Creating an AWS IAM Role to connect AWS with Ubidots

This is a complement to "Connect AWS IoT with Ubidots". If you haven't read it, make sure to check it out before continuing.

This guide explains an alternative method to grant Ubidots access to your AWS account.

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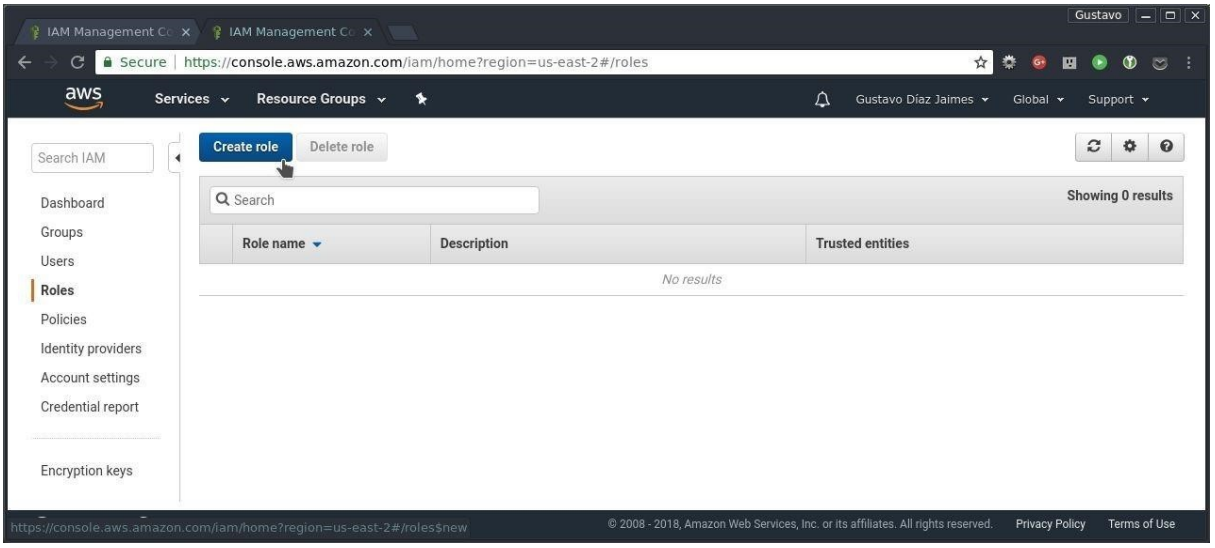
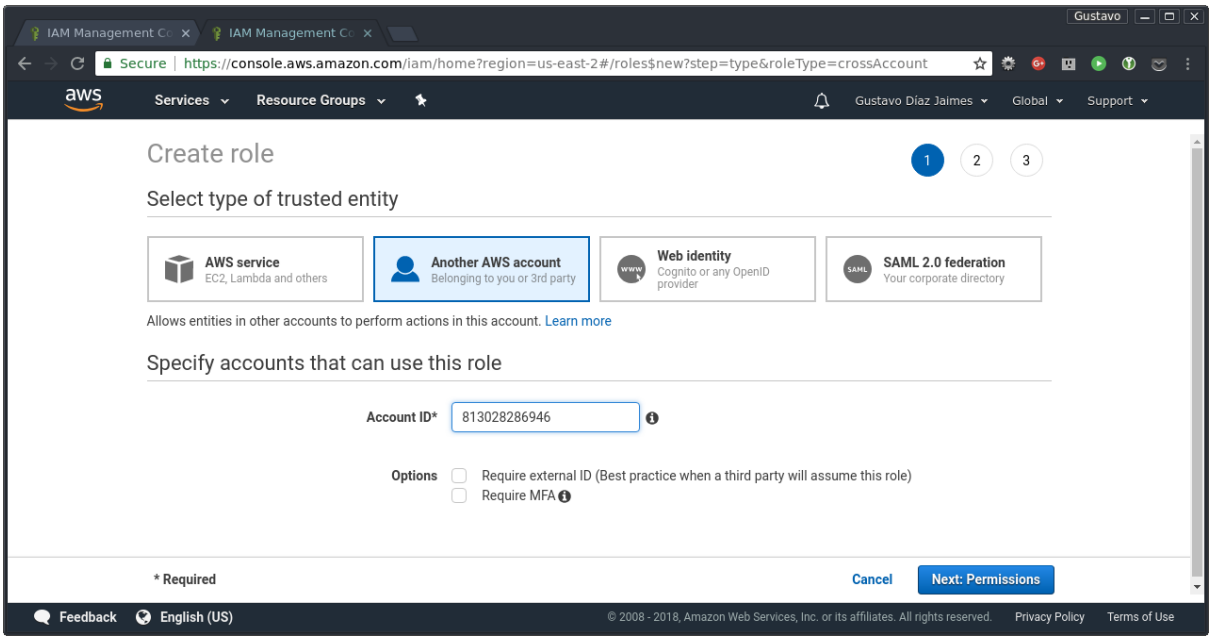
1- Create an AWS IAM Role

Go to your AWS IAM User Management console, then click on "Roles" → "Create Role":

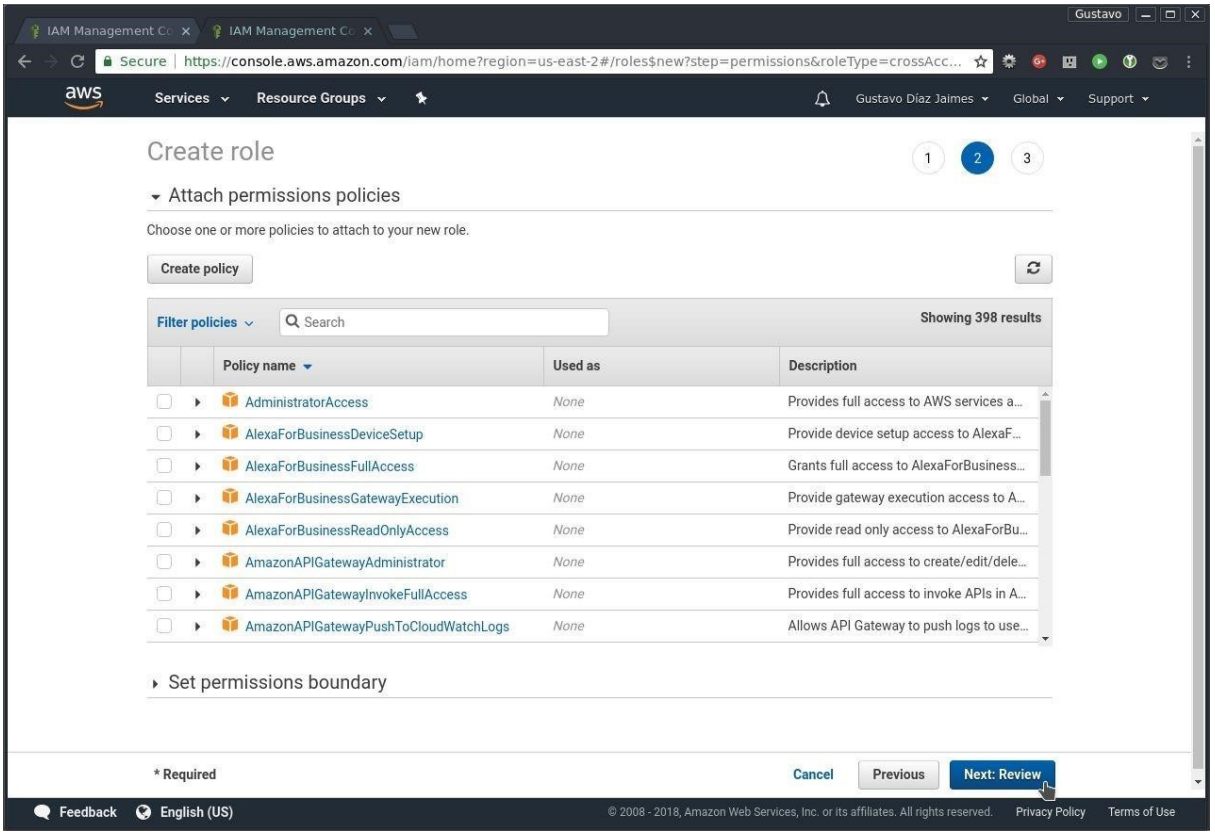


Select the type of trusted entity **"Another AWS Account"**, then enter Ubidots AWS account ID and continue to the next step.

Account ID: **813028286946**

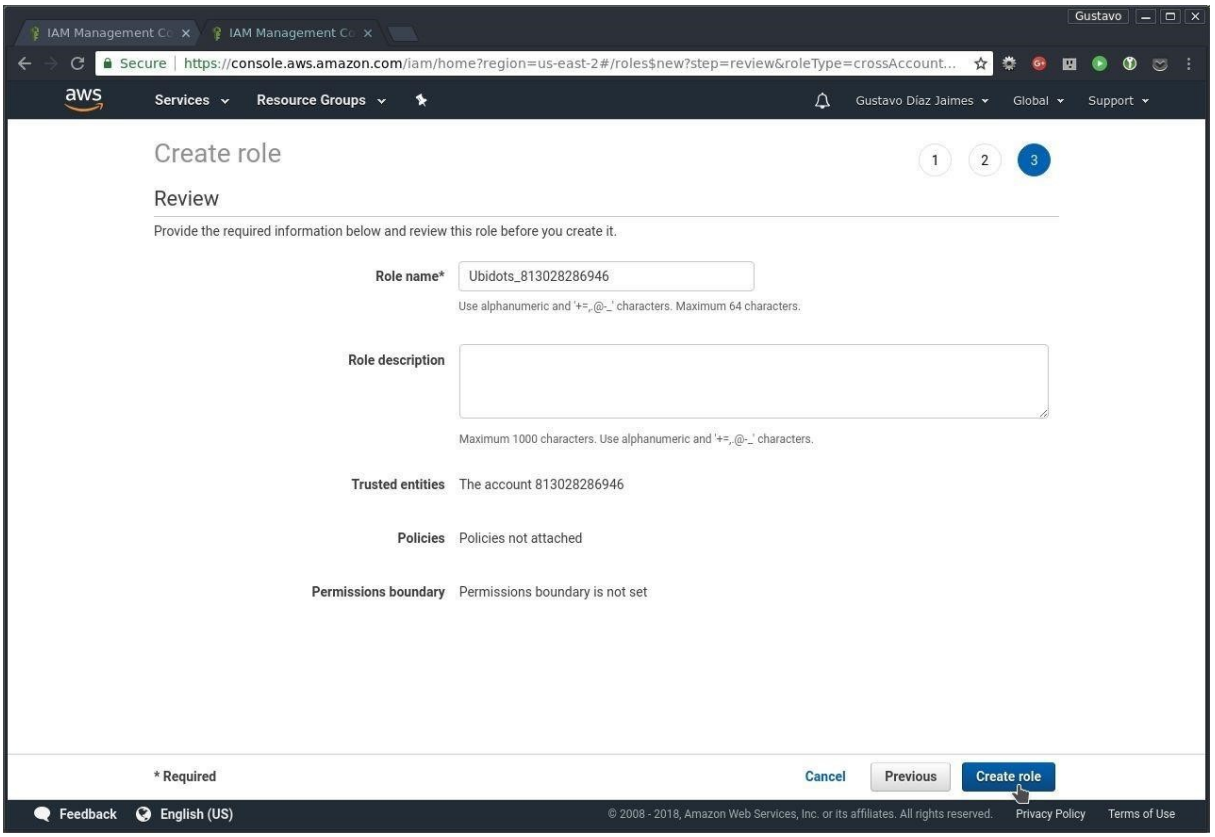


Leave the screen to “Attach permission policies” untouched and click on **“Next: Review”** (We’ll be adding those permissions later):



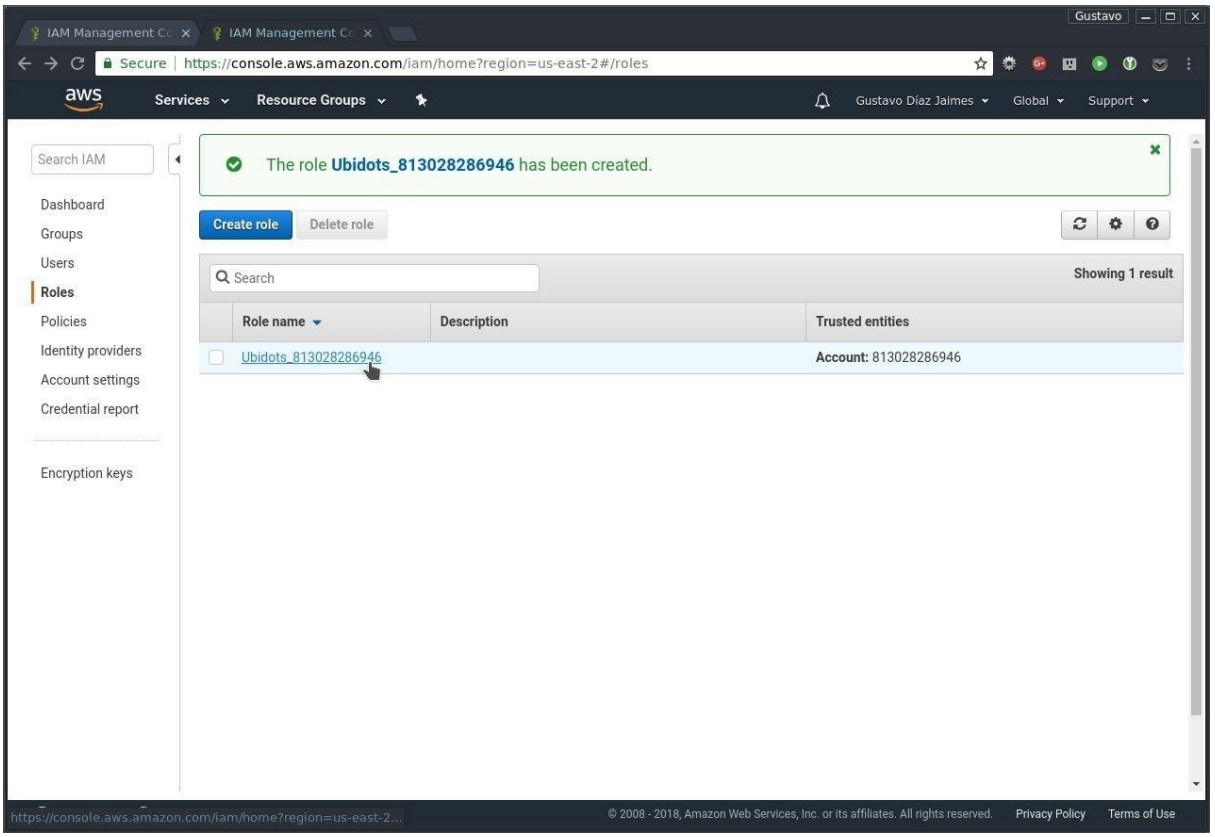
Finally, in the **Role name**, enter a name that begins with **“Ubidots_”**.

Mandatory prefix for Role name: **“Ubidots_”**

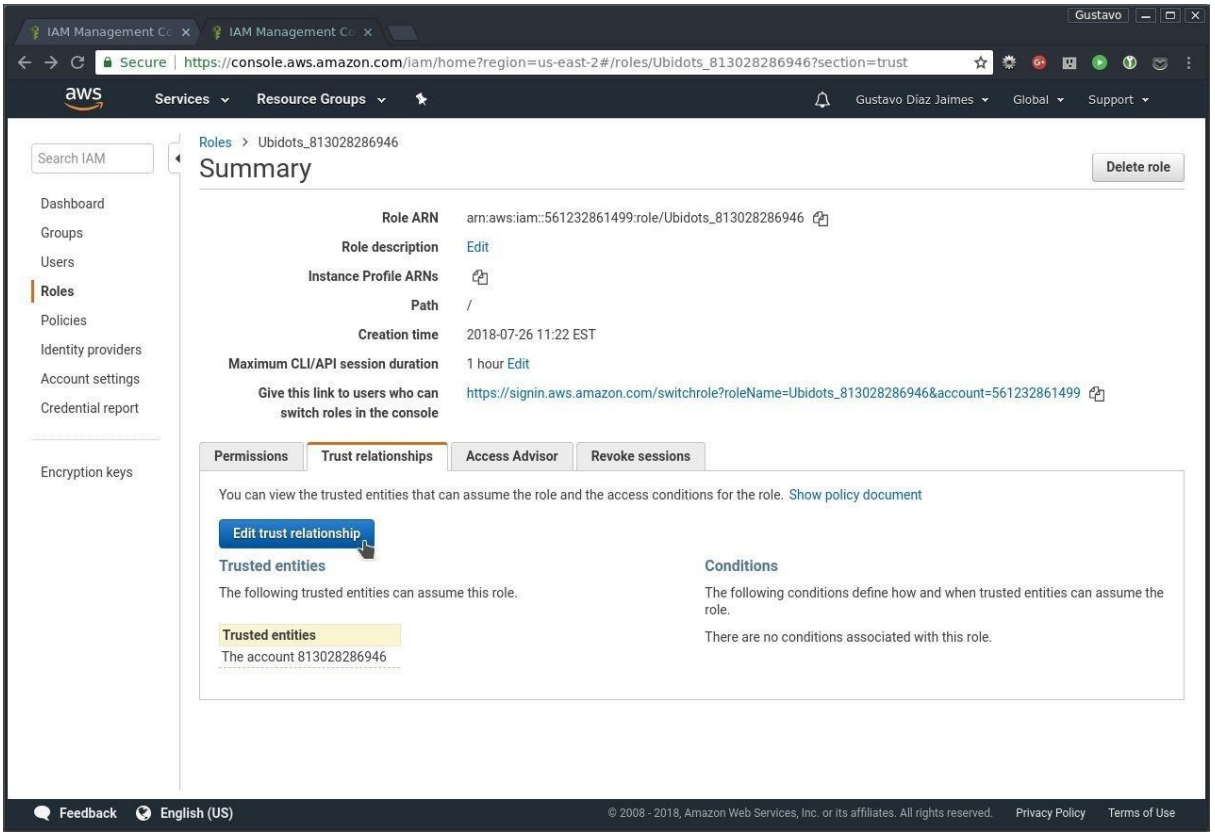


2- Edit IAM Role's Trust Relationship and Permissions

Click on the created Role to edit it:

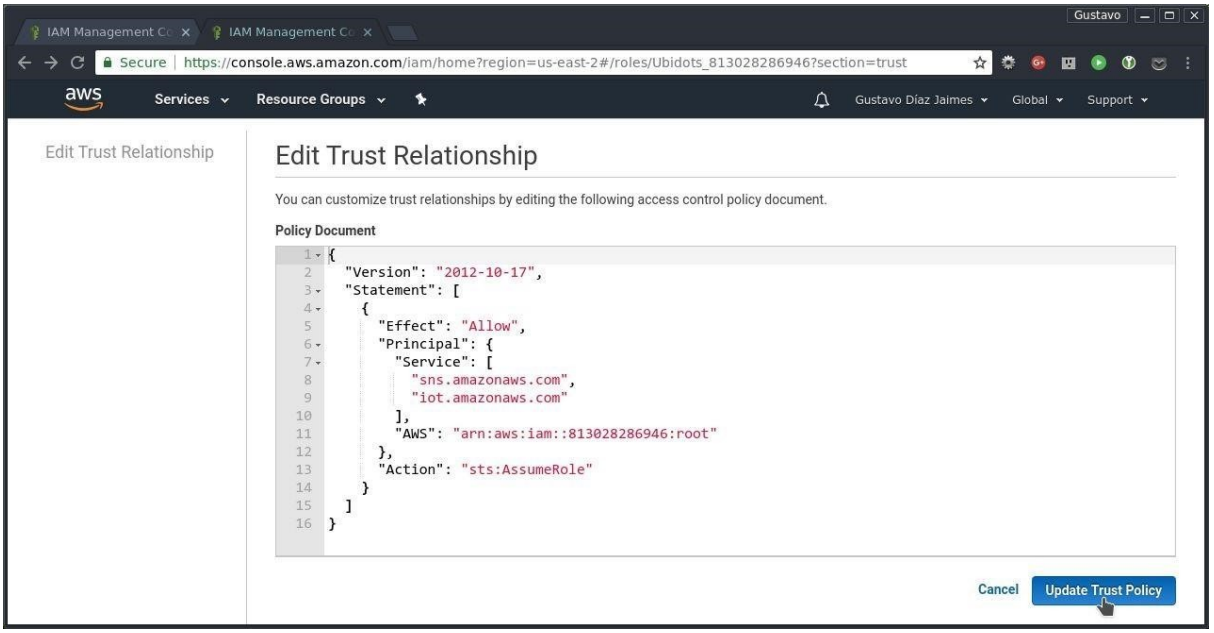


Go to the tab **“Trust relationship”**, then click on **“Edit trust relationship”**:

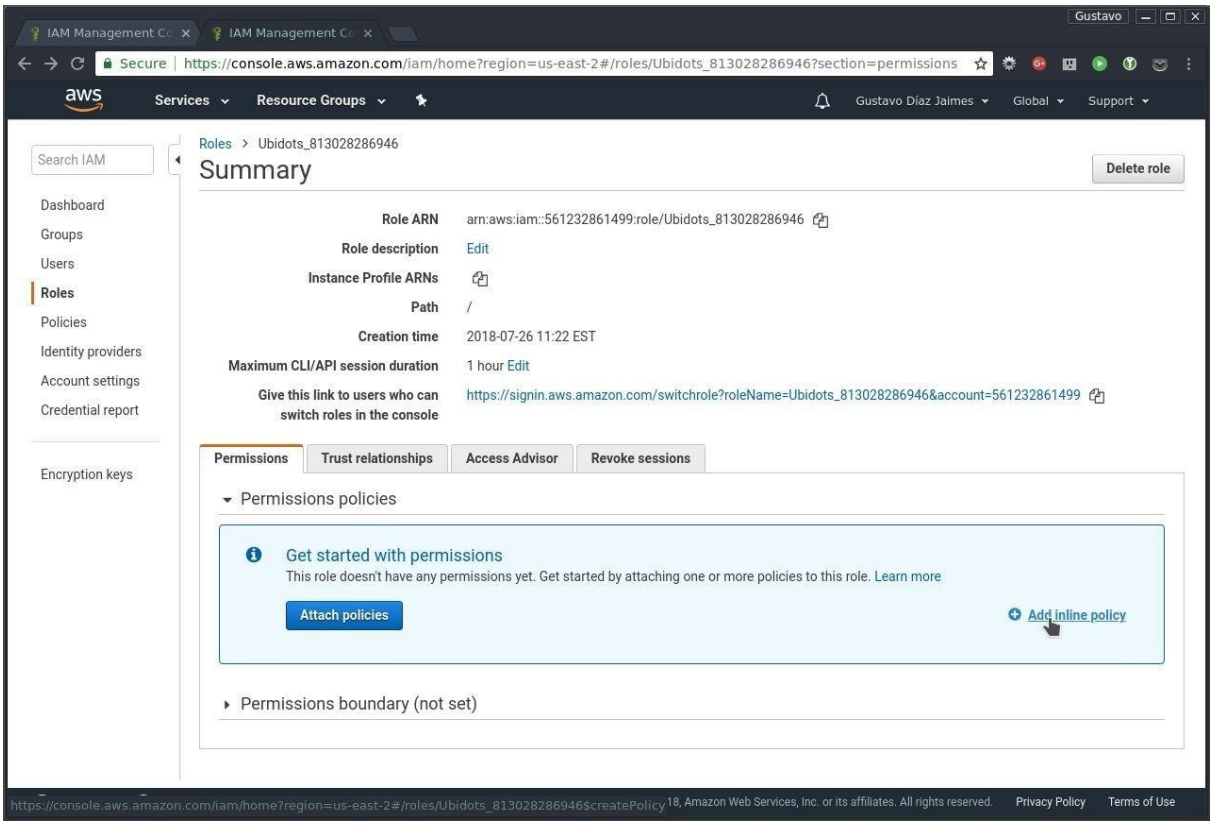


Copy and paste the following trust policy, then click on **“Update Trust Policy”**:

```
{
  "Version": "2012-10-17",
  "Statement": [
     {
    "Effect": "Allow",
    "Principal": {
    "Service": [
         "sns.amazonaws.com",
         "iot.amazonaws.com"
    ],
   "AWS": "arn:aws:iam::813028286946:root"
    },
   "Action": "sts:AssumeRole" }
  ]
}
```



Go to the **“Permissions”** tab, then click on **“Add inline policy”**:



Copy and paste the following policy into the “JSON” tab, then click on **“Review policy”**:

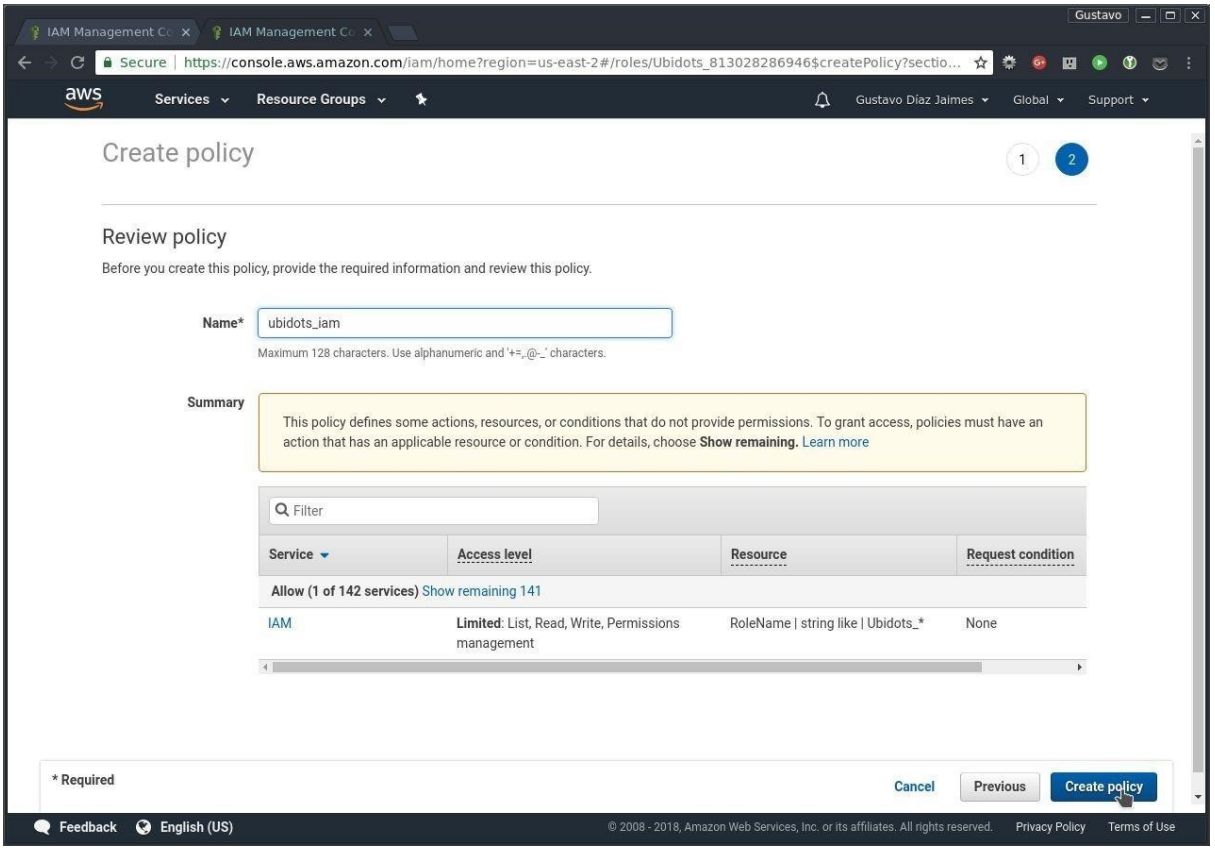
```
{
     "Version": "2012-10-17",
     "Statement": {
         "Effect":
"Allow",
           "Action": [
               "iam:GetRole",
               "iam:CreateRole",
               "iam:PutRolePolicy",
               "iam:ListRolePolicies"
             ],
         "Resource":
"arn:aws:iam::*:role/Ubidots_813028286946
     }
}
```

Visual editor | JSON

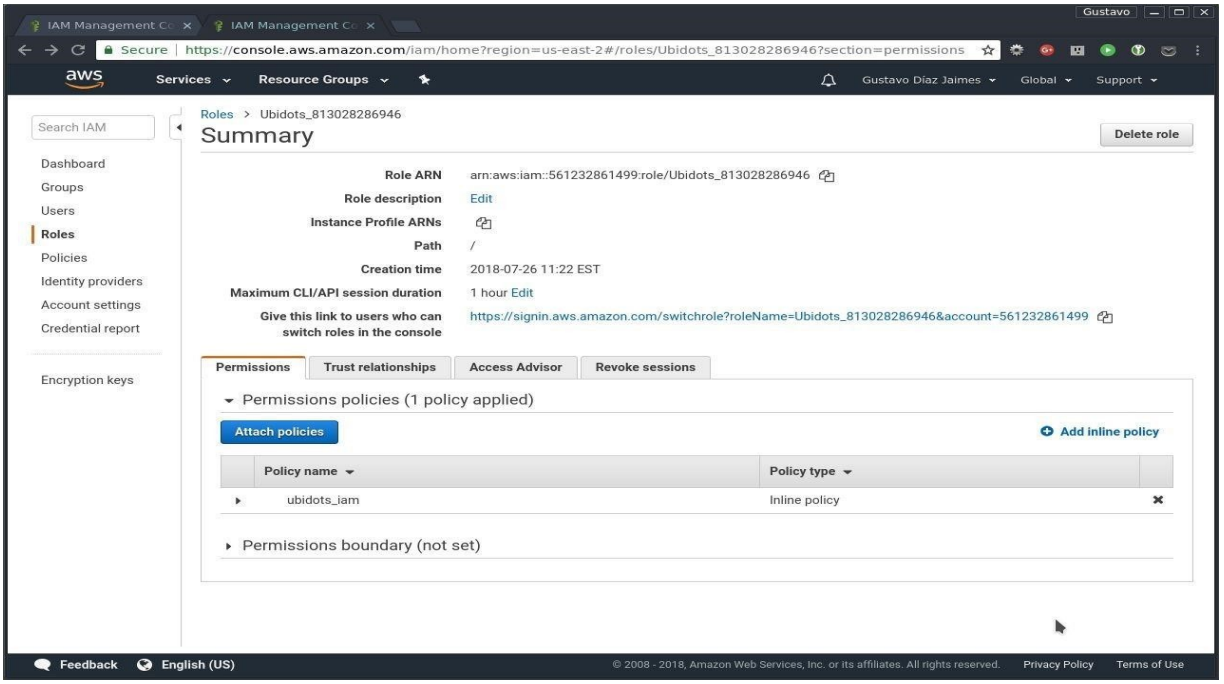
```
{
    "Version": "2012-10-17",
    "Statement": {
        "Effect": "Allow",
        "Action": [
            "iam:GetRole",
            "iam:CreateRole",
            "iam:PutRolePolicy",
            "iam:ListRolePolicies"
        ],
        "Resource": "arn:aws:iam::*:role/Ubidots_813028286946"
    }
}
```

Give a name to your policy, then click on **“Create Policy”**. Please note the name must be **“ubidots_iam”**:

Mandatory inline policy name: **“ubidots_iam”**



You should see the inline policy “ubidots_iam” successfully created:



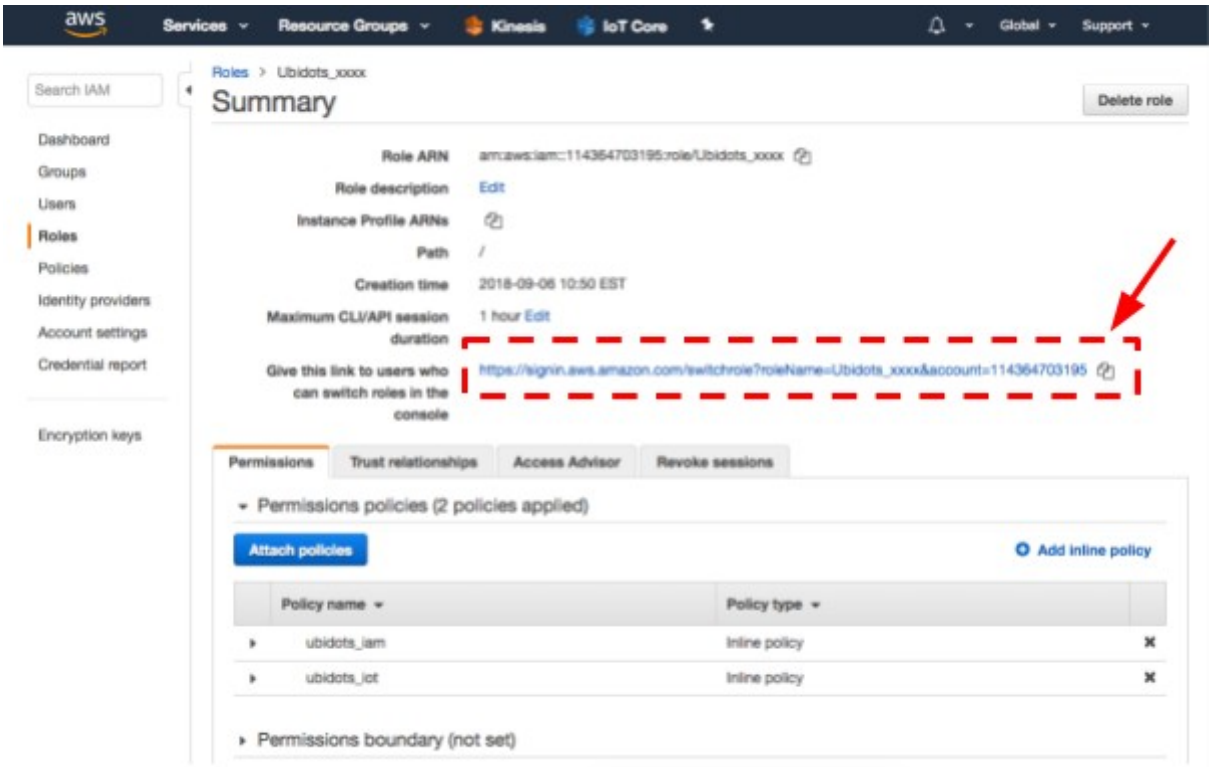
Repeat the same process to create another “Inline policy”. This time, copy and paste the following policy into the “JSON” tab, then click on **“Review policy”**:

```
      {
         "Version": "2012-10-17",
         "Statement": [
            {
               "Sid": "VisualEditor0",
               "Effect": "Allow",
               "Action": [
                  "iot:ReplaceTopicRule",
                  "iot:DisableTopicRule",
                  "iot:GetTopicRule",
                  "iot:EnableTopicRule",
                  "iot:CreateTopicRule",
                  "iot:List*"
               ],
               "Resource": "arn:aws:iot:*:*:rule/Ubidots_*"
            },
            {
               "Sid": "VisualEditor1",
      "Effect": "Allow",
      "Action": [
         "iot:List*",
         "iot:Update*"
      ],
      "Resource": "*"
   }
] }
```

Give a name to your policy, then click on **“Create Policy”**. Please note the name in this case must be **“aws_iot_core_read_policy”**:

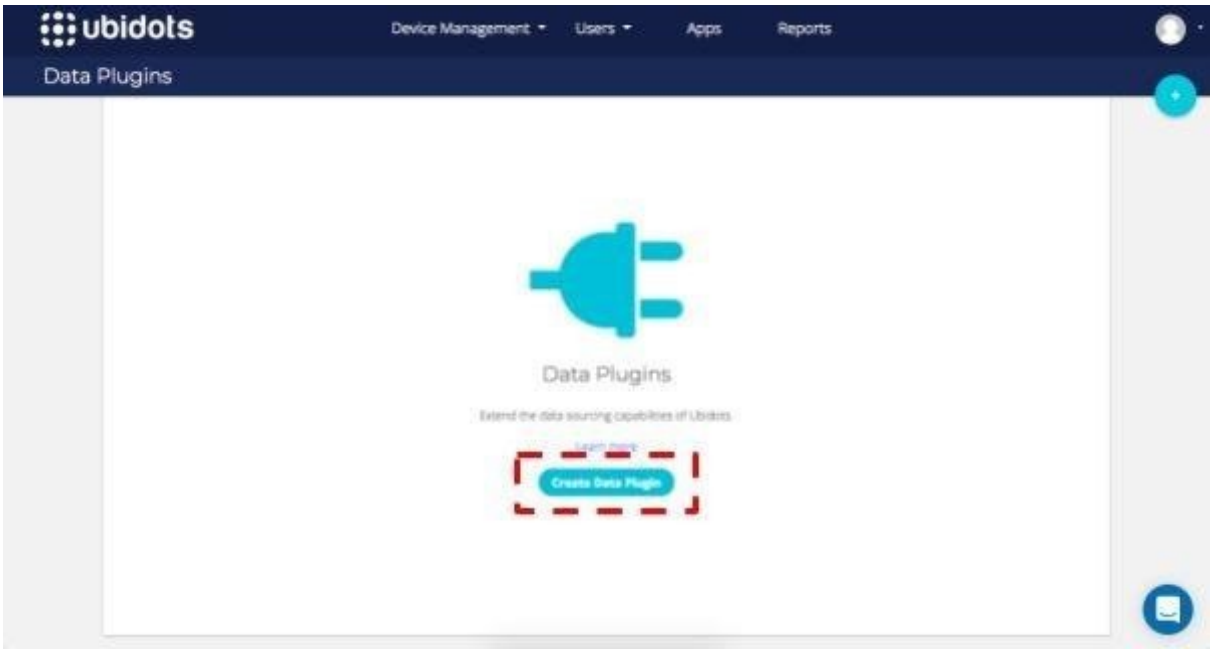
Mandatory inline policy name: **“ aws_iot_core_read_policy”**

You’ve now successfully configured your IAM Role. Finally, copy the IAM Role URL:

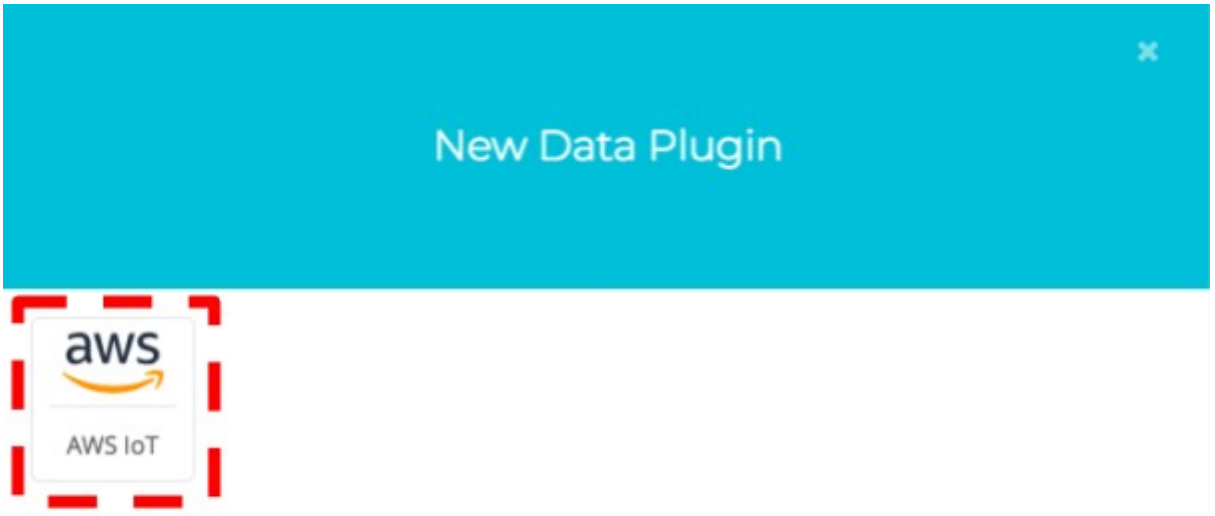


3- Enter your IAM Role URL in Ubidots

In your Ubidots account, go to “Data” → “Plugins”, then click on “Create Data Plugin”:

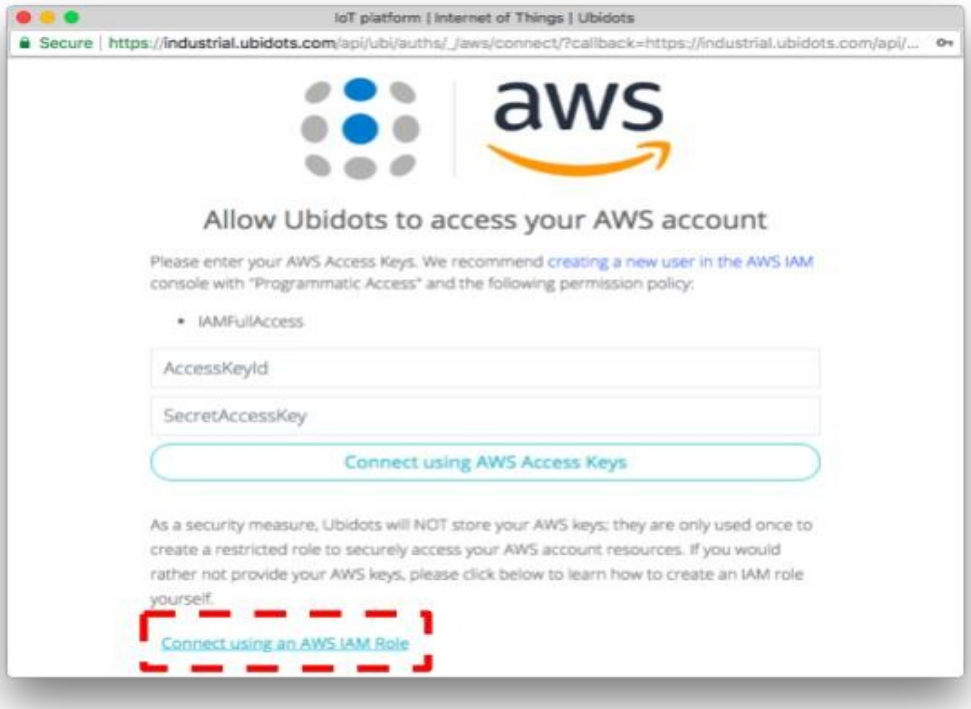


Select AWS IoT:

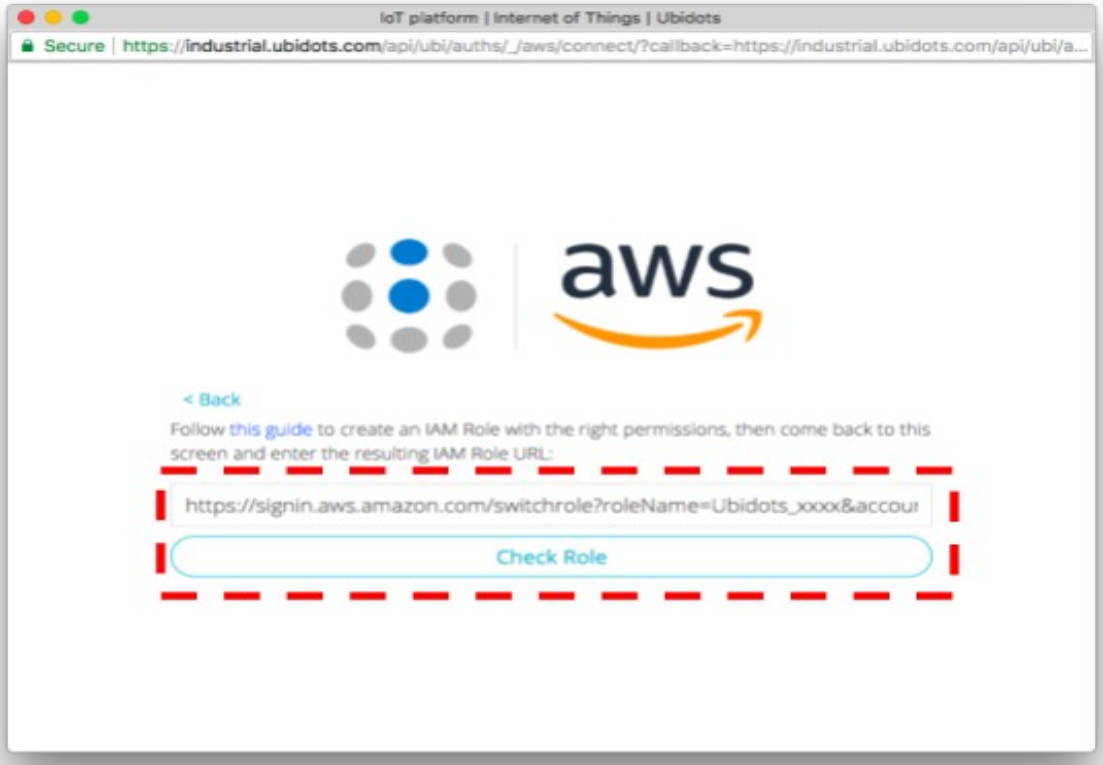


Click on “Connect” to link your AWS account with Ubidots:

An authorization screen will appear. Scroll down and select the option **“Connect using IAM Roles”**:



Enter your IAM Role URL then click on **"Check Role":**



After a successful handshaking between Ubidots and AWS, the authorization screen will disappear and you'll be back to your Ubidots account, where the message **"Account connected successfully"** will appear, along with the AWS Account you just connected to Ubidots. At this point, you're ready to continue creating your AWS Data Plugin.