



# Retain 4.9.2

## User Guide

May 2021

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# Preface

## About Retain

Retain Unified Archiving

- ♦ Archives email and text messages.
- ♦ Catalogs them for search and retrieval.

Retain is not a backup/restore system.

## About This Guide

This is the user documentation for Retain Unified Archiving version 4.9.2.

## For Documentation Feedback

Scroll to the bottom of the online page and enter a User Comment.

## To Join the Retain Idea Exchange

Got an idea for a new Retain feature or enhancement? [Log in to Microfocus.com](#) and join the conversations happening inside the [Retain Idea Exchange](#).

## For Additional Documentation

See the [Micro Focus Knowledge Base](#) website.

## To Contact Technical Support

Browse to [the Micro Focus Support Page \(https://www.microfocus.com/support-and-services/\)](https://www.microfocus.com/support-and-services/) and begin typing *Retain Unified Archiving* in the **Search for a Product** field.

## For Sales

Go to the [Micro Focus Contact page \(https://www.microfocus.com/en-us/contact\)](https://www.microfocus.com/en-us/contact).

## For Professional Services

Contact Micro Focus Professional Services by sending an email to [sales@microfocus.com](mailto:sales@microfocus.com) or calling (877) 772-4450.



# 1 Using Retain's Archives

- ♦ “Logging in to Retain as a Non-admin User” on page 9
- ♦ “Searching in Retain’s Archives” on page 10
- ♦ “Acting On Selected-Items” on page 30
- ♦ “Viewing Message Contents” on page 36
- ♦ “Exporting Search Results to PST or PDF Files” on page 38
- ♦ “Retain Mobile Apps” on page 43

## Logging in to Retain as a Non-admin User

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**NOTE:** Administrators can enable OpenID authentication for Office 365 and GSuite users, enabling them to access their Retain archives by authenticating to their respective messaging platforms.

See the following:

- ♦ **Office 365 Instructions:** “[Providing OpenID Access \(Modern Authentication\) to Users](#)” in *Retain 4.9.2: Archiving Guide*.
  - ♦ **GSuite Instructions:** “[Open ID Tab \(Google Apps module\)](#)” in *Retain 4.9.2: Archiving Guide*.
- 

To access their Retain archives, users must first log in to Retain.

- 1 In a workstation browser, enter the following URL:

`http://retain-server-ip-or-DNS/RetainServer`

For example: `http://192.168.1.121/RetainServer`

- 2 In the Login dialog that displays, enter the username and password for the archived mailbox that you want to access.

For example:

- ♦ If you are accessing a GroupWise mailbox, enter your GroupWise username and password.
- ♦ If you are accessing an Exchange mailbox, enter your AD username and password.
- ♦ If you are accessing a Google mailbox, enter your G Suite username and password.

---

**WARNING:** Because G Suite classifies Retain as a less-secure app, if you attempt to have Retain verify your credentials to access the archive before completing the steps below, Google will deny access, block your account, and send you an email warning of a security risk to your account.

Therefore, before attempting to access the Retain archive, you must do the following:

1. Using a browser, log in to your Google account.
2. While logged in, go to [this page \(https://myaccount.google.com/lesssecureapps\)](https://myaccount.google.com/lesssecureapps).
3. Notice that the **Allow less secure apps:** option status is **OFF** (unless you have previously turned it on).
4. To access your G Suite archive, you must turn the option **ON** using the slider control to the right.

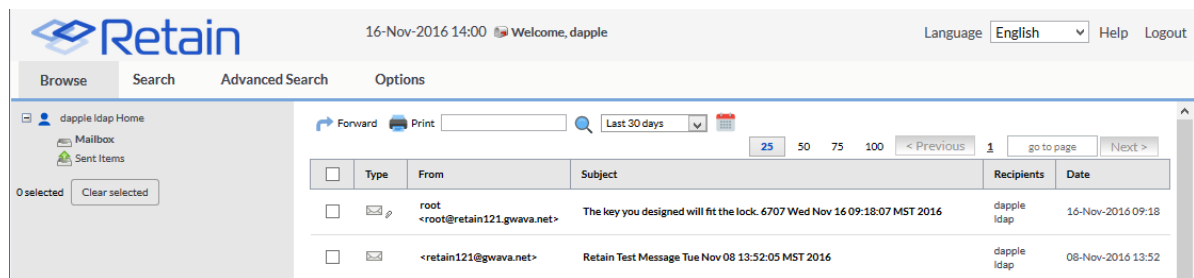
Turning the option on, causes Google to send you an email alert that the setting was changed.

5. Retain actually poses no security threat. However, you can turn the option ON temporarily each time you access the archive if desired.

Retain's browser-based user interface is the core of the information retrieval system for the Retain archive. Administrators, auditors, and users search for what they want and can view, print, export, or forward the results. General users have the right to view their own archive, and will immediately be brought to the Retain mailbox interface, but limited to their own account.

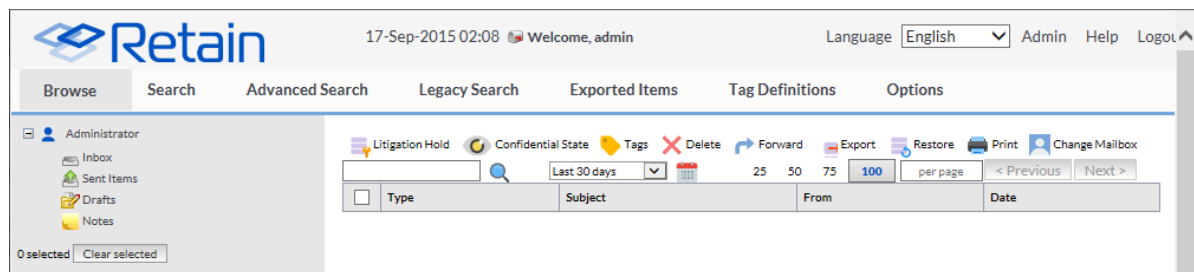
Retain takes a snapshot of each mailbox as an archive is made. Each message is stored where it was found at the time it was archived.

A normal user will be directed to their Retain Mailbox. Users by default have the rights to View and Save attachments, and Forward and Print messages.



If a user has at least one administrative right assigned, the user will see the Retain Management console on login, and must select the 'Search Messages' option from the navigation window in order to access the archive.

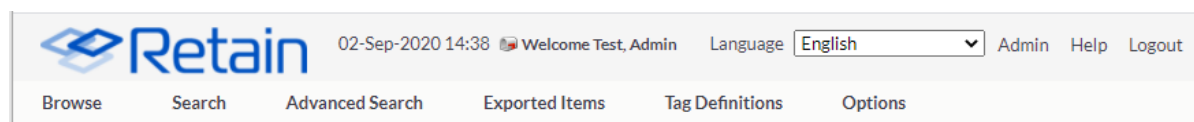
The full administrator interface opens with the following tabs, users may or may not have access to all of these depending on the rights assigned by the admin:



## Searching in Retain's Archives

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#)

**Figure 1-1** The Search Messages page



If you log in as a user with administrative privileges, you see the six tabs documented in the sections that follow. If you log in as a user without administrative privileges, [the Search tab](#) opens and you can search on only the mailboxes where you have access as a regular user.

- ♦ [“The Browse Tab” on page 11](#)
- ♦ [“Using the Search Tab” on page 14](#)
- ♦ [“The Advanced Search Tab” on page 20](#)
- ♦ [“The Exported Items Tab” on page 24](#)
- ♦ [“The Tag Definitions Tab” on page 25](#)
- ♦ [“The Options Tab” on page 26](#)

## The Browse Tab

The Browse tab immediately grants access to the selected mailbox. Individual users will only see their own mailbox, while users with the administrator right to search all mailboxes will have the option to change mailboxes to another user.

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Browse tab](#)

- ♦ [“Exchange” on page 12](#)
- ♦ [“Exchange” on page 12](#)
- ♦ [“GroupWise” on page 13](#)
- ♦ [“Google Apps” on page 13](#)
- ♦ [“Blackberry” on page 13](#)
- ♦ [“CellTrust” on page 13](#)
- ♦ [“Mobile” on page 14](#)

Retain is an archiving solution not a message management system. All items are stored in the location Retain found them in the production system and cannot be moved.

To change to a different mailbox, select the ‘Change Mailbox’ button in archive toolbar. Once clicked, the ‘Select Mailbox’ dialog will open.

**Select Mailbox**

**Criteria**

First Name  begins with

System  Show only users ☐ Show only recently cached items ☐

**Currently Selected**

Stubby User (69890680-14F9-0000-B519-1BB8B426358D)

	First	Last	Mail Server	Mailbox	Dept.	Type	Domain
<input type="radio"/>	amandeepk		SocialMessage	amandeepk@EDIR4		U	SocialMessage
<input type="radio"/>	amandeepk		SocialMessage	amandeepk@NBLOCAL		U	SocialMessage
<input type="radio"/>	amandeepk		SocialMessage	amandeepk@NBLOCAL		U	SocialMessage
<input type="radio"/>	colinb		SocialMessage	colinb@NBLOCAL		U	SocialMessage
<input type="radio"/>	ericm		SocialMessage	ericm@EDIR4		U	SocialMessage
<input type="radio"/>	james		SocialMessage	james@EDIR4		U	SocialMessage
<input type="radio"/>	james		SocialMessage	james@NBLOCAL		U	SocialMessage

The Select Mailbox dialog asks for specific information. Select which mailbox you want to see by selecting its radio button and clicking OK.

When searching for a mailbox, the system of the mailbox must be selected as mailboxes from different systems may have the same user name or criteria. Select which mail system the desired user belongs to, specify any further criteria, or leave the criteria blank to display all possible mailboxes from that system.

If the search results are extensive, the system will have a 'Next' or 'Previous' button at the bottom of the search results window, which displays the next set of results.

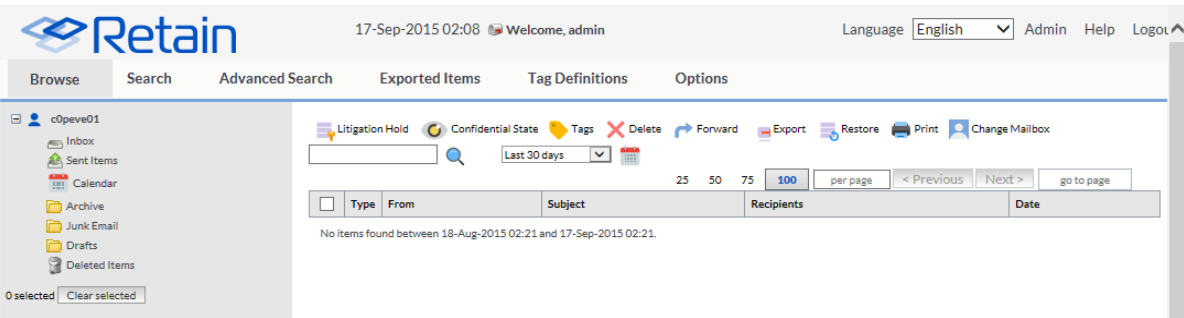
Refine search parameters to reach a manageable search result.

In Retain, you can only browse one mailbox at a time. To search multiple mailboxes simultaneously, use the search function.

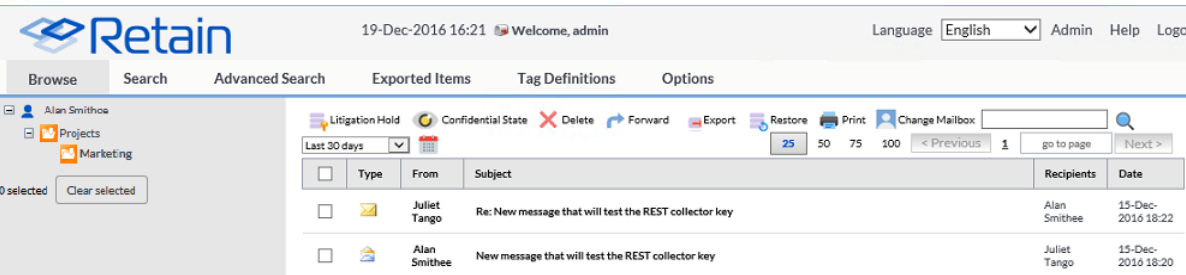
After selecting a mailbox, click 'Ok' to load that mailbox into the viewer.

How the browse interface appears will depend on the email system being archived.

## Exchange

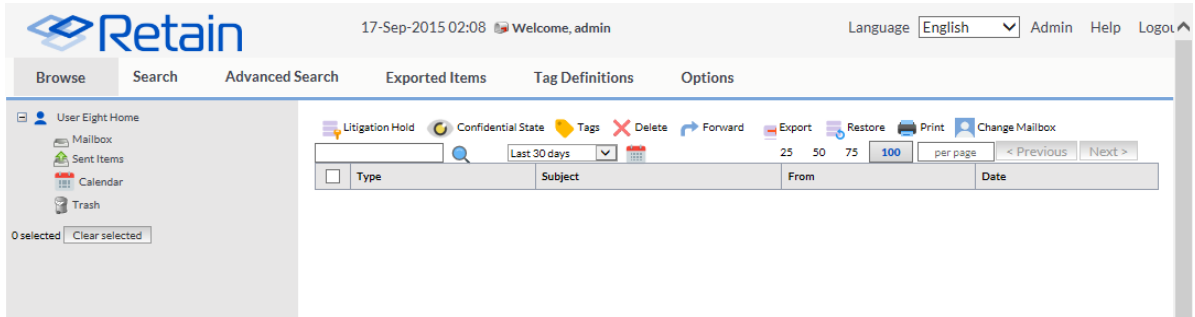


## Exchange

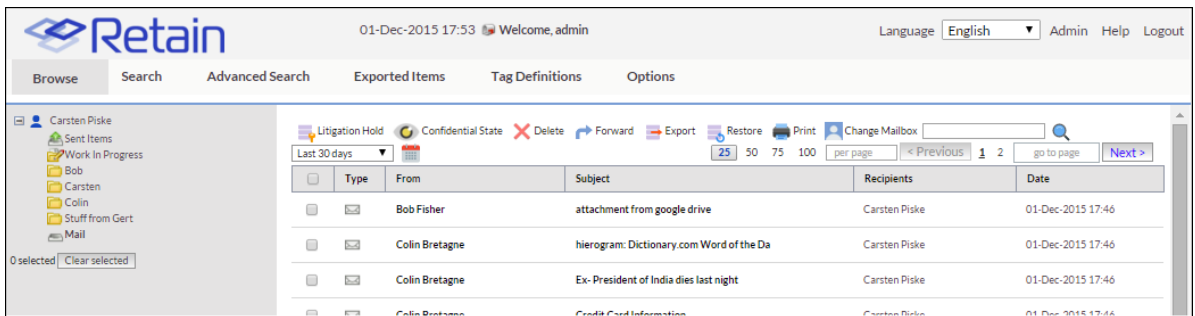




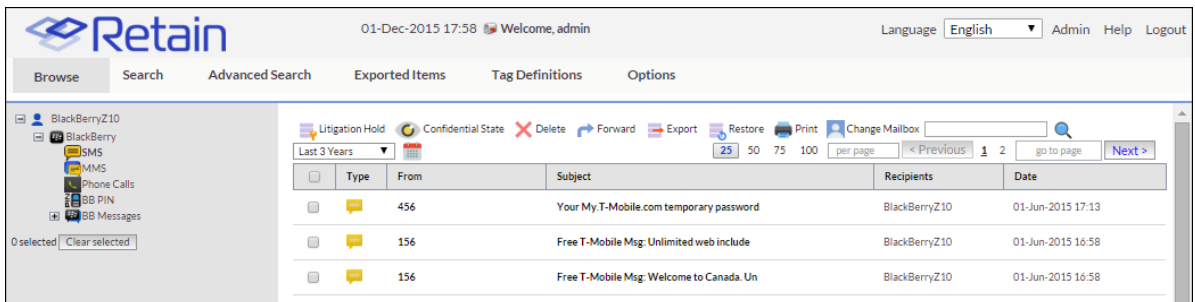
## GroupWise



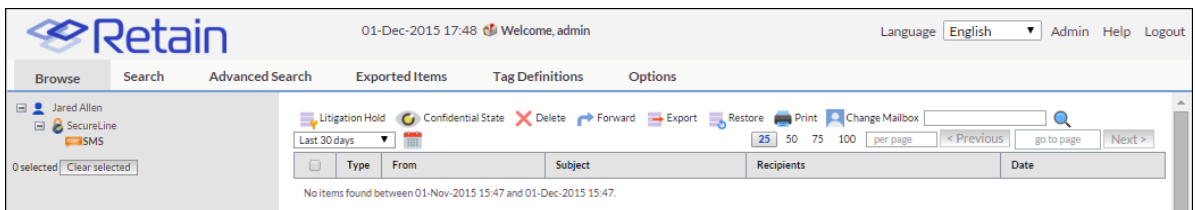
## Google Apps



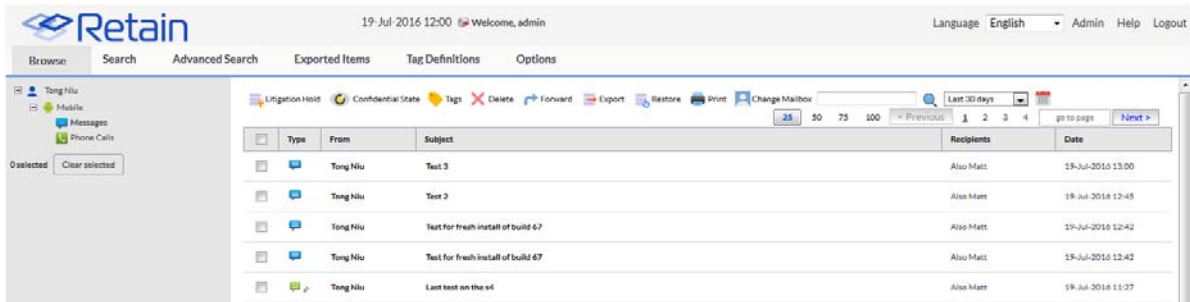
## Blackberry



## CellTrust



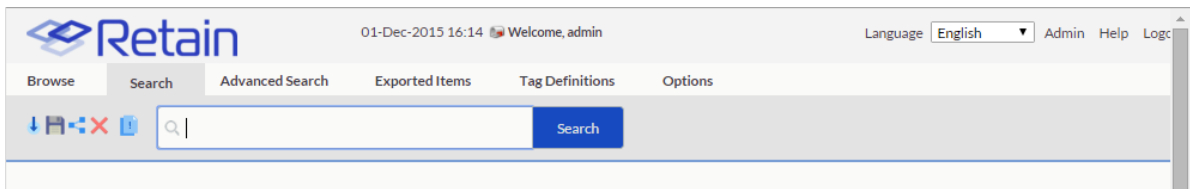
## Mobile



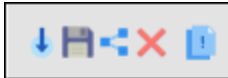
## Using the Search Tab

Retain's Search feature designed to work much like a Google search, with anticipated auto-correct search terms. The Search tab allows searching across the entire Archive for administrators, while users can only search their own archives.

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Search tab](#)



The Search tab allows for management of searches. This is accomplished by Saving searches for later use. These searches can then be shared with others, loaded later, removed when no longer desired, and trimmed to remove duplicate data.



The icons for these functions are on the left, next to the search field. In order: *Load*, *Save*, *Share*, *Delete*, and *Collapse Duplicates*. **Collapse Duplicates** removes all duplicate results in GroupWise mailboxes.

To begin a search, type the desired search term into the search query field, or load a saved search. The search results will be automatically populated on specified search terms after a sufficient pause in typing. The auto complete suggestion feature requires at least 3 characters to be specified and a pause of several seconds before it will begin to work.

### Tokenized Search Phrase

The indexing engine follows Unicode Standard Annex #29. This standard uses many common characters such as ' " . : @ + - \* / and , as phrase-ending or-beginning characters. These characters will cause the system to read any character separated terms as individually entered items when the search is performed. Individually entered terms are treated as OR searches. For example, this means that using the search term 10/20 will be processed as 10 OR 20. Substituting a space instead of the character will provide a logical 'AND' search. For example, searching for 10 20 will be processed as 10 AND 20 as the search term. For example, searching for an email address test@gwava.com will drop the @ even in an exact search with double quotes and with return test AND gwava.com.

Spaces between normal search terms are a delimiter between search terms:

The search algorithm follows these criteria:

1. Highest weighting: All delimited words together consecutively. (e.g. Searching for "quick brown fox" while the message contains: "The quick brown fox jumped over the lazy dog.")
2. All delimited words in the string although they may not be right next to each other. (e.g. quick AND brown AND fox)
3. Least weighting: Any of the delimited words in the string. (e.g. quick OR brown OR fox)

Results from these different terms are weighted in the order listed above. This behavior can be overridden by locating the solarcloud.indexing.properties file and changing the property phraseSearch.singleWordMatch. Setting this property to '0' turns this off, while leaving it set at '1' activates this search behavior.

Result terms are also highlighted in the user interface to ease visual confirmation that the term exists in the message. However, terms in attachments are not highlighted.

## Wildcard Search

Accepted wildcard characters are: \*, ?, and ". The '\*' denotes 'any character or characters', while the '?' denotes 'any one unknown character'. The double quotes(" ") denote an exact phrase, and only that exact phrase. Retain does not index letter case, so "IT" is the same as "it".

For example, a search for the term "We all love spoons" will fetch a result of that exact phrase. Asterisks may be added inside the double quotes to allow for incomplete or unknown words: "We all love sp\*" will return both 'We all love spoons for our ice cream', and 'We don't like sporks but we all love space.'. While the '?' works like the asterisk, it is only for a single unknown character. This is particularly helpful when searching for exact phrases where the terms may be misspelled. For example, "Their going" would miss a misspelled 'there going'. However, if the search term were "The?? going", it would catch both.

Supported Regex characters are listed in the Advanced Search section.

The screenshot shows the Retain web application interface. At the top, there's a navigation bar with 'Browse', 'Search', 'Advanced Search', 'Exported Items', 'Tag Definitions', and 'Options'. The 'Search' tab is active. Below the navigation bar, there's a search input field with the text 'report'. A dropdown menu is open, showing a list of search suggestions: 'reporting service', 'report: weekly', 'report: weekly report', 'report: daily', 'report: daily report', 'report fpe 2-15-08', 'report fpe 3-31-08', 'report fpe 1-15-08', 'collins development - report', 'development - report', 'gwava reporting', 'gwava reporting service', 'ebm-gwavaapp (linux) report:', 'ebm-gwavaapp (linux) report: weekly', and 'ebm-gwavaapp (linux) report: weekly report'. To the left of the search input, there's a sidebar with filters for 'Search In', 'Scope', 'Item Source', 'Date Range', 'Mailboxes', 'Tag', and 'Misc.'. The main content area displays a table of search results. The table has columns for 'Subject', 'Recipients', 'Date', 'Mailbox', and 'Folder'. The first two rows show 'Retain Test Message Tue Aug 18 14:53:54' with recipients 'Samsung Galaxy SIII QA Phone' and 'Samsung Galaxy SIII', dated '18-Aug-2015 14:53', in the 'SamsungGalaxySIII' mailbox, with folders 'Trash' and 'Mailbox'. The next three rows show 'Foreign Annual Report submission receive', 'Your Annual Report has been filed', and 'Your Annual Report has been filed', all with recipient 'Jody Dietel', dated '20-Feb-2008 09:35', '20-Feb-2006 13:46', and '26-Feb-2007 15:51' respectively, in the 'JDietel' mailbox, with folders 'licensing', 'licensing', and 'Exec Asst'. The last two rows show 'Seen on 20/20: Miracle Anti-Aging Pill' with recipient 'emaughan79@gmail.com', dated '06-Jun-2014 13:10', in the 'StarLord' and 'DraxTheDestroyer' mailboxes, with folder 'Inbox'.

Select a final query, either by hitting enter, clicking with the mouse, or using arrows and hitting enter.

Search results will display the results with the search term highlighted for each message. The message type, Sender, Subject, Recipients, date, mailbox, and folder are all displayed.

The screenshot shows the Retain web interface. At the top, the Retain logo is on the left, and the date '03-May-2016 03:58' and user 'Welcome, admin' are in the center. On the right, there are links for 'Language', 'English', 'Admin', 'Help', and 'Logout'. Below the header, there are tabs for 'Browse', 'Search', 'Advanced Search', 'Exported Items', 'Tag Definitions', and 'Options'. The 'Search' tab is active, and a search bar contains the text 'rep'. To the left of the search results is a 'Search In' sidebar with the following options: Subject(236), Sender(1), Recipient(0), Domain(0), Attachment Name(1), Message Content(6,908), and Category(0). The main area shows 'Current Search In: (6,944 hits) All'. Below this, there are icons for 'Litigation Hold', 'Confidential State', 'Tags', 'Delete', 'Forward', 'Export', 'Restore', and 'Print'. A table of search results follows, with columns for 'Type', 'From', 'Subject', 'Recipients', 'Date', 'Mailbox', and 'Folder'. The first row shows a message from 'Rep. Marsha Blackburn' with subject 'Fight the Liberal Smears on Sarah Palin'. The second row shows a message from 'Marcia Gehris' with subject 'Rep. Marsha Blackburn'. The third row shows a message from 'Terry Bentley' with subject 'Ikon Rep/ Document Solutions/ AM Meeting'. The fourth row shows a message from 'Linda Campbell' with subject 'T3 Rep for TSA'. The fifth row shows a message from 'Terry Bentley' with subject 'Creative Benefits Account Rep?'. The sixth row shows a message from 'Linda Campbell' with subject 'Re: T3 Rep for TSA'. The seventh row shows a message from 'Tara.Manno@VerizonWireless.com' with subject 'Verizon wireless Rep \*\*\*Please Read\*\*\*'. The eighth row shows a message from 'r@chard1' with subject 'Kron & Rep - Willschick the free account'.

## Search In

Once search results have begun to populate, the left hand scope pane is populated with limiting and filtering options. If faceting is enabled, the side bar will show numbers next to each section, indicating how many hits there are for each particular topic. The hits are total numbers of matching instances, not items. So if a message states a search term several times in the message body, it will be counted as that many hits even though it is only one message.

The screenshot shows the 'Search In' sidebar. It has a title 'Search In' and a sub-title '- less'. Below the title, there are the following search criteria and their corresponding hit counts: Subject(0), Sender(18,838), Recipient(8,388), Domain(18,849), Attachment Name(0), Message Content(19,230), and Category(0).

The Search In criteria limits the area in the message or data where the search is performed:

- ◆ The Subject indicates hits in the Subject field.
- ◆ The Sender field contains the sender of the message or data item.
- ◆ The Recipient is the recipient of the item or message.
- ◆ The Message Content will search in the following locations within a message:
  - ◆ body
  - ◆ attachment
  - ◆ subject
  - ◆ headers

Searching exclusively for the domain will be effective with search terms if a complete domain is provided, otherwise the term is recognized as text. If the top level domain is not known, (.com, .org, .edu, .etc) then the search term should use an asterisk afterwards. For example, searching for gwava.com will yield good results, as will searching for gwava.\* or gwava\*, though results will vary.

Searching for an item that has BCCed recipients has some special behavior. Retain acts like a normal email system, only the sender and the BCCed recipient can see themselves. If you are logged in as the sender, you will be able to see To, CC and BCC recipients as normal. If you are logged in as the To, or CC recipients, you will only see the Sender, To and CCed recipients. If you are logged in as a BCC recipient, you will see the Sender, To, CC, and no other BCC recipients. If you are logged in as admin and in a mailbox other than the Sender, you will not see the BCC recipients listed in the item even though they are returned from the correct mailboxes, except from the Sender folder, because admin is not one of the BCC recipients.

## Item Type

The Item Type criteria option limits the type of message which is to be searched. All item types are available in the scope term. Again, the number of available hits is displayed to the side.

The Message Item Type includes:

- ♦ Mail
- ♦ Phone Message
- ♦ Appointment
- ♦ Task
- ♦ Note
- ♦ Message
- ♦ Phone Call
- ♦ BB Pin

## Item Source

The Item Source criteria option limits the results to a particular source. This source can be limited to show 'received', 'personal', 'sent', or 'draft' items.

## Date Range

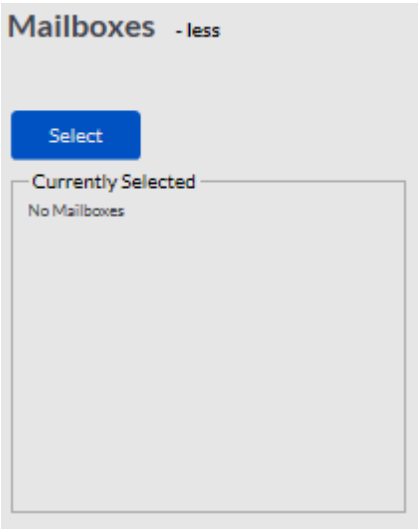
The Date Range criteria limits the time frame of item's creation. Only messages which conform to the date range selected will be displayed in the results field.

The date range may be specified for any of the dates corresponding with an item. The range may also be selected from the drop-down menu, with pre-configured times for last week, month, or year. These time frames are for the past 7 days, the past 30 days, or the past year, not the previous calendar time frame.

The screenshot shows a search criteria interface for 'Date Range'. It includes a dropdown menu for selecting the date field (currently set to 'Received Date'), two input fields for 'mm/dd/yyyy' with a 'To' label between them, and an 'OR' section with a dropdown menu and a '>>' button. To the right, two panels show the available options: the top panel lists 'Received Date', 'Sent Date', 'Begin Date', and 'End Date'; the bottom panel lists '...', 'Last Week(0)', 'Last Month(284)', and 'Last Year(6,208)'.

# Mailboxes

The Mailboxes criteria limit which mailbox or mailboxes the search will pull results from. To add users to the selected mailboxes list, click on the 'Select' button to launch the mailbox selection window.



The Select Mailboxes window allows for searching of every mailbox available to the user, the admin user can search all mailboxes. Mailboxes must be searched for by system and specified criteria. The results of the search are displayed below, while the active selected mailboxes can be added to the dialog through the use of the 'Add Selected' button along the top. Alternately, if the 'Add All' button is clicked, it will add all mailboxes displayed in the search results, the Address Book field. Addresses which have been added to the top field may be removed by selecting the red 'X'.

Select Mailboxes

Add SelectedAdd AllOkCancel

Currently Selected

X

Stubby 12 User

Criteria

First Name

begins with

stubby

Search

SystemGroupWiseShow only usersShow only recently cached items

Address Book

Previous1Nextgo to page

	First	Last	Mail Server	Mailbox	Dept.	Type	Domain
<input type="checkbox"/>	Stubby	User	NWPO	Stubby	new	U	NWDom
<input checked="" type="checkbox"/>	Stubby 12	User	LXPO	Stubby12		U	LXDom
<input type="checkbox"/>	Stubby 14	User	GW14LXPO	Stubby14		U	GW14LXDom

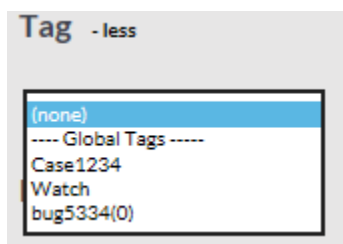
18 Using Retain's Archives

Once the desired addresses have been added to the top window, select the 'OK' button to load them into the search pane.



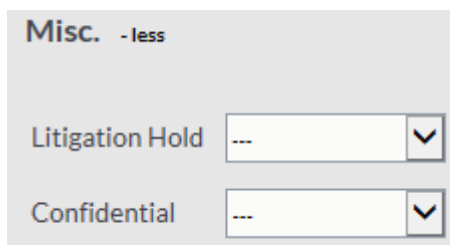
The Address option limits the results to a selected address. The addresses available are displayed below, and may be selected. Addresses in the window are dictated by what is in the result set. Selecting an address adds it as a filter to the top of the search window, or the user may specify an address manually. Multiple addresses may be added to the search window at a time. To remove an address filter, select the 'X' next to the active address, and the result set will be reset.

## Tag



The Tag option limits the search to items which have been tagged with a specific tag definition. The tag definitions may be personal or global. Tags must be specified in advance and applied before this option will work. Select the desired tag to limit the result set.

## Misc.

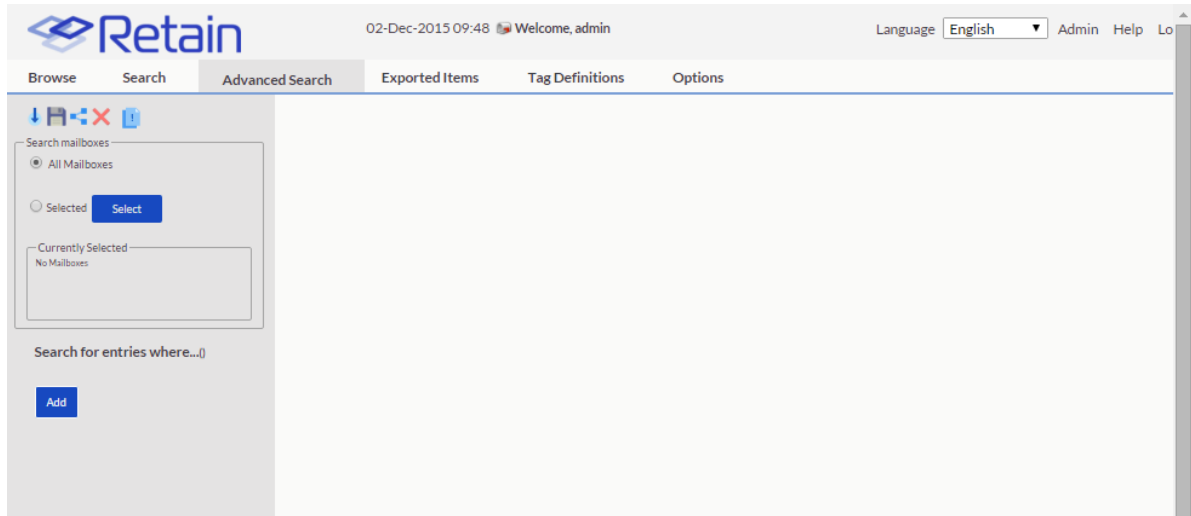


The Misc option contains limits for the Litigation hold and the Confidential tags. They have two settings: True or False. A Setting of 'True' restricts all results to only items which have the selected tag.

# The Advanced Search Tab

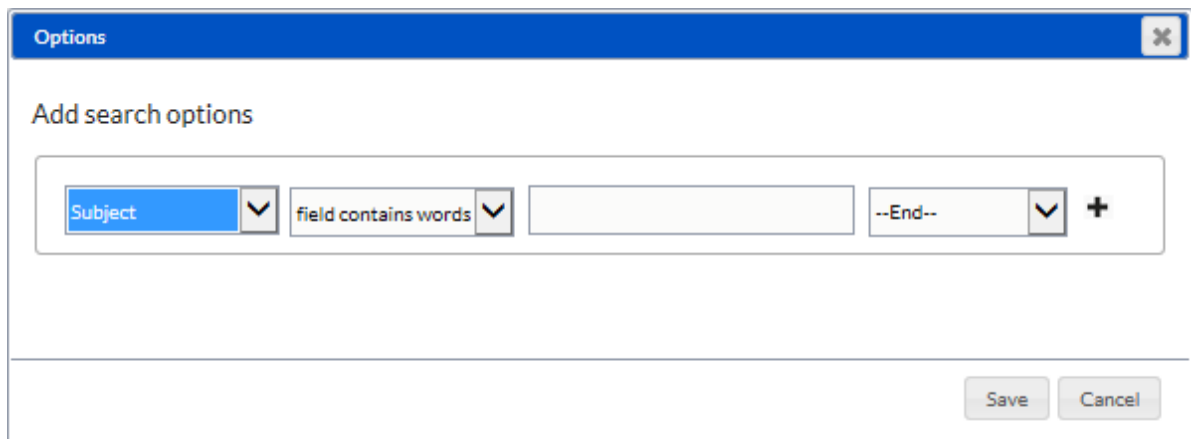
The Advanced Search tab contains the ability to specify vast amounts of criteria and combine search terms to exclude and include various searchable items to retrieve specific information. This search works better, the more you know about what you are looking for, as it allows fine tuning of criteria.

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Advanced Search tab](#)

The screenshot shows the 'Advanced Search' tab in the Retain Server Manager. The top navigation bar includes 'Browse', 'Search', 'Advanced Search' (selected), 'Exported Items', 'Tag Definitions', and 'Options'. The main area is divided into two sections. On the left, there's a 'Search mailboxes' section with a radio button for 'All Mailboxes' (selected) and a 'Select' button. Below it, a 'Currently Selected' section shows 'No Mailboxes'. Further down is a 'Search for entries where...' section with an 'Add' button. The right section is currently empty.

Searches will be restricted to the mailboxes specified in the 'Search Mailboxes' window. By default, all mailboxes are set for searching. To limit the search to the mailbox or mailboxes specified, click on the **Select** button to open the 'Select Mailboxes' window. The 'Select Mailboxes' window functions exactly the same in advanced search as it does in the standard search.

The system will begin to display results as soon as either the search mailboxes have been specified, or new search criteria has been added. To add new criteria, select the **Add** button.

The screenshot shows the 'Options' dialog box. It has a title bar with 'Options' and a close button. The main area is titled 'Add search options'. Below this, there's a form with a dropdown menu set to 'Subject', a dropdown menu set to 'field contains words', an empty text input field, and a dropdown menu set to '--End--'. There's a '+' button to the right of the '--End--' dropdown. At the bottom right, there are 'Save' and 'Cancel' buttons.

The Search Criteria contains the ability to specify where to search, operating criteria - (word ends with, word starts with, field contains words, field contains phrase), and the desired search terms. The list of search items and fields available to be specified in the drop-down list is shown. Each variable on the list is tied to appropriate search operators, (date range allows the specification of a date, Confidential tags have a true/false operator, etc.)

## Search Field



Subject: search the message subject field.

Recipient: search the message recipient field.

Attachment name: search the names of the message attachments.

Category: search the item's category field.

Date: this depends on the type of item. This can be a range. If it is a sent email or instant message, it is the sent date. If it is a received email, then the received date; an appointment, the appointment date.

Sent date: search the message sent date field. If the message is an email this can set by email sender and can be spoofed.

Received date: search the message received date field. If the message is an email, it is set by receiving email server and is very reliable.

Begin date: The earliest date to be searched for calendar items, appointments, tasks and so on.

End date: The latest date to be searched for calendar items, appointments, tasks and so on.

Tag: search tags set within Retain.

Litigation hold: search items that have litigation hold applied by Retain.

Confidential: search items that have confidentiality applied by Retain.

Item Type: search the item type, which may be Mail, Phone message, Appointment, Task, Note, Message, Phone call, and BB PIN.

Item Source: search the item source of Received, Sent, Personal, or Draft.

Sender (email): search sender by email address.

Sender (display): search sender by display name.

Sender Domain: search by the sender domain.

Recipient Domain: search by the recipient domain.

Mail server: search by the mail server of sender and recipient.

Messaging Domain: search by the messaging domain of sender and recipient.

Phone number: search by phone number, if the phone number field exists.

Location: search by location, if the location field exists.

Internet Header: search the term in the Internet header field

Message Content: search only the content (body and attachments)

Attachment size: search by attachment size in bytes.

Opened: search only messages that have been opened.

Read: search only messages that have been read.

Private: search only messages that have been marked private.

### **Operating Criteria**

Each field can be restricted to:

*Field Contains Phrase:* An exact search of the phrase, the same as enclosing the phrase in quotes in simple search. Basically ANDing each word in the phrase. For example, search for “The quick brown fox” will return only items with the entire phrase ‘The quick brown fox’

*Field Contains Words:* will search for each word in the phrase. This will be ranked by closest match at the top. Basically ORing each word in the phrase. For example, search for “The quick brown fox” will return only items with the entire phrase ‘The OR quick OR brown OR fox’.

*Field Does Not Contain Words:* will exclude search results with the words.

*Words Start With:* will search for the word but with a wildcard at the end. For example, deter will be treated like deter\* and return determine, determined, deterred, and so on.

*Word Ends With:* will search for the word but with a wildcard at the front. For example, “tion” will be treated like \*tion and return action, playstation, function, and so on.

## Cascading Options

In addition, the interface allows for no limit of search terms, additional terms can be added to the search criteria and connected to the previous search terms. Additional criteria may be logically connected with ‘and’, ‘or’, or ‘new group’. To add a new search term and criteria, select the ‘+’ directly to the right of the existing search criteria.

The screenshot shows a dialog box titled "Options" with a close button in the top right corner. Below the title bar, the text "Add search options" is displayed. The main area contains three rows of search criteria configuration. Each row consists of a field selector (a dropdown menu with "Subject" selected), a search type selector (a dropdown menu with "field contains words" selected), an empty text input field, a logical connector selector (a dropdown menu with "AND" selected), and two buttons: a plus sign (+) and a minus sign (X). The third row's connector dropdown shows "--End--" instead of "AND". At the bottom right of the dialog box are "Save" and "Cancel" buttons.

By default, when a new search term is added, it is automatically ‘AND-ed’ together with the previous search term. This allows you to be able to build complex search terms to fit known data.

When building complex search criteria, it is critical to know what you are looking for. For instance, if an insider trading tip was suspected, and the recipient was known as well as some details about the message and when it must have been sent by, the following search could be compiled:

Options

Add search options

Subject	word starts with	Merge	AND	+	×
Message Content	field contains words	company trade secret	OR	+	×
Subject	field contains words	NYSE	OR	+	×
Message Content	word starts with	share	New Group	+	×
OR					
Recipient	field contains words	sec@insidetrader.com	AND	+	×
Sent Date	<=	12/13/2015 23:50:00	--End--	+	×

Save Cancel

In this search, any message sent which stated 'merge', or 'merger' in the subject, and contained a known company secret in the message body, or, discussed the name of an executive involved, would be displayed. In addition, the search would also grab any messages sent to the suspected contact before the merger date. Additional criteria which could be added includes the company's stock listing or any further details pertaining to the proposed leak.

Subject	word starts with	Merge	AND
Message Content	field contains words	company trade secret	OR
Subject	field contains words	NYSE	OR
Message Content	word starts with	share	
OR			
Recipient	field contains words	sec@insidetrader.com	AND
Sent Date	Less than or equal to	12/13/2015 23:50	

Edit Reset

0 selected Clear selected

To begin the search, select the **Save** button at the bottom of the query window to perform the search. The active criteria is now listed in the left pane, and may be edited or removed. To add criteria, select the **Edit** button to add to or refine the search criteria.

## RegEx and Wildcards

Both the Search and Advanced Search contain *limited* support for Regular Expression (regex) searches. An explanation of regular expression searches are beyond the scope of this documentation. There are extensive tutorials on the Internet.

To use Regular Expressions, simply put the desired regex string into the criteria field, denoted by a '/' on either side of the regex, for example `/red queen/`. If the '/' is not used, Search will not recognize it as regex.

Wildcard searches may be done with the '\*' and '?' characters. The '\*' will match zero or more characters, and the '?' will match exactly one character.

## Special Characters

The Search has a list of special characters which cannot be searched for, and will cause erratic results with search criteria. The list of non-supported characters is: @,+,,-,|,[,],{,},(),",\,#,&,&,~. All of these characters are viewed as delimiters, and will break up the query. They are not supported and will be replaced by a space.

## RegEx Example

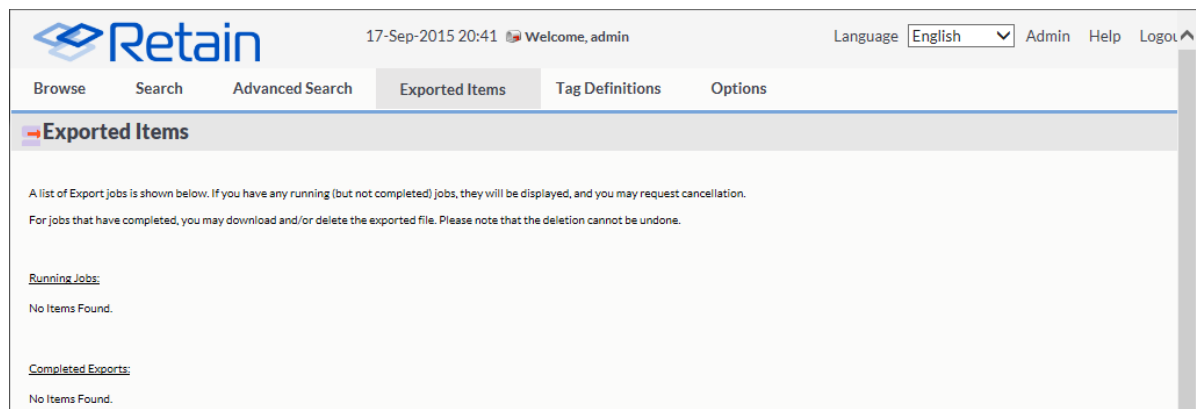
You can search for a string of numbers, for example a US telephone number, of the format: (012) 345-6789.

You can enter into the search field `/[0-9]{3}/` `/[0-9]{3}/` `/[0-9]{4}/` and all number strings that match a three digit, three digit, four digit grouping will be returned.

## The Exported Items Tab

The Exported Items tab shows the export jobs which are currently running, or have been run in the past, on the system. If an export job has completed, this tab will contain the file and provides a link for download of the completed export job.

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Exported Items tab](#)



**NOTE:** PST files open in Microsoft Outlook.

Adobe PDF Portfolio files require Adobe Flash for viewing.

Once complete, a notification email is sent, if a notification address was provided, and the PDF or PST .zip file is shown here.

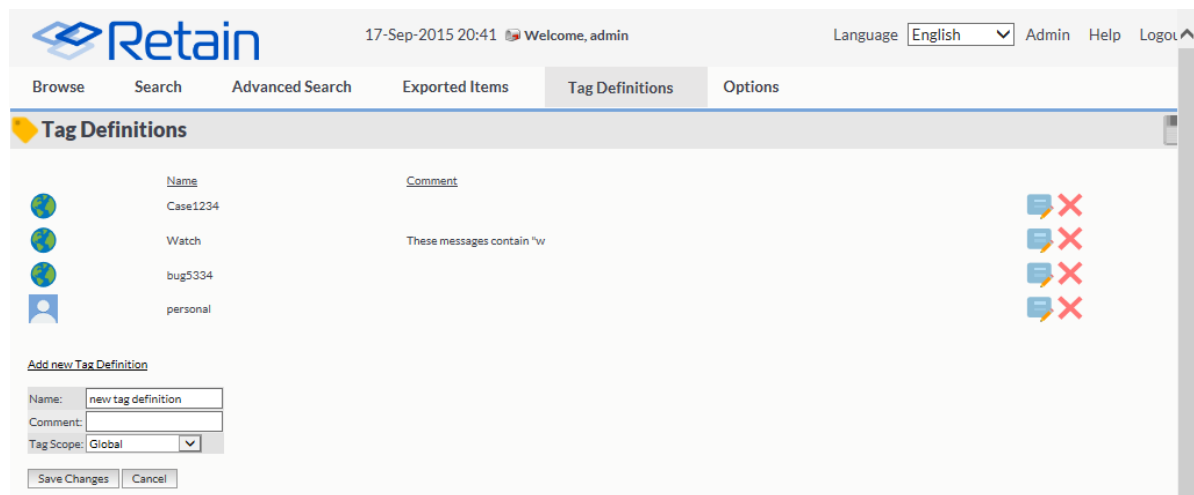
Locate the desired export and select the disk icon to download the export file.

A notification also shows in your Notification Center found under "Welcome, [username]" at the top center of the Retain Mailbox web console.

## The Tag Definitions Tab

The Tag Definitions tab allows the creation and removal of Tags, their automatic comment, and name. Tags are an informative note which can be attached to any data item in the search messages interface. There is no limit to how many tags any one item may have applied to it, and there is no limit to how many tags a user may create. In addition, tags are also a searchable item, making this one of the most versatile ways to add long-term identification for items in the data store.

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Tag Definitions tab](#)



Before the tag icon will appear on the in the search interface tool bar, there must be at least one tag defined. To define a tag, enter the tag name and initial comment if desired, then, if the user has permissions to do so, define whether the tag is personal or global. Once saved the tag is available for use.

Global tags are tags that any user with the rights to see global tags will be able to view and apply. Personal tags are limited to the user who created them. Only tags visible to users will be available to be searched for by that user.

Any tags created or subject to manipulation by the user logged-in will be displayed under this tab.

To apply a tag to a message or data item in the search messages interface, simply select the data item or items, and then click the 'Add / Remove' tag button in the tool bar.

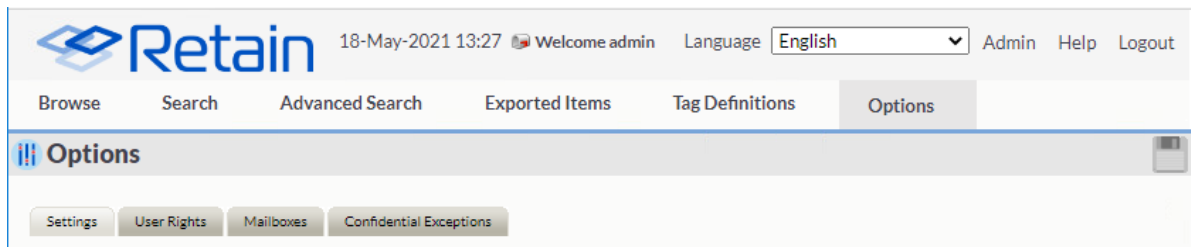
# The Options Tab

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Options tab](#)

- ♦ “The Settings Subtab” on page 26
- ♦ “The User Rights Subtab” on page 28
- ♦ “The Mailboxes Subtab” on page 29
- ♦ “The Confidential Exceptions Subtab” on page 29

The options section here is exactly like the section in the Administration | Users section. These settings here are specific to the currently logged in user. .

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Options tab](#)



## The Settings Subtab

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > [Options tab](#) > [Settings subtab](#)

Settings

User-Specific Settings (not inherited)

User IDadmin

Description

Authentication MethodOffline Authentication Exclusive (forced)

Primary UID (links your rights)eba671f1-ca3a-4f3e-9e4e-183b4759c83b (none)

Inheritable Settings from Group

Group Membershipdefault

Account can expire☐

Change Internal Password

Old

New

Confirm

Forwarded Messages Comment

Forwarded Messages Internet Domain

Date Display FormatDay-ShortMonth

Time Display Format24 Hour

Example: 18-May-2021 13:27

Display Number of Messages Per Page25

Message Age DisplayLast 30 days

Session Timeout (minutes)0

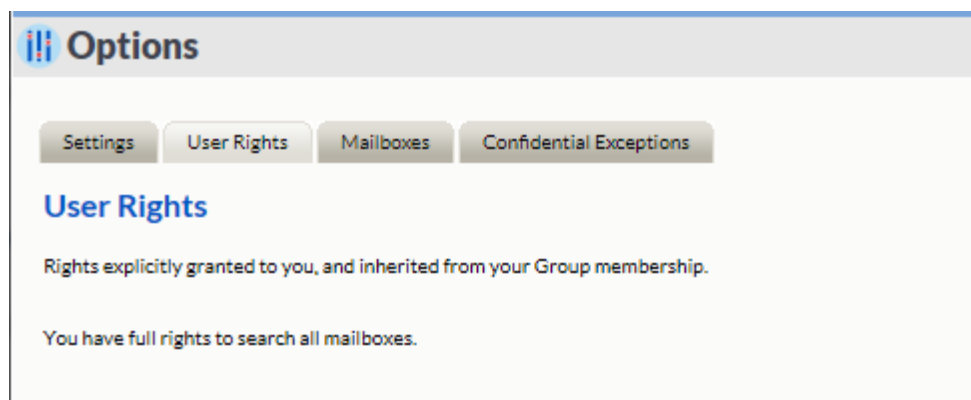
**Table 1-1** Using the Settings subtab

Field, Option, or Button	Information and/or Action
<b>User-specific Settings Panel</b>	
These settings are specific to each user.	
♦ <b>User ID</b>	♦ User ID of the current user.
♦ <b>Description</b>	♦ Optional information about the user.
♦ <b>Authentication Method</b>	♦ User's authentication method.
♦ <b>Primary UID</b>	♦ System-assigned string that links the user's rights.
<b>Inheritable Settings from Group Panel</b>	
These settings can be inherited from the specified Configuration Group.	
♦ <b>Group Membership</b>	♦ Groups the user belongs to.
♦ <b>Account Can Expire</b>	♦ If enabled, the account can expire.

Field, Option, or Button	Information and/or Action
♦ <b>Change Internal Password</b>	♦ If Allow User to Change Password is set to yes, the user can reset the password in Retain..
♦ <b>Forwarded Messages Comment</b>	♦ The default comment for forwarding messages.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Forwarded Messages Internet Domain</b>	♦ Automatically append the specified address to forwarded messages.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Date Display Format</b>	♦ How to display dates.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Time Display Format</b>	♦ How to display time.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Display Number of Messages Per Page</b>	♦ How many items to display per page.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Message Age Display</b>	♦ Default date filter for searching. Can be changed on the fly.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.
♦ <b>Session Timeout (Minutes)</b>	♦ A value between 10 and 480 minutes.  You can have the user inherit this setting from the specified Configuration Group, or you can set it to one of the values in the drop-down list.

## The User Rights Subtab

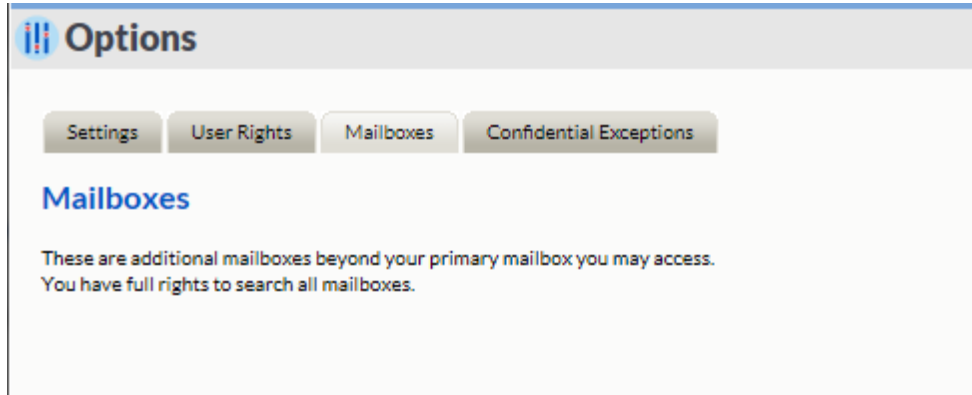
You're shown the rights you have within Retain on this screen. Available rights may only be changed by a user administrator within the Administration screen.





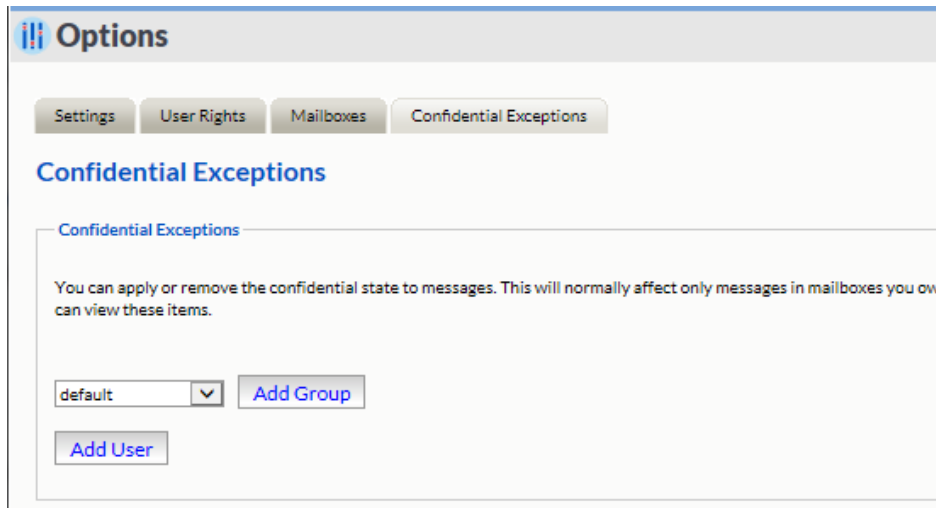
## The Mailboxes Subtab

In this section, you're shown the mailboxes you have been given explicit rights to work in. By default, you have rights to only your own mailbox. If an administrator explicitly gives you rights to other mailboxes or you are a member of a group that has rights to other mailboxes explicitly, those mailboxes will be shown here.



## The Confidential Exceptions Subtab

When a user marks a message as 'Confidential' in the archive, the message becomes invisible to all except administrators who have been given the confidential right, or any user which is specified in the exception list.



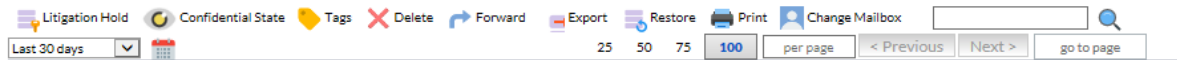
The 'Confidential Exceptions' tab allows users to add any necessary exceptions to the confidential tagging. Confidential tagging may be applied to protect sensitive. However, sometimes this information may need to be viewed by others and instead of granting that user rights to see confidential items for all users, a user may apply that right to only their items.

A group or individual user may be added to or removed from the list.

# Acting On Selected-Items

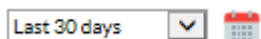
When browse or search queries display found messages, various tools are available, depending on the current user's rights.

You will first have to select one or more items with the checkbox before these will function.

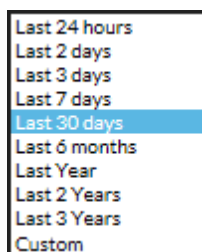


- ♦ “Date Range Drop-down” on page 30
- ♦ “Litigation Hold Icon” on page 31
- ♦ “Confidential State Icon” on page 31
- ♦ “Tags Icon” on page 32
- ♦ “Delete Icon” on page 33
- ♦ “Forward Icon” on page 33
- ♦ “Export Icon” on page 33
- ♦ “Restore Icon” on page 34
- ♦ “Print Icon” on page 34
- ♦ “Change Mailbox Icon” on page 34
- ♦ “Quick Search” on page 34
- ♦ “Results per page selector” on page 34
- ♦ “Previous/Next Control” on page 35
- ♦ “Go to Page” on page 35
- ♦ “Quick View” on page 35
- ♦ “Selection and Sorting” on page 36
- ♦ “Browse Tab Defaults” on page 36

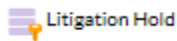
## Date Range Drop-down



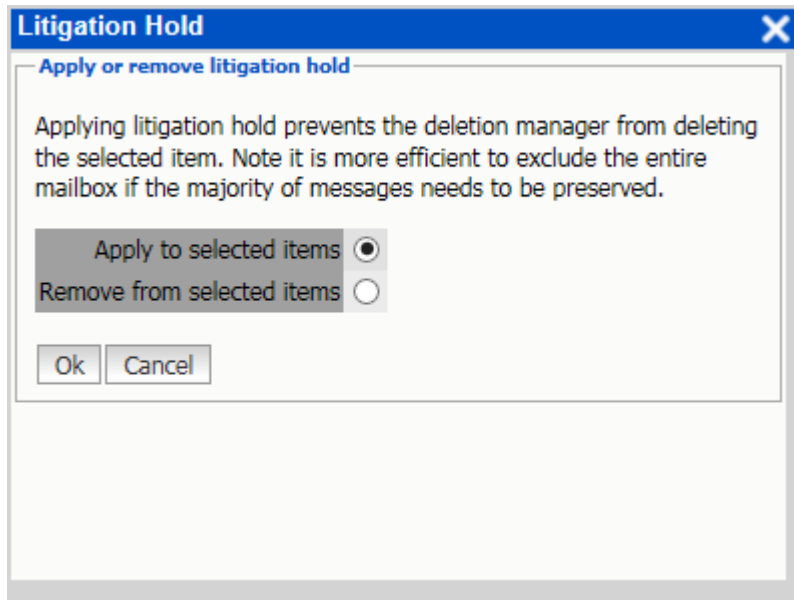
Only messages in the specified time frame are displayed for selection. The date range can be any of the drop-down options or it can be a custom range as selected through the ‘custom’ calendar button.



## Litigation Hold Icon



After you select the messages you wish to affect, use the Litigation hold icon applies the litigation hold property to messages and items. Items with a litigation hold cannot be removed from the system. To apply or remove the litigation hold from items in the archive, a user must have the litigation hold right.



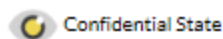
To apply or remove a litigation hold, first select the desired item or items, then click the 'Litigation Hold' button to open the litigation hold window.

Select whether to apply or remove the hold. Select 'Ok' to continue.

Items which have a hold placed on them display a miniature hold icon next to the message icon.

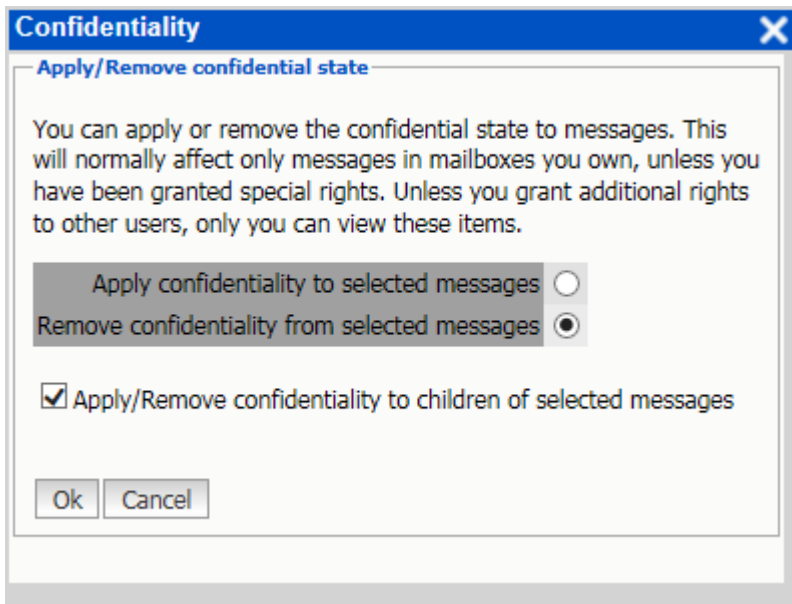


## Confidential State Icon



After you select the messages you wish to affect, use the Confidential State icon to toggle the confidential state.

Confidential items are only visible with Admin rights, or to those specified by the user under the *Options / Confidential Exceptions* tab. Items which a user has marked in their box as Confidential may be viewed by other users who have the 'See Confidential Items [other mailboxes]' admin right.



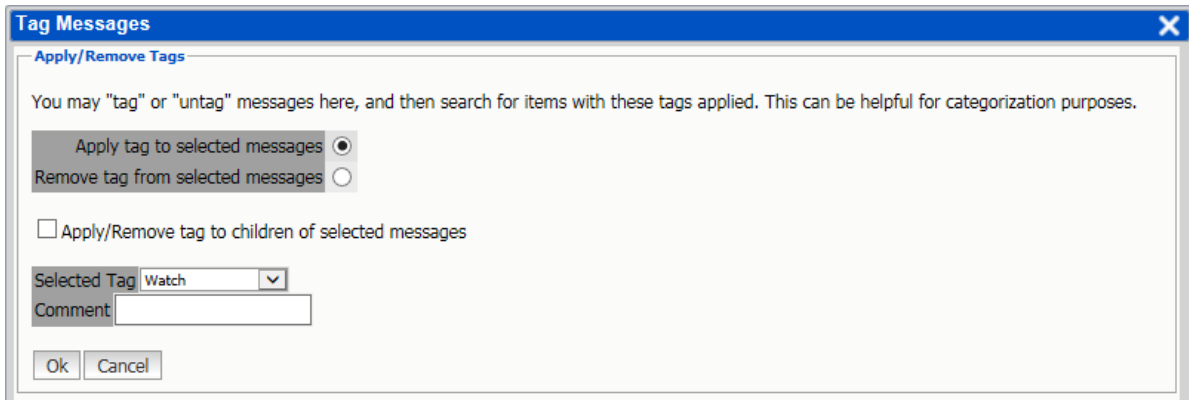
To apply a confidential state to an item, select the item then select the 'Confidential State' button. Items which have been marked confidential display the confidential icon below the message icon.



## Tags Icon



After you select the messages you wish to affect, use the Tags icon to add or remove tags from items. This is only visible with appropriate rights. Tags are an informative note which can be attached to any data item in the search messages interface. To apply a tag, select an item and click the 'Tags' icon.



Select the tag which is to be applied. All tags open to use by the user will be displayed. There is no limit to the amount of tags an item may have. An additional comment may be added to the tag for the specific item or items selected. Additionally, any associated items or messages, 'children', such as all messages in a thread, may also be selected for tag creation. Tags must be created previous to applying them to messages. See the Tag Definitions tab for more info.

Messages with a tag applied to them, either a global or personal, will show a miniature tag icon next to the message or item icon.

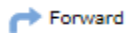
## Delete Icon



After you select the messages you wish to affect, use the Delete icon to mark items for removal from personal archives. This right is only visible with rights. To delete an item, highlight the item and then select the 'Delete' button.

The Delete right is not a default right, it must be specifically added to users or groups. Messages or data marked to be deleted will not necessarily be immediately removed, but will be queued for deletion. The actual item removal will depend on server availability and the amount of items queued for deletion.

## Forward Icon



After you select the messages you wish to affect, use the Forward icon to forward messages out of their archive to a specified address. This right is only visible to users who have the Forward Messages right. The SMTP server must be setup by the admin user under Server Configuration | Notification for this to function successfully.

Select a message or messages and then the 'Forward' button. Specify the address or comma-separated addresses the messages should be forwarded to, a desired subject, and any comments. Finally, select the 'Forward Messages' button and Retain will send the message via SMTP. This is a default user right.

There will also be a notification entered in your Notification Center found under "Welcome, [username]" at the top center of the Retain Mailbox web console.

## Export Icon



After you select the messages you wish to affect, use the Export option to export messages, calendar events, and other items in either PST (Microsoft Personal Storage file) or Adobe PDF Portfolio format.

When you click the Export icon, the Export Messages dialog displays, letting you select the output format desired.

For more information, see [“Exporting Search Results to PST or PDF Files”](#) on page 38.

## Restore Icon



After you select the messages you wish to affect, use the Restore icon to restore messages to the message system. Forwarding is the preferred method to return mail to the email system. To use, select the desired messages and select the 'restore' button. Once there, select the target message system and mailbox. (If the user has rights to restore to any mailbox, the target mailbox must be selected. Select the 'Restore Message' button and messages will be restored to that account.

Restoring a message which currently exists in the target mailbox results in a duplicate message existing in that mailbox. It is recommended to only restore messages that have been deleted from the mail system, but exist in the Retain archive.

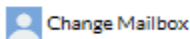
Restore works best with On-Premise Exchange, restoring the message completely to the Exchange Inbox, which is seen as a new message by the system. With GroupWise, it restores a link to the message, if stubbing server is configured in Retain but stubbing does not need to be enabled in GroupWise and we do not recommend enabling Stubbing in GroupWise. Restore does not work with GMail.

## Print Icon



After you select the messages you wish to affect, use the Print icon to print selected messages. To use this option, select the desired messages and then select the 'print' button. The 'print' function utilizes the user's local print configuration; if there is no printer accessible to the local workstation, print will not function. This is a default user right.

## Change Mailbox Icon



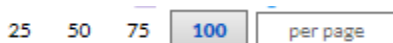
If you are an administrator or have proxy rights to another mailbox, use the Change Mailbox option to switch mailboxes.

## Quick Search



The Quick Search displays only for Browse tab results. Use it to rapidly search for data in the subject field of messages in the selected mailbox.

## Results per page selector



Results are automatically set to 100 per page. The selector lets you specify how many messages are to be displayed on each page. You can use the predefined values or specify an alternative limit in the field provided.

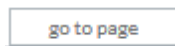
## Previous/Next Control



The Previous/Next option lets you navigate through the search or browse result pages. The total number of pages is displayed next to the 'Next' button.

Select a number to immediately move to the desired page

## Go to Page



The Go To Page option lets you specify what page you want to jump to.

Select the option box, specify the page number desired, and hit 'enter' to immediately go to that page.

## Quick View



This appears in a column in the list of search results. Click it to quickly view the body of a message without having to actually open the message in the interface.



Quick View is a display-only function so there are no actions available. Click the X to close the window.

## Selection and Sorting

<input type="checkbox"/>	Type	From	Subject	Recipients	Date	Mailbox	Folder
--------------------------	------	------	---------	------------	------	---------	--------

The top column bar contains all the different column headers and is located directly beneath the toolbar. This tool contains a select all/none checkbox as well as sortable column headers. Every column in this bar may be sorted by order except the 'Mailbox' and 'Folder' columns. (They are multi-value attributes and thus are not sortable.)

## Browse Tab Defaults






By default, the browse window remembers which mailbox last browsed was, and will return to that mailbox when opened. When Administrators first login, they will be taken immediately to their mailbox. Afterwards, the browse will remember their last location.

## Viewing Message Contents

You may double-click on a message to view the contents. From the Message tab you may open (if the proper viewing agent is installed) or save the message or attachments to disk.

Message

Properties



**From:** Test Zero <test0@sf.doc.mf.net> 23-Aug-2018 14:06

**To:** Odin Allfather <odin@sf.doc.mf.net>

**Subject:** Hail and rain

**Attachments:** MESSAGE TEXT (476 bytes) [Open] [Save]  
MESSAGE HTML (773 bytes) [Open] [Save]

```
Remember how free clouds are. They just lay around in the sky
all day long. Don't be bashful drop me a line.
We don't have to be concerned about it. We just have to let it
fall where it will.

There are no limits in this world. The least little bit can do
so much. See how easy it is to create a littl
e tree right in your world. We'll have a super time. We don't
really know where this goes - and I'm not sure
we really care. It's a super day, so why not make a beautiful
sky?
```

The Properties tab shows various properties about the message.



Message

Properties

**From:** Test Zero <test0@sf.doc.mf.net>
 23-Aug-2018 14:06

**To:** Odin Allfather <odin@sf.doc.mf.net>

**Subject:** Hail and rain

**Attachments:**

MESSAGE TEXT (476 bytes) [\[Open\]](#) [\[Save\]](#)

MESSAGE HTML (773 bytes) [\[Open\]](#) [\[Save\]](#)

---

Core

Item Type: Mail

Box Type: Received

Owner UID: E1BC2D80-02A7-0000-816D-796437323664

Parent Node: 48379

Read: no

Confidential: no

Indexing: [EMail fully indexed.]

Created: 23-Aug-2018 14:06:12

Delivered: 23-Aug-2018 14:06:13

Stored: 23-Aug-2018 14:09:03

Expiration Date: 31-Dec-1969 17:00

Tags: (none)

Path:

---

Additional Properties

emailSystem: gw

internet: false

postoffice: PO

senderUUID: EC64D680-1803-0000-816D-796437323664

abSystem: gw

domain: MyDomain

---

Audit

Date	Info	User	Mailbox	IP Address	Action	NodeID
28-Aug-2018 13:26	Hail and rain	admin	Odin	137.65.60.224	Viewed	48379

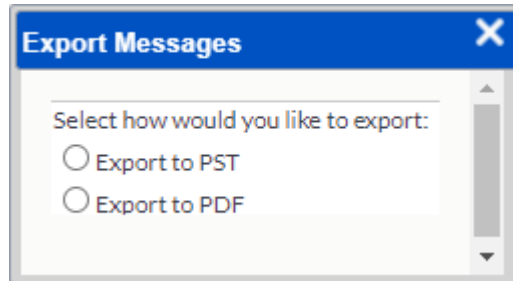
- ♦ **Created Date:** This is set by the sending messaging system and is stored in the message header, which Retain reads and stores.

- ♦ **Delivered Date** This is set by the receiving messaging system and is stored in the message header, which Retain reads and stores.
- ♦ **Stored Date:** This is set by Retain when the message is stored in Retain.
- ♦ **Expiration** This is set by Retain, if that feature is set as part of Job | Core Settings.

## Exporting Search Results to PST or PDF Files

- 1 After you have displayed and selected one or more archived messages in the [Browse](#), [Search](#), or [Advanced Search](#) tab, click the Export button.

The Export Messages dialog displays



- 2 Select either **Export to PST** or **Export to PDF** and continue with the instructions that match your selection.

### Export to PST

- ♦ “Core Settings Tab” on page 38
- ♦ “Ensuring Adequate Disk Space” on page 39
- ♦ “Setting the PST File Maximum Size” on page 39
- ♦ “The PST Export Process” on page 39
- ♦ “PST Export Speed” on page 40
- ♦ “Running the Export Process” on page 40

### Core Settings Tab

**Path:** [Retain Server Manager](#) > [Overview](#) > [Search Messages](#) > search or browse, then select one or more messages > [Export](#) > [Export to PST](#)

*Table 1-2 Using the PST Export Core Settings Tab*

Field, Option, or Button	Information and/or Action
<a href="#">Send email when export is complete</a>	1. Type a valid email address of person to notify.
<a href="#">Download Filename</a>	1. Accept the generated filename or type an alternative.
<a href="#">Maximum size of PST in GB</a>	1. Type a smaller number if desired. Size cannot exceed 49 GB.

## Ensuring Adequate Disk Space

Because PST exports can be very large, you might want to designate an additional drive to contain them. If a drive is added, make sure to change the Exports Path in the “[Storage Panel](#)” to point to the new drive. In Linux, make sure that the ownership of the Exports Path is set to `tomcat:www` or exports will not run.

PST files are larger than the corresponding files stored in Retain. Furthermore, you cannot estimate how large a PST export will be based on the size of the selected messages stored in Retain.

Message body size, the number of messages, the type of messages, the size of attachments that are included, and the number of recipients all factor in the PST file size. Retain doesn’t have this information before the export is created and therefore cannot estimate the exported file size.

## Setting the PST File Maximum Size

Outlook cannot open PST files that are larger than 50 GB. Therefore, Retain caps exported files at 49 GB maximum.

You can specify a smaller maximum size if needed.

Typing a number larger than 49 in the Maximum size field is allowed, but when the export runs, the maximum size reverts to 49 GB.

## The PST Export Process

When all messages have been exported to PST format, Retain

1. Checks the size of the PST export.
2. If the PST file is smaller than the specified limit, Retain saves it with the name specified in the [Download Filename](#) field and makes it available for downloading.
3. If the file is larger than the specified limit, Retain does the following:
  - a. Splits the resulting file into separate PST files that are no larger than the limit.
  - b. Compresses the files into a combined `.zip` file with the name specified in the [Download Filename](#) field.

## PST Export Speed

Disk I/O is the main limiting factor to export speed. The following points also apply:

- If possible use SSD storage in the Export Path location to greatly increase the speed at which the export runs.
- If this is not possible, the next best option is to add more processing power.
- Adding memory will have very little effect, if any, on export speed.

## Running the Export Process

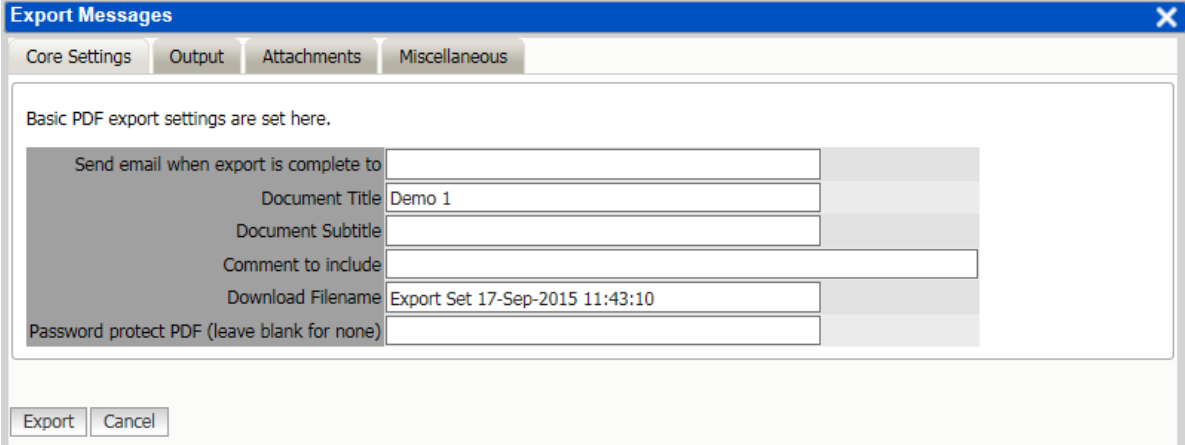
When you are satisfied that all options and parameters are set correctly, Click the **Export** button. Progress and status of the export job are shown in the [“The Exported Items Tab” on page 24](#).

## Export to PDF Option

The default view provides a list on top of the PDF viewer which works as a table of contents to provide access to the exported archive and requires that Adobe Flash is installed on the viewing workstation.

Select the desired message or messages, then click the **Export** button.

## Core Settings Tab



The screenshot shows a window titled "Export Messages" with a close button (X) in the top right corner. Below the title bar are four tabs: "Core Settings", "Output", "Attachments", and "Miscellaneous". The "Core Settings" tab is selected. Inside the tab, there is a text label "Basic PDF export settings are set here." followed by a list of settings, each with a text input field and a checkbox:

Setting	Value	Checkbox
Send email when export is complete to		
Document Title	Demo 1	
Document Subtitle		
Comment to include		
Download Filename	Export Set 17-Sep-2015 11:43:10	
Password protect PDF (leave blank for none)		

At the bottom of the dialog are two buttons: "Export" and "Cancel".

Basic PDF export settings are set here.

Send email when export is complete to

Document Title

Document Subtitle

Comment to include

Download Filename

Password protect PDF (leave blank for none)

Output tab

Fill out the various options as desired.

## PDF Export Output Tab

**Export Messages**

Core Settings Output Attachments Miscellaneous

You may optionally include the fields listed below in the exported PDF.

CC	<input type="checkbox"/>
BCC	<input type="checkbox"/>
Creation date	<input type="checkbox"/>
Store date	<input type="checkbox"/>
Status flags (opened, read, etc.)	<input type="checkbox"/>
Box type (sent, received, etc.)	<input type="checkbox"/>
Parent folder	<input type="checkbox"/>

Export Cancel

CC

BCC

Creation date

Store date

Status flags (opened, read, etc.)

Box type (sent, received, etc.)

Parent folder

Attachments tab

File output and included fields can be edited

# PDF Export Attachments Tab

Export Messages

Core Settings

Output

Attachments

Miscellaneous

You may restrict which attachments are included and excluded by extension. By default all attachments are included. You may also set the maximum attachment size in MB.

Include attachments with extension

Add

Edit

Remove

Exclude attachments with extension

Add

Edit

Remove

Maximum size of attachments, in MB (must be less than 2048)

2048

Export potentially dangerous attachments

☐

Export

Cancel

You may restrict which attachments are included and excluded by extension. By default all attachments are included. You may also set the maximum attachment size in MB.

Include attachments with extension

Exclude attachments with extension

Maximum size of attachments, in MB (must be less than 2048)

Export potentially dangerous attachments

Miscellaneous tab

Select which attachments to include and exclude from the PDF.

# PDF Export Miscellaneous Tab

Export Messages

Core Settings

Output

Attachments

Miscellaneous

You may set the page size, or the total PDF size.

Page Size to use

Letter Portrait

Maximum size of PDF in MB (must be less than 2048)

2048

Time Zone

US/Mountain

Export

Cancel

You may set the page size, or the total PDF size.

Page Size to use

42 Using Retain's Archives

Letter

A4

Maximum size of PDF in MB (must be less than 2048)

Time Zone

Additionally, any restrictions to the size or time zone for the PDF. If the archive size does not exceed the maximum size, then the archive will be contained in one file. If the archive is larger than the defined limit, it will be exported in multiple PDFs. Time zone information will be used for formatting any time and date information in the email headers. The time written to the cover sheet and date column in the PDF table of contents is written according to the time zone of the Retain Server.

When ready to export, select 'Export'. Depending on the size of the selected archive, the export may take some time.

Currently running export jobs are listed under the 'Exported Items' tab.

## Retain Mobile Apps

Retain may be accessed through apps available for Android and iOS. You can manually install the App on Mobile devices through Google Play and the Apple App Store or use an Enterprise Mobile Management product that has AppConfig support. The Retain app supports Username, Password, Server and AllowCopyPaste through AppConfig.

---

**IMPORTANT:** AllowCopyPaste must be enabled in iOS.

---

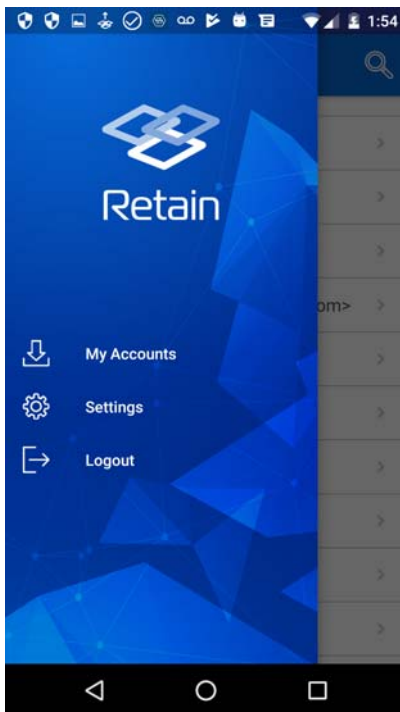
### Android App

The Mobile App for Android requires Android Oreo 8.x or later.

Once the app is downloaded and installed, enter the Retain Server address. This should be given to you by the system administrator and is in the form of <https://<Retain-Server-URL>/RetainServer>. Log in with your email credentials

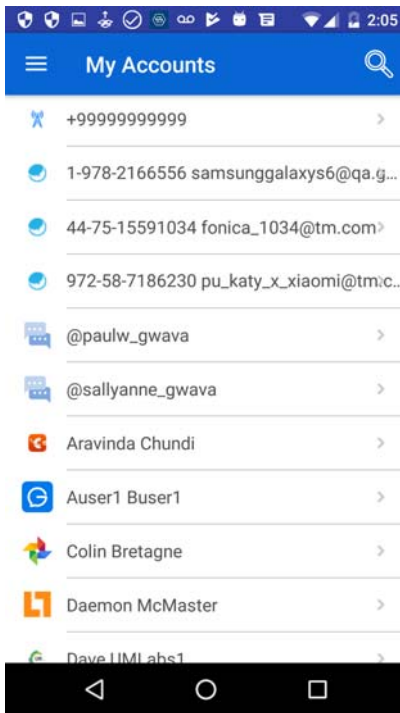


Once logged in, you may view your accounts, change settings or logout.

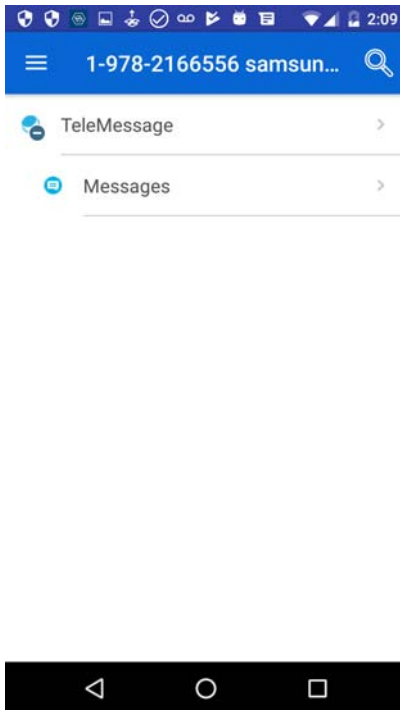


Pressing "My Accounts" will take you to the Retain archive mailboxes you have access to.

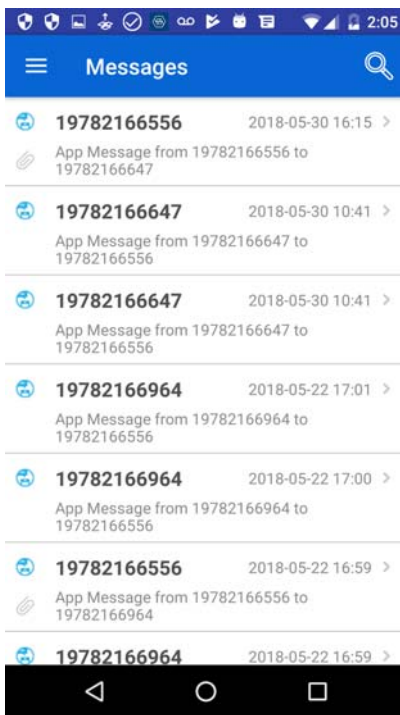




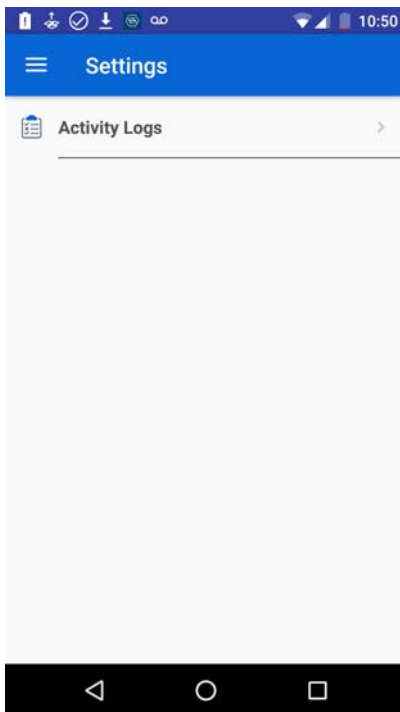
Select a message system to browse messages from. For example, TeleMessage.



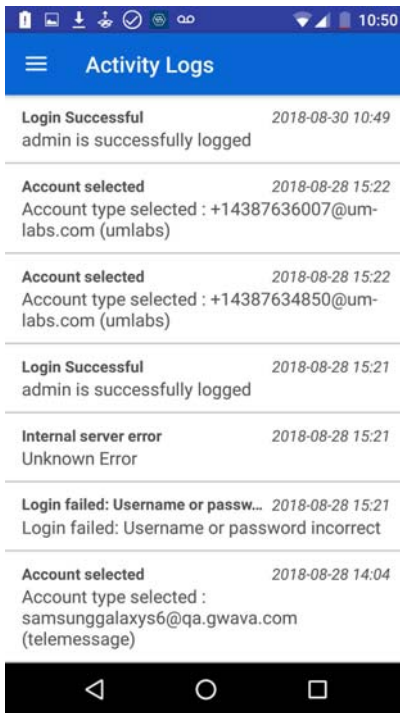
Press “Messages” to be taken to the message view.



You can press the hamburger menu at the top left to access settings.



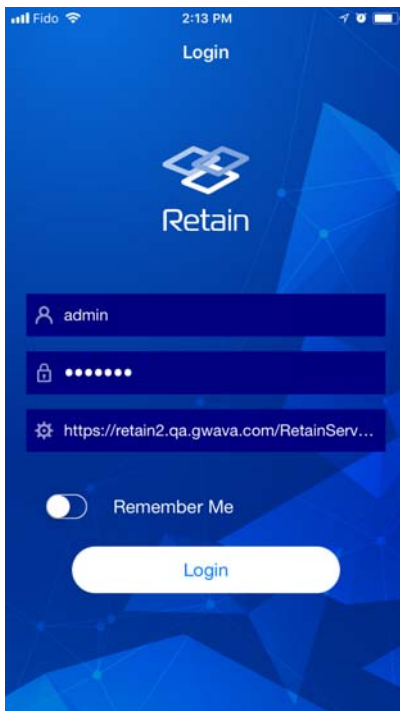
You can access the Activity Logs here. This is used for troubleshooting by the system administrator.



## Retain App: iOS: iPhone

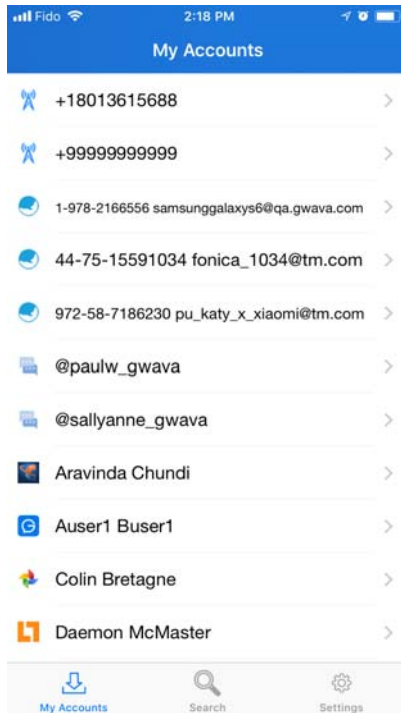
The Retain Mobile App for iOS requires iOS 12 or 13.

Once the app is downloaded and installed, enter the Retain Server address. This should be given to you by the system administrator and is in the form of "https://<Retain-Server-URL>/RetainServer". Log in with your email credentials

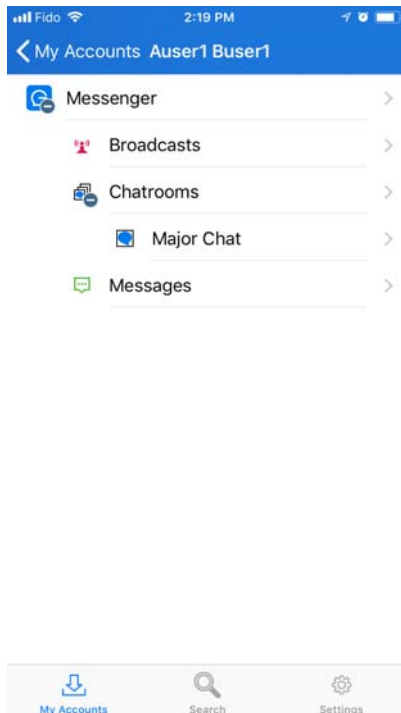


## Viewing Messages

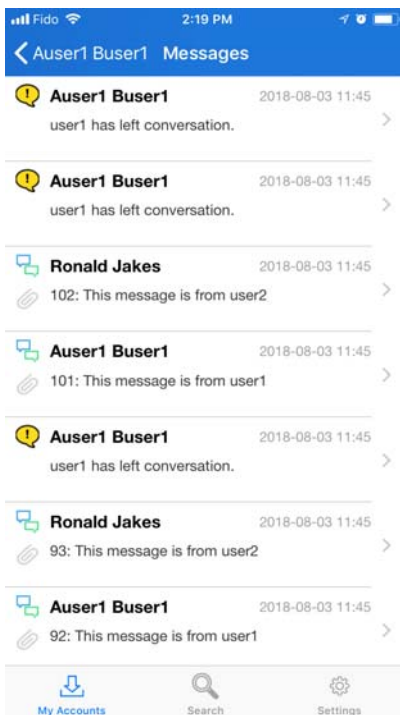
Select an account to access, you will generally have access only to your own.



Then select the message system you wish to browse. For example, GroupWise Messenger.



You can then select messages to view or search for particular messages.

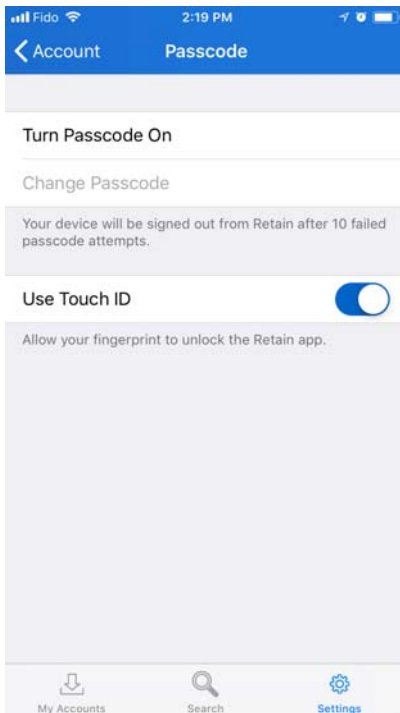


## iPhone Settings

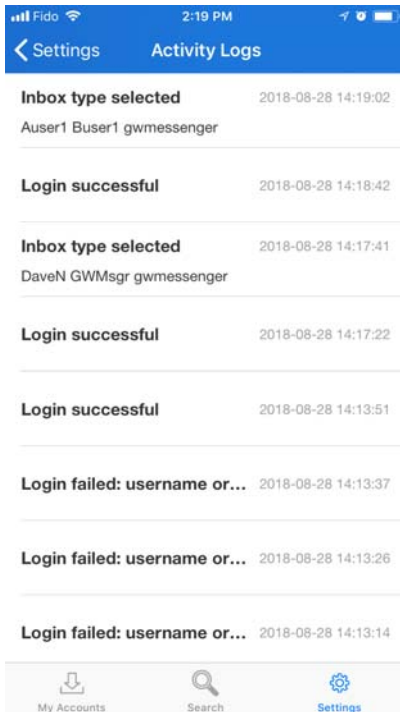
Press the Settings button to go to the settings screen.



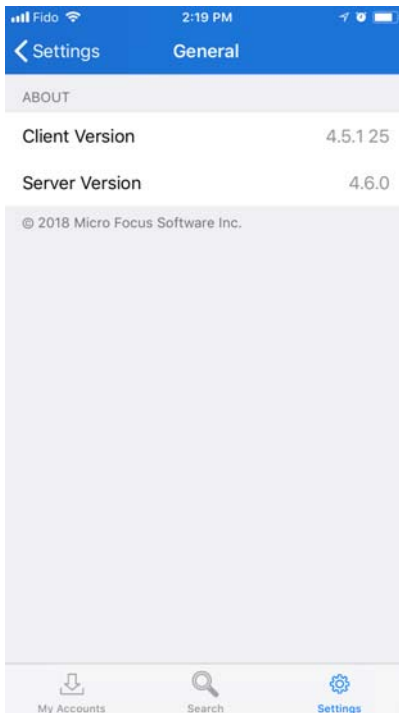
You may also enable Passcode Lock to require authentication for access. This may use TouchID.



Press on the User ID to get a log what the app has done.



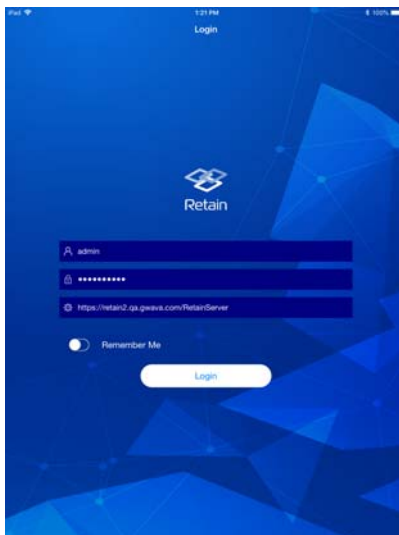
Press Server to get version information.



## Retain App: iOS: iPad

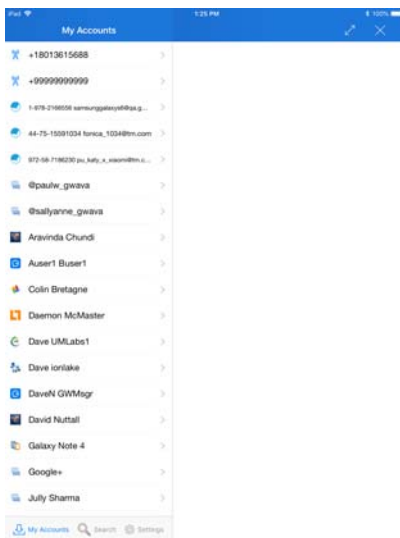
When viewed on an iPad the Retain app provides a multi-pane view.

Once the app is downloaded and installed, enter the Retain Server address. This should be given to you by the system administrator and is in the form of "https://<Retain-Server-URL>/RetainServer". Log in with your email credentials



## Viewing Messages

You will be able to see a list of accounts you have access to in the left pane.

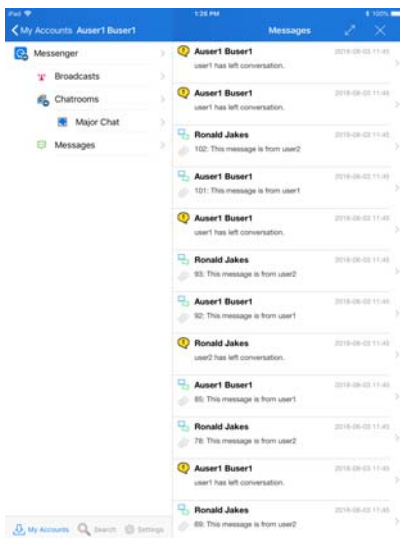


Select a message system to access those messages. In this case GroupWise Messenger.

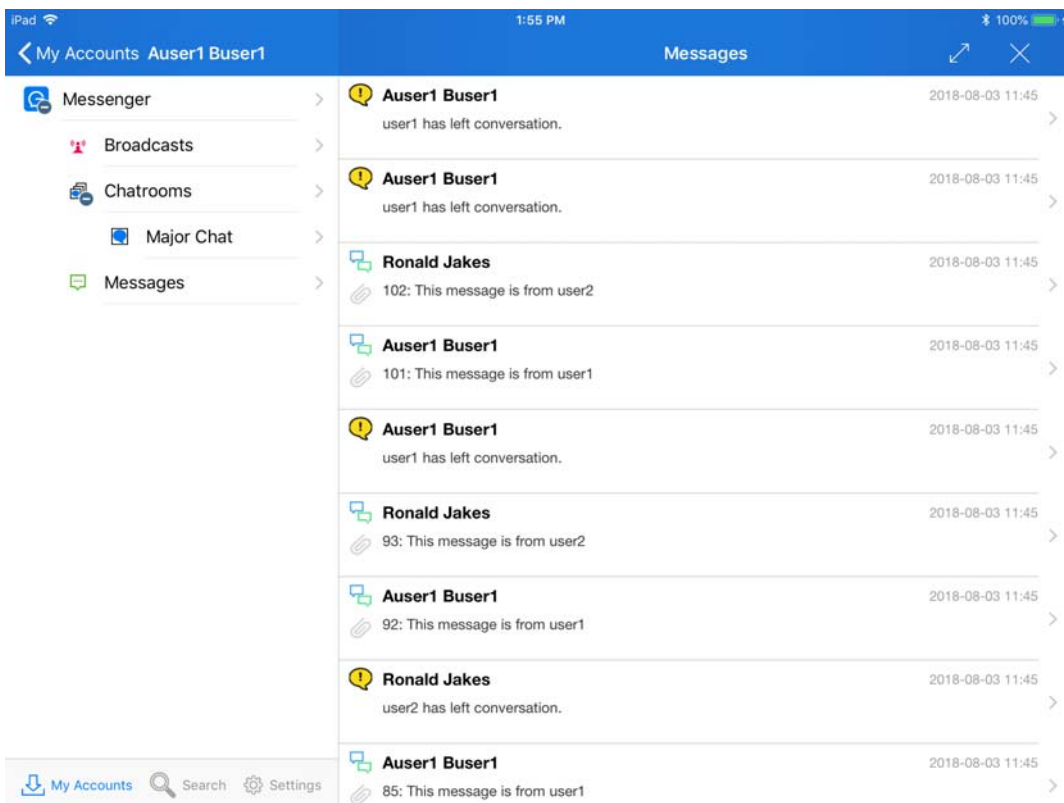


You will be able to browse messages.

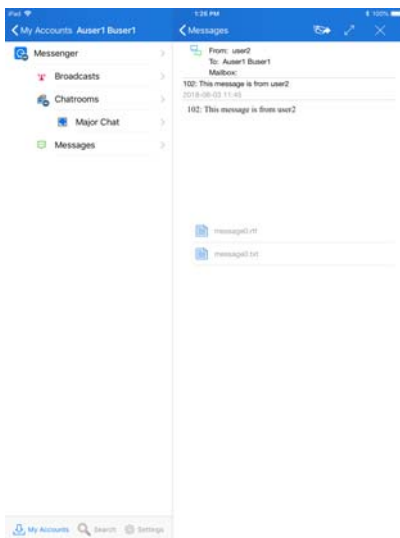




This can also be viewed in landscape mode.



And view individual messages.

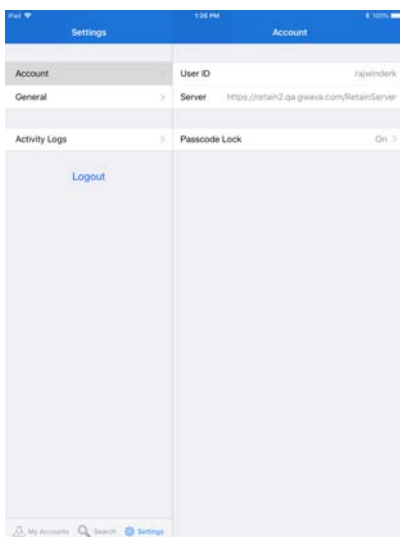


## iPad Settings

Access the app settings by pressing the Settings button.

Under the Account section you will be able to see your User ID and the Server the app is connecting to.

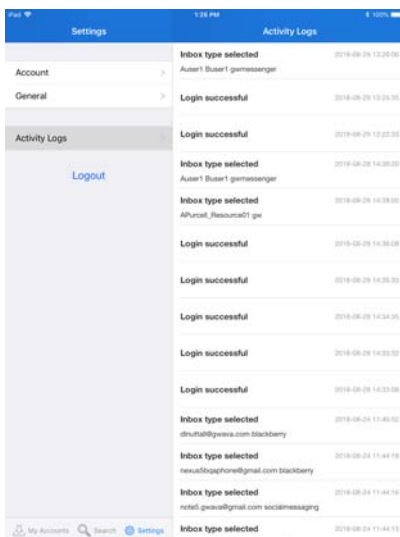
A Passcode Lock can be enabled as an extra level of security. You may use TouchID to secure the app.



Under the General tab you can find the app client version and the Retain server version.



Under the Activity Log tab you can see what the app is doing. These are helpful for troubleshooting. Generally you'll only have to deal with this if you are a system administrator.





# 2 Tools

- ♦ [“Tools Overview” on page 57](#)
- ♦ [“Retain Publisher and Viewer” on page 58](#)
- ♦ [“Outlook Plugin Administration” on page 94](#)
- ♦ [“Outlook Plugin” on page 113](#)
- ♦ [“Outlook Web App Plugin” on page 124](#)
- ♦ [“Retain PST Importer” on page 135](#)
- ♦ [“GroupWise WebAccess Plugin” on page 144](#)
- ♦ [“GroupWise Client Plugin” on page 151](#)
- ♦ [“GroupWise Archive Migration Tool” on page 160](#)
- ♦ [“Mobile Tools” on page 172](#)
- ♦ [“Retain App” on page 179](#)
- ♦ [“Create a REST Collector” on page 180](#)
- ♦ [“Swagger UI” on page 180](#)
- ♦ [“Managing Retain Language Support” on page 185](#)

## Tools Overview

- ♦ [“Tool Compatibility with Retain 3.x \(Lucene\) Indexes” on page 57](#)

Retain has a number of tools available for importing and exporting data, as well as connecting to other programs.

To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.

## Tool Compatibility with Retain 3.x (Lucene) Indexes

Not all tools are compatible with the Retain 3.x (Lucene) indexes.

Tool	Compatibility
Retain web console	Compatible
Publisher	Not compatible
Outlook Plugin	Not compatible
Retain App for Android Phones	Not compatible
Retain App for iOS Phones	Not compatible
Retain Single Sign-on plugin for GroupWise Client	Does not use indexes

Tool	Compatibility
Retain Single Sign-on plugin for GroupWise WebAccess	Does not use indexes
GroupWise Archive Migrator/PAM Tool	Does not use indexes
PST Importer	Does not use indexes
PowerShell Sync Script	Does not use indexes

## Retain Publisher and Viewer

Retain comes with the ability to export selected messages to a local archive for searching and viewing or to fulfill the need of a mobile archive for legal compliance. This can be extremely useful for larger systems or systems which have a high load, and where the need for review or legal compliance is being exercised, but access to the entire Retain archive is not necessary. Instead of allowing or facilitating constant access to the entire Retain Server, the Publisher can export and index groups of messages to a local archive, and the Viewer can search, view, and forward messages from the local archive.

The process is performed in two parts: the Publisher and the Viewer. The publisher, using an existing account with the `Publish Messages` right, connects to the Retain Server and exports the messages complying with the search request, and creates a local database archive on the host machine. The viewer accesses the local archive and allows browsing, searching, and message exportation from the local archive.

### System Requirements:

- ♦ Windows 7x, 8x, 10x (32-bit or 64-bit).
- ♦ .Net 4.5 SP1.
- ♦ PST migration requires Outlook to be installed. (32 and 64-bit systems are supported.)
- ♦ Network connection to Retain Server.
- ♦ Retain user with rights to Publish Messages (see “Users” in [Retain 4.9.2: Configuration and Administration](#)).

---

**NOTE:** Due to file access, the publisher cannot publish archives to a network drive.

---

The Viewer can be run or be installed as stand-alone client wherever a published archive exists, but it is recommended to install the Viewer when you install the Publisher. While the Viewer and Publisher can be installed and run separately, the Viewer must have direct access to the published archive. Do not place the published archive on a network share. Accessing the published database from a remote machine may cause instability and is insecure. For this reason, it is best to use the Viewer local to the published archive.

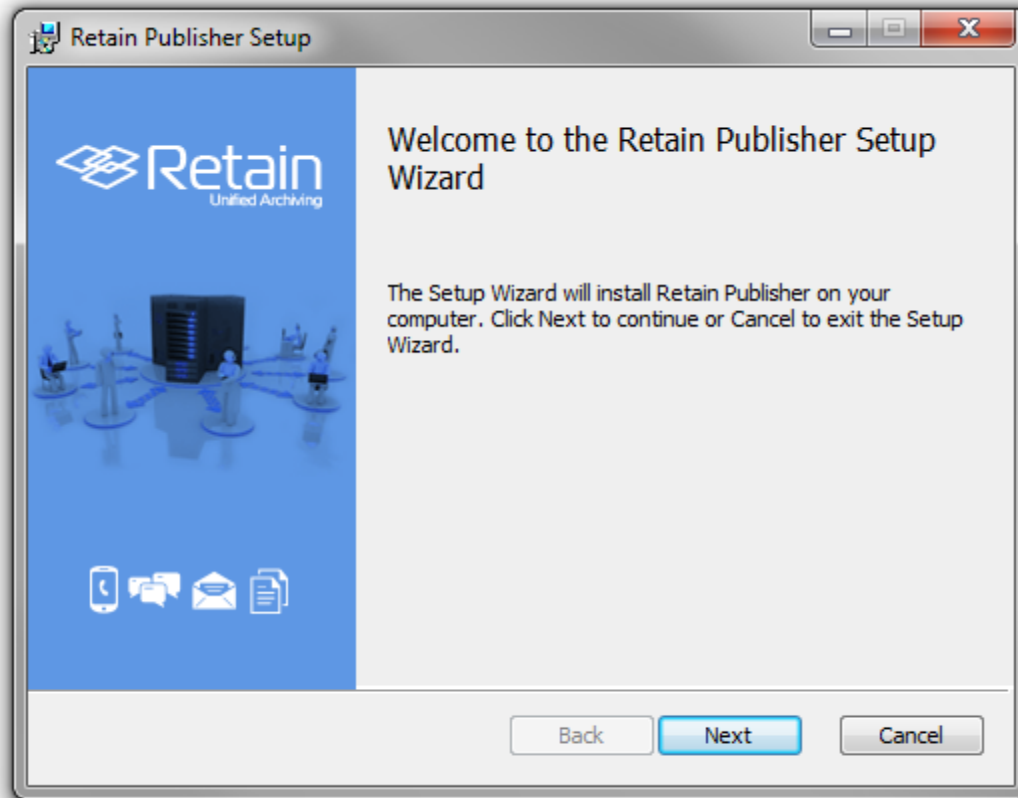
Download the tools from the Retain site

Run the installers on the desired machine.

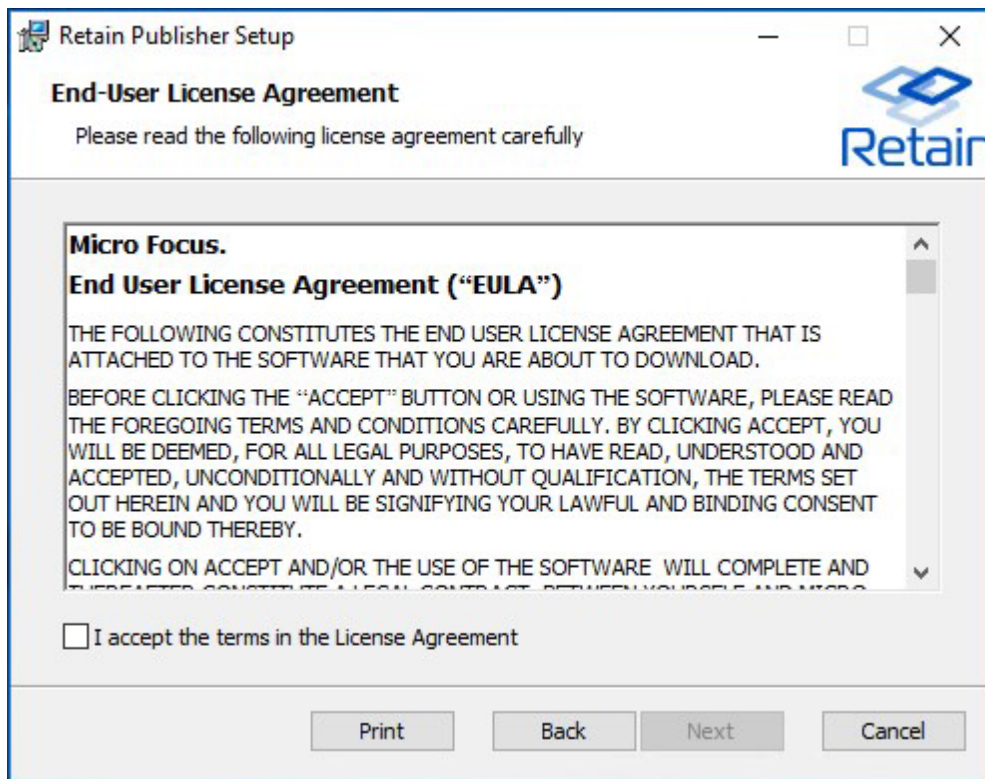
The Retain Publisher and Viewer are found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.

## Installation

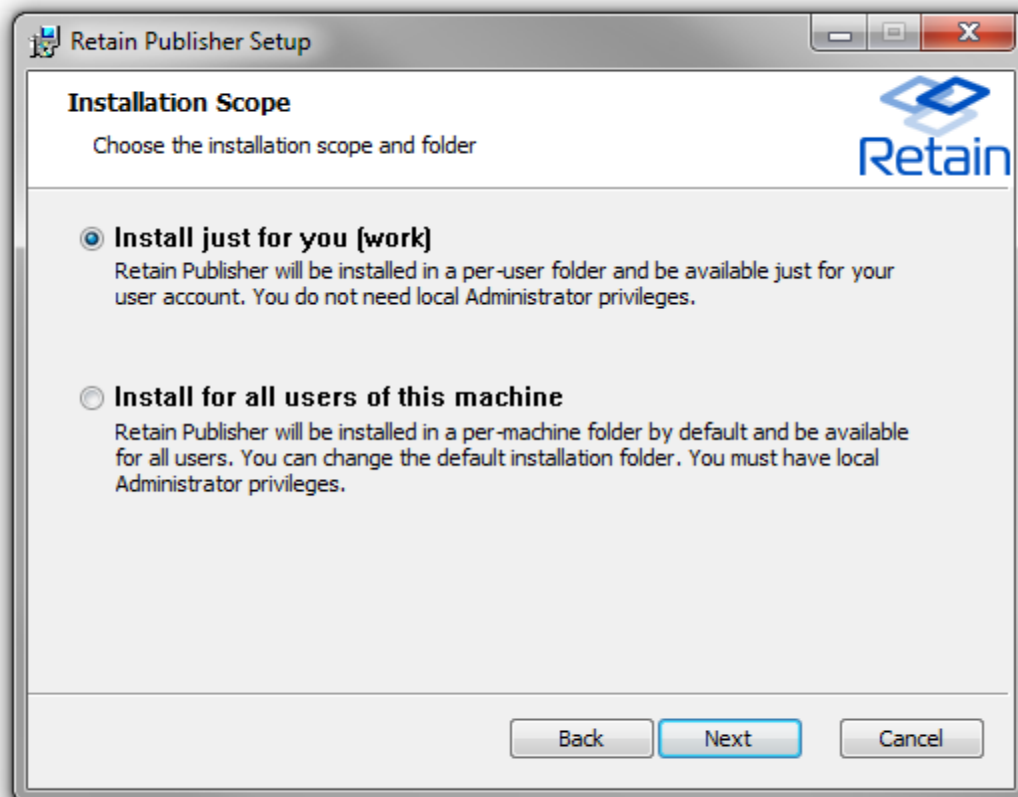
The Retain Publisher installation is very similar to the Viewer installation. Basic questions are asked, and the installer checks for .NET 4.5 SP1 before copying or installing any files. Click 'Next' to continue.



Read and accept the license agreement. Select 'Next' to continue.

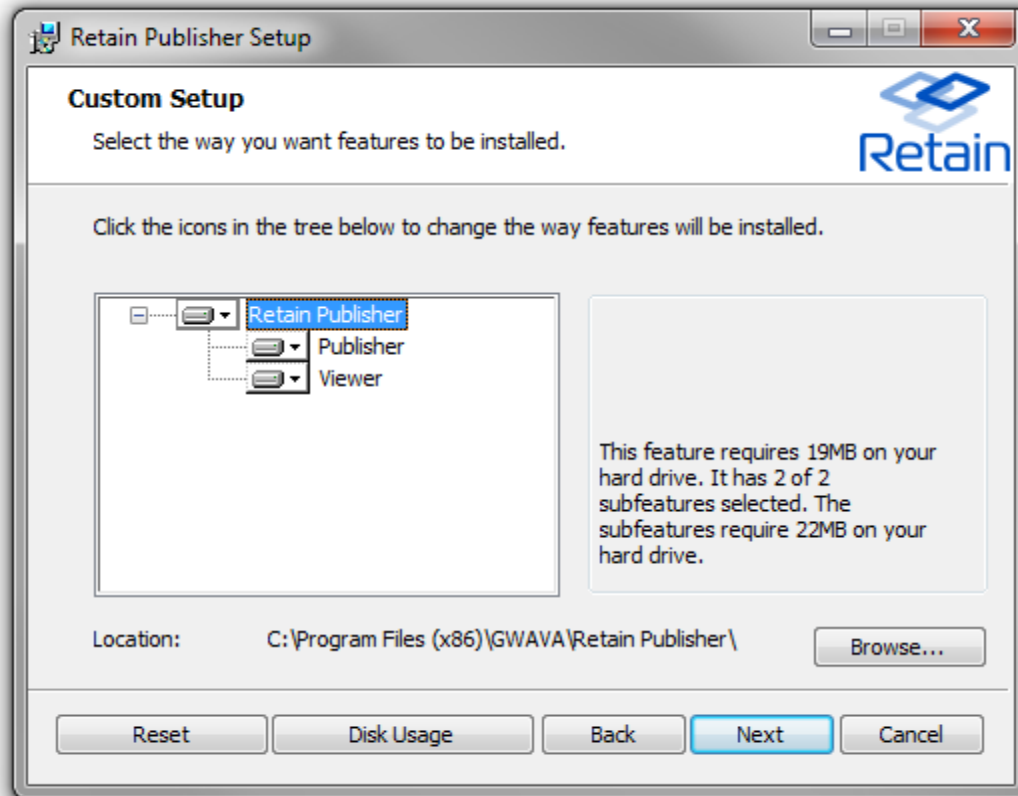


The installer checks for any programs that need to be closed for installation. Close any applications specified and click 'Next'. Otherwise you will need to choose which users to install the software to.





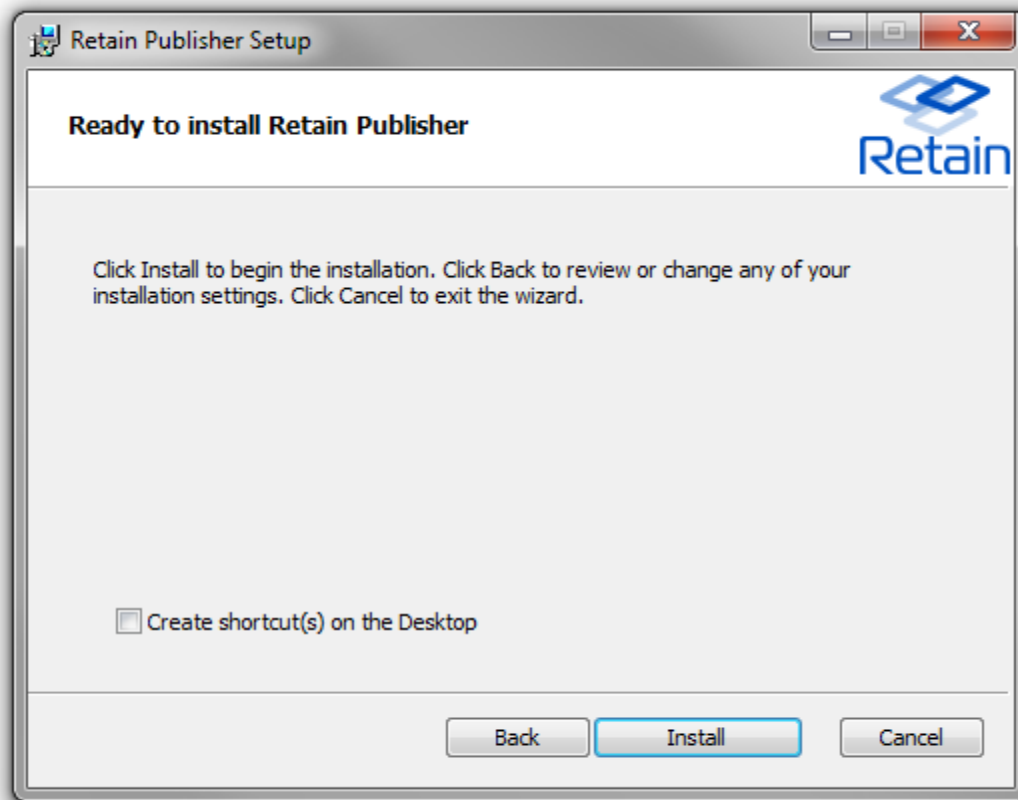
Select the scope of the install



Select which components to install.

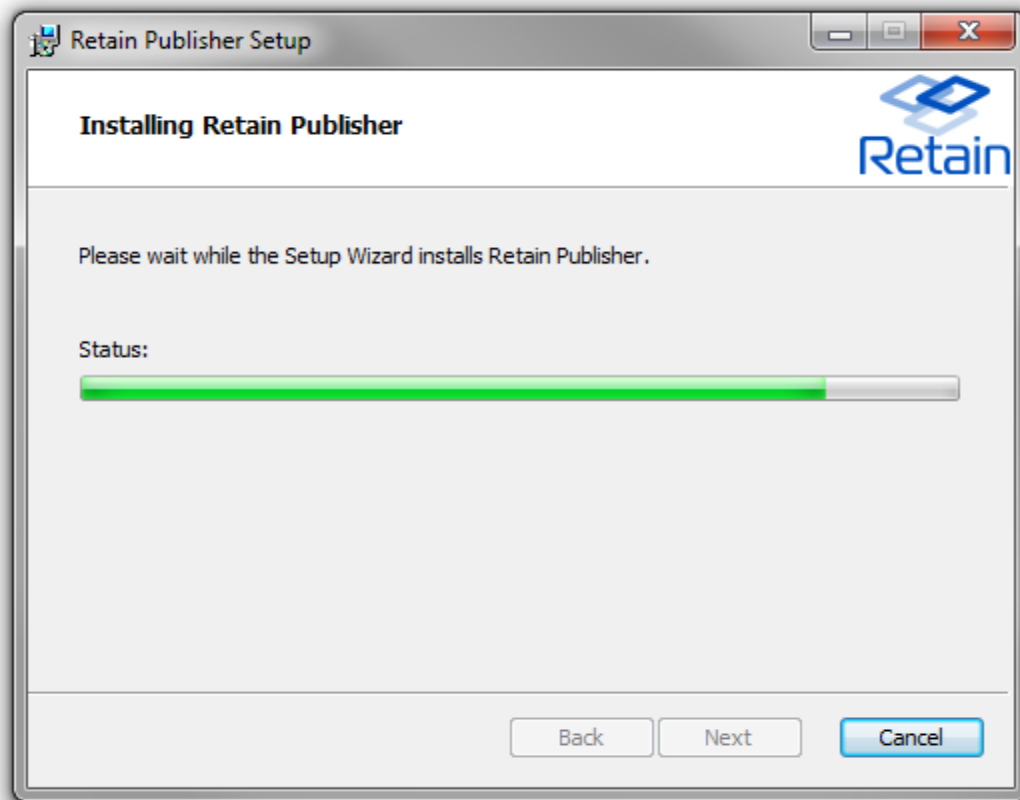
The Publisher installation provides the option to install the viewer alongside the publisher. If the viewer has already been installed, this is not necessary. It is recommended to have both the viewer on the same machine as the publisher. To only install the viewer, unselect the publisher. Select the desired setting and click 'Next' to continue.

Select the install location. The default is shown. If the default location does not work for the system, browse to, or specify the desired install location.

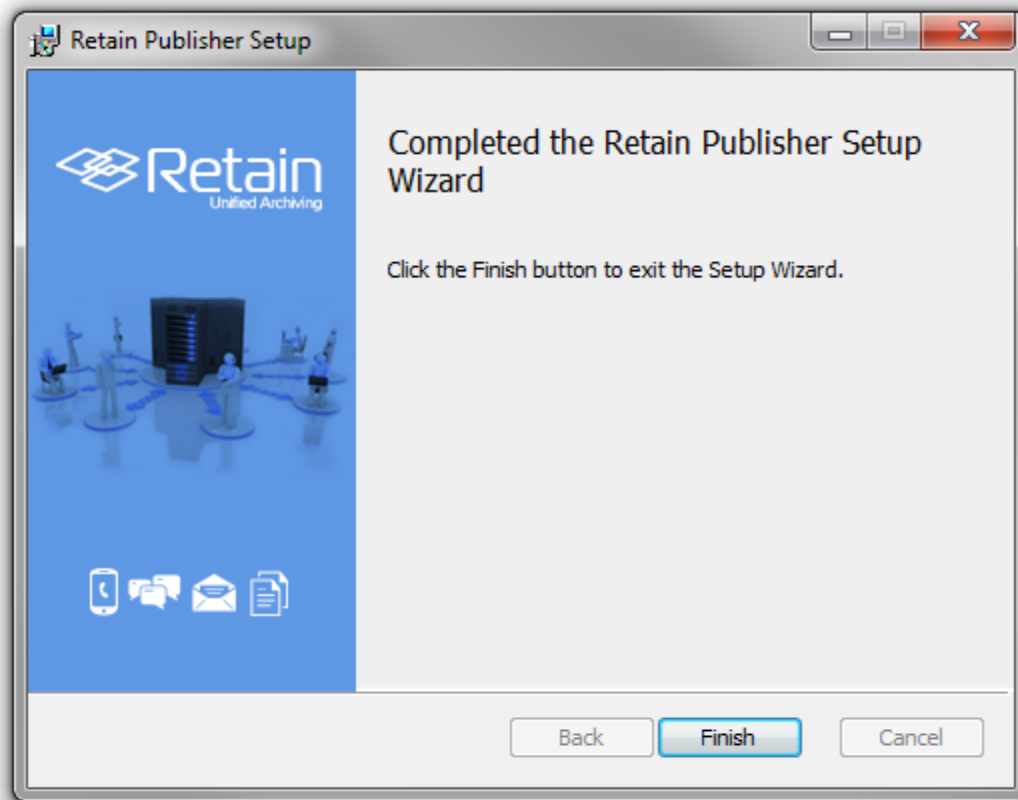


Select whether to create shortcuts or not. Default is to not create shortcuts. Select the check box to create shortcuts on the Desktop.

Click 'Install' to begin installation.



Wait for installation to complete.



After install has completed, select 'Finish'.

## Retain Publisher

The Retain Publisher must be run to create the local archive for the Viewer to connect to. The Publisher does not display messages, it just accesses and exports messages into a portable message archive.

### User Rights

Rights explicitly granted to the user.

Administrator level rights

<input type="checkbox"/>	Search all mailboxes
<input checked="" type="checkbox"/>	Publish messages
<input type="checkbox"/>	Restore messages [any mailbox]
<input type="checkbox"/>	See confidential items [other mailboxes]
<input checked="" type="checkbox"/>	View all Messages
<input checked="" type="checkbox"/>	View Message Content
<input checked="" type="checkbox"/>	View Message Metadata
<input type="checkbox"/>	Manage Server
<input type="checkbox"/>	Encryption Management
<input type="checkbox"/>	Access Reporting and Monitoring Server
<input type="checkbox"/>	Assign Rights
<input type="checkbox"/>	Access all audit logs
<input type="checkbox"/>	Deletion Manager
<input type="checkbox"/>	Device Management
<input type="checkbox"/>	Add, edit, remove global tag definitions
<input type="checkbox"/>	Apply or remove litigation hold
<input type="checkbox"/>	Manage Users and Groups
<input type="checkbox"/>	Manage Workers, Schedules, Profiles, Jobs

The Publisher must be used in conjunction with a user that has administrator rights to publish messages. Because the Publisher connects over the network, it requires an open network connection to the Retain Server.

The Administrator account for Retain automatically has the publish messages right, and can be used here, though it is highly recommended to create and use an auditor account with the mail export right and access to the desired mailboxes or post offices required.

Core Settings
User Rights
Mailboxes
Miscellaneous

### Mailboxes

These are additional mailboxes beyond the primary mailbox that the user may access. A non-admin user will only view messages addressed to these e-mail addresses (and to their primary mailbox), and might be able to forward/delete messages if given rights. An admin with *Search All Mailboxes* rights can access all mailboxes and perform any operation in the Search Interface.

Currently Selected

✗ Brice Bitter
✗ User02-Projects

Criteria

Mail Server
begins with
LX
Search

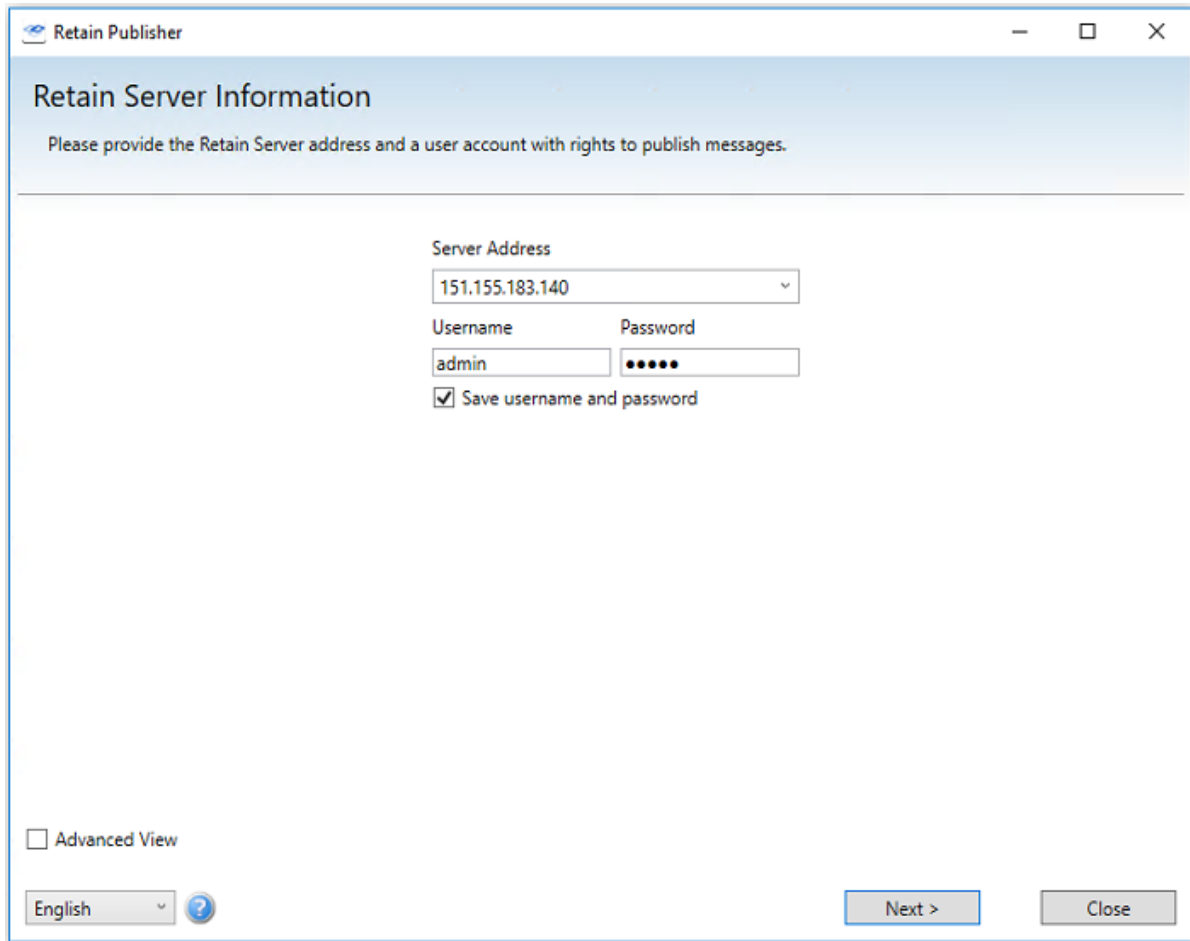
System GroupWise
Show only users
Show only recently cached items

Add Selected
Add All

Start Retain Publisher by opening the program Publisher.exe.

## Retain Server Information Page

Input the Retain Server's DNS or IP Address and the login for the account with message export rights and rights to the desired mailboxes. Unless the login account has the administrator level right to 'search all mailboxes', only the mailboxes granted to the auditor account will be accessible. Granting rights to mailboxes other than the active user's own mailbox are specified in the user rights section, under the 'mailboxes' tab.



The screenshot shows a window titled "Retain Publisher" with a sub-header "Retain Server Information". Below the sub-header is a message: "Please provide the Retain Server address and a user account with rights to publish messages." The main area contains a "Server Address" dropdown menu with "151.155.183.140" selected. Below this are "Username" and "Password" text boxes; the "Username" box contains "admin" and the "Password" box contains six dots. A checkbox labeled "Save username and password" is checked. At the bottom left, there is an "Advanced View" checkbox (unchecked) and a language dropdown menu set to "English" with a help icon. At the bottom right, there are "Next >" and "Close" buttons.

The advanced view provides a protocol and port options.

The image shows a screenshot of the 'Retain Publisher' application window. The title bar reads 'Retain Publisher'. The main heading is 'Retain Server Information'. Below the heading, a message states: 'Please provide the Retain Server address and a user account with rights to publish messages.' The form contains the following fields and controls:

- Protocol:** A dropdown menu with 'http://' selected.
- Server Address:** A text input field containing '151.155.183.140'.
- Port:** A text input field containing '48080'.
- Username:** A text input field containing 'admin'.
- Password:** A text input field with masked characters (dots).
- Save username and password:** A checked checkbox.
- Advanced View:** A checked checkbox.
- Language:** A dropdown menu with 'English' selected.
- Buttons:** 'Next >' and 'Close' buttons are located at the bottom right.

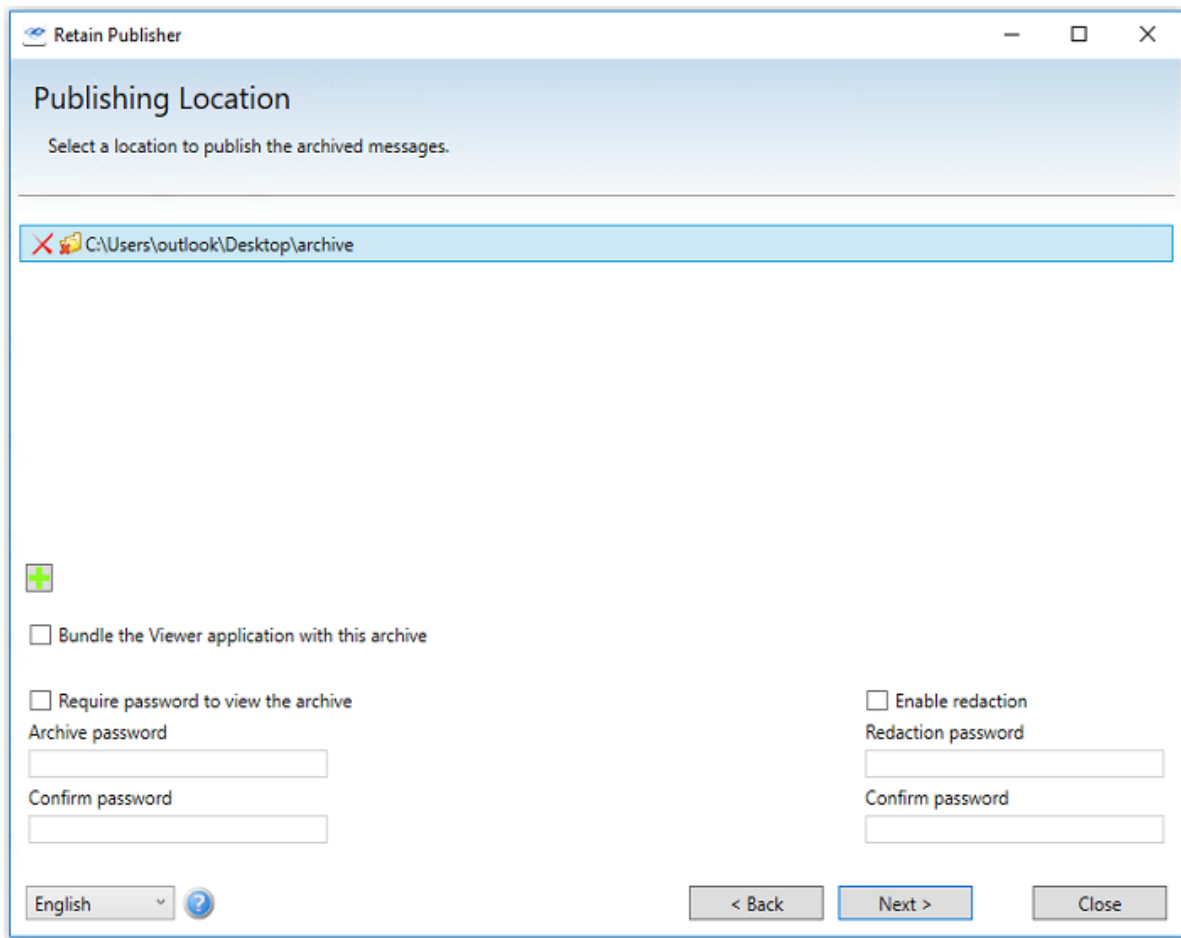
Select 'Next' to login to the Retain Server.

## Publishing Location Page

The Publisher then asks for the desired location for the exported archive messages.

The messages extracted from the Retain Server will be saved in a database at this location. Select an existing location or select the green plus button and then browse to, or create a new folder for the published archive destination. If a destination is selected which already contains an existing archive, a warning of overwriting an existing archive will be displayed.

You must select, or create and select, a location for the messages to be exported to before you may proceed to the next screen.



The options to password protect and use Redaction, both require passwords. To use them, select the checkbox and specify a password. The passwords can be different and both options may be present on the same archive.

When the 'Bundle the Viewer application with this archive' option is selected, the Viewer installation file is copied into the archive as well, preparing it to be completely mobile; the entire destination folder can then be copied or sent to any system with all that is required to read and search the archive. If the archive is to be distributed on a burned DVD or CD, further redaction will not function from the disk. All redaction comments should either be made before the archive is burned to a disk, or the archive should be copied from the disk to a local location where changes can be saved. When writing the archive to a read-only medium, it is always prudent to finalize the compilation.

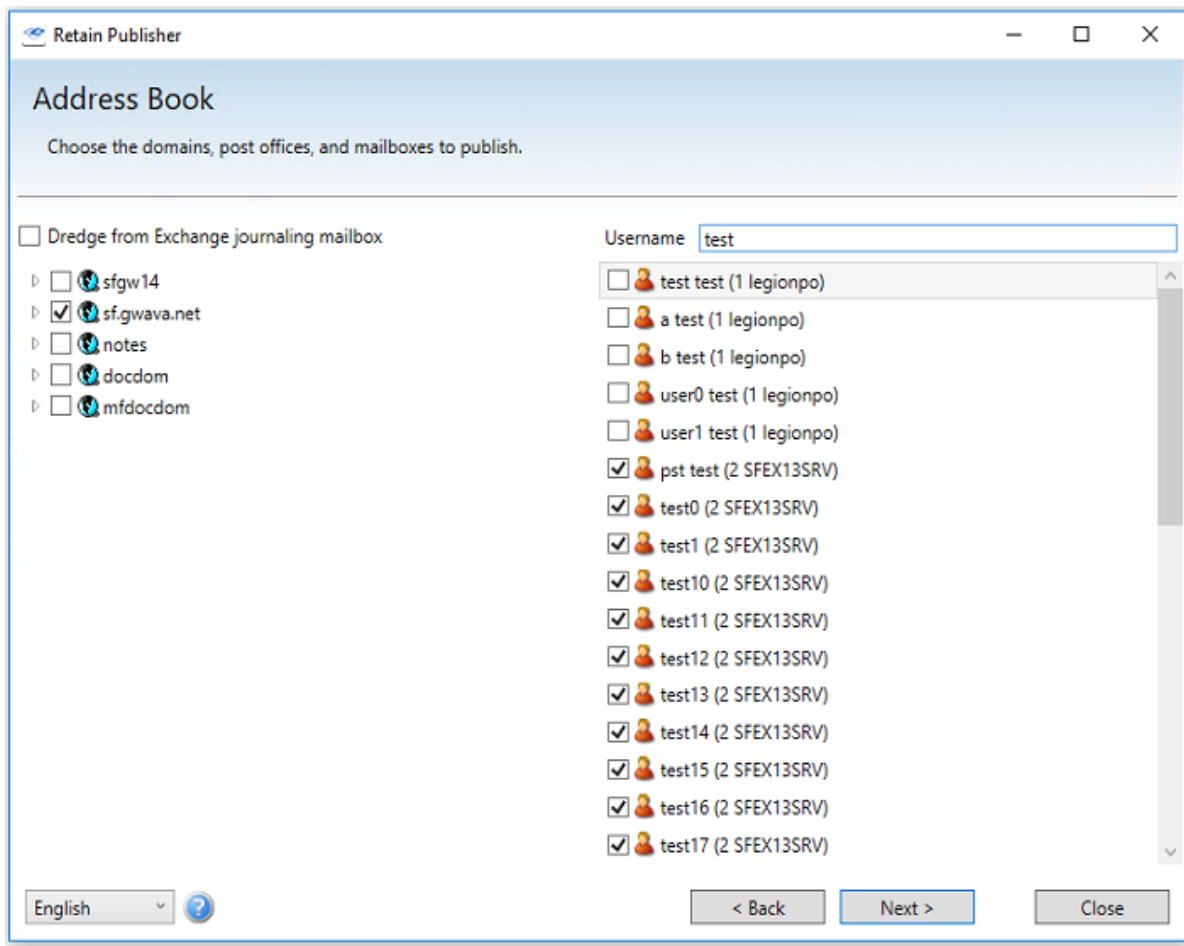
Making the archive mobile can be very useful in situations where direct access to the Retain archive, such as during legal discovery, when email information is required to be surrendered for a user or group of users, an archive can be created and provided without disrupting current Retain operation. Click 'Next' to continue.

## Address Book Page

Select the Post office and/or users to dredge.

Search for users by their display name.





## Query Form Page

Select or create a query to filter the scope of the export job. There are three tabs but you only need to use the one you need to build the query. You can use a query saved in the Retain Web console, a simple search or an advanced search.

If you don't want to perform a query, press the "Skip this step" button.

## Queries Tab

A query saved "[Searching in Retain's Archives](#)" on page 10 on the Retain Server can be loaded at this point.

Queries can be saved under the Search and Advanced Search tabs in the Search Messages Web interface. Publisher requires you to log in to the same account as the one used in the web interface to access the saved query.

The screenshot shows a window titled "Retain Publisher" with standard window controls (minimize, maximize, close). The main heading is "Query Form" with a subtext "Please select query for filtering data." Below this is a tabbed interface with three tabs: "Queries", "Search", and "Advanced Search". The "Search" tab is currently selected. The main area of the "Search" tab is titled "Queries saved in Retain Server" and contains a single text input field with the value "poor alice". At the bottom of the window, there is a language selector set to "English" with a help icon, and four navigation buttons: "< Back", "Next >" (which is highlighted in blue), "Skip this step", and "Close".

## Search Tab

The Search tab allows you to create a simple search query within Publisher.

The screenshot shows a window titled "Retain Publisher" with a "Query Form" header. Below the header is a light blue bar with the text "Please select query for filtering data." Below this bar are three tabs: "Queries", "Search", and "Advanced Search". The "Advanced Search" tab is selected. Under the "Core" section, there is a "Search phrase:" label followed by a text input field containing "poor alice". Below this is an "Operator:" label followed by a dropdown menu showing "Equals". Below the "Operator" dropdown are two sections: "Scope" and "Misc.", each with a downward-pointing arrow icon. At the bottom of the window, there is a language dropdown menu set to "English", a help icon (question mark in a circle), and four buttons: "< Back", "Next >", "Skip this step", and "Close".

## Advanced Search Tab

The Advanced Search Tab allows you to create a complex search query within Publisher.

The Publisher may restrict what mail or items are published into the message archive by specifying search or query terms. If a message or item does not apply to the search terms, it will not be added to the published archive. There are three opportunities to specify search terms or criteria; Core (query), Scope, and Misc.

Each of the three different criteria panels at this step may be shown or hidden by clicking on the hide/show arrow. Previously saved searches or searches that have been shared with the logged-in user will be displayed in the queries menu.

Retain Publisher

# Query Form

Please select query for filtering data.

Queries

Search

Advanced Search

Core

Search Terms

Search Type	Operator	Search Phrase	Connecto
✖ SenderEmail	Equals	hatter@carroll.co	AND
✖ Content	Contains	poor alice	AND

+

Scope

Misc.

English

?

< Back

Next >

Skip this step

Close

## Core Panel

To add criteria to the Core query parameters, simply select the green '+' icon, then select the different desired operator, search type, and phrase.

For instance, a very exclusive 'contains' search of the message contents will only publish messages that have the exact specified word or phrase in them. Fuzzy searches for approximates to the specified phrase, producing results including the words, but not in the specific order, or similar words.

## Scope Panel

The Scope details what types of messages will be searched for. If no items are checked, all are allowed, and that setting is default.

To restrict to specific messages and types, (some are mail system specific), at least one item must be selected. If one item is selected, or something is desired to be excluded from the published archive, select all desired item types. The Item Type, Item Source, and Attachment size, are all independent factors and must be specified independently or left blank. A blank item source and attachment size will not restrict those criteria when combined with a specified type.

Attachment sizes can be restricted or allowed into the message archive, and are accessible through the drop-down menu at the bottom of the query screen, under the 'Attachment Size' menu.

Less than 100 kilobytes

Greater than 100 kilobytes, but less than 1 megabyte

Greater than 1 megabyte, but less than 10 megabytes

Greater than 10 megabytes, but less than 100 megabytes

Greater than 100 megabytes

## Misc Panel

The Miscellaneous panel allows you to restrict the message based on the message's status. Options are Doesn't matter, True or False.

The screenshot shows a window titled "Retain Publisher" with a "Query Form" header. Below the header is a sub-header "Please select query for filtering data." and three tabs: "Queries", "Search", and "Advanced Search". The "Queries" tab is active, showing a list of query categories: "Core", "Scope", and "Misc.". Each category has a dropdown arrow. Below the categories are several filter sections, each with a label and a dropdown menu: "Status" (with sub-items "Opened", "Read", "Private"), "Litigation Hold", and "Confidential". All dropdown menus are set to "Doesn't matter". At the bottom of the window, there is a language selector set to "English", a help icon, and four buttons: "< Back", "Next >", "Skip this step", and "Close".

Select 'Next' to continue.

## Folder Structure and Date Range Page

Choose how much of the folder structure and date range you wish to download. By default, the entire date range of the system will be searched.

**Retain Publisher**

### Folder Structure and Date Range

Select options for retrieving folder structure.  
If desired, you may publish messages from a specific time period.

**Folder Structure:**

- ☒ Non-empty folders
- ☐ All folders

**Date Range**

☒ Filter items by creation date (creation date range is required if any query is selected):

From  To

Calendar (August 2016):

31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

English ?

< Back    Next >    Close

Simply selecting the desired setting will make it active in the search criteria. Set as desired and continue.

The publisher can also be restricted to exclude all empty folders from the published archive.

The Date Range allows for specific item date ranges to be selected or excluded. The query will cause the publisher to only look for the specific mail required within the specified time frame. The time range can have a start date, an end date, or both. This feature is disabled if a saved query is being used.

This setting differs from the following time restriction in that the start and end times may be specified in a range, instead of a specific hard date. Only messages strictly adhering to the range will be published. If a date range is desired, enable the date range and select the desired range.

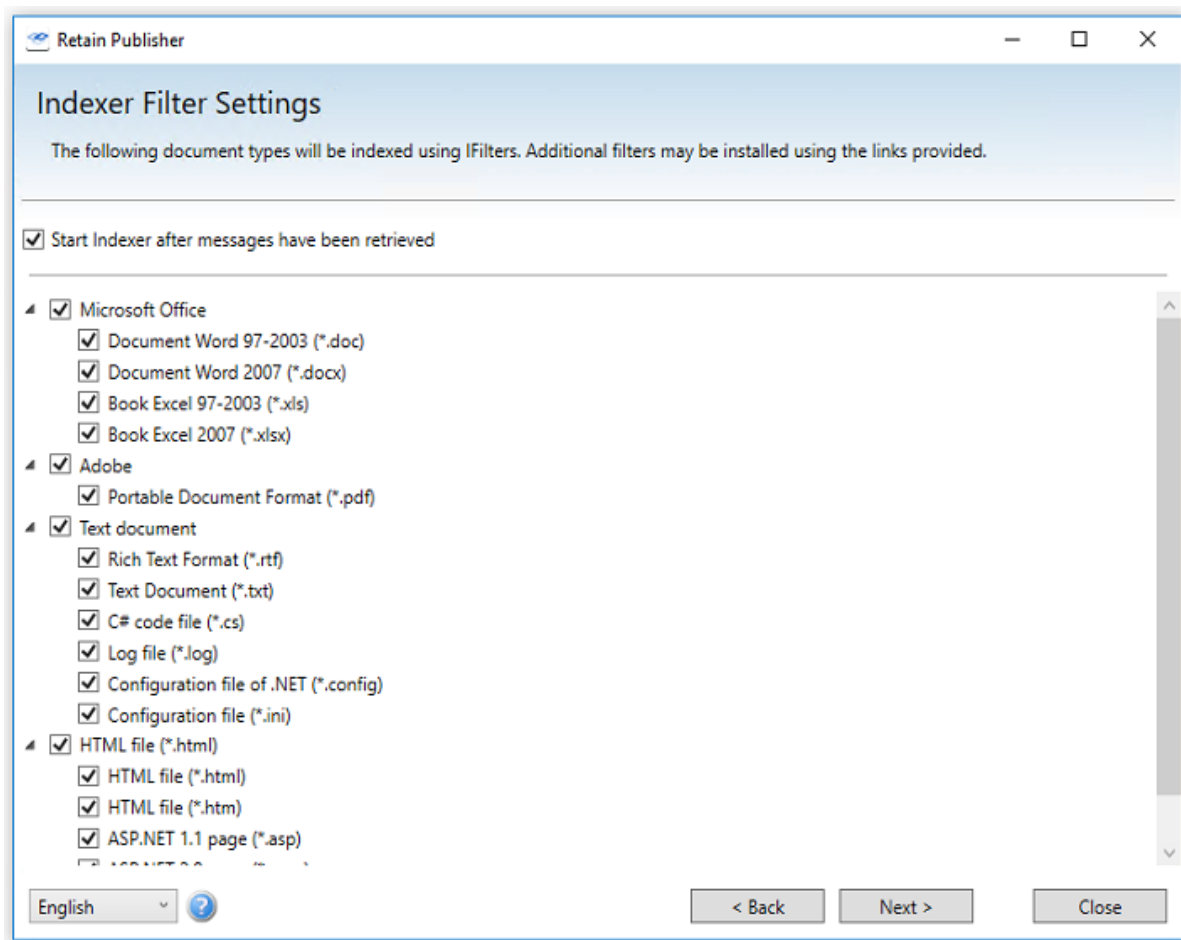
A date range is required to be specified if the active query is anything other than a previously saved query, so make sure it is set to an acceptable window for the desired data. The publisher automatically defaults the date range to one year.

Click on the 'From' or 'To' dates to reveal the data selection calendar and specify the date as desired.

Click 'Next' to continue.

## Indexer Filter Settings Page

Select what types of documents to be indexed. It is best to index all types of documents so all items may be searched.

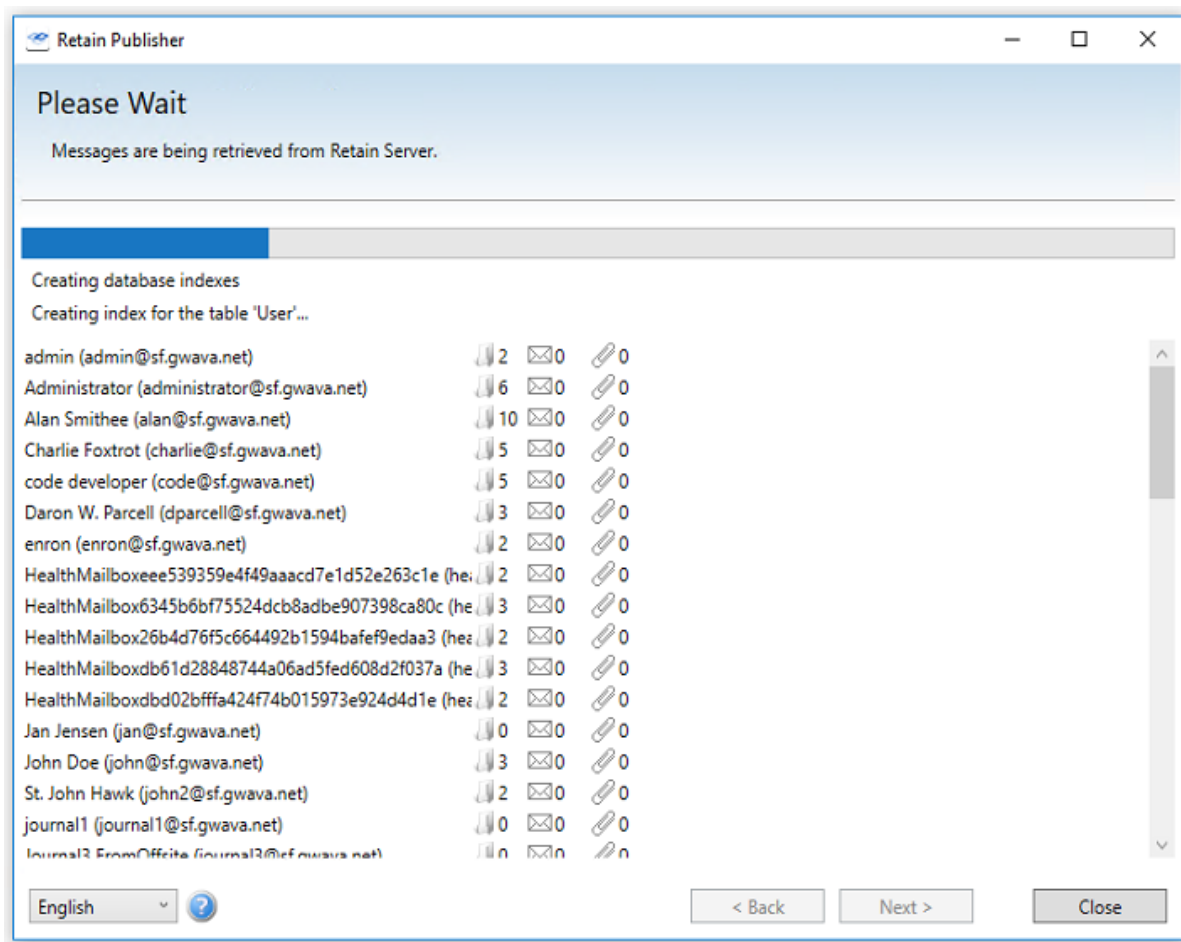


The Publisher can create and index the archive for faster searching and browsing by the Viewer. It is highly recommended to index a published archive. All default filters are shown. To enable Adobe PDF indexing you will need to install Adobe PDF iFilter found on Adobe's web site.

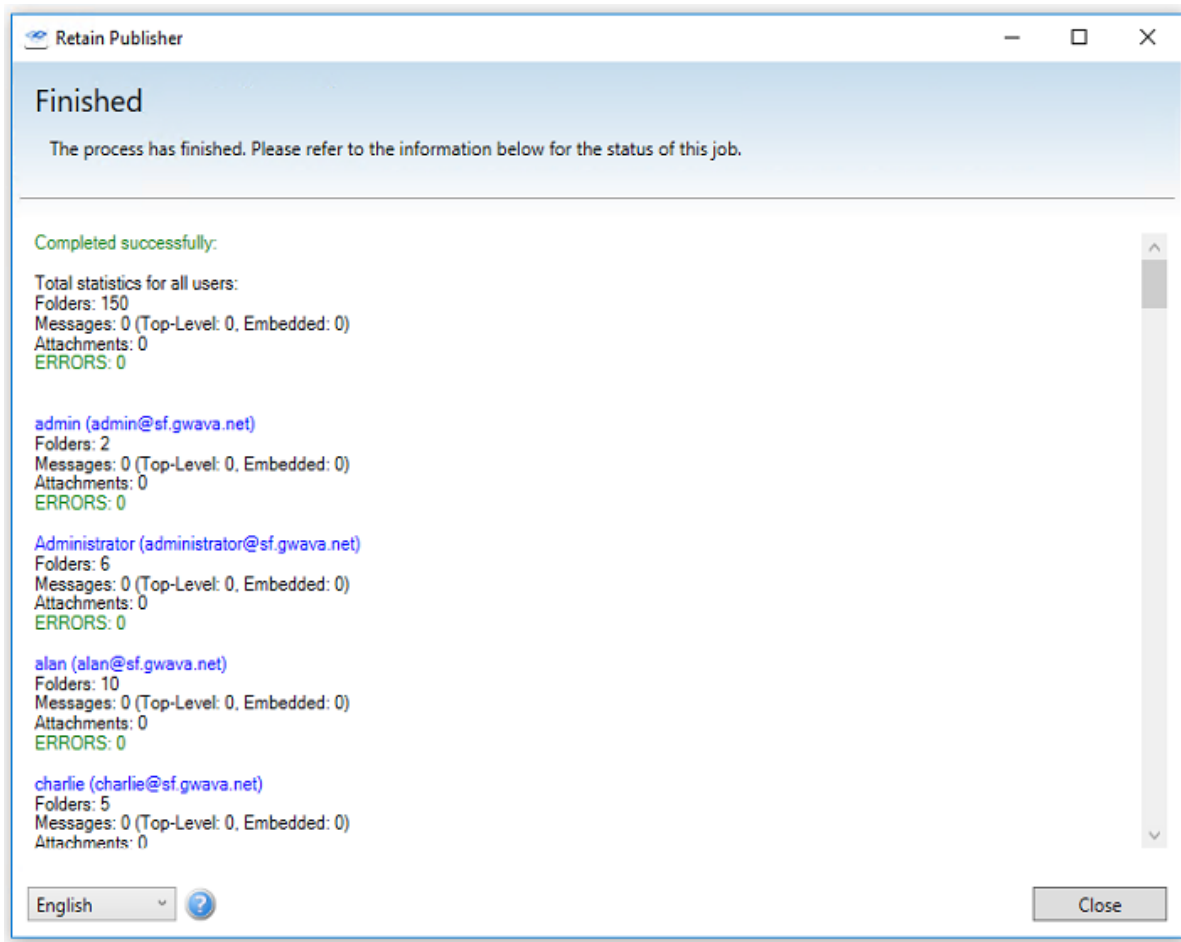
Click 'Next' to continue.

The Publisher will connect to the Retain Server and export the qualifying messages from the selected users mailboxes and builds the local archive.





When the Publisher is done, it will display a report on the job. Depending on whether the exported archive was selected to be indexed after the job is done, the indexer will run. A.net error may occur at the end of Indexing, caused by an error in Adobe iFilter, if this error occurs, please install the latest Adobe PDF iFilter found on Adobe's web site.

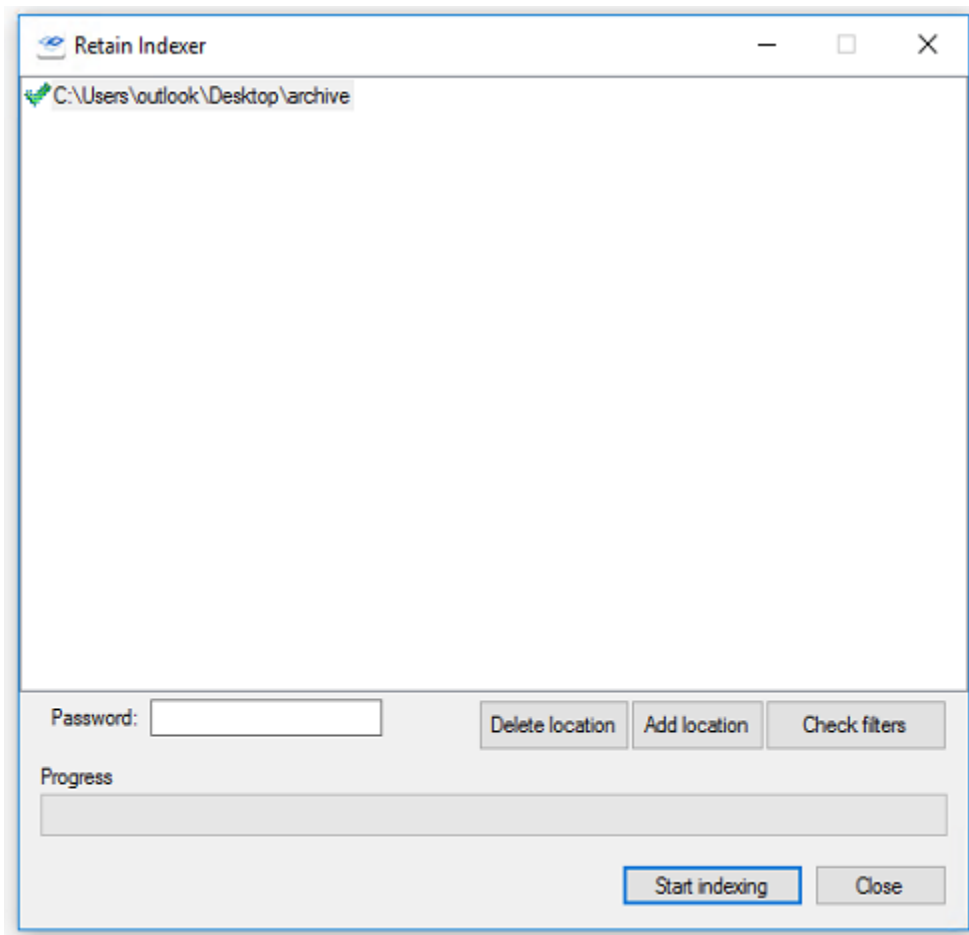


Select 'Close' to exit the publishing wizard and the indexer will automatically run if that option was selected. With a successful publishing job, the archive is now ready to be connected to the Viewer.

## Retain Indexer

Retain Indexer runs automatically after Publisher completes the download. If the Indexer was not automatically run, it must be run before the Viewer can search the archive.

Select the archive and press "Start indexing"



If an archive is password protected, you will need to provide the password before indexing can be run successfully.

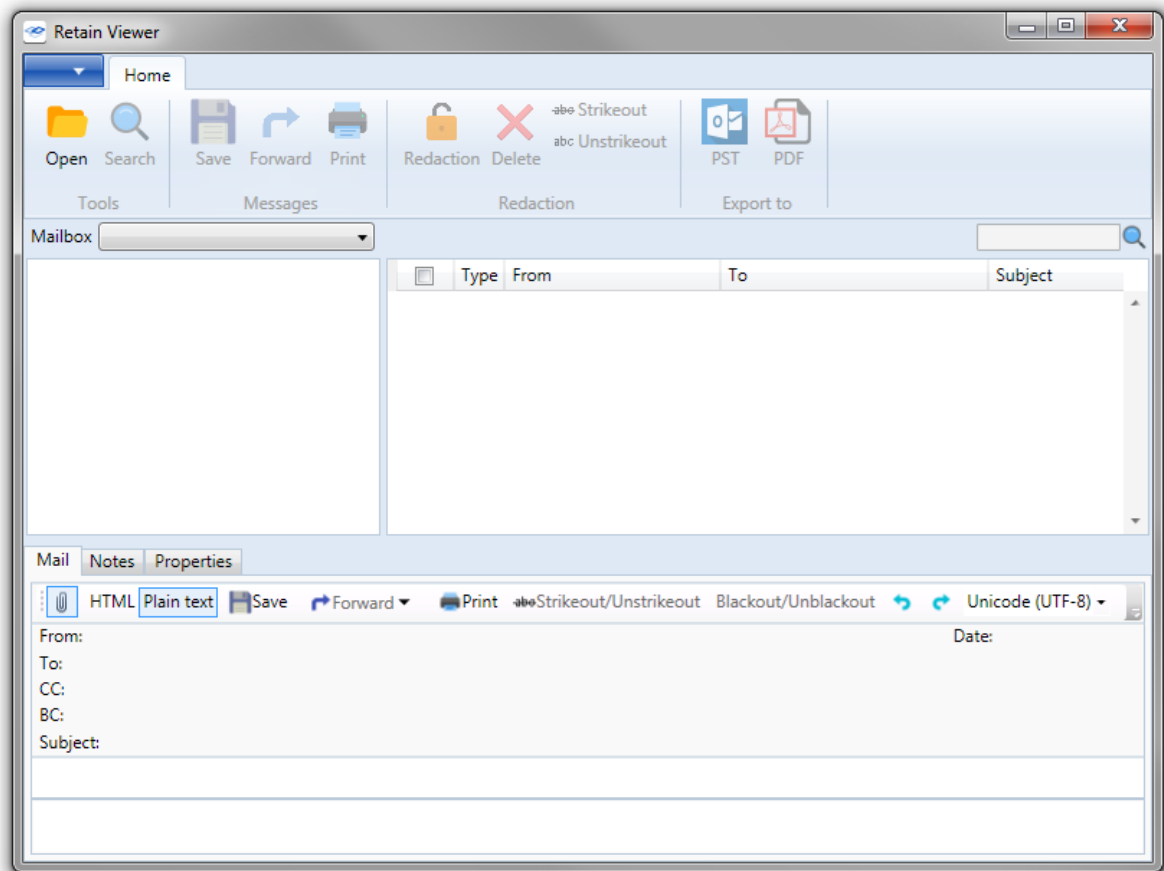
Delete location will remove the archive from the display but not the disk.

Add location will allow you to add an archive location.

Check filters shows installed indexing filters and can be enabled or disabled.

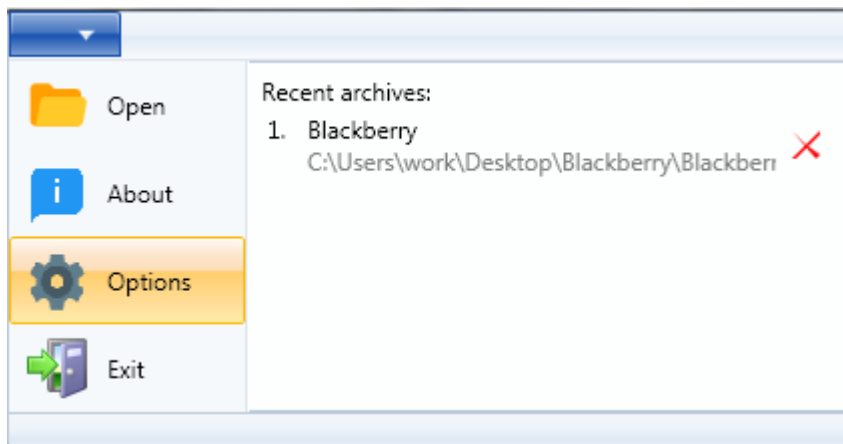
## Retain Viewer

To connect to the published archive, locate the shortcut to the installed Retain Viewer and start the Viewer.

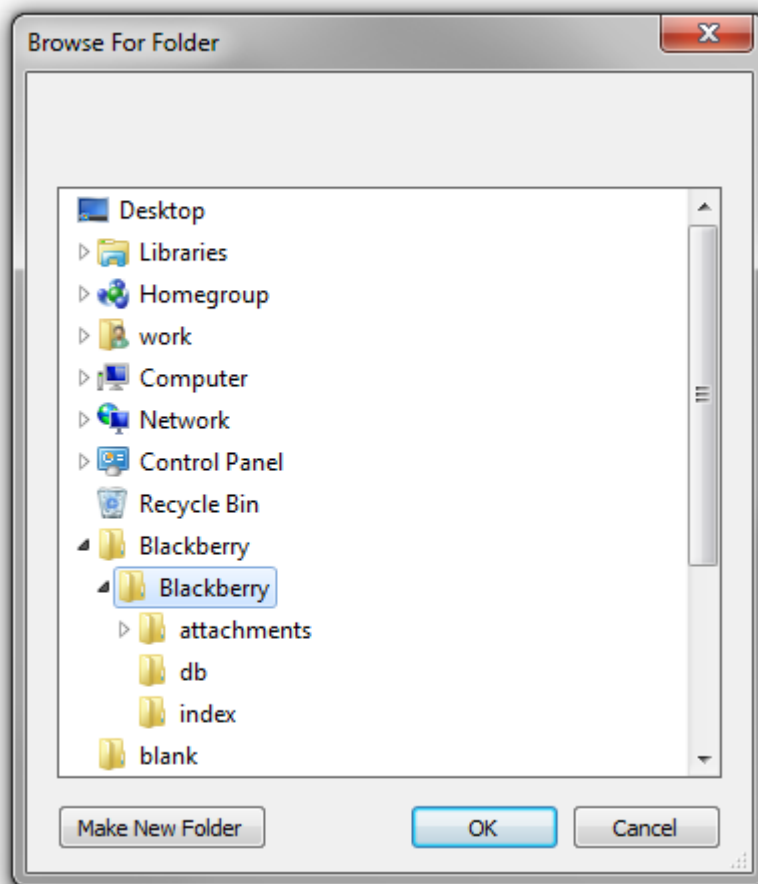


The viewer must be pointed to a valid database on initial startup. If the viewer does not prompt for the location to a published database, or if a new database is desired, select the 'Open' button and browse to and select the containing folder. If the Viewer has been previously opened, it will remember the last database opened.

The viewer is setup similar to an email client, with the mailbox and account on the left, the selected account's contents fill the space on the top right, and any selected message's contents are displayed along the bottom. Tabs allow access to the message properties or text, and highlighted buttons below the tabs determine what is shown and how, (Attachments, HTML, Plain Text). The Viewer also has the ability to forward the selected message out of the portable archive to any specified address.



To access an archive, select the 'open' button from the top toolbar, or select the 'Open' option from the 'File' dropdown menu.

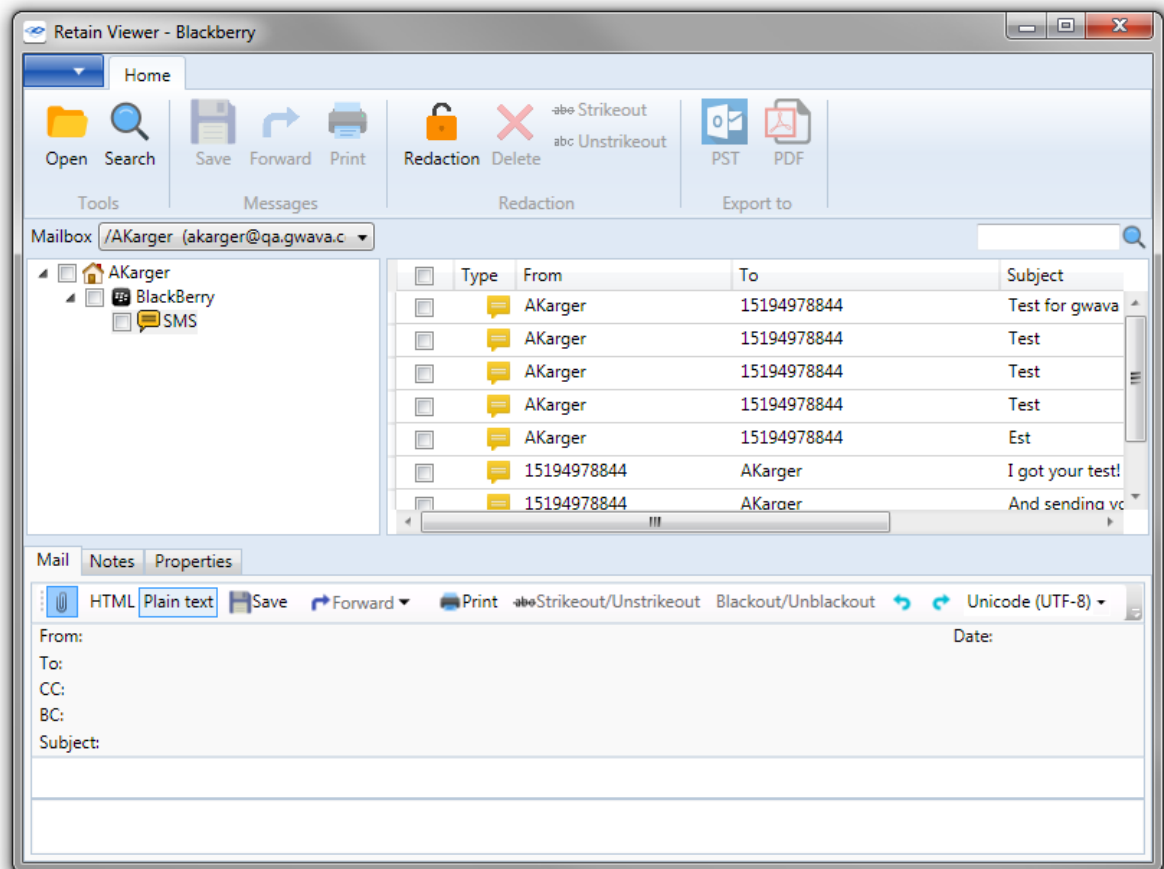


The Viewer only needs to know the base location of the archive, or the folder selected in the Publisher as the archive location. The 'Open' menu starts a browse window.

Browse to the location where the portable archive is located, select it, and click 'OK'.

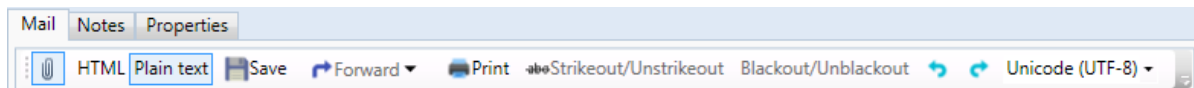
If the archive was password protected, the correct password must be entered before the Viewer can gain access.

Once the Archive has opened, all mailboxes contained in the archive are displayed. Select a mailbox to access the mail in the archive.



It is important to note that while the Publisher stores time in UTC, the time displayed in the viewer, located in the 'Date' column for each message, is relative to the viewer's installed time zone, it is not in UTC. Messages published in PDF also display according local time zone. PST is exported in UTC, but Outlook rounds to the nearest minute, and displays the UTC time stamp in local time.

The text of the selected message will be displayed in the bottom viewer pane. The viewer contains options to show or hide the attachments, forward the message, as well as whether to view the message in plain text, or in HTML when available.



**HTML:** Select the HTML version of the item, if available.

**Plain text:** Select the text version of the item, if available.

**Save:** Save the current item to disk.

**Forward:** Forward the current item to an email address.

**Print:** Print the current item.

**Strikeout/Unstrikeout:** Toggle the strikeout feature of the current highlighted section.

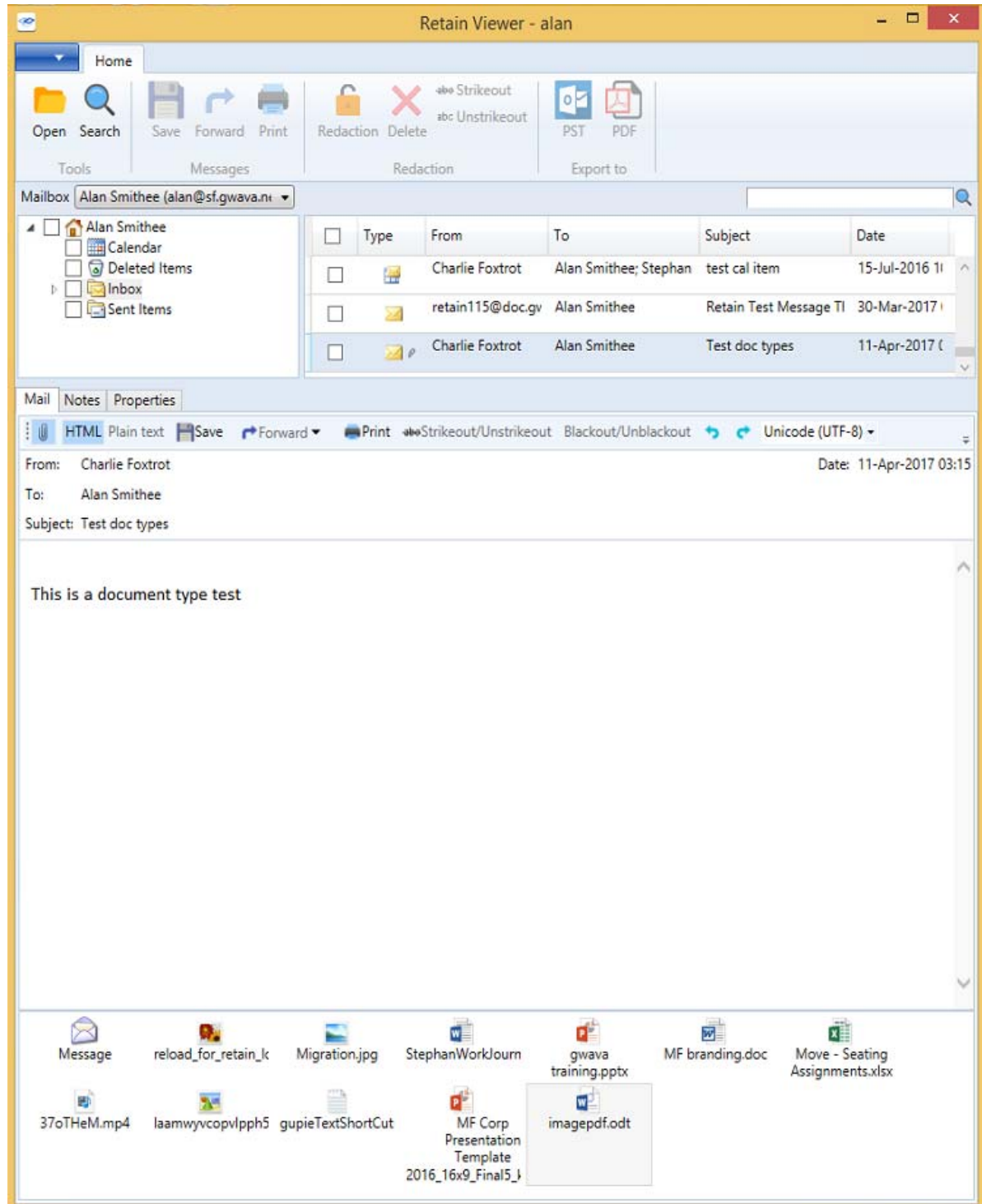
**Blackout/Unblackout:** Toggle the blackout feature of the current highlighted section.

**Undo redaction:** A green reverse arrow that undos the last action.

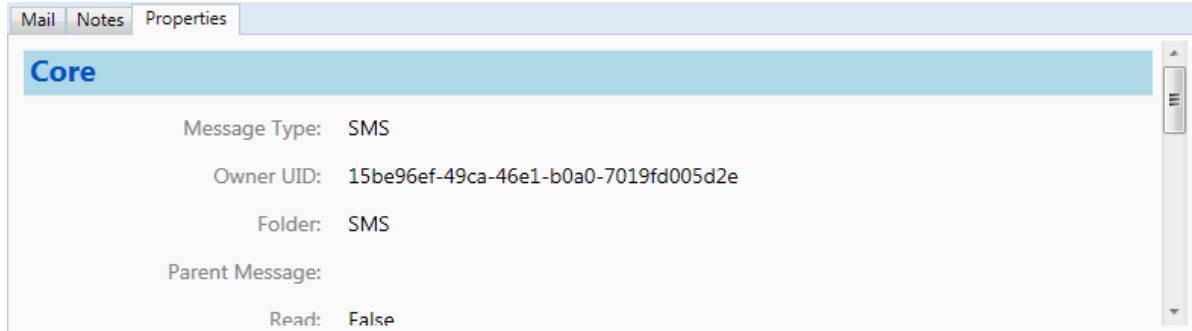
*Redo redaction:* A green forward arrow that redos the last action.

*Encoding drop down menu:* Change the item encoding, depending on the encoding schemes installed to the OS. Default, Unicode (UTF-8).

Attachments are shown along the bottom of the message window. Double-clicking on an attachment will send it to the operating system to open in the appropriate program.

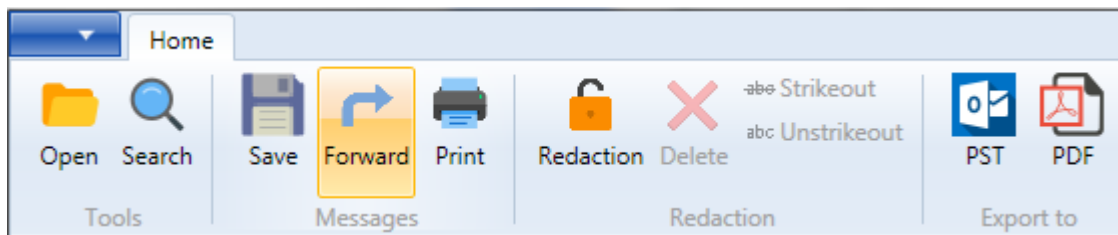


The properties tab displays the essential information on the mail item in question. The created, delivered, read status, and store date are displayed along with the identification number, message source, etc.

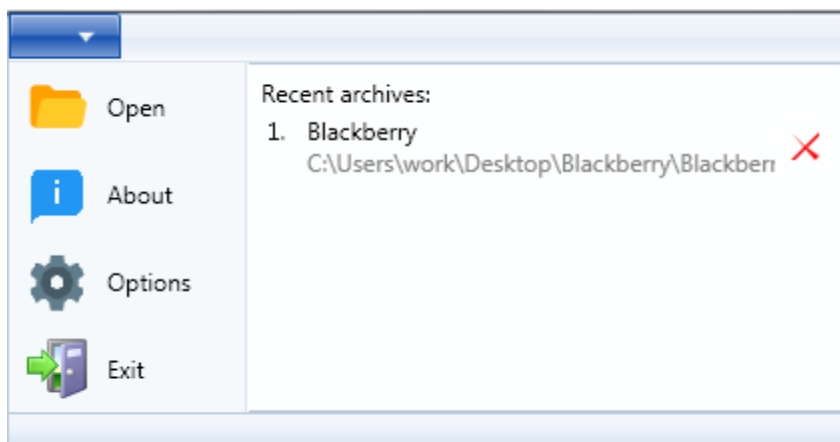


## Forward

The Forward, and forward as attachment options, (found both on the main toolbar, as well as a drop down menu in the toolbar in the view window), allow the Retain Viewer to send the selected message from the archive to a destination account. 'Forward' functions exactly as the forward function in an email client. The 'Forward as attachment' creates an attachment from the selected email and attaches it to a message sent.

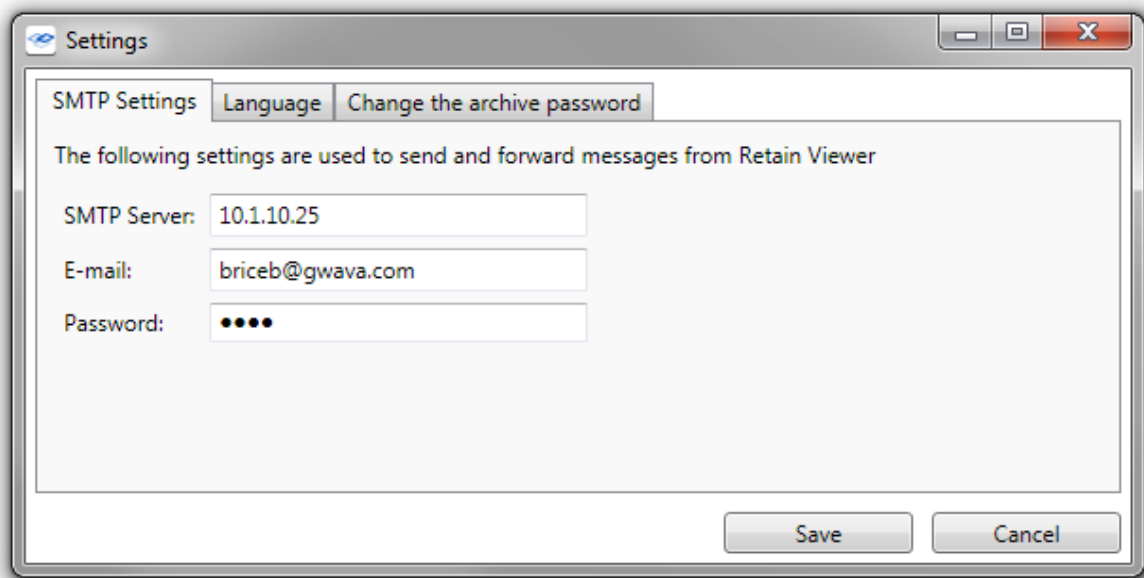


In order to utilize the 'Forward' option in the viewer pane, the Viewer must be configured with a mail server. To tell the Viewer which SMTP server and account to use to send messages, select 'Options' from the drop-down menu.



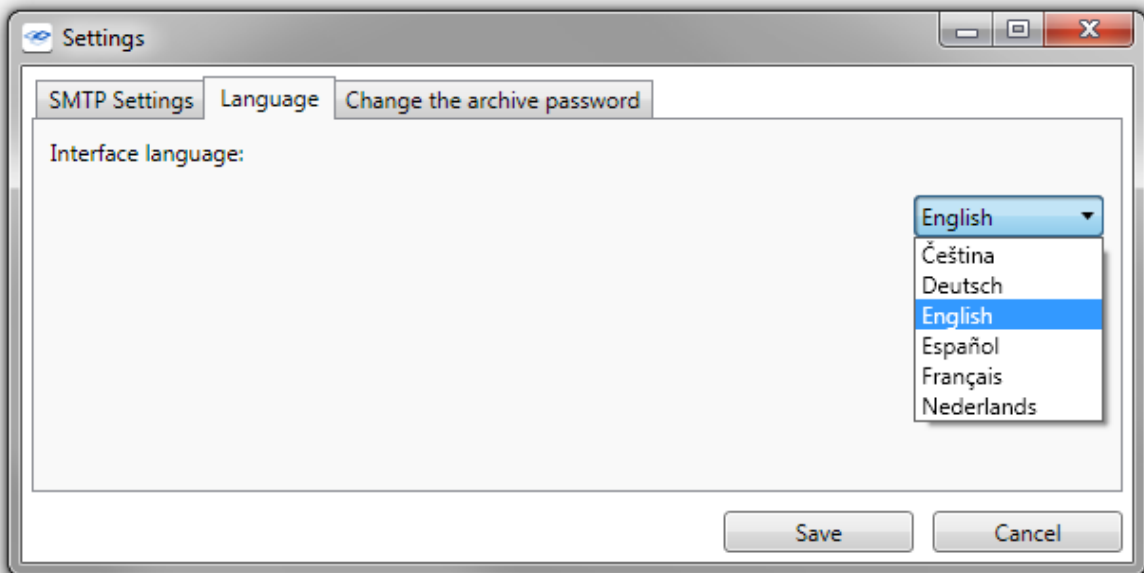


## Settings

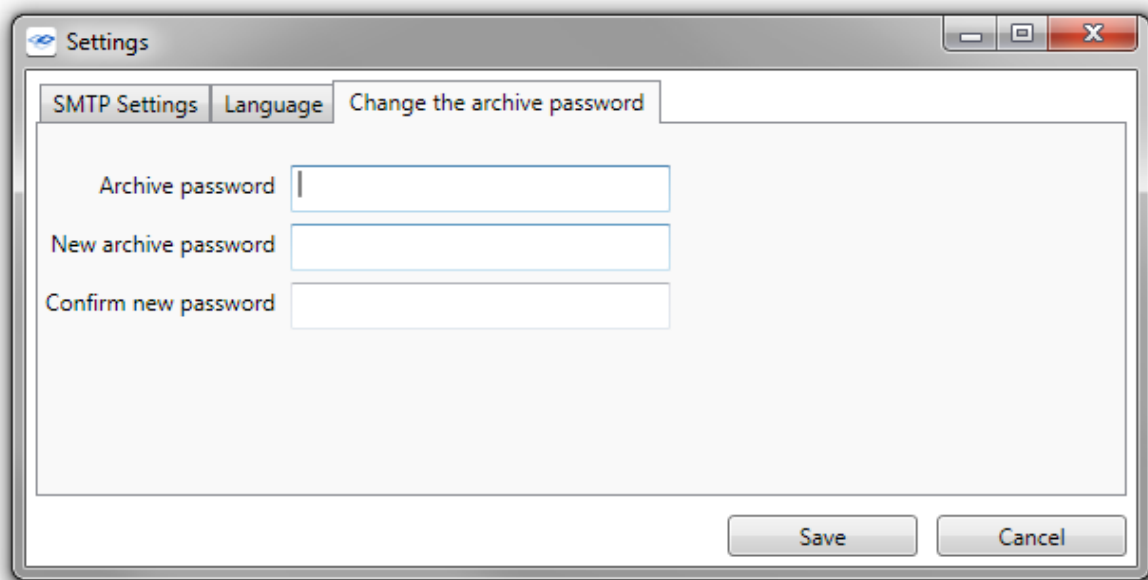


The 'Settings' configuration menu will appear. Enter the DNS or address of the SMTP Server desired to use for the Viewer system, and an appropriate account, (Username is required, password is optional), to connect and send messages.

Language and displayed document format settings may be changed as well for the specific viewer.



The 'Change the archive password' tab allows access to modify the password of the current archive. In order to change a password on an archive, the original password must be supplied first. If there is no password on an archive, a new password may be created; simply leave the current password field blank and input the desired password in the provided fields. While passwords may be changed, or created, the requirement for a password may not be removed.



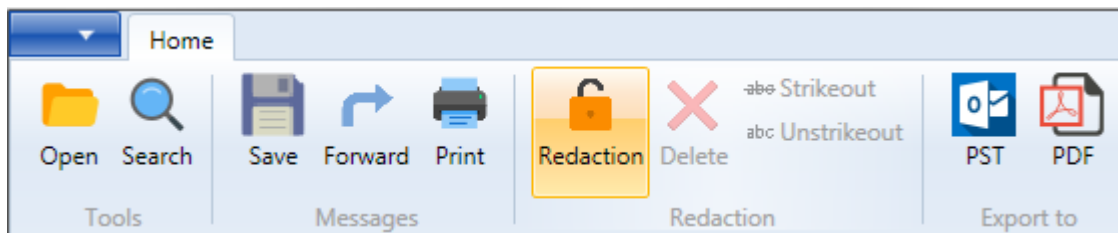
## Redaction

Redaction allows the viewing auditor to compile notes on the archive.

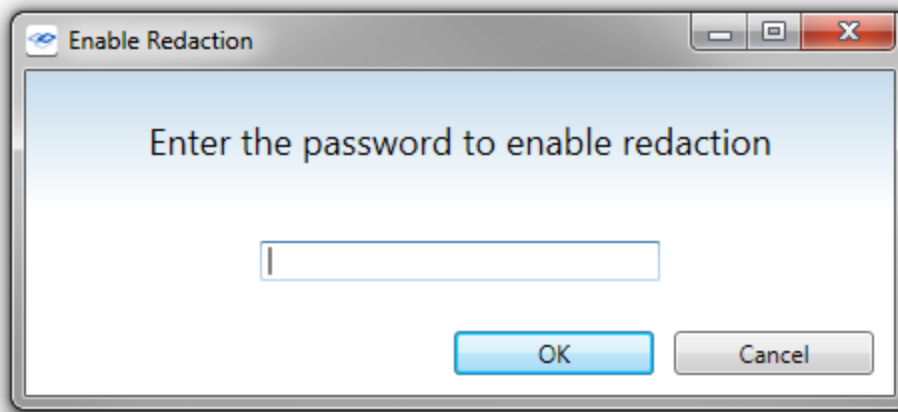
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**NOTE:** Attachments cannot be redacted directly because they require third-party software to open. However, the archive can be exported as PDF and a [third-party plugin \(http://blogs.adobe.com/acrolaw/2010/05/extracting-and-printing-attachments-from-email-portfolios/\)](http://blogs.adobe.com/acrolaw/2010/05/extracting-and-printing-attachments-from-email-portfolios/) can be used to redact the PDF portfolio.

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The notes are appended to the entire archive, and not any individual messages, which makes Redaction extremely useful to compile messages and identify messages of interest.

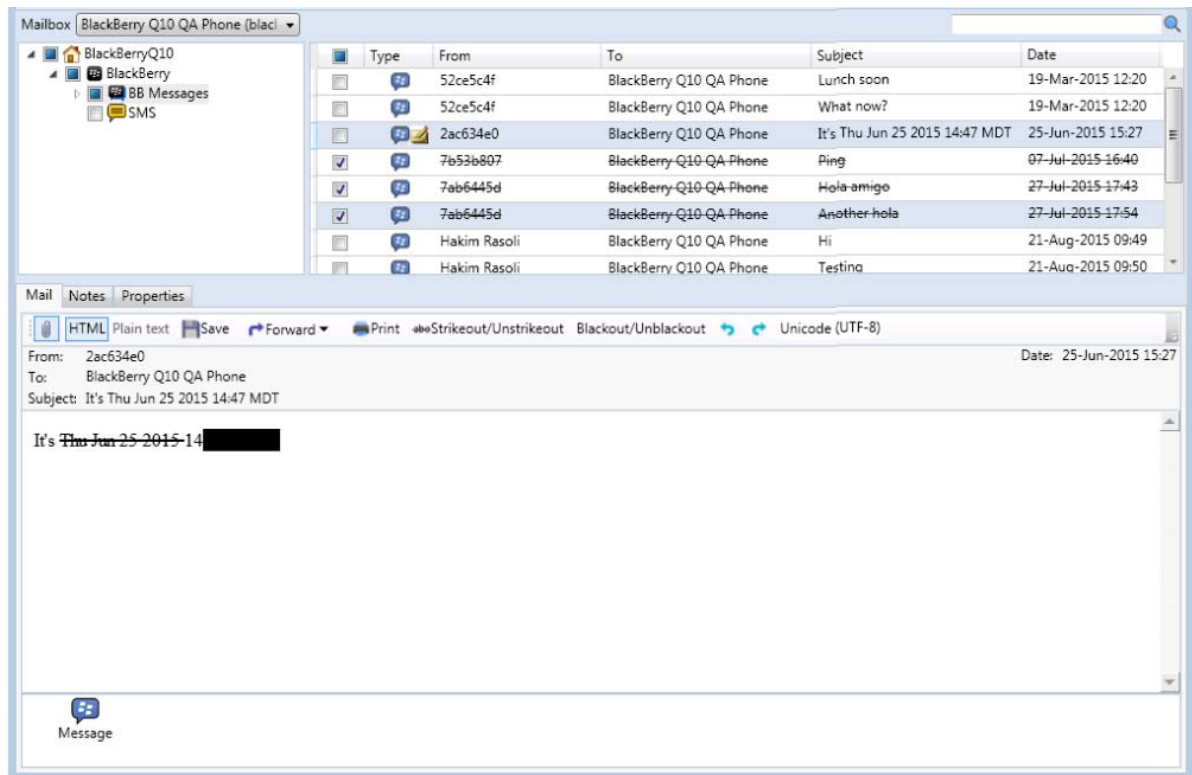


To enable redaction, the archive must first be exported with the redaction option enabled in the publisher, (if the archive was not published with Redaction enabled, the option will appear grayed out), and a redaction password must be entered.

On a redaction-enabled archive, to access the feature, it must be 'enabled' in the viewer. This option is found on the toolbar. Select 'Redaction' and enter the redaction password.

When Redaction is enabled, the 'Strikeout/Unstrikeout', 'Black out' options, and 'Notes' tab become active. The Notes tab works much like a notepad that is always connected to the archive. Items of interest or whole messages' texts can be copied and compiled in the redaction notes. Messages with notes on them are marked in the archive viewer with a notepad icon in the message list.

Redaction notes are attached to the message. Notes are only accessible for the messages which have notes, indicated by the note icon.



## Strikeout/Unstrikeout and Blackout

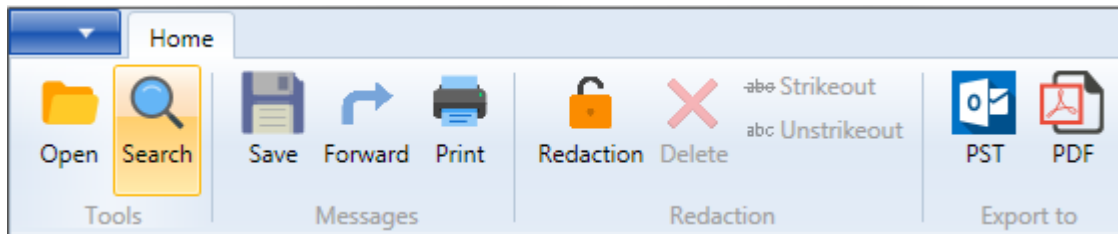
The Strikeout option enables a review of the archive before handing it over to legal scrutiny. This allows the user to denote items and messages which do not apply, or are unnecessary for the published goal. For example, if an investigation is being performed on specific activity, or internally on the account and all correspondence with a customer, the strikeout will allow messages or even sections of messages which do not apply, to be marked out.

To use the Strikeout, first Redaction must be enabled. After redaction is enabled, the options become active. To Strikeout or Unstrikeout messages in the message list, select the messages by placing a check in the checkbox and then select the 'Strikeout', or 'Unstrikeout' button from the top bar. To strikeout sections in the body of the message, highlight the desired section and select the 'Strikeout/Unstrikeout' button from the view message bar.

The Blackout option allows a reviewer to remove sensitive information, such as social security numbers, from published messages. To use the Blackout option, highlight the desired text and select the 'Blackout' button. Blackout cannot be removed from text.

## Searching the Archive

The Retain Viewer provides full search functionality.



The search function is accessed through either the shortcut 'Ctrl+F' or by selecting 'Search' from the toolbar.

The different options for the search are shown with the criteria input below the options. Any text string or value can be searched for in the full text of the mail, or simply in the subject line. The following options are functional for both the search messages option included here, as well as the publisher search criteria. In the search 'look for' line:

- ♦ && represents 'and'
- ♦ || represents 'or'
- ♦ No operators work as an exact match search.
- ♦ For example:
- ♦ Boy girl = exact search for "Boy girl"
- ♦ Boy && girl = Boy and girl search
- ♦ Boy || Girl = Boy OR girl search
- ♦ Boy && girl || dog && cat = Boy and girl OR dog and cat search.

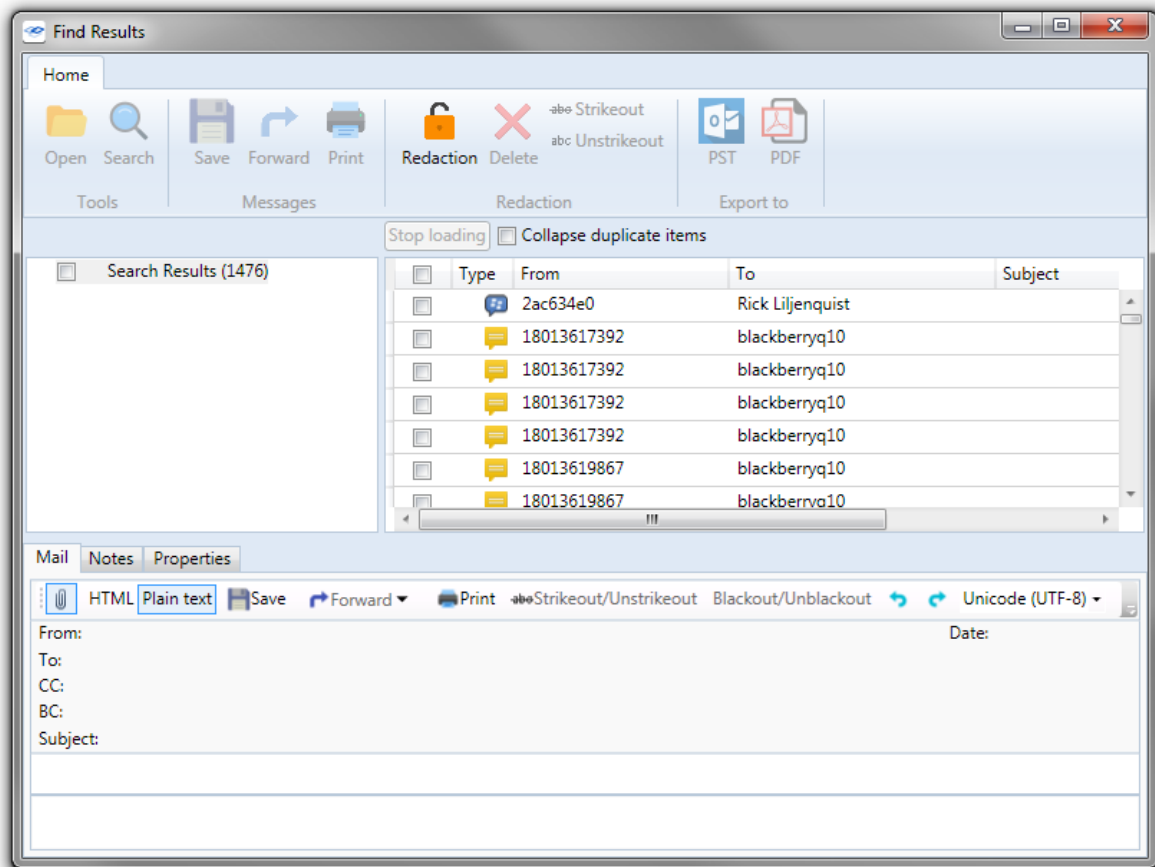
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**NOTE:** These search operators DO NOT work with the search option 'starts with', but can be utilized with all of the other base modes of the search.

The search engine does not recognize the following English 'stop words' or articles of speech:

a, an, and, are, as, at, be, but, by, for, if, in, into, is, it, no, not, of, on, or, such, that, the, their, then, there, these, they, this, to, was, will, with

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These words are not indexed, and thus are not taken into account if they appear in the list of words specified for the search. This may result in some unanticipated results in “exact” searches.

In addition to the operators and text, the sending Author or the destination and carbon copy recipients of a message as well as item type and the date range can specify or restrict a search. Selection of the date range is done through an interactive calendar.

Be sure to select the desired mailbox or mailboxes to apply the search through. (The depicted example archive only contains one mailbox.) Select ‘Search’ to begin.

When the search is finished, the results will be displayed in a separate results window, identical to the main viewer interface.

## PDF and PST Export

Retain Viewer can export selected files and messages from a mailbox or archive to a PDF or PST archive file.

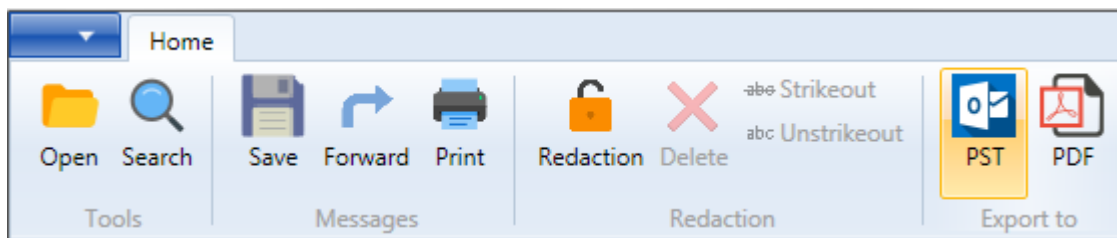
### PST

*Prerequisites:*

- ♦ Outlook

PST export requires Outlook, or the associated plugin. The viewer will prompt for plugin installation if necessary. It is highly recommended to have Outlook installed.

To migrate to PST, select desired files in the view window then select ‘PST’ from the toolbar.



A window confirming the location and file will open. When the 'Save' button is selected the PST file is created and available for use.

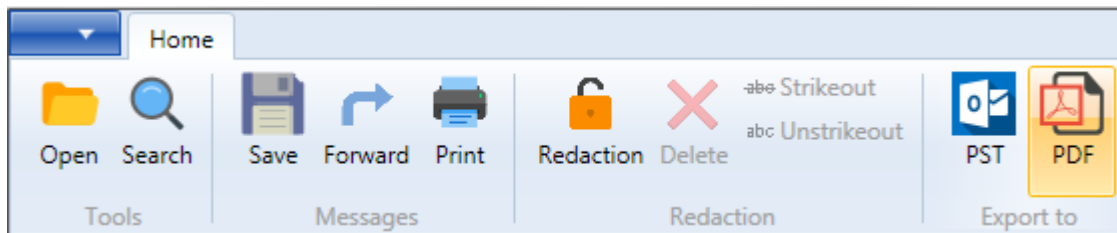
## PDF

### *Prerequisites:*

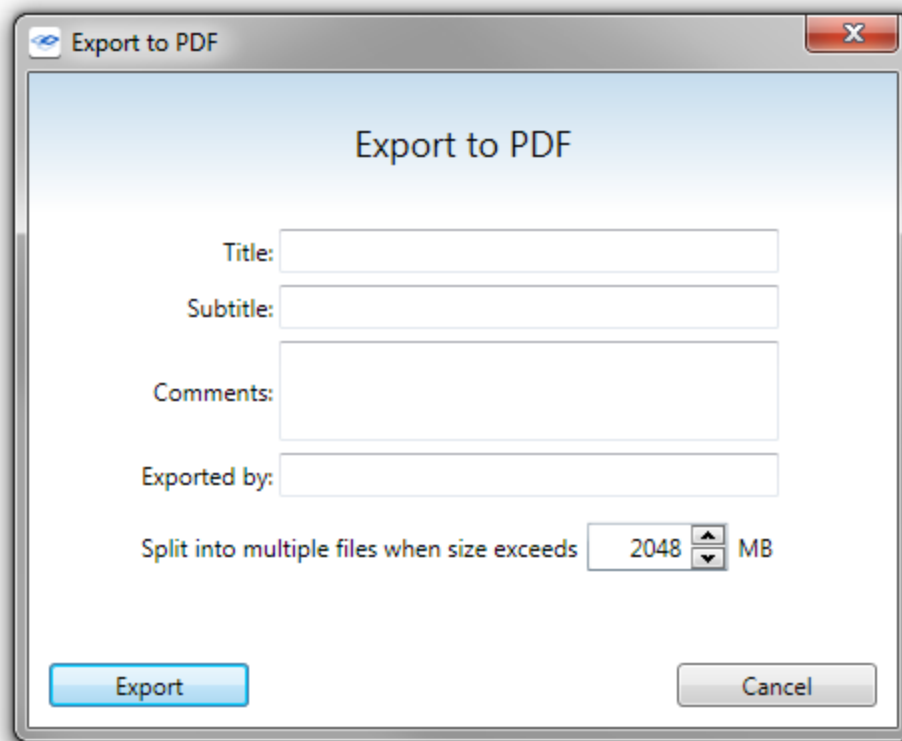
- ♦ Adobe Acrobat or Adobe Acrobat Reader
- ♦ Adobe Flash

The export PDF is a PDF Portfolio and requires Adobe Flash to be installed on the workstation to properly display the message selector header. Adobe Acrobat Reader DC appears to have Flash integrated and does not need a separate install.

The Retain Viewer can also save selected messages as PDF. Select the desired messages and click 'PDF' in the toolbar.



The selected messages are then published in a single PDF. This is an Adobe PDF Portfolio, this requires Adobe Flash to be installed on the workstation for full functionality, or you will only see the title page.

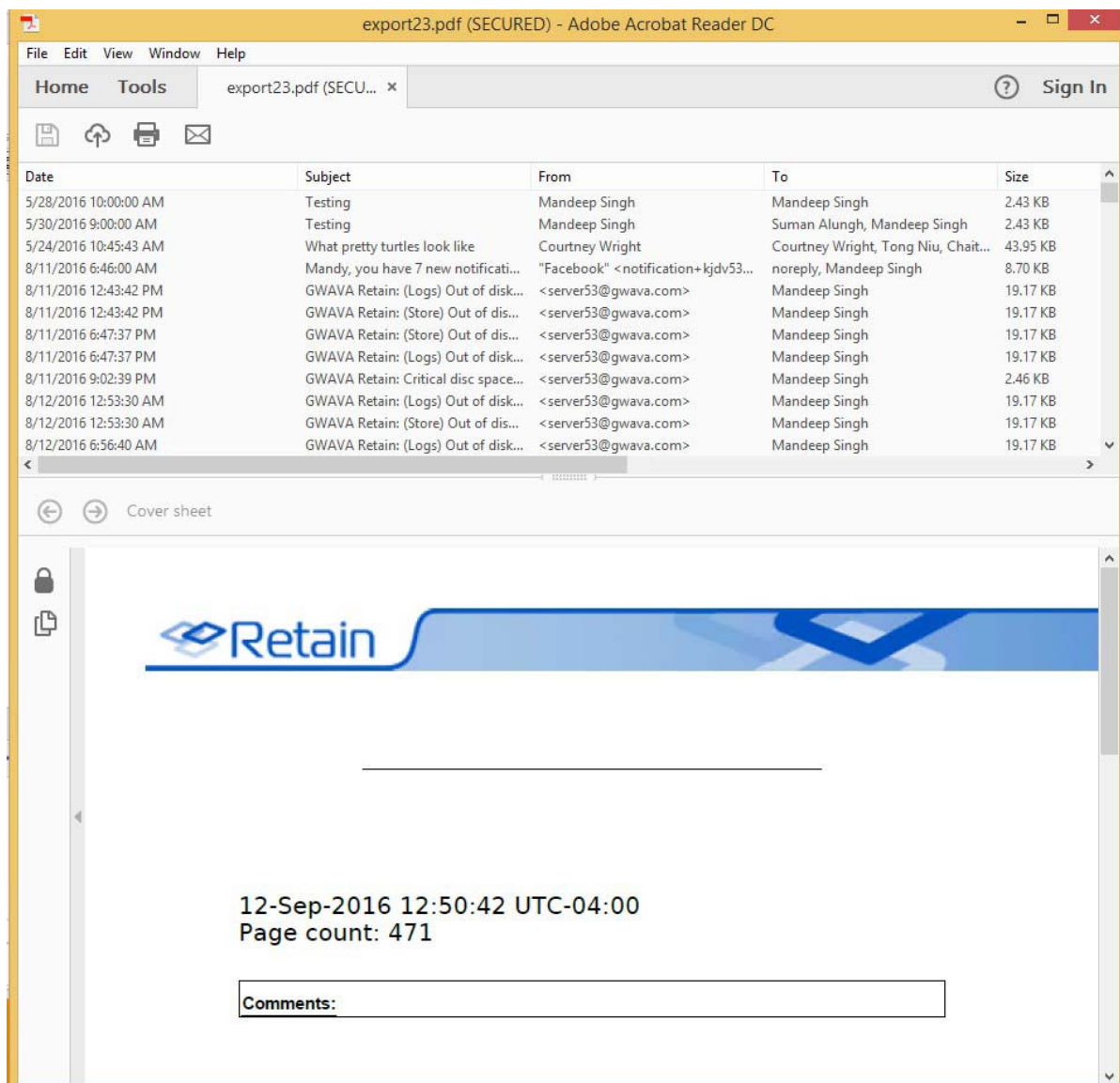


In addition to the standard file name and location, the PDF has title, exported by, and comment sections that the user is prompted to specify before the viewer publishes the PDF.

The finished PDF contains all the information displayed in the viewer, as well as an option to save individual text or message sources. (This information includes redactions, litigation tags, confidential tags, strikeouts etc. from the Retain Server archive as well as the Viewer.)

The published PDF displays the separate emails along the top in a list and displays the message information in a lower pane, as shown below. Flash must be installed on the workstation viewing the PDF Portfolio file.





## Enabling Debug Logging

On occasion, extra logging will be needed for troubleshooting purposes.

The Publisher and Viewer logs are found in the `%APPDATA%/Gwava/Retain Publisher` folder

To enable debug level logging:

1. Close Publisher, if open
2. Open File Explorer and enter `%APPDATA%` in the address bar
3. Enter the `Gwava` folder
4. Enter the `Retain Publisher` folder
5. Edit `Publisher.settings.xml`
6. Find the line `<LogLevel>INFO,WARN,ERROR,FATAL</LogLevel>`
7. Add the `DEBUG` level `<LogLevel>INFO,WARN,ERROR,FATAL,DEBUG</LogLevel>`

```
<?xml version="1.0" encoding="utf-8"?>
<PublisherSettings xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <LogLevel>INFO,WARN,ERROR,FATAL,DEBUG</LogLevel>
  <StartIndexer>true</StartIndexer>
</PublisherSettings>
```

8. Save and exit
9. Run Publisher

## Outlook Plugin Administration

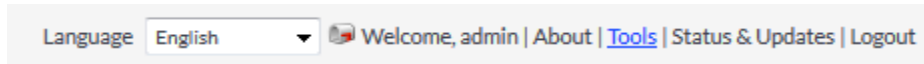
### Overview

The Outlook Plugin integrates the Retain archive directly into the Outlook client. After it is downloaded from the Tools page and installed, users see a new tab and ribbon in the Outlook client for connecting to Retain.

They can then retrieve messages, add them on their local machine for administration through the Outlook client. They can then search in both the Retain archive and in the locally restored messages.

Actions performed through the plugin do not modify the Retain Server or archive.

The Outlook Plugin is found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.



### System Requirements

- ♦ Windows 7 SP1, Windows 8.1 or Windows 10, fully updated
- ♦ Retain 4.3 or higher
- ♦ Visual Studio Tools for Office v. 4
- ♦ .Net 4 or higher
- ♦ Outlook 2010, 2013, 2016 32-Bit and 64-Bit, October 2017 update or later.

---

**NOTE:** Whether the 64-Bit or 32-Bit version should be used is determined by the bit version of Outlook installed, not the version of the OS. To check the version of Outlook being used;

*2010:* The information on the system is located under File | Help | About Microsoft Office

*2013:* The information on the system is located under File | Office Account | About Outlook

*2016:* The information on the system is located under File | Office Account | About Outlook

---

### Proxy Access

The Retain Outlook plugin does not return mailbox data from other users the primary user has proxy access to but only the messages from the primary user's Retain mailbox.

If the user has access rights to other mailboxes on the Retain system, Outlook will error because it doesn't know how to handle multiple users.

# Installation

## Prerequisites

**On the Retain Server:** Under Server Configuration | Communications | Retain Server Connection, set the Server Protocol (http or https), Retain Server Host (IP or hostname of the Retain server), Retain Server Port (default: 48080), and Retain Server Path (default: /RetainServer).

**Retain Server Connection**

The Router and REST applications will need to know how to connect to the Server. It is highly recommended that you use a DNS host name for the Host Name. It's important to note that you are specifying the URL from the point of view of the **Router or REST application contacting the Server**, which may or may not match the URL you'd use from your browser to reach the Router or Server.

Server Protocol	http ▼
Retain Server Host	151.155.183.140
Retain Server Port	48080
Retain Server Path	/RetainServer

**On the Workstation:** Install:

- ♦ Visual Studio Tools for Office v. 4
- ♦ .Net 4 or higher

## Retain Outlook Plugin Installation

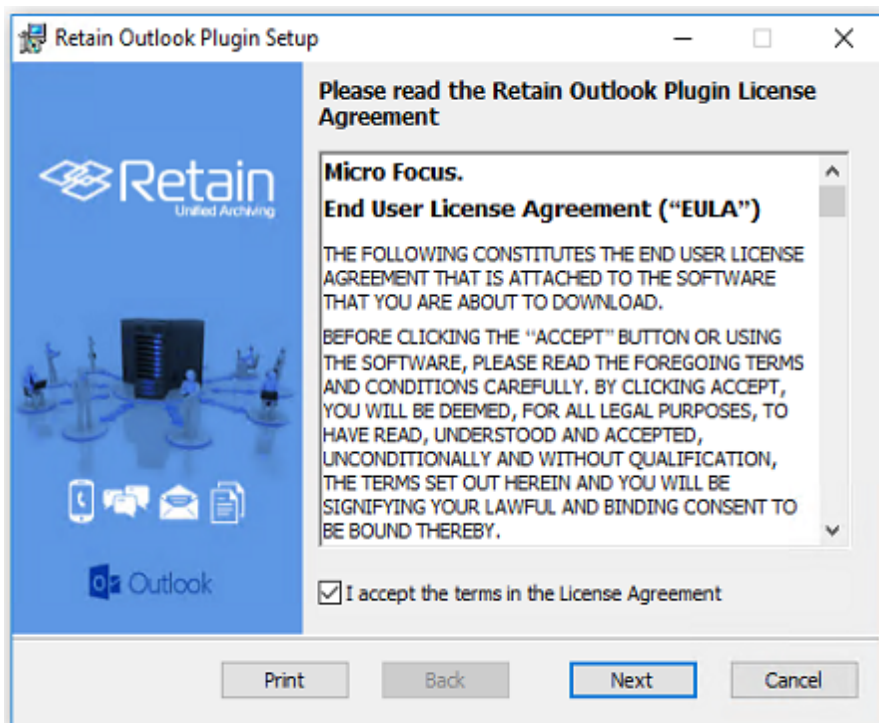
If deploying to an individual user on a workstation, the Outlook plugin needs to be installed by the user account that will be using it (HKEY\_CURRENT\_USER), and administrator credentials will be required to be entered during the installation process.

If deploying to multiple users on a single workstation a group policy will need to be created to set the registry keys needed by the Outlook plugin across all users. The October 2017 updates of Office and Windows have caused some [issues](https://support.office.com/en-us/article/Fixes-or-workarounds-for-recent-issues-in-Outlook-for-Windows-ecf61305-f84f-4e13-bb73-95a214ac1230) (<https://support.office.com/en-us/article/Fixes-or-workarounds-for-recent-issues-in-Outlook-for-Windows-ecf61305-f84f-4e13-bb73-95a214ac1230>) that may need [workarounds](https://www.slipstick.com/problems/folder-home-pages-arent-available/) (<https://www.slipstick.com/problems/folder-home-pages-arent-available/>).

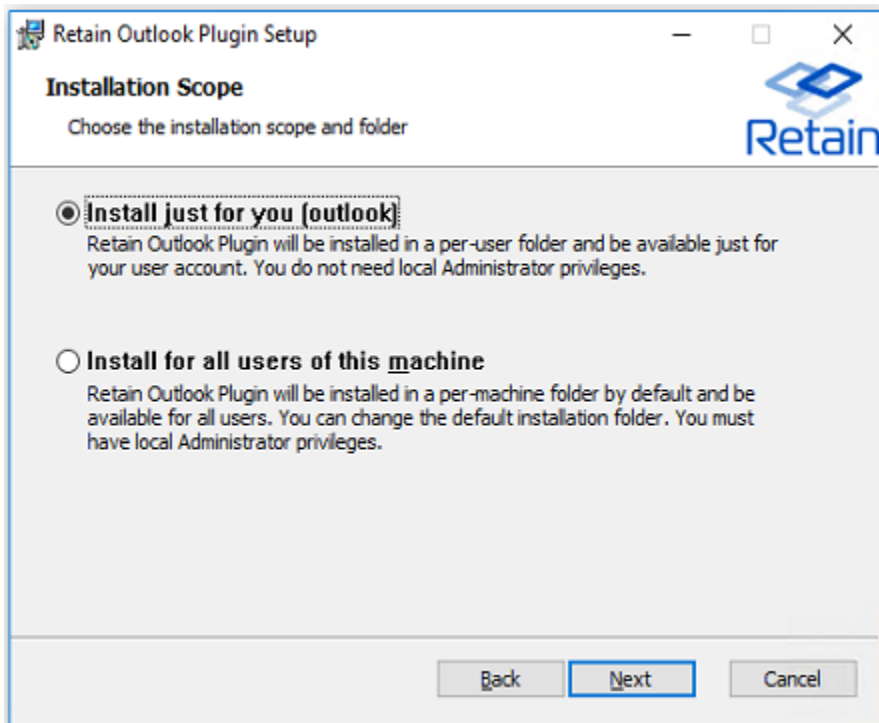
If deploying from a distribution server, utilize the MSI installer package. In addition, silent install commands are provided. A full list of silent install commands can be found in the Silent Install section below.

Make sure to utilize the correct version of the installer to match the bitness (32-Bit or 64-Bit) of the version of Outlook, not the operating system, the workstation has installed.

Begin the installation, accept the license agreement, and click 'Next'.



Select whether the installation will be system wide or restricted.



The Retain Outlook Plugin may be customized during installation, to only allow certain functions once installed.

*Retain server URL:* this is the connection address for the Retain Server. Do not put the '/ RetainServer/' suffix on the end of the URL. Use the following syntax:

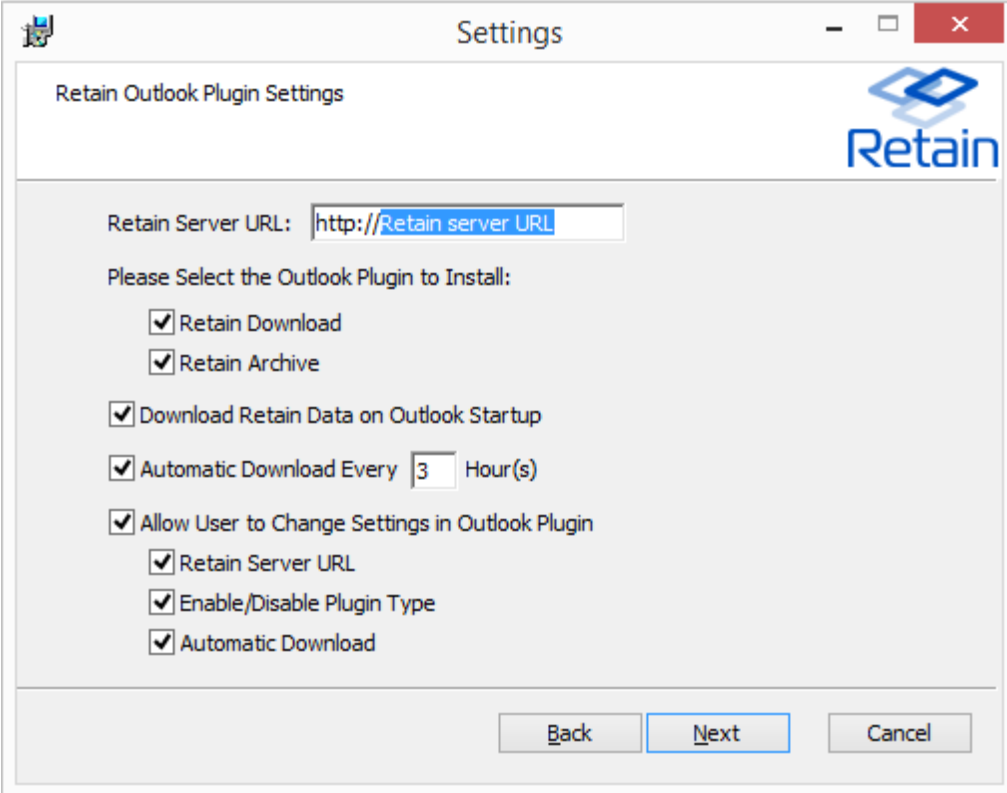
https://<Retain\_Server\_URL>

*Please Select the Outlook Plugin to Install:* There are two options for the plugin. Retain Download allows the user to download data from the Retain server to their workstation. Retain Archive opens the Retain interface in the Outlook window

*Download Retain Data on Outlook Startup:* This tells the Retain plugin to match the local data with what is in the Retain Server. This does not push any data from the plugin to the Server. The plugin may be configured to download at start, or on an automatic time period. The setting is designated in hours.

*Allow users to change settings:* If checked, the following selected options are available to be changed by the user in the plugin. If this option is not checked, the options will be grayed-out in the settings section of the plugin, and cannot be modified.

Configure as desired and select 'Next'.



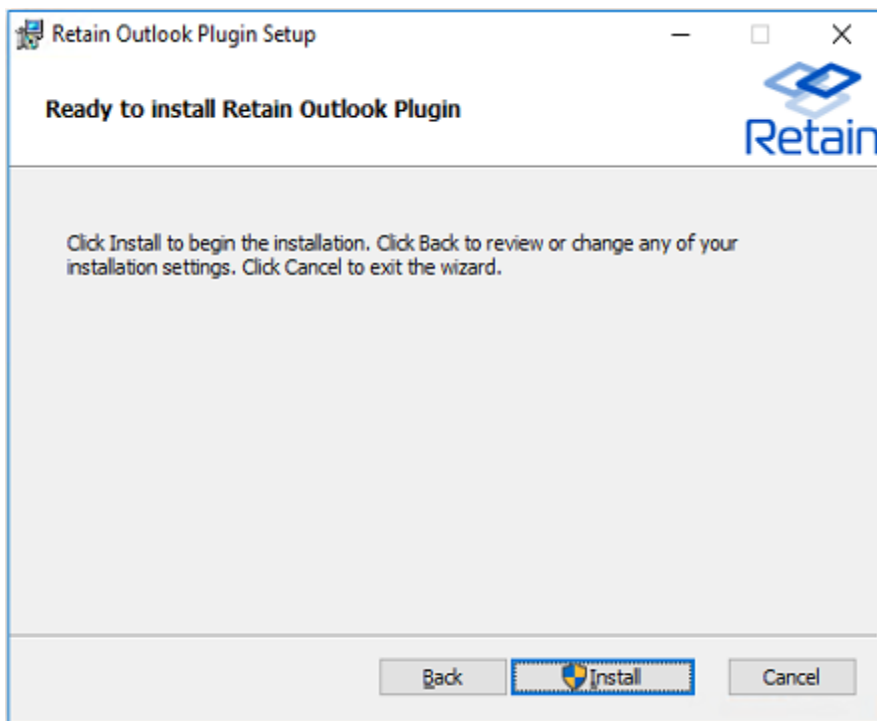
The screenshot shows a Windows-style dialog box titled "Settings" with a standard minimize, maximize, and close button set in the top right corner. The main content area is titled "Retain Outlook Plugin Settings" and features the Retain logo in the top right. The settings are as follows:

- Retain Server URL: A text box containing "http://Retain server URL".
- Please Select the Outlook Plugin to Install:
  - ☒ Retain Download
  - ☒ Retain Archive
- ☒ Download Retain Data on Outlook Startup
- ☒ Automatic Download Every  Hour(s)
- ☒ Allow User to Change Settings in Outlook Plugin
  - ☒ Retain Server URL
  - ☒ Enable/Disable Plugin Type
  - ☒ Automatic Download

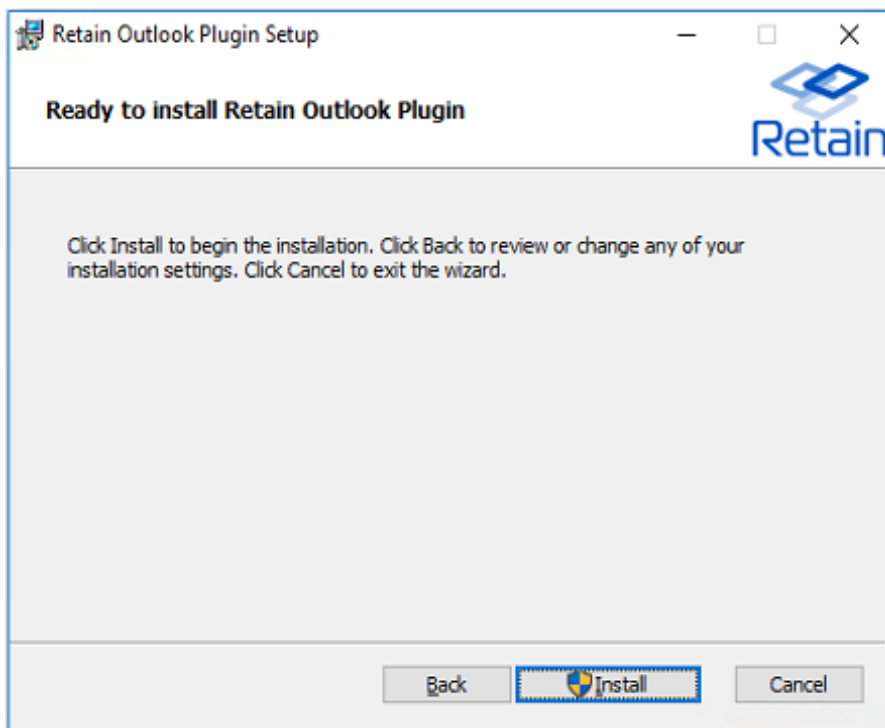
At the bottom right, there are three buttons: "Back", "Next" (which is highlighted with a blue border), and "Cancel".

If any settings need to be changed, use the 'back' button and change then.

Select the 'Install' button to begin the plugin installation. (Installation will require admin rights.)



Wait for the plugin to install.

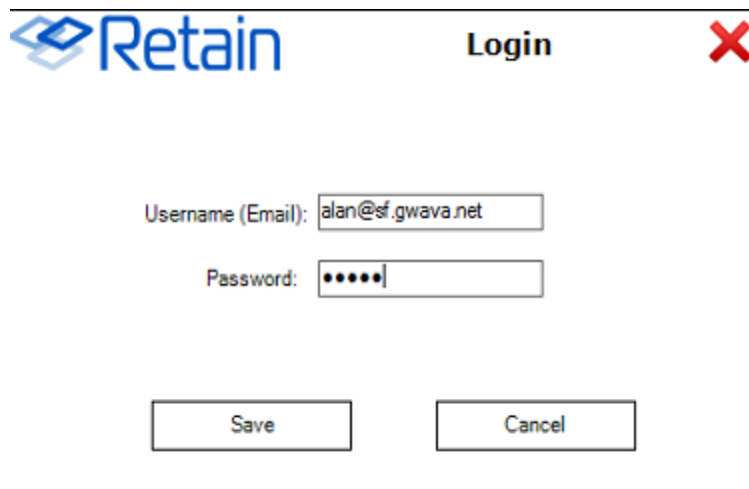


Once the install has completed, select '*Finish*' to exit the installer.

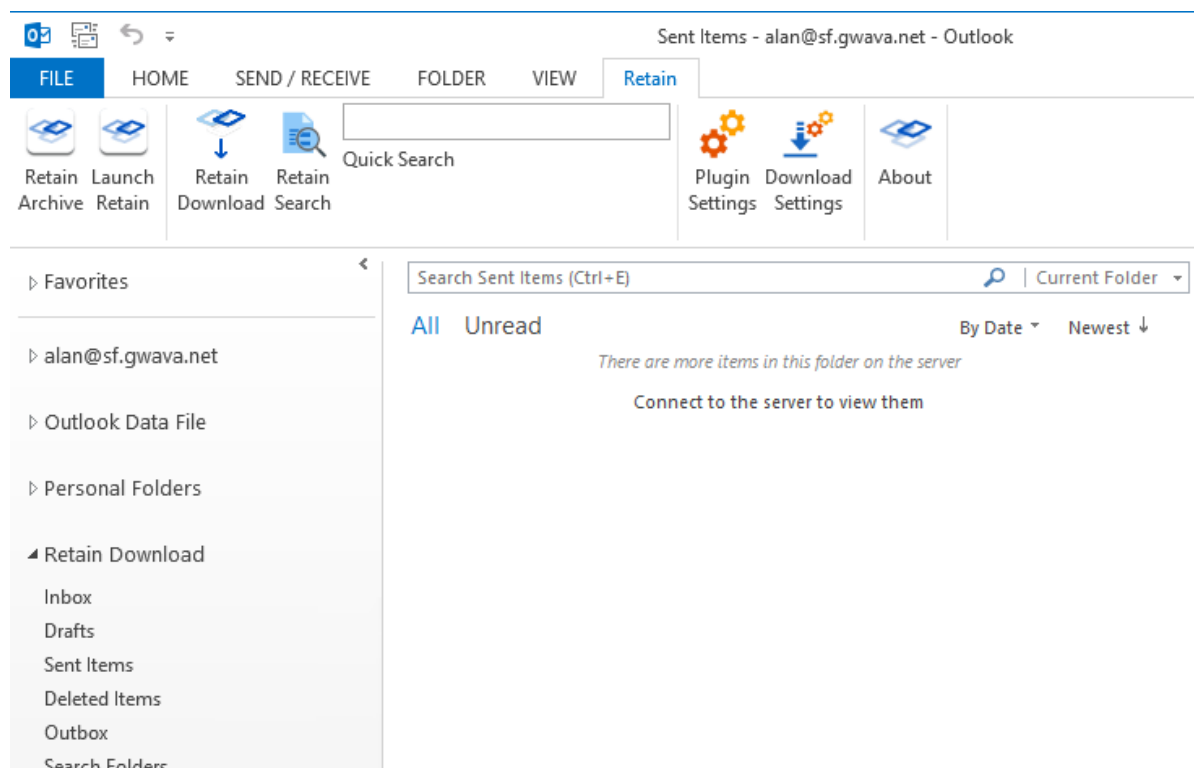
## Features and Use

To access the Retain Outlook plugin, open the Outlook client.

A dialog will appear asking for Retain login credentials. Users will then need to log into Retain with their Active Directory/Azure Logon.

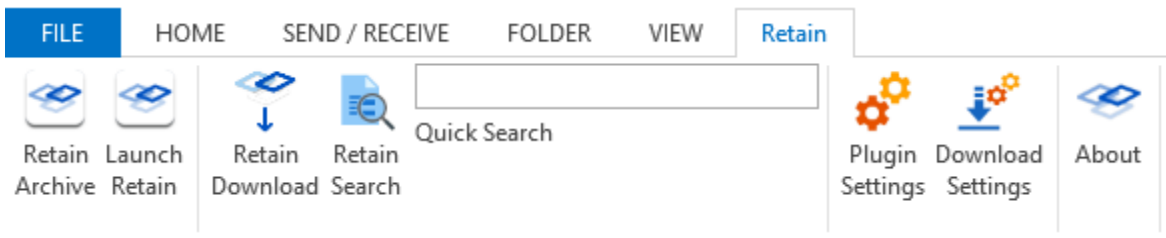


Once installed and initialized, the Retain tab, ribbon, and folder structure are available. A new folder called *Retain Download* will appear.



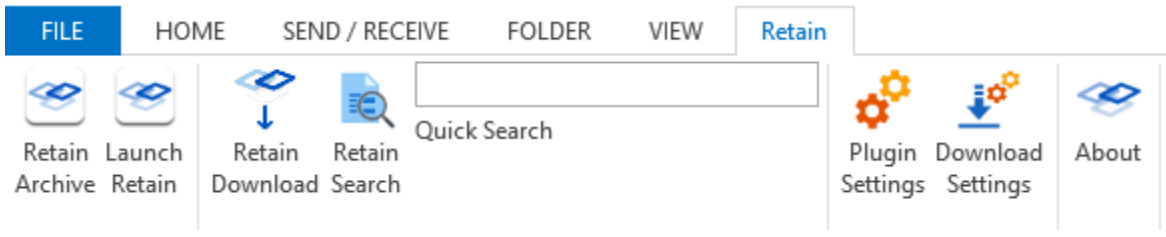
To access the folder structure, simply select it as you would the normal folder structure in Outlook.

Individual settings of the plugin can be changed from the ribbon.

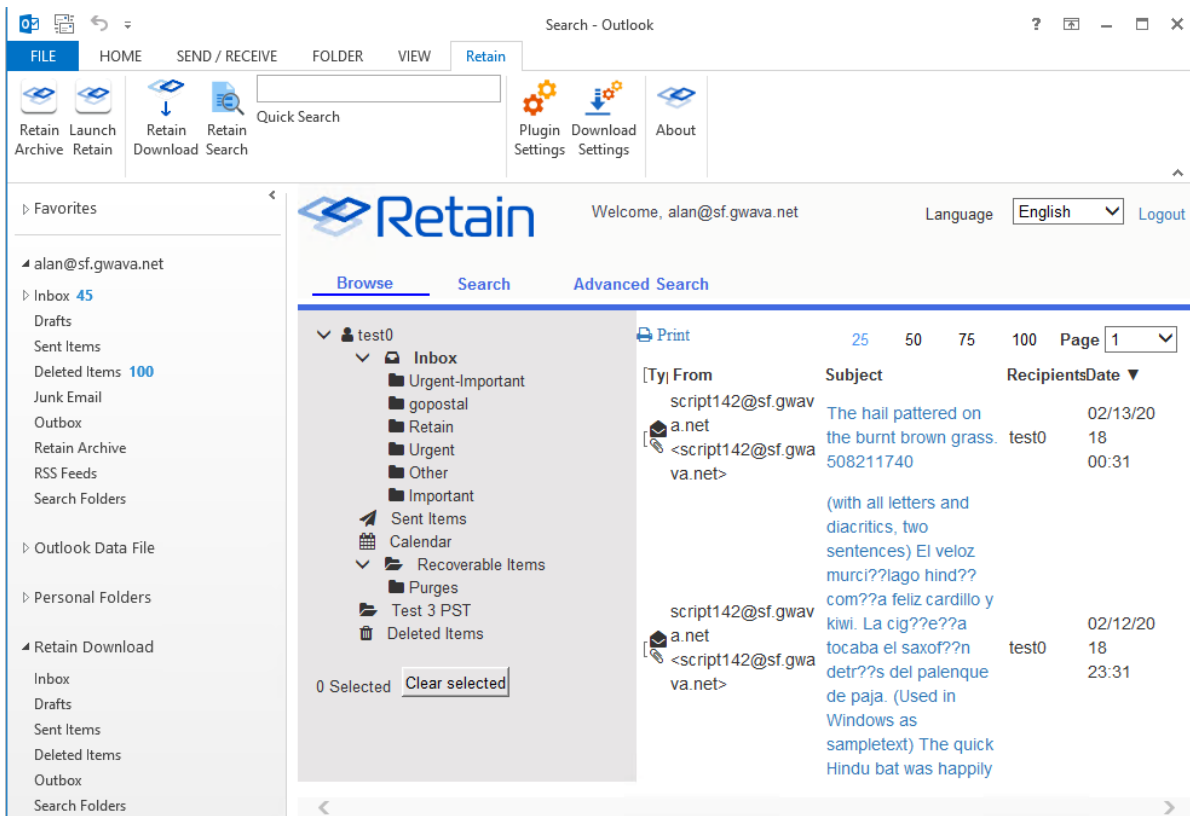


## Retain Archive

The Retain Archive button is simply a portal to the Retain web interface for users.

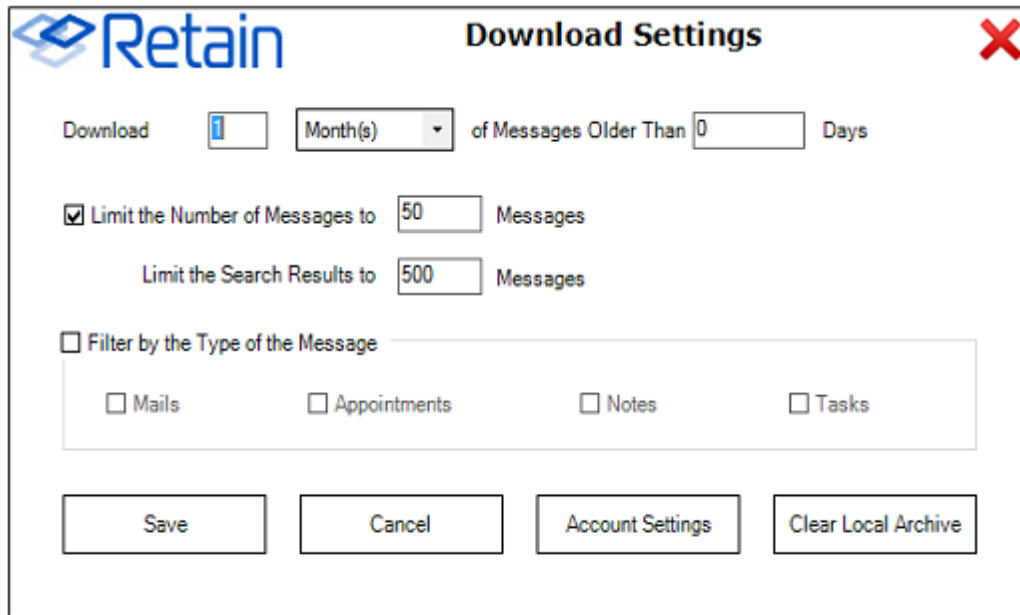


A new folder called Retain Archive will also be created at the Inbox level of the user's local folder. This will allow the user to Browse or Search their Retain archive mailbox. Click on Launch Retain or the Retain Archive folder to log into Retain and the Retain web interface will appear in the Outlook window.





## Download Settings



The screenshot shows the 'Retain' logo in the top left and the title 'Download Settings' in the top center. A red 'X' button is in the top right corner. The main area contains the following controls:

- A 'Download' label followed by an information icon, a text box containing 'Month(s)', a dropdown arrow, and the text 'of Messages Older Than' followed by a text box containing '0' and the word 'Days'.
- A checked checkbox labeled 'Limit the Number of Messages to' followed by a text box containing '50' and the word 'Messages'.
- A text box containing 'Limit the Search Results to' followed by a text box containing '500' and the word 'Messages'.
- An unchecked checkbox labeled 'Filter by the Type of the Message' followed by a container with four unchecked checkboxes: 'Mails', 'Appointments', 'Notes', and 'Tasks'.

At the bottom, there are four buttons: 'Save', 'Cancel', 'Account Settings', and 'Clear Local Archive'.

The Download Settings contains the criteria which dictates what message data will be added into the local storage and made available in the Outlook client. It is recommended to keep the download size small because Outlook has difficulty serving very large amounts of data.

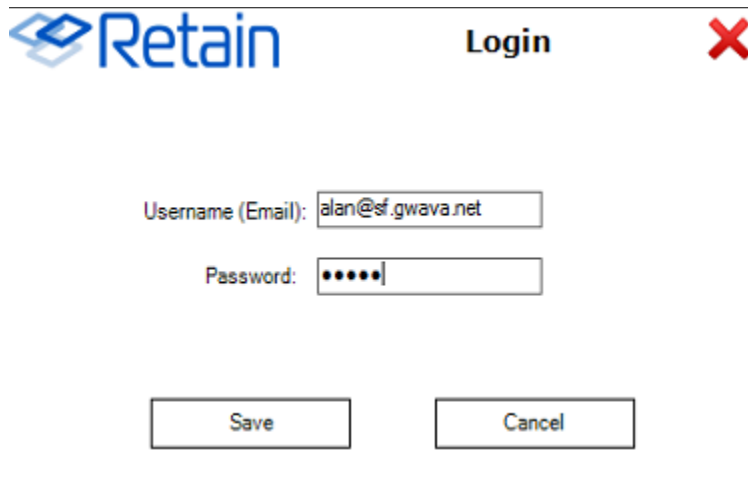
The download time limit dictates the time frame of messages which will be displayed in the Outlook client. This can download a large amount of data which may overwhelm the resources available to Outlook, so it is best to limit this to 90 days or less.

Messages may be limited by total number, as may the search results. (Search results limit the number of results by default to only display 500 messages.)

In addition, the type of data may be limited to only the types selected, or all types.

What data is added to local storage can be limited by age, number of messages, or item type. 'Save' saves your settings. However, before the download can be performed, the login information must be provided. Select the 'Account Settings' button.

## Account Settings



The image shows a 'Login' dialog box for the 'Retain' application. It features the Retain logo in the top left corner and a red 'X' close button in the top right. The dialog contains two input fields: 'Username (Email):' with the text 'alan@sf.gwava.net' and 'Password:' with masked characters '•••••'. Below these fields are two buttons: 'Save' and 'Cancel'.

The account settings are simply the login credentials of the account which is to be used for the download. Input the email and password. GroupWise usernames must not be the full address. If inputting an Exchange username, enter the entire email address. Save settings.

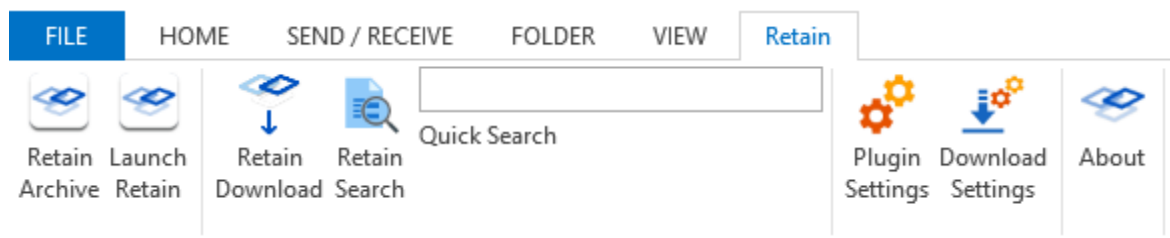
## Clear Local Archive

The Clear local archive button does exactly as it sounds, it will empty the local archive, Retain, folder tree of all message data items. Any folders which were part of the Retain archive, and not part of the default folder set of Outlook will also be removed. The default set of folders and the Retain folder tree will still be present. To completely remove the Retain outlook plugin, please uninstall the plugin from the system's Control Panel.

## Launch Retain

The Launch Retain button will cause the default browser to open to the Retain Server URL.

## Retain Download



The Retain Download button initiates a download of the users Retain archive according to the download settings. Download settings and the user credentials must be configured before the download will complete.

## Retain Search

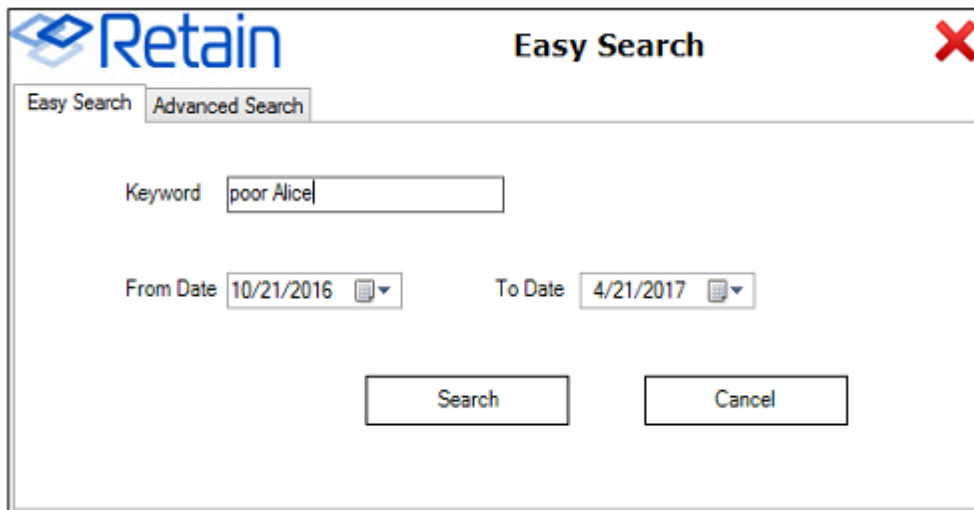
The user's downloaded Retain archive can be searched with the search functions of the ribbon. To search the entire archive click on the Retain Archive button and use the search tab.

Searching the downloaded Retain Archive with the Retain Plugin is simple. Select the 'Retain Search' button from the Retain ribbon.

The search interface has two different screens: Easy and Advanced search.

## Easy Search

With the Easy search, the plugin only offers a simple keyword and date range.

The image shows a screenshot of the 'Retain Easy Search' dialog box. The window has a title bar with the 'Retain' logo on the left and a red 'X' close button on the right. Below the title bar, there are two tabs: 'Easy Search' (which is selected) and 'Advanced Search'. The main area of the dialog contains a 'Keyword' label followed by a text input field containing the text 'poor Alice'. Below this, there are two date selection fields: 'From Date' with a calendar icon and the date '10/21/2016', and 'To Date' with a calendar icon and the date '4/21/2017'. At the bottom of the dialog, there are two buttons: 'Search' and 'Cancel'.

The search keywords are subject to the same restrictions and abilities as the Retain web interface. Easy search supports wildcards and quotes for search criteria. Without quotes, the search text will be searched as each word is an individual search term. With quotes, the search phrase is the criteria.

For example: Searching for ping pong will result in messages with the term 'ping', with the term 'pong', and with both, 'ping pong'.

While searching for "ping pong" will only result in messages with the term 'ping pong'.

Searching with wildcards: Searching for gwava.\* will produce results of 'gwava.com, gwava.org, gwava.edu', and 'gwava.'.

In general, if multiple search terms are desired, move to the advanced search option. After search terms and a date range has been applied, select the 'Search' button.

## Advanced Search

The screenshot shows the 'Advanced Search' dialog box in the Retain application. It features a 'Search In' table with columns for Search In, Condition, Keyword, and Connector. Below the table are date filters (From Date, To Date, Date Type), message type checkboxes (All Message Types, Mail, Note, Appointment, Task), a section for specifying date ranges for appointments, tasks, or notes, and status filters (Opened, Private, Read). The dialog includes 'Search' and 'Cancel' buttons at the bottom.

Search In	Condition	Keyword	Connector

From Date: 10/21/2016 To Date: 4/21/2017 Date Type: Created

Message Types

☒ All Message Types ☒ Mail ☒ Note ☒ Appointment ☒ Task

☐ Specify the Date Range for Appointments, Tasks or Notes

Start Date Range

Starting between 4/21/2017 and 4/21/2017

End Date Range

Ending between 4/21/2017 and 4/21/2017

Status

Opened: Doesn't matter Read: Doesn't matter

Private: Doesn't matter

Search Cancel

The advanced search allows for more control in the search process.

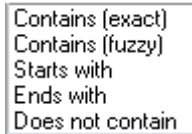
The 'Search in' drop-down menu allows for customization of the limiting function of the keyword.

Content  
Sender email  
Sender name  
Recipients  
Subject  
File name

- ♦ Content
- ♦ Sender email
- ♦ Sender name
- ♦ Recipients

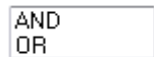
- ♦ Subject
- ♦ File name

The condition field restricts the condition of the data items in the Retain Message Store.



- ♦ Contains (exact)
- ♦ Contains (fuzzy)
- ♦ Starts with
- ♦ Ends with
- ♦ Does not contain

Finally, the Connector setting allows for the logical connection between criteria.



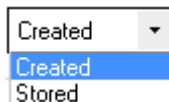
And

Or

The “+ and -” buttons to the right of the window allow the user to add multiple search term lines. There is no limit to the amount of lines, or criteria, which may be added.

The Message type option allows the search to be limited to the specific selected type or types. (Note, Appointment, Task, or Mail)

The Date Range is designed with appointments, tasks, and notes. If the date range is used, the range for the desired date applies. This is essentially a date range for the date ranges. This is a good way to look for tasks and appointments which were placed into the system before, but not removed later.



Created

Stored

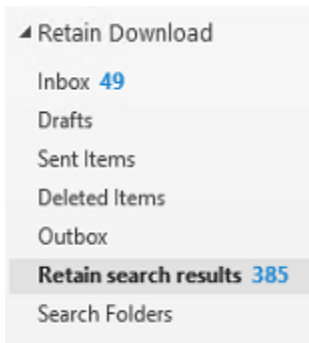
The Status restriction allows the user to search for messages with a specific message state; opened, read, and private.

Once the search terms are satisfactory, select the ‘Search’ button to begin the search. Once the search has completed, the resulting group of messages is added to the Retain local archive, under the ‘Retain search results’ folder.

---

**NOTE:** It is important to note that the number outside the folders represents the ‘unread’ message count, not the total message count. To view the total message count, see the ‘Items:’ count at the bottom left of the Outlook window.

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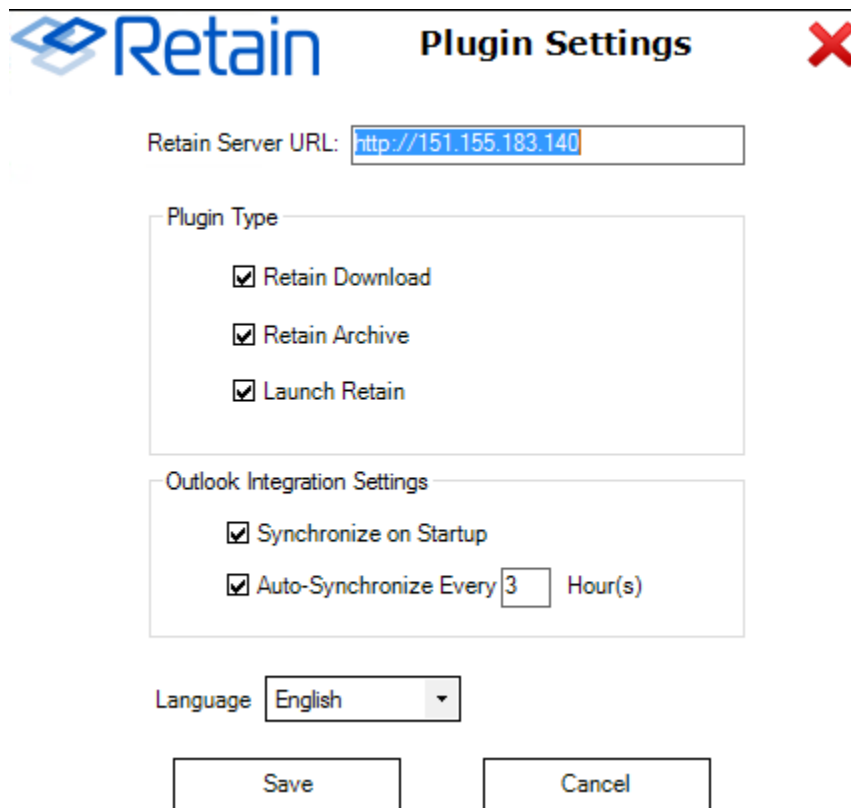


## Quick Search

The Retain ribbon contains a quick search field, which performs a simple search of last six months of the user's downloaded archive right from the ribbon without opening any additional windows. Simply place the desired criteria in the field and click on the 'Quick Search' button. Results will be displayed the same way they are for the Easy and Advanced search. In addition, the Quick Search supports the same wild-cards.

## Retain Outlook Plugin Settings

The Plugin settings button opens the plugin settings window. This is where the user can modify the basic plugin settings.



This window contains all connection and plugin settings. If the entries here are grayed-out, then the ability to change the settings has been disabled during install, and the setting information is display-only.

The connection URL should be specified with just the hostname or IP address. If a port number is required, it may also be specified, but is not necessary if Apache or IIS is handling requests for the Retain Server.

Whether the Retain Download section or the Retain Archive section is visible is controlled here. The plugin may be set to automatically download messages from the archive on startup, or at a set time interval, to ensure that the plugin shows what is present in the Retain Archive.

The Launch Retain button will cause the default browser to open to the Retain Server URL.

The Language set in the Plugin Settings will change the displayed language for all Retain plugin displays.

## Data File

The Retain Outlook plugin stores the downloaded data in the user's folder. You can find this location by right-clicking on the Retain Download folder and selecting *Data File Properties*.

It will be generally found in C:\Users\[userName]\Documents\GWAVA\Retain.nst

## Log File Location

The plugin will create a log file if the folder C:\temp exists.

For example: C:\temp\WrapPST.txt

## Outlook Plugin Silent Install

The Retain Outlook plugin can be deployed across your network with a Windows policy.

## Command Line Install

**Prerequisites:** To install the MSI, two packages must be installed. These packages are included in the bundle which is an EXE, not an MSI. If either of these are missing the install will fail.

- ♦ **Microsoft .NET Framework 4 Extended**
- ♦ **Microsoft Visual Studio 2010 Tools for Office Runtime.**

If you open a non-admin command prompt, you will be asked to provide Administrator level credentials to proceed with the install.

The plugin is designed to be installed via command line silently. To do this, open a Command Prompt and run the .msi file and add a /q then enter the settings desired from the following:

RETAINURL: The Retain server URL http://<Retain\_Server\_Address> no trailing slash. For example: http://retain.company.com. Default http://RetainURL

MAXSYNC: Maximum integer number of items to be synced in every synchronization. Default 50.

MAXSEARCHRESULTS: If using the Retain search feature, the maximum integer number of items that will appear in the results. Default 500.

USERNAME: The username of the user (generally the user's email address).

MESSAGESYSTEM: The type of messaging system. Values:

0-> Exchange

1-> GroupWise

FILTERTYPE: Filter messages based on the type during the synchronization.

It uses bit pattern to store the values:

0-> 0000-> No filter (All types)

1-> 0001-> Mail

2-> 0010-> Appointment

4-> 0100-> Note

8-> 1000-> Task

COMBINE THE BIT NUMBERS TO HAVE MULTIPLE VALUES SET

3-> 0011 -> MAIL & APPOINTMENT

6-> 0110-> APPOINTMENT & NOTE

15-> 1111-> ALL FILTERS

ARCHIVEFILEPATH: The path and the file name of the desired local NST file. The path should exist but **not** the NST file itself.

ISWEBUI: Use the new Retain login within Outlook. Boolean value. Default true.

ISNATIVE: Download Retain files into Outlook, original plugin style. Boolean value. Default true.

HASAUTOSYNC: Enable auto synchronization to Retain. Boolean value. Default true.

SYNCINTERVAL: How often to automatically download new items, in hours. Default 3.

SYNCSTARTUP: Enable Synchronize on startup. Boolean value. Default true.

DAYSAGOARCHIVED: Synchronize messages older than x days ago

CANCHANGESSETTINGS: Enable the right for the user to change settings. Boolean value. Default true.

SCOPE: Install just for one or all users on the machine. perUser or perMachine. Default perMachine.

Here is an example of the command line that could be used. Using the /qb option will present a progress prompt, but is not required. Adding the /l\* will output a log for troubleshooting.

```
msiexec /qb /l* plugin.log /i "Retain Outlook plugin_x86.msi" /norestart  
ARCHIVEFILEPATH="C:\Users\UserName\My Documents\RetainLocalStore.NST"  
RETAINURL=http://10.1.43.17/ MAXSYNC=200 DAYSAGOARCHIVED=0 DURATION=7 RANGE=2  
USERNAME=UserName@company.com MESSAGESYSTEM=0 FILTERTYPE=6
```

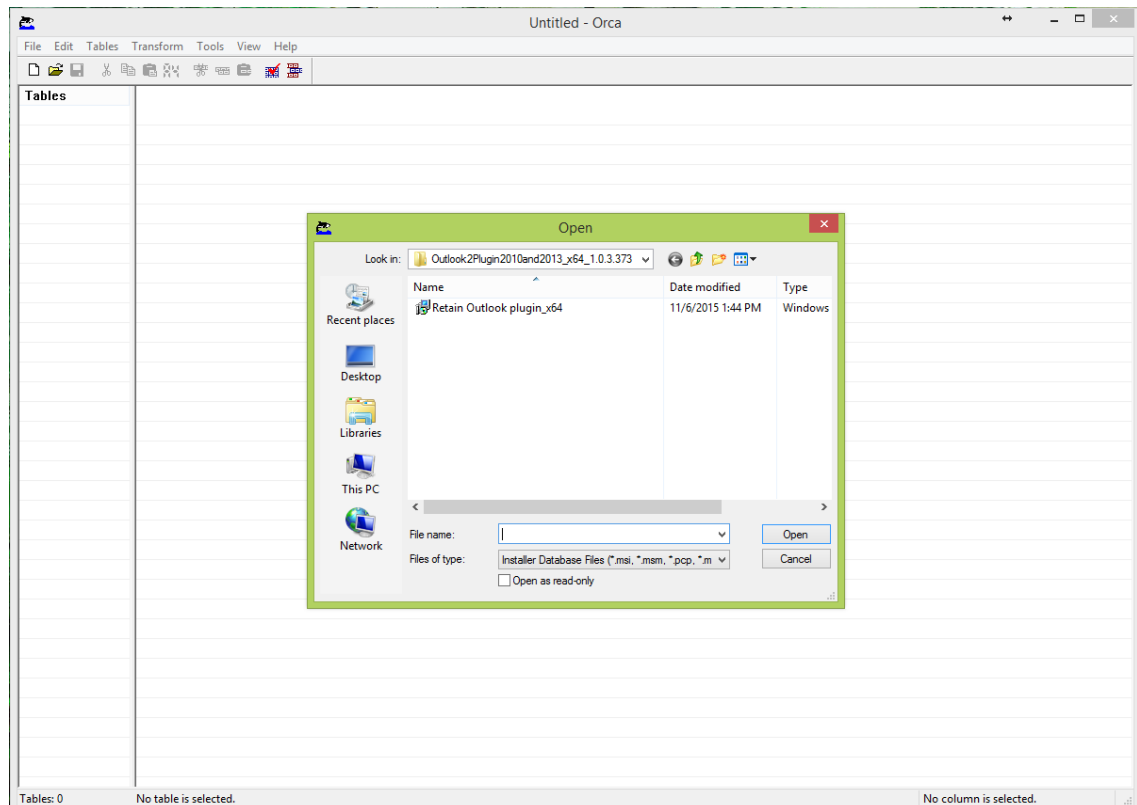
## Group Policy Install

You can use an AD Group Policy to install the Outlook Plugin. You may use [MS System Center Configuration Manager](https://www.microsoft.com/en-us/cloud-platform/system-center-configuration-manager) (<https://www.microsoft.com/en-us/cloud-platform/system-center-configuration-manager>) using this as a template (<https://support.office.com/en-us/article/Deploy->

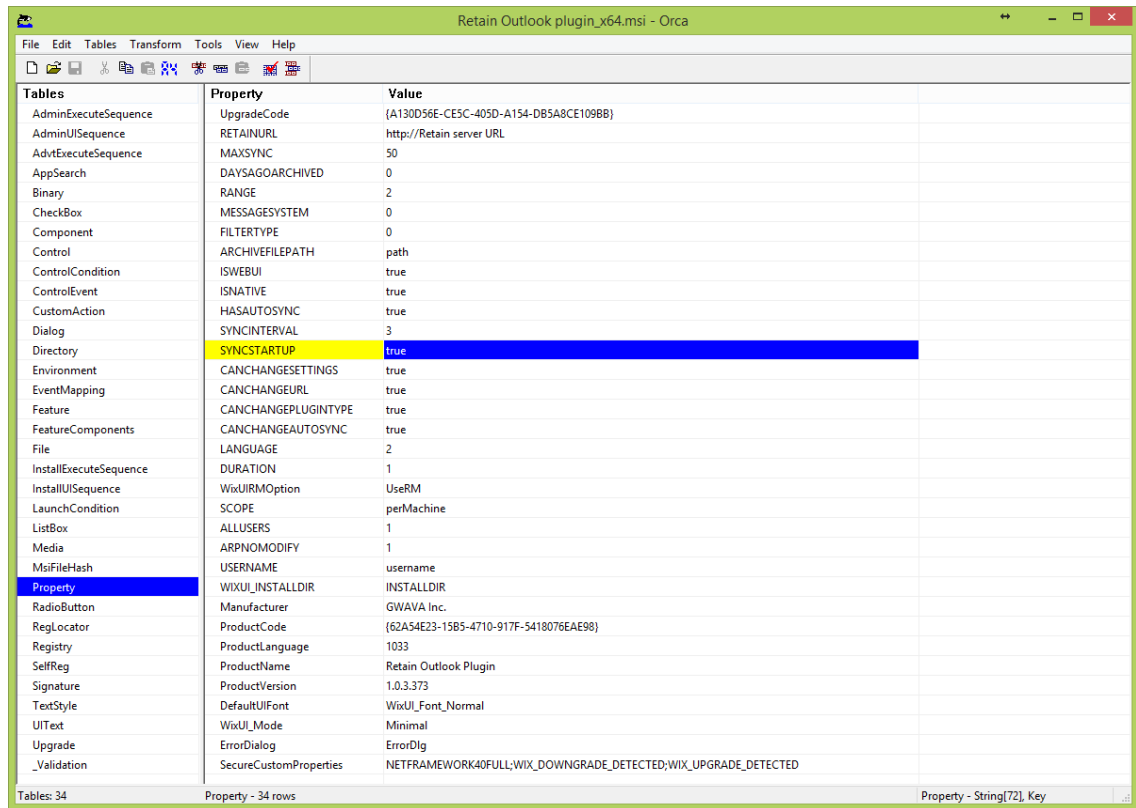


[Office-365-ProPlus-with-System-Center-Configuration-Manager-4dd6a023-0a5d-4dc9-9bad-ff70e01840b8](#)) or a third-party program such as [Orca](http://www.klaus-hartnegg.de/gpo/orca.html) (<http://www.klaus-hartnegg.de/gpo/orca.html>) to adjust the settings in the MSI file for your organization. Orca is a third-party program that allows you to set parameters within an MSI file.

1. Download the correct Outlook plugin MSI file that you need for your installation from the Tools menu. Make sure you get the 32bit or 64bit version that corresponds to your version of Outlook, *not* your operating system. If using Outlook 32-bit on Windows 64-bit, use the 32-bit plugin installer.
2. If using Orca, download [Orca](http://www.klaus-hartnegg.de/gpo/orca.html) (<http://www.klaus-hartnegg.de/gpo/orca.html>) and install it on the computer where you have your newly downloaded MSI file.
3. Run Orca and open the MSI file that you wish to make the changes to.



4. After you open the MSI file you will need to go down to the table called "property" and select this table which will show you all the properties and switches of the MSI file. Here is where you will set your switches to true or false depending on what you would like your final settings to be after the silent install.



- After you have made the changes, save the amended file and close Orca. Now you are ready to deploy the MSI file in your group policies across your network.
- Make sure that the prerequisites: October 2017 Office and Windows updates, Visual Studio Tools for Office v. 4. and Net 4 or higher are installed on the workstations.
- Setup the [Group Policy \(https://support.microsoft.com/en-us/help/816102/how-to-use-group-policy-to-remotely-install-software-in-windows-server\)](https://support.microsoft.com/en-us/help/816102/how-to-use-group-policy-to-remotely-install-software-in-windows-server) in Active Directory.

## Retain Outlook Plugin Single Sign-On

The Retain Outlook Plug-in can be enabled to use Single Sign-On (SSO) so users can connect to Retain from within Outlook without being prompted to log into Retain separately.

**NOTE:** These instructions require the Retain Server to be hosted on a Windows server.

You are expected to have some knowledge about setting up a user with OpenSSO (<https://docs.oracle.com/cd/E19681-01/820-3885/gimmi/index.html>) and Keytab ([https://docs.oracle.com/cd/E41633\\_01/pt853pbh1/eng/pt/tsec/task\\_GeneratingtheKeytabFileandMappingtheServicePrincipalName-8371d4.html](https://docs.oracle.com/cd/E41633_01/pt853pbh1/eng/pt/tsec/task_GeneratingtheKeytabFileandMappingtheServicePrincipalName-8371d4.html)) files.

You will need to create an Active Directory Retain Single Sign-On user (retainssso) that will handle the single sign on, generate a keytab file, update Retain's kerberos.properties file and configure the client workstation, the steps will be shown below.

To enable the Retain Outlook Plugin with Single Sign-On you will need to follow these steps:

## Prerequisites

Complete these prerequisites before beginning.

- ♦ Retain Server must be hosted on Windows.
- ♦ The Retain server must be connected to the same domain as the Single Sign-On user you will be creating.
- ♦ The workstations running Outlook with the Retain plug-in must be connected to the same domain as the Single Sign-On user you will be creating.
- ♦ You will need to know the realm or FQDN of your Exchange server, for this example “exchange2013.qa.gwava.com”.

## Create the Single Sign-On User

Create the SSO user:

1. On the Active Directory Domain Controller server, logged in as a domain admin, open “Active Directory Users and Computers”.
2. Create a new user, (Actions menu | New | Users) with the following attributes, with your domain information filled in instead of the sample information:
  - ♦ First name: retainssso
  - ♦ User login name: HTTP/retainssso.exchangeserver.example.com. For Example: HTTP/retainssso.exchange2013.qa.gwava.com
  - ♦ Pre-windows logon name: retainssso
  - ♦ Set password: Specify an appropriate password
  - ♦ Enable: Password never expires
  - ♦ Disable: User must change password at next logon
  - ♦ Disable: Use Kerberos DES encryption types for this account
  - ♦ Disable: This account supports Kerberos AES 128 bit encryption
  - ♦ Disable: This account supports Kerberos AES 256 bit encryption
  - ♦ Disable: Do not require Kerberos preauthentication

## Associate the Single Sign-On User With the Service Principal Name

Associate the Single Sign-On User with the Service Principal Name (SPN) (<https://technet.microsoft.com/en-us/library/dd632778.aspx>)

1. On the Active Directory Domain Controller server, logged in as a domain administrator, open a command shell.
2. Enter the following command, with your domain information filled in instead of the sample information: `setspn -A HTTP/retainssso.exchange2013.qa.gwava.com@EXCHANGE2013.QA.GWAVA.COM retainssso`
3. View the SPN registration (<https://social.technet.microsoft.com/wiki/contents/articles/717.service-principal-names-spn-setspn-syntax-setspn-exe.aspx>) by entering the following command on the command line: `setspn -L retainssso`
4. If these steps have completed without error, then the SPN has been successfully setup.

## Create the Keytab File

Create the keytab file. For more information see: (<https://blogs.technet.microsoft.com/pie/2018/01/03/all-you-need-to-know-about-keytab-files/>):

1. On the Active Directory Domain Controller server, at the command line prompt, enter the following updated with your domain information filled in instead of the sample information:  

```
ktpass /out retainssso.keytab /princ HTTP/  
retainssso.exchange2013.qa.gwava.com@EXCHANGE2013.QA.GWAVA.COM /mapuser  
retainssso /mapop set /pass Password1 /crypto ALL /ptype KRB5_NT_PRINCIPAL
```
2. That command will generate a file with the name `retainssso.keytab` at the location of command line prompt's current working directory.
3. Store the keytab file in a secure location that the Retain Server has full access to or the keytab may be copied to the Retain Server
4. Verify that the SSO user has been successfully configured by logging onto any machine on the domain with that user.

## Create the krb5.ini File

1. On the Retain Server, create a new file and name it `krb5.ini`.
2. Add the following details to the `krb5.ini` file, with your domain and server information filled in instead of the example domain and server information:

```
[libdefaults]  
    default_realm = QA.GWAVA.COM  
    kdc_timesync = 0  
    forwardable = true  
    proxiable = false  
[realms]  
    EXAMPLE.COM = {  
        kdc = exchange2013.qa.gwava.com  
        admin_server = exchange2013.qa.gwava.com  
    }  
[domain_realm]  
    .qa.gwava.com = QA.GWAVA.COM  
    qa.gwava.com = QA.GWAVA.COM
```

---

**NOTE:** The file is case sensitive, so make sure you use the same case as the example above.

---

3. Save `krb5.ini` in the same location as the `keytab` file.
4. Provide full File Permissions to the `krb5.ini` file to the Retain Server.

## Configure Retain Server for Single Sign-On

The Retain Server needs to be configured properly for Single Sign-On:

1. On the Retain Server, Confirm that the Retain Server is in the same Domain from which the Kerberos authentication is done.
2. The computer name of the Retain Server must match the SPN username. In this example, "retainssso"
3. Place the keytab and "krb5.ini" files created previously in `C:\Windows` on the Retain server.

4. On the Retain server, browse to the `kerberos.properties` file. By default, the file is found in `C:\Program Files\Beginfinite\Retain\RetainWebUI\src\main\webapp\WEB-INF\cfg\kerberos.properties`
5. Edit the file: `kerberos.properties`.
6. Set `kerberos.Server.Principal.Name` to the retainssso User Logon Name from above. For example: `HTTP/retainssso.exchange2013.qa.gwava.com`
7. Set `kerberos.Keytab.Filepath` to the location of the `retainssso.keytab` file from above. The path should use forward slashes (/) instead of back slashes (\).
8. Confirm there are no trailing spaces on any line in the `kerberos.properties` file. Especially at the end of the SPN name.
9. Save the `kerberos.properties` file.
10. Confirm that the Retain Server has access to the directory where “.keytab” and “krb5.ini” are mentioned in the `kerberos.properties` file.
11. Restart the Retain Tomcat service. See “[Starting and Stopping the Retain Server](#)” in *Retain 4.9.2: Installation and Upgrade*.

## Configure the Client

Each client workstation needs to have Integrated Windows Authentication configured. Outlook and the Retain Outlook Plugin should already be installed.

---

**NOTE:** You must perform this procedure for each end-user computer where you want to provide single sign-on access to Retain Web UI.

---

On the workstation users will be using Single Sign-On:

1. Open the Internet options control panel.
2. Click Security
3. Click Trusted Sites > Sites.
4. Add the DNS name of the identity applications server. For example: `retainssso.exchange2013.qa.gwava.com`
5. Click Add, then click Close.
6. Click Custom level...
7. Under User Authentication, select Automatic logon with current user name and password.
8. Click OK.
9. In Internet Options, click Advanced.
10. Under Security, select Enable Integrated Windows Authentication.
11. Verify that Single Sign-On is working by opening Outlook, connecting to the Retain archive, selecting a local Outlook folder and then back to the Retain archive.

## Outlook Plugin

Open Outlook and a new tab will appear on the ribbon called: Retain.

The first time you start Outlook after the installation of the plugin there will be a dialog box that appears asking for your login credentials.

The screenshot shows the Outlook application window with the 'Retain' tab selected in the ribbon. A 'Login' dialog box is open, featuring the Retain logo and a red 'X' close button. The dialog contains two input fields: 'Username (Email):' with the text 'test0@sf.gwava.net' and 'Password:' with masked characters. At the bottom are 'Save' and 'Cancel' buttons.

## Outlook Account Setup

If necessary, you may need to set your account information in the Download Settings|Account Settings section of the ribbon.

To enter your log-in credentials:

1. Go to the Retain tab
2. Select "Download settings"
3. Then click the "Account settings" button
  - a. Enter your Username which is your logon name from Active Directory (AD) for Exchange including the domain (George@gwava.com) or your username from GroupWise (George).
  - b. Enter your password.
  - c. Select the messaging system you wish to connect to.
4. Then click Save.

Outlook Today - Outlook

FILE HOME SEND / RECEIVE FOLDER VIEW Retain

Retain Archive Launch Retain Retain Download Retain Search Quick Search Plugin Settings Download Settings About

### Retain Download Settings

Download 1 Month(s) of Messages Older Than 0 Days

☒ Limit the Number of Messages to 50 Messages

Limit the Search Results to 500 Messages

☐ Filter by the Type of the Message

☐ Mails ☐ Appointments ☐ Notes ☐ Tasks

Save Cancel Account Settings Clear Local Archive

### Retain Login

Username (Email): alan@sf.gwava.net

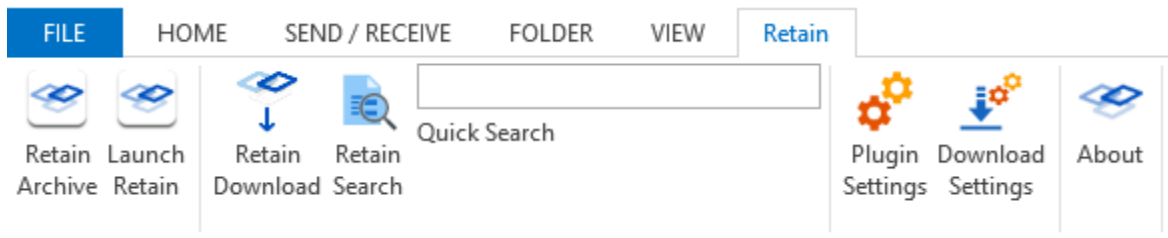
Password: .....

Save Cancel

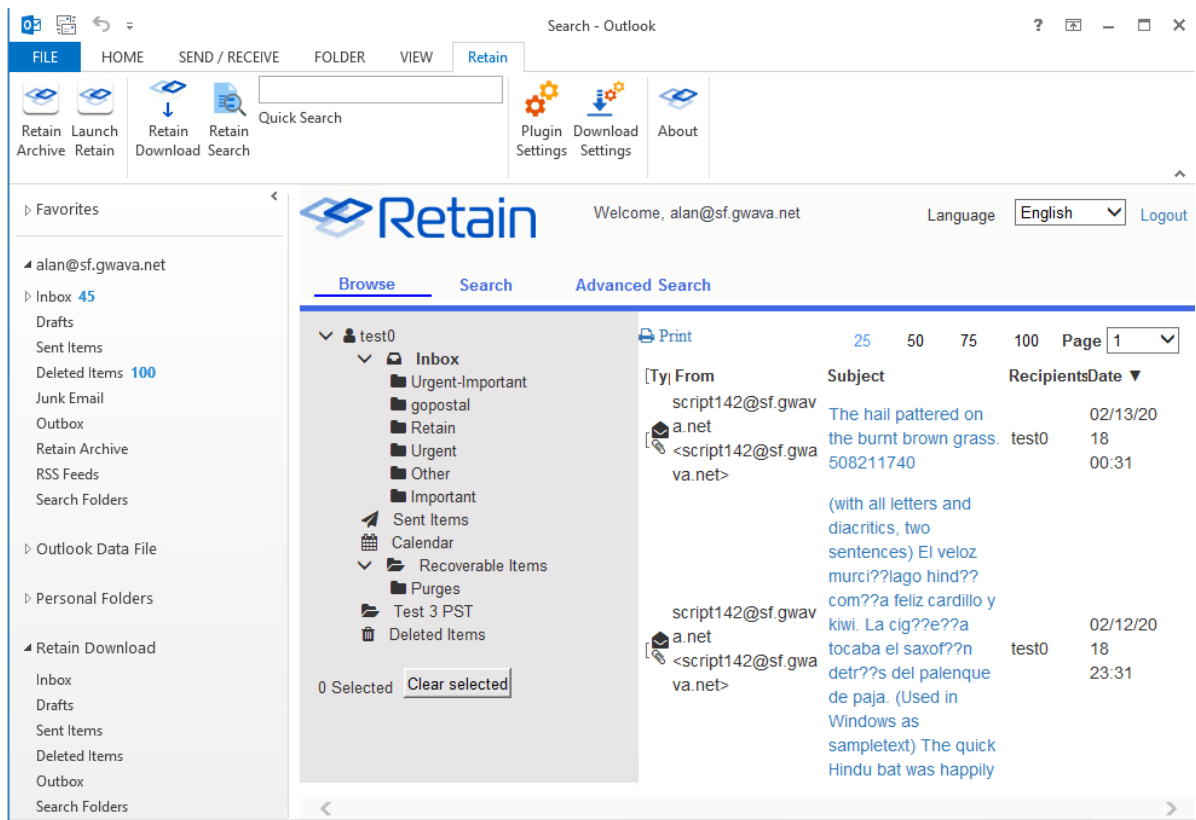
**NOTE:** It is not recommended to exceed 3 months or 5000 messages, because the file becomes too large for Outlook to serve.

## Retain Archive

The Retain Archive button is simply a portal to the Retain web interface.



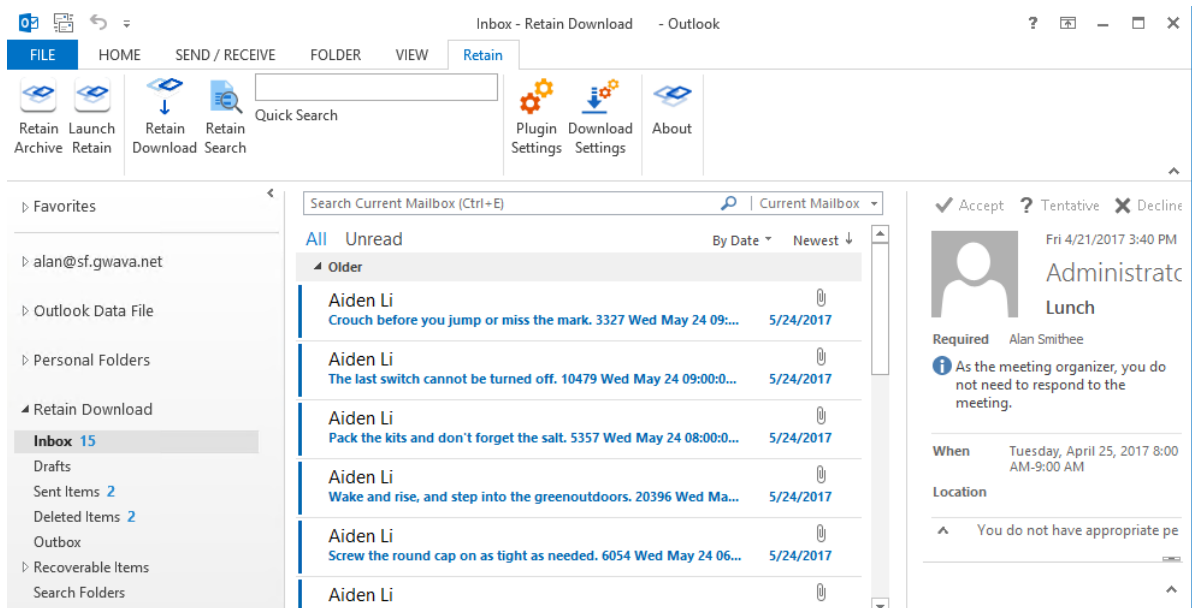
A new folder called Retain Archive will also be created at the Inbox level of your local folder. This will allow you to Browse or Search your Retain archive mailbox.



## Retain Download

Once the connection is made a new folder will show up in your left sidebar. It will be labeled "*Retain Download*" which gives you access to your Retain archive mailbox.





Outlook will download a copy your archived messages to your local drive, just like a normal Exchange archive mailbox. Depending on the settings you chose in the Download Settings (see Figure 1).

This can be very useful after a migration (for example, from GroupWise to Exchange). You can choose to download the messages Retain archived from the GroupWise system so you can see them in Outlook.

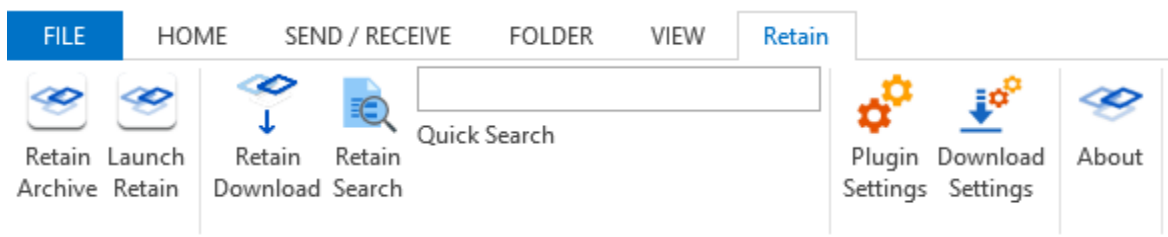
The Retain Download folder does not allow you to move messages between folders, an error dialog box will appear. Retain is not a email management system, it is only archiving.

Automatic download is useful for having easy access to past emails you have removed from Exchange to keep your inbox clean.

## Retain Search

This is the main function of the Retain Outlook Plug-In, and what you use most often.

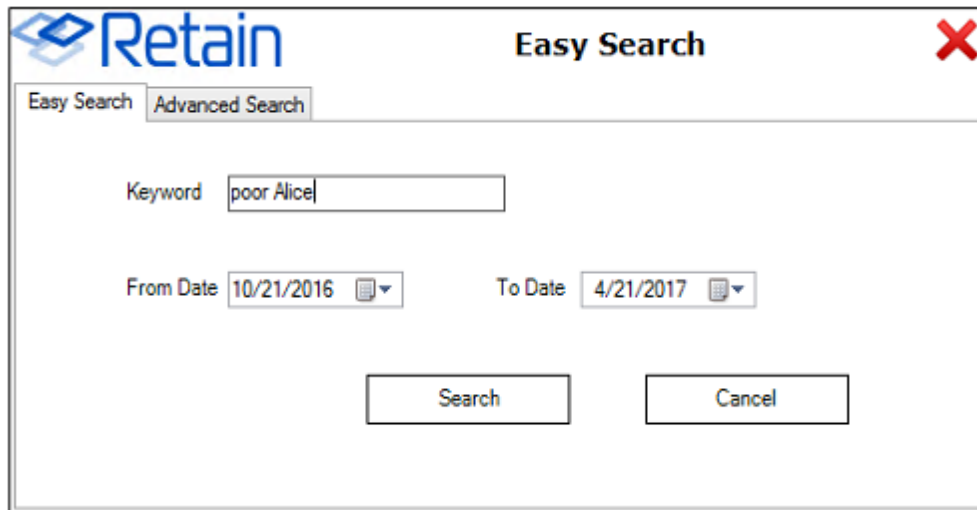
There are two ways to do a Retain search: Quick Search and the Retain Search button.



## Quick Search

Quick Search will perform a search on the last 6 months of messages in your Retain Download Folder on your workstation. The results will be shown in the Retain search results folder. This is different from Outlook's search which only applies to messages that are on your local computer.

## Retain Search Button Easy Search



The screenshot shows a window titled "Easy Search" with a red "X" close button in the top right corner. The window has a tabbed interface with "Easy Search" selected and "Advanced Search" as an alternative. Below the tabs is a "Keyword" text field containing "poor Alice". Underneath are two date fields: "From Date" set to "10/21/2016" and "To Date" set to "4/21/2017", each with a small calendar icon to its right. At the bottom of the window are two buttons: "Search" and "Cancel".

With the Retain Search button the Easy search is as simple as it gets, you give it a keyword and a date range and it will search To:, From:, Subject:, and message contents fields for the keyword. By default "To date" will be today's date and the "From date" will be 6 months ago. Clicking on the calendar icon will allow you change the dates.

## Retain Search Button Advanced Search

**Retain** Advanced Search

Easy Search Advanced Search

Search In	Condition	Keyword	Connector

From Date 10/21/2016 To Date 4/21/2017 Date Type Created

Message Types

☒ All Message Types ☒ Mail ☒ Note  
☒ Appointment ☒ Task

☐ Specify the Date Range for Appointments, Tasks or Notes

Start Date Range

Starting between 4/21/2017 and 4/21/2017

End Date Range

Ending between 4/21/2017 and 4/21/2017

Status

Opened: Doesn't matter Read: Doesn't matter

Private: Doesn't matter

Search Cancel

With the Retain Search button the Advanced search allows for more precision in how you search for a message. This is very useful if you know who it came from or where a particular keyword is or when it was sent.

You can use the various fields to narrow the search focus.

### Search In

- ♦ Content
- ♦ Sender email
- ♦ Sender name
- ♦ Recipients
- ♦ Subject
- ♦ File name

## Condition

- ◆ Contains (exact)
- ◆ Contains (fuzzy) (not recommended for use)
- ◆ Starts with
- ◆ Ends with
- ◆ Does not contain

## Keyword

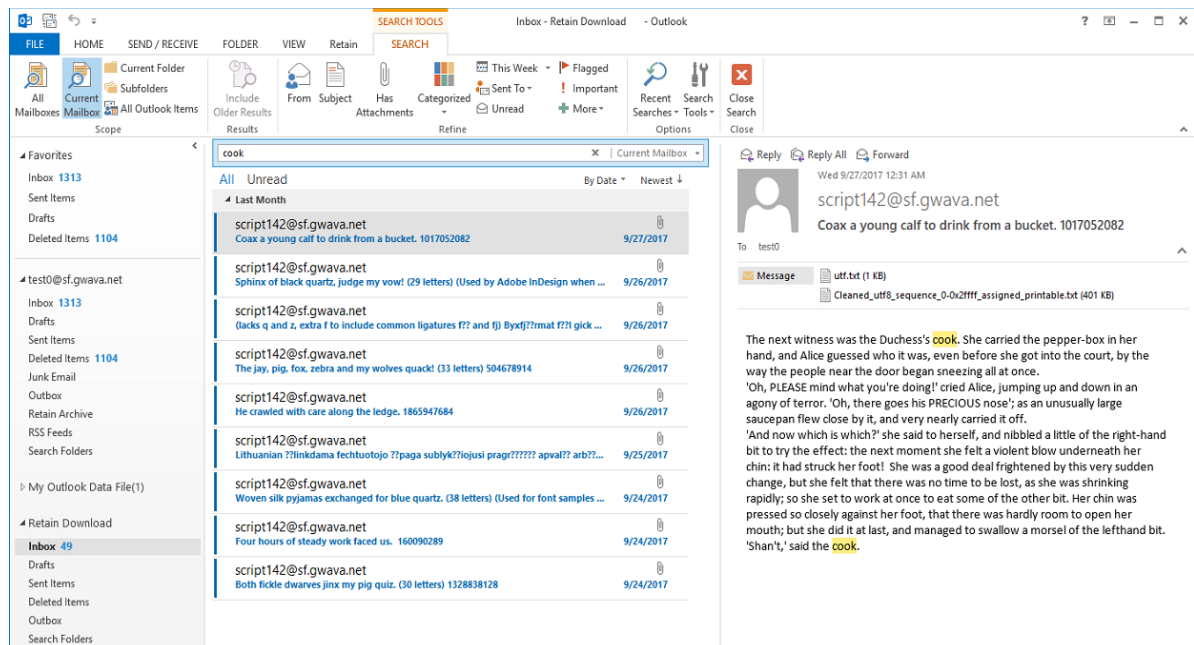
- ◆ This is the word you are looking for.

## Connector

- ◆ AND (returns messages that contain all of the keywords)
- ◆ OR (returns messages that contain any of the keywords)
- ◆ By default, the "To date" is today's date and the "From date" will be 6 months ago. Clicking on the calendar icon will allow you change the dates.

## Outlook Search

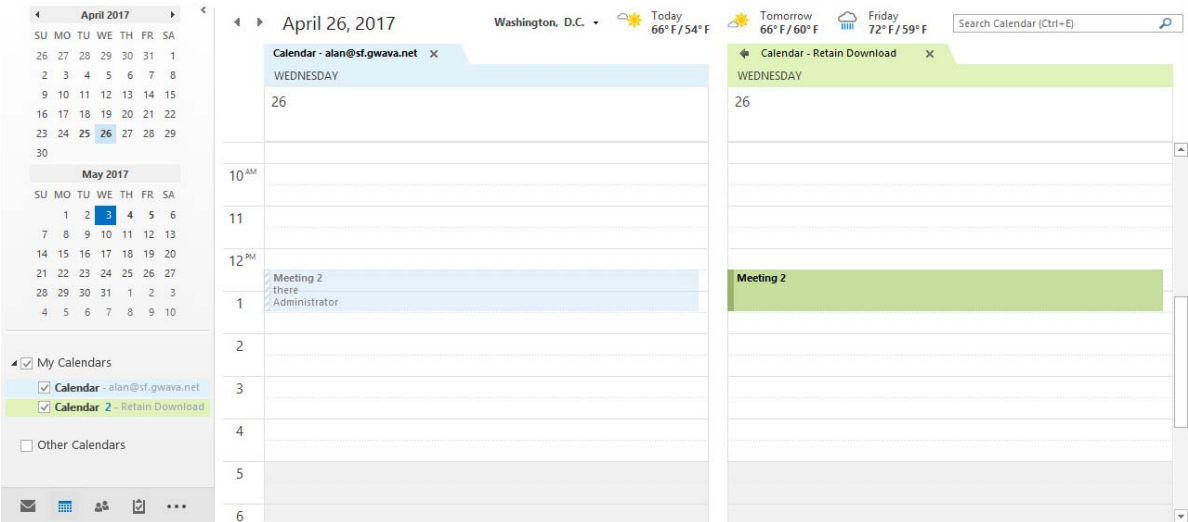
If you have used Retain Download and had your archived messages downloaded into Outlook. You can then use Outlook's search to further refine your search. For example, if you remembered you received a spreadsheet at the end of last quarter, you could download items from the archive from that time period and then use Outlook's built-in search capability to find the word "cook" because you remember that was part of the message.



# Outlook Calendar

Retain archives calendar items and it can be shown side-by-side to your Exchange calendar.

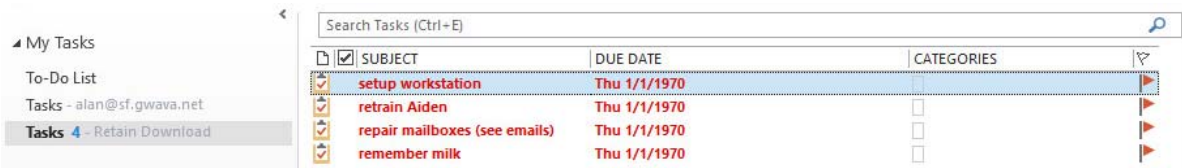
Click the checkbox to enable the *Retain Download* calendar.



# Outlook Tasks

Retain archives Tasks

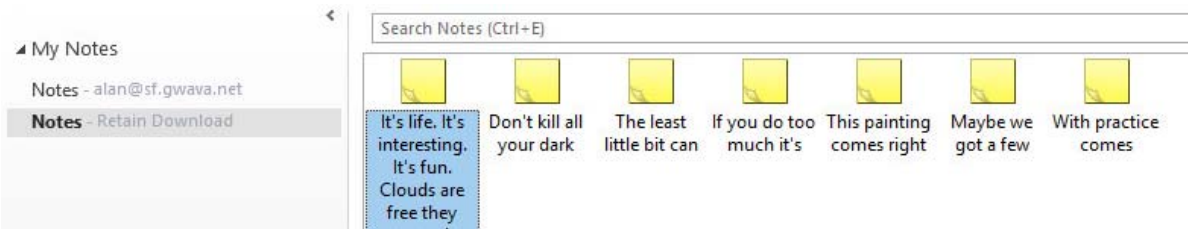
Select the *Retain Download* Task list to see items stored in Retain.



# Outlook Notes

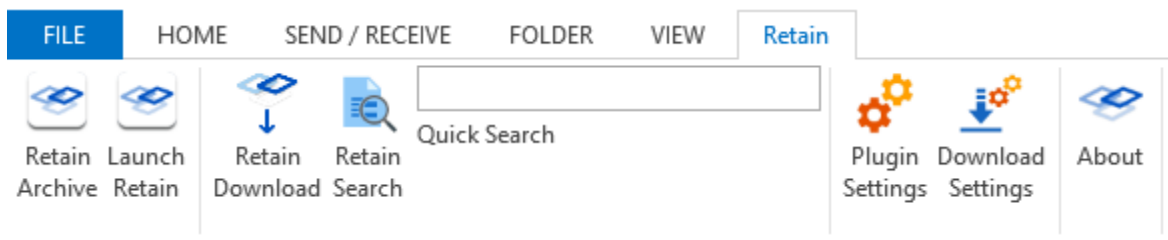
Retain archives Notes.

Select the *Retain Download* Notes list to see items stored in Retain.



# Other buttons under the Retain tab

The Retain ribbon has a number of available functions. These may be restricted by your System Administrator.



The other buttons under the Retain tab:

- ♦ *Retain Archive* will open your Retain archive mailbox in your browser.
- ♦ *Retain download* will manually download messages from Retain if you want to update right now.
- ♦ *Quick search* will perform a search of the last 6 months of your downloaded messages.
- ♦ *Plugin settings* is where you set the URL to the Retain Server and other settings like Language. Generally, only your system Administrator will need to change these settings.
- ♦ *Download settings* allows you to customize how many and how often messages are downloaded.
- ♦ *About* tells you which version of the plugin is installed.

### Download Settings

From this dialog box you can set certain behaviors for the Retain Outlook Plugin.

**Retain Download Settings**

Download  Month(s) of Messages Older Than  Days

☒ Limit the Number of Messages to  Messages

Limit the Search Results to  Messages

☐ Filter by the Type of the Message

☐ Mails ☐ Appointments ☐ Notes ☐ Tasks

Save Cancel Account Settings Clear Local Archive

*Download:* The number of Days, Weeks, Months, or Years of data to download can be set. Default, 5 Months

*Messages Older than:* How many days back that can be ignored can be set as well. For example, you might want to look back into the archive for 3 months of items but you don't need the last 30 days. Default, 0 Days.

*Limit the Number of Messages to:* How many messages to download to you workstation. Outlook does not like to deal with very large local storage files so it is best to keep this number small. Default, 50 messages.

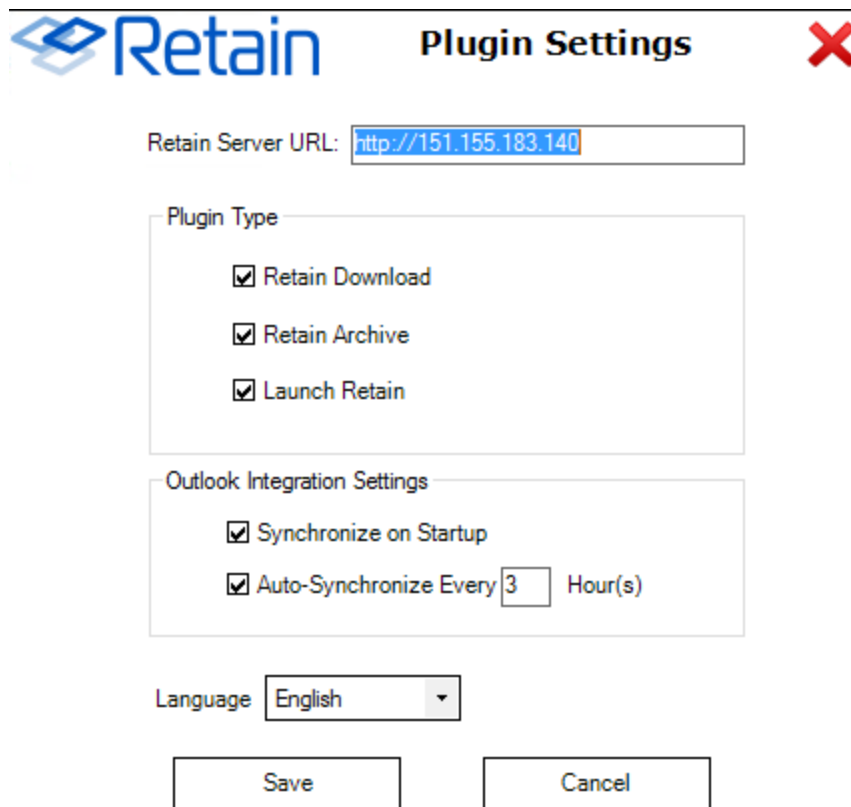
*Limit the Search Results to:* This will limit the number of messages downloaded after a search. Default, 500 messages

*Filter by the Type of the Message:* You can restrict the plugin to Mail, Appointments, Notes, and/or Tasks. With this option checked, you will have to check which items are to be downloaded. Default, all unchecked, so all items will be downloaded.

*Clear Local Archive:* This will empty the local archive folder on your workstation of all items, and folders except the default set of folders. To remove all folders the plugin will need to be uninstalled.

## Plugin Settings

This dialog box allows more general changes to the Retain Plugin.



Retain Server URL:

Plugin Type

- ☒ Retain Download
- ☒ Retain Archive
- ☒ Launch Retain

Outlook Integration Settings

- ☒ Synchronize on Startup
- ☒ Auto-Synchronize Every  Hour(s)

Language:

*Retain Server URL:* This is the IP address or Host name of the Retain Server where the archive is stored. Your system administrator will provide or set this for you.

*Retain Download:* This allows the plugin to add the Retain Download folders to Outlook.

*Retain archive:* This enables the *Retain Archive* button that opens your Retain archive mailbox.

If Outlook Integration is enabled:

*Synchronize on Startup:* When Outlook starts up, the plugin will check for new items in the Retain Archive.

*Auto-Synchronize Every "3" Hours:* The plugin will check for new items in the Retain archive every 3 hours by default.

Language

You can select the following languages for display in the Outlook interface:



Czech

German

English

Spanish

French

Dutch

## Uninstall Retain Outlook client Plugin

To uninstall the plugin

1. Go to right-click (Win7/8) *Start | Control Panel | Programs | Uninstall a program* or (Win10) *Start | Apps and Features*
2. Select the Retain Outlook Plugin
3. Choose Uninstall.

## Outlook Web App Plugin

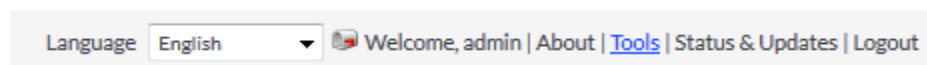
The Outlook Web App plugin utility adds a Retain Archive auto-logon button to user's Outlook Web App window.

---

**NOTE:** Outlook Web App was called Outlook Web Access in versions of Microsoft Exchange earlier than Exchange 2010.

---

The OWA Plugins are found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.





# System Requirements

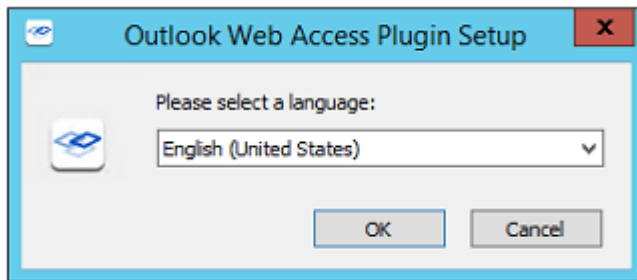
Exchange 2007, 2010, 2013, or 2016

There are two versions of the Outlook Web App plugin: the Outlook Web Access plugin for Outlook versions 2007 and 2010, and the Outlook Web App plugin for Outlook versions 2013 and 2016. Make sure to download the correct plugin as dictated by the Outlook Web App version.

## Installation

To install the plugin, download and run the appropriate plugin installation files on the Outlook Web App server.

On initialization, the installation allows language selection.

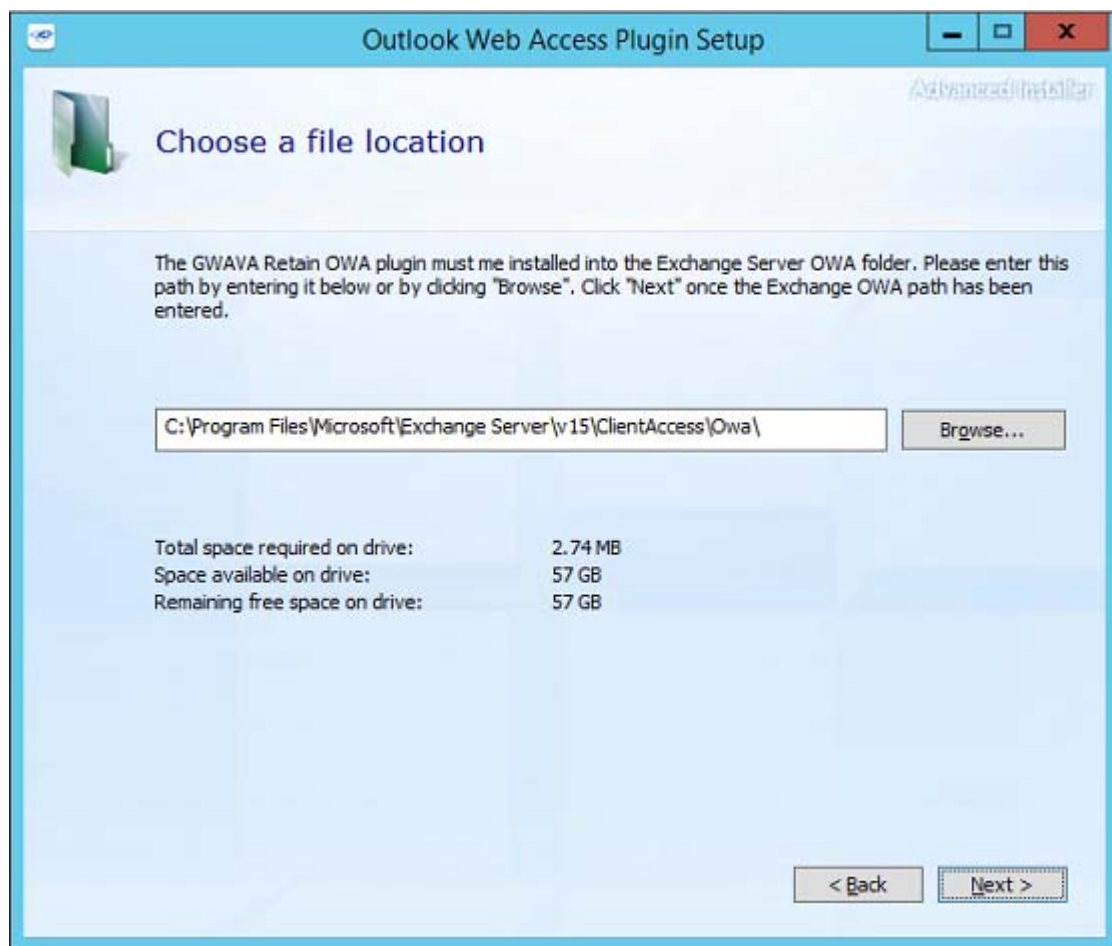


The installation then begins. Select 'Next' to continue.

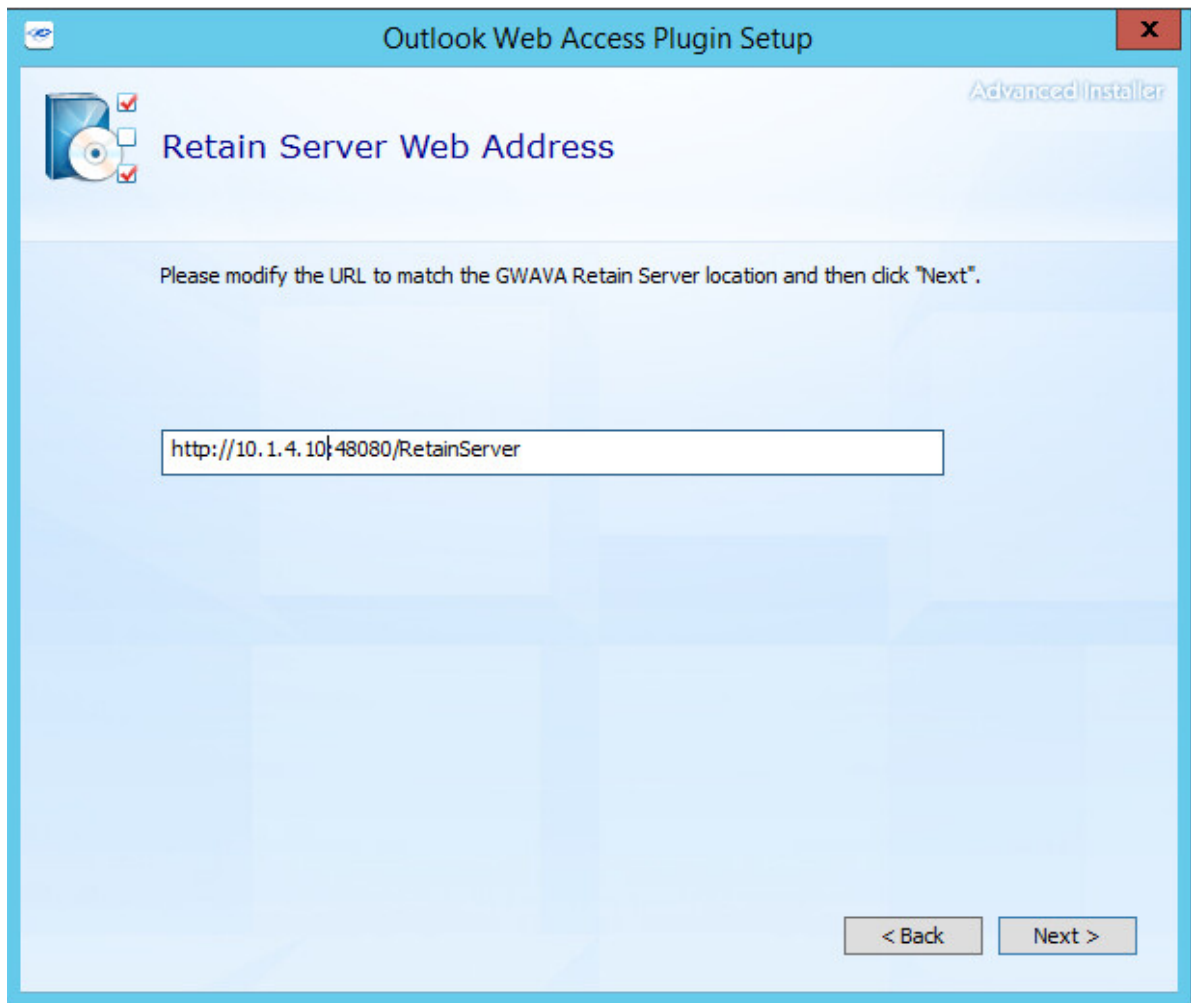


System space requirements and installation path are displayed. The installation path needs to be the location of the OWA folder. Default path for Exchange 2013 is displayed.

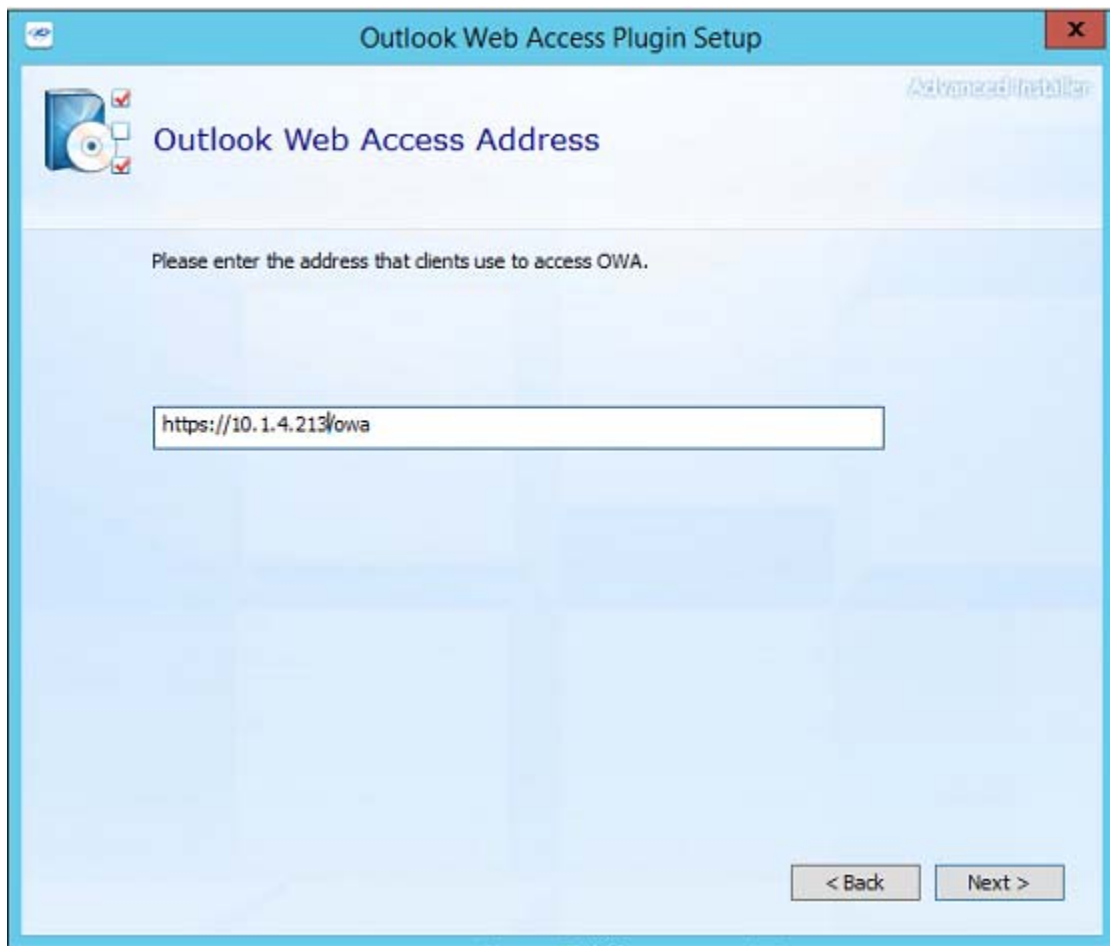
C:\Program Files\Microsoft\Exchange Server\v15\ClientAccess\OWA



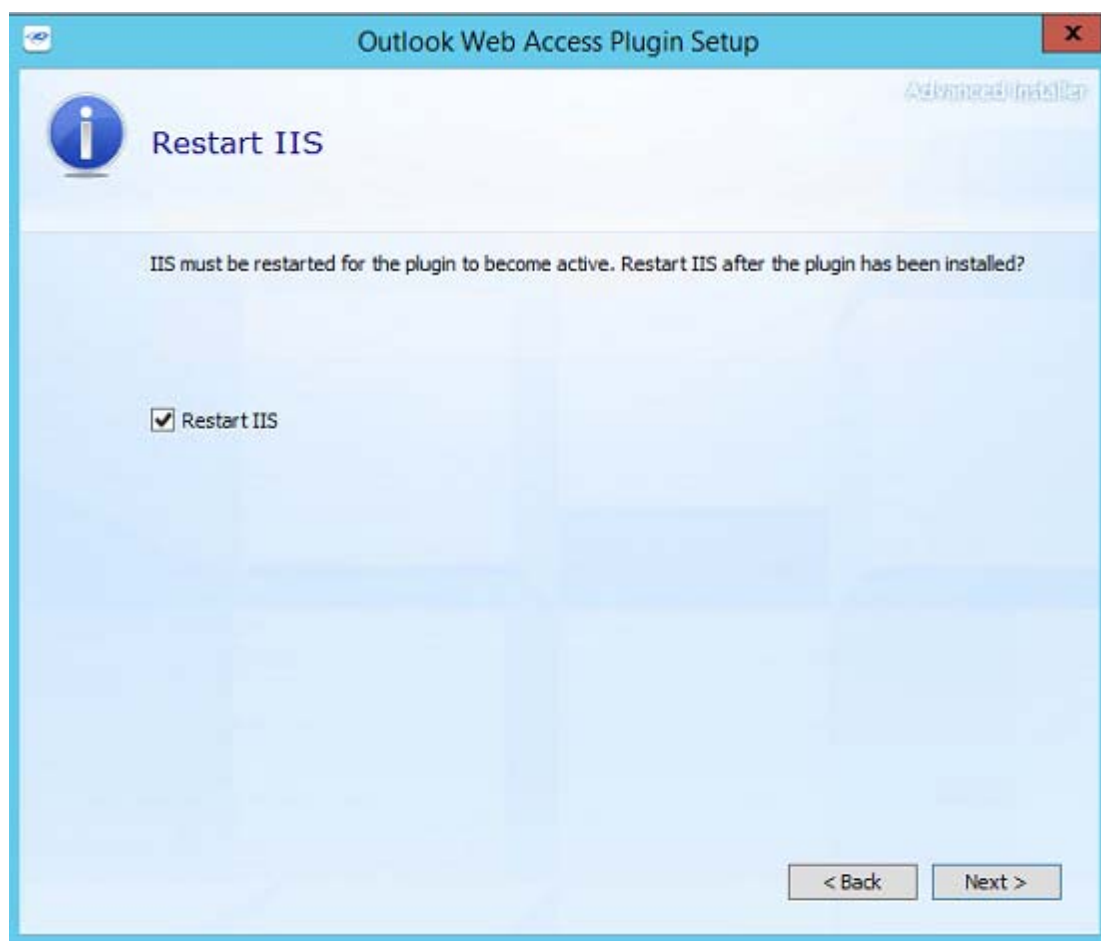
Enter the URL for the Retain Server that has data for the users. This is the address which will be used to access the Retain Server. Ensure that the address functions. This address should include the port used by tomcat, default 48080.



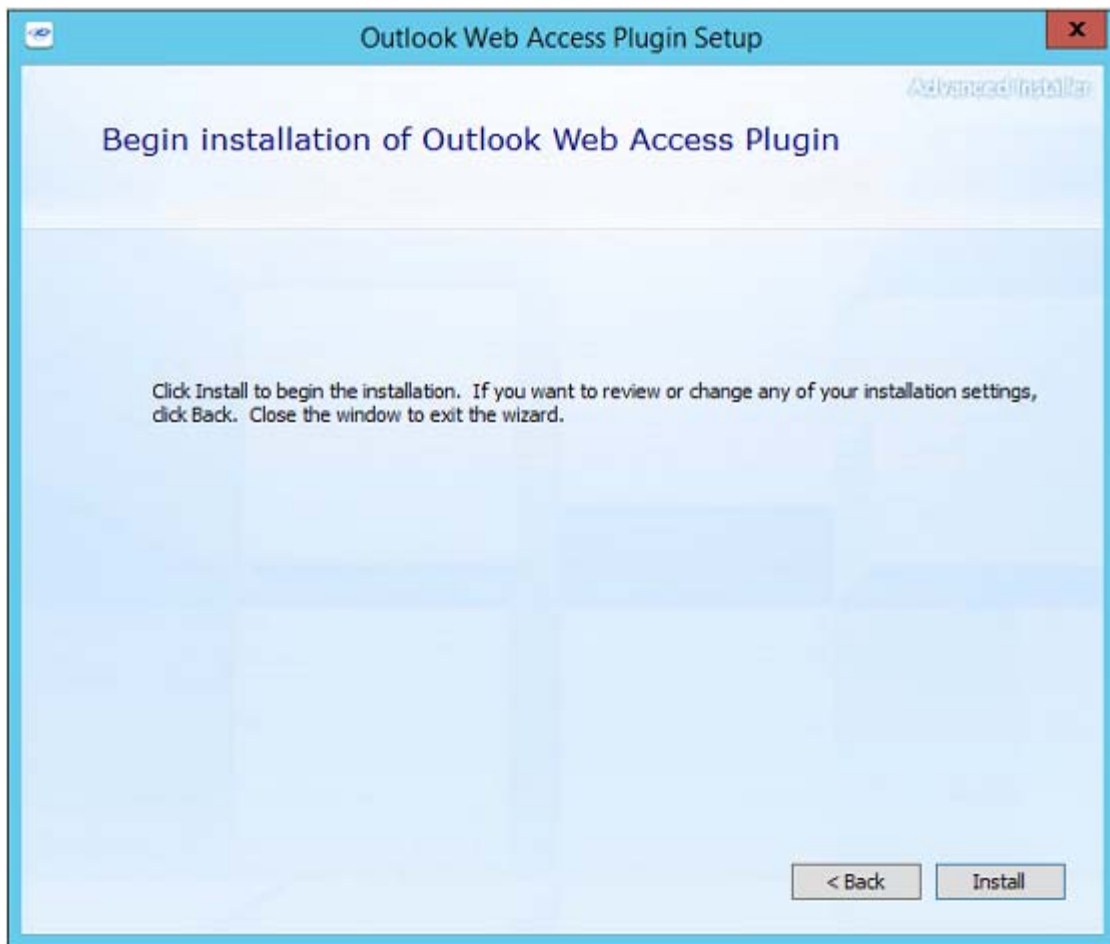
Enter the Outlook Web App client access URL. This address is the connection used by clients to access the Outlook Web App, usually this is an Exchange server. (This step is not included in or required by the 2007/2010 version install)



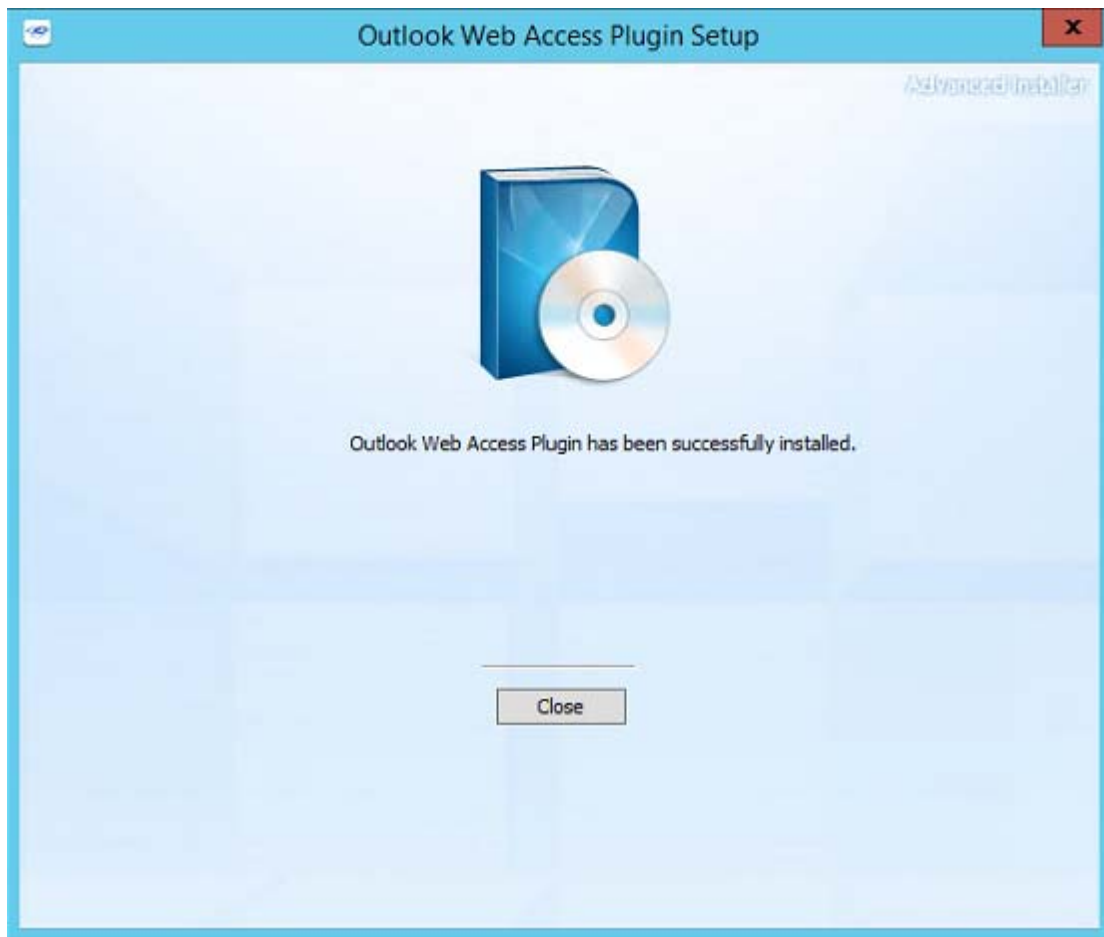
IIS must be restarted to load the plugin into Outlook Web App. The installation has the ability to automatically restart IIS to complete the installation. If checked, IIS will be restarted as part of the install.



If any settings need to be changed, this is the opportunity to change them. Once the 'Install' button is pressed, the installation will begin.

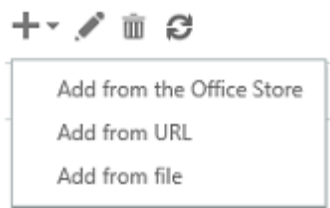


Once the installation has completed, select the 'Close' button.



## Enable Plugin for the Organization

- ♦ After IIS is restarted, log into the Exchange Admin Center.
- ♦ Browse to Organization | Apps and select "Add from file" from the Add plus sign menu.



- ♦ Browse to the install location. Example from Exchange 2013  
C:\Program Files\Microsoft\Exchange Server\v15\ClientAccess\Owa\Retain



- ♦ Select *manifest.xml* and Open.

Exchange admin center

recipients permissions compliance management **organization** protection mail flow mobile public folders unified messaging servers hybrid tools

sharing **apps** address lists

Apps let your users do and see more without leaving their mailbox. The following list shows apps that have been installed for the or

+ - ✎ 🗑️ ↺

NAME	PROVIDER	USER DEFAULT	PROVIDED TO
Action Items	Microsoft	Enabled	Everyone
Bing Maps	Microsoft	Enabled	Everyone
My Templates	Microsoft	Enabled	Everyone
<b>Retain</b>	<b>GWAVA</b>	<b>Disabled</b>	<b>Nobody</b>
Suggested Meetings	Microsoft	Enabled	Everyone
Unsubscribe	Microsoft	Enabled	Everyone

Double click to edit

- ♦ Enable "Make this app available to users in your organization"
- ♦ Select "Mandatory, always enabled. Users can't disable the app"

Edit App Settings - Internet Explorer

Retain [Help](#)

☒ Make this app available to users in your organization

Specify user defaults:

☐ Optional, enabled by default

☐ Optional, disabled by default

☒ Mandatory, always enabled. Users can't disable this app

save cancel

100%

## The Plugin in the Outlook Web App

If you did not make the plugin mandatory, the plugin may not be active:

- ♦ Click the gear icon near the top right next to your users name and select "Manage apps..."

- ♦ A list of apps available to the users will be listed. Notice that Retain App is available but disabled. Select the Retain app and in the right sidebar, click the Enable link.
- ♦ Navigate back to your inbox with the right arrow or by clicking on your username and choosing My Mail.

Using the plugin:

- ♦ Browse to any message. Within the Viewer pane on the right or if you open the message in its own window, you will see a Retain link inside a grey bar.
- ♦ Clicking the link will reveal a Retain logo image and clicking on that will open a new window to the Retain archive.

The sense of smell is better than that of touch. 1597598642

← REPLY   ← REPLY ALL   → FORWARD   ...

[mark as read](#)

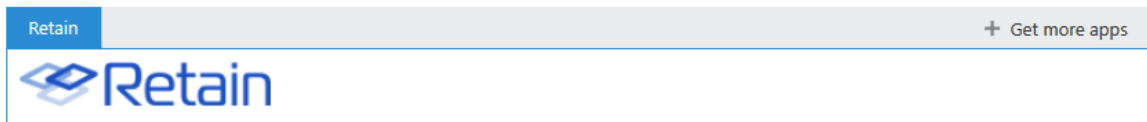
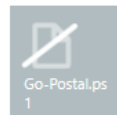
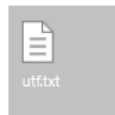
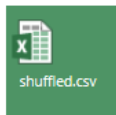


[script50@sf.gwava.net](mailto:script50@sf.gwava.net)

Tue 9/27/2016 1:52 PM

To: test11;

3 attachments

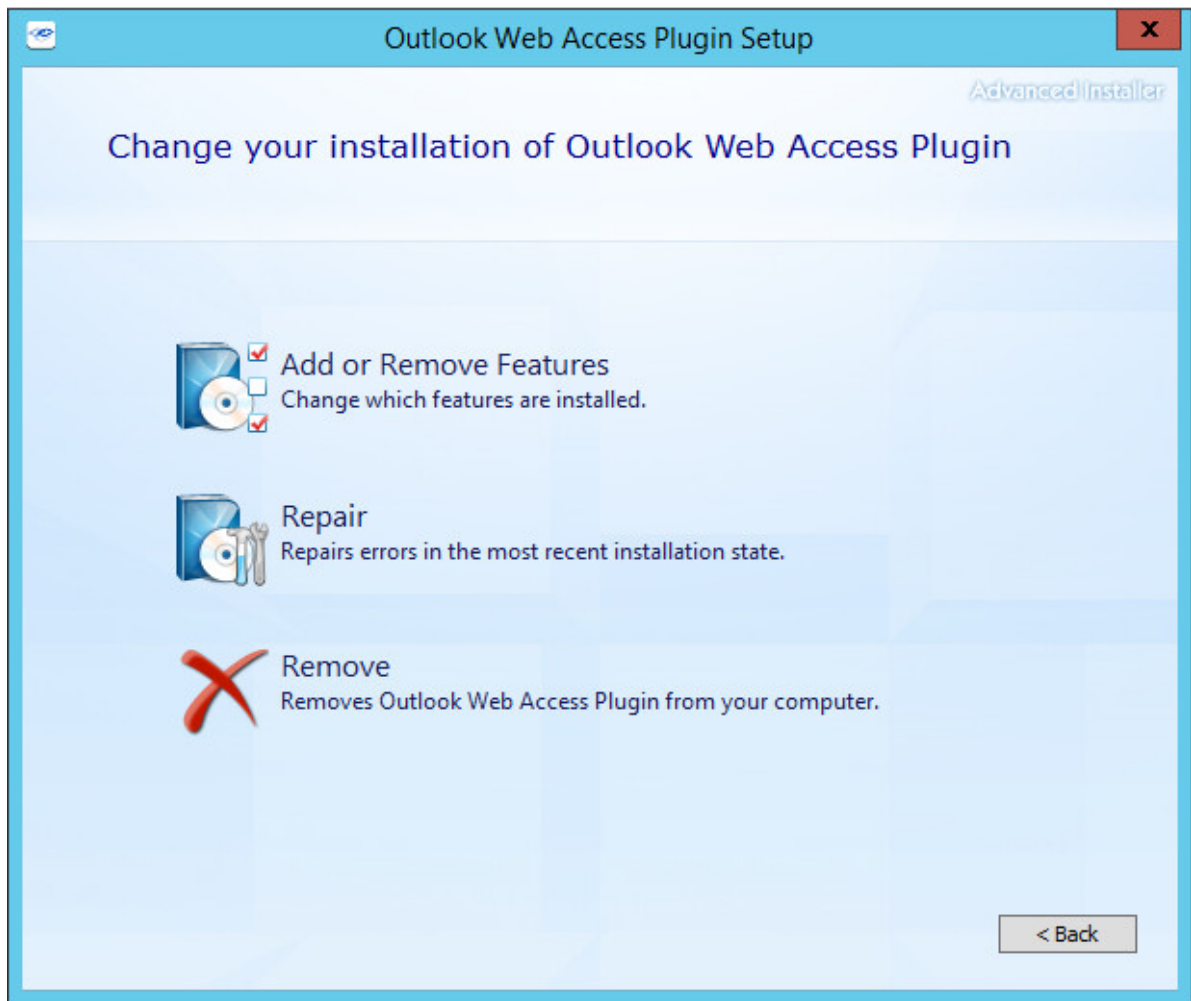


'No, I give it up,' Alice replied: 'what's the answer?' 'I haven't the slightest idea,' said the Hatter.

## Change Features, Repair or Remove the Plugin

To add or remove features, repair or remove the plugin, run the installer on the Outlook Web App server again. The plugin will detect that it is currently installed and give you these options:

- ♦ Add or Remove features will allow you to adjust the features installed to the plugin.
- ♦ Repair will refresh the installation of the plugin.
- ♦ Remove will delete the plugin.

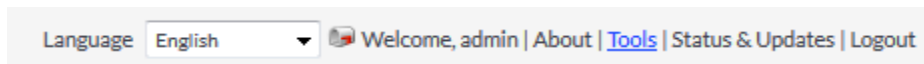


If you entered incorrect data or changed the location of the Retain server, you will need to uninstall the plugin and then re-install to enter the correct data.

## Retain PST Importer

The Retain PST Importer is a tool which inputs mail from PST archives into the Retain system. The PST Importer is a utility which is installed on a Windows machine, local to the PST archive and works in coordination with the Retain Server.

The Retain PST Importer is found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.



## System Requirements

- ♦ Windows 7x, 8x, 10x
- ♦ Open and direct network connection to the Retain Server
- ♦ Java Runtime Environment 8 (No other Java can be present on the system.)

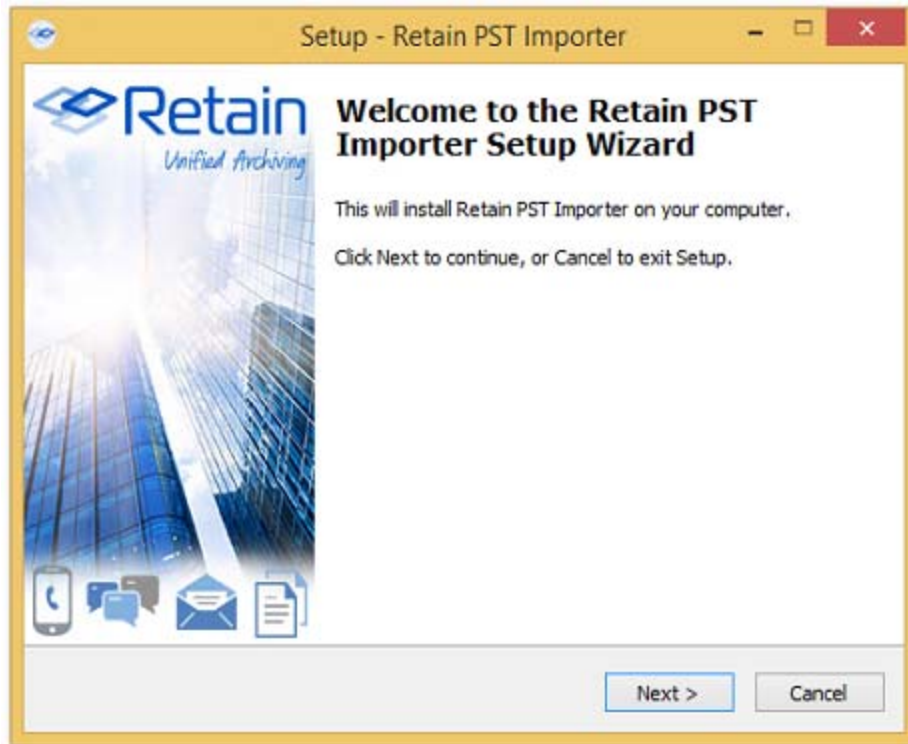
---

**NOTE:** If the correct Java is not present in the system, the Importer install will not start, but will provide a link to the download of the appropriate JDK. Select the correct version, (32 or 64-bit), download and install it. Due to the way Windows interacts with Java, there can be no other version of Java on the host machine. Uninstall any other version.

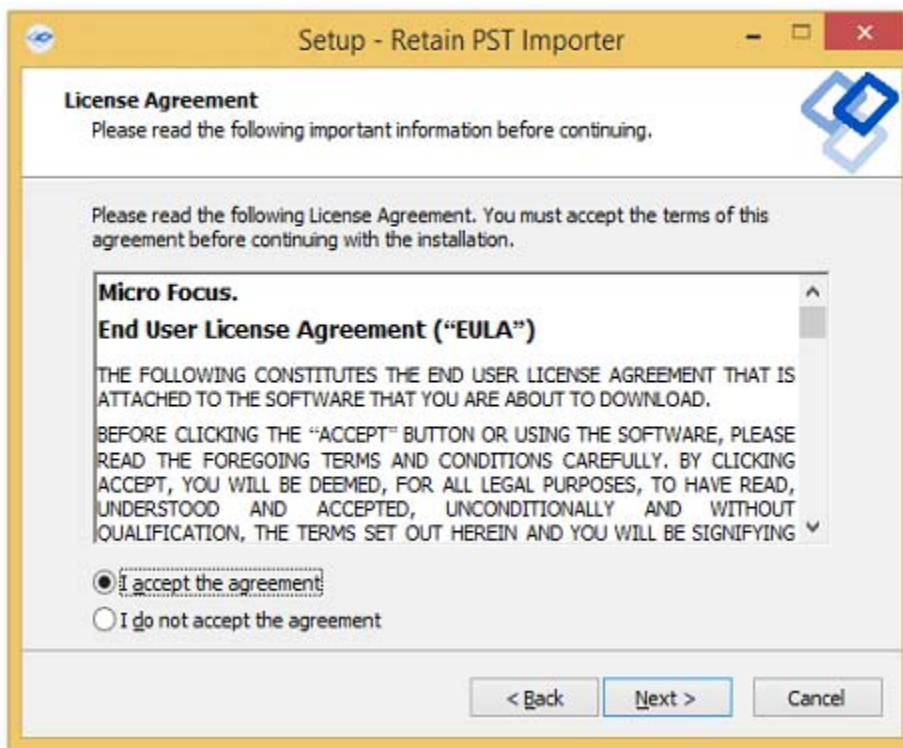
---

## Installation

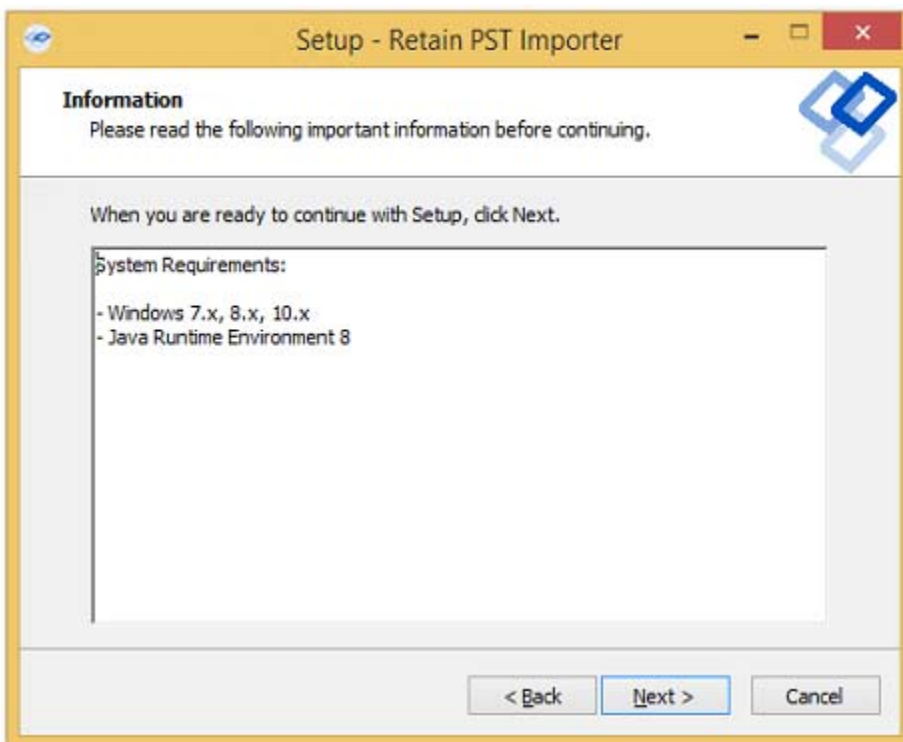
Installation of the PST Importer is simple. Locate the 'Retain PST Importer Install.exe' file and run it. Once initialized, the installation will display this page. Select 'Next' to continue.



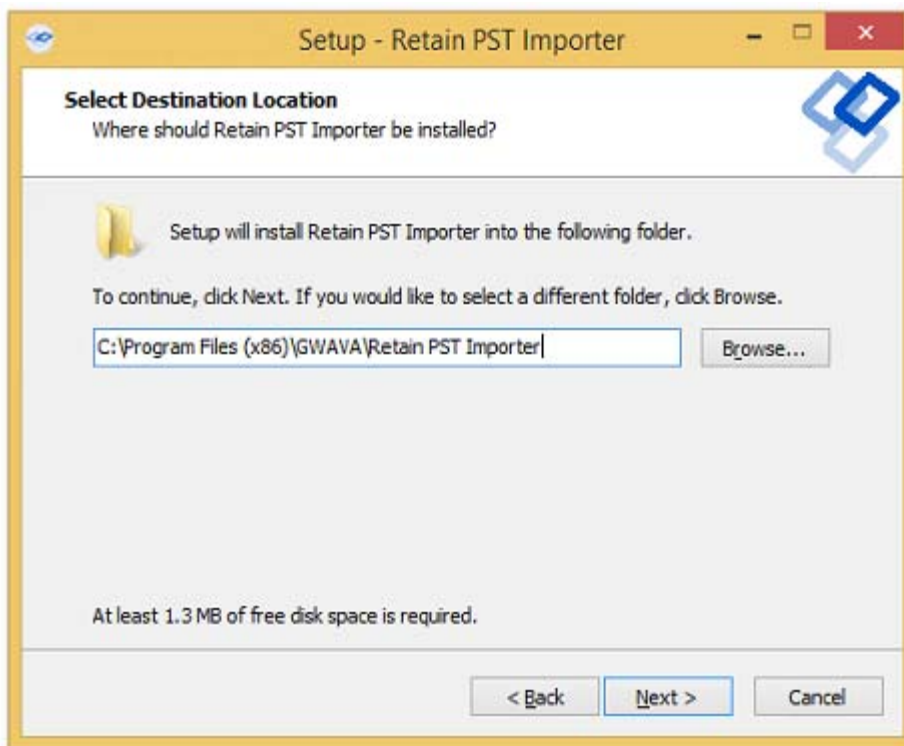
Accept the License agreement and select 'Next' to continue.



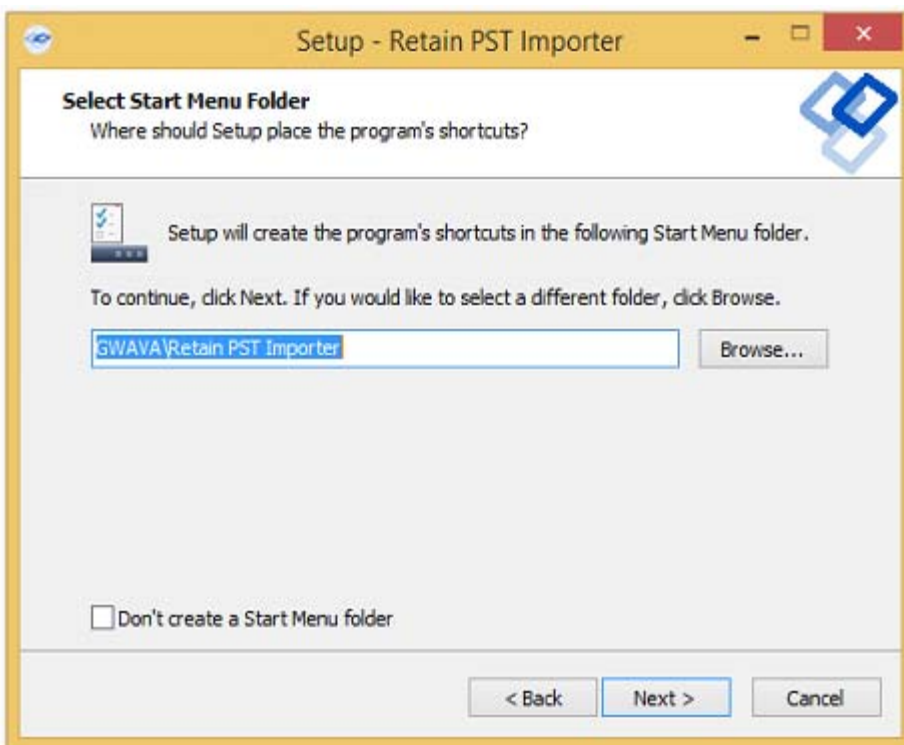
The System Requirements are listed. Select 'Next' to continue.



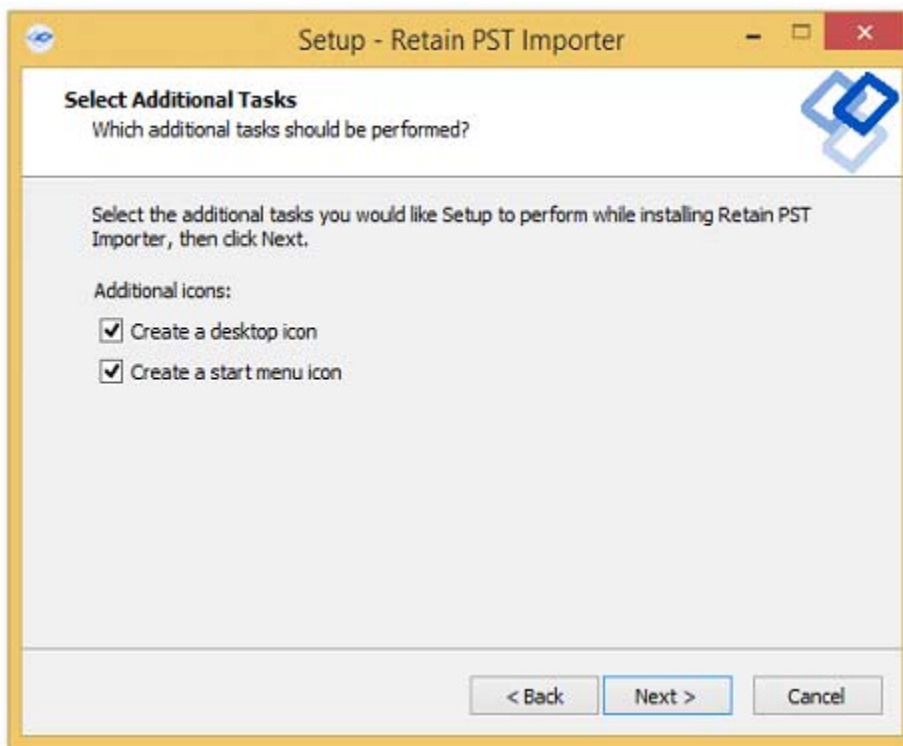
The installation folder is displayed. Change it as desired and select 'Next' to continue.



The PST Importer may be installed with a shortcut in any desired start menu folder. The default folder is displayed. Change as desired and select 'Next' to continue.

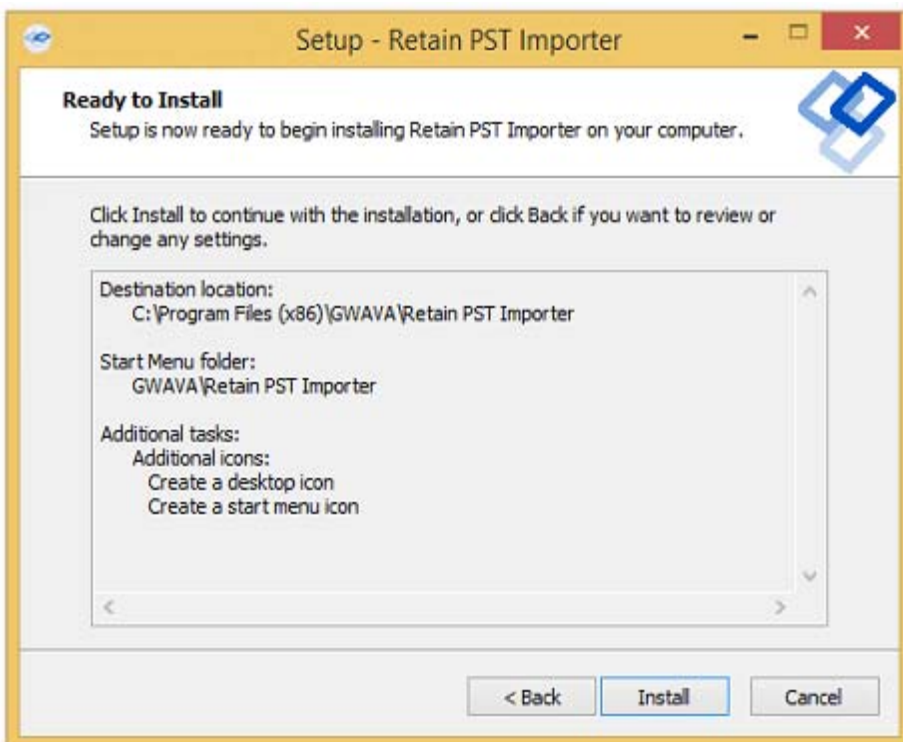


Select which icons are going to be installed in the system and select 'Next' to continue.



Review the installation settings. If any settings need to be changed or revised, use the 'Back' button to return to the appropriate pages and change them.

When correct, select 'Install' to install the program.





Once the installation is completed successfully, select the 'Finish' button.



## Configuration and Use

The PST Importer requires a Worker configuration and a bootstrap file to know where and how to communicate with the Retain Server. A new worker must be created, configured, and the configuration file loaded into the PST Importer. Follow the steps below.

1. In the Retain Server administration console, create a new Worker. It would be appropriate to name it 'Importer' or 'pst importer' for ease of remembrance, but any name desired will do. Remember that this worker should never be configured with any jobs in the Retain Server. A general configuration is all that is required; no specific settings need to be changed from default, except the connection information if it needs to be modified in accordance to the needs of the local network. It is imperative that the PST Importer has an open connection to the Retain server. When the settings are correct, save the new Worker.

Worker: PST importer

Poling | Logging | Connection | Module specific | Status | Bootstrap

**Server Connection**

The worker will need to know how to connect to the Server. It is highly recommended that you use a DNS host name for the Host Name. It's important to note that you are specifying the URL from the point of view of the **Worker contacting the Server**, which may or may not match the URL you'd use from your browser to reach the Worker or Server.

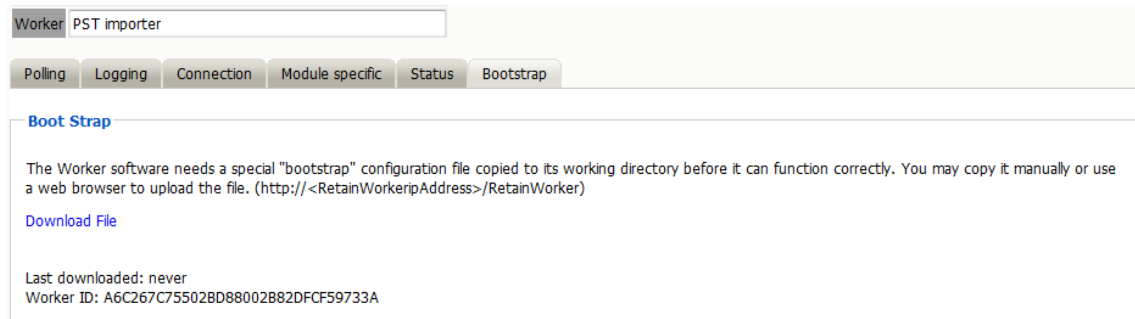
For administrators using the Reload interface, note the worker password assigned must be the same for each worker that contacts the Reload Server. As part of setting of the Reload Server, you must know this password.

Server Protocol	http
Server Host Name	10.1.10.20
Server Port	48080
Server Path	/RetainServer
Worker Password	..... (Password is default)

**Note:** Changing any of these parameters will require recopying the worker bootstrap file!



2. Download the bootstrap file.



The screenshot shows a web interface for a worker named 'PST importer'. It has tabs for 'Polling', 'Logging', 'Connection', 'Module specific', 'Status', and 'Bootstrap'. The 'Bootstrap' tab is active, showing instructions on how to download a bootstrap file. A 'Download File' link is provided. Below the instructions, it shows 'Last downloaded: never' and a 'Worker ID: A6C267C75502BD88002B82DFCF59733A'.

Worker: PST importer

Polling Logging Connection Module specific Status Bootstrap

**Boot Strap**

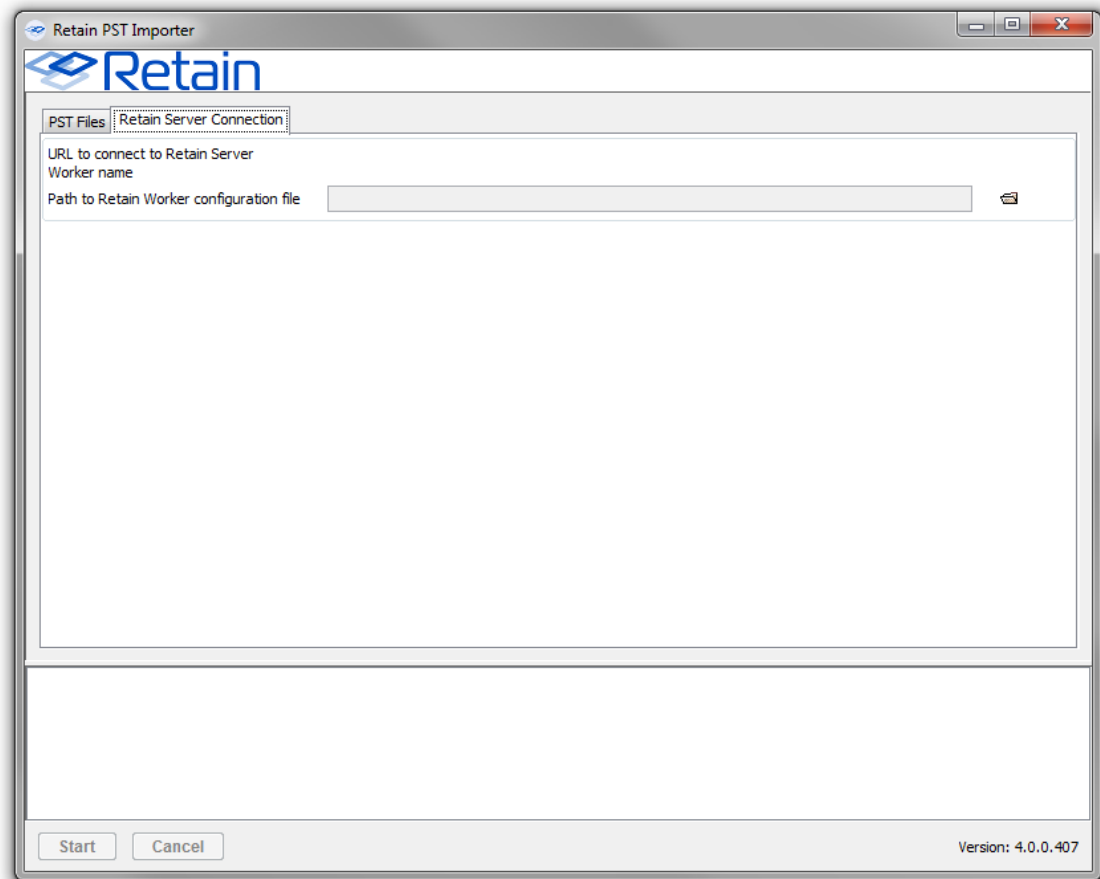
The Worker software needs a special "bootstrap" configuration file copied to its working directory before it can function correctly. You may copy it manually or use a web browser to upload the file. (<http://<RetainWorkeripAddress>/RetainWorker>)

[Download File](#)

Last downloaded: never  
Worker ID: A6C267C75502BD88002B82DFCF59733A

3. Run the PST Importer utility. Locate the Retain PST Importer icon or start menu item and run the program.

On initial startup, the Retain PST Importer opens to the configuration page. The worker configuration file contains all the connection information for the Retain Server. (If the location changes, the worker configuration file will need to be re-downloaded.)



The screenshot shows the 'Retain PST Importer' application window. It has a title bar with the Retain logo and the text 'Retain PST Importer'. The window is divided into two tabs: 'PST Files' and 'Retain Server Connection'. The 'Retain Server Connection' tab is active, showing fields for 'URL to connect to Retain Server', 'Worker name', and 'Path to Retain Worker configuration file'. The 'Path to Retain Worker configuration file' field has a browse button (folder icon). At the bottom, there are 'Start' and 'Cancel' buttons. The version number 'Version: 4.0.0.407' is displayed in the bottom right corner.

Retain PST Importer

Retain

PST Files Retain Server Connection

URL to connect to Retain Server  
Worker name  
Path to Retain Worker configuration file

Start Cancel

Version: 4.0.0.407

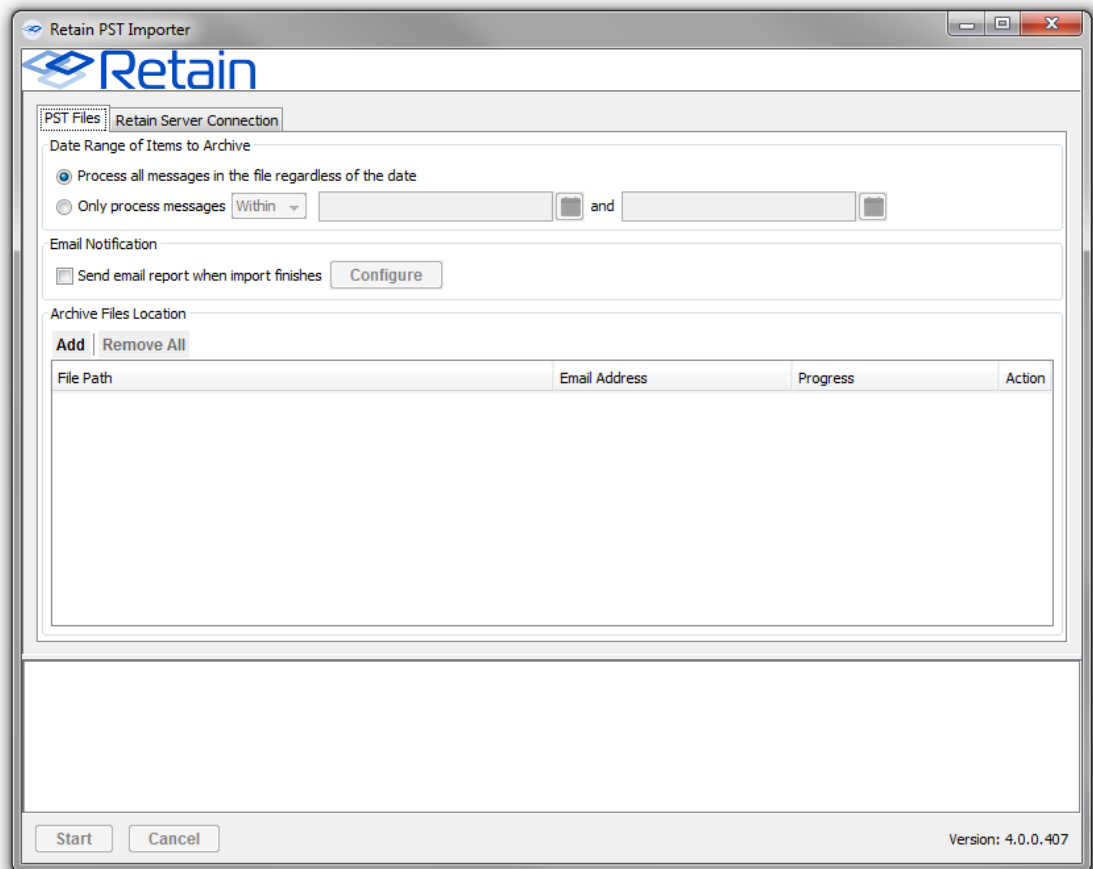
4. Upload the Worker Configuration file to the PST Importer.

Select the Retain Server Connection tab, where the bootstrap file is specified and select the 'folder' to browse to the file location. Select the appropriate worker configuration file and load it into the Import tool.

## Use

Use of the PST Importer is very simple. The PST Importer tool may be restricted to import only messages in the archive which fall into a specified date range or it will attempt to import the entire archive. The PST Importer may be restricted to import only messages which meet selected criteria:

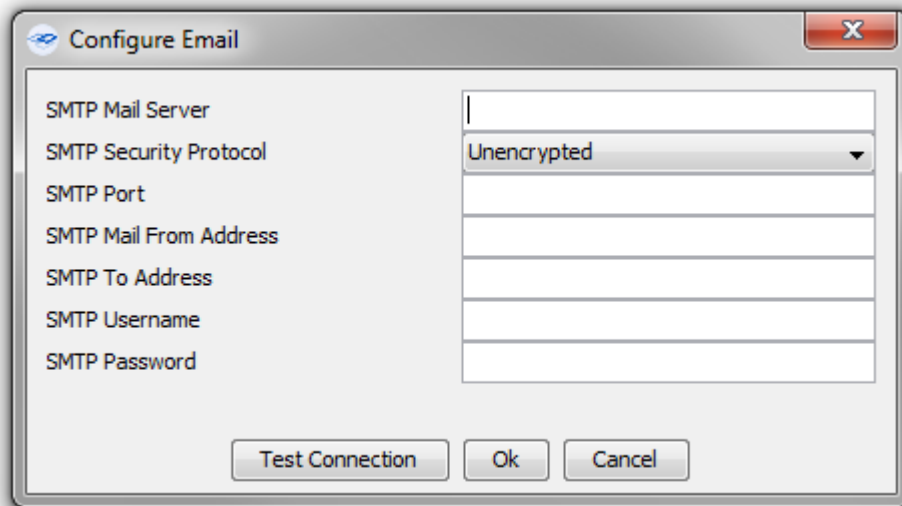
- ♦ A specified date range (inclusive)
- ♦ Before a specified date (exclusive)
- ♦ After a specified date (exclusive)



If desired, the PST Importer may send a notification message when the job is complete. The email will contain a job summary including:

- ♦ The total number of messages selected for import
- ♦ Number of successfully process messages

- ♦ Number of messages not processed



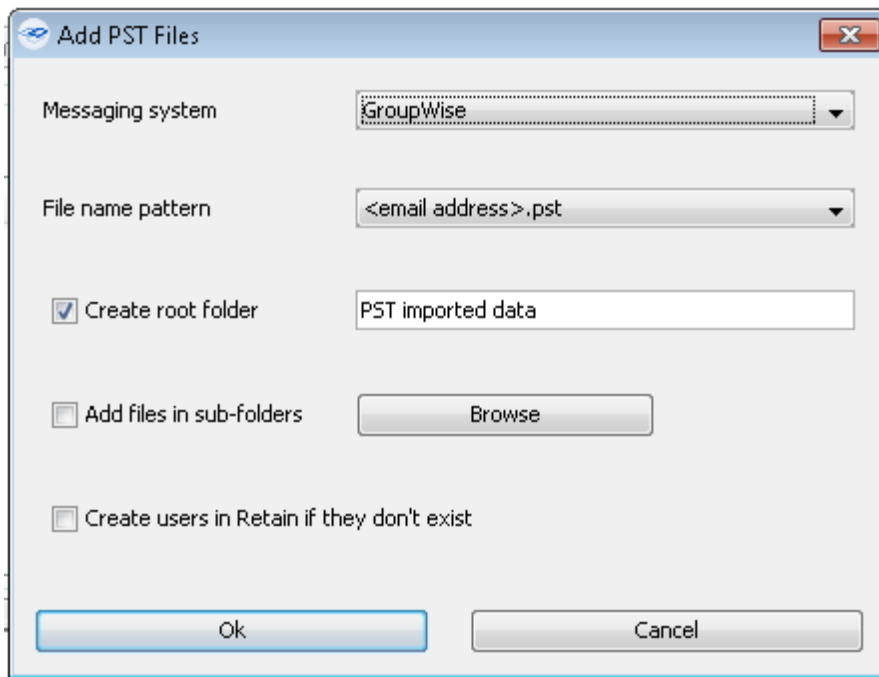
To receive a notification email, an SMTP connector needs to be specified and settings provided. Security protocol options are: 'Unencrypted, TLS, and SSL'. Test the connection to ensure the settings are correct.

When the desired archive or archive have been added and settings have been configured, select the 'Start' button to begin importing the archive. Rolling information is displayed in the information window at the bottom of the screen.

To add or remove an archive to or from the PST Importer tool, use the 'add' and 'remove all' buttons at the top of the archive window.

Adding an archive opens a browse window to allow selection of the archive. Adding an archive requires the selection of the desired messaging system, (select the system the user will be using so messages will be added to their archive). The user can select the file name pattern corresponding to the PST archives and whether to import the archive into existing root folders or to have the tool import the archive in to automatically created subfolders.

Users can import messages from the PST archive for either existing users in Retain, or if the user does not currently exist in Retain, it will be automatically created.



When complete, select 'Browse' button to browse to and select the archive. Hovering over the path will show the complete path.

To remove all the archives from the list, select 'remove all'.

## Logs

Log files are generated and placed in the following default location:

C:/Users/<username>/AppData/Roaming/GWAVA/Retain PST Importer

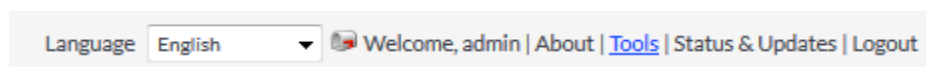
This can be reached by typing %APPDATA% in the File Explorer address bar.

# GroupWise WebAccess Plugin

## Overview

The Retain for GroupWise WebAccess Plugin is a quick and effective way to integrate access to the Retain archive into WebAccess for users. The Plugin adds a button which will automatically take users to their personal archive. The archive interface will be displayed inside the WebAccess window, and provides all the same access and management of the archive which users can experience by directly logging in to Retain.

The GroupWise WebAccess Plugin is found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.



# System Requirements

The plugin servlet is installed and run on the GroupWise WebAccess server.

- ♦ GroupWise WebAccess 8.x, 2012, 2014, 2014 R2, 18
- ♦ Functioning Retain Server, with configured GroupWise module
- ♦ Open network connection to the Retain Server
- ♦ If SSL is to be used on the web server, either IIS or Apache, then SSL must be enabled on the Retain server as well.

## Installation

To install the plugin, execute the installation file.

### Linux:

Linux requires root access to install the plugin. Change the files to executable and run the files.

- ♦ `chmod +x *.sh`
- ♦ `./installgui.sh` (if a graphical install is desired)

or

- ♦ `./installtext.sh` (if a text install is desired)

### Windows:

On Windows, double click and run the .bat file.

- ♦ `install.bat`

## Graphical install shown

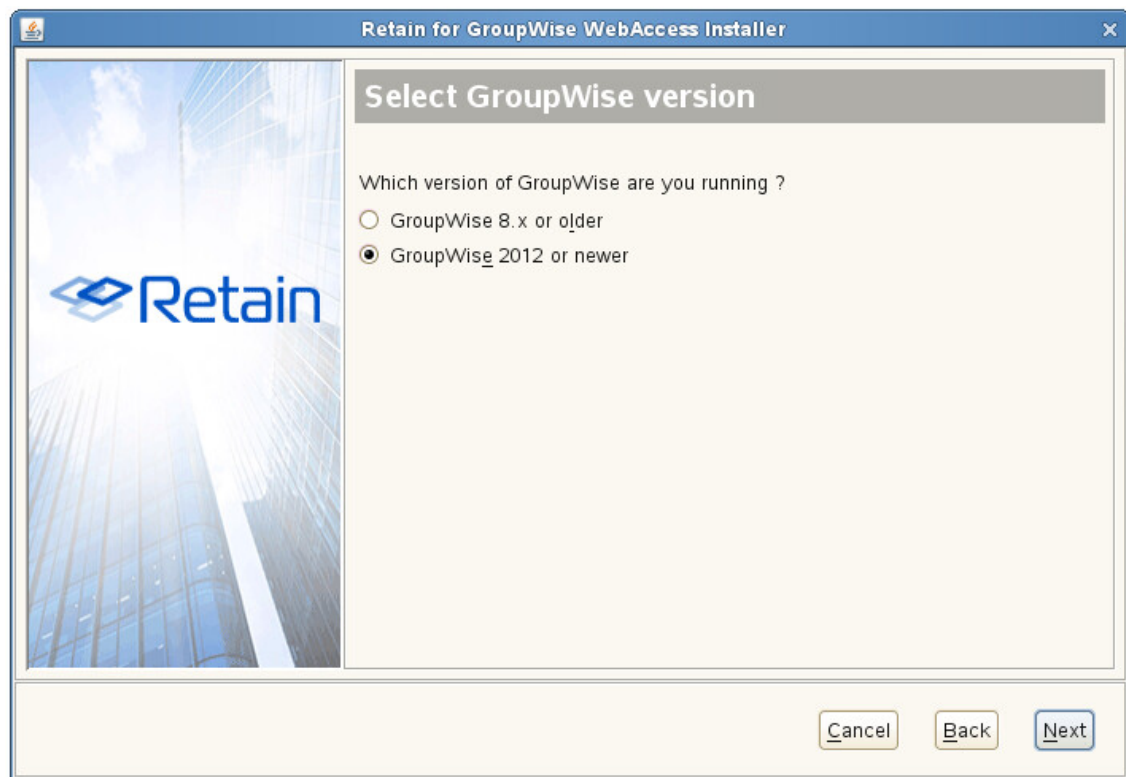
1. Click 'Next' to begin the installation



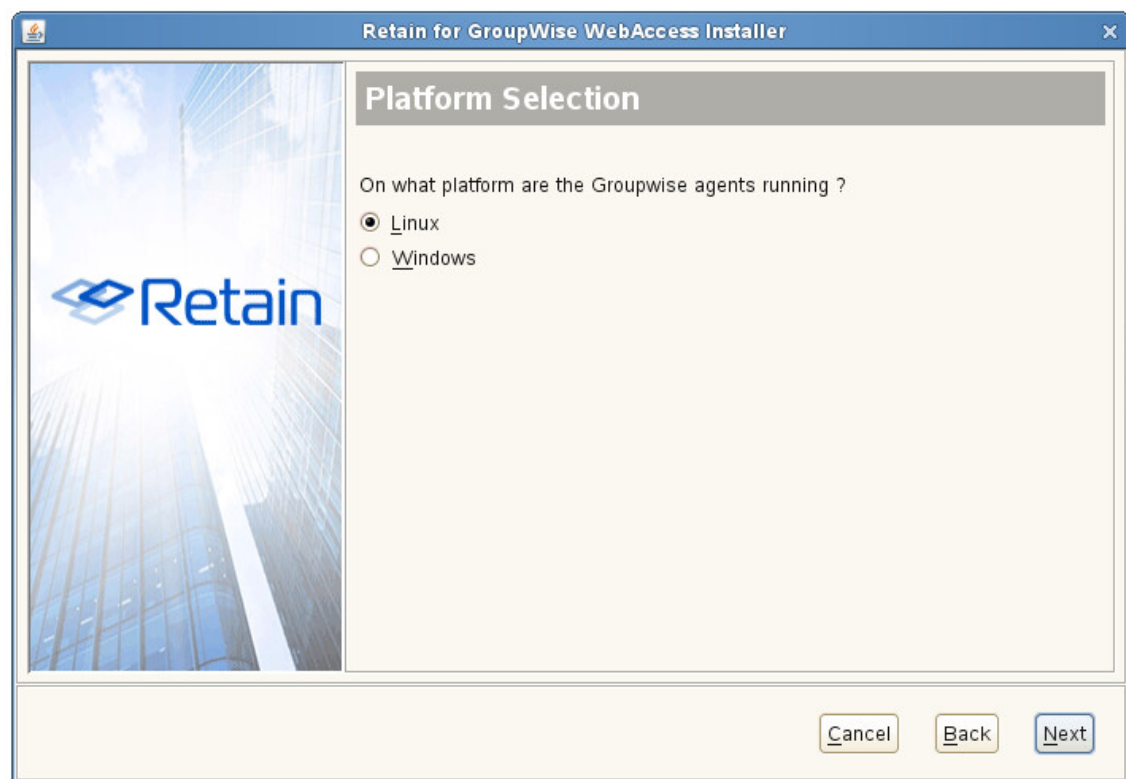
2. Accept the license agreement.



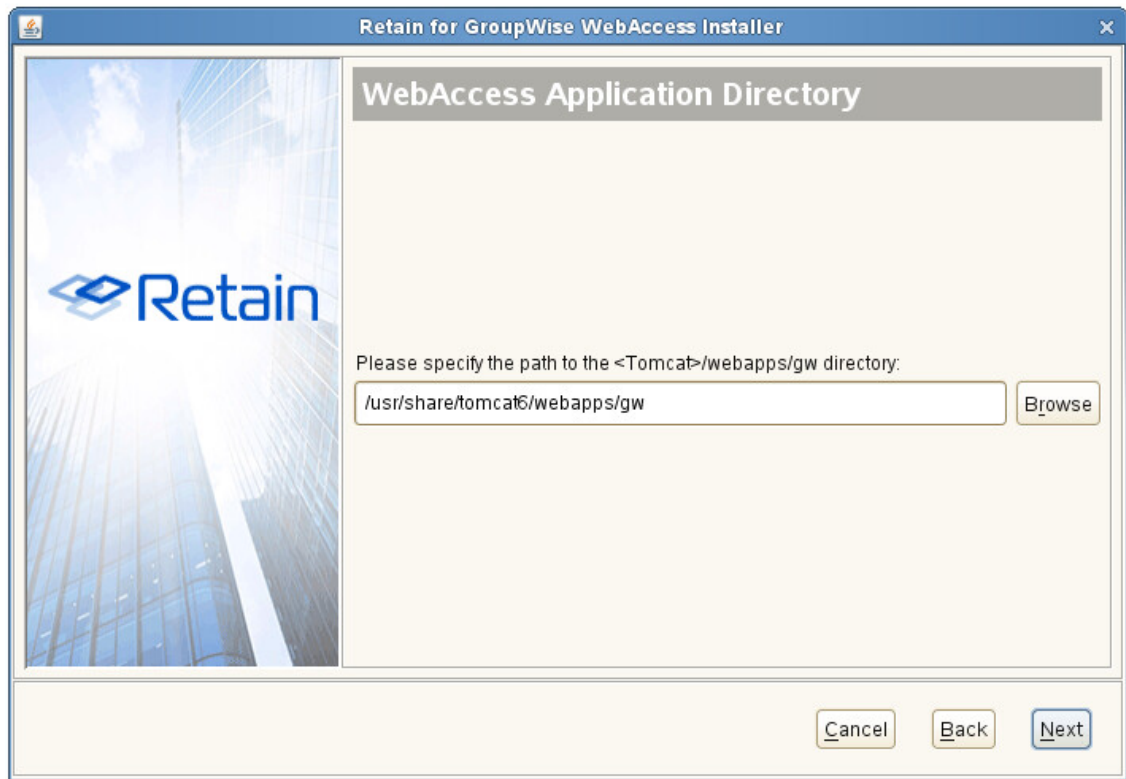
3. Select the GroupWise WebAccess version. GroupWise 8 or older, or GroupWise 2012 or newer.



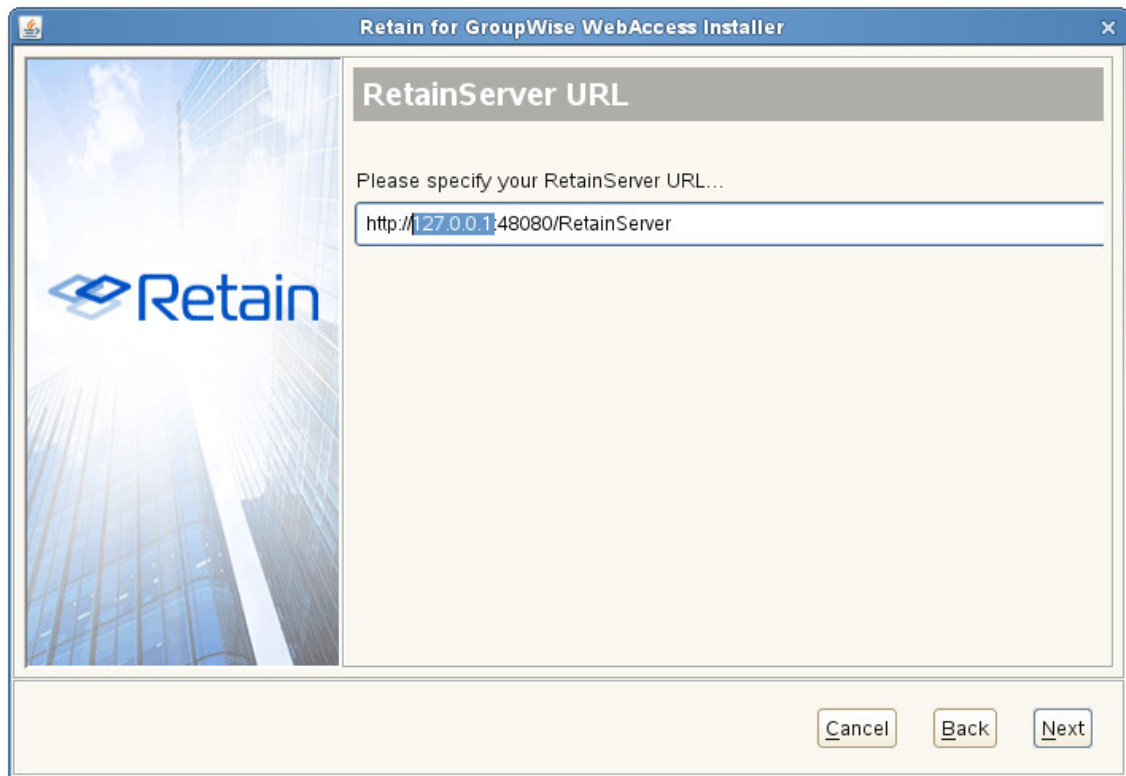
4. Select the platform the WebAccess is being installed to. Linux or Windows.



5. Specify the active ...webapps/gw directory, or browse to it.

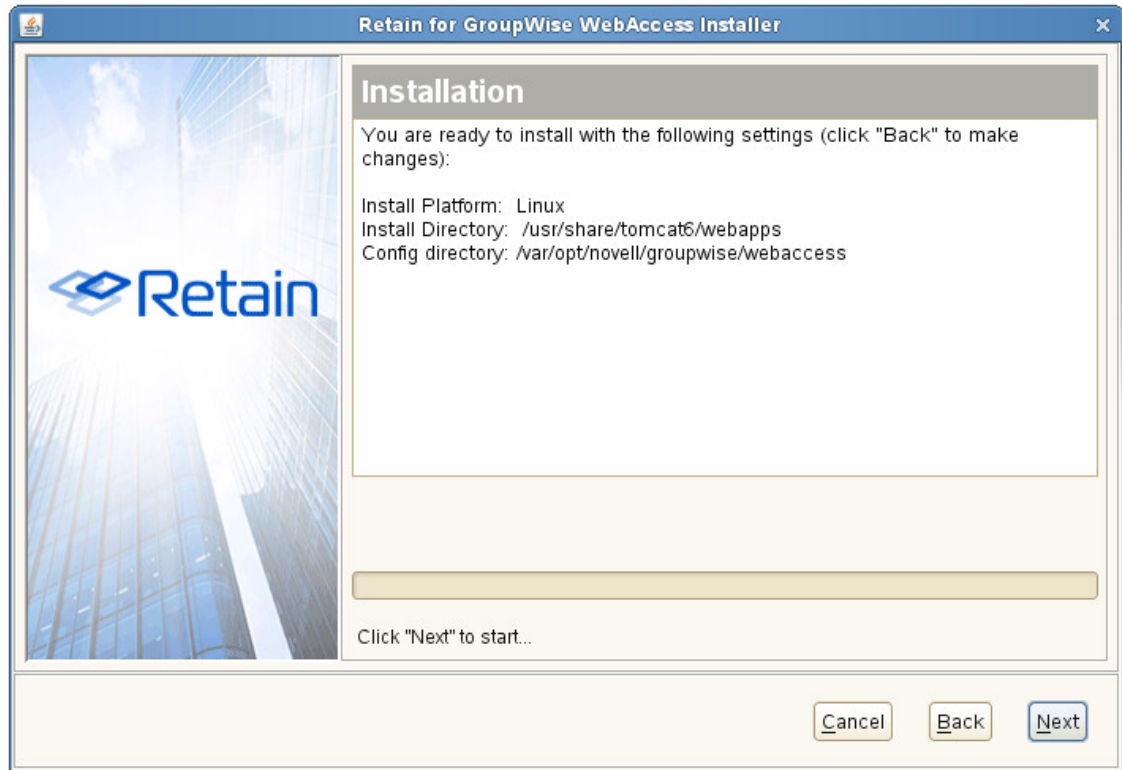


6. Specify the Retain Server URL. An open connection to the Retain Server is required for the plugin to work.

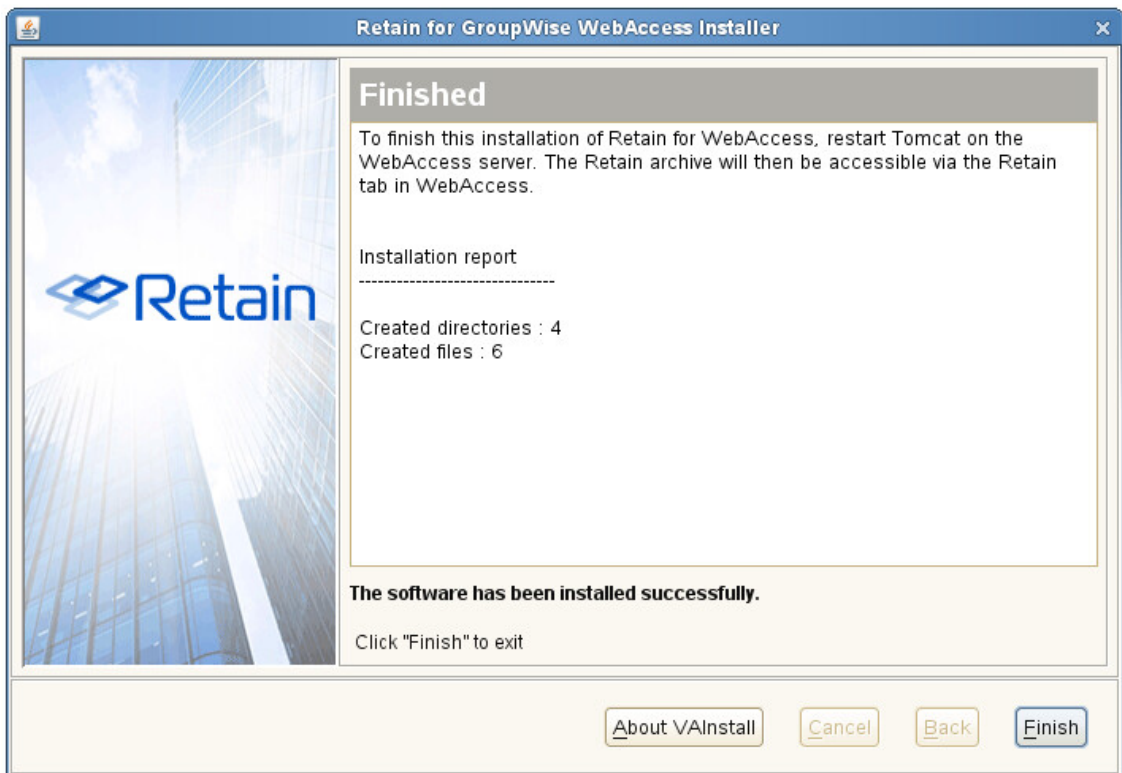




7. Confirm the settings. Click 'Next' to begin the install, or 'Back' to change the settings.



8. Once finished, click 'Finish' to exit the installer.



## Post Install Tasks

Once the plugin is installed the final step to install the WebAccess plugin is to create two folders in the Novell folder structure.

Retain cannot create folders or set permissions on the host system, but requires the folders to be created in the Novell directory structure to function.

### Linux

Retain requires two folders to be created, as well as the permissions set to match, on the GroupWise server.

Browse to:

`/var/opt/novell/groupwise/webaccess/retain/templates/webacc`

- ♦ Create two new folders here: 'mobile' and 'simple'  
`mkdir mobile`  
`mkdir simple`
- ♦ Note the file permissions and owner of the 'css' folder, and change the permissions of the two new folders to match.

### Windows

Two folders need to be created on the GroupWise server. From where GroupWise was installed, browse to the webacc folder. For example,

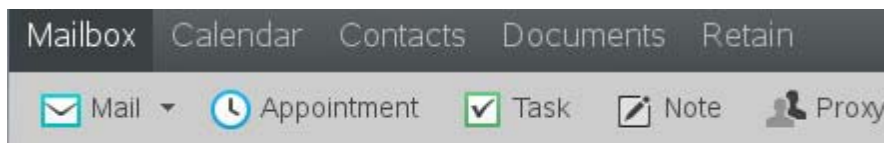
`C:\GroupWise\webaccess\retain\templates\webacc`

- ♦ Create two new folders here: 'mobile' and 'simple'  
`mobile`  
`simple`
- ♦ Restart Tomcat and the plugin installation is complete

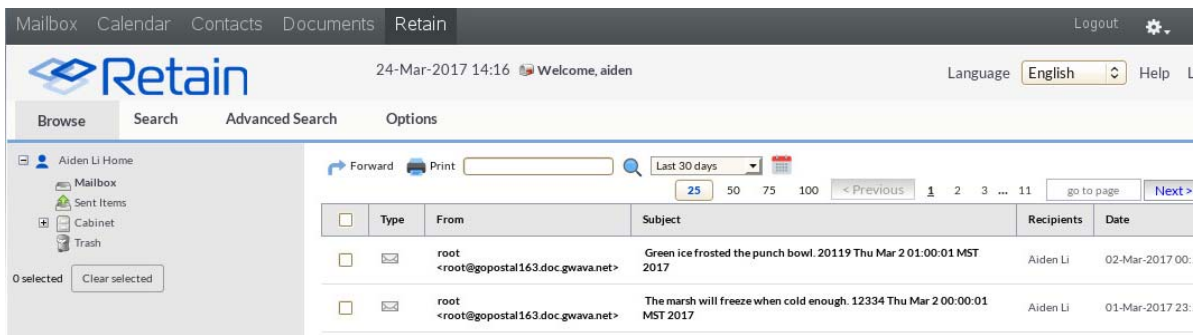
## Confirmation

The plugin is now installed. Once WebAccess has been restarted, simply login as usual.

After logging in, users will see the interface they usually see, with an additional 'Retain' tab on the end of the top ribbon.



For users to access their own archive, all they need to do is click on the 'Retain' button and their archive will automatically open. Choose a folder to see the contents.



## Uninstalling the GroupWise WebAccess Plugin

1. Stop Tomcat for the WebAccess Application
2. Navigate to the WebAccess directory
3. Rename or remove the retain/ directory
4. Navigate to \srv\tomcat\4\webapps\gw\WEB-INF\classes\templates\webacc\css
5. Edit the caption.htm file
6. At the end of the file look for the line that says:  

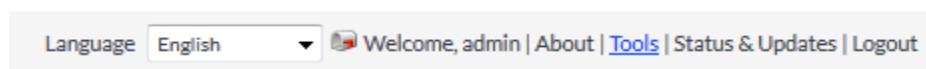
```
{INCLUDE retain.inc}
```
7. Comment out or remove this line
8. Save the file.
9. Start tomcat

## GroupWise Client Plugin

The GroupWise Client Plugin provides access to the logged-in user's Retain Archive from the GroupWise Client interface. The plugin adds a Retain Menu item as well as a Retain button along the top ribbon for easy web access to the archive. These buttons will open a new browser window and log the user into Retain automatically. Additionally, the plugin may hide the native GroupWise Archive option if selected during the install.

To enable the GroupWise client to search the Retain archive from within the GroupWise client itself, the administrator would need to enable Stubbing. See “[Performing Retain Searches Within The GroupWise Client](#)” in *Retain 4.9.2: Configuration and Administration*.

The GroupWise Client Plugin is found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.



## System Requirements

- ♦ GroupWise Win 32 Client
- ♦ Retain Server 4+

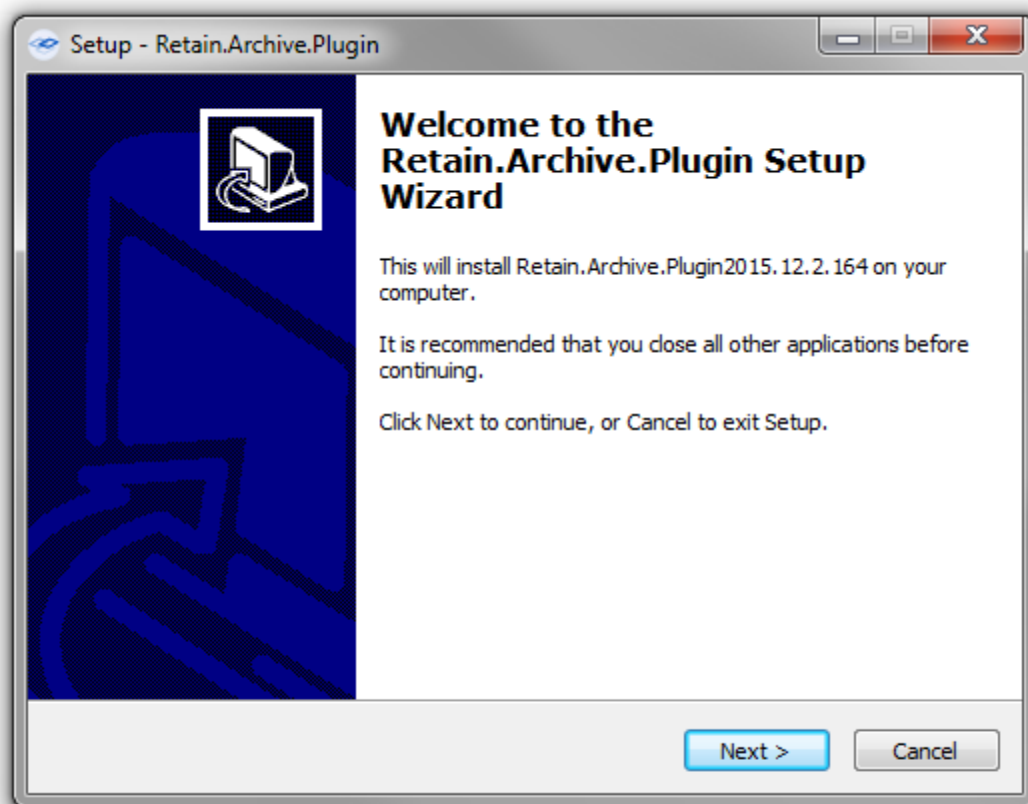
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**NOTE:** Because the plugin provides transparent single sign-on features, installing the client may introduce some security concerns on a public workstation. It is not recommended for installation on any public workstation.

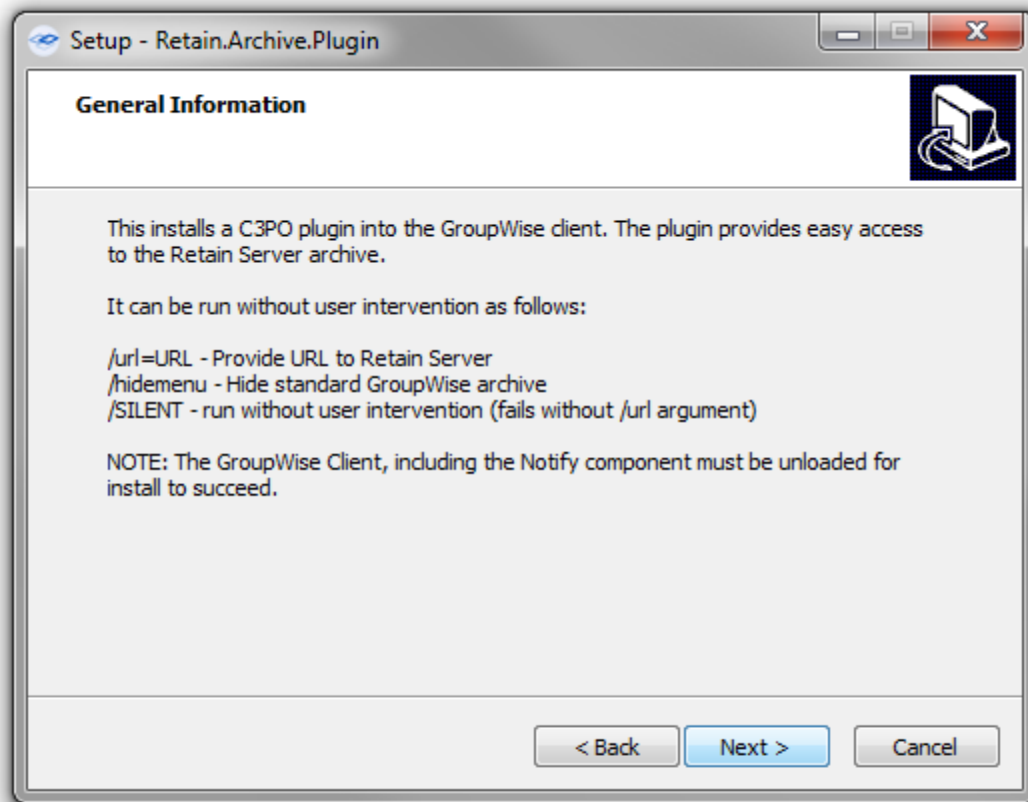
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## Installation

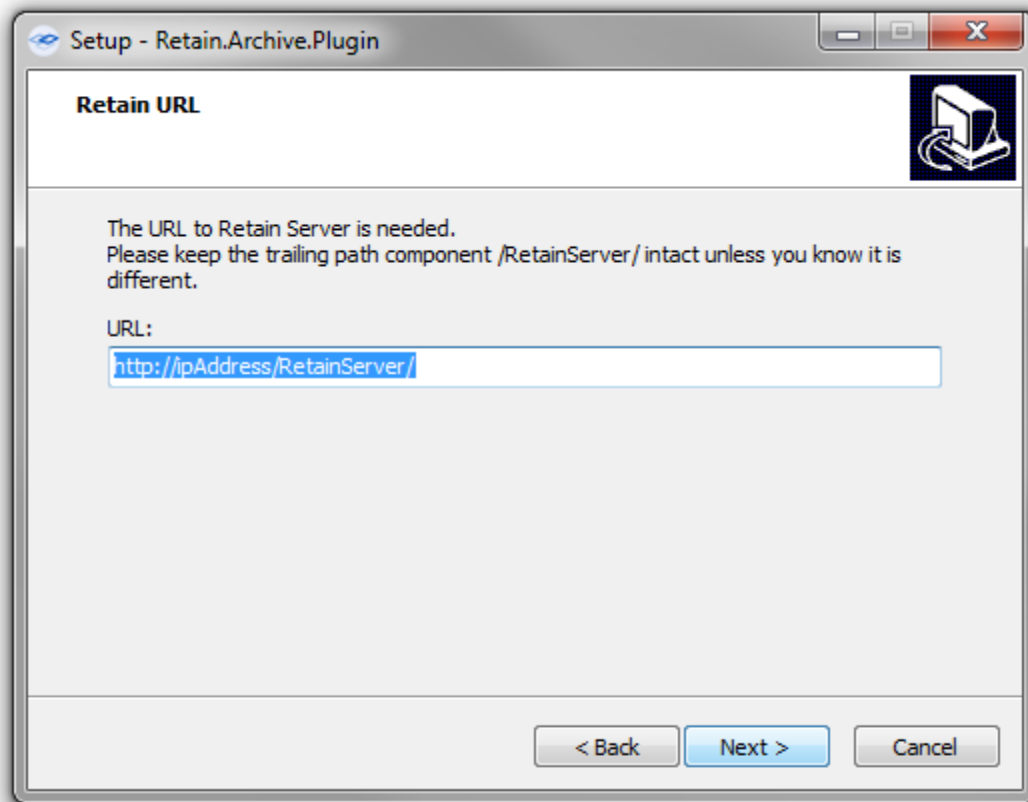
To install the plugin, download the plugin to the desired workstation and run the executable file.



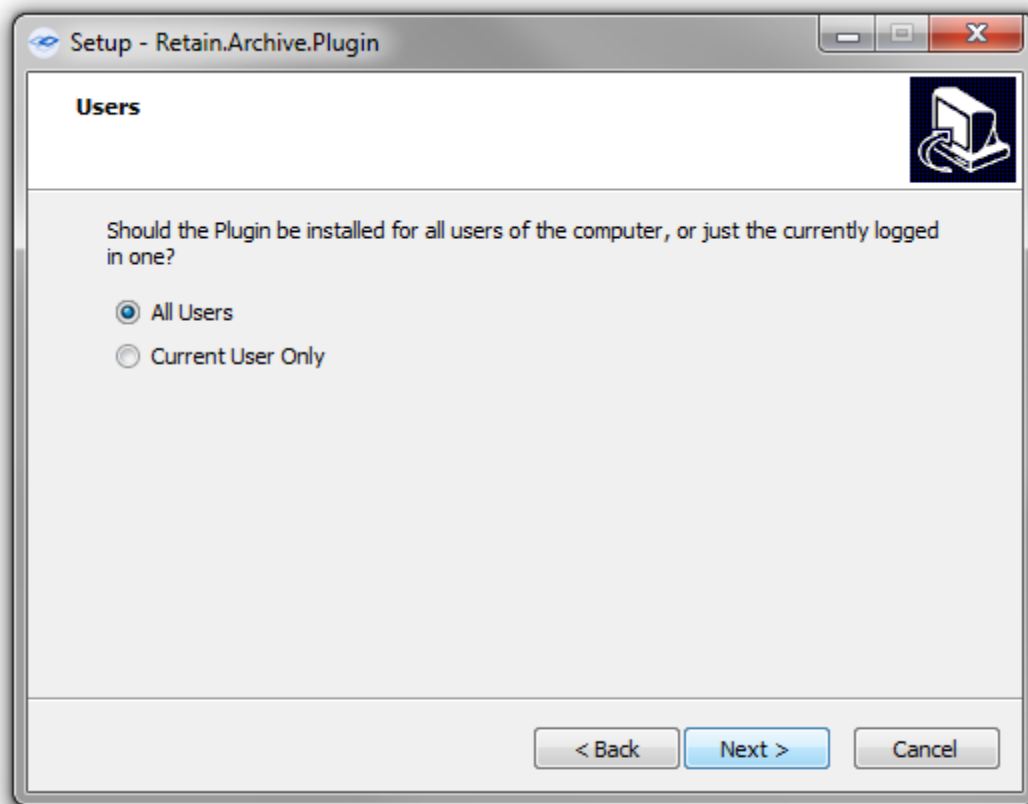
The installation gives an opening summary. Click 'Next' to continue.



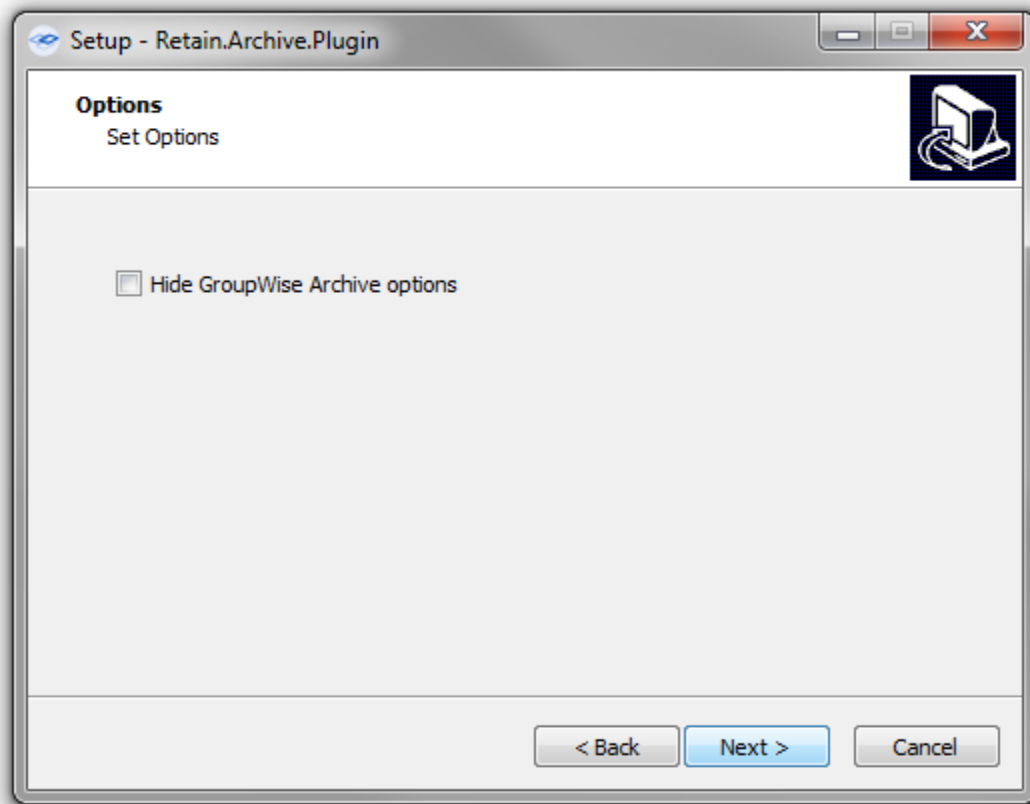
An installation summary is displayed. If a silent install is desired, the install may be performed with the following commands.



The Retain URL is the connection URL for the Retain Server. Check the URL to make sure the URL works before continuing. If the URL is incorrect the plugin will not function correctly.

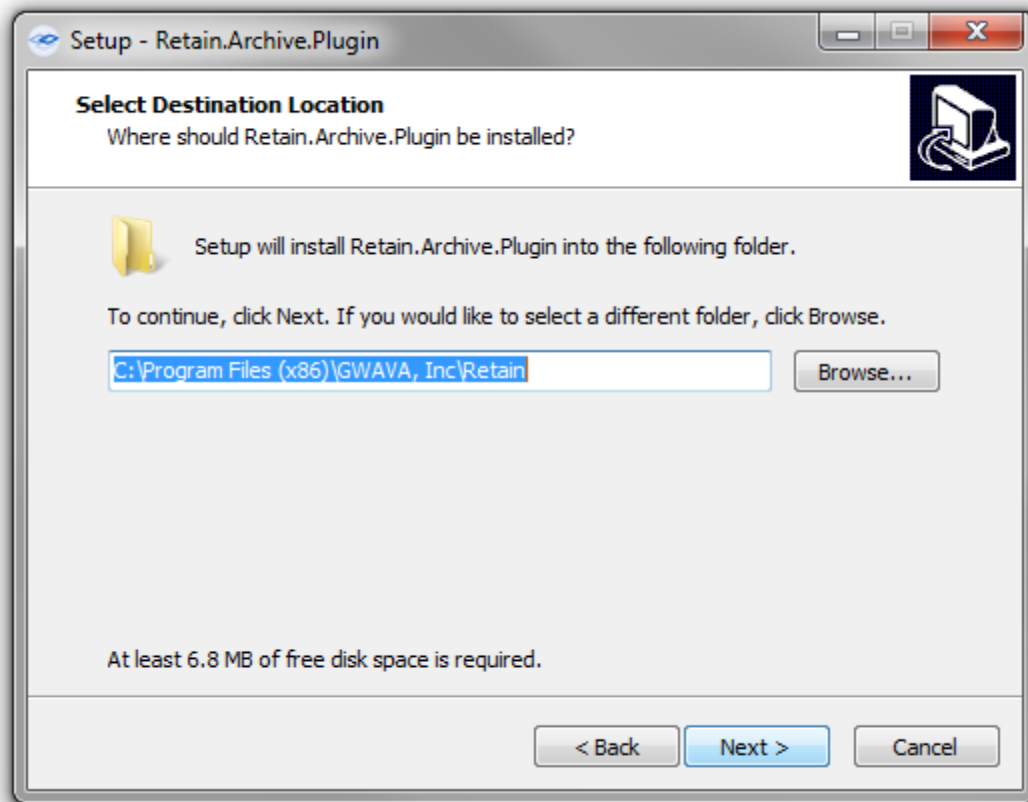


Select whether to install for only current, or all users on the system.

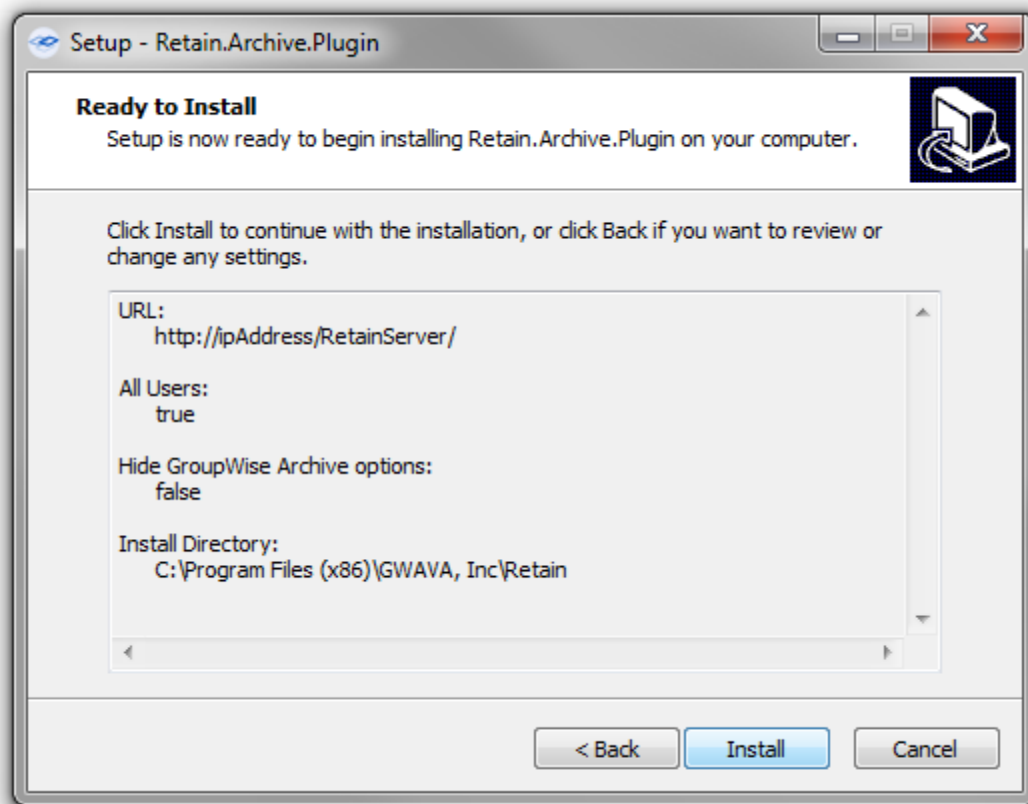


The Retain plugin may be used instead of the GroupWise Archive. To hide the GroupWise Archive in favor of the Retain Archive, select the box and click 'Next' to continue.

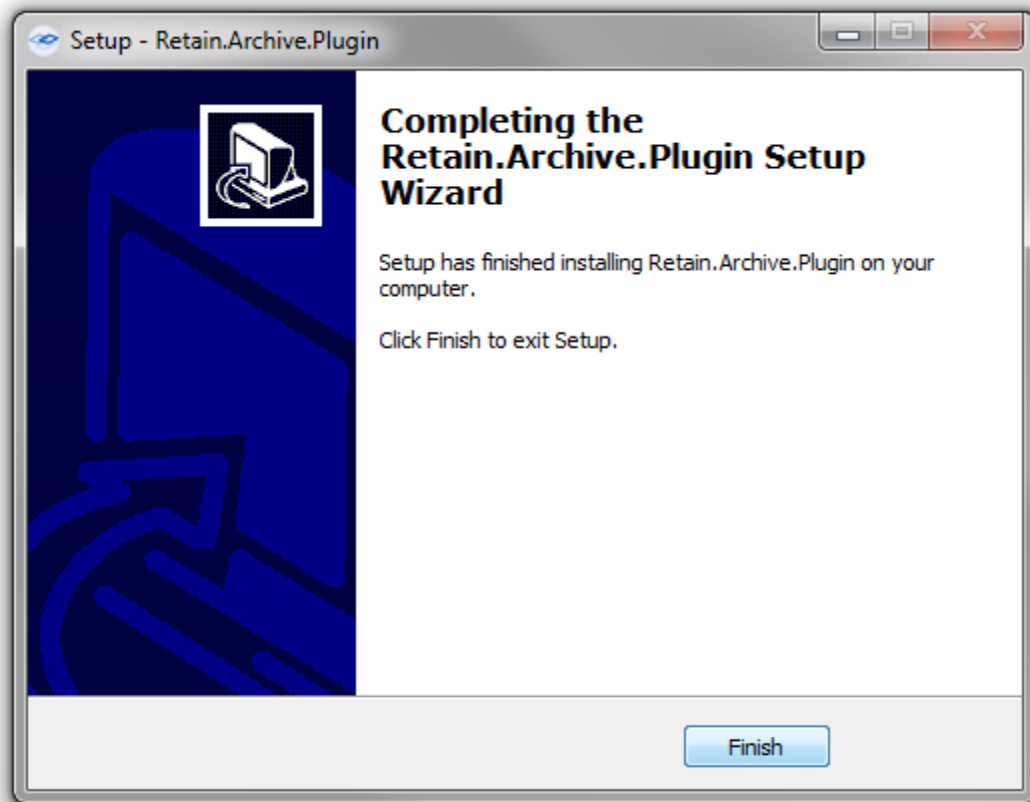




The install location for the plugin is displayed. The location may be changed. Default is shown.



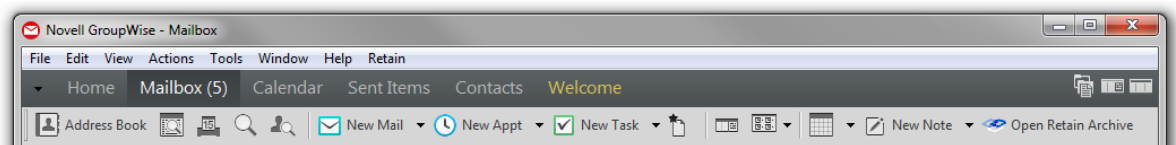
A final summary of the selected settings is displayed. To change any setting, utilize the 'Back' button. Otherwise, select 'Install' to continue.



Once the install has been completed, the GroupWise Client needs to be started, or restarted, to load the plugin.

## Appearance

Once started/restarted, login to the Client as usual.



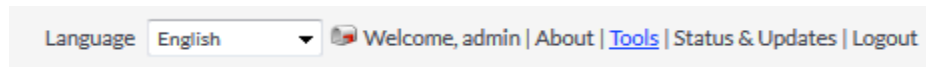
The Retain plugin will have a Retain menu item as well as a Retain Archive button on the top ribbon. To access the Retain Archive, a user simply selects the 'Open Retain Archive' button from the ribbon, or the same item from the Retain menu from the top bar. Once selected the user's Retain Archive will open in a new browser window.

# GroupWise Archive Migration Tool

## GroupWise Personal Archive Migration Tool

This migration tool is designed to import native GroupWise archives directly into Retain. Also known as the PAM tool.

The GroupWise Archive Migration Tool is found on the tools page. To access the tools page, select the 'tools' link from the top right of the Retain Server administration page.



## System Requirements

- ♦ A Windows workstation running GroupWise client 7.0.1 or up. GW 2014 and up use a slightly different file structure so there may be errors.
- ♦ Access to the archives you want to migrate.
- ♦ An HTTP connection to Retain.

## Overview; Modes of Operation

There are two modes:

1. Run at all workstations mode.

From a command line, you'll run this and it will log into the users mailbox, and then open the local archive. It will then feed messages directly to Retain.

2. Centralized run.

This only works if you have all archives stored at a central point.

In this case, one can conveniently run all of the migrations from a single workstation, and not involve the users at all.

The migration tool uses the GroupWise client to access the archives you want to migrate.

- ♦ In single-user mode, the migration tool will access the mailbox of the logged-in GroupWise user and it will read the archives available to the GroupWise client and send them to the Retain Server you specify.
- ♦ In multi-user mode, it uses the trusted application key to log in to the mailboxes of the users specified in a chosen GroupWise distribution list, attempt to access the archives defined in their mailbox and will send them to the Retain Server you specify.

## How it Works

The migration tool does not access the archive files directly. Due to the way GroupWise stores its archives, you need the GroupWise client to read the archives and to hand the data to the migration tool. The migration tool then sends the archives to a Retain Server, much like a worker would.

In normal operation, a Retain Worker reads data from the live GroupWise system and sends it to a Retain Server. With the migration tool, the tool itself is a worker that reads the archived data from the GroupWise client and sends it to a Retain Server.

The migration tool reads the path to the archives as defined in the GroupWise mailbox that you're accessing. That path must be accessible by the workstation you're on. It will then ask GroupWise to open the archives and it will read the items in the archive and send them to the Retain Server you have specified.

If you run in single-user mode, the migration tool will access the mailbox currently logged into by the GroupWise client. If none is logged in, GroupWise will be opened and you will be asked to log in.

If you run in multi-user mode, the migration tool will open GroupWise, you can be logged in as any valid user, and it uses the trusted application key to log in to each user specified in a GroupWise distribution list, one at a time.

## Prerequisites

The GroupWise client on the workstation you're using must be able to open the archives you wish to migrate. The process depends on GroupWise being able to access these archives. If you're migrating the archives of another user, as you would be doing in multi-user mode, you must be able to access that user's archives from the workstation you're on.

It is not enough that the archives are on a network-accessible volume. GroupWise must be aware of the path to these archives and that path must be available from the workstation you're going to use for migration. Refer to the error handling section for important configuration.

## Setting It All Up

In multi-user mode, you can use one workstation to migrate the archives of multiple users. In so doing, you can migrate the data without affecting the users in question. In single-user mode, you will run the migration tool on a workstation that has access to the archives you want to migrate (typically the workstation of the user whose archives you're migrating) and you'll migrate just one mailbox.

1. Copy the migration tool files to any directory accessible to your workstation
2. Log in to the Retain Server you want to migrate the archives to Create a new worker. You're not actually installing a new Retain Worker anywhere; you're creating a new bootstrap file for the use of the migration tool so it knows which Retain Server to send the archives to. Be sure the settings listed are accessible and usable by the workstation where you will be running the migration tool. The migration tool uses these settings to log into the Retain Server

Polling

Logging

Connection

Module specific

Status

Bootstrap

Server Connection

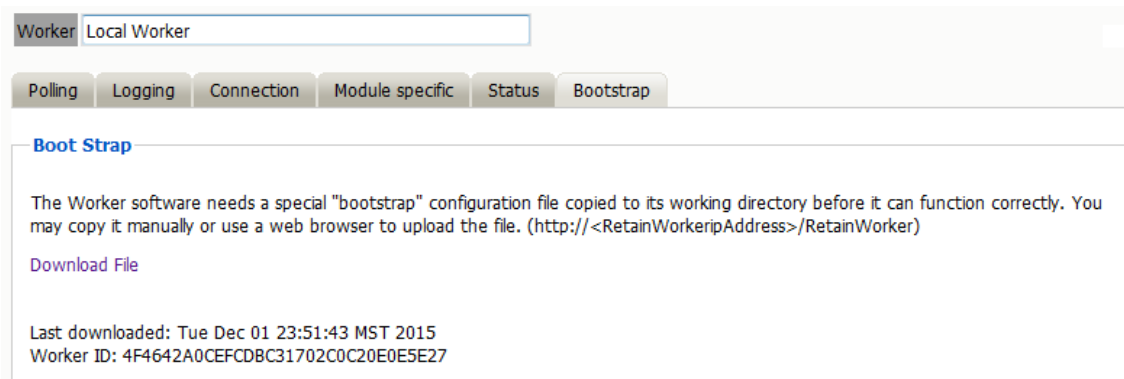
The worker will need to know how to connect to the Server. It is highly recommended that you use a DNS host name for the Host Name. It's important to note that you are specifying the URL from the point of view of the **Worker contacting the Server**, which may or may not match the URL you'd use from your browser to reach the Worker or Server.

For administrators using the Reload interface, note the worker password assigned must be the same for each worker that contacts the Reload Server. As part of setting of the Reload Server, you must know this password.

Server Protocol	http
Server Host Name	10.1.12.62
Server Port	48080
Server Path	/RetainServer
Worker Password	..... (Password is default)

**Note:** Changing any of these parameters will require recopying the worker bootstrap file!

3. Once you've saved changes, you will be able to save the bootstrap file. Save it in the directory of the migration tool.



The screenshot shows a web interface for configuring a worker. At the top, there's a 'Worker' dropdown menu set to 'Local Worker'. Below it are several tabs: 'Polling', 'Logging', 'Connection', 'Module specific', 'Status', and 'Bootstrap'. The 'Bootstrap' tab is selected. The main content area is titled 'Boot Strap' and contains the following text: 'The Worker software needs a special "bootstrap" configuration file copied to its working directory before it can function correctly. You may copy it manually or use a web browser to upload the file. (http://<RetainWorkeripAddress>/RetainWorker)'. Below this text is a 'Download File' link. At the bottom, it shows 'Last downloaded: Tue Dec 01 23:51:43 MST 2015' and 'Worker ID: 4F4642A0CEFCDBC31702C0C20E0E5E27'.

4. Now start up the migration tool configuration utility. A window will open on top of the configuration utility requiring the location to find the bootstrap file you have just saved.

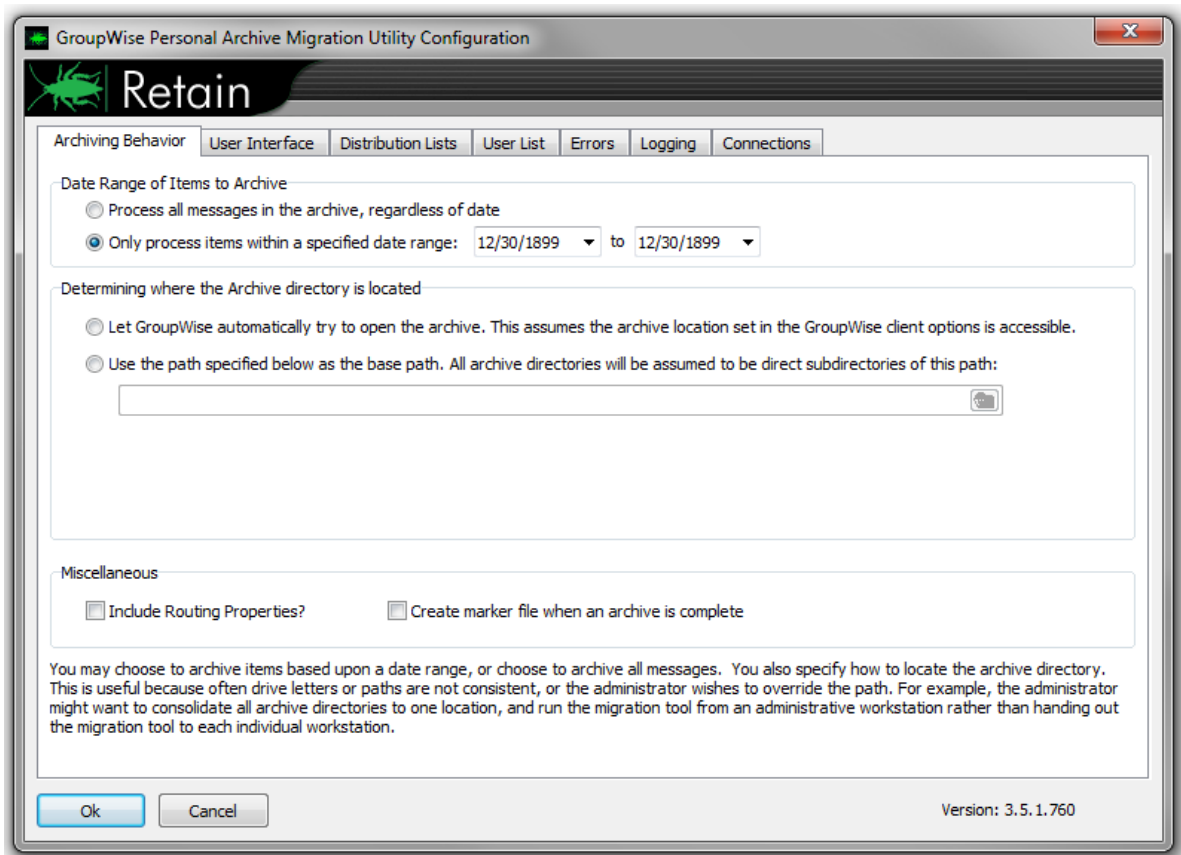


The screenshot shows a small window with an 'Add' button. Below it is a 'Delete' button, a dropdown menu set to 'Root', a text input field, and a checkbox labeled 'Include subfolders'.

(This window will also accept saved configurations from previous sessions.)

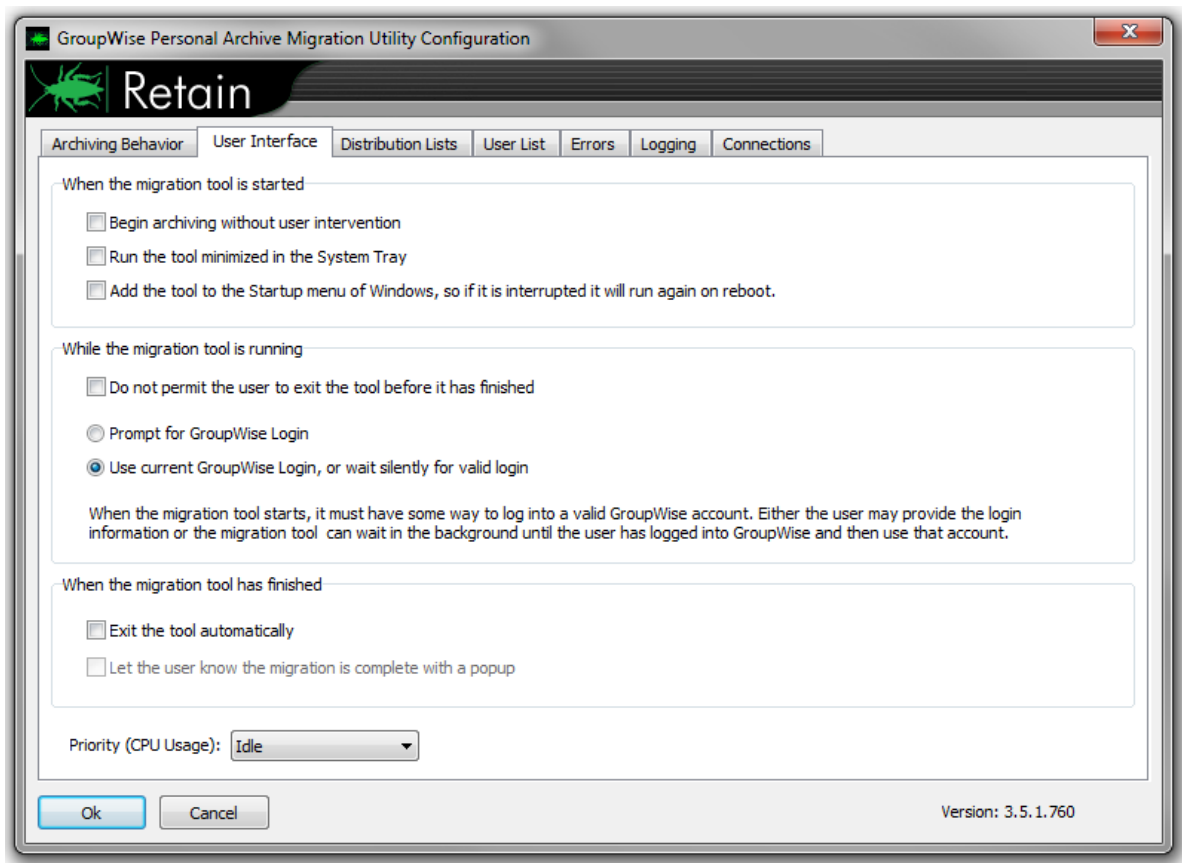
## Archiving Behavior

- ♦ Date Range – limits or specifies specific mail to process based on a date range.
- ♦ Archive Directory – The location of the archive or archives to be migrated. The default path is assumed unless selected to be specified.
- ♦ Miscellaneous – contains the options to preserve the routing properties in the archive or to add a marker file when the migration is complete.



## User Interface

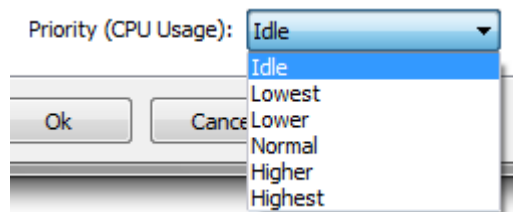
When the Migration Tool is Started - Begin without user intervention the archive process immediately begins without any prompts. Run minimized sets the migration utility to run the migration in the background while the workstation completes other work. The tool may also be set to run automatically on system boot, in case something interrupts the archive job.



When Migration Tool is Running - Contains options to prohibit the user exiting the program before the archive migration is complete and GroupWise login settings. The tool must be able to login and gain access to the archives.

When the Migration Tool has Finished – Contains the behavior of the migration utility on completion; automatic exit, notification, or neither.

CPU priority usage is also set here.



Idle

Lowest

Lower

Normal

Higher

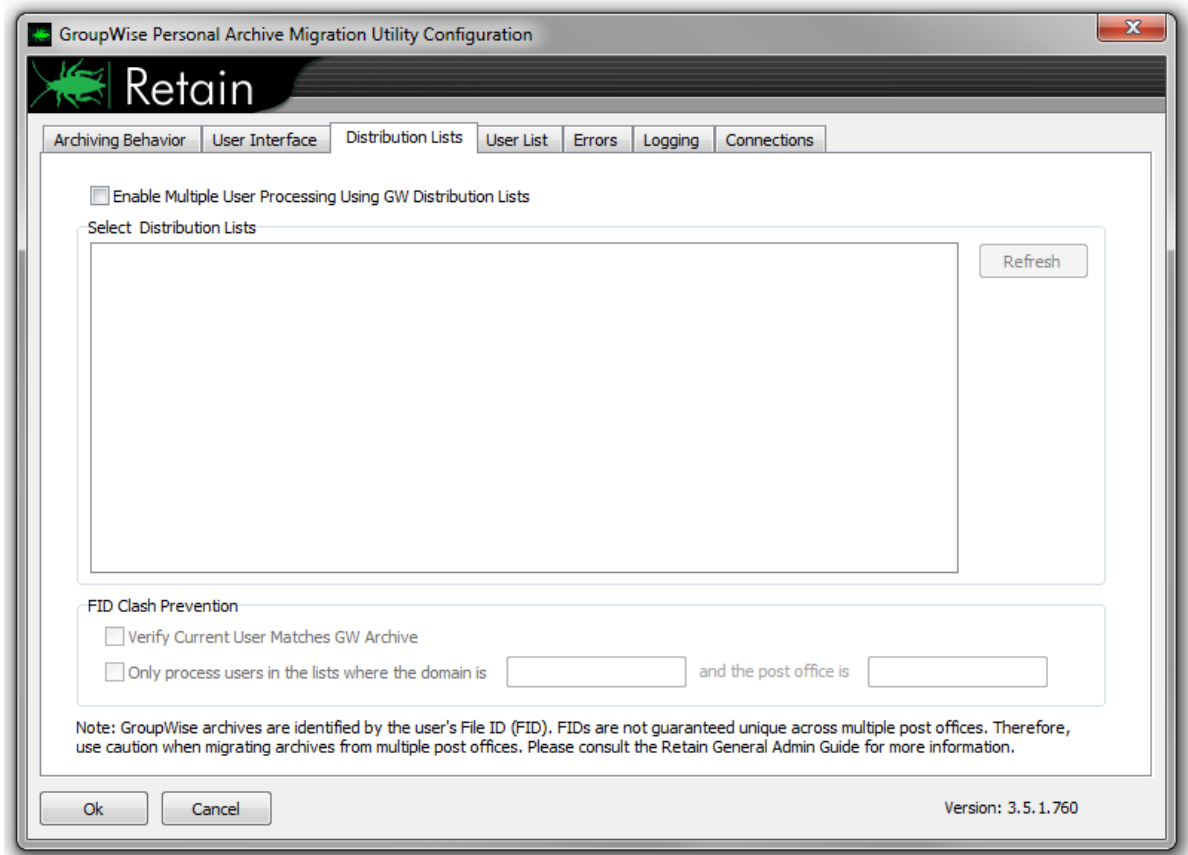
Highest



## Distribution Lists

In order to process more than one user archive the option must be enabled at the top of this page and the users must be verified against the GroupWise system.

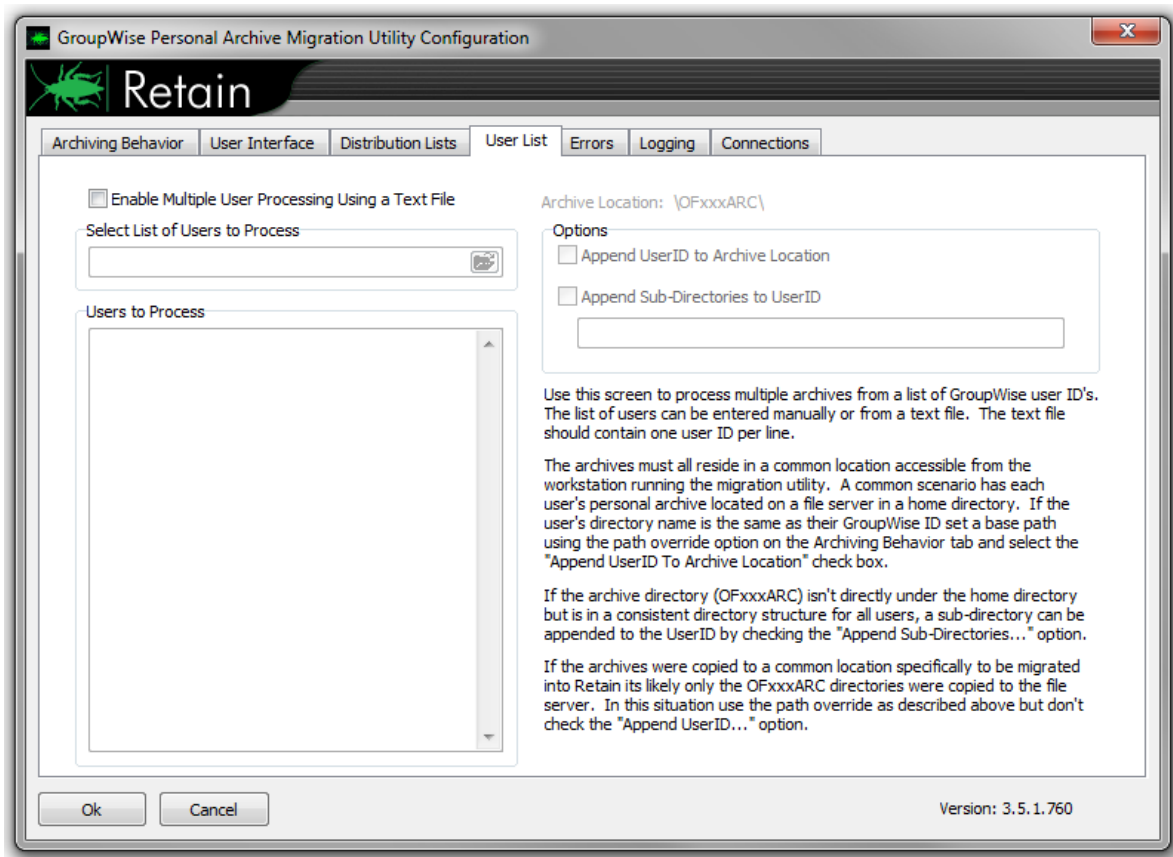
It is recommended to only process multiple archives from the same post office.



The Distribution Lists will only be populated if it is enabled and if the 'Refresh' button is selected. It displays the available distribution lists. To have the connection work correctly, the GroupWise Client Parameters on the 'Connections' tab must be filled-out with the GroupWise Server IP and port. Displayed lists can be selected. The archives belonging to the users in the selected distribution lists will be migrated. If users from multiple Post Offices are to be migrated, employ some kind of FID clash protection by verifying archives or only processing users which can be verified by a specified Domain and Post Office, (specified in DNS:port or IP address:port).

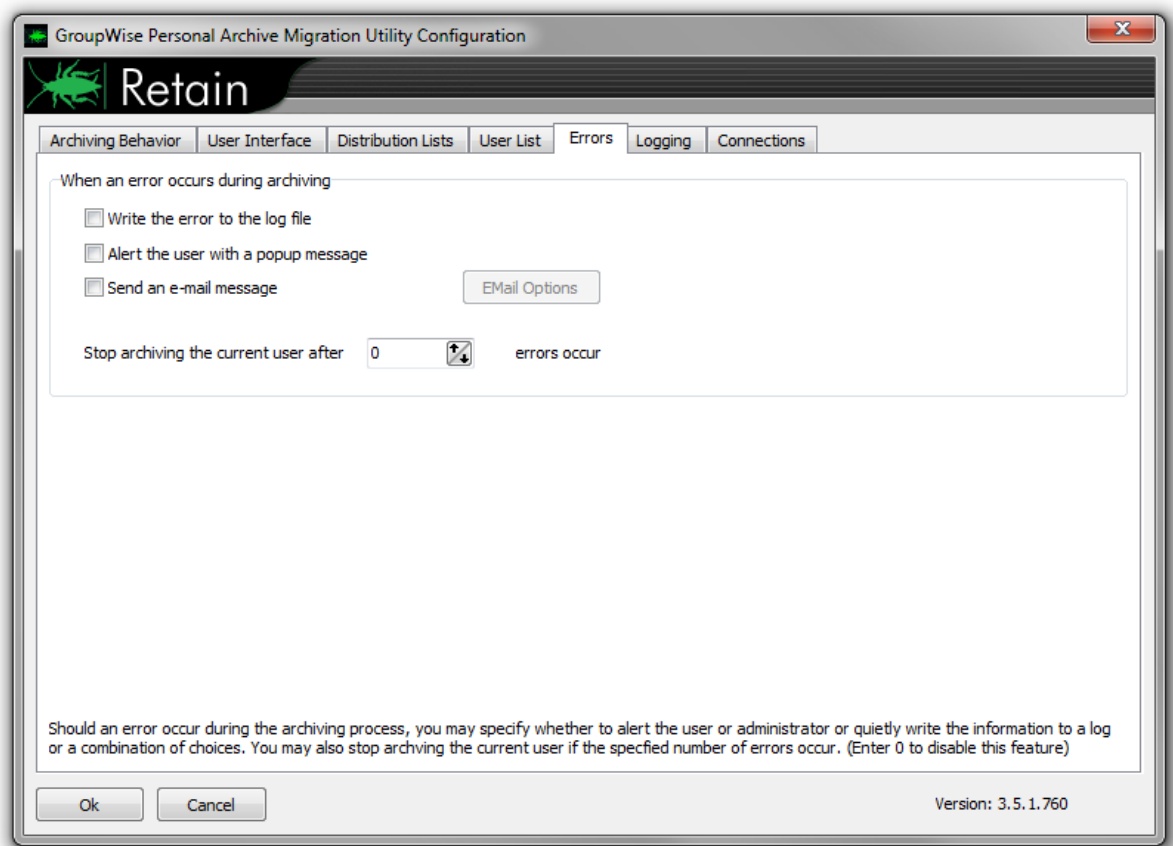
## User List

The User List screen allows the migration of multiple users specified by a user list. The user list is a plain text file with one user ID per line. To enable the process, select the 'Enable Multiple User Processing Using a Text File' checkbox, then browse to and select the desired text file.

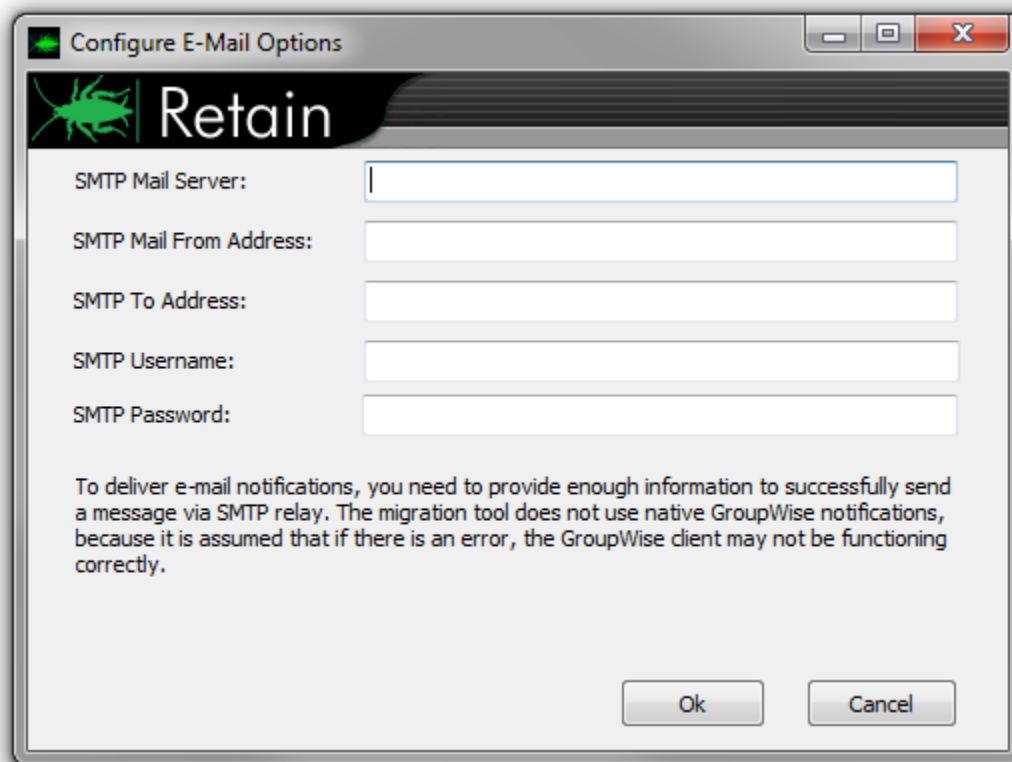


## Errors

The error limit and actions taken when an error is encountered are specified on this tab.



Errors may be written to the log file, (specified in the next tab), sent in a pop-up message to the user, or sent as an email to the specified address.



The limit of how many errors may be encountered before the migration utility quits the current user is specified. A setting of '0' sets the limit to infinite.

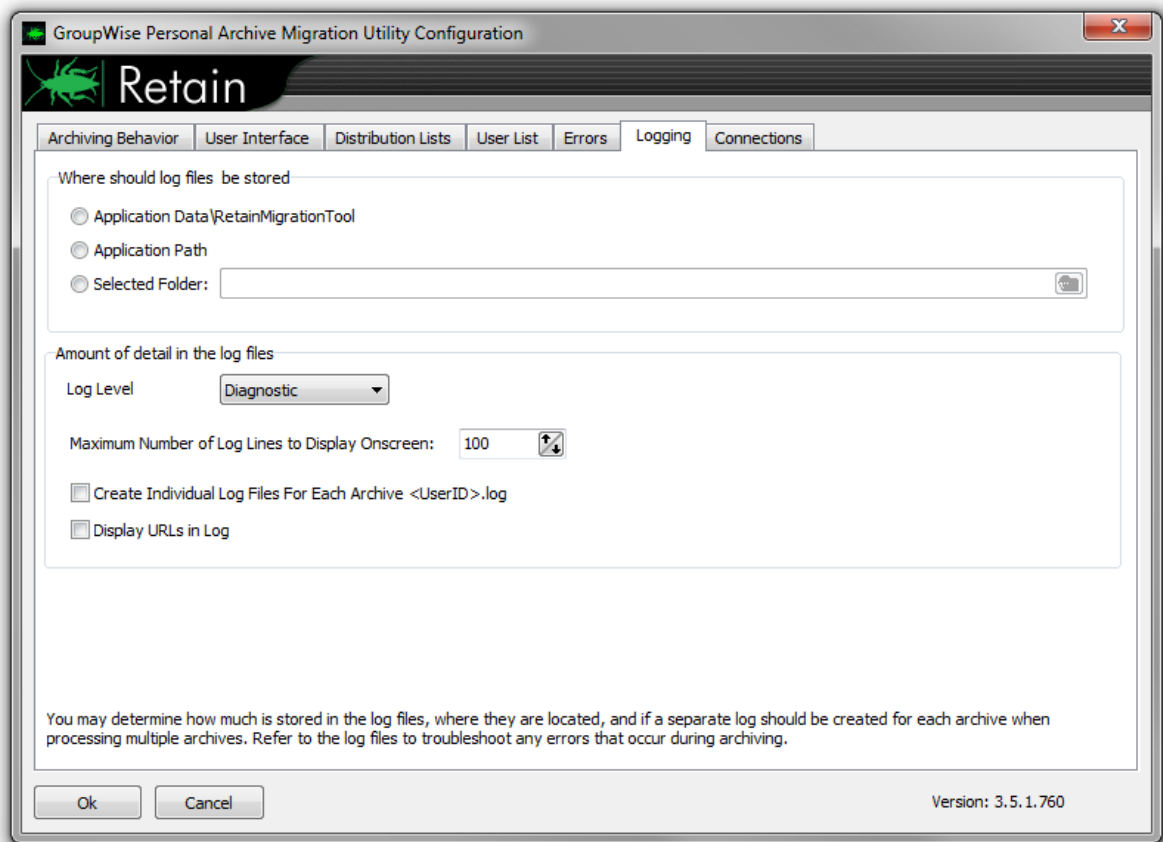
Important: By default, the current user will be skipped after 20 errors by default.

If an email is desired for each error encountered, email settings must be configured. Select 'Email Options' and input the connection information, source address, destination address, and user login information for the SMTP Mail Server.

## Logging

The location, logging levels, and buffer of the logging screen are all configured on this tab.

Where Should Log Files be Stored - A specified path, the path to the current location of the application, or a specified path must be selected.



Amount of Detail in the Log Files – The logging level determines how much information is provided in the log files. Unless troubleshooting, log levels of ‘normal’ and ‘errors only’ are sufficient. The buffer size for the logging screen determines how much history the running log screen of the migration tool contains.

## Connections

This is an informational page showing the connection settings from the RetainWorker.cfg created in the Retain Server. If this information is incorrect, the Retain Server Connection settings must be modified under the worker configuration in the Retain Server, and a new bootstrap file downloaded for use.

The GroupWise Client Parameters contains the connection information used by the Distribution Lists configuration to allow the Migrator to connect to the GroupWise system.

Provide the POA IP or Hostname, GW Client Port (default: 1677), and the POA SOAP URL. (default: <http://<POA>:7191/soap>)

GroupWise Personal Archive Migration Utility Configuration

**Retain**

Archiving Behavior | User Interface | Distribution Lists | User List | Errors | Logging | **Connections**

Retain Server Connection

URL to connect to Retain Server: http://retain3gw:48080/RetainServer

Name: PAM

GroupWise Server Parameters

POA IP/Hostname: gw2018.lab.gwava.com

GroupWise Client Port: 1677 (e.g. - 1677)

POA SOAP URL: http://gw2018.lab.gwava.com:7191/soap (e.g. - http://<poa ip>:7191/soap)

GroupWise Trusted App

Name: Retain

Key: C81CBF020BA12345842F9C9C444E48EBC81CBF030BA12345BC43AFF25EC3D530

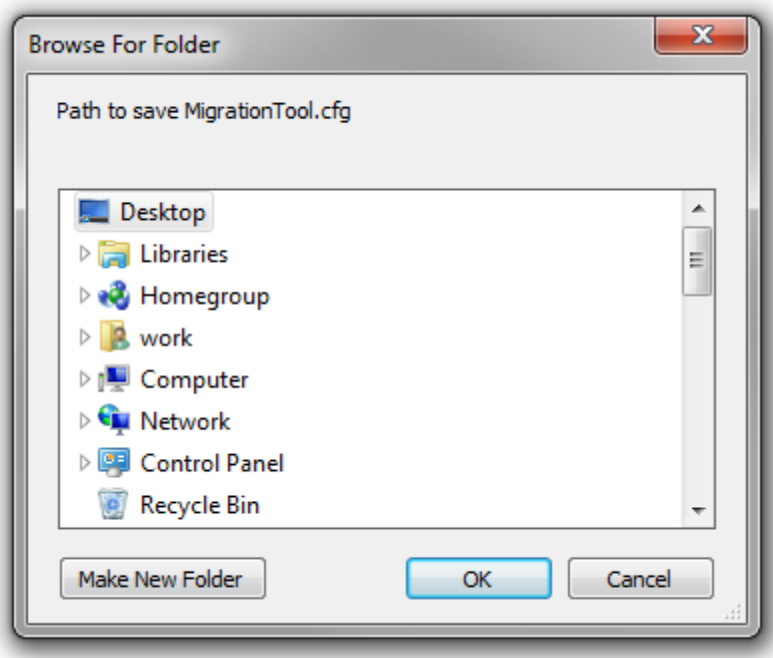
The Retain server connection information is taken directly from the bootstrap file (RetainWorker2.cfg) that you created in the Retain Server's web interface. The information cannot be edited.

Ok Cancel

Version: 4.5.1.812

## Save Configuration

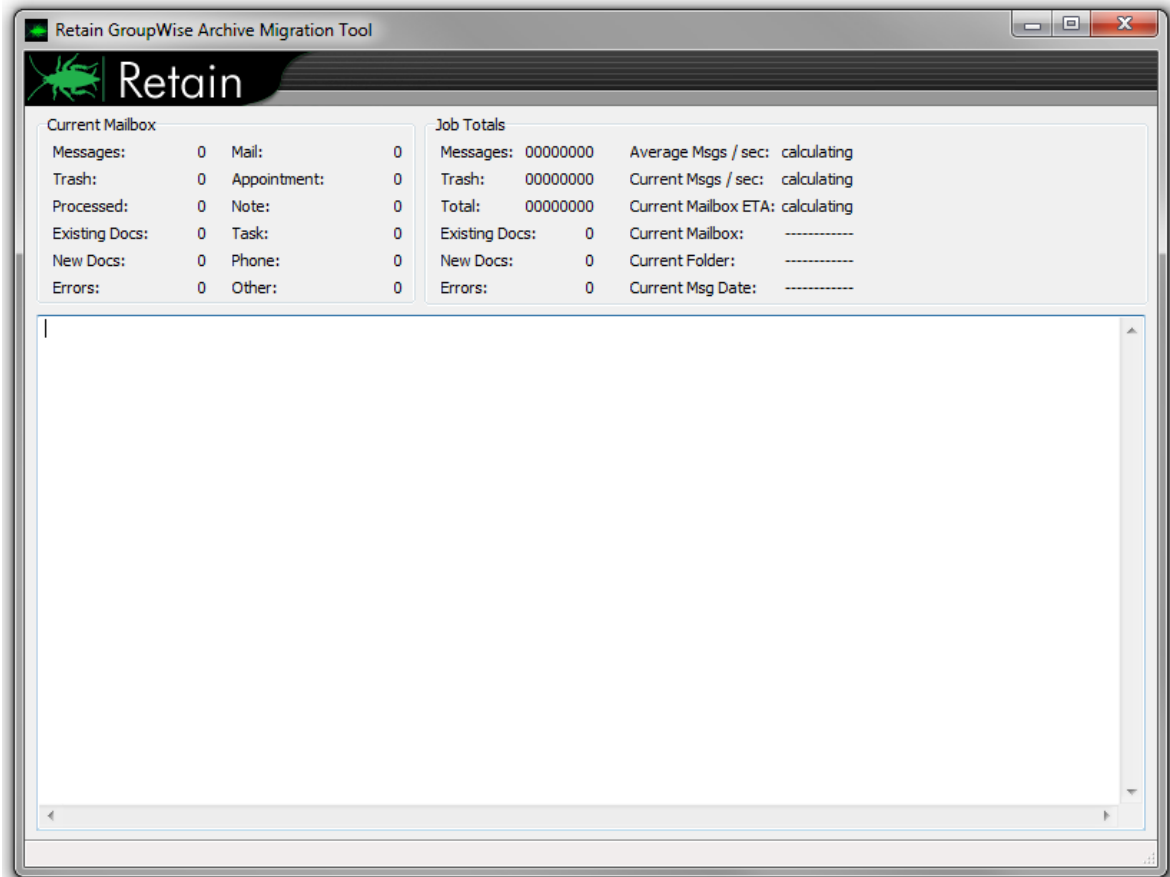
Once the configuration has been setup as desired, click 'Ok' and select the location to save the changes into a 'MigrationTool.cfg' file.



## Running the Migration

The migration tool uses the configuration file to run the job as you have specified in the configuration tool. You may run the configuration tool as often as you need to set up the migration job to your liking.

When run, the tool will prompt for the configuration file, or automatically load the configuration file if the configuration is found in the same directory, and immediately begin the migration. When the tool runs, you will see a screen like this:



You will see any errors in this screen and it will display a notification when the job is complete.

For each user in a multi-user job, it will read the location of the archives from GroupWise and then it will attempt to open the archives. It is critically important that the workstation used for the migration can access the archive files.

## Limit of 5 Concurrent Migrations

There is a maximum of 5 migrations permitted at any given time. For instance, if you're running the migration tool from the workstations of your users, only 5 at a time can be migrated, the others will wait their turn. This is to prevent all the migration requests from overwhelming the server.

## Other Notes

The migration tool may be deployed using management tools such as Novell ZENworks. This is one method to collect archives which have been stored on users' workstations. Users may run the tool manually or it can be run automatically.

## UUID errors

[ERROR] Exception: Error getting UUID.

There are a various reasons for a UUID error:

- ♦ The User does not exist in the GroupWise system.

If the user does not exist in GroupWise anymore but the personal archive needs to be moved into Retain, Retain will create the user mailbox and assign it a Retain UUID (unique user ID). Thus, this is also why the address book needs to be refreshed prior to using the PAM tool. If the user exists in the GroupWise system, you would get two different user mailboxes in Retain if you archived with the PAM tool first and then refreshed the address book in the Retain system.

- ♦ The Users's visibility is set too low in GroupWise.

In GroupWise, edit the account of the user and set the visibility to *System*.

- ♦ Apache has been configured to redirect traffic to a secure HTTPS connection.

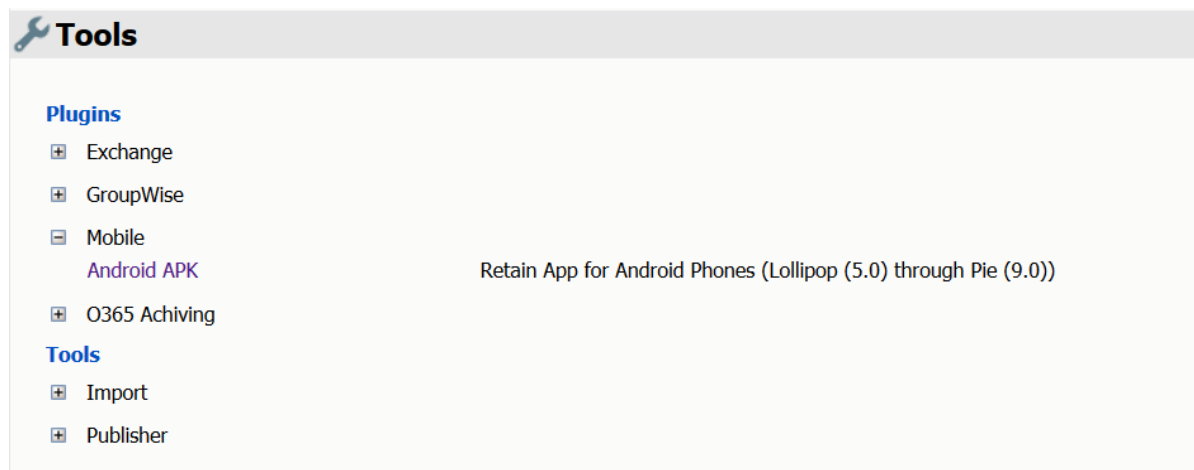
Edit the bootstrap file to connect to `http://[Retain Server IP address or hostname]:48080` to connect directly to tomcat and bypass the apache redirect.

## Mobile Tools

Retain can archive messages from a mobile device.

## RetainService Android App

The RetainService Android App is available under the Tools menu as Android APK Retain App for Android Phones





## System Requirements

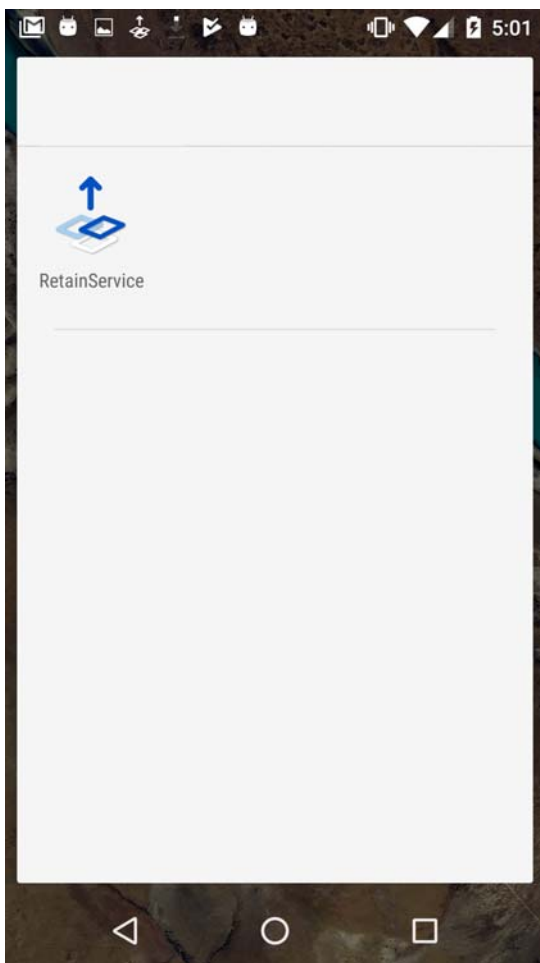
- ♦ Android Oreo 8.x or higher.
- ♦ If the user will travel internationally it is important to set the device to connect with port 80 as port 48080 is blocked by telecom companies across borders.

## Installation

Download to the mobile device manually or with an MDM. See “[Creating a Mobile \(Android\) Module](#)” in [Retain 4.9.2: Archiving Guide](#).

## Use

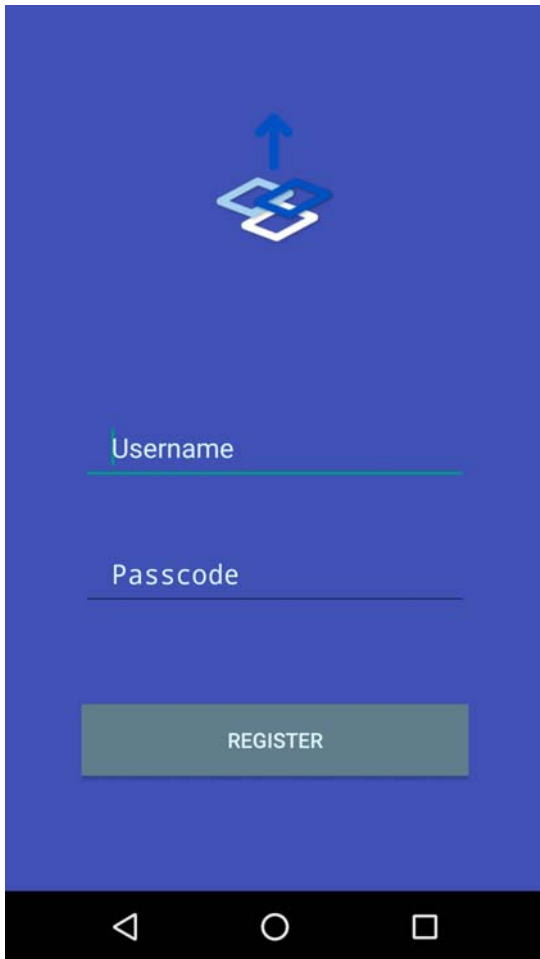
Once installed the RetainService app appears.



After the RetainService app has been installed the Retain Administrator may send a registration email. This will include a JSON file with registration details.

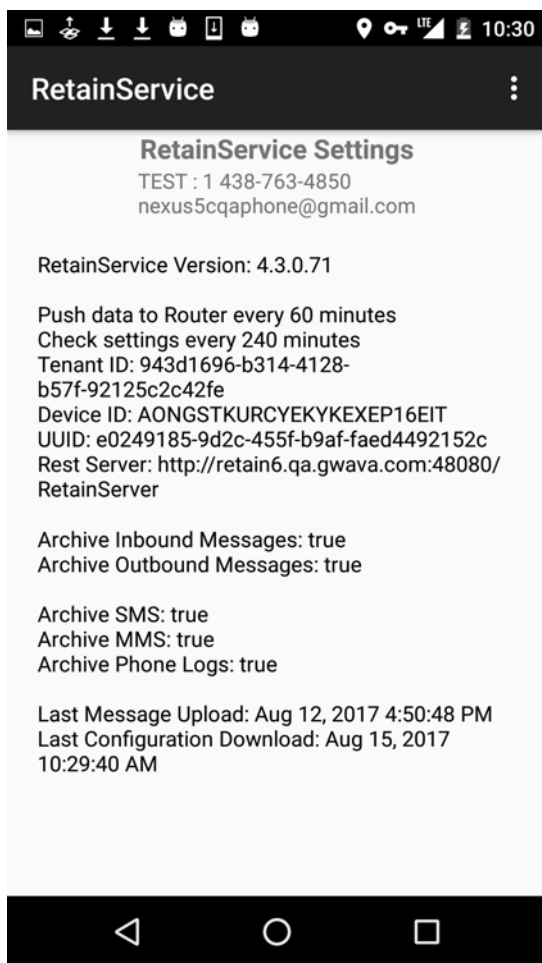
You may be asked to log into the app the first time. This will be your email address for the user name and the Registration ID for the password.

If the administrator has the IMEI of the device, a message can be sent to register the device remotely.



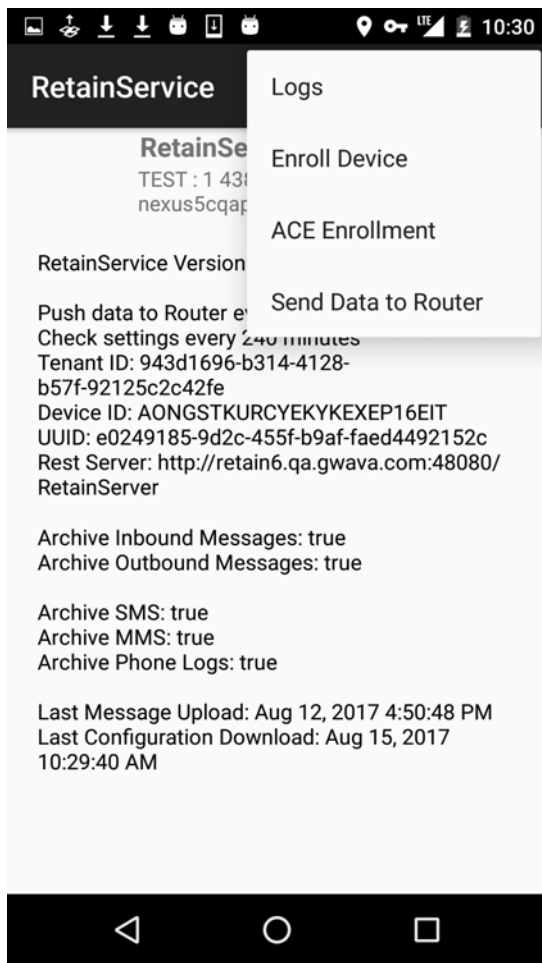
## Main Page

Once logged in the main page shows the settings for the app.



## Options menu

The options menu is available under the three vertical dots. This provides Logs, Enroll Device, ACE Enrollment and Send Data to Router.

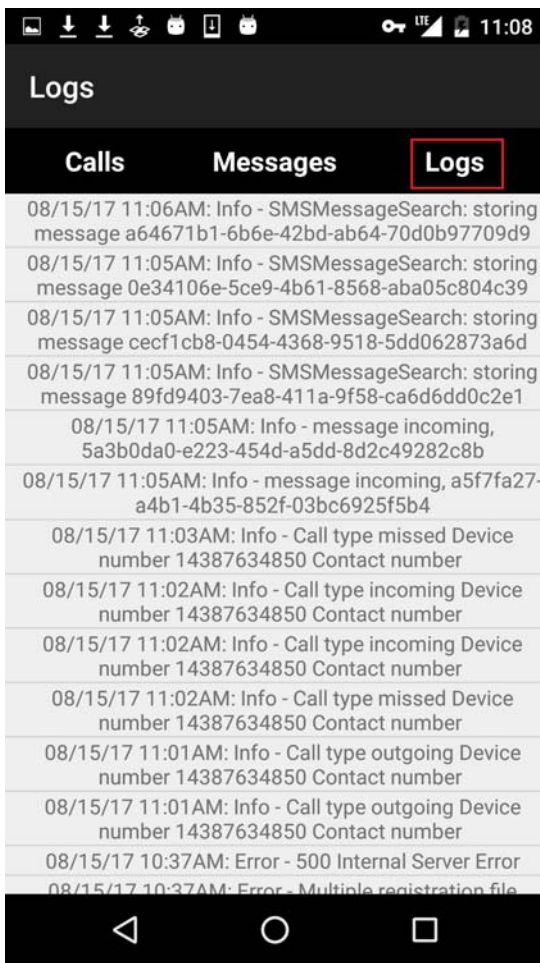


## Logs

The logs option will show the logs.

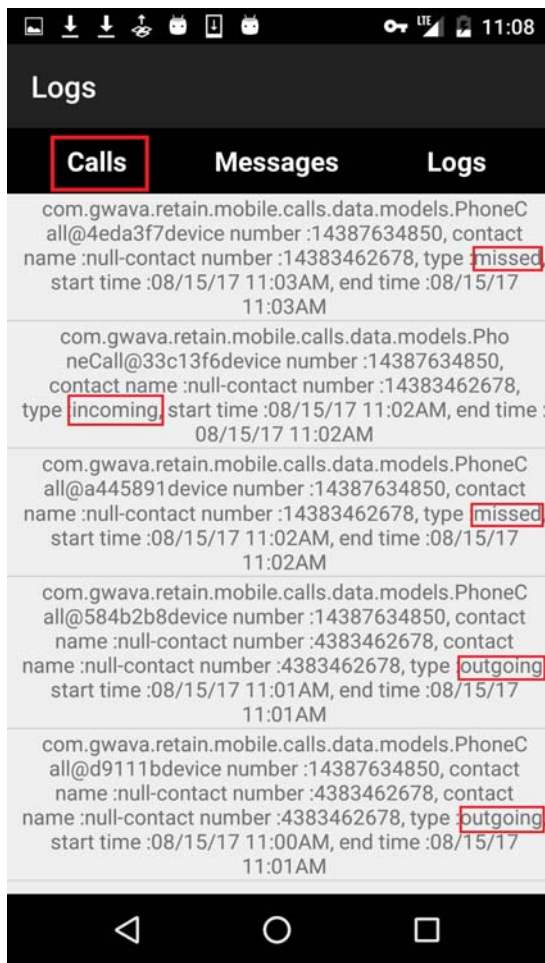
## Logs Tab

The Logs tab will show all activity.



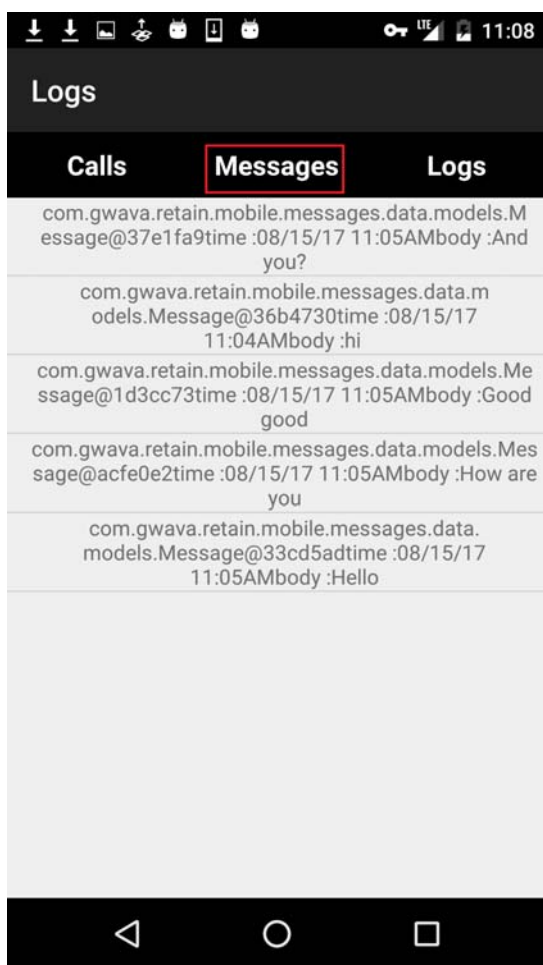
## Calls Tab

The Calls tab will show only the calls made.



## Messages Tab

The Messages tab will show only the messages made.



## Enroll Device

If the device cannot be enrolled with an MDM an email can be sent with an enrollment link, which is placed here.

## ACE Enrollment

For use with Retain SaaS only. This provides the IEMI ID to be used with Retain Device Management.

## Send Data to Router

This option will send data to the router immediately rather than by the default schedule.

# Retain App

The Retain App is available on the Apple App store and Google Play store.

After installing the app, enter the location of the Retain Server and the user credentials.

Options can be changed under the hamburger (three horizontal stripes) menu.

Once connected to Retain the user will be able to access their Retain mailbox archive.

For more information see the Search User Guide [“Retain Mobile Apps” on page 43](#)

## Create a REST Collector

Create a REST Collector by providing a name and press the Add collector button.

Click the Export button and save the file to disk.



The screenshot shows a web interface titled "REST Collectors". Below the title, it states: "REST Collectors are given rights to push data inside of Retain using the REST API." There is a form with a "Collector Name" input field and an "Add collector" button. Below this is a table with three columns: "Collector Name", "Key", and "Secret". The table contains one row with the collector name "Migrator", a long alphanumeric key, and another long alphanumeric secret. To the right of the secret are two buttons: "Delete" and "Export".

Collector Name	Key	Secret		
Migrator	6bc541d7-ddff-4920-aedf-77a974ae6022	0145df09-d32b-4eeb-968b-d03b4722fee3	Delete	Export

If using Retain 4.0-4.0.3.1:

Download a worker bootstrap file. See [“Workers Overview”](#) in [Retain 4.9.2: Archiving Guide](#).

## Swagger UI

Swagger is a developer user interface for Retain’s REST API.

This documentation assumes you are a developer and are familiar with REST API.

This allows the developer to get to know the API and experiment with Retain data. See Swagger.io (<https://swagger.io/>) for more details.

---

**NOTE:** It is recommended to use Swagger in a development environment.


---

## Prerequisites

The administrator will have access to this but it is recommended to grant a developer more limited rights even to a development environment.

- ♦ The developer must be granted the *Assign Rights* right, before Swagger will be visible under the Tools Menu.




**Tools**

**Plugins**

- Exchange
- GroupWise
- Mobile
- O365 Archiving

**Tools**

- Import
- Publisher
- REST API

[Swagger UI](#)


This tool allows admin to visualize and interact with the Retain REST APIs with the up to date automated request/response structure along with the ability to execute the APIs on the fly.

- ♦ Create a REST Collector “[Create a REST Collector](#)” on page 180.

## Using Swagger

To being using Swagger, go to the Tools menu, open the REST API section and click on the Swagger link.

The Swagger interface will open in a new tab.


**swagger**

Select a spec
default


### Retain REST APIs <sup>1.0</sup>

[ Base URL: 151.155.183.140:48080/RetainServer/swagger ]  
<http://151.155.183.140:48080/RetainServer/swagger/v2/api-docs>

Please use the following namespaces for XML POST/PUT type requests: (please prefix the appropriate tns to the xml root element accordingly)

xmlns:tns="http://www.gwava.com/retain/rest/v1/Insertion" xmlns:tns1="http://www.gwava.com/retain/rest/v1/Common" xmlns:tns2="http://www.gwava.com/retain/rest/v1/Retrieval" xmlns:tns3="http://www.gwava.com/retain/rest/v1/Search" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.gwava.com/retain/rest/v1/Insertion Insertion.xsd"

An issue has been observed in the Swagger library, as a workaround user needs to edit POST requests if it consists of domains, postOffices, jobs, profiles, schedules, workers, devices, messages, attachments, messageRecipients.  
 User needs to remove the extra 's' from the nested tags only for the request consists of the above models. For example, inside the domain post request, the second (nested) domains should be changed to domain.

Authorize


**api-information-controller**
Api Information Controller
>

**attachment-controller**
Attachment Controller
>

**check-if-doc-exists-controller**
Check If Doc Exists Controller
>

There will be a long list of available calls. Click on a reveal arrow to open a call for more information.

api-information-controller

Api Information Controller

▼

GET

/api getApiInformation

🔒

Parameters

Try it out

Name	Description
<b>appKey</b> * required string (query)	Application key
<b>appSecret</b> * required string (query)	Application secret

Responses

Response content type application/xml ▼

Code	Description
200	<div>OK</div> <div>Example Value   Model</div> <div>&lt;?xml version="1.0" encoding="UTF-8"?&gt; &lt;ApiInformation&gt;   &lt;readRequestsPerMinute&gt;0&lt;/readRequestsPerMinute&gt;   &lt;uploadSizeLimit&gt;0&lt;/uploadSizeLimit&gt;   &lt;writeRequestsPerMinute&gt;0&lt;/writeRequestsPerMinute&gt; &lt;/ApiInformation&gt;</div>

GET

/api/foldertypes getFolderTypeInfo

🔒

GET

/api/itemtypes getItemTypeInfo

🔒

GET

/api/versions getMajorMinorVersion

🔒

To use an API call press the “Try it out” button.

Authorize

**api-information-controller** Api Information Controller

GET /api/getApiInformation

Parameters

**appKey** \* required

string

(query)

Application key

appKey - Application key

**appSecret** \* required

string

(query)

Application secret

appSecret - Application secret

Execute

Cancel

You will first need to press *Authorize* and enter a user name and password.

You will then need to provide a REST *appKey* and *appSecret*. These can be exported from a REST collector under *Server Configuration | REST API*.

Then press *Execute* to run the call.

api-information-controller

Api Information Controller

GET

/api1/getApiInformation

Parameters

Cancel

Name	Description
<b>appKey</b> * required string (query)	Application key 570f1f80-2442-41ee-ba27-5fa00ce6b3ca
<b>appSecret</b> * required string (query)	Application secret 49e93380-c650-4bf4-a400-d8446993ab1f

Execute

Clear

Responses

Response content type application/xml

Curl

curl -X GET "http://151.155.183.140:48080/RetainServer/swagger/api?appKey=570f1f80-2442-41ee-ba27-5fa00ce6b3ca&appSecret=49e93380-c650-4bf4-a400-d8446993ab1f" -H "accept: application/xml"

Request URL

http://151.155.183.140:48080/RetainServer/swagger/api?appKey=570f1f80-2442-41ee-ba27-5fa00ce6b3ca&appSecret=49e93380-c650-4bf4-a400-d8446993ab1f

Server response

Code	Details
401 Undocumented	Error: Unauthorized <div> <div>Response headers</div> <div> cache-control: no-cache, no-store, max-age=0, must-revalidate  content-length: 0  date: Fri, 10 Aug 2018 19:38:36 GMT  expires: 0  pragma: no-cache  server: Apache-Coyote/1.1  x-content-type-options: nosniff  x-frame-options: DENY  x-xss-protection: 1; mode=block </div> </div>

Responses

Code	Description
200	<div>OK</div> <div> <div>Example Value</div> <div>Model</div> <div> &lt;?xml version="1.0" encoding="UTF-8"?&gt;  &lt;ApiInformation&gt;  &lt;readRequestsPerMinute&gt;0&lt;/readRequestsPerMinute&gt;  &lt;uploadSizeLimit&gt;0&lt;/uploadSizeLimit&gt;  &lt;writeRequestsPerMinute&gt;0&lt;/writeRequestsPerMinute&gt;  &lt;/ApiInformation&gt; </div> </div>

The result will appear below the curl and Request URL.

## Enabling Swagger

Swagger is intended for use by developers. To prevent user access you must first enable swagger in the misc.properties file.

Linux: /opt/beginfinite/retain/RetainServer/WEB-INF/classes/config

Windows: C:\Program Files\Beginfinite\Retain\RetainServer\WEB-INF\classes\config

To enable swagger change its visibility to 1:

```
tools.swagger.visible=0
```

## Managing Retain Language Support

Retain is translated into 14 languages and matches these to browser settings when possible.

Users can also select any of the other 13 languages in various drop-down lists within the Retain web UI.

As a Retain Administrator, you can control which languages are listed by using the Language Editor.

- 1 Using your administrative browser, sign in to Retain as the Admin user.
- 2 Open a new tab and access the following URL:

```
http://retain-server-ip-or-dns/RetainServer/Util/languageEdit.jsp
```

The Language Editor opens, displaying a list of 18 languages (shown below). The 14 languages that have corresponding localized strings on the Retain server, are enabled for selection by Retain users in the **Expose to User?** column.

ISO LangID	Description	Expose to User?	Delete Entry?
en	English	Yes ▾	No ▾
de	German	Yes ▾	No ▾
es	Spanish	Yes ▾	No ▾
fr	French	Yes ▾	No ▾
nl	Dutch	Yes ▾	No ▾
pt	Portuguese	No ▾	No ▾
ru	Russian	No ▾	No ▾
ch	Chinese	Yes ▾	No ▾
ja	Japanese	Yes ▾	No ▾
cs	Czech	Yes ▾	No ▾
sk	Slovak	No ▾	No ▾
no	Norwegian	No ▾	No ▾
it	Italian	Yes ▾	No ▾
hu	Hungarian	Yes ▾	No ▾
pt_B	Portuguese(Brazil)	Yes ▾	No ▾
pt_P	Portuguese(Portugal)	Yes ▾	No ▾
pl_PL	Polish	Yes ▾	No ▾
ko_K	Korean	Yes ▾	No ▾

Add new language LangID (should be 2 char IANA code):  Description:

- 3 To change which languages users can choose in drop-down lists, change the **Expose to User** option.

---

**NOTE:** Although Portuguese, Russian, Slovak, and Norwegian are included in the list, Retain has no localized strings for these languages.

---

- 4 To remove a language from this list, change the **Delete Entry** choice to **Yes** and save your changes.

---

**NOTE:** Localized strings are not removed from the Retain server; only the list is affected. You can add back any languages previously removed by entering their 2-character IANA codes and appropriate descriptions.

---

- 5 Be sure to save any changes that you make in this editor. Otherwise, your changes are lost.
- 6 To see your changes, you must restart Retain as explained in “[Starting and Stopping the Retain Server](#)” in [Retain 4.9.2: Installation and Upgrade](#).