Installation instructions

This hotfix replaces existing files and items and should be installed on all CM environments (including any dedicated dispatch servers).

When asked what to do, allow the installation wizard to overwrite any existing files and items.

The following configuration files will be overwritten:

- /App_Config/Include/ListManagement/Sitecore.ListManagement.config
- /App_Config/Include/EmailExperience/Sitecore.EmailExperience.ContentManagementPrimary.config
- /App_Config/Include/EmailExperience/Sitecore.EmailExperience.ContentManagement.config
- /App_Config/Include/EmailExperience/Sitecore.EmailExperience.UI.config
- /App_Config/Include/EmailExperience/Sitecore.EmailExperience.Core.config

After the hotfix has been installed these steps must be taken:

1. Enable /App_Config/Include/ListManagement/Sitecore.ListManagement.DisableListLocking.config.disabled to disable list locking functionality (see the description in the file to understand the implications)
2. If list locking has been disabled, you need to enable the setting EXM.CheckRecipientListsCount in /App_Config/Include/EmailExperience/Sitecore.EmailExperience.ContentManagement.config
3. The following files must be removed/disabled on all but the primary CM server:
   - \App_Config\Include\EmailExperience\Sitecore.EmailExperience.ContentManagementPrimary.config
   - \App_Config\Include\EmailExperience\Sitecore.EmailExperience.UI.config
   - \bin\Sitecore.EmailCampaign.Cm.UI.dll
   - \bin\Sitecore.EmailCampaign.Server ---

Changes included in the hotfix

Sitecore List Manager

Please note that this hotfix provides three different fixes to help address issues when uploading lists.

Import batching (work item 114088)

Use cases: Previously, List Manager uploaded all contacts as a single set to the Marketing Foundation BulkOperationManager. In the event of any disruption during the import process (e.g. a server restart), this was found to result in incomplete loading and a locked list.

Solution: An improvement has been introduced to batch contacts into xDB when importing csv files.

- Default batch size is 1000 contacts, and is configurable if required.
- During testing, memory consumption during the import process has been significantly reduced.

- Import speeds have been improved.
- Import information is now logged.
- User can view progress of importing and indexing by viewing the list task page. E.g. importing 10,000 contacts may initially give a reading of "1,000 out of 4,000 contacts indexed", then upon refresh "3,000 out of 8,000 contacts indexed", etc. until all contacts are imported and indexed.
- Please note that batching of contacts will ensure a more robust import process, however events such as a server restart during importing may still result in an incomplete list.

Disabling of the list locking mechanism (work item 121177)

Use cases:

The list locking mechanism was intended to ensure that contact lists were uploaded, indexed and completed before they were available for use, for example as an email distribution list, or as a source for another contact list. It was also intended to ensure that lists could only be edited by one user at a time to avoid any concurrency issues.

Some Sitecore users may encounter scenarios where multiple changes to a list may be required in short periods of time. For example, during email dispatches where large numbers of list subscriptions or unsubscriptions happen at the same time. In such scenarios, list locking may not be appropriate and developers may prefer to disable this functionality.

For consideration when using List Manager without the list locking mechanism:

- Disabling list locking may lead to inconsistencies in the number of contacts available in a contact list or an EXM dispatch, versus the number of expected contacts, as the list locking mechanism will not be able to prevent the premature usage of a contact list.
- If the list locking mechanism is disabled, a contact list will be available to use in EXM immediately after import, even if most of the contacts have not yet been processed. This may result in an email being sent to a smaller audience than intended. In such scenarios, please check the list count in List Manager before using the list in EXM, to ensure that the list count is as expected before proceeding with an EXM dispatch.
- If the list locking mechanism is disabled, incomplete contact lists will be available to use as sources for other lists. This may result in incomplete child lists. In such scenarios, please check the list count of any source lists, to ensure that the list count is as expected before proceeding with a new list.
- If the list locking mechanism is disabled, incomplete contact lists will editable by multiple users at the same time. This will result in lists that may contain unexpected contacts, if list sources are being changed concurrently while contact associations are being written and indexed. In such scenarios, ensure that your list management processes and user groups are aligned to take into account the potential impact of concurrent edits.

Setting IdentificationLevel on imported contacts (work item 84176)

Use case:

It was found that when importing contacts, the IdentificationLevel was not set as 'known' on the imported contacts. This resulted in incorrect contact merges in scenarios where end users make themselves known on a shared device.

Please note that this discrepancy only occurs when multiple end users imported via List Manager share the same device (i.e. when multiple Sitecore user cookies are present in the same browser). No other data discrepancies have been observed in relation to this bug.

Effects on data:

If two contacts (e.g. "A" and "B") have been imported via List Manager and identify themselves on the site (e.g. by logging in) from a shared device, these contacts would be incorrectly merged in xDB. "A" becomes the successor contact to "B", which loses its contact data.

The list created at the time of import would however still refer to both contacts, as it was created before the merge occurred. Therefore if the list is used in an EXM dispatch, this would result in "A" receiving 2 emails, and "B" not receiving any emails.

The fix contained in this package will resolve the issue and prevent future erroneous merges from occurring between users on shared devices.

Sitecore EXM

Please note that this hotfix provides four different fixes to help address issues.

Impossible to collect bounces/complaints more than one at once (work item 123990)

Use cases:

It is impossible to handle more than one bounce/complain at a time.

Solution:

The hotfix adds a new setting EXM.CheckRecipientListsCount to /App_Config/Include/EmailExperience/Sitecore.EmailExperience.ContentManagement.config.

This setting should be enabled only if list locking has been disabled i.e. if the file /App_Config/Include/ListManagement/Sitecore.ListManagement.DisableListLocking.config is enabled. The EXM.CheckRecipientListsCount setting adds a check when you attempt to send a message. This check will attempt to verify if the recipient lists you have included for the message have been fully processed.

Specifically it checks if the number of actual contacts on the list matches the expected number of contacts on the list.

These numbers will not align if the list is being indexed which happens when contacts have been added or removed from the list. If the numbers do not align, the following message will be shown: "One or more of the included lists are still in the process of being imported. If you send your email campaign now, the recipients that have not yet been imported will not receive your email campaign." You can choose to continue dispatching, in which case the message will only be sent to the current contacts on the list, or you can abort and try again later.

CalculateRecipientCount method causes OutOfMemoryException (work item 115674)

Use cases:

If an EXM message is configured to use a list with a large number of contacts, an OutOfMemory exception might occur.

Solution:

This hotfix drastically improves the performance of how EXM gets the recipient count for a campaign.

Breaking changes:

A constructor of the Sitecore.Modules.EmailCampaign.RecipientManager (Sitecore.EmailCampaign.dll) has been changed:

From: public RecipientManager([NotNull] Item messageInnerItem, [NotNull] EcmFactory factory)

To: public RecipientManager([NotNull] Item messageInnerItem, [NotNull] EcmFactory factory, [NotNull] Sitecore.ListManagement.ContentSearch.ContactListManager contactListManager)

"Send message" is not disabled quick enough (work item 125562)

Use cases:

When dispatch of the message is started, it is possible to click the "Send Message" button more than once. This will trigger multiple dispatches of the same message.

Solution:

The "Send message" button is disabled immediately after it has been clicked.

Sent message CampaignReport does not display stats for emails older than 1 month (work item 115475)

Use cases:

When viewing the report for a campaign, only statistics for the last month is shown.

Solution:

No breaking changes or configuration changes. The hotfix adds a created date property to the message which is used when querying for the reporting data for the campaign, ensuring that all reporting data since the creation of the campaign is returned.

Automatic winner strategy sends email duplicates id test size is 100% (work item 135538)

Use cases:

If automatic winner strategy is chosen for an AB test, and the test size is set to a number that will send the AB test variants to all recipients, e.g. 100%, then the winner task will send the winning variant to all recipients.

Solution:

No breaking changes or configuration changes. The hotfix ensures the message is not moved into SENT state for an AB test message, even if no recipients remain to be processed. This ensures the winning task will not send out duplicate emails.

Several winner selection tasks can be created for campaign if MTA is unavailable (work item 135622)

Use cases:

If an error occur when starting an AB test, e.g. the MTA is unavailable, a winner task will still be created. A task will be created every time the button is clicked, potentially causing duplicate emails.

Solution:

No breaking changes or configuration changes. The hotfix ensures the winner task is not created unless the test successfully started.

"Duplicate email campaign" redirects to report page (work item 135242)

Use cases:

When clicking "Duplicate email campaign" a new campaign is not created and you are redirected to the campaign report page.

Solution:

No breaking changes or configuration changes. The hotfix ensures a new campaign is created.

Message preview in content editor kills performance with a large recipient list (work item 135069)

Use cases:

When opening a message in the Content Editor, the Message Preview takes a very long time to load and allocates a lot of memory.

Solution:

No breaking changes or configuration changes. The hotfix ensures the message preview is considerably faster to load and doesn't allocate as much memory.

Ability to disable email dispatcher on CM server (work item 118712)

Use cases:

A new processor in the DispatchNewsletter pipeline makes it possible to disable dispatch on the primary CM entirely, and wait for the dedicated dispatch server(s) to finish dispatching.

Solution:

In Sitecore.EmailExperience.ContentManagementPrimary.config, disable the SendMessage pipeline processor in the DispatchNewsletter pipeline, and enable the WaitForDispatchToFinish pipeline processor instead. The WaitForDispatchToFinish pipeline processor should only be enabled if you have at least one dedicated dispatch server enabled.

Simplify the message generation process if personalization is not needed (work item 51926)

Use cases:

Instead of making a HTTP request for every contact to generate the message HTML, only a single request is now made and the result is cached in the new EmailCampaign.MessageBodyCache cache. For campaigns with multiple variants, a request is made for each variant. This approach should only be used for campaigns with no server-side personalisation. Token personalisation is still supported.

Solution:

The hotfix adds a new setting EXM.MessageBodyMaxCacheSize to /App_Config/Include/EmailExperience/Sitecore.EmailExperience.Core.config. This can be used to control the message body cache size.

For campaigns that require personalisation beyond token and link personalisation, enable the new "Personalization" checkbox on the Delivery tab.

Test dispatch doesn't work if dispatch is disabled on CM (work item 139767)

Use cases:

When dispatch is disabled on the primary CM and you try to send a test message, the dispatch pipeline never finishes.

Solution:

The hotfix adds a new pipeline processor, SendTestMessage, to the DispatchNewsletter pipeline. This processor should always be enabled, even if dispatch is disabled on the primary CM.

Sent tasks are not retried if custom values cannot be loaded (work item 144991)

Use cases:

When a sent task is processed, the task should be retried if custom values fail to load, but by mistake this does not happen.

Solution:

The HandleMessageEventBase pipeline processors now throw exceptions instead of aborting the pipeline, and the MessageEventBaseTaskProcessor now rethrows those exceptions. This ensures tasks are retried.

OutOfMemoryError on the Solr server during dispatch (work item 161033)

Use cases:

Due to an issue with Solr allocating too much memory, it is necessary to work around this by limiting the number of results.

Solution:

This is resolved by first getting the expected count of recipients and then adding the contact ids to memory in batches.

This also improves several occurrences where the UI would be unresponsive because the recipient count was not performing well.