Replay SIP

Call Recording Manual

TRISYS INC.

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Document Revision Record

RPSIP	Description
160531	New template
160622	WinCap and Minimum Requirements updated; Quicktime removed
160809	Font updated

Replay SIP

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Minimum System Requirements

- Intel Core 2 Duo processor or AMD equivalent
- 4 GB of RAM
- 80 GB of free space on C: drive
- Microsoft Windows 7 Pro / 2008 r2 / 8.1 Pro / 2012 / 10 Pro
- .NET 4.5
- Network switch that supports bidirectional "port mirroring" (or a plain "hub")
- RTP must be un-encrypted
- 2 network cards
- MS Internet Explorer 10 or higher
- Monitor resolution 1024 x 768
- Internet access
- Sound card on each PC used for listening to voice files
- DVD drive (if installing from disk)
- Windows Media Player to play recordings

Before Installing Replay SIP

Replay SIP runs as a Windows Service, ensuring that it starts automatically. Tapit NOVA Call Accounting software provides a Web-based user interface to the recordings. Replay SIP and Tapit NOVA can be installed on the same or on the separate computers.

There are many ways of connecting Replay to capture VoIP traffic. Thus, it is important to clearly understand the network topology and which VOIP traffic needs to be captured. Based on that, the decision is made on "how" and "where" to connect Replay.

One way, in a fairly straightforward environment, is to connect Network card #1 to your network, and Network card #2 to a "mirrored" (SPAN) port of a network switch connected to IP PBX. In some cases, when a "mirrored" port is not available, Replay SIP may be connected to a simple network hub inserted between the IP PBX and the network switch. In a more complex setting, Trisys technicians work closely with client's network staff to accommodate their needs.

When a "mirrored" port is used, data packets processed by the network switch are replicated. Replay connects to this port, captures VOIP packets and decodes them. Please note that RTP (audio) has to be unencrypted.

Client's network administrator must determine the capacity of the "mirrored" port on their system before assuming that this single port can handle the traffic load. If the network is running at high capacity, the packet loss can occur even if the switch is designed with a high speed "mirrored" port.

If you intend to record "station-to-station" calls, please make sure that RTP traffic is "seen" on the mirrored port, so Replay SIP could capture it. Typically, this accomplished by configuring your IP phones to send/receive RTP (audio) packets to/from the IP PBX.
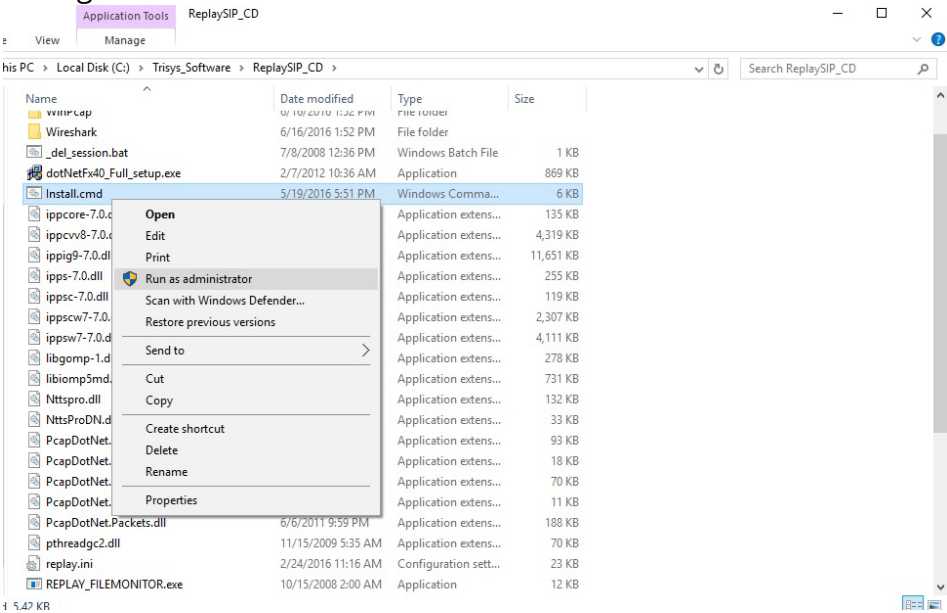
NOTE: Replay can only capture VOIP traffic that it can "see".
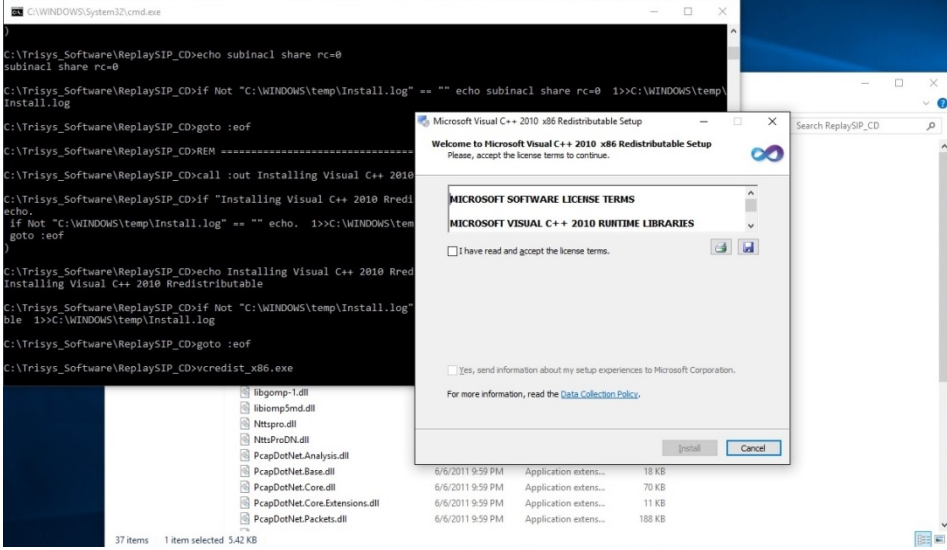
Replay SIP–Single location with IP PBX diagram
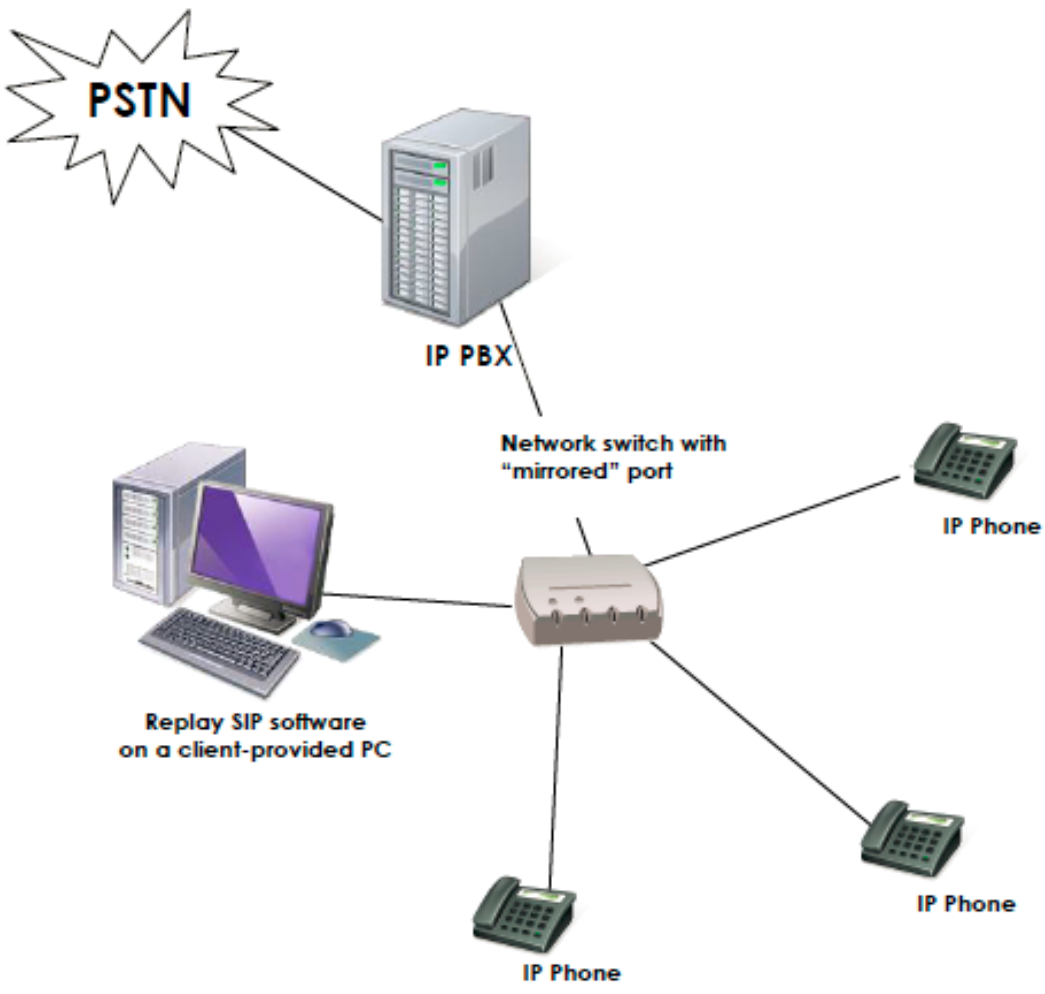
1. Insert **Replay SIP DVD** into the DVD player.
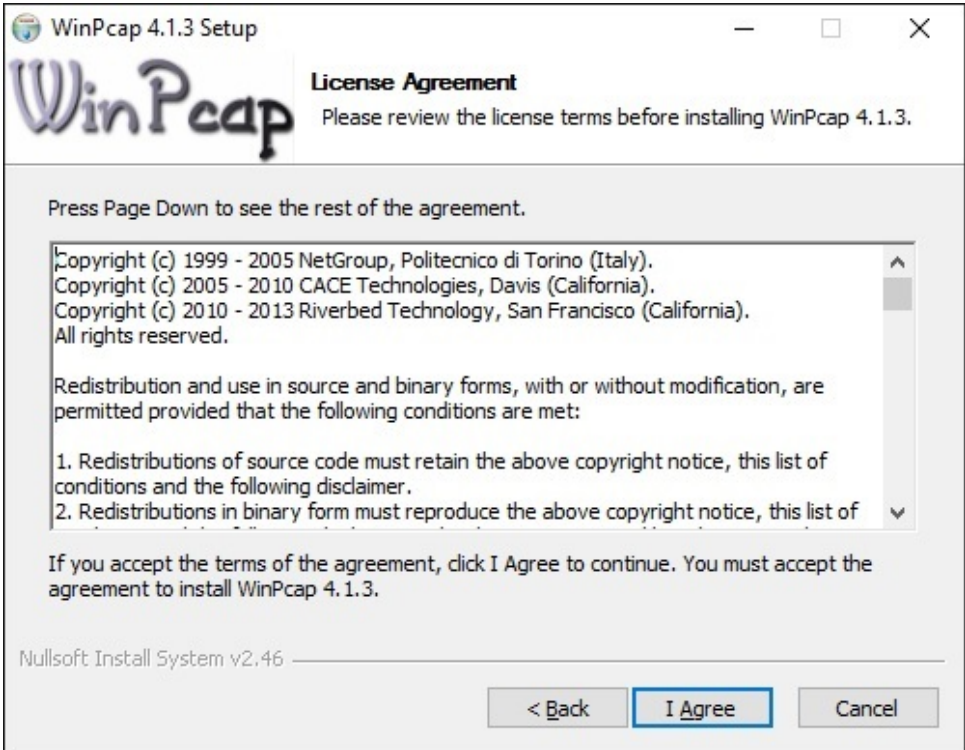2. Right click on the **Install.cmd** file and select Run as Administrator.

3. The **Command Prompt** window comes up. Please wait.
4. The **MS Visual C++ Installation Screen** comes up. To continue check the box to agree to the software license and click **Install**.
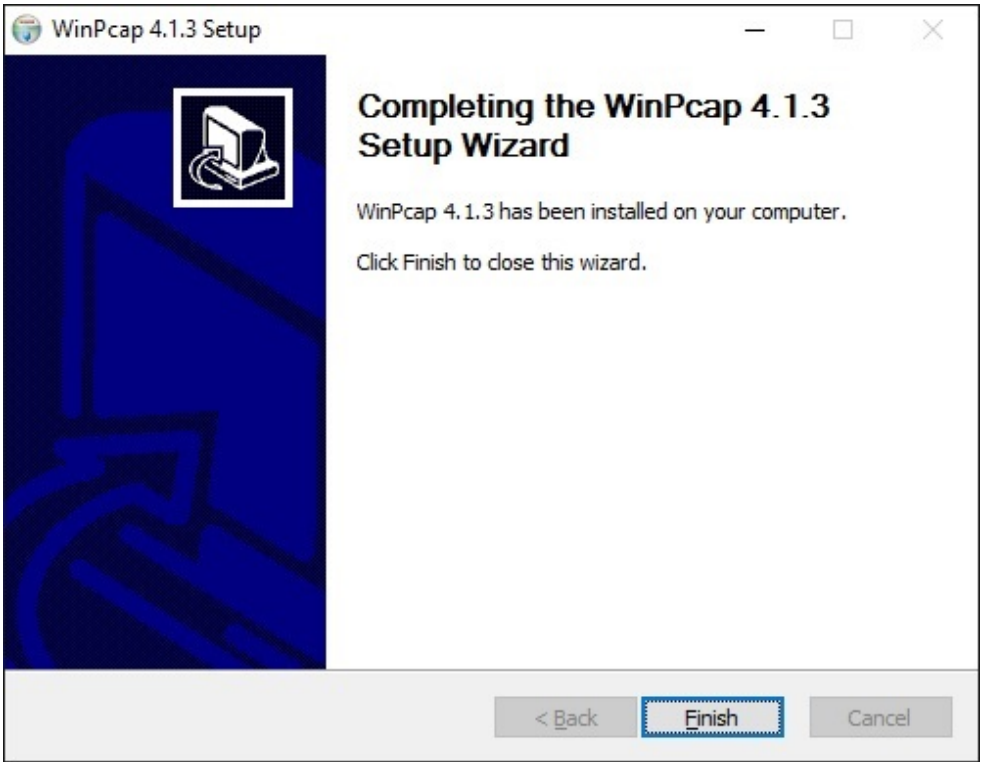
6. First screen of the wizard is displayed. Click on **Next**.

7. The **License Agreement** screen is shown. Click on **I Agree**.

8. The software is being installed and the last screen of the wizard pops up. Click on the **Finish** button.

By default, Replay SIP is installed with a 5-user license valid for 30-days. Please make sure to register this software with a serial number provided by Trisys upon purchase, or it will stop working in 30 days.

See the registration instructions on page 13.

Setting up Replay SIP

Configuration Files

There are two configuration files that control operation of Replay SIP: **Replay SIPData.csv** and **Replay.ini**. They are located in **Replay_SIP\bin** folder on the PC where Replay SIP is installed.

ReplaySIPData.csv

This file contains information for each IP phone that Replay SIP is monitoring.

Replay.ini

This file SHOULD NOT be modified without express request from Trisys' technical support.

Information in the above files must be accurate to insure proper operation of Replay SIP.

To specify IP phones to be recorded:

1. Open the **Replay_SIP\bin** folder on the PC where Replay SIP has been installed.
2. Open the **ReplaySIPData.csv** file with Windows Notepad.
   The file is populated with sample data.
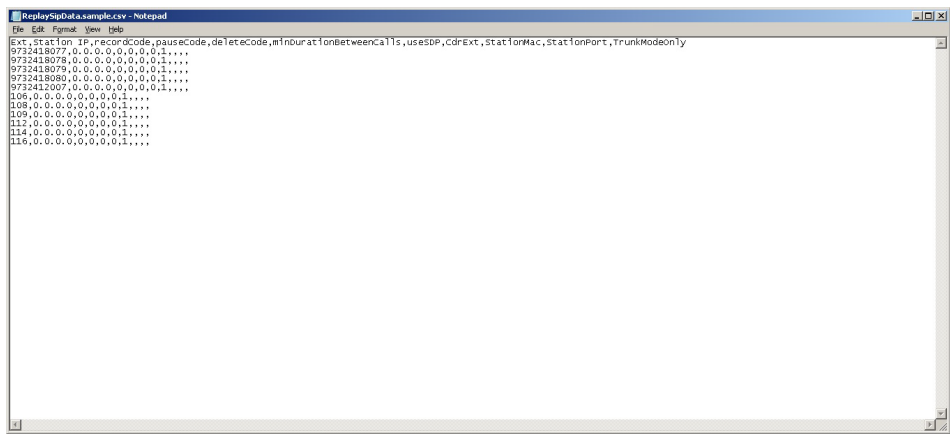
The top line of the CSV file is the header, listing the field names.
All you need to get started is the information for the first field: **Extension**.
For now, please do not change entries in the remaining fields.

3. Replace the **Extension** filed in the provided sample lines with information specific to your system. If the SIP Station ID is different from the extension number, please use the Station ID in the CSV file.

the "Extension" field
This field will contain Extension ID you wish to record.

the "Station IP" field
Leave this field as "0" unless instructed by Trisys otherwise.

NOTE: recordCode, pauseCode and deleteCode will **ONLY** work if your IP phones and PBX support **RTP Events** as per RFC 2833/4733.

the "recordCode" field
If this field has a '0' value, all calls for this phone will **always** be recorded. However, if you would like to record calls on this phone **on demand**, enter a 3-10 character value into the **recordCode** field. Valid characters are: 0-9, "s" for *****, "p" for #. For example if the on demand code is: #86 – the entered value is: p86. In this scenario, during any call on this phone, a user may record the conversation in progress by simply pressing the **recordCode** characters on his phone's keypad. Following our example, a user would press #86 to record the call. Otherwise, the phone call is not recorded. This action is only valid while a call is in progress.

the "pauseCode" field
By default this field is set to '0'. However, if you would like to be able to exclude parts of the phone calls from a voice recording generated on this phone, enter a 3-10 character value into the **pauseCode** field. Valid characters are: 0-9, "s" for *****, "p" for #. For example if the **pauseCode** code is: #86 – the entered value is: p86. In this scenario, during any call on this phone, a user may **pause** call recording by simply pressing the **pauseCode** characters on his phone's keypad (i.e. #86). To **resume** recording, a user has to press the **pauseCode** characters again. The call will be recorded except for the time elapsed between pause and resume. This action is only valid while a call is in progress.

the "deleteCode" field
By default this field is set to '0'. However, if you would like to be able to selectively delete recording (currently in progress), enter a 3-10 character value into the **deleteCode** field. Valid characters are: 0-9, "s" for *****, "p" for #. For example if the delete code is: #86 – the entered value is: p86. In this scenario, during any call on this phone, a user may **"delete"** a recording by simply pressing the **deleteCode** characters on his phone's keypad. This recording will be deleted right after the phone call is over. This action is only valid while a call is in progress.

the "minDurationBetweenCalls" field
Leave this field as "0" unless instructed by Trisys otherwise.

Revise all sample lines to reflect your extension information and add additional extension lines underneath- one line per each extension.

Each Extension line has to look like this:

ext number, **0,0,0,0,0**

Note, field values are separated by commas and there is no comma at the beginning and at the end of the line.

Replay SIP will <u>ONLY</u> record Extensions specified in ReplaySIPData.csv file. However, if the number of licenses exceeds the number of entries in the ReplaySIPData.csv file, the "extra" entries will not be processed.

If you have fewer extensions to record then the sample file: revise sample lines to reflect your extension information and delete extra lines.

When revising ReplaySIPData.csv file, make sure the top line (header line) is left intact.

4. When done, save changes to the file and close it.

5. For the changes to take effect, restart **Replay_SIP** and **Replay_SIP_Filemonitor** services.

Any time you make changes to ReplaySIPData.csv or Replay.ini files, Replay_SIP and Replay_SIP_Filemonitor services need to be restarted to incorporate new information. Please keep in mind that restarting services interrupts call recording. Therefore, if needed, it is recommended to restart services during the lowest call traffic times of the day to prevent loss of voice recordings.

If you need assistance, please contact Trisys technical support: tech@trisys.com.
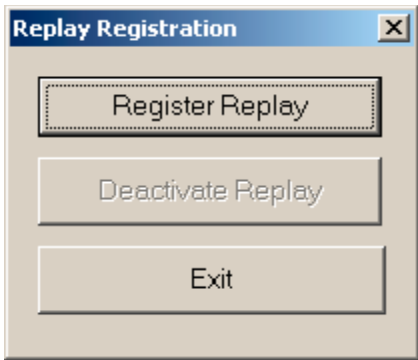
Replay SIP Registration

Replay SIP has to be registered.

It is very important to register your software promptly. Otherwise it will stop functioning within 30 days from the date of installation.

Please make sure to stop Replay services before registration and start them after your software has been registered as described below.
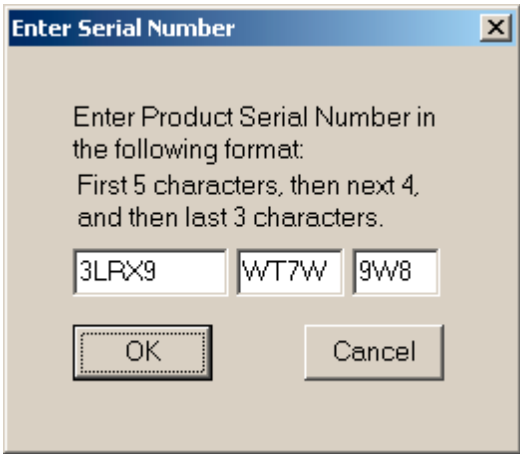
At the PC where Replay SIP Server is installed:
1. Stop **Replay_SIP** and **Replay_SIP_Filemonitor** services via Window Services. Please keep in mind that stopping Replay SIP services interrupts call recording and depending on the call traffic at the time of registration voice recordings may be lost.
2. Go to the **Replay_SIP\Register_Replay_SIP** folder.
   Double click on the **ReplayVIRg.exe** file.
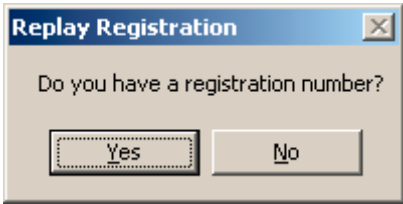3. Click on the **Register Replay** button.

4. The message "The Serial Number ... is found on this computer...". This is the demo serial number that needs to be changed to the serial number provided by Trisys at the time of purchase. Click on **NO**.
5. The message "If you have a Serial Number..." comes up. Click on **YES**.

6. The **Enter Serial Number** screen appears. Enter the new serial number in the provided space.
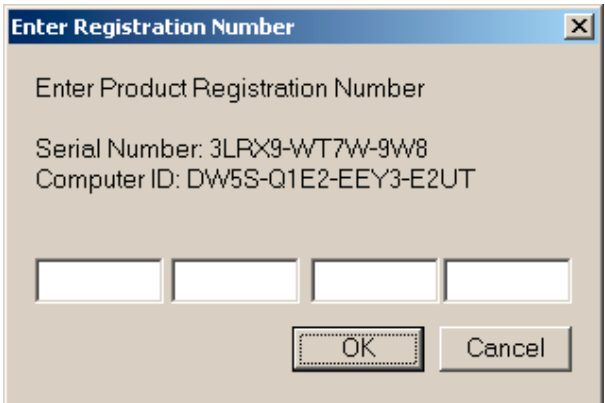

7. If the message "The Serial Number … is registered properly…" appears click on **NO** to overwrite old registration. Otherwise, proceed with point 8.
8. The message asking if you have a registration number comes up. Even though you have not obtained a registration number yet – click on **YES**.

9. The **Enter Registration Number** screen appears.
   It displays your software Serial Number and the Computer ID.
   At this point you have to obtain a registration number to continue.
   You'll be asked for both the Serial Number and the Computer ID during this process. **To obtain Trisys registration number**:
   a. Open **Internet Explorer**.
   b. Go to http://www.trisys.com/register.htm.
   c. Trisys Registration web page appears. Click on registration link for **Replay VoIP**.
   d. The web page with registration instructions appears. Follow the on-screen instructions to obtain the registration number.
   You will need your serial number and the Computer ID displayed on the **Enter Registration Number** screen.
   Once the online Registration process is completed, your registration number will be emailed to the email address provided by you.

10. When you obtain the registration number via email, enter it in the provided space on the **Enter Registration Number** screen and click on **OK**.

Your software is registered.

9. Start **Replay_SIP** and **Replay_SIP_Filemonitor** services via Window Services.
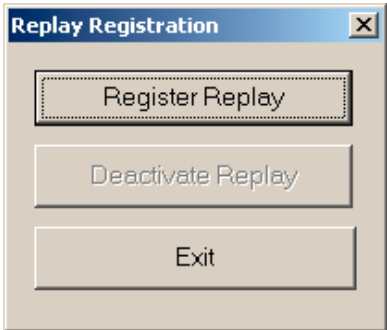
Adding Licenses to Replay SIP

Replay SIP comes with a serial number which determines the number of extensions that can be recorded. If you need to record additional extensions, you need to purchase additional Replay SIP licenses. You will obtain a new serial number upon purchase that will have to be registered.

It is very important to register your software promptly. Otherwise it will stop functioning within 30 days from the date of installation.

Please make sure to stop Replay services before registration and start them after your software has been registered as described below.
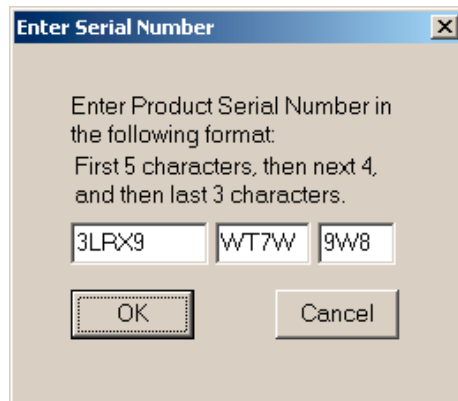
At the PC where Replay SIP Server is installed:

1. Stop **Replay_SIP** and **Replay_SIP_Filemonitor** services via Window Services. Please keep in mind that stopping Replay SIP services interrupts call recording and depending on the call traffic at the time of registration voice recordings may be lost.
2. Go to the **Replay_SIP\Register_Replay_SIP** folder. Double click on the **ReplayVIRg.exe** file.
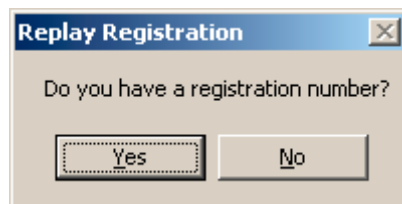3. Click on the **Register Replay** button.

4. The message "The Serial Number … is found on this computer…" This is current serial number that needs to be changed to the new serial number provided by Trisys at the time of purchase of additional licenses. Click on **NO**.
5. The message "If you have a Serial Number…" comes up. Click on **YES**.

6. The **Enter Serial Number** screen appears. Enter the new serial number in the provided space.

7. If the message "The Serial Number … is registered properly…" appears click on **NO** to overwrite old registration. Otherwise, proceed with point 8.
8. The message asking if you have a registration number comes up. Even though you have not obtained a registration number yet – click on **YES**.
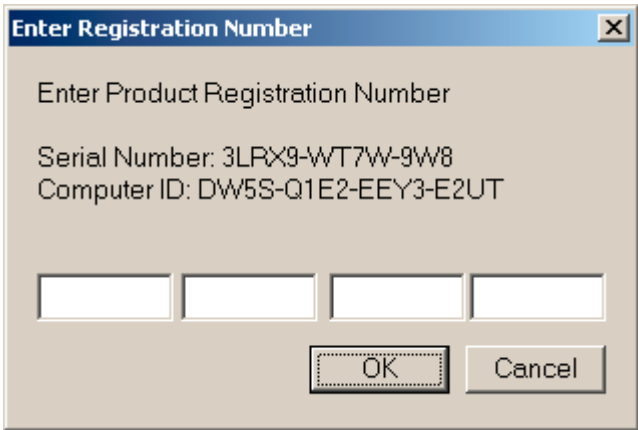

9. The **Enter Registration Number** screen appears.
   It displays your software Serial Number and the Computer ID.
   At this point you have to obtain a registration number to continue.
   You'll be asked for both the Serial Number and the Computer ID during this process.
   **To obtain Trisys registration number:**
   a. Open **Internet Explorer**.
   b. Go to http://www.trisys.com/register.htm.
   c. The Trisys Registration web page appears. Click on registration link for **Replay VoIP**.
   d. The web page with registration instructions appears. Follow the on-screen instructions to obtain the registration number.
   You will need your serial number and the Computer ID displayed on the **Enter Registration Number** screen.
   Once the online Registration process is completed, your registration number will be emailed to the email address provided by you.

10. When you obtain the registration number via email, enter it in the provided space on the **Enter Registration Number** screen and click on **OK**.

Your software is registered.

11. Follow steps below to add desired extensions to the list of extensions in the **ReplaySIPData.csv file**.
12. Open the **Replay_SIP\bin** folder on the PC where Replay SIP has been installed.
13. Open the **ReplaySIPData.csv** file with Windows Notepad The file already contains extensions that are being recorded.
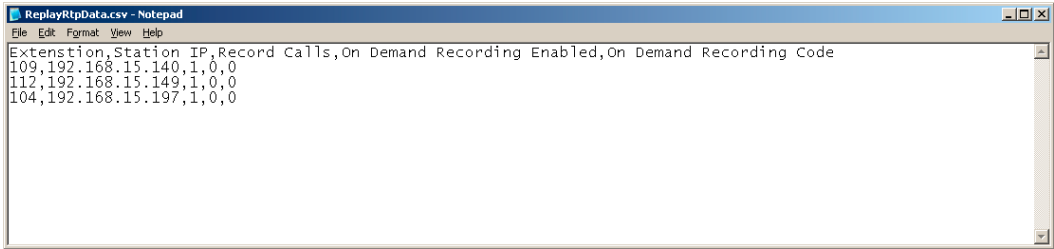
The top line of the csv file is the header listing the field names.
14. **the Extension field**
    This field will contain Extension ID you wish to record.
15. **the Station IP field**
    Leave this field as "0" unless instructed by Trisys otherwise.
16. When done, save changes to the file and close it.
17. Start **Replay_SIP** and **Replay_SIP_Filemonitor** services.

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