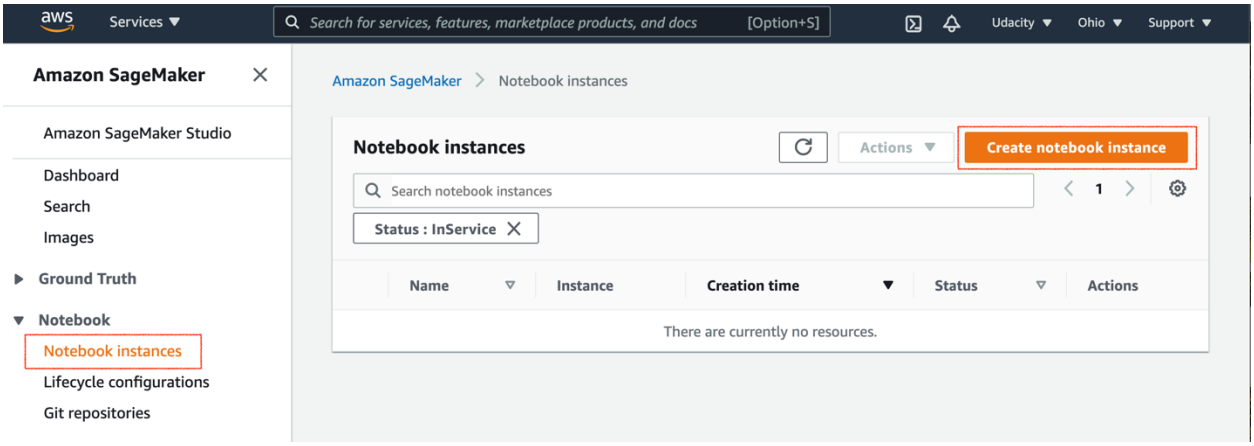
Setting up a Notebook Instance

The deployment project you will be working on is intended to be done using Amazon's SageMaker platform. In particular, it is assumed that you have a working notebook instance in which you can clone the deployment repository.

If you have not yet done this, please see the beginning of **Lesson: Building a Model using SageMaker**where we have walked you by creating a notebook and cloning the deployment repository. Alternatively, you can follow the instructions below.

Step 1. Go to AWS SageMaker

First, start by logging in to the **AWS console**, opening the SageMaker dashboard, and clicking on **Create notebook instance**.

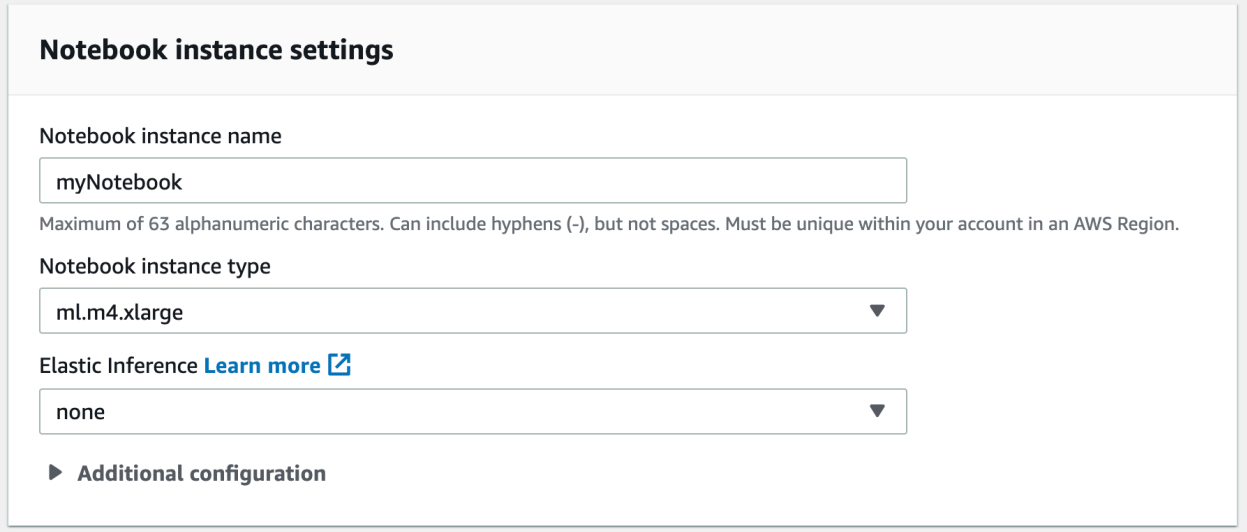


AWS SageMaker → Notebook instances service

Step 2. Create a notebook instance

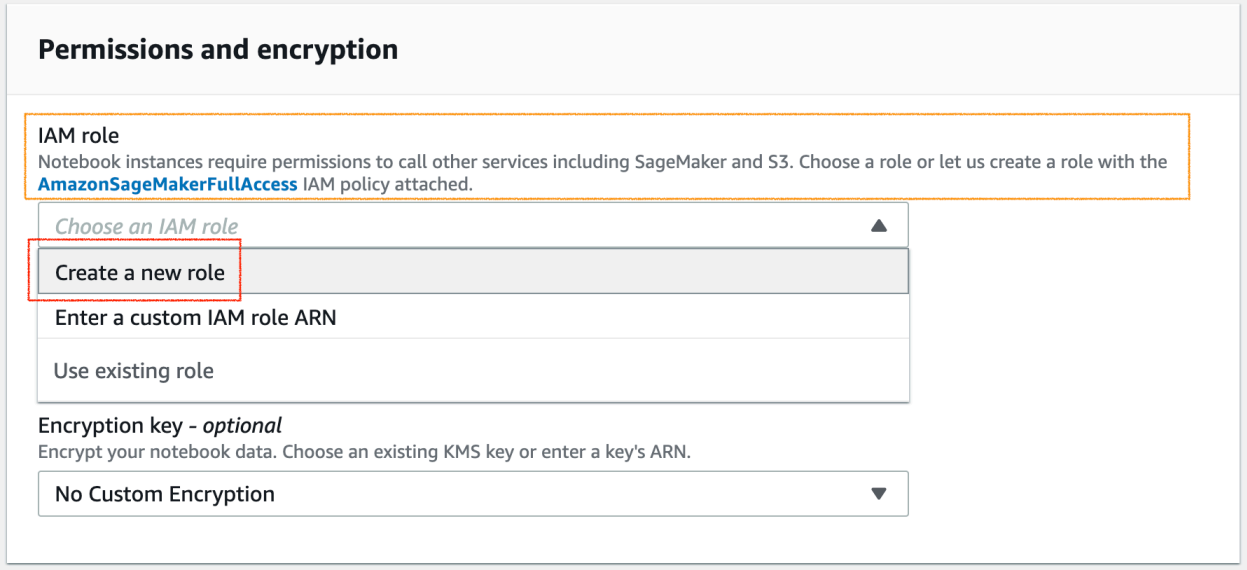
The **Create notebook instance** wizard will come up, asking you the following information:

1. **Notebook instance settings** - In this section, you may choose the notebook instance name of your choice. By default, a **ml.t2.medium** type is available. But, we will use **ml.p2.xlarge** for **training** a model and **ml.m4.xlarge** for **deployment**. These instances may not be available to all users by default. If you haven't requested **ml.p2.xlarge** so far, go to the **AWS Support Center** to raise a *Service limit increase* request.
   Note that your notebook may have a different name than the one displayed here.



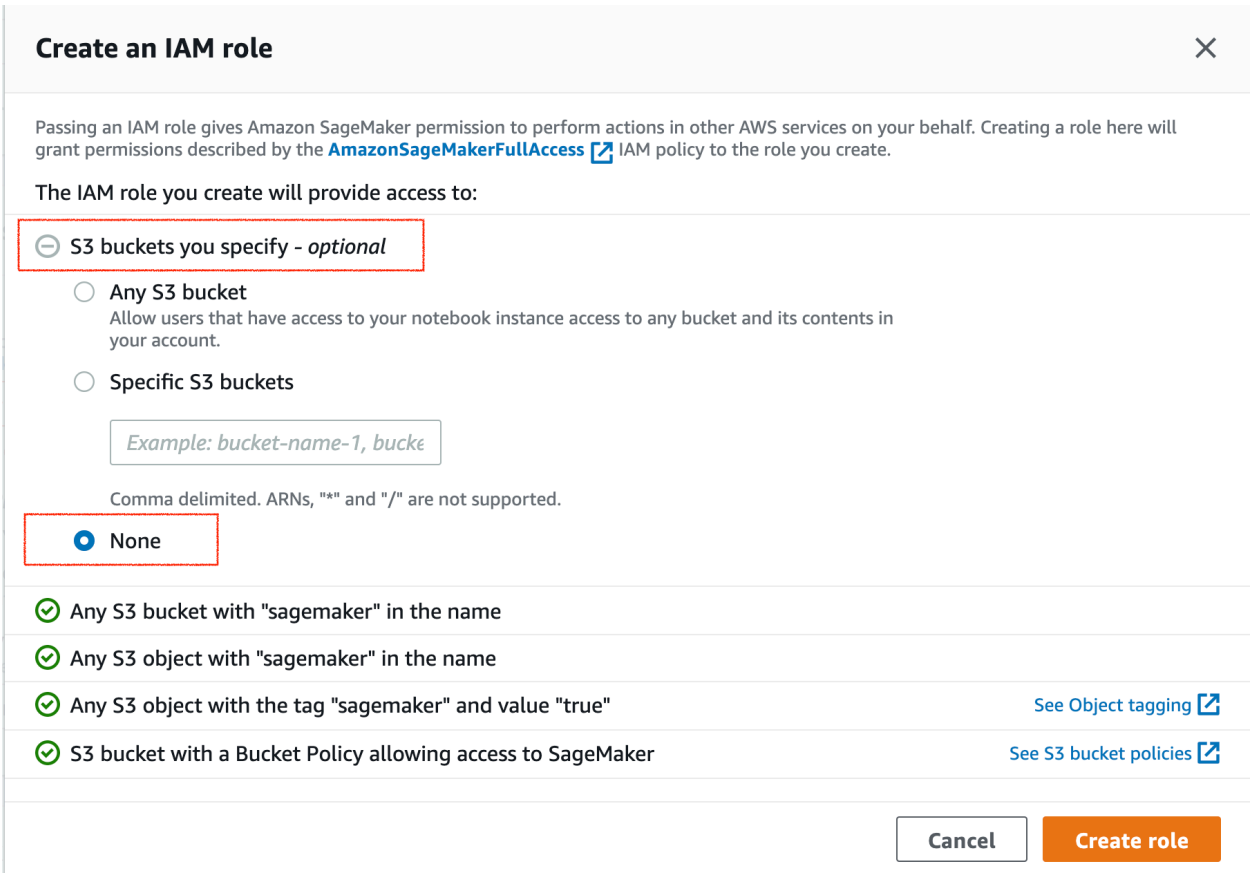
Create notebook instance → Notebook instance settings

2. **Permissions and encryption** - Next, under *IAM role* field select *Create a new role*.

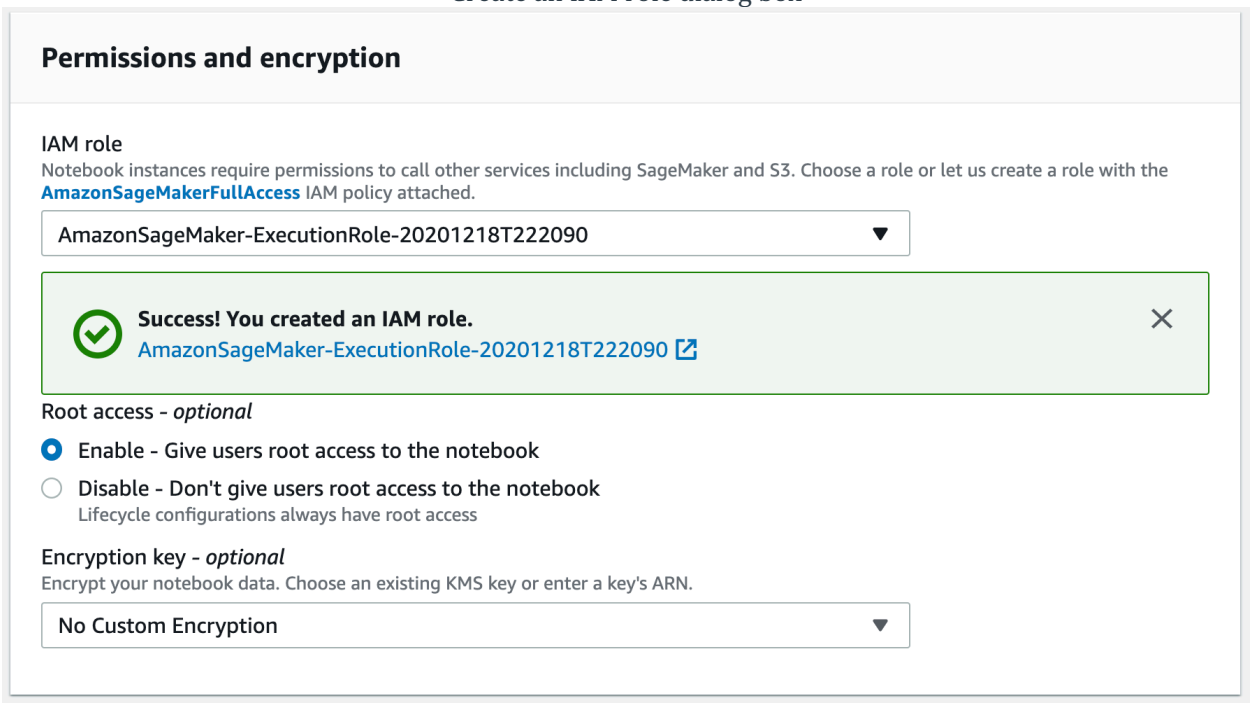


Create notebook instance → Permissions and encryption. Create a new IAM role

3. **Create an IAM role** - You should get a pop-up dialog box, where you have to select **None** radio-button under **S3 buckets you specify** field, as is shown in the image below. Note that the IAM role name that appears may be different than the one displayed here.

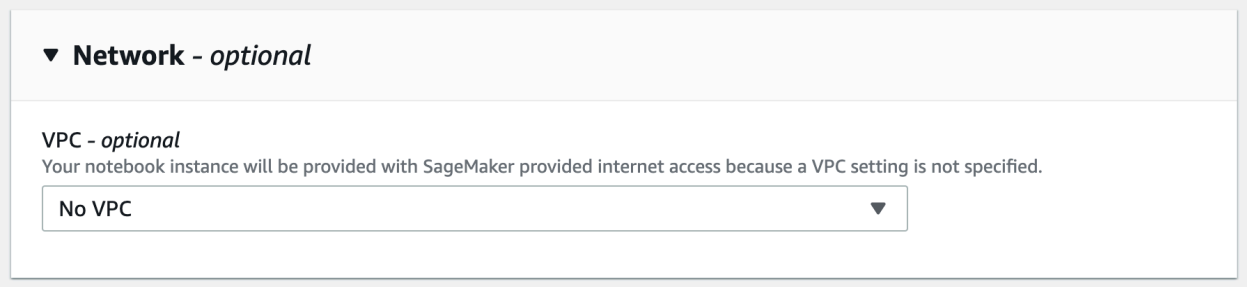


Create an IAM role dialog box



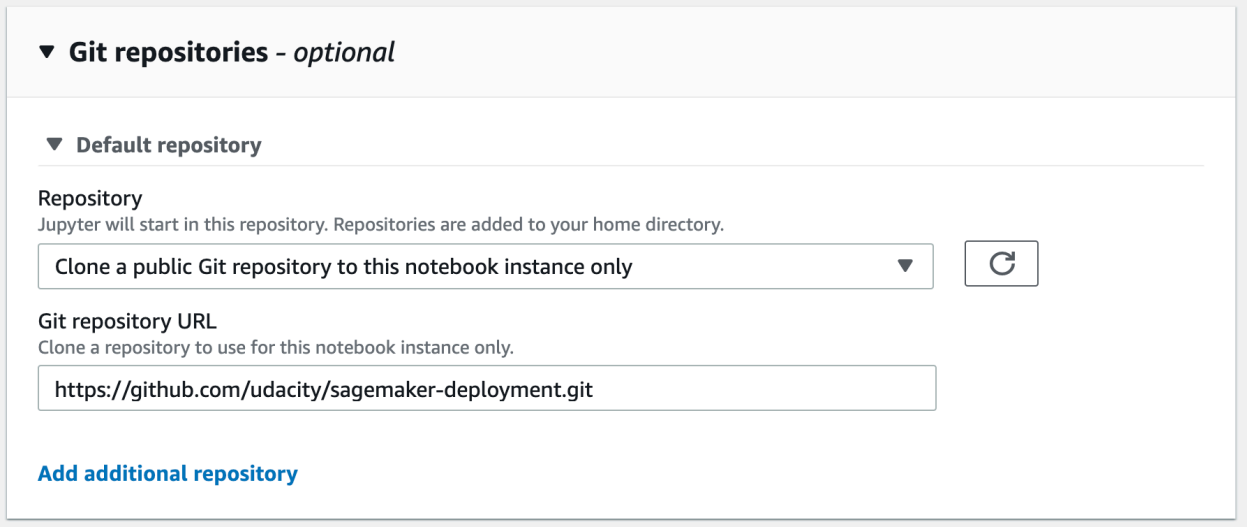
Success, creating a new IAM role

4. **Network - optional** - Choose the *No VPC* option.



Create notebook instance → Network settings. Choose *No VPC*

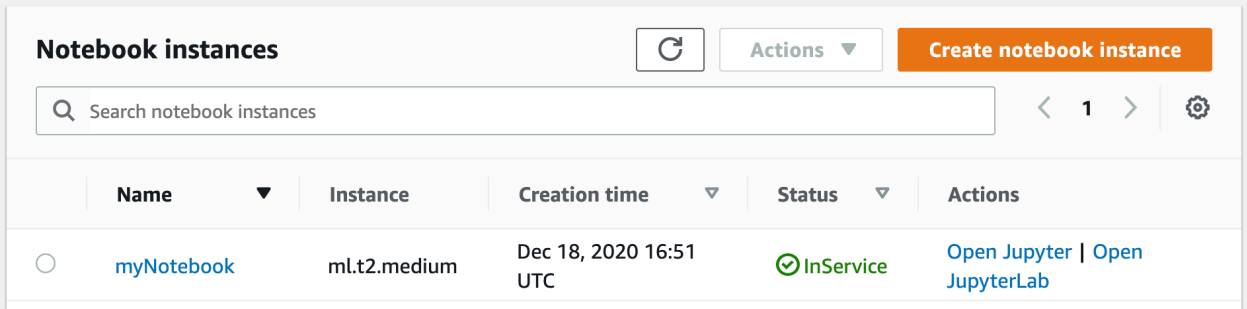
5. **Git repositories** - Here you will clone the `https://github.com/udacity/sagemaker-deployment.git` repository to the current notebook instance only.



Create notebook instance → Git repositories setting

6. You're done! Click on **Create notebook instance** button.

Your notebook instance is now set up and ready to be used! Once the Notebook instance has loaded, you will see a screen similar to the following snapshot.



A successfully created notebook instance (Status: InService). You can access your notebook using the **Open Jupyter** Action.