

Connected Homes with AWS IoT: Home Networking



With 940M smart home devices expected to be shipped worldwide by 2022, the connected home market is booming. AWS IoT's suite of software and services helps optimize customer experience with their home networks.



Consumer needs:

Reliable service and network performance with stress-free troubleshooting



Service Provider needs:

Cost-efficient ways of fixing network issues by optimizing customer support resources

Homes That Support Consumers

Home networking helps providers understand their network and will allow customers to easily troubleshoot network issues, making offline moments resolution-based rather than stress-fueled.



WiFi routers



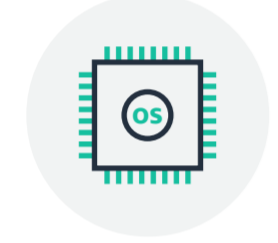
Modems



Cable set top boxes

AWS IoT Products

By considering a diverse range of devices and enabling capabilities such as device-based machine learning or cloud-based management and analytics, AWS IoT offers a holistic approach to creating home networking products and services.



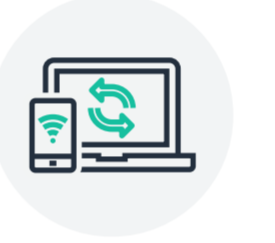
Amazon FreeRTOS: Operating system for microcontrollers



AWS Greengrass: Gateway to bring cloud capabilities to the edge



AWS IoT Core: Secure device connectivity and messaging



AWS IoT Device Management: Fleet onboarding, management, and software updates



AWS IoT Device Defender: Fleet audit and protection



AWS IoT Analytics: Data analytics and intelligence

Innovating Home Networking

Through the IoT suite, AWS provides a means of working more easily with network issues to improve customer experience while reducing cost.

Local diagnosis



Help in diagnosing network issues — without internet connectivity



Reduced need for hands-on fixes, lessening costs and time impact

Reliable error logging



Automatically send service providers data on errors so they can be prevented in the future



Proactive relaying of data back to the cloud for transparent, real-time information and preventative action

Data-driven insights for maintenance



Proactive solutions for less downtime



Clear issue identification — based in historical data — for operations team

Easy certificate management

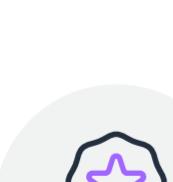


Reassurance of up-to-date devices and software



Fewer resourcing needs due to over-the-air updates and valid device certificates

AWS Home Networking in Action



Device certificates that won't expire and OTA software updates for routers and set-top boxes from AWS IoT Device Management



Help for the operations team with issue identification using historical data from AWS IoT Analytics

Proactive solutions for customers, who can apply fixes themselves



Network diagnosis help for customers—even without internet connectivity—from AWS Greengrass

Data from AWS IoT Core for preventive action once cloud connection is re-established

AWS IoT enhances networking by filling in the missing links between network issues, service providers, consumers, and their data.

Learn more about Home Networking with IoT

aws.amazon.com/iot/connected-home/