



Developer Guide

# Apache MXNet on AWS



# Apache MXNet on AWS: Developer Guide

Copyright © 2024 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

# Table of Contents

What Is Apache MXNet? .....	1
-----------------------------	---

# 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](#).