



IoT Cloud Integration and Protocol Conversion

The Soracom cloud integration service enables direct connections between your devices and the leading cloud services.

www.soracom.io

Transmitting data from your IoT device directly into your cloud platform can be a game-changer for connected applications, significantly reducing reliance on 3rd-party APIs or scripts, and helping to reduce IoT data consumption.

With Soracom's IoT cloud adapter, Soracom Funnel, any data captured from sensors on your hardware is ingested automatically by your preferred cloud service – including AWS, Google Cloud Platform, or Microsoft Azure – without any relay server, SDK installation, or on-device credentials required.

This simple, frictionless application works with virtually any IoT device and supports the following cloud services:

- AWS IoT
- Amazon Kinesis
- Amazon Kinesis Firehose
- Microsoft Azure Event Hubs
- Google Cloud Pub/Sub



Google Cloud



Microsoft Azure

Connecting devices to a cloud service usually requires extra steps

Without a platform like Soracom that has a built-in cloud adapter service, connecting devices to cloud services securely involves extra security measures, additional development resources, and impacts minimum requirements for hardware specifications.

Cloud connections will usually leverage a combination of relay servers that live on the public internet, installing a device-side SDK, or encrypting data at the device level. Doing it right takes more time, more code, more processing power, more energy consumption, and more data usage.

Connecting devices to a cloud service with Soracom eliminates steps

The Soracom platform can route data from your devices that connect via Soracom Air (our global IoT cellular service) or Soracom Arc (a service for non-cellular devices to securely connect to the platform) to a predefined endpoint for automatic ingestion by your preferred cloud service. No public internet facing relay server, SDK installation, or on-device credentials required.

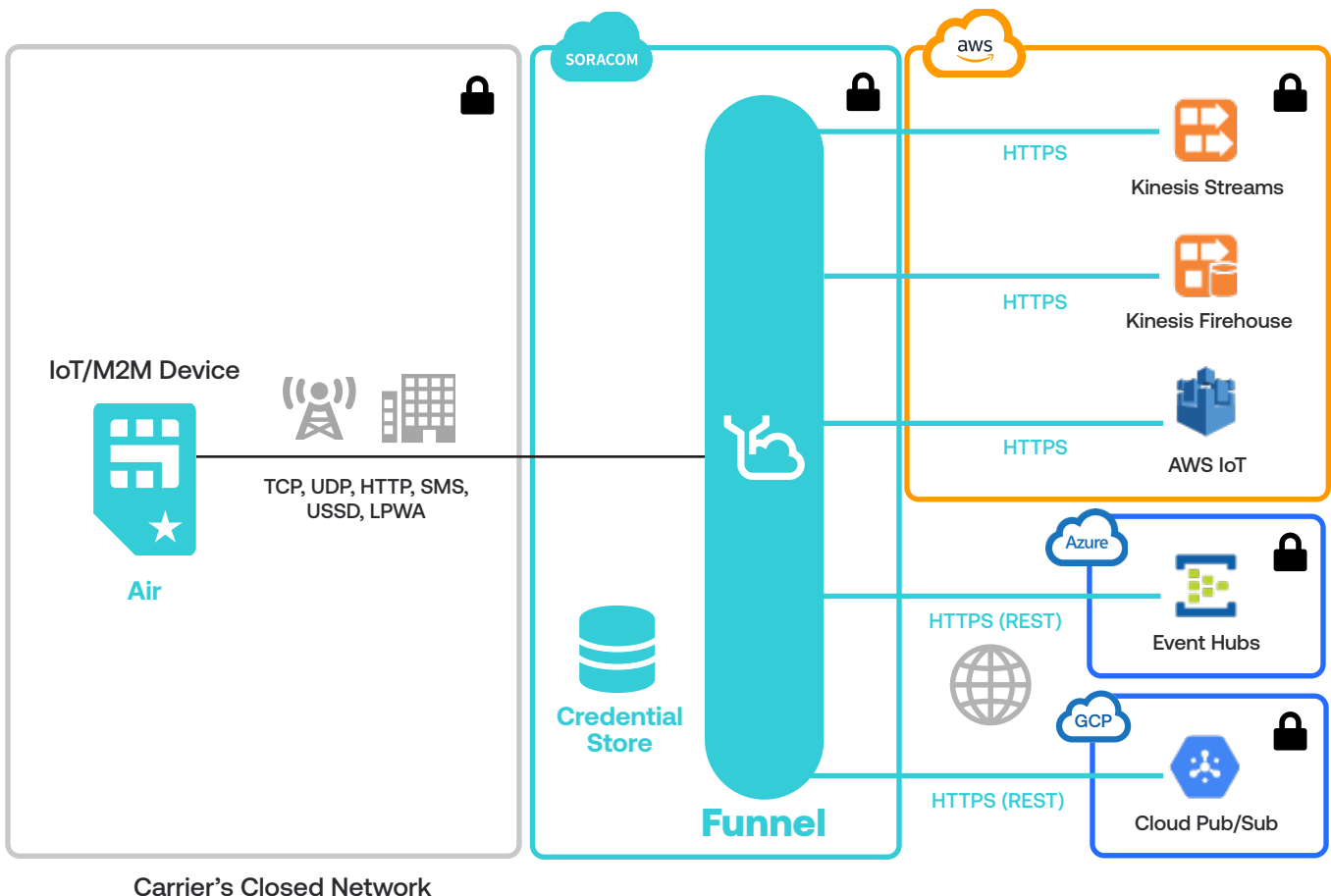
Get up and running securely within minutes with your cloud credentials

When you use Soracom's cloud adapter, you can transmit data directly from devices just by specifying your desired cloud service and resource. This step removes the need to store passwords on devices, and allows access to cloud services with minimal setup or in-field maintenance.

Use lightweight and legacy protocols without making compromises

Because the connection between your device and the Soracom platform is already secured (with Soracom Air or Soracom Arc, Soracom Funnel) you're able to use lighter HTTP, TCP, and UDP protocols and backwards compatibility for legacy devices that might be using SMS or USSD. Soracom will automatically convert traffic to secure protocols for delivery to your cloud, reducing total power and bandwidth requirements of your deployed devices.

In some cases, cloud providers may specifically block lightweight protocols like HTTP, TCP, or UDP, which can severely impact your data usage or power consumption budget. **This route can reduce your monthly data fees without compromising security or performance and drastically extend the operational life of battery powered devices.**



Soracom cloud adapters currently support:

- AWS IoT
- Amazon Kinesis
- Amazon Kinesis Firehose
- Microsoft Azure Event Hubs
- Google Cloud Pub/Sub
- Need a specific cloud adapter? We're happy to consider additional cloud services.

Programmable Access Points

Because you can set the Funnel endpoint as the destination for device data, you can manage connections for any device or group directly through the Soracom console or API.

When you're ready to switch from test to production, just send a command. No need to reset individual devices.

Why Soracom – What's the business case?

- **Streamlined Cloud Integration** - Connect to leading cloud services, including AWS, Microsoft Azure and Google Cloud Platform, without storing SDKs or credentials on devices.
- **Simple Application Updates** - Re-route traffic from devices or change integrations without pushing new firmware to devices
- **Enhanced IoT Security** - Credentials and keys stay in the cloud to limit security risk even if in-field devices are breached.

Developer Guides

- [Connect to AWS IoT Core using Soracom Funnel](#)
- [Connect to Azure IoT Event Hubs using Soracom Funnel](#)

Developer Documentation

- [Soracom Funnel overview, configuration, and advanced security options](#)

Is there a Free Tier to test the cloud integration and protocol adapters?

Soracom provides a free tier for Funnel with each Soracom account. Refer to the [Pricing & Fee Schedule](#) for more information.

Ready to connect your device directly to an IoT cloud service?

Buy a Soracom Air compatible IoT SIM and get started today