

Stubbing

<https://campus.barracuda.com/doc/86543028/>

Options are:

- None
 - Convert ArchiveOne message links to BMA stubs
 - If an ArchiveOne stub has a corresponding item on the BMA, then the ArchiveOne stub is unarchived regardless. The unarchived message is then considered for conversion to a BMA stub. Conversion to a BMA stub will only occur if the item is a normal email (message class is IPM.Note) and either:
 - The message has an attachment; or
 - The message body is more than 10K in size
- Delete message links
- Unarchive

Bear in mind that the policies to convert/delete/unarchive run only against mailboxes enabled for processing in the Mailbox Manager. If the customer has disabled mailboxes, these mailboxes will not be considered for stub conversion.

Convert ArchiveOne Stubs to BMA Stubs

1. After upload phase completed, ArchiveOne Migrate to Message Archiver service calls ArchiveOne BMA Service to run the stub converter policy.

Logging in: \\localhost\Add-

ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log

```
2017-08-11 10:09:50.5696      8: Opening DB connection to update stub count
2017-08-11 10:09:50.5696      8: Stub policy starting
```

2. ArchiveOne BMA Service creates a policy called StubConverter for all mailboxes (primary and archive mailbox) to find any ArchiveOne stubs with the action to convert them to BMA stubs.

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\IntegrationFramework

```
11 10:09:50 939588  PolRepCreate called for a 'Policy' called
'StubConverter'
11 10:09:50 941683  CPolicyCriteria::SaveCriteria called for
'StubConverter'
```

3. ArchiveOne BMA Service then runs this policy.

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\IntegrationFramework

```
11 10:09:51 815796 *TraceFromClient:(IntegrationFramework) Completed
PolicyManager.StartPolicy - True
```

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.l
og

```
11 10:09:52 405463 Running policy on demand
11 10:09:52 408843 *** INFO:Applying the following policies to all
mailboxes and folders
11 10:09:52 411274 *** INFO:Processing policy 'StubConverter' - details
are:
11 10:09:52 413352 *** INFO:Criteria: Message is an ArchiveOne link
11 10:09:52 415439 *** INFO:Action: Convert stubs to BMA format
11 10:09:52 417942 *** INFO:Where: Search in all mailboxes (mailbox
including archive )
11 10:09:52 421741 *** INFO:When: No scheduled processing
11 10:09:52 423889 *** INFO:Others: Mailbox Processing
```

- Each mailbox thread searches the mailbox for ArchiveOne stubs. If one is found, it's Index ID is searched for in the database to find the BMA fingerprint (if it exists).

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>

```
11 10:39:00 997497 *** INFO:Processing message 'd'
11 10:39:00 007961 PolicyMTIterator::FoundMessage got message 'd'
size 2286 from 'User Name' to 'User Name'
11 10:39:00 038733 TIME_TRACING:PolicyMTIterator time to get
basic message data=0.061171
11 10:39:00 084552 PolicyMTIterator::FoundMessage - Message
matches all conditionals
11 10:39:00 147220 C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID = '8AD9547C-
FE7D-4CB9-B623-95A574F05378''
```

- If the ArchiveOne stub has a corresponding BMA fingerprint, the message is unarchived.

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```
11 10:39:04 161016 UnarchiveArch2 in
11 10:39:04 176908 UnarchiveOneMessage called with
repos='Year_2016',
zip='E:\Repositories\Year_2016\Archive\1\A1P170811103741_SERVER5_P000001
=0.zip', cmsg='000009_d.cmsg'
11 10:39:05 235997 *TraceFromClient:Connected from ArchiveOne
Enterprise Service (BMA Processing Service) Unarchive on 'SERVER5'
11 10:39:05 257082 CAMComplianceServer::GetIniVars for repository
'Year_2016'
```

```

11 10:39:05 259880      CAMComplianceServer::GetIniVars storage is not
using a storage manager - archive at 'E:\Repositories\Year_2016\Archive'
index at 'E:\Repositories\Year_2016\Index'
11 10:39:05 263102  CAMComplianceServer::GetMessageToFolder called for
'000009_d.cmsg' in
'E:\Repositories\Year_2016\Archive\1\A1P170811103741_SERVER5_P000001=0.z
ip'
11 10:39:05 283255  CAMComplianceServer::GetMessageToFolder skipping
FindMessage
11 10:39:05 286078      EnsureFolderExists called for
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1ba4'
11 10:39:05 311281      UNZIP
ZipFilename=[E:\Repositories\Year_2016\Archive\1\A1P170811103741_SERVER5
_P000001=0.zip]
11 10:39:05 314410      UNZIP
tempdir=[E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_
1ba4]
11 10:39:05 325728      UNZIP QuotedFilename=[000009_d.cmsg]
11 10:39:05 328059      *** INFO:unzipping file
'E:\Repositories\Year_2016\Archive\1\A1P170811103741_SERVER5_P000001=0.z
ip' to
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1ba4'
11 10:39:05 383355      *** INFO:Creating new message in '\Inbox'
11 10:39:05 417217      CAMComplianceServer::DeleteAllFiles
E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1ba4
11 10:39:05 431152  CAMComplianceServer::GetMessageToFolder returning
entryid
'00000000d4d79774632342449748d36c9b87ee96070053f97aa8e91ea74f850ab2dd7c1
b2b830000006cb279000053f97aa8e91ea74f850ab2dd7c1b2b830000331887040000'
11 10:39:05 480308      UnarchiveOneMessage completed with status
0:ACSS_OK

```

6. Once unarchived, the message is then stubbed by the BMA (if appropriate):

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```

11 10:39:05 495986      ConvertStub called for fingerprint
'272acebe0569667361fe686e23cc63727acabc3851f1712fd060ed8ad4b7529b8bfe59
51453817854'
...
11 14:24:08 009845      BMA: 08/11/17 14:24:08 Stubbed body from
length of 19.3K to 767B (18.6K redaction)
If the message is not suitable for archiving (e.g. due to size), then it
will be skipped e.g.:
11 10:39:05 961090      BMA: 08/11/17 10:39:05 Length of HTML body
(352B) does not exceed limit (10.0K)

```

```
11 10:39:05 978086      BMA: 08/11/17 10:39:05 EXCEPTION: Throwing
exception at Stubbing.cpp, Barracuda::MapiApp::VerifyCanStubMessage,
line 47: Message has no attachments and body is too small to stub
11 10:39:05 982010      BMASubConverter::ConvertStub CAUGHT
Barracuda::CRuntimeError: Message has no attachments and body is too
small to stub
```

7. After the stubbing is completed, the status in the database is updated to mark it as complete (and thus not used in estimations for stubbing actions pending):

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```
11 10:39:05 989285      C2CDatabase::RunQuery running (truncated) SQL
'UPDATE BMAMigration Set State = N'Completed' WHERE IndexID =
'5226F6E8-5BE5-4072-9DCA-9F8354998BF0' '
```

8. If the ArchiveOne stub does not have a corresponding fingerprint, the stub is skipped and left in the mailbox.

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```
11 10:10:34 712222    *** INFO:Processing message 'ArchiveOne Enterprise
Results'
11 10:10:34 714368      PolicyMTIterator::FoundMessage got message
'ArchiveOne Enterprise Results' size 4352 from 'ArchiveOneAdminNA' to
'User Name'
11 10:10:34 716464      TIME_TRACING:PolicyMTIterator time to get
basic message data=0.005786
11 10:10:34 733232      PolicyMTIterator::FoundMessage - Message
matches all conditionals
11 10:10:34 739357      C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID =
'87963AD6-6109-4316-8949-50E8D6894391' '
11 10:10:34 741942      PolicyMTIterator::FoundMessage item not in
database
```

9. After all threads have finished, the policy completes.

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.l
og

```
11 10:11:54 001794    *** INFO:Starting report status from the end of the
run
11 10:11:54 004567      *** INFO:ArchiveOne Enterprise (BMA Processing
Service) results on completion:
11 10:11:54 006730      *** INFO:Policies run: "StubConverter"
11 10:11:54 008830      *** INFO:The scan took 2 minutes, 2 seconds
11 10:11:54 010884      *** INFO:ArchiveOne Enterprise (BMA Processing
```

```
Service) started at 10:09:51 on Friday 11 August, 2017
11 10:11:54 013130    *** INFO:Completed processing of 7 mailboxes, 266
folders, 2787 messages, 2677 attachments
11 10:11:54 016115    *** INFO:Found 2787 search matches (including
message links)
```

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log
```

```
2017-08-11 10:11:55.1636    8: Migration thread completed successfully
2017-08-11 10:11:55.1792    8: Status on completion:
Migration has completed successfully.
```

Delete Message Links

1. After the upload phase is completed, ArchiveOne Migrate to Message Archiver service calls ArchiveOne BMA Service to run the stub converter policy, which will delete any ArchiveOne stubs.

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log
```

```
2017-08-11 14:59:56.6636    50: Opening DB connection to update stub count
2017-08-11 14:59:56.6636    50: Stub policy starting
```

2. ArchiveOne BMA Service creates a policy called StubConverter for all mailboxes (primary and archive mailbox) to find any ArchiveOne stubs with the action to delete them.

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

```
11 14:59:56 177489  PolRepCreate called for a 'Policy' called
'SubConverter'
11 14:59:56 179736  CPolicyCriteria::SaveCriteria called for
'SubConverter'
```

3. ArchiveOne BMA Service then runs this policy (the action is still to 'convert stubs' though this will in fact delete them).

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

```
11 14:59:57 958107  *TraceFromClient:(IntegrationFramework) Completed
PolicyManager.StartPolicy - True
```

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.l
og
```

```

11 14:59:58 564538 *** INFO:Applying the following policies to all
mailboxes and folders
11 14:59:58 566685 *** INFO:Processing policy 'StubConverter' - details
are:
11 14:59:58 568766 *** INFO:Criteria: Message is an ArchiveOne link
11 14:59:58 570834 *** INFO:Action: Convert stubs to BMA format
11 14:59:58 572984 *** INFO:Where: Search in all mailboxes (mailbox
including archive )
11 14:59:58 575039 *** INFO:When: No scheduled processing
11 14:59:58 577536 *** INFO:Others: Mailbox Processing

```

4. Any message links that are found in the database (and thus have a fingerprint because they have been successfully uploaded to the BMA) are deleted and the status in the database marked as completed:

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```

11 15:00:06 536018 C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID = '30869F0C-
E60F-4AF4-B7B0-3F430CC5AF1E' '
11 15:00:06 555101 C2CDatabase::RunQuery running (truncated) SQL
'UPDATE BMAMigration Set State = N'Completed' WHERE IndexID = '30869F0C-
E60F-4AF4-B7B0-3F430CC5AF1E' '

```

5. Messages links that are not found in the database are skipped and left in the mailbox:

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```

11 15:00:06 246049 C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID =
'D99C584C-5A09-4A74-B976-105D08642C13' '
11 15:00:06 258168 PolicyMTIterator::FoundMessage item not in
database

```

6. After all threads have finished, the policy completes.

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.log

```

11 15:02:08 211479 *** INFO:Starting report status from the end of the
run
11 15:02:08 214721 *** INFO:ArchiveOne Enterprise (BMA Processing
Service) results on completion:
11 15:02:08 216985 *** INFO:Policies run: "StubConverter"
11 15:02:08 219021 *** INFO:The scan took 2 minutes, 10 seconds
11 15:02:08 221065 *** INFO:ArchiveOne Enterprise (BMA Processing
Service) started at 14:59:57 on Friday 11 August, 2017
11 15:02:08 223181 *** INFO:Completed processing of 7 mailboxes, 266

```

```
folders, 2794 messages, 2680 attachments
11 15:02:08 225233 *** INFO:Found 2794 search matches (including
message links)
```

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log
```

```
2017-08-11 15:02:10.6197 50: Migration thread completed successfully
2017-08-11 15:02:10.6326 50: Status on completion:
Migration has completed successfully.
```

Unarchive

1. After the upload phase is completed, ArchiveOne Migrate to Message Archiver service calls ArchiveOne BMA Service to run the stub converter policy, which will unarchive any ArchiveOne stubs.

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log
```

```
2017-08-11 15:53:30.3105 53: Opening DB connection to update stub count
2017-08-11 15:53:30.3105 53: Stub policy starting
```

2. ArchiveOne BMA Service creates a policy called StubConverter for all mailboxes (primary and archive mailbox) to find any ArchiveOne stubs with the action to unarchive them.

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

```
11 15:53:30 072544 *TraceFromClient:(IntegrationFramework) Called
PolicyManager.StartPolicy - 'StubConverter'
```

3. ArchiveOne BMA Service then runs this policy (the action is still to 'convert stubs' though this will in fact unarchive them).

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

```
11 15:53:31 568242 *TraceFromClient:(IntegrationFramework) Completed
PolicyManager.StartPolicy - True
```

```
Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.l
og
```

```
11 15:53:31 200952 *** INFO:Applying the following policies to all
mailboxes and folders
11 15:53:31 203150 *** INFO:Processing policy 'StubConverter' - details
are:
```



```
11 15:53:31 205205 *** INFO:Criteria: Message is an ArchiveOne link
11 15:53:31 207615 *** INFO:Action: Convert stubs to BMA format
11 15:53:31 209489 *** INFO:Where: Search in all mailboxes (mailbox
including archive )
11 15:53:31 211524 *** INFO:When: No scheduled processing
11 15:53:31 213579 *** INFO:Others: Mailbox Processing
```

4. Any message links that are found in the database (and thus have a fingerprint because they have been successfully uploaded to the BMA) are unarchived and the status in the database marked as completed:

Logging in: \\localhost\Add-

ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```
11 15:53:38 858941 C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID =
'39FA6E4B-3319-4F35-93EA-56671DE5C486''
11 15:53:38 871218 UnarchiveArch2 in
11 15:53:38 876629 UnarchiveOneMessage called with
repos='Year_2017',
zip='E:\Repositories\Year_2017\Archive\1\A1P170811155257_SERVER5_P000042=0.zip',
cmsg='000010__ArchiveOne_Enterprise_Deployment_Analyzer__Succe.s.cmsg'
11 15:53:38 928204 *TraceFromClient:Connected from ArchiveOne
Enterprise Service (BMA Processing Service) Unarchive on 'SERVER5'
11 15:53:38 949517 CAMComplianceServer::GetIniVars for repository
'Year_2017'
11 15:53:38 952509 CAMComplianceServer::GetIniVars storage is not
using a storage manager - archive at 'E:\Repositories\Year_2017\Archive'
index at 'E:\Repositories\Year_2017\Index'
11 15:53:38 963270 CAMComplianceServer::GetMessageToFolder called for
'000010__ArchiveOne_Enterprise_Deployment_Analyzer__Succe.s.cmsg' in
'E:\Repositories\Year_2017\Archive\1\A1P170811155257_SERVER5_P000042=0.zip'
11 15:53:38 975687 CAMComplianceServer::GetMessageToFolder skipping
FindMessage
11 15:53:38 979122 EnsureFolderExists called for
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1104'
11 15:53:38 995000 UNZIP
ZipFilename=[E:\Repositories\Year_2017\Archive\1\A1P170811155257_SERVER5_P000042=0.zip]
11 15:53:38 997361 UNZIP
tempdir=[E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1104]
11 15:53:38 999411 UNZIP
QuotedFilename=[000010__ArchiveOne_Enterprise_Deployment_Analyzer__Succe.s.cmsg]
```



```

11 15:53:38 001765 *** INFO:unzipping file
'E:\Repositories\Year_2017\Archive\1\A1P170811155257_SERVER5_P000042=0.zip' to
'E:\Programs\Barracuda\ArchiveOne\ServerData\SERVER5_BUnzipTemp_1104'
11 15:53:38 068084 *** INFO:Creating new message in '\Inbox'
...
11 15:53:39 854174 CAMComplianceServer::GetMessageToFolder returning
entryid
'00000000d4d79774632342449748d36c9b87ee96070053f97aa8e91ea74f850ab2dd7c1
b2b830000006cb279000053f97aa8e91ea74f850ab2dd7c1b2b8300003318870d0000'
11 15:53:39 891245 UnarchiveOneMessage completed with status
0:ACSS_OK
11 15:53:39 895216 UnarchiveArch2 retrieved using supplied
zip/cmsg/repos
11 15:53:39 897605 C2CDatabase::RunQuery running (truncated) SQL
'UPDATE BMAMigration Set State = N'Completed' WHERE IndexID =
'39FA6E4B-3319-4F35-93EA-56671DE5C486'

```

5. Messages links that are not found in the database are skipped and left in the mailbox:

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\

```

11 15:53:40 913558 C2CDatabase::RunQueryReturnRecords running
(truncated) SQL 'SELECT * FROM BMAMigration WHERE IndexID = '6645781A-
FB12-4978-97C2-970F7473D4DA'
11 15:53:40 934329 PolicyMTIterator::FoundMessage item not in
database

```

6. After all threads have finished, the policy completes.

Logging in: \\localhost\Add-
ins\AOnePol\logs\AOneBMAService\<date_time>\PolicyPhase1\<date_time>\Phase1Core_0000.log

```

11 15:55:42 576722 *** INFO:Starting report status from the end of the
run
11 15:55:42 579743 *** INFO:ArchiveOne Enterprise (BMA Processing
Service) results on completion:
11 15:55:42 582123 *** INFO:Policies run: "StubConverter"
11 15:55:42 584145 *** INFO:The scan took 2 minutes, 9 seconds
11 15:55:42 586120 *** INFO:ArchiveOne Enterprise (BMA Processing
Service) started at 15:53:31 on Friday 11 August, 2017
11 15:55:42 588080 *** INFO:Completed processing of 7 mailboxes, 266
folders, 2788 messages, 2680 attachments
11 15:55:42 590071 *** INFO:Found 2788 search matches (including
message links)

```

Logging in: \\localhost\Add-

ins\AOnePol\logs\MigrateBMAService\<date_time>\MigrateBMAService.log

```
2017-08-11 15:55:43.8733 53: Migration thread completed successfully
2017-08-11 15:55:43.9358 53: Status on completion:
Migration has completed successfully.
```

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