

# S3 Settings



Bucket name

Bucket name must be globally unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

AWS Region

US East (N. Virginia) us-east-1 ▾

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

[Choose bucket](#)

**Object Ownership** [Info](#)

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

**ACLs disabled (recommended)**  
All objects in this bucket are owned by this account.  
Access to this bucket and its objects is specified using only policies.

**ACLs enabled**  
Objects in this bucket can be owned by other AWS accounts.  
Access to this bucket and its objects can be specified using ACLs.

Object Ownership  
Bucket owner enforced

# S3 Settings



## Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

### **Block all public access**

Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

#### **Block public access to buckets and objects granted through *new* access control lists (ACLs)**

S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

#### **Block public access to buckets and objects granted through *any* access control lists (ACLs)**

S3 will ignore all ACLs that grant public access to buckets and objects.

#### **Block public access to buckets and objects granted through *new* public bucket or access point policies**

S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

#### **Block public and cross-account access to buckets and objects through *any* public bucket or access point policies**

S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

# S3 Settings



## Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

### Bucket Versioning

- Disable
- Enable

## Tags (0) - optional

You can use bucket tags to track storage costs and organize buckets. [Learn more](#)

No tags associated with this bucket.

[Add tag](#)

## Default encryption

Automatically encrypt new objects stored in this bucket. [Learn more](#)

- Server-side encryption
- Disable
  - Enable

## ► Advanced settings

i After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.

[Cancel](#)

[Create bucket](#)

# Notebook Settings

## Notebook instance settings

Notebook instance name

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

Notebook instance type



Elastic Inference [Learn more](#)



i Amazon SageMaker Notebook Instance is ending its standard support on Amazon Linux AMI (AL1). [Learn more](#)

Platform identifier [Learn more](#)



▶ Additional configuration



# Notebook Settings

## Permissions and encryption

### IAM role

Notebook instances require permissions to call other services including SageMaker and S3. Choose a role or let us create a role with the [AmazonSageMakerFullAccess](#) IAM policy attached.

AmazonSageMaker-ExecutionRole-20230101T194235



Success! You created an IAM role.



[AmazonSageMaker-ExecutionRole-20230101T194235](#)

### Root access - *optional*

- Enable - Give users root access to the notebook
  - Disable - Don't give users root access to the notebook
- Lifecycle configurations always have root access

### Encryption key - *optional*

Encrypt your notebook data. Choose an existing KMS key or enter a key's ARN.

No Custom Encryption



# Notebook Settings



## Create an IAM role



Passing an IAM role gives Amazon SageMaker permission to perform actions in other AWS services on your behalf. Creating a role here will grant permissions described by the [AmazonSageMakerFullAccess](#) IAM policy to the role you create.

The IAM role you create will provide access to:

### S3 buckets you specify - *optional*

#### Any S3 bucket

Allow users that have access to your notebook instance access to any bucket and its contents in your account.

#### Specific S3 buckets

*Example: bucket-name-1, bucke*

Comma delimited. ARNs, "\*" and "/" are not supported.

#### None

### Any S3 bucket with "sagemaker" in the name

### Any S3 object with "sagemaker" in the name

### Any S3 object with the tag "sagemaker" and value "true"

[See Object tagging](#)

### S3 bucket with a Bucket Policy allowing access to SageMaker

[See S3 bucket policies](#)

Cancel

Create role

# Notebook Settings



▶ **Network** - *optional*

▶ **Git repositories** - *optional*

▶ **Tags** - *optional*

Cancel

Create notebook instance

# Train Job Settings



## Job settings

### Job name

richard-de-prep

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

### IAM role

Amazon SageMaker requires permissions to call other services on your behalf. Choose a role or let us create a role that has the [AmazonSageMakerFullAccess](#) IAM policy attached.

AmazonSageMaker-ExecutionRole-20230101T194235



Create role using the role creation wizard

### Algorithm options

Use an Amazon SageMaker built-in algorithm, your own algorithm, or a third-party algorithm from AWS Marketplace.

#### ▼ Algorithm source

- Amazon SageMaker built-in algorithm [Learn more](#)
- Your own algorithm resource
- Your own algorithm container in ECR [Learn more](#)
- An algorithm subscription from AWS Marketplace

#### ▼ Choose an algorithm

# Train Job Settings

## ▼ Choose an algorithm

Tabular - XGBoost : v1.3

### Container

The registry path where the training image is stored in Amazon ECR. [Learn more](#)

683313688378.dkr.ecr.us-east-1.amazonaws.com/sagemaker-xgboost:1.3-1

### Input mode

You can provide your training data as a file or pipe.

File

### Metrics

The algorithm you selected will publish the following metrics to CloudWatch metrics.

Metric name	Regex
train:rmse	.*\[[0-9]+\].*#011train-rmse:([-+]?[0-9]*\.[0-9]+(?:[eE][-+]?[0-9]+)?).*
train:mae	.*\[[0-9]+\].*#011train-mae:([-+]?[0-9]*\.[0-9]+(?:[eE][-+]?[0-9]+)?).*
train:logloss	.*\[[0-9]+\].*#011train-logloss:([-+]?[0-9]*\.[0-9]+(?:[eE][-+]?[0-9]+)?).*
.	.*\[[0-9]+\].*#011train-error:([-+]?[0-9]*\.[0-9]+(?:[eE][-+]?[0-

# Train Job Settings



## Resource configuration

Instance type	Instance count	Additional storage volume per instance (GB)
ml.m4.xlarge ▾	1	1

## Keep alive period

Use [SageMaker Training Managed Warm Pools](#)

 minutes ▾

Maximum runtime is 1 hour (60 minutes or 3600 seconds).

## Encryption key - optional

Encrypt your data. Choose an existing KMS key or enter a key's ARN.

 ▾

## Stopping condition

### Maximum runtime

 seconds ▾

# Train Job Settings



```
xgb_model.set_hyperparameters(max_depth=4,  
                               eta=0.3,  
                               num_round=200,  
                               objective = "reg:squarederror",  
                               early_stopping_rounds=10) #objective = "reg:squarederror", "reg:linear" for latest xgboost!
```

normalize\_type

rate\_drop

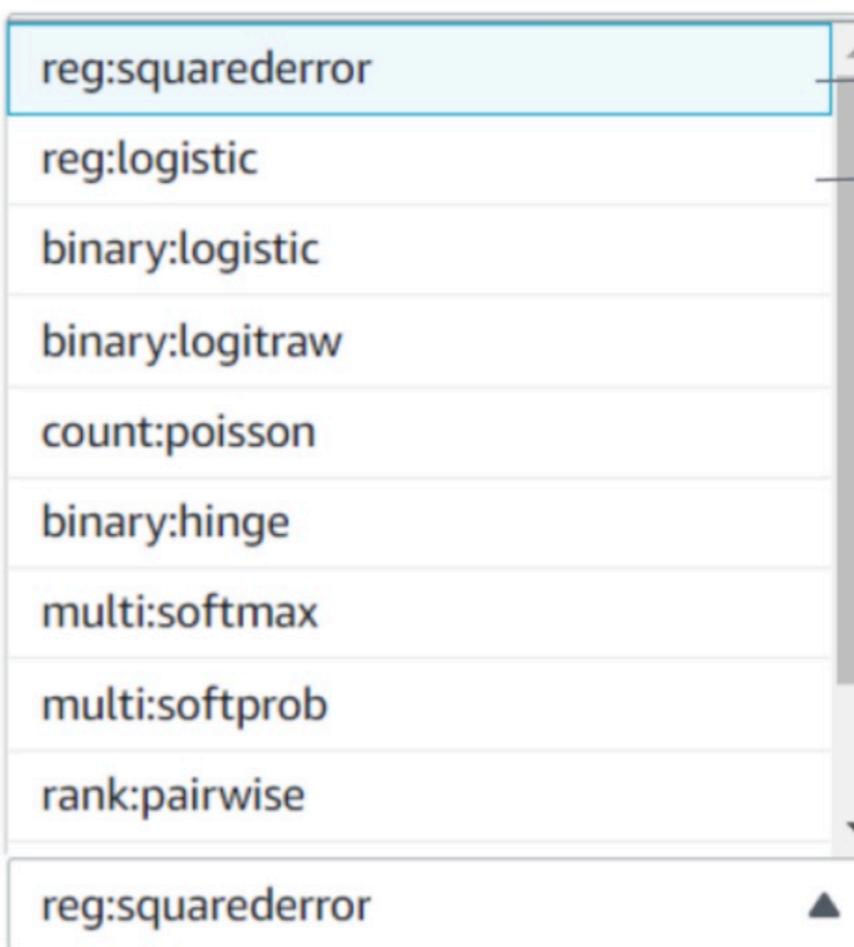
one\_drop

skip\_drop

lambda\_bias

tweedie\_variance\_power

objective



**regression problems**

**classification problems**

# Train Job Settings



## Input data configuration

Create up to 20 channels of input sources. If the algorithm you chose supports multiple input channels here. See [Algorithms Provided by Amazon SageMaker: Common Parameters](#)

### Channels

#### ▼ train

##### Channel name

train

##### Input mode - optional

File

##### Content type - optional

CSV

Choose one of the formats below

- \* libsvm
- \* CSV

##### Compression type

None

##### Record wrapper

None

##### Data source

S3

S3

File system

##### S3 data type

S3Prefix

##### S3 data distribution type

FullyReplicated

##### S3 location

s3://richard-de-prep/sagemaker-autoscout/data/train.csv

Add channel



**Don't forget to add channel for validation data**

# Train Job Settings

## ▼ validation

Channel name

validation

Input mode - *optional*

File

Content type - *optional*

CSV

Choose one of the formats below

- libsvm
- CSV

Compression type

None

Record wrapper

None

Data source

S3

File system

S3 data type

S3Prefix

S3 data distribution type

FullyReplicated

S3 location

s3://richard-de-prep/sagemaker-autoscout/data/validation.csv

# Create Output Folder (Optional)



## Folder

Folder name

 /

Folder names can't contain "/". See rules for naming [↗](#)

## Server-side encryption

i The following settings apply only to the new folder object and not to the objects contained within it.

Server-side encryption

- Disable
- Enable

Cancel

Create folder

# Train Job Settings



## Output data configuration

S3 output path

```
s3://richard-de-prep/sagemaker-autoscout/output/
```

Encryption key - *optional*

If you want Amazon SageMaker to encrypt the output of your training job using your own AWS KMS encryption key instead of the default S3 service key, provide its ID or ARN.

# Train Job Settings



## Managed spot training

### Enable managed spot training - *optional*

Save compute costs for jobs that have flexibility in start and end times. Amazon SageMaker will use spare capacity only to run this job. [Learn more](#)

### Maximum wait time before job terminates *optional stopping condition*

At the end of this duration you will receive the complete or partial results of your managed spot training job.

48

hours ▾

### ▼ Tags - *optional*

Key	Value	Remove
<input type="text"/>	<input type="text"/>	<button>Remove</button>

[Add tag](#)

Cancel

Create training job

# Model Settings



## Model settings

### Model name

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

### IAM role

Amazon SageMaker requires permissions to call other services on your behalf. Choose a role or let us create a role that has the [AmazonSageMakerFullAccess](#) IAM policy attached.



[Create role using the role creation wizard](#)

## Container definition 1

### ▼ Container input options

- Provide model artifacts and inference image location

# Model Settings



richard-de-prep

Clone

Create model package

Stop

Create model

## Job settings

## Algorithm

Algorithm ARN

-

Training image

683313688378.dkr.ecr.us-east-1.amazonaws.com/sagemaker-xgboost:1.3-1

Additional volume size (GB)

1

Maximum runtime (s)

1800

Maximum wait time for managed spot training(s)

-

Managed spot training

Disabled

Volume encryption key

-

Input mode

File

# Model Settings



## ▼ Provide model artifacts and inference image options

### Use a single model

Use this to host a single model in this container.

### Use multiple models

Use this to host multiple models in this container.

#### Location of inference code image

Type the registry path where the inference code image is stored in Amazon ECR.

```
683313688378.dkr.ecr.us-east-1.amazonaws.com/sagemaker-xgboost:1.3-1
```

#### Location of model artifacts - *optional*

Type the URL where model artifacts are stored in S3.

```
s3://richard-de-prep/sagemaker-autoscout/output/richard-de-prep/output/model
```

The path must point to a single gzip compressed tar archive (.tar.gz suffix).

#### Container host name - *optional*

Type the DNS host name for the container.

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

## ▼ Environment variables - *optional*

# Model Settings



## Network

### Enable network isolation

Containers that run with network isolation can't make any outbound network calls. This is required for AWS ML Marketplace products.

### VPC - optional

For better security, we recommend that you use a private VPC.

No VPC



### ▼ Tags - optional

Key

Value

Remove

[Add tag](#)

Cancel

Create model

# Endpoint Config Settings



## Create endpoint configuration

To deploy models to Amazon SageMaker, first create an endpoint configuration. In the configuration, specify which models to deploy, and the relative traffic weighting and hardware requirements for each. See [Deploying a Model on Amazon SageMaker Hosting Services](#) Learn more about the API

### Endpoint configuration

Endpoint configuration name

richard-de3-prep

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

Type of endpoint

- Provisioned
- Serverless

Encryption key - *optional*

Encrypt your data. Choose an existing KMS key or enter a key's ARN.

No Custom Encryption

# Endpoint Config Settings



P Production

Model name	Training job	Variant name	Instance type	Elastic Inference	Initial instance count	Initial weight	Actions
There are currently no resources.							
<a href="#">Create production variant</a>							

Add model

Search resources

Name	Creation time
richard-de3-prep	Jan 01, 2023 18:40 UTC
richard-autoscout-de03	Dec 30, 2022 17:01 UTC
sagemaker-xgboost-2022-12-30-11-37-29-341	Dec 30, 2022 11:37 UTC
sagemaker-xgboost-2022-12-22-20-00-16-306	Dec 22, 2022 20:00 UTC
sagemaker-xgboost-2022-12-11-11-44-26-214	Dec 11, 2022 11:44 UTC

Cancel **Save**

# Endpoint Config Settings



## P Production

Model name	Training job	Variant name	Instance type	Elastic Inference	Initial instance count	Initial weight	Actions
richard-de3-prep	richard-de-prep	variant-name-1	ml.m4.xlarge	none	1	1	<a href="#">Edit   Remove</a>

[Create production variant](#)

Cancel

Create endpoint configuration

# Endpoint Settings



## Endpoint

### Endpoint name

Your application uses this name to access this endpoint.

richard-de3-prep

Maximum of 63 alphanumeric characters. Can include hyphens (-), but not spaces. Must be unique within your account in an AWS Region.

## Attach endpoint configuration

Use an existing endpoint configuration

Use an existing endpoint configuration or clone an endpoint configuration.

Create a new endpoint configuration

Add models and configure the instance and initial weight for each model.

# Endpoint Settings



## Endpoint configuration

C

Search resources

< 1 ... >

Name ▾

ARN

Creation time ▾

richard-de3-prep	arn:aws:sagemaker:us-east-1:046402772087:endpoint-config/richard-de3-prep	Jan 01, 2023 18:44 UTC
richard-autsocout-de03	arn:aws:sagemaker:us-east-1:046402772087:endpoint-config/richard-autsocout-de03	Dec 30, 2022 17:25 UTC
sagemaker-xgboost-2022-12-30-11-37-29-341	arn:aws:sagemaker:us-east-1:046402772087:endpoint-config/sagemaker-xgboost-2022-12-30-11-37-29-341	Dec 30, 2022 11:37 UTC

Select endpoint configuration

Cancel

Create endpoint