



for BlackBerry Enterprise Server

# Retain

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## for BlackBerry Enterprise Server

Installation Guide and Users' Manual

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## About Retain for BlackBerry Enterprise Server

Retain for BlackBerry Enterprise Server is an Executive level system for:

- Archiving
- Auditing
- Data Retention
- Regulatory Compliance.

It provides a quick, safe and immediate access to a company's BlackBerry Enterprise Server usage information so that executives can review BlackBerry smartphone usage:

- PIN messages
- SMS messages
- Phone Call logs
- Which messages came through which BlackBerry Enterprise Server

### 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](http://www.gwava.com).

### Sales

You may contact a Beginfinite sales team member via:

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## Introduction

As BlackBerry Smartphones gain popularity, companies have been installing BlackBerry Enterprise Servers to connect them to their corporate networks. This creates some complications for organizations who must keep records archived of corporate communications. Up until now, there has been no real facility to archive and easily audit BlackBerry Smartphone activity.

Retain for BlackBerry Enterprise Server allows authorized users to review the PIN and SMS messages sent from a BlackBerry Smartphone through a BlackBerry Enterprise Server. It also allows accessing Phone Call logs in order to review call usage. Retain for BlackBerry Enterprise Server provides protection from information leaks, misuse of company resources, and legal liability. Retain for BlackBerry Enterprise Server ensures that executives are able to accurately evaluate PIN, SMS 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 personnel may review the archived data and run reports against it using the Viewer Application.

Retain for BlackBerry Enterprise Server is designed to gather information that is visible to the BlackBerry Server which is not visible to your e-mail system.

### Confidential PIN and SMS messages inspection

For legal, human resources and compliance auditors, Retain for BlackBerry Enterprise Server provides the ability to maintain oversight to all PIN and SMS messages communications sent through the BlackBerry Enterprise Server. Retain for BlackBerry Enterprise Server monitors and scans all PIN and SMS messages. This provides protection from information leaks, misuse of company resources, and legal liability.

### Confidential BlackBerry investigations

Retain for BlackBerry Enterprise Server shows authorized personnel all PIN and SMS messages sent by a particular user or selected users. These messages may be reviewed discreetly for investigative purposes.

### Export PIN, SMS and Phone Call data for evidentiary review

Retain for BlackBerry Enterprise Server can export PIN, SMS and Phone Call log data into an Excel or Calc (OpenOffice) spreadsheet by using the XLS format.

## Licensing

Like other GWAVA products, Retain for BlackBerry Enterprise Server is licensed per user. Retain for BlackBerry Enterprise Server will operate as a demo for thirty days for testing purposes. After that, you must purchase a license for the appropriate number of users on your system.

## Features

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

## **Minimum System Requirements Archiving Agent (server side)**

- Windows XP or Windows 2000 or Windows 2003 (fully updated and patched through 'Windows Update')
- BlackBerry Enterprise Server v4.1 (Service Pack 3 preferred)
- Microsoft SQL Server 2000, 2005 (Express/MSDE, Workgroup, Standard or Enterprise)
- Microsoft .NET Framework 2.0 or higher (fully updated and patches through 'Windows Update')
- 512 MB 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. See <http://www.microsoft.com/sql/howtobuy/faq.mspx>.)

## **Minimum System Requirements Viewer Application (client side)**

- Windows XP or Windows 2000 or Windows 2003 (fully updated and patched through 'Windows Update')
- Microsoft .NET Framework 2.0 or higher (fully updated and patches through 'Windows Update')
- 512 MB RAM
- 1 GB hard drive space (depending on the space needed for exporting)

## ***Special Notes***

The actual data gathered by the Archive Agent is textual. It is therefore easily compressed and the field lengths are very small. So the overall space required by the database is quite small.

The archived data itself 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, if you wish.

## ***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”)

- Also called “Archive Viewer”

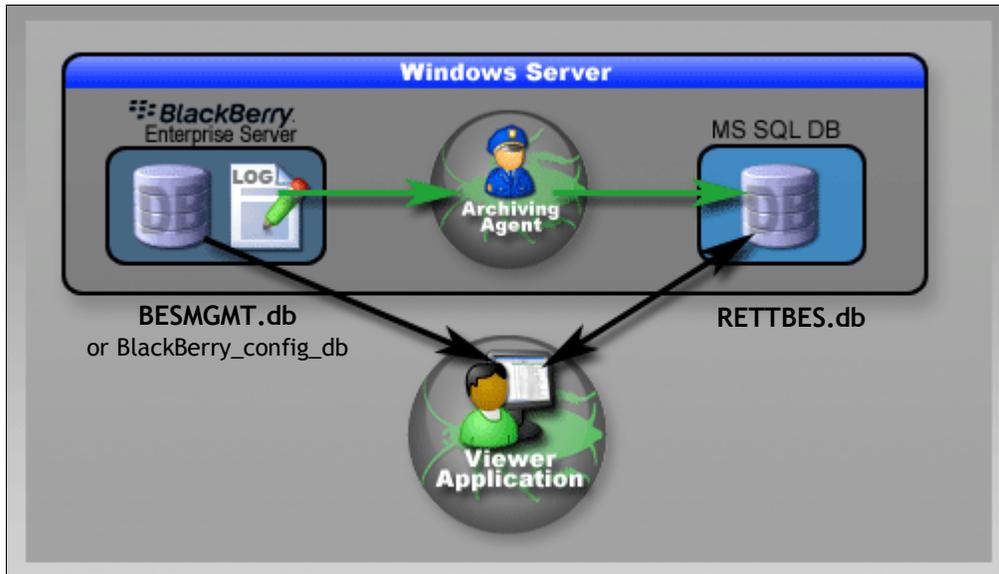
The Agent sits on the same server as your BlackBerry Enterprise Server. It reads the log files generated by the BlackBerry Enterprise Server and stores them in a Microsoft SQL database. In addition to the log files, the Agent stores configuration information on how you’re Retain for BlackBerry Enterprise 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 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.

## How It Works

### A simple configuration

In its simplest configuration, the Retain for BlackBerry Enterprise Server system works as shown in the diagram below:



On the Windows server in this example, there is:

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

The Microsoft SQL database containing the Retain for BES database does NOT need to be on the Blackberry Enterprise Server. We have just placed it here in this example to show a “simplest” configuration.

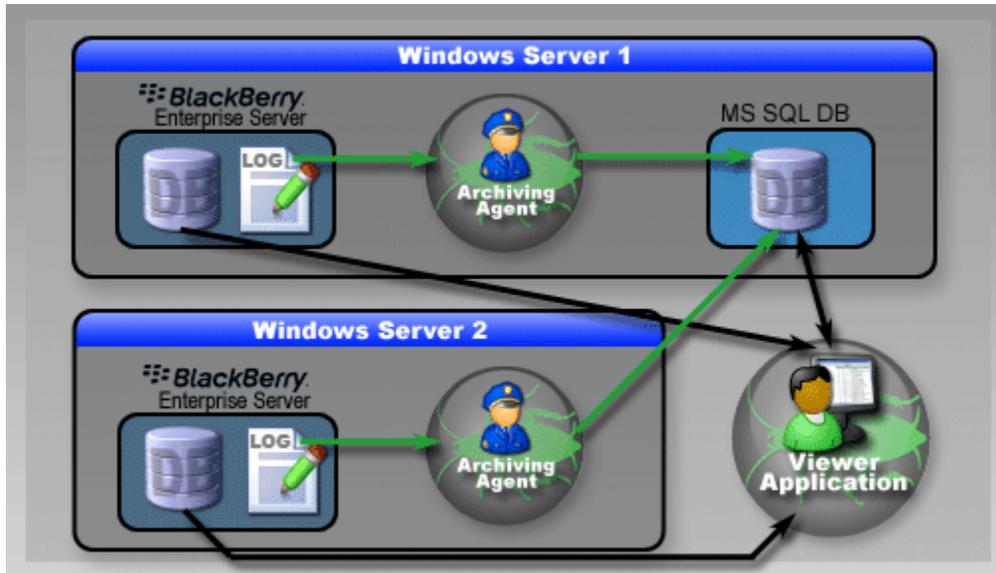
Note that the same SQL database server that the BlackBerry Enterprise Server uses may also be used to store the archived data for Retain. This would be an example of the simplest configuration.

The Agent will read the log files from the server’s hard disk and will store them in the SQL database, as shown.

The Viewer logs in to the SQL database and reads the archived data and configuration information. Behind the scenes, the Viewer will read live information from the BlackBerry Enterprise Server database and it will combine this data with the archives you will be viewing.

## In an Enterprise configuration

In a configuration where you might have more than one BlackBerry Enterprise Server, the system works like this:



The first Windows server with BlackBerry Enterprise Server is set up just like in the simplest configuration shown earlier.

You may put the Microsoft SQL database anywhere; it does not need to be installed on the same server as your BlackBerry Enterprise Server. It is shown on the same server in this diagram for the sake of illustration.

Every BlackBerry Enterprise Server to be included in the archiving system must have its own Agent installed. You configure each Agent to tell it where to send the data it collects and where the server actually is within the network, so that the Viewer may communicate with it.

The Viewer, as always, logs in to the SQL database and reads the configuration information that tells it where to find the live BlackBerry Enterprise Server databases. It then connects behind the scenes to bring you a more complete view of the archived data.

Additional servers work the same way as shown here with "Windows Server 2".

## 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 finally how you will want to access it.

Download Retain for BlackBerry Enterprise Server from [www.gwava.com](http://www.gwava.com). Be sure to get your license too.

### **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. You might want to use an existing server with plenty of available space or you might want to use a whole new server. You might want to use a virtual server connected to a network-attached storage device or a SAN.

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**

Make sure that all your servers have the necessary software installed and properly working. Ensure that there is an unblocked TCP connection available between the servers. See the [software checklist](#)

By default, the BlackBerry Enterprise Servers do not log PIN, Phone Call or SMS data. You must configure it to do so.

Once this is done, you may proceed with installing the SQL server and the Agents. Otherwise, the Agents will have nothing to collect.

### **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 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. Run the Agent Setup program and run the 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.

## Install the Viewer

The viewer can be installed on any workstation that can see the SQL database server by 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.**

## Software and Settings Checklist

For Retain for BES to work correctly, the following programs, settings, or information needs to be installed, set correctly, and available for use.

- SQL server installed and working.
- All SQL servers must have mix authentication enabled. (Mix mode Uses both Windows and SQL authentication modes – See <http://support.microsoft.com/kb/325022> )
- Must have SA password or equivalent Administrator rights (User with database creation rights, read/write rights to the RETTBES.db and read rights to the BES management database. (Instructions to change SA password – See <http://support.microsoft.com/kb/321081> )
- Access to a user that can create a new database. (This will be the RETTBES database)
- This user MUST also have full read/write rights to the RETTBES.db.
- Same user MUST also have read rights to the BESMGT.db on BES server
  - [The BESMGT.db is the default name for the Blackberry management database but the name may be different if specified. Make sure you know the name of your management database. The Management database name MUST NOT be the same as the database for Retain BES – default is RETTBES.db.](#)
- The SQL server MUST have TCP/IP enabled and connections allowed.
- IF the SQL server listens on a port other than the default, this port must be specified. Know the port.
- To install you also need access to the server(s) where BES is installed. (agent must be installed on BES server)

## Configuring Your BlackBerry Enterprise Server(s) to Monitor PIN, SMS and Phone Calls

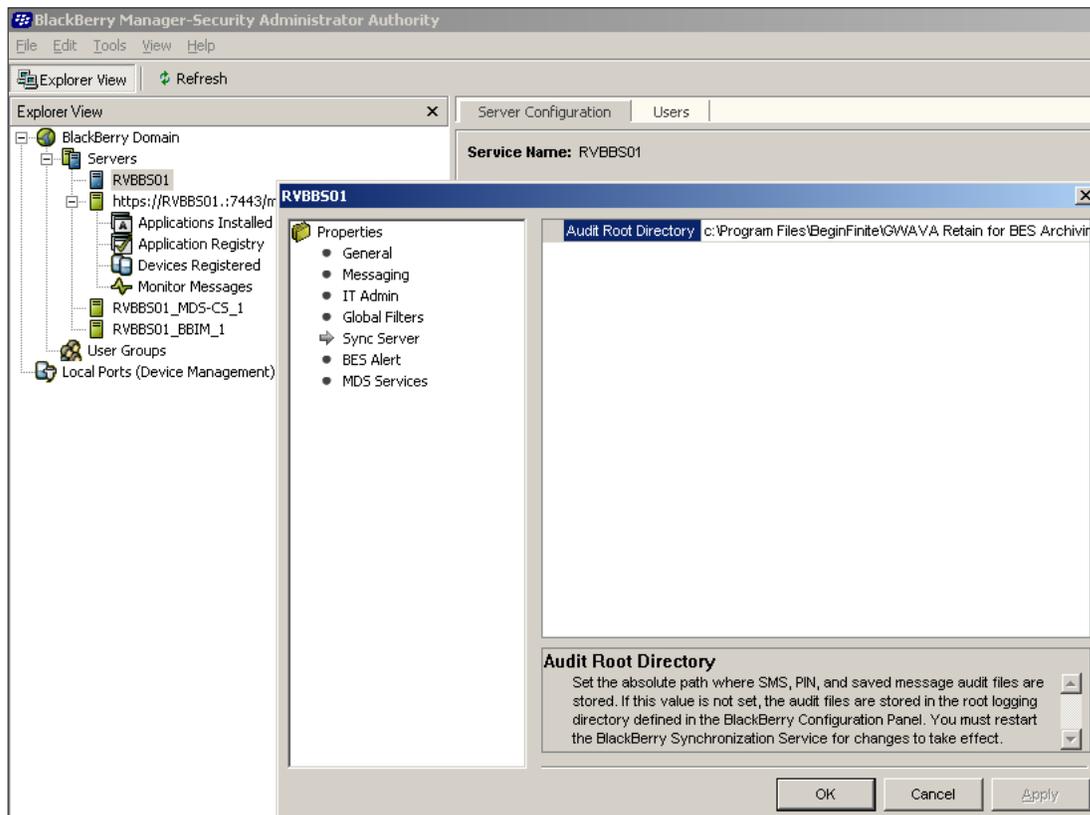
Before installing the 'Archiving Agent' components, you need to configure the BlackBerry Enterprise Server to monitor PIN messages, SMS messages and Phone Calls. Otherwise, there will be no data for the agent to gather.

These instructions are provided as a courtesy. The real guide is in the help file within the BlackBerry Manager. This Help File is accessible from within both the 'BlackBerry Manager', installed on the BlackBerry Enterprise Server, as well as 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 configure it for the Archiving Agent, you need to take the following steps and **NOT** the steps mentioned in the documentation:

- 1) In the BlackBerry Manager, in the left pane, choose a BlackBerry Enterprise Server.
- 2) On the Server Configuration tab, click Edit Properties.
- 3) Click Sync Server.
- 4) Double-click Audit Root Directory.
- 5) Choose a directory to store the log files. Example:  
c:\Program Files\BeginFinite\GWAVA Retain for BES Archiving Agent\Logfiles\

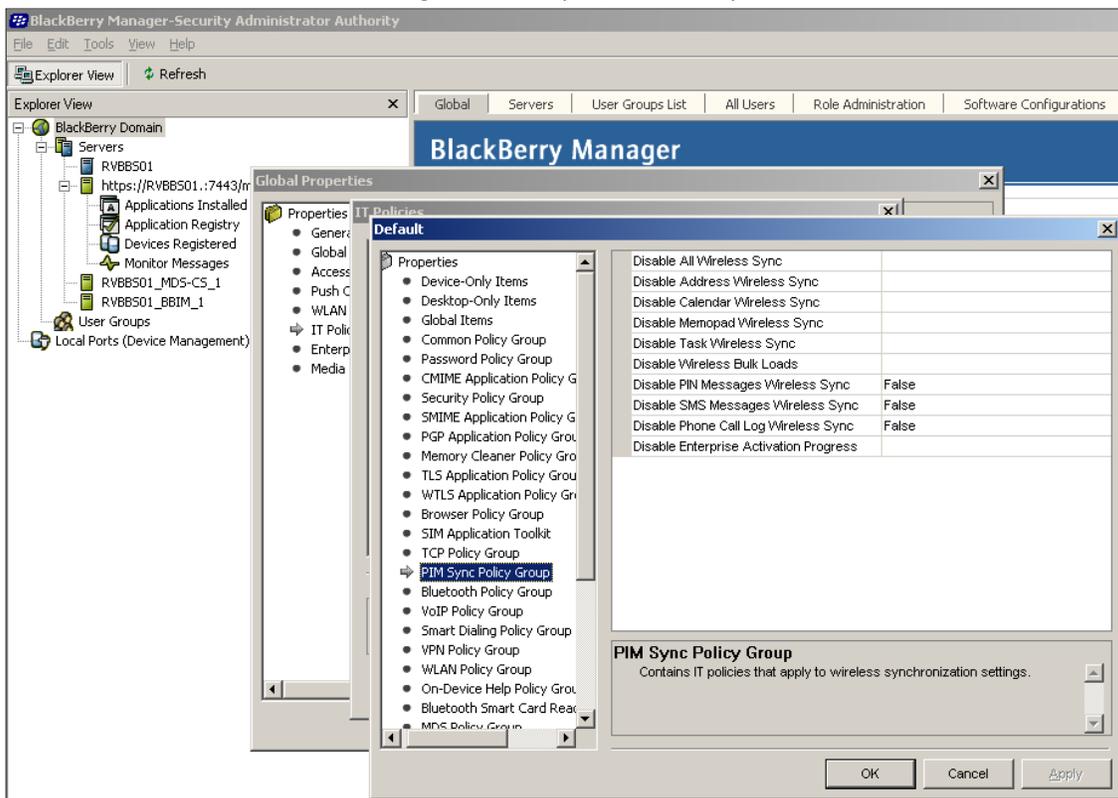


- 6) Click OK.
- 7) In the BlackBerry Manager, in the left pane, click BlackBerry Domain.
- 8) On the Global tab, click Edit Properties.
- 9) Click IT Policy.
- 10) In the IT Policy Administration section, double-click IT Policies.
- 11) In the list of policies, click a policy.
- 12) Click Properties.
- 13) Click PIM Sync Policy Group.
- 14) Perform any of the following actions:  
(The log settings in BES work with a reverse logic. You turn them off by setting it on. ie: a check in “disable SMS Message Wireless Sync” will shut off SMS Wireless Sync.)

- to Monitor SMS messages that users send from BlackBerry devices:  
Click **Disable SMS Messages Wireless Sync**, In the drop-down list, click **False**.

- to Monitor PIN messages that users send from BlackBerry devices:  
Click **Disable PIN Messages Wireless Sync**, In the drop-down list, click **False**.

- Do not monitor phone calls that users make on BlackBerry devices:  
Click **Disable Phone Call Log Wireless Sync**, In the drop-down list, click **False**.



- 15) Restart the 'BlackBerry Synchronization Service' or restart the BlackBerry Enterprise Server as a whole for these changes to take effect.

**You are now ready to install Retain for BlackBerry Enterprise Server**

## Installing the Archiving Agent

The 'Archiving Agent' component is responsible for importing the BlackBerry Enterprise Server Audit data into the Microsoft SQL database.

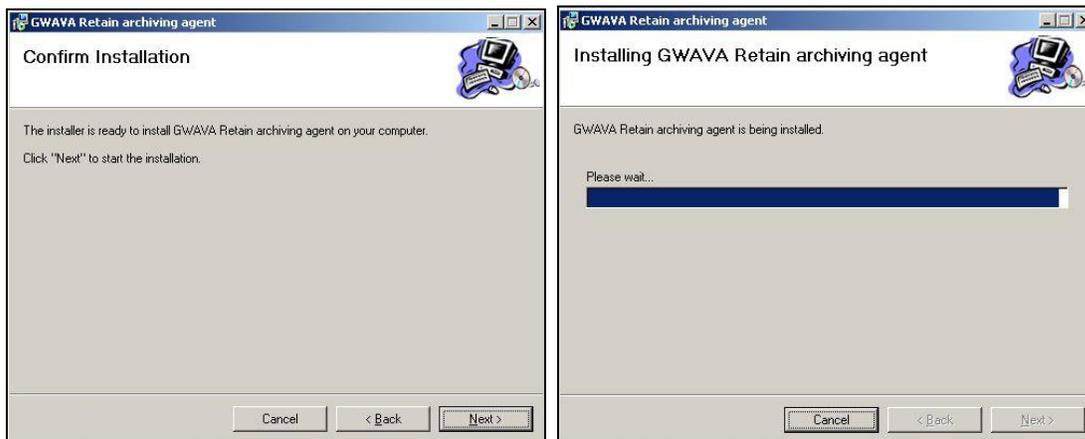
Download the software from [www.gwava.com](http://www.gwava.com) and extract it into a temporary directory. There are two components, the **Viewer** and the **Agent**. Go to the directory where you extracted the Agent installation files.

Run **setup.exe** to launch the installation procedure.



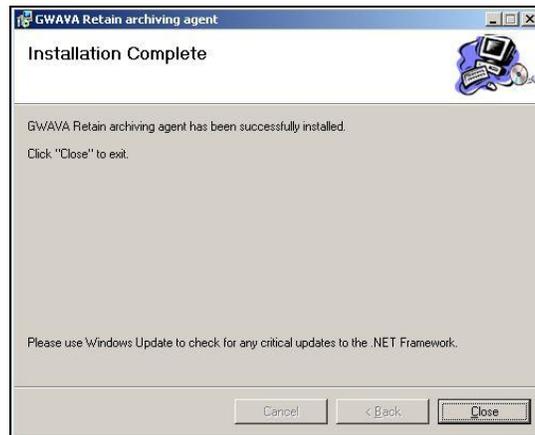
Click "Next" to start the installation wizard.

Select the installation folder. We suggest you accept the default. Also, we suggest you install it for "everyone" to avoid user-permission troubles later on.



Click "Next" to continue and the installation itself will begin. The Archiving Agent runs as a service.

When you see this screen, the installation process is complete.



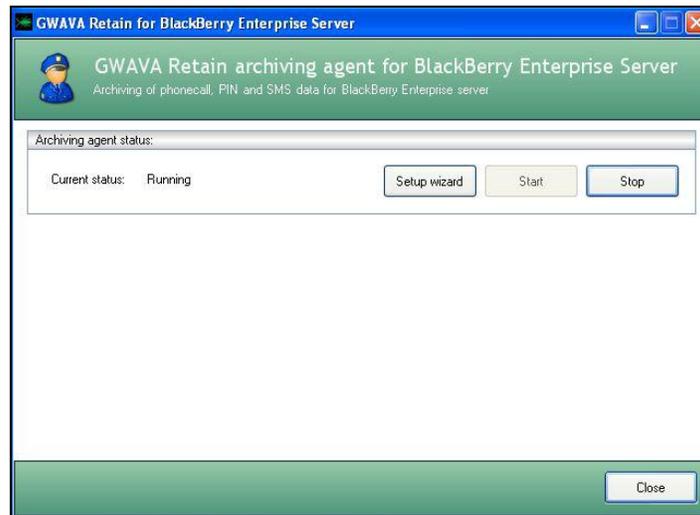
What's next?

The 'Archiving Agent' software has been installed, now you need to configure it.

## Configuring the Archiving Agent

After you've installed the Archiving Agent, you need to configure and start it.

Use the icon on the desktop or the Start Menu option (Start, Programs, Beginfinite, GWAVA Retain for BlackBerry Enterprise Server Archiving Agent, 'GWAVA Retain for BlackBerry Enterprise Server Archiving Agent Config').

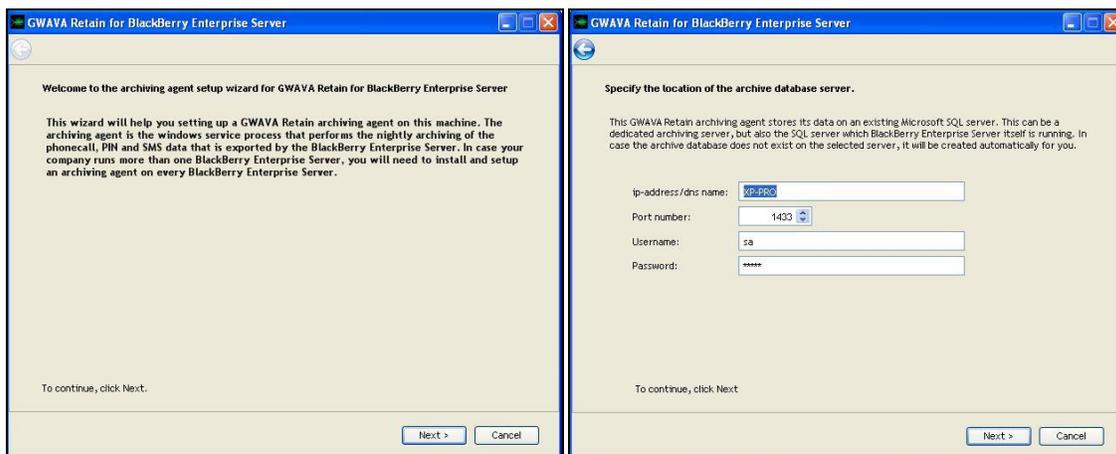


This is the main screen for the configuration program. It will tell you the status of the service – running or not. You may start, stop or configure the service here. To configure the service, click the Setup Wizard button.

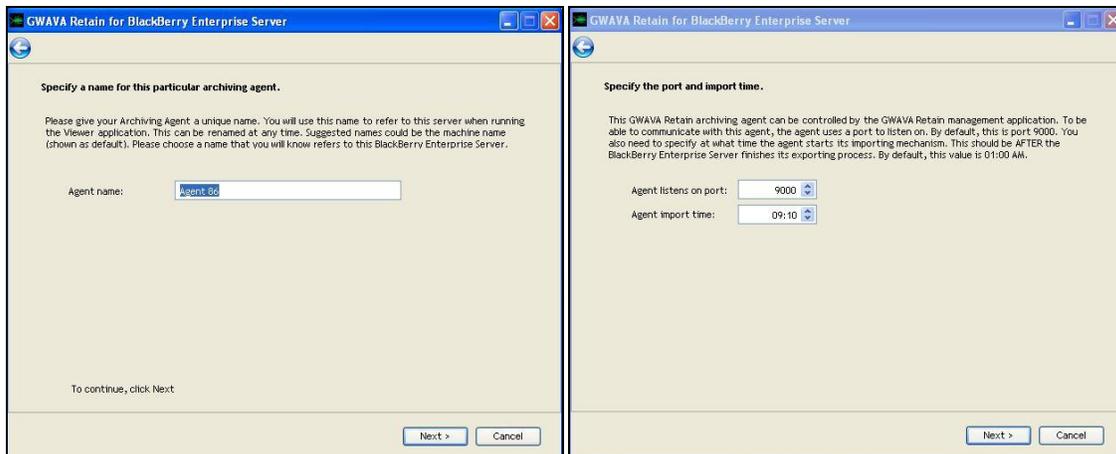
If this is the first time you've run the configuration program, the setup wizard will launch automatically.

## The Setup Wizard

The setup wizard walks you through 5 main sets of options so that the Archiving Agent can work.



The first screen is informational. Click 'Next'. On the second screen, you will specify the login parameters for the Microsoft SQL server which will be used to store the archived data. Use DNS names in preference to IP addresses when you can.



The Archiving Agent needs a name so you can identify it in reports. You may change this name at any time. Click 'Next'.

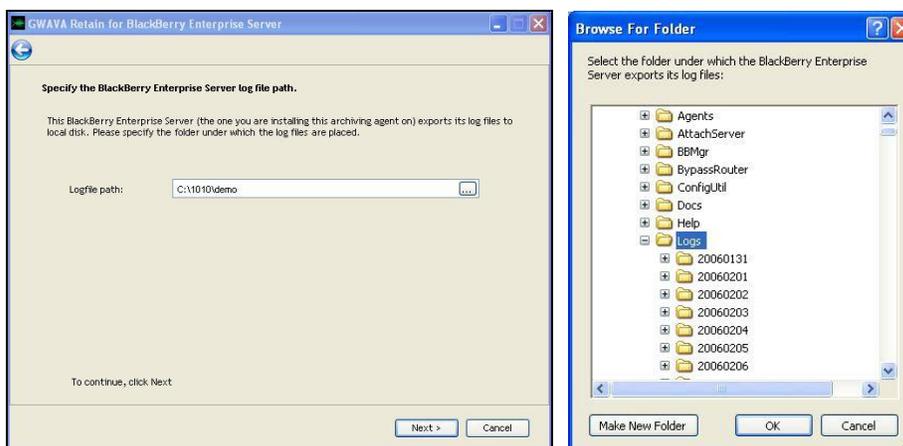
The next screen is where you set what port the Agent listens on for control signals from the Viewer and at what time to import the logs.

## Log Import Time

This bears a bit more explanation. By default, the BlackBerry Enterprise Server rolls over its logs at midnight. The default name for the log files includes the date that they cover. The default import time is 1 AM, which gives plenty of time for the logs to be ready to import.

Because it's 1 AM "the next day", the import function will import the PREVIOUS day's logs. In other words, on the 15<sup>th</sup> of October, it will import the logs dated October 14. This is worth noting, especially when doing a manual log import.

When you do a manual log import, you will have to change the file name of the log files to match the date you want to import. If you're importing today, you would change the date on the filenames to YESTERDAY's date.



## Choosing the Log File Path

In this step of the wizard, you will specify where the log files get stored. The log files are grouped by date under the log file folder. Each day's set is stored in its own folder, using the date as its file name. Choose the parent folder (highlighted) as the log file path.

The log files are imported from the file system so the Archiving Agent needs access to the log files via a static path. While this may be done with a permanent drive mapping, it is always best to install the Agent on the same server as the BlackBerry Enterprise Server it services.

**Specify the BlackBerry Enterprise Server database.**

The archiving agent needs to have read access to the BlackBerry Enterprise Server database. This database (called BESMgmt by default) will probably be on this machine. If you are running multiple BlackBerry Enterprise Servers, the location and name of this database could be different.

ip-address/dns name:

Port number:

Username:

Password:

Database:

To continue, click Next

Here you specify the login parameters to the BlackBerry Enterprise Server database. This is information you set when you installed the BlackBerry Enterprise Server.

## Choosing What to Import

Retain for BlackBerry Enterprise Server lets you choose **WHAT** you want to import. By default, “everything” is imported from the log files. This might not suit your own archiving policy so you may choose what gets imported at this stage of the setup wizard.

**Specify import settings**

You can specify what the archiving agent should import. For privacy considerations you could decide i.e. not to import the actual bodytext of PIN messages.

Enable importing of Call log data

To continue, click Next

**Specify import settings**

You can specify what the archiving agent should import. For privacy considerations you could decide i.e. not to import the actual bodytext of PIN messages.

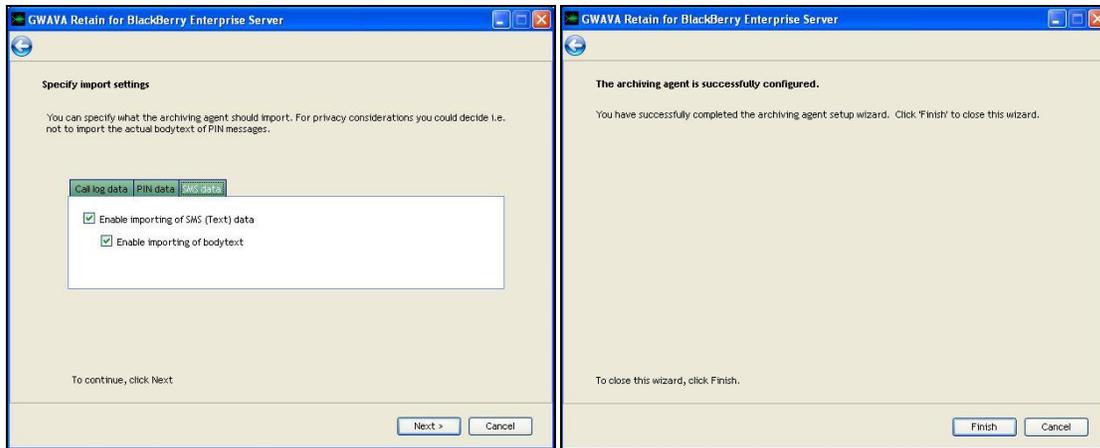
Enable importing of PIN data

Enable importing of subject

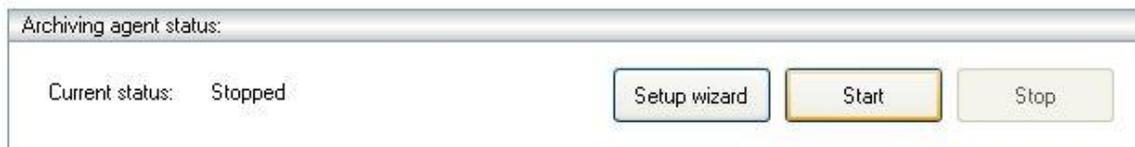
Enable importing of bodytext

To continue, click Next

Click on the tabs to choose the category of information you want to control. Items are imported if the box is CHECKED. Therefore, if you do NOT want to import something, UNCHECK the box. Click ‘Next’.



Once you have completed the wizard, you may now start the service. Upon completion of the wizard, the service is stopped:



Click 'Start'.



Your agent is now running and will import data once per day at the time you have specified. You may now install the Viewer. When you have data in the archives, you use the Viewer to see it and report on it.

## Manually Importing Logs

To import a log manually, you may:

- 1) Change the name of the log files to yesterday's date.
- 2) Run the setup wizard and choose:
  - a. The path to the log files you want to import
  - b. A time a few minutes away.
- 3) When the wizard is complete, start the service, wait until the time you set and allow the Agent to import the logs.
- 4) Rerun the wizard to set the import parameters back to normal.

To import data from a date range, there is a special command-line utility you may use.

Older log files can be imported manually by using the 'Retain for BlackBerry Enterprise Server Archiving Agent utility':

```
C:\Program Files\BeginFinite\GWAVA Retain for BlackBerry Enterprise Server Archiving Agent>agent-util
GWAVA Retain for BES - Archiving Agent utility v1.00
Usage:  <ip-address> <port> importsingledate <datevalue>
        <ip-address> <port> importdaterange <startdatevalue> <enddatevalue>
        <ip-address> <port> importphonelog <phonelog file>
        <ip-address> <port> importpinlog <pinlog file>
        <ip-address> <port> importsmslog <smslog file>
        <ip-address> <port> readsetting <section> <keyname>
        <ip-address> <port> writesetting <section> <keyname> <value>
        <ip-address> <port> showlogfile
        <ip-address> <port> ping
        <ip-address> <port> version

C:\Program Files\BeginFinite\GWAVA Retain for BlackBerry Enterprise Server Archiving Agent>_
```

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)
- 2) CD to "C:\Program Files\Beginfinite\GWAVA Retain for BlackBerry Enterprise Server Archiving Agent"
- 3) Run the agent.
  - a. If you simply enter agent-util<ENTER>, you will get the screen you see above. It is helpful if you forget the syntax.
  - b. The syntax is: agent-util [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:

```
agent-util 127.0.0.1 5000 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 5000 (set in the configuration screen).

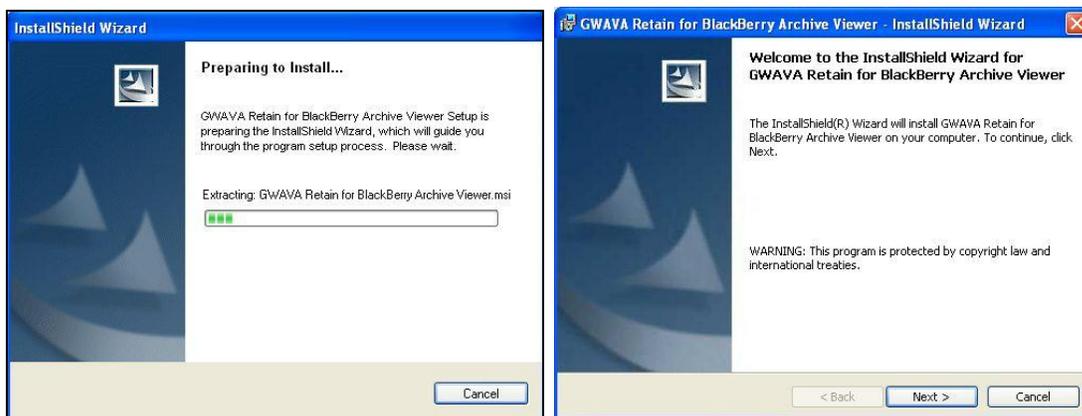
One other important point is that the date format is MM/DD/YYYY.

## Installing Retain for BlackBerry Enterprise Server Archive Viewer

The Viewer Application enables an auditor to access the archived data. It installs on your Windows XP or Vista desktop with Microsoft .NET Framework 2.0 installed.

Download the software from [www.gwava.com](http://www.gwava.com) and extract it into a temporary directory. There are two components, the **Viewer** and the **Agent**. Go to the directory where you extracted the Viewer installation files.

Run **setup.exe** to launch the installation procedure. Click Next to continue.



### **License**

Retain for BlackBerry Enterprise Server is commercial software and licenses for its operation must be purchased from GWAVA. Please read the license agreement and click to agree to the terms to continue. Click **Next** when ready.

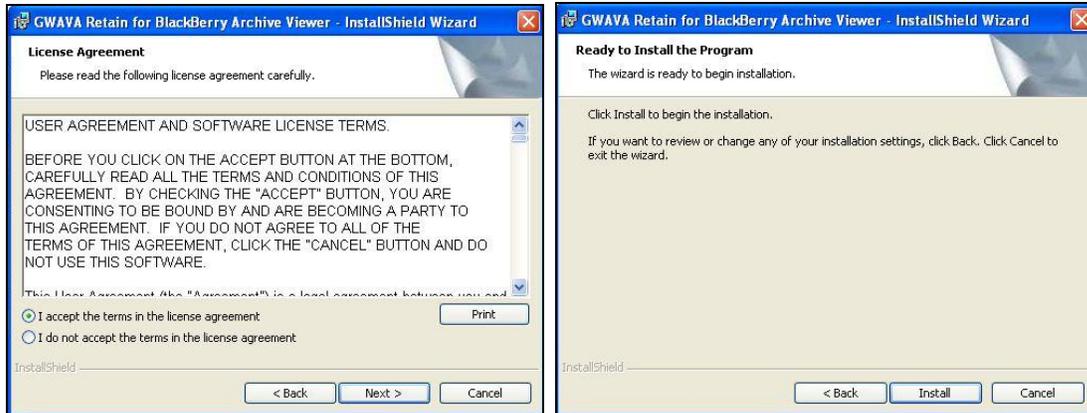
### **Installing your license**

The license file should be applied after the application is installed.

GWAVA Retain for Blackberry Enterprise Server uses PEM-based licensing. That is, your license is encoded in a special file with a .PEM extension. You will receive this file from GWAVA.

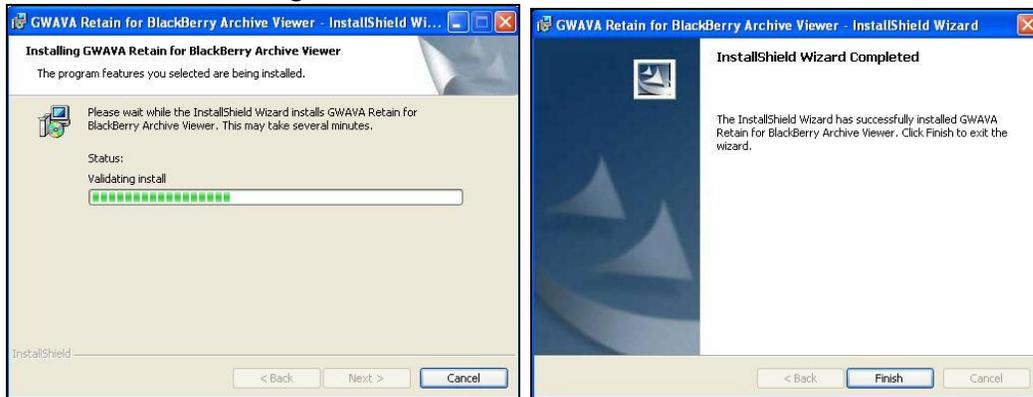
To install the license file, simply copy it into the directory where the application is installed.

Clicking **Back** or **Cancel** will leave your computer unchanged.



Click **INSTALL** to start the installation procedure.

The installation itself begins:



Once the procedure is complete, click **“Finish”** and your Viewer Application is installed.

Now, install the license file.

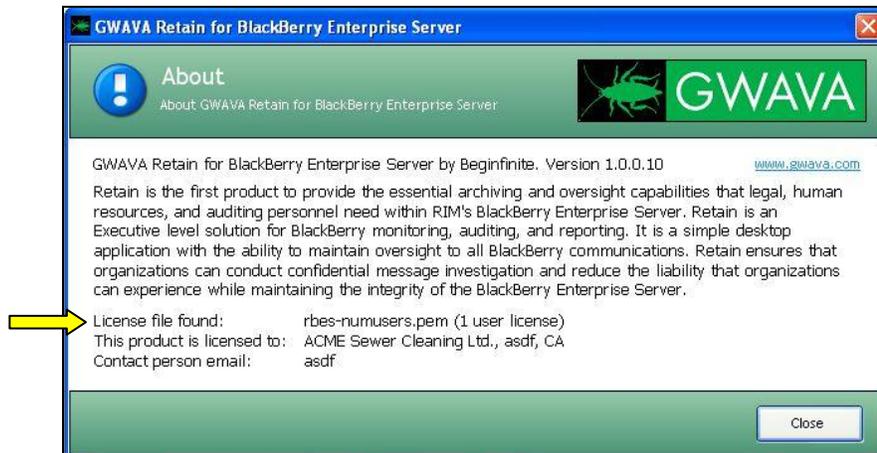
GWAVA Retain for BlackBerry Enterprise Server uses PEM-based licensing. That is, your license is encoded in a special file with a .PEM extension. You will receive this file from GWAVA.



To install the license file, simply copy it into the directory where the application is installed.

 C:\Program Files\Beginfinite\GWAVA Retain for BlackBerry Archive Viewer

If your license is installed correctly, you should see it in the Help | About screen:



## Setup and configuration for the Archive Viewer

### Starting up

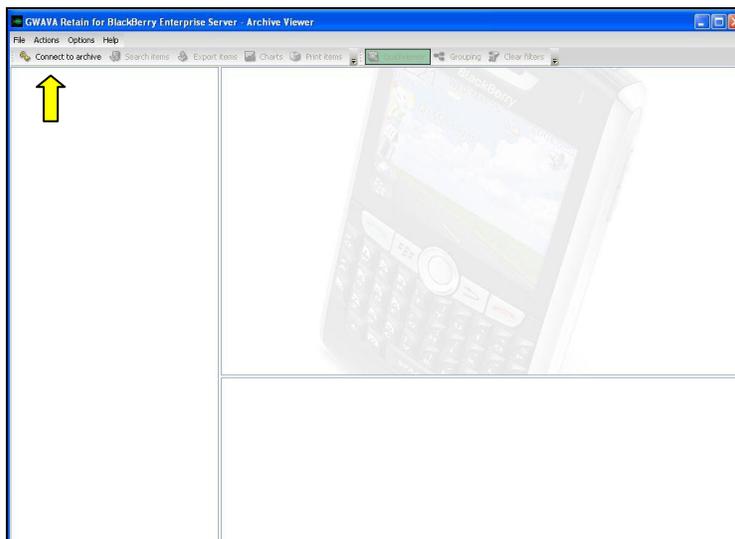
Now that the Viewer is installed, you will see its icon on your Windows desktop. You can start the Viewer Application by using the icon on the desktop or the Start Menu option (Start, Programs, BeginFinite, GWAVA Retain for BlackBerry Enterprise Server Archive Viewer, 'GWAVA Retain for BlackBerry Enterprise Server Archive Viewer')



Start the viewer and you will see the initial splash screen which also shows your license.

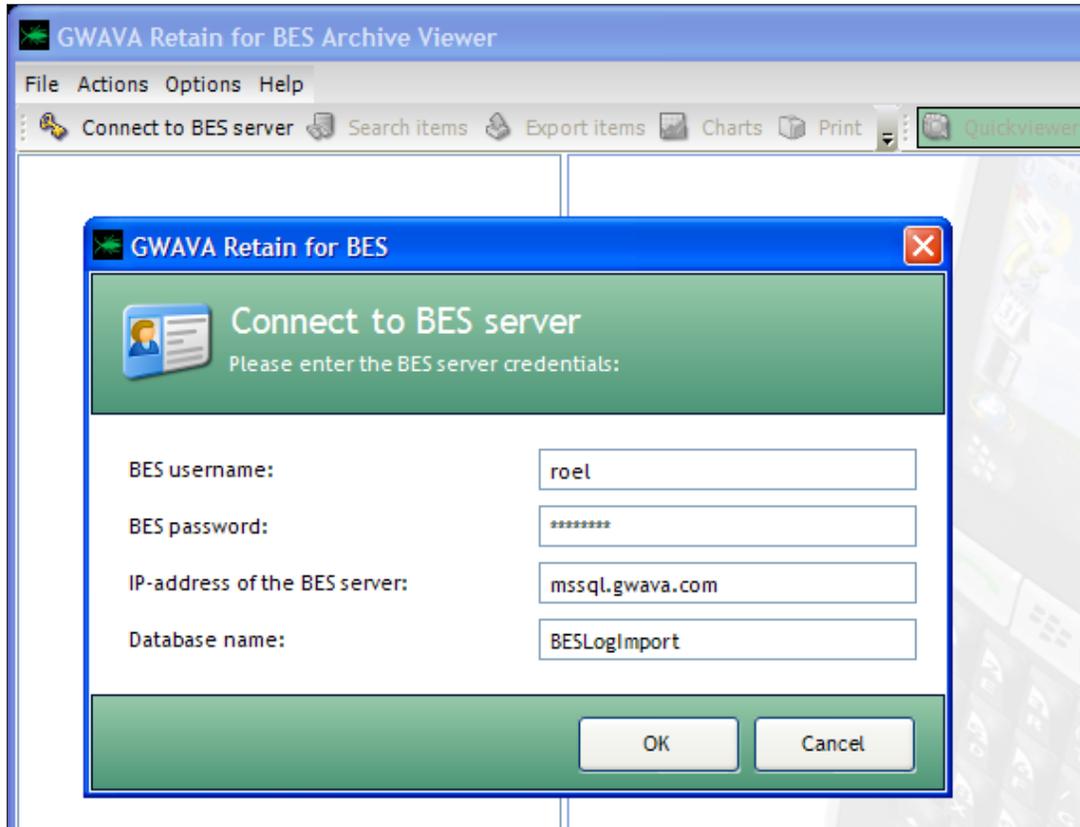


Once the program is loaded, you will have to log in to the Archive database. Use "Connect to archive".



You will be asked to supply the IP/DNS address of the database server in addition to the login credentials. The default database name is **BESLogImport**.

The first time the Viewer Application is run it prompts the user for a 'username', a 'password', and the IP address of the Microsoft SQL server where you're Archiving Agent stores the data.

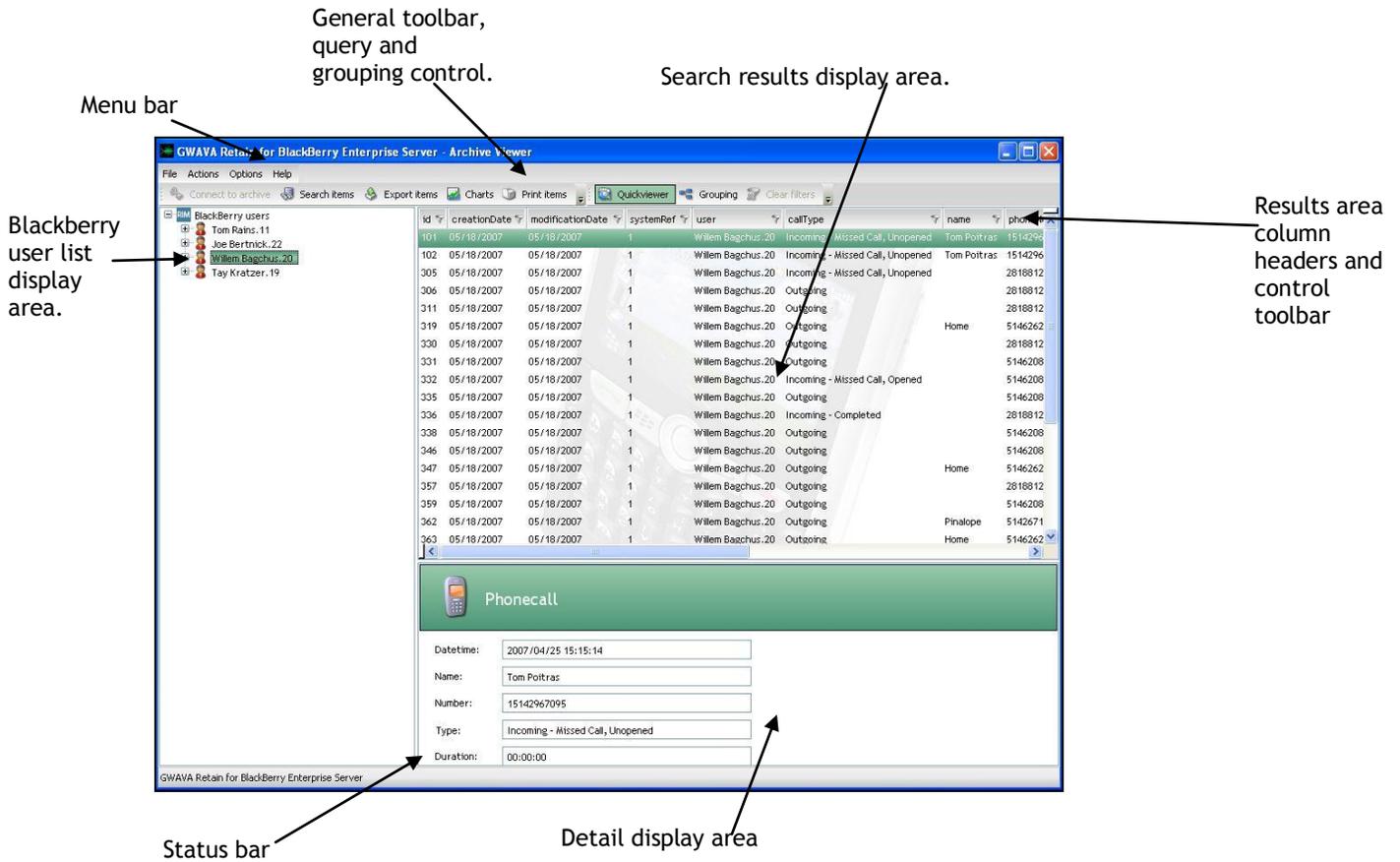


Click Ok to connect.

## Using the Archive Viewer

Once you've logged in to the database server, the viewer will retrieve your system's information and you will be brought to the main screen.

Here are the components of the main screen:

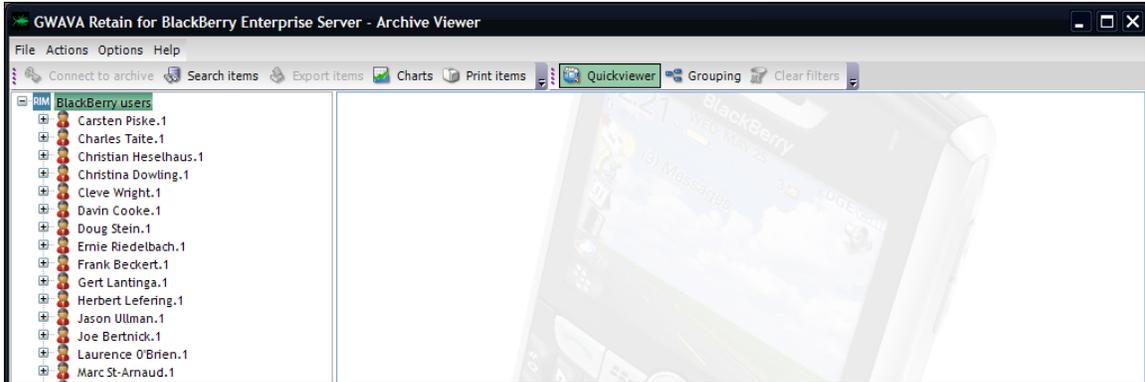


This main display area is very versatile and serves many functions. The three main areas are the user list area, the results area and the detail area.

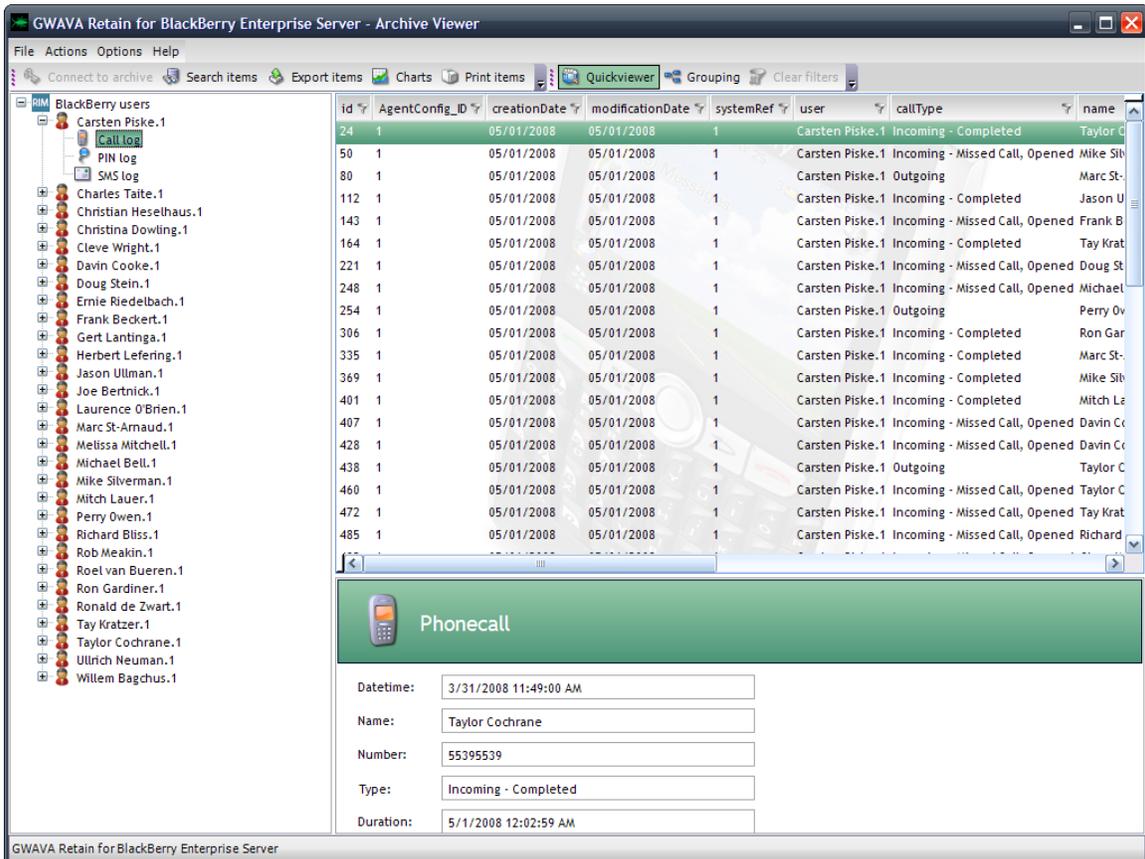
The system is controlled using the toolbars.

## Viewing your system

After a successful login, the viewer starts out with only the user tree.



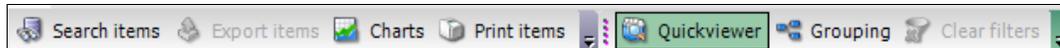
To view messages quickly, select a user and an item type: PIN, SMS, or Call log.



## Quickviewer

This view type is the **QuickViewer** mode. This mode maximizes the results field to show as much as possible for quick view of the total information. This can be used in conjunction with the Search Items and Grouping modes to provide easy access to the information presented.

Click on the Quickviewer button in the toolbar to deselect this mode and enable the details window to appear.



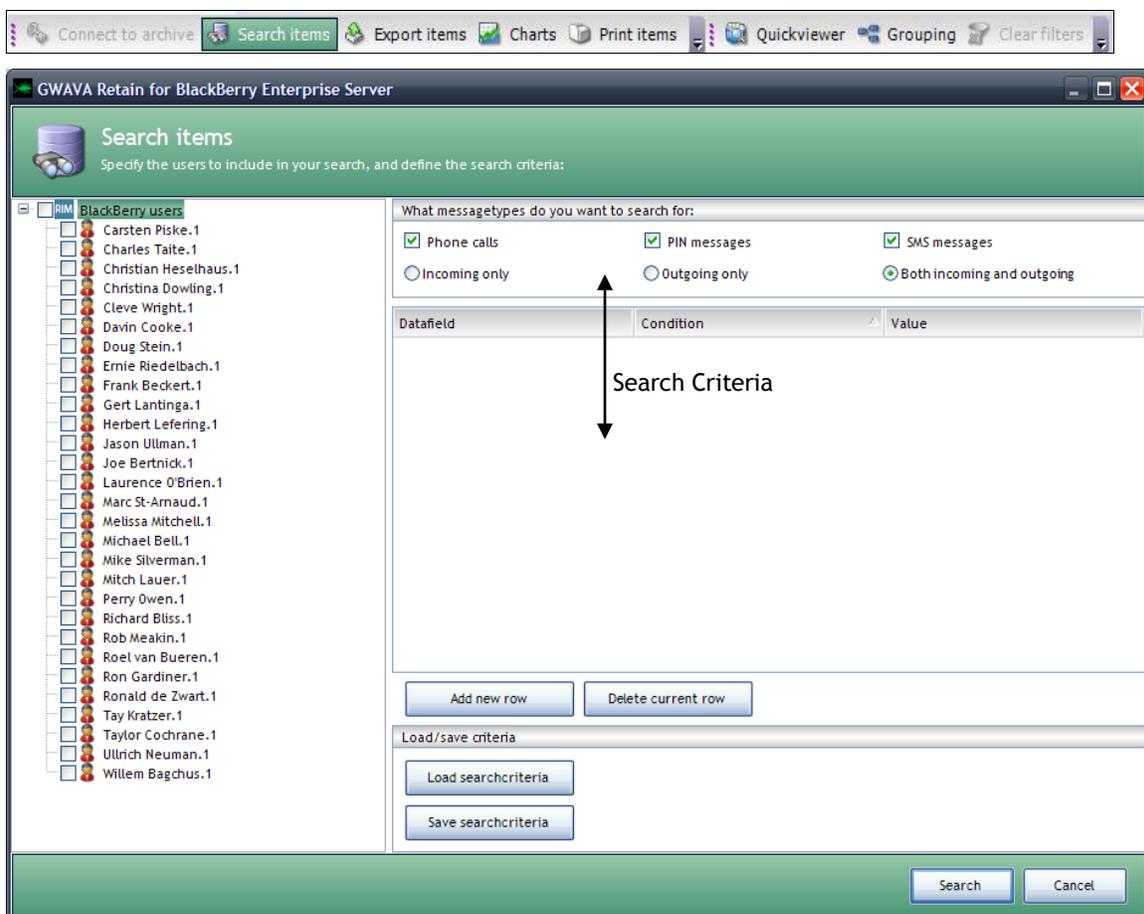
The quickviewer button toggles the detail display area at the bottom of the results pane which contains information on the time, name, number, direction, and duration of the selected object. With this you can quickly maximize the results area or see individual information on selected results.

 A screenshot of the 'GWAVA Retain for BlackBerry Enterprise Server - Archive Viewer' application. The interface shows a tree view on the left with 'BlackBerry users' expanded to show a list of users. The main area displays a table of call logs. The table has columns for 'id', 'AgentConfig\_ID', 'creationDate', 'modificationDate', 'systemRef', 'user', 'callType', and 'name'. The 'Quickviewer' button in the toolbar is highlighted.
 

id	AgentConfig_ID	creationDate	modificationDate	systemRef	user	callType	name
24	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Taylor C
50	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Mike Sil
80	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Marc St.
112	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Jason U
143	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Frank B
164	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Tay Krat
221	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Doug St
248	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Michael
254	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Perry Ov
306	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Ron Gar
335	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Marc St.
369	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Mike Sil
401	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Mitch La
407	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Davin Co
428	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Davin Co
438	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Taylor C
460	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Taylor C
472	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Tay Krat
485	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Richard
492	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Missed Call, Opened	Cleve W
529	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Roel var
542	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Melissa
587	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Mitch La
638	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Ernie Ri
646	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Herbert
654	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Carsten
685	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Joe Ber
686	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Frank B
701	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Frank B
725	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Outgoing	Melissa
729	1	05/01/2008	05/01/2008	1	Carsten Piske.1	Incoming - Completed	Roel var

## Search Items

To search through the items in the system, select the **Search Items** button from the toolbar to spawn the search items window.



The search items window spawns without anything selected. To search, first select the users from the tree or the entire system you desire to search within.

After you have selected an item to search from, the search engine needs the item type and source specified.

What messagetypes do you want to search for:

<input checked="" type="checkbox"/> Phone calls	<input checked="" type="checkbox"/> PIN messages	<input checked="" type="checkbox"/> SMS messages
<input type="radio"/> Incoming only	<input type="radio"/> Outgoing only	<input checked="" type="radio"/> Both incoming and outgoing

Select all types you wish to include in the scope of the search. You are now ready to specify the search criteria. To specify the criteria, click the **Add New Row** button from the bottom of the criteria window.

Click on the new row, below the **Datafield** column header. Then select the criteria type desired.

Datafield	Condition	Value
From/To/Phonenumber		
From/To/Phonenumber		
Subject		
Bodytext		
Date		

Repeat the step under the Condition column, selecting the search parameter. The search criteria does not allow wildcards, but does have the functions of a wildcard built into the conditions available.

Datafield	Condition	Value
From/ To/Phonenumber		
	Contains Is equal to Starts with Ends with Contains not From date Until date	

Again select the Row under the Value column. This will give you a cursor to specify the search criteria you wish to find in the BlackBerry logs.

Datafield	Condition	Value
From/ To/Phonenumber	Contains	Joe Bertnick

Click on Search button at the bottom of the window to execute the search.

**Search result**  
Below you will find the results of your search:

Call log result (83) | PIN log result (25) | SMS log result (31)

id	AgentConfig_ID	creationDate	modificationDate	systemRef	user	callType	name	phone
10	1	05/01/2008	05/01/2008	1	Joe Bertnick.1	Incoming - Miss...	Gert Lantinga	50315031
31	1	05/01/2008	05/01/2008	1	Joe Bertnick.1	Incoming - Com...	Laurence O'Brien	600860
34	1	05/01/2008	05/01/2008	1	RoelvanBuere...	Incoming - Com...	Joe Bertnick	948194
79	1	05/01/2008	05/01/2008	1	Mike Silverman.1	Incoming - Com...	Joe Bertnick	302330
82	1	05/01/2008	05/01/2008	1	Mitch Lauer.1	Outgoing	Joe Bertnick	496245
95	1	05/01/2008	05/01/2008	1	Christina Dowli...	Outgoing	Joe Bertnick	922792

**Phonecall**

Datetime: 3/12/2008 11:49:00 AM

Name: Gert Lantinga

Number: 50315031

Type: Incoming - Missed Call, Opened

Duration: 5/1/2008 12:02:37 AM

Export

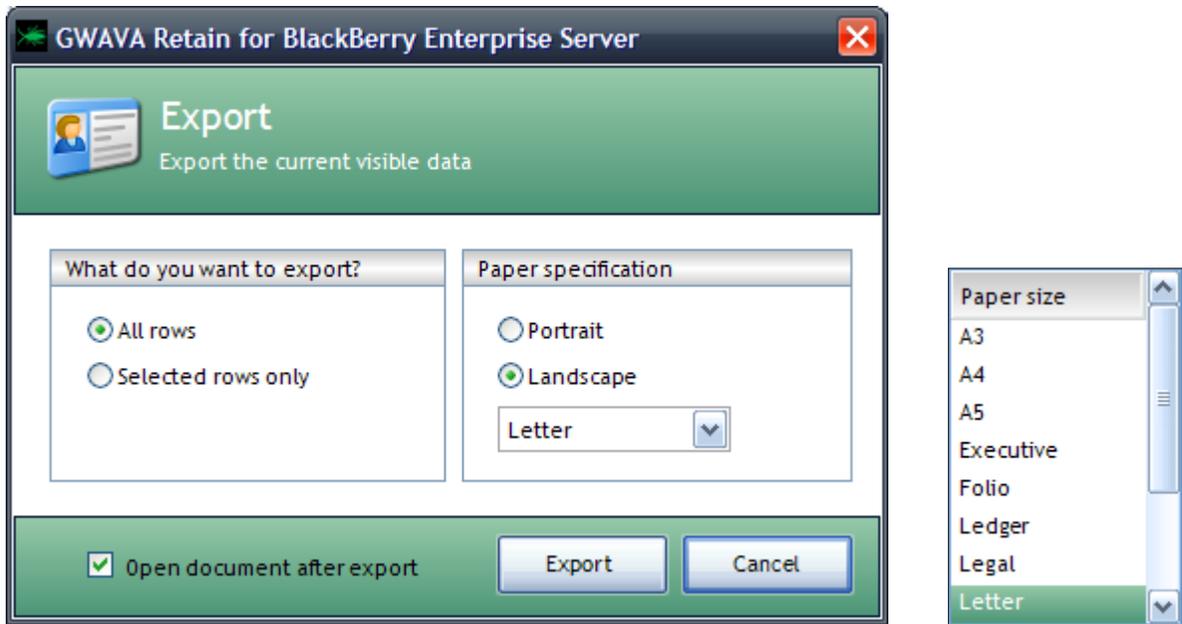
Close

The search results window is displayed for all messages and item types matching the search.

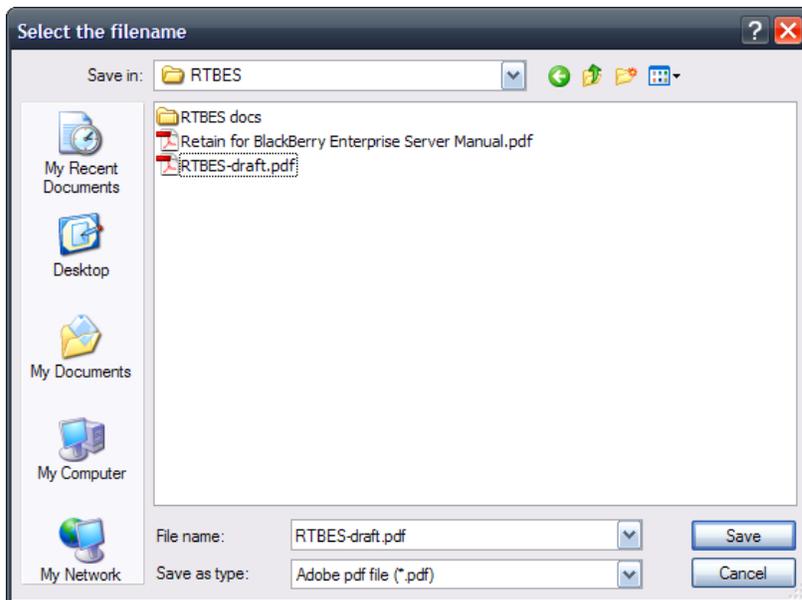
To make this information useful for Auditor's or system administrators, the Export function is of note. Click the **Export** button near the bottom of the window to launch the Export wizard.

## Export Items

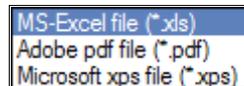
The export window allows you to export information to a useable format for other programs or reports in the system. If you have selected a particular row or rows, then the option to export only the selected information will be available.



Choose the paper type or specification that you wish to export into, whether you wish to open the document after it is exported, and click Export.

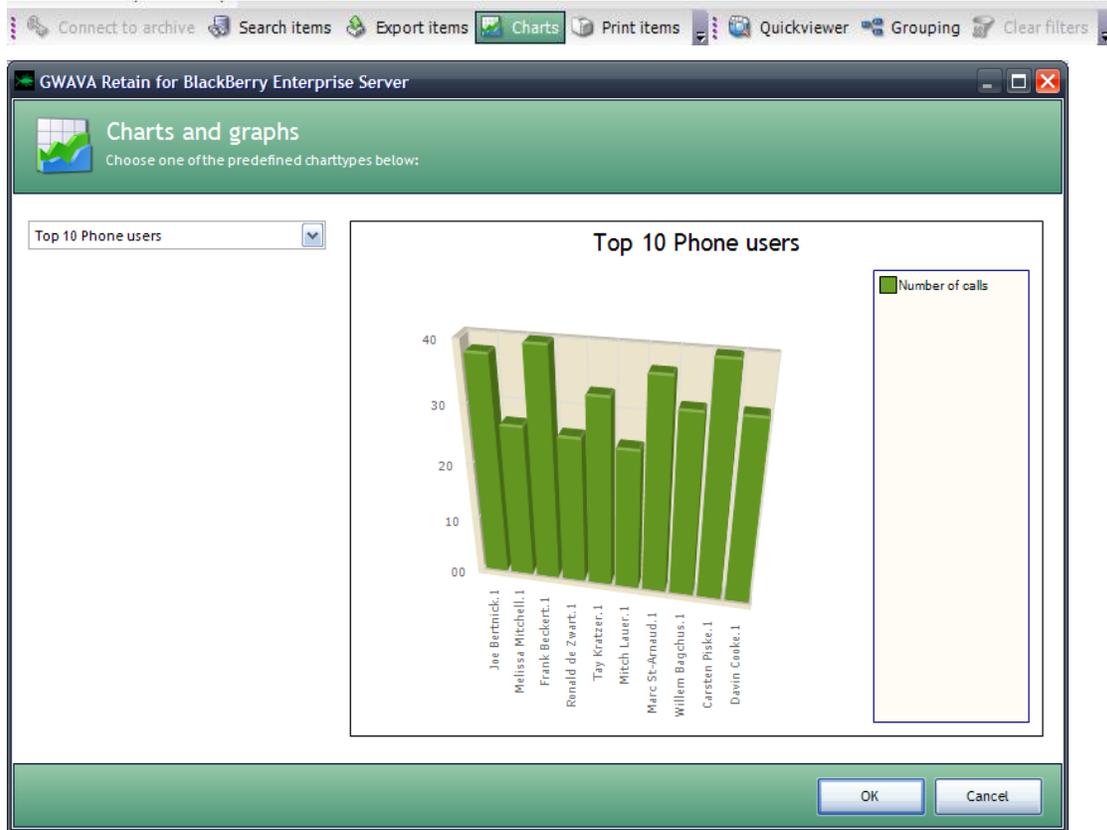


Specify the save name, where you want the save location, and select the type you wish to save it as. Currently, .pdf, .xps, and .xls are available.



## Charts

Retain for BES organizes information from the BES system logs to create charts that are easily accessible. To launch the chart window, select the **Charts** button from the toolbar.

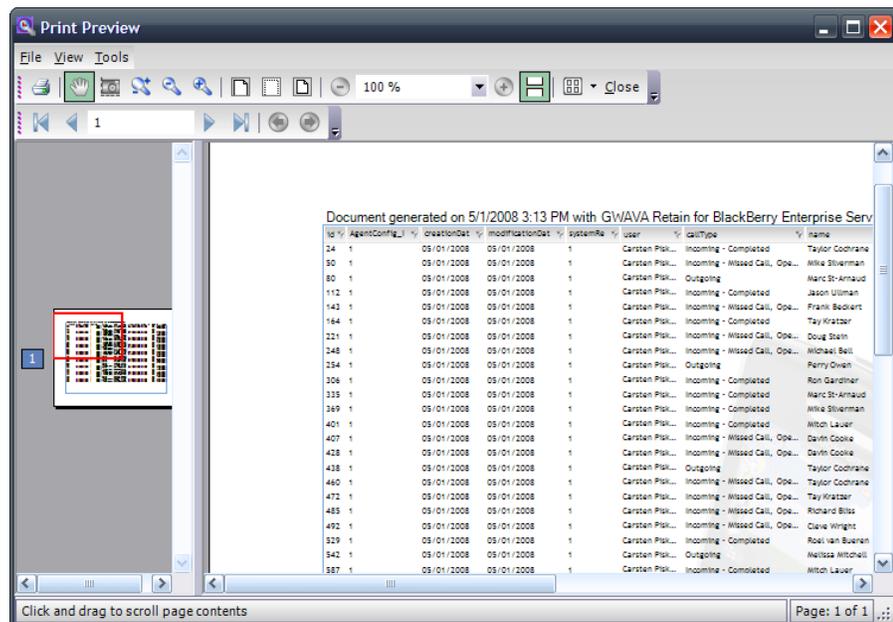


The charts window opens with the default chart selected: Top 10 Phone users. You may choose any of the other charts to view.

## Print

With selected information in the results field, click on the **Print** button in the toolbar to launch the print window.

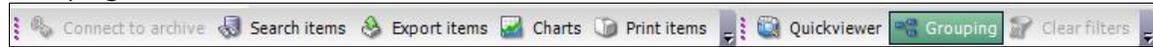
Check the format, and choose the printer you wish. Click the Print



button to complete the action.

## Grouping

The grouping option is a tool to help you organize the information field. Grouping allows you to sort and group the results according to the column header desired. To use grouping, select the Grouping button from the toolbar.



A sorting row will appear above the information field with instructions to drag a column header to that location.

Drag a column header here to group by that column.							
id	AgentConfig_ID	creationDate	modificationDate	systemRef	user	callType	name
80	1	04/07/2008	04/07/2008	1	Adam Fields.598	Outgoing	Mom
81	1	04/07/2008	04/07/2008	1	Adam Fields.598	Outgoing	Louie
82	1	04/07/2008	04/07/2008	1	Adam Fields.598	Incoming - Missed Call, Opened	Neil
83	1	04/07/2008	04/07/2008	1	Adam Fields.598	Incoming - Missed Call, Opened	Nick
84	1	04/07/2008	04/07/2008	1	Adam Fields.598	Incoming - Missed Call, Opened	Nick

Using your mouse, click and drag the column headers desired, in the desired order, to the sorting row that appeared. There is no limit to the amount of headers you can group with. Repeat as desired.

Here we have grouped according to System Ref, then Modification date, then the user name, and finally the creation date.

systemRef							
modificationDate							
user							
creationDate							
id	AgentConfig_ID	callType	name	phoneNumber	startDate	serverLog	
systemRef : 1 (40 items)							
+ modificationDate : 5/1/2008 11:50:01 AM (1 item)							
- modificationDate : 5/1/2008 11:50:01 AM (1 item)							
- user : Carsten Piske.1 (1 item)							
- creationDate : 5/1/2008 11:50:01 AM (1 item)							
50	1	Incoming - Missed Call, Opened	Mike Silverman	84498449	04/21/2008	05/01/2008	
+ modificationDate : 5/1/2008 11:50:02 AM (1 item)							
+ modificationDate : 5/1/2008 11:50:02 AM (1 item)							
+ modificationDate : 5/1/2008 11:50:02 AM (1 item)							
+ modificationDate : 5/1/2008 11:50:03 AM (1 item)							

If you unselect the Grouping option, the sorting header will disappear, but the grouped results will remain until you reverse the process and drag the organizing headers back into the information field. Drop them there to return the system to normal.

You may also rearrange the column headers in the main field if desired. This will not group or sort the data, just change the order in which the columns are displayed.

## Clear Filters

Filters allow the user or auditor to trim the results quickly without specifying a new search parameter. An active filter removes all results from the information field that does not comply to the parameters that the filter has specified. To set a filter, choose the desired parameter, such as the user name, and select the funnel icon at the left side of the header.

id	AgentConfig_ID	callType	name	phoneNumber	startDate	serverLogDate
systemRef : 1 (2 items)						
modificationDate : 4/7/2008 3:17:45 PM (1 item)						
modificationDate : 4/7/2008 3:17:45 PM (1 item)						

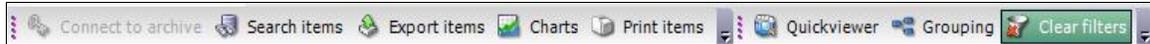
A drop-down menu will appear allowing you to select the appropriate filter for the header you selected.

id	AgentConfig_ID	creationDate	modificationDate	systemRef	user	emailAddress	messageType
37	1	05/01/2008	05/01/2008	1	(All)	noreply@gwava.com	Incoming
125	1	05/01/2008	05/01/2008	1	(Custom)	noreply@gwava.com	Outgoing
137	1	05/01/2008	05/01/2008	1	(Blanks)	noreply@gwava.com	Incoming
205	1	05/01/2008	05/01/2008	1	(NonBlanks)	noreply@gwava.com	Incoming
224	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
262	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming

Select the User name, or blank, non blank, or custom users to define this filter.

id	AgentConfig_ID	creationDate	modificationDate	systemRef	user	emailAddress	messageType
37	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming
125	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
137	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming
205	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
224	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
262	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming
308	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
327	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
328	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
332	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming
383	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Incoming
386	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
452	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
455	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
508	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
521	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
549	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing
553	1	05/01/2008	05/01/2008	1	Charles Taite.1	noreply@gwava.com	Outgoing

To remove any and all filters that are active in the system. Select the **Clear Filters** button from the toolbar and the system will reset to the default information field without filters.



## Appendix 1: Troubleshooting

Retain for BlackBerry Enterprise Server is straightforward and simple.

The trouble points are at the connection level. Here are some points to watch for:

- 1) The archiving agent must be able to
  - a. Connect to the archiving database.
  - b. See and read the log files on all monitored BlackBerry Enterprise Servers.
    - i. Often, each BlackBerry Enterprise Server will have its own agent installed.
  - c. Connect to the BlackBerry Enterprise Server management database.
    - i. Again, this is often done on a locally-installed agent.
- 2) The archive database must have its TCP/IP connectivity switched on and allow remote connections.
- 3) The viewer agent must be able to connect to the archive database.

Be sure to check these connection settings at all levels. If the components can communicate, then the system will function properly.

## Appendix 2: Uninstalling Retain for BlackBerry Enterprise Server

Removing both the Retain for BlackBerry Enterprise Server Archiving Agent software as the Retain for BlackBerry Enterprise Server Archive Viewer is a straightforward, entirely automated process. Only log files, configuration files and audit files will not be removed automatically.

## Contact GWAVA

For all of your support and purchasing needs, please visit our home page at [www.gwava.com](http://www.gwava.com).

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