

API Demo Objectives

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Get hands on experience with MyJohnDeere API integration with a focus on Contribution APIs

Have some fun integrating an Amazon IoT Button with MyJohnDeere APIs

Understand how MyJohnDeere APIs can be integrated into your product or platform



Demo Requirements – What you need...

1. Expertise? None! Anyone can complete this demo!

AWS IoT Button

https://www.amazon.de/AWS-IoT-Button-2-Generation/dp/B0727NW8HT/ref=sr_1_1?ie=UTF8&qid=1541163251&sr=81&keywords=amazon+iot+button



3. Laptop Computer

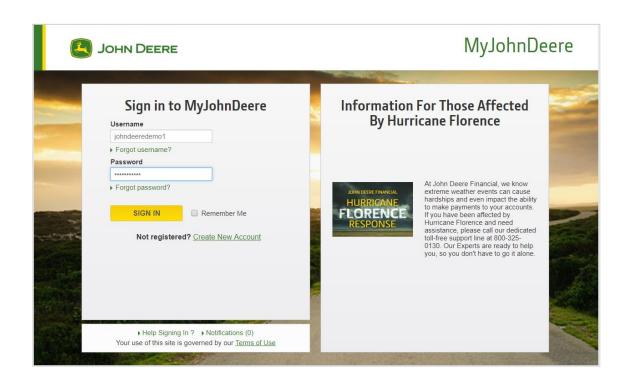


API Demo Outline

- 1. MyJohnDeere Login
- 2. Amazon Web Services (AWS) Console Login
- 3. IoT Button Lambda Configuration
- 4. Experiment and customize different Lambdas to...
 - Post an OpsCenter Notification
 - Contribute a Field Analyzer Map Layer
 - Update the location of an Asset IoT Device

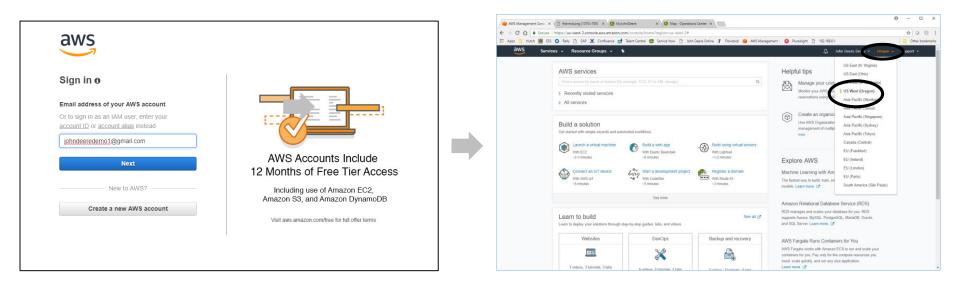
Step #1 – MyJohnDeere Login

- In a new browser tab, navigate to <u>myjohndeere.com</u>
- 2. Login with your credentials



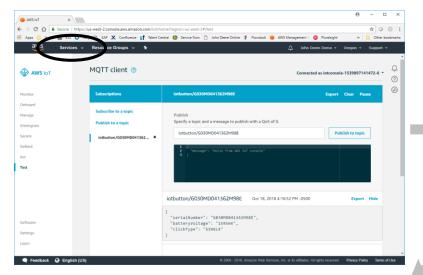
Step #2 – AWS Console Login

- In a new browser tab, navigate to <u>console.aws.amazon.com</u>
- B. Login with your credentials
- C. Confirm the AWS region to "US West(Oregon)" in the upper right hand corner

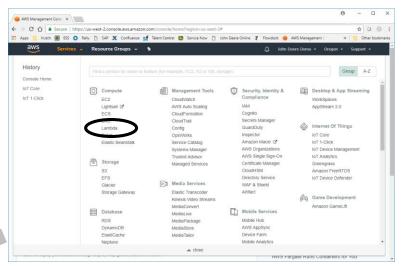


Step #3 – AWS Lambda Configuration

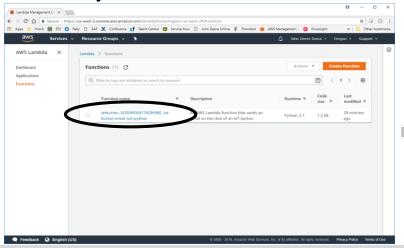
A - Click on "Services"

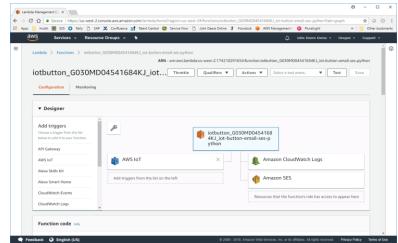


B - Click on "Lambda"



C - Find your "Lambda" function - click on its link





Step #4 – Experiment and Customize

- There are three provided lambda examples
 - Post an OpsCenter Notification
 - Source code file notification.py
 - AWS lambda handler "notification.lambda_handler"
 - 2. Contribute a Field Analyzer Map Layer
 - Source code file map_layer.py
 - AWS lambda handler "map_layer.lambda_handler"
 - 3. Update the location of an Asset IoT Device
 - Source code file asset.py
 - AWS lambda handler "asset.lambda handler"
- You can change which lambda your button controls by editing the "Handler" input field in the "Function Code" pane
 - Update the lambda "Handler" field with the string specified above to run each example

Step #4 – Experiment and Customize

 At the top of each Lambda source code file, there are DEMO_PARAMS that specify what your button will do on a SINGLE, DOUBLE, or LONG button press

```
File Edit Find View Goto Tools Window
 python_modules
                               1 | from _common_setup import *
                                 2 from _demo_helper import DemoHelper
     _common_setup.py
      demo_helper.py
                                      Modify the params below to customize your demo
                                    DEMO_PARAMS = {
     map_layer.py
                                        # Set this to true if you want to clear out any existing notifications
     notification.nv
                                        'delete_existing_notifications': False,
                                        # A button press can be either SINGLE, DOUBLE, or LONG
                                        # See notification documentation - https://developer.deere.com/#!documentation&doc=myjohndeere%2Fnotifications
                                            'SINGLE': {
                                                 'notification_details' : {
                                                   'severity' : 'LOW',
'type' : 'ANNOUNCEMENT',
                                                    'text' : "Map layer contributed",
                                             'DOUBLE': (
                                                 'notification_details': {
                                                   'severity' : 'MEDIUM',
'type' : 'ORGANIZATION',
'text' : "John added as org staff member",
                                             'LONG': {
                                                 'notification_details': {
                                                    'severity' : 'HIGH',
'type' : 'MACHINE INSIGHTS'.
```

- Try out each type of button click and then observe the contribution Operations Center
- Feel free to edit these parameters to customize your demo!

