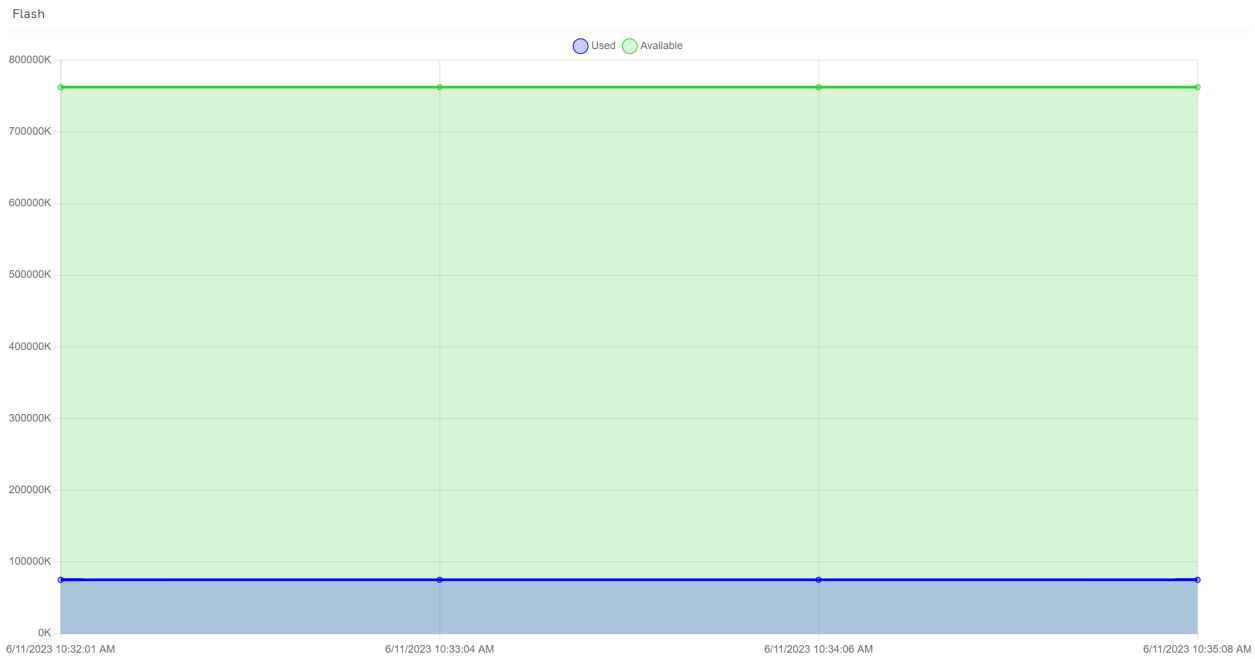
- **RAM (Heap) graph:** Shows the used and available heap memory.
- **RAM (file system) graph:** Shows the used and available file system memory.



RAM (Heap) and RAM (File System) Memory Graphs

Flash Graph

This graph shows the used and available flash memory.



Flash Memory Graph

About

View the Open Source Software (OSS) agreements from this screen.

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