

# Harness the Internet of Things

Businesses are deploying Internet of Things (IoT) strategies to improve efficiency, respond to changing demands quickly, and explore new business models. Google Cloud offers an integrated set of managed services to help you easily connect, manage, and ingest IoT data from globally dispersed connected devices, then process, visualize, and analyze it in real time to respond to and anticipate business needs.

## Fully managed infrastructure

Google Cloud IoT services are serverless and fully managed, which means Google takes care of the infrastructure. Cloud IoT Core helps you manage the identity and security of your devices, requires no up-front software installation, and provides automatic load balancing for all device connections. Connect Cloud IoT Core to other Google Cloud Platform tools for a single view of batch and streaming data, real-time analysis, and compelling visualizations.

## End-to-end security

Google Cloud adheres to stringent industry-standard security protocols that help keep your business data secure. Cloud IoT Core customers can enable end-to-end security using asymmetric key authentication over TLS 1.2 and use CA signed certificates to verify device ownership. Devices running Android Things or supporting the Cloud IoT Core security requirements can deliver full-stack security.

## Seamless integrations

The Google Cloud IoT platform supports a wide variety of embedded operating systems, works seamlessly with Android Things, and provides out-of-the-box support for devices from leading manufacturers (like Intel and NXP Microchip) so you can make the most of your data and devices.

## Related Products

- Android Things
- BigQuery
- Cloud Dataflow
- Cloud IoT Core
- Cloud ML Engine & APIs
- Cloud Pub/Sub
- Data Studio

## Learn More

- [IoT Solutions](https://cloud.google.com/solutions/iot)  
cloud.google.com/solutions/iot
- [Cloud IoT Core](https://cloud.google.com/iot-core)  
cloud.google.com/iot-core

“ Our devices are heavily used and constantly send us a huge volume of data. By connecting these devices to Cloud IoT Core, we have a secure and reliable way to not only ingest that data but then also use it to gain valuable insights. We know exactly how our systems are performing and can push updates to devices to ensure we deliver the best products and services as cost effectively as possible. ”

**John Heard**, Group CTO, Smart Parking Limited