

## Upload Process

<https://campus.barracuda.com/doc/86543030/>

On services start, the ArchiveOne Migrate to Message Archiver service reads the System\_Migration.ini. If restarting after a service crash, the INI file settings will indicate a job should be restarted.

1. User configures job in the ArchiveOne Migrate to BMA console.
2. The ArchiveOne Migrate to Message Archiver service counts all items in the repository to give an estimate total number of items to process:

Logging in: \\localhost\Add-ins\AOnePol\logs\MigrateBMAService\<date\_time>

```
2017-07-24 14:45:50.1489 4: GetRepositoryItemCount() - Determined that repository Year_2016 has 17 items
```

1. For the first repository in the job, counts all .msg files in all .zip files of the defined directory for the repository's archived data. The count of .msg files is done by reading the .zip header. This gives an estimated total number of items in the repository.
  2. This total count is stored in memory, but written out to disk when the service stops/starts so can be loaded back into memory.
3. The ArchiveOne Migrate to Message Archiver service opens a connection to the C2CAOneConfig database in preparation for processing.

```
2017-07-24 14:45:50.1802 4: Opening DB connection for uploading
```

4. The ArchiveOne Migrate to Message Archiver service performs a search against the repository index to get a list of items for migration. It uses the ArchiveOne BMA Service to do this work. MigrateBMAService.log shows the overview (the detail of this work is in the ArchiveOne BMA Service tracing):

```
2017-07-24 14:45:50.2114 4: Starting searching into repository 'Year_2016'
```

```
2017-07-24 14:45:50.3677 4: Created temporary repository 'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279' and temp index directory
```

```
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
```

```
2017-07-24 14:45:50.3677 4: Processing all 4 partitions from repository 'Year_2016'
```

```
2017-07-24 14:45:50.4145 4: Starting search in repository 'Year_2016' and partition file '1\SERVER5_P160603110937_0000.ali' which is 1 of 4
```

1. The ArchiveOne BMA Service counts all the partitions from all master files in the repository.

Logging in: \\localhost\Add-ins\AOnePol\logs\AOneBMAService\<date\_time>\IntegrationFramework

```
24 14:45:50 779341 Retrieving extended files from master file
'E:\Repositories\Year_2016\Index\MasterFile.ali'
24 14:45:50 782128 ValidateMasterFile - Starting to validate
'E:\Repositories\Year_2016\Index\MasterFile.ali'
24 14:45:50 784532 Master appears to be valid, containing 4
partitions
24 14:45:50 786979 GetPartitionsFromRepository got 4
partition files for repository 'Year_2016'
```

2. The ArchiveOne BMA Service creates a temporary repository. The temporary repository uses the original data directory, but creates a new folder to use for index data.

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\\IntegrationFramework

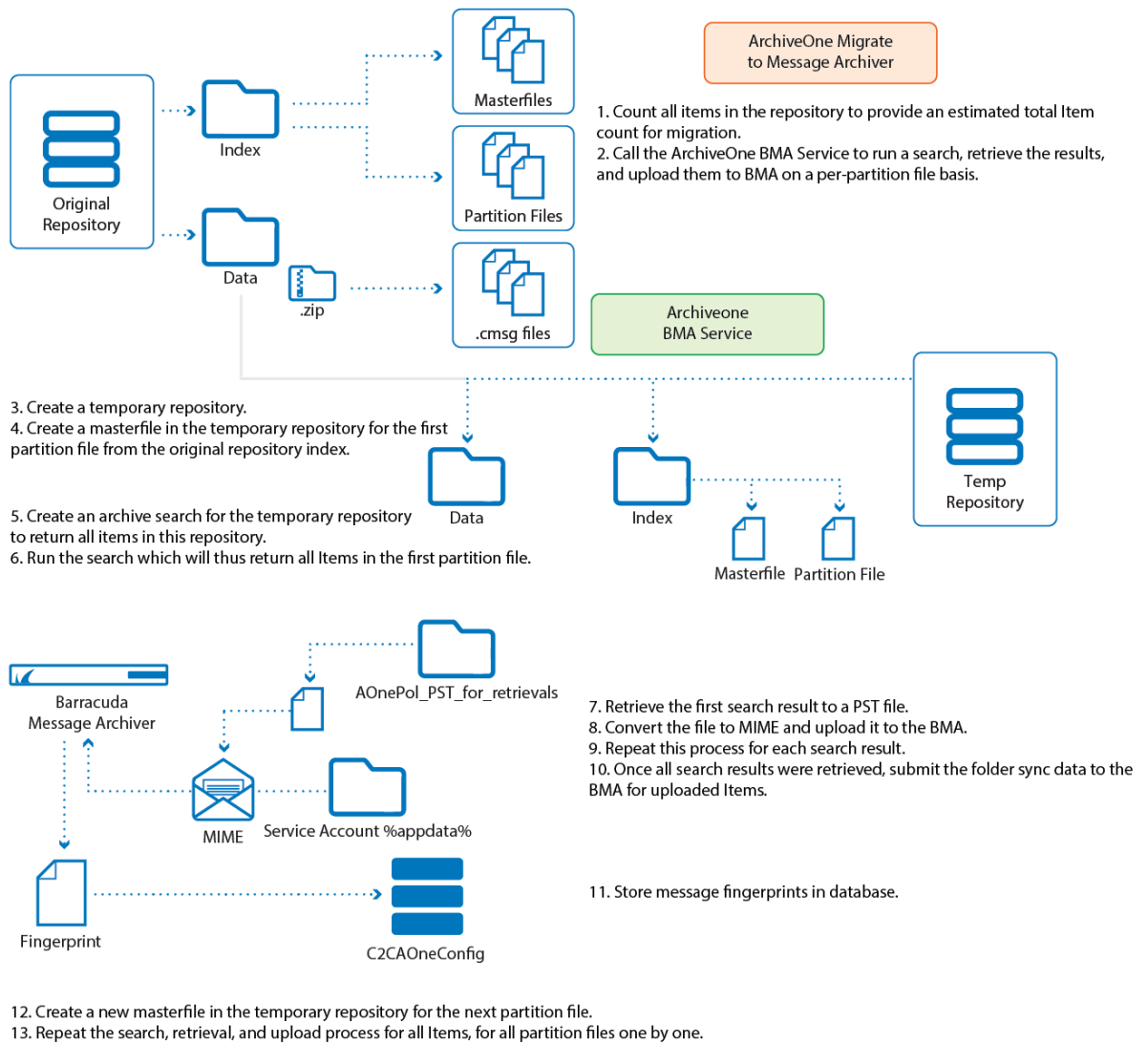
```
24 14:45:50 791808 *TraceFromClient:(IntegrationFramework) Called
RepositoryManager.CreateRepository for
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
24 14:45:50 805323 PolRepCreate called for a 'Repository' called
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
24 14:45:50 817856 PutNameIntoList not found Repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279',
adding it
24 14:45:50 821712 PolRepCreate succeeded
```

3. The ArchiveOne BMA Service writes one Masterfile per partition file into the temporary repository index directory. The original partition files are used in situ; only new Masterfiles are written into the temporary repository index folder. This way a corrupt partition file can easily be identified and skipped if it causes a failure during the search as only partition file is searched at a time.

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\\IntegrationFramework

```
24 14:45:50 942398 Rebuilding master
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\MasterFile.ali' from 1 extended files
24 14:45:50 956361 CreateMasterFileForOnePartition created
master file for repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
containing partition file '..\1\SERVER5_P160603110937_0000.ali'
```



4. The ArchiveOne BMA Service deletes the archive search BMAMigrationSearch (if it exists) and then creates an archive search with this name for all messages in the temporary repository.

Logging in: \\localhost\Add-ins\AOnePol\logs\AOneBMAService\\IntegrationFramework

```

24 14:45:50 960644 *TraceFromClient:(IntegrationFramework) Called
SearchManager.DeleteSearchIfExists for 'BMAMigrationSearch'
24 14:45:50 965957 *TraceFromClient:(IntegrationFramework)
SearchManager.DeleteSearchIfExists the requested search does not
exist
24 14:45:50 969034 *TraceFromClient:(IntegrationFramework) Called
SearchManager.CreateSearch for 'BMAMigrationSearch'
24 14:45:50 973034 PolRepCreate called for a 'Search' called
'BMAMigrationSearch'
24 14:45:50 975154 CArchiveCriteria::SaveCriteria called for
'BMAMigrationSearch'
    
```

```
24 14:45:50 979996    PolRepCreate succeeded
24 14:45:50 982483    *TraceFromClient:(IntegrationFramework)
SearchManager.CreateSearch succeeded
24 14:45:50 986680    PolRepAddToProperty called for a 'Search'
called 'BMAMigrationSearch', property 'Repository' adding value
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
24 14:45:50 989137    CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 992353    CArchiveCriteria::SaveCriteria called for
'BMAMigrationSearch'
24 14:45:50 997090    PolRepAddToProperty succeeded
24 14:45:50 999818    *TraceFromClient:(IntegrationFramework)
AddRepository for repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
returned status PolRepOK
24 14:45:50 003129    PolRepSetProp called for a 'Search' called
'BMAMigrationSearch', property 'SearchDeleted' value '0'
24 14:45:50 005244    CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 008369    CArchiveCriteria::SaveCriteria called for
'BMAMigrationSearch'
24 14:45:50 014975    PolRepSetProp succeeded
24 14:45:50 023073    *TraceFromClient:(IntegrationFramework)
SetPropertyValue for 'SearchDeleted' returned status PolRepOK
24 14:45:50 025522    PolRepSetProp called for a 'Search' called
'BMAMigrationSearch', property 'SearchExpired' value '0'
24 14:45:50 027583    CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 031120    CArchiveCriteria::SaveCriteria called for
'BMAMigrationSearch'
24 14:45:50 035881    PolRepSetProp succeeded
24 14:45:50 038452    *TraceFromClient:(IntegrationFramework)
SetPropertyValue for 'SearchExpired' returned status PolRepOK
24 14:45:50 040837    PolRepSetProp called for a 'Search' called
'BMAMigrationSearch', property 'MatchIfAllCriteriaMatch' value '1'
24 14:45:50 043130    CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 046738    CArchiveCriteria::SaveCriteria called for
'BMAMigrationSearch'
24 14:45:50 052658    PolRepSetProp succeeded
24 14:45:50 055273    *TraceFromClient:(IntegrationFramework)
SetPropertyValue for 'MatchIfAllCriteriaMatch' returned status
PolRepOK
```

5. The ArchiveOne BMA Service runs the search for the first Masterfile so it only gets back a total count of items one partition file at a time.

```
Logging: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<>date_time>\AdminSearch\BMAMigrationSearch

24 14:45:50 116703 *** INFO:Starting:A user application using ID
77ac428 is starting a search called 'BMAMigrationSearch'
24 14:45:50 120724
CAMComplianceServer::SearchIndexWithCommentCount is being called by
'AWESOME\ArchiveOneAdminS5'
24 14:45:50 122906 CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 138846 *** INFO:SearchIndex called, user gave comment
'comment'
24 14:45:50 141357 CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 145310 ParseUnicodeString: input=' ' output=''
24 14:45:50 148101 *** INFO:Searching search 'BMAMigrationSearch'
- details are:
24 14:45:50 150134 *** INFO:Criteria: Search in all messages
24 14:45:50 152130 *** INFO:Where: Search in all archived
mailboxes and public folders
24 14:45:50 154218 *** INFO:Status: No status criteria
24 14:45:50 156753 *** INFO:Repository: Search repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
24 14:45:50 158991 *** INFO:Others: Show all matched results
...
24 14:45:50 235884 CArchiveCriteria::LoadCriteria called for
'BMAMigrationSearch'
24 14:45:50 316099 MetaSearchIndex::Search searching repos
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
...
24 14:45:51 793320 DetermineSearchMasterFilename::Copying
index master
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\MasterFile.ali' to search temp
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\TempSearch_MasterFile.ali'
24 14:45:51 796141 CSearchIndex::OpenIndex - Opening master index
file
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\TempSearch_MasterFile.ali'
24 14:45:51 800122 IsMasterFileEmpty checking size of master
file
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\TempSearch_MasterFile.ali'
24 14:45:51 802622 file size of
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
```

```

7-9286-e57af08f9279\TempSearch_MasterFile.ali' is 4848
24 14:45:51 804952 Performing search - Ranked string='NULL'
Boolean string='( #0x4d65737361676544656c697665727954696d65.0 -
4294967295# )'
24 14:45:51 807523 SODPopulateVector found 7 records in repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279' code
'Repository [TempReposForMigration_76e1fd40-776c-4537-9286-
e57af08f9279] Index num 0'
24 14:45:51 809653 TraceMasterCodes dump of all mastercodes
(index files):
24 14:45:51 811843 Counts Cumulat MasterCode
24 14:45:51 814210 7 7 Repository
[TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279] Index
num 0
24 14:45:51 816582 MetaSearchIndex::Search OUT, returning
0:ACSS_OK
24 14:45:51 818751 CAMComplianceServer::SearchIndex returning
count 7
24 14:45:51 820781 *** INFO:CompletedSucessfully:A user
application using ID 77ac428 has completed a search called
'BMAMigrationSearch'

```

- For each search, the ArchiveOne BMA Service retrieves the search results. It creates a new profile. It creates a PST file named BMAMigrationFolder.pst in the AOnePol\_PST\_for\_retrievals share and adds this new PST file to the profile. Logging: \\localhost\Add-ins\AOnePol\logs\AOneBMAService\\AdminSearch\ClientConnection

```

24 14:45:51 838810 MAPISession::MAPISession
24 14:45:51 840870 RetrievalSession::Open in
24 14:45:51 847156 RetrievalSession::OpenPstRetrievalSession
in
24 14:45:51 850100 RetrievalSession::OpenPstRetrievalSessionPath to open session on
pst
'E:\Programs\Barracuda\ArchiveOne\ServerData\AOnePol_PST_for_retrie
vals\BMAMigrationFolder.pst'
24 14:45:51 852228 MAPISession::NewPSTSession called to add
PST
'E:\Programs\Barracuda\ArchiveOne\ServerData\AOnePol_PST_for_retrie
vals\BMAMigrationFolder.pst' to profile 'AOnePolRet_400000000'

```

Data will be retrieved from the archive to a PST file prior to uploading to the BMA as the .csmg data needs to be converted to MIME.

- The search returns the data values (.zip file name, .csmg file name, etc.) and converts the stored information in the index about the .zip file location at the point of archiving into the current .zip file location for each item (in case the repository has been moved), ready for

retrieval.

Logging: \\localhost\Add-  
ins\AOnePol\logs\AOneBMAService\

```
24 14:45:52 652695 MetaSearchIndex::GetMessages OUT got 7 results
24 14:45:52 654734 SearchIndexGetResultsInChunks got 7
results
24 14:45:52 663661 CAMComplianceServer::GetIniVars for repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
24 14:45:52 665684 CAMComplianceServer::GetIniVars storage
is not using a storage manager - archive at
'E:\Repositories\Year_2016\Archive' index at
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279'
24 14:45:52 667720 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 669761 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 672390 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 674453 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 677081 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 679104 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 681181 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 683197 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
```

```
24 14:45:52 685264 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 687751 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 689934 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 692913 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 695363 CAMComplianceServer::GetState ZipFilePath
'E:\Repositories\Year_2016\Archive\', ZipFileName
'C:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 697738 CAMComplianceServer::GetState final
ZipFilePath
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:52 699831 SearchIndexGetResults in chunk mode, safearray
is 100 but we only have 7 so filling the rest with blanks
24 14:45:52 702243 *** INFO:CompletedSucessfully:A user
application using ID 77ac428 has completed retrieval of search
results
```

5. The ArchiveOne BMA Service now starts the retrieval process to upload the item to the BMA.
    1. First, the ArchiveOne BMA Service ensures the folder and store information are present in the C2CAOneConfig database tables.
      - If the store is for a live mailbox and the data is not already in the database, the ArchiveOne BMA Service will log in to the mailbox and seed the list of folders in the live mailbox. If the mailbox is no longer live, a fake store blob is generated. If a folder for an archived item is no longer present in the live mailbox, a fake store blob is generated.
- Logging: \\localhost\Add-  
ins\AOnePol\logs\AOneBMAService\<<date\_time>\AdminSearch\ClientConnection).

```
24 14:45:52 710114
CAMComplianceServer::MigrateToBMAOneItem called for mailbox
'/o=Awesome/ou=Exchange Administrative Group
(FYDIBOHF23SPDLT)/cn=Recipients/cn=User Name' store 'User Name'
repository 'Year_2016' zip
```



```
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P0
00000.zip' cmsg '00739f_d.cmsg' path 'User Name\Deleted Items'
24 14:45:52 713165
BMAFolderHierarchyCollector::ConnectToStore called for
MailboxDN '/o=awesome/ou=exchange administrative group
(fydibohf23spdlt)/cn=recipients/cn=User Name' Name 'User Name'
type Mailbox
24 14:45:52 720394          C2CDatabase::RunQueryReturnRecords
running (truncated) SQL 'SELECT count(*) as c FROM sys.tables
WHERE type = 'U' AND name='Items''
24 14:45:52 723604          C2CDatabase::RunQueryGetInt got value
1
24 14:45:52 725700          C2CDatabase::GetCount for command
'SELECT count(*) as c FROM sys.tables WHERE type = 'U' AND
name='Items'' returning count of '1'
24 14:45:52 727755          CheckTables is not considering
whether upgrade of tables is required as this is a non-primary
service
24 14:45:52 732316          C2CDatabase::RunQueryReturnRecords
running (truncated) SQL 'SELECT [Id], [SyncBlob] FROM
BMAMigrationSyncStores WHERE
[MailboxDN]='/o=awesome/ou=exchange administrative group
(fydibohf23spdlt)/cn=recipients/cn=User Name' AND
[StoreName]='User Name' AND [StoreType]=0'
24 14:45:52 736263
BMAFolderHierarchyCollector::ConnectToStore failed to find
mailbox, log in and generate data
24 14:45:52 754668
MigrateToBMAFolderIterator::ProcessThisMailbox called for DN
'/o=awesome/ou=exchange administrative group
(fydibohf23spdlt)/cn=recipients/cn=User Name'
...
24 14:45:54 558629 MigrateToBMAFolderIterator::FoundFolder
called for folder path '\\' name 'Tasks'
24 14:45:54 564232
BMAFolderHierarchyCollector::AddFolderToHierarchy called for
name 'Tasks' path '\\'
24 14:45:54 569622          C2CDatabase::RunQueryReturnRecords
running (truncated) SQL 'INSERT INTO BMAMigrationSyncFolders
([Mailbox_Id], [FolderPath], [SyncBlob], [IsRoot]) VALUES (6,
N'\Tasks',
N'{"folder":{"content_count":0,"name":"Tasks","sync_key":"53f97
aa8e91ea74f850ab2dd7c1b2b830000006cb287"},"job":{"id":"21cc08fc
28b4c74fbc682768c60a27e"},"owner":{"email":"ajack@awesome.com"
,"name":"","sid":"0105000000000005150000003a93b2701a447f7997e38
dc768040000"},"store":{"name":"","record_key":"d4d7977463234244
```

```

9748d36c9b87ee96", "type": "ExchangeOther"}}
', 0) '
24 14:45:54 572639      C2CDatabase::RunQuery return TRUE
24 14:45:54 583689      BMA: 07/24/17 14:45:54 TRACE:
Querying folder ACL
24 14:45:54 591255      TIME_TRACING:IterateFolders time to
call FoundFolder=0.033015
24 14:45:54 599883      FolderIterator release root folder
ref count 0
24 14:45:54 602426
MigrateToBMAFolderIterator::ProcessThisMailbox -
ProcessOneMailbox succeeded, now uploading
24 14:45:54 604452
BMAFolderHierarchyCollector::SendToBMA sending...
24 14:45:54 100347     BMAFolderHierarchyCollector::SendToBMA
sent 6402 bytes of hierarchy to BMA

```

2. For each item, the .msg file is extracted from the .zip file.

```

24 14:45:54 118138
BMAFolderHierarchyCollector::GetFolderFromHierarchy found folder in
database
24 14:45:54 120279      EnsureFolderExists called for
'C:\ProgramData\Barracuda\ArchiveOne\MigrateBMATemp'
24 14:45:54 147107     CAMComplianceServer::GetIniVars for repository
'Year_2016'
24 14:45:54 149663     CAMComplianceServer::GetIniVars storage
is not using a storage manager - archive at
'E:\Repositories\Year_2016\Archive' index at
'E:\Repositories\Year_2016\Index'
24 14:45:54 152960     EnsureFolderExists called for
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_890
_RM'
24 14:45:54 155479     *** INFO:zip file name is
'E:\Repositories\Year_2016\Archive\1\A1P160603110937_SERVER5_P00000
0.zip'
24 14:45:54 157873     *** INFO:file name is '00739f_d.msg'
24 14:45:54 160446     *** INFO:unzip location is
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_890
_RM'
24 14:45:54 203806     GetMSGFileFromZipAndMsg succeeded,
MSGfile='E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzi
pTemp_890_RM\1053d395_00739f_d.msg'

```

3. This extracted item is then retrieved to the BMAMigrationFolder.pst in the AOnePol\_PST\_for\_retrievals share.

```
24 14:45:54 206977      RetrievalSession::CheckSizeOfPST
MaxPSTRetrievalSize is 1024 MB
24 14:45:54 231355    *** INFO:Creating new message in '\1'
```

- A MIME item is then staged in the ArchiveOne service account's temp data directory (C:\Users\ARCHIV~4\AppData\Local\Temp\\_) as an .eml.gz file and uploaded to the BMA.

```
24 14:45:54 364060      BMA: 07/24/17 14:45:54 TRACE: Entered
CMapiItem::Export
24 14:45:54 366370      BMA: 07/24/17 14:45:54 TRACE: Exporting
transport headers
24 14:45:54 368595      BMA: Received: from SERVER2.awesome.com
([fe80::d59d:8682:70ea:1a4]) by
SERVER2.awesome.com ([fe80::d59d:8682:70ea:1a4%13]) with mapi id
...
24 14:45:55 532592      BMA: 07/24/17 14:45:55 TRACE: Creating
MIME message
24 14:45:55 535720      BMA: 07/24/17 14:45:55 TRACE: Entered
CMapiMessage::ExportBodyHeaders
24 14:45:55 537871      BMA: 07/24/17 14:45:55 TRACE: Entered
CMapiItem::ExportBarracudaEnvelopeHeader
24 14:45:55 540266      BMA: 07/24/17 14:45:55 TRACE: Message
staged at:
C:\Users\ARCHIV~4\AppData\Local\Temp\08270b95976c0a4f954cba98cf63a2
89.eml.gz
```

- If successful, the BMA responds with the fingerprint of the item. This is stored in memory at this stage.

```
24 14:45:55 149731      BMA: 07/24/17 14:45:55 Stored message
with fingerprint:
272acebe0569667361fe686e23cc63727acabc3851f1712fdf060ed8ad4b7529b8b
fe5951453817854
24 14:45:55 152636      BMA: 07/24/17 14:45:55 TRACE: Entered
CMapiItem::LoadEnvelopeParticipants
24 14:45:55 155262      BMAMigrate::MigrateItem succeeded for
message with CMSG '00739f_d.cmsg'
```

- The process is repeated for all items from the search results. Once all items have been processed, the folder sync data (which has been stored in memory) is now uploaded to the BMA. The data is staged in the C:\ProgramData\Barracuda\ArchiveOne\MigrateBMATemp directory.

```
24 14:45:57 334404    *** INFO:CompletedSucessfully:A user
application using ID 77ac428 has completed retrieval of search
results
24 14:45:57 338064      CAMComplianceServer::MigrateToBMAEndSession
24 14:45:57 340163      BMAFolderContentCollector::SendToBMA
```

```

sending...
24 14:45:57 461589      BMAFolderContentCollector::SendToBMA sent
1364 bytes of content to BMA
24 14:45:57 463358      BMAFolderContentCollector::SendToBMA
sending...
24 14:45:58 656700      BMAFolderContentCollector::SendToBMA sent
1076 bytes of content to BMA
24 14:45:58 665966      BMAFolderContentCollector::SendToBMA
sending...
24 14:45:58 837571      BMAFolderContentCollector::SendToBMA sent
1070 bytes of content to BMA
24 14:45:58 839721      BMAFolderHierarchyCollector::SendToBMA
sending...
24 14:45:58 841824      BMA: 07/24/17 14:45:58 No folder data to
queue
24 14:45:58 844179      BMAFolderHierarchyCollector::SendToBMA sent 0
bytes of hierarchy to BMA
24 14:45:58 847610      RetrievalSession::Close in

```

7. Now all items in the partition have been uploaded along with the folder sync data, the fingerprint data of the uploaded messages are written to the **BMAMigration** table in the C2CAOneConfig database. This prevents data being uploaded again.
8. The ArchiveOne Migrate to Message Archiver service orchestrates the creation of the search for the next partition file and retrieves its data until all partition files are completed:

Logging in: \\localhost\Add-ins\AOnePol\logs\MigrateToBMAService\

```

2017-07-24 14:45:58.5552  4: Starting search in repository
'Year_2016' and partition file '1\SERVER5_P160224113150_0000.ali'
which is 2 of 4
2017-07-24 14:45:59.9927  4: MigrateBMAThread search got an
initial estimate (no filtering) of 4 items in repository
'Year_2016' partition '1\SERVER5_P160224113150_0000.ali'
2017-07-24 14:46:00.8989  4: Migrated message '28d450a0-6a41-4b7f-
b788-a13983be990c' with subject 'd' to BMA
2017-07-24 14:46:01.3052  4: Migrated message
'805055ab-0b51-4382-9ac5-b72e21caf947' with subject 'd' to BMA
2017-07-24 14:46:01.5865  4: Migrated message '7937818e-4bf2-4bc7-
a92a-2d066fa09a92' with subject 'd' to BMA
2017-07-24 14:46:01.8677  4: Migrated message
'6b8d78d3-3aab-438b-828f-603aef16f1cc' with subject 'd' to BMA
2017-07-24 14:46:02.6333  4: Starting search in repository
'Year_2016' and partition file '1\SERVER5_P160126141819_0000.ali'
which is 3 of 4
2017-07-24 14:46:03.7583  4: MigrateBMAThread search got an
initial estimate (no filtering) of 2 items in repository

```

```
'Year_2016' partition '1\SERVER5_P160126141819_0000.ali'
2017-07-24 14:46:04.3052 4: Migrated message '89012d64-d8f8-460f-
ad4c-7d6955fbc317' with subject 'd' to BMA
2017-07-24 14:46:04.5865 4: Migrated message
'05384abb-0a99-475a-812a-7cb212f683a4' with subject 'd' to BMA
2017-07-24 14:46:05.1802 4: Starting search in repository
'Year_2016' and partition file '1\SERVER5_P160224114302_0000.ali'
which is 4 of 4
2017-07-24 14:46:06.3521 4: MigrateBMAThread search got an
initial estimate (no filtering) of 4 items in repository
'Year_2016' partition '1\SERVER5_P160224114302_0000.ali'
2017-07-24 14:46:06.9614 4: Migrated message
'9229c538-4cd0-46ed-8518-bbc4f928dc6c' with subject 'd' to BMA
2017-07-24 14:46:07.2909 4: Migrated message
'095db2c7-05cc-40f5-9b3e-fd65493c1fe9' with subject 'd' to BMA
2017-07-24 14:46:07.5865 4: Migrated message
'881bfde3-9f8b-4bf5-8caf-a8dd086402d3' with subject 'd' to BMA
2017-07-24 14:46:07.8521 4: Migrated message '886596a2-5d47-4436-
abba-0bce80282b94' with subject 'd' to BMA
2017-07-24 14:46:08.7271 4: Completed searching into repository
'Year_2016'
```

As before the ArchiveOne BMA Service is used to rebuild the Masterfile for the next partition, recreate the archive search and run it, rebuild the Masterfile again and so on for the remaining partition files in the repository index:

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<<date\_time>\IntegrationFramework

```
24 14:45:58 075522 Rebuilding master
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\MasterFile.ali' from 1 extended files
24 14:45:58 085942 CreateMasterFileForOnePartition created
master file for repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
containing partition file '..\1\SERVER5_P160224113150_0000.ali'
24 14:46:02 152627 Rebuilding master
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\MasterFile.ali' from 1 extended files
24 14:46:02 174616 CreateMasterFileForOnePartition created
master file for repository
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'
containing partition file '..\1\SERVER5_P160126141819_0000.ali'
24 14:46:05 698852 Rebuilding master
'E:\Repositories\Year_2016\Index\TempForMigration_76e1fd40-776c-453
7-9286-e57af08f9279\MasterFile.ali' from 1 extended files
24 14:46:05 708907 CreateMasterFileForOnePartition created
```

```
master file for repository  
'TempReposForMigration_76e1fd40-776c-4537-9286-e57af08f9279'  
containing partition file '..\1\SERVER5_P160224114302_0000.ali'
```

```
Logging in: \\localhost\Add-  
ins\AOnePol\logs\AOneBMAService\<<date_time>\AdminSearch\BMAMigrationSearch
```

```
24 14:45:58 260908 *** INFO:Searching search 'BMAMigrationSearch'  
- details are:  
24 14:46:02 352780 *** INFO:Searching search 'BMAMigrationSearch'  
- details are:  
24 14:46:05 882100 *** INFO:Searching search 'BMAMigrationSearch'  
- details are:
```

## Figures

1. bma\_migrate-01.png

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