Make Your Smart Devices Easy to Setup, Use, and Maintain with Frustration-Free Setup, New Smart Home Skill API Features, and the Alexa Connect Kit

Nathan Smith Sep 25, 2019

Connected Devices API Smart Home News

Today, we're excited to announce new features you can use to make your smart devices easier for customers to setup, use, and maintain, and easier for you to build.

You can join us in our Frustration-Free Setup initiative, and use simple setup, app-to-app account linking, and automated registration to reduce the number of steps it takes customers to connect your Wi-Fi, Zigbee, and Bluetooth devices to their home network and to Alexa. When you make setting up your products easier, customers can take advantage of them more quickly, with fewer customer service contacts and fewer returns.

You can use the updated Smart Home Skill API and Alexa to enable customers to use more natural voice commands to control any device, to control your home routers and cooking appliances, to stay up-to-date on the state of their smart devices, and even to avoid running out of consumables their devices need to keep running at their best. As a result, you can increase customer engagement and satisfaction with your devices, and create new monetization opportunities for your business.

You can use the Alexa Connect Kit (ACK), to connect any device to the Internet and Alexa without worrying about managing cloud services, Alexa skills, or complex networking and security firmware. With ACK, you can create products that customers love – easily, quickly, and economically.

Finally, we are introducing Certified for Humans, a new program designed to help customers find smart home products that are easy to set up and work seamlessly with Alexa. By meeting the minimum eligibility requirements for the program, you can deliver a better customer experience, and, if your product is certified, you could see increased traffic to your products on Amazon.com through high-visibility placements in search and display the new Certified for Humans badge on your product listings.

Make Your Devices Easy to Connect to Customers' Home Networks and to Alexa

Last year, we announced the Frustration-Free Setup initiative, aimed at making setting up a smart home absolutely simple. We have more work to do together to make it truly effortless. In fact, setup problems are the top source of Amazon customer service contacts and returns for smart home devices.

The first thing a customer does to setup a smart device is connect it to their home network. By reducing the number of steps required to connect your device to the customer's home network, you can reduce customer frustration, customer service contacts, and product returns. For your business, this means lower cost and higher profit. With simple setup, now generally available for Wi-Fi and Zigbee, and coming soon for Bluetooth, you can enable customers to connect your device to their home networks by simply powering it on in many cases. For example, when a customer purchases your Wi-Fi connected device on Amazon.com and plugs it in, simple setup can securely send the customer's saved Wi-Fi password to your device, enabling it to join the customer's Wi-Fi network automatically. Or, the customer can use the Alexa app to scan your device barcode and then follow the simple instructions to complete the setup with fewer steps than before. **TP-Link Kasa, Philips Hue,** and **eero** have already implemented simple setup in their products, and you can implement it beginning today.

The second thing many customers do to setup a smart device is to connect it to Alexa. Last month we released app-to-app account linking; you can use it now to enable customers to enable your Alexa skill and link their Alexa account to your account from within your mobile application. We are also working to enable customers to begin controlling a device connected to your Alexa skill before they complete the account linking process. Automated registration, coming soon, can associate a new device with your smart home skill as soon as it is connected, enabling them to use Alexa to control it right away. With the combination of simple setup and automated registration, customers can both connect your device to their network and enable Alexa control simply by plugging it in. **TP-Link Kasa** is already adding automated registration to their products, and you will be able to add it soon.

You can learn more about Frustration-Free Setup in this blog and request access to the Bluetooth simple setup preview here. Sign up here to be notified when more information on automated registration is available.

Deliver More Natural and Complete Control with

Smart Home Skill API Updates

The Smart Home Skill API provides building block APIs that you can use to connect any device feature to Alexa, and APIs you can use for the most common smart device functions, such as turning on lights and locking doors. Device makers have used the Smart Home Skill API to integrate more than 85,000 products with Alexa, enabling customers to control them not only with their voices, but also via touch in the Alexa app, and automatically with Routines. We are enhancing both types of APIs to enable you to do more for customers.

Richer Basic Building Block APIs

Last year, we introduced the toggle, mode, and range building block APIs in the US. **Lutron, Moen, Dyson, Netgear, Ring**, **Kenmore** and other device makers have used these APIs to enable Alexa control of their air conditioners, air purifiers, dog cameras, fans, humidifiers, routers, vacuums, TVs, and more. Coming soon, you can use the building block APIs in nine additional Alexa locales, specifically Australia, Canada, France, Germany, India, Italy, Mexico, Spain, and the UK. **Dyson, eWeLink** and **Liebherr** are already building skills to take advantage. Also coming soon, as described below, you can enable customers to use additional voice commands with the building block APIs, and use the APIs to give customers more details about your device state.

The building block APIs enable you to control any feature of any device using a set of pre-defined phrases. With semantic extensions (coming soon), you can enable additional voice commands - and deliver more natural control - with just a few lines of code. You can tell Alexa to map commands like “open”, “close”, “raise,” and “lower” to specific toggle, range, and mode directives for your device. For example, your customer can say “Alexa, open the garage door,” in addition to “Alexa, set the garage door mode to open.” **beam Home** and **Nexx,** are using semantic extensions for their garage door openers, and **IKEA, Legrand, Lutron, Schellenberg,** and **Somfy** are using them for their shades. You will be able to use them soon.

Until now, you could use state reporting from your smart home skill to tell Alexa the state of any toggle, mode, or range that customers can control, and Alexa would use this information to keep customers up-to-date by voice and in the Alexa app. With non-controllable states (coming soon), you can also give customers detail on states they cannot control. For example, you can warn customers that the top of your smart stove is too hot to touch, or tell them when your smart washing machine automatically goes from wash to rinse, or rinse to spin. **Hamilton Beach** uses a non-controllable state to report on the brew cycle status for their smart coffee maker.

You can learn more about the building block API updates in this blog and sign up here to be notified when more information is available.

Inventory State Updates and Easy Re-ordering

One of the states that customers care most about is when consumable products used in your devices, such as air filters, batteries, and coffee pods, get low and need to be replaced. We are excited to announce that coming soon you can use new inventory sensors in the Smart Home Skill API to report the level or usage of consumables used by your device, and take advantage of built-in integration with Alexa and the Dash Replenishment Service to enable automatic re-ordering of consumables when they’re needed. As a result, you can ensure your customers never have that “ran out of it” moment and create new monetization opportunities for your business. You simply provide inventory or usage updates from your smart home skill and identify the right replacement supplies in the Amazon Dash replenishment service portal, and we’ll do the rest. You can choose to sell your own genuine products that you design and manufacture specifically for your device, or you can receive a fee for other products sold on Amazon.com. **August Home, Blink, Coway, Ring, Schlage,** and **Yale** are already building skills using inventory sensors, and you can use them soon.

Learn more in this blog and sign up here to be notified when more information is available.

New APIs for Home Networking and Cooking Functions

In addition to the building block APIs, the Smart Home Skill API provides you with APIs designed specifically to enable control of common smart home functions, such as turning on lights, locking doors, and setting target thermostat temperatures. Coming soon, we are introducing a new networking API for controlling home router and Wi-Fi functions, expanding the cooking API to support more cooking modes and functions, and extending 2-way communications with smart home cameras to many more Echo endpoints.

With the new networking API (coming soon), you can enable your customers to use Alexa to control your networking devices. With Alexa control, your customers can use their voices to quickly manage Wi-Fi access and other valuable features in your devices that previously required them to open a mobile app or web browser. You can enable them to manage Wi-Fi access for individual devices or groups of devices. For example, your customers could say, “Alexa, turn off Daniel’s Wi-Fi” when it’s time for dinner and “Alexa, enable guest Wi-Fi” when relatives visit. **Arris, ASUS, eero, Linksys,** and **TP-Link** are already building skills using the networking API, and you can use it soon.

The Smart Home Skill API currently supports defrost, preset, reheat, and timecook cooking modes, and is best suited for microwaves and other preset-centric cooking appliances. Coming soon, you can use the updated cooking API to enable customers to control more cooking appliances and functions with Alexa, allowing them to use your appliances hands-free and check cooking progress from other rooms in the house. The updated cooking API enables you to support 40 different cooking modes, including air-fry, bake, pressure cook, roast, and slow cook, and adds new APIs that allow you to enable customer control based on oven and food temperature. **GE Appliances, Instant Pot, June Oven, LG, Traeger,** and **Whirlpool** are already building skills using the updated cooking API now, and you can use it soon.

Next year, we will add the ability for you to use Alexa to make announcements on cooking status, and to enable your customers to Scan-to-Cook packaged foods using Alexa. With Scan-to-Cook, your customer

can use the Alexa app to scan the barcode on packaged food, and Alexa sends your device the right cooking instructions. Scan-to-Cook will work with hundreds of packaged foods from brands including **Whole Foods Market, 365 Everyday Value, Gardein, Marie Callender's**, and more.

Last year, we released the 2-way communication API to enable smart cameras and doorbells to establish 2-way communications with Echo Show and Echo Spot. With this feature, your customers could use these devices to talk to visitors at their door through your smart home camera. Starting tomorrow, your customers can use all Echo devices with a microphone and speaker, including those without screens, to talk to visitors through your smart home camera. If you already support 2-way communications with Echo Show and Echo Spot in your skill, no changes are required to take advantage of this update. If not, you can add 2-way communications using the session controller API.

Sign up here to be notified when more information is available on the networking API. Learn more about the updated cooking API in this blog and sign up here to be notified when more information is available.

Use the Alexa Connect Kit to Easily Make Your Devices Smart

We are excited to announce that the Alexa Connect Kit (ACK), is now generally available. ACK enables device makers to connect any device to the Internet and Alexa using an Amazon-managed hardware module, without worrying about managing cloud services, Alexa skills, or complex networking and security firmware. With ACK, you can build smart devices that customers will love - easily, quickly, and economically. **Crock-Pot, Eaton, Hamilton Beach, Leedarson, Midea, Mr. Christmas, Procter & Gamble, Tonly,** and **Amazon** are already using it to build products ranging from smart coffee makers to smart Christmas trees; now, you can use it too.

The ACK hardware module provides Internet connectivity with simple setup, and lets you use Smart Home Skill API features like setting ranges, modes, and toggles, controlling cooking functions, and reporting inventory levels. ACK's managed cloud service is built on AWS IoT, and meets the cloud reliability requirements for both Works with Alexa and Certified for Humans certification. With ACK, you pay a fixed one-time cost of less than $7 on average for both the hardware module and your ongoing use of the ACK cloud service. This enables you to eliminate the ongoing unpredictable cost of managing your own cloud service.

We're also excited to announce multi-step control (coming soon) on ACK devices. With multi-step control, you can deliver sophisticated functions like recipe presets from the cloud, allowing you to make your devices smarter and smarter over time, with no firmware updates required. You provide the logic which dictates which primitive commands to send to your device and when - based on time, device state, and more. Your device provides real-time state information and responds to primitive commands. The ACK cloud does the rest, including sending the right commands at the right time.

You can learn how to take advantage of ACK in this blog and order the ACK development kit today. You can also sign up to be notified when more information is available about multi-step control here.

Certified for Humans

Today we are excited to introduce Certified for Humans, a new program designed to help customers find smart home products that are easy to set up and work seamlessly with Alexa. Since 2016, Works with Alexa has helped device manufacturers to promote their Alexa compatibility for over 11,000 certified products, and has been successful in driving increased conversion and sales globally. Certified for Humans products go above Works with Alexa to deliver a struggle-free, tinker-free, and stress-free experience. Customers can find the Certified for Humans badge on select smart home devices starting this fall from brands including **Amazon, Philips Hue, Hamilton Beach,** and **TP-Link Kasa**.

To be eligible for the Certified for Humans program, your device must qualify for the Works with Alexa program as well as offering Frustration-Free Setup and a dependable Alexa experience that meets the Certified for Humans bar. If you are certified, you could see increased traffic to your product on Amazon.com through high-visibility placements in search and display the new Certified for Humans badge on your Amazon.com product listings. You can submit your product to Amazon for Certified for Humans consideration once it meets the minimum requirements. We will assess each product against our quality and customer experience standards to determine its eligibility for Certified for Humans certification.

You can see Certified for Humans products here and learn more about the Certified for Humans program here.

Learn More and Get Started Today

Whether you are starting with a blank sheet of paper, or already offer customers devices that integrate with Alexa, you can take advantage of the new features announced today to make your devices easier for customers to setup, use, and maintain. Take advantage of the following resources linked to learn more and get started today.

- Frustration-Free Setup
- Updated Smart Home Building Block APIs
- Inventory Sensors and Automatic Reordering
- Updated Smart Home Cooking API
- Alexa Connect Kit

Back to Top

Alexa Skills Kit

Alexa Skills Kit
Learn
Design
Build
Launch

Alexa Voice Service

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Learn
Design
Build
Launch

Connected Devices

Alexa Smart Home
Alexa Gadgets

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