

AWS DevOps Competency Consulting Partner Submission

Summary Report

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Contracting Technical Writer
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Engineers at AND.digital collaborated to respond to the requirements of the AWS Competency Program, to achieve recognition as an APN Partner demonstrating technical proficiency and proven customer success in delivering specialized APN Partner solutions.

A comprehensive response was composed to the AWS DevOps Competency Consulting Partner Validation Checklist to apply for recognition of AND.digital's AWS Competency.

This document outlines the structure, contents and location of the completed work immediately prior to submission.

Contributors were Adam King, Alex Detesan, Ben Mawson, Greg Dowmont, Jamie Shields, Stuart Jones.

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Structure

The AWS Competency Bid follows the structure outlined in the latest iteration of the AWS DevOps Competency Consulting Partner Validation Checklist (August 2020 – 2.0).

The submission comprises the four principal parts enumerated in the checklist:

1. Common APN Partner Practice Requirements
2. DevOps Practice Requirements
3. Common Customer Example Requirements
4. DevOps Customer Example Requirements

Each of the four parts is divided by subject, requiring demonstration of understanding and process implementation of a range of technologies and practices.

The document was co-written using Atlassian Confluence with a strict peer review and approval process in place.

The top-level page replicated all competency checklist headings with contributor and reviewer names and status (to write, in draft, under review and approved).

This page was updated by all contributors as content status changes were made.

Example:

The screenshot shows a Confluence page with a red header bar containing the AND Digital logo and navigation links. The left sidebar shows a tree view of the page structure. The main content area is titled 'Internally developed content' and '1. Common APN Partner Practice Requirements'. It contains a table with four columns: Subject, Contributor, Status, and Completed Section.

| Subject | Contributor | Status | Completed Section |
|---|----------------|----------|--|
| 1.1 DevOps Practice Overview <ul style="list-style-type: none">POV-001 - Customer PresentationPOV-002 - Maintaining AWS ExpertisePOV-003 - APN Partner Solution SellingPOV-004 - AWS Sales EngagementPOV-005 - Training for Internal Personnel | @Jamie Shields | APPROVED | 1.1 DevOps Practice Overview 11 Dec 2020, 05:4... |
| 1.2 APN Partner Delivery Model <ul style="list-style-type: none">PRJ-001 - Expected OutcomesPRJ-002 - ScopePRJ-003 - Statement of WorkPRJ-004 - Project ManagerPRJ-005 - Change Management | @Jamie Shields | APPROVED | 1.2 APN Partner Delivery Model 17 Dec 2020, 04:2... |
| 1.3 Customer Satisfaction <ul style="list-style-type: none">CSN-001 - Customer Acceptance for ProjectsCSN-002 - Customer Satisfaction Aligned to Project Milestones | | | |



Upon approval of all content of a given part (or sub-section if a large single document), the content was extracted to plain text and reformatted using an approved AND.digital template (identical to that used here).

The .pages file was then converted to a .pdf file and uploaded as an attachment embedded in the top-level checklist Confluence page, as shown above.

Final review by contributors verified faithful reproduction of the approved content, and consistency in template styling and the use of US English throughout (as used by AWS).

Contents

The submission's four parts break down into demonstration of understanding and implementation of technologies and practices where the responses given were as follows:

Section 1: Common APN Partner Practice Requirements

Comprises:

a slide presentation with company overview and summary of proven AWS DevOps capabilities (Keynote).

and a written response demonstrating how AND.digital

1. Maintain AWS Expertise
2. Sell Solutions
3. Conduct AWS Sales Engagement
4. Provide Internal Training

Section 2: DevOps Practice Requirements

Comprises:

1. Organizational Change: How AND.digital approach making an assessment of customer internal organization and methodology for making organizational change recommendations to maximise the benefits of migration to AWS

2. Infrastructure as Code: Management, provisioning and updating of AWS resources; templated infrastructure provisioning for repeatable deployments; management of configuration and infrastructure; processes and methodologies for managing AWS resources

3. CI/CD: Processes for build, test and deployment based on defined models that support provisioning, managing and scaling servers

4. Version Control: Source control systems

5. Microservices: Methodologies to build and deploy containerized or serverless microservices architectures

6. Monitoring and Logging: Methodologies for cloud and network monitoring, debugging, activity and API usage tracking

- 7. Platform as a Service:** Orchestration of deployments including capacity provisioning, load balancing, auto-scaling and application health monitoring
- 8. Security:** Demonstration of advanced understanding and effective communication to customers of AWS security processes and technologies

Section 3: Common Customer Example Requirements

Comprises four documents, each relating to work with a single customer, containing:

- 1. Architecture diagram,** depicting overall design and deployment of the AWS solution
- 2. AWS Account Configuration:** securing of root user, contact information controls, enablement of AWS CloudTrail
- 3. Operational Excellence:** definition, collection and analysis of metrics on health of each workload component and provision to customer of comprehensive guidance on operational event detection based on these metrics
- 4.-6. Security:** identity and access management (granting of least privilege, use of appropriate credentials), networking (security of groups and data), IT Operations (secure management of cryptographic keys)
- 7. AWS API Integration:** use of official SDKs to access AWS APIs
- 8. Reliability:** automated infrastructure change using scripting tools, definition of availability requirements, dynamic adaptation to changes in demand
- 9. Cost Optimization:** demonstration of TCO analysis and cost modeling to run the solution in the customer's environment.

The four customer solutions relate to AND's work with NBrown Retail, Co-Op Health, People's Postcode Lottery and Covea Insurance.

Section 4: DevOps Customer Example Requirements

Comprises use cases demonstrating transformation from traditional development to AWS Cloud-based Infrastructure as Code along with business and technical process transformation.

Two use cases were submitted, relating to AND's work with NBrown Retail and Co-Op Health, comprising problems encountered, solutions implemented and impacts enjoyed by customer business as a result, including continued transformation.

Appendices

Appendix A:

Example Statement of Work referenced in several parts of the main submission

Appendix 1:

Example Best Practice documents used internally and with customer organizations

Appendix 2:

Example Client Onboarding documentation

Appendix 3

Documents showing processes and methodologies used with customers

3.1: NBrown Retail

3.2: Co-Op Health

Location

The AWS DevOps competency bid submission is by upload of all responses with self-assessment spreadsheet confirming required responses have been made. The submission comprises the approved content in attachments at:

<https://anddigitaltransformation.atlassian.net/wiki/spaces/CLOUD/pages/865632684/AWS+DevOps+Competency>

File list:

1.1 DevOps Practice Overview POV-001 - Customer Presentation.key

1. Common APN Partner Practice Requirements.pdf

2.DevOps Practice Requirements.pdf

3.Common-Customer-Example-Requirements_1_NBrown.pdf

3.Common-Customer-Example-Requirements_2_Co-Op.pdf

3.Common-Customer-Example-Requirements_3_Postcode-Lottery.pdf

3.Common-Customer-Example-Requirements_4_Covea.pdf

4.DevOps-Customer-Example-Requirements.pdf

AND-Overview_Jan-2020.pdf

Appendix 1.1 BP DevSecOps 5 pillars.pdf

Appendix 1.2 BP Right Sizing.pdf

Appendix 1.3_Example-Platform-Roadmap_NBrown.pdf

Appendix 2.1 Onboarding DevSecOps.pdf

Appendix 2.2 Onboarding Gitlab CI.pdf

Appendix 2.3 Onboarding Terraform 0.12.pdf

Appendix 3.1.1 Service Pod Database Backups.pdf

Appendix 3.1.2 Envoy upgrade process.pdf

Appendix 3.1.3 Service Pods Blue Green Deployments.pdf

Appendix 3.1.4 Consul Cluster Build Process.pdf

Appendix 3.1.5 Service Management Process.pdf

Appendix 3.1.6 Structure of CI-CD Pipeline.pdf

Appendix 3.1.7 Service Mesh NFRs.pdf

Appendix 3.1.8 PORT-869 Initial Cost Estimate.pdf

Appendix 3.2.1 Service-management.pdf

Appendix 3.2.2 RDS-backup-process.pdf

Appendix 3.2.3 IAM-keys.pdf

Appendix A.SoW.pdf

N.B.

All content as edited (Apple Pages) was also uploaded as a compressed folder to the above-linked Confluence page, except where the edit comprised only creation of title page and imposition of template style upon pre-existing (pdf or png format) content.