SCOPE OF WORK

SOW NO:4 EFFECTIVE DATE: 5/1/21

1. Detailed description of project to be accomplished by Cloud Operations Engineer: Cloud Operations will provide <Engineer name> for this SOW in support of OPADM Ascension Delivery project

Background

OPADM dev team is working on their AWS migration plan (here). Looking at their phase 2, OPADM dev is building the orange box, Prod Ops QA's the data at the on-prem Hadoop cluster (blue box) and finally the DEXTR owned client delivery is the last box. The phase 3 diagram shows an all-AWS process but doesn't answer what is replacing the on-prem Hadoop cluster. CCOE may need to provide some guidance on this process between the 3 teams as we are moving large amounts of data in and out of AWS before we even get to the point of sending the client the data.

This SOW assumes the files to be sent to the client are already in a s3 that DEXTR can access (ideally in the client outgoing folders in the AWS SFTP).

Problem

We need a solution to deliver OPADM data to clients from AWS. I have divided this into 3 portions. The most time sensitive part is the Ascension s3 to Google Cloud Storage. This needs to handle moving large files monthly from our environment to their Google Cloud. They have recommended using a tool called gsutil to accomplish this (this isn't a requirement though). The second part and third parts are options to handle delivering files to the rest of our OPADM consumers. These models should be configurable by the DEXTR team to add and remove clients.

Requirements

- 1. Ascension OPADM data delivery
 - Send data from s3 to Ascension's Google Cloud Storage
 - o Currently at 2TB of data (and growing), sent monthly
 - o Send email notifications to the Client on success/error
 - o Logging (tie into where we are logging the other DEXTR AWS functions)
- 2. 'Client Delivery' model utilizing outgoing folders on the AWS SFTP
 - o Files dropped in the outgoing folder either:
 - Trigger a job to Send to a client's SFTP
 - Picked up from the automation running on the Client VMs
 - Send alerts on success/error
 - o Logging (tie into where we are logging the other DEXTR AWS functions)
- 3. 'Client Pick Up' model utilizing outgoing folders on the AWS SFTP

- o Auto delete files after download or X days
- o Send alerts when files are ready to pick up
- o Send alerts when untouched files will be removed
- o Logging (tie into where we are logging the other DEXTR AWS functions)

Existing process scripts for reference: opadm github

2. Deliverables to be produced by Cloud Operations Engineer

List all deliverables to be produced by Cloud Operations Engineer and describe them with as much detail as possible

- 1. Ascension model: AWS architecture design
- 2. Client delivery model: AWS architecture design
- 3. Client pick up model: AWS architecture design
- **3.** Estimated date of completion for each deliverable
 - 1. 4/28/21
 - 2. 5/15/21
 - 3. 5/15/21
- **4.** Acceptance criteria for each deliverable
- 1,2,3. Diagram could be delivered to an AWS engineer to build. Solution is cost effective, reliable, and fast. All above requirements met.

5. Time spent on meetings

Describe the different meetings the Cloud Operations engineer will need to attend and the duration

1. We have a recurring check in on Tuesday morning and Thursday morning that can be used for questions and updates.

SOW Created By: Derek Roberts

SOW Created Date: 4/14/21

SOW Accepted By:

SOW Accepted Date: