



.. www.totalrecallvr.com ..

Total Recall VR Connector

User Guide

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Related Documents:

- [1] Prolancer Pty Ltd, Total Recall VR web site. Available from:
<http://www.totalrecallvr.com/>.
- [2] Prolancer Pty Ltd, Prolancer web site. Available from:
<http://www.prolancer.com.au/>.
- [3] Prolancer Pty Ltd, Total Recall VR Overview User Guide, 28.0, May 2022
- [4] Prolancer Pty Ltd, Total Recall VR Browser User Guide, 19.0, May 2022
- [5] Prolancer Pty Ltd, Total Recall VR Monitor User Guide, 19.0, May 2022
- [6] Prolancer Pty Ltd, Total Recall VR Embedded GUI User Guide, 28.0, May 2022
- [7] Prolancer Pty Ltd, Total Recall VR Manager User Guide, 19.0, May 2022
- [8] Prolancer Pty Ltd, Total Recall VR Deployment User Guide, 28.0, May 2022

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1. Preface

1.1. Conventions

Our guides use several conventions to highlight certain words and phrases and draw attention to specific pieces of information.

1.1.1. Notes & Warnings

We use the following visual styles to draw attention to information that might otherwise be overlooked:



Notes are tips, shortcuts or alternative approaches to the task at hand. Ignoring a note should have no negative consequences, but you might miss out on a trick that makes your life easier.



Important boxes detail things that are easily missed: configuration changes that only apply to the current session, or services that need restarting before an update will apply. Ignoring the information will not cause data loss, but may cause irritation and frustration.



Warnings should not be ignored. Ignoring warnings will most likely cause data loss.

1.1.2. Typographic Conventions

We use typographic conventions to call attention to specific words and phrases. These conventions, and the circumstances they apply to, are as follows.

Example	Meaning
Select <u>Guide</u> to display ...	Locate the link named "Guide" on the screen, position the cursor over the link and then depress the appropriate mouse button to follow the link.
Select Add to create a new ...	Locate the button or menu item named "Add" on the screen, position the cursor over the button or menu item and then depress the appropriate mouse button to initiate an action.

Enter <i>Commission</i> ...	Locate the field named "Commission" on the screen, position the cursor over the field and then depress the appropriate mouse button to select the field. Once the cursor appears in the field, enter a value.
Choose <i>Country</i> ...	Locate the field named "Country" on the screen, position the cursor over the field and then depress the appropriate mouse button to display the available options. Then position the cursor over the desired option and depress the appropriate mouse button to select it.
Tick <i>Active User</i> ...	Locate the check box named "Active User" on the screen, position the cursor over the check box and depress the appropriate mouse button to place a visual tick in the box.
Un-tick <i>Active User</i> ...	Locate the check box named "Active User" on the screen, position the cursor over the check box and depress the appropriate mouse button to remove the visual tick in the box.
Enter \$30.95 ...	Enter "\$30.95" using the keys on your keyboard.

1.1.3. Procedures

We use numbered sequence of steps to define procedures for performing certain tasks. For example:

Procedure Title

1. This is the first step of the procedure.
2. This is the second step of the procedure.
 - a. This is the first sub-step of step 2.
 - b. This is the second sub-step of step 2.
3. This is step three.

1.2. We Need Feedback

If you find a typographical error in this guide, or if you have thought of a way to make this guide better, we would love to hear from you.

Please submit your feedback using the feedback form on our web site:

<http://www.prolancer.com.au/contact/feedback>.

If you have a suggestion for improving the guide, then try to be as specific as possible when describing your suggestion. Otherwise, if you have found an error, please include the section number and some of the surrounding text so we can find it easily.

2. Introduction

2.1. About This Guide

This guide describes the Total Recall VR Connector application.

The guide is intended for Total Recall VR end users. It describes how to configure and use the Total Recall VR Connector application. Please keep a copy of this guide handy for quick reference.

2.2. What is Total Recall VR



Audio Logging
and
Call Recording
Systems

Total Recall VR is a professional audio logging and call recording system which is self-contained, fully featured and cost-effective. Enterprises and governments worldwide use it to create electronic records of many forms of audio communication including telephone, 2-way radio, broadcast radio, public address, intercoms, room microphones and much more.

Total Recall VR is the ideal solution for:

- Recording business telephone conversations;
- Recording agent calls in contact centres;
- Logging emergency response communication;
- Logging business operations communication;
- Logging radio broadcasts;
- Logging public announcements;
- Logging Air Traffic Control communication;
- Creating audio records of meetings, legal proceedings, public enquiries and similar events; and
- Creating compliance records to meet duty of care and legal requirements.

Total Recall VR captures all audio in digital format and stores it in a proprietary, secure and tamper proof file format in its on-board hard drive storage. The file format preserves the originality of the audio that it stores and has a number of built-in mechanisms that aid quick and reliable detection of tampering. However, for ease of access, Total Recall VR client applications can generate copies of recordings in a number of popular and everyday formats such as Microsoft's Wave (.wav) and MPEG Layer-3 (.mp3).

Storing audio by itself does not help when looking for one recording in a store that can hold hundreds of thousands of recordings. That is why, in addition to audio, Total Recall VR captures and then stores information related to each recording and audio source in its database such as start time, end time and duration of recordings, calling and called numbers on telephone calls, DTMF digits during calls, radio IDs, user configurable notes and much more. This information is the backbone of a powerful search capability which can pin point a single recording in a set of hundreds of thousands of recordings which reside either on a Total Recall VR recorder or in one of many types of off-system archives of recordings.

In addition to the audio recorder and the on-board storage, each Total Recall VR system comes with a built-in media player with comprehensive player controls (start, stop, fast-forward, rewind ...). The player can play audio stored in files directly on the system or stream audio to a remote client application which then outputs the sound to the PC speakers of the PC that it runs on.

While audio recording, storage and re-play are the main functions of Total Recall VR, every Total Recall VR offers many more advanced, professional-grade features. For example:

- Ability to capture audio from different types of audio sources (analogue, VoIP, RoIP, AoIP and ISDN), at the same time – hybrid recording.
- Live and real-time monitoring (listening) of recordings in progress on the system itself or on a remote PC with the aid of a PC client application.
- Feature-rich archiver which can create searchable archives of recordings on CD, DVD or BD discs, USB keys or drives and network drives, either automatically or on-demand.
- Automated self-cleaning mechanism that removes obsolete recordings automatically and on regular intervals to keep the system operating endlessly.
- SNMP agent capable of generating SNMP alarms (traps).
- SMDR integration for a number of popular PBXes.
- Fully internationalised user interface; all menus and software available in multiple languages.
- Role based access control.
- On-board LCD display and control keypad on selected models.
- A range of PC client applications with value adding functionality.
- APIs and PC applications for integration with other business systems and solutions.

When audio records are critical to your operations, Total Recall VR delivers. It is professional, reliable and fully self-contained solution for audio logging and call recording that comes at an affordable price.



The Total Recall VR Overview [3] guide contains a comprehensive description and overview of Total Recall VR.

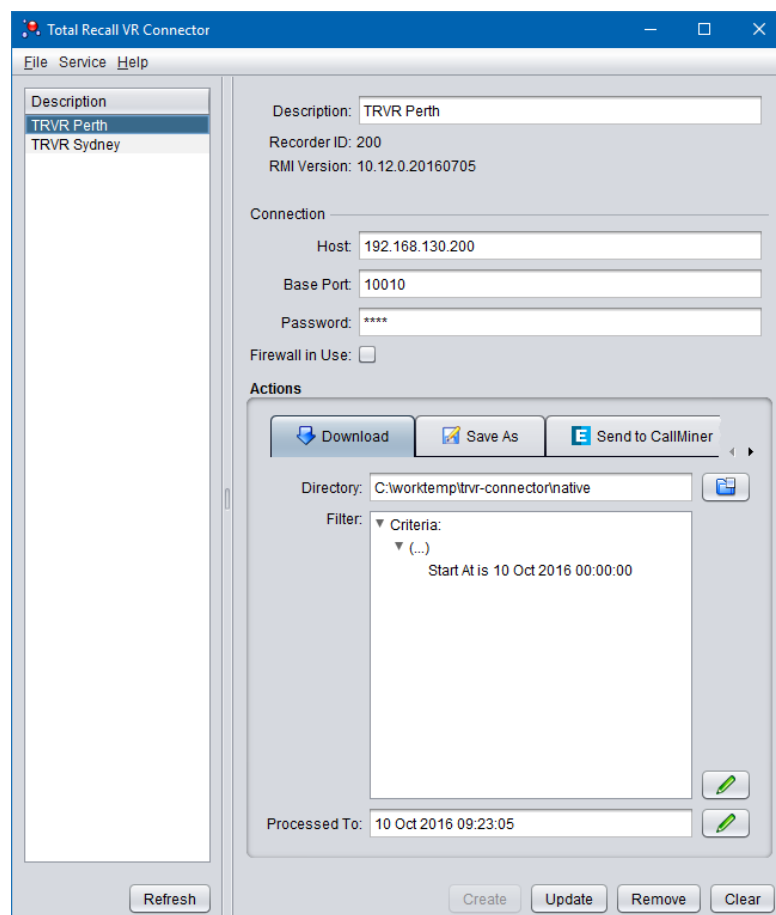
2.3. What is Total Recall VR Connector

Total Recall VR Connector is a combination of a Windows service and a GUI application.

The service enables easy integration of Total Recall VR with business systems and cloud recording solutions where Total Recall VR is used as an audio capture device to create recordings that are subsequently consumed by other business systems and cloud recording solutions.

The service downloads recordings from multiple Total Recall VR systems in near real-time and delivers the recordings, and optionally the metadata for the recordings, to other business systems and cloud recording solutions in a user specified format.

The GUI application provides for configuration and control of the service.



Total Recall VR Connector offers:

- Windows service operating mode.
- Continuous near real-time fetching (downloading) of recordings, in their native format, from one or multiple Total Recall VR systems.
- Export of recordings from the native format to a number of popular audio file formats such as the mp3 and wav formats.
- Export of recording metadata to CSV and XML formats.
- Export of recordings and metadata to the [CallMiner Eureka](#) speech analytics platform and applications.
- Delivery of recordings in native or exported format to remote systems via e-mail.
- Automatic removal of downloaded and/or exported recordings.

Total Recall VR Connector is a Java/Windows based application designed to run on a PC with Windows 7, 8, or 10 or a server with Windows Server 2010 or 2012.



Total Recall VR Connector is a licensed application. You must purchase an Activation License in order to use the application.



Total Recall VR Connector requires an AMBE decoder license to export recordings that are stored in the AMBE audio format.

You can purchase a USB based AMBE decoder from us, order code TRVR-AMBE and TRVR-AMBE-3.

3. Start Here

3.1. System Requirements

Total Recall VR Connector is a Java based application designed to run on a PC with Windows 7, 8 or 10 or a server running Windows Server 2010 or 2012.

The application is compatible with Windows XP and Vista, however it has not been tested for correct operation on Windows XP and Vista.

Total Recall VR Connector should be installed on a system with the following minimum specification:

- 25Mb free hard disk space.
- 4Gb memory (RAM).
- Display hardware that supports the 1024x768 resolution.
- At least one network connection

The system must have a working network connection and access to an E-Mail server in order to send e-mail from Total Recall VR Connector.



Total Recall VR Connector requires an AMBE decoder license to export recordings that use the AMBE audio format.

You can purchase a USB based AMBE decoder from us, order code TRVR-AMBE and TRVR-AMBE-3.

3.2. Compatibility

Total Recall VR Connector uses cutting edge technology to connect to Total Recall VR systems that run different releases of the Total Recall VR application.

As a result, it is possible to connect Total Recall VR Connector to Total Recall VR systems that run a 9.x.y, 10.x.y or 11.x.y version of the application at the same time. However, the minimum releases of the Total Recall VR application that have support for applications like Total Recall VR Connector are 9.16.0 and 10.7.0 so you will have to upgrade your Total Recall VR systems to at least 9.16.0 or 10.7.0, if possible to do so, in order to use Total Recall VR Connector with your systems.



It is not possible to connect Total Recall VR Connector to Total Recall VR systems that run application version 8.x.y or earlier.

3.3. Pre-Installation

Total Recall VR Connector requires 3rd party software and drivers which you may need to install before installing Total Recall VR Connector.

3.3.1. Java SE Runtime Environment



This 3rd party software is mandatory. The application will not run at all without it.

Total Recall VR Connector is a Java application and as such it requires a Java SE runtime environment to run.



You must install a 32bit, version 8 (tested and recommended), Java SE Runtime Environment on your PC to use Total Recall VR Connector.

You can download a Java SE Runtime Environment installer from <http://www.oracle.com/technetwork/java/javase/downloads/index.html>.

You may already have a Java SE runtime environment on your PC or server. Ask your friendly technical staff to help you determine this if you are not sure how to check.

If your PC or server is running a 64bit version of Windows, then you may already have a 64bit Java SE runtime environment on your PC or server. If this is the case you must install the 32bit Java SE runtime environment on your PC or server as well in order to use Total Recall VR Connector. Ask your friendly technical staff to help you if you are not sure what to do.

3.3.2. FTDI D2XX Drivers



This 3rd party software is optional. It is required to decode recordings that use the AMBE audio encoding.

Total Recall VR Connector uses a USB based AMBE decoder when exporting AMBE encoded audio.



You can purchase the USB based AMBE decoder from us – order code TRVR-AMBE and TRVR-AMBE-3.

The USB device requires FTDI D2XX drivers to work.



You must install FTDI's D2XX version 2.12.06, or better, WHQL certified drivers on your PC to enable Total Recall VR Connector to export recordings in the AMBE format.

You can download an installer for the drivers from <http://www.ftdichip.com/Drivers/D2XX.htm>.

3.3.3. Visual C++ 2015 Redistributable



This 3rd party software is mandatory. The application will not run correctly without it.

Total Recall VR Connector uses native Windows libraries and as such it requires the Visual C++ 2015 redistributable to run.



You must install the 32bit Visual C++ 2015 redistributable on your PC to use Total Recall VR Connector.

You can download an installer for the 32bit Visual C++ 2015 redistributable from <https://www.microsoft.com/en-au/download/details.aspx?id=48145>.

You may already have a Visual C++ 2015 redistributable on your PC or server. Ask your friendly technical staff to help you determine this if you are not sure how to check.

If your PC or server is running a 64bit version of Windows, then you may already have a 64bit Visual C++ 2015 redistributable on your PC or server. If this is the case you must install the 32bit Visual C++ 2015 redistributable on your PC or server as well in order to use Total Recall VR Connector. Ask your friendly technical staff to help you if you are not sure what to do.

3.3.4. H2 Database



This 3rd party software is mandatory. The application will not run correctly without it.

Total Recall VR Connector uses an H2 database to store its operating state. You must install an H2 database server on the same machine, or a different machine, in order to use Total Recall VR Connector.



You can download a Windows installation package for an H2 database server from <http://www.h2database.com/html/download.html>. We have tested the application with version 1.4.200 and we recommend that you use this version.

Once you have installed an H2 database on a server, configure the H2 database service (using the wrapper.conf file in the services directory) and make sure that the H2 database service is running.



This document uses an H2 database server which runs on a machine with IP address 192.168.120.200 and provides service on TCP port 9092 in examples. The same server provides a management service on TCP port 8082.

The H2 database installation instructions are not as clear as they should be when it comes to explaining how to get an H2 database server going. The following is a summary of the steps and can be used as a guide when setting up an H2 database server; however, it does not aim to replace the official H2 database documentation.

Install an H2 database server

1. Download the latest stable Windows installer from <http://www.h2database.com/html/download.html>. We downloaded a file named 'h2-setup-2019-10-14.exe' for this example.
2. Run the installer file which by default will install the software in "c:\Program Files\H2" on a 32bit system or "c:\Program Files (x86)\H2" on a 64bit system.
3. Step 2 does not install the H2 database service automatically. You must manually install it, after configuring it, as follows.

The service ensures that the H2 database starts when the machine restarts.

4. The service configuration is in the "c:\Program Files\H2\service\wrapper.conf" file. We modified the following to tailor the service to our environment:

```
1. # Application parameters. Add parameters as needed starting from 1
2. ## -- Make sure to allow tcpPort on the firewall -- ##
3. wrapper.app.parameter.1=org.h2.tools.Server
4. wrapper.app.parameter.2=-tcp
5. wrapper.app.parameter.3=-tcpPort 9092
6. wrapper.app.parameter.4=-tcpAllowOthers
7. wrapper.app.parameter.5=-web
8. wrapper.app.parameter.6=-webPort 8082
9. wrapper.app.parameter.7=-webAllowOthers
10. wrapper.app.parameter.8=-ifNotExists
11. wrapper.app.parameter.9=-baseDir "c:/worktemp/db"
```

In summary, we want the service to store database files in the "c:\worktemp\db" directory on the local machine and run on TCP port 9092. Also, we want the service to use TCP port 8082 for web management.

5. With the above changes in place, open a terminal window and change to the "c:\Program Files\H2\service" directory. Then:

- a. Run the *1_install_service.bat* script to install the service on the machine. This adds the “H2 Database Engine Service” to the set of services on the machine.
 - b. Run the *2_start_service.bat* script to start the service.
 - c. To make sure that the service is running, start a browser using the *3_start_browser.bat* script on the same machine. This should show the login page for the database server management console.
6. Edit the firewall configuration for the machine and make sure that TCP ports 9092 and 8082 (if you are using our configuration from step 4) are not blocked.

How you complete this step depends on the firewall application that you are using. Please consult the documentation for your firewall application.

7. Once the firewall is allowing communication to TCP ports 9092 and 8082 open a browser on a different machine and attempt to access the H2 server web management console using <http://192.168.120.200:8082> (if you are using our configuration from step 4) to make sure that remote access to the server is possible.

Note that you do not need to create database users and a database for Total Recall VR Connector once the server is running. Total Recall VR Connector will create users and a database when it attempts to access the server for the first time.

3.3.5. Remote Interface



This recorder configuration is mandatory. The application will not be able to connect to recorders without it.

Total Recall VR Connector will connect to one or more Total Recall VR systems.

Total Recall VR Connector uses the Remote Interface provided by Total Recall VR systems to connect and interact with Total Recall VR systems. As a result, you must configure the Remote Interface on each Total Recall VR system that you wish to access from Total Recall VR Connector.

See section 6.5 in the Total Recall VR Embedded GUI User Guide [6] for details on how to configure the Remote Interface on systems with built-in screen.

For example:

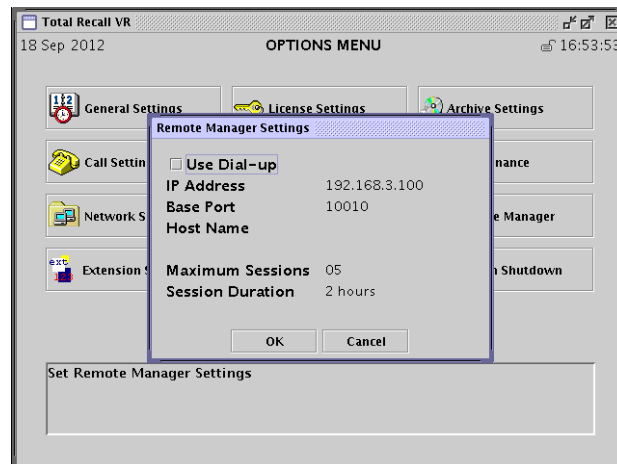


Figure 1: Remote Manager Interface Configuration

If your Total Recall VR system does not have a built-in screen, then use the Total Recall VR Manager application to configure the Remote Interface. See section 8.2.5 in the Total Recall VR Manager User Guide [7] for details on how to configure the Remote Interface on systems without a built-in screen.

For example:

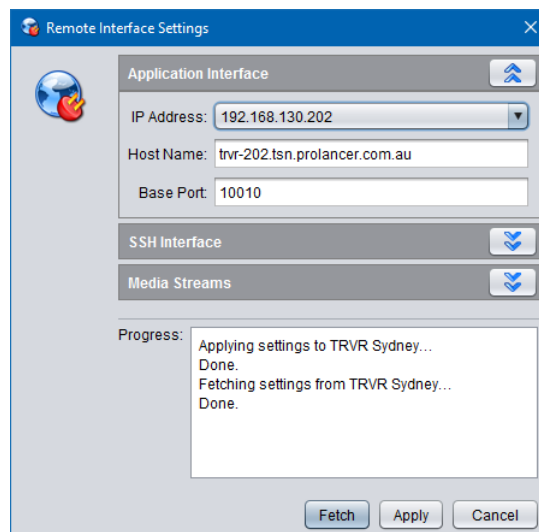


Figure 2: Remote Interface Configuration

3.4. Application Installation

A Total Recall VR Connector installer is available for download from our web site. We do not ship installation media for Total Recall VR Connector.



Please visit <http://www.totalrecallvr.com/applications/total-recall-vr-connector> to download the installer for Total Recall VR Connector.

The installer is a wizard based installation program which will guide you through the installation steps. To install Total Recall VR Connector on your PC:

Install Total Recall VR Connector

1. Extract the TRVRConnector-Setup-x.y.z.yyyymmdd.exe file from the TRVRConnector-Setup-x.y.z.yyyymmdd.zip file that you downloaded from our web site.
2. Double-click on the TRVRConnector-Setup-x.y.z.yyyymmdd.exe file to launch the installer.
3. Follow the prompts to complete the installation.



The installer does not automatically start the Total Recall VR Connector service at the end of the installation.

You must start the service manually after installing and configuring the application, or alternatively restart the machine.

3.5. Application Update

To upgrade Total Recall VR Connector:

- If you wish to keep the previous configuration and activation license for the application, then simply follow the installation procedure. Do not uninstall the previous version of the application.
- If you wish to have a clean installation of the application, with new configuration, then first uninstall the previous version of the application and then install the new version. Please make a record of your activation license before you uninstall the old version of the application. You will need the activation license for the new version of the application.



The installer will stop the Total Recall VR Connector service when uninstalling the application or before upgrading it.

The installer does not automatically start the Total Recall VR Connector service at the end of the upgrade.

You must start the service manually after upgrading and configuring the application, or alternatively restart the machine.



The installer will reset the runtime properties of the service to their default values. So if you have been using the service with custom runtime properties, for example the Log On properties, then you must customise the properties again after the upgrade and before you run the service.

3.6. First Run

Total Recall VR Connector requires an activation license key to run. As a result, when you run the Total Recall VR Connector GUI application for the first time, it will prompt you to enter an activation token or license as shown on the following screen capture.

Figure 3: Activation Dialog

You can activate the application in one of the following ways:

1. Activate a 10 day trial of the application by choosing the **Trial Token** option. This mode of activation requires Internet access.

Note that you will be able to activate one, and only one, trial of the application on a given PC. Once the 10 day trial is complete, it will not be possible to activate another trial for the application on the same PC.

2. Activate the application for either a limited time or perpetually by entering an **Activation Token** that we send you when you purchase a license for the application. This mode of activation requires Internet access.

Based on the number of licenses that you purchase, and the type of token that we send you, you may be able to activate the application with the token on a single PC or multiple PCs. Please consult the instructions that come with the token for more details.

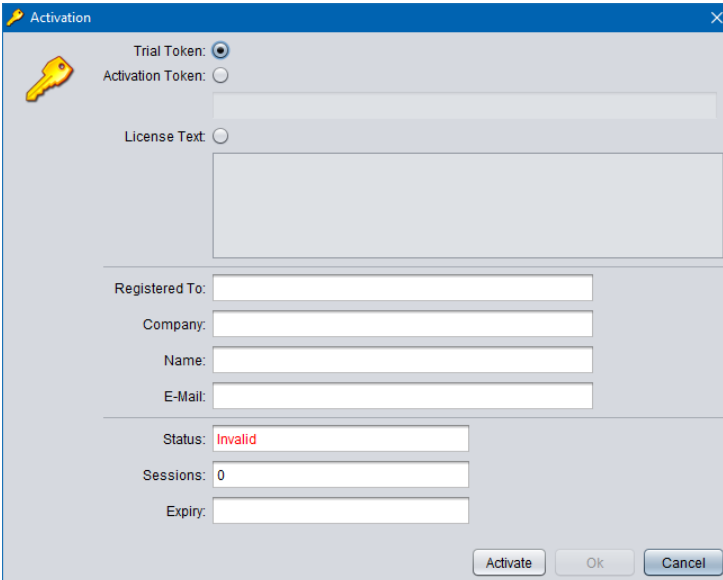
3. Activate the application for a limited time or perpetually by entering a **License Text**. This mode of activation does not requires Internet access.

This mode of activation, in general, will be used only for existing licenses (activated previously) when lost or misplaced. Please contact us for instructions on how to proceed to recover lost activation licenses. However, it can be used to activate the application on PCs that do not have Internet access.

Instructions for each method of activation follows.

Activation with the Trial Token

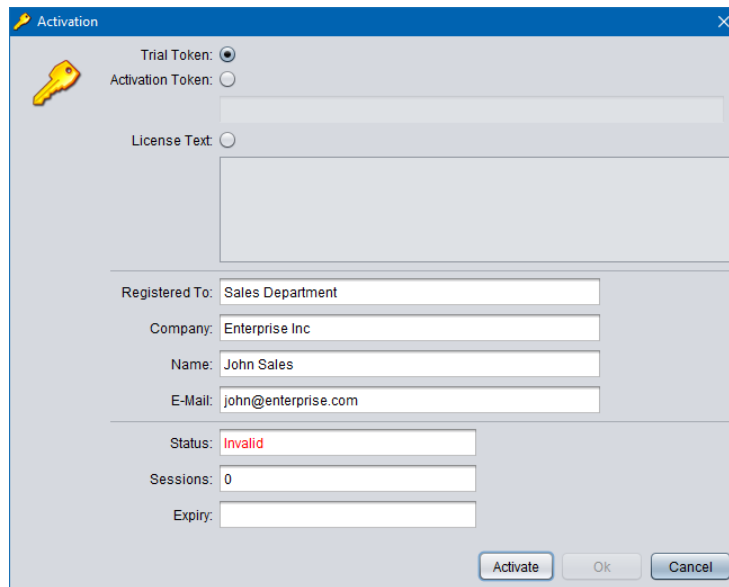
1. To activate a 10 day trial of the application select **Trial Token**.



The screenshot shows a Windows-style dialog box titled "Activation". It has a blue title bar with a close button. Inside, there's a yellow key icon. The "Trial Token:" radio button is selected. Below it are three text input fields: "Activation Token:", "License Text:", and a larger one for "License Text:". Further down are four text input fields labeled "Registered To:", "Company:", "Name:", and "E-Mail:". At the bottom, there are three more text input fields: "Status:" (which contains the word "Invalid" in red), "Sessions:" (which contains "0"), and "Expiry:". At the bottom right are three buttons: "Activate", "Ok", and "Cancel".

2. Enter ***Registered To***, ***Company***, ***Name*** and ***E-Mail*** as desired. Note that the details that you enter here will be needed to recover the trial activation license in the event that it is lost or misplaced so make a record of them and keep them in a safe place.

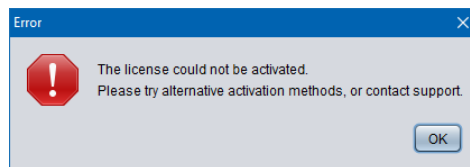
For example:



The Activation dialog box contains the following fields and controls:

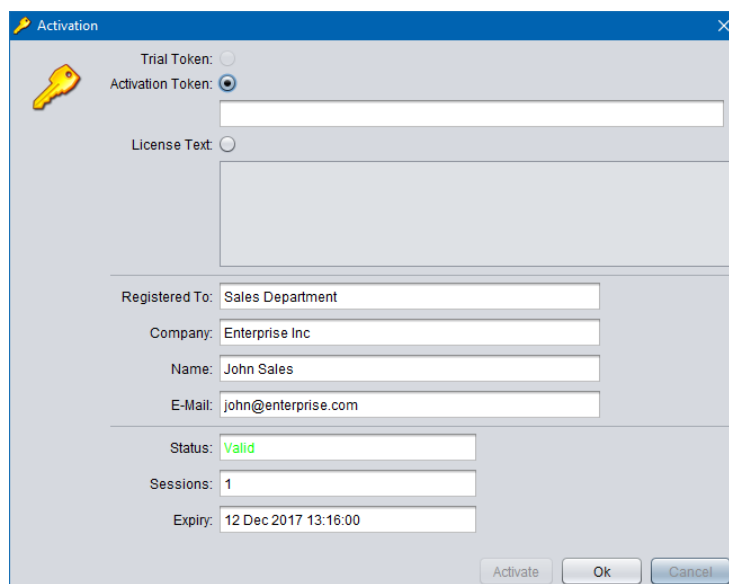
- Trial Token:** ☒ (selected)
- Activation Token:** ☐
- License Text:** ☐
- Registered To:** Sales Department
- Company:** Enterprise Inc
- Name:** John Sales
- E-Mail:** john@enterprise.com
- Status:** Invalid
- Sessions:** 0
- Expiry:** (empty field)
- Buttons:** Activate, Ok, Cancel

3. Select **Activate** to attempt activation. The application will attempt activation (over the Internet) with the Total Recall VR licensing server. If you receive the following error message, then a trial of the application was previously activated on the PC.



As a result, the Trial Token cannot be used to activate the application (again).

4. In most cases the activation will be successful. For example:



The Activation dialog box contains the following fields and controls:

- Trial Token:** ☐
- Activation Token:** ☒ (selected)
- License Text:** ☐
- Registered To:** Sales Department
- Company:** Enterprise Inc
- Name:** John Sales
- E-Mail:** john@enterprise.com
- Status:** Valid
- Sessions:** 1
- Expiry:** 12 Dec 2017 13:16:00
- Buttons:** Activate, Ok, Cancel

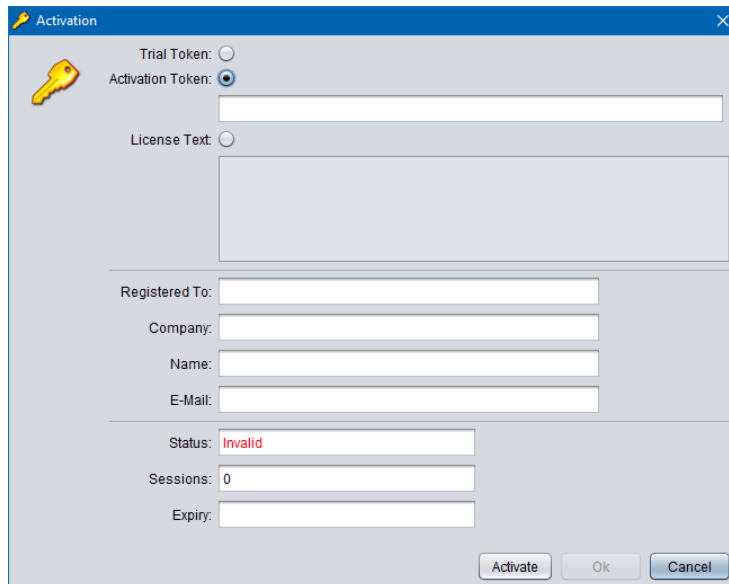
5. Select **Ok** to start the trial of the application. You will not be asked to activate the application again during the trial.

Activation with an Activation Token

1. If you have received an activation token from us, then you can activate the application with the token. This is an example of an activation token that you will receive:

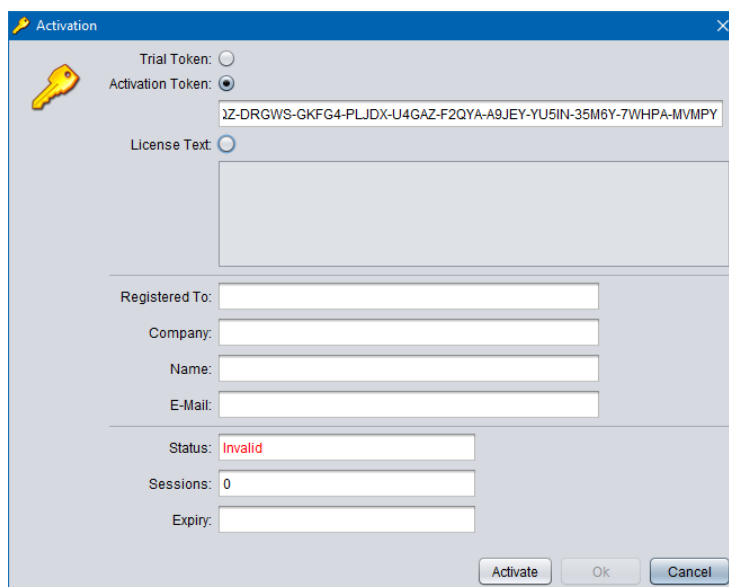
ZU2QL-DSFGK-GHAHA-3NW9B-24RAH-LJQ9A-A9LEH-GTPH5-3G6L4-XJPTX-H5SEA

2. To activate the application with an activation token select **Activation Token**.



The screenshot shows the 'Activation' dialog box. It has a title bar with a key icon and a close button. Inside, there are three radio buttons: 'Trial Token', 'Activation Token' (which is selected), and 'License Text'. Below the 'Activation Token' radio button is a text input field. Below the 'License Text' radio button is a larger text area. There are five text input fields for 'Registered To', 'Company', 'Name', and 'E-Mail'. Below these is a 'Status' field showing 'Invalid' in red text. There are also 'Sessions' (showing '0') and 'Expiry' fields. At the bottom are 'Activate', 'Ok', and 'Cancel' buttons.

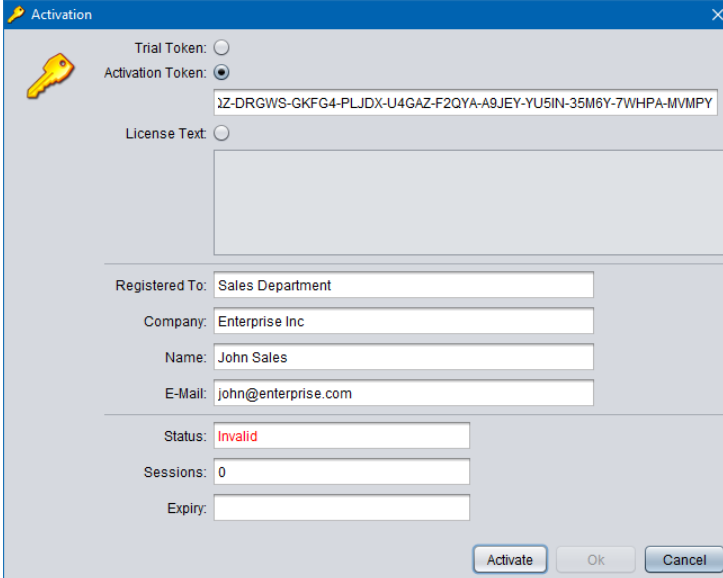
3. Enter the token as you received it from us. For example:



This screenshot is similar to the previous one, but the 'Activation Token' field now contains the example token: 'JZ-DRGWS-GKFG4-PLJDX-U4GAZ-F2QYA-A9JEY-YU5IN-35M6Y-7WHPA-MVMPY'. The 'Status' field still shows 'Invalid' in red.

4. Enter **Registered To**, **Company**, **Name** and **E-Mail** as desired. Note that the details that you enter here will be needed to recover the activation license in the event that it is lost or misplaced so make a record of them and keep them in a safe place.

For example:

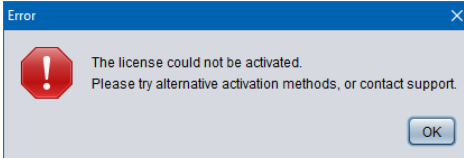


The Activation dialog box contains the following fields and values:

- Trial Token: ☐
- Activation Token: ☒ (Selected)
- License Text:
- Registered To: Sales Department
- Company: Enterprise Inc
- Name: John Sales
- E-Mail: john@enterprise.com
- Status: Invalid
- Sessions: 0
- Expiry:

Buttons: Activate, Ok, Cancel

5. Select **Activate** to attempt activation. The application will attempt activation (over the Internet) with the Total Recall VR licensing server. If you receive the following error message, then the Activation Token is no longer valid, or it was previously used to activate the application.

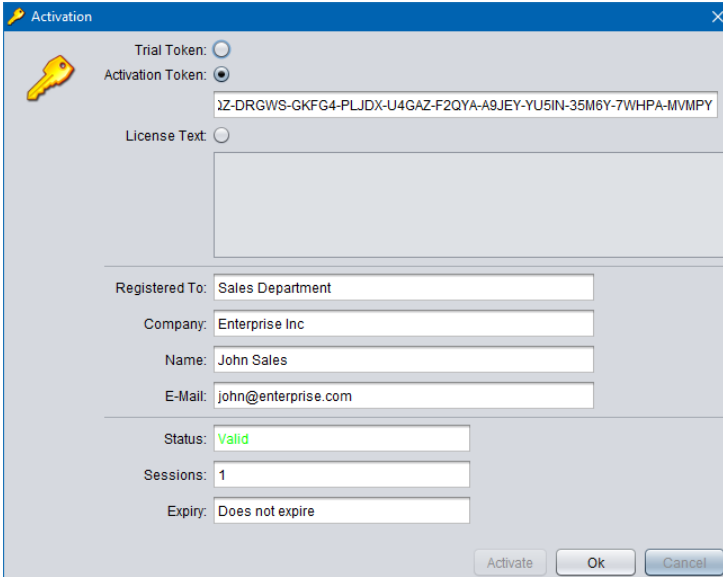


The Error dialog box contains the following text:

The license could not be activated.
Please try alternative activation methods, or contact support.

Button: OK

6. In most cases the activation will be successful. For example:



The Activation dialog box contains the following fields and values:

- Trial Token: ☐
- Activation Token: ☒ (Selected)
- License Text:
- Registered To: Sales Department
- Company: Enterprise Inc
- Name: John Sales
- E-Mail: john@enterprise.com
- Status: Valid
- Sessions: 1
- Expiry: Does not expire

Buttons: Activate, Ok, Cancel

7. Select **Ok** to start using the application.

(Re)Activation with License Text

1. We may send you the license text of an activation license if you cannot activate the application over the Internet, or if you have activated the application before and misplaced your activation license for the application on a particular PC. This is an example of license text that you will receive (some lines were removed to save space):

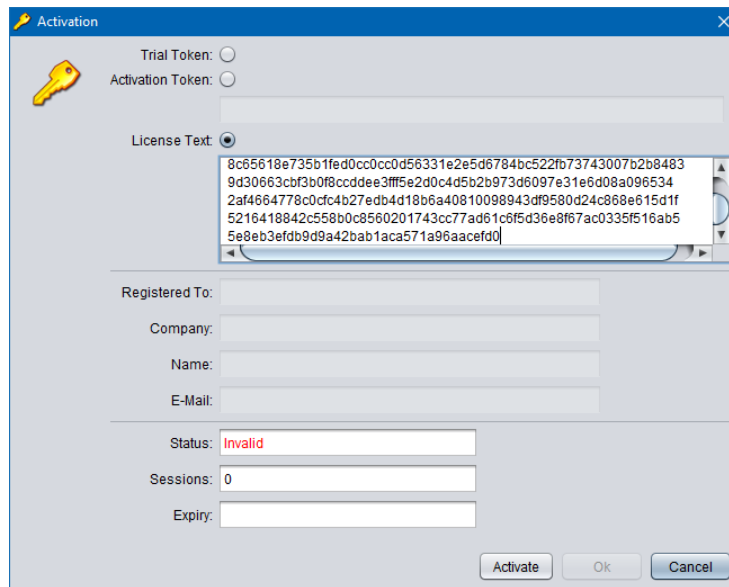
```
# Example Application License (id: 1511837763868)
6729c0c1fc5b9b29b19c4336e2068b75b231474c87cbce079ff39ea741b0
04ec3480fda88ffed82f6dee402293e82e1ece184925ed3510c2189c2b18
4c819332337373235b9e7b8210da6286c2f502de30a0a4140e3a5ddc1102
:
:
4abc5a5efd5f38c804a4ee8b45e92495aac362e67cf5c9721a48400c9ee3
8b699a6d3fc266e0d8efabcede2d58427ac92f510576c4250af30d5ad7a2
5cde6395e2493adb54960307e8083ae8
```

Note:

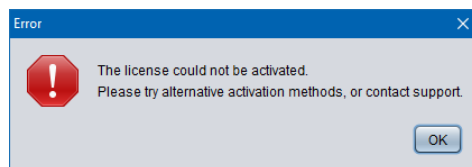
- a. The PC does not need Internet access to (re)activate the application with license text.
 - b. The license text that we will send you is for an existing license which activates the application on the same PC (without hardware modifications) as it was when activated for the first time.
 - c. If the activation license is lost due to damaged hard disk, or motherboard and you replace the faulty hardware, then the license text of the original activation license (which we will send you) will no longer be valid as the hardware of the PC changed and you will have to purchase a new license.
2. To activate the application with a license text select **License Text**.

The screenshot shows a window titled "Activation" with a close button (X) in the top right corner. On the left side, there is a yellow key icon. The window contains three radio buttons: "Trial Token:", "Activation Token:", and "License Text:". The "License Text:" radio button is selected. Below the radio buttons is a large, empty text box for pasting the license text. Underneath the text box are four input fields labeled "Registered To:", "Company:", "Name:", and "E-Mail:". At the bottom of the window, there are three more input fields: "Status:" (which contains the text "Invalid" in red), "Sessions:" (which contains the number "0"), and "Expiry:". At the very bottom of the window are three buttons: "Activate", "Ok", and "Cancel".

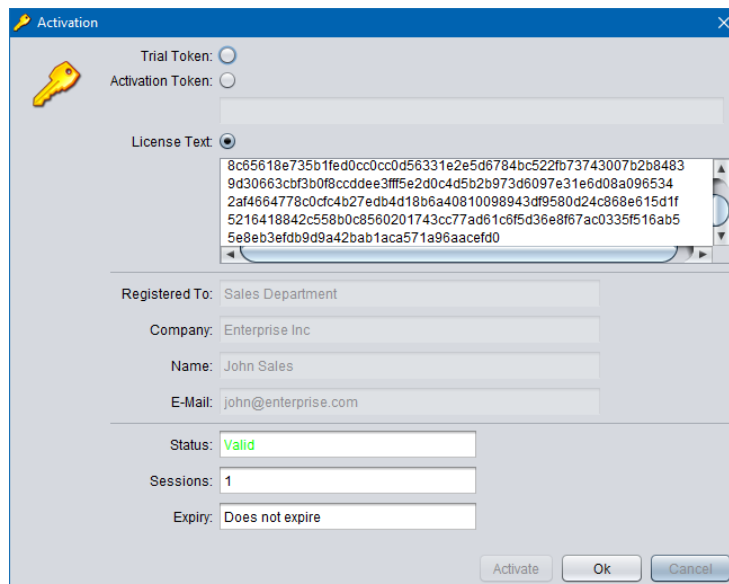
3. Enter the license text as you received it from us. For example:



4. Select **Activate** to attempt activation. If you receive the following error message, then the activation license is no longer valid, or it is for a different application, or it is for a PC with different hardware.



5. In most cases the activation will be successful. For example:

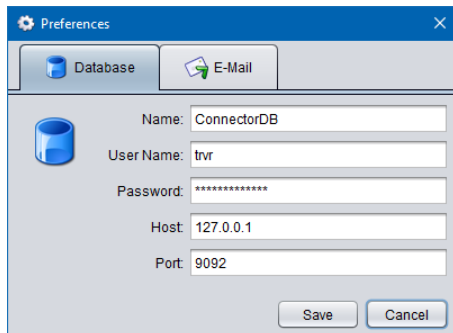


6. Select **Ok** to start using the application.

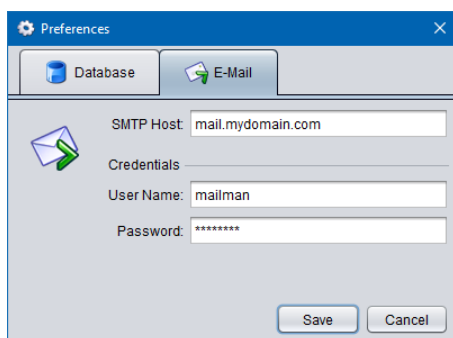
Once you activate the application (for the first time), it will display the Preference dialog which allows you to configure the application.

Application Configuration

1. The Preferences dialog allows you to configure the application.



2. On the **Database** tab:
 - a. Enter **Name**. This is the name of the H2 database that will be created, if required, and used by this instance of Total Recall VR Connector.
 - b. Enter **User Name**. This is the user name that Total Recall VR Connector will use when connecting to the database.
 - c. Enter **Password**. This is the password that Total Recall VR Connector will use when connection to the database.
 - d. Enter **Host**. This is the IP address, or the host name, of the server which runs the H2 database server.
 - e. Enter **Port**. This is the TCP port that is used by the H2 database server to provide database services.
3. Optionally, and if you wish to enable sending of e-mail from the application, switch to the **E-Mail** tab:



4. To enable sending of e-mail from the application:
 - a. Enter **SMTP Host**. This is the IP address, or the host name, of an SMTP e-mail server on your network that the application can use to send e-mail.
 - b. Optionally, and if your SMTP server requires authentication to send e-mail, enter **User Name** and **Password**.

Next you should proceed to configure Total Recall VR Connector as described in section 5 Application Configuration.

4. User Interface

Total Recall VR Connector uses a simple GUI application to configure and control its Windows service.

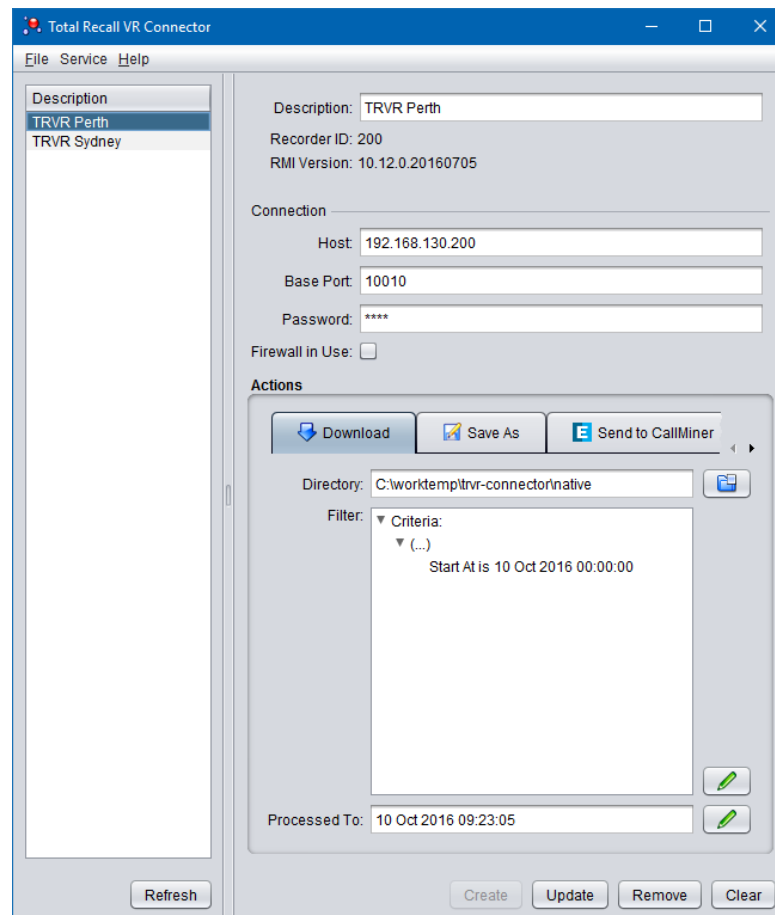


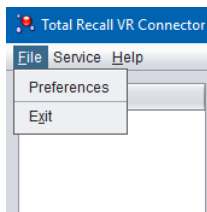
Figure 4: Total Recall VR Connector GUI Application

Use the GUI application to add Total Recall VR systems connections; to start, stop and restart the service and to view the service state.

4.1. Main Menu Bar

The Total Recall VR Connector main menu bar includes 3 menus: File, Service and Help.

4.1.1. File Menu



The File menu includes the following options:

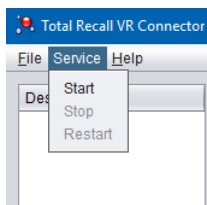
1. **Preferences**

It opens the Preferences dialog which allows you to make changes to the application configuration.

2. **Exit**

It terminates Total Recall VR Connector GUI application. It does not stop the service.

4.1.2. Service Menu



You must run the application “As Administrator” in order to control the service from the application.

The Service menu includes the following options:

1. **Start**

It starts the Total Recall VR Connector Windows service.

2. **Stop**

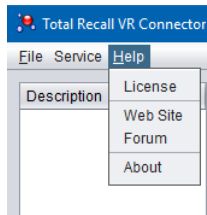
It stops the Total Recall VR Connector Windows service.

Note that if the service is in the process of archiving recordings then it may take few minutes for it to stop as it will first complete archiving the current batch of recordings before it stops.

3. Restart

It restarts (stop followed by start) the Total Recall VR Connector Windows service.

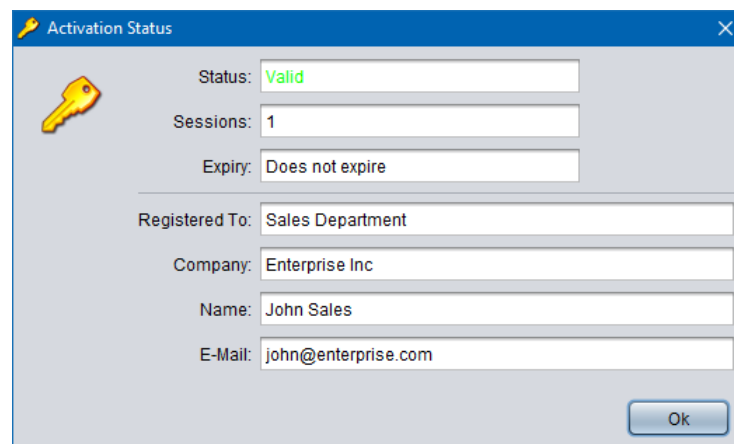
4.1.3. Help Menu



The Help menu includes the following options:

1. License

It displays the Activation Status dialog which shows information on the activation license:



2. Web Site

It starts the default system web browser and loads the front page of the Total Recall VR web site.

3. Forum

It starts the default system web browser and loads the Forums page of the Total Recall VR web site.

4. About

It display 'about' information about the application including the version number of the application.

5. Application Configuration

For best results with Total Recall VR Connector, we recommended that you configure it as explained in this section before using it.

5.1. Recorders and the Download Action

Total Recall VR Connector fetches recordings from one or multiple Total Recall VR recorders on regular basis.

You must specify connection details for each recorder and configure the associated (recording) download action.



If you have multiple Total Recall VR systems, then you must assign a different recorder ID to each system before you configure Total Recall VR Connector to connect to them.

See the Total Recall VR Embedded GUI User Guide [6] and/or the Total Recall VR Remote Manager User Guide [7] on how to assign a recorder ID to your systems.



You must configure the Remote Manager Interface on your Total Recall VR systems before you configure Total Recall VR Connector to connect to them.

See section 3.3.5 Remote Interface for more details.

Then, to add a recorder:

Add a recorder

1. Stop the service. Select **Stop** from the **Service** menu.
2. Select **Clear**.
3. Enter the connection details:

- a. Enter **Description**, which must be unique, to help you identify the recorder.
- b. Enter **Host** and **Base Port** which must reflect the configuration of the Remote Manager Interface on a Total Recall VR system. For example:

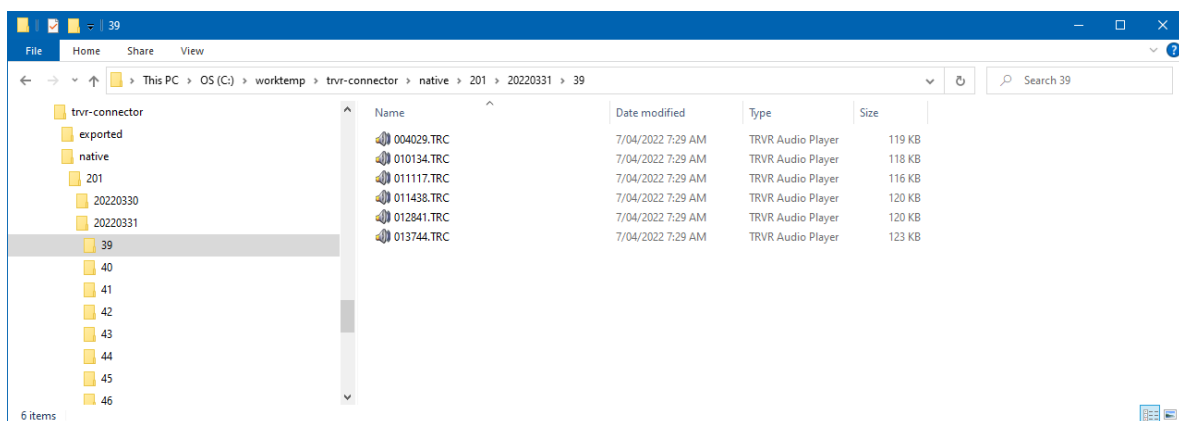
- c. Enter **Password** which must be the password assigned to the Administrator user on the Total Recall VR system. By default this password is '0000' (four zeroes); however, you may have changed it to a different value.
 - d. If there is a firewall between the networks that connect the system that runs Total Recall VR Connector and the Total Recall VR system, then tick **Firewall in Use** and then change **Host** and **Base Port** as described in the Total Recall VR Deployment Guide [8].
4. Configure the **Download** action:

- a. Enter, or select, **Directory** where Total Recall VR connector will store recordings that it downloads from the Total Recall VR.

Due to the near real-time operating nature of the Connector, it is not possible to use the same directory for both the Download Action and the Save As action.
 - b. Optionally, create a **Filter** that will be used by the Connector when choosing which recordings to download from the recorder. See section 7 Criteria Builder for details on how to use the Criteria Builder dialog to create the filter.
 - c. Set the **Processed To** time to the time of the first recording that you wish to download from the recorder.
5. Select **Create**. Total Recall VR Connector will attempt to connect to the recorder and access details from it and if successful it will add the recorder to its configuration.
 6. Start the service. Select **Start** from the **Service** menu.

Once you start the service after adding a recorder, the service will start fetching recordings from the recorder and then store the recordings in the specified directory. The recordings will be in their native format (.TRC).

Total Recall VR Connector stores recordings in a standard directory structure as shown on the following screen capture of recordings that the Connector downloaded from a recorder with ID set to 201:



The parts of the directory structure are:

```

1.    ... \native                <- base location (see configuration)
2.    |
3.    + - 201                    <- Recorder ID
4.    |
5.    |   + 20220331             <- Date when recordings were created (yyyymmdd)
6.    |   |
7.    |   + - 39                 <- Channel used to create the recordings
8.    |   |
9.    |   |   + - 0040229.TRC    <- Recording file. The name format is
10.   |   |   |                  hmmmss.TRC, were hmmmss is the time
11.   |   |   |                  of the recording
12.

```

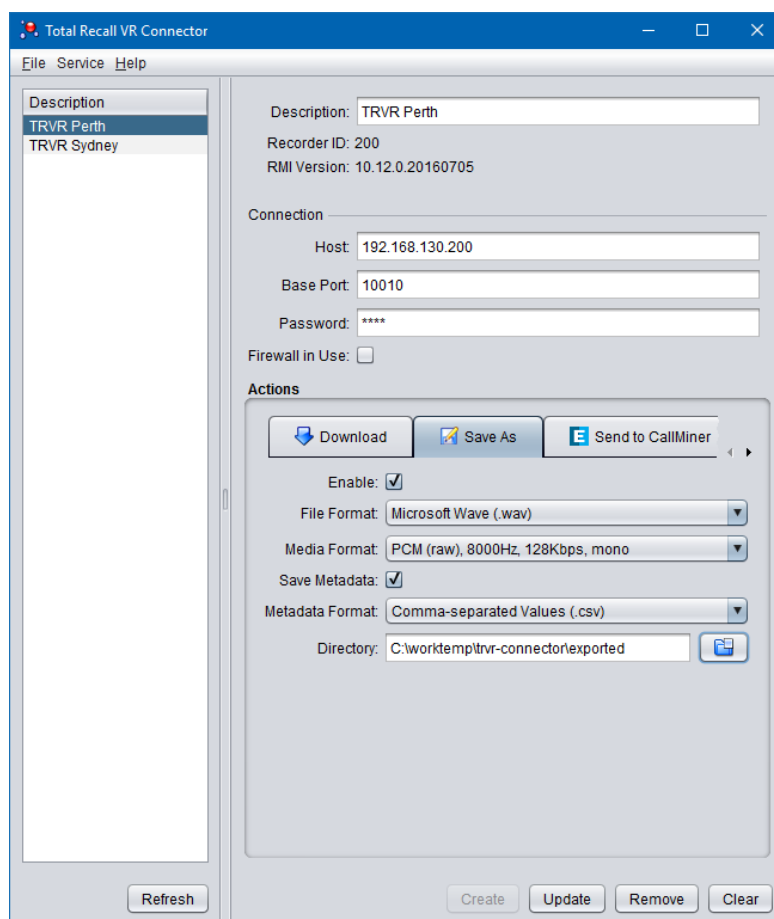

5.2. Save As Action

The Save As action is optional and when enabled instructs Total Recall VR Connector to export recordings, and optionally their metadata, that it downloads to a specified format.

To configure the Save As action:

Configure Save As


1. Stop the service. Select **Stop** from the **Service** menu.
2. Select a recorder and the switch to the **Save As** tab.



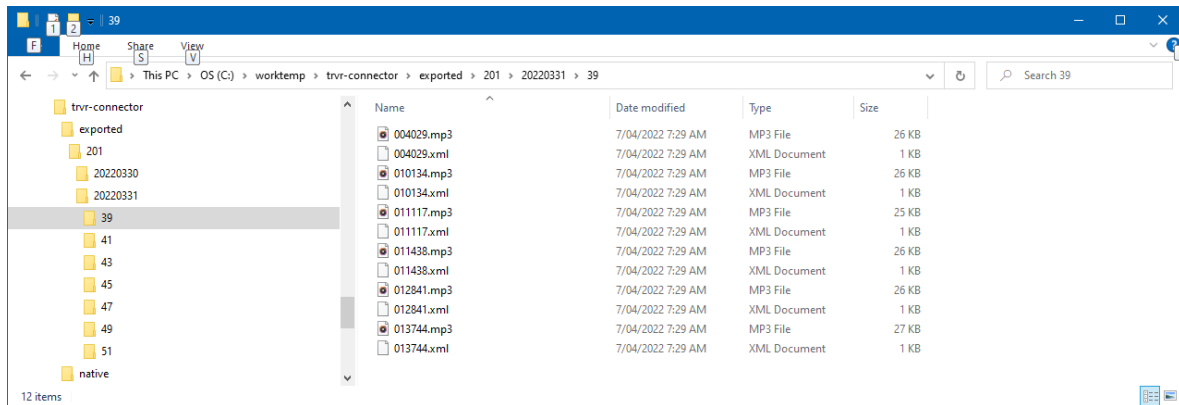
3. Tick **Enable** to enable the Save As action.
4. Select **File Format** and **Media Format**.
Note that not all media formats can exist in all file formats. The set of media formats that are available depends on the chosen **File Format**.
5. If you wish to export the recording metadata in a separate file tick **Save Metadata** and then select **Metadata Format**.
6. Enter, or select, **Directory** where Total Recall VR will write the exported files.

Due to the near real-time operating nature of the Connector, it is not possible to use the same directory for both the Download Action and the Save As action.

Specify one of:

- Local directory. For example “C:\worktemp\trvr-connector\exported”
Alternatively select  to display a dialog which lets you choose a directory.
 - UNC path to a shared directory when using network attached storage. For example “\\nas.mydomain.com\trvr-connector”. In this case you must configure the Connector service to run with the credentials of a local user that has rights to create directories and files on the network attached storage.
7. Select **Update** to save the new configuration.
 8. Start the service. Select **Start** from the **Service** menu.

Total Recall VR will store exported files in the specified directory as shown on the following screen capture:



The parts of the directory structure are:

```

1. ... \exported                <- base location (see configuration)
2.   |
3.   + - 201                    <- Recorder ID
4.   |
5.   | + 20220331              <- Date when recordings were created (yyyymmdd)
6.   |
7.   + - 39                    <- Channel used to create the recordings
8.   |
9.   | + - 0040229.mp3         <- Recording file in the specified format.
10.  |                        The name format is hhmmss.mp3, where hhmmss
11.  |                        the time of the recording.
12.  + - 0040229.xml           <- Metadata file in the specified format.
13.  |

```

5.3. Send to CallMiner Action

The Send to CallMiner action is optional and when enabled instructs Total Recall VR Connector to export recordings and their metadata in a format suitable for ingestion by the [CallMiner Eureka](#) speech analytics platform and applications and then upload the same to the CallMiner Eureka server specified in the configuration of the action.



You need an account with CallMiner Eureka in order to use this action. Please contact CallMiner to sign up and receive the account details.

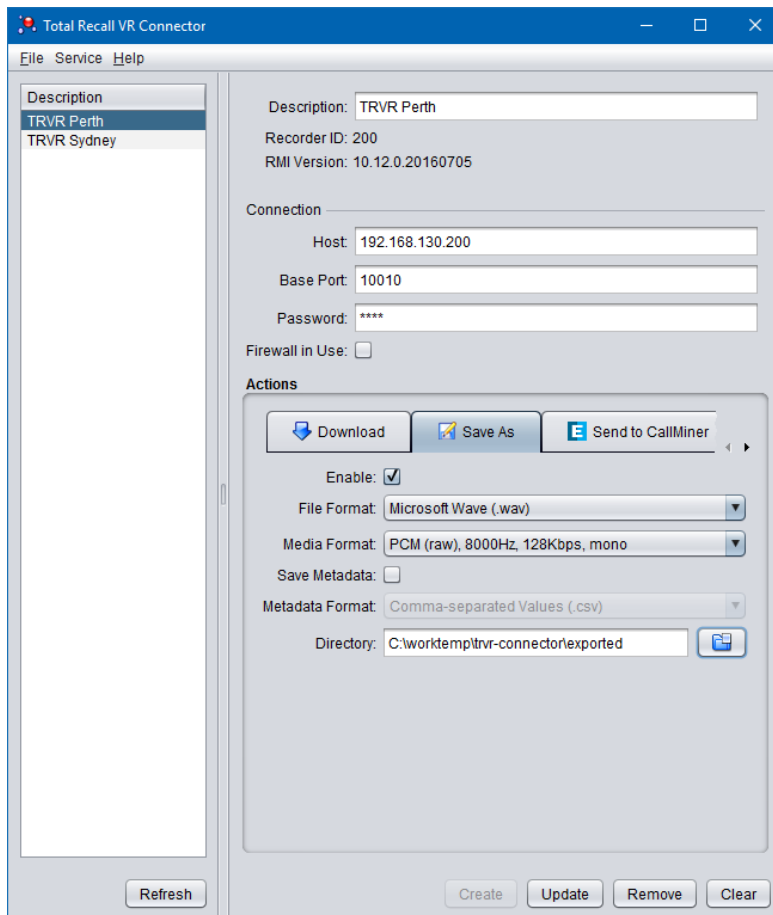


You must configure the Save As action as described in the subsequent procedure in order to use this action.

To configure the Sent to CallMiner action:

Configure Send to CallMiner


1. Stop the service. Select **Stop** from the **Service** menu.
2. Select a recorder and the switch to the **Save As** tab.



3. Tick **Enable** to enable the Save As action.
4. Select *Microsoft Wave (.wav)* for **File Format** and *PCM (raw), 8000Hz, 128Kbps, mono* for **Media Format**.
5. Enter, or select, **Directory** where Total Recall VR will write the exported files.

Due to the near real-time operating nature of the Connector, it is not possible to use the same directory for both the Download Action and the Save As action.

Specify one of:

- Local directory. For example “C:\worktemp\trvr-connector\exported”
Alternatively select  to display a dialog which lets you choose a directory.
 - UNC path to a shared directory when using network attached storage. For example “\\nas.mydomain.com\trvr-connector”. In this case you must configure the Connector service to run with the credentials of a local user that has rights to create directories and files on the network attached storage.
6. Select **Update** to save the new configuration.
 7. Switch to the **Sent to CallMiner** tab. The configuration on this tab will be supplied to you when you open an account with CallMiner.

8. Tick **Enable** to enable the Send to CallMiner action.
9. Enter **Host**. This is the SFTP host name, or IP address, given to you by CallMiner.
10. Enter **User Name**. This is the SFTP user name given to you by CallMiner.
11. Enter **Password**. This is the SFTP password given to you by CallMiner.
12. Optionally, enter **Directory**. This is the SFTP directory given to you by CallMiner.
13. Start the service. Select **Start** from the **Service** menu.

5.4. E-Mail Action

The E-Mail action is optional and when enabled instructs Total Recall VR Connector to send recording and metadata files to a remote location via e-mail as attachments.



Sending of e-mail messages may fail as recording file sizes may exceed limits imposed by your e-mail server.

If this action is enabled, then Total Recall VR Connector will e-mail:

- Recording files only in the native format (.TRC) if the Save As action is NOT enabled.
- Recording files only in the exported format if the Save As action is enabled and it is configured to NOT export metadata files.
- Recording and metadata files in the exported format if the Save As action is enabled and it is configured to export metadata files.

To configure the E-Mail action:

Configure E-Mail

1. Stop the service. Select **Stop** from the **Service** menu.
2. Select a recorder and the switch to the **Save As** tab.

The screenshot shows the 'Total Recall VR Connector' application window. On the left, a list of recorders includes 'TRVR Perth' and 'TRVR Sydney'. The main panel displays configuration for 'TRVR Perth'. Under the 'Connection' section, fields for Host (192.168.130.200), Base Port (10010), and Password (masked with asterisks) are visible. The 'Firewall in Use' checkbox is unchecked. The 'Actions' section contains three buttons: 'Send to CallMiner', 'E-Mail' (which is highlighted), and 'Clean Up'. Below these buttons, the 'Enable' checkbox is checked. The 'From' field is set to 'noreplay@yourdomain.com', the 'To' field to 'someone@yourdomain.com', and the 'Subject' field to 'Recording from TRVR Perth'. The 'Message' text area contains the text 'New recording from TRVR Perth. Regards.' At the bottom of the window, there are buttons for 'Refresh', 'Create', 'Update', 'Remove', and 'Clear'. A status bar at the very bottom indicates '1962 remaining from 2000'.

3. Tick **Enable** to enable the E-Mail action.
4. Enter **From**. This is the e-mail address that will be used as the sender's address for the messages.

5. Enter **To**. This is the e-mail address of the recipient. You can enter multiple e-mail addresses, however you must separate them with semicolon (;).
6. Enter **Subject**. This is a free text field.
7. Enter **Message**. This is a free text field.
8. Select **Update** to save the new configuration.
9. Start the service. Select **Start** from the **Service** menu.

5.5. Clean Up Action

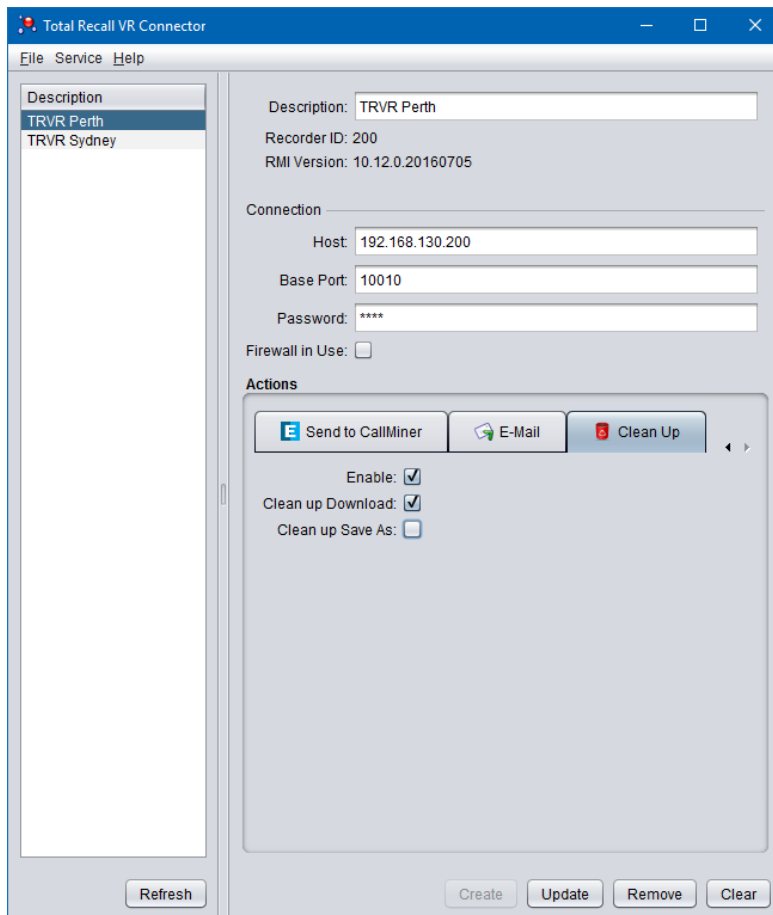
The Clean Up action is optional and when enabled instructs Total Recall VR Connector to remove downloaded and/or exported files.

This is useful for example when you wish to keep only exported files, or if you wish to get rid of downloaded and exported files after exporting to CallMiner and/or e-mailing recordings to a desired destination.

To configure the Clean Up action:

Configure Clean Up

1. Stop the service. Select **Stop** from the **Service** menu.
2. Select a recorder and the switch to the **Clean Up** tab.



3. Tick **Enable** to enable the Clean Up action.
4. Tick **Clean up Download** if you wish to delete the downloaded files (the output of the **Download** action).
5. Tick **Clean up Save As** if you wish to delete the exported files (the output of the **Save As** action).
6. Select **Update** to save the new configuration.
7. Start the service. Select **Start** from the **Service** menu.

Note that the Clean Up action is not retrospective, that is it will not remove recordings that were downloaded or exported before it was enabled.

6. Connector Service

The Total Recall VR Connector service is a Windows service that continuously fetches new recordings from Total Recall VR systems and optionally exports recordings to a specified format and then sends recordings to a remote location via e-mail.

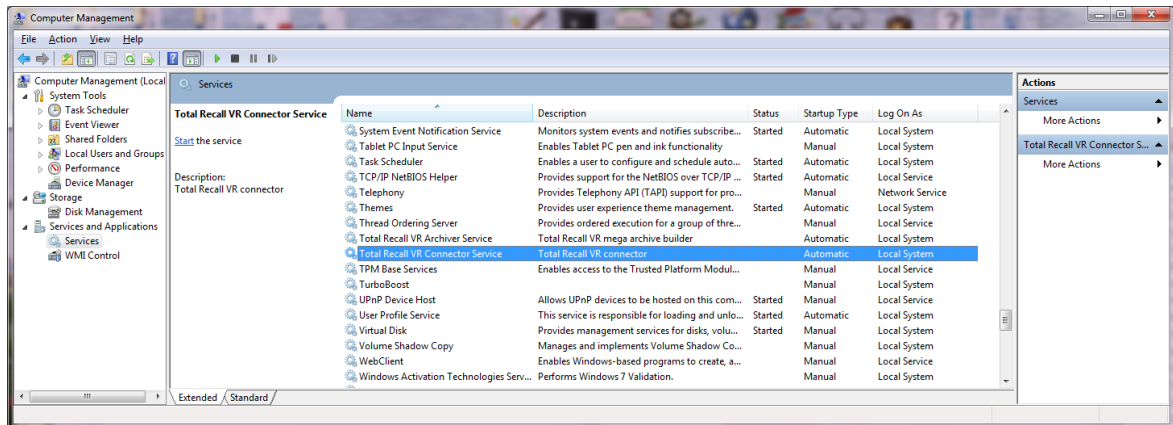


Figure 5: Total Recall VR Connector Service

You can use the Windows Services console (see previous screen capture) to control the operation of the service. Alternatively, you can use the Total Recall VR Connector GUI application to control the operation of the service.

However, you must use the Total Recall VR Connector GUI application to configure the service. This is not possible with the Windows Services console.



The service may take considerable time to fetch all recordings from a Total Recall VR system that has many recordings on it when you run the service for the first time with such Total Recall VR system.

Allow 5 minutes per 1000 recordings.

Once the service completes fetching the initial set of existing recordings, it starts to fetch new recordings in near real-time as recordings are created.



The service will transfer large amounts (multiples of GiB) of data over your network on regular bases.

This can have undesirable impact on your network and lead to excess data charges for your data network provider if you do not plan the traffic flow correctly.

The service creates an operating log which is a text file. The file is called TRVRConnectorService.log and is located in the “<data folder>\log” directory. Typically this is the “C:\Program Files (x86)\Common Files\TRVR Connector\log” folder.

You should examine this log from time to time to make sure that the service is operating without problems.

7. Criteria Builder

Total Recall VR Connector uses Criteria Builder to create recording filters for each Total Recall VR connection.

Criteria Builder is an application that provides for the creation and editing of comprehensive natural language search queries.

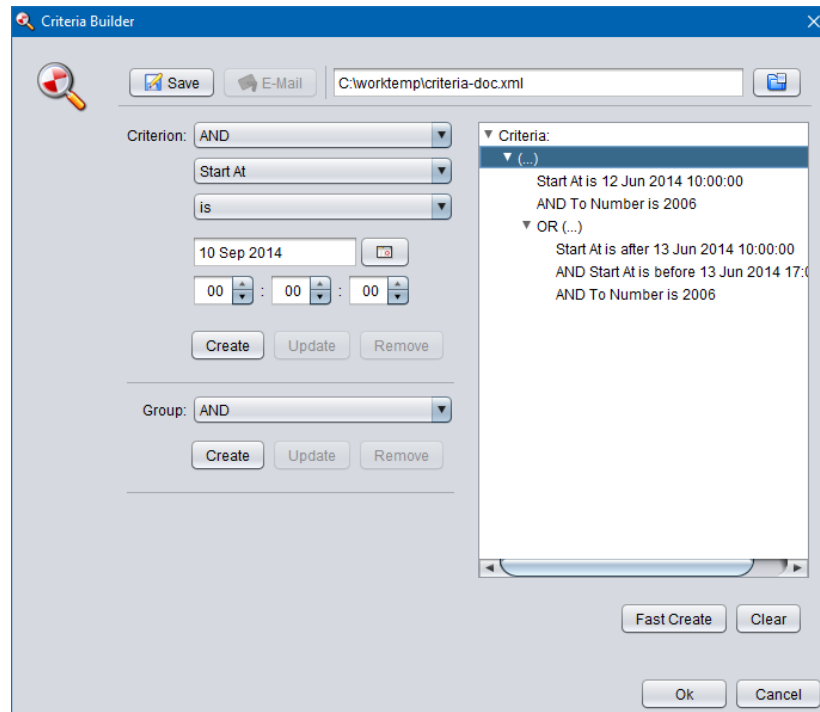


Figure 6: Criteria Builder



Not sure how to create a query? Or struggling to get the right query?

E-mail us the details of the query that you wish to create and we will e-mail you a query file which you can load into Criteria Builder and then use it in the application.

This is a free service.

7.1. Anatomy of a Query

Criteria Builder creates queries which comprise of criteria that may be organised into groups. Criteria and groups may be joined with logical ‘and’ and ‘or’ operators to form complex queries.

The main building blocks of each query are criteria. For example:

- Start At is after 12 Jun 2014 10:00:00
- To Number is 2006
- From Extension matches 10%

You can join criteria together with ‘and’ and ‘or’ to create conjunctions and disjunctions. For example:

- Duration is more than 00:01:00 AND To Number is 2006
- To Number is 1000 OR To Extension matches 10%

Criteria Builder does not impose a limit on the number of criteria that are joined with ‘and’ and ‘or’.

You can organise criteria into groups and then join whole groups with ‘and’ and ‘or’ to create complex conjunctions and disjunctions. For example:

- Duration is more than 00:01:00 AND (To Number is 1000 OR To Extension matches 10%)
- (Start At is after 12 Jun 2014 10:00:00 AND Duration is more than 00:01:00) AND (To Number is 1000 OR To Extension matches 10%)

Criteria Builder does not impose a limit on the number of groups and the level of nesting of groups.

7.2. Criterion Comparators

An integral part of each criterion is a comparator. Criteria Builder supports the following comparator (most are self-explanatory):

Operator	Description
is	Matches values that are same as the one specified.
is not	Matches values that are NOT the same as the one specified.
is less than	Matches values that are less than the one specified.
is more than	Matches values that are more than the one specified.
is before	Matches values that are before the one specified.
is after	Matches values that are after the one specified.
matches	Matches values that match the specified pattern. The pattern comprises of alphanumeric characters and the following wildcard characters: % - matches zero or more alphanumeric characters. For example: 10% matches any sequence of

	<p>characters that start with 10.</p> <p>To match the actual % character use ‘\%’.</p> <p>_ - matches exactly one character.</p> <p>For example: 10_ matches any sequence of 3 characters that start with 10.</p> <p>To match the actual _ character use ‘_’.</p>
--	--

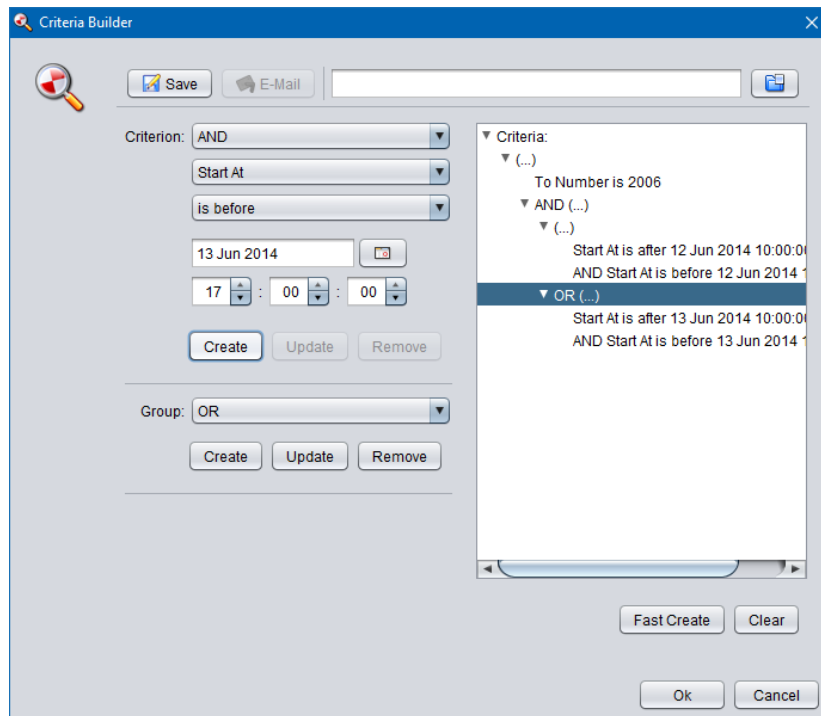
7.3. Creating Queries

The flexibility of Criteria Builder enables creation of complex queries. Also, queries that result in the same search outcome may take different forms and shapes. Consequently, it is impossible to explain here how you can create every possibly query. Instead we explain how you can create the following example query:

To Number is 2006 AND (
(Start At is after 12 Jun 2014 10:00:00 AND
Start At is before 12 Jun 2014 17:00:00)
OR
(Start At is after 13 Jun 2014 10:00:00 AND
Start At is before 13 Jun 2014 17:00:00)
)

The query basically identifies all recordings which have To Number set to 2006 and started between the hours of 10am and 5pm on the 12th and 13th of June 2014.

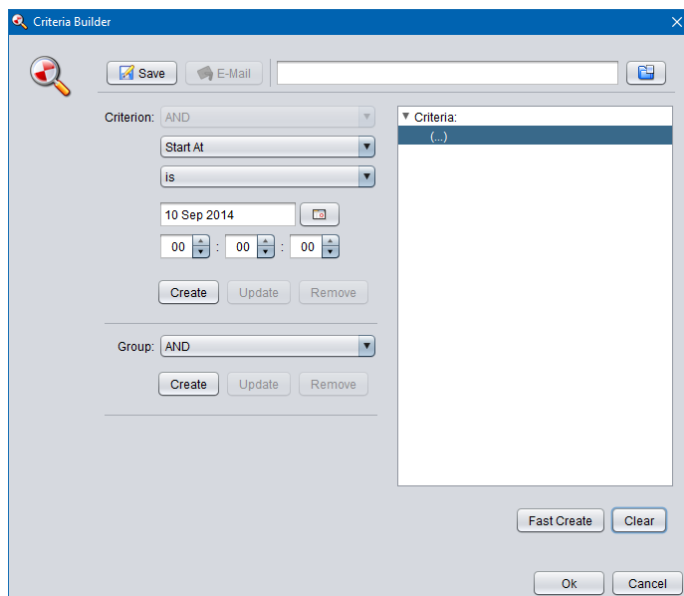
The following screen capture shows the query in Criteria Builder:



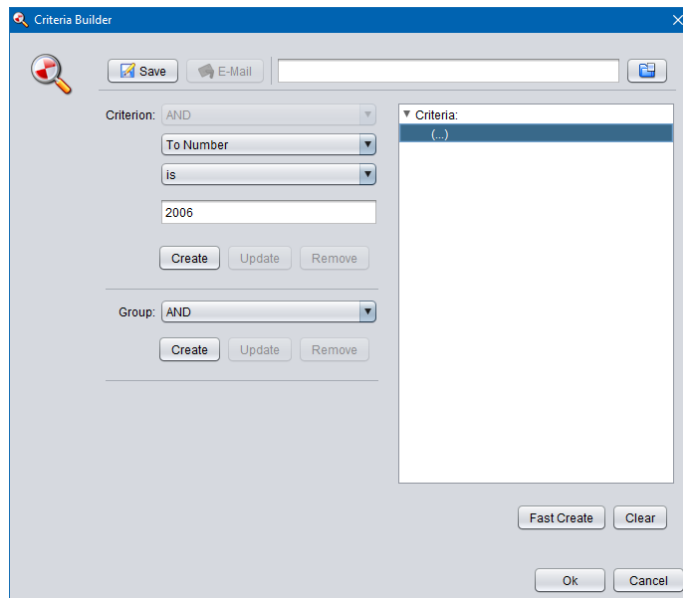
The example query comprises of 5 criteria and 3 groups one of which is used to group two groups.

Example query creation

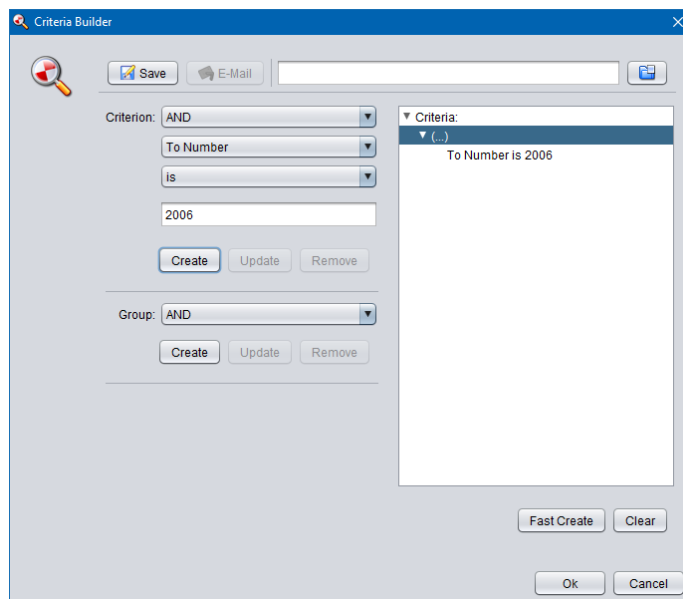
1. New queries start with an empty Criteria tree:



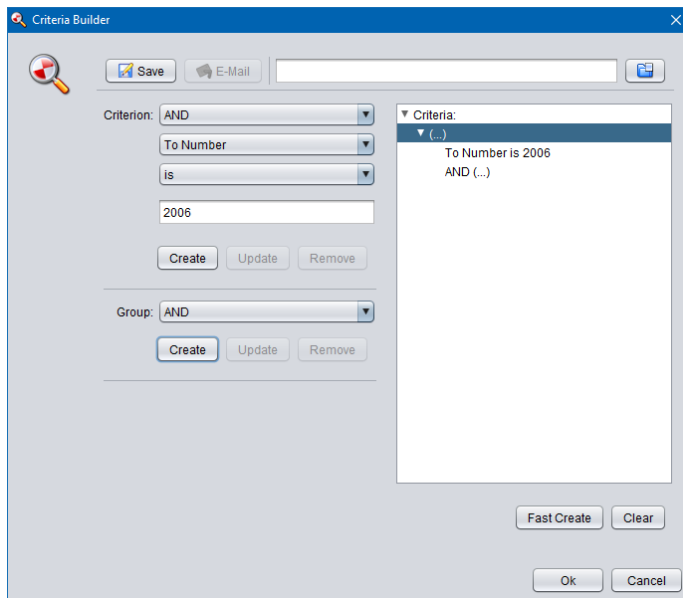
2. To create the first criterion (*To Number is 2006*), first set **Criterion** as shown on the following screen capture:



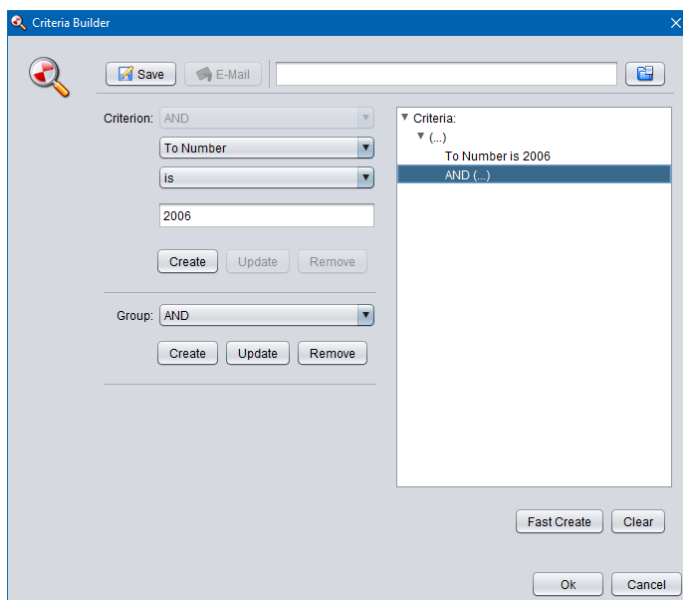
3. Now select **Create** in the **Criterion** area to add the criterion to the Criteria tree:



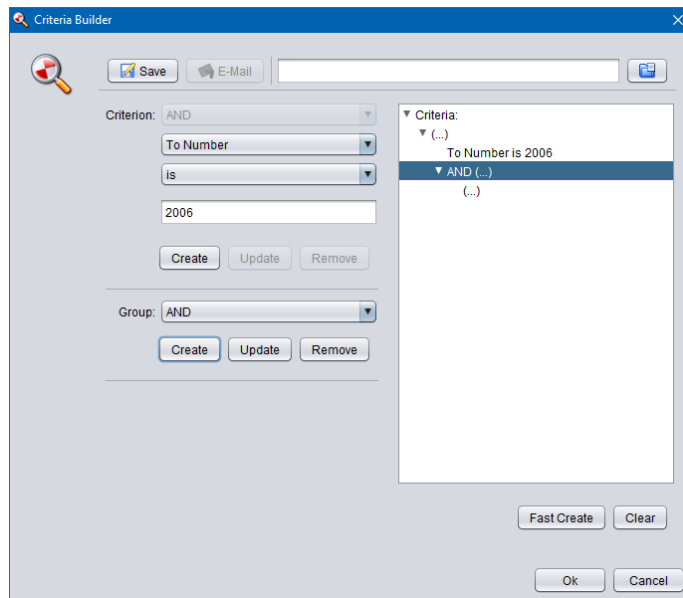
4. Now we need to create the group that will hold the two groups with the Start At criteria. Choose **AND** for **Group** and then select **Create** in the **Group** area to add the group to the Criteria tree:



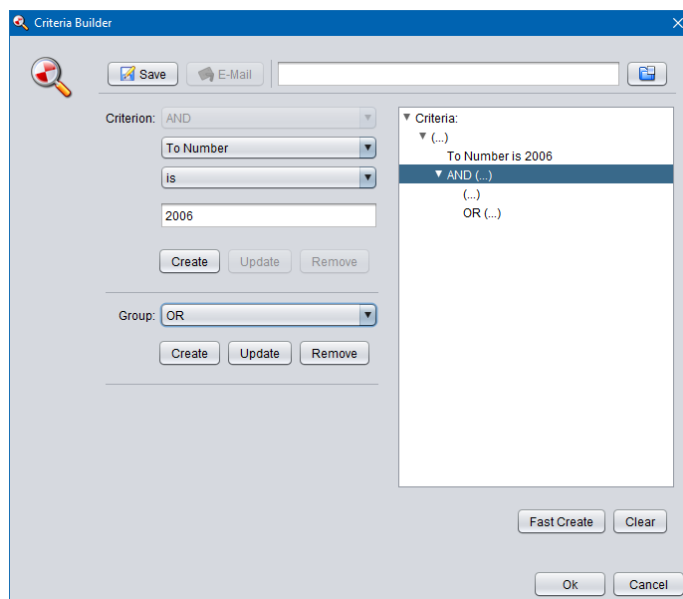
5. The new group comprises of two groups which are joined with “or” in our example query. So we will create the two groups first. To do so, select the group node that we just created on the Criteria tree:



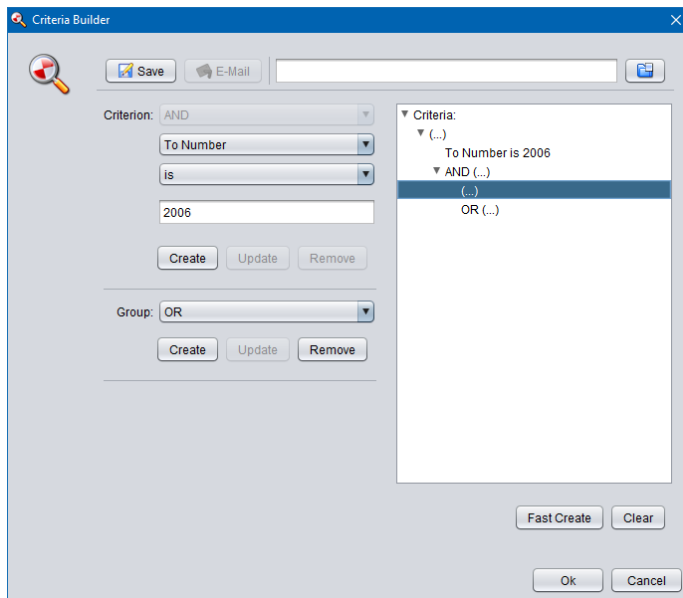
6. Choose AND for **Group** and then select **Create** in the **Group** area to add the first group to the Criteria tree:



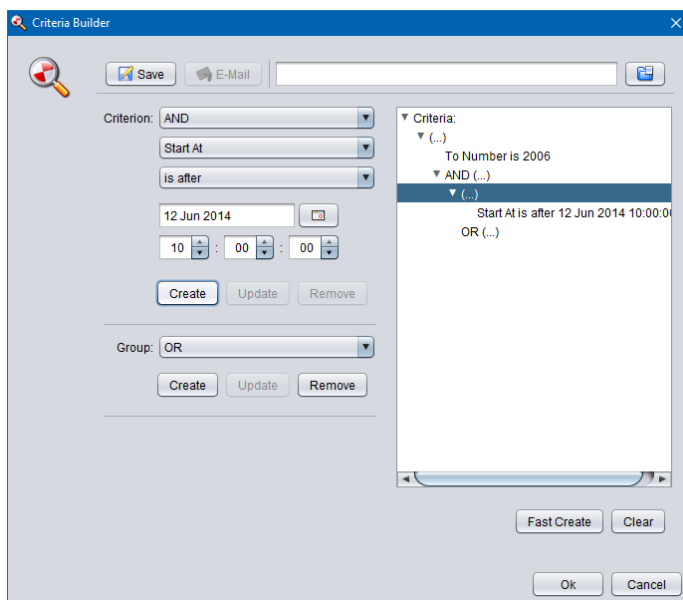
7. Choose OR for **Group** and then select **Create** in the **Group** area to add the second group to the Criteria tree:



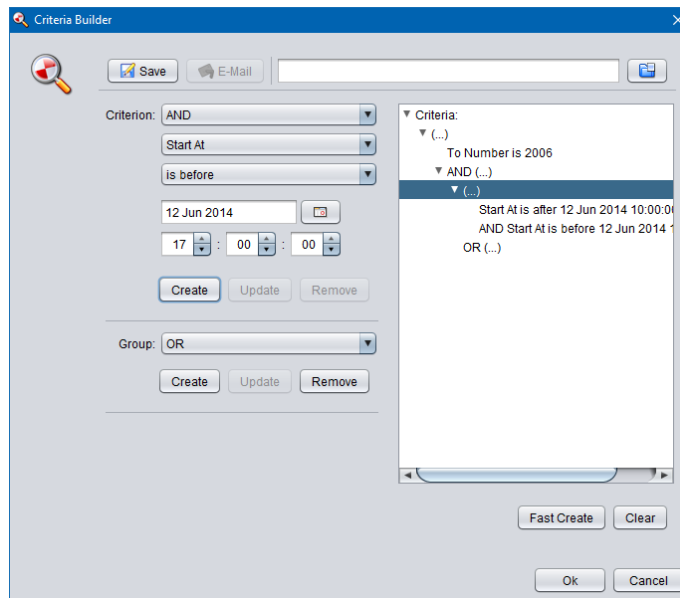
8. Now we will add the criteria for 12th of June. To do so, select the first sub-group in the Criteria tree:



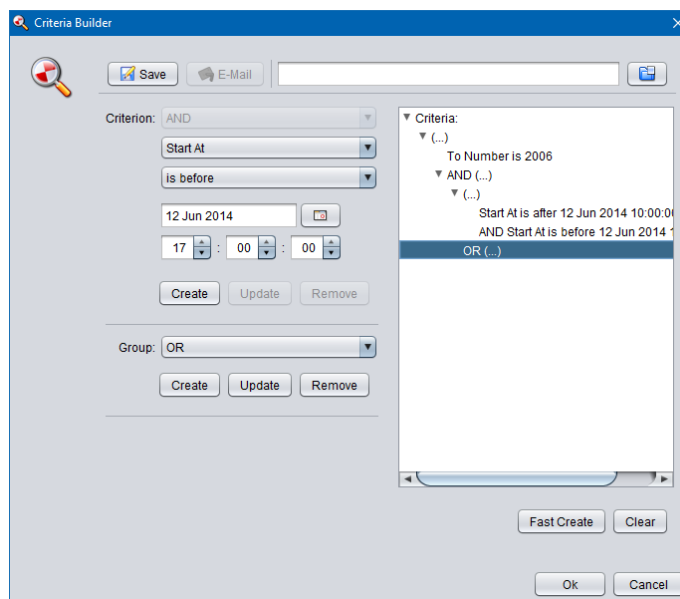
9. To create the first criterion for 12th of June (*Start At is after 12 Jun 2014 10:00:00*), first set **Criterion** as shown on the following screen capture, and then select **Create** in the **Criterion** area:



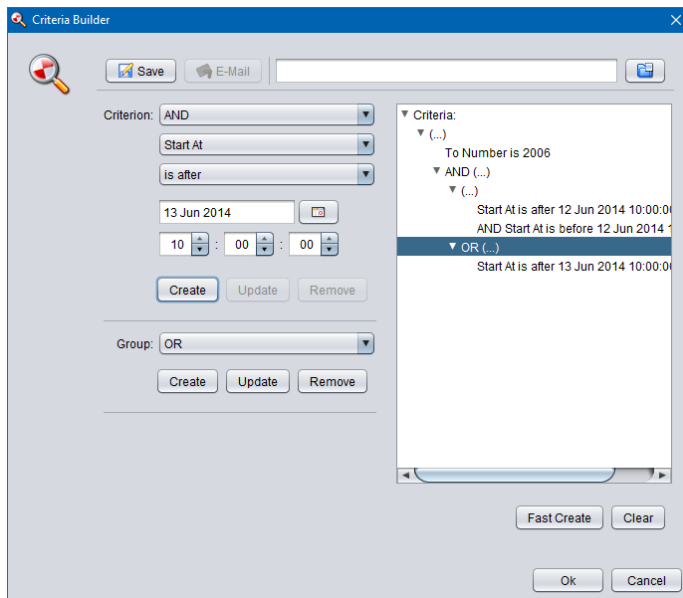
10. To create the second criterion for 12th of June (*Start At is before 12 Jun 2014 17:00:00*), first set **Criterion** as shown on the following screen capture, and then select **Create** in the **Criterion** area:



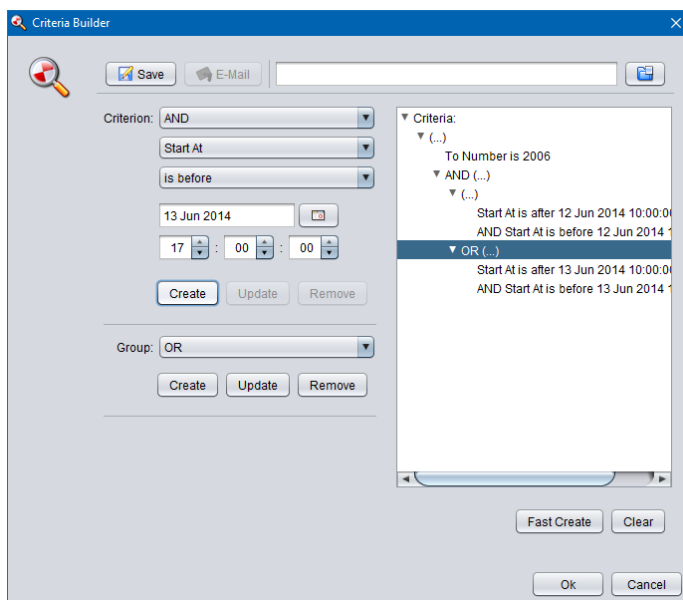
11. Finally we will add the criteria for 13th of June. To do so, select the second sub-group in the Criteria tree first:



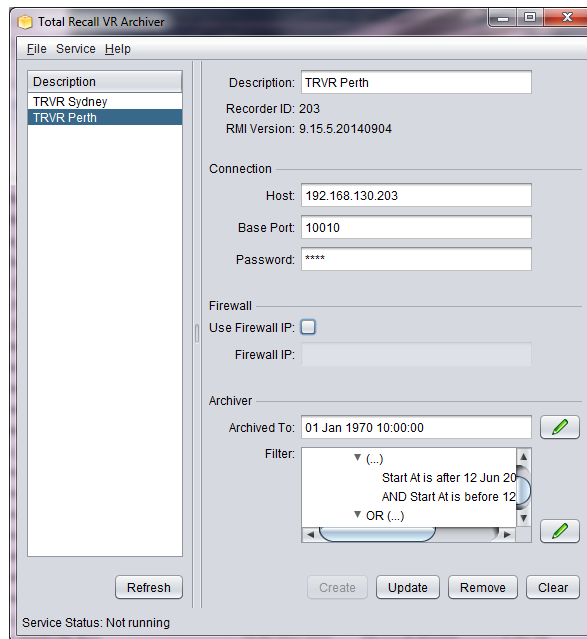
12. To create the first criterion for 13th of June (*Start At is after 13 Jun 2014 10:00:00*), first set **Criterion** as shown on the following screen capture, and then select **Create** in the **Criterion** area:



13. To create the second criterion for 13th of June (*Start At is before 13 Jun 2014 17:00:00*), first set **Criterion** as shown on the following screen capture, and then select **Create** in the **Criterion** area:



14. The query is now complete.
15. Select **Ok** to close Criteria Builder.



16. Select **Update** to store the query (filter) in the configuration.

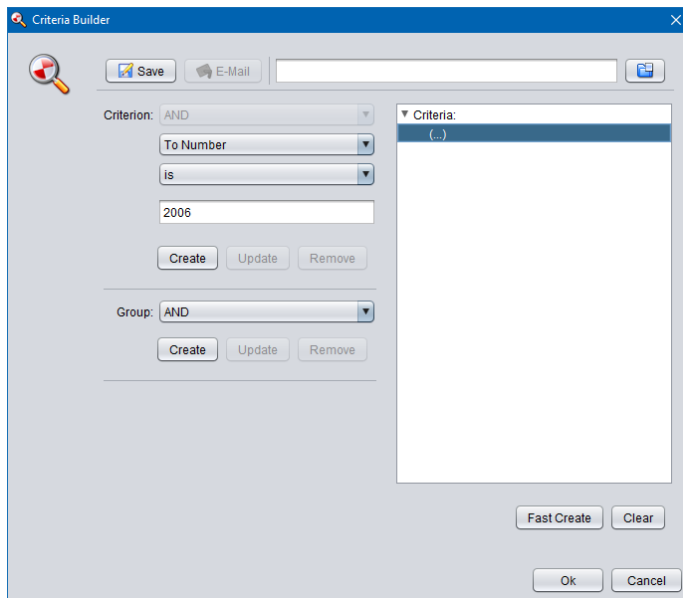
7.4. Fast Queries

The previous sections explain the flexibility of Criteria Builder, however if you find the flexibility a bit overwhelming then it is possible to create simple, but very useful queries using the Quick Query builder.

You need specify only values for various search parameters and the Quick Query builder will create a query for you. You can use the query as is or modify it in the Criteria Builder.

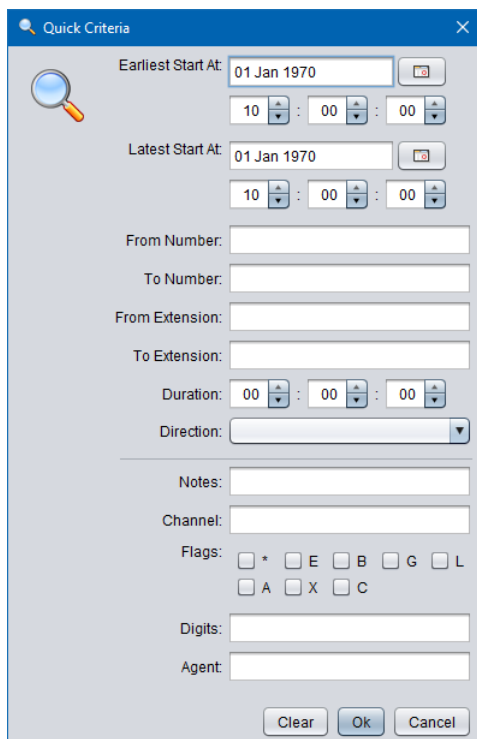
Fast query creation

1. Start with an empty Criteria tree (select **Clear** if the Criteria is not empty as shown on the following screen capture):



The Criteria Builder dialog box is shown. It has a title bar with a magnifying glass icon and a close button. Below the title bar are buttons for 'Save', 'E-Mail', and a text input field. The main area is divided into two sections. The top section is for 'Criterion' and the bottom section is for 'Group'. Both sections have a dropdown menu for the logical operator (currently set to 'AND'), a dropdown for the field (currently set to 'To Number'), a dropdown for the comparison operator (currently set to 'is'), and a text input field (currently containing '2006'). Below each section are 'Create', 'Update', and 'Remove' buttons. On the right side, there is a list box labeled 'Criteria:' containing a single entry '(-)'. At the bottom right, there are 'Fast Create', 'Clear', 'Ok', and 'Cancel' buttons.

2. Select **Fast Create** to display the Quick Criteria dialog:



The Quick Criteria dialog box is shown. It has a title bar with a magnifying glass icon and a close button. The main area contains various input fields and checkboxes. The 'Earliest Start At:' field is set to '01 Jan 1970' with a calendar icon. Below it are time selection buttons for hours (10), minutes (00), and seconds (00). The 'Latest Start At:' field is also set to '01 Jan 1970' with a calendar icon. Below it are time selection buttons for hours (10), minutes (00), and seconds (00). There are input fields for 'From Number:', 'To Number:', 'From Extension:', and 'To Extension:'. There is a 'Duration:' field with time selection buttons for hours (00), minutes (00), and seconds (00). There is a 'Direction:' dropdown menu. There are input fields for 'Notes:', 'Channel:', 'Digits:', and 'Agent:'. There are checkboxes for 'Flags' with labels: *, E, B, G, L, A, X, C. At the bottom, there are 'Clear', 'Ok', and 'Cancel' buttons.

3. Enter values for the parameters that you wish to use in the query. Parameters that do not have a value will be ignored.

For example let's assume we wish to filter all incoming calls to 2006 on the 12th of June 2014. If so, set values as shown on the following screen capture:

Quick Criteria

Earliest Start At: 12 Jun 2014 00 : 00 : 00

Latest Start At: 12 Jun 2014 23 : 59 : 59

From Number:

To Number: 2006

From Extension:

To Extension:

Duration: 00 : 00 : 00

Direction: Incoming

Notes:

Channel:

Flags: ☐ * ☐ E ☐ B ☐ G ☐ L
☐ A ☐ X ☐ C

Digits:

Agent:

Clear Ok Cancel

That is, set:

- **Earliest Start At** to 12 Jun 2014, 00:00:00
- **Latest Start At** to 12 Jun 2014, 23:59:59
- **To Number** to 2006
- **Direction** to Incoming

4. Select **Ok** to load the query into the Criteria Builder:

Criteria Builder

Save E-Mail

Criterion: AND

Start At

is before

13 Jun 2014

17 : 00 : 00

Create Update Remove

Group: OR

Create Update Remove

Criteria:

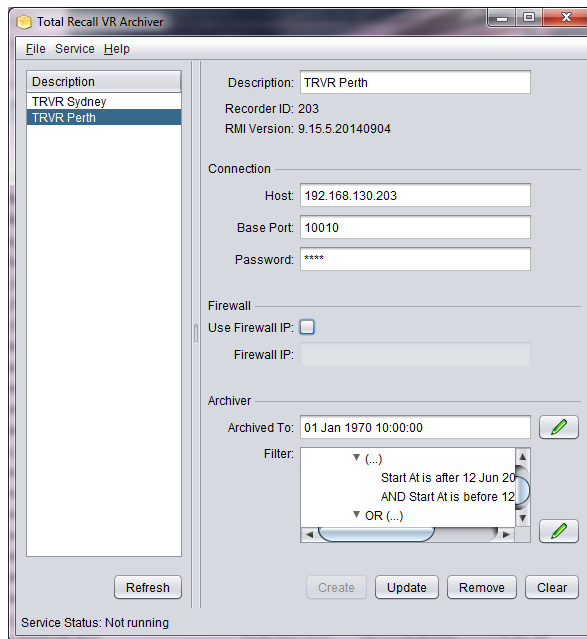
- Start At is 12 Jun 2014 00:00:00
- OR Start At is 12 Jun 2014 23:59:59
- Start At is after 12 Jun 2014 00:00:00
- AND Start At is before 12 Jun 2014 23:59:59
- AND To Number matches 2006
- AND Direction is Incoming

Fast Create Clear

Ok Cancel

5. Now you can use the query as is or modify it as desired before using it.

6. Select **Ok** to close Criteria Builder.



7. Select **Update** to store the query (filter) in the configuration.

Of course, not all queries can be created with this method. For complex queries please use the Criteria Builder directly as explained in the previous section.

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