

Please

Ask questions
through the app



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Thank you!



What does **THIS** button do?

Goto Berlin 2019

James Beswick, AWS Serverless

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About me



- James Beswick
 - Email: jbeswick@amazon.com
 - Twitter: [@jbesw](https://twitter.com/jbesw)
- Senior Developer Advocate – AWS Serverless
- Serverless geek
- Software Developer and Product Manager
- Previously:
 - Multiple start-up tech guy
 - Rackspace, USAA, Morgan Stanley, J P Morgan...
 - AWS customer since 2012

Topics for today



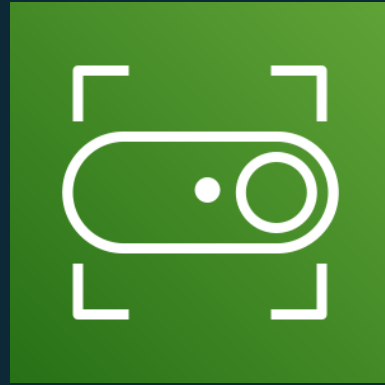
IoT and Serverless



Architecture and Tools



Demos and code



IoT Button

A cloud-programmable IoT button.

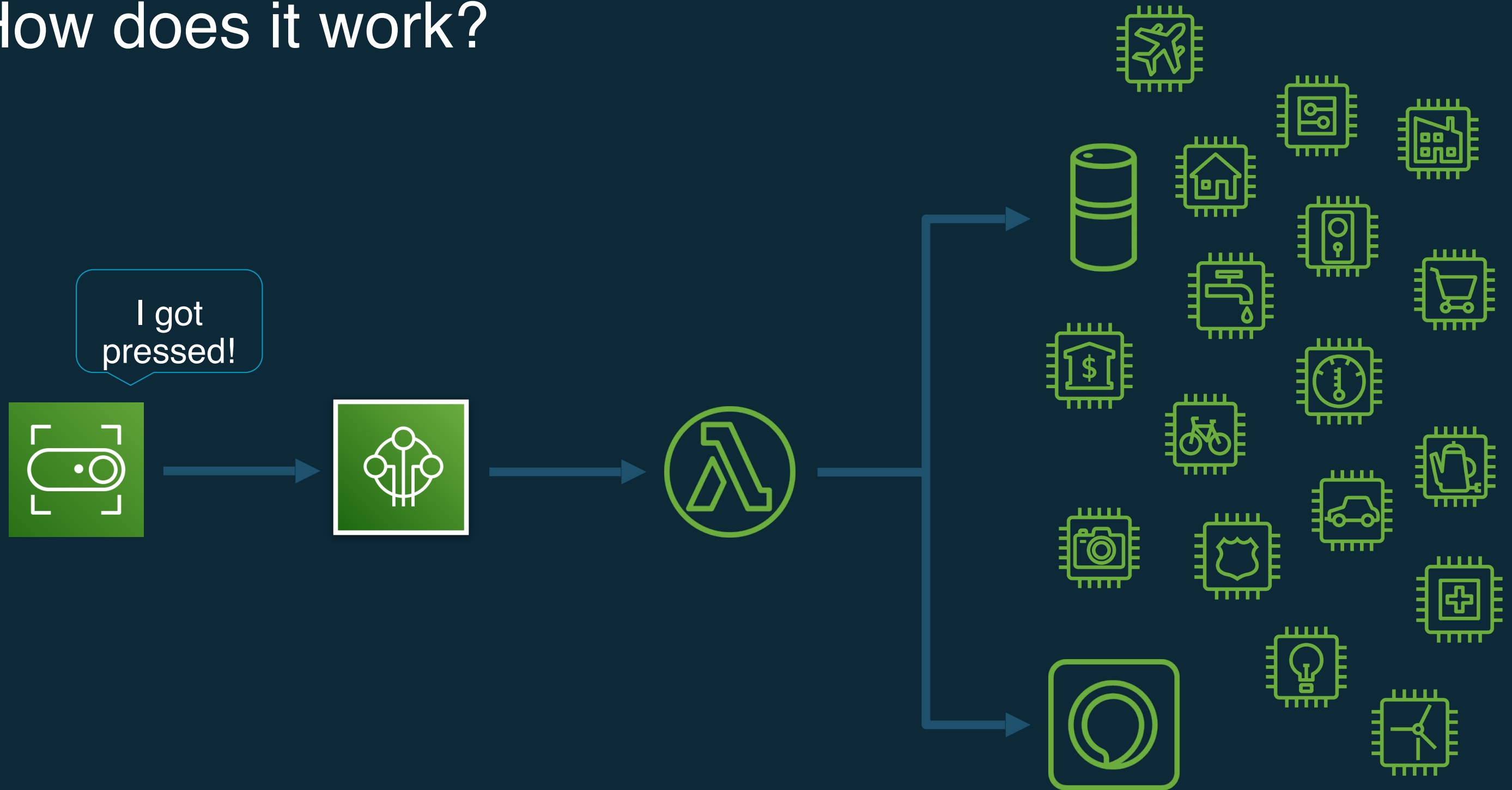
<https://aws.amazon.com/iotbutton/>



What could you do with the button?

- Start an AWS service
- Send an SMS
- Send an Email
- Turn on/off a light
- Alert your family
- Start a car
- Transfer Money
- Retrieve your Tesla
- Retrieve your kids
- Close a garage
- Put house on vacation
- Feed your dog
- Start sprinklers
- Call the police

How does it work?



What is serverless infrastructure?

AWS Serverless technology



Amazon API
Gateway



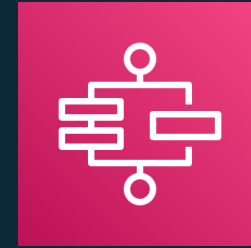
AWS Lambda



Amazon
DynamoDB



AWS IoT
1-Click



AWS Step
Functions



Amazon
EventBridge

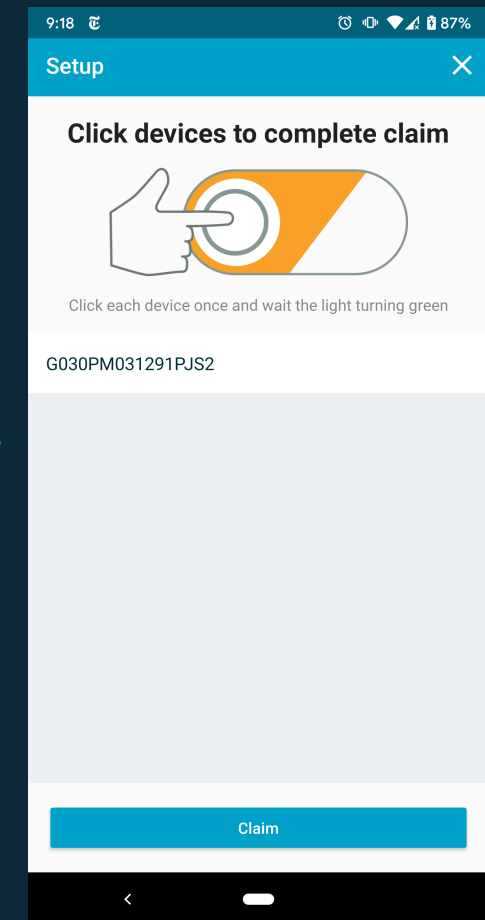
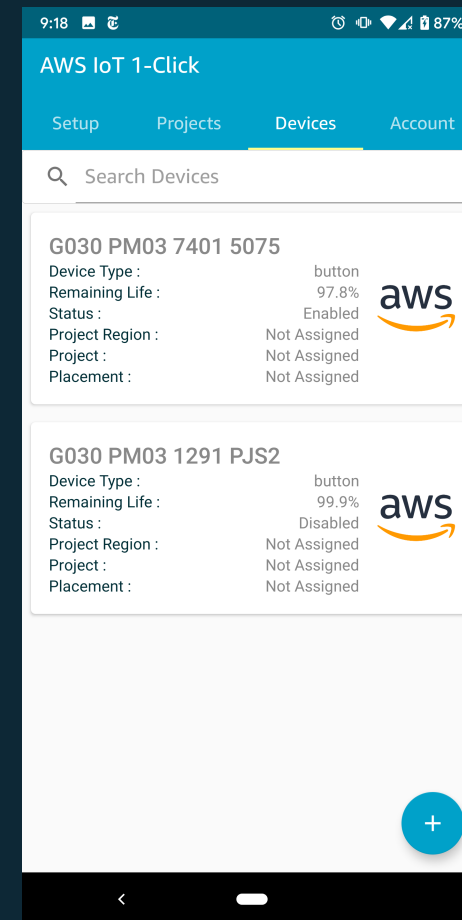
Unboxing an IoT button

Setting up the IoT button

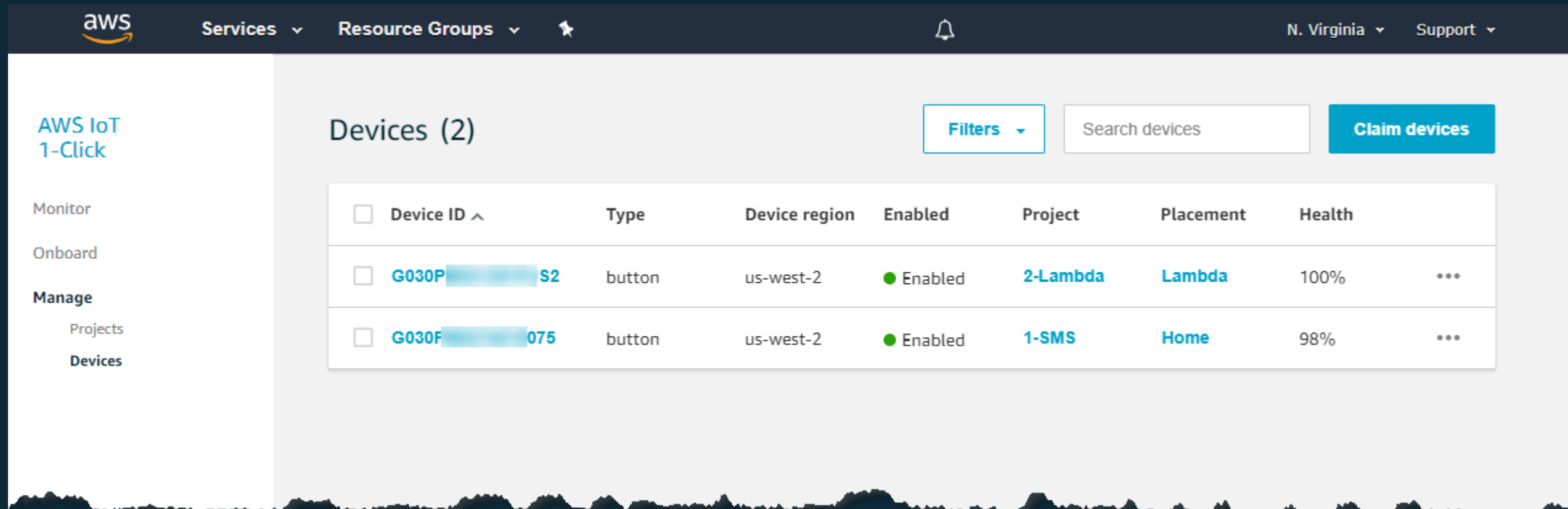
- Each device has a unique DSN



- Use the IoT 1-Click mobile app to register



Devices appear in your AWS console



The screenshot shows the AWS IoT console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', a notification bell, and the region 'N. Virginia' with a 'Support' link. The left sidebar contains navigation options: 'AWS IoT 1-Click', 'Monitor', 'Onboard', and 'Manage' (with sub-links for 'Projects' and 'Devices'). The main content area is titled 'Devices (2)' and includes a 'Filters' dropdown, a 'Search devices' input field, and a 'Claim devices' button. Below this is a table listing two devices.

<input type="checkbox"/> Device ID ^	Type	Device region	Enabled	Project	Placement	Health	
<input type="checkbox"/> G030P[redacted]S2	button	us-west-2	● Enabled	2-Lambda	Lambda	100%	...
<input type="checkbox"/> G030F[redacted]075	button	us-west-2	● Enabled	1-SMS	Home	98%	...

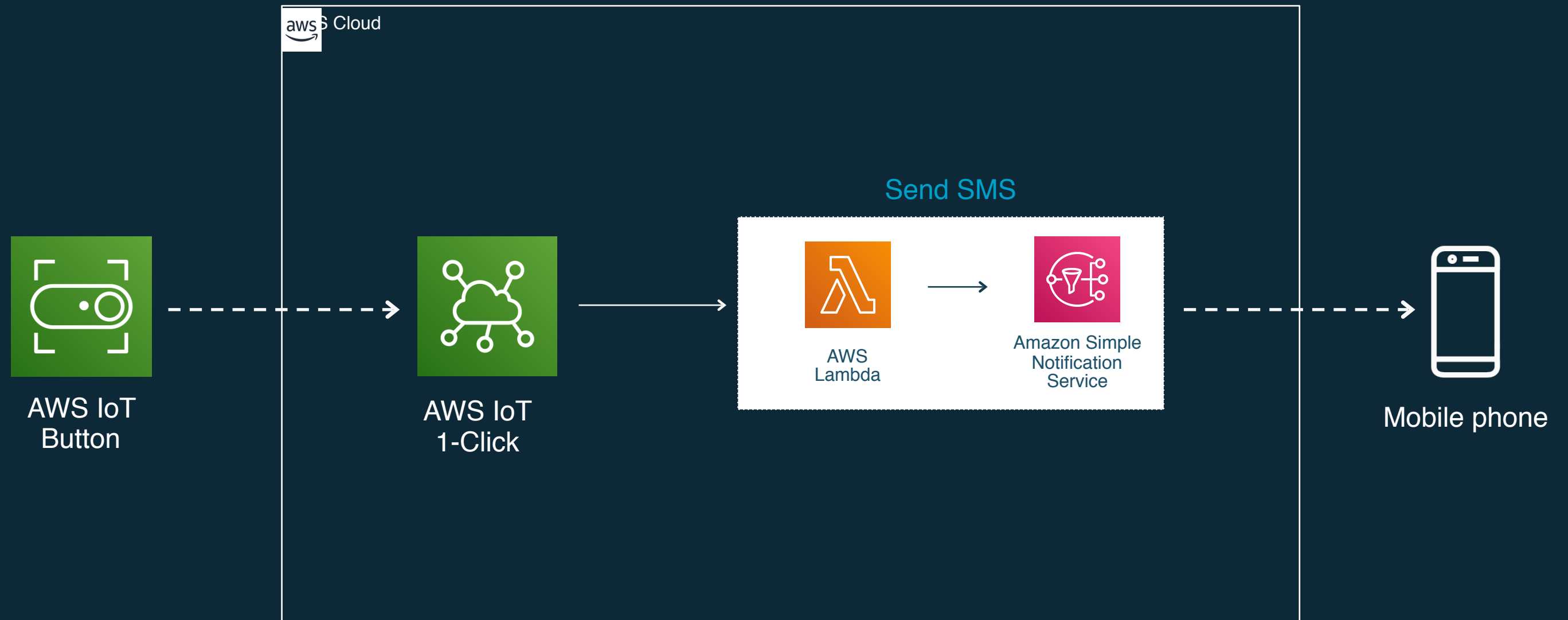
What does a button press look like?

Example event:

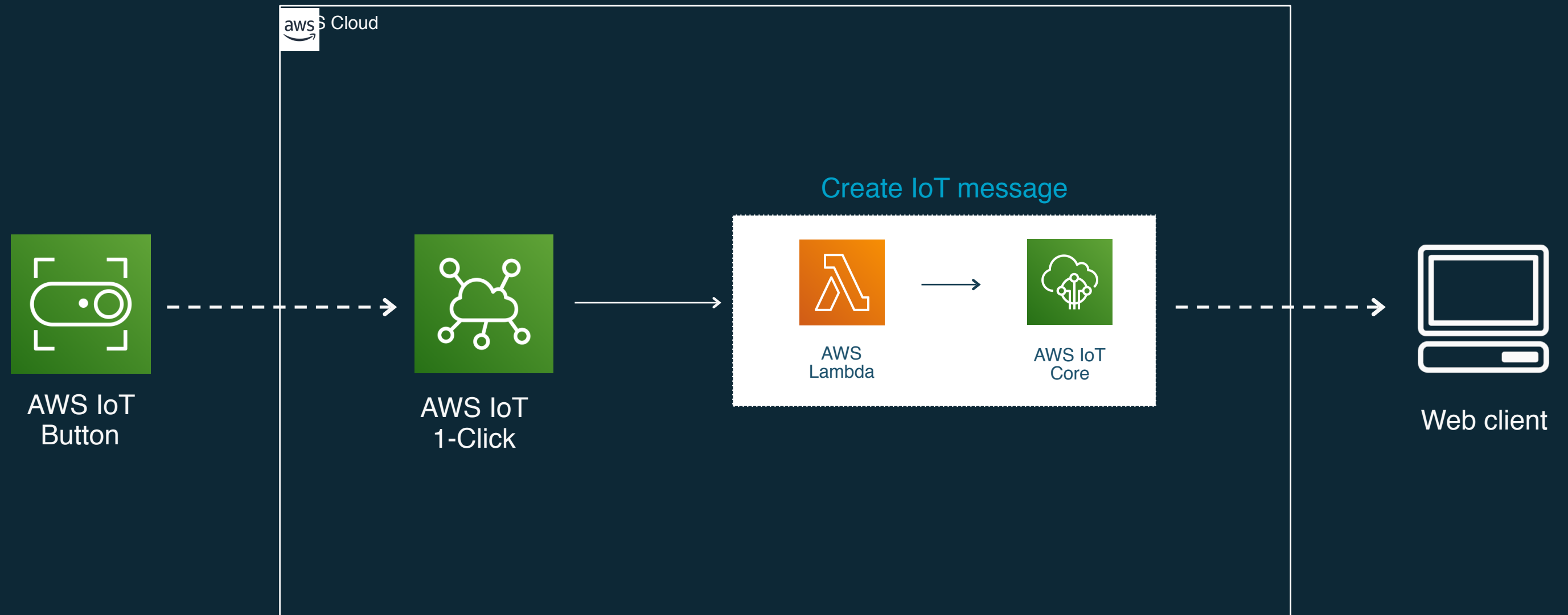
```
{
  "deviceInfo": {
    "deviceId": "G030123456789ABC",
    "type": "button",
    "remainingLife": 99.8,
    "attributes": {
      "projectRegion": "eu-central-1",
      "projectName": "2-RingTheBell",
    }
  },
  "deviceEvent": {
    "buttonClicked": {
      "clickType": "SINGLE",
      "reportedTime": "2019-09-06T17:51:48.709Z"
    }
  }
}
```

Demos

Demo 1 – Send an SMS message

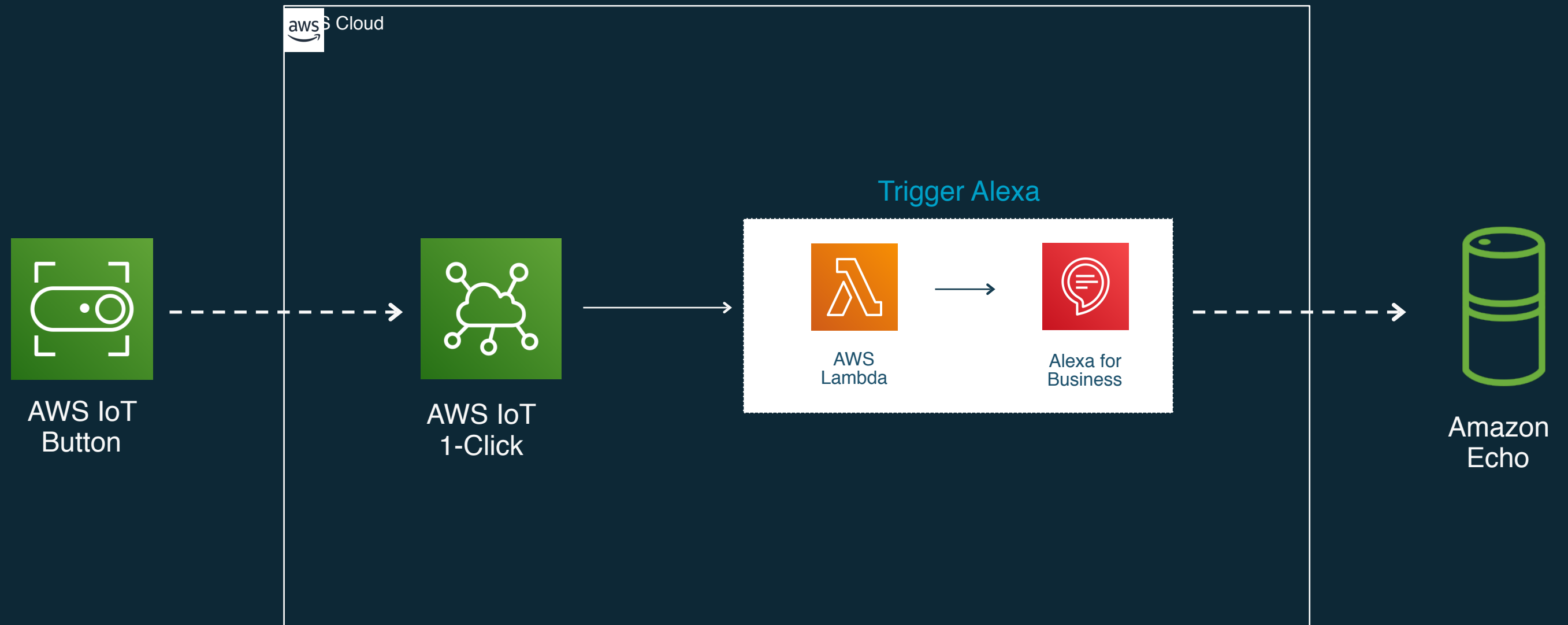


Demo 2 – Increment a web page counter



Go to <https://iot.jbes.dev> on your phone

Demo 3 – Say hello with Alexa



Thank you!

jbeswick@amazon.com

Please

**Remember to
rate this session**

Thank you!

