



# AWS Machine Learning Competency Technology Partner Validation Checklist

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## Table of Contents

<b>Introduction.....</b>	<b>3</b>
<b>Competency Application and Audit Process .....</b>	<b>3</b>
<b>Program Policies .....</b>	<b>3</b>
<b>AWS Machine Learning Technology Competency Categories.....</b>	<b>5</b>
<b>AWS Machine Learning Program Prerequisites .....</b>	<b>7</b>
<b>AWS Machine Learning Technology Partner Validation Checklist .....</b>	<b>8</b>
<b>1.0 AWS Customer References.....</b>	<b>8</b>
<b>2.0 Solution Details .....</b>	<b>8</b>
<b>3.0 Security .....</b>	<b>8</b>
<b>4.0 AWS Machine Learning Competency Requirements.....</b>	<b>9</b>

## Introduction

The AWS Competency Partner Validation Checklist is intended for APN Partners who are interested in applying for AWS Competency. This checklist provides the criteria necessary to achieve the designation under the AWS Competency Program.

**The goal of the AWS Competency Program is to recognize APN Partners who demonstrate technical proficiency and proven customer success in specialized solution areas.**

APN Partners undergo a validation of their capabilities upon applying for the specific Competency, and every 12 months thereafter. AWS leverages in-house expertise to facilitate the review.

AWS reserves the right to make changes to this document at any time. **It is expected that APN Partners will review this document in detail before submitting an AWS Competency application, even if all of the pre-requisites are met.** If items in this document are unclear and require further explanation, please contact your AWS Partner Development Representative (PDR) or Partner Development Manager (PDM) as the first step. Your PDR/PDM will contact the Competency Program Team if further assistance is required.

## Competency Application and Audit Process

In order to begin the validation process, please follow the steps outlined below:

- Step #1: Review the Partner Validation Checklist
- Step #2: Submit a Competency Application through the APN Portal
  - Login to the [APN Partner Central](#)
  - Click “View My APN Account” in left navigation
  - Scroll to AWS Competencies and select the appropriate Competency
  - Complete the Competency Application

Incomplete applications will not be considered and will be rejected.

Once your firm’s application has been submitted through the APN Partner Central, the AWS Competency Team will review for compliance.

AWS recommends that APN Partners have individuals who are able to provide evidence of compliance and to speak in-depth to the requirements available during the validation process.

Upon completion of the review, a recommendation is given to the AWS Competency Team regarding APN Partner acceptance into the Competency. The final decision regarding acceptance is made by the AWS Competency; APN Partners will be notified of their status by AWS.

## Program Policies

An APN Partner's application to the AWS Competency may be rejected at the discretion of the Global Segment Business or Technical Lead. Rejections may be made due to estimated ability to consistently implement technical solutions, lack of current required APN Partner certifications, judgment of the technical or business merit of the proposed solution, perceived lack of solution delivery capabilities, or any other business or technical criteria deemed critical.

AWS Competency status can be revoked at the discretion of the Global Segment Business or Technical Lead. Revocations may be issued due to loss of required APN Partner certifications, lack of progress toward billing or win goals, repeated violations of AWS PR guidelines, evidence of poor customer experience, including cost vectors, when using the solution, or any other business/technical factors that would indicate that the practice or solution may not meet current requirements, or is projected not to meet future requirements.

AWS Competency status must be renewed annually on a calendar year basis. Requirements for renewal may change from year to year, subject to the business and technical needs of AWS and its customers.

## AWS Machine Learning Technology Competency Categories

AWS Machine Learning Competency APN Partners provide solutions that help organizations solve their data challenges, enable machine learning and data science workflows or offer SaaS based capabilities that enhance end applications with machine intelligence. We are looking to recognize partners that are 'builders' and that can help their customers, within the previously listed areas, create intelligence within their applications. What we are **NOT** looking for are users or developers that leverage Machine Learning as part of their overarching application or service. An example of this could be applying a predictive model for cyber security. For this, we would recommend pursuing the APN Security Competency. By attaining the AWS Machine Learning Competency, APN Partners are demonstrating to our customers that your organization has deep expertise in Machine Learning experience on the AWS platform and can deliver your organization's solutions seamlessly in the AWS Cloud environment.

In order to properly showcase the best APN Partner for specific customer needs, it is important to demonstrate areas of strength, depth, and experience.

Below are the Machine Learning Technology categories that an APN Partner may apply for. Also included are examples of the characteristics a firm would possess to be classified under the respective category. For Competency-specific requirements, start with the Prerequisites section of this document.

Category	Characteristics
Data Services	<p>For data solutions or services, APN Partner must provide evidence or thorough documentation on how they help data scientists and machine learning practitioners prepare their enterprise data for the eventual training of a predictive model.</p> <p>Technology offerings could include the following:</p> <ul style="list-style-type: none"> <li>▪ Data Annotation platform or services</li> <li>▪ Data transformations, augmentation or generation</li> <li>▪ Data normalization or 'Wrangling'</li> </ul>
Platform Providers	<p>For a Platform Provider, APN Partners must provide evidence or thorough documentation on how their platform allows data scientists and ML practitioners the tools to take their data, train predictive models and make predictions on new data. Platforms should support structured and unstructured data sources.</p> <p>Offerings could include any or all of the following:</p> <ul style="list-style-type: none"> <li>▪ Data management</li> <li>▪ Predictive model training</li> <li>▪ Model evaluation</li> <li>▪ Model deployment</li> <li>▪ Model and/or experiment management</li> <li>▪ Offline and online prediction</li> <li>▪ Prediction monitoring</li> </ul>

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SaaS/API Providers	<p>For SaaS or API Providers, APN Partner must provide evidence of thorough documentation and details on how the solution enables predictive capabilities within customer applications.</p> <p>Application areas include, but are not limited to:</p> <ul style="list-style-type: none"><li>▪ Computer vision i.e. Image or video classification, detection and/or semantic segmentation</li><li>▪ Natural language processing/understanding i.e provide predictions such as sentiment, parts of speech tagging, named entities, etc..</li><li>▪ Recommendation engines</li><li>▪ Anomaly detection</li><li>▪ Event prediction</li></ul>
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## AWS Machine Learning Program Prerequisites

AWS Machine Learning – Technology Partner Prerequisites	
<b>APN Membership</b>	<b>APN Partner must meet Advanced tier+ APN Technology Partner (view <a href="#">requirements</a>)</b>
<b>AWS Support</b>	APN Partner must have Business level+ Support plan (view <a href="#">Support</a> plans)
<b>AWS Customer References</b>	<p>APN Partner must provide <math>\geq 4</math> AWS customer references specific to completed Machine Learning projects:</p> <ul style="list-style-type: none"> <li>▪ 2 of the 4 AWS customer references must be public (i.e., documented in a case study, white paper, or blog post). Public references must mention AWS, the end customer, and the APN Partner.</li> <li>▪ References must be for projects started within the past 12 months, and must be for projects that are in production, rather than in pilot or proof of concept stage</li> <li>▪ All customer references submitted must have supporting documentation providing evidence of compliance to the requirements of this checklist</li> </ul>
<b>AWS Machine Learning Product or Solution</b>	<p>APN Partner must have an Machine Learning product or solution on AWS, including:</p> <ul style="list-style-type: none"> <li>▪ Availability of product or solution in 3 or more AWS regions</li> <li>▪ Qualifying for and posting an AWS public support statement on APN Partner's website detailing the APN Partner's Machine Learning practice on AWS and including public reference to the APN Partner's solution, practice, or guidance on Machine Learning. For example, an acceptable public support statement is a landing page on the APN Partner's website that contains various elements, including the AWS solutions and competency use cases, reference architecture, technology partnerships, customer references, sample TCO pricing, and any other relevant information supporting the APN Partner's expertise related to Machine Learning and highlighting the partnership with AWS through the APN.</li> <li>▪ A reference architecture for an Machine Learning use case which is optimized for security, reliability, performance, cost optimization, and operational excellence</li> </ul>
<b>Technical Certification</b>	$\geq 1$ staff certified on AWS associate level or higher. See AWS Certifications

## AWS Machine Learning Technology Partner Validation Checklist

In preparation for the validation process, APN Partners should become familiar with the requirements of this checklist. Supporting documentation (e.g., design and architectural documents) for the submitted customer references must be provided, in order to demonstrate compliance to the below requirements.

1.0 AWS Customer References		Met	Not Met
1.1 Customer References	<p>APN Partner has four (4) AWS customer references of completed Machine Learning projects.</p> <p>APN Partner must provide for each reference:</p> <ul style="list-style-type: none"> <li>▪ Name of the customer</li> <li>▪ Problem statement/definition</li> <li>▪ What you proposed</li> <li>▪ How AWS services were used as part of the solution</li> <li>▪ Third party applications or solutions used</li> <li>▪ Start and end dates of project</li> <li>▪ Outcome(s)/results</li> <li>▪ Lessons learned</li> </ul>		
1.2 Public References	<p>2 of the above 4 references are publicly endorsed by the customer.</p> <p>Evidence must be in the form of a publicly available case study, white paper, blog post, or equivalent that includes, as a minimum:</p> <ul style="list-style-type: none"> <li>▪ Reference to customer name, APN Partner name, and AWS</li> <li>▪ Customer problem that was solved</li> <li>▪ How AWS was used as part of the solution</li> <li>▪ Outcome(s)/results</li> </ul> <p>Public references must be easily discoverable on the APN Partner's website.</p>		
2.0 Solution Details		Met	Not Met
2.1 Solution Capabilities	<p>APN Partner must provide details on how the solution helps customers with Machine Learning workloads on AWS or using models trained on AWS. This must be documented in a detailed manner including:</p> <ul style="list-style-type: none"> <li>• How the solution integrates with or uses any AWS Machine Learning services</li> <li>• Predictive and or process control functionality of the Machine Learning offering and highlighting capabilities unique to AWS</li> </ul> <p>Documentation provided as white-papers, reference architectures, public documentation, etc.</p>		
2.5 AWS Best Practices	<p>APN Partner product provides customers with solutions that are aligned with AWS architecture best practices and reference architectures. APN Partner must provide an architectural overview including details on the use of AWS services and patterns to provide highly available and reliable infrastructure.</p>		
3.0 Security		Met	Not Met
3.1 Security Best Practices	<p>APN Partner has documentation that proves that the solution is aligned as per <a href="#">AWS Security Best Practices</a> and <a href="#">AWS Risk and Compliance</a>.</p>		
3.2 Security Control	<p>APN Partner product or solution has the appropriate security controls:</p> <ul style="list-style-type: none"> <li>• For SaaS solutions, the solution does not in any form or control ask customer to provide their AWS credentials. All access controls are implemented via Cross Account roles.</li> </ul>		



	<ul style="list-style-type: none"> <li>For product being deployed by the customer, product has features to manage access to AWS resources and APIs using identity federation, IAM users, and IAM roles</li> </ul>		
3.3 Governance and Compliance	<p>Solution has capabilities that support good governance and security, specifically including services such as:</p> <ul style="list-style-type: none"> <li>AWS Identity and Access Management (IAM)</li> <li>AWS CloudTrail</li> </ul>		

4.0 Competency Requirements		Met	Not Met
To qualify for candidacy, the Partner's application must fulfill all of the following:			
4.1 Production	The product or service operates in commercial production on AWS.		
4.2 Platform	Provide a platform for developing, distributing or enhancing the total lifecycle of Machine Learning applications.		
4.3 Solution Availability	Machine Learning product or solution available as a Quick Start, in AWS Marketplace, or via a managed offering (SaaS) platform on AWS including RESTful APIs.		