**Ancestry.com Migration Plan for Oracle EBS**

* Migrate from OMCS to OCI

**Introduction**

There are multiple ways to migrate Ancestry’s EBS environments to OCI. Arisant’s plan considered the use several of Oracle best practices approaches but based on the circumstances (engaging with Oracle OMCS) we are proposing a low-tech approach that is has been proven many times. The options that were available were:

**Option 1 – EBS Cloud Manager**: Arisant has had mixed success with Oracle’s EBS Cloud Manager tool for migrations. With this in mind, we see that as a risky approach as it may require extra involvement from the OMCS team in order to get it to work properly – therefore, we are not choosing this option.

**Option2 – Oracle Data Guard**: Arisant has leveraged Oracle Data Guard for migrations with good success. However, this requires some setups and configuration changes along with tight coordination with the OMCS team. We feel this extra level of involvement with OMCS is not realistic based on the situation.

**Option 3** – **Level-0 backup with Archive Logs**: This approach is very low tech, but is also very straight-forward. We recommend this approach as it appears to be the most fool-proof and offers the lowest amount of OMCS involvement to complete the setups and forwarding of log-files. Therefore, we recommend this approach.

The following steps document the plan for migrating Ancestry’s EBS to OCI. There are steps required by OMCS and Arisant and there will be some coordination between the parties that is required to ensure that the migration is successful.

**Oracle Fast Connect**

Arisant recommends that Oracle Fast Connect is established between OMCS and the Ancestry OCI environment. Ancestry has acquired the OCI cloud services and will pay for a dedicated line (if required\*) between OMCS and OCI. This will require involvement from the OMCS team to get this established and available to Ancestry and Arisant.

\* If Required –Ancestry’s OMCS data(located in Austin) and Ancestry’s OCI (located in the Phoenix data center)

**EBS OCI Migration**

**Prerequisites for OMCS** (These steps need to be executed in advance by OMCS)

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| **Database Tier**   1. Provide current version and PSU level 2. Provide output from $ORACLE\_HOME/OPatch/opatch lsinventory 3. Provide DBID |
| **Application Tier**   1. Apply required patches as documented in **Requirements for Oracle E-Business Suite on Oracle Cloud Infrastructure (Doc ID 2438928.1)**  * The patches listed in [Document 406982.1](https://support.oracle.com/epmos/faces/DocumentDisplay?parent=DOCUMENT&sourceId=2438928.1&id=406982.1), *Cloning Oracle Applications Release 12 with Rapid Clone* * [Patch 10427234:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=10427234:R12.TXK.B) * [Patch 22025575:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=22025575:R12.TXK.B) * [Patch 21370116:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=21370116:R12.TXK.B) * The following container database/pluggable database patches   + [Patch 24931031:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=24931031:R12.TXK.B)   + [Patch 23759922:R12.AD.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=23759922:R12.AD.B)   + [Patch 25694785:R12.AD.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=25694785:R12.AD.B)   + [Patch 23760008:R12.FND.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=23760008:R12.FND.B)   + [Patch 26660672:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=26660672:R12.TXK.B)   + [Patch 28601093:R12.TXK.B](https://support.oracle.com/epmos/faces/ui/patch/PatchDetail.jspx?parent=DOCUMENT&sourceId=2438928.1&patchId=28601093:R12.TXK.B)  1. Provide logs from each patch 2. Run admkappsutil.pl as the application owner (e.g. applmgr) 3. Provide the output from running admkappsutil.pl 4. Run adpreclone.pl as the application owner 5. Provide the output from running adpreclone.pl |

**Prerequisites for Arisant:** (These steps need to be executed in advance by Arisant)

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| **OCI**  Create credentials for OMCS to use for uploading to Object Storage  Provide the following details:   * User Name * User Auth Token * Cloud Service Endpoint * User OCID * Fingerprint * Tenancy OCID * Region * Tenant Name * Compartment OCID |

**First migration - steps for OMCS** (Copy of Ancestry PROD to a DEV environment)

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| **Database Tier**   1. Perform RMAN full or level 0 backup (include database, archive logs, spfile, and current controlfile) – to OCI Object Storage using the Cloud backup module 2. If TDE is in use, tar up the TDE wallet and upload to OCI Object Storage |
| **Application Tier**   1. Run admkappsutil.pl as the application owner (e.g. applmgr) 2. Run adpreclone.pl as the application owner 3. As root, create a (or multiple) tar (compressed) file of:   $APPL\_TOP  $COMMON\_TOP  $ORACLE\_HOME  $IAS\_ORACLE\_HOME  Ensure this includes all custom module directories   1. Upload to OCI Object Storage |
| **Credentials**  Provide the following credentials:  DB: APPS, sys, system  Application: sysadmin  Also, if TDE is enabled, provide the TDE wallet and wallet password |

**Subsequent migration – production dry run - Steps for OMCS** (Copy of Ancestry PROD to Pre-PROD)

* + Production dry run may be run multiple times to perfect the approach and timings

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| **Database Tier**   1. Enable force logging to ensure we don’t introduce logical corruption. 2. Perform RMAN full or level 0 backup (include database, archive logs, spfile, and current controlfile) – to OCI Object Storage using the Cloud backup module 3. If TDE is in use, tar up the TDE wallet and upload to OCI Object Storage 4. Continue to provide archivelog backups – at a minimum daily, more often is also fine – going to OCI object storage 5. If needed, force logging could be turned back off after the dry run. |
| **Application Tier**   1. Run admkappsutil.pl as the application owner (e.g. applmgr) 2. Run adpreclone.pl as the application owner 3. As root, create a (or multiple) tar (compressed) file of:   $APPL\_TOP  $COMMON\_TOP  $ORACLE\_HOME  $IAS\_ORACLE\_HOME  Ensure this includes all custom module directories   1. Upload to OCI Object Storage |
| **Credentials**  Provide the following credentials separately:  DB: APPS, sys, system  Application: sysadmin  Also, if TDE is enabled, provide the TDE wallet password |

**Final migration – Production cutover – Steps for OMCS & Arisant** (Copy of Ancestry PROD to PROD)

Based on results from the initial migrations, a final cutover plan will be developed and shared with OMCS. This plan will coordinate the steps of the overall migration approach and will include the sequencing, estimated timing, and responsible party for each step.