Total Recall VR LinX Edge

Quick Start Guide

March, 2021
Guide Issue 27.0
Total Recall VR Release 11.11.0

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 Deployment User Guide, 27.0, March 2021

[4] Prolancer Pty Ltd, Total Recall VR Desktop User Guide, 18.0, March 2021

Table of Contents

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 *Commission* ...	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 *Country* ...	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 *Active User* ...	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 *Active User* ...	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 *3** ...	Enter "3*" using the keys on the numeric keypad.
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. Thank You

Congratulations on your purchase of a Total Recall VR professional audio logging and call recording system. Thank you.

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, room microphones and much more.

2.2. About This Guide

This guide contains information intended to get you recording with your new Total Recall VR as quickly as possible.

However, to enjoy the maximum benefit from your purchase we recommend that you carefully read the following additional documents:

- Total Recall VR Deployment User Guide
- Total Recall VR Desktop User Guide

3. Pre Installation

3.1. Unpacking

Please use care and assistance when unpacking, lifting and moving Total Recall VR.

⚠️ DO NOT DROP Total Recall VR. It contains sensitive electronic components.

Check the box for damage. A crushed box, holes, or water damage, for example, could indicate that Total Recall VR has been damaged. Open the box and inspect Total Recall VR and associated accessories.

ℹ️ If Total Recall VR appears damaged then contact your supplier, or us, right away. Save all packaging and if possible take photos that clearly show the damage to all packaging and Total Recall VR.

Check that you have received the following in the box:

1. Dell server with accessories (power cables, mounting rails, face plate and keys for the face plate).

2. Cross over network cable.

3. USB thumb drive that contains Total Recall VR manuals (including this one) as well as Total Recall VR PC applications.

4. One page quick start guide.

ℹ️ If items are missing then contact your supplier, or us, right away to arrange replacements.

3.2. Front Panel

The front panel of your Total Recall VR features a lockable cover which prevents unauthorised access to the BluRay disc drive and the hard drives.

A

B   C   E   D
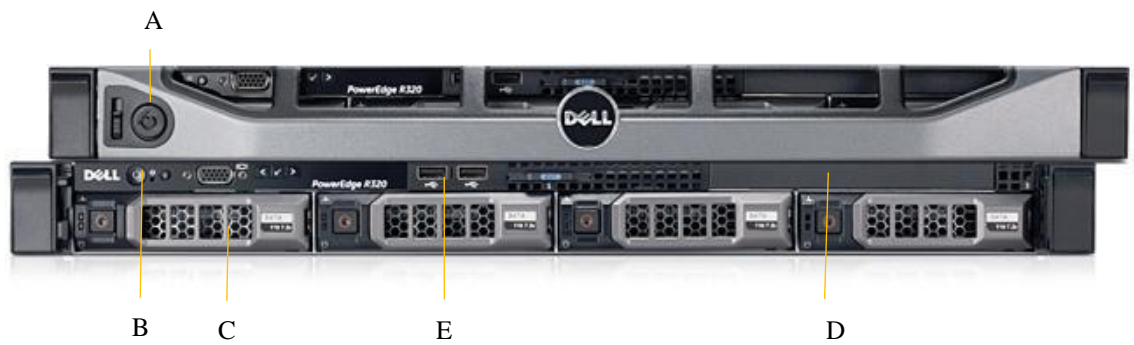
Item	Description	Note
A	Cover lock	Keep the keys in a safe place. They are unique to your system.
B	Power on/off button	A blue light around the power button indicates that the system is on.
C	Easy swap hard disk caddies	Two disks are used in RAID 1 configuration.
D	BluRay disc drive	Archive recordings to DVD and BD discs.
E	USB 3.0 ports	Connect a standard USB key to use as a Total Recall VR archive device.

For more details consult the Dell server owner's manual which is included in the box. Alternatively, you can download an electronic copy from the Dell web site.

3.3. Back Panel

The back panel of your Total Recall VR has a set of standard connectors.

A   B   C

In summary:

Connector	Description	Note
A	LAN port	Total Recall VR 'LAN 1' port. We recommend you use this port to connect Total Recall VR to you enterprise LAN.

B	LAN port	Total Recall VR 'LAN 2' port. We recommend you use this port to record VoIP calls and RTP streams.
C	USB 3.0 ports	Connect a USB 3.0 stick or disk drive to use as a Total Recall VR archive device.

For more details consult the Dell server owner's manual which is included in the box. Alternatively, you can download an electronic copy from the Dell web site.

3.4. Hardware Options

Your Total Recall VR may have been fitted with some of the following hardware options to customise it to better fit your environment.

3.4.1. Solid State Disk (SSD)

This option replaces the 2 internal 3.5" AV-GP hard disks with 2 solid state disks (SSDs).

3.4.2. Double Audio Storage

This option replaces the 2 internal 3.5" AV-GP hard disks with double capacity 3.5" AV-GP hard disks.

This option can be combined with the Solid State Disk (SSD)Solid State Disk (SSD) option. If this is the case, then this option replaces the 2 internal 3.5" AV-GP hard disks with double capacity SSDs.

3.4.3. AMBE Decoder

This option adds 1 or 3 AMBE decoder channels to your recorder.

The option is mandatory if you are recording 2-way radio conversations that use the AMBE codec. Without it, you will not be able to listen to recordings of such conversations on the recorder itself.

In most cases you will need 1 AMBE decoder channel, however there are 2-way call scenarios where more than 1 AMBE decoder channel is necessary to listen to all participants that are part of a conversation. Please discuss your 2-way radios communication with us, or visit our on-line forums, to determine the number of AMBE decoder channels that you will need.

4. Installation

4.1. Safety Information

Always follow basic safety precautions when installing Total Recall VR to reduce the risk of injury from electrical shock and fire.

> ⚠️ WARNING: Potential shock hazard. Total Recall VR must be installed by qualified person.

Observer the following:

1. Read and understand all instructions in Total Recall VR guides.

2. Observe all warnings and instructions marked on the product.

3. Use only grounded electrical outlet when connecting Total Recall VR to a power source. If you are unsure the outlet is grounded, then have a qualified electrician check it.

4. First connect Total Recall VR to grounded outlet, and only then connect the appropriate interface lines.

5. Do not touch the contacts on the ends of any cables used with Total Recall VR. If any cable becomes damaged, then have it replaced immediately.

6. Shut down and unplug Total Recall VR from telephone jacks, and then from power outlets, prior to moving or cleaning.

7. Do not open Total Recall VR. There are no user serviceable parts inside Total Recall VR. Refer all servicing to qualified personnel.

4.2. General

Total Recall VR is computer equipment and in general has the same physical and electrical requirements as a computer server. Attention should be paid to their environment to assure long life and reliable operation.

4.3. Location

When choosing a location for your Total Recall VR, consider the following:

- **Convenience**. Make the unit accessible to operators and service personnel who need to access system.

- **Security**. User with access to the unit can remove power, disconnect cables and possibly compromise the recordings on Total Recall VR. Logins are no protection against determined attackers with physical access to the unit.

- **Operating environment**. Total Recall VR requires adequate cooling, clean and always on power source, vibration and shock free surface and protection from liquids.

> ⚠️ DO NOT place Total Recall VR in an enclosed cupboard, a damp or dusty room or location with direct exposure to sunlight. Doing so will severely reduce the lifetime of your new Total Recall VR and void the warranty.

4.4. AC Power

Total Recall VR uses "universal" switching, AC to DC power adapter. This means you can plug the power adapter into any line (mains) voltage from 100 Volts to 240 Volts AC nominal.

However, to prevent unplanned shutdowns caused by power glitches or interruptions, we strongly recommend the use of an Uninterruptible Power Supply (UPS) unit.

Use only grounded electrical outlet when connecting Total Recall VR to a power source. If you are unsure the outlet is grounded, then have a qualified electrician check it.

4.5. Local Area Network

Connect Total Recall VR to an Ethernet network by attaching a network cable between the RJ45 jack (with label LAN 1 or LAN 2) on the back of Total Recall VR and a network switch. Use a standard CAT5, or equivalent, straight through cable.

Alternatively, use a crossover cable to isolate Total Recall VR from your network and connect it directly to the network connection of a PC (without using a switch). The default configuration of the Total Recall VR network interfaces is:

Parameter	Default Value for LAN 1	Default Value for LAN 2
IP Address	192.168.1.100	192.168.2.100
Netmask	255.255.255.0	255.255.255.0
Gateway	Not set	Not set
VLAN ID	Not set	Not set

4.6. VoIP Networks

Total Recall VR uses a software based VoIP packet collector which is capable of detecting, extracting and then processing SIP, H.323 and RTP packets when connected to an Ethernet link.

The packet collector does not interact with the packets on the Ethernet link. It does not add, remove or modify packets. It simply detects and takes a copy of each packet for further processing.

Each Total Recall VR is equipped with single VoIP packet collector capable of collecting VoIP packets from a single Ethernet link.

> Use the LAN 2 interface for capturing VoIP packets. This leaves the LAN 1 interface to all other network communication.

Ethernet switch SPAN port (or port mirroring as it is otherwise known) is by far the cheapest and easiest way to connect a Total Recall VR to a VoIP network for the purpose of recording. Even if your current Ethernet switch does not support it, myriad other switches, which cost not more than few hundred dollars, do support it.
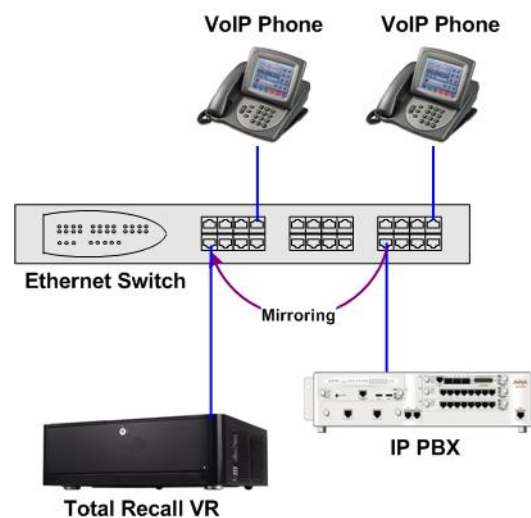

Figure 1: SPAN Port for VoIP Call Recording

SPAN ports may be the cheapest and easiest way to start recording VoIP calls and RTP streams; however in some cases it may be necessary to use other methods in order to record all VoIP calls and RTP streams on the network. The Total Recall VR Deployment Guide [3] explains all techniques in detail.

4.7. RoIP Networks

Total Recall VR is capable of recording audio carried in standard RTP and proprietary protocols (such as Tait VRP) that are extensively used by RoIP and AoIP system in passive and active mode.

In passive mode Total Recall VR uses a software based RTP packet collector which is capable of detecting, extracting and then processing RTP packets when connected to an Ethernet link.

The packet collector does not interact with the packets on the Ethernet link in any way. It does not add, remove or modify packets. It simply detects and takes a copy of each packet for further processing.

Ethernet switch SPAN port (or port mirroring as it is otherwise known) is by far the cheapest and easiest way to connect a Total Recall VR to a RoIP network for the purpose of recording. Even if your current Ethernet switch does not support it, myriad other switches, which cost few hundred dollars only, do support it.
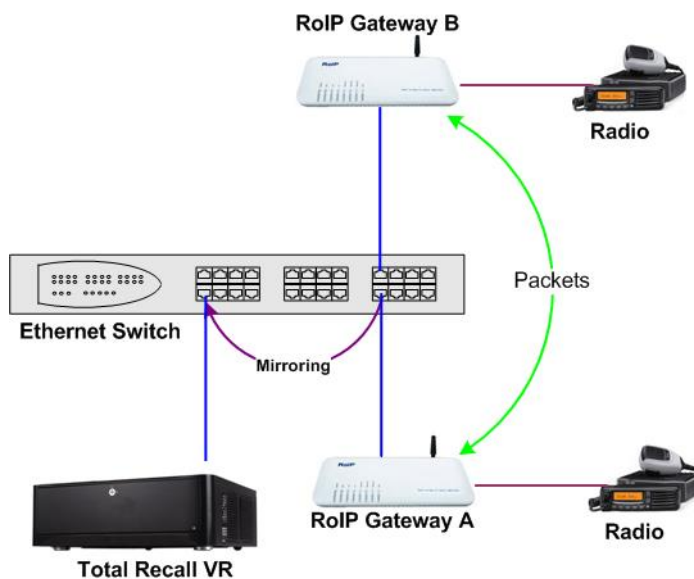

Figure 2: SPAN Port for RoIP Recording

In active mode Total Recall VR accepts RTP and Tait VRP packets on user configurable UDP ports, also known as UDP services. RoIP equipment can send RTP and VRP packets to the UDP services for the purpose of recording.

This interface receives RTP and VRP packets only. It does not send packets to the network.
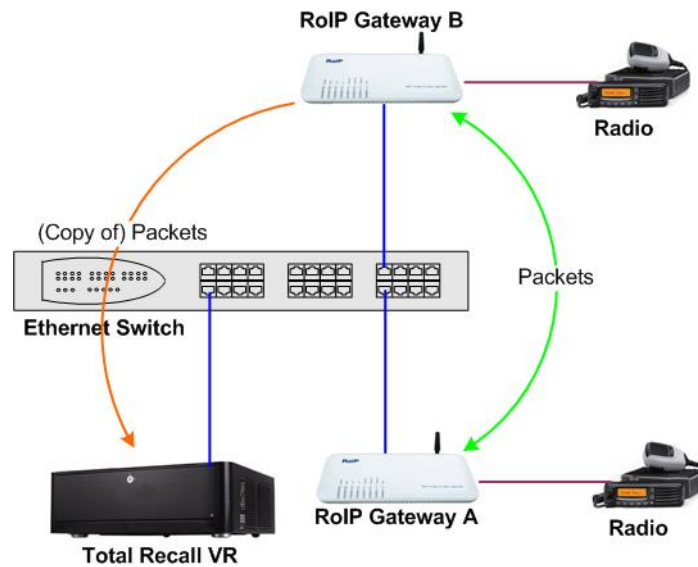
Figure 3: UDP Services for RoIP Recording

4.8. USB Key

Your Total Recall VR is equipped with a number of USB 2.0 and 3.0 ports. You can connect a USB key to any of the ports and use it to archive recordings.

> Total Recall VR can archive to one USB key or disk drive at a time.
>
> If you connect multiple USB keys/disk drives, then Total Recall VR will write archives to the key/drive that you connected LAST.
>
> To write archives to a specific key/drive, first disconnect all USB keys/drives and then connect the one that Total Recall VR should write to.

4.9. Total Recall VR PC Application

One of the Total Recall VR PC applications, such as the Total Recall VR Desktop [4], is the only method of access to your Total Recall VR.

You can install Total Recall VR Desktop on a PC by following the instructions in the Total Recall VR Desktop User Guide [4]. Then, to gain access to your Total Recall VR for the first time:

Connecting with Total Recall VR Desktop for the first time

1. Connect the PC that runs the Total Recall VR Desktop and the Total Recall VR system with a cross-over network cable. Use LAN 1 on the Total Recall VR system.

2. Configure the LAN port on the PC with the following IP address: 192.168.1.99 and the following netmask: 255.255.255.0.

3. Test the connectivity between the PC and the Total Recall VR machine by running the following command on a DOS prompt:

```
ping 192.168.1.100
```

You should see "ping" response from the Total Recall VR system.

4. Start the Total Recall VR Desktop and use the Resource Manager to create a new Recorder as shown on the following dialog:
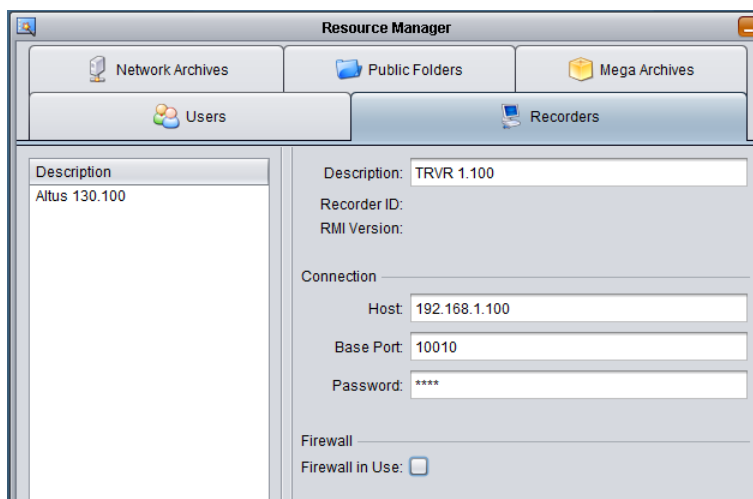
The *Password* is 0000.

5. After you create the Recorder record, you will be able to manage its configuration using the Recorder Control Panel.

5. Configuration

5.1. Default Configuration

Every Total Recall VR leaves the factory with a default configuration which enables it to start recording the minute it is powered up.

In summary the default configuration is:

- The ID of the Total Recall VR is set to 1. If you have multiple Total Recall VRs we recommend that you assign a different ID to every Total Recall VR.

- The time zone is set to Australian Eastern Standard Time. The time and date are set to the current time and date in Sydney, Australia. We recommend that you change the time zone before starting to record.

- The default passwords for the administrator and the standard user are set to '0000'. We recommend that you change both to improve the security of Total Recall VR.

- The LAN 1 interface has an IP address of 192.168.1.100/24.

- The LAN 2 interface has an IP address of 192.168.2.100/24.

- The Remote Interface accepts connections from client applications on IP address 192.168.1.100 and TCP port 10010.

- All recordings will be kept when recorded irrespective of their duration.

- Recordings will not be deleted based on their age, but will be deleted when the occupancy of the disks reaches 95% or more, or the number of recordings in reaches 600,000 or more.

- All SIP calls that are detected on the network that is connected to the LAN 2 interface will be recorded and kept.

- Automatic archiving of recordings is not enabled.

The following list is a summary of the default factory configuration.

General Settings

Language	English
Time & Date	
Use NTP	No
NTP Address 1	0.0.0.0
NTP Address 2	0.0.0.0
Date	Current date in Sydney, Australia
Time	Current time in Sydney, Australia

	Time Zone Area	Australia
	Time Zone City	Sydney
User Session		
	Enable Timeout	Yes
	Idle Timeout	2 minutes
Recent Calls		
	Update Period	10 seconds
	Records to Show	50
User Password		0000
Administrator Password		0000

Call Settings

Min. Call Length	Ignore
Max. Call Length	60 minutes
Max. Call Lifetime	Ignore
Recording Period	Not set (always recording)

Network Settings

Name Server (DNS)	Not set
Host Name	Not set

LAN 1

IP Address	192.168.1.100
Netmask	255.255.255.0
Default Gateway	Not set
VLAN ID	Not set

LAN 2

IP Address	192.168.2.100
Netmask	255.255.255.0
Default Gateway	Not set
VLAN ID	Not set

Extension Settings

Enable Monitoring	Yes
Recording Mode	Record by Default
Enable Phone Keys	No

Start Recording Phone Key   *11

Stop Recording Phone Key   *22

License Settings

The parameters in this group are pre-configured with valid licenses.

Analog Settings

The analogue configuration does not apply to your system.

ISDN Settings

The ISDN configuration does not apply to your system.

VoIP Settings

Packet Collector

Connection Type	Local
Connector	LAN 2
Port	10020
IP Address	192.168.2.100

VoIP Calls

Signalling Type	SIP
Trace Signalling	No

RTP Endpoints	None specified
RTP Streams	None specified

Tait VRP

Enable	No
IP Address	192.168.2.100
UDP Port	9999
VOX Timeout	15 seconds
Address Type	MPT 1327
Fleets	None specified

SIP Media Server

Enable	No
SIP IP Address	192.168.2.100
SIP UDP Port	5060
RTP IP Address	192.168.2.100
RTP Base Port	7000

	Trace Signalling	No
	Firewall	Disabled
RTSP Media Server		
	Enable	No
	RTSP IP Address	192.168.2.100
	RTSP TCP Port	554
	RTP IP Address	192.168.2.100
	RTP Base Port	13090
	Trace Signalling	No
	Firewall	Disabled

Archive Settings

Reminder	No
Auto Archive Every	No
Archive Device	Disc

Maintenance

System Information

| | Recorder ID | 1 |

Remote Manager

Use Dial-up	No
IP Address	192.168.1.100
Base Port	10010
Hostname	Not set
Maximum Sessions	5
Session Duration	2 hours

5.2. Pre-Recording Configuration

Your Total Recall VR will operate with its default configuration.

> However, we strongly recommend that at minimum you change the following configuration in order to customise Total Recall VR to

> your business environment BEFORE you start recording.

General Settings

    Time & Date

        Date   Set it to your current date

        Time   Set it to your current time

        Time Zone Area   Set it to your time zone area

        Time Zone City   Set it to your city

    User Password   Change the password to improve security

    Administrator Password Change the password to improve security

Network Settings

    Name Server (DNS)   Set it to the IP address of your DNS

    LAN 1

        IP Address   Set it to an IP address for your network

        Netmask   Set it to the netmask for your network

        Default Gateway   Set it to the IP address of your gateway

        VLAN ID   Set it to the VLAN ID for your network

VoIP Settings

    VoIP Calls

        Signalling Type   Set to SIP or H.323

    RTP Endpoints   If required, specify RTP end-points

    RTP Streams   If required, specify RTP streams

    Tait VRP   If required, enable it and specify correct settings

    SIP Media Server   If required enable it and specify correct settings

    RTSP Media Server   If required enable it and specify correct settings

Maintenance

    System Information

        Recorder ID   Set it to a unique ID if you have multiple recorders

> ⚠️ We recommend that you restart Total Recall VR after completing the pre-recording configuration.

6. Basic Operation

To access Total Recall VR use the Total Recall VR Desktop application, or one of the other PC applications. The Total Recall VR Desktop User Guide [4] explains the Total Recall VR Desktop application in great detail. This section contains a summary.

Total Recall VR Desktop comprises of the following applications:

Resource Manager

Resource Manager is an application that provides for configuration of application resources such as users, Total Recall VR systems, location of network drives which contain Total Recall VR network archives, Public Folder archives and Mega archives.

This application appears on the desktop only, if and only if, the current user has administrative privileges for the application.

Criteria Builder

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

The queries that are created by this application can be shared by multiple recording explorer applications and the event player and monitor applications. In addition, the queries can be used as recording filter on the users' profile.

This application is always present on the desktop.

Audio Player

Audio Player is a powerful audio player application that provides for play of, and conversion between, all Total Recall VR audio file and encoding formats.

In addition to playing and media conversion, this application provides for sharing of recordings via e-mail and integrity check of recordings that are stored in the TRC file format.

This application appears on the desktop only if the current user has authority to play (listen to) recordings.

Event Player

Event Player is a powerful audio player application designed to play the mix of the audio from multiple recordings ordered in time. This enable users to recreate events that comprise of one or more recordings and listen to the audio of the events as it happened in time.

In addition to playing, this application provides for exporting events to popular audio file formats, sharing of events via e-mail and integrity check of event segments.

Disc Archive Explorer

Disc Archive Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored in Total Recall VR disc archives.

This application appears on the desktop only if the current user has authority to search Total Recall VR archives and only when the application detects a disc with a Total Recall VR archive in one of the disc drives that are attached to the machine that runs the application.

USB Archive Explorer

USB Archive Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored in Total Recall VR USB archives.

This application appears on the desktop only if the current user has authority to search Total Recall VR archives and only when the application detects a USB device with a Total Recall VR archive on one of the USB ports of the machine that runs the application.

Public Folder Explorer

Public Folder Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored in Public Folders.

This application appears on the desktop only if the current user has authority to search Public Folders and only when the application has access to Public Folders.

Network Archive Explorer

Network Archive Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored in Total Recall VR network archives.

This application appears on the desktop only if the current user has authority to search Total Recall VR archives and only when the application has access to network drives that contains one or more Total Recall VR network archives.

Mega Archive Explorer

Mega Archive Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored in Total Recall VR mega archives.

This application appears on the desktop only if the current user has authority to search Total Recall VR archives and only when the application has access to the database and disk space used by the mega archive.

Recorder Explorer

Recorder Explorer is a recording explorer that provides for viewing, searching, exporting and managing of recordings that are stored on Total

Recall VR systems.

This application appears on the desktop only if the current user has authority to search Total Recall VR systems and only when the application can access Total Recall VR systems over the network.

Recorder Monitor

Recorder Monitor is a powerful application designed for real-time monitoring (listening) and observing of recordings in progress on multiple Total Recall VR systems simultaneously. It provides for real time display of recording meta data and waveforms as well as listening to multiple recordings in progress.

This application appears on the desktop only if the current user has authority to monitor recording in progress on Total Recall VR systems and only when the application can access Total Recall VR systems over the network.

Recorder Control Panel

Recorder Control Panel is an application that provides for remote configuration management of the configuration of Total Recall VR systems. In addition, the application has provisions for performing a comprehensive set of maintenance activities on Total Recall VR systems.

This application appears on the desktop only if the current user has authority to manage recorders.

Recorder Status Panel

Recorder Status Panel is an application that shows the status of Total Recall VR systems as well as the status of recording channels on Total Recall VR systems in near real-time.

This application appears on the desktop only if the current user has authority to manage recorders.

6.1.   Recording

You do not need to interact with Total Recall VR in any way to log audio and record calls. Total Recall VR automatically records as instructed by its configuration.

6.2.   Monitoring

Recordings that are in progress, and while in progress, are shown by the Recorder Monitor.

Recorder Monitor is a powerful application designed for real-time monitoring (listening) and observing of recordings in progress on multiple Total Recall VR systems simultaneously.
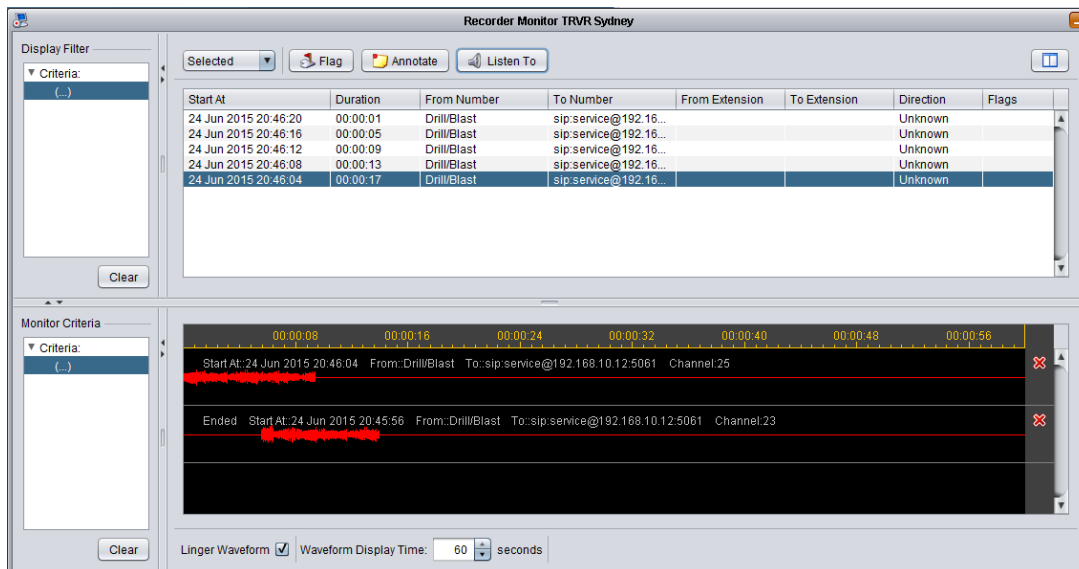
Figure 4: Recorder Monitor Application

Use Recorder Monitor to:

- View the metadata of recordings in progress in real time (as they happen).

- Listen to multiple recordings in progress simultaneously and in real-time on ad-hoc basis.

- Listen to multiple recordings that match a user defined criteria in progress simultaneously and in real-time automatically.

- Use the waveform lingering feature to visually observe who is talking when in a pre-defined time window (for example during the last 2 minutes).

- Add notes to recordings in progress.

- Tag and lock (to prevent deletion) recordings in progress.

6.3. Searching

Recording Explorers provide for viewing, searching, exporting and managing of recordings that are stored in one of the Total Recall VR archives as well as recordings that reside on Total Recall VR systems.

Total Recall VR PC applications have a number of Recording Explorer applications: Disc Archive Explorer, USB Archive Explorer, Recorder Explorer etc. However, while they are different applications, all look, feel and behave the same way to make you user experience simpler and consistent.
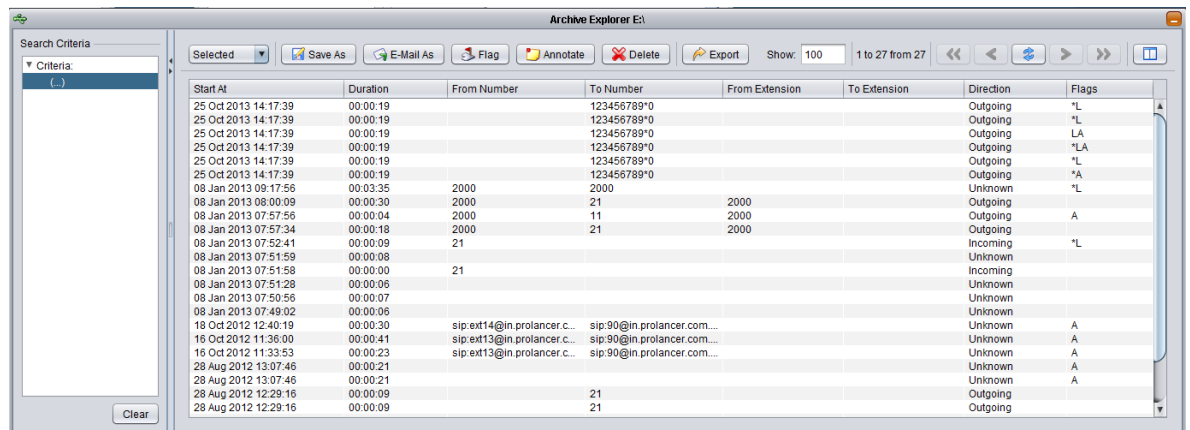
Figure 5: USB Archive Explorer Application - Example Recording Explorer

Use Recording Explorers to search for recordings.

Once you locate recordings of interest, you can export batches of recordings to any of the supported file and media formats. In addition, you can e-mail batches of recordings in any of the supported file and media format. Finally, and if the archive media allows it, you can delete recordings if they are no longer useful to you.

Recording Explorers allow you to edit the metadata of recordings (notes, flags …) and export the metadata of batches of recordings in the CSV format suitable for use in popular reporting tools such as Microsoft Excel as well.

6.4. Playing

Audio Player is a powerful audio player application that provides for play of, and conversion between, all Total Recall VR audio file and encoding formats.
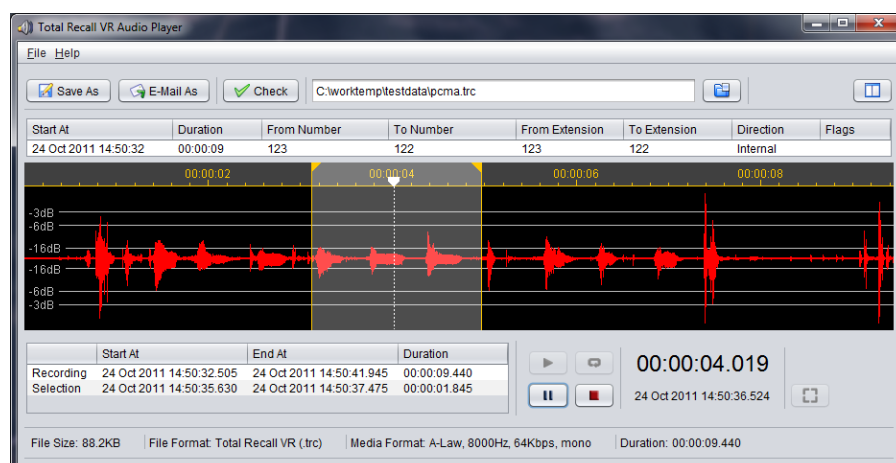

Figure 6: Audio Player Application

Use Audio Player to listen to recordings.

In addition, you can use Audio Player to export individual recordings to standard audio file formats (wav, mp3, aifc, au and spx) that are compatible with popular audio player applications such as Windows Media Player. You can save exported recordings to a file or send them via e-mail to other members of your team.

Finally, you can use Audio Player to check the integrity of recordings stored in the latest generation TRC file format.

The simplest way to use Audio Player is to simply select a recording in a recording explorer window, drag it to Audio Player and simply drop it.
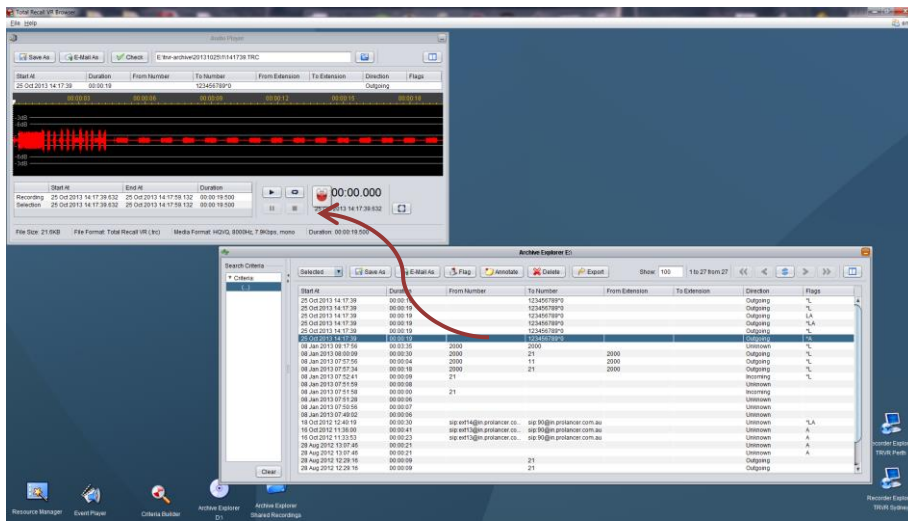
Once Audio Player loads the file and displays the waveform, you can use it to listen to the audio and export it in a number of different formats.

7. Preventative Maintenance

Total Recall VR requires minimal preventive maintenance to ensure maximum performance.

7.1. Hard Disks

The hard disks are the hardest working component in Total Recall VR. Information is constantly written to and read from the disks.

The average life expectancy of the hard disks is 5 years. However, as with any electronic and mechanical technology, the disks in your system may last much longer or much less.

We recommend that you replace the disks in your system every 4 years of so. You can purchase suitable disks from us or your local Total Recall VR supplier.

7.2. Disk Space

Total Recall VR manages disk space automatically.

Total Recall VR has an in-built auto cleaning function which ensures that it has enough free disk space in it to continue recording endlessly.

> ⚠️ A working archiving strategy must be implemented to avoid losing recordings as a result of auto-cleaning.

In general, the auto-cleaning function automatically deletes recordings when the number of recordings reaches more than 900,000, or the disk occupancy reaches 95% whichever occurs first. It removes oldest first recordings until the number of recordings reduces to 700,000 or less and the disk occupancy is below 88%.

7.3. Orderly Shutdown

Total Recall VR must be powered down in an orderly fashion to prevent damage to its electronic components and in particular its hard disks.

> ⚠️ DO NOT turn power off Total Recall VR while it is recording. This will result in damage of its hard disks which may result in total information loss.
>
> In addition it may cause damage to other electronic components.

To shut down, or restart, Total Recall VR in an orderly fashion use the **Shutdown,** or the **Restart,** option from the Recorder Control Panel.
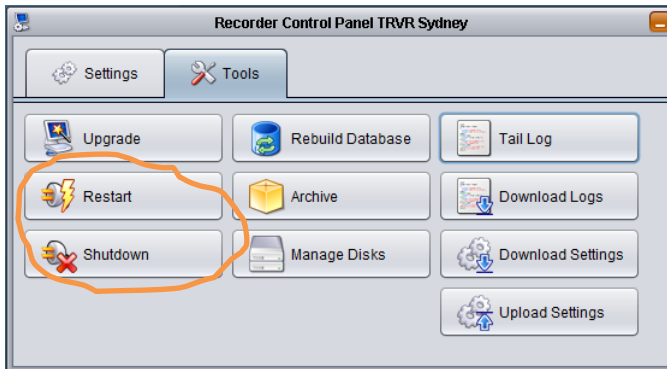
The system will stop all recording, then stop all applications and then stop its operating system thus avoiding any system damage or damage to recording files.

8. Troubleshooting

8.1. Limited Product Warranty

For full details of the limited product warranty for this product please visit our web site: http://www.totalrecallvr.com/warranty.

8.2. Support Information

If after using this manual, and other Total Recall VR manuals, you still have questions about the operation of Total Recall VR, or you are experiencing problems with your Total Recall VR, then:

1. Please visit the Resources section on our web site http://www.totalrecallvr.com

2. Contact technical support via e-mail: itsupport@prolancer.com.au

8.3. Forums

Our online forums, http://www.totalrecallvr.com/forum, contain answers to common problems that you may experience when installing and using Total Recall VR.

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