



Architecture Diagrams

Connected Home Telemetry



Connected Home Telemetry: Architecture Diagrams

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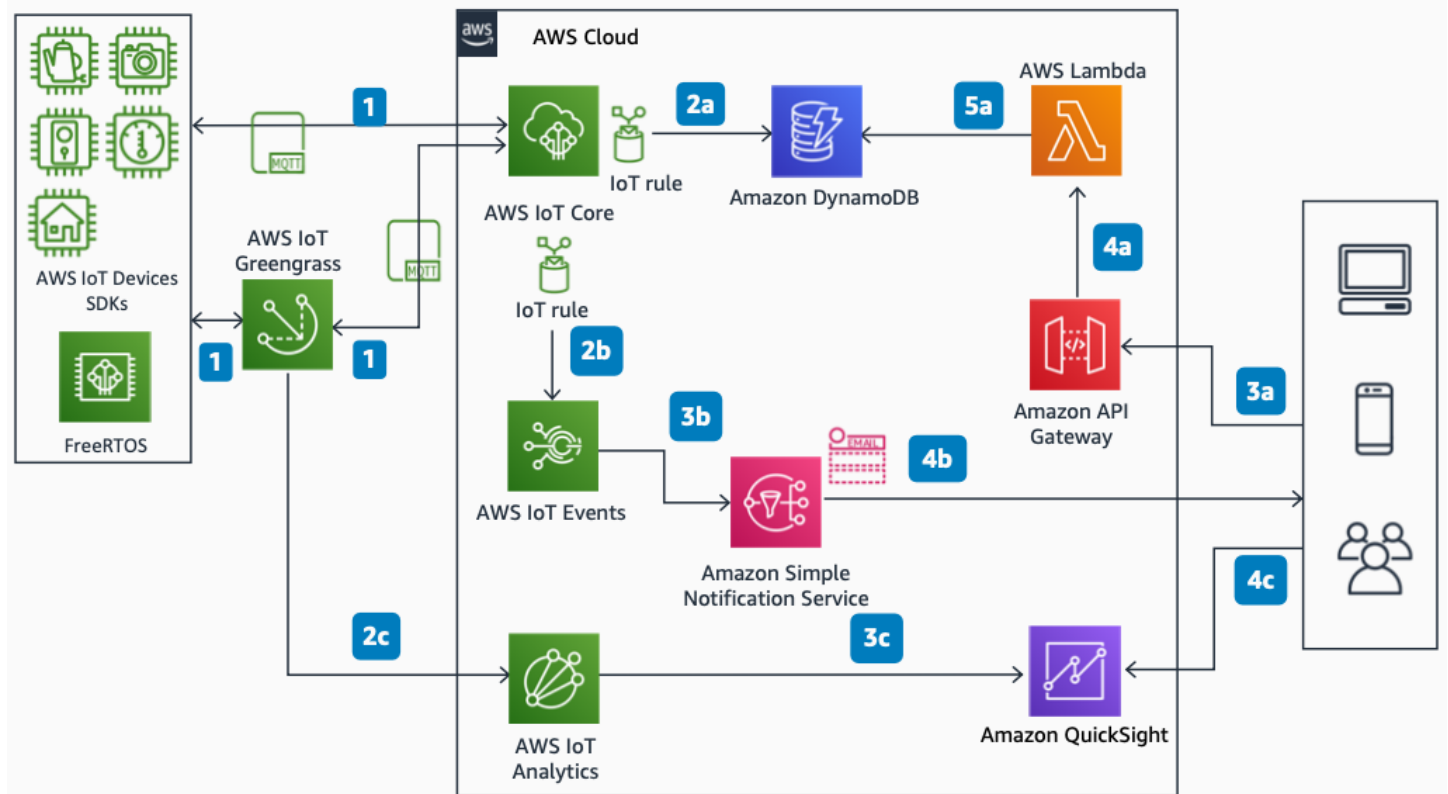
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Connected Home Telemetry on AWS

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This reference architecture diagram shows how to measure and collect data from smart home devices by using AWS.

Connected Home Telemetry on AWS



1. The devices connect to [AWS IoT Core](#) directly by using MQTT from FreeRTOS or through AWS IoT Greengrass.
2. AWS IoT Core topic rules route data to downstream services:
 - **2a.** A topic rule picks up meaningful data and saves it in [Amazon DynamoDB](#).
 - **2b.** Another topic rule triggers AWS IoT Events for certain data, like temperature.
 - **2c.** AWS IoT Analytics can ingest data directly from AWS IoT Greengrass.
3. Client applications can retrieve and visualize data:
 - **3a.** Client applications can make an API call to retrieve data through Amazon API Gateway.

- **3b.** AWS IoT Events can trigger [Amazon Simple Notification Service](#) actions in case certain changes occur in the data (for example, temperature exceeds 25 degrees).
 - **3c.** You can import data from AWS IoT Analytics into [Amazon Quick Sight](#) for visualization and further insights.
4. Notifications and data retrieval:
- **4a.** [Amazon API Gateway](#) invokes an [AWS Lambda](#) function with logic to retrieve data requested by the client applications from DynamoDB.
5. Visualization and alerts:
- **5a.** Client applications can visualize the data in Amazon Quick Sight.

Further reading

For additional information, refer to

- [AWS Architecture Icons](#)
- [AWS Architecture Center](#)
- [AWS Well-Architected](#)
- [AWS IoT product page](#)

Diagram history

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