

GWAVA® Retain for BlackBerry Enterprise Server®

Installation Guide and Users' Manual

Licenses are required in order to run Retain for BlackBerry Enterprise Server, for both demo and full use of the software. Please contact BlackBerry@GWAVA.com to obtain license files.

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Intended Audience

This manual is intended for IT administrators in their use of Retain for BlackBerry Enterprise Server or anyone wanting to learn more about Retain for BlackBerry Enterprise Server. It includes installation instructions and feature descriptions.

Technical Support

If you have a technical support question, please consult the GWAVA Technical Support section of our website at www.gwava.com.

Sales

You may contact a GWAVA sales team member via:

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Retain for BlackBerry Enterprise Server is software designed to assist users in complying with legal and regulatory archiving mandates. Use of this software does not, in itself, constitute compliance with any regulation or statute, notwithstanding the fact that GWAVA may be informed of the use for which it is being put.

Further, it is expressly understood that no warranties are created herein by a course of dealing, performance or trade usage and GWAVA does not warrant that the Software developed pursuant to the present Agreement will meet the Customer's needs, be free from errors, satisfy the Customer's obligations under any statute or rule, or that the operation of the Software will be uninterrupted .It is further expressly understood and agreed that the disclaimers and exclusions contained in the present Section constitutes condition precedent to the present Agreement, are an essential part thereof and have formed a component part of the process of determining the compensation charged to the Customer by GWAVA for the services provided hereunder.

About Retain for BlackBerry Enterprise Server

Retain for BlackBerry Enterprise Server provides archiving, auditing, and data retention for regulatory compliance and as a part of a company's data loss prevention strategy. Retain provides safe and immediate access to an organization's BlackBerry Smartphone users' SMS, BBM, PIN message data, and phone usage data. This is a server based solution; there is no thin client required for the devices.

Introduction

Retain for BlackBerry Enterprise Server allows authorized users to audit and conduct discoveries of PIN, BBM, and SMS messages and Phone Call usage data sent or received from a BlackBerry Smartphone. Organizations can now protect themselves proactively from information leaks, misuse of company resources, and legal liability. Retain for BlackBerry Enterprise Server ensures that executives and administrators are able to accurately evaluate PIN, SMS, BBM and Phone Call activity so they can properly enforce policy and procedure.

Product Overview

Retain for BlackBerry Enterprise Server is a system based on a client – server architecture. Our server component, the Archiving Agent, runs on the same server as your BlackBerry Enterprise Server and our client component, the Viewer Application, runs on any Windows workstation. Retain for BlackBerry Enterprise Server archives the data it collects from the BlackBerry Enterprise Server and stores it in a Microsoft SQL database. The database may be located anywhere on your network. Authorized auditors can view the archived data. They can conduct discoveries and export data from these discoveries in .xls, .pdf or .xps formats.

Many organizations, already archiving email, have a requirement to maintain one archival repository. Retain can also convert each PIN, BBM, SMS text message, and phone call usage into a piece of email which can be delivered to the email server where it will be archived by the existing email archiving solution.

Retain for BlackBerry Enterprise Auditors, compliance, legal, human resources, IT, administrators and security departments oversight and review of all PIN, BBN, and SMS message communication that pass through the BlackBerry Enterprise Server.

Licensing

Retain for BlackBerry Enterprise Server is licensed per user, but has a fully featured demo lasting thirty days. After the trial period is over, Retain must be licensed to restore functionality. To obtain a license, contact your GWAVA sales representative, Call 866-GO GWAVA ext 700 or visit http://www.gwava.com/products/form.php.

Features

- Confidential PIN, SMS, BBM and call log inspection of BlackBerry devices
- Designed for auditors and legal staff
- Search employee PIN, BBM, and SMS messages, Phone Call logs.
- Print and export PIN, BBM, and SMS messages, Phone Call logs
- Confidential process No modifications are made to the data
- Complete logging for review of auditing activities

Minimum System Requirements

Archiving Agent (server side)

- ➤ Windows XP or Windows Server 2003 or Windows Server 2008 (fully updated and patched through 'Windows Update')
- BlackBerry Enterprise Server v4.1, (SP 4 for GroupWise, SP 6 for Exchange), or higher.*
- Microsoft SQL Server 2005, 2008 (Workgroup, Standard or Enterprise), or higher.**
- Microsoft .NET Framework 2.0 SP1 or higher
- ➤ 1 GB RAM
- 2 GB hard drive space (depending on the size of the BlackBerry Enterprise Server audit log files)
- Enough SQL users to satisfy Retain for BES Viewer. (The viewer connects to the SQL server. If five viewers are used simultaneously, five 'user CALs' are required. For more information, see http://www.microsoft.com/sql/howtobuy/fag.mspx.)
- *BlackBerry Enterprise Server 5.0 SP1 is required for BlackBerry Messenger Archiving
- **SQL Server: Mixed Mode Authentication and TCP connections must be enabled. SQL Express is NOT officially supported.

Viewer Application (client side)

- Windows XP, Windows Server 2003, 2005, 2008, Vista, Windows 7 (fully updated and patched through 'Windows Update')
- ➤ Microsoft .NET Framework 2.0 SP1 or higher.
- ➤ 1 GB RAM
- 1 GB hard drive space (depending on the space needed for exporting)

Architecture

Retain for BlackBerry Enterprise Server is made up of two main components:



The Archiving Agent (or the "Agent")



The Viewer Application (or the "Viewer")

The Agent, (Archiving Agent), sits on the same server as your BlackBerry Enterprise Server. It reads the log files generated by the BlackBerry Enterprise Server and stores them in a Microsoft SQL database. In addition to the log files, the Agent stores configuration information on how your Retain for BlackBerry Enterprise Server system is set up. This information includes the location of other BlackBerry Enterprise Servers in your network that you wish to monitor and archive. Every BlackBerry Enterprise Server that you wish to include in your archiving system must have an Archiving Agent installed on it.

The Viewer, (Viewer Application), sits on a workstation and connects to the SQL database via TCP/IP to read what the Agent put there. In addition, it reads configuration information from the SQL database to know where your other BlackBerry Enterprise Servers are located and contacts those servers to provide you with additional information about the archives you will be viewing.

NOTE For running the Agent and Microsoft SQL on the same server

When the Archiving Agent and the SQL server are housed on the same machine, the SQL server must start before the Archiving Agent, or the agent will fail to connect because the SQL server is not currently running when the Agent starts. To remedy this problem, add a Windows Service dependency to the Retain Archiving Agent to ensure that the Agent starts up after the SQL service.

How It Works

In a simple configuration

A simple configuration contains four things:

- 1) BlackBerry Enterprise Server
- 2) Microsoft SQL database
- 3) Retain Archiving Agent
- 4) Retain Viewer

The Microsoft SQL database containing the Retain for BlackBerry database does NOT need to be on the Blackberry Enterprise Server. In a simplified configuration, they can be hosted on the same machine. The same SQL database server which the BlackBerry Enterprise Server uses may also be used to store the archived data for Retain. Having both databases on the same system would be an example of the simplest configuration.

The Agent reads the log files from the server's hard disk and will store them in the SQL database.

The Viewer logs in to the Agent and receives the data and configuration information from the Agent. The Agent gathers this data and information from the BlackBerry Enterprise Server database as well as the logged information which has been stored in the Retain database. If the Agent and Microsoft SQL are run on the same server, Microsoft SQL must be started before the Agent.

In an Enterprise configuration

A complex or Enterprise configuration contains the same basic four things that the simple configuration has, and essentially works the same, but may have multiple BlackBerry Enterprise Servers, Retain Agents, and Retain Viewers. There can only be one Retain database, to which all Agents connect to keep the information consistent in the system.

In a configuration where you might have more than one BlackBerry Enterprise Server, the system works much the same as the simple configuration.

The first Windows server with BlackBerry Enterprise Server is set up just like in the simplest configuration discussed earlier. The second Windows server and BlackBerry Enterprise Server system is added to the configuration. You may put the Microsoft SQL database anywhere; it does not need to be installed on the same server as your BlackBerry Enterprise Server. However, every BlackBerry Enterprise Server to be included in the archiving system must have its own Retain Agent installed. You configure each Agent to tell it where to send the collected data and which BlackBerry configuration to connect to, so that the Viewer may communicate with any Agent and receive the same information. It does not matter which Agent a viewer connects to, the viewers will all show the same information as long as there is only one Retain database which the Agents connect to and store the collected data. The Viewer logs into any Retain Agent, which gathers the same information from the Retain and BlackBerry Enterprise Server databases, and relays that information to the viewer.

Preparation

Retain for BlackBerry Enterprise Server requires MS SQL server to be setup to accept certain connection, as well as the BlackBerry Enterprise Server configured to log the correct data. We will first discuss the correct configuration of the SQL and BlackBerry Enterprise Servers before we install Retain.

The following settings and programs are required before a Retain Install:

➤ A MS SQL server

- The MSSQL server MUST have mix authentication enabled. Mix mode Uses both Windows and SQL authentication modes (If you are using MSDE, this web site explains how to change authentication mode: http://support.microsoft.com/kb/325022)
- Retain for BlackBerry Enterprise Server requires a user with rights to create and manage its storage database. The user must have the following rights:
 - Read rights to the BlackBerry Enterprise Server configuration database, (by default, the BESMgmt database).
 - Read and Write rights to the Retain for Blackberry Enterprise Server database. (BBArchive database)
- MSDE users will probably use the SA (system administrator) password. (If this password is not known, it can be reset using osql.exe in a command prompt.)
 - If you decided to change this password, please make sure no other applications are using SQL authentication. By default BES uses Windows authentication (therefore changing the sa password has no effect). This can be verified by opening BlackBerry Enterprise Server Configuration (not the Manager) and selecting the 'Database Connectivity' tab. Osql.exe is usually located in C:\Program Files\Microsoft SQL Server\80\Tools\Binn. Once the directory is changed to Binn in the command prompt, type:

osql -E -q "EXEC sp password NULL, 'new password', 'sa'"

Make sure to replace *new password* with your desired sa password.

- The actual data gathered by the Archive Agent is text-based, is easily compressed, and the field lengths are very short. So the overall space required by the Retain database is quite small.
- The Retain archives may be placed on any reachable Microsoft SQL server. Usually, the same machine used for the BlackBerry Enterprise Server is used to store the Retain archives, because the space requirements are small. However, this is always dependent on the amount of data you will be archiving. So you can decide when setting up to put the data elsewhere.
- ➤ The MSSQL server must have TCP/IP connections allowed. A good way to test this is to launch osql.exe using the -S switch with the MSSQL IP address. Further instructions are given here: http://technet.microsoft.com/en-us/library/aa213088(SQL.80).aspx
- ➤ If the MSSQL server listens on a port other than the default port, this port must be specified during the install. Know the port (default port is 1433).
- License file(s) downloaded to both Retain for Blackberry Agent and Viewer machines.

Software downloaded to Server/Workstations. The current version of Retain for Blackberry can be downloaded here:

http://www.gwava.com/products/dev_downloadform.php

Fill out the form and select the download button for Retain for Blackberry Enterprise Server from the product page.

Plan Your Installation

Setting up GWAVA Retain for BlackBerry Enterprise Server requires advance planning to decide exactly what and how you want to archive, where to store the data, and how you will want to access it. Download Retain for BlackBerry Enterprise Server from

http://www.gwava.com/products/dev_downloadform.php. Be sure to obtain your license as well.

Strategy

- 1) Plan your system.
- 2) Prepare your servers.
- 3) Install the SQL Database.
- 4) Install the Archiving Agent(s).
- 5) Configure the Archiving Agent(s).
- 6) Install the Viewer.

Plan Your System

Consider where you want your archived data stored. How much space that will be required, depends on the size of your BlackBerry system. (Use the current BlackBerry log files as your guide.) The data will be stored in a Microsoft SQL database and the Viewer will access the database server to present the data to you. So a key factor in this is speed and availability of access. Every Agent must be able to connect to and store data in this SQL database. In addition, for more detailed features, (such as showing which data came from which BlackBerry Enterprise Server), the Viewer must be able to connect to the BlackBerry Enterprise Servers.

Prepare Your Servers

All necessary software must be installed, working, and configured for Retain. Ensure that there is an unblocked TCP connection available between the servers. See the <u>software checklist</u>, for details. By default, the BlackBerry Enterprise Servers do not log PIN, Phone Call, BBM, and SMS data. The BlackBerry Enterprise Server must be configured to log PIN, SMS, BBM, or call data before Retain's agents will have any data to collect. First <u>configure the BlackBerry Enterprise Server</u>, and then install the agents.

Install the SQL Database

Before the Agents start collecting the data, you need to provide a place for the data to be stored. Choose what database server you will use to store the archived data and make it available and ready. Then, proceed with installing the Agents.

Install the Viewer

The viewer can be installed on any workstation that can connect to the SQL server via TCP/IP. In a multiple server system, the Viewer also needs to be able to connect to the BlackBerry Enterprise Servers.

BE SURE TO INSTALL THE LICENSES SO THE VIEWER AND AGENTS RUN PROPERLY.

Install the Archiving Agent(s)

Install an agent on each BlackBerry Enterprise Server you wish you include in your archiving system. Do not run the configuration utility until you have installed all of the Agents.

Configure the Archiving Agent(s)

Start with the primary or the most important BlackBerry Enterprise Server. After running the Agent Setup program, run the setup wizard. The wizard will start up automatically if it's the first time you run the Agent Setup program. Once you have the first one running, configure the other agents.

BlackBerry Enterprise Server log settings

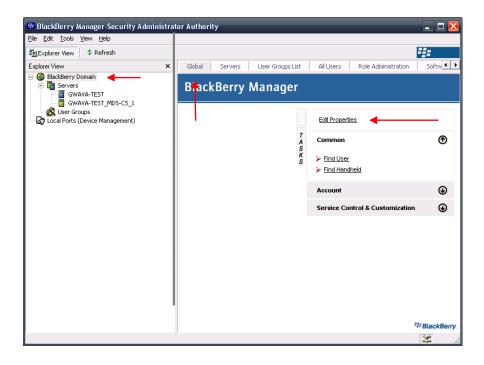
For Retain to be able to find data to import, the BlackBerry Enterprise Server must be set to log the phone calls, PIN, BBM, and SMS. If your BlackBerry Enterprise Server has not been logging this information, you will not be able to collect data until it begins logging the information.

This quick guide to changing the logging level in the BlackBerry Enterprise Server is provided as a courtesy. The full guide is in the BlackBerry Enterprise Server Help file, accessible from the within the BlackBerry Manager program and from the Start menu. (Start, Programs, BlackBerry Enterprise Server, Help, BlackBerry manager Help.)

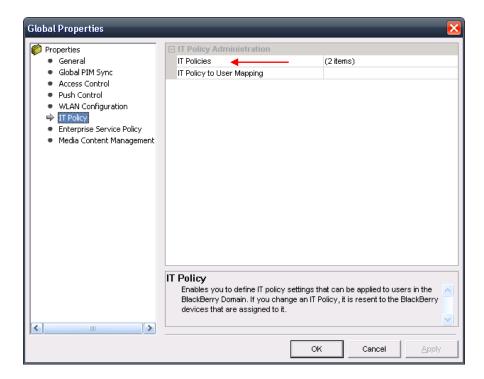
Enabling this feature is explained in detail in the part entitled 'Accessing log files for BlackBerry services', section 'Monitor PIN messages, SMS messages, and phone calls in a BlackBerry Domain'

To set the BlackBerry Enterprise Server to log this information, open the BlackBerry administrator utility and select the BlackBerry Domain.

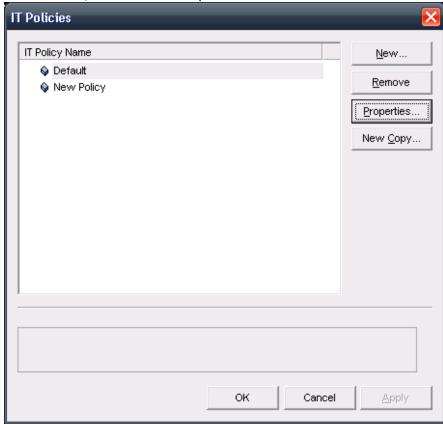
On the Global tab, click Edit Properties.



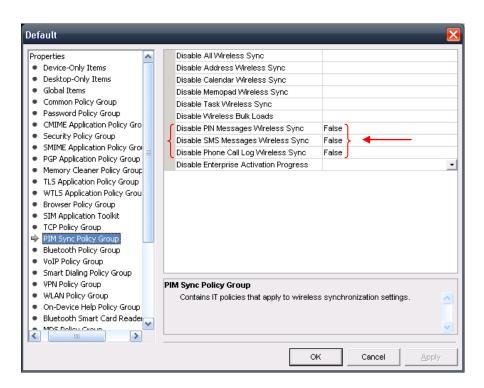
When the Global Properties window opens, select the IT Policy item from the left tree, and double click on the It Policies field.



Select Default, and then click Properties.



Scroll down and select the PIM Sync Policy Group item from the tree on the left.



The logic behind the three options shown is in reverse. Set all three of the options shown here to "False". (Disable PIN, SMS, and Phone Call Log Wireless Sync) Click on the fields desired and select 'False' from the drop-down menu. Now your BlackBerry Enterprise Server will log all PIN, SMS, and Phone Calls for all the connected users.

If you do not wish to monitor all these items, only set the items you wish to monitor to 'false'.

Select OK. Your BlackBerry Enterprise Server is ready for the Retain Agent.

General Installation

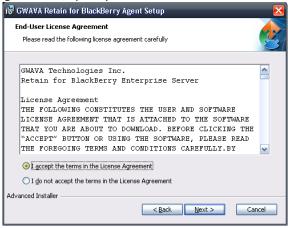
To install Retain for BlackBerry Enterprise Server, locate and unzip the download from www.gwava.com. Select and run either the Viewer or Agent installer. The installation for both objects is nearly identical. If you have a previous Retain for BlackBerry Enterprise Server installation, it must be completely removed before you install version 2.0 (Save your license file, rename your database, completely uninstall the viewer and agent software.)



The Retain for BlackBerry Agent or Viewer installation begins.



Read, and if you accept the agreement, specify and click next.



After accepting, you may proceed through the installation.

Only the Viewer installation allows you to specify the install location. The Agent install does not have this screen.



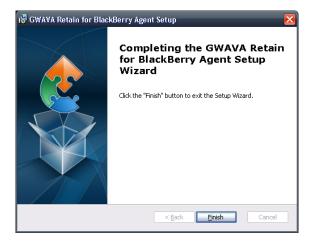
Specify your choice or accept the default and click 'Next'.



Click 'Install' when you are ready to install the program. If you wish to change any settings, use the 'back' button.



Click 'Finish' to complete the installation



Agent Configuration

Before you can run Retain for BlackBerry Enterprise Server, you need to configure the Agent and specify where the data is, then collect it. Find the GWAVA Retain for BlackBerry Agent icon and run the Agent.

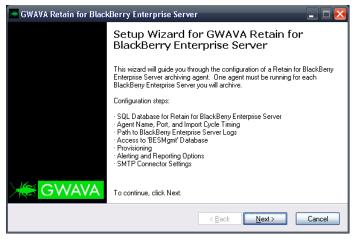
(The BlackBerry Enterprise Server must be set to log PIN, SMS, BBM and Phone calls. See the Appendix for instructions on how to check or modify the correct settings.)

GWAVA Retain Agent Console

The Agent only imports the current day's BlackBerry Enterprise Server logs. If the

Agent is shut down, the BlackBerry Enterprise Server transactions logged afterwards will not be imported if the Agent is not restarted during that day. When the Agent is restarted, only the current day's logs will be imported. To import older logs, use the log import tool.

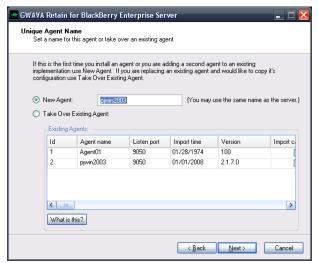
First the Agent needs to be configured. Click 'Setup Wizard' if the setup wizard does not automatically start.



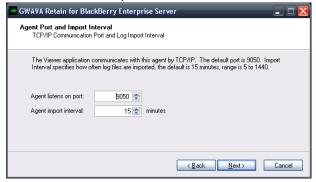
The Agent needs to know the address and have access to the MS SQL server. It is recommended to use the SA user and password here because the Retain database will be created. (If a user other than SA is used here, it must have rights to create a database.)



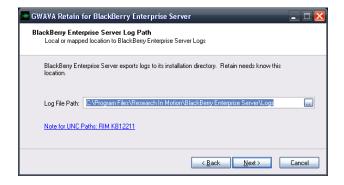
The Retain Agent requires a unique configuration name. Provide one and click 'next'.



You may specify or change the Agent listening port or leave it as default. This is the port that the Viewer will require to contact the Agent. If you change this port, note what you changed it to. (This port must be accessible for external Viewers to function.)



The Agent gathers all of the information from the BlackBerry Enterprise Server logs, and requires them to be on a local disk. Specify the location here and click 'Next'.

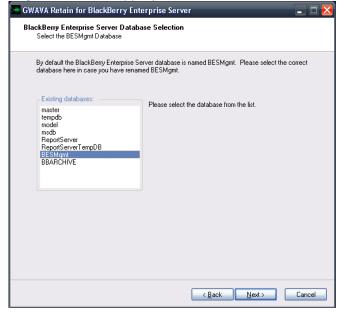


Retain for BlackBerry Enterprise Server requires a connection to, and rights to read the BlackBerry Enterprise Server configuration database.

Enter the address to the MS SQL database where the BlackBerry management database is located, and the credentials for a user with read rights to the database. (The SQL database MUST use mixed authentication for this to work.)



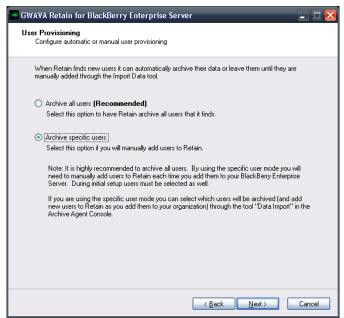
By Default, the BlackBerry Management database is called the BESMgmt.db, though the management database name can be changed. Select the appropriate database and select 'Next'.



If you have multiple BlackBerry Enterprise Servers sharing the same management database, select the correct configuration that your BlackBerry Enterprise Server is currently using.



Select whether all users, or just specific users are to be archived. Keep in mind how many users the system is licensed to archive. Once a user has data archived, they cannot be removed from the license total.



Retain can contact you with any errors or reports of what was imported once daily. If you want to receive these notifications, specify a contact address(s) and SMTP server information here. You must provide a valid user and password for Retain to send the mail from.



Select 'Next'.

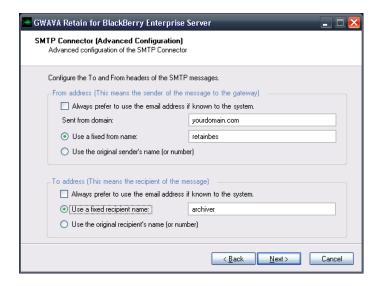
SMTP Connector

Retain has the ability to take the BlackBerry Enterprise Server logged events and turn them into a status email containing the information of the original phone call, SMS, BBM, or PIN that was logged. This is mainly used to input logs into long term storage systems designed for Email. This allows current Email archive solutions to also archive all the activity on the BlackBerry Enterprise Server. This is achieved through the SMTP connector.

If you have an Email archive solution you want to contain the BlackBerry Enterprise Server activity, or you want an Email record of all events, enable the SMTP connector here. Otherwise, leave the SMTP connector disabled and click 'Next' through the next two screens and finish the setup wizard. If you wish to enable or disable the connector at a later time, all you need do is re-run the setup wizard.



Enter the correct information for your SMTP server with a valid SMTP username and password.



You may specify which user name the SMTP connector will use to send the messages, the 'from' name, as well as the domain name. If you choose not specify a user address, you send the messages as the BlackBerry user which created the log entry. (i.e. If the phone owner is Theodor Geisel, and the phone number 312-345-6789, an email containing his SMS message may be sent to 3123456789@lorax.com, or theodor.geisel@lorax.com depending on your BlackBerry Enterprise Server settings.)

IMPORTANT: If your Email server does not accept all messages, then you **must** make sure that your system will accept the addresses that the SMTP connector will generate. For this reason, it is recommended to use a **fixed address** that will be accepted by the email server. If the original sender's name or number is used, and the email is rejected by the server, the next message will attempt to use an alternate address, cycling through addresses until one is accepted. With variable addresses selected, you may have different addresses for the same user, and messages rejected. If a message is rejected, it will not be regenerated, so messages which are rejected are lost.

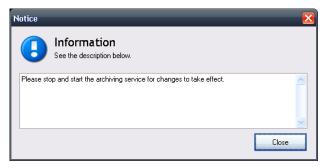
The SMTP connector runs right after the log import. So the date of messages sent by the SMTP connector is after the actual phone call, SMS, or PIN. The log import interval you set earlier in the wizard determines the time difference between the actual event and the email.

REMEMBER: the SMTP connector creates an Email for every single SMS, BBM, PIN, and phone call that is logged by the BlackBerry Enterprise Server. This can generate large amounts of traffic on busy servers.

Select 'Next' to continue.

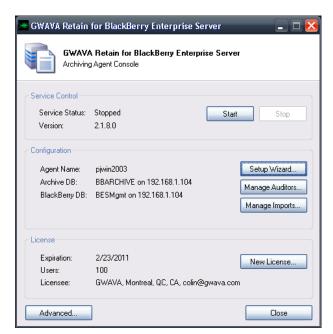


The Agent configuration is complete. If you wish to change anything, use the 'Back' button to return to the page you wish to change. If you are satisfied with the settings you provided, select 'Next' to finish the configuration.

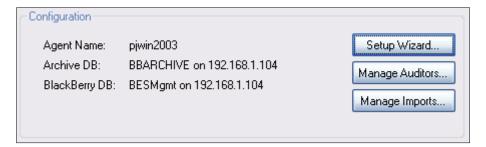


If you need to change any of the settings, you may run the setup wizard at any time.

After you have finished the wizard, the agent and the service must be restarted.



Once the configuration has been completed, you should be returned to the agent window, and should find the configuration listed on the agent screen in the Configuration Summary.



Start the service.



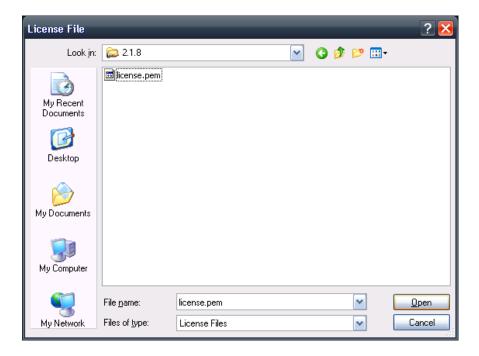
After the service is configured and started, it will run automatically as a system service on system startup.

Install License

From the agent screen, select the copy license button on the bottom of the page



Browse to where your license file is located, select it, and click 'Ok'.



The license information should appear in the license information field on the Agent screen. When it does, the license has been recognized and is properly installed.

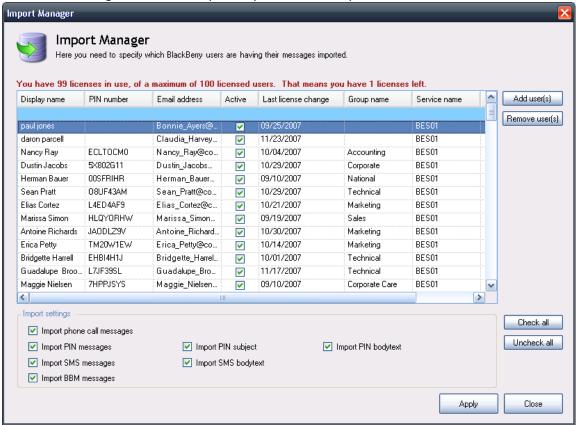
Manage Imports

The Import Manager is where you can exclude or include specific users' data from your Retain system. Without setting up the Import Manager, you will not have any data imported into your



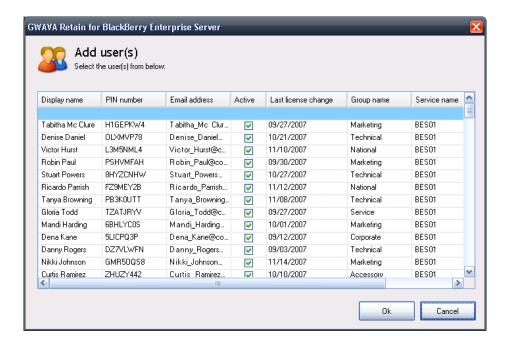
system. The import Manager starts with an empty list of active users. To access the Manage Imports window, select the 'Manage Imports' button from the Agent window interface. You MUST populate this section before any data will be available to your system.

It also shows a running list of how many users you have left in your license.



This interface works the same as the User Rights interface. The items checked for a selected user, or users, will be imported into the Retain system, while the items not checked in the Import settings will be omitted.

To add a user, select add user and then select the user from the list. You may select multiple users at once. The Add user(s) window ONLY shows the users that are not currently listed in the import section, so it is impossible to add duplicates.

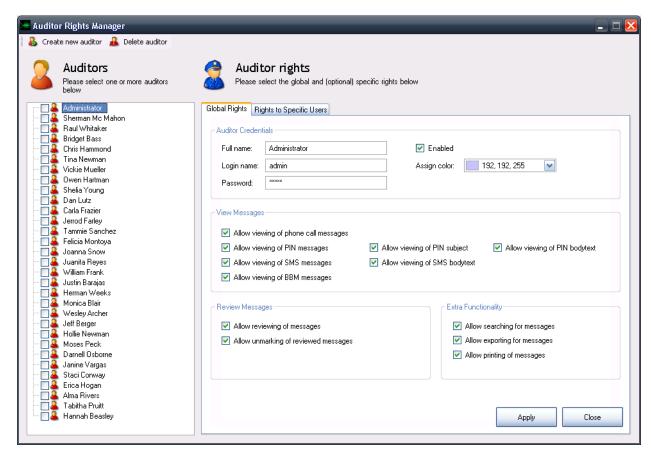


To Remove a user or users, simply select that user or users and then select the Remove button.

Manage Auditors

The Rights manager allows you to create or grant auditing rights to a user in your system. To spawn the manager, select the 'Manage Auditors' button from the configuration section of the Agent.





To create an auditor, select the "Create new auditor" button from the

toolbar.

Enter the desired information for the new Auditor. This user name is what the auditor will be known by in the system and the login and password allow access through the viewer to the data.

Once you have created the new auditor, you may select them and modify their rights in the system.



🚵 Create new auditor 🔬 Delete auditor

There are two ways to modify rights for new or existing auditors in the system, global and user specific. The Global rights window applies the rights granted to the auditor to every user in the system, (present and future). The "Rights to specific users" option applies to only the users specified in the list. The rights listed and their effects in both modes are the same.

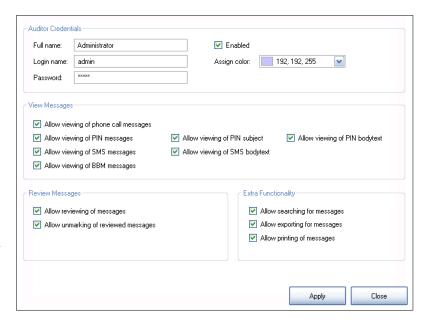
Global

The optional rights for auditors allow you to customize what an auditor has rights to modify or review.

The rights here are mainly self explanatory. The full name, login name, and password all change the way the auditor logs in or is logged in the audit log.

The Assign Color option allows you to dictate the highlight color for the auditor, (The color of the highlight behind the messages that are reviewed by this auditor).

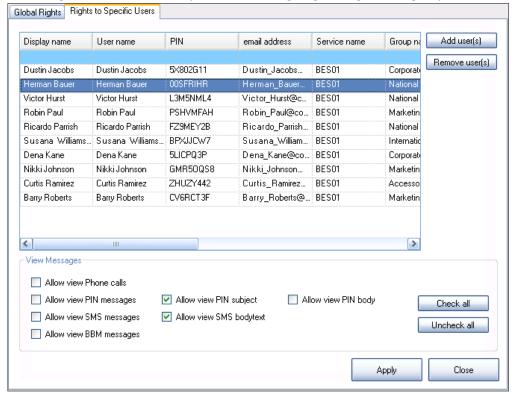
The View messages, Review messages and the Extra functionality allow the restriction of rights to the actual data that is collected on the specific values shown. This allows tight control over what an auditor can do.



Newly created auditors start with no rights and no assigned color as default. This allows you to create users without the risk of accidentally granting a right you did not specifically select.

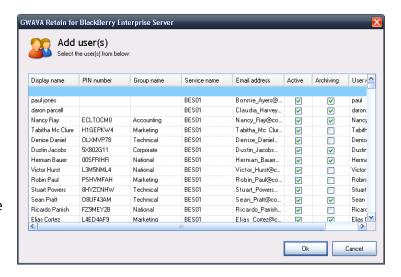
Rights to specific users

The user specific rights tab allows you to grant the auditor rights that affect only the users listed, and only the rights listed for that user. You may grant rights specific to a certain user, or you may select multiple users using the 'shift' or 'ctrl' keys while selecting to grant rights to a group.



To add users to the list, select the add user button and select the users from the list. Repeat if necessary, though you may again use the 'shift' and 'ctrl' keys to select multiple users at once. The Add user(s) list only shows the users that are not currently listed in the user rights list, so it is impossible to have duplicates.

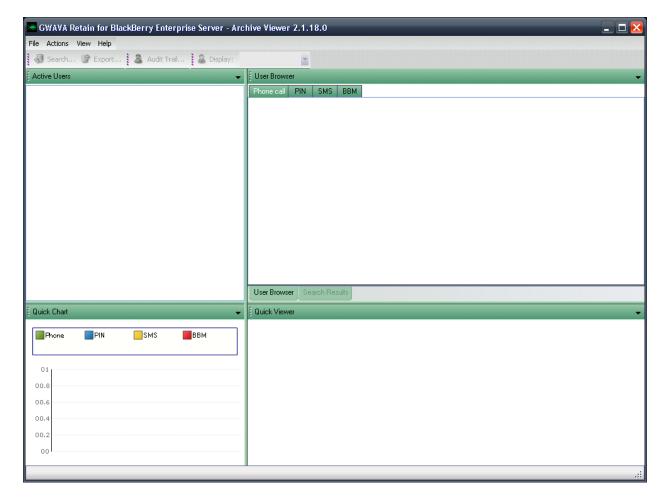
You may likewise remove users from the list, and any rights that the auditor had for that user which are not granted globally will also be removed. Select multiple or single users as desired.



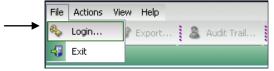
Archive Viewer



GWAVA Retain Archive Viewer To start the viewer, locate the viewer icon on the desktop and launch the program, or start the program from the start menu. (Programs | Beginfinite | GWAVA Retain for BlackBerry Agent Viewer)



When you start the viewer, you are greeted by the blank viewer window. Before you can manage your data, you must connect to the archive. Select "Login" from the 'File' menu.



Retain for Blackberry Enterprise Server requires that you connect to one of the installed Retain Archiving Agents. The Viewer always authenticates with an archiving agent, (it does not matter which one if multiple agents are installed). If properly authenticated, the archiving agent passes the credentials of the Retain DB (ip / user name / password) to the viewer. The viewer is then able to connect to the Retain DB. The end user will never know the ip address, name, or password to the Retain DB. This all happens in the background. Use the username and password which you used for the Retain Agent.

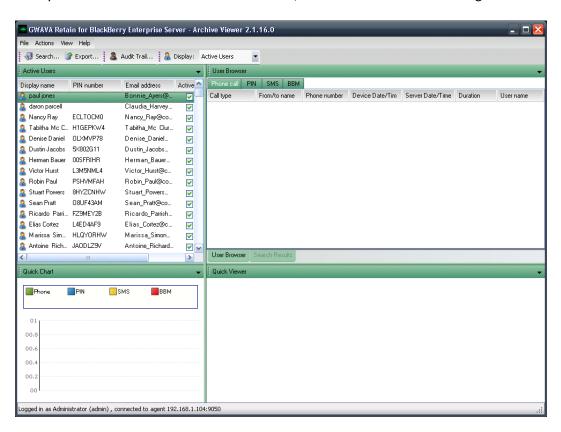
Enter in the Agent address, (IP address or DNS), and if you changed the Agent listen port, change it here as well.

The first thing an Administrator needs to do is to setup the <u>Import Manager</u>, so that logs can be imported. Without setting up the Import Manager, no data will be available in the viewer or the Retain database.

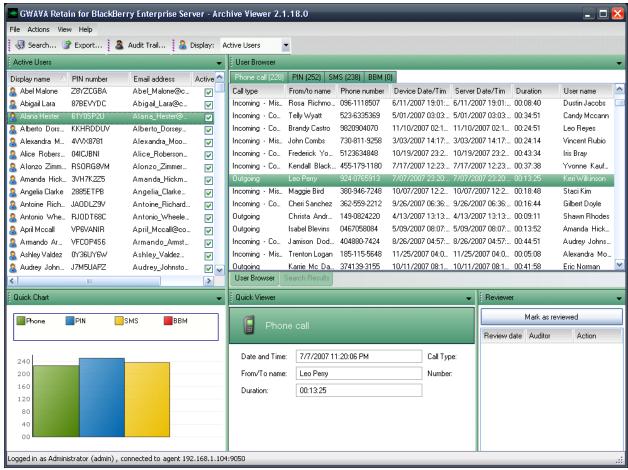


The default name and password is admin | admin. You can change this from the Rights manager.

After you have entered the correct information, select OK to connect to the Agent.



Once you have connected, any data in the database should be viewable in the viewer.

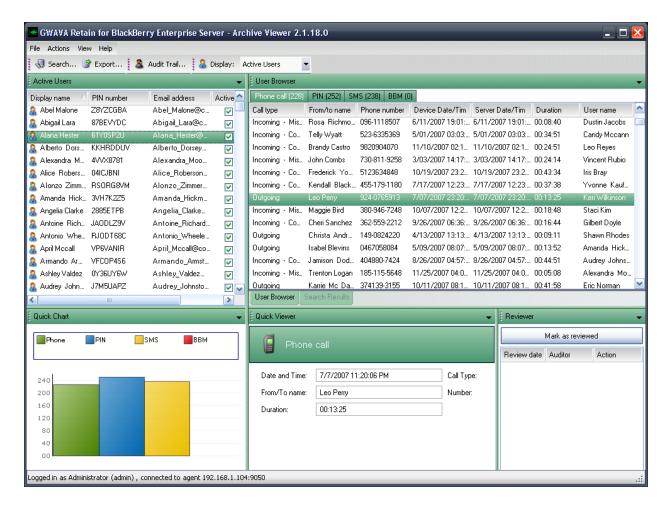


Select a user. Any items that have been reviewed by an auditor are marked in red.

The archive viewer has three major options to change or toggle the view; Quick viewer, Quick chart, and Reviewer. These are toggled on and off through their respective buttons under 'View' menu.



The user list and the User Data panes in the window are the base of the viewer, and cannot be toggled off. The other three windows along the bottom can be removed or combined as desired. The configuration showed below has all three windows active.

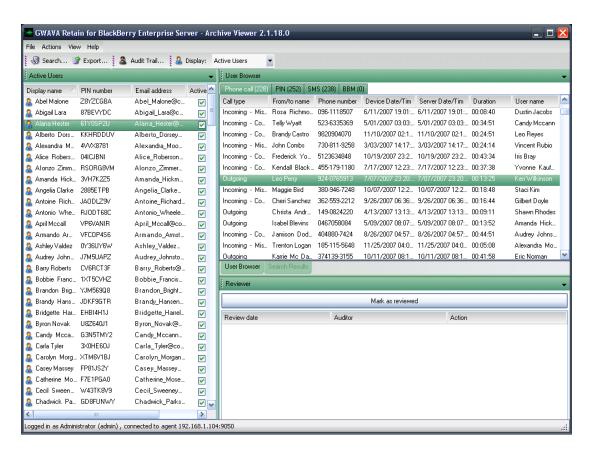


The Quick chart window pane displays a simple chart of the number of phone calls, PIN, SMS, and BBM messages that the user has recorded in Retain. The graph shown rates the amount of items from 0 to 600 and provides a quick status of this particular user's phone activities.

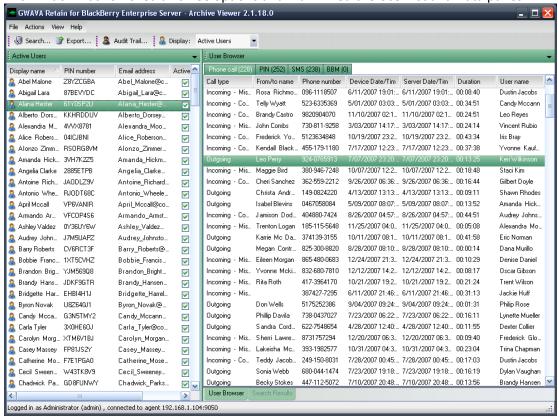
The Quick viewer window pane displays information on the selected item. For a phone call, it displays the call time, recipient, duration, and when expanded, the call type and number.

The Reviewer window pane shows the activity that Retain has seen on this item. (This is the auditor's tool.) This lists when an item was listed as reviewed, and by which user. If an item is unlisted as reviewed, that is logged as well.

Removing or deselecting any of these window panes allows for more room in the Archive viewer window to display either the remaining options or the base viewer with the user list and item window. This window has only the Reviewer active.

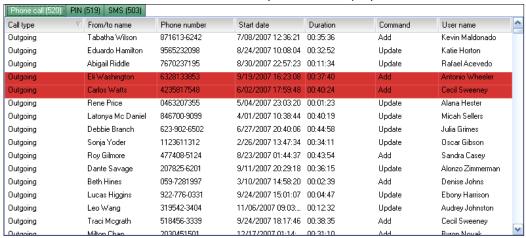


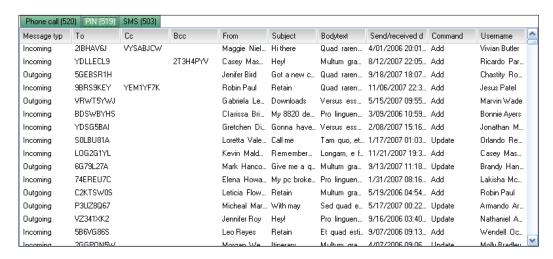
This window has removed all three options and maximized the User list and Data panes.

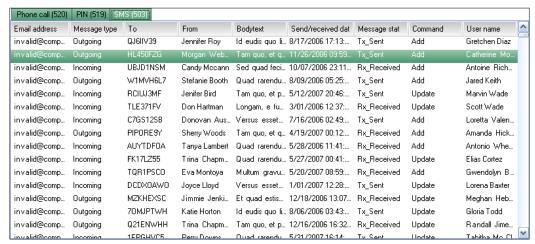


The User Data Pane has three tabs. The Phone call, PIN, SMS, and BBM tabs will be populated with data only if you selected Retain to monitor and import this data from the BlackBerry Enterprise Server logs. The BlackBerry Enterprise Server must be set to monitor these interactions before data will be available to Retain.

The different windows and the data that they show are displayed below.



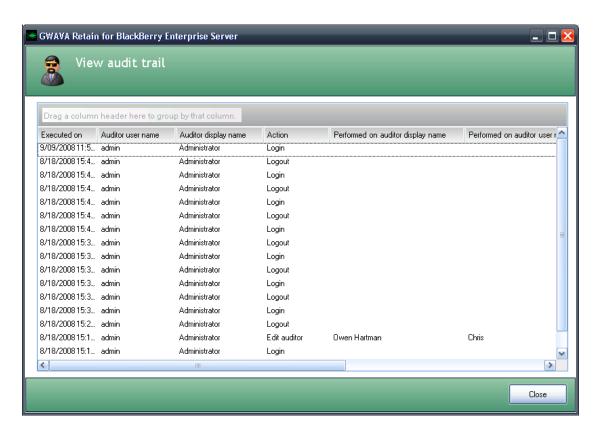




View Audit trail

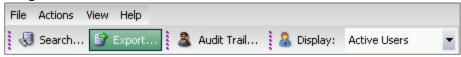
Retain also tracks the movement of all Auditors in the system. Select the 'View audit trail' button from the tool bar and the audit trail window will be spawned.

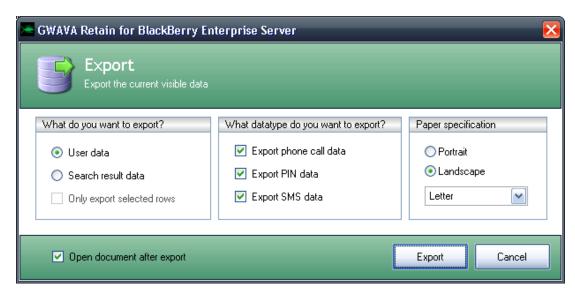




This window shows the footsteps of the auditor through Retain and reports each action taken.

Export Items





The Export Items function allows you to publish data from Retain to other formats. You can either export the User data, (all data specified in the export window), and then clicking export, or export the entire search result.

The export function grabs all user data and search results. If you wish to export only a section of the results, tighten the search criteria or edit the exported data.

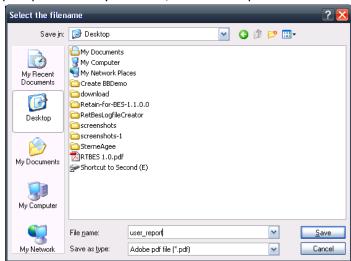
After you have chosen the data type and Paper specification you desire, select the Export button.

You can now choose the filename and type to which Retain will export the data.

Browse to the location and enter the filename you wish to save the data as.

Export allows you to publish the data in three different formats; .xls, .pdf, and .xps. Choose one of these from the Save as type and select Save.



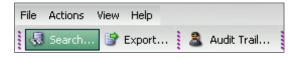


If you selected Export to do so, or left it as default, the document will open after it has been saved. (This is an exported log excerpt from a two page .pdf, portrait size output file.)

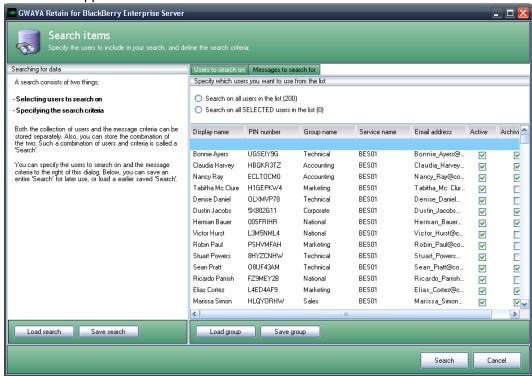
						_	
Call type		From/to name	Phone number	Start date	Duration	Command	User name
Incoming -	Completed	Guillermo Ball	345669-4398	6/01/2007 04:22:53	00:40:00	Add	Ebony Harrison
Outgoing		Neal Rocha	863387-3138	8/11/2007 13:48:36	00:41:43	Add	Lamont Larson
Incoming -	Completed	Gretchen Barnett	139-1371988	4/15/2007 00:09:19	00:42:39	Update	Gabriela Lester
Incoming -	Missed Call, Unopened	Levi Galloway	164-5537354	6/02/2007 02:14:31	00:06:23	Update	Timothy Schmitt
Incoming -	Missed Call, Unopened	Claude Kelly	2277870047	7/26/2007 10:32:26	00:27:30	Update	Curtis Ramirez
Incoming -	Missed Call, Unopened	Chadwick Ware	228033-8374	5/14/2007 05:56:04	00:03:00	Update	Shawn Rhodes
Outgoing		Victor Wolf	178806-5078	4/24/2007 07:01:09	00:33:08	Add	Armando Armstrong
Outgoing		Donna Fowler	353-904-9528	9/24/2007 15:57:31	00:38:25	Add	Orlando Reed
Incoming -	Completed	Randal Wheeler	483-6984037	6/23/2007 19:11:18	00:32:50	Add	Gwendolyn Byrd
Incoming -	Missed Call, Unopened	Gilberto Forbes	776-5829483	9/14/2007 02:58:06	00:25:17	Add	Shari Mc Bride
Incoming -	Missed Call, Unopened	Penny Crawford	907-297-0123	7/15/2007 05:19:58	00:14:14	Add	Denise Valenzuela
Incoming -	Missed Call, Unopened	Kenneth Knapp	485109-9909	6/29/2007 16:37:06	00:22:38	Update	Lamont Larson
Incoming -	Missed Call, Unopened	Jay Morrison	1577922436	11/21/2007 13:13:33	00:15:12	Update	Joan Mullen
Incoming -	Completed	Latisha Jordan	321-916-2796	8/13/2007 10:40:41	00:30:48	Update	Guadalupe Brooks
Incoming -	Completed	Jarrod Ritter	129-104-9227	12/30/2007 02:59:16	00:22:10	Update	Jenifer Bird
Incoming -	Completed	Janelle Bradford	833-895-5042	6/11/2007 14:29:57	00:19:22	Update	Tia Mays
Incoming -	Missed Call, Unopened	Constance Moses	627419-2428	9/03/2007 07:16:00	00:23:19	Add	Clarissa Briggs
Incoming -	Missed Call, Unopened	Jeannette Pham	0316043490	3/23/2007 07:56:08	00:04:50	Add	Jonathon Allen
Incoming -	Completed	Glenda Marshall	8513954465	10/11/2007 23:51:52	00:41:36	Add	Kristina Melendez
Incoming -	Missed Call, Unopened	Kristen Obrien	964583-8786	7/23/2007 11:06:44	00:26:57	Update	Martin Mc Gee
Outgoing		Andre Noble	015409-9136	6/23/2007 02:17:13	00:10:12	Add	Alice Roberson
Outgoing		Roberta Moyer	2353374835	9/22/2007 09:35:42	00:38:01	Add	Mark Hancock
Incoming -	Completed	Perry Zimmerman	8727748335	6/22/2007 09:05:33	00:43:48	Update	Larry Joyce
Incoming -	Completed	Reginald Haynes	493-936-6326	10/15/2007 15:23:14	00:31:01	Update	Diane Mc Intyre
Incoming -	Missed Call, Unopened	Toby Hogan	5164873102	6/28/2007 22:53:57	00:22:32	Update	Dustin Jacobs
Incoming -	Completed	Lucas Sellers	896-366-6848	5/27/2007 11:48:07	00:27:52	Update	Felix Shannon
Incoming -	Completed	Bonnie Hobbs	658-281-0177	5/14/2007 14:03:20	00:25:33	Update	Jonathan Manning
Outgoing		Alisha Logan	3651833654	7/23/2007 05:23:33	00:04:27	Update	Margarita Mc Dowell
Incoming -	Missed Call, Unopened	Cassie Watkins	1689153822	10/05/2007 06:00:16	00:29:07	Update	Joan Mullen
Outgoing		Robyn Rubio	994-0632559	9/28/2007 14:16:47	00:39:08	Add	Mandi Harding
Incoming -	Completed	Bobbie Chung	838326-1710	10/12/2007 06:41:22	00:41:37	Add	Nathaniel Arellano
Incoming -	Completed	Abraham Huerta	776-861-3062	5/08/2007 09:26:21	00:24:26	Update	Lamont Larson
Outgoing		Sarah Pacheco	184-710-9347	8/07/2007 11:38:09	00:40:58	Add	Maggie Nielsen
Incoming -	Missed Call, Unopened	Chad Daugherty	086-374-2098	4/23/2007 13:44:33	00:21:44	Update	Dustin Jacobs
Incoming -	Completed	Lakesha Morrow	2117777220	12/26/2007 16:24:18	00:44:04	Update	Christy Irwin
Incoming -	Missed Call, Unopened	Philip Leach	381-581-6576	5/14/2007 05:49:41	00:14:13	Add	Martin Mc Gee

Search Items

The Search items option allows you to search the entire Phone, SMS, BBM, and PIN records for any criteria you



provide. To create a search, first select the Search items button from the toolbar. The search items window will appear.



If you already have a saved search, you can select the Load search option; otherwise the system assumes that you wish to create a new search. At any time, if you wish to save your search, selecting the Save search button allows you to do so.

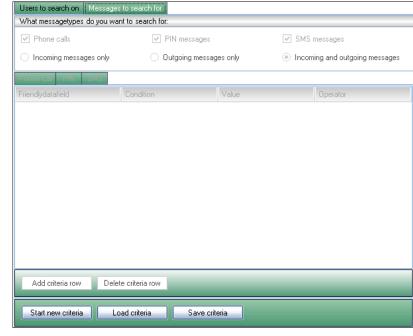
To perform a search, you must first select which users and item types will be searched. The system allows you to either search on all users in the system, (this system has 200 users), or you may opt to search in only the selected users. This requires that you select one or more users from the list.

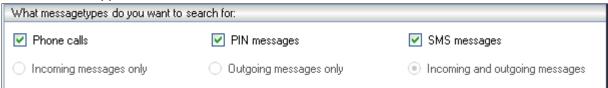
Once you have selected the users you wish to search in, you must then select which item types you wish to search through. (All types, SMS, BBM, phone, or PIN.) Click on the "Messages to search for" tab

above the user selection window pane.

Before you can select any of the message types you wish to search through, you must select either the Start new criteria, or Load criteria button.

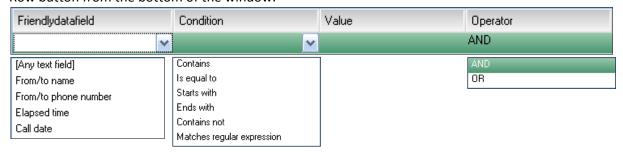
After you have selected the Start new criteria, or loaded new criteria from a saved search, you can change the message types that the search applies to.





The boxes with check marks in them are active and will have the search applied to them.

Now that the message types have been selected, you may add search criteria. Select the Add criteria Row button from the bottom of the window.



The dropdown window menus are shown here. To access the dropdown windows, double-click on the desired field, then select the operator. The Value field is the area where you manually add the keywords to search for. If you wish to add more than one search criteria, use the AND, OR operator and select the Add Criteria Row button again, and then input the desired search information. Repeat as desired.

Click the Search button when you wish to perform the search.

After the search is complete, you will be returned to the main viewer screen. The search results are listed under the search results tab, at the bottom of the User data/Search results window. To toggle between the two, use the tabs.

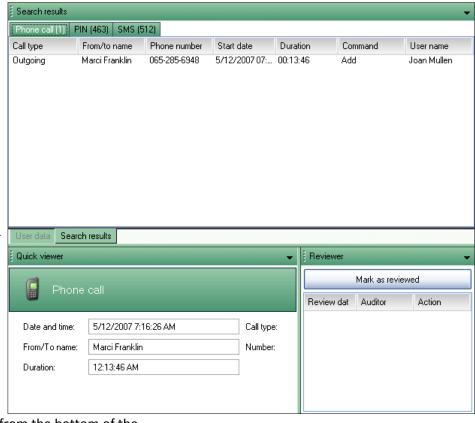
This search data can be organized and printed or exported in the same manner as the User data results and information can.

If you wish to save the search criteria, select

the Save criteria button from the bottom of the search criteria window.

You will be prompted to create a save name and a description.

Unsaved criteria will remain in the search window until new search criteria are specified, or the program is restarted.

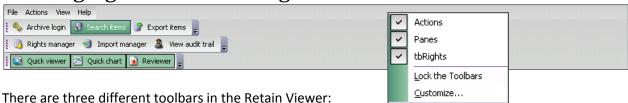




Customizing the Viewer

Retain allows the user to extensively customize the viewer to fit any environmental need. The toolbars, viewer panes and viewers can be moveable and edited. The viewer panes can also be detached from the main window to 'float' as their own independent window on the desktop.

Changing and customizing the toolbars



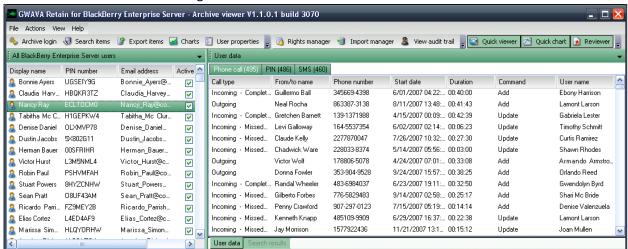
Actions toolbar – Archive login, Search Items, Export Items, Charts, User Properties Panes – Quick viewer, Quick chat, Reviewer

tbRights - Rights Manager, Import Manager, View Audit Trail

You can remove or add toolbars, add or remove buttons, and move these toolbars. To remove or add a toolbar to the viewer, right click on the toolbar area in the window, and select the toolbar you wish to add or remove from the right click menu.

All panes and items in the viewer which are not locked are available to be moved. The toolbars are the only items which can be locked into place. Moveable items are noted by the four vertical dots at the top-right edge of the item you wish to move.

A simple use of this, for instance, to maximize the view panes on a monitor, is to expand the main viewer window and click and drag the toolbars and set them end-to-end.



The gray buttons on the end of the toolbars allow you to add or remove items from the toolbar.

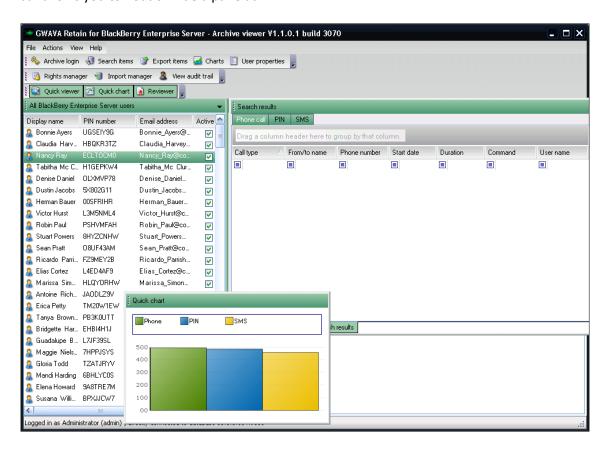


The menus here contain the buttons allowed for each toolbar, and can be deselected to remove, or selected to add them to the toolbar.

Changing the viewer panes

The viewer panes have the option to be detached from the viewer window completely and float on the desktop as independent windows. To move a pane to another location in the Retain Viewer, click and drag the pane title bar to the desired location. As you drag, you will notice hot buttons appear which allow you to drop and resize the pane to the pre-designed location and size. If you avoid the hot buttons then the pane will set wherever you drop it on the viewer window.

If you do not drop the window pane in the viewer window, or set it in an area which the viewer does not recognize as an anchor spot, the pane will float on the desktop. Floating panes act as their own independent windows, and as such, can be resized a moved independently from the main viewer window. You may also detach, or float, a pane from the right click menu. Right clicking on a pane title bar allows you to float or hide a pane at will.



To return a floating pane to the main viewer window, either drag and drop the pane to an anchor location in the main window or right click and unselect the floating option to return the pane to its default location.

All panes will return to their original location on restart of the viewer application.

Floating

Organizing Data

desired option.

The viewer allows you to organize and filter the data shown in the user list, search results, and user data panes. The two different ways of organizing the data are filtering and grouping. Filtering works like a miniature search, only displaying the information that fits the particular criteria you set as the filter. Filters are set on columns in the data fields. Grouping uses the column headers to organize the data into a tree, where you choose the hierarchy for the grouping tree.

Both of these options use columns. To view which columns are active in the data panes, right click and

Toggle filtering

Clear all filters

select Show columns from the menu. The list that opens shows the active columns, and allows you to add or remove columns.

By default, filtering and grouping are turned off. You enable and disable both options from the right click menu by selecting 'Toggle' for either option to turn on, or off, the

Toggle grouping
Clear all groups
Show columns
Ton, or off, the
Clear all groups
Clear all group name
Clear all groups
Clear all

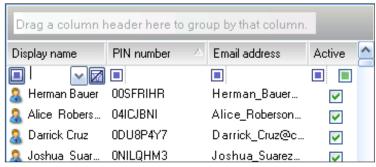
4

Display name

PIN number

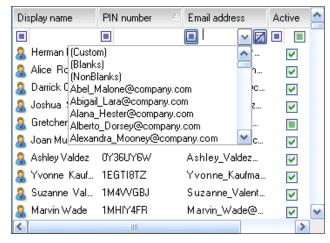
When either option is enabled the data pane where the option is enabled expands to display the option area.

The grouping option spawns the area above the columns, whereas the filtering option adds a row directly beneath the column headers.

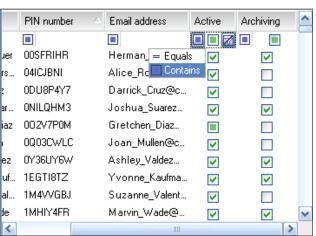


Filtering

To set a filter, click on the filter row in the column which you wish to set the filter, a drop menu arrow should appear in the column field, which displays the automatic filters available. This shows the details which show all the values which are contained in that column.



Once a filter has been set, only the rows which contain that value in that column will be displayed.



There are some columns which only show two options, contains and equals. These filters only have two or three values in the columns to filter out. These columns may also be the most useful as they cut down large amounts of data without having to know the exact value in the column which you are looking for. For instance, if you wish to see all the accounts which Retain is not archiving, set the archiving column filter to 'equals' and an empty checkbox. The results will be filtered as soon as you have set a value.

To clear or remove all the filters you have set, you may right click and select 'Clear all filters' from the menu.

Grouping

Grouping columns organizes the data according to the column criteria. To enable grouping, right click on

the title bar of the pane you wish to organize, and select Toggle grouping. The pane should now display a grouping area to hold the columns you have decided to group

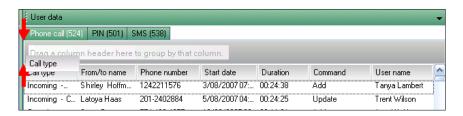
by.



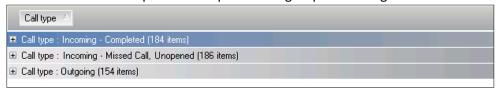


After you have activated grouping, the grouping bar appears above the column headers, with instructions to drag headers to that location. In this example, we are looking for information on an incoming call on a specific date to Jamie Koch, in order to get the call number. Select Jamie Koch from the User list, and toggle grouping on the User data pane.

Click and drag the Call type header into the grouping window. (Red arrows will appear, pointing to the grouping bar to indicate where the column header should be dropped.)



The information in the pane will be pulled into groups according to the header column values.



To continue grouping, expand a desired group, and drag the next column header to the grouping bar. Since we know the day that the phone call came in, we can group according to the start date header



We then can expand the correct date and find the phone calls listed. Here, there is only one call listed, and further grouping is needless.

You may group as many headers as you like, and rearrange the order by dragging them to the desired location in the grouping bar.

To clear all grouping, right click and

select 'Clear all groups' from the menu.

Uninstall

Retain for BlackBerry Enterprise Server can be removed for both the viewer and the agent, without affecting the rest of your system.

To completely uninstall Retain for BlackBerry Enterprise Server:

Agent:

Stop the agent running process through the Agent configuration wizard. Use the 'Remove Programs' windows utility to uninstall the program

If desired, remove the program installation directory and logs, which are not removed automatically. DO NOT DELETE YOUR LICENSE.

You still need to drop your BBArchive database from the MySQL system. Using the MySQL Management Studio, remove the database and close all open connections. Doing this deletes all of your collected data. It is recommended that you retain your log files in order to retain all data if the BBArchive database is deleted.

Viewer:

Use the 'Remove Programs' windows utility to uninstall the program.

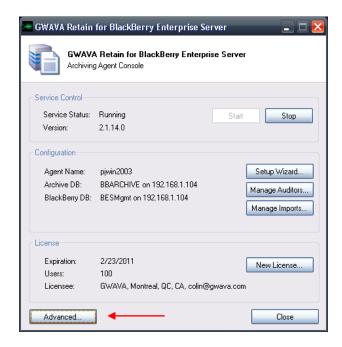
If desired, you may remove the program installation directory and logs. DO NOT DELETE YOUR LICENSE.

Appendix

Manually Importing Logs

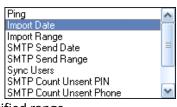
To add BlackBerry Enterprise Server logs, (older than your Retain installation) to the database, the logs must be manually imported through the advanced options in the Retain Agent interface.

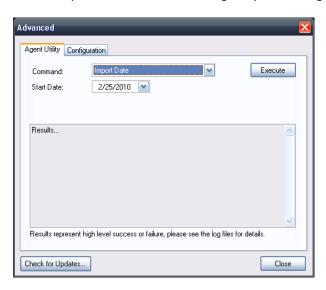
Manually importing logs tells Retain to look for older logs in the original source directory, and the log files must retain their original name.



After selecting 'Advanced', the import tools desired must also be selected from the drop-down menu of the advanced tools window.

There are two options which deal with manually importing logs: a single date, and a date range. The import Date only imports logs conforming with the specified date. A date range imports all logs falling within the specified range.







Select the desired date, or range, and select 'Execute'. You may view the results in the results window. Imported log data will be added to the system according to the 'imported users' settings.

The command-line import tool is still included for scripting purposes, and instructions can be found below.

Command Line Manually Imported Logs

To add BlackBerry Enterprise Server logs, (older than your Retain installation) to the database, you need to use the manual log import tool, agentutil.exe. This allows you to input the older data to your Retain system.

To import a single log or a single day's worth of logs, there are options, or commands, to use with the agentutil.exe utility included with Retain. There are also commands that allow you to import a date range or a specific type of log. The SMTP connector can be triggered by this utility, and the options are included below which allow you to create messages for the SMTP connector, or to bypass that option in order to avoid overwhelming your mail server.

The options or commands recognized by the utility are listed below, and will be shown if you run the utility without any parameters.

The source directory used is configured in the archiving agent graphic configuration screen. This is simply a way to force a manual import.

- 1) Open a command prompt (Start|Run|CMD)
- CD to "C:\Program Files\Beginfinite\GWAVA Retain for BlackBerry Agent"
- 3) Run the agent. ("agentutil")
- a. If you simply enter agentutil<ENTER>, you will get the screen you see above. It is helpful if you forget the syntax.
- b. The syntax is: agentutil [ip-address] [port] [command] [parameters]

Example:

If you wish to import the log files between August 27, 2007 and August 28, 2007, you would enter: agentutil 127.0.0.1 9050 importdaterange 08/27/2007 08/28/2007

This assumes that your agent is on the same host you're running this command (usually so) and that you're using the default port of 9050 (set in the configuration screen).

One other important point is that the date format is MM/DD/YYYY.

Migrating data from a Retain for Blackberry 1.x database

The Retain 2.0 database is not compatible with the Retain 1.0 database format, and the data must be pulled from the original log files or migrated from the current 1.x database to the new 2.0 database format.

To migrate Retain 1 data into the new Retain 2 system you must:

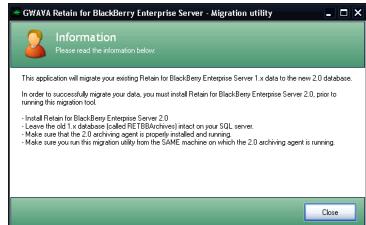
- Uninstall Retain 1.x (DO NOT delete RETBBArchives database)
- Install Retain 2.0
- Create BBArchive database using the 'Create200db.exe' utility.
- Configure Archive agent, and have agent running.

Once you have completed these steps, run the Retain migratory utility. It can be found under Start | All Programs | GWAVA Retain for BlackBerry Agent | GWAVA Retain for BlackBerry DB Migrator.



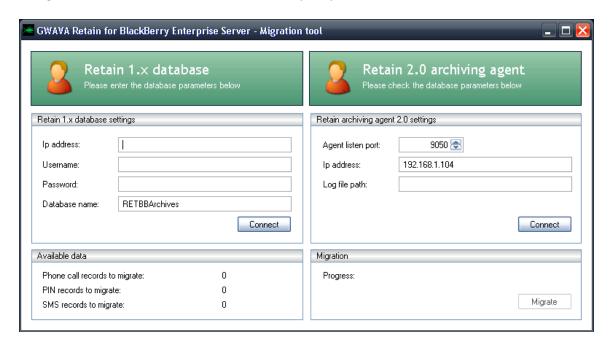
The Migration utility will first alert you to its function with this screen.

Click 'Close' to continue



The Migration utility will open with this window.

To migrate the data, connection info to the old database must be provided. Supply the IP address of the MySQL server where the RETBBArchives database. Provide the Username and Password, and if you changed the database name from the default, specify that here.



Select 'Connect'. The Migration utility will notify you if you have successfully connected. If the connection fails, correct the information and verify that the SQL server is running and the connection is available.

Provide the correct information for the Retain 2.0 archiving agent as well. The default port is specified. If you are not running the Migration utility local to the Archiving agent, you will need to change the IP Address.

Click 'Connect'.

The Log file path will be automatically propagated if you have a valid connection to the Archiving agent.

When you have successfully connected to both the 2.0 agent and the 1.x database, the 'Migrate' button will become available. Select 'Migrate' to move your data from the old database into your Retain 2.0 system.

The Migration utility will show you status of the migration. It may take several minutes depending on the size of the database and the performance of your system and connections.

You will be notified when the migration has completed. Once you see this notification, close the migration utility. Your data has been migrated.

