# Apache MXNet on AWS Developer Guide



## Apache MXNet on AWS: Developer Guide

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# What Is Apache MXNet?

Apache MXNet (MXNet) is an open source deep learning framework that allows you to define, train, and deploy deep neural networks on a wide array of platforms, from cloud infrastructure to mobile devices. It is highly scalable, which allows for fast model training, and it supports a flexible programming model and multiple languages.

The MXNet library is portable and lightweight. It scales seamlessly on multiple GPUs on multiple machines.

MXNet supports programming in various languages including Python, R, Scala, Julia, and Perl.

This user guide has been deprecated and is no longer available. For more information on MXNet and related material, see the topics below.

#### MXNet

MXNet is an Apache open source project. For more information about MXNet, see the following open source documentation:

- Getting Started Provides details for setting up MXNet on various platforms, such as macOS, Windows, and Linux. It also explains how to set up MXNet for use with different front-end languages, such as Python, Scala, R, Julia, and Perl.
- Tutorials Provides step-by-step procedures for various deep learning tasks using MXNet.
- API Reference For more information, see MXNet. At the top of this page, choose a language from the API menu.

For all other information, see MXNet.

### Deep Learning AMIs (DLAMI)

AWS provides Deep Learning Amazon Machine Images (DLAMIs) optimized for both CPU and GPU EC2 instances. The DLAMI User's Guide explains how to set up MXNet on AWS using these AMIs.

## Amazon SageMaker

You can use MXNet with Amazon SageMaker to train a models using your own custom Apache MXNet code. Amazon SageMaker is a fully managed machine learning service. With Amazon SageMaker, data scientists and developers can quickly and easily build and train machine learning models, and then directly deploy them into a production-ready hosted environment.

For more information, see the Amazon SageMaker documentation.