



Amazon Aurora AWS Service Delivery Program Consulting Partner Validation Checklist

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Introduction

The goal of the AWS Service Delivery Program is to recognize APN Partners who demonstrate successful customer delivery and experience in specific AWS services. The AWS Service Delivery Validation Checklist is intended to prepare APN Partners who are interested in applying for AWS Service Delivery. This checklist provides the criteria necessary to achieve the designation(s) under the [AWS Service Delivery Program](#).

Expectations of Parties

Once APN Partners have applied to a designation within AWS Service Delivery, APN Partners undergo a validation of their capabilities known as the technical validation upon applying for any AWS Service Delivery designation, and every 12 months thereafter. AWS leverages in-house expertise and may leverage a third-party firm 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 Service Delivery application, even if pre-requisites are met.** If items in this document are unclear and require further explanation, please contact your Partner Development Representative (PDR) or Partner Development Manager (PDM) as the first step. Your PDR/PDM will contact the Program Office if further assistance is required.

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

- Step #1: Review the Partner Validation Checklist and ensure all requirements are met
- Step #2: Submit an AWS Service Delivery Application through the APN Partner Central
 - Login to the APN Partner Central
 - Click "View My APN Account" in left navigation
 - On this page, first submit the following:
 - Your AWS Service Specific AWS Customer Case Study (2) with attached Architecture Diagrams
 - Your AWS Service Specific Consulting Practice
 - Next, scroll to AWS Service Deliveries and select the AWS service you want to apply for
 - Complete the Service Delivery Application
- Step #3: Email completed Self-Assessment to aws-service-delivery@amazon.com

Incomplete applications will not be considered and will be declined until all requirements are met.

Once your firm's application has been submitted through the APN Partner Central, the APN Team will review for completeness and for compliance with the prerequisites. Next, we send applications to in-house or third-party experts to complete a Technical Validation.

AWS recommends that APN Partners have individuals who are able to 1) provide evidence of compliance and 2) speak in-depth to the technical requirements about the AWS Service during the validation process.

Upon completion of the Technical Validation, APN Partners will receive a final status for the submitted application either confirming or not confirming the APN Partners' acceptance into the Service Delivery Designation. APN Partners may attain one or more AWS Service Delivery Designations. Attaining one designation does not guarantee approval into additional Service Delivery Designations.

AWS Service Delivery Program Prerequisites

AWS Service Delivery Partners have demonstrated success helping customers evaluate and use AWS services productively, at varying levels of complexity, and at scale by completing the below requirements.

The following items must be met before a Technical Validation review will be scheduled. These items will be validated by the AWS Service Delivery Program Manager; any deficiencies must be addressed prior to scheduling a validation review.

1.0 APN Program Requirements		Met Y/N
1.1 Program Guidelines	The APN Partner must read the Program guidelines and Definitions before submitting the application. Click here for Program details.	
1.2 Program Requirements	APN Partner is Select, Advanced, or Premier APN Consulting Partner (view requirements)	
2.0 AWS Customer Case Studies		
2.1 AWS Customer Case Studies	APN Partner has two (2) case studies demonstrating successful delivery of the AWS service(s) that are in production to their external customers, rather than in pilot or proof of concept stage. Note: <i>Public-facing references are encouraged over private references, as they may be used by AWS for marketing purposes. Evidence of a publicly referenceable case study must be provided in the form of a case study, white paper, blog post, or equivalent, and must be easily discoverable on the APN Partner's website. For best practice on how to write a Public Case Study See Here</i>	
	APN Partner provides for each reference: <ul style="list-style-type: none"> ▪ Name of the customer ▪ AWS Account ID (Will be used to verify AWS service usage) ▪ Problem statement/definition ▪ What you proposed ▪ How AWS services were used as part of the solution ▪ Third party applications or solutions used ▪ Start and end dates of project ▪ Outcome(s)/results ▪ Lessons Learned 	
2.2 Architectural Diagrams	Submitted case studies must include architectural diagrams. <ul style="list-style-type: none"> ▪ Architectural diagrams must detail how the solution interacts with the AWS Cloud; specifically, what AWS tools and services are used in the solution ▪ Diagrams must also include evidence of AWS best practices for architecture and security Note: <i>For best practice on how to build an accepted Architecture Diagram See Here</i>	
2.3 Partner Practice Landing Page	APN Partner must have an AWS-branded microsite that is related to or specific to AWS service. <ul style="list-style-type: none"> ▪ Evidence must be provided in the form of a public reference to the APN Partner's solution, practice, or service-specific webpages. ▪ APN Partner microsite must be accessible from APN Partner home page; Home page is not acceptable as a microsite. Note: <i>For best practice on how to build an accepted Landing Page See Here</i>	
3.0 APN Partner Self-Assessment		
3.1 Program Validation Checklist Self-Assessment	APN Partner must conduct a self-assessment against designation requirements using the AWS Service Delivery Validation Checklist. <ul style="list-style-type: none"> ▪ APN Partner must complete all sections of the checklist. ▪ Completed self-assessment must be emailed to aws-service-delivery@amazon.com, using the following convention for the email subject line: "[APN Partner Name], Service Delivery Partner Completed Self-Assessment." 	

AWS Service Delivery Program Requirements

In preparation for the validation process, Partners should become familiar with the items outlined in this document, and prepare objective evidence, including but not limited to: prepared demonstration to show capabilities, process documentation, and/or actual customer examples.

Amazon Aurora Approval Criteria

The AWS Service Delivery Program is guided by [AWS best practices](#) and [Well Architected Framework](#).

Amazon Aurora Validation Checklist	Detailed Description of Evidence	Met Y/N
<p>1.0 Case Study Requirements</p> <p>Two customer references per database engine are provided. APN Partner may apply for more than one engine, but must provide two customer references per engine to receive a designation:</p> <ul style="list-style-type: none"> ▪ Amazon Aurora MySQL ▪ Amazon Aurora PostgreSQL <p>For engagements where the customer will have responsibility for managing the database, details on guidance that was provided to the customer in order to enable them to meet their Recovery Time Objective (RTO) and Recovery Point Objective (RPO). This guidance would be specific to the Amazon Aurora engine and should include the following:</p> <ul style="list-style-type: none"> ▪ How to use the point in time restore functionality that is provided by Amazon RDS. ▪ How to recover in the same AWS region and in a different AWS region. This would involve techniques such as creating snapshots and replicating snapshots. ▪ Use cases where snapshots and point and time recovery can be used. This would include, but not be limited to: <ul style="list-style-type: none"> ○ Recovery due to unavailability of a region. ○ Recovery and research due to operator error and application bugs. ○ Recovery due to unexpected data loss or corruption. ▪ How to perform periodic testing of the customer’s recovery/restore process to confirm that processes and procedures are known and proved to work in advance of actually needing them. <p>For engagements where the partner will be managing the customer’s database, provide details on what is in place to enable the customer to meet their Recovery Time Objective (RTO) and Recovery Point Objective (RPO). This recovery plan would be specific to the Amazon Aurora engine and should include the following:</p> <ul style="list-style-type: none"> ▪ Use of the Amazon RDS point in time restore functionality. ▪ Techniques being used to recover in the same AWS region or a different AWS region, based on customer requirement. ▪ Outline how testing of the recovery and restore process is done and how frequently this testing is performed for each customer. <p>For engagements where the customer will have responsibility for managing the database, details on customer enablement to allow</p>	<p>Customer implementation description or documentation</p> <p>Customer implementation description, documentation, and proof.</p>	

the customer to use and evolve the solution over time. This customer enablement information should include at least the following evidence:

- Training and reference materials provided to the customer to ensure that they understand the Amazon Aurora engine and the Amazon RDS service.
- Training and reference materials provided to the customer to demonstrate how they are able to operate and evolve their Amazon Aurora cluster(s) to meet their current and future requirements.
- Training and reference materials that show the customer how to measure the performance of their Amazon Aurora cluster(s) as well as how to evaluate the current cost of their cluster(s).
- Training and reference materials that show the customer how to adjust their Amazon Aurora cluster(s) based on performance and cost measurements.

Details of a properly sized Amazon Aurora architecture based on the customer’s pre-Aurora architecture or requirements for a new application being developed. The purpose of this information is to show the ability to match up customer requirements and usage patterns with what can be done in an Amazon Aurora cluster.

Details should include:

Existing Architecture:

- Pre-Aurora architecture and what its performance and availability characteristics were.
- High Availability and Recovery model of the existing architecture.
- Shortcomings of the existing architecture.
- Final Amazon Aurora architecture, how it lines up against the previous architecture, and how it meets or exceeds the current customer implementation in regards to cost, operations, and performance.

New Application:

- Requirements for the new application and what the database needs were. Details should include: availability needs, regional or multi-regional access needs, transactions per second, database initial size, and expected growth rate of the size of the database.
- Final Amazon Aurora architecture and details on how the final architecture lines up with the application requirements.

Details on what the customer was provided in relation to implementing database security related to their Amazon Aurora cluster(s). This would include such items as:

- How to implement password policies for their database (password strength, rotation policies, etc.)
- How to implement secure password storage, retrieval, and rotation for human and application access to the database.
- How to capture and analyze available log files for potential security events related to their database.
- Encryption options for data at rest or at the column level.
- Relevant AWS security features:
 - Identity and Access Management configuration.
 - Configuration of the VPC and overall network containing the database and applications interacting with the database.

	<ul style="list-style-type: none"> o Access controls to the database and database subnets via security groups and Access Control Lists. <p>Details on what assistance was provided to the customer on how their application could be architected to take advantage of functionality that exists within the Amazon Aurora Engine. This would include, but is not limited to:</p> <ul style="list-style-type: none"> ▪ Changing the application to utilize concurrent connects to the Amazon Aurora Cluster ▪ Changing their application to utilize the different read and write endpoints of the Amazon Aurora cluster. ▪ Changing of other applications or processes to utilize the read endpoint of the Amazon Aurora cluster to enable reporting or data warehouse operations. 		
<p>2.0 AWS Service Requirements</p>	<p>2.1 Solution Characteristics: Each submitted customer reference includes and describes in detail the approach, implementation, and customer acceptance testing for at least one the following use cases. While at least one use-case is needed, please highlight all the use cases that applied to the customer reference.</p> <ul style="list-style-type: none"> ▪ Cross-regional replication or another cross-regional DR setup. ▪ Use of a master instance and one or more read replicas with the primary fail over read replica located in a different availability zone from the master instance. ▪ Use of AutoScaling for Read Replicas. ▪ Use of encryption in the database (either server side or client side). ▪ A migration to Amazon Aurora from a different engine. ▪ Utilization of read replica failovers with different priorities to enable automated failover to the correct read replica. ▪ Zero downtime, automated re-sizing of master and read replica instances based on performance metrics being exhibited on those instances. Enabling the customer to maintain adequate performance and a cost-effective architecture. 		
	<p>2.2 Solution Complexity Each submitted customer reference is for a database at least 25GB in size. Please provide the following characteristics of the database:</p> <ul style="list-style-type: none"> ▪ Initial size of the database. ▪ Expected yearly growth of the database. ▪ Number of tables in the database. ▪ Anticipated number of concurrent requests during peak use of the database. ▪ Anticipated percentage of read operations against the entire database during peak usage. ▪ Anticipated percentage of write operations against the entire database during peak usage. 		

AWS Resources

Title	Description
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How to Build a Practice Landing Page	Provides guidance how to build a Practice/solution page that will meet the prerequisites of the Program.
How to Write a Public Case Study	Provides guidance how to build a Public Customer Case Study that will meet the prerequisites of the Program.
How to Build an Architecture Diagram	Provides guidance how to build an architecture diagram that will meet the prerequisites of the Program.
Amazon Aurora User Guide	What is Amazon Aurora?
Amazon Aurora Best Practices Amazon Aurora Whitepaper – Getting Started Amazon Aurora Migration Handbook Amazon Aurora Performance Assessment	Amazon Aurora Best Practices and Assessment Handbooks.

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