

Helium x LoRaWAN

Helium Dev Webinar | Mar 26, 2020

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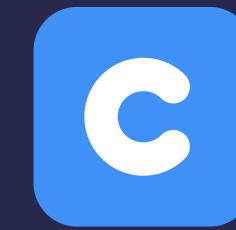
Overview of Today's Webinar

Agenda

- Helium × LoRaWAN update
- Helium Console Update
- LoRaWAN Device Demo
- What's Next?
- Developer Community Resources
- Q&A

Helium × LoRaWAN

- Helium supports **Class A** devices on LoRaWAN 1.0.2 spec
- Console updated to support onboarding pre-provisioned LoRaWAN devices
- Devices should use **subband 7** (Channels 48-55)

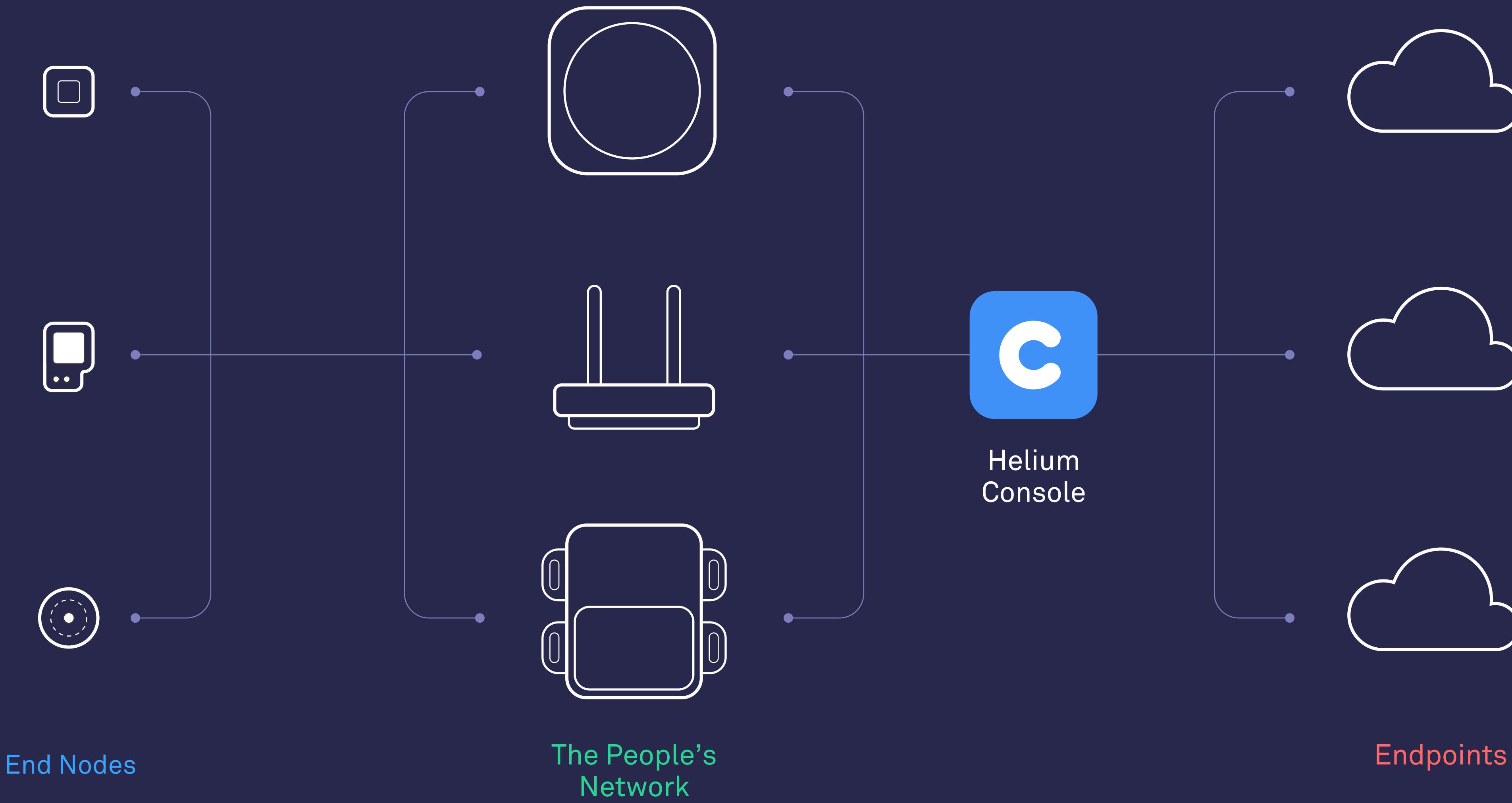


Helium Console

The screenshot shows the Helium Console interface. On the left is a dark sidebar with navigation links: Dashboard, Devices, Integrations, Users, Data Credits, Labels, REQUEST BIN, HUMIDITY, TEMP, Cayenne-Integra..., CUSTOMER 1, and test. The main area is titled "8 Devices" and lists the following data:

Device Name	Device EUI	Labels	Integrations	Frame Up	Frame Down	Date Activated	Last Connected
device serial 5	1571CB2AE5A02392	TEMP HUMIDITY				Mar 10, 2020 9:30 AM	Delete Show
device serial 4	794F786EE416FCF2	TEMP HUMIDITY				Mar 10, 2020 9:30 AM	Delete Show
device serial 6	8255EE74E438C396	TEMP HUMIDITY				Mar 10, 2020 11:08 AM	Delete Show
device serial 3	91BC3FB80B0902A8	TEMP HUMIDITY				Mar 10, 2020 9:31 AM	Delete Show
device serial 2	D571FAA5C83EE5EC	TEMP HUMIDITY				Mar 10, 2020 9:31 AM	Delete Show
device serial 1	D86F1EE5729517B8	TEMP HUMIDITY				Mar 10, 2020 9:31 AM	Delete Show

- Combination of powerful device management tool with network services
- Provision & manage devices, monitor data activity, configure integrations, and manage connectivity costs.
- Built on extensible REST APIs.





HOW TO GET STARTED

Sign up for Console



console.helium.com

LoRaWAN Demo

What's Next?

-
- MQTT Integration
 - AWS IoT Integration
 - TTN Device Migration
 - MyDevices Integration
 - Helium Developer Kits
 - Helium-approved LoRaWAN device library



Helium Insider Program

helium.com/insider

-
- Represent Helium in your local community and host meetups and workshops to kickstart projects
 - Will be provided hardware, food/drink stipend, swag, learning resources, etc. to maximize success
 - Direct access to the Helium Team and be the first to know about changes and updates



helium

Organization: TEST - NEW ORG

8 Devices							Quick Action
<input type="checkbox"/>	Device Name	Device EUI	Labels	Integrations	Frame Up	Frame Down	Date Activated
<input type="checkbox"/>	device serial 5	1571CB2AE5A02392	TEMP HUMIDITY				Mar 10, 2020 9:30 AM
<input type="checkbox"/>	device serial 4	794F786EE416FCF2	TEMP HUMIDITY				Mar 10, 2020 9:30 AM
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<input type="checkbox"/>	device serial 1	D86F1EE5729517B8	TEMP HUMIDITY				Mar 10, 2020 9:31 AM

[helium](#)

Home

CONSOLE

- Introduction
- Quickstart
- CLI
- Users
- Integrations
- Labels
- Adding Devices

DEVICES

- Introduction to Helium Devices
- LongFi Arduino Quickstart
- Migrating Devices to Helium
- LoRaWAN Devices

BLOCKCHAIN

- Introduction
- Mining and Token Rewards
- Network Components
- Helium Tokens and Data Credits
- Proof-of-Coverage
- The Helium Consensus Protocol

[Edit on GitHub](#)

CONTENTS

- Welcome to the Helium Net...
- Console
- Devices
- Blockchain
- Hotspot
- LongFi



Welcome to the Helium Network

Welcome to the Helium Network

The Helium Network is the largest, public LPWAN in the United States, and enables long range, low power, bi-directional communication for any LoRaWAN compatible device.

The Helium Network is open and permissionless, and requires no up-front payments, contracts or commitments to use. Devices pay Helium hotspot owners and other Helium Network Operators on a per-packet basis for delivering their sensors packets to the application end point.

In this developer documentation you will find examples, tutorials, specifications, and API references for building devices to run on the Helium network.

Why GitHub? Enterprise Explore Marketplace Pricing

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Helium

The world's first peer to peer wireless network.

San Francisco, CA https://www.helium.com hello@helium.com

Repositories 125 Packages People 20 Projects

Pinned repositories

 erlang-hbbft Erlang implementation of HoneyBadgerBFT Erlang ★ 32 ⚡ 5	 erlang-dkg Distributed key generation for Erlang (using pairing based cryptography) Erlang ★ 16 ⚡ 2	 blockchain-core Erlang ★ 13 ⚡ 1
 blockchain-api Rest API for blockchain Elixir ★ 5 ⚡ 2	 miner Miner for the helium blockchain Erlang ★ 11 ⚡ 3	 helium-wallet-rs Rust implementation of a helium wallet CLI Rust ★ 2 ⚡ 1

Find a repository... Type: All Language: All

gateway-config

The Helium configuration application. Enables configuring the Helium Hotspot over Bluetooth

Erlang Apache-2.0 ⚡ 2 ★ 7 ⚡ 0 ⚡ 1 Updated 7 hours ago

helium-wallet-rs

Rust implementation of a helium wallet CLI

Rust Apache-2.0 ⚡ 1 ★ 2 ⚡ 0 ⚡ 1 Updated 12 hours ago

ebus-command

An erlang command client using ebus

erlang networking erlang-library command

Top languages

Erlang C Rust Python Haskell

Most used topics

Loading...

People

20 >



Helium Console

console.helium.com

Helium Docs

developer.helium.com

Helium Public Github Repo

github.com/helium

The screenshot shows the Helium mobile application interface. At the top, there's a header bar with the app logo, a search bar, and a notifications badge indicating 9+ updates. Below the header, the main screen displays a list of channels on the left and a conversation in the #general channel on the right.

#general

falling on first hop

andrew giff 3:10 AM
maybe ill pull that data tonight for recent challenges and see how far they make it

JoeM 3:23 AM
Dead as in it falls every challenge,

JoeM 3:23 AM
replied to a thread: maybe ill pull that data tonight for recent challenges and see how far they make it
The first hop is my hotspot

andrew giff 3:24 AM
Ah gotcha and must be that is only neighbor in RF range to run challenges through for you or do you get some other challenges you can pass via different paths

JoeM 3:24 AM
1 reply Today at 3:24 AM

andrew giff 3:28 AM
I wonder if the "witness" mechanic is better for POC than this multihop thing

JoeM 3:31 AM
Image from iOS ▾

A modal window titled "CHALLENGE DETAILS" is open, showing a list of challenges:

- Zealous Blonde Flish PASSED CHALLENGE
- Tricky Oily Haddock FAILED CHALLENGE
- Bright Pastel Buffalo NOT CHALLENGED
- Lone Ivory Kestrel NOT CHALLENGED

Judah 7:42 AM joined #general.

Message #general

A screenshot of the r/HeliumNetwork subreddit homepage. The page features a dark blue header with the subreddit name "r/HeliumNetwork" and a search bar. Below the header is a large, semi-transparent map of a city. The main content area shows several posts. The first post is titled "What's Helium? Glad You Asked." and includes a link to a blog post. The second post is titled "Hacking to solve COVID19 related issues" and also includes a link. The third post is titled "Helium for Business: Harness the Power of the Network" and includes a link. On the right side of the page, there is a sidebar with sections for "About Community", "Community topics", "Community options", and "Important Links". The "About Community" section includes statistics like 591 members and 5 online users, and a brief description of the community's purpose: "Building the world's first peer-to-peer wireless network, The People's Network, for a new class of devices." The "Community topics" section lists "New" and "Top" posts. The "Community options" section has a "CREATE POST" button. The "Important Links" section lists "Helium Site", "Helium System Status", "Helium Network Status", and "Helium Dashboard".

Hotspots - Grafana

Your Workspaces | Slack

Helium Community

Sign Up | Log In | Search | More

all categories ▾ Latest Top Categories

Topic Replies Views Activity

SDK and API overview Webinar on Nov 14th at 10AM PT 1 46 6d

Devices & LongFi Hey all, We released our developer documentation, which can be found here: <https://developer.helium.com/> I'm going to host a SDK Webinar and Q&A session on Thursday, November 14 from 10:00 AM - 11:00 AM (PST) : Webinar ... [read more](#)

Hotspot internet connection ... why? 4 31 6h

Hotspot

Antenna Upgrades (Better Range) 8 236 8h

Hotspot

Helium hotspot baud rate? 0 5 8h

What is the purpose of port 44158 & how does it come into play with challenges? 3 125 18h

Devices & LongFi

What Android version is supported by Helium app in Google Play Store? 2 36 3d

Devices & LongFi

Finding your hotspot neighbors with python 1 60 4d

Hotspot

My First Device 5 233 4d

Devices & LongFi

Clarification of which freq option in RAK store for RAK-2245 in Dev Hotspot? 1 42 6d

Devices & LongFi

Dev Community Slack

chat.helium.com

Helium Subreddit

[reddit.com/r/HeliumNetwork](https://www.reddit.com/r/HeliumNetwork)

Community Forum

community.helium.com



Q&A

Developer inquiries
developer@helium.com