**Step-by-Step Guide to Deploy Forex Trading Bot on AWS**

**1. Prerequisites**

Before starting, ensure you have:

* An **AWS account** with admin access.
* AWS **CLI** installed and configured.
* **Terraform** installed.
* An OANDA trading account.
* The Forex trading bot source code.

**2. Setting Up AWS Infrastructure**

**2.1 Create an S3 Bucket for Model Storage**

1. Log in to AWS Console.
2. Navigate to **S3**.
3. Click **Create Bucket**.
4. Name it **forex-bot-models** and choose a region.
5. Enable versioning (optional but recommended).
6. Click **Create**.

**2.2 Create a DynamoDB Table**

1. Navigate to **DynamoDB**.
2. Click **Create Table**.
3. Set **Table Name** as ForexBotData.
4. Use TradeID as the **Primary Key** (String).
5. Click **Create Table**.

**2.3 Store API Keys in AWS Secrets Manager**

1. Go to **Secrets Manager**.
2. Click **Store a new secret**.
3. Choose **Other type of secrets**.
4. Add OANDA API key (OANDA\_API\_KEY).
5. Click **Next**, name it ForexBotSecrets, and save.

**2.4 Deploy a Lambda Function for Trading**

1. Navigate to **Lambda**.
2. Click **Create Function**.
3. Choose **Author from scratch**.
4. Set **Name** as ForexBotLambda.
5. Select **Python 3.x**.
6. Assign an IAM role with **DynamoDB**, **S3**, and **Secrets Manager** permissions.
7. Deploy the trading bot logic inside the function.

**2.5 Set Up SageMaker for AI Training**

1. Go to **SageMaker** in AWS.
2. Create a **Notebook Instance**.
3. Configure permissions to access S3 and DynamoDB.
4. Upload training scripts.
5. Set up a scheduled retraining job.

**3. Automating Deployment with Terraform**

To automate the entire setup, use Terraform scripts, which will be provided separately.

**4. Running the Trading Bot**

1. The Lambda function fetches data from OANDA.
2. Data is stored in **DynamoDB**.
3. AI model updates using **SageMaker** and stores models in **S3**.
4. The bot continuously improves performance based on stored data.

**5. Monitoring and Scaling**

* Use **CloudWatch** for logs and metrics.
* Set up **Auto Scaling** for Fargate (if used).
* Optimize SageMaker model retraining frequency.

This guide ensures a managed AWS deployment while enabling automated AI learning and improving trading performance over time. Terraform scripts will be provided to automate the entire process.