

## Hackspace Pi / Echo Tutorial by David Primus

### REVISIONS

NOTE: In April 2018, the Amazon Developer Console was upgraded to a new version. The user interface changed significantly. Early versions of this tutorial describing setting up the AWS skill will no longer work. This document shows the differences – the old text is ~~struck out~~; the new text is highlighted in yellow.

To create your skill, you need to have an Amazon Developer account. Sign up for one here: <https://developer.amazon.com>. Once you have created your account, login and set up the skill.

~~Click **Developer Console** at the top right. Click **Alexa**, then **Get Started**> in the **Alexa Skills Kit** box. Click **Add a New Skill**. This will walk you through a series of screens, starting with **Skill Information**. Fill out the screens as follows, leaving everything else at default.~~

Click **Developer Console** at the top right. Click **Alexa Skills Kit**, then **Create Skill**. This will walk you through a series of screens, starting with **Create a new skill**. Fill out the screens as follows, leaving everything else at default.

#### Create a new skill

Enter **Pi Station** into both the **Name** and **Invocation Name** fields. Click **Save**, then **Next**.

Enter **Pi Station** into **SkillName** field. Click **Next**.

#### Choose a model to add to your skill

Click **Select** in the **Custom** box, then click **Create Skill**.

#### Skill builder checklist

Click **Invocation Name**, then enter **pi station** into the **Skill Invocation Name** field. Click **Save Model**, then click your browser's back arrow to return to the skill builder checklist.

Click **Intents, Samples, and Slots**, then enter **YesIntent** into **Enter name for intent** field, then click **Create custom intent**. In the **Sample Utterances** field, enter **Yes**, then click the + sign. Add a No intent by clicking the **Add** button next to **Intents**, then enter **NoIntent** into **Enter name for intent** field, then click **Create custom intent**. In the **Sample Utterances** field, enter **No**, then click the + sign. Click **Save Model**, then click your browser's back arrow several times to return to the skill builder checklist.

Click **Build Model**. This will take several minutes.

In the next two steps, you can either type the code or copy and paste it from the text files in the directory **pi\_echo**.

#### Interaction Model

Enter into **Intent Schema** the following schema in JSON (JavaScript Object Notation) format. Note the use of spaces to line up the brackets.

```
@code
{
  "intents": [
    {
      "intent": "YesIntent"
    },
    {
      "intent": "NoIntent"
    }
  ]
}
```

Enter into **Sample Utterances** the utterances, then Click **Next**.

```
@code
YesIntent yes
YesIntent sure
NoIntent no
NoIntent go away
```

Click **Endpoint**, then click HTTPS. Be sure ngrok is still running in a terminal window; if not, run it again and use the new address. Enter the web address from ngrok into the **Default Region** field. In the **Select SSL certificate type** field below, select **My development endpoint is a subdomain of a domain that has a wildcard certificate from a certificate authority**. Click **Save Endpoints**.

At this point, you may need to enable the skill for your echo device. Using the Alexa app, find the skill **Pi Station**, and click **Enable**. The skill will then be accessible from your echo. Note that it may take a few minutes for the skill to be recognized.

### Configuration

Set the **Service Endpoint Type** to **HTTPS**. Be sure ngrok is still running in a terminal window; if not, run it again and use the new address. Enter the web address from ngrok into the **Default** field. Click **Next**.

### SSL Certificate

Select **My development endpoint is a subdomain of a domain that has a wildcard certificate from a certificate authority**. Click **Next**.

### Test

You now will be on the **Test** screen and should see five green checkmarks. This indicates you are ready to test the setup. Do nothing more on this screen.