

OpenText Retain CE 24.1 Configuration and Administration

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	LGPL – GNU Lesser General Public License	
	BSD License – Individual Component Licenses	
	ANTLR 3 License	
	ASM	
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	XStream	
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	PDF Box	
	WSDL4J	
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	Arev Fonts Copyright	
	Java Util Concurrent Public Domain	
	SLF4J MIT License, below	

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 administrative documentation for Retain Unified Archiving version 24.1.

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 official website and join the conversations happening inside the Retain Idea Exchange.

For Additional Documentation

See the OpenText Knowledge Base website.

To Contact Technical Support

Browse to the OpenText Support Page and begin typing *Retain Unified Archiving* in the Search for a **Product** field.

For Sales

Go to the OpenText Contact page.

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Contact OpenText Professional Services by calling (877) 772-4450.

1 Conf

Configuration

- "Rules Configuration Page" on page 9
- "Connecting Retain and the Message Router" on page 12
- "Retain Message Router Configuration Page" on page 13
- "Retain Message Router Console" on page 15
- "Storage Manager" on page 16
- "Stubbing Server" on page 20
- "GroupWise Disaster Recovery Integration" on page 37

Rules Configuration Page

- "Core Settings tab" on page 9
- "Conditions tab" on page 10
- "Actions tab" on page 11

You can use Rules to automate tasks and administration.

Messages containing items or information specified in the criteria have the described action applied automatically. A rule must be enabled, have at least one condition, and one action defined before a rule comes into effect.

Overview	🗐 Rules Configuration	C 🖱
Documentation		
Search Messages	Case1234	
Auditing		
System Log	Add Rule	
Reporting		
Monitoring	Edit Rule -	
Data Collection	Remove Rule	
Schedules		
Profiles		
Workers		
Jobs	Rule Case1234 loaded.	
Management	Rule Case1234	
Users		
Groups	Core Settings Conditions Actions	
 Device Management 		
Deletion Management	Core Settings	
-		
Configuration	Rule Enabled	
Server Configuration		
Bulas Castanatian		

Core Settings tab

To create a rule, select the Add Rule button and name the rule. To make the rule active, select Rule Enabled.

Core Settings	Conditions	Actions
-Core Settings		
Rule Enabled	√	

Conditions tab

The conditions are the criteria which determine whether the action is applied to message data or not.

Core Settings	Conditions	Actions
- Conditions -		
Set the condition	ons for this rule	e to be active. All the conditions must be fulfilled for the Actions to be performed.
Category Add Condition	▼ Starts	s with
🗙 🍗 Subje	ct Contains Un	deliverable

Category list

Select the category that the criteria is to be restricted to, from the menu.

Category 💌
Category
Department
Display Name
Domain Name
EMail Address
Attachment Name
First Name
From
Last Name
Location
Mailbox
PO Name
Private
Recipient
Sender Domain
Subject
Title
Туре
UID

Criteria

After a criterion is selected, the condition is entered in plain text or as a regular expression, and are separated into categories.

Starts with
Contains
Ends with
equals to
is not equal to
Does not contain
Does not end with
Does not start with
Regular Expression
Starts with

The 'Starts with' menu further defines the criteria. The 'Starts with' menu also allows the administrator to either relax some constraints by selecting a vague entry like 'Contains' or 'Starts with', or specify the criteria with 'Regular Expression'. Select the appropriate limiter and then select the 'Add Condition' button. Multiple conditions may be added. Make sure to save changes before leaving the page.

Actions tab

The actions tab defines which actions are to be taken. There are four different options to choose from.

Core Settings	Conditions	Actions				
Actions						
Set the actions	that will be pe	rformed by	this rule i	f the cond	litions are fu	ulfilled.
Apply litigation ho	-	•				
Add Action						
🗙 家 Tag ite	em (Case1234))]

All four actions may be applied to any one rule. Once the desired actions are applied to a rule, save changes before leaving the page.

Apply litigation hold to item
Apply litigation hold to item
Mark item confidential
Tag item
Abort rule processing

Connecting Retain and the Message Router

- "How Mobile Message Routing Works" on page 12
- "Setting Up the Retain Message Router" on page 13

How Mobile Message Routing Works

The Retain Message Router enables archiving services for mobile devices on the Internet, outside the firewall. Basic functionality is illustrated in Figure 1-1 on page 12 and explained in Table 1-1 on page 12.



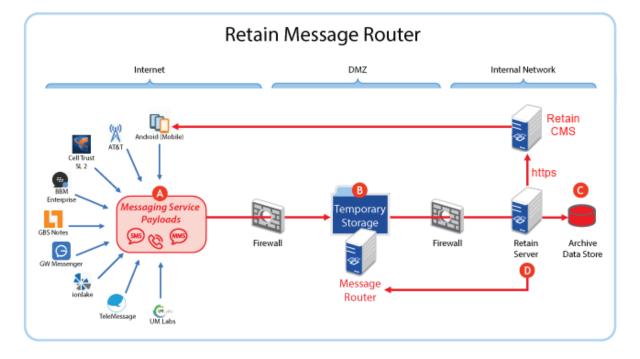


Table 1-1 Job Component Information and Links

Letter	Brief Description
A	Messaging platforms push message data (payloads) to the Retain Message Router.
B	The Message Router stores the payloads in a temporary storage area, which you create while setting up the router and connecting it to Retain.
G	When the Message Router sends the payload to Retain, it archives the messages in the data store.
D	When archiving completes, Retain confirms to the Router, which then deletes the payload from its temporary storage area.

Setting Up the Retain Message Router

To connect a Message Router to Retain, you must do the following:

- 1 Install the Router software on a server in the DMZ, as illustrated in Figure 1-1 on page 12.
 - For instructions, see "Installing a Retain Message Router on Linux" or "Installing a Retain Message Router on Windows" in the *OpenText Retain CE 24.1: Installation and Upgrade* guide.
- 2 Create a directory on the Router server for temporarily storing message payloads. For example, you might create a directory named temp-store inside the Retain folder.

You specify this location when setting up the Retain Message Router in Step 5 below.

- 3 In the Retain Server Manager > Configuration > Server Configuration > Communications tab > Retain Server Connection panel, make sure the settings for connecting to the Retain server are correct.as described in "Retain Server Connection Panel" on page 54.
- 4 In the Retain Server Manager > Configuration > Router Configuration > Communications tab Message Router Connections panel, enter the hostname or IP address of the server the Router agent software resides on. Make sure that the Port and Security match the Retain Server Connection settings from Step 3 above.
- **5** Under the Storage tab, enter the storage path you created on the Router server after installing the Router agent. Be sure to specify the path from the perspective of the router. It can be a full drive path, or a path relative to the /Retain installation directory on the Router.
- **6** Under the Logging tab confirm that the log level is Diagnostic (Trace) and old logs are removed after a few days.
- 7 Click Save Changes.
- 8 Click Test Connection to connect to the router and send the configuration information to it.

You can now access the router's console. For more information, see "Retain Message Router Console" on page 15.

Retain Message Router Configuration Page

Path: Retain Server Manager > Configuration > Router Configuration

For tab information, see the following sections.

- "Communications tab" on page 13
- "Storage tab" on page 14
- "Logging tab" on page 14

NOTE: Although this sets up a connection with the Retain Message Router, it does not require installing the Router software on the Retain server.

Communications tab

The Communications tab sets communications parameters for the Retain server to communicate with the Message Router.

Path: Retain Server Manager > Configuration > Router Configuration > Communications tab

Field, Option, or Button Information and/or Action

Tenant ID Panel

This identifies the Retain server to the Message Router and other REST applications.

Tenant ID
 Retain automatically creates this the first time you open the page.

Message Router Connections Panel

This provides the Retain server with network contact details for the Message Router.

The Router should be installed in your network's DMZ so that Retain is behind the firewall and not directly exposed to the Internet.

 Host 	 Host name or IP address of the server where the Router software is installed.
Port	 Port on which Retain and the Router communicate.
	Defaults: SSL = 443, Plain Text = 48080.
Security	SSL (default) or Plain Text
Test Connection button	 Make sure you click this to verify that the connection with the Message Router is working.

Storage tab

The storage tab contains the path to the temporary storage location that you create on the Message Router.

Path: Retain Server Manager > Configuration > Router Configuration > Storage tab

Table 1-3 Using the Storage tab

Field, Option, or Button	Information and/or Action
Message Router REST Stor	age Panel
The Router stores data here	e (usually for only a few seconds but longer if needed) before sending it to Retain.

Storage Path	 You create this when setting up the Message Router.
	See "Installing a Retain Message Router on Linux" and Installing a Retain Message Router on Windows.

Logging tab

The logging tab contains settings to enable logging, dictate the logging level of the Router, and settings to purge old logs from the system after a specified age.

Field, Option, or Button	Information and/or Action			
Message Router Logging Options Panel				
• Logging enabled	 Select this to enable Message Router logging. 			
 Log level 	 Select a level of events to log: Diagnostic (Trace), Verbose (Debug), Normal (Info), Error Only. 			
Compress logs	 Select this to store the logs using file compression. 			
Remove old logs	 Select this to prevent the log directory from running out of disk space. 			

 When age exceeds • Set this to the number of days you want log files kept before deletion. (days)

Retain Message Router Console

After installing the Retain Message Router and connecting to it from the Retain Server, you can access its console.

Using an administrative browser, enter the following URL and sign in as the Retain administrative user on the Retain server connected with the router.

Path: http://routing-server-IP-or-DNS/RetainRouter

ssage Router			Show Log	Test Server Connection	Upload Pending Payload
uter Time: 11:21:45	5 AM				
tain Server:	the close share a com	RetainServer			
nant ID: 7	f828252-8f6f-44f1-8089-d	46cb22994d4			
orage Path: /	retain/rest				
chive Inbound: t	rue				
chive Outbound: t	rue				
Daily Mobile Stats					
Date	SMS - Enabled	MMS - En	abled	Phone - Enabled	Total
2020-08-27	0	0		0	0
		0	E-Mail_	0	Last
Mobile Device List	Device ID_	-		0 counceOtigryaugeoreaccom	
Mobile Device List	Device ID_	-	apurced, res		Last
Mobile Device List Display Name_ APurcell_Resource	Device ID 01 8J0LEQ2V0JGO1Z 8379324	DF1NV9DBV1	apurcel], res 837932484	ouroediggagemacom	Last
Mobile Device List Display Name APurcell_Resource Device8379324	Device ID 01 8J0LEQ2V0JGO1Z 8379324	DF1NV9DBV1 CH0SW17O1S0	apurceil, res 857932484 Retainbervi	ouroritige_genet.com	Last
Mobile Device List Display Name APurcell_Resource Device8379324 RetainService Emu	Device ID 201 8J0LEQ2V0JGO1Z 8379324 Ilator Q73RCR46C1TVAC	DF1NV9DBV1 CH0SW17O1S0	apurced_ene 8579929484 Retaindervit eneuropage	ouroe0tigspageasaacom ummercom ecilizmail.com	Last
Mobile Device List Display Name APurcell_Resource Device8379324 RetainService Emu nexus green afw	Device ID 801 8J0LEQ2V0JGO1Z 8379324 Ilator Q73RCR46C1TVAQ UNZC0A9Y0J8WX	DF1NV9DBV1 CH0SW17O1S0	apurced_ene 8579929484 Retaindervit eneuropage	ownoritigga.gwast.com tananet.com twitainet.com twitainet.com	Last

Retain RES	T API Statistical Data —	
Payloads F	ending Upload:	0
Uploaded	Payloads Pending Deletic	on: 0

The Message Router console lets you view the devices that connect to Retain through the router and the state of temporarily stored communications (payloads) waiting to be transferred to Retain.

Field, Option, or Button	Information and/or Action	
Information block	The upper-left section shows the following configuration settings:	
	Retain Server: The DNS name of the Retain server.	
	• Tenant ID: The automatically generated ID used to verify connections with the Retain server.	
	 Storage Path: The temporary storage directory for data waiting to be transferred to Retain. 	
	 Archive Inbound: The state of data coming from mobile carriers. 	
	Archive Outbound: The state of data transferring to Retain for archiving.	
Show Log button	1. Click this to view the Message Router log file.	
Test Server Connection button	1. Click this to verify the connection to the Retain server is working.	
Upload Pending Payloads button	 Click this to immediately upload the message data that is accumulated in the temporary storage directory to the Retain server. 	
Daily Mobile Stats	A daily count of devices with each of the supported message types.	
Mobile Device List	Information about each device that has had messages routed through the Message Router. Sort any column by clicking its header.	
Retain REST API Statistical Data	Information about the current state of message data payloads.	

Table 1-5	Using the Message Router Console
	comy the meetinge neuter comotie

Storage Manager

Retain Supports the ability to change the location or engine used to store the archived mail.

🗄 Storage Manager 👘 🚺	0
 Use this to select and configure Retain's storage engine. The Standard engine stores all attachments and email pieces directly on a standard drive mapping. The engine works with all platforms. The NetApp SnapLock option configures the NetApp SnapLock feature. NetApp works without it, but using it ensures NetApp compliance. 	
Regardless of which engine you select, substantial disk space may be consumed locally as well. (The default drive-based engine consumes the most space).	
Restarting Tomcat after changing the Storage Engine configuration is strongly advised.	
Storage Engine Standard Engine. Store directly on locally accessible drives.	
Standard Engine The Standard Engine supports file consolidation. This is particularly useful when archiving smaller messages. This option is recommended only if archiving mobile or social	
messages.	
Note: You can alter the the storage paths in the Storage tab of the Server Configuration menu option.	
Enable file consolidation?	
Last Access Date 🔲 Set Last Access Date according to Expire Date	
In addition, if desired, you may define and remove "partitions" here.	

To change the storage option settings which were created during the initial setup of Retain, simply select the other storage option. The appropriate panel displays:

- "Standard Engine Panel" on page 17
- "Legacy Engine" on page 18
- "NetApp SnapLock" on page 18
- "Partitions" on page 19

Standard Engine Panel

Storage Engine Standard Engine. Store directly on locally accessible drives. 🗸
Standard Engine
The Standard Engine supports file consolidation. This is particularly useful when archiving smaller messages. This option is recommended only if archiving mobile or social messages.
Note: You can alter the the storage paths in the Storage tab of the Server Configuration menu option.
Enable file consolidation?
Last Access Date 🗌 Set Last Access Date according to Expire Date
In addition, if desired, you may define and remove "partitions" here.

The standard storage engine is the standard storage option which should be selected for all new installations of Retain. The storage engine utilizes locally accessible drives and media. When selecting this option, make sure that storage requirements will be easily met, size or capacity increased, and managed.

The engine also allows for background compression to be used. Background compression is recommended for mobile modules, to help keep the size of the data store down.

Partitions Sub-panel

Partitions
Creating a partition allows you to direct all new attachment blobs to a new storage device. (Your old device might be running out of space, or you might prefer to split the storage on a yearly basis etc.). Retain retrieves and stores blobs based upon the partition's date threshold.
Deleting or adding a partition can easily result in the loss of data. For example, deleting a partition that contains data, will make all of that data completely inaccessible to Retain, unless it is moved to another partition. Carefully read the user manual and/or consult with Technical Support before proceeding.
Current path used for storage: /Retain/archive
There are no partitions defined currently. All blobs will be stored to the default storage path configured in Server Configuration.
You may add a partition below. Just enter a name and the full path to the directory to store blobs under.
New Partition Name new partition
New Partition Path

Legacy Engine

The legacy engine works as a seamless connection to the 2.x line of Retain, and is available as a bridge for upgraded devices and legacy support systems.

NetApp SnapLock

NetApp is fully supported with SnapLock for storage. Note the information in the option. To enforce WORM rules you MUST set the Job Expiration feature. Also set the IP address, user name, password, and the correct path to the server. The path must be set in netapp format.

NetApp SnapLock			
SnapLock settings			
If you enable SnapLock, then as items are stored on the NetApp applia This effectively enforces WORM rules. You may use NetApp without th			
A note about the path requested below: it is not a Linux, Windows, or uses the NetApp format, and must point to the directory containing all enabling SnapLock.			
Enable SnapLock? No	• •		
NetApp Server/IP			
Port 80	D		
Admin User			
Admin Password		(Password is not set)	
Base path to archive directory (example: /vol/myvolname/archive)			

Partitions

Retain also supports the ability to define a different storage location, through the partitioning option. Partitioning is only available when Storage is set to the 'local' drive. To access the partitions option click on "partitions" in the Enhanced or Standard Engine window. Ideally, this option would only be used to archive to a new, larger, location when the current storage path has been filled, or to separate mail storage between years. (I.e. /archive/2008; /archive/2009)

□ Partitions	
Partuons	
Creating a partition allows you to direct all new attachment blobs to a new storage device. (Your old device might be ru split the storage on a yearly basis etc.). Retain retrieves and stores blobs based upon the partition's date threshold.	nning out of space, or you might prefer to
Deleting or adding a partition can easily result in the loss of data. For example, deleting a partition that co completely inaccessible to Retain, unless it is moved to another partition. Carefully read the user manual ar before proceeding.	
Current path used for storage: /retain/archive	
There are no partitions defined currently. All blobs will be stored to the default storage path configured in Server Config	uration.
You may add a partition below. Just enter a name and the full path to the directory to store blobs under.	
New Partition Name new partition	
New Partition Path	

A Retain system without a specified partition location will store all mail in the default storage location. This is defined in the Server Configuration menu, under the Storage tab mentioned previously. The default location is set during the initial install.

NOTE: Read the bold warning on changing partitions!

You may only specify one new partition at a time. After you have entered the new partition information, click 'save changes'. Creation or changes to a partition requires Tomcat to be restarted. When adding a Partition on Linux, the path needs to be created manually on the Linux Server before specifying the path within Retain. Ensure that the permissions for the new path are given to Tomcat.

Once Tomcat has been restarted, the new partition can be viewed, edited, or deleted from this window.

Partitions are listed with their Begin Date, Name, and Path. The Begin Date is the creation date. A partition is used to store all archived mail from the moment it is created

Because of how Retain indexes and tracks messages that are archived, deleting a partition can lead to catastrophic data loss. Do not delete an active storage partition or location without first consulting support.

If a partition is deleted Retain will look for the archived mail that was stored in the deleted partition to be stored in the default storage location. (This is defined in Server Configuration, under the Storage Tab.) Removing a designated partition in the management console does not delete the storage directories or data on the hard drive or SAN, but it does disconnect Retain from the storage location.

All partition changes are logged in the partition.log file, located in the backup directory specified in Server Configuration. (By default this is located in <your storage location>/backup)

Stubbing Server

Retain has the ability to use the Stubbing capabilities of GroupWise. Stubbing was designed as a way to reduce disk space usage in a time when the cost of disk space was at a premium. This is less of an issue today.

- "Stubbing Server Overview" on page 20
- "Prerequisites" on page 21
- "Stubbing Install" on page 22
- "Stubbing Configuration" on page 23
- "Retain Stubbing Server Page" on page 25
- "Configure Stubbing Server" on page 27
- "Stubbing Server Administrative Console" on page 28
- "Performing Retain Searches Within The GroupWise Client" on page 32
- "Configure Stubbing To Remove Messages from GroupWise and Leave Only Stubs" on page 34

Stubbing Server Overview

The Stubbing server has two abilities:

- 1. Enabling Retain Archive search "Performing Retain Searches Within The GroupWise Client" on page 32 from the GroupWise desktop client.
- 2. Removing items "Configure Stubbing To Remove Messages from GroupWise and Leave Only Stubs" on page 34 from GroupWise and leaving stub pointers to the data in the Retain Archive. This functionality CANNOT be reversed. *We do not recommend enabling this functionality.*

How Retain Interacts With GroupWise Stubbing

When GroupWise is set up for stubbing and the Stubbing Server is configured in Retain, the archive job that runs will archive all the items and place in their stead in the GroupWise mailbox a "stub". Since the actual message gets placed into the Retain system, GroupWise replaces the original message with a stub that points to the message residing in Retain. A user's GroupWise mailbox will look the same - the user will see a list of messages; however, the icon is different.

When a user clicks on a stubbed message, the GroupWise POA will send a request to the Retain Stubbing Server for the item. Retain sends the item to the POA and the client displays it; however, this does NOT place the message back into GroupWise. When the user closes the message, the stub is all that remains.

Why Stubbing Is Good

- Save Disk space. Mail can be removed from the system without being deleted.
- Users have easy access to items stored in Retain.
- Transparent access, no need to login to Retain for common tasks.
- The "Restore" feature in Retain can be enabled. However, it does not actually restore the message into GroupWise. It only restores the stub if the stub is missing (user deleted it).

Why Stubbing May Not Work for a System

- *Stubbing CANNOT be reversed.* Once a message is stubbed, it cannot be returned to the same position in the system.
- Stub items are NOT COMPATIBLE with third party APIs. These applications view the stubs as
 posted items only, with no text or attachments. Mobile, Web, IMAP, and POP3 clients will only
 see posted empty items, not actual contents.
- User training for stubbed items may be necessary due to decreased access speed.
- No method for protecting stubs from deletion in the GroupWise client (re-creation is difficult and complicated).
- Non-mail items should not be stubbed (calendar and appointment items behave erratically when rescheduled).

Determine the correct option for your system. If you wish to enable Stubbing, you need to install and configure the Stubbing Server as well. If you wish to only stub large items in your mail server, you may set a size threshold. Any item larger than the specified size will be stubbed. If this option is not set, all messages will be stubbed regardless of size.

Prerequisites

- You must be using GroupWise 8.0HP1 or greater.
- The GroupWise module must be configured. This means that a Trusted App Key exists for Retain to use already.
- Confirm that stubbing is *disabled* in *all* the GroupWise profiles:

Profile Name Ord	linary							
Core Settings	Message Settings	Scope	Miscellaneous	Advanced				
— Profile Functio	ons							
				Wise 8 introduces the capability to "Stub" items so Retain. This can save disk space.				
You may enable	e Archiving and Stubbi	ng separat	ely or together, o	depending on what you think your users would like.				
	commend you do NOT reassigned. (Most Cale			use it can lead to confusing results if they are rge anyway).				
You may safely item will not be	-	GroupWise	e 7 post office, ho	owever the functionality will be ignored, and the				
✓ Enable Archiving (store messages in Retain) □ Enable Stubbing (if items are already archived)								
	Do not stub Calendar Items (Appointments, Notes, and Tasks)							
	Stub only items exceeding a size threshold							
	2048		Size Threshold (b	oytes)				

Stubbing Install

If you did not install the Stubbing Server during the initial install of the Retain Server you can install it now.

Run the installer and click through to the point where the installer detects what you have installed.

```
Retain Installer 4.1.0.0
Retain has already been installed on this system with the following components:
Retain Server
Retain Reporting & Monitoring Server
Retain Worker
Choose one of these options:
1) Upgrade current installation of Retain
2) Upgrade current installation of Retain and add new components
3) Exit this installer
```

```
Choose (1-3):
```

Choose "2) Upgrade current installation of Retain and add new components."

Retain Installer 4.1.0.0

Retain has already been installed on this system with the following components:

```
Retain Server
Retain Reporting & Monitoring Server
Retain Worker
```

```
Choose one of these options:
1) Upgrade current installation of Retain
2) Upgrade current installation of Retain and add new components
3) Exit this installer
```

Choose (1-3): 2

```
Choose components...
Install Retain Stubbing Server (y/n)?y
Install Retain Message Router (y/n)?n
```

Then tell the installer to Upgrade Retain, preserving configuration. The installer will stop tomcat, install the Stubbing server and restart tomcat.

Stubbing Configuration

GroupWise

Update Trusted Application Key

- 1. Go to the Retain Trusted App Key and enable "Allow access to archive service"
- 2. Set the Archive Service Address to the Retain server IP Address or hostname
- 3. Set the port to 48080 (the Retain tomcat port)

Retain		Close 🗙
Name:	Retain	
Description:	Trusted App key for Retain	
🗖 Restrict us	e of the trusted app key to connections from:	
Address:		
Port:	0 Require SSL	
Provides M	essage Retention Service	
Allow acc	ess to archive service	
Archive Se	ervice Address: 10.1.4.131	
Port:	48080 🖶 🗖 Require SSL	
0	ОК	Cancel

Now you have to decide if you are going to use stubbing on a particular Post Office or System wide.

Archive Service System Setting

If you are enabling stubbing across the entire system you will need to override the Archive Service Trusted Application setting in System Preferences.

Go to System | System Preferences.

Under Settings and Archive Service Trusted Application, enable the Override and select the Trusted Application Key that Retain is using.

System Preferences	Close 🗙
General Settings	
Administrator Lockout Settings	
Restrict System Operations to Primary Domain Lock Out Older GroupWise Administration Tools Minimum Admin Tool Release Version(x.x.x) 14.2.0 Minimum Admin Tool Release Date(01/01/11) Archive Service Settings	
Default Archive Service Trusted Application: Retain V None Nickname Settings	
Auto-create on User Move O Never O Always O Prompt Expire after: 30 to days (0-365)	
0	OK Cancel

Archive Service Post Office Settings

If you are just stubbing one, some but not all Post Offices you will need to override the Archive Service Trusted Application setting for each Post Office.

Go to the Post Office that will be stubbed.

Under Settings and Archive Service Trusted Application, enable the Override and select the Trusted Application Key that Retain is using.

Micro Focus' GroupWise	Administration	C
Connected Domain: earth	Recent 👻 Favorites 👻	
Administration (Post Office : marspo	
Overview	🎯 earth 📄 marspo 🛛 Jump To: 🕣 POA	
Jystem	Maintenance Client Options More Diagnostics	
S Domains	General Objects Settings Client Settings Security	Int
Post Offices	Disable Live Move	
Post Office Agents	Software Distribution Directory: None 🗾	
Message Transfer Agents	Restore Area: (Not Set)	
- Internet Agents	Address Book Update Settings	
L Users	Create Deltas	
A Groups	Maximum Age for Deltas: 15 🚭 Days	
😽 Resources	Remote File Server Settings	
A Nicknames	Remote User Name:	
ibraries	Remote User Password:	
	Archive Service Trusted Application	
	Default: (Not Set)	
	✓ Override Retain ≎	

Retain Stubbing Server Page

Stubbing Server		🖱 🗘 📑
Module selection Groupwise-1	~	
GroupWise, and replacing it with an transparent access to the stubbed ite	ise 8, where a message item may be "stubbed" tem (a stub) that connects to Retain to access m from their GroupWise client, and the stub be ual for detailed instructions and the pros and co	the message. Effectively, the user has ehaves largely as if a native GroupWise item

In Retain, open the Stubbing Server page from the left-navigation bar.

Core Settings tab

Check the box next to "Enable Stubbing Server"

You may restrict the IP addresses POA connections will be accepted from. Use commas to separate multiple addresses.

Core Settings	Logging	Connection	Bootstrap				
Basics							
Choose whether addition, for sec		-					
Enable Stub							
Accept POA conr	ections only	from these IP /	Addresses:		_		
Interval							
How often shoul	d the stubbin	g server poll fo	r configuratio	n changes?			
Poll for configura	tion every	LO minut	es				

Logging tab

Set the logging level to Diagnostic (Trace)

Core Settings		.ogging	Co	nnection	Во	otstrap			
Logging Options									
Logging	· ·								
	Log	ging ena	bled	~					
Log level Normal (Info) 🗸					~				
Compress logs 🗹									
Remove old logs 🗹									
Whe	n age e	ceeds (d	ays)	10					

Connection tab

If you have installed the stubbing server on a separate server you will need to specify the location of the Retain server so that it can connect.

Retain Server Co	onnectio	n						
The Stubbing Serv host name for the Server contactin Stubbing Server or	Host Nam Ig the Re	ne. It's importan tain Server, w	t to note th	at you are specify	ing the URL f	from the po	oint of view o	of the Stubbing
Server	Protocol	http 🗸						
Retain Server Ho		localhost						
Retain Server Ho Retain Ser	ost Name							
Retain Ser	ost Name rver Port							

The connection to the Retain Server is very important. This must be set to the address of the Retain Server, and is automatically filled out for you. Verify that the Retain Server is located at the specified address and is accessible. Generally you may leave this section default as the Stub Server should be installed local to the Retain Server. If your Retain Server IP address is assigned by DHCP, which we do not recommend, change the Host Name to the DNS name or localhost (127.0.0.1).

Press "Save Changes" and the Bootstrap tab will appear.

Bootstrap tab

Click on "Download File" to save the bootstrap file.

Boot Strap	
-	Server software needs a special "bootstrap" configuration file copied to its working directory before it can tly. You may copy it manually or use a web browser to upload the file.
	istubServeripAddress>:48080/RetainStubServer)

Configure Stubbing Server

Browse to *http://<Retain_Stubbing_Server_Address>/RetainStubServer* or http://<Retain_Stubbing_Server_Address>:48080/RetainStubServer and upload the bootstrap.

Retain Stubbing Server

The Stubbing Server needs to be configured in the Retain Server web interface. Once it has been configured a "bootstrap" file needs to be downloaded and applied here.

Without a bootstrap file the Stubbing Server will not know how to find the Retain server. After applying the bootstrap file any configuration changes made in the Retain Server will be polled by the stubbing server. You will not have to reconfigure the Stubbing Server manually unless you change the Connectivity settings configured in the Retain Server.

	DIOWSC
Browse	

When the Configuration is complete, press Continue.

Configuration Complete. From now on, you'll have to log in as a user (such as the initially created admin user) with the Manage Workers right.

Continue

Stubbing Server Administrative Console



Path: http://stubbing-server-IP-or-DNS/RetainStubServer

Log in to the console with the admin user.

You will then see the Stubbing Server Configuration tab page, which looks much like the Worker page.

Configuration Tab

Stub Server Configurat		https://logelleg	1 10000 /D - 1 - 1 - 0 /
URI to Server		1.00	st:48080/RetainServer/
Stub Server Version		4.9.0	
Memory Free/Max/Tota	al	3265561/1258	32912/4194304
Check for New Versi	on		
Refresh Configuratio	on now		
Click "Refresh Configur	ation now" to prompt	the Stubbing Serve	r to poll for configuration changes right now.
Pootstrap information h	as been applied to th	is somer. If the con	figuration must be changed in the future,

Path: Retain Stubbing Server Manager > Configuration Tab

 Table 1-6
 Using the Configuration Tab

Field, Option, or Button	Information and/or Action
<dialog, panel="" tab,=""></dialog,>	
• <field button="" or=""></field>	 <description>.</description>
Delete button	1. <action>.</action>
<subtab, subpanel=""></subtab,>	

Server Connection Tab

This tab will show you if the Stubbing server was able to connect to the Retain Server.

Configuration	Server Connection	Status	Scheduler	
Server Connection	n			
Successfully c	onnected to Retain serve	er		

Path: Retain Stubbing Server Manager > Server Connection Tab

Field, Option, or Button	Information and/or Action
<dialog, panel="" tab,=""></dialog,>	
• <field button="" or=""></field>	• <description>.</description>
Delete button	1. <action>.</action>
<subtab, subpanel=""></subtab,>	

Status Tab

This tab provides statistics about what has been happening with the Stubbing server.

nfiguration		Status		
Shahua D				
Status 3				
Up since		Tue Jun 30) 14:25:56 PDT 2020	
Successful L	ogins	0		
Failed Logins		0		
Message Served		0		
Attachments Served		0		
Communica	Communication Errors (POA)			
Communica	tion Errors (Retain)	0		
Cached Sess	ions	0		
Max Session	IS	0		
Expired Ses	tions	0		

Path: Retain Stubbing Server Manager > Status Tab

Table 1-8 Using the Status Tab

Field, Option, or Button	Information and/or Action
<dialog, panel="" tab,=""></dialog,>	
field or button>	 <description>.</description>
Delete button	1. <action>.</action>
<subtab, subpanel=""></subtab,>	

Scheduler Tab

This tab is mainly used by support.

Configuration	Server Connection	Status	Scheduler	
connguration	Server Connection	Status	Scheduler	
- Scheduler Status				
Scheduler Status				
To see advanced	information regarding the th	broad achadular, click l	horo	
To see advanced	information regarding the t	ireau scheduler, click j	nere.	

Path: Retain Stubbing Server Manager > Scheduler Tab

 Table 1-9
 Using the Scheduler Tab

Field, Option, or Button	Information and/or Action
<dialog, panel="" tab,=""></dialog,>	
field or button>	<description>.</description>
Delete button	1. <action>.</action>
<subtab, subpanel=""></subtab,>	

Scheduler Advanced Information Tab

This tab is mainly used by support.

Configuration	Server Connection	Status	Scheduler	
- Scheduler Status	s			
To see advanced	- d information regarding the t	hread scheduler, click	here.	
	······································			

Path: Retain Stubbing Server Manager > Scheduler Tab

 Table 1-10
 Using the Scheduler Tab

Field, Option, or Button	Information and/or Action		
<dialog, panel="" tab,=""></dialog,>			
<field button="" or=""></field>	 <description>.</description> 		
Delete button	1. <action>.</action>		
<subtab, subpanel=""></subtab,>			

Performing Retain Searches Within The GroupWise Client

Once GroupWise and the Stubbing server is configured to this point, it is possible to use the Retain Stubbing Server to allow GroupWise to search the Retain archive from the GroupWise client.

GroupWise client only performs whole-word searches. For example, searching for "wel" will only return messages with the word "wel" in them. Retain performs begins-with searches "wel*" and will return "wel", "well", "welcome" and so on.

NOTE: GroupWise client is hard-coded to search only up to 5 years in an archive search.

Prerequisites

Setup Stubbing Server as above. However, do *NOT* enable stubbing in the Retain Profile.

In the GroupWise client click on the search magnifying glass icon. Under the Find tab you'll see an External Archive for the user that is the Retain archive.

In Online mode	, click the	checkbox to	enable the	External	Archive search
----------------	-------------	-------------	------------	----------	----------------

Look in:
 Pravo datus Home Pravo datus External Archive
< >
Find items in the trash Find folders matching full text
Advanced Find Reset

In Caching mode, you will also have to set Look in to Online data.

Find	×
Find Find by Example	
Full Text ↓ ✓ From/Author	Look in: O Caching Online data C A admin admin Home A admin admin External Arch C Look in: O Caching O Online data User01 User01
Item source: Received Personal Sent Draft	
Date range: Created or delivered between:	< >>
5/12/2017 and 5/12/2017 and	Find items in the trash
Find only official document versions	Advanced Find Reset
	OK Cancel

Now a search will search not only the GroupWise mailbox but also the Retain mailbox. The Retain ones will show the empty circle stubbing icon for the messages it has.

6			GroupWise	Find R	esults				×
File Edit	View Action	ns Tools Window	Help						
R 20	् 🖨 🖉	🖻 🚋 🖑							
🕾 Find I	Results							Q,+	
	Name	Subject	Date 🔺	Ver	Docum	Library	Folder		
> 🟠	bravo datus:	170 items found							
▽ 🏠	bravo datus	External Archive: 185 it	ems found						
٥	root	PHM: The best m	12/9/2016 10:				bravo da		
٥	root	PHM: The best m	12/9/2016 10:				bravo da		
٥M	root	PHM: A break in	12/9/2016 10:				bravo da		
٥⊠	root	PHM: A break in	12/9/2016 10:				bravo da		
٥		PHM: The play se	12/9/2016 10:				bravo da		
٥M		PHM: The play se					bravo da		
٥M		PHM: He knew t					bravo da		
٥M		PHM: He knew t					bravo da		
٥M		PHM: Pure bred	12/9/2016 10:				bravo da bravo da		
0 🖂		PHM: Pure bred	12/9/2016 10:				bravo da bravo da		
o ا		PHM: Their eyeli PHM: Their eyeli	12/9/2016 10: 12/9/2016 10:				bravo da bravo da		
0 0 0		PHM: Prod the o	12/9/2016 10:				bravo da		
		PHM: Prod the o					bravo da		
0 0 0		PHM: Neat plans	12/9/2016 10:				bravo da		
0 0 0		PHM: Neat plans	12/9/2016 10:				bravo da		
°¤		PHM: The colt re					bravo da		
• ~ ~		PHM: The colt re					bravo da		
		0:00:02 Finding item	-			1	Selected: 0	Total: 355	tî

Configure Stubbing To Remove Messages from GroupWise and Leave Only Stubs

Enabling Stubbing in the Profile will cause Retain to automatically delete items from GroupWise and replace them with a stub pointer to the Retain Archives. This will have effects, for example, you will be able to see the header data in GroupWise but not the message bodies or attachments, on viewing the items in anything other then the desktop client.

Once you start stubbing in the profile you cannot reverse it. We do not recommend this use of stubbing.

Once GroupWise and the Stubbing Server have been configured as above, you need to enable stubbing in the Profile.

Profile Name Da	aily			
Core Settings	Message Settings	Scope	Miscellaneous	Advanced
Profile Function	ns			
in the original m	nailbox, but are really s	tored in Re	tain. This can save	8 introduces the capability to "Stub" items so they appear to b lisk space. Iding on what you think your users would like.
We tend to reco		tub Calend	ar Items, because i	can lead to confusing results if they are rescheduled or
You may safely stubbed.	enable stubbing on a (GroupWise	7 post office, howe	er the functionality will be ignored, and the item will not be
🗹 Enable Arch	niving (store message:	s in Retain)		
Enable Stul	bbing (if items are alrea	ady archive	d)	
	🗹 Do not stub (Calendar Ite	ems (Appointments	Notes, and Tasks)
	Stub only iter	ns exceedi	ng a size threshold	
	52			

Retain will show a popup warning of the effects of stubbing.

Warning: Groupwise will delete messages from the post office after they have been archived in Retain. Only use this option if you understand the implications to data integrity
ОК

WARNING: GroupWise will delete messages from the post office after they have been archived in Retain. Only use this option if you understand the implications to data integrity.

The next job that runs will delete items from GroupWise and replace them with stubs that point to the Retain Archives. Users will not be able to see anything other then the header data (Subject, to, from, date, &etc.) in WebAcc, or mobile clients. User will be able to read the whole message only in the desktop GroupWise client.

You would want to set the Date Range to Scan to "All Items in Mailbox" because what would be the point of stubbing only new messages.

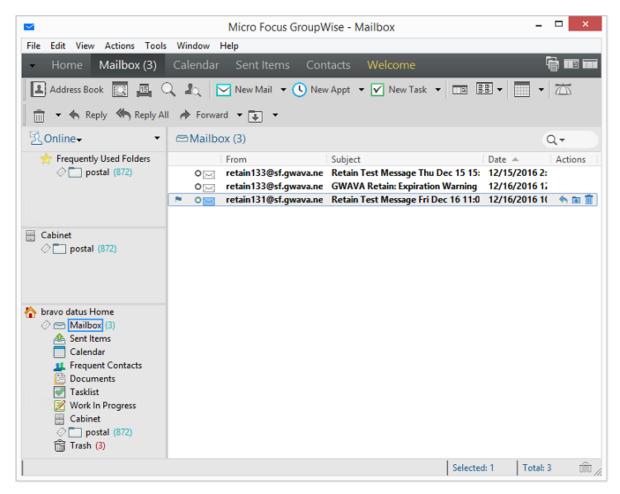
Set up the Job

You can set up the job to use the Stubbing profile and select the Mailboxes to a particular Post Office or a particular User.

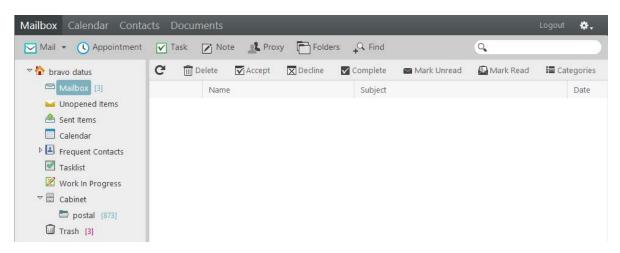
When the worker successfully dredges each item in the mailbox the item will be deleted and stubs placed.

GroupWise Client

In the GroupWise Client, messages that have been stubbed will be marked with an open circle icon. Opening messages may take a moment as the data is retrieved from Retain.



But in web access and third-party applications, you'll see nothing:



GroupWise Disaster Recovery Integration

OpenText GroupWise Disaster Recovery and OpenText Retain perform very different functions. Retain is an archiving product whose main feature is the storage of data in one place for later search and retrieval. GroupWise Disaster Recovery is a Hot Backup, Quick Restore and Push-Button Disaster Recovery product whose main feature is the storage of instances of GroupWise post offices for the purposes of restoring items to their original location in their original form or providing disaster recovery of domains or post offices.

So, why would you want to integrate GroupWise Disaster Recovery and Retain?

- GroupWise Disaster Recovery is very good at moving data efficiently from point A to point B.
 - It copies your post office data in its original form.
 - It can make what is effectively a full backup by moving and storing as little as 12% of the total amount of data in the post office.
 - By having the backed up data available in its original form, it can serve as a data source for Retain.
 - GroupWise Disaster Recovery's backups are available the moment the backup job is complete.
- Retain moves a lot of data and needs strong network links to do so rapidly.
 - An archiving job moving "everything" will move all of the data. This may seem self evident but when you combine GroupWise Disaster Recovery with Retain, you can achieve the same thing by moving only 12% of the data.
 - If you don't integrate them, you will pull data twice over the link once for GroupWise Disaster Recovery, and once for Retain. On top of that, if you don't have GroupWise Disaster Recovery and you only have Retain, you will definitely have to move your data twice.
 - By integrating GroupWise Disaster Recovery and Retain, you can centralize your archives and ensure good backups and achieve a single data pull.

A Brief Review on How GroupWise Disaster Recovery Works

No Helper Software Needed.

GroupWise Disaster Recovery runs on a Linux server. It does not use agents or helper software on the source post offices to work. In other words, no agents or TSA's are required. GroupWise Disaster Recovery simply connects to the server where a post office or domain is stored and then copies the data to its backup storage location.

Backups are instantly available.

Because the data is copied in its original format, the data becomes available as soon as a backup job is complete by simply running a post office agent (POA) against it (for post office backups) or a message transfer agent (MTA) (for domain backups).

Backups Have Little or no Impact on Users.

Because GroupWise Disaster Recovery does not use the Post Office Agent to make backups, there is very little impact on users. The POA will continue to run and service users as normal. GroupWise Disaster Recovery also does not use TSA software or helper agents on the live post office server. Backups can be made while the users are logged in and working.

GroupWise Disaster Recovery Leverages GroupWise's Architecture to Save Bandwidth.

A GroupWise post office is composed of databases and overflow files. Databases contain users' mailbox layouts and indexes and other databases contain users' authentication information. For any GroupWise item exceeding 2KB in size, such as e-mail with attachments, overflow files are stored, commonly called BLOBs (Binary Large Object).

While the contents of the databases changes almost constantly, the BLOBS are static. Therefore, in a Standard Backup, GroupWise Disaster Recovery grabs the databases in their entirety but only those BLOBS that have been newly created since the last backup.

Generally, the BLOBs take up almost 90% of the space occupied by the whole post office. Therefore, with a standard backup, GroupWise Disaster Recovery only need to copy the new data which is 12% of the data – the databases and only those BLOBs which have recently been added. For those BLOBs that have been backed up in prior backup instances, GroupWise Disaster Recovery links to a master backup directory, taken the first time a backup was run, using a Linux feature called symbolic links. A symbolic link is like a Windows shortcut except that it looks, feels, and acts like the real thing.

This is how GroupWise Disaster Recovery can achieve VERY fast backups. In addition, using GroupWise Disaster Recovery to move data will save tremendously on network bandwidth compared to traditional backup systems which grab all of the data.

Backups Can be Made of Backups Allowing Centralization and Redundancy

GroupWise Disaster Recovery was made to backup live post offices and domains and it can also make backups of other GroupWise Disaster Recovery backups. The following two cases can help illustrate how useful this can be:

- Consider client "A" who has two physical locations, one post office in each. This client wants redundant backups a primary backup plus a secondary in case the primary fails.
- This client installed a GroupWise Disaster Recovery server in each location. The servers backed up the local post office in addition to making a backup of the GroupWise Disaster Recovery server in the other location. Thus, each GroupWise Disaster Recovery box effectively had backups of both servers.
- Consider client "B" who has one central data center and four branch offices. This client wants the head office to have backups of all post offices in all locations.
- Branch offices 1, 2, and 3 have fast WAN links to head office but branch office 4 has a very weak connection to head office. However, branch office 4 has a strong WAN link to branch office 2.

So the client installed a GroupWise Disaster Recovery server in each office and one in the head office. The GroupWise Disaster Recovery server in the head office was set to back up the GroupWise Disaster Recovery servers in branch offices 1, 2, and 3. For Branch office 4, the

GroupWise Disaster Recovery server in Branch office 2 was set up to back up the data from the GroupWise Disaster Recovery server in branch office 4 and then the head office was set to back this data up from the GroupWise Disaster Recovery server in branch office 2.

Thus, backups can make as many hops and can be backed up in as many places as you need.

Using the ability to backup one GroupWise Disaster Recovery server with another, you can achieve data centralization and redundancy. The redundancy also gives you the ability to use GroupWise Disaster Recovery for off-site disaster recovery.

Additionally, for client "B", their old backup system moved all of the data every day. Using GroupWise Disaster Recovery, they managed to cut their network traffic by 88%.

How Retain Takes Advantage of the Features of GroupWise Disaster Recovery

Consider client "B" from the earlier example who has four branch offices and a head office. They want their Retain Server to be located at head office. So they need to centralize their data.

Without GroupWise Disaster Recovery, they would have Retain Workers on the branch office POA servers and the data would be sent over the WAN links. For a data collection involving "everything", all data would surely saturate the WAN links.

Plus, their backup/restore software would use the WAN links too, if they were centralizing their backups.

Adding GroupWise Disaster Recovery to the mix, they are able to achieve huge bandwidth savings and performance gains.

GroupWise Disaster Recovery would be set up to centralize the data to one GroupWise Disaster Recovery server in head office, saving immediately 88% of their bandwidth compared to their existing backup/restore system.

Next, A Retain Worker would be set up on the central GroupWise Disaster Recovery box to draw data from all backed up post offices.

One Retain Worker can only run one job at a time, so the post offices would be archived one at a time.

Multiple Workers on One Server

It is possible to install more than one Retain Worker on one server (Linux or Windows platform OS). This would double the hardware requirements and Tomcat memory tuning parameters. For more information see, Installing Other Retain Components on Windows and Installing Other Retain Components on Linux.

You would normally only add additional workers if you wanted to dredge more than one post office at a time.

On a GroupWise Disaster Recovery server, it might not be so time critical to dredge the post offices on it since there is no impact on the end users. On top of that, GroupWise Disaster Recovery has a special feature made especially for Retain, a special post office agent that stays up all the time, except to move to the latest backup. This way, it is always available to Retain. So you will have to decide if it is acceptable to have the post offices dredged one at a time or if you would prefer to dredge many at a time. To do many at a time requires multiple workers.

Timing

It's important to time the data collection on Retain so that the GroupWise Disaster Recovery backup will be complete long before the Retain job is scheduled to start. This is set in the schedule section under the Data Collection menu in Retain.

Retain Settings

The three tasks to configure Retain to work with GroupWise Disaster Recovery are to assign the GroupWise Disaster Recovery password for the worker, assign the running jobs to use the GroupWise Disaster Recovery integration, (this setting is found in the Jobs configuration page in the Retain management console), and configure the Profile to use the Item store flag for duplicate checking.

first backup reload job Edit Job Remove Job Job reload job added. Job reload job Core Settings Maliboxes Reload Reload You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.	obs										r	। 🏖	1
reload job Add Job Edit Job Edit Job Remove Job Remove Job Job reload job added. Job Job reload job Core Settings Mailboxes Reload Notification Status Reload You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.	first backup												
Intervent in the second server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.					dd Job								
Job reload job added. Job reload job Core Settings Mailboxes Reload Notification Status Reload You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.				E	dit Job								
Job reload job added. Job reload job Core Settings Mailboxes Reload You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.				R	emove Job	0							
Job reload job Core Settings Mailboxes Reload				Ŧ									
Core Settings Mailboxes Reload Reload	Job reload job ad	ded.											
Reload You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.	Job reload job												
You can backup your GWAVA Reload server, saving network bandwidth if desired. You'll need Reload 2.5, and some settings set on the Reload machine. Please consult the user manual for additional information.	Core Settings	Mailboxes	Reload Not	tification Statu	s								
Reload machine. Please consult the user manual for additional information.	Reload												
Reload machine. Please consult the user manual for additional information.													
						lesired. You	u'll need R	eload 2.5,	and son	ne setting	gs set on f	the	
Enable Reload Integration?	Enable Reload	Integration?	v										
Reload Server URL http://10.1.1.101:55)1:55									

Enter the management console, and select Jobs from the Data Collection menu.

Create or select a job which you desire to use against the GroupWise Disaster Recovery system, and select the GroupWise Disaster Recovery Tab. You must select the Enable GroupWise Disaster Recovery Integration option, as well as supply the correct connection address for the GroupWise Disaster Recovery Server URL. (Both IP address and DNS name will work, but DNS is recommended wherever possible.)

Set the rest of the Core Settings, Notification, and Status as you would normally for your Retain system, but note that in the Mailboxes section you MUST assign the mailbox that GroupWise Disaster Recovery is backing-up.

Save the changes.

To specify the GroupWise Disaster Recovery –Retain password to the worker, open the specified worker in the worker settings page, and click on the Connection tab. Specify the new Worker Password by entering it into the provided field and then click 'Save changes' in the top corner of the page. You must re-upload the bootstrap file to the worker after creating a new password. (See the worker section to get instructions on correcting the bootstrap file.)

	ing the URL from the po		a DNS host name for the Host Name. It's important to note may or may not match the URL you'd use from your browser
	sing the Reload interface ad Server, you must knov	signed must be the same fo	or each worker that contacts the Reload Server. As part of
Server Protocol	http 🔻		
Server Host Name	localhost		
Server Port	48080		
Conver Dath	/RetainServer		
Server Fach			

How to Setup GroupWise Disaster Recovery to work with Retain

This part assumes that you have already set up and configured one or more Retain workers to collect data from your GroupWise Disaster Recovery box.

First, GroupWise Disaster Recovery must be set up so that the backups are available. There is a special feature in GroupWise Disaster Recovery for this. It calls up a post office agent that stays up all the time and it only goes down long enough to change to the most recent backup. So it will always be there with very small interruptions as the POA is brought down then up.

Setting up GroupWise Disaster Recovery is done on a Profile-by-profile basis. Each post office that you set up for Retain to dredge from must be configured within the profile configuration menu.

1. Start up GroupWise Disaster Recovery's Administration menu.



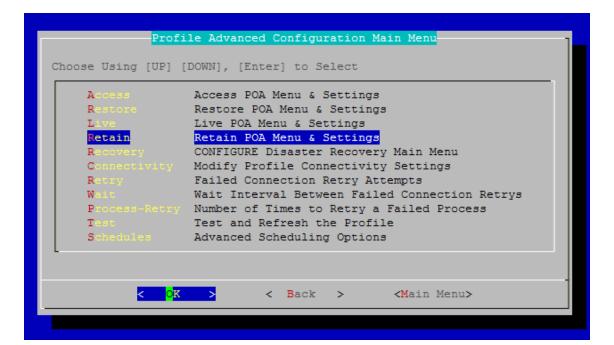
2. From the main menu, choose Profiles – Administer Profiles.

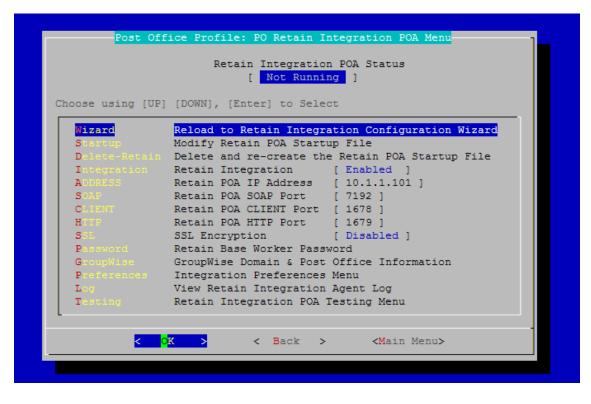
GWAVA Reload Main Menu						
Daemon Status						
[Running]						
Choose using [UP] [DOWN], [Enter] to Select						
Access Access Backups						
Recovery Disaster Recovery Warning Read Warning						
Jobs Start/Stop Jobs						
Logs View Logs						
Profiles Administer Profiles Create Create Profiles						
System Administer System						
DOCS Documentation INFO Program Information						
< OK > < Exit > < Help >						

3. Choose Advanced Profile Configuration Menu

Post Office Profile Administration Main Menu- Choose using [UP] [DOWN], [Enter] to Select					
ActionsProfile Actions MenuLogsProfile Logs MenuStandardStandard Backup (Incremental) Configuration MenuPortablePortable Backup (Full) Configuration MenuTapeTape Backup (TAR Portable Backups) Configuration MenuPreferencesPreferences Settings MenuAdvancedAdvanced Profile Configuration MenuDescriptionEdit Profile DescriptionGroupWiseGroupWise Domain & Post Office InformationINFOProfile Information					
< <mark>CK ></mark> < Back > <main menu=""></main>					

4. Choose Retain POA Menu & Settings





Now it's worthwhile examining this menu. It contains all the settings you will need to make the Retain integration work. This will be a new post office agent running and it will not interfere with the POA being used to access, backup or disaster recovery. Thus, the settings NEED to be different. The easiest way to start is to run the wizard.

Here is another shot of the configuration screen after running the wizard. You will see sample settings and the menu options will be described below.

Wizard Reload to Retain Integration Configuration Wizard Startup Modify Retain POA Startup File Delete-Retain Delete and re-create the Retain POA Startup File Integration Retain Integration ADDRESS Retain POA IP Address SOAP Retain POA SOAP Port CLIENT Retain POA CLIENT Port	<u>1</u>
StartupModify Retain POA Startup FileDelete-RetainDelete and re-create the Retain POA Startup FileIntegrationRetain Integration[Enabled]ADDRESSRetain POA IP Address[10.1.1.101]SOAPRetain POA SOAP Port[7192]	1
Delete-RetainDelete and re-create the Retain POA Startup FileIntegrationRetain Integration[Enabled]ADDRESSRetain POA IP Address[10.1.1.101]SOAPRetain POA SOAP Port[7192]	
IntegrationRetain Integration[Enabled]ADDRESSRetain POA IP Address[10.1.1.101]SDAPRetain POA SOAP Port[7192]	
ADDRESS Retain POA IP Address [10.1.1.101] SOAP Retain POA SOAP Port [7192]	
SOAP Retain POA SOAP Port [7192]	
HTTP Retain POA HTTP Port [1679]	
SSL SSL Encryption [Disabled]	
Password Retain Base Worker Password GroupWise GroupWise Domain & Post Office Information	
Preferences Integration Preferences Menu	
Log View Retain Integration Agent Log	
Testing Retain Integration POA Testing Menu	
resting Actain integration Fox resting Menu	

At the top, the status of the Retain Integration POA is displayed.

- Wizard: Run the configuration wizard.
- Startup: modify the startup file for the POA if you want to make specific changes to it.
- Delete-Retain: delete the startup file if you want to start fresh and configure from default.
- Integration: Enable or disable the Retain Integration
- Address: The IP address this POA will listen on.
- SOAP: The SOAP port this POA uses.
- CLIENT: The port that a GroupWise client may use to access this POA.
- HTTP: The HTTP port for this POA.
- SSL: Enable or disable SSL (Generally keep SSL Disabled)
- Key: A password Retain uses to access this POA.
- GroupWise: Specify the domain name and post office name for this POA.
- Log: View the Integration Agent Log.

The wizard will be shown below.

1. Run the Wizard

	(emilita)	- = ×
Eda Er	ik ⊻iew Terminal Tabs Help	2011
Groupwi	ne Post Office Name	-
	GroupWine Post Office Name	
	In the field below indicate the name of the ScoupWise Post office that this meload profile represents.	
	BAD0	
	10	
	< save >	
		=

				Terminal	: =
	The second s	Terminal	Lains	-Teh	
storbe	cise poma	in water			
	-				
			arout	Stine Domain Neme	
	In th	he field b	clow in	ndicate the name of the GroupWise	
	Doma	in that our	ns the	GroupWise Post Office:	
	OHD-	Þ			
	(THE	22		1	
	- Darce	oen.		1.1	
				C Save >	
				- Re	

2. Enter the name of the post office and domain.

	Terminal	_ = ×
Ele E	dit View Ierminal Tabs Help	
Retain	Worker Authentication Ney	-
	Metain Worker Authentication Mey	
	In the field below indicate a key (string of characters) that the metain worker can use to get access to the Reload to Retain integration for this profile. NOTE: Use only letters and numbers for this key. The case of the letters does matter.	
	Cancel>	

3. Choose an authentication key that Retain uses to access this POA. This must match the password you assigned to the Retain Worker.

	Termina	*
<u>File</u> Edit	t View Terminal Tabs Help	
Retain 1	ntegration POA BOAP Port	
	Netain POA SCAP Port	
	In the field below indicate the SOAP port on this Reload server that the metain integration you should use. NOTE: Use digits, not letters	
	<mark>c cx ></mark> estanceto	
		=
		-

4. Specify the IP address and SOAP port for this POA. Be sure it is unique. Some will choose one IP for the whole box with different client ports and SOAP ports for each POA. Others use the same ports but the IP addresses are different.

	Territed	_ 0 X
<u>File Edi</u>	t <u>V</u> iew <u>Terminal</u> Ta <u>b</u> s <u>H</u> elp	
Retain 1	Integration POA CLIENT Port	A
	Retain POA CLIENT Port	
	In the field below indicate the CLIENT port on this meload server that the metain integration Pow should use. NOTE: Use digits, not letters	
	< dK > <cancel></cancel>	=

5. Choose the HTTP port for this POA.

Retain HTTP Port	
In the field below indicate the HTTP port on this Reload server that the Retain Integration POA should use.	
NOTE: Use digits, not letters	
10080	
< OK > <cancel></cancel>	
< OK > <cancel></cancel>	

Because GroupWise Disaster Recovery is creating a faux POA for Retain to archive mail from, the GroupWise Disaster Recovery POA must be on a different or unique port, so there is no conflict with your original POA. If your GroupWise Disaster Recovery installation is on a separate machine from your POA, any port will do, but if it is the same, pick a port that you know is open, different from the live system.

Retain will pull all necessary connection information from the GroupWise Disaster Recovery server. There is no need to enter these settings into the Retain Server.

Now that you have set up the basics, you may edit the POA startup file in case you wish you change any other settings, (Retain.poa), or you can re-run the wizard from step 1.

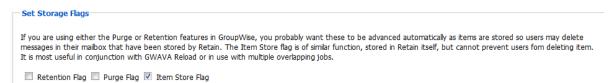
IMPORTANT Notes for the Integration

Retain

Because GroupWise Disaster Recovery essentially creates a snapshot of the Post Office, the duplicate checks that Retain can use are very limited. The retention flag and purge flag will not function as they are kept within GroupWise and would be changed back as soon as GroupWise Disaster Recovery creates a new backup. The Item Store Flag is the only duplicate check that is internal to Retain, and is the ONLY duplicate check ability that will work when Retain archives against a GroupWise Disaster Recovery system. Again, the retention and purge flags will not work but the item store flag will. Be sure your Retain Profile matches this setting.

Retain	1	Language Englah 👻 🕪 Welcome, admin About Tools Status & Updates Logout
Overview	Profiles	🖱 Ø 🕚
Documentation Search Messages Auditing System Log Reporting Monitoring Data Collection Schedules Profiles Group/Wise Exchange Social Messaging Mobile Google Apps BlackBerry CellTrust Workers (# Jobs Management Users Groups (# Device Management Deletion Management	AlFolders AlMessages NoArchiveMark NoStubbing ItemStore AlFolders AlMessages NoArchiveMark NoStubbing NoFlags AlFolders AlMessages NoArchiveMark NoStubbing NoFlags AlFolders AlMessages NoArchiveMark STUBBING NoFlags Disabled/Expired - Error Disabled/Expired - Usan Disabled/Expired - Varn Stub Sent Items "Stub These" folder Trash from 01-30 Apr 2013 Profile AlFolders AlMessages NoArchiveMark STUBBING NoFlags No flags chosen for advancement Profile Name AlFolders AlMessages NoArchiveMark STUBBING NoFlags Core Settings Message Settings Scope Miscelaneous Advar Date Range to Scan Al Messages (ignore date)	Add Profile Associated Jobs Edit Profile • Stubbing Remove Profile
Configuration Server Configuration Rules Configuration Module Configuration Storage Manager Stubbing Server Reporting and Monitoring Licensing	Important performance factor. Using the retention or purge flag choices : the system for the first time. Try to publish all messages (SLOW) • Set Storage Flags If you are using either the Purge or Retention features in GroupWise, you	fining how the Worker determines new items (so it may skip sending them to the Server) is an are the fastest choices, if these are options. Never publish all messages unless you are priming u probably want these to be advanced automatically as items are stored so users may delete ore flag is of similar function, stored in Retain itself, but cannot prevent users fom deleting item. le overlapping jobs.

The item store flag is set in two places: Duplicate Check under the Scope tab and under Set Storage Flags under the Miscellaneous tab. The correct settings are shown.



GroupWise Disaster Recovery

To mitigate the chances of getting Retain Worker archive errors while working against a GroupWise Disaster Recovery POA, it is STRONGLY recommended that GroupWise Disaster Recovery is set to create highly consistent backups.

This setting is located at:

Main menu > Profiles (Administer Profiles) >Standard (Standard backup (incremental) Configuration Profile) > Consistency (Backup Consistency level): Set to highest.

ichedule Lustomize	Standard Backup (Incremental) - Basic Schedule Create Customized Job Event Actions
Database	Standard Backup Database Threads Configuration
LOBS	Standard Backup BLOBS (OFFILES) Threads Configuration
martPurge	SmartPurge Configuration
lugh	High Performance Standard Backups: [Enabled]
onsistenc	Backup Consistency Level: [Highest]
MS	Backup DMS Libraries at Post Office: [Disabled]

This is enabled by default for new installs of GroupWise Disaster Recovery, but will have to be manually enabled on systems that are upgraded to GroupWise Disaster Recovery 2.5 You want a highly consistent backup, to make sure that you have all the blobs associated with the database. Database is picked-up first, so the blobs that are referenced in the database will be consistent with the current backup.

Server Configuration





Use these tabs and panels to manage your Retain server's configuration.

Path: Retain Server Manager > Configuration > Server Configuration

Server Configuration includes the following tabs:

- "Communications Tab" on page 51
- "Index Tab" on page 56
- "Storage Tab" on page 60
- "Accounts Tab" on page 66
- "Maintenance Tab" on page 72
- "Logging Tab" on page 75
- "Miscellaneous Tab" on page 77
- "Module Forwarding Tab" on page 78
- "REST API Tab" on page 81
- "SSL Certificates Management Tab" on page 83

Communications Tab

Use this tab to change various server configuration settings made during the initial setup of Retain.

Path: Retain Server Manager > Configuration > Server Configuration > Communications Tab

The Communications Tab contains the following panels:

- "Database Connectivity" on page 52
- "Notification Panel" on page 54
- "Retain Server Connection Panel" on page 54
- "Cloud Mobile Service (CMS) Proxy Connection Panel" on page 55

Database Connectivity

Server Configuration

Communications Index Storage Accounts Maintenance Logging Miscellaneous Module Forwarding REST API SSL Certificates Management Database Connectivity The message store data is stored on a database server. To successfully create the tables, the database server must already be running, with a database named retain created. Be sure to specify: • The correct JDBC URL. If the database server is not running on the same machine as Retain, the IP address or host name of the machine must be included in the URL. • You must provide a user and password for the database server which has full rights to the database you created. Retain can encrypt all data communicated between the Retain server and the database server. For SSL support to work, you must provide the digital certificates. Message Store DB Configuration DB Database Driver MariaDB 10.0+ (MySQL 5.5,5.6,5.7,8.0) MariaDB 10.0+ (MySQL 5.5,5.6,5.7,8.0) Database URL jdbc:mariadb://gwava-server/retain jdbc:mariadb://gwava-server/retain Database User Account root root Database User Password (Password is set) (Password is set) Enable SSL 🔽 Choose trust mode: Allow only trusted certificates v This will apply to Message Store as well as Configuration Database Test DB Connection

The Database Connectivity panel contains the connection information for both the configuration and storage databases.

WARNING: Do not change these settings except in conjunction with migrating the database server to a new location.

Path: Retain Server Manager > Configuration > Server Configuration > Communications Tab > Database Connectivity Panel

Table 2-1	Using the	Database	Connectivity Pa	inel
-----------	-----------	----------	-----------------	------

Option, Field, or Sub-panel	Information and/or Action				
Message Store DB					
Database Driver	The database driver to use.				
Database URL	The database URL				
Database User Account	The database user				
Database User Password	The password for the above				
Configuration DB					
Database Driver	The database driver to use.				
Database URL	The database URL				
Database User Account	The database user				
Database User Password	The password for the above				

Option, Field, or Sub-panel	Information and/or Action					
Enable SSL	Enabling SSL secures the database connection. On upgrading to Retain 23.2, you can switch from non-SSL to SSL configuration and vice versa.					
	NOTE: •Before you enable the SSL, ensure that the certificates are uploaded and is listed under the SSL Certificates Managements tab. For more information see "SSL Certificates Management Tab" on page 83.					
	 For Oracle database, change the database URL to non-SSL PORT to switch from SSL to non-SSL database. If the port is not specified, the communication happens through the default port. 					
	 When any modifications are made in the database connectivity section, you must restart the tomcat server. 					
Choose trust mode	If the SSL is enabled and the data base type is MariaDB, MySQL, PostgreSQL and MSSQL, select one of the options from the Choose Trust Mode dropdown list.					
	Allow only trusted certificate: If the SSL is configured with the database and this option is selected, then all the certificates are trusted.					
	Allow all certificate: This allows only trusted certificates. You can upload self signed SSL certificates during SSL configuration to the Retain trust store.					
	Following are the supported and certified files formats:					
	 MSSQLpfx 					
	Postgrespem					
	 MariaDBpem and .crt 					
	 MySQLpem and .crt 					
	• Oraclep12					
	Based on the database type, the certificates can be either a lone certificate or a key pair. The certificate name must be unique, else you may not be able to upload the file. To create a key pair, upload the cert.pem file and then upload the key.pem file. Ensure that, the alias name given for both the files are same. Only self-signed certificates must be manually trusted. Registered CA-signed certificates are automatically trusted.					
Test DB Connection	Ensures the database connections are established.					

Notification Panel

Notification			
	or forwarding search results and for sending job notification of the sending search results and for sending job	ons. If the mail server i	is not set,
ionwardning search results is	diabled.		
SMTP Mail Server			
SMTP Security Protocol	unencrypted 🗸		
SMTP Port	25		
SMTP Mail From Address	Retain@microfocus.com		
SMTP To Address			
SMTP Username			
SMTP Password		(Password is not set)	
Mail when errors occur			
Test Connection			

In this location, the admin user specifies what address receives notifications about the general system, as well as what SMTP Gateway to utilize to send these notifications. This is also used for forwarding messages from Retain to the SMTP Mail Server for transmission to the recipients.

Path: Retain Server Manager > Configuration > Server Configuration > Communications Tab > Notification Panel

Option, Field, or Sub-panel	Information and/or Action
SMTP Mail Server	The SMTP mail server
SMTP Security Protocol	Security protocol used
SMTP Port	Port used
SMTP Mail From Address	From address to use
SMTP To Address	To address to use
SMTP Username	Username to use
SMTP Password	Password
Mail when errors occur	Email address for errors
Test Connection button	Use to test validity of configuration

 Table 2-2
 Using the Notification Panel

Retain Server Connection Panel

This specifies the connection address, port, and protocol that the Router and other REST applications should use to communicate with the Retain server. Settings must be correct for the Retain server from the point of view of the applications connecting to the Retain server.

Figure 2-1

Retail 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 IP or Hostname
Retain Server Port 48080
Retain Server Path //RetainServer

Path: Retain Server Manager > Configuration > Server Configuration > Communications Tab > Retain Server Connection Panel

Option, Field, or Sub-panel	Information and/or Action					
Server Protocol	 Specify whether Retain uses insecure (HTTP) or secure (HTTPS) communications with other Retain components, such as the Reporting and Monitoring server or the Retain Message Router. 					
	The protocol specified here must be consistent among all the Retain components.					
Retain Server Host	 Specify the DNS name that other components use when communicating with the Retain server. 					
Retain Server Port	 This field is automatically populated when you choose the Server Protocol. (http=48080, https=443) 					
	Only change this if your network uses a non-standard protocol.					
Retain Server Path	 This is the path where the Retain Server is installed. Only change it if you installed Retain in a non-standard location 					

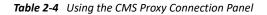
 Table 2-3
 Using the Retain Server Connection Panel

Cloud Mobile Service (CMS) Proxy Connection Panel

Cloud Mobile Service (CMS) Proxy Connection	
To route automatic (IMEI) mobile registration messages from Retain thr	ough a proxy, specify the proxy server settings.
Enable CMS Proxy?	
Proxy Server Host	
Proxy Server Port 80	
Proxy User	
Proxy Password	

If you use Retain's Cloud Mobile Service (CMS) to automatically provision and register devices in Retain, this option lets you specify a Proxy server for your Retain server to connect to CMS.

Path: Retain Server Manager > Configuration > Server Configuration > Communications Tab > Cloud Mobile Service (CMS) Proxy Connection Panel



Option, Field, or Sub-panel	Information and/or Action 1. Select this to enable CMS.				
Enable CMS Proxy?					
Proxy Server Host	1. Specify the CMS proxy server host's IP address.				
Proxy Server Port	 Specify the port on which the proxy server communicates. (Default is 3128.) 				
Proxy User	1. Type the name of the user with rights to access the proxy server.				
Proxy Password	1. Type the password of the Proxy User.				

Index Tab

Use the Index tab to manage the indexing engine, the kinds and sizes of attachments that are indexed, index optimization, and so on.

Path: Retain Server Manager > Configuration > Server Configuration > Index Tab

The Index tab contains the following panels:

- "Indexing Engine Panel" on page 56
- "Indexing Panel" on page 58
- "Rebuilding Indexes Panel" on page 59

Indexing Engine Panel

Indexin	g Engine										
At the c	ore of Retain's search	ing functionality is the indexing	engine.								
stat is n	ot executed because	it is not in the whitelist.									
In the f	ields below you spec	fy the host name and port numb	er for one of the Ind	ex Manager instances. All i	information abo	out the index	cluster will be auto	natically retrieved	l from this instar	ice.	
Conne	ct to this Index Mana	ger:									
Index N	Manager Host Name	localhost									
	Index Manager Port	9081									
Refres	sh Index Configuratio										
	Indexer Name	Indexing Node	Index schema	Active Index Engine	Indexed	Failed	Connectivity				
1	Solr 9	https://localhost:8083/hpi	234	True	100.00% [12597]	0% [0]	online				
Most R	ecent Index Mainten	ance:									
La	ast Index Backup 06-	Dec-2023 11:43									
Last Inc	dex Optimization 06-	Dec-2023 11:43 Optimize Acti	ve Index Now								

Path: Retain Server Manager > Configuration > Server Configuration > Index Tab > Indexing Engine Panel

Option, Field, or Sub-panel	Information and/or Action					
Connect to this Index Manager:						
Index Manager Hostname:	The DNS name of the server where the index manager is installed.					
Index Manager Port:	The port on which the index manager communicates. (Default is 9081.)					
Index Manager Ensemble:						
Refresh Index Configuration button	Use this to refresh the configuration settings.					
Index Schema:	The version of the index schema					
Most Recent Index Maintena	nce:					
Last Backup of Indexes	Date and time of last index backup					
Last Index Optimization	Date and time of last index optimization					
Optimize Index Now button	Click this to optimize the index immediately.					
optimize index now batton						

Index Maintenance and Optimization

You can also configure how often indexes get backed up and how often the indexes are optimized for speed.

Use the **Optimize Index Now** button if you need to optimize the index immediately rather than waiting for the scheduled cycle. While the optimization proceeds, the **Last Index Optimization** field changes to In Process. When the process finishes, the date and time display, and the indexer log is updated.

WARNING: Index optimization will temporarily *double* the amount of index storage used as new index files are written. If a job is running the space use can *triple*. It is recommended to run index optimization on the weekend while no jobs are running.

Indexing Panel

Index	king							
	 The first co The next c 	olumi olum	n indica In is the	types of items to be indexed. You may add, delete, or edi ites if the entry is based on a filename extension or MIME entry itself, filename extension or MIME type. ates the built-in extractor to use to process the attachmen	type.	ractors	may be provide	d in future versions c
_			n í	type is not listed, the indexing engine will not index the c				
\checkmark	Extension	~	Item:		excel	~	Add	
✓	Extension	~	Item:	xls	excel	~	Delete	
✓	MIME	~	Item:	application/excel	excel	~	Delete]
✓	MIME	~	Item:	application/vnd.ms-excel	excel	~	Delete]
✓	Extension	~	Item:	htm	html	~	Delete]
	Extension	~	Item:	html	html	~	Delete	
✓	MIME	~	Item:	text/html	html	~	Delete	
✓	Extension	~	Item:	odp	ooffice	~	Delete	
✓	Extension	~	Item:	ods	ooffice	~	Delete]
✓	Extension	~	Item:	odt	ooffice	~	Delete	

You can control what Retain indexes here by adding as many items as you wish to the list of attachment types to index. Items are listed (in order) by type, extension, archived form (extractor used), and maximum stream size and file size. Choose whether to index the attachment based on its filename extension or its MIME type (the content itself). You also choose which extractor to use to index the attachment. Select as many as you need. If an attachment type is common in the system and needs to be indexed, but is not already indexed, configure the row above the list with the information, then click Add.

Path: Retain Server Manager > Configuration > Server Configuration > Index Tab > Indexing Panel

Option, Field, or Sub-panel	Information and/or Action	
Extension/MIME drop-down	Use this to specify whether the item is identified by a filename extension or by its MIME type.	
Item:	The file extention or application designation	
Action button	Use these to add a new item or delete an existing one.	
Extension/MIME list	A list of various applications, beginning with exalead.	

 Table 2-6
 Using the Indexing Panel

Rebuilding Indexes Panel

Rarely, usually due to hardware failure, Retain's search indexes can become incomplete or even damaged. Acting under direction from Retain support, you can use this panel to return the index to health

WARNING: Rebuilding indexes consumes significant amounts of CPU, RAM, disk IO and time.

Back up the Retain database before proceeding. Then use this panel only under the direction of a Retain customer support engineer.

Path: Retain Server Manager > Configuration > Server Configuration > Index Tab > Rebuilding Indexes Panel

Table 2-7	Using the	Rebuilding	Indexes Panel
-----------	-----------	------------	---------------

Option, Field, or Sub-panel	Information and/or Action	
Reindex Failed Messages button	Click this when one or more parts of the message failed to index. Existing indexes are updated with changes. Searches will work as normal during the reindex process.	
Reindex All Messages button	Click this to reindex all of the messages in the system and update the existing index as required. Searches continue to work.	
Delete Index button	Click this to delete the existing index and create a new one by indexing all messages in the system. Initially, no results are returned, but searches become more accurate over time as reindexing continues.	

NOTE: Depending on the number of messages to be reindexed, this process could take a long time. Most systems index 2M - 8M messages per day, which is dependent upon various hardware factors.

There are 3 options:

- 1. Reindex Failed Messages: reindexes messages where one or more parts of the message failed to index. Existing indexes are updated with changes. Searches will work as normal during the reindex process.
- 2. Reindex All Messages: reindexes all messages and updates existing index with changes. Searches will work as normal during the reindex process.
- 3. Delete Index: Deletes the current index and reindexes all messages. Searches will not be accurate until the reindex completes.

Index performance can be increased by the number of threads allowed to the indexer. Again this uses significant amounts of CPU, RAM and disk IO and any one of these can limit indexing and Web UI performance.

To increase indexing threads:

- 1. Stop tomcat
- 2. Edit ../RetainServer/WEB-INF/classes/config/solrcloud.indexing.properties
- 3. At the end of the file, change the setting: *indexingThreads=0* to *indexingThreads=[1 24]* (You should not go higher than 10 times the number of CPU cores; otherwise, the overhead of CPU slicing would actually work against you.)
- 4. Start tomcat

You will also need to keep in account users needing to access their Retain mailboxes and perform searches. Increasing threads could slow down the web UI response, so you'll need to experiment with what works best for your system.

Storage Tab

Use this tab to specify where the Retain archive files are stored and to manage encryption of archive BLOB files.

Path: Retain Server Manager > Configuration > Server Configuration > Storage Tab

The Storage tab contains the following panels:

- "Storage Panel" on page 61
- "Storage Encryption Panel" on page 62

Storage Panel

- Storage				
-	se, indices, XML files, and the archive files are stored under the storage path which should be on a vice with plenty of disk space.			
The standard storage engine places archive files under the storage path. You may change the storage path on this screen; the storage engine can be changed from the Storage Manager menu.				
Storage Engine datas	tore_process			
Base Storage path /reta	in			
Advanced Settings				
For more advanced scenarios, some paths may be assigned to one device and some to another.				
Derive all file locations from above base path?				
Attachments Path	/retain/archive			
XML Mappings Path	/retain/xml			
Index Path	/retain/index			
Exports Path	/retain/export			
Backups Path	/retain/backup			
License Path	/retain/license			
Digital Certificates Path	/retain/keystore			
Compression (always on	Compression (always on)			

Path: Retain Server Manager > Configuration > Server Configuration > Storage Tab > Storage Panel

Option, Field, or Sub-panel	Information and/or Action	
Storage Engine	Only informational. Configurable in the Storage Manager	
Base Storage Path	Sets the default path for where the Retain archive, XML files, search index files, PDF exports, backups, and license files are stored.	
	Customized paths for these can be set by clicking the Advanced Settings link and deselecting the Derive all file locations option.	

 Table 2-8
 Using the Storage Panel

Option, Field, or Sub-panel	Information and/or Action		
Advanced Settings	Use this link to access customizable storage paths for the Retain archive, XML files, search index files, PDF exports, backups, and license files.		
	Deselect the Derive all file locations option to display the list of paths.		
	You can specify customized paths for the following:		
	Attachments		
	XML Mappings		
	 Indexes 		
	PDF Exports		
	Backups		
	License Files		
Compression	A reminder that compression is always used.		

Storage Encryption Panel



- "Keystore Sub-panel" on page 64
- "Storage Re-encryption Sub-panel" on page 65

NOTE: Encryption is not currently supported on MS SQL databases.

Path: Retain Server Manager > Configuration > Server Configuration > Storage Tab > Storage Encryption Panel

 Table 2-9
 Using the Storage Encryption Panel

Oblight, Field, of Sub-ballet Information and/or Action	Option.	Field, or Sub-panel	Information and/or Action
---	---------	---------------------	---------------------------

IMPORTANT: The following options, fields, etc. display only after you change the **Storage Encryption** option to **aes**.

Option, Field, or Sub-panel	Information and/or Action		
Storage Encryption option	 none: This is the default state. Jobs run normally and Retain archive files are not encrypted. 		
	If you switch back to this option after encrypting archive files, new archive archive files won't be encrypted, but files that are already encrypted remain encrypted.		
	 aes: When you select this, Job processing is suspended until a new key is generated using the Generate Key button. 		
	After a key is generated, Job processing resumes, and Retain encrypts new files as they come in. Existing files are encrypted in the background when the server is idle.		
	Although encrypting a large amount of archived data can take some time, there are no impacts on user tasks or the overall user experience.		
Key Status field	 Initial: This indicates that the system is waiting for key generation. Jobs are suspended until that is done. 		
	 Active: This indicates that the key with the Alias name displayed below is currently being used to encrypt the Retain archive files. 		
	 Revoked This indicates that the encryption key that was previously active is no longer in use for encrypting archive files. Encryption is currently suspended until a new key is generated and stored in the keystore. 		
Key Alias	This is the system name that Retain assigned to the currently active encryption key. Keys are listed in the keystore using this system name (alias).		
Кеу Туре	The encryption type and level of the currently active encryption key.		
	Retain generates new keys to the 256-bit Advanced Encryption Standard (AES 256).		
Generate Key button	Clicking this causes Retain to generate a new AES 256 key and to begin encrypting the Retain archive files with that key.		
	When generating the system's first key, you must set and confirm a keystore password that		
	Contains at least 6 upper- or lower-case alphanumeric characters.		
	 Does not contain special characters. 		
	IMPORTANT: Make sure you don't lose the keystore password.		
	For generating subsequent keys, you need only enter the password once.		
Revoke Key button	Clicking this and confirming the action, causes the encryption key to be revoked. Encryption of incoming archive items is suspended and the Key Status changes to Revoked.		
	The revoked key is saved in the keystore so that Retain can decrypt any archive files that were encrypted with it.		
	Revoked keys are only removed after all items that were previously encrypted by the revoked keys are re-encrypted by a new key through Retain's Storage Re-encryption functionality.		

Keystore Sub-panel

Keystore
The keystore holds the keys used for encryption and is protected by a password. The password will need to be supplied in order to generate, revoke, export or import keys.
Display Keys
Export Keys
Import Keys Choose File No file chosen
The keystore password can be changed using the button below. *Note that changing the password will also update the key modification date(s) to the current date.
Change Password

Path: Retain Server Manager > Configuration > Server Configuration > Storage Tab > Storage Encryption Panel > Keystore Sub-panel

Table 2-10Using the Keystore Sub-panel

Option, Field, or Sub-panel	Information and/or Action		
Display Keys button	Clicking this displays the names (key aliases) and modification dates of all keys in the keystore.		
	To view the contents of an exported .jks file that is offline, use one of the following options.		
	At a terminal prompt,		
	1. Install Java 1.8.		
	 Use the command line tool keytool.exe (https://docs.oracle.com/ javase/8/docs/technotes/tools/unix/keytool.html) to view the file. 		
	For example,		
	keytool -list -v -keystore key-store-file.jks		
	In a desktop GUI environment,		
	 Install and use a GUI tool, such as Portecle (https:// www.sslsupportdesk.com/portecle-advanced-keystore-creation-and- manipulation-tool/). 		
Export Keys button	Clicking this and entering the keystore password causes the keystore to be exported as a .jks file named retainKeyStore.jks and downloaded to the browser's default download location on the machine that is running the management browser.		
	We recommend renaming this file to reflect its origin. For example, Retain- svr01-KeyStore.jks for a retain server named Retain-svr01.		
Import Keys button	Before clicking this button, you must first browse to and choose a . $\rm jks$ file.		
	After clicking this button, you must enter the keystore password for this Retain server and then the keystore password for the keystore on the server where the . jks file originated.		
Choose File button	Click this button to browse to and select a .jks keystore file for importing.		

Option, Field, or Sub-panel Information and/or Action

Change Password button Click this button to change the keystore password for this Retain server.

Storage Re-encryption Sub-panel

nodification of all items in the s	orage area. The process car	be started immediately or it can	a lengthy process as it involves the be scheduled to run during off-hours, the Retain administrator, if desired.
Configuration			
Enable Re-encryption Process			
Schedule	Daily V		
Run at	19 ¥ : 43 ¥		
Mail report to Retain administra	or 🗆		
Limit processing time			
Hours	1		
Processing threads	1		
Start Re-encryption Now St	p		
Process Status			
outton to refresh the data wher	processing is active.	e, if running, or the final state o	f the last cycle. Use the Update Stats
Current cycle	RUNNING		
Status of previous cycle	JNKNOWN		
Items to process	33256		
Processed in current cycle	3002		
Processing rate (items/second)	35		
Duration (hhh:mm:sec)	0:1:25		

Path: Retain Server Manager > Configuration > Server Configuration > Storage Tab > Storage Encryption Panel > Storage Re-encryption Sub-panel

Table 2-11	Using the Storage	Re-encryption	Sub-panel
------------	-------------------	---------------	-----------

Option, Field, or Sub-panel	Information and/or Action	
Configuration Section: Use the	Configuration Section: Use the following to manage and control the re-encryption process.	
Enable Re-encryption Process option	Re-encryption only runs when this is enabled.	
Schedule drop-down list	You can schedule re-encryption processes to run daily, weekly, or monthly.	
Run at option	Specify when you want re-encryption processes to run in 24-hour time.	
Mail report to Retain administrator option	If you have configured the system with SMTP services and the Retain administrator has an associated email account, enabling this causes Retain to email the administrator with status updates.	
Limit processing time option	If you want to limit the length of time spent on re-encryption in each run cycle, enable this option.	

Option, Field, or Sub-panel Information and/or Action		
Hours field	Specify the number of hours the system can spend on re-encryption in each run cycle.	
Processing threads option	Specify the number of threads the system can devote to re-encryption processes.	
Start Re-encryption Now button	Click this to circumvent the schedule and start re-encryption immediately.	
Stop button	Click this to halt the current re-encryption process.	
Process Status Section: Inform	mational fields for tracking re-encryption process status.	
Current cycle	Not running	
	◆ Running	
Status of previous cycle	Unknown	
	 End_of_Processing 	
	 Manual_stop 	
Items to process	The total number of archived items that require re-encryption.	
Processed in current cycle	The total number of items encrypted during the current cycle.	
Processing rate (items/ second)	The average number of items processed per second.	
Duration (hhh:mm:sec)	How long the current cycle has been running.	
Update Stats button	Click this to immediately update the statistics displayed above it.	

Accounts Tab

Use this to control the creation and functionality of accounts.

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab

The Accounts tab contains the following panels:

- "Account Management Panel" on page 66
- "NetIQ Advanced Authentication Configuration Panel" on page 68
- "Office 365 End User Authentication Panel" on page 70
- "KeyShield SSO Panel" on page 71
- "Intruder Lockout Panel" on page 72

The accounts tab lets you control accounts and manage access to Retain.

Account Management Panel

The settings in this panel affect all users in the Retain system, including those with accounts listed in the Users dialog and those found only in the archive's Address Book.

Account Manageme	ent		
You may expire unus	ed accounts, disable new accounts	from being created automatically,	and restrict some users from logging in.
Expire unused ac after how mar (0=			
Disable new ad	counts		
Prohibited	Logins		Remove selected address Address Add
	assword strength policy if you want to lual messaging systems.	o enforce strong passwords for use	ers. Keep in mind these passwords may be
Password strength:	Will accept any password \checkmark		
Will accept any pase	Will accept any password		
	Low		
	Medium		
	High		

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab > Account Management Panel

Table 2-12	Using the Account Management Panel
------------	------------------------------------

Option, Field, or Sub-panel	Information and/or Action
Expire Unused Accounts after How Many Days	Setting this to 0 disables account expiration. Setting it to a different value causes any account, including the Admin account, to be removed when it has not logged in for the specified number of days. The default is 30 days.
Disable New Accounts option	By default, Retain is an "open" system, meaning that all users in the archive's address book can log in. Retain checks to see if a Retain account already exists and if not, it creates a new account, encrypts their passwords, and assigns them to the default group. See
	Enabling this option makes Retain a "closed" system. prevents the automatic creation of new accounts when users log in to Retain for the first time.
	If you don't want specific users to access the Retain archives, add them to the list of Prohibited Logins (below)
	To make a "closed" Retain system, simply click on "Disable New Accounts". If you use this option, it means that you will have to manually create accounts in Retain for authorized users. In other words, the only people who can access your system will be people for whom you specifically create an account.
Prohibited Logins list	You can block individual users from logging in to Retain by adding them here.

Option, Field, or Sub-panel	Information and/or Action	
Remove Selected Address button	Select an address to remove from the list and click this button.	
Address	Type the address to add in this field.	
Add button	Click this to add a typed address to the list.	
Password Strength: drop- down	Use this to specify password strength for a user account. Settings on a back- end messaging system override this.	
	User-created passwords can be required to meet specific requirements.	
	Will accept any password: The default setting.	
	 Low: Must be between 5 and 15 characters in length. 	
	 Medium: Must be between 5 and 20 characters in length, with at least 1 lowercase character, at least 1 uppercase character, and at least 1 numerical character. 	
	 High: Must be between 8 and 20 characters in length, with at least 2 lowercase characters, at least 2 uppercase characters, at least 2 numerical characters, at least 2 special characters, and must not be a dictionary word. 	

NetIQ Advanced Authentication Configuration Panel

Depending on the identity stores configured in NetIQ Advanced Authentication, Retain supports multi-factor authentication for any combination of Retain users.

You use this panel to connect the Retain server with the NetIQ system.

For information about the entire process of enabling multi-factor authentication on Retain, see "Configuring Retain for NetIQ Advanced Authentication MFA Support" on page 211.

Figure 2-2	The NetIQ Advanced Authentication Configuration Panel
------------	---

·NetIQ Advanced Authentication Co	nfiguration
Enable Multi-factor Authentication	
Activate LDAP Service	Port : 8082
	Password copied to clipboard
Server URL of AA Server:	https://192.168.1.92/
Client ID:	id-gqvz3094LZ096gAHJluTG1kebkdfgHA
Client Secret:	•••••
Tenant Name:	ТОР
Redirect URI:	http://retain.example.com/RetainServer/Server/AdvancedAuthentication.jsp

Test Login with Advanced Authentication

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab > NetIQ Advanced Authentication Configuration Panel

Option, Field, or Sub-panel	Information and/or Action	
Enable Multi-factor Authentication checkbox	You must enable this for multi-factor authentication to work.	
Activate LDAP Service checkbox	You must enable the checkbox to activate Retain's User Account LDAP service.	
	 Port: This is for LDAP communications between Retain and the NetIQ Advanced Authentication server. The default port is 8082, but you can specify an alternate. 	
	Make sure there is are no port conflicts and that the firewall allows traffic through the port.	
	 Password: Use the Retain-generated Password or an alternate you have specified when configuring the AA server to connect with Retain. 	
	 Copy-password Icon: Use this to copy the Retain-generated password to your clipboard. 	
	Specify the following when creating the repository for Retain's User Account LDAP service:	
	• Type: eDirectory	
	 Base DN: OU=users, O=retain 	
	• User: cn=retainldap	
	• Password: Copy the password to your clipboard by clicking the copy-	
	password icon 🧊 to the right of the password field. Paste the password from the clipboard when creating the repository in NetIQ AA.	
Server URL of AA Server field	The URL that this system uses to communicate with the Advanced Authentication server.	
Client ID field	The Client ID generated for this Retain system when you create an OAuth2 event for it on the Advanced Authentication server. See Configuring Retain for NetIQ Advanced Authentication MFA Support, Step 7 on page 211	
Client Secret field	The Client Secret generated for this Retain system when you create an OAuth2 event for it on the Advanced Authentication server. See Configuring Retain for NetIQ Advanced Authentication MFA Support, Step 7 on page 211	
Tenant Name field	The default Tenant Name is TOP. If you created a different name, specify that here.	
Redirect URI field	The URI path from the AA server to this Retain server. See Configuring Retain for NetIQ Advanced Authentication MFA Support, Step 4 on page 211	
Test Login with Advanced Authentication button	When Retain and the Advanced Authentication server are configured and the system is ready, use this button to check that MFA is working as expected.	
	When prompted, log in as one of the users that you have enabled for MFA.	

 Table 2-13
 Using the NetIQ Advanced Authentication Configuration Panel

Office 365 End User Authentication Panel

Office 365 End User Authent	lication
Tenant ID	<copy and="" here="" id="" paste="" tenant="" the=""></copy>
Client ID	<copy and="" client="" here="" id="" paste="" the=""></copy>
Test Login with Office 365	This button displays after the Tenant and Client IDs are entered.

Retain supports modern authentication through users entering their Office 365 credentials to access Retain. This panel sets up the connection with Office 365. The entire setup procedure is documented in "Providing Retain Users with Access Through Their Office 365 Accounts" in *OpenText Retain CE 24.1: Archiving Guide*.

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab > Office 365 End User Authentication Panel

Option, Field, or Sub-panel	Information and/or Action
Tenant ID field	This information is exposed when you complete the procedures described in "Synchronizing the Address Book Using Office 365 (Microsoft GraphAPI)" in <i>OpenText Retain CE 24.1: Archiving Guide</i> .
Client ID field	This information is exposed when you complete the procedures described in "Synchronizing the Address Book Using Office 365 (Microsoft GraphAPI)" in <i>OpenText Retain CE 24.1: Archiving Guide</i> .
Test Connection button	Click this to verify that the credentials you have entered are valid with your Office 365 system.

 Table 2-14
 Using the Office 365 End User Authentication Panel

KeyShield SSO Panel

KeyShield SSO
Configure this feature if Keyshield SSO is to be used for user authentication.
Enable Keyshield SSO authentication?
KeyShield SSO Server URL (e.g. http://127.0.0.1:8485)
Connection timeout (in seconds)(e.g. 5)
User ID alias (e.q. x-retain)
API key
Test Connection

Retain supports the use of KeyShield SSO for users.

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab > KeyShield SSO Panel Table 2-15 Using the KeyShield SSO Panel

Option, Field, or Sub-panel	Information and/or Action
Enable KeyShield SSO Authentication option	Select this to enable KeyShield SSO authentication.
KeyShield SSO Server URL	Specify the KeyShield server URL.
Connection Timeout (in seconds)	Specify the length of time a connection request remains active
User ID Alias	The alias id assigned to this server
API Key	The API key from KeyShield
Test Connection button	Click this to test the KeyShield connection.

To use the KeyShield client in coordination with Retain, Retain needs to have an open connection to the KeyShield server, the User ID alias, and the API key. Specify the KeyShield SSO Server URL, Alias, and API key. The Timeout is set in seconds, and may be anything required, 5 is recommended. Test the connection to ensure proper function.

When configured, Retain checks to see if the KeyShield client is running and if the user is currently logged in. If they are logged in, Retain checks the user against the specified KeyShield Server and then either fails authentication and sends users to the login page, or immediately passed them to their interface. The effect is that users who are already logged into the KeyShield client will not be required to login to Retain, but will be immediately taken to their appropriate interface.

Intruder Lockout Panel



Accounts can be locked if multiple failed attempts are detected within a specified window of time. This is useful to deny password cracking attempts on the server.

Path: Retain Server Manager > Configuration > Server Configuration > Accounts Tab > Intruder Lockout Panel Table 2-16 Using the Intruder Lockout Panel

Option, Field, or Sub-panel	Information and/or Action
Enable Intruder Lockout option	Select this to enable intruder lockout protection.
Number of Invalid Login Attempts	Set the number of invalid login attempts before an account is locked.
Time Interval (minutes)	Specify how long the system allows access attempts.
If triggered, lock account for this period (minutes)	Specify how long the account is locked out.
Clear Lockouts button	Use this to clear locked accounts. (Doesn't require saving.)

To enable Intruder Lockout, select the checkbox next to the 'Enable Intruder Lockout' option and save the changes. All changes will be immediate as soon as the save button is selected.

If a user has locked their account and requires immediate access to the system, all lockouts may be cleared. To clear any locked accounts, select the 'clear lock outs' button at the bottom of the page. There is no need to save changes; the clear command is immediate.

Maintenance Tab

Path: Retain Server Manager > Configuration > Server Configuration > Maintenance Tab

The Maintenance tab contains the following panels:

- "Maintenance/Caching Panel" on page 73
- "Ignore Domains Panel" on page 74

Maintaining a Retain system involves many tasks:

- Backup Configuration (Embedded) Database
- Compress Configuration Database
- Zookeeper Purging and Backup

These items are all controlled here.

This configuration database – the "Embedded" database:

- Should be backed up regularly
- Contains your system address book
- Also contains key information used by Retain
- Configure how often it gets backed up here.

Maintenance/Caching Panel

Maintenance/Caching				
You may automatically backup and/or	comp	press the	e embedde	d database at a specified time. The indices are also backed up. The Retain Server is offline at this time. so no jobs may be active at this point.
Enable Index Backup		Daily	~	
Enable Index Optimization		Daily	~	Index optimization will require 15.63 GB of free disk space on the drive.
Mail Job Report				
Purge exported files when older than		10	day(s)	
Run maintain procedure at	01 •	• : 00 •	•	
Delete Zookeeper backup older than	30	day	y(s) (1-99)	

Path: Retain Server Manager > Configuration > Server Configuration > Maintenance Tab > Maintenance/Caching Panel

Table 2-17	Using the Maintenance/Caching Panel
------------	-------------------------------------

Option, Field, or Sub-panel	Information and/or Action		
Enable Index Backup	Select this to enable scheduled index backups at the interval specified.		
Enable Index Optimization	Select this to enable scheduled index optimization at the interval specified.		
Mail Job Report	Specify whether a Mail Job Report is generated.		
Purge exported files when older than	Specify how old exported files can be before they are purged.		
Run maintenance procedure at	Specify when to run the maintenance procedure.		
Delete Zookeeper backup older than	Specify the number of days for which zookeeper backup folder to be retained. Default is 30 days.		

Datastore Maintenance

Retain also lists a history of backups and maintenance here.

NOTE: This maintenance section does not involve backup or maintenance of the data store. You must back that up yourself with your normal backup tools.

You must backup:

- SQL Database
- File System where your data is stored

Zookeeper Purging and Backup

Beginning 23.4 zookeeper data will be purged and backed up when the maintenance job runs. First, the zookeeper data will be purged to maintain the last three files (snapshot<datetime> and log), then the backup of the zookeeper data will happen. The zookeeper backup will maintain the same folder structure as in the zookeeper path.

The following are the zookeeper paths

- Default zookeeper path: <basepath>/zookeeper
- Default zookeeper backup path: <basepath>/backup/zookeeper/snapshot<datetime>

When the maintenance runs again, it creates a new snapshot folder with DateTime (snapshot<datetime>) and backs up the current zookeeper data, then deletes the old zookeeper data backed up based on the number of days specified in the field: "Delete zookeeper backup older than"

NOTE: Do not delete or modify the zookeeper folder data and the zookeeper backup folder data manually.

Upgrade from a Retain version lower than 23.4 to 23.4 or higher. By default, index backup is disabled.

When upgrading Retain from version 23.4 or later, the index backup specification is maintained

Ignore Domains Panel

- Ignore Domains -	
You might want sp	pecific Domains (and their child POs and users) to be completely ignored - not cached, not stored, etc.
Ignored Domains	Remove Selected Domain Domain Add

Path: Retain Server Manager > Configuration > Server Configuration > Maintenance Tab > Ignore Domains Panel

Table 2-18	Using the Ignore Domains Panel
------------	--------------------------------

Option, Field, or Sub-panel	Information and/or Action	
Ignored Domains list	A list of Domains that Retain ignores.	
Remove Selected Domains	Select an entry in the Ignored Domains list and use this button to remove it.	
Domain	Type a domain to be added to the Ignored Domains list in this field.	
Add button	Click this to add the typed domain to the Ignored Domains list.	

Some mail systems allow for the addition of non-system, or external domains. Sometimes, you might do this to add external domains to the mail system address book. However, the mail system cannot pull up e-mail from these domains and you may want to tell Retain to ignore references to these external domains to avoid wasting time during data collection.

Specify these domains in this window.

Logging Tab

Path: Retain Server Manager > Configuration > Server Configuration > Logging Tab

The Logging tab contains the following panels:

- "Logging Panel" on page 75
- "Auditing Panel" on page 76

Logging Panel

ogging		
Logging enabled	✓	
Log level	Diagnostic (Trace) 🗸	
Remove old logs	Z	
Vhen age exceeds (days)	10	

Configure the system logging here.

Path: Retain Server Manager > Configuration > Server Configuration > Logging Tab > Logging Panel

Table 2-19 Using the Logging Panel

Option, Field, or Sub-panel	Information and/or Action	
Logging Enabled option	Select this to enable logging	
Log Level	Use this drop-down list to specify what the system logs.	
Diagnostic		
Verbose		
Normal		
• Error only		
Remove Old Logs option	Select this to have logs automatically removed when they reach a specified	
• When age exceeds	age.	
(days)	 Specify the age at which logs are to be removed. 	

Normally, you want verbose logging. Diagnostic is ordinarily done just for troubleshooting purposes.

You also specify how long to keep logs here. By default, logs are deleted after 10 days. Logs may be compressed to save disk space.

Auditing Panel

		trace when and who opened a message, forwarded a message etc.
0 1	· · ·	se they would generate enormous audit logs. Enable them with care. Also,
nsider clearing your audit log	s regularly (see below) or expon	ting your logs from the audit table on your SQL Server.
ays before audit records are	removed (0=never remove) 0	
lvanced auditing options		
Select/Unselect all		
Changed User/Group	Changed Data Collection	n 🔲 Searched
Mailbox Switch	Audited	Server Config Change
Exported	Published	Restored Message
Mobile Device Manageme	nt 🔲 Rules Configuration	Module Configuration
Router Configuration	Storage Manager	Stubbing Server
Reporting and Monitoring	Data Removal	Licensing

Retain creates an auditing record of all actions, specified by the user, which are taken on a specific piece of mail. You can remove Auditing records after a specified length of time.

Path: Retain Server Manager > Configuration > Server Configuration > Logging Tab > Auditing Panel

Table 2-20	Using the	Auditing Panel
------------	-----------	----------------

Option, Field, or Sub-panel	Information and/or Action	
Days before audit records are removed (0=never)	Specify how long auditing logs are retained.	
Advanced Auditing Options	You can log all actions that users take on specific messages. Select the actions that you want logged.	

The variable is set in days. All of the options associated with this feature are found under the Server Configuration page, Logging tab.

This logging option creates very detailed activity logs for the options selected. It is very important to know that if every option is turned on the logs can become extremely large. However, the audit log cannot be searched for any items or activity which is not configured to be logged. If activity on any of the offered items it must first be enabled here. It is highly recommended that an expiration date is set for the logs so that they are automatically removed from the system to avoid filling up your disk space. Selecting all options for logging will also adversely affect performance. Do not select all the options at one time unless requested by Support.

Miscellaneous Tab

Path: Retain Server Manager > Configuration > Server Configuration > Miscellaneous Tab

The Miscellaneous tab contains the following panels:

• "Miscellaneous Panel" on page 77

You can specify a worker password that is different from the one the system generates when you create a worker.

Miscellaneous Panel

Miscellaneous						
You may change the default Worker password, which is assigned to all Workers when they are created (but can be individually overridden).						
You can enable or disable XML Export, which create	es XML representations of each	n message as the	/ are created.			
Default Worker Password	•••••• ((Password is set)				
Export XML						
Server Friendly Name	RetainServer					
Restrict Global Tag application to users with rights	2					
Use strong security policy	✓					

Path: Retain Server Manager > Configuration > Server Configuration > Miscellaneous Tab > Miscellaneous Panel

Option, Field, or Sub-panel	Information and/or Action
Default Worker Password	If desired, specify a password for all the workers.
Export XML	This XML Export function is included in Retain in case you have an XML compliance mandate. You enable it here.
	When selected, each attachment will have an XML export file of its parent message. In other words, an XML representation of the metadata is created and linked to the blobs as the messages are stored. There's nothing more done.
	Ordinarily, you would not want to do this because it consumes enormous quantities of disk space, loads up your file system and degrades performance
	When you do NOT use the XML export function, you will benefit from Retain's single-instance message storage and data compression to save disk space and improve performance.
Server Friendly Name	<rick?></rick?>
Restrict Global Tag application to users with rights	<rick?></rick?>
Use strong security policy	<rick?></rick?>

Module Forwarding Tab

This tab lets you specify an SMTP mail server or an FTP server (or both) to serve as targets for redundant archiving of items archived in Retain.

In addition to specifying the target servers here, you must also enable this feature in the affected modules.

Path: Retain Server Manager > Configuration > Server Configuration > Module Forwarding Tab

The Module Forwarding tab contains the following panels:

- "SMTP Forwarding for Modules Panel" on page 79
- "FTP Forwarding for Modules Panel" on page 80

Modules can be set to forward all new items to another location.

SMTP Forwarding for Modules Panel

— SMTP Forwarding for Mod	lules	
An SMTP mail server only r	needs to be defined when forwarding a copy of the items	collected by Retain to an external system.
SMTP Mail Server]
SMTP Security Protocol	unencrypted 🗸	
SMTP Port	25	
SMTP Mail From Address]
SMTP To Address]
SMTP Username]
SMTP Password]
Test Connection		

Path: Retain Server Manager > Configuration > Server Configuration > Module Forwarding Tab > SMTP Forwarding for Modules Panel

 Table 2-22
 Using the SMTP Forwarding for Modules Panel

Option, Field, or Sub-panel	Information and/or Action
SMTP Mail Server	The SMTP Forwarding feature requires an SMTP Mail Server connection
SMTP Security Protocol	configured.
SMTP Port	Specify the destination Mail Server's DNS name, protocol, and port.
SMTP Mail From Address	The address that displays as the 'from' address for the forwarded messages.

Option, Field, or Sub-panel	Information and/or Action
SMTP To Address	 To send message copies to a single destination, specify the destination account of a journaling mailbox.
	 To send message copies to each respective owner's mailbox, specify the to address as follows:
	{userid}@yourdomain.com
	Retain will automatically use the userID of the originating device or account. Use of this feature requires that the SMTP server has an existing mail account for each user which matches the userID Retain shows for the mobile or Blackberry device.
SMTP Username	The username for connecting to the SMTP server.
SMTP Password	The password for the SMTP user above.
Test Connection button	Click this to test the SMTP server configuration.

SMTP Forwarding is a feature which instructs Retain to forward a copy of any archived message data to the specified address and domain, when the message item is archived. For Module Forwarding to function, it must be configured here on the Server Configuration and also enabled on the specific desired module. Any module which has the SMTP Forward option enabled will send messages according to the settings configured here.

This setting is designed for exporting data to an external SMTP system for redundant archival. This is most often used for mobile or blackberry message systems. SMTP Forwarding will take a text, pin, or sms message and message data, convert it into a MIME file and send the message to the specified SMTP system. The Forward process checks for and sends any queued data once every 10 minutes. If a message is unable to be sent for any reason, after 5 days the MIME file will be saved to the local disk and may be reviewed and repaired by an administrator.

This feature is not recommended for use with any SMTP system which Retain is currently archiving. If Module Forwarding is enabled and configured to use the SMTP system which Retain is currently archiving, duplicate data will be archived; Mobile, Blackberry, and Social data will be doubled in the Retain archive.

DO NOT use SMTP Forwarding with any email module if Retain is archiving the destination SMTP Mail System. This will cause a feedback loop which will rapidly fill the archive and email system.

Requirements

- Separate, working SMTP system
- Mobile module requires the mobile app 4.0.1 or higher

For troubleshooting, attempting to telnet from the Retain server to the SMTP server may provide useful information. Configuration data is stored in ASConfig.cfg.

FTP Forwarding for Modules Panel

FTP Forwarding for M	odules
,	
An FTP server only nee	eds to be defined when uploading a copy of the items collected by Retain to an external system.
FTP Server	
FTP Security Protocol	unencrypted V
FTP Port	21
FTP Upload Location	
FTP Username	
FTP Password	
Test Connection	

Path: Retain Server Manager > Configuration > Server Configuration > Module Forwarding Tab > FTP Forwarding for Modules Panel

Option, Field, or Sub-panel	Information and/or Action
FTP Server	The IP address or DNS name of the FTP Server.
FTP Security Protocol	The security of the receiving FTP server.
	Options are Unencrypted, SSL, or TLS.
FTP Port	The listening port of the FTP server.
FTP Upload Location	FTP Upload Location is the path to the desired destination directory of the
FTP Username	FTP Server.
FTP Password	—This must be the location as you would view it in an FTP client.
	FTP Username and Password are the login credentials to the FTP Server.
Test Connection button	Click this to test the configuration, and then save the settings by selecting the disk icon at the top right of the page.
	Now the FTP Forwarding option has been configured the FTP option will appear in the module forwarding section of each individual module configured in the system.
	Only the modules which have had the FTP option saved will be able to utilize FTP Forwarding. The feature must be configured in both places in order to function.

 Table 2-23
 Using the FTP Forwarding for Modules Panel

This feature instructs Retain to take a copy of any archived message data to the specified location, when the data item is archived. This feature must be configured here, in Server Configuration as well as selected on the desired system module configuration page.

FTP Forwarding is designed for exporting data to an external FTP server for redundant archival. While the FTP Forwarding service does not have the inherent danger of duplicating data as the SMTP Forwarding feature does, it is important to note that should the exported data be sent through any system the Retain system archives, it will duplicate data in the Retain archive. FTP forwarding simply sends a copy of the data in the format that it is received, (Mime, text, etc.). The FTP Forwarding service is run every 10 minutes, checking for any data queued for delivery.

Requirements

- Separate, working FTP Server
- Module and Server Configuration must both be configured

Configuration

The FTP Forwarding feature must have a configured FTP Server connection before the forward option will appear in the Module configuration pages. To configure the FTP Forwarding option fill out all the required information and then test the connection. Test results will be displayed after the test completes.

For troubleshooting, attempting to FTP from the Retain server to the FTP server may provide useful information. Configuration data is stored in ASConfig.cfg.

REST API Tab

The REST API is an interface that allows third-party applications to input data into the Retain archive. For third-party applications to utilize the REST API, they must have a key provided by OpenText.

Path: Retain Server Manager > Configuration > Server Configuration > REST API Tab

The REST API tab contains the following panels:

- "License Summary Panel" on page 82
- "Submit License Panel" on page 82
- "REST Collectors Panel" on page 83

The REST API is an input protocol only. For Archive security, the API prohibits migrating data out of the Retain Archive. There are also limits placed in each applications API license file to protect the integrity of the data being input into the archive, based on the application.

License Summary Panel

- Licer	nse Summary —		
	,		
Globa	al Settings		
x	API Enabled		True
	License begins		Mon Dec 28 12:02:10 MST 2015
	License expires		Mon Feb 21 10:59:59 MST 2033
	Maximum read requests per minute		100000
	Maximum write requests per minute		60000
	Maximum read requests per applica	tion per minute	10000
	Maximum write requests per applica	tion per minute	6000
	Maximum read requests per user pe	er minute	10000
Annli	cation Settings		
\ppii	cation Settings		
	Application	Retain Worker	
	Application Key	75C1F268-9A0	C9-43C4-BBD5-DB31F856E30C
	Enabled	True	
	License begins	Sat Feb 11 12:	10:32 MST 2017
	License expires	Thu Mar 03 10:	:59:59 MST 2033
	Maximum read requests per minute	100000	
	Maximum write requests per minute	100000	
	Capabilities	Manage, Searc	ch, Insert, Read
	Application	Retain AT&T	
	Application Key		BA-4AD1-9513-5939B097D81F
	Enabled	True	
	License begins	Ŭ	:25:55 MDT 2017
	License expires		:59:59 MST 2037
	Maximum read requests per minute		
	Maximum write requests per minute	6000	

Path: Retain Server Manager > Configuration > Server Configuration > REST API Tab > License Summary Panel

Submit License Panel

Submit License	
Submit License	
Browse No file selected.	
and an an	
Submit License	

Path: Retain Server Manager > Configuration > Server Configuration > REST API Tab > Submit License Panel

To gain a credentialed key for a third party application, contact a OpenText sales representative. Use of the REST API will require a REST API base license, and an application specific license for each desired application.

REST Collectors Panel

REST Collectors	
REST Collectors are given rights to push data	inside of Retain using the REST API.
Collector Name	Add collector

Some modules use the REST API for data collection. You need to create a collector to connect to the message system. You may have multiple REST collectors.

Path: Retain Server Manager > Configuration > Server Configuration > REST API Tab > REST Collectors Panel

Table 2-24 Using the REST Collectors Panel

Option, Field, or Sub-panel	Information and/or Action
Collector Name	A name of your choosing, preferably one that identified the system that will use it to archive to your Retain server.

- Create a REST Collector by providing:
 - 1. The *Collector Name* can be anything you want, but we recommend something easy to identify with the system it connects with. A Key and Secret will be created for the collector. The Key and Secret will be used on the message system side of the system for authentication.
 - 2. Then press "Add collector" to enable the collector.
 - 3. *Export* the collector allows you to export the Key and Secret to disk for use with the message system.
 - 4. Send exported file to your message service provider.
- Delete removes the collector.

SSL Certificates Management Tab

Secure communications requires Retain server to use industry-recognized Certificate Authorities and Self-signed certificates. On upgrading to Retain 23.2, when certificates are expired or become invalid, you are allowed to upload and manage new certificates.

Earlier we supported secure database only with MariaDB and MySQL. Beginning with Retain 23.2, we support secure database with all the supported database types - MariaDB, MySQL, Oracle, PostgreSQL, and MSSQL.

The certificates can be either a lone certificate or a key pair. Each certificate must have a unique name or it will fail to upload. To create a key pair, you need to upload the cert.pem first and then the key.pem and the alias name should be the same for both. If your database type is Oracle DB, upload a single .p12 certificate.

For example, if you are generating a new self-signed certificate files with 3 certificates, CA certificate - ca.pem, Client certificate - client-cert.pem, and Client key - client-key.pem, then

you have to create a key pair. First you have to upload/import the client-cert.pem file, give an alias name to the file. Then, upload the client-key.pem file, give the alias name same as the client-cert.pem file and then upload/import ca.pem with a different alias name.

NOTE: Only self signed certificates must be manually trusted. Registered CA signed certificates are automatically trusted.

Path: Retain Server Manager > Configuration > Server Configuration > SSL Certificates Management Tab

Certificate state	Owner	Issuer	Expiration	Alias/Comment
Trusted	CN=outlook.com, O=Microsoft Corporation, L=Redmond, ST=Washington, C=US	CN=DigiCert Cloud Services CA-1, O=DigiCert Inc, C=US	Tue Jul 25 17:59:59 MDT 2023	JDK CACerts trustor
Trusted	CN=DigiCert Cloud Services CA-1, O=DigiCert Inc, C=US	CN=DigiCert Global Root CA, OU=www.digicert.com, O=DigiCert Inc, C=US	Tue Sep 24 17:59:59 MDT 2030	JDK CACerts trustor
Trusted	CN=download.gwava.com, O=Micro Focus International plc, L=Newbury, C=GB	CN=DigiCert TLS RSA SHA256 2020 CA1, O=DigiCert Inc, C=US	Tue Nov 21 16:59:59 MST 2023	JDK CACerts trustor
Trusted	CN=DigiCert TLS RSA SHA256 2020 CA1, O=DigiCert Inc, C=US	CN=DigiCert Global Root CA, OU=www.digicert.com, O=DigiCert Inc, C=US	Sun Apr 13 17:59:59 MDT 2031	JDK CACerts trustor
Trusted	C=CA, O=GWAVA, OU=Retain, CN=www.gwava.com	C=CA, O=GWAVA, OU=Retain, CN=www.gwava.com	Thu Nov 06 10:07:51 MST 2042	JDK CACerts trustor
Trusted	C=us,ST=ut,O=gwava,CN=gwava-ca	C=us,ST=ut,O=gwava,CN=gwava-ca	Mon Feb 07 05:44:06 MST 2033	retain ca
Trusted	C=us,ST=us,O=gwava,CN=gwava-client	C=us,ST=ut,O=gwava,CN=gwava-ca	Mon Feb 07 05:47:53 MST 2033	retain cert
Trusted	C=CA, O=GWAVA, OU=Retain, CN=www.gwava.com	C=CA, O=GWAVA, OU=Retain, CN=www.gwava.com	Thu Nov 06 10:07:51 MST 2042	solr8 indexer
Not trusted	CN=RETAIN	CN=RETAIN	Mon Apr 01 09:35:55 MDT 2024	Untrusted certificate

 Table 2-25
 SSL Certificates Management Tab

Information and/or Action
Click the browse button to upload a new key and certificate files.
Select the check box to mark the certificate as trusted.
Select the check box to validate all the certificates.

NOTE: Any modification made to the state of the certificate or when the Enable HTTPS Validation checkbox is enabled or disabled, to make the changes effective you have to restart the Tomcat service on the Retain Server.

Synchronize TrustStore for Workers

Beginning with Retain 23.3, Retain Server's TrustStore is shared with local and remote workers. With this, workers can connect to HTTPS-secured messaging systems (like GroupWise or Exchange and so on) and communication through HTTPS will be validated before running the archiving job. The validation is based on the state of the certificate and the HTTPS validation configured on the Server. There is no configuration to be done on the RetainWorker.

The trust store synchronization from server to worker happens when:

- A new worker bootstrap file is uploaded
- During worker poll interval
- When "Refresh job cache now" on the RetainWorker is clicked
- When the "Run Job Now" option is used to run a job

After the truststore is synced to remote workers, restart the Tomcat service on Remote RetainWorker for the changes made on the Retain Server to be effective. When the Tomcat service on Retain Server is restarted, the changes will be available for the local workers.

Begining with Retain 24.1, trust store synchronization on the remote worker happens when you restart the Tomcat service on the Retain Remote Worker.

Management

- "Users" on page 87
- "Groups" on page 101
- "Account Linking" on page 109
- "Device Management Overview" on page 113
- "Mobile Device Management" on page 114
- "Blackberry Device Management" on page 155
- "Jobs" on page 158
- "Re-uploading Bootstrap" on page 162
- "System Log Option (Overview)" on page 164
- "Auditing Option (Overview)" on page 165
- "Deleting Data" on page 168
- "Litigation Hold" on page 177

Users

a0izyu01@exchange2013.qa.gwava.com aaa1 aaauser112 aatestuser aatestuser aatestuser2 acramer ademouserr1 admin2 administrator@exchange2013.qa.gwava.com adminnew adminrouter10 adminrouter17 aesummit2018a@omail.com	Add User Remove User Remove Multiple Users	 The selected user has Administrative rights. This means: The user can see all messages in the database. An 'ordinary' user can only see messages belonging to them. The user may view message content The user may view message metadata
---	--	---

Path: Retain Server Manager > Management > Users

- "Settings Tab" on page 88
- "User Rights Tab" on page 94

- "Mailboxes Tab" on page 97
- "GroupWise Proxy Support" on page 99
- "Creating Users" on page 100
- "Creating a Retain Only User" on page 101

User and Groups Management requires the Manage users and groups or the Assign Rights administrative right.

Settings Tab

Path: Retain Server Manager > Management > Users > Settings tab

 Table 3-1
 Using the Settings tab

Field, Option, or Button	Information and/or Action

Users List

Select a user from the list.

Add User button	 Click to create a new user. See "Creating Users" on page 100
 Remove User and Remove Multiple Users buttons 	 Click to remove users. In the case of users imported from messaging systems, those systems are unaffected.

User-specific Settings Panel

These settings are specific to each user.

Description	 Optional information about the user.
Primary UID	Offline-only accounts usually won't have this.
	 The initial admin account is set to use offline exclusively, so it doesn't have this.
• Expire Account	 This lets the admin set a date when the account will no longer be allowed to log in. When an account expires, the account is not removed from Retain.
 List of groups 	Default is default.
	 Create groups under Groups and they appear as choices here.
	 If you choose to assign users to multiple groups, make sure you understand the explanation in "When Users Belong to Multiple Groups" on page 94.
	 If a listed group displays in red text, that group has been designated as the Default Configuration group for the user.
Remove Group	Click this to remove the selected group.
button	When the change is saved, the user no longer inherits privileges from this group.

Field, Option, or Button	Information and/or Action
Add Groups button	 Click this to display a list of groups.
	Select one or more groups and click OK.
	The user then inherits privileges from the additional groups. Additionally, the groups that are added are eligible to be selected as the Configuration Group for the user.

Inheritable Settings from Group Panel (User context)

These settings can be inherited from the specified Configuration Group. If so, setting information, etc. displays in blue text.

Settings displayed in normal text are set directly in the User account.

Configuration Group	 Initially, no group appears in this field, which means that the default group settings are available to be inherited.
	You can select one group from the groups assigned to this user in the User-specific panel (above).
	The settings under "Inheritable Settings from Group Panel (Group context)" on page 103 are then available to be inherited by the user by selecting the empty slot at the top of each drop-down list. Inherited settings display in blue text to the right of the affected field.
	Alternatively, any of the other selectable settings will override the Configuration Group's setting if they are specifically selected.
Enable Multi-factor	 This must be Enabled for MFA to work for this user.
Authentication	 You can enable the option here, or you can enable it in the user's designated Configuration Group.
 Authentication Method 	If set, this option determines how a user's input to the Retain Login Dialog is processed.
	There are two categories:
	 Preferred: The named authentication method be tried before other valid options are attempted.
	• Exclusive: Only the named authentication method is tried.
	IMPORTANT: The drop-down list displayed contains only the options appropriate for the user type.
blank	If no Authentication Method is selected for a given user, Retain tries to authenticate the username/password by using each method in turn until the attempt either succeeds or fails.

Field, Option, or Button	Information and/or Action
Offline Authentication Preferred	Retain first tries authenticating the username/password against the user's encrypted credentials that were manually entered or that it cached previously.
	 The first time a user authenticates, If a password has not been encrypted and stored previously, offline authentication fails and Retain then tries other options. If the credentials entered match those of a valid backend messaging system, authentication succeeds.
	 When authentication succeeds, the password is encrypted and stored in Retain.
	After that, the user can enter the same credentials and be granted access to Retain whether the backend messaging system is online or not.
	 If the password changes on the backend system and the user enters the old password, offline authentication fails.
	Retain then tries other options and when they succeed, the changed password is encrypted and cached.
	 You can allow or prevent users from changing their internally stored, encrypted password in Retain. Obviously this doesn't affect the password on the backend messaging system. Therefore, you might want to avoid password confusion by not allowing any but manually created, administrative users to do this.
Offline Authentication	Retain only authenticates the username/password against the user's encrypted password. No other methods are tried.
Exclusive	 Initial passwords must have either been manually set or encrypted and cached when another authentication option was set for the user.
	While this option is in force, only manual password changes are possible.
	 You can allow or prevent users from changing their internally stored, encrypted password by using the Allow User to Change Password dropdown.
	 If authentication fails, Retain reports that the login attempt failed.
LDAP Authentication (GW) Preferred	IMPORTANT: You must have previously configured GW LDAP Authentication in the GroupWise module > LDAP Tab.
	 Retain first tries to authenticate the username/password against the configured GroupWise LDAP service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain attempts other applicable methods of authentication, such as GW SOAP Authentication and Offline Authentication.

Field, Option, or Button	Information and/or Action
LDAP Authentication (GW) Exclusive	IMPORTANT: You must have previously configured GW LDAP Authentication in the GroupWise module > LDAP Tab.
	 Retain only authenticates the username/password against the configured GroupWise LDAP service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain reports that the login attempt failed.
SOAP Authentication (GW) Preferred	IMPORTANT: You must have previously configured GW SOAP Authentication in the GroupWise module > SOAP Tab.
	 Retain first tries to authenticate the username/password against the configured GroupWise SOAP service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain attempts other applicable methods of authentication, such as GW LDAP Authentication and Offline Authentication.
SOAP Authentication (GW) Exclusive	IMPORTANT: You must have previously configured GW SOAP Authentication in the GroupWise module > SOAP Tab.
	 Retain only authenticates the username/password against the configured GroupWise SOAP service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain reports that the login attempt failed.
Exchange Authentication Preferred	IMPORTANT: This option is generally not recommended for Office 365 users. If you choose it, make sure you understand the caveats explained in "When Google and Office 365 Systems Require an App Password" in <i>OpenText Retain CE 24.1: How Retain Works</i> .
	 Retain tries to authenticate the username/password against the configured Exchange service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain attempts Offline Authentication, which either succeeds and the login is accepted, or fails and the login attempt is rejected.
Exchange Authentication Exclusive	IMPORTANT: This option is generally not recommended for Office 365 users. If you choose it, make sure you understand the caveats explained in "When Google and Office 365 Systems Require an App Password" in <i>OpenText Retain CE 24.1: How Retain Works</i> .
	 Retain tries to authenticate the username/password against the configured Exchange service.
	 If authentication fails, the login attempt is rejected.

Field, Option, or Button	Information and/or Action
Google IMAP Preferred	IMPORTANT: This option is generally not recommended for GSuite users. If you choose it, make sure you understand the caveats explained in "When Google and Office 365 Systems Require an App Password" in <i>OpenText Retain CE 24.1: How Retain Works</i> .
	 Retain tries to authenticate the username/password against the configured Google service.
	 If authentication succeeds, the password is encrypted and cached in Retain.
	 If authentication fails, Retain attempts Offline Authentication, which either succeeds and the login is accepted, or fails and the login attempt is rejected.
Google IMAP Exclusive	IMPORTANT: This option is generally not recommended for GSuite users. If you choose it, make sure you understand the caveats explained in "When Google and Office 365 Systems Require an App Password" in <i>OpenText Retain CE 24.1: How Retain Works</i> .
	 Retain tries to authenticate the username/password against the configured Google service.
	 If authentication fails, the login attempt is rejected.
Google OpenID	This option assumes the following:
Connect Exclusive	 You have configured your GSuite system to provide Two-factor Authentication through OpenID Connect.
	• You have configured Retain to connect with your GSuite (Google) system.
	When you set this option for users, the following occurs:
	 The only authentication option that Retain accepts from the affected users is the Login with Google button.
	 When a user clicks the button, Retain then turns the authentication process over to Google until authentication succeeds or fails.
	IMPORTANT: If you don't apply this option, your GSuite users can choose to enter a username and password (Google IMAP) rather than clicking the Login Using Google button.
	You are responsible to inform them that they must enter their assigned App Password rather than the password associated with the GSuite account. See "When Google and Office 365 Systems Require an App Password" in <i>OpenText Retain CE 24.1: How Retain Works</i> .

Field, Option, or Button	Information and/or Action
Microsoft OpenID Connect Exclusive	This option assumes the following:
	 You have configured your Office 365 system to provide Two-factor Authentication through OpenID Connect.
	 You have configured Retain to connect with your Office 365 system.
	When you set this option for users, the following occurs:
	 The only authentication option that Retain accepts from the affected users is the Login with Office 365 button.
	 When a user clicks the button, Retain then turns the authentication process over to Office 365 until authentication succeeds or fails.
	IMPORTANT: If you don't apply this option, your Office 365 users can choose to enter a username and password (Exchange Authentication) rather than clicking the Login Using Office 365 button.
	You are responsible to inform them that they must enter their assigned App Password rather than the password associated with the Office 365 account. See "When Google and Office 365 Systems Require an App Password" in <i>OpenText</i> <i>Retain CE 24.1: How Retain Works</i> .
 Language 	 The language used in the search interface for this user.
	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.
Change Internal	 You can specify and confirm a new user password.
Password	 If Allow User to Change Password is set to yes, the user can reset the password in Retain.
Forwarded Messages	 The default comment for forwarding messages.
Comment	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.
Forwarded Messages	 Automatically append the specified address to forwarded messages.
Internet Domain	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.
Date Display Format	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.
• Time Display Format	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.
Display Number of	 How many items to display per page.
Messages 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.

Field, Option, or Button	Information and/or Action
Message Age Display	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.
 View Message Format 	 Whether to display HTML format when possible or always display text regardless of actual format.
	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.
 Session Timeout (Minutes) 	 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.

When Users Belong to Multiple Groups

The following points apply:

- Access Rights: Users inherit the access rights assigned to each group they belong to, in addition to their explicitly assigned rights and attributes. If privilege-level differences exist between assigned groups, the highest privilege level applies.
- Mailboxes: In addition to their primary mailbox, users have access to all mailboxes available to the groups that they belong to.
- Inheritable Attributes: Several attributes that affect users can be assigned directly in the user's account or inherited from a designated Configuration Group. For more information about these attributes, see "Inheritable Settings from Group Panel (User context)" on page 89 and. "Inheritable Settings from Group Panel (Group context)" on page 103.

User Rights Tab

When an administrator-level right is granted to a user, that user will see that right in the management console when they log into Retain. If a right that the full Administrator can view is missing from the menu of that user, they are missing that right. To view and have access to that option, they must have the missing right granted to that user. If you have performed an upgrade and are missing options, check for a missing administrator right.

- Control what rights you grant to the user here. Check the box to enable the right
- These are extra rights
 - You don't need any of them for the user to access their mailboxes
 - You do need them to do "special things". The first admin account gets them all
- Retain first checks your assigned group and you start with the Group Rights
- The rights you explicitly set here are added to the group rights for the user's effective rights
- This way, you can control users as a group and give different rights to different groups
- If you don't have rights to an administrative option, it won't appear on the left

It should be clear from this screen that there is no such thing as an Administrator per se in Retain. Instead, some users simply have more rights to do more things than others. A distinction is made between Administrator level rights (which allow a user global system wide power) and User level rights, but any user can have zero or more rights in either category. The Administrator you created in the setup wizard was simply a user account with all of the Administrator level rights granted by default.

User Rights Rights explicitly granted to the user. Administrator level rights Search all mailboxes Publish messages Restore messages [any mailbox] See confidential items [other mailboxes] View all Messages View Message Content View Message Content View Message Metadata Manage Server Encryption Management Access Reporting and Monitoring Server Assign Rights Deletion Manager Deletion Manager Deletion Manager Deletion Manager Manage Users and Groups Manage Users and Groups Manage Workers, Schedules, Profiles, Jobs User level rights View/Save attachments View personal audit log Delete messages [other mailboxes] Delete messages [own mailbox] Export messages Forward messages Print messages Read configuration (Redline) Restore messages [own mailbox] Apply confidential tag [own mailbox] Apply confidential tag [own mailbox]	Settings	User Rights	Mailboxes	
Rights explicitly granted to the user. Administrator level rights Search all mailboxes Publish messages Restore messages [any mailbox] See confidential items [other mailboxes] View all Messages View Message Content View Message Metadata Manage Server Encryption Management Access Reporting and Monitoring Server Assign Rights Access all audit logs Deletion Manager Device Management Add, edit, remove global tag definitions Apply or remove litigation hold Manage Users and Groups Manage Workers, Schedules, Profiles, Jobs User level rights View/Save attachments View personal audit log Delete messages [other mailboxes] Delete messages [other mailboxes] Delete messages [other mailboxes] Peter messages Forward messages Print messages Print messages Petror messages [own mailbox] Restore messages [own mailbox] Apply confidential tag [own mailbox]	— User Rights –			
Administrator level rights Search all mailboxes Publish messages Restore messages [any mailbox] See confidential items [other mailboxes] View all Messages View Message Content View Message Metadata Manage Server Encryption Management Access Reporting and Monitoring Server Assign Rights Access all audit logs Deletion Manager Device Management Add, edit, remove global tag definitions Apply or remove litigation hold Manage Users and Groups Manage Workers, Schedules, Profiles, Jobs User level rights Apply confidential tag [other mailboxes] View/Save attachments View personal audit log Delete messages [own mailbox] Export messages Forward messages Print messages Print messages Print messages Apply confidential tag [own mailbox]				
Search all mailboxes Publish messages Restore messages [any mailbox] See confidential items [other mailboxes] View all Messages View Message Content View Message Metadata Manage Server Encryption Management Access Reporting and Monitoring Server Assign Rights Access all audit logs Deletion Manager Device Management Add, edit, remove global tag definitions Apply or remove litigation hold Manage Users and Groups Manage Workers, Schedules, Profiles, Jobs User level rights Apply confidential tag [other mailboxes] View personal audit log Delete messages [own mailbox] Export messages Forward messages Print messages Read configuration (Redline) Restore messages [own mailbox]	Rights explicitly	granted to the u	iser.	
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	Restore m	essages [own ma	ailbox]	
Add, edit, remove user tag definitions	Apply cont	fidential tag [owr	mailbox]	
	🗆 Add, edit,	remove user tag	definitions	

Administrator-level Rights

• Search all mailboxes: also grants View all Messages rights.

- Publish messages: allows user to connect to Retain with the Publisher tool.
- Restore messages [any mailbox]: returns message to live mailbox in Exchange, adds stub to GroupWise mailbox.
- See confidential items [other mailboxes]: Allows users to view items which others have tagged as confidential
- View all messages: All messages and content in Search Messages.
 - View Message Content: Only the message body and attachments.
 - View Message Metadata: Only the properties of the message.
- Manage Server: Allows user access to the Configuration section of the Retain Server and access diagnostic utilities.
 - Encryption Management: Generate and revoke storage encryption keys under Server Configuration | Storage.
- Access Reporting and Monitoring Server
- Assign Rights: Can assign rights to other users.
- Access all audit logs: Enables access to the audit logs.
- Deletion Manager: Access to Item and Mailbox Deletion.
- Device Management: May add, remove, and edit devices.
- Add, edit, remove global tag definitions: Allows manipulation of global tags in the view messages interface.
- Apply or remove litigation hold: On individual users or groups.
- Manage Users and Groups: Create users and groups and modify rights.
- Manage Workers, Schedules, Profiles, Jobs: Control archive jobs.

NOTE: Only users with administrative rights will see the administrator's screen on login. Non-admin users are simply forwarded to the Search Interface.

User-level Rights

All user level rights are strictly optional, and add functionality. None are needed to access your own mailbox and other mailboxes assigned to you. The "Default" group grants Forwarding, View Attachment, and Printing rights. Note: There is no way to perfectly block printing in a web browser, so using this feature should not be taken as a 100% guarantee that users won't be able to print. Nonetheless, for most users, it is effective. Rights marked [other mailbox] refers to other mailboxes the user has been granted rights to as explained below for the Mailboxes tab.

- Apply confidential tag [other mailboxes]
- View/Save attachments
- View personal audit log
- Delete messages [other mailboxes]
- Delete messages [own mailbox]
- Export messages: Enables the export to PDF button.
- Forward messages

- Print messages
- Read configuration (Redline)
- Restore messages [own mailbox]
- Apply confidential tag [own mailbox]
- Add, edit, remove user tag definitions

The Read Configuration right (GroupWise Reporting and Monitoring Integration)

If you are integrating with GroupWise Reporting and Monitoring (GWRM) product, you will need to create a user account so that GWRM can log in and retrieve monitoring information. We recommend the following settings:

- Account Never Expires
- Offline Password Authentication is required. (use exclusively) (be sure to set the password)
- Read Configuration (Redline) right.

Mailboxes Tab

Select the mailboxes this user will be able to access in addition to their own. This allows one user to access another user's mailbox.

Settings	User Rights	Mailboxes	
Mailboxes			
THEORES			
messages addre	essed to these o en rights. An ad	e-mail address	primary mailbox that the user may access. A non-admin user will only view es (and to their primary mailbox), and might be able to forward/delete <i>rch All Mailboxes</i> rights can access all mailboxes and perform any operation in
Currently S	elected		
🗙 admin	istrator		
Criteria —			
First Name	▼ beg	jins with	▼ Search
System Gro	upWise 🔻	Show only u	users 🔲 Show only recently cached items 🔲
Add Select	ed Add A		
Address Bo	ok		
Enter criteria	a to search the	cached addre	ssbook.
the Search Inter- Currently S × admin First Name System Groo Add Select	erface. elected istrator upWise ted Add A	ins with • Show only u	Search Users Show only recently cached items

Granting Rights to All Mailboxes

You may want some users to be able to search through more than just their own mailbox. Administrators have the "Search All Mailboxes" under User Rights as a right which gives them access to everything. If that is too much access for that user you can grant rights to individual mailboxes.

Granting Rights to Individual Mailboxes

You may grant rights to some users so they can access just certain mailboxes. For example we can give the facilities manager rights to two of his workers.

User ID facilities-r	management		
Settings	User Rights	Mailboxes	
Mailboxes			
messages addre	ssed to these e	e-mail address	rimary mailbox that the user may access. A non-admin user will only view as (and to their primary mailbox), and might be able to forward/delete messages <i>boxes</i> rights can access all mailboxes and perform any operation in the Search
Currently Se			
× loki odi			
	ainson		
- Criteria			
Display Name	∨ beg	ins with	✓ Search
Show only us	ers 🗹 Show (only recently o	cached items
Add Selecte	ed Add A	I	
⊢ Address Boo	ok		
Enter criteria	to search the	cached addres	sbook.

In the example above, the user has explicit rights to two mailboxes. These mailboxes can be taken away from the user simply by clicking on the red 'X'.

Address Book Selector

Adding users to the list is done using the Address Book selector. In the criteria section, you may enter information to search for a mailbox or a set of mailboxes. The search results will appear in the Address Book section. Each listed entry has a check box you can use to select that mailbox for addition to the list. Once you are done selecting, click Add Selected Items to add those mailboxes to your list of searchable mailboxes.

This interface is utilized in various other areas, but is described here.

⊢ Criteria	
First Name begins with	
System GroupWise Show only users Show only recently cached items	
Add Selected Add All	

		Pre	evious 122	3 4 5 25	Next	go to page ≑
<u>First</u>	<u>Last</u>	Mail Server	<u>Mailbox</u>	<u>Dept.</u>	Туре	<u>Domain</u>
retain		Exchange2013	retain		U	ExchangeQA
Administrator		Exchange2013	Administrator		U	ExchangeQA
Archive310		LXPO	Archive310		R	LXDom
BladP		GW7NTPO	BladP		U	GW7NTDom
CobraCal		CBIPO	CobraCal		R	CBIDOMAIN
Conf 1		CBIPO	Conf 1		R	CBIDOMAIN
Conf 2		CBIPO	Conf 2		R	CBIDOMAIN

It shows the currently selected items at the top, and lets you delete an item by clicking the red X.

(The New Mailbox selector in the Search Interface is an exception; just choose another item)

Adding Mailboxes

- 1. Choose between the configured module systems
- 2. Fill out basic criteria to narrow your search results (or no criteria for the first 100)
- 3. Click Search
- 4. The results up to a maximum of 100 are displayed
- 5. The user can then page back and forth among the first 5 pages of results
- 6. Choose which of the results you want to add to the selected list
- 7. Click Add Selected Items

Notes: You can restrict to just Users (skipping Resources). You can show only recently cached items (last 10 days). The search is not case sensitive.

About "Show only recently cached items"

This option restricts the list of items shown in the selector to those with items stored within the last 10 days. In user/group management, it restricts the list to users who have logged in to the live Mail system within the last 10 days. The idea is to show only current items. If you DO want to see all items regardless of whether they've shown activity within the last 10 days, just uncheck this option.

GroupWise Proxy Support

Retain supports the GroupWise proxy function. To enable it, check the box in the Module Configuration section. (NOTE: using proxy is useless if the user you wish to enable this function for is set to use offline authentication – found under the core settings of the user) **NOTE:** The 'all user rights access' in GroupWise is not supported.

This function is used to enable a user to access the mailbox of another user. For example, if user B grants the right to user A to access their mailbox in the GroupWise client, then user A can "proxy" in to user B's mailbox.

Much the same way, if user A has proxy rights into user B's mailbox in GroupWise, and the function is enabled in Retain, then user A may select user B's mailbox for browsing or may search through user B's mailbox in the Search Screen.

In Retain, it is the MAIL READ right which grants access.

Retain uses the list of available mailboxes shown in the GroupWise client to determine which mailboxes will be made available to the logged in user (user A in our example). Thus, it is important that user A has logged into user B's mailbox as proxy using the GroupWise client before doing this in Retain. While user B might have granted the rights to user A, if user A has not yet logged in as proxy to user B's mailbox with GroupWise, then user B will not appear in user A's list of available accounts to proxy into.

Retain checks these proxy rights the first time you access a proxy users mailbox, then caches the information for 7 days as configured in the server Configuration – Miscellaneous tab. (Default is 7 days.)

If you have access to another mailbox by virtue of GroupWise proxy, then you will see that mailbox appear in the mailbox selector in the search screen or you may search through that mailbox as well.

Creating Users

The primary purpose of a user account is to store their preferences, rights, mailboxes to which they have access, and authentication information.

Retain allows two types of users:

 Associated Messaging System Users: Retain adds these in conjunction with archiving their message content.

These users authenticate to Retain using their messaging system credentials. For example, GroupWise users authenticate using SOAP, Exchange users authenticate using Active Directory credentials.

• Retain-Only Users: You create these in Retain, independent of any message system.

These users authenticate using what Retain calls a Offline Passwords, which you create for them. Offline means that no connection to a separate system is required for authentication.

Initially, both of these user types belong only to the group named default, but you can add them to other groups that you create as needed.

Offline Passwords

You can allow users to search through the Retain archives who are not part of the mail system, such as an independent auditor, a lawyer, or a user that has been deleted from the system.

Offline passwords are stored in Retain's control database.

All Authentication Methods Provide Access

How a user authenticates has no bearing on their access rights within Retain. An administrator who possesses the Assign Rights administrative right can assign all pertinent rights to any user on the system.

Users can be assigned access to more than one mailbox. Retain-only users must be given access permissions for at least one mailbox to perform searches. Users who are assigned "Search All Mailboxes" rights have access to all users' mailboxes.

NOTE: GroupWise Proxy support only works for users who authenticate via the GroupWise SOAP protocol.

Creating a Retain Only User

1 Click the "Add User" button.

Core Settings	
Comment	
Authentication Method	Offline Authentication V Use Exclusively
Primary UID (links your rights)	ea776d08-8126-495d-ba08-27e7e2a3d2b2
Change Internal Password	New Confirm
	Prevent user from changing
Language	English v
Expire Account	□ Date: 2020 ∨ Jan ∨ 09 ∨ 🛗

- 2 Enter a new user name and then fill out the options under each tab.
- **3** When you are done, click the save changes disk icon at the upper right

Groups

After you have created users, you can group them for the purpose of assigning the same settings and rights to everyone in the group.

For example, you could create a group named "Auditors" and assign the group rights to specific functions that an auditor needs.

Or you could create a group named GW-MFA and enable Multi-factor Authentication as an inheritable setting. GroupWise and on-prem Exchange users with GW-MFA as their assigned Configuration Group, could then inherit the setting and access Retain using multi-factor authentication (MFA).

a Groups	💾 🗘 🚺
IMPORTANT: Retain automatically assigns new users to the "default" group. As a best practice, consider assigning the default group only those access rights that you want all users to have.	
	7
새 그룹 ademogroup1 ademogroup2 can forward can publish can search all celltrust_group default group1 HTML View l10n-alvin-01-es-üöäóñéàôèêáíéčáéúážHoвая新建文新資ルダ l10n-group1 l10n-group1	Add Group Remove Group
Group ademogroup1 loaded.	
Settings Group Rights Mailboxes	

Path: Retain Server Manager > Management > Groups

The groups page lists all defined groups, including the group named default, which is created when you install Retain.

Users are automatically assigned to default when they are first created. If you want users to be part of other groups, you can create them and then add users to them.

Use the information in the following sections to manage the groups on your Retain system.

- "Settings Tab" on page 102
- "Group Rights Tab" on page 105
- "MailboxesTab" on page 108
- "Creating a New Group" on page 108

Settings Tab

Path: Retain Server Manager > Management > Groups > Settings tab

Table 3-2Using the Settings tab

Field, Option, or Button Information and/or Action

Group-specific Settings Panel

These settings are specific to each group.

Changes take effect when you click Save.

eld, Option, or Button	Information and/or Action
Description	 Optional information about the group.
Group Membership	 A list of users belonging to the group.
 Configuration Group Membership 	 A list of users who have this group assigned as their Configuration Group. Before users can be assigned here, they must be listed in the Group Membership list. If they are subsequently removed from the Group Membership list, they are automatically removed from this list.
	 Adding a user to this list, automatically sets this group as the user's Configuration Group in the Inheritable Settings from Group Panel (User context).
	 Setting this group as the Configuration Group for multiple users is more easily accomplished by adding the users here than by accessing each user's Inheritable Settings from Group panel individually and then selecting this group.
Remove Member buttons	Click this to remove the selected users.
Add Members button	Click this to display a list of users.
	 Select one or more users and click OK.

Inheritable Settings from Group Panel (Group context)

The settings specified for the following fields can be inherited by users who have this group selected as their Configuration Group.

Settings you make in this panel are only potentially effective if this group is selected as a User's Configuration Group and another setting made in the user's configuration doesn't override the setting.

 Language 	 The language used in the search interface for this user.
	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
 Allow User to Change Password 	 This setting controls whether users are able to store their internal password.

Field, Option, or Button	Information and/or Action
 Authentication Method 	 Users can inherit this setting if this group is their specified Configuration Group:
	 Offline Authentication: Credentials stored within Retain, any type of user
	 If you use this authentication method, store the password here.
	 It can be changed as needed.
	 You can prevent users from changing it.
	 Passwords are always stored in an encrypted format - never in clear text.
	 LDAP Authentication (GW): Must be set up in the GroupWise module LDAP Tab.
	 SOAP Authentication (GW): Users are automatically entered into Retain's user list
	 Exchange Authentication: Users are automatically entered into Retain's user list
	 Google IMAP: Google users are authenticated through IMAP to the Google system
	 Use Exclusively: Allows the user to only use one type of authentication. If this setting is not checked, it will try one authentication and if that is unsuccessful, it will try another
• Enable Multi-factor Authentication	 GroupWise and on-prem Exchange users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
Forwarded Messages	The default comment for forwarding messages.
Comment	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
Forwarded Messages	 Automatically append the specified address to forwarded messages.
Internet Domain	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
• Date Display Format	 How to display dates.
	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
• Time Display Format	 How to display time.
	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
Display Number of	 How many items to display per page.
Messages Per Page	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.

Field, Option, or Button	Information and/or Action
Message Age Display	 Default date filter for searching. Can be changed on the fly.
	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
 View Message Format 	 Whether to display HTML format when possible or always display text regardless of actual format.
	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
Session Timeout	 A value between 10 and 480 minutes.
(Minutes)	Users can inherit this value if this group is selected as their Configuration Group and they haven't selected an alternative value.
	Group and they haven't selected an alternative value.

Group Rights Tab

Group rights are the same as user rights "User Rights Tab" on page 94, just applied to the entire group.

Group Rights

Rights granted to the group. Members of the group will inherit these rights, as well as ones explicitly	ly assigned to them.
---	----------------------

Administrator level rights

- Search all mailboxes Publish messages Restore messages [any mailbox] See confidential items [other mailboxes] View all Messages View Message Content View Message Metadata Manage Server Encryption Management Access Reporting and Monitoring Server Assign Rights Access all audit logs Deletion Manager Device Management Add, edit, remove global tag definitions Apply or remove litigation hold Manage Users and Groups Manage Workers, Schedules, Profiles, Jobs User level rights Apply confidential tag [other mailboxes] View/Save attachments View personal audit log Delete messages [other mailboxes] Delete messages [own mailbox] Export messages Forward messages Print messages Read configuration (Redline) Restore messages [own mailbox] Apply confidential tag [own mailbox]
 - Add, edit, remove user tag definitions

In this tab, you define all the rights that will be common to all members of the group. These rights are ADDITIVE and will be in ADDITION to the rights you have explicitly given to the individual user.

For this reason, if you want to manage users as a group, you would typically not assign any individual rights. Rather, you would assign rights to their group. These rights have all the same meanings and functions as the user rights.

To log into and manage or monitor Workers, a User or Group must have the manage workers, Schedules, Profiles, Jobs right. To set or work with the Deletion Manager, the user must likewise have the Deletion Manager right, or they will not be able to modify those settings. There are, however, certain rights which implicitly grant other rights. For example, granting a Group the Restore Messages [Any Mailbox] right automatically grants the Restore Messages [Own Mailbox] right.

TIPS

Typically, you will not want to grant GroupWise Reporting and Monitoring rights to a group, but in a situation where you have more than one GroupWise Reporting and Monitoring control center and you want to see which one is monitoring, group-level GroupWise Reporting and Monitoring rights would be appropriate.

Typically, you will want to make the default group's rights rather restrictive, granting very limited access by default. If you wanted a user to have more rights, you would simply assign them to another group or you could assign additional explicit rights.

By using groups, you can have groups of individuals with rights to totally different sets of archives. Other than their own mailboxes, users only get rights to the mailboxes that you grant to them.

MailboxesTab

Settings	Group Rights	Mailboxes	
Mailboxes			
These are additional mailboxes beyond the primary mailbox that the members of the group 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 <i>Search All Mailboxes</i> rights can access all mailboxes and perform any operation in the Search Interface.			
Include these objects:			
BES10 (BlackBerry) Add Mail Server			
Currently Selected			
First Name	▼ begin	s with	▼ Search
System GroupWise Show only users Show only recently cached items Add Selected Add All			
- Address Boo			
Enter criteria to search the cached addressbook.			

- This screen works exactly like the user's access to mailboxes. Please see the user's mailbox section for details on how to select which mailbox or mailboxes to assign to the group.
- You use the address book selector to choose which mailbox or mailboxes to give the group access to.
- By default, groups have access to NO mailboxes; users may only access their own mailboxes. If the user exists only in Retain (no GroupWise account) and their group has access to no mailboxes, then they will have access to no mailbox either.
- Only give group access to mailboxes when you want all members of the group to be able to access a particular mailbox. Some examples could include a general sales account or accounts being audited by a group of auditors, a workgroup needing to access each other's archives, and so on.

Creating a New Group

If you want to create a new group, simply

1. Click "Add Group"

- 2. Type the name in "Group"
- 3. Change the properties of the group in the tabs below
- 4. Click "Save Changes"

Account Linking

- "Link Accounts" on page 109
- "Split Accounts" on page 111

Account linking allows user accounts to be linked together. This is used when you have migrated from one email system to another and you wish to allow users to access their previous data.

A report may be downloaded by pressing the "Generate Account Reports" button.

If you want to allow one user to access the archived mailbox of another user, use the Mailboxes tab of Users Management section "Mailboxes Tab" on page 97.

There are two functions: Link accounts, which will bring accounts together and split accounts which will separate accounts.

Link Accounts

When you add a new email module Retain will ask you if you wish to link accounts. If you agree, you will be taken to the Account Linking page.

Account Link	ing					🗂 🗘 🚺
Link accounts	Split accounts					Generate Account Reports
Manually select acco	unts for linking:				Accounts to be linked manually:	
Module: All	Y		State: All		<no accounts="" selected=""></no>	
Search accounts						
	ministrator@sf.gwava.net)	Exchange-142		add ^		
	doc.mf.net) Groupwise-1			add		
	n@doc.mf.net) Groupwise			800		
	e@doc ml.net) Groupwise			800		
	er@doc.mf.net) Groupwis			800		
	lakota@doc.mf.net) Group			. 800		
	n@doc.mf.net) Groupwise			800		
	finley@doc mf net) Group			add		
	19@sf gwava net) Exchan	ge-142 gunter@doc.mf.net) Groupwise-1		edd		
	e O Malley-Callagnan Jr. (z (hayden@doc.mf.net) G			add		
			da83218bcf262f8671@sf.gwava.net) Exchange-142	add add		
			b/ea89280228c2c85d4@sf.gwava.net) Exchange-142	edd	Add to linking queue	Clear
			75b036cdc7ec995f17@sf.gwava.net) Exchange-142	800		
	den@doc mf net) Groupw			add		
	kamryn@doc.mf.net) Grou			bbe	Automated scanning	
	@sf gwava net) Exchange-			855	Match EMail Address Start scanning with automated linker	
Linking queue:					Sourcesonning may approve a minor	
 Linking queue is 	smpty>					
Process linking que	ue					Clear

There are two ways to link accounts: automatically and manually.

Automatic Linking

Automatic linking will attempt to link accounts by a selected criteria.

Account Link	ing			<u> </u>
Link accounts	Split accounts			Generate Account Report
Manually select acco	unts for linking:		Accounts to be linked manually:	
Module: All	¥.	State: All	«No accounts selected»	
thor				
Thor Odinson (tho	r@sf.doc.mf.net) Groupwise-1	80		
thor odinson (thor)	@sf.gwava.net) Exchange-142	205		
			Add to Inlang queue Automated scanning: Math by First and Latt Name Start scanning with automated linker.	Gear
Linking queue:				
× thor odinse	n (Exchange-142) 🖙 thor odinson (Groupwise-1)			
	er (Exchange-142) 🗢 odin allfather (Groupwise-1)			
Process linking que	ue			Clear

- 1. Select one of the criteria:
 - Match EMail Address
 - Match Display Name
 - Match by First and Last Name
 - Match by Username
- 2. Press the "Start scanning with automated linker" button. Matches will be added to the Linking queue.
- 3. You may select a different scan criteria and scan again.
- 4. You may remove incorrect links by pressing the red X next to the account.
- 5. Press the "Process linking queue" button to link the accounts.

Manual Linking

You may also link accounts manually. For example if the user had a name change during the migration.

- 1. Select an account from the "Manually select accounts for linking:" pane, and press the "add" button. It will now appear in the "Accounts to be linked manually:" pane.
- 2. Select another account and press "add."

C Account Linking		E 0
Link accounts Split accounts		Generate Account Report
flanually select accounts for linking:		Accounts to be linked manually:
Module All State All	×	★ frigg allmother.frigg@sf.gwava.net (d57f9f65-2853-4ca4-a778-fea16611c981)
Search accounts		Frigg.frigg@sf.doc.mf.net (280C7D00-02A8-0000-816D-796437323664)
Administrator (administrator@sf.gwava.net) Exchange-142	800 ^	
Aiden Li (aiden@doc.mf.net) Groupwise-1	add	
Alan Smithee (alan@doc mf.net) Groupwise-1	add	
Baldr (baldr@sf.doc.mf.net) Groupwise-1	add	
Blake Zhang (blake@doc.mf.net) Groupwise-1	800	
Carter Wang (carter@doc.mf.net) Groupwise-1	add	
Dakota Nguyen (dakota@doc.mf.net) Groupwise-1	405	
Eden Garcia (eden@doc.mf.net) Groupwise-1	806	
Finley Gonzalez (finley@doc.mf.net) Groupwise-1	800	
Freyja Allmother (freyja@sf.doc.mf.net) Groupwise-1	add	
Frigg (higg@sf.doc.ml.net) Groupwise-1	800	
Not linked		Add to linking queue Clear
frigg allmother (frigg@sf gwava net) Exchange-142	att	Not to mixing queue
Fryr (fryn@sf.doc mil net) Groupwise-1	855	
Günter Scunthorpe O'Malley-Callaghan Jr. (gunter@doc.mf.net) Groupwise-1	800	Automated scanning
Hayden Hernandez (hayden@doc mf.net) Groupwise-1	800	Match by First and Last Name
HealthMailboxd390f2cf0ffb457062cb2cfcadbdde38 (healthmailbox59643d6716b345da83216bcf262f6671(@sf.gwava.net) Exchange-142	add w	Start scanning with automated linker

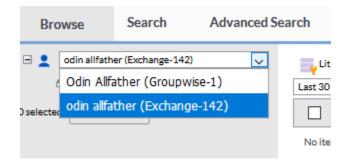
3. Press the "Add to linking queue" button to add the selected accounts to the linking queue. You may press the red X to remove a link from the queue.

Linking qu	ueue:		
× 🖹 1.	frigg allmother (Exchange-142)	0	Freyja Allmother (Groupwise-1)
Process	linking queue		

4. Press the "Process linking queue" button to link the accounts in the queue.

Verify Linking

Verify that this worked by running an archive job on the new server with one of the linked or all accounts. You should see a drop down menu to switch between the accounts.



Split Accounts

Accounts may also be split so the archive mailboxes are no longer associated with each other.

Account Linking		💾 🗘 🕕
Link accounts Split accounts		Generate Account Reports
Manually select accounts for splitting:	i F	Remove accounts from link:
Module: All		 frigg allmother,frigg@sf.gwava.net (d57f9f65-2853-4 Freyja Allmother,freyja@sf.doc.mf.net (F26CA381-0
Search accounts		Frigg,frigg@sf.doc.mf.net (2B0C7D00-02A8-0000-8)
Freyja Allmother (freyja@sf.doc.mf.net) Groupwis	e-1 edit split	
Frigg (frigg@sf.doc.mf.net) Groupwise-1	edit split	
frigg allmother (frigg@sf.gwava.net) Exchange-1-	2 edit split	
Odin Allfather (odin@sf.doc.mf.net) Groupwise-1	edit split	
odin allfather (odin@sf.gwava.net) Exchange-142	edit split	
Thor Odinson (thor@sf.doc.mf.net) Groupwise-1	edit split	
thor odinson (thor@sf.gwava.net) Exchange-142	edit split	
Split All In case you want to split all account linkings in Reta	in, you can do so by pressing the buttor	n "Split All".

Splitting Accounts Automatically

You may split all links between all accounts by pressing the "Split All" button at the bottom of the page.

Splitting Accounts Manually

Existing links will be shown under the "Manually select accounts for splitting:" pane.

Split all links between an account by pressing the "split" button next to one of the account.

Editing Links

Links between accounts may be edited:

- 1. Select a link to edit from the "Manually select accounts for splitting:" pane
- 2. Press "edit" next to one of the accounts to load it into the "Remove accounts from link:" pane. For this example Frigg was added incorrectly to Freyja.

Manually select accounts for splitting:	Remove accounts from link:		
Module: All	edit edit edit edit	split split split split	 frigg allmother,frigg@sf.gwava.net (d57f9f65-2853 Freyja Allmother,freyja@sf.doc.mf.net (F26CA381-0 Frigg,frigg@sf.doc.mf.net (2B0C7D00-02A8-0000-8
odin allfather (odin@sf.gwava.net) Exchange-142	edit	split	Apply changes

- 3. Press the "Apply changes" button to split the link.
- 4. Verify by going into Browse Messages and changing to the Freyja account and finding no drop down menu to the other accounts.

Device Management Overview

- "Searching for Devices" on page 114
- "Deleting Devices" on page 114
- "Generating Reports" on page 114

Retain manages Blackberry and mobile devices such as Android and iOS devices.

Management	
Users	
Groups	
Device Management	
Mobile	
BlackBerry	
Litigation Hold	

In the Device Manager Interface devices can be:

- Added
- Removed
- Reported on

NOTE: Connection information from Server Configuration | Communications tab | Retain Server Connection panel will be used. If users will travel internationally, it is important to set the Retain Server Port to port 80 as port 48080 is blocked by telecom companies across borders.

Searching for Devices

Use the search text box to filter devices.

•		
3		

This is a "Starts with..." type of search. You may search by Enrollment Code, Display Name and Email Address.

Clicking on a column can change the sort direction.

Deleting Devices

The *Delete Device* button will only remove the selected device or devices from device management, but will not remove the data from the Retain archive.

× Delete Devices

To remove data you would have to use Data Removal as described in "Deleting Data" on page 168.

Generating Reports

The *Generate Report* button will take open a new tab or window to the Reporting and Monitoring server and open a Device Management Report configuration page.

Generate Report

See Reporting and Monitoring Device Management Report "Device Management" on page 208 for more information.

Mobile Device Management

- "Mobile Device Management Overview" on page 114
- "Deleting Mobile Devices" on page 155

Mobile Device Management Overview

- "Provisioning Mobile Devices" on page 115
- "Registering Mobile Devices" on page 121

Mobile devices are managed through the device management interface on the Mobile page. You may click on columns to sort by ascending or descending, or search with the filter text field.

evice Management									Save (Changes -	0
u are unfamiliar with the Device Manage Delete Devices	ment feature, please refer to the online documer Generate Report	tabon which can be accessed	using the i button on the top right of	orner of this screen.				9			
Code Display Name	EPtail Address	Phone Number	Device ID	HIPOP-ID	uid 🕈	Device Added	Registration Sent	Time of Registration	FDN	1941	ľ
LR38WAD Device 1188083	1188083@hammer.com		1188083	-	58654f41-d287-4cef-bedc-214618731cf8	20-3an-2016 22:20:49		20-Jan-2016 22:20:49			
GTH2PTU Device 1666910	1666910@fummer.com		1666910	•	894806a6-dc90-4439-9f0f-2836359de7f7	26-3an-2016 10:53:17		26-Jan-2016 10:53:18			
3V2650K Device 1868 169	1868169@hammer.com		1868169		ec416c8c-9cd0-43e3-a2c0-5caf643f9a9c	21-Jan-2016 08:35:59		21-Jan-2016 08:36:00			
U180R1F Device2277610	2277610@hammer.com		2277610		ced744e4-17dd-4eae-afab-415b7e0cff9a	25-Jan-2015 11:47:58		26-Jan-2016 11:47:58			
#YPAWP Device6014601	6014601@hammer.com		6014601	20	8c495818-696c-4e66-922c-9911f4bc4d06	20-3an-2016 22:20:48		20-3an-2016 22:20:49			

Provisioning Mobile Devices

- "Add Device Button" on page 115
- "Batch Device Registration" on page 118
- "Provisioned Groups" on page 119

Before mobile devices can be registered in Retain they need to be provisioned.

From the Retain device management page, devices can be provisioned in three different ways:

- Using the Add Devices button.
- Batch device registration.
- Provisioned group or groups from an LDAP directory.

NOTE: Phone numbers can only be added with "Add Device for A New User" or adding the phone number to the CSV file for Batch Device Registration. There is no option to edit the user to add the phone number when adding the user by searching "Add Devices for Existing Retain Users".

You can add existing users that are cached in the Retain system, that have a user name and email address from another module.

You can also add users which are not cached in the Retain system, but they must be added one at a time by manually entering the display name, email address, phone number and device IMEI associated with each device.

You have the option to add a user via:

- Email registration
- Automatic registration

Add Device Button

Devices can be added individually through the *Add Devices* button for either existing Retain users or new Retain users.

Add Devices

Existing User

To add devices for users that are already cached in the Retain system, navigate to the device management page and click on the Add Devices button.

- 1. In the Add Devices window that opens, under Add Devices for Existing Retain Users, enter the criteria to search the cached address book of Retain and click on the Search button.
- 2. Select the desired users from the returned search results.
- 3. Click on Add Selected button at the bottom left corner.

Add Devices for Existing Retain Users First Name begins with System GroupWise Show only users Show only recently cached items	
Enter criteria to search the cached addressbook.	
Enter criteria to search the cached addressbook.	
Enter criteria to search the cached addressbook.	
Enter criteria to search the cached addressbook.	

4. Your selected users are now added to the device management table.

New User (email)

Email registration requires end user intervention as Retain sends a registration email to the user, which must be accessed from the device in order to register with the Retain Server.

The user must have the **RetainService** application installed on the device for successful registration.

Email registration offers two options to register with the Retain Server:

- 1. *Via Retain Registration JSON file*: the user downloads the JSON file and places it in the device's Download folder to complete the registration process.
- 2. *Via the activation link*: the user opens the activation link using the **RetainService** application to complete the registration process.

Add Devices		×
System Groupwise V Snow		^
Enter criteria to search the cache	d addressbook.	l
	ady in Retain via email registration, enter their Display Name and Email Address, otherwise, if you er their Display Name, Email Address, Phone Number and Device IMEI:	
Add User		~

To use email registration:

- 1. Navigate to the device management page and click on the Add Devices button.
- 2. In the Add Devices window that opens, under Add Device for a New User.
- 3. Provide values for Display Name and Email Address.
- 4. Click on Add User button found on the bottom left corner.
- 5. Your user is now added to the device management table and an email is sent to the user, which will be used to complete the registration process.

New User (automatic with IMEI)

Automatic registration will register devices without end user intervention. The user must have the RetainService application installed for successful registration.

Add Devices			×
Enter criteria to search the cache	d addressbook.		^
	ady in Retain via email registration, enter their Display Name and Email Address, otherwise, if you]	
	er their Display Name, Email Address, Phone Number and Device IMEI:		
Display Name			
EMail Address			
Phone Number			
Register Device Automatically Device IMEI			
Add User			
		_	¥

To use automatic registration:

- 1. If using IMEI automatic registration the Retain server must have access to the OpenText Retain Cloud Mobile Service (CMS) through the firewall (via whitelisting etc.). Customers who use automatic registration need to permit the Retain server to access: cms.qa.gwava.com.
- 2. Navigate to the device management page and click on the Add Devices button.
- 3. In the Add Devices window that opens, under Add Device for a New User, check the box to Register Device Automatically.
- 4. Provide values for Display Name, Email Address, Phone Number and Device IMEI.
- 5. Click on Add User button found on the bottom left corner.
- 6. Your user is now added to the device management table and an automatic registration attempt takes place.

Batch Device Registration

To register multiple devices, a file can be used to specify the Display Name, EMail Address, Phone Number, and Device International Mobile Equipment Identity (IMEI) Number for each device that is uploaded to Retain which will sent registration data to the device.

Batch Device Registration	
See sample for the expected structure.Example	
Browse No file selected. Upload a CSV file.	

The display name and email address is required in all cases. The RetainService app must be on the target device before attempting to register the device.

To register a device with an email message, enter the display name and email address of the users. A registration email will be sent to the user and the user will need to open the email and click the link to register the device.

To register a device automatically, enter the display name, email address, phone and IMEI numbers of the users, no further user intervention is necessary.

Once the file is prepared, upload the file to Retain.

To upload the registration file, click on Browse, select the file and click on Upload a CSV file. Once the file is processed, the entries will appear in the list of devices.

Batch Registration CSV file

You will find a sample file under the "Example link" on the Add Device page.

The registration file must contain one record per line with these four fields, delimited by a comma (,) character: Display Name, EMail Address, Phone Number, Device IMEI

For **email registration**, the Phone Number and IMEI fields can be left empty, but must still include the comma delimiter like this example:

Joe Cole, joec@opentext.com,,

For automatic registration, all fields must be supplied, like this example:

Bob Wood, bobw@opentext.com, 4548278127, 451289080261454

The Retain Server must have access to CMS as adding a new user above. To upload the registration file, click on Browse, select the file and click on Upload a CSV file. Once the file is processed, the entries will appear in the list of devices.

Provisioned Groups

A provisioned group of users in your LDAP system can be used to add user devices in Retain by providing the necessary attributes in the device management page, under Provisioned Groups section.

Provisioned groups are synced every 8 hours by default. The LDAP sync frequency can be changed in the Mobile Module configuration page under the Core Settings tab. A manual sync process can be triggered by clicking on the Synchronize Now button in the device management page.

Adding Users To Retain with a Provisioned Group

When a user is added to the provisioned group, during the sync process the user will be identified as new user by Retain.

If there are only name and email address fields a registration email will be sent and the user will have to complete the registration process manually.

If there are name, email, phone and IMEI fields then the device will be registered automatically.

If there is no email address then an error will be logged and the user will not be added. Changing the email address will trigger a new registration during the next synchronization process.

If a user is removed from the provisioned group then the archiving of messages will be disabled during the next synchronization. If the user is added back into the group archiving will resume after the next synchronization, messages and calls from the period outside of the group will not be archived. The same mailbox will be used unless the email address was changed.

Add a Provisioned Group

Add a new group by pressing the green plus sign.

- Provi	sioned Groups
-	Add Provisioned Group

You may now fill in the group information so that Retain can connect to and gather data from your LDAP directory.

Common Name (e.g. cn=users) cn=RetainMobil	Devices	
Context (e.g. o=beginfinite)	ou=GWTestSystem,o=gwava	
LDAP Directory Implementation	NetIQ eDirectory	
LDAP Server (Host/IP)	rick-edir.ga.gwava.com	
LDAP Port (usually 389 or 636)	389	
Use SSL		
LDAP Admin User (e.g. cn=admin,o=beginfinite)	cn=ldapuser,o=gwava	
Password for LDAP Admin User		
LDAP attribute for Full name	fullName	
LDAP attribute for EMail	mail	
LDAP attribute for Mobile phone number	mobile	
LDAP attribute for IMEI	mobileIMEI	

Common name: The common name of the provisioned group. The distinguished name of the organizational unit of the group. For example, CN=MobileUsers.

Context: The context of the group, or the LDAP path to the organizational unit. For example, OU="Special Groups",OU=Users

LDAP Directory Implementation: Choose NetIQ eDirectory or Microsoft Active Directory.

LDAP Server: The hostname or IP address of the LDAP server.

LDAP Port: 389 or 636.

Use SSL: Enable, if desired. Set the port appropriately above.

LDAP Admin User: The distinguished name of an LDAP admin. For example, CN=admin,OU=Users,DC=company,DC=com

Password for LDAP Admin User: Password of the LDAP admin user.

LDAP attribute for Full Name: Specify the Display name field used in the directory. Required for email registration. Required for IMEI automatic registration.

LDAP attribute for Email: Specify the email field used in the directory. Required for email registration. Required for IMEI automatic registration.

LDAP attribute for Mobile phone number: Specify the mobile phone number field used in the directory. Required for IMEI automatic registration.

LDAP attribute for IMEI: Specify the IMEI of the mobile device field used in the directory. Required for IMEI automatic registration.

Press the Synchronize Now button to have Retain synchronize with the LDAP group.

Registering Mobile Devices

- "Device Permissions" on page 121
- "Email Registration" on page 122
- "Automatic (IMEI) Registration" on page 144
- "Re-registering Devices" on page 154

Once mobile devices are provisioned they can be registered with Retain. Devices can be registered via email or automatically.

Device Permissions

The Retain APK requires permission to access certain areas of the device. RetainService needs to be allowed to:

- Access Contacts
- Make and Manage Phone Calls
- Access Phone Call Logs
- Access Photos, Media, and Files
- Send and View SMS messages

Email Registration

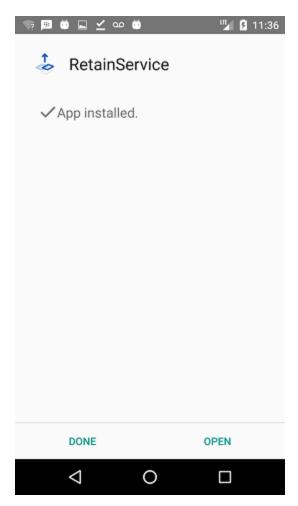
Email registration takes place when:

- Only the Display Name and the Email Address are provided at the time the user was added in Retain.
- The sysadmin clicks on the *Reregister Devices* button on the device management page.

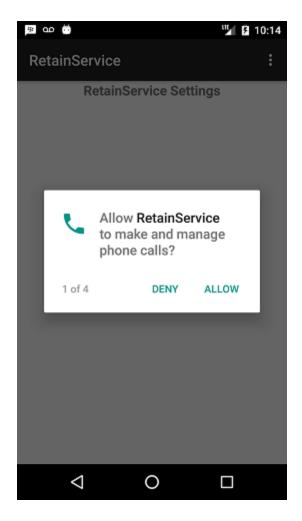
Email Registration by JSON

The RetainService application needs to be registered to a Retain Server before any data collection is done.

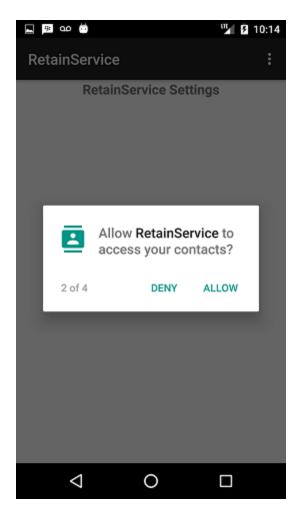
- 1. Install the RetainService application on your Android device.
- 2. Click on Open once the installation is complete.



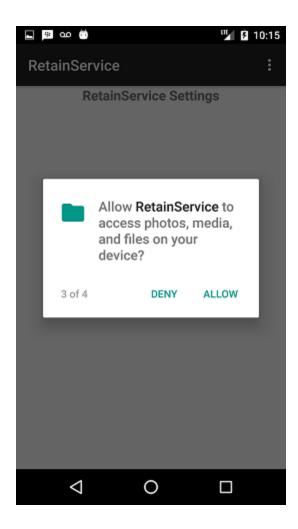
- 3. The application has to be launched once in order to be subscribed to notifications. The user/ MDM will have to grant all rights to the app:
 - Allow RetainService to make and manage phone calls.



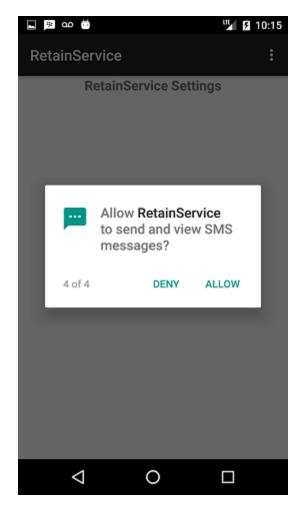
• Allow RetainService to access your contacts.



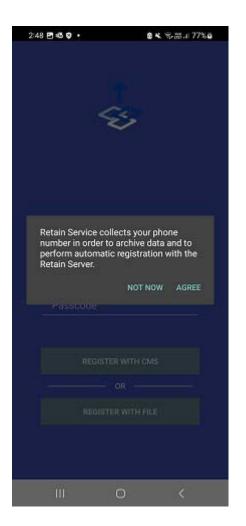
• Allow RetainService to access photos, media and files on your device.



• Allow RetainService to send and view SMS messages.



4. Click Not Now button. Close the RetainService application and make sure it is not running.



5. From your Android device, open the registration email sent by Retain.

From: <retain2_noreply@qa.gwava.com>

To: <Fathimam@qa.gwava.com>

Subject: Installation of Retain on your mobile device

Attachments: RetainRegistration.json (377 Bytes) View



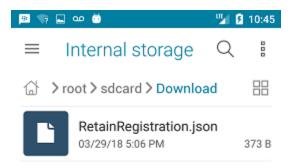
Fathima M

Your administrator has invited you to use the Retain archiving system

Open this email on the device and <u>click here</u> to activate.

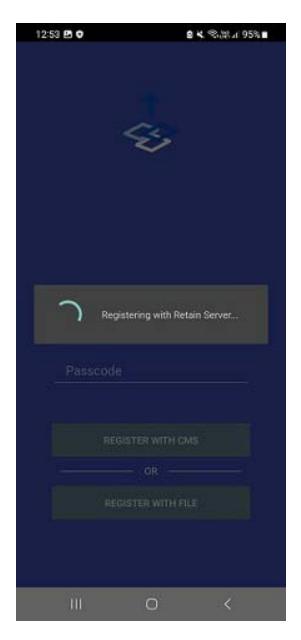
http://www.microfocus.com • Retain

6. Place the RetainRegistration.json file inside the Download folder on your mobile device.





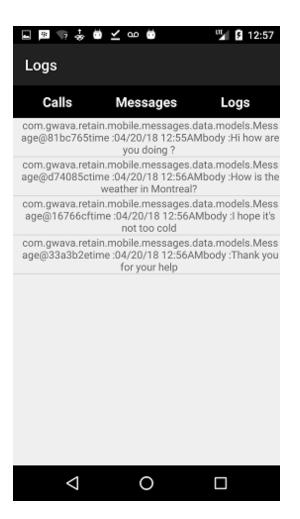
7. Open the RetainService application and click on Register With File button and choose the RetainRegistration.json downloaded.



8. Upon successful registration, your main activity screen should display the Tenant ID, DeviceID, UUID and Rest Server URL.

12:49 🕹 🖻 🗹 🔸	0 K %	ഷ 96%∎
RetainService		:
RetainServi user2 Mobile user2@blr8-98-93.	ice Settings .labs.blr.novell.co	om
RetainService Version: 4.11.0	D	
Push data to Router every 5 r Check settings every 240 mir Tenant ID: 70350d70-6f4a-4f Device ID: NUVPKQK2AX079 UUID: 789f0aac-e727-4bd4-9 Rest Server: http://151.155.2 Archive Inbound Messages: 1	nutes (f3-adf9-2899fef3 RD2FNYF5W543 9760-ff14de6c4aa 210.90:48080/Ret true	16
Archive Outbound Messages Archive SMS: true Archive MMS: true Archive Phone Logs: true	s: true	
Last Message Upload: Jan 3 Last Configuration Download		

9. You can now begin archiving your SMS/MMS messages as well as phone calls. SMS/MMS messages will appear in the logs under the Messages tab and phone calls will appear under Calls tab.





JSON File Details

The registration email will contain a RetainRegistration.json file with the registration metadata.

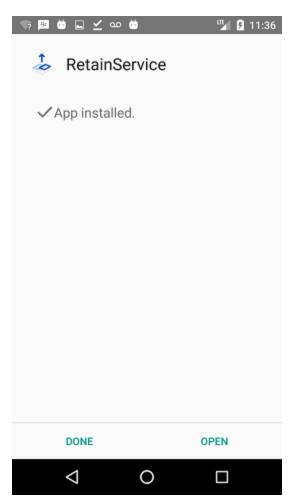
RetainRegistration.json file contains:

- *Timestamp*: Time device was add or reregistered in Retain.
- EnrollmentCode: This is generated when the device is created on the device management page.
- *Tenantid*: This is static number for Retain. Displayed on the mobile page from Module Configuration. It is used to identify your system during the registration and data collection processes.
- *Deviceid*: This is from the Device Management page.
- *Email*: This is from the Device Management page.
- *Name*: This is from the Device Management page.
- RouterURL: This is pulled from the mobile page of Module Configuration.
- *RestServer*: This is pulled from the mobile page of Module Configuration.

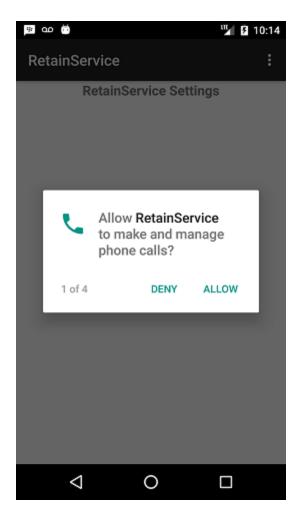
Email Registration by Link

Retain creates an email which contains an activating link. Users need to open this email and follow the link on their mobile device. The link should be activated through the Retain application on the Android device. Therefore, the RetainService application must be installed on the Android device prior to clicking the activation link.

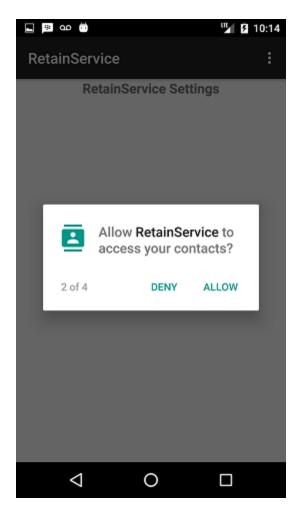
- 1. Install the RetainService application on your Android device.
- 2. Click on Open once the installation is complete.



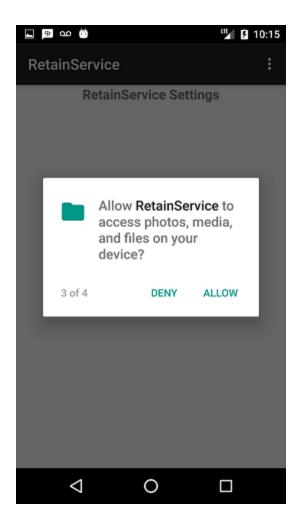
- 3. The application has to be launched once in order to be subscribed to notifications. The user/ MDM will have to grant all rights to the app:
 - Allow RetainService to make and manage phone calls.



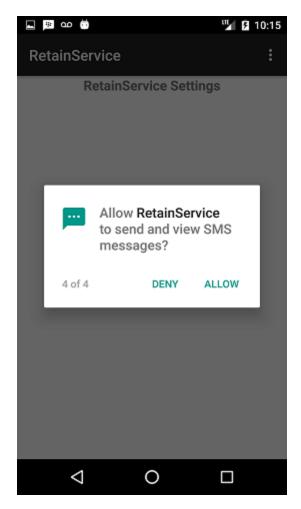
• Allow RetainService to access your contacts.



• Allow RetainService to access photos, media and files on your device.



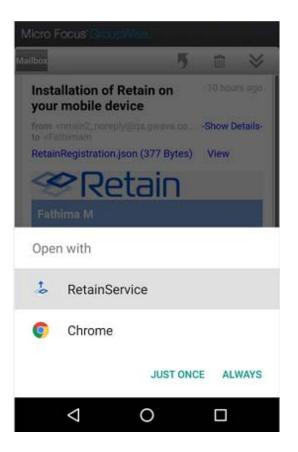
• Allow RetainService to send and view SMS messages.



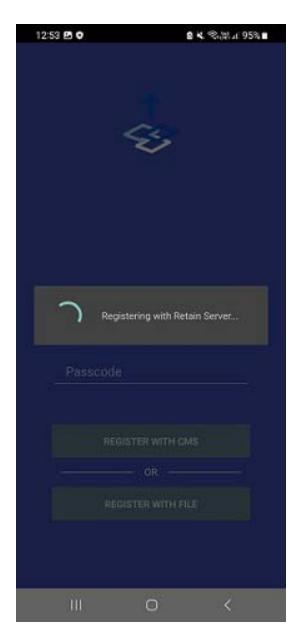
- 4. Close the RetainService application and make sure it is not running.
- 5. From your Android device, open the registration email sent by Retain.

From:	<retain2_noreply@qa.gwava.com></retain2_noreply@qa.gwava.com>
	<fathimam@qa.gwava.com></fathimam@qa.gwava.com>
	Installation of Retain on your mobile device
Attachments:	RetainRegistration.json (377 Bytes) View
Fathima	Retain ™
Fathima	
Fathima Your admi	M nistrator has invited you to use the Retain archiving system fathimam@qa.gwava.com
Fathima Your admin Username : Access Cod	M nistrator has invited you to use the Retain archiving system fathimam@qa.gwava.com

6. When prompted, click on open with RetainService and then click ALWAYS.



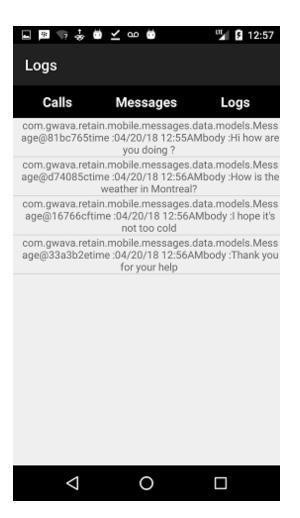
7. The RetainService registration page loads and registers the user".



8. Upon successful registration, your main activity screen should display the Tenant ID, DeviceID, UUID and Rest Server URL.

12:49 🕹 🖻 🗹 🔹		■★ 邻語言 96	% 🗎
RetainService			:
RetainS user2 Mobile user2@blr8-9			
RetainService Version:	4.11.0		
Push data to Router eve Check settings every 24 Tenant ID: 70350d70-6f Device ID: NUVPKQK2A UUID: 789f0aac-e727-4 Rest Server: http://151.	40 minutes 4a-4ff3-adf9 XO7RD2FN bd4-9760-ff 155.210.90	-2899fef333c0 (F5W543 14de6c4aa6	er
Archive Inbound Messa Archive Outbound Messa			
Archive SMS: true Archive MMS: true Archive Phone Logs: tru	ie		
Last Message Upload: Last Configuration Dow			РМ
111	0	<	

9. You can now begin archiving your SMS/MMS messages as well as phone calls. SMS/MMS messages will appear in the logs under the Messages tab and phone calls will appear under Calls tab.





Customizing the Registration Email

An activation email will be sent to the associated email address. The activation email can be customized. The template from which the email is generated is located in the file:

...\RetainServer\WEB-INF\classes\config\mobile\registeruser.html

The template contains different variables that are distinguished by double brackets "[[]]". The below variables can be customized to adopt the email sent out by Retain to any organization:

- *Product*: This is automatically filled out with the Retain product name. Admins may set this to be the company name. This variable is used in the subject and the body of the email message.
- *Retainheader*: This is automatically filled with the Retain product logo. Admins may set this to any branding or company image file. This must be an image file.
- *GwavaURL*: Automatically filled-in with a link to the OpenText website.
- GwavaURLLabel: This determines text displayed for the GwavaURL link.
- ProductNameURL: This is automatically filled-in with a link to the product website.
- ProductNameLabel: This determines text displayed for the productNameURL link.

The below variables **cannot** be changed. This information is generated by the device management page when the device is added:

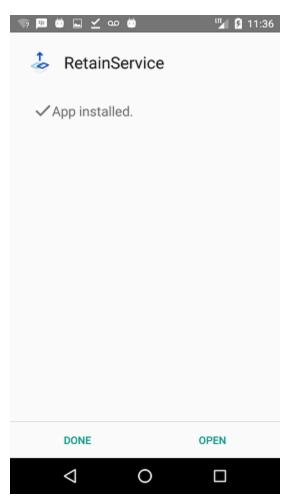
- *Name*: Each user's individual user name will be inputted here.
- ActivateHREF: This is an identification string, a link specific to the user and installation.
- Username: Applicable for cloud registration only.
- Password: Applicable for cloud registration only.

Automatic (IMEI) Registration

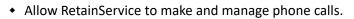
Automatic registration is done through our Cloud Mobile Service (CMS). This registration method requires no end user intervention and ideally, the user should not be aware of the registration process. Automatic registration requires four mandatory values to be provided in the device management page at the time of registration: display name, email address, phone number and IMEI number.

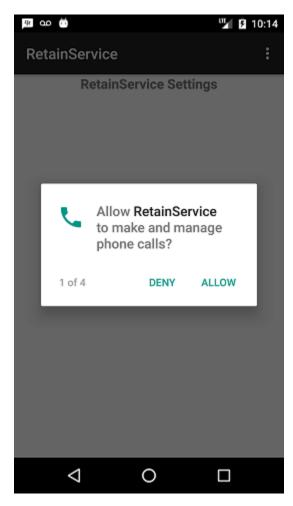
Before attempting an automatic registration, ensure that the RetainService application is installed on the Android device.

- 1. Install the RetainService application on your Android device.
- 2. Click on Open once the installation is complete.

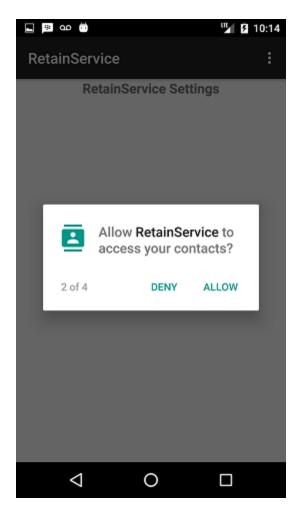


3. The application has to be launched once in order to be subscribed to notifications. The user/ MDM will have to grant all rights to the app:

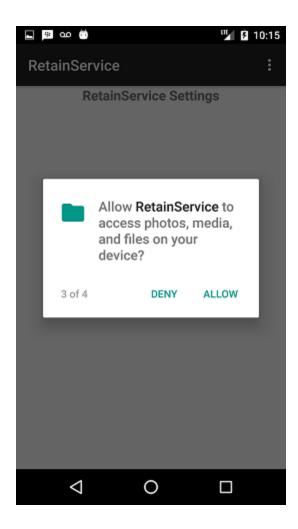




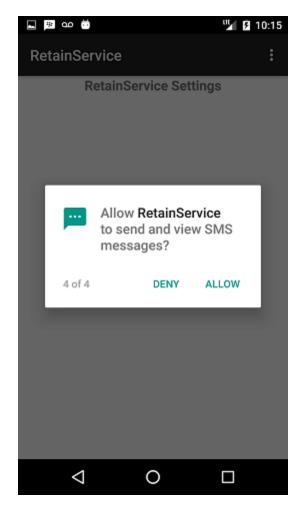
• Allow RetainService to access your contacts.



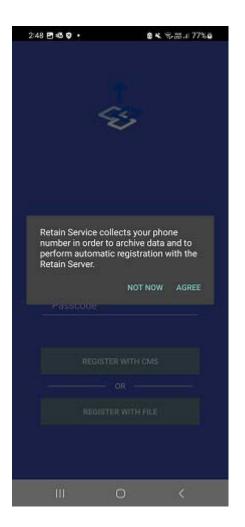
• Allow RetainService to access photos, media and files on your device.



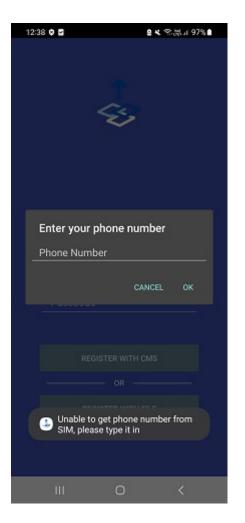
• Allow RetainService to send and view SMS messages.



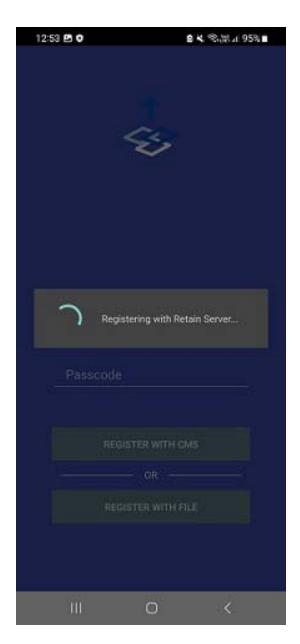
4. Click AGREE. Close the RetainService application and ensure it is not running.



 In the Retain device management page, add a device that is eligible for automatic registration. Hence, provide display name, email address, phone number and IMEI number. For more information, refer to the device provisioning section of this document. "Provisioning Mobile Devices" on page 115



6. Open the RetainService application, If the application is unable to get the phone number from the SIM, it displays a popup to enter the phone number. Enter the phone number.



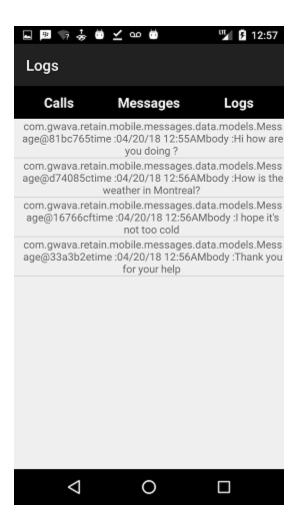
7. Open the RetainService application

12:49 🕹 🖻 🗹 🔹		e ≮ \$%#i 96%∎
RetainService		:
Retain	Service S	Settings
user2 Mobile	e	
user2@bir8-	98-93.labs.l	blr.novell.com
RetainService Version:	4.11.0	
Push data to Router ev	ery 5 minute	25
Check settings every 2 Tenant ID: 70350d70-6		0.2000(+(222+0
Device ID: NUVPKQK2/		
UUID: 789f0aac-e727-		
Rest Server: http://151	.155.210.90	48080/RetainRouter
Archive Inbound Mess Archive Outbound Mes		
	aayes. uue	
Archive SMS: true Archive MMS: true		
Archive Phone Logs: tr	ue	
Last Message Upload:	Jan 30, 202	3 12:46:24 PM
Last Configuration Dov		
111	\bigcirc	<

8. The "Time of Registration" field will updated for your device in the device management table of Retain.

Device Man	agement									Save	Changes 📕	00
ou are unfamilar Delete Device		nent feature, please refer to the online docum nerate Report Add	entation which can Devices	be accessed using the i button on t	he top right	corner of this screen.			7			
Enrolment	Display Name	EHail Address	Phone Number	Device ID	MPOP- ID	OTD 0	Device Added	Registration Sent	Time of Registration	FDN	IMEL	Ŷ
	LG Optimus Exceed QA	igoptimusexceed@qa.gwava.com		FT62A85Y3GU6H01KTD3R0GVY		93fd9bdc-916f-4a18-b253-18fa2a9431a7		25-Apr-2018 09:35:46	25-Apr-2018 10:52:29			

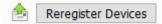
9. You can now begin archiving your SMS/MMS messages as well as phone calls. SMS/MMS messages will appear in the logs under the Messages tab and phone calls will appear under Calls tab.





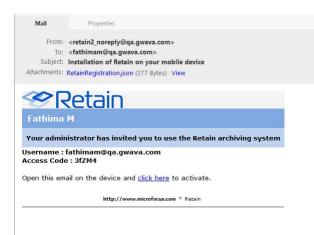
Re-registering Devices

To re-register a device, navigate to the Device Management page, select the desired device and press the *Reregister Devices* button. Once pressed, Retain will recreate the enrollment, remove the old Device ID, and resend the registration email. The end user will need to repeat the enrollment process.



NOTE: Important Note Regarding Reregistration.Regardless of the registration method initially used to register the device with Retain Server (email registration or automatic registration), once the *Reregister Devices* button is clicked, the reregistration will be done through email. The only difference is, if the device was initially provisioned to use automatic registration, the reregistration email sent will contain two new fields: a Username and an Access Code as seen below. In other words, if a device that contains values for display name, email address, phone number and IMEI number has been selected for reregistration, Retain will fall back to the email registration method. The email will always contain the embedded link, .json file and additionally, it will contain the username/access code combination for access through the RetainService UI.

The Username and Access Code provided in the reregistration email can be entered in the first page of the RetainService application to re-register the device with the Retain Server. Once done, click on REGISTER to connect to the Retain Server.



Deleting Mobile Devices

Mobile devices can be selected and deleted from Device Management enrollment by selecting one or more devices and pressing "*Delete Device*".

evice Management									Save (Changes 💾	0
ou are unfamiliar with the Device Manage Delete Devices	ement feature, please refer to the online documer Generate Report		sing the i button on the top rig	ht corner of this screen.				9			
Code Display Name	EMail Address	Phone Number	Device ID	HPOP-ID	UID	Device Added	Registration Sent	Time of Registration	FDN	INEL	1
URIBWAD Device1188083	1188083@hammer.com		1188083		58654f41-d287-4cef-bedc-214618731cf8	20-Jan-2016 22:20:40		20-Jan-2016 22:20:49			
GTH2PTU Device 1666910	1666910@hammer.com		16669 10	25	89400ba6-dc90-4439-9f0f-2836359de7f7	26-Jan-2016 10:53:17		26-Jan-2016 10:53:18			
3VZ650K Device 1868 169	1568169@hammer.com		1868169		ec416c8c-9cd0-43e3-e2c0-5caf643f9e9c	21-Jan-2016 08:35:59		21-Jan-2016 08:36:00			
U480R1F Device2277610	2277610.@hammer.com		2277610	•	ced744e4-170d-4eae-afab-415b7e0cff9a	25-Jan-2015 11:47:58		26-Jan-2016 11:47:58			
APYPAWP Device6014601	6014601@hammer.com		6014601	40	8:495818-696:-4e66-922:-9911f4b:4d06	20-3an-2016 22:20:48		20-Jan-2016 22:20:49			

Blackberry Device Management

- "Blackberry Device Management Overview" on page 155
- "Blackberry Device Management" on page 156
- "Deleting Blackberry Devices" on page 157
- "Generating Reports" on page 157

Blackberry Device Management Overview

Retain supports archiving data from both Blackberry devices and devices running the BBM Enterprise system. Devices running the BBM Enterprise system can have their communication data archived through the BBM app, obtained from Blackberry.

You must first configure the Blackberry Module and Job. See "Creating a Blackberry Module" and "Creating a Blackberry Job" in the *OpenText Retain CE 24.1: Archiving Guide*.

Device Man	agement					Q 🚺
 Mobile device Once added, The user sho Once the reg Deleting a de 	es can be added for ex an email with a regist ould open the email on gistration completes, n evice will stop the mes	Mobile Profile is properly configure disting Retain users or for a new i ration .json file and link will be se the device and download the .j nessages should flow from the d sage flow to Retain and un-regis	user. ent to the user. son file or click the registi evice to the Message Rou ter the device.	ter and then to Retain.		
Note: User p Delete Device Device List			figured appropriately to e	nsure user accounts are created.	٩	
Code	Display Name 🔶	EMail Address	Phone Number 🔶	Device ID	UID	Time of Registration
CL38FBO	Aileen O'Leary	aileen@sfgw14.gwava.net		VZDZQCNTPED53JY2TYBOM6WX		
08C6SBC	Aiden Li	aiden@doc.gwava.net		I4JR4PTKQDBPB808K3MZESAZ		
OIDMG8C	Leroy Jenkins	leroy@sfgw14.gwava.net		AE8GJQ516OS0MOIMJYSCTX9V		
	egistration e expected structure. file selected.	Example				

The Blackberry device page displays all devices which have been registered into the Retain system. Native Blackberry and BBM Enterprise devices are displayed together. Retain registers Blackberry devices through log files from the BES server or through data sent by the device running the BBM Enterprise application. If a device is not yet registered, it is either not in the BES address book or no data has been archived for the device. The device list may be filtered for any specified content desired. In addition, devices may be selected for removal.

Blackberry Device Management

"Adding Blackberry Devices" on page 156

Adding Blackberry Devices

Blackberry devices are managed through the device management interface on the Blackberry page.

Device Management						O 🚯
Information about the BlackBerry devices known to Retain.						
 One way the device information is added to Retain is during 	the BES Address Book synchronization.					
	Generate Report					9
Device List						
Enrolment Code 💌	Display Name	Mail Address		Phone Number MPOP-ID	ию 🔷	Time of A Registration
W6SPYSK	test device display name	estdeviceenail@test.com			702fbe34-f4ec	-413e-922b-05db13cfd93e 05-Apr-2018 13:18:46
VRTN9SW	test device display name	estdeviceemail@test.com				:-413e-922b-05db13cfd93e 05-Apr-2018 13:18:51
Tm2H4bfPW-Wbcwa3ezvb8krh2Wsm0K2z	Example User	user@org.com	28EAD000	+15144631595 -	791f7b34-f63b	-4a2c-beeb-e57877e2d6ee 28-Feb-2017 11:15:55

Devices are added automatically after an address book sync from the BES servers. You may click on columns to sort by ascending or descending, or search with the filter text field. Retain supports Blackberry Multiple Points of Presence, which has not been deployed by Blackberry Limited as of this release.

Deleting Blackberry Devices

Blackberry devices can be selected and deleted from Device Management enrollment by selecting one or more devices and pressing "Delete Device".

Device Management							0	0
nformation about the BlackBerry devices known to Retain. • One way the device information is added to Retain is d	luring the BES Address Book synchronization							
Delete Devices Device List	Generate Report					٩		
Enrolment Code 🔻	Display Name	EMail Address		Phone Number MPOP-	ш (ит	Time of Registration	î
W6SPYSK	test device display name	testdeviceenail@test.com				702fbe34-f4ec-413e-922b-05db13cfd93e		
VRTN9SW	test device display name	testdeviceenail@test.com				702fbe34-f4ec-413e-922b-05db13cfd93e	05-Apr-2018 13:18:51	
Tm2H4bfPW-Wbcwe3ezvb8knh2Wsm0K2z	Example User	user@org.com	28EAD000	+15144631595 -		791f7b34-f63b-4a2c-beeb-e57877e2d6ee	28-Feb-2017 11:15:55	

Generating Reports

The *Generate Report* button will take open a new tab or window to the Reporting and Monitoring server and open a Device Management Report configuration page.

Generate Report

The *Generate Report* button will open a new Reporting and Monitoring: Generate report window, where a report can be created.

Home Report - Schedule Report -	Manage Scheduled Reports 🔻	System Monitor	Mailbox Error Monitoring	Maintenance
Generate report: Device Managem	ent			
This report generates the device registrat	ion details by user, generation	time, registration t	ime.	
Report Output Format	HTML	~		
	Registration Date	~		
Sort Rows by Column				
	Descending	~		
Maximum Returned Rows	1000			
	Select/Unselect all actions			
	Registered Users			
Actions	Non-Registered Users			
Deliver Report In	Browser	~		
Generate				

See Reporting and Monitoring Device Management Report "Device Management" on page 208 for more information.

Jobs

- "Run a Job" on page 158
- "Starting a Job Manually By Scheduling the Frequency" on page 159
- "Stopping a Job" on page 160

Run a Job

Retain now provides you an option to run a job immediately with **Run Job Now** button. You can run jobs assigned to a single worker or assigned to a worker group.

🕹 Jobs			
Ŷ			1
GW Job		•	
			Add Job
		-	Remove Job
4	•		
Job GW Job loaded.			
You need to assign mailboxes to this job.			
Job GW Job	Run Job Now		

To run a job you need to:

- 1. Select a job.
- 2. Click the Run Job Now button.

The job is triggered and the Run Job Now button is disabled until the Job is completed.

NOTE: •If it is a single-worker job and the assigned worker is currently running other jobs, the job initiated on Run Job Now is queued and resumed after the current job is completed.

• If the job initiated through Run Job Now, and is assigned to a worker group, if any of the workers in the Worker Group are running other jobs, the job is queued for those workers and the other workers available in the group will start processing the messages and run the job.

Starting a Job Manually - By Scheduling the Frequency

Jobs will start automatically at the date and time they are set to.

To start an archive job manually you need to

- 1. Select a Single Frequency Schedule for the job. Save Changes
- 2. Go the selected single frequency schedule and set the time at least 1 minute into the past.

📅 Schedules	41		
Schedules	42		
	43		
9	44		
Daily Now	45		
	46		
	47		
	48		
	49		
	50		
	51	-	
Calcadula Nama	52		
Schedule Name Now	53		
Schedule Frequency Single V	54		
This job will run only once, at the time specified below ur	55	-	rror
	56	~	
Date: Jan \checkmark 04 \checkmark 2018 \checkmark Time: 11 \checkmark	56	~	

- 3. Browse to the Worker Console <a href="http://<Retain_Worker_Host">http://<Retain_Worker_Host>/RetainWorker
- 4. Click the "Refresh job cache now" button.

	tion		
Worker Configura Friendly Name Worker Unique IE URI to Server Worker Version Memory Free/Ma)		
Check for New			
Refresh job cac Click "Refresh job		e worker to poll for config	guration changes right now.
Bootstrap informa	tion has been applied to t	his server. If the configura	ation must be changed in the

- 5. The job will begin momentarily.
- 6. Once the job has completed you will want to confirm the data is in the archive. See "Using Retain's Archives" in the OpenText Retain CE 24.1: User Guide.

Stopping a Job

A running job can be aborted.

Go to **Jobs | Status tab**. There will be an abort button visible. Press it and in a few moments the job should abort.

🖐 Jobs		
Patri		
Daily Special		
Job Special loaded.		
Job Special loaded.		
Job Special		
Core Settings Journa	aling Mailboxes	Notificatio
	3]	
	-	
Job: Special (3801A8E	6DD96BC844F7EF9	E9A0FA447
	Current	
Job began	21-Mar-2018 12:5	1:02
Job ended	Abort Job	
Completed: 0 / 28 (0	%)	
Mailboxes	28	
Messages Archived	0	
Messages Processed	0	
Messages Deleted	0	
Errors	0	
	Current	
Mailbox	retain@ex121.doc	.mf.net
MS	EX121	
Error		

If after at least **five minutes** the job does not abort, you may want to consider killing the job.

Killing a Job

To kill a job, go to the Retain Worker Console and under the Status tab attempt to kill the job with the "Kill Job" button.

WARNING: Do NOT use this button if you have not already attempted to use the Abort Job button in Retain Server | Job | Status.

Alternatively, you can restart tomcat to stop a job.

nfiguration	Server Connection Status	Scheduler	
Job Status 1			
lease use this as	informational only. If you need to report a	n error to Technical Support, the I	logs are much more useful.
Pause Refres	n		
Job Retrieve	r Status		
No jobs av	ailable jobs: DailyEX, SpecialEX		
Juneudieu	Jobs BanyeA, SpecialeA		
-Job Informat	ion		
SpecialEX			
ID		60023CA55F8A6A65D2	236592DDF139610
Job runn	ing?	Yes	Kill job
Job Bega	in	Wed Mar 07 15:16:06 M	IST 2018
Job Ende	ed	Still Running	
Time Ela	psed	0d : 0h : 0m	
Total Err	ors	0	
Total Ma	ilboxes	23	
Total Ne	w Messages archived	0	
Total Me	ssages processed	0	
Totaline			
	s deleted from Messaging System	0	
Message	s deleted from Messaging System s for current mailbox	0	

Re-uploading Bootstrap

• "Removing a Bootstrap and Re-uploading" on page 162

Removing a Bootstrap and Re-uploading

If you change something on a worker's connection tab, you must remove the old bootstrap to reset the worker connection and then upload the new bootstrap file.

Perform the following procedure for removing the Bootstrap file from the Worker, R&M, and StubServer, and re-uploading the Bootstrap file.

If a worker agent, R&M, or stub serve cannot connect to the Retain Server correctly, a new bootstrap may help. The old bootstrap must be removed to reset.

1. On the Worker Agent server, stop tomcat. See "Starting and Stopping the Retain Server" in the OpenText Retain CE 24.1: Installation and Upgrade.

WebApp	Bootsrap File Name	Location
RetainWorker	RetainWorker2.cfg and RetainWorker2_bak.cfg	Linux:opt/beginfinite/ retain/RetainWorker/WEB- INF/cfg.
		Windows:[Disk]:Program

StatsConfiguration.cfg

and

fg

2. Navigate to the WebApp configuration folder to which you need to re-upload the bootstrap file.

		Windows: [Disk]:Program Files\Beginfinite\Retain \RetainStatsServer\WEB- INF\cfg.
RetainStubServer	StubConfig.cfg and StubConfig_bak.cfg	Linux:opt/beginfinite/ retain/RetainStubServer/ WEB-INF/cfg.
		Windows:[Disk]:Program Files\Beginfinite\Retain \RetainStubServer\WEB- INF\cfg.

- 3. Remove the bootstrap files based on the webapp. Removing the bootstrap resets the worker to initial configuration.
- 4. Start tomcat. The Worker Agent is now in its un-configured state and needs a bootstrap.
- 5. Download the new or updated Worker bootstrap from the Retain Server Console.
- 6. Upload the bootstrap. See .

RetainStatsServer

- a. For uploading bootstrap file for Worker Agent, see "Uploading a Worker Bootstrap to the Worker Console" in *OpenText Retain CE 24.1: Archiving Guide*
- For uploading bootstrap file for R&M, see "Configuring Email Delivery of R&M Reports" on page 198.
- c. For uploading bootstrap file for RetainStubServer, see "Retain Stubbing Server Page" on page 25.

Files\Beginfinite\Retain

\RetainWorker\WEB-

Linux: opt/beginfinite/

INF\cfg.

retain/

INF/cfg.

StatsConfiguration_bak.c RetainStatsServer/WEB-

Removing a Worker Bootstrap when Multiple Workers Are Present

If you have multiple workers on a server you will need to make sure you are removing the bootstrap to the correct worker, which will be dependent on the worker number. See "Deploying Production-Use Worker Agents on Linux" or "Installing Additional Retain Workers on Windows" in OpenText Retain CE 24.1: Installation and Upgrade.

- 1. On the Worker Agent server, stop tomcat. See "Starting and Stopping the Retain Server" in *OpenText Retain CE 24.1: Installation and Upgrade*.
- 2. Delete the Retain Worker.cfg file on the Worker machine. For security reasons, there is no way to do this except by manually deleting the file from the server console itself. The path is: .../ RetainWorkerN/WEB-INF/cfg, N being the number of the Worker Agent. Removing the bootstrap resets the worker to its initial configuration.
- 3. Start tomcat. The Worker Agent is now in its un-configured state and needs a bootstrap.
- 4. Download the new or updated Worker bootstrap from the Retain Server Console.
- 5. Browse to the worker console of the worker you are updating. http://<retain worker address>/RetainWorkerN
- 6. Upload the bootstrap to the worker "Uploading a Worker Bootstrap to the Worker Console" in *OpenText Retain CE 24.1: Archiving Guide*.

System Log Option (Overview)

This option lets you read and parse through the latest system log file. The level of detail is controlled in system configuration.

The actual filename and path on the server is also listed. You may clear the view buffer at any time in case you want to monitor a particular operation for troubleshooting purposes.

Overview	Logs	Ø 🚹
Documentation		
Search Messages	Clear Buffer	
Auditing		
System Log	Logfile: C:\Program Files\Beginfinite\Retain\Tomcat\logs\RetainServer.2020-07-03.log	*
Reporting	5	
Monitoring		
Mailbox Error Monitoring	Jul 3, 2020 8:34:41 AM receiving document TEXT.htm done. hash:E242682F431901C09C	
	CBA76144DDBB26269C878A3247253B83A68C70806180A8	
Data Collection	Jul 3, 2020 8:34:41 AM receiving document Mime.822 done. hash:ED81815C68E90DB81D	
	F7347846C87284FD202697F488D566D4468258E00F398F	
Schedules	Jul 3, 2020 8:34:41 AM receiving document The Point: A record-setting bad week o n coronavirus.txt done, hash:EA1954C58E8486272F9E1EE287C271E705DCB25C826CB2EE95E	
Profiles	0269295D83E70	
Workers	Jul 3, 2020 8:34:41 AM receiving document TEXT.htm done. hash:784461B67305130CD4	
🗄 Jobs	7752DA7E3745E416F4541E6355B83A4F34E44C464536	
	Jul 3, 2020 8:34:41 AM receiving document Mime.822 done. hash:14814DEFE1BAAB3A6F	
Data Removal	D1DAEEF5074A38DB89E9CD0688C33670895A93943E3182	
Mailbox Deletion	Jul 3, 2020 8:34:42 AM receiving document Fareed: China Has Bungled Its Pandemic	
1 Item Deletion	-Era Diplomacy .txt done. hash:51F9318539172452A82B7DCEE15DCCECBC9AC39622E6862CA	
	E368C943D6D4596	
Management	Jul 3, 2020 8:34:42 AM receiving document TEXT.htm done. hash:36D982FC7165FA7E07	
	8A48FDE9E2052E3A9CD74DCE34C3D95E3BFB85AC1A76D1	
Users	Jul 3, 2020 8:34:42 AM receiving document Mime.822 done. hash:D0487D91591DC4A082	
Groups	327B3769276A7D7FE97697F851DC0866AB29C42D44D4EF	
Account Linking	Jul 3, 2020 8:34:42 AM receiving document Fareed: China Has Bungled Its Pandemic	
Litigation Hold	-Era Diplomacy .bxt done. hash:51F9318539172452A82B7DCEE15DCCECBC9AC39622E6862CA E368C943D6D4596	-
	Liul 3, 2020 8:34:42 AM receiving document TEXT.htm done, hash:36D982EC7165EA7E07	1
Configuration	and 2020 DEFET2 AND FEEDBOOK AND INFIDE TO A COMPENSATE DEFE DATE.	16

Location of Log Files

At the end of each day the logs are closed and compressed to save space. After 10 days, by default, the logs are removed from the system.

The full length logs can be found in, be default:

Linux: /opt/beginfinite/retain/tomcat8/logs

Windows: C:\Program Files\Beginfinite\Retain\Tomcat 8.0\logs

There are several log files that are stored here, the ones of primary interest are:

RetainServer.<date>.log: Contains server transactions.

RetainWorkerN.<date>.log: Contains worker transactions. N being the worker number.

Indexer.<date>.log: Contains indexer transactions.

Auditing Option (Overview)

This option provides reports on user activities.

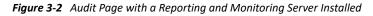
Path: Retain Server Manager > Overview > Auditing

All pertinent actions performed by users in Retain are logged and can be discovered and printed. If Reporting and Monitoring is installed, four buttons are added to the following page, as shown below.

tart date	Ö						
nd date	2020-07-11 08:53						
ort rows column	Date						
aximum eturned ows	0			Auditable Use			
	Select/Unselect all actions				IS		
	Archived		User Name ≎	User UID \$			Display Name ≎
	Deleted FTP Forwarded	a	ıdmin	24fcb828-38b9-44bf-9152-adb154	70f731	admin	
ctions	Forwarded Litigation Hold Login SMTP Forwarded Viewed						
un report 1	🖯 🔿 All users 🔍 Select users						
	Reset						
Date 4	≎ Info ≎		User ≎	Mailbox ≎	Job	Name \$	Action \$
1-Jul-2020	0 08:01 Success [::1]		admin	admin	-		Login
1-Jul-202(0 08:01 Success [::1]		admin	admin	-		Login
	0 07:57 Success [::1]		admin	admin	-		Login
1-Jul-202(admin	admin	-		Login
	0 07:43 Success [::1]		aumin	duillin			Login
1-Jul-202(1-Jul-202(1-Jul-202(admin	admin	-		Login

Figure 3-1 Audit Page without a Reporting and Monitoring Server Installed

The Audit dialog is also available through the Reporting and Monitoring Server admin console as shown in Figure 3-2 on page 166.



Ø	Retain	Audit					
Report - S	chedule Report 👻						
Start date	2	020-06-11 12:34	1				
End date	2	020-07-11 12:34	0				
Sort rows by	ر column)ate	~				
	[)escending	~				
Maximum re	turned rows						
	~	Select/Unselect all action	IS				
Actions Run report o Search	Actions Action						
	1 of 211 🗔	1234	5 6 7 8 9 10	►> ►1 10 ¥			
Date ≎	Info ≎	User ≎	Mailbox ≎	Job Name ≎	Action \$		
11-Jul-2020	Success [192.168.1.224]	admin	admin	-	Login		
11-Jul-2020	Success [192.168.1.224]	admin	admin	-	Login		
	Failure [192.168.1.224]	admin	admin	-	Unsuccessful Login		
11-Jul-2020		admin	admin	-	Login		
11-Jul-2020		admin	admin	-	Login		
11-Jul-2020	Message ID = 35201	collector	AmandeenK		Archived		

- Accessing the audit log requires the "Access all audit logs" administrative right.
- Ordinary users cannot access their audit logs unless you grant the "View Personal Audit Log" right, in which case they can find the audit log on a per-message basis under the Properties tab.

To view actions, select the desired actions, one or all, a date range, and a user, one or all, and then click Search. The results are displayed in a table with sortable columns.

You can print the report by selecting **Export as PDF** and printing the result.

Auditors do not automatically have rights to READ messages in mailboxes that are not assigned to them.

The Export Audit Table sorts the entire Audit log with the settings desired and creates a report for specific users or all users, with specific events or all events. This report can be limited by size and date range.

eport Outj ormat	P ^{ut} HTML	~			
tart Date	2019-11-03 03:34				
nd Date	2019-12-03 03:34				
ort Rows	Date 🗸			Auditable Users	
olumn	Descending 🗸		User Name ≎	User UID \$	Display Name ≎
imit the ize of the aport	 Limit By Size O Limit By Items 			f8420f7d-bc59-4afd-9528-5680efcecac3	rickl@GWAVA.COM
	File Size: 0	KBs 🗸		8b9a8dab-46ff-4f36-92d6-a86e6336c13e	hakim rasoli
	Send data in multiple filess			4f1900d2-cbf3-4f9a-b117-7f714284b260	amandeepk@EDIR4
				cbb1691f-83c0-421a-80c3-8d64426abf00	Dave Nuttall<18013619867>
ctions	Select/Unselect all actions			03a266d2-ccd7-44ab-aa5a-f3a75a988a23	matts@NBLOCAL
	Archived			a4c22aa6-eb1b-4806-b6f4-d7f46f634306	sorchard@EDIR4
	Changed Data Collection			90f3e05c-4aec-4d9b-be84-6ee2141c53cd	Nexus5 White QA Phone<14387634851
	Changed User/Group				
	Cloud Router Configuration			ed59e084-eff3-439a-b93c-232ffeae7793	BlackBerryZ10
	Data Removal Deleted			3d486a63-0b40-49ac-b60c-38797cdcca3a	ericm@EDIR4
	Exported		1 of 211 🛛 🖪 🦪 🚺	2 3 4 5 6 7 8 9 10 🕨 🖬	10 🗸

Output formats for this report include: HTML, PDF, XLS, and CSV.

You can limit the report by size or by items. Enabling the **Send data in multiple files** option generates a complete report broken down into multiple files, each conforming to the limits set above the option.

If restricting the report to a specific user or users, a menu displaying 'auditable users' is displayed. The different fields are searchable. The option to select all, or none, is also present. Users may be searched for via User Name or email address, User UID, or the user Display Name.

Date	
Info User Mailbox	
User	
Mailbox	
Job Name	
Job Name Action	

The rows and columns are not sortable in the generated report, but they can be sorted or organized from the report generation interface. The rows may be organized by the columns listed.

This has the exact same effect as organizing columns for the jobs on the reporting and monitoring home page. Configure as desired and then select 'Generate' to create the report.

To Schedule the report, select the 'Schedule' button from the top of the report to keep the settings.

Deleting Data

- "Deleting Mailboxes" on page 168
- "Deleting Items" on page 169
- "Deleting Individual Messages" on page 177
- "Deletion Report and Logging" on page 177

Deleting Mailboxes

Mailbox Deletion will delete one or more entire mailboxes from Retain.

If you are trying to clean up mailboxes for your license report, run mailbox deletion on the target users. All messages are deleted, except those flagged with a litigation hold.

NOTE: The time required to delete a mailbox varies depending on how many messages are stored in it.

Deleting Users

The primary action is to press the Add User button to select users to be deleted from Retain.

Core Settings—Data Deletion

Core Settings allows you to choose between *Generate a report but don't delete message* and *Delete messages as they are processed* when processing the job.

o Mailbox Deletion			
Full deletion of user malibox data including folders Image: DL_Testing (Office365 / Office365-1) Save And Run Job Now Core Settings	Add User Add Distribution List	asa, DLgroup	>
When processing job Delete messages as they are processed. Delete from Retain's Address Book	v		

Data Deletion Notifications

To be notify about errors and/or when the job is complete, fill out this tab. By default it is filled in with the notification data from Server configuration.

Il deletion of user mailbox d	lata including folders				
K 🛓 DL_Testing (Office3)	65 / Office365-1)				
			Add User Add Distribution List	aaa_DLgroup	 ~
Core Settings Notification		and/or errors that occur	rred when the job complet	25.	
Notification You can have Retain e-mail		and/or errors that occur	rred when the job complete	2 5.	
Notification You can have Retain e-mail SMTP Mail Server	a summary of operations	and/or errors that occur	rred when the job complete	25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol	a summary of operations	and/or errors that occur	rred when the job complete	5.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Port	a summary of operations	and/or errors that occur	rred when the job complet	5.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address	a summary of operations	and/or errors that occu	rred when the job complet	55.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address SMTP To Address	a summary of operations	and/or errors that occu	rred when the job complet	25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address SMTP To Address SMTP Username	a summary of operations			25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address SMTP To Address SMTP Username SMTP Password	a summary of operations	and/or errors that occur		25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Mail From Address SMTP To Address SMTP Username SMTP Dessword Mail when errors occur	a summary of operations			25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Mail From Address SMTP To Address SMTP To Address SMTP Username SMTP Password Mail when errors occur On job complete	a summary of operations			25.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Mail From Address SMTP To Address SMTP Username SMTP Vaseword Mail when errors occur On job complete Mail summary	a summary of operations			5.	
Notification You can have Retain e-mail SMTP Mail Server SMTP Security Protocol SMTP Mail From Address SMTP To Address SMTP To Address SMTP Username SMTP Password Mail when errors occur On job complete	a summary of operations			5.	

Press the Run Job Now button to begin the process.

Deleting Items

When items pass out of their retention period it is time to remove them from the system.

An item deletion job is set up much like an archive job with a schedule, profile and job, but there is no need for a worker because Retain can connect to itself just fine.

Scheduling Item Deletion

There are three types of schedules:

• Single, the job will run only once at the assigned date and time

📅 Schedules	Save Changes 💾 💭 🚺
9	
	Add Schedule No jobs are associated with this schedule.
	Remove Schedule
Enter new schedule below	
Schedule Name Single Schedule Frequency Single	
Recurring Weekly	ccurs. If an error occurs the job will be retried unless you select the checkbox below.
Date: Apr V 06 V 2017 V Time: 14 V 17 V	
If time assigned for job start has elapsed, don't resend job	

• Recurring Weekly, the job will run each week on the assigned day and time

Schedules		
Monthly Single Weekly Schedule Weekly saved. Schedule Name Schedule Frequency Recurring Weekly	γ ▼	Add Schedule Remove Schedule
 Sunday Monday Tuesday Wednesday Thursday Friday Saturday 	Start Job at: 01 ▼ 00 ▼	

• *Recurring Monthly*, the job will run each month on the assigned day and time

📅 Schedules		
Monthly		
Single Weekly		Add Schedule Remove Schedule
	-	
Schedule Name Monthly Schedule Frequency Recurring Monthly		
Run job on 1 V day of the month Start Job at: 01 V 00 V		

Creating an Item Deletion Profile

The profile sets the type and age of the items to be deleted.

Basic Options Tab

Sets the limits on the Type, Source and Status of the items to be deleted

Profiles	Sa
♥	Add Profile No jobs are associated with this Profile. Remove Profile
Enter new profile below Profile Name 10Year × Basic Options Date Scope	
Item Type By default, Retain stores every type of message. You can restrict this. Mail Appointment Note Task Voice Message	Message 🗹 Phone Call 🗹 BB PIN 🗹 BBM 🗹 Social Messages
Messages are classified in one of these categories. You may restrict the Received Sent Draft Personal	e storage of messages if desired.
Message Status You can restrict the storage of messages based upon the setting of value Read is Doesn't matter V Private is Doesn't matter V	

Item Types include: Mail, Appointment, Note, Task, Voice Message, Message, Phone call, BB PIN, and BBM.

Item Sources include: Received, sent, draft and personal.

Message Status can include Read, private or personal, depending on Doesn't matter, True or False.

Date Scope Tab

Items can be deleted based on the following:

- Date Stored in Retain: This date is set by Retain. This is when your Retain server copied the message to the Retain archive. This is a good time to use if Retain has archiving for at least as long as your organization's retention period and is a trusted source.
- *Delivered Date:* This date is set by the recipient mail server. This is when your organization's mail server received the message. This is considered the most accurate date as your email server sets this time and is a trusted source.

- *Expiration Date:*This date is set by your Retain server and is based on when the message is stored in Retain. Configure this in the Job | Core Settings tab. This date will be set in the future.
- *Created Date:*This date is set by the sending mail client. This date is set by an untrusted source. This is considered the least desirable date to use as spammers often set the date to the far future to keep their messages at the top of the list of the recipient's mail client.

And if the items are older than a specified number of Days, Months or Years or between two specific dates.

Profiles	Save Changes 💾 💭 🚺
۶	Add Profile No jobs are associated with this Profile.
Enter new profile below	Remove Profile
Profile Name 10Year	
Basic Options Date Scope	
Date Scope	
	int to choose the correct range, and the correct date type. The creation and delivered date are vas stored in Retain. The expiration date is related to the expiration settings active in the Job
Delete messages where $\Box_{\text{Date Stored in Retain }}$ is:	
Older than 60 Days	
O Between two specific dates	_
Start Date:Apr 06 2017 Time: 14 33 End Date:Apr 06 2017 Time: 14 33	

Creating Item Deletion Jobs

Creating a deletion job is just like creating an archive job select a schedule and profile to prepare the job.

Core Settings Tab

A job can be enabled or disabled.

A job can have a description.

Core Settings allows you to choose between *Generate a report but don't delete message* or *Delete messages as they are processed* when processing the job.

A Schedule and a Profile must be chosen.

🖕 Jobs		
9		
delbb1 delbb2 ggdelbb2	*	
		Add Job
		Remove Job
You need to assign mailboxes to this job.		
Job ggdelbb2		
Core Settings Mailboxes Notification Status		
Core Settings		
Job enabled		
Job Description When processing job Generate a report but don't delete messages V		
Each Job must have the following assigned to it:		
 schedule - How often to run profile - What to do when running 		
Schedule delete_BB1 V		
Profile BB_del_profile1 V		

Selecting Mailboxes for Data Deletion

Select the objects to be included for the deletion job.

- Journaling Mailboxes may be excluded.
- An entire mail server or post office can be included.
- Individual users may be included or excluded.

Jobs	
9	
	Add 1
	Remo
~	
inter new jab below	
lob 10YearPolicy	
Core Settings Mailboxes Notification	
Mailboxes	
Exclude Journaling Mailboxes	
Include these objects:	
docoo (docdom) V Add Mail Server	
Add User	
Kayden Hernandez	
Exclude these objects:	
Add User	

Notification Tab

To be notify about errors and/or when the job is complete, fill out this tab. By default it is filled in with the notification data from Server configuration.

P			
		Add Job Remove J	lob
ter new job below			
b 10YearPolicy			
	tification		
ore settings Mailhoves No			
Core Settings Mailboxes No	uncation		
Core Settings Mailboxes No Notification			
Notification			
		r errors that occurred v	vhen the job complet
Notification	nary of operations and/or	r errors that occurred v	vhen the job complet
Notification You can have Retain e-mail a sumr	nary of operations and/or 10.1.4.214	errors that occurred v	vhen the job complet
Notification You can have Retain e-mail a sumr SMTP Mail Server	nary of operations and/or 10.1.4.214 unencrypted V	r errors that occurred v	vhen the job complet
Notification You can have Retain e-mail a sumr SMTP Mail Server SMTP Security Protocol	nary of operations and/or 10.1.4.214 unencrypted V 25	r errors that occurred v	vhen the job complet
Notification You can have Retain e-mail a sumr SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address	nary of operations and/or 10.1.4.214 unencrypted V 25		vhen the job complet
Notification You can have Retain e-mail a sumr SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address	nary of operations and/or 10.1.4.214 unencrypted 25 retain10@gwava.net		vhen the job complet
Notification You can have Retain e-mail a summ SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address SMTP To Address	nary of operations and/or 10.1.4.214 unencrypted 25 retain10@gwava.net		vhen the job complet
Notification You can have Retain e-mail a summ SMTP Mail Server SMTP Security Protocol SMTP Port SMTP Mail From Address SMTP To Address SMTP Username	nary of operations and/or 10.1.4.214 unencrypted ✓ 25 retain10@gwava.net aileen@sfgw14.gwava.n		vhen the job complet

If tomcat crashes during a deletion job, then the job will continue when the tomcat is restarted. If there is an issue and the server goes down during a job, then the job will need to be rerun.

Deleting Individual Messages

Individual Messages can be deleted by the admin or a user given sufficient rights (RetainDocs/ Administration/User_and_Group_Management/User and Group Management.htm#XREF_User_rights).

Within the users mailbox one or more messages can be deleted by selecting with the checkbox and pressing the *Delete* button.

Browse Search Ad	dvanced Search	n Expo	orted Ite	ems Tag Definitions Options		
🖃 💄 user2	_	Litigation Hold t 30 days 🔍	_	onfidentialState Delete Provard Export Restore Print Change Mailt		Q Next >
1 selected Clear selected	[Туре	From	Subject	Recipients	Date
		v 🖂 🤊	root	Twist the valve and release hot steam. 32234 Thu Apr 6 13:19:02 MDT 2017	user2@sfgw14.gwava.net	06-Apr- 2017 13:19
	[root	The stitch will serve but needs to beshortened. 19003 Thu Apr 6 12:19:01 MDT 2017	user2@sfgw14.gwava.net	06-Apr- 2017 12:19

Deletion Report and Logging

Individual message deletion actions as well as job status are logged in the Retain Deletion log.

The resulting report CSV file is placed in the archive directory. For large deletion jobs, the report file is split into CSV files of up to 500,000 line each. The mailbox is labeled by the user's first, last and display names with a list of items removed.

You can view the current status of deletion jobs in the "Deletion Tab" of the Retain Server Administrative Console. Note that Jobs register as completed before item deletion finishes.

Litigation Hold

• "Add User" on page 177

Litigation hold prevents a mailbox and its associated data from being deleted until the hold is released. This will prevent items from being removed from disk by Mailbox Deletion, Item Deletion or by users with the Delete Messages rights. If Data Removal is run and disk space does not increase it may be because items are under Hold. Items not removed because of a hold will be shown in the RetainServer log.

Add User

Add mailboxes by clicking on the Add User button and selecting user or users from the dialog box.

Litigation Hold

Save Changes 💾 🕥 🌘

Litigation Hold

If you have been granted rights to do so, you may apply or remove litigation hold on an entire users mailbox. You can apply a hold on a per item basis from the main search interface. Holds placed here will prevent ALL messages from being deleted from the relevant user listed when running a deletion manager job.

Jayden Smith		
	Add User	

Add Item

Individual or groups of items may have litigation hold applied by a user with the litigation hold right, for example the admin user.

In the user's mailbox, select the item or items and click on the Litigation Hold action to apply the hold.

P Liti	gation Hold	🥑 Confidential State 🗙 Delete	e 🎓 Forward 📑 Export 🔜 Restore 🛑 Print
	Туре	From	Subject
~		root <root@mail2.gwava.net></root@mail2.gwava.net>	The couch cover and hall drapes were blue. 26832 Tue Au
~	⊠ _ℓ	<datasoong@omicrontheta.com></datasoong@omicrontheta.com>	FILE: The stems of the tall glasses cracked and broke. 321



- "Installing a Reporting and Monitoring (R&M) Server" on page 179
- "Configuring the R&M Server" on page 179
- "Reporting and Monitoring Administration Console" on page 183
- "Defining, Scheduling, and Managing Retain Reports" on page 191
- "Retain's Reports" on page 196

Retain includes a separate Reporting and Monitoring server. Although the server can be installed on a separate machine (physical or virtual), best practice is to install it and the Retain Server on the same machine.

Installing a Reporting and Monitoring (R&M) Server

See "Installing Retain 24.1" in the *OpenText Retain CE 24.1: Installation and Upgrade* guide. When choosing which components to install, include **Reporting and Monitoring Server** among your selections.

Configuring the R&M Server

After the server is installed, do the following:

- 1 On an administrative workstation, open a supported administrative web browser.
- 2 Open Retain's adminstration console http://RetainServer-IP-or-DNS/RetainServer.
- 3 Browse to Configuration > Reporting and Monitoring.
- **4** Configure the R&M Server as outlined in the following table.

NOTE: Most R&M deployments require few if any modifications, except to Notification tab settings.

 Table 4-1
 Configuring the Reporting and Monitoring Server

Tab	Information or Action		
Core Settings Tab			
Basics Panel			
 Days to retain job information 	 Specify how long the R&M server retains job information. Default is 14 days. Maximum allowed value is 90 days. 		
 Run maintenance at (hour) 	 Specify what time R&M maintenance runs each day. Default is 0200 or 2 AM. 		

ıb		Info	rmation or Action
	• Update interval for Server Statistics (minutes)	1.	Specify how often server statistics, such as CPU usage, dis storage, and so on are collected.
			Default is every 10 minutes.
	 Update interval for Archive Statistics (minutes) 	1.	Specify how often archiving statistics such as messages archived, messages processed, errors, and so on are collected.
			Default is every 10 minutes.
	Accept Server connections only from	1.	To limit connections to the R&M server to only specified I Addresses, type the addresses separated by commas.
	these IP addresses		All connections are allowed by default.
	 Do not expire inactive sessions 	1.	Select (enable) this to prevent inactive data collection sessions from expiring.
			This is useful in conjunction with the Monitoring page.
			Default is disabled (inactive sessions expire).
	 Disable the disk usage statistics 	1.	Deselect (disable) this to prevent Archive Size from being listed in the Server Utilization report.
			Default is enabled (size is listed in the report).
	 Disable the number of messages statistics 	1.	Select (enable) this to prevent the Total Messages Stored number from appearing on the Reporting and Monitoring dashboard. This is useful if collecting the total is impactin your system's performance.
			Default is disabled (total is collected and displayed).
Int	terval Panel		
	Poll for configuration change	1.	Specify how often (in minutes) the R&M server checks wit the Retain server for retrieving new statistics.
			Value must be between 5 and 255. Default is 10.
gging	Tab		
	 Logging enabled 	1.	Use this to enable and disable logging.
			Default is enabled.
	Log level	1.	You can change the logging level if required.
			Best practice is to not change this unless Support directs you to. Levels are: Diagnostic (Trace), Verbose (Debug), Normal (info), and Error only.
			Default is Normal (Info).
	Compress Logs	1.	Deselect this to disable log file compression.
			By default, the system compresses log files to save disk space.

Tab	Information or Action			
	Remove Old Logs	 You can prevent log files from being discarded by disabling this option. However, you should only do this temporarily. 		
		By default, old logs are removed after a set number of days (see the next field).		
	 When age exceeds (days) 	 Use this to specify how long log the server retains its log files. 		
		Default is 10 days.		

Connection Tab

IMPORTANT: If your Retain system uses HTTPS, the web server must use a full TLS certificate chain signed by a trusted third-party Certificate Authority.

The chain must include both server and intermediate certificates.

Self-signed certificates do not work.

Connection from R&M Server to Retain Server Panel

IMPORTANT: Do not change these system-created connection settings unless the Retain Server requires a modified connection path, such as a custom port.

• Server Protocol 1. Select the protocol (http or https) for communications
from the R&M server to the Retain server.
Retain Server Host Name 1. Specify the DNS host name of the Retain server.
 Retain Server Port Specify the port on which the R&M server communicate with the Retain server.
Retain Server Path 1. Specify where Retain is installed on the server.
• R&M Server Password 1. Specify the Admin user password to the R&M server.

Connection from Retain Server to R&M Server Panel

IMPORTANT: Do not modify these system-created connection settings unless you have created custom connection settings.

Server Protocol	 Select the protocol (http or https) for communications from the Retain server to the R&M server.
• R&M Server Host Name	1. Specify the DNS host name of the R&M server.
 R&M Server Port 	 Specify the port on which the Retain server communicates with the R&M server.
 R&M Server Path 	1. Specify where Reporting and Monitoring is installed on the server.
Connection from Browser to R&	M Server Panel

These settings specify the connection when the browser is redirected from Retain server links to the R&M server.

Server Protocol	1. Select the protocol (http or https) for communication			
	from the browser to the R&M server.			

Tab	Information or Action		
	R&M Server Host Name	1. Specify the DNS host name of the R&M server.	
	 R&M Server Port 	 Specify the port on which the browser communicates with the R&M server. 	
	 R&M Server Path 	 Specify where Reporting and Monitoring is installed on the R&M server. 	

Notification Tab

By default, this tab reflects the settings specified for the Retain server.

Notification Panel		
 SMTP Mail Server 	 Specify the DNS hostname (preferred) or IP address of the SMTP server that Retain should use for emailing notifications. 	
SMTP Security Protocol	 Select the security protocol setting Retain uses for communications with the SMTP server: unencrypted, SSL, or TLS. 	
SMTP Port	 Specify the port on which Retain communicates with the SMTP server. 	
SMTP Mail From Address	 Specify the From address shown on the messages that Retain sends. 	
SMTP To Address	 Specify the address to which Retain sends notifications through the SMTP server. 	
SMTP Username	 Specify the username for authenticating with the SMTP server. 	
SMTP Password	1. Specify the password for the username.	
 Test Connection button 	 Click this to test the connection with the SMTP server. If the test succeeds, an email message is received in the SMTP To Address mailbox. 	

Bootstrap Tab

This tab appears after the configuration is saved.

 Download File link 	TIP: To easily download and then upload the bootstrap file, access both the Retain server and the R&M server on the same machine.
	 Use this button to download the R&M server's bootstrap file.
	2. Note where the file is downloaded.

Tab	Information or Action		
	URL to R&M server	 Click this link in the explanation that displays to access the R&M server for the first time. 	
		2. Log in using the Retain admin username and password.	
		On the R&M server's initial webpage, browse to the saved bootstrap file and select it.	
		4. Click Continue to upload the bootstrap file.	
		5. After the bootstrap file is uploaded, users with the Access Reporting and Monitoring Server right can access the R&M server.	

Reporting and Monitoring Administration Console

Using an administrative browser, enter the following URL and sign in as a Retain administrative user.

Path: http://reporting-and-monitoring-server-IP-or-DNS/RetainStatsServer

opentext Retain	Language English 🗸 Help admin 🗸
Home Report V Schedule Report V Manage Scheduled Reports V Maintenance	System Monitor Mailbox Error Monitoring
Jobs Refresh	

NOTE: You can also access the R&M server from the Retain administration interface by clicking either the **Reporting** or **Monitoring** links in the left navigation panel.

From the R&M console, you can access the following:

- "Home Tab" on page 183
- "Reports, Scheduled Reports, and Manage Scheduled Reports Drop-down Lists" on page 187
- "System Monitor Tab" on page 187
- "Mailbox Error Monitoring Tab" on page 189
- "Maintenance Tab" on page 190

Home Tab

The Reporting and Monitoring Home tab/page lists current archive activity on the associated Retain server. It also includes the following subpanels.

- "Job History Panel" on page 184
- "Job Details Panel" on page 185
- "Job Mailbox Summary Panel" on page 186

Path: Retain Reporting and Monitoring Server > Home

Jobs Refresh					
Job Name ≎	Worker ≎	Profile \$	Schedule \$	Email System 🗘	Last Reported Time 4
andranga (ide	analise.	illanturga i	an colleadola	Endstange	305.0.01 (0.0
a'BA	undus	Easturgs I	addit coltradicia	Endnange	3020-31-29 (0.49
gar (olu	terminer.	per profile	gen stalisterikale	Compositor	3026-01-01-00-01
ISBN 1	tany	ung k	lary.	ling .	
Warmsharg, I	tany	Islaminary.1	lary .	Buankung	
Claugheilippe, F	tany	-Campbelgge. 8	lary.	Kanglaupps	
Markhamy 1	Lany -	felantitisarry: A	Basery :	Bunkhamy	

Table 4-2 Using the Reporting and Monitoring Server Home Page

Field, Option, or Button	 Information and/or Action Use this to select or change the UI display language. 	
Language Drop-down		
Top Navigation Bar	 Use this to navigate among the following. Click the links for more details about each item. 	
	 Home: Open or return to this page. 	
	Report drop-down	
	Scheduled Report drop-down	
	 Manage Scheduled Reports drop-down 	
	System Monitor page	
	Mailbox Error Monitoring page	
	Maintenance page	
Refresh button	1. Click this to refresh the details displayed.	
Jobs list	This lists all of the jobs in your Retain system along with their associated workers, profiles, schedules, and last-reported run times.	
	You can	
	 Sort the list by clicking any of the column headings. 	
	 Click a finished Job run to display 	
	• A Job History report.	
	 Details of the selected job 	
	 A Mailbox Summary Report. 	
	 In the Job History report you can also drill down into mailbox errors for a given job run. 	

Job History Panel

Path: Retain Reporting and Monitoring Server > Home > select a listed Job

					Job History					
Job Name	Job Run ID	Status \$	Messages P	Archived Me	Speed (Mess	Errors	Warnings	Start Time \$	End Time 🗘	Duration (h)
1001	ieldet .	Completed	378	5	1.18	4	-21	2008-07.2118	3036.0724.0	100.06.11
1001	12017	Completed	325	2	138	4	2	2020-03-2018	3036.0724-6	100.06341
2004	10554	Completed	388	3	1.12	4	2	202.43.49.8	303.87.444	100.045.63
1001	20196	Completed	388	8	1.18	4	2	2020-03-018	303.07.11.0	00.05.11
aldei -	32341	Completed	360	10. E	11.951	4	2	368.43.476	MARKET R	100.04.24
1961	38286	Completed	387	а.	6.86	4	4	2626-63-66.6	DOLE HA	10125-03
1064	10824	Completed	326	1	1.10	4	4	2024.43.45.8	MARKED AND	10125-24
1061	38111	Completed	300	3.	6.82	4	2	2020/07/010	303.07.11.6	00.05.26
1.10X	20043	Gampidad	286		6 FQ	1	\$	3000.00	303.01116	III MAI
1961	26808	Completed	OBT -	14	6.85	4	-12	2606-63.43 8	303.07.114	道法符
1993	26.69	Completed			10	4		•		

 Table 4-3
 Using the Job History Panel

Field, Option, or Button	Information and/or Action
List of Job runs	 Job Name: Name that you assigned to the job.
	 Job Run ID: Internal ID assigned to job run.
	Status: Current job status.
	 Messages Processed: Number of messages processed by the job.
	 Archived Messages: Number of messages archived by the job.
	 Speed (Messages/sec): How many messages the job processed per second.
	• Errors: Number of errors encountered on each job run.
	The number links to en error summary panel with more information about each error, such as severity, how many mailboxes had the error, and how many times it occurred during the job run selected.
	 Warnings: Number of warnings generated during the job.
	 Start Time: Date and time that the job started.
	End Time: Date and time that the job ended.
	 Duration (hh:mm:ss): How long the job run lasted.

Job Details Panel

Path: Retain Reporting and Monitoring Server > Home > select a listed Job > select a Job Run ID— the Job Details panel for the selected run displays directly below the Job History panel.

	Job	Details	
Job Name	12 Maile	Status	Completed
Worker	is prince	Duration (hh:mm:ss)	0013-6-53
Start Time	2020-01-01-00-01	End Time	2020-01-1100-02
Mailboxes Processed	W.	Archived Messages	191
Messages Processed	100	Message Data Stored	2.00.000
Last PO Scanned	sellips the	Last Mailbox Scanned	(Mathonyst)
Errors	10	Last Error	

Field, Option, or Button	Information and/or Action
Job Detail Items	• Job Name: Name that you assigned to the job.
	Status: State of the job run.
	Worker: Worker that is running or that ran the job.
	 Duration (hh:mm:ss): How long the job has been running or if completed, how long it ran.
	Start Time: Date and time that the job started.
	• End Time: Date and time that the job ended.
	 Mailboxes Processed: Total number of mailboxes processed during the run.
	 Archived Messages: Total number of messages archived during the run.
	 Messages Processed: Total number of messages that the job processed during this run.
	 Message Data Stored: Size of the message data that the job stored during this run.
	Last PO Scanned: Last Post Office scanned during the job run.
	Last Mailbox Scanned: Last mailbox scanned during the job run.
	• Errors: Number of errors encountered during the job run.
	Last Error: Last error message recorded during the job run.

Job Mailbox Summary Panel

Path: Retain Reporting and Monitoring Server > Home > select a listed Job > select a Job Run ID— the Job Mailbox Summary panel for the selected run displays directly below the Job Details panel.

				Job Mailbox Summ	nary			
Mailbox \$	Messages Proc	Archived Messa	Errors \$	Warnings \$	Advanced Date	Start Time 💲	End Time ≎	Duration (hh:mr
Challing of the	2	4	1	4		3020-01-01-00-0	10030-01141-00140	10-04-05
stepheni (offen)	2	8	21	B		3020-01-03-00.4	20201-011-0108-0	10104-03
and the latter of the		e:	2		Logi der Mand Flegs (3009-10-	2020-01-01-00-0	3636-07-12-08-0	10-20-08

Field, Option, or Button	Information and/or Action
Mailbox Summary	Mailbox: Mailbox UserID and post office name.
Columns	 Messages Processed: Number of messages processed from this mailbox during the job run.
	 Archived Messages: Number of messages archived from this mailbox during the run.
	• Errors: Number of errors encountered on the mailbox during the job run.
	 Warnings: Number of warnings encountered on the mailbox during the job run.
	 Advanced Date Flags: Date flags encountered for the mailbox during the job run.
	 Start Time: Date and time the mailbox processing started.
	• End Time: Date and time the mailbox processing ended.
	 Duration: How long it took to process the mailbox.

Reports, Scheduled Reports, and Manage Scheduled Reports Drop-down Lists

Path: Retain Reporting and Monitoring Server > Report or Schedule Report or Manage Scheduled Reports

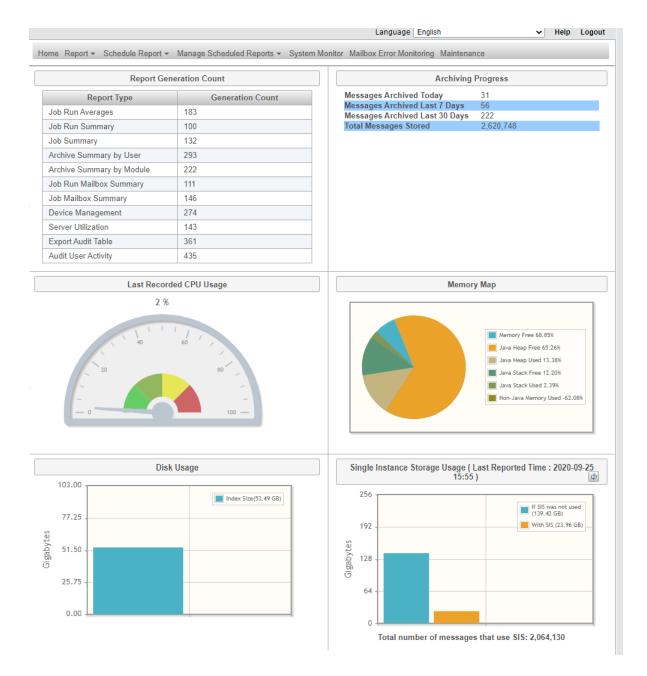
Retain	Welcome to the Re	porting and Monitoring Home Page	Language English
Home Report - Schedule Report -	Manage Scheduled Reports -	System Monitor Mailbox Error Monitoring	Maintenance

For information and usage instructions for these drop-down reports and tasks, see the following sections:

- "Comparing Reports and Scheduled Reports" on page 191
- "Creating Scheduled Reports—Overview" on page 192
- "Managing Scheduled Reports" on page 195

System Monitor Tab

Path: Retain Reporting and Monitoring Server > System Monitor Tab



The System Monitor page shows the following:

- Report Generation Count: The total number of reports that have been generated on the system, by type.
- Archiving Progress: Two calculation methods are reflected in these numbers.
 - Messages Archived: These numbers for the previous day, week, and month, include only the primary or initial messages themselves. Attached and child messages that are associated with the primary message threads, are not counted.
 - **Total Messages Stored:** This number includes all messages. In other words, it reflects all initial messages and all of the attached and child messages associated with them.
- + Last Recorded CPU Usage: This is the latest measured System CPU load recorded.

- Memory Map: This pie chart focuses on memory usage by various Java-associated processes that support Retain functionality.
- **Disk Usage:** This reports the disk space consumed by Retain's data index.
- Single-Instance Storage Usage: This compares the disk space actually used by archived messages against what would have been used if messages sent to multiple mailboxes had been archived separately for each mailbox.

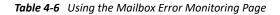
Retain's single-instance storage system archives message data only once and links the archived data to the mailboxes that received the messages.

NOTE: If there is a problem gathering system-level information, the CPU, RAM, and system memory usage are set to 0 until the issue is resolved.

Mailbox Error Monitoring Tab

Path: Retain Reporting and Monitoring Server > Mailbox Error Monitoring Tab

Home Report - Schedule Report - Manage Scheduled Reports -	System Monitor Mailbox Error Monitoring Maintenance				
Error Summary for all the Mailboxes with Errors					
Mailbox(es	s) with errors				
Mailbox 🗢	Errors \$				
user10(legionpo)	2				
user11(legionpo)	1				
user15(legionpo)	2				
user17(legionpo)	1				
user19(legionpo)	1				
user20(legionpo)	4				
user7(legionpo)	1				
user8(legionpo)	2				



Field, Option, or Button	Information and/or Action
Mailbox(es) with errors	
 Mailbox 	Mailbox name

Field, Option, or Button	Information and/or Action
Errors	A number that links to error information for the mailbox.
	1. Access the errors for a given mailbox by clicking the error number.
	The Error Summary for Mailbox [mailboxName] list displays.
	Each line includes:
	 A description of the error and its error code
	 The path to the folder the message was found in
	 The message's subject, sender, attachment that the error occurred on, and the delivered date.
	 If the message is accessible from the user's client, save the message from the client. Then import the message into Retain using the PST Importer or GroupWise Personal Archive Migrator.
	3. To skip messages the next time the job runs,
	a. Select individual messages or use the title bar checkbox to select all.
	b. Then click the Skip Errors button.
	The message is not reported in future job runs.

NOTE: This page is also accessible through the Retain Admin Console> Overview > Mailbox Error Monitoring

Maintenance Tab

The R&M server refreshes itself automatically each morning at 2 a.m. by expiring and deleting statistical data that is older than 14 days.

Use this dialog if you need to manually purge older data.

Path: Retain Reporting and Monitoring Server > Maintenance Tab

Maintenance	
Maintenance job(s) will be performed a	t 2:00 (24hr clock).
Currently configured to keep 14 days o	f statistical data.
To configure these settings or other sta	its settings please do so via the Retain Server.
	A CONTRACTOR CONTRACTOR
Remove old statistical data now	older than 14 days.
Remove old statistical data now Synchronize address book cache	
Synchronize address book cache	

• **Retain Server link:** Click this to open the Retain administrative console.

In the administrative console, you can adjust the data retention period setting by accessing the Reporting and Monitoring configuration page. OpenText recommends not retaining statistical data longer than 30 days.

- **Remove old statistical data now:** Use this button to remove statistical data that is older than the number of days indicated, immediately rather than at 2 a.m.
- Synchronize address book cache now: Use this button if you need to ensure that the R&M server's address book is synchronized with the Retain server's address book. (They are automatically synchronized every 24 hours, but they can get out of sync in the interim.)
- Synchronize jobs cache now: Use this button if you need to ensure that the R&M server's job cache is synchronized with the Retain server's address book. (They are automatically synchronized every 24 hours, but they can get out of sync in the interim.)
- Active job run maintenance: Use this button to clear the current job status, for example when a job has completed but the R&M server shows it as is still running.

Defining, Scheduling, and Managing Retain Reports

- "Comparing Reports and Scheduled Reports" on page 191
- "Creating Scheduled Reports—Overview" on page 192
- "Configuring Email Delivery of R&M Reports" on page 194
- "Managing Scheduled Reports" on page 195

Path: Retain Reporting and Monitoring Server > Report or Scheduled Report drop-down

Comparing Reports and Scheduled Reports

Reports and Scheduled reports have the same titles and contain the same information. Reports are generated one time as requested; Scheduled reports are generated at specified intervals.

Table 4-7 on page 191 outlines the main differences between the Reports and Scheduled Reports.

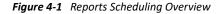
Feature or Item	Report	Schedule Report		
Reports Available	All summarized in "Retain's Reports" on page 196.	Reports not available as scheduled reports include:		
		 Job Run Summary 		
		 Job Run Mailbox Summary 		
Output Format Availability:				
HTML	Yes (In-browser only)	No		
PDF	Yes	Yes		
XLS	Yes	Yes		

Table 4-7 Reports vs.Schedule Reports

Feature or Item	Report	Schedule Report
CSV (for Audit User Activity, Export Audit Table, and Device Management reports only)	Yes	Yes
In-browser Delivery	Yes	No
Email Delivery	Yes	Yes
Automatic Report Generation	No	Yes
Report Date Range	Generated reports include the Start Date thru the End Date specified.	The result of the specified Use Data from Last range of time counted back from each report generation specified by the Send Report value.
		For example, if the R&M server uses data from the last 1 day and sends a report Daily, each report covers exactly one day.
		Obviously it is possible to specify reports that either overlap or miss periods of time.
Report Start and End Dates	One report only is generated for each request made.	Report generation starts on the date specified for the Schedule Start Date field.
		If the Schedule End Date field is blank, reports are generated until specifications change.
		If a Schedule End Date is set, report generation ceases on the specified date.
Report Size and Multiple	Settings vary by report.	Generally, the same settings available
Pages	Some let you limit the number of errors reported or set other limitations.	for the Report version are also available for the Schedule Report version of the same report.
	If you select an output other than HTML, some reports let you limit the file size, number of pages, etc.	

Creating Scheduled Reports—Overview

The process for creating scheduled reports is illustrated and briefly explained in the following graphic and table.



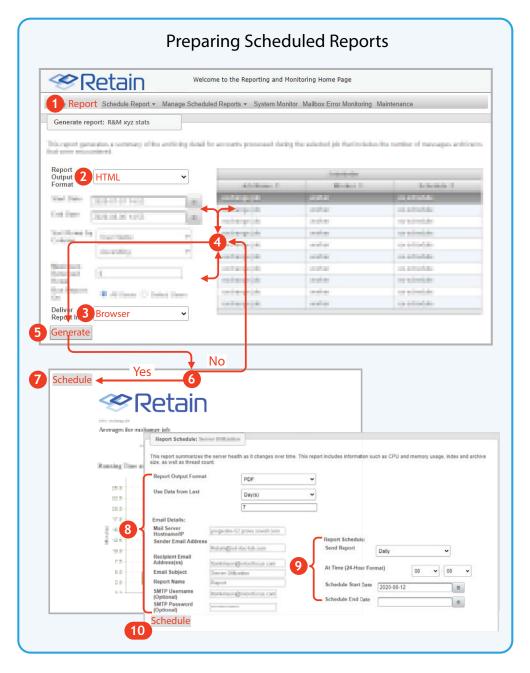


 Table 4-8
 Setting up a Scheduled Report

Number	Details
1	In the R&M server console, click the Report tab and select a report that you want to schedule for regular generation.
	IMPORTANT: The Job Run Summary and Job Run Mailbox Summary reports are not available for scheduling.
2	Select HTML as the report output format.

Number	Details
3	Specify Browser delivery for the report you are setting up.
	This lets you quickly view in your browser what is being reported.
4	Adjust the report parameters as needed for the data that you want included in the report.
5	Click Generate.
	An HTML rendition of the report displays.
6	Review the report contents.
	Then if you want to adjust the output, return to Step 4 and adjust the parameters.
7	When the generated report meets your needs, click Schedule.
-	The Schedule dialog opens.
8	Specify the output format you want (PDF or XLS) and the SMTP settings for delivery of the generated report as an email attachment.
9	Specify the schedule for when, how often, and how long you want the report generated.
10	Click Schedule.
-	Retain generates and sends regular reports according to the schedule you have specified.

Configuring Email Delivery of R&M Reports

If you choose to deliver an R&M server report in email, the Email Details panel displays for specifying the SMTP server to use.

By default the R&M server is configured with the same SMTP configuration as you specified for Retain in "SMTP Notifications" in the *OpenText Retain CE 24.1: Installation and Upgrade* guide.

You can specify a different configuration here if needed.

Email Details Panel

1. Specify the SMTP configuration settings that you want used for emailing the report you are configuring.

Mail Server Hostname/IP	The DNS hostname (preferred) or IP address of the SMTP server that the R&M server uses for emailing notifications.
Sender Email Address	The From address shown on the messages that the R&M server sends.
Recipient Email Addresses	The email addresses of report recipients.
Email Subject	The Subject line on the sent email.
Report Name	The reports filename.
SMTP Username (Optional)	A username on the SMTP server. Optional if the SMTP server doesn't require authentication.
SMTP Password (Optional)	The password of the user.

Managing Scheduled Reports

You can modify, manually run, or delete scheduled reports by using the Manage Scheduled Reports drop-down options.

Path: Retain Reporting and Monitoring Server > Manage Scheduled Reports Drop-down



Changing or Viewing Scheduled Reports

Path: Retain Reporting and Monitoring Server > Manage Scheduled Reports Drop-down > View/ Change Details

Report Name 🗘	Output Format \$	Schedule Type \$	Next Fire Time 🗘	Sender Email Address ≎	Email Subject ¢
Archive Summary by User	pdf	Daily	2020-08-19 15:04	Retain@ret-doc-lab.com	Archive Summary by User
Job Run Averages	pdf	Daily	2020-08-19 15:01	Retain@ret-doc-lab.com	Job Run Averages
Audit User Activity	pdf	Daily	2020-08-20 00:00	Retain@ret-doc-lab.com	Audit User Activity
Server Utilization	pdf	Daily	2020-08-19 15:06	Retain@ret-doc-lab.com	Server Utilization
Device Management	pdf	Daily	2020-08-19 15:07	Retain@ret-doc-lab.com	Device Management
Export Audit Table	pdf	Daily	2020-08-19 15:00	Retain@ret-doc-lab.com	Export Audit Table
Archive Summary by Module	pdf	Daily	2020-08-19 15:05	Retain@ret-doc-lab.com	Archive Summary by Module
Job Summary	pdf	Daily	2020-08-19 15:03	Retain@ret-doc-lab.com	Job Summary
Job Mailbox Summary	pdf	Daily	2020-08-19 15:06	Retain@ret-doc-lab.com	Job Mailbox Summary

- 1 To modify or view a report's settings, select a report in the list, then click View/Change Details.
- 2 The report's configuration dialog opens.
- **3** Adjust the report's settings as needed.
- 4 Click Update to save your changes or Cancel to leave the settings unchanged.

Running or Removing Scheduled Reports

Path: Retain Reporting and Monitoring Server > Manage Scheduled Reports Drop-down > Run and Delete Reports

	Report Name O	Output Format 0	Schedule Type ¢	Next Fire Time ≎	Sender Email Address ©	Email Subject ¢
2	Archive Summary by User	pdf	Daily	2020-08-19 15:04	Retain@ret-doc-lab.com	Archive Summary by User
	Job Run Averages	pdf	Daily	2020-08-19 15:01	Retain@ret-doc-lab.com	Job Run Averages
	Audit User Activity	pdf	Daily	2020-08-20 00:00	Retain@ret-doc-lab.com	Audit User Activity
	Server Utilization	pdf	Daily	2020-08-19 15:06	Retain@ret-doc-lab.com	Server Utilization
	Device Management	pdf	Daily	2020-08-19 15:07	Retain@ret-doc-lab.com	Device Management
	Export Audit Table	pdf	Daily	2020-08-19 15:00	Retain@ret-doc-lab.com	Export Audit Table
	Archive Summary by Module	pdf	Daily	2020-08-19 15:05	Retain@ret-doc-lab.com	Archive Summary by Module
	Job Summary	pdf	Daily	2020-08-19 15:03	Retain@ret-doc-lab.com	Job Summary
	Job Mailbox Summary	pdf	Daily	2020-08-19 15:06	Retain@ret-doc-lab.com	Job Mailbox Summary
			Run report now	x Remove selected	1	

- 1 To run a listed report, select its checkbox in the list, then click Run Report Now.
- 2 To delete one or more reports, select the checkboxes for the reports you want to delete.
- **3** Click Remove Selected.

The selected reports are removed.

Retain's Reports

The following sections detail the content of each R&M report.

- "Audit User Activity" on page 197
- "Export Audit Table" on page 197
- "Job Run Averages" on page 198
- "Job Run Summary" on page 199
- "Job Summary" on page 200

- "Archive Summary by User" on page 202
- "Archive Summary by Module" on page 204
- "Server Utilization" on page 205
- "Job Run Mailbox Summary" on page 206
- "Job Mailbox Summary" on page 207
- "Device Management" on page 208

Audit User Activity

Report Contents: A summary of all specified auditable actions by each user.

See Table 2-20 on page 76 for instructions on specifying which actions are logged and therefore available for reporting.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Audit User Activity

 Table 4-10
 Configuring an Audit User Activity Report

Section or Item	Information or Action
Report Parameters	

There are no report-specific parameters to set for this report.

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

Figure 4-2 Sample Audit User Activity Report

Actions Performed on Archive				
User Name	Count	Action	Last Action	
admin	138	Login	2015-09-18 14:01	
	36	Changed User or Group	2015-09-17 09:47	
	89	Switched .	2015-09-17 11:04	
	88	Searched	2015-09-18 00:02	
admin2	4	Switched	2015-09-10 11:59	
	3	Changed User or Group	2015-09-17 14:02	
	54	Login	2015-09-18 13:32	
	14	Viewed	2015-09-10 11:57	
ajay	0	No action performed	None	
ambiguous	0	No action performed	None	

Export Audit Table

Report Contents: A customized view of the Audit Log, showing the users and events that you specify, with report contents organized by the column that you specify.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Export Audit Table

Section or Item

Information or Action

Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

Sort Rows by Column	1. Choose which column you want the report to be sorted by:
	Date
	 Info
	◆ User
	 Mailbox
	 Job Name
	Action
	Specify whether you want it sorted in ascending or descendin order.
Action	1. Select the Actions that you want included in the report.
	NOTE: Of course, if an action is not logged, it cannot appear i the exported table.
Run Report on	 Choose either All Users, or choose Select Users and pick thos you want included from the list that displays.
	2. Click Generate.

Figure 4-3 Sample Export Audit Table Report

Export of Audit Log Items						
Date	Info	User	Mailbox	Job Name	Action	
2020-07-24 08:33	Message ID = 45718	collector	Stubby14		Archived	
2020-07-11 08:32	Message ID = 34993	collector	Stubby14		Archived	
2020-07-25 08:38	Message ID = 46575	collector	Stubby14		Archived	
2020-07-25 08:43	Message ID = 46717	collector	User07		Archived	
2020-07-10 08:37	Message ID = 34083	collector	User07		Archived	
2020-07-10 08:32	Message ID = 33645	collector	Stubby14		Archived	
2020-07-22 08:40	Message ID = 43829	collector	Stubby14		Archived	
2020-07-29 08:53	Message ID = 48932	collector	Stubby14		Archived	

This report is also available on systems without a Retain Reporting and Monitoring Server installed. For help, see "Auditing Option (Overview)" on page 165.

Job Run Averages

Report Contents: A.chart for one or more selected jobs, showing and comparing the jobs' effectiveness, overall load, and performance.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Job Run Averages

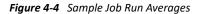
Section or Item Info	rmation or Action
----------------------	-------------------

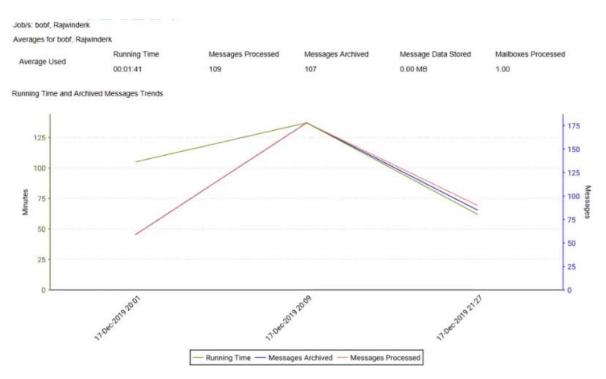
Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

Jobs	1. Select one (or more) of the listed jobs that you want to view
	trends for (and optionally compare).

2. Click Generate.





You can see performance trends when you compare run time with message counts over a time period. The averages used to create the graph are listed above the graph; the legend is below.

Job Run Summary

The Job Run Summary report covers one job run in detail.

Path: Retain Reporting and Monitoring Server > Report > Job Run Summary

Section or Item

Information or Action

Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

Job Run Summary		
Job Name > Select a Value drop- down	1.	Click the drop-down and select one of the listed job names to filter the Job list.
	2.	Select one of the listed jobs.
	3.	Click Generate.

Figure 4-5 A Sample Job Run Summary Report

Aailboxes Processed	Messages Processed	Messages Archived	Message Data Stored	Errors	Start Time	End Ti	me D	Juration
66	158397	1084	27 MB	70	2015-09-17 20:30			3:26:32
Errors Encounter	ed During Job							
Error Name	Description		Error	D	Severity	Occurred	Last Occurrence	e
ava.io.IOException	GWPOA HTTP server ret Code: 920c	urned http error (gw error): 400(0x920C) 82376	2	Normal	3	17-Sep-2015 23:	29
ava.io.IOException	GWPOA HTTP server ret Code: c081	urned http error (gw error): 400(0xC081) 88871:	3	Normal	87	17-Sep-2015 22:4	42
com.gwava.gweasysoap	.CUser Database is tempor	arily disabled Code: d714	88717	3	Warning	1	17-Sep-2015 20:	36
com.gwava.gweasysoap	.CUser account is expired (Code: d023	88717	3	Warning	1	17-Sep-2015 20:	36
com.gwava.gweasysoap Errors Encountere	· ·	Code: d023	88717	3	Warning	1	17-Sep-2015 20:	36
	· ·	Code: d023 Description	88717 Error I		Warning Severity	1 Occurred	17-Sep-2015 20:	
Errors Encountere	ed In Mailboxes		Error I	D	, in the second s			•
Errors Encountere	ed In Mailboxes Error Name	Description GWPOA HTTP serve error (gw error): 400	Error I er returned http 888713 0xC081) Code: 823783	D	Severity	Occurred	Last Occurrence	2
Errors Encountere Jser Name DeeZeroOneBee	ed In Mailboxes Error Name java.io.IOException	Description GWPOA HTTP serve error (gw error): 400y c081 GWPOA HTTP serve error (gw error): 400y	Error I ar returned http DxC081) Code: 888713 ar returned http Dx920C) Code: 823762 ar returned http 823762	D	Severity Normal	Occurred 23	Last Occurrence 17-Sep-2015 22:4) 2 9

The summary displays the total mailboxes, messages, data store, errors, and running time of the job. Afterwards, this information is broken down by each mailbox the job covers.

Job Summary

The Job Summary reports on the same statistics as the Job Run Summary report, but it summarizes the complete history for all runs of a given job rather than a single run.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Job Summary

 Table 4-14
 Configuring a Job Summary Report

Section or Item

Information or Action

Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

Job	Summary
-----	---------

Job Name

1. Select one of the listed jobs.

All of the jobs with that name are selected in the background.

2. Click Generate.

Figure 4-6 A Sample Job Summary Report

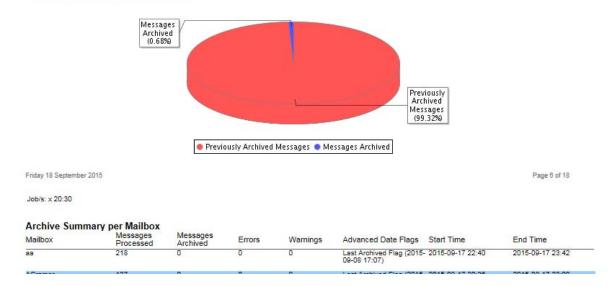
Job/s: x 20:30

Job Summary

Messages Processed	Messages Archived	Message Data Stor	ed Errors	Start Time	End Til	me	Duration
158397	1084	27 MB	70	2015-09-17 20:30	2015-09	9-17 23:57	03:28:32
ed During Job							
Description		Erro	or ID	Severity	Occurred	Last Occu	rrence
		gw error): 400 823	762	Normal	3	17-Sep-201	15 23:29
		gw error): 400 888	713	Normal	67	17-Sep-201	15 22:42
ed In Mailboxes							
Error Name	Description	Err	or ID	Severity	Occurred	Last Occu	urrence
java.io.IOException			713	Normal	23	17-Sep-20	15 22:42
java.io.IOException			762	Normal	2	17-Sep-20	15 23:29
	158397 ed During Job Description GWPOA HTTP = (0x020C) Code: GWPOA HTTP = (0x020C) Code: GWPOA HTTP = (0x0081) Code: red In Mailboxes Error Name java.io.IOException	158397 1084 ed During Job Description GWPOA HTTP server returned http error ((0x2002) Code: 220a GWPOA HTTP server returned http error ((0x2031) Code: c081 red In Mailboxes Error Name Description java.io.IOException GWPOA HTTP server error (gw error): 400 java.io.IOException GWPOA HTTP serve error (gw error): 400	158397 1084 27 MB ed During Job Description Error GWPOA HTTP server returned http error (gw error): 400 8231 (0x820C) Code: 9200 8233 GWPOA HTTP server returned http error (gw error): 400 8881 red In Mailboxes 8885 Error Name Description [ava.io.IOException GWPOA HTTP server returned http error (gw error): 400(0xC081) Code: c081 [ava.io.IOException GWPOA HTTP server returned http error (gw error): 400(0xC081) Code: c081	158397 1084 27 MB 70 ed During Job Description Error ID GWPOA HTTP server returned http error (gw error): 400 823762 (0x820C) Code: 9200 888713 GWPOA HTTP server returned http error (gw error): 400 888713 (0x081) Code: c081 Error ID gwpoA HTTP server returned http error (gw error): 400 888713 red In Mailboxes Error Name Description java.io.IOException GWPOA HTTP server returned http error (gw error): 400(0x081) Code: c081 888713 java.io.IOException GWPOA HTTP server returned http error (gw error): 400(0x0920) Code: 823762	158397 1084 27 MB 70 2015-09-17 20:30 ed During Job Description Error ID Severity GWPOA HTTP server returned http error (gw error): 400 823762 Normal (0x2081) Code: e200 GWPOA HTTP server returned http error (gw error): 400 888713 Normal (0x0081) Code: e2081 Description Error ID Severity in Mailboxes Error Name Description Error ID Severity [ava.io.IOException GWPOA HTTP server returned http error (gw error): 400(0x2081) Code: c081 Normal Normal [ava.io.IOException GWPOA HTTP server returned http error (gw error): 400(0x2020) Code: Normal Normal	158397 1084 27 MB 70 2015-09-17 20:30 2015-09 ed During Job Description Error ID Severity Occurred GWPOA HTTP server returned http error (gw error): 400 823762 Normal 3 GWPOA HTTP server returned http error (gw error): 400 823762 Normal 67 red In Mailboxes Error Name Description Error ID Severity Occurred java.io.IOException GWPOA HTTP server returned http error (gw error): 400 888713 Normal 67 isva.io.IOException GWPOA HTTP server returned http error (gw error): 400(0xC081) Code: c081 888713 Normal 23 isva.io.IOException GWPOA HTTP server returned http error (gw error): 400(0xC081) Code: c081 Normal 23	158397 1084 27 MB 70 2015-09-17 20:30 2015-09-17 23:57 ed During Job Description Error ID Severity Occurred Last Occu GWPOA HTTP server returned http error (gw error): 400 823762 Normal 3 17-Sep-201 (0x0202) Code: 6200 GWPOA HTTP server returned http error (gw error): 400 888713 Normal 67 17-Sep-201 (0x02031) Code: c031 GWPOA HTTP server returned http error (gw error): 400 888713 Normal 67 17-Sep-201 red In Mailboxes Error ID Severity Occurred Last Occu [ava.io.IOException GWPOA HTTP server returned http 888713 Normal 23 17-Sep-201 [ava.io.IOException GWPOA HTTP server returned http 888713 Normal 23 17-Sep-201 [ava.io.IOException GWPOA HTTP server returned http 888713 Normal 23 17-Sep-201 [ava.io.IOException GWPOA HTTP server returned http 823762 Normal 2 17-Sep-202

SeeZeroEightOne	java.io.IOException	GWPOA HTTP server returned http error (gw error): 400(0x920C) Code: 920c	823762	Normal	1	17-Sep-2015 22:42
SeeZeroEightOne	java.io.IOException	GWPOA HTTP server returned http error (gw error): 400(0xC081)	888713	Normal	44	17-Sep-2015 22:42
Friday 18 September 2015						Page 1 of 18

Archive Ratio of Processed Messages



Archive Summary by User

This report summarizes the archive history for selected users, including pertinent information for each mailbox over the previous 3 months.

While the report cannot be sorted after it is generated, it may be sorted at generation through the 'Sort Rows by Column' feature. The columns may be sorted by either descending or ascending order. Select 'Generate' to create the report.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Archive Summary by User

 Table 4-15
 Configuring an Archive Summary by User Report

Section or Item	Information or Action
Report Parameters	
For help with setting standard report "Defining, Scheduling, and Managing	parameters, such as email delivery and schedule settings, see Retain Reports" on page 191.
Sort Rows by Column	1. Choose which column you want the report to be sorted by:
	User Name
	 Messages Processed
	 Messages Archived
	 Disk Space Used
	 Retention Flag
	Purge Flag
	 Last Archive Flag
	Specify whether you want it sorted in ascending or descending order.
Maximum Returned Rows	1. Use this to limit the size of the report.
Run Report On	 Choose either All Users, or choose Select Users to specify a subset from the list that displays.

The report displays the total information for every mailbox selected, including: User name, the time stamps and their advanced dates, and the message store for the associated user.

Schedule

Jser Full Name (Mail Server)	Message Store		Timestamps
aDconnO1	Archived:	9	Item Store Flag: Not set
(EXCHANGEQA)	Processed:	83	Last Archive Flag: 2015-07-30 08:05
	Disk Space Used:	0 MB	Retention Flag: Not set
Data Since: 2015-06-05 02:00			Purge Flag: Not set
aDizyuO1	Archived:	0	Item Store Flag: Not set
(EXCHANGEQA)	Processed:	0	Last Archive Flag: Not set
	Disk Space Used:	0 MB	Retention Flag: Not set
Data Since: 2015-07-24 09:04			Purge Flag: Not set
a0john01	Archived:	8	Item Store Flag: Not set
(EXCHANGEQA)	Processed:	35	Last Archive Flag: 2015-07-30 08:05
	Disk Space Used:	0 MB	Retention Flag: Not set
Data Since: 2015-06-21 02:00			Purge Flag: Not set
a	Archived:	2	Item Store Flag: Not set
(LXPO)	Processed:	679	Last Archive Flag: 2015-09-08 17:07
	Disk Space Used:	0 MB	Retention Flag: Not set
Data Since: 2014-02-10 21:33			Purge Flag: Not set
Administrator	Archived:	1	Item Store Flag: Not set
(LXPO)	Processed:	454	Last Archive Flag: 2015-08-26 15:18
	Disk Space Used:	0 MB	Retention Flag: Not set
Data Since: 2014-06-14 02:00			Purge Flag: Not set

Total Users in Address Book: 10367

Administrators often use this report to monitor disk space usage and messages processed and stored on a user-by-user basis.

Archive Summary by Module

Administrators find this report especially useful for monitoring archiving by push-based messaging systems that don't have admin-created Jobs.

Push-based modules include:

- Mobile
- AT&T
- Celltrust
- GBS Notes
- BBM
- Ionlake
- Tele Messages
- UM Labs

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Archive Summary by Module
 Table 4-16
 Configuring an Archive Summary by Module Report

Section or Item	ion or Item Information or Action					
Report Parameters	Report Parameters					
	rd report parameters, such as email delivery and schedule settings, see Managing Retain Reports" on page 191.					
Denning, Scheuding, and I						
Module	1. Select one or more modules from the list.					

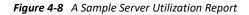
Server Utilization

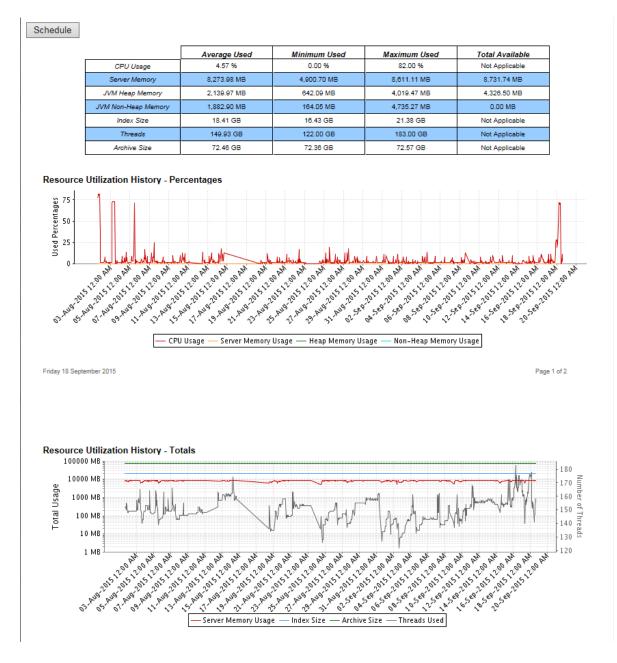
The Server Utilization report shows the memory, CPU utilization, archive size, thread usage, index size, heap memory, and non-heap memory usage for the Retain server.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Server Utilization

 Table 4-17
 Configuring an Archive Summary by Module Report

Section or Item	em Information or Action				
Report Parameters					
1 0	rd report parameters, such as email delivery and schedule settings, see Nanaging Retain Reports" on page 191.				
Module	1. Specify the date range you want to examine.				
	2. Click Generate.				





Job Run Mailbox Summary

The report shows the user name, messages archived, disk space used, and archiving time for each mailbox as well as for the total job run.

Path: Retain Reporting and Monitoring Server > Report > Job Run Mailbox Summary

 Table 4-18
 Configuring a Job Run Mailbox Summary Report

Section or Item

Information or Action

Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

b Runs List	
Job Name > Select a Value drop- down	 Click the drop-down and select one of the listed job names to filter the Job list.
	2. Select one of the listed jobs.
Run Report on	 Choose either All Users, or choose Select Users and pick those you want included from the list that displays.
	2. Click Generate.

Figure 4-9 A Sample Job Run Mailbox Summary Report

Archive	Report	Totals
---------	--------	--------

Messages Archived	122
Disk Space Used	0 MB
Archiving Time	00:12:54

Archiving Detail by User

User Name	Messages Archived	Disk Space Used	Archiving Time
Rasoli, Hakim	111	0 MB	00:00:18
User, Stubby	11	0 MB	00:06:21
User, Stubby 14	0	0 MB	00:06:15

This report cannot be scheduled.

Job Mailbox Summary

The Job Mailbox Summary report displays the number of messages archived, the disk space used, and the time the job took, by individual, specified mailboxes (users).

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Job Mailbox Summary

Section or Item	Information or Action

Report Parameters

For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.

ection or Item Information or Action	
Jobs List	
Sort Rows by Column	 Choose which column you want the report to be sorted by: User Name
	Messages Archived
	Disk Space Used
	 Archiving Time
	2. Specify whether you want it sorted in ascending or descending order.
Job Name > Select a Value drop-	1. Select one of the listed Job Names.
down	All of the Job Name entries are selected in the background
Run Report on	 Choose either All Users, or choose Select Users, select a Mail Server from the drop-down list, specify the users that you want included.
	2. Click Generate.

Figure 4-10 A Sample Job Mailbox Summary Report

Archive Report Totals

Messages Archived	1084
Disk Space Used	27 MB
Archiving Time	03:19:18

Archiving Detail by User

User Name	Messages Archived	Disk Space Used	Archiving Time
aa	0	0 MB	00:00:18
Administrator	0	0 MB	00:00:04
Allen, Jared	4	0 MB	00:06:59
Alungh, Suman	160	4 MB	00:00:41

Device Management

The device management report generates the device registration details by user, generation time, registration time.

Path: Retain Reporting and Monitoring Server > Report or Schedule Report > Device Management

 Table 4-20
 Configuring a Device Management Report

Section or Item Information or Action
Report Parameters

Section or Item	Information or Action		
For help with setting standard report parameters, such as email delivery and schedule settings, see "Defining, Scheduling, and Managing Retain Reports" on page 191.			
Sort Rows by Column	1. Choose which column you want the report to be sorted by:		
	 Registration Date (date the user was officially registered) 		
	 Generation Date (when the registration process began) 		
	User Name		
	Email		
	Specify whether you want it sorted in ascending or descending order.		
Actions	 Select the user types you want included (Registered, Non- registered, or both) 		
Email Details	1. You must specify a valid SMTP configuration.		
	Browser delivery is not available.		
Report Schedule	 Specify when and how often you want the report generated and sent. 		
	2. Click Schedule.		

Figure 4-11 A Sample Device Management Report

Fine

Jacqueline

vampire

Schedule Schedule Retto Device Management	ain				
First Name	Last Name	Registration Date	Generation Date	Email	Phone
Mandeep	S.	2017-04-0412:10	2017-02-07 09:35	mandeeps@qa.gwava.com	
TongN		2017-04-0410:08	2017-02-0310:00	tongn@qa.gwava.com	
Diana	Stanley	2017-02-0212:30	2017-02-0212:20	diana@mythos.com	
knox	in canada	2017-01-19 08:08	2017-01-1813:32	hakimr@qa.gwava.com	
Lily	Chen	2017-01-1710:30	2016-10-27 08:03	lily@mythos.com	

2016-12-1512:24 2016-12-1511:32 jacqueline@mythos.com

Not Registered 2016-10-27 08:03 vampire@mythos.com

A Configuring Retain for NetIQ Advanced Authentication MFA Support

You are responsible to set up and configure Retain and NetIQ Advanced Authentication to provide MFA support in Retain.

For help with setting up MFA in NetIQ Advanced Authentication, refer to the *NetIQ Advanced Authentication 6.3 Administration Guide* (or to the guides for your version of the Advanced Authentication product).

To set up Multi-factor authentication support in Retain, do the following:

- 1 Using your management browser, open the Retain Administrative Console and access the Accounts Tab > NetIQ Advanced Authentication Configuration Panel. See Figure 2-2, "The NetIQ Advanced Authentication Configuration Panel," on page 68.
- 2 Select the option to enable Multi-factor Authentication.
- **3** In the Server URL ... field, type the URL that you use to access the NetIQ Advanced Authentication server.
- 4 In the configuration panel > Redirect URI field, modify the displayed URI as follows:
 - 4a Specify the protocol (HTTP or HTTPS) used for connections to this Retain server.
 - 4b Replace localhost with the DNS name or IP address of the Retain server.
 - **4c** (Optional) If an alternate port is used for connections to the Retain server, modify the port number accordingly.
 - 4d Leave the rest of the URI intact.

IMPORTANT: You copy this to the Advanced Authentication server while completing Step 9 below.

- 5 Open a new tab in your management browser.
- 6 Access the NetIQ Advanced Authentication administrative console as described in the *Advanced Authentication Administration Guide*.
- 7 Create an "OAuth2 event" for the Retain server by following the steps in Creating an OAuth2.0/ OpenID Connect Event.
- 8 Copy the generated OAuth2 Client ID and OAuth2 Client Secret from the AA admin console to their respective fields in the Retain console,
- **9** While still in the Retain console, copy the modified URI (Step 4) in the Redirect URI field to the clipboard, then paste it in the Redirect URIs field in the OAuth2 event configuration dialog in the Advanced Authentication console.

IMPORTANT: The URI on the Retain and AA servers must match exactly.

- **10** Save the configurations in both consoles.
- 11 Configure the NetIQ server with LDAP identity stores appropriate for the users you are enabling for MFA.

Basically, there are two effective approaches, depending on the types of users you are supporting:

 Only GroupWise and/or Exchange Users: Create identity store links in NetIQ AA for their respective LDAP identity stores as needed.

IMPORTANT: Be aware that this should only be done when you want only GroupWise or Exchange users to use MFA. If you want administrative, offline, mobile, and other Retain users to use MFA, use Retain's User Account LDAP service instead (next bullet point), which also provides MFA support for GroupWise and Exchange users.

Or

 A Combination of Retain Users Not Limited to GroupWise or Exchange: Create an identity store repository link to Retain's User Accounts LDAP directory service.

IMPORTANT: For a successful deployment, follow these guidelines:

 Do NOT configure other LDAP repositories that overlap Retain's User Accounts LDAP service. In other words, if you previously linked to the GroupWise and/or Exchange backend LDAP services, remove those repository links from NetIQ AA to prevent duplicate user IDs.

See "Duplicate LDAP User Entries Are Not Allowed" in the *OpenText Retain CE 24.1: How Retain Works* gude.

- Make sure there are no port conflicts on the server and that the firewall allows traffic through the port you specify (default is 8082).
- When configuring the Retain LDAP repository in NetIQ Advanced Authentication be sure to specify the following. Otherwise, the connection with Retain's User Accounts LDAP service will not work.
 - **Type:** eDirectory
 - Base DN: OU=users, O=retain
 - **User:** cn=retainldap
 - Password: Copy the password to your clipboard by clicking the copy-password

icon I to the right of the password field. Paste the password from the clipboard when creating the repository in NetIQ AA.

- **12** Enable Multi-factor authentication on an individual user basis, or by including users in a Configuration Group and enabling MFA for the group.
 - Individual users: "Inheritable Settings from Group Panel (User context)" on page 89.
 - Multiple users: "Inheritable Settings from Group Panel (Group context)" on page 103.
- **13** Using the **Test Login with Advanced Authentication** button, sign in as one of the users you have enabled for MFA.

About Retain

- "About and Diagnostics Page" on page 213
- "Retain Component Licensing" on page 216
- "LGPL GNU Lesser General Public License" on page 220
- "BSD License Individual Component Licenses" on page 222

About and Diagnostics Page

To get this page from anywhere in the administrative console of Retain, click on the Retain logo in the top-left corner, or the **about** link in the top-right.

About

opentext " Retain 24.1

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Uptime	Od : Oh : 3m
Current Time	Thu 1 Aug 2024 6:56:02
Timezone	Eastern Standard Time
Retain Name	Retain91
JVM Version	17.0.6+10
JRE Version	17.0.6+10
Java Home	/opt/beginfinite/retain/java/jdk-17.0.6+10
Tomcat Home	/opt/beginfinite/retain/tomcat
Indexed Documents	0
Log Home	/opt/beginfinite/retain/tomcat/logs
OS Architecture	amd64
OS Name	Linux
User Name	tomcat
temporary Directory	/var/cache/retain-tomcat/work/Catalina/localhost/RetainServer
Tomcat Version	Apache Tomcat/9.0.84
Tomcat Free Memory	2779877
Tomcat Maximum Memory	12582912
Tomcat Total Memory	4194304
Index Engine	High Performance Index
Index Host	
Index Port	10000
Index Protocol	http
retain Home	/opt/beginfinite/retain/RetainServer/
retain Edition	Standard
retain Build	30
retain Availability	ga
Configuration Schema	52
Message Store Schema	7
Indexing Schema	1
Derby Version	10.13.1.1
Indexing Type	High Performance Index
Hibernate Version	5.4.33.Final
Core Info	JAR List Jobs
Schedules	Profiles Workers
Quartz	Retention Date Utility Indexer Status
Exchange Test	Indexer Test System Properties
Generate License Report	Verify DB Schema
Quartz	Retention Date Utility Indexer Status
Exchange Test	Indexer Test System Properties
Generate License Re	port Verify DB Schema

This page displays statistics and general program information as well as linking to valuable diagnostics. When tuning the memory usage of the Retain components, it is useful to refer to these diagnostics and statistics.

Operational statistics are listed such as uptime, component version numbers, directory paths and memory statistics.

Below that, the buttons will give you more detailed diagnostic information. Generally, you will only use these at the request of technical support.

Please pay particular attention to the Tomcat memory statistics. This information is needed to fine tune Tomcat.

Diagnostic Buttons

In usual operation, none of these buttons will be used without instruction of support. The diagnostic buttons found on the diagnostics page are used in conjunction with support and can be dangerous for the system if used without understanding or instruction. The utilities contained here display or modify core settings and functions of the Retain Server. Mismanagement of these functions may render the Retain Server unmanageable and in a non-functioning state.

Core info, JAR List, Jobs, Schedules, Profiles, Workers

The Core info, JAR List, Jobs, Schedules, Profiles, and Workers buttons initiate a download of the configuration .xml for each of those categories. All configuration tied to those items which have been configured in the Retain Server will be contained in the downloaded .xml and can be used to examine recorded configuration.

Quartz

The Quartz button displays a page containing all information and configuration for the Quartz scheduler. These settings determine when jobs start, when maintenance is, and time in the system.

Retention Date Utility

The Retention Date Utility tests the retention and purge flags in the mail systems. It is set in UNIX time stamp format, and should not be used without express guidance from Support.

Indexer Status

The Indexer Status displays the current health of the indexer engine along with the total un-indexed items and associated memory load. There is also an option to shut off or to turn on the indexer. As the indexer should be alive at 'on' at all times during normal operation, only use this utility under instruction from Support.

Exchange Test

The *Exchange Test* utility attempts to connect to and login to the specified mailbox in the Exchange mail system, utilizing current configuration from the Exchange module, if configured. This is used to ensure that sufficient rights and access is open to Retain in the Exchange system. A target mailbox different from the Retain 'service' account must be specified.

Indexer Test

The indexer test utility provides a simply and quick query to the index engine and database. This is used as a low-level diagnostic tool for Support and is best used in conjunction with Support. Normal operation does not require any use of this tool.

System Properties

The System Properties utility displays basic system information and settings about the Retain Server, host environment, and functioning parts.

Verify DB Schema

This button lets Retain administrators verify database schema integrity manually.

When a Retain database is created or updated, Retain automatically runs a schema check to verify integrity.

If errors are found, they are logged, an email is sent to the system admin, Retain is switched to maintenance mode, and a schemaCheckFailed flag is set.

Restarting Retain at that point initiates a schema update process that should resolve the issue and allow normal operations to resume.

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LGPL	EDS, Hibernate, C3PO Connection Pooling, Jericho HTML Parser, Textmining, 7-zip	
BSD License	XStream, JDOM, MetaStuff DOM4J, Object Web ASM, ANTLR	
BOuncy Castle APIS	Special license included below	
PDFBox	Special license included below	

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Open Software License v.3.0	openXML Indexer
Mozilla Public License	iText
GNU GPL V. 2	VAInstall
Bitstream Vera Fonts Copyright	DejaVuSans Fonts
ICU Licence	Java Utilities

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