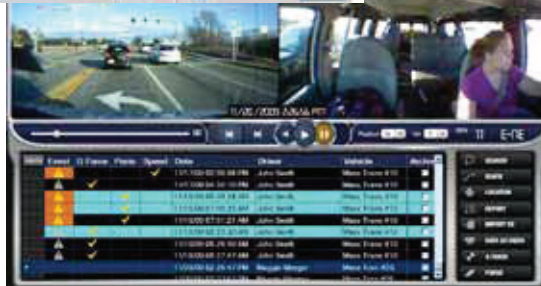
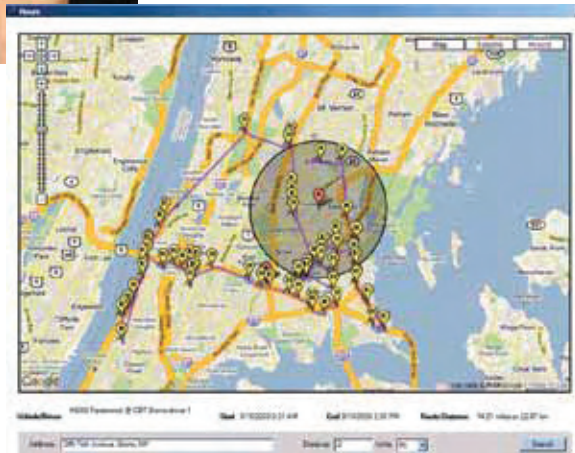


Dual-Vision™ DV-Pro™ User Manual

Version 3.5



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




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Specifications & details subject to change without prior notice Patent Pending

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System Requirements

Operating System Requirements: Windows 7, Vista or XP Professional or Enterprise version. Dual-Vision utilizes Microsoft .NET Framework 3.5 which will be provided as part of the installation procedure if it is not found on the system.

RAM: 1 Gigabyte Minimum, 2 Gigabytes Recommended

Disk Space: The Dual-Vision DV-Pro program requires 10 Megabytes of disk space. Dual-Vision data files are approximately 20 Megabytes per minute, so the amount of disk space required will be heavily dependent on how much Dual-Vision data is stored at any time. If the user intends to catalog files on a daily basis it is recommended that external storage be dedicated to Dual-Vision DV-Pro of at least 500 Gigabytes.

For example, a school bus which is run 5 hours a day will require 36 Gigabytes of storage if a complete record of 5 days of operation is kept. Similarly, a paratransit vehicle operated 20 hours per day will generate almost 30 Gigabytes of data every day.

Installation

Upgrading from an earlier Version to DV-Pro 3.5

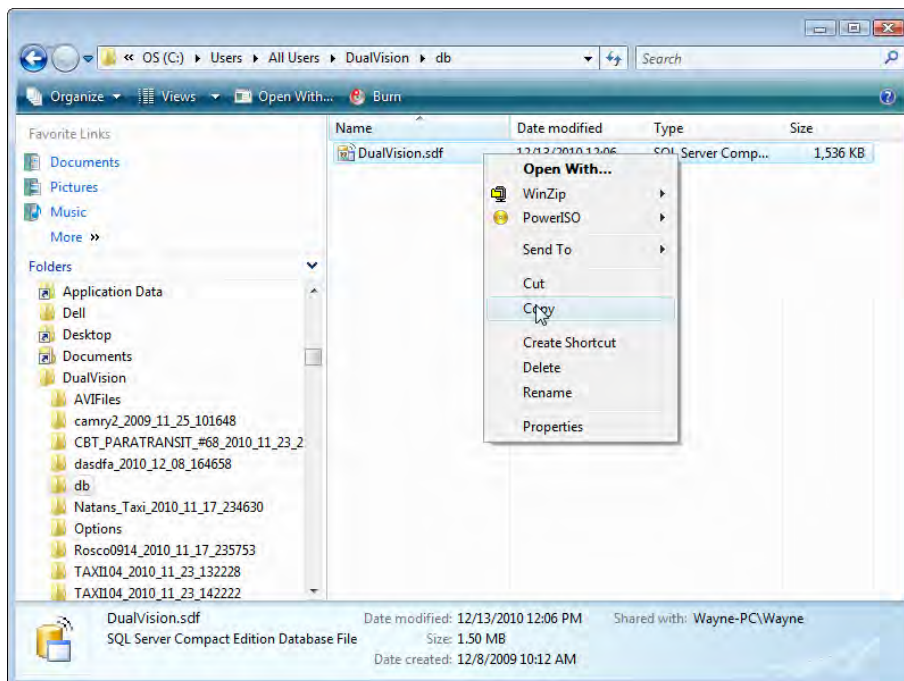
DV-Pro 3.5 will perform an automatic upgrade from earlier versions. You may wish to back up your existing DV-Pro database file before beginning the upgrade.

Backing Up the DV-Pro Database

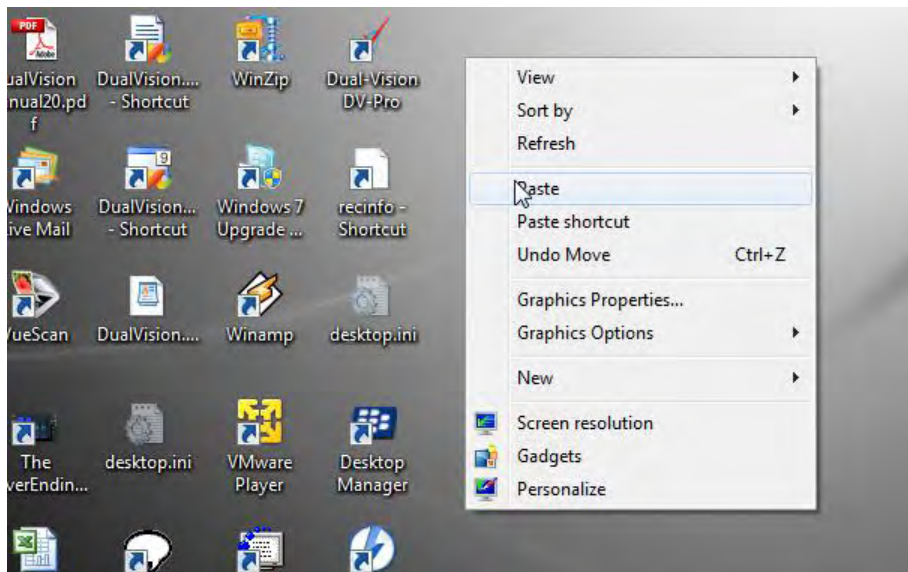
Depending on your operating system, the database file, Dualvision.sdf, will reside in the following default directory:

- On a Windows 7 System, C:\ProgramData\Dualvision\db\DualVision.sdf
- In Vista, C:\Users\All Users\DualVision\db\DualVision.sdf
- In XP, C:\Documents and Settings\All Users\Application Data\DualVision\db\DualVision.sdf

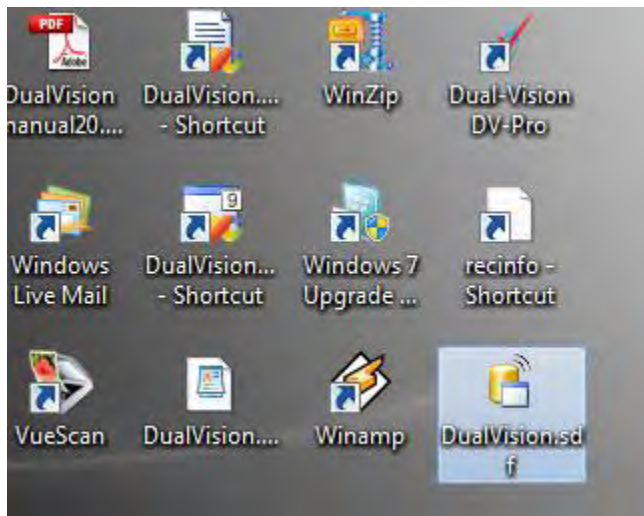
1. **Using Windows Explorer, copy Dualvision.sdf to the Desktop. Right-click on the filename, and choose Copy.**



2. Then, right-click on the Desktop, and choose Paste.



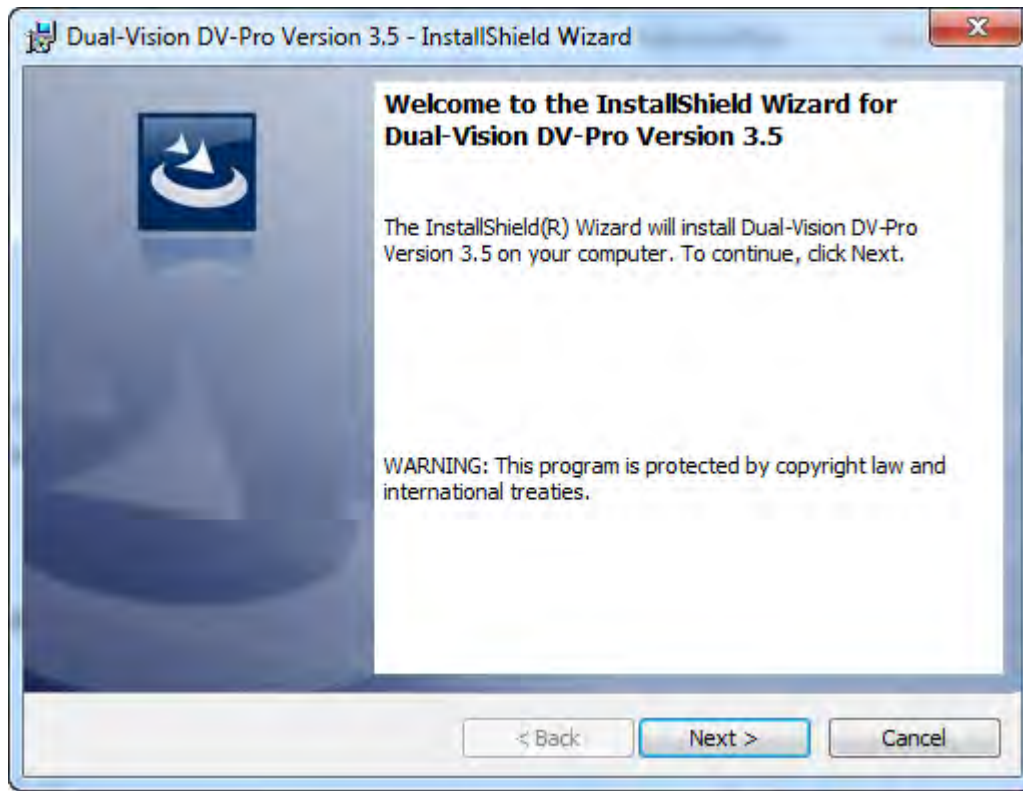
The newly created copy will now reside on the Desktop, as shown below.



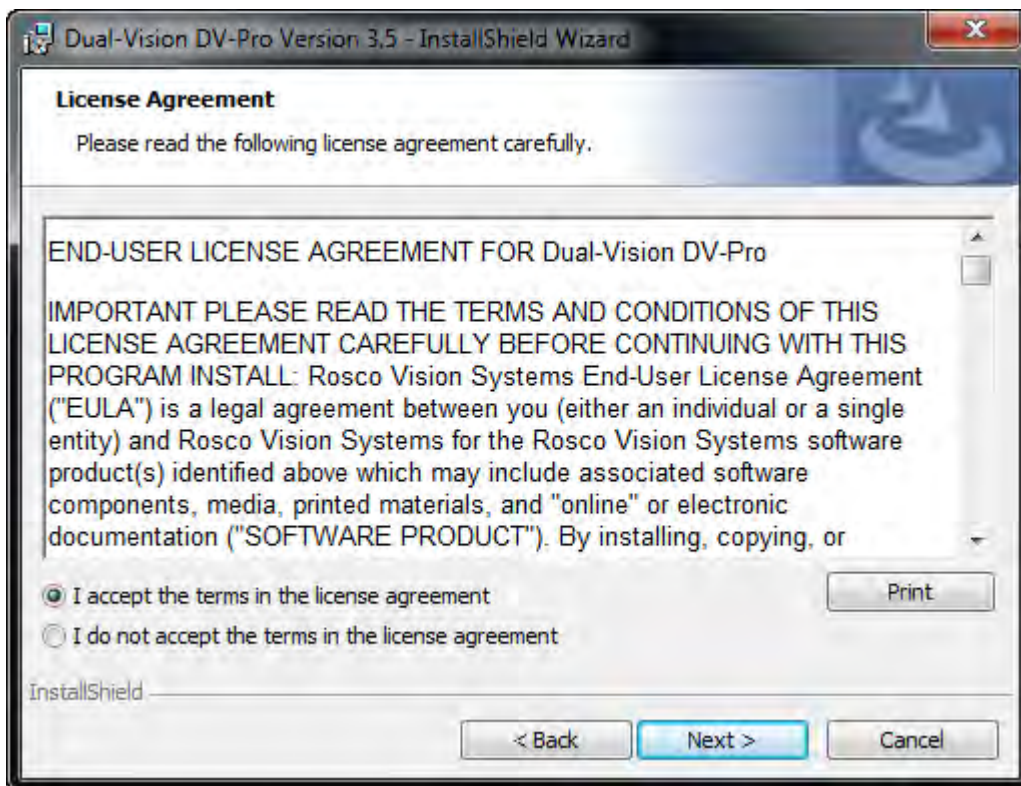
Instructions for Performing the Version 3.5 Upgrade

Installation must be performed by a user with Administrator privileges.

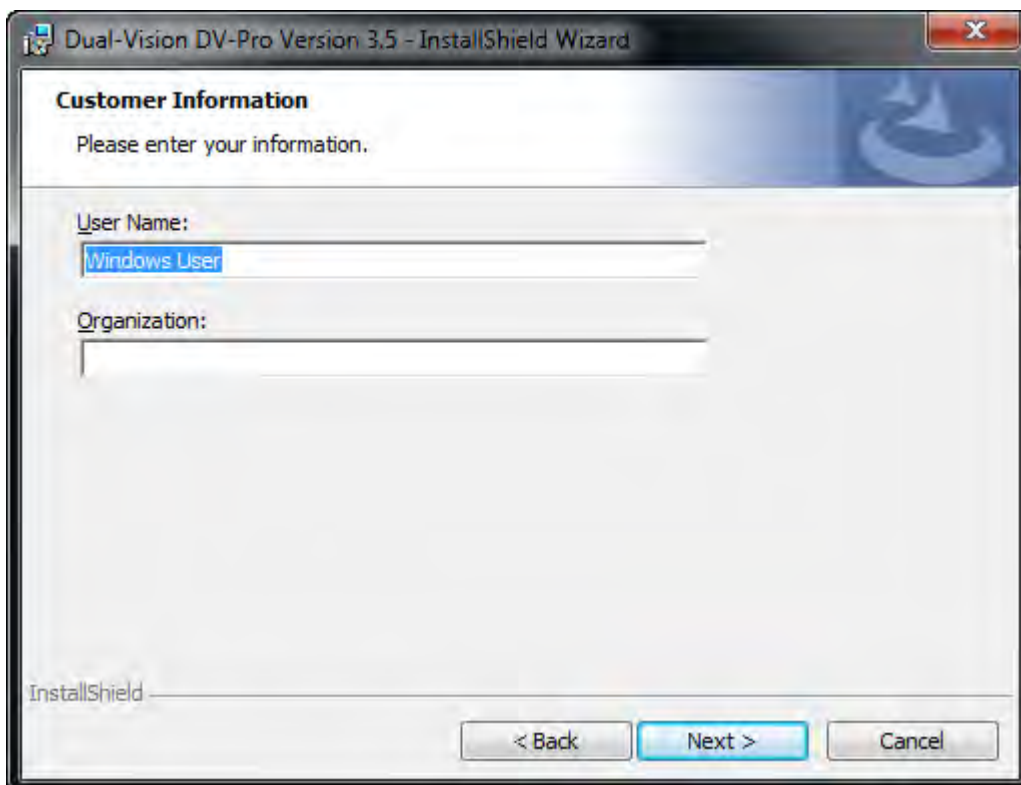
1. Run Setup.exe from the DV-Pro CD and click Next at the introductory screen.



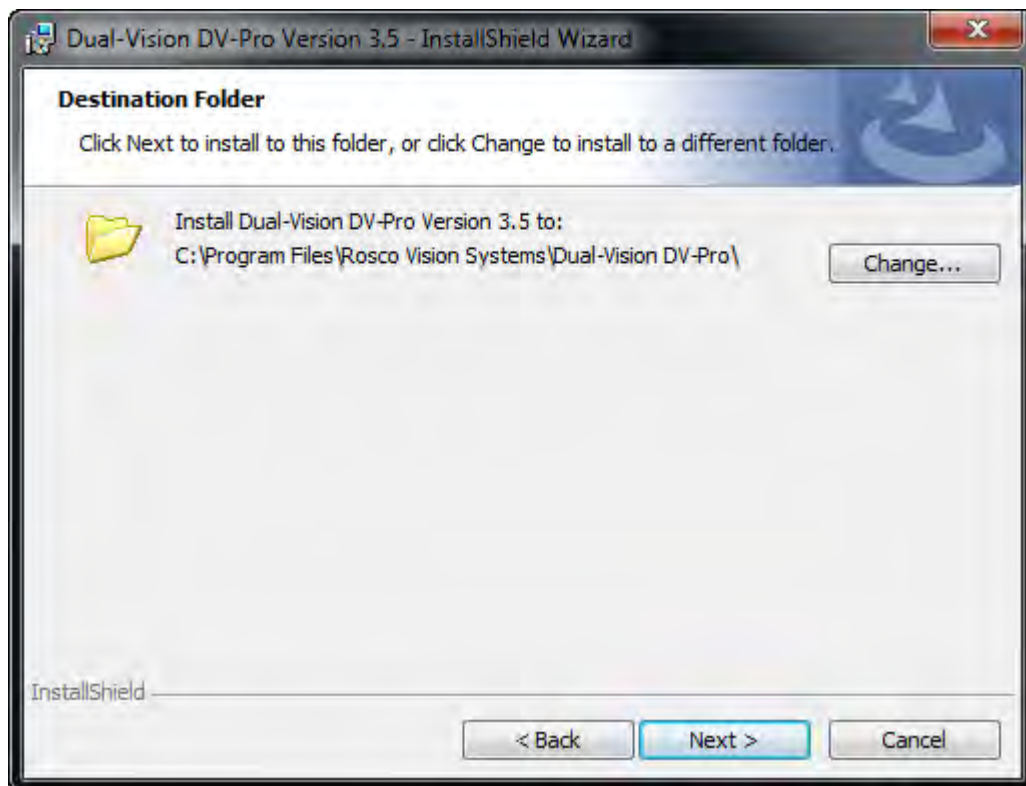
2. At the License Agreement; choose the "I accept the terms in the license agreement" button and click Next> to continue.



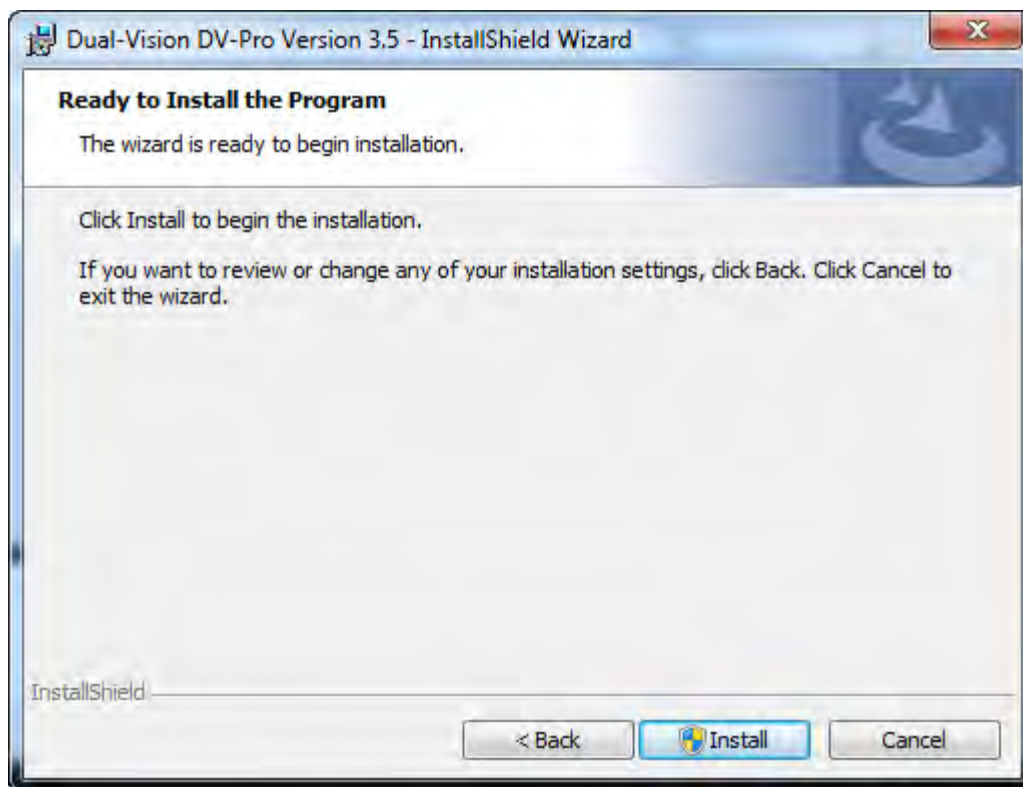
3. Identify yourself and your organization. Click Next> again after entering that information.



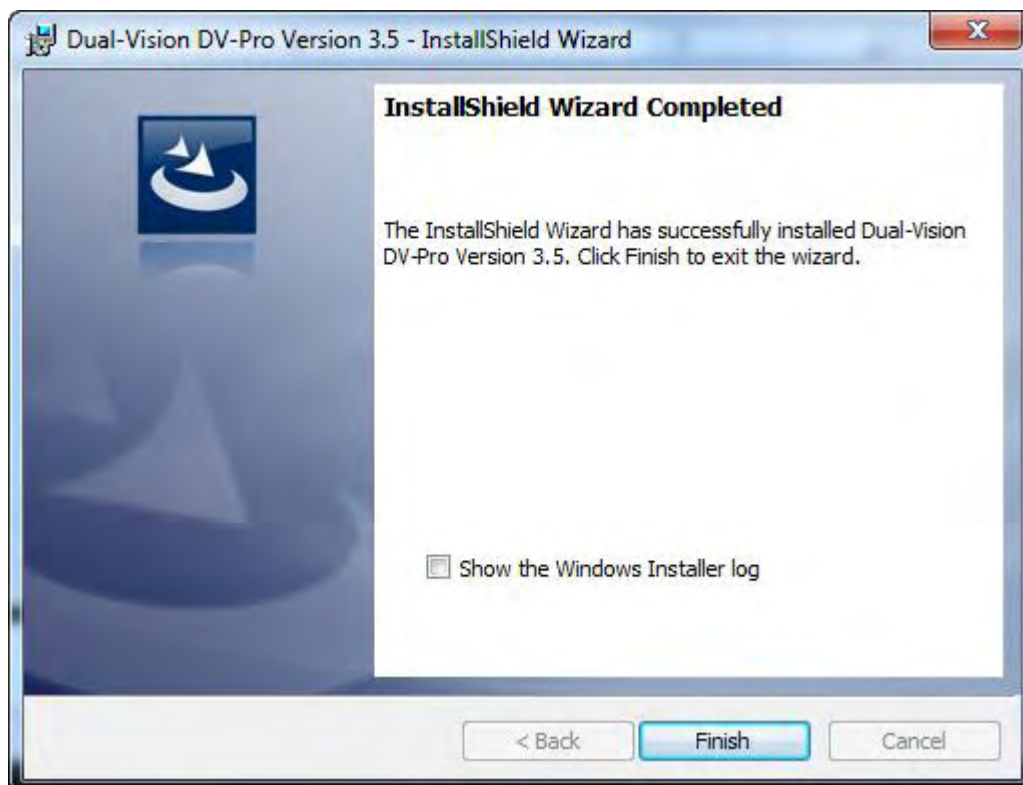
4. Specify an installation directory (or accept the default) and click Next >.

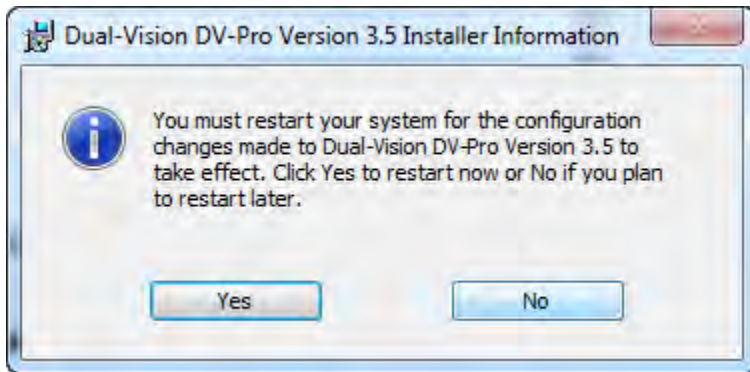


5. Click Install to copy the files to your computer.



6. Click Finish to complete the installation.



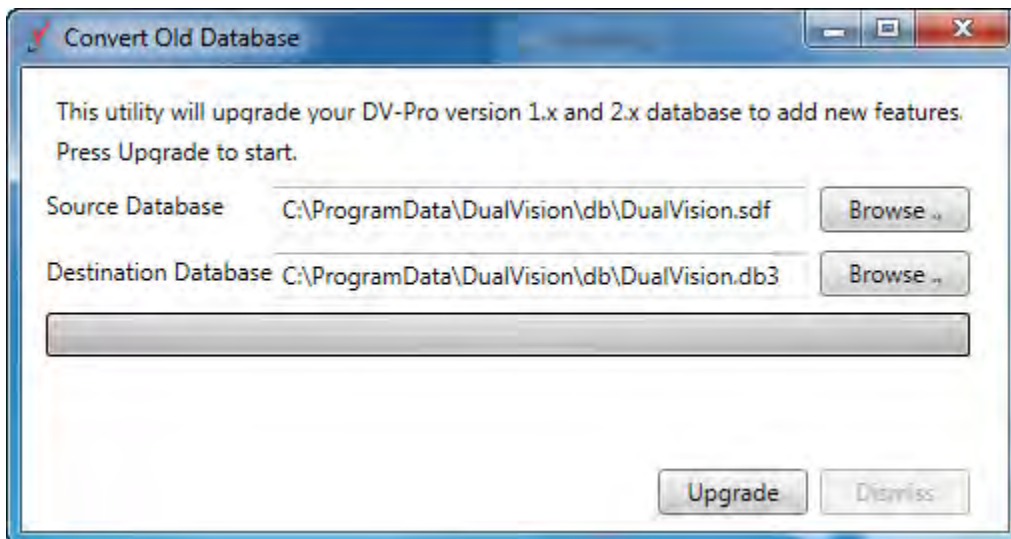


Your system will need to restart. You will be given an opportunity to restart. If you choose to restart later, go to the start programs icon and "restart" your computer before running Dual-Vision DV-Pro.

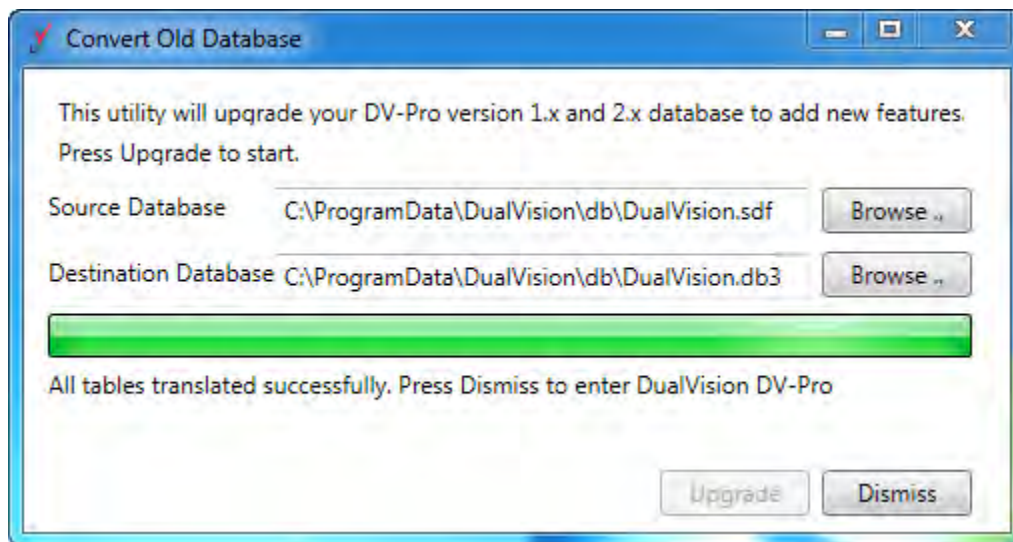
Once the restart has completed, Dual-Vision DV-Pro can be launched from its icon on the desktop.

When DV-Pro is run for the first time after an upgrade, the existing database will be converted to add new features. The window shown below will appear.

1. Click **Upgrade** to begin the conversion process.



When the conversion operation has completed, the following window is shown.



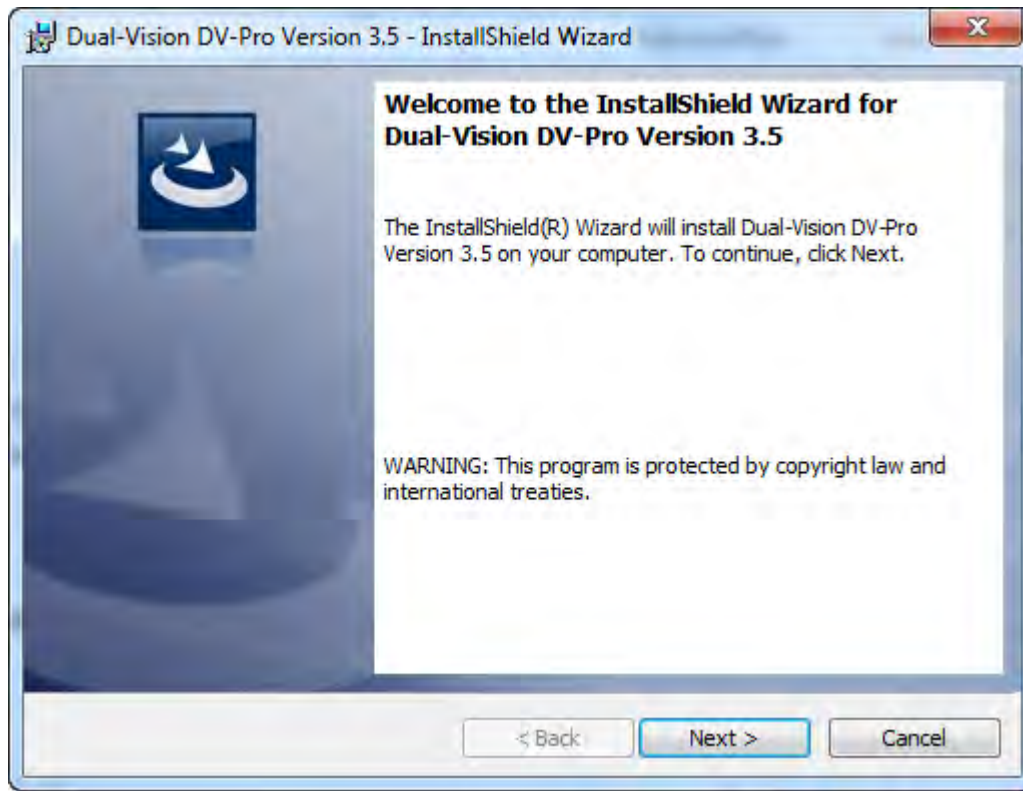
2. Click **Dismiss** to complete the conversion.

This completes the upgrade process. Continue on page 29 for DV-Pro operational instructions.

First-Time Installation

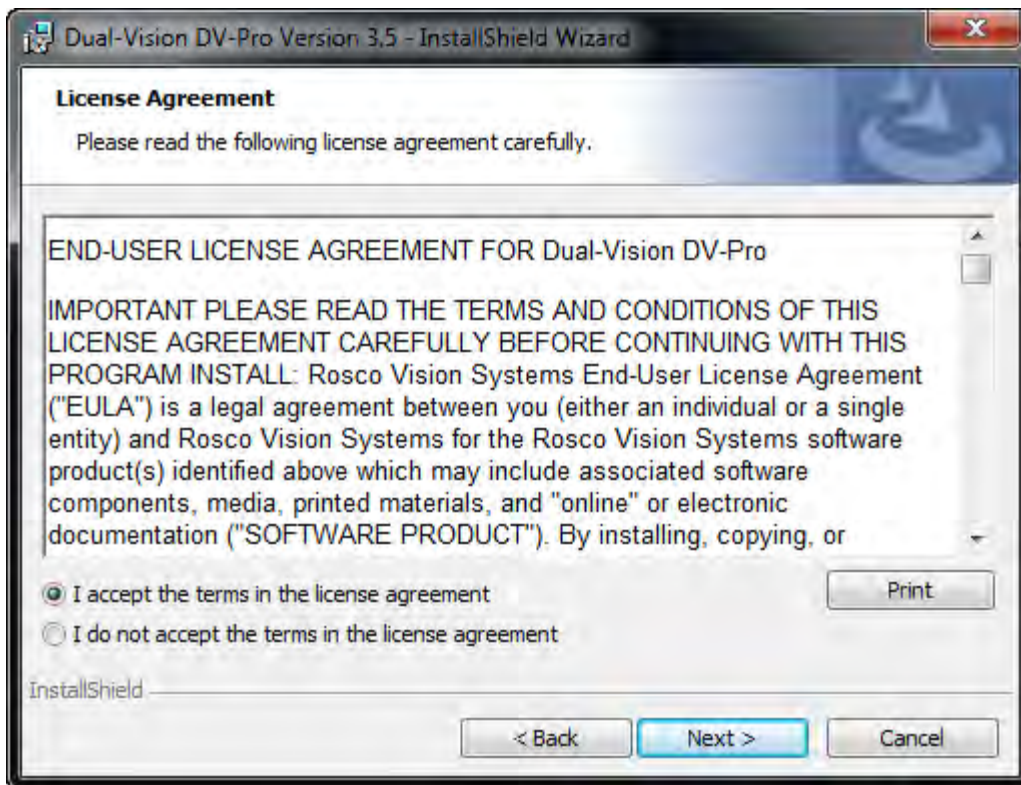
Installation must be performed by a user with Administrator privileges.

1. Run Setup.exe from the DV-Pro CD and click Next at the introductory screen.

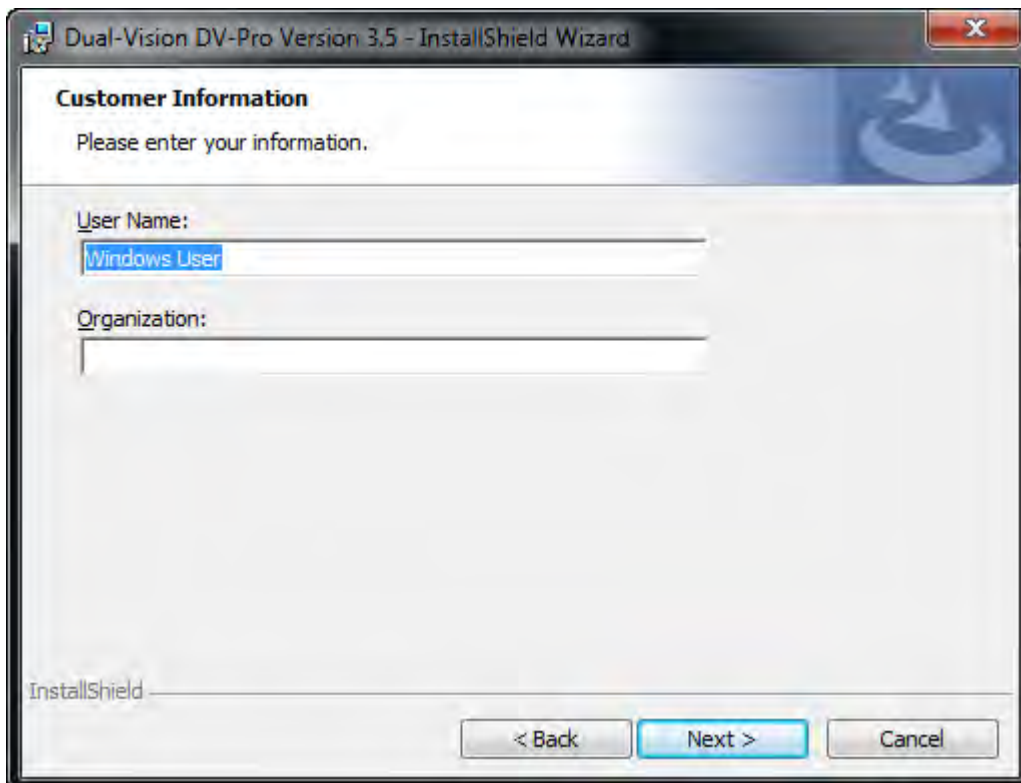


This will first check to determine which version of the Microsoft .NET Framework is currently resident on your computer, and, if version 3.5 or later is not available, it will install it. This operation typically takes several minutes.

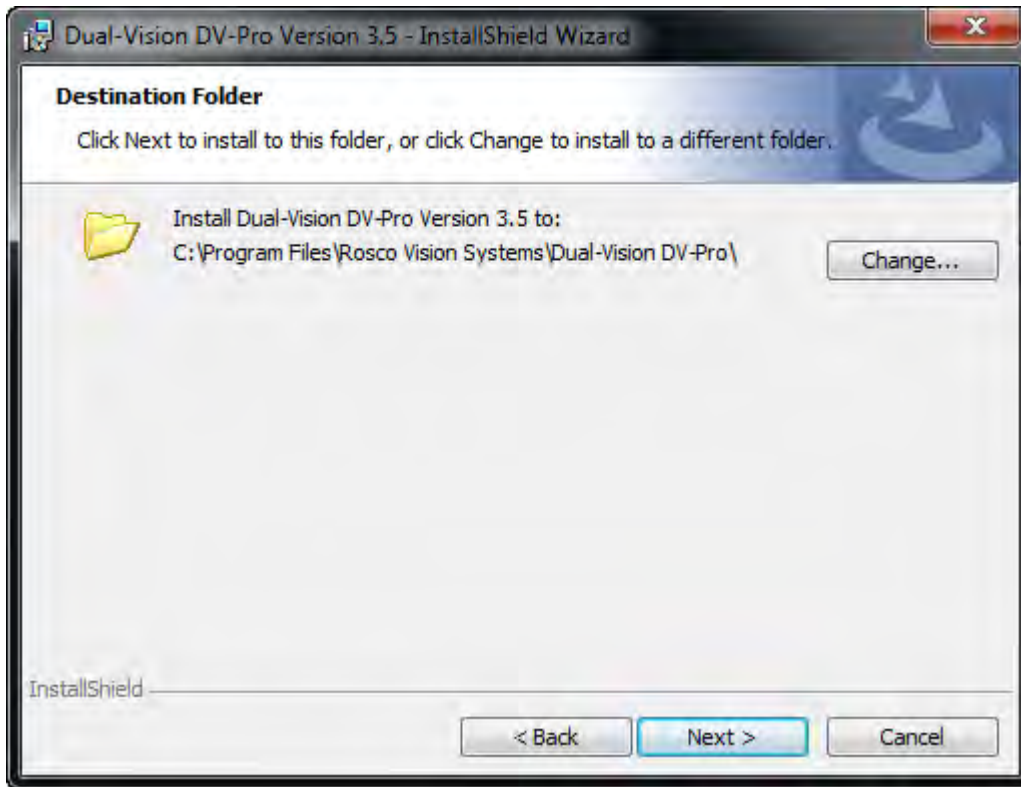
Once .NET framework installation is complete, Dual-Vision DV-Pro will begin.



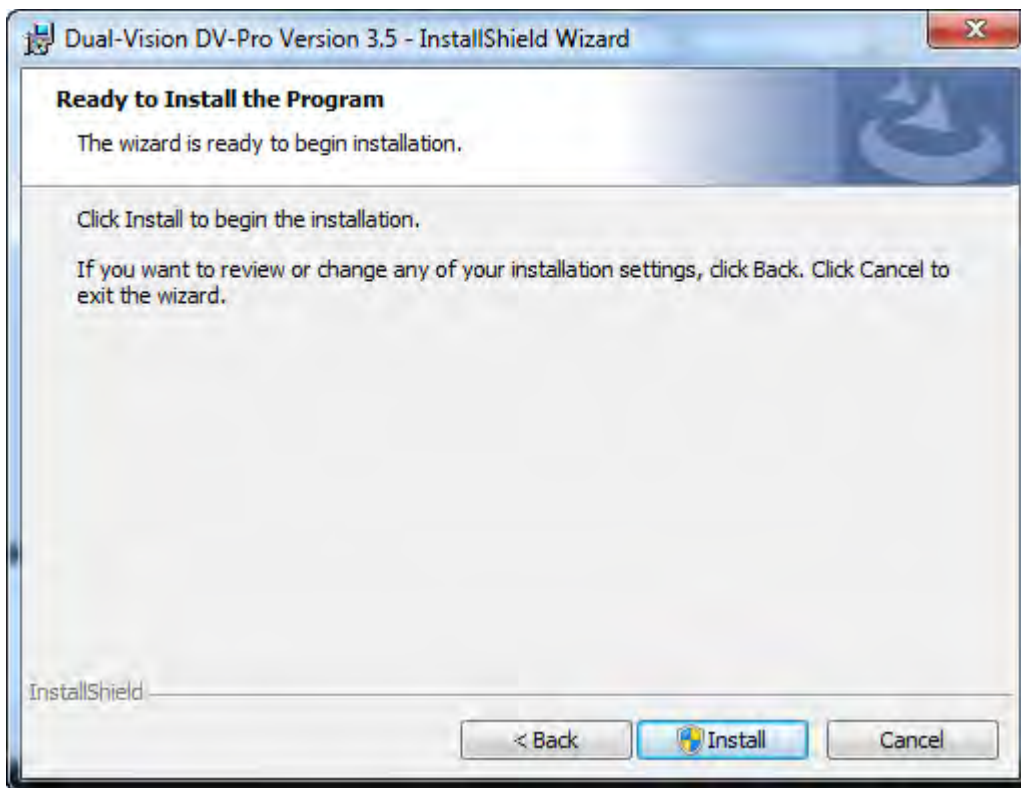
2. At the License Agreement; choose the "I accept the terms in the license agreement" button and click Next> to continue.



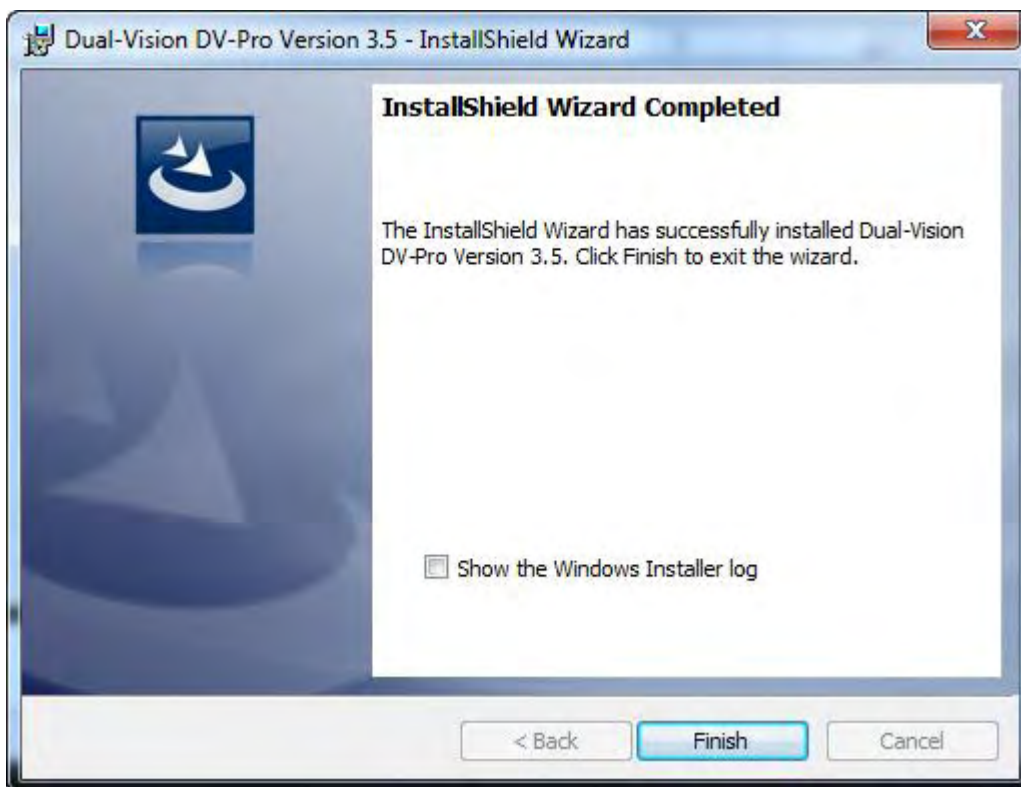
3. Identify yourself and your organization. Click Next> again after entering that information.



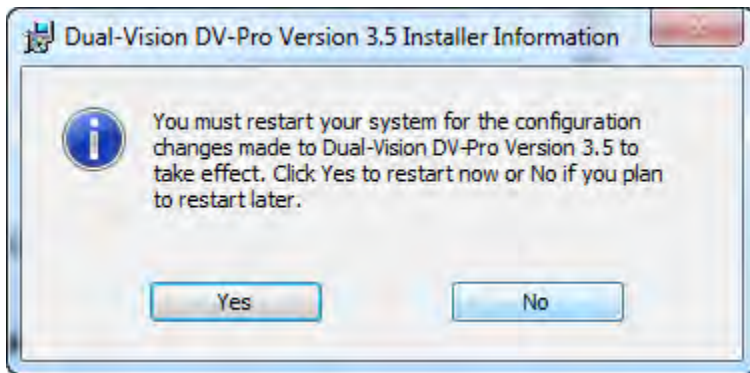
4. Specify an installation directory (or accept the default) and click Next >.



5. Click Install to copy the files to your computer.



6. Click Finish to complete the installation.



Your system will need to restart. You will be given an opportunity to restart. If you choose to restart later, go to the start programs icon and “restart” your computer before running Dual-Vision DV-Pro.

Once the restart has completed, Dual-Vision DV-Pro can be launched from its icon on the desktop.

Other Installation Considerations

1. **Database file** - After completing the installation, a newly created copy of the database file, “DualVision.db3”, will have been created in the database directory.
2. **Setting Permissions** - If necessary, set the permissions for Dualvision.db3 so that non-administrator users running the software will have read/write/modify permissions. This is further described on page 26 of this manual.
3. **Running as a non administrator** - After the Administrator logs off, any other user who has been given permission by the administrator will be able to run DV-Pro on this computer.
4. **Activation (when upgrading from 1.0 or 1.1)** - When the computer has rebooted, and the program starts for the first time, a new **activation key** which is compatible with version 3.5 must be used. See the following section.

Running DV-Pro for the first time

When DV-Pro is launched for the first time the License Manager will prompt you for a serial number and the email address you used when registering online. Provided serial numbers must be used within 30 days of issue. They will not expire once they are validated.

Do not enter the “-“ in the number provided. If you copy the whole serial number from the email sent to you or the web form where you downloaded it from, you can paste it into the controls. Place your cursor in the first serial number field and press Ctrl-v, and the number will flow into the rest of the fields.

Serial Number Entry



The screenshot shows a Windows-style dialog box titled "Enter Your Serial Number". It features a close button (X) in the top right corner. The dialog contains two main input sections. The first section, labeled "Serial Number", consists of six individual text boxes, each containing a digit: "1234", "5678", "9012", "3456", "7890", and "1234". The second section, labeled "Email", contains a single text box with the email address "sample@somecompany.com". At the bottom of the dialog, there are two buttons: "Exit" and "Validate".

*this serial number and email are not valid and are for demonstration purposes only.

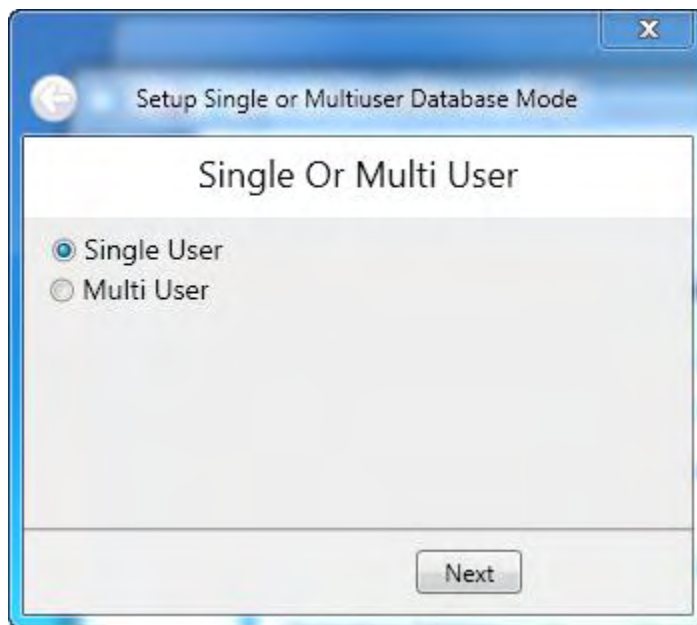
After you have validated the serial number you will be taken directly to main screen of DV-Pro. You will not be prompted to enter this information unless your installation becomes corrupted.

Specifying Single or Multi User Operation

DV-Pro 3.5 makes it possible for multiple users to access data from a common database (Multi User Operation). Depending on the access permissions assigned to that database, an administrator may choose to give some users Read Only access to that data, while allowing others the ability to write data to it as well. See the Appendix at the end of this manual, Information for Administrators Establishing Access Permissions for Multiple Users, for more information.

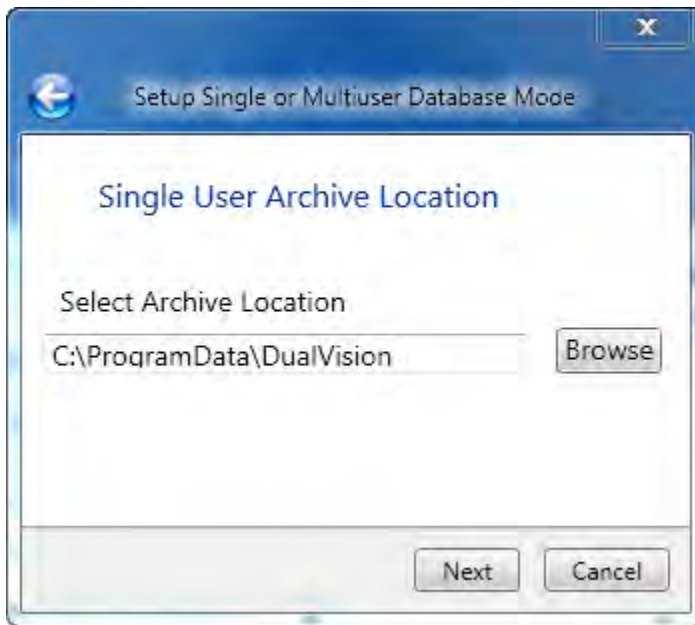
When first running the program, the administrator will have to specify which mode is to be used, and where a shared database exists or should be created.

When the program starts up for the first time, the following dialog appears:



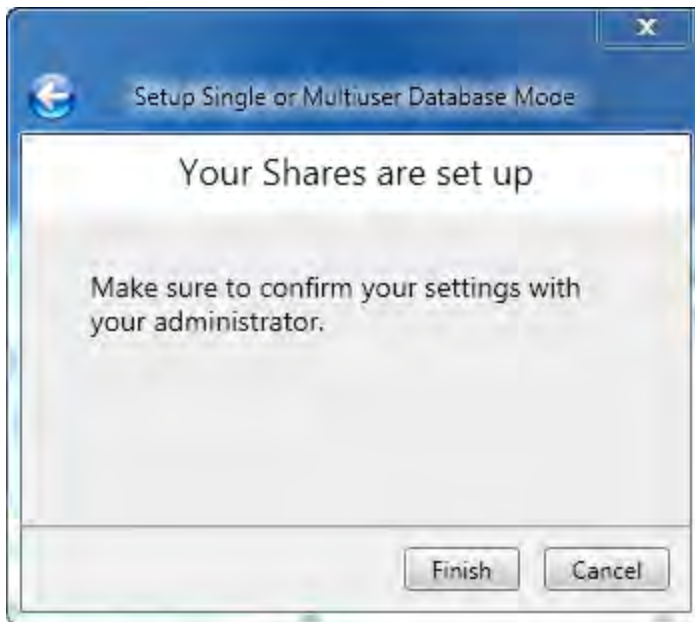
1. Choose the mode the program will be operated in, and click Next.

If Single User mode is chosen, the following screen appears:



2. Specify a directory where video files will be saved and click Next.

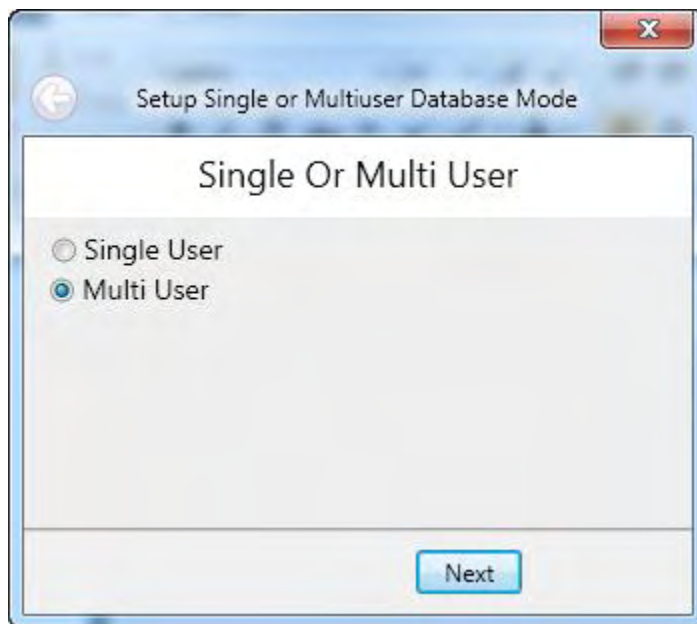
Since these files are large, a disk location where several Gigabytes of data can be stored is recommended. See **Disk Space** on page 3 for more information.



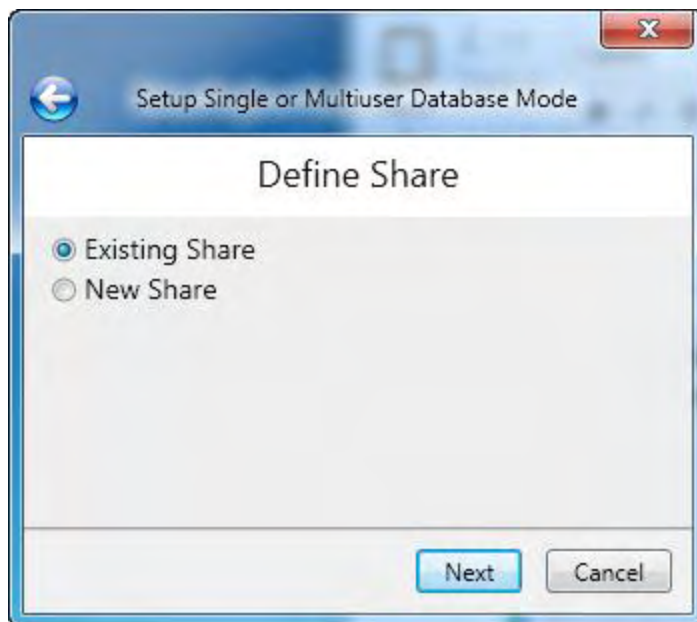
3. Click Finish to complete the set up operation and start DV-Pro.

DV-Pro will access the data found in DualVision.db3 located in the \ProgramData\DualVision\db directory.

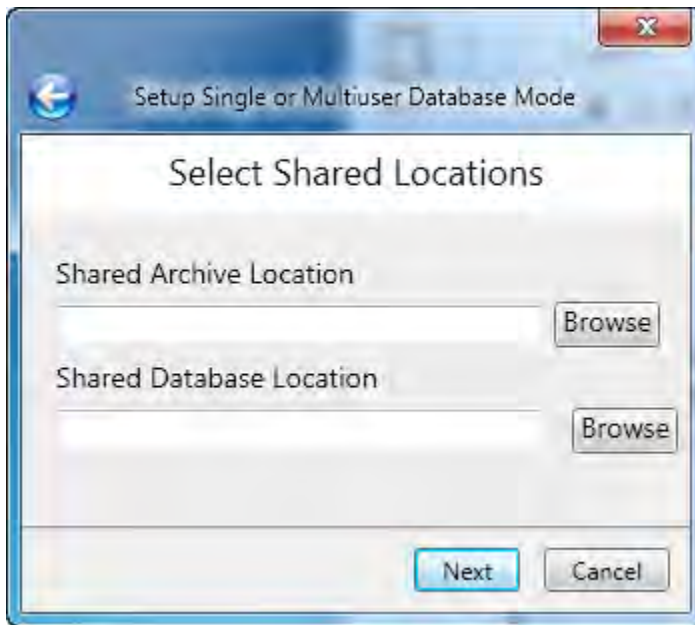
1. For operating in Multi User mode, choose Multi User from the initial setup wizard window.



2. Choosing Existing Share will prompt the user to specify an existing database, which was set up by an administrator on the user's network; New Share will allow a new one to be created, which can be used by other users on the network.

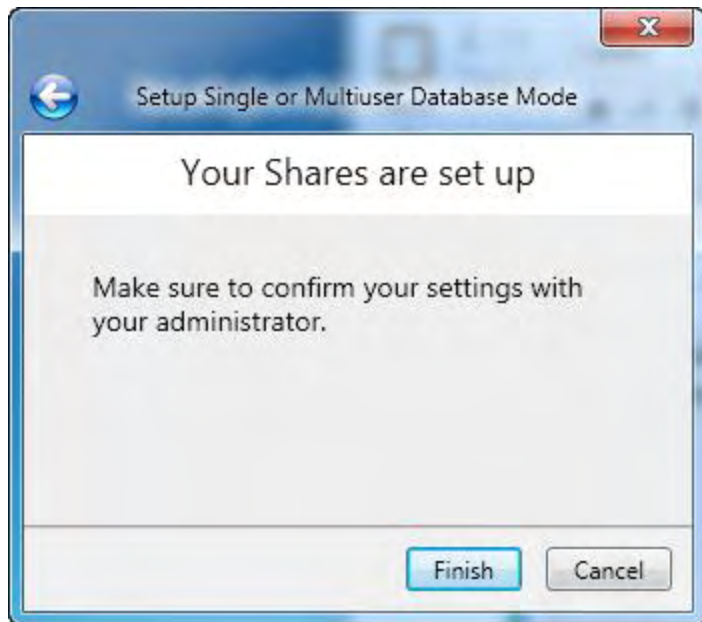


If Existing Share is chosen, the following screen will appear:



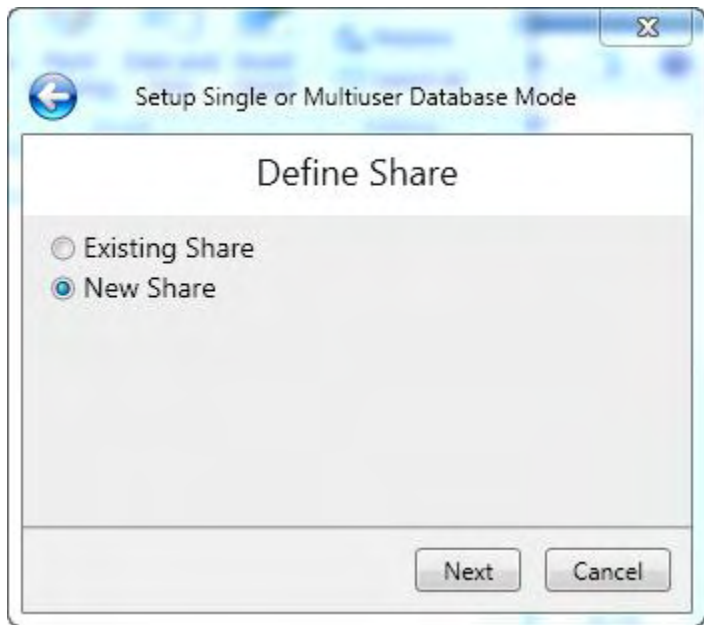
3. **Specify an Archive Location (directory) where video segments will be stored, and the directory where the database to be shared resides. This directory should be accessible to other users and computers on the network who will be sharing the DV-Pro database and archive. Click Next when finished.**

The Shares Are Set Up window will appear:

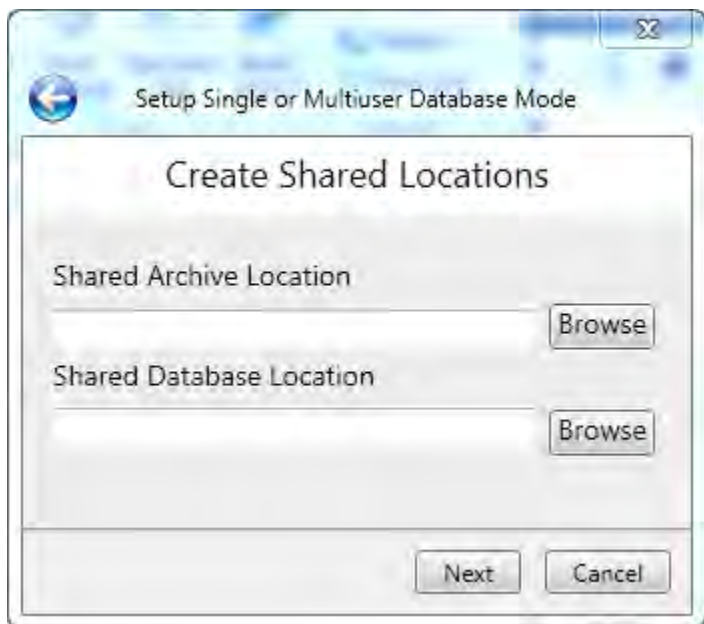


4. **Click Finish to complete the set up operation and start DV-Pro.**

1. If a new Database is to be created for sharing, choose **New Share** from the Define Share window.

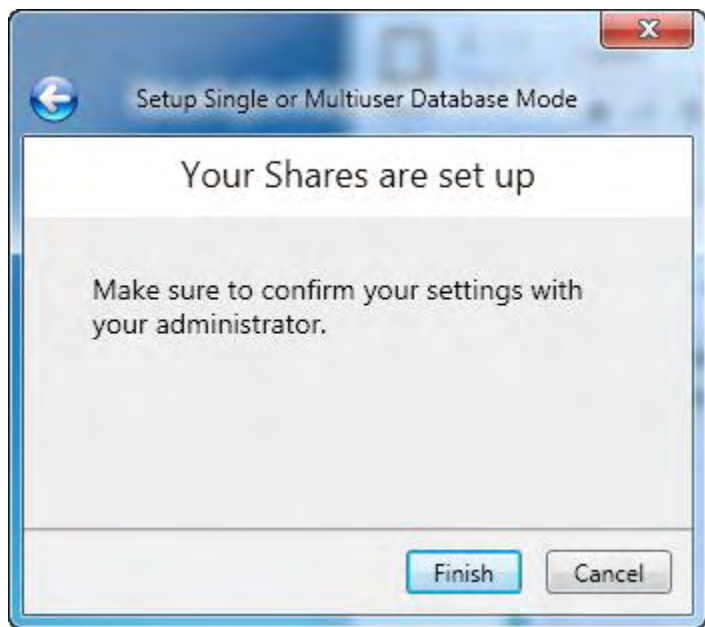


2. Next, the Create Shared Locations window will be presented:



3. **Specify an Archive Location (directory) where video segments will be stored, and the directory where the database to be shared will be created. This directory should be accessible to other users and computers on the network who will be sharing the DV-Pro database and archive. Click Next when finished.**

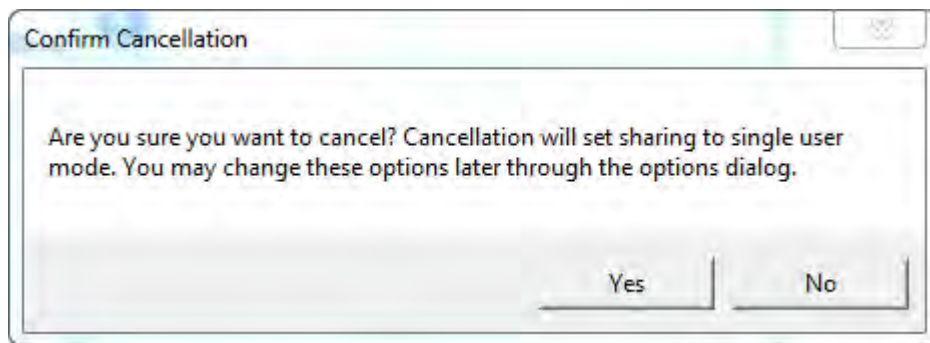
The Shares Are Set Up window will appear:



4. Click **Finish** to complete the set up operation and start DV-Pro.

Cancelling Single or Multi User Operation Selection

If, at any point, it is necessary to cancel these selections, clicking the Cancel button on any dialog will terminate the operation and put DV-Pro in Single User mode. The following confirmation screen will be presented:

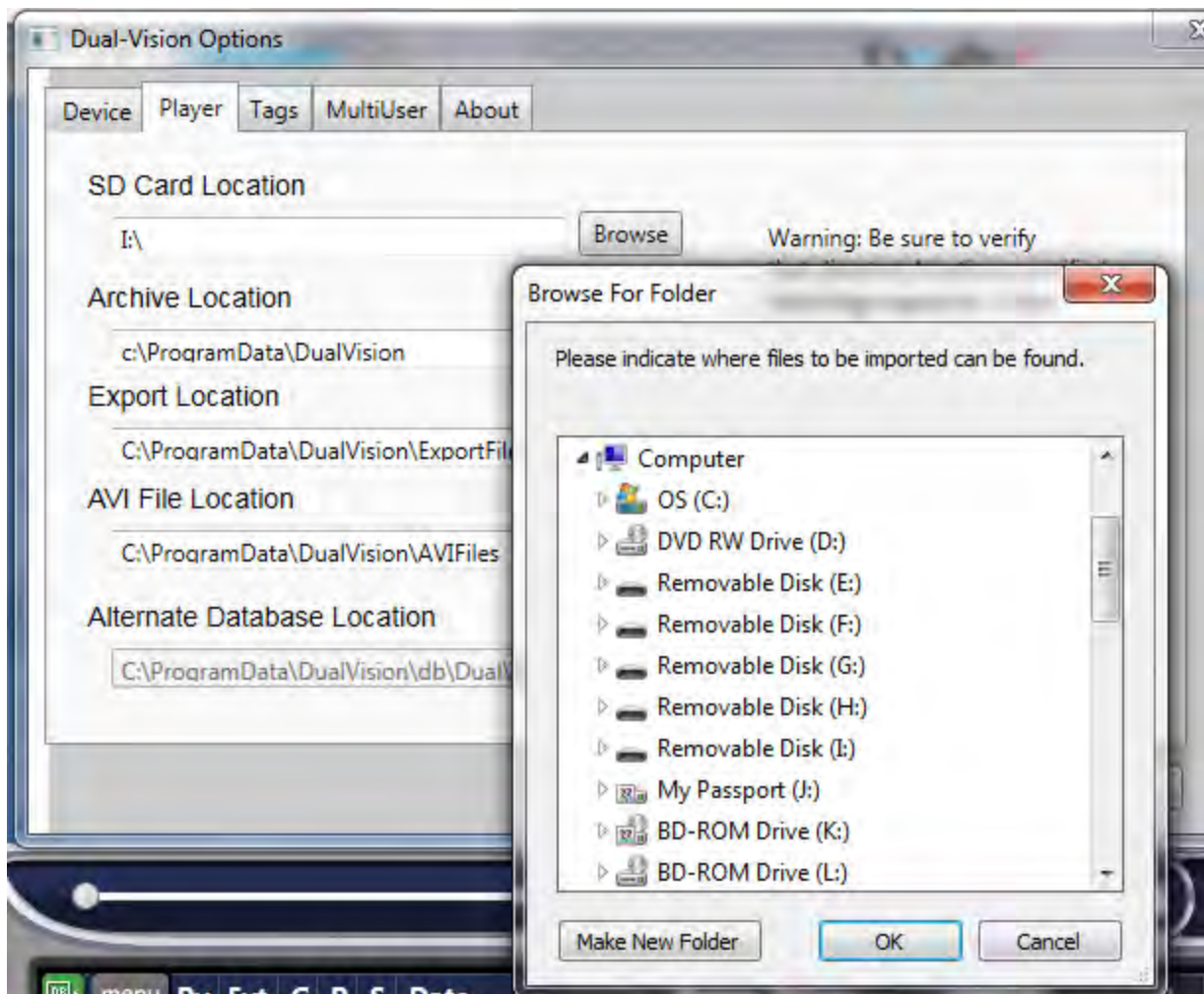


The Single or Multi User mode can always be changed through the **Options Dialog box**, as described on page 53.

Setting Directory locations and SD Card Data Sources

It is recommended that the following Directory Locations be specified before any video files are imported into DV-Pro. This is done using the **Configuration** dialog, as described on page 51.

1. **The location (drive designation) of the SD Card** used in the Dual-Vision Recorder.
For example, if your SD Card is identified as Removable Disk (G:), browse to that directory and click OK.



2. **The disk area where imported files should be stored.**
3. **The disk area where AVI files should be written** when the Convert To Video operation is preformed.

By default, the storage locations are set to the application data space. On a Windows XP system, this is C:\Documents and Settings\All Users\Application Data\DualVision\db. Using Windows 7 or Vista, this location is C:\ProgramData\DualVision\db. Since, in most cases, large amounts of data will be stored locally, it is strongly recommended that another location be chosen.

4. **Click OK when the directories have been specified**

Video and data files can now be imported into the system from SD Cards written by the Dual-Vision recorder.

Running DV-Pro as a Non-Administrator

While only Administrators can install DV-Pro, users with other privileges can run the program. In order for this to work properly, it is necessary for an Administrator to assign the appropriate access to the DualVision database. Here are the steps necessary to perform that task:

1. **Identify the location of the Dualvision.db3 file.**

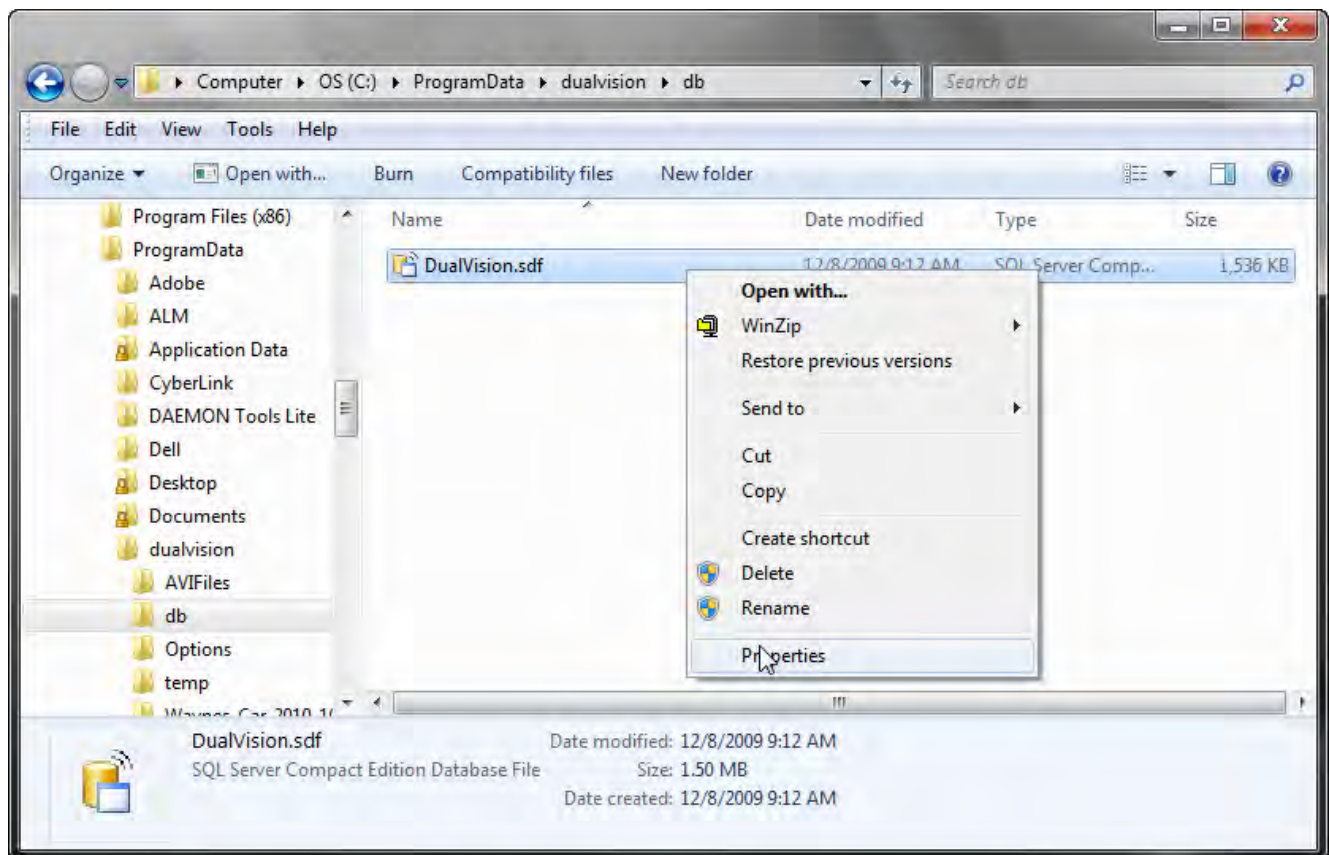
By default, on a Windows 7 System, this will be C:\ProgramData\Dualvision\db\DualVision.db3

In Vista, this is C:\Users\All Users\DualVision\db\DualVision.db3

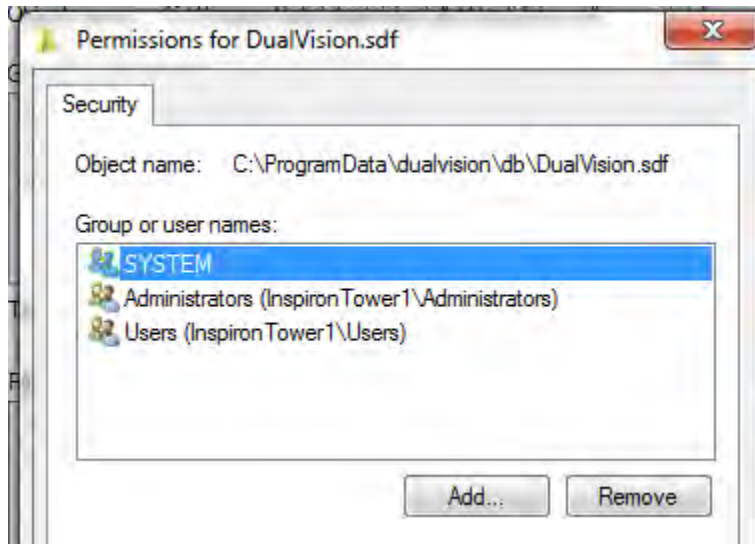
In XP, C:\Documents and Settings\All Users\Application Data\DualVision\db\DualVision.db3

2. **In Windows Explorer, right-click on this file, and choose Properties from the Menu**

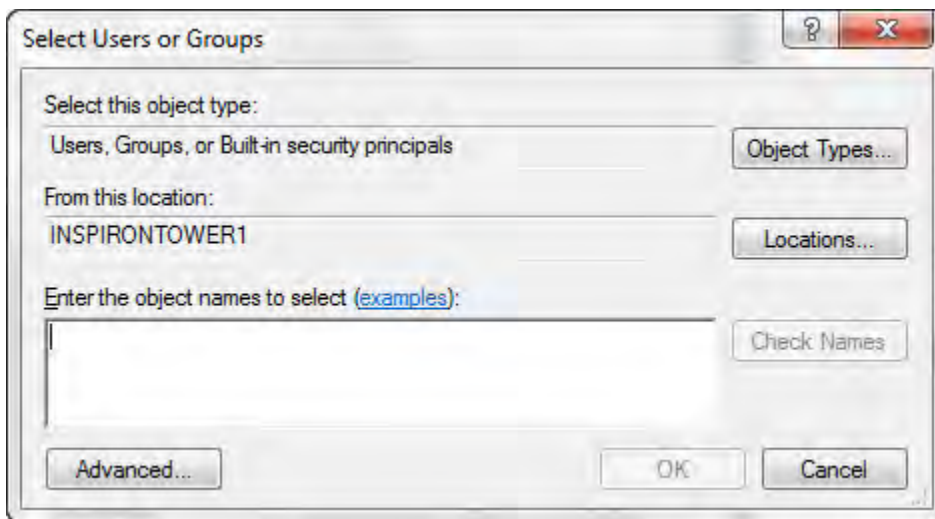
This is the way the screen will look in Vista and Windows7.



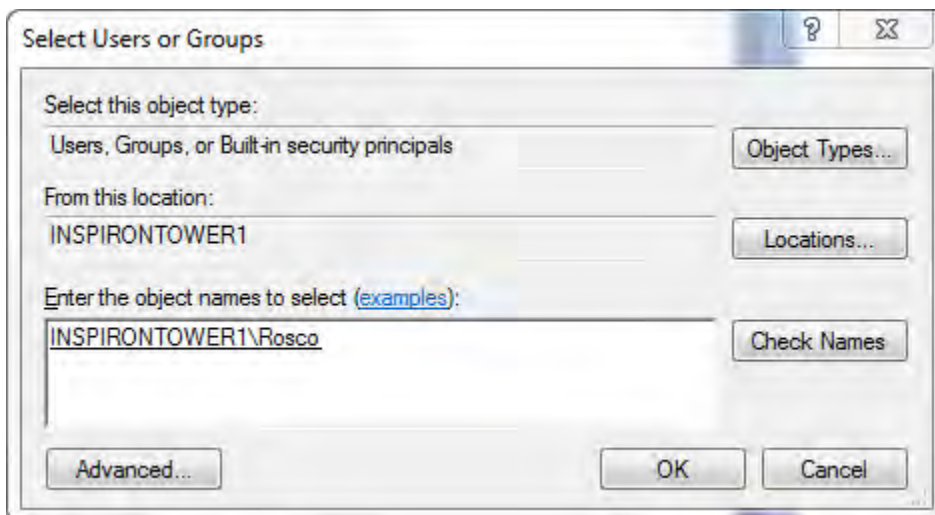
3. In the Properties Dialog, choose the Security tab, and click the Edit button to change permissions



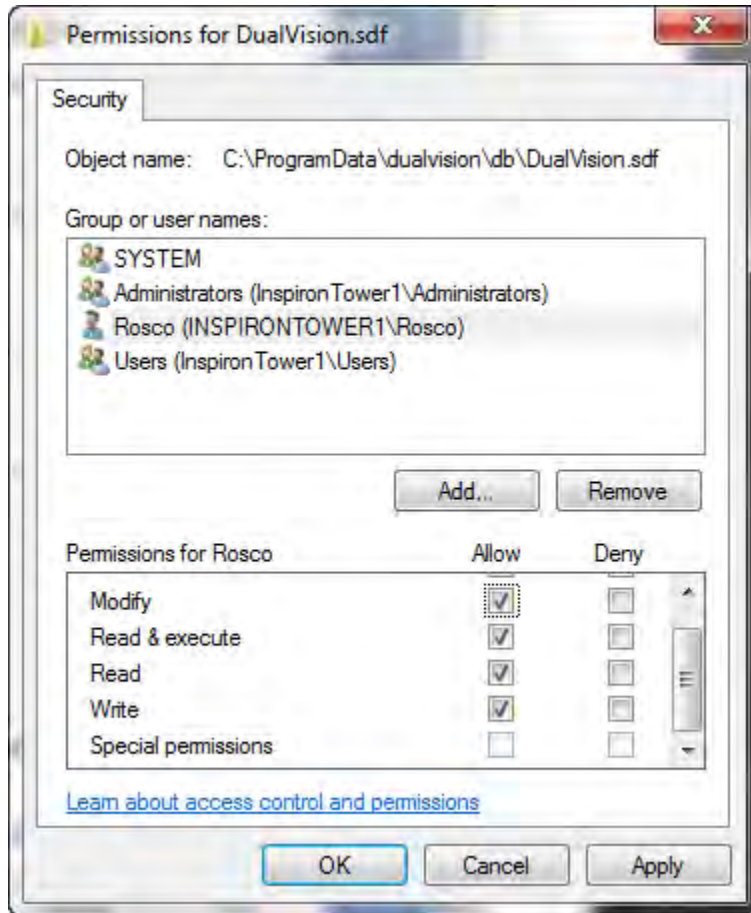
4. Next, click the Add button, which opens the Select Users or Groups dialog



5. Enter the name of the user who will be running DV-Pro



6. Click OK to return to the Permissions dialog
7. With the DV-Pro user selected, make sure that the Modify, Read & execute, Read and Write boxes in the Allow column are checked



8. Click Apply, OK, and then OK again to complete the procedure.

Importing Video from the Dual-Vision Recorder to DV-Pro Player

The functionality of Dual-Vision DV-Pro revolves around the files that are generated by the Dual-Vision recorder as it records sounds, images and data from the vehicle. Those files are stored on SD Cards, and then imported from the SD card onto a PC, allowing them to be cataloged, searched and played by Dual-Vision DV-Pro. These files are referred to as “**Segments**”, and are used to record event information and break the video into more manageable chunks.

This feature is not available to users who have Read Only access to the database.

There are two modes that can be used to import data from the Dual-Vision recorder into DV-Pro: Database Mode and Preview Mode.

Importing Video Segments Using Database Mode

1. Insert a Dual-Vision SD Card into a reader attached to your computer.
2. Launch Dual-Vision DV-Pro if it is not running
3. Click on the Import SD button. .

The **Import** Dialog Window will appear:

Import

☒ Import All Segments 81 Segment Files.

☐ Import Preview Selections

☐ Import Event Segments 19 Segments

☐ All Events
(Segments containing multiple events are only counted once)

☐ GForce Events 19 GForce Events

☐ Panic Button Events 0 Button Events

☐ Speed Events 0 Speeding Events

Numbers include pre- and post-event Segments

☐ Filter Import by Time

Start 11/19/2010 3:51 PM

End 11/19/2010 9:07 PM

☐ Delete files from SD Card after Import completes

☒ Leave all files on SD Card

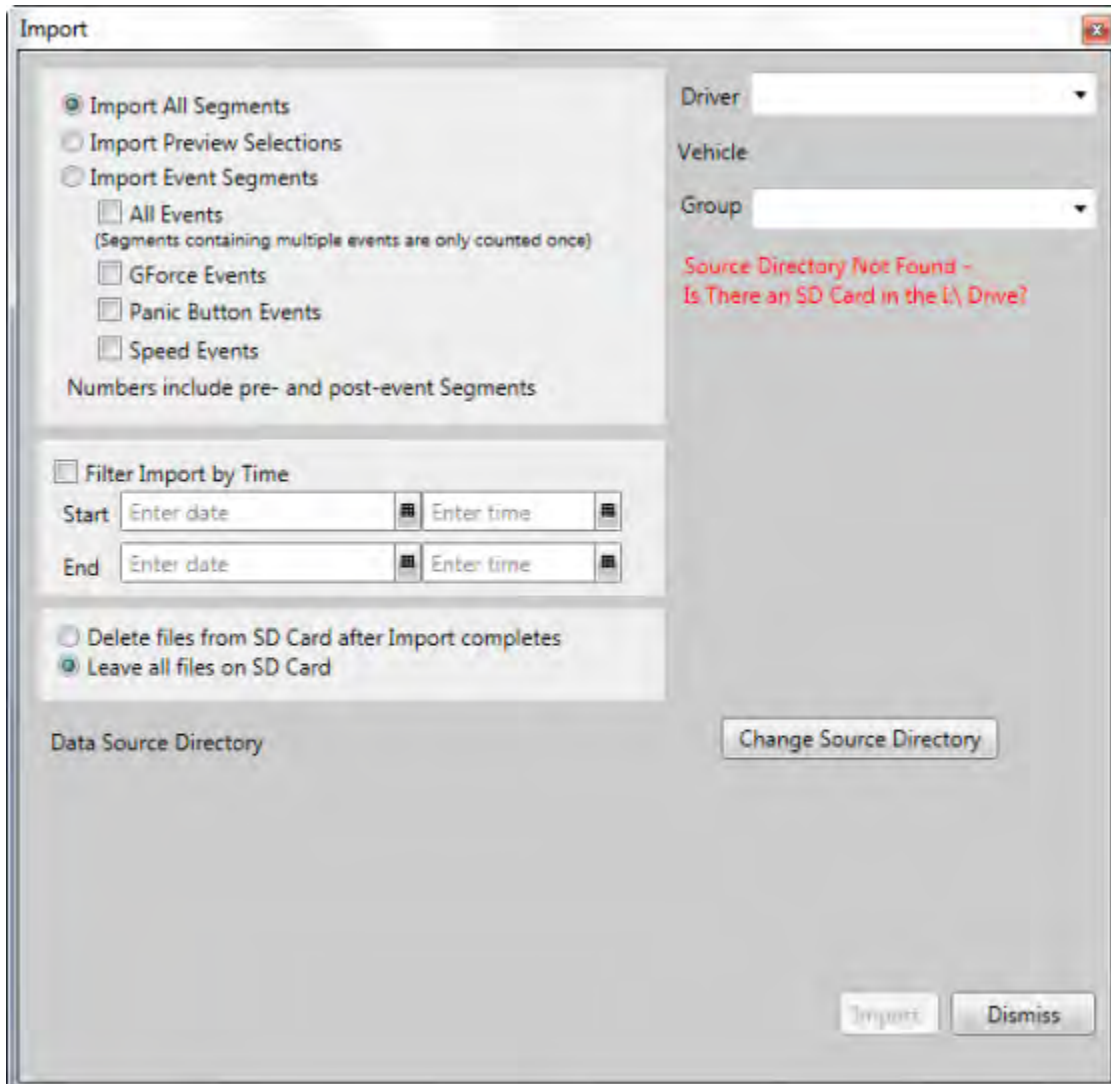
reading data from I:\\data

Change Source Directory

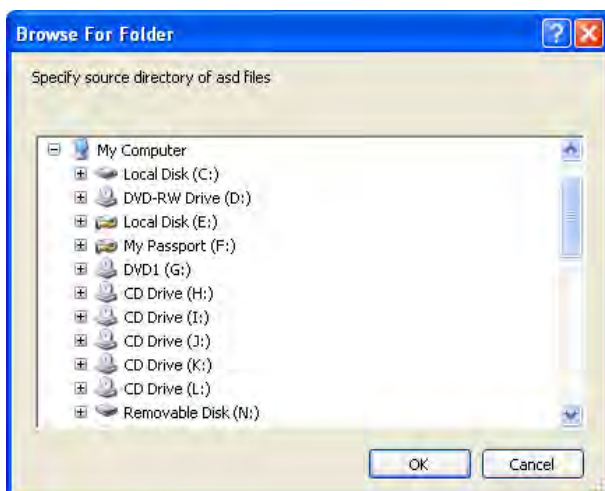
Driver Vehicle Group

Import Dismiss

If the SD Card can't be found, a screen similar to the one below will be shown:



If an SD Card has been inserted, click on the **Change Source Directory** button to specify its location/drive letter:



4. Once the Dual-Vision SD Card is recognized, choose the import criteria.

By default, all of the segments found on the card will be imported. However, to save time and storage space, it is possible to restrict the number of segments to import based on the time of recording, or any events that might have occurred. In the example below, only those segments for which speeding events were recorded, and which occurred between 10:00 AM and 4:00 PM on Sept. 9th will be imported:

The screenshot shows a software window titled "Import". On the left, there are three radio button options: "Import All Segments" (selected), "Import Preview Selections", and "Import Event Segments". Next to "Import All Segments" is the text "81 Segment Files.". Next to "Import Event Segments" is "19 Segments". Below these are four checkboxes: "All Events" (unchecked), "GForce Events" (unchecked), "Panic Button Events" (unchecked), and "Speed Events" (unchecked). To the right of each checkbox is a count: "19 GForce Events", "0 Button Events", and "0 Speeding Events". A note below says "Numbers include pre- and post-event Segments". On the right side of the window are three dropdown menus labeled "Driver", "Vehicle", and "Group". Below the event checkboxes is a checked option "Filter Import by Time". Under this, there are "Start" and "End" time pickers. The "Start" picker shows "9/9/2011" and "10:00 AM". The "End" picker shows "9/9/2011" and "4:00 PM". Below the time pickers are two radio button options: "Delete files from SD Card after Import completes" (unchecked) and "Leave all files on SD Card" (checked). At the bottom left, it says "reading data from I:\data". At the bottom right is a button labeled "Change Source Directory". At the very bottom are two buttons: "Import" and "Dismiss".

5. Identify the driver.

You must name the driver of the vehicle before importing can proceed. Dual-Vision keeps a record of previously identified drivers, and allows you enter new names at this point.

Import

☒ Import All Segments 81 Segment Files.

☐ Import Preview Selections

☐ Import Event Segments 19 Segments

☐ All Events
(Segments containing multiple events are only counted once)

☐ GForce Events 19 GForce Events

☐ Panic Button Events 0 Button Events

☐ Speed Events 0 Speeding Events

Numbers include pre- and post-event Segments

☒ Filter Import by Time

Start 9/9/2011 10:00 AM

End 9/9/2011 4:00 PM

☐ Delete files from SD Card after Import completes

☒ Leave all files on SD Card

reading data from I:\data

Change Source Directory

Driver:

Vehicle: <enter new driver's name>

Group: Ben, Buck, CBT, George, Joe, Larry, Natan, SunJet, Tom, Wayne

Import **Dismiss**

6. Identify the vehicle, if necessary.

Usually, the vehicle name is established in the configuration file and is present on the card. When that is not the case, you will be prompted to enter a vehicle name before importing can proceed. As with your drivers, Dual-Vision keeps a record of vehicle names, and allows you enter a new one at this point.

Import

☒ Import All Segments 81 Segment Files.

☐ Import Preview Selections

☐ Import Event Segments 19 Segments

☐ All Events
(Segments containing multiple events are only counted once)

☐ GForce Events 19 GForce Events

☐ Panic Button Events 0 Button Events

☐ Speed Events 0 Speeding Events

Numbers include pre- and post-event Segments

☒ Filter Import by Time

Start 9/9/2011 10:00 AM

End 9/9/2011 4:00 PM

☐ Delete files from SD Card after Import completes

☒ Leave all files on SD Card

reading data from I:\data

Change Source Directory

Driver

Vehicle

Group

- #4268 Paratransit @ CBT Bronx
- <enter new vehicle name>
- Andrew Buck
- Ben Englander
- Error C
- Robert Buck
- UNIT AA CARD AA 8GB-2
- Wayne's Car

Import Dismiss

7. Identify the group, if necessary.

Optionally, you can organize drivers by groups. Dual-Vision keeps a record of group names, and allows you enter a new one at this point.

The screenshot shows the 'Import' dialog box with the following elements:

- Import Options:**
 - ☒ Import All Segments 81 Segment Files.
 - ☐ Import Preview Selections
 - ☐ Import Event Segments 19 Segments
 - ☐ All Events (Segments containing multiple events are only counted once)
 - ☐ GForce Events 19 GForce Events
 - ☐ Panic Button Events 0 Button Events
 - ☐ Speed Events 0 Speeding Events
- Filter Import by Time:**
 - ☐ Filter Import by Time
 - Start: 11/19/2010 3:51 PM
 - End: 11/19/2010 9:07 PM
- SD Card Options:**
 - ☐ Delete files from SD Card after Import completes
 - ☒ Leave all files on SD Card
- Source Directory:** reading data from I:\data
- Buttons:** Change Source Directory, Import, Dismiss
- Dropdowns:** Driver, Vehicle, Group (with a list showing '<enter new group's name>', 'Garage', 'Night Shift', 'Rosco', 'Taxi Garage')

8. Specify whether or not you want segment files permanently deleted from the SD Card after importing.

This will free disk space on the card for further data recording. By default, this deletion operation is not performed.

9. Click the Import button.

The number of files to be imported will be shown and progress will be tracked as importing proceeds.

Import

☒ Import All Segments 35 Segment Files.

☐ Import Preview Selections

☐ Import Event Segments 0 Segments

☐ All Events
(Segments containing multiple events are only counted once)

☐ GForce Events 0 GForce Events

☐ Panic Button Events 0 Button Events

☐ Speed Events 0 Speeding Events

Numbers include pre- and post-event Segments

☐ Filter Import by Time

Start 8/30/2010 2:01 PM

End 8/30/2010 2:49 PM

☐ Delete files from SD Card after Import completes

☒ Leave all files on SD Card

reading data from E:\\data

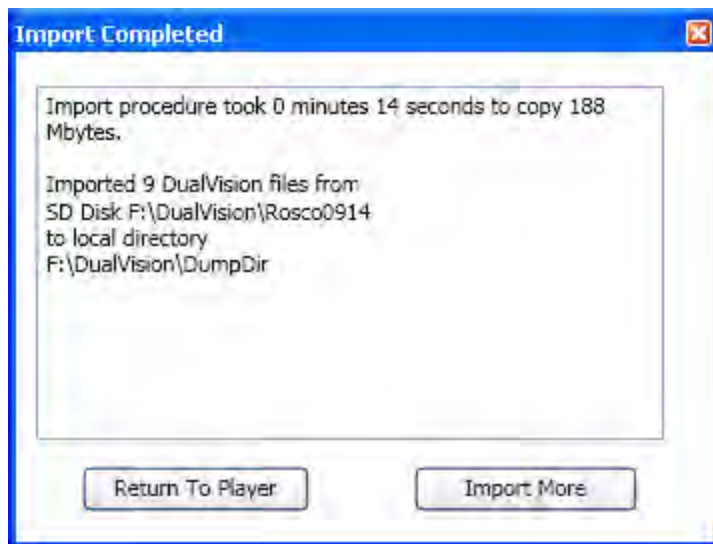
Saving Segment 1 of 35

Importing: rec00000000.asd

Cancel Import

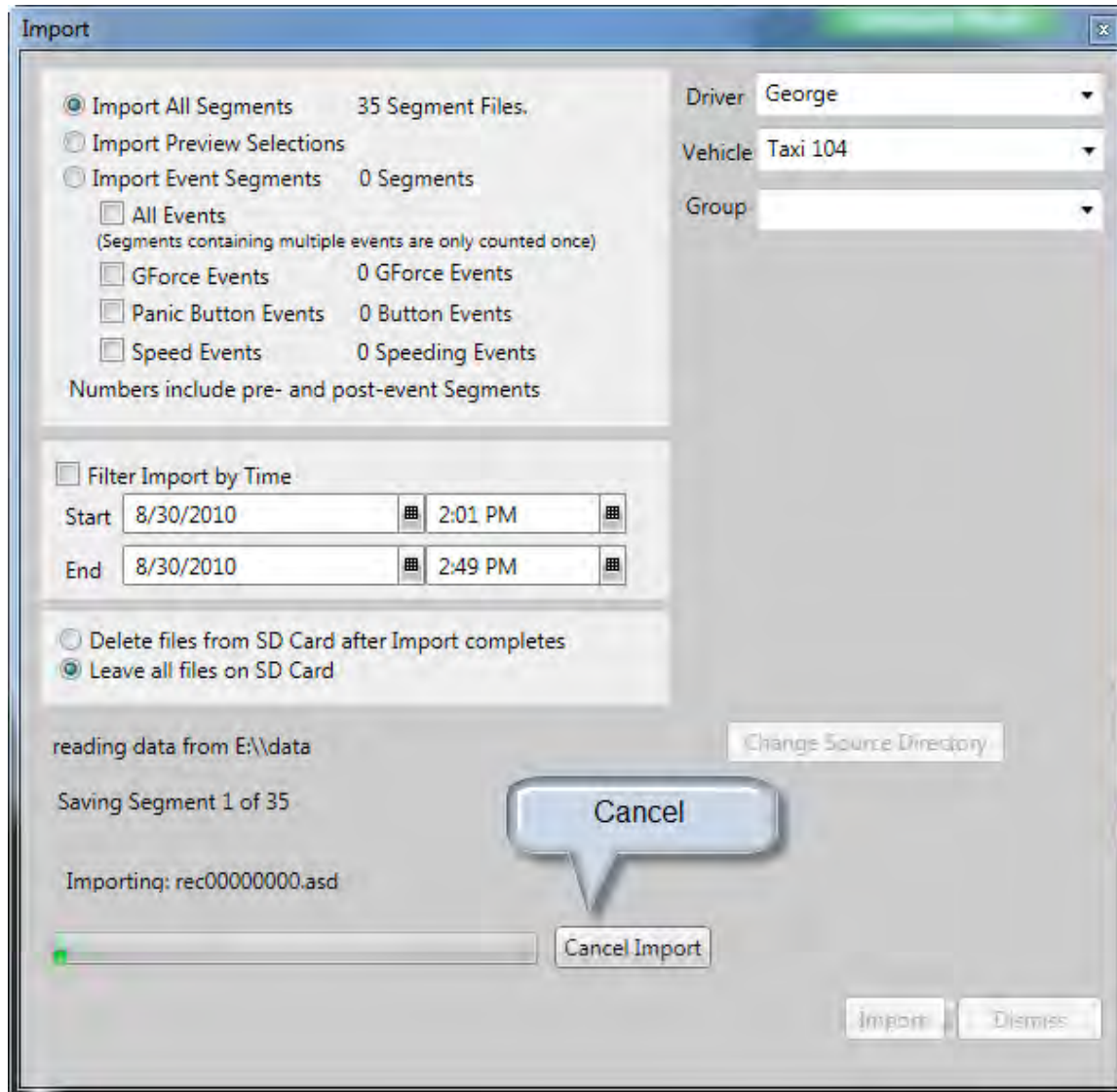
Import Dismiss

When the import operation completes, a window similar to the one below will be displayed:



10. Click Return to Player to view video of imported segments, or click Import More if there is more segment data to be transferred to Dual-Vision DV-Pro.

11. Import operations can be terminated at any time by clicking the Cancel Import button.

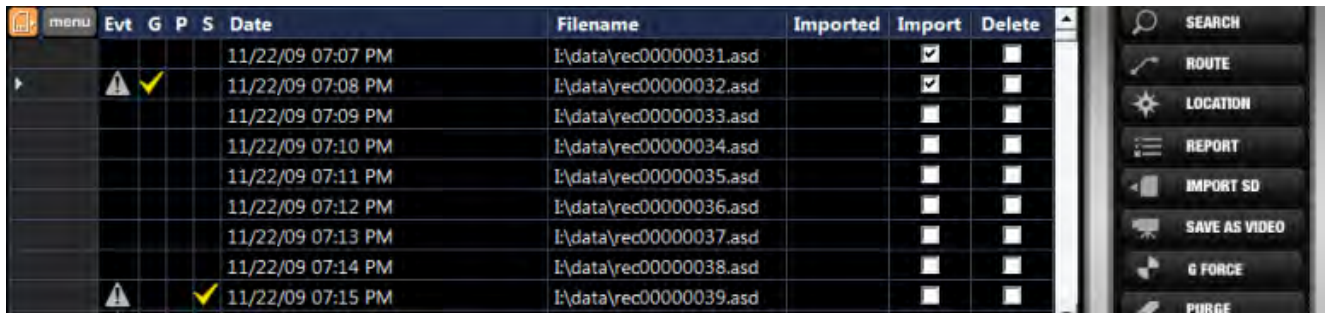


Any files imported prior to cancelling will remain available to the system; they can only be removed by using the Purge or Delete functions.

Importing Video Segments Using Preview Mode

Instead of using selection criteria to specify segments to be imported, it is possible to view video from them in the player, and then select them individually for import.

Preview mode is activated by clicking the green  icon at the top left corner of the Segment Display Grid.

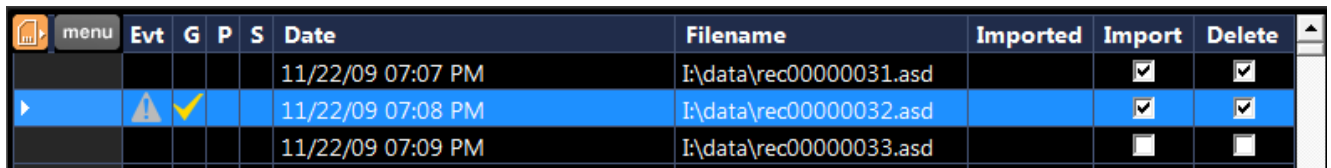


menu	Evt	G	P	S	Date	Filename	Imported	Import	Delete
					11/22/09 07:07 PM	I:\data\rec00000031.asd		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	▶	⚠	✓		11/22/09 07:08 PM	I:\data\rec00000032.asd		<input checked="" type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:09 PM	I:\data\rec00000033.asd		<input type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:10 PM	I:\data\rec00000034.asd		<input type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:11 PM	I:\data\rec00000035.asd		<input type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:12 PM	I:\data\rec00000036.asd		<input type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:13 PM	I:\data\rec00000037.asd		<input type="checkbox"/>	<input type="checkbox"/>
					11/22/09 07:14 PM	I:\data\rec00000038.asd		<input type="checkbox"/>	<input type="checkbox"/>
	▶	⚠	✓		11/22/09 07:15 PM	I:\data\rec00000039.asd		<input type="checkbox"/>	<input type="checkbox"/>

This view provides you with a list of the segments/files on the SD card, the time they were created, and the event information associated with those files. From here it is possible to play videos and choose the segments to be imported after viewing them.

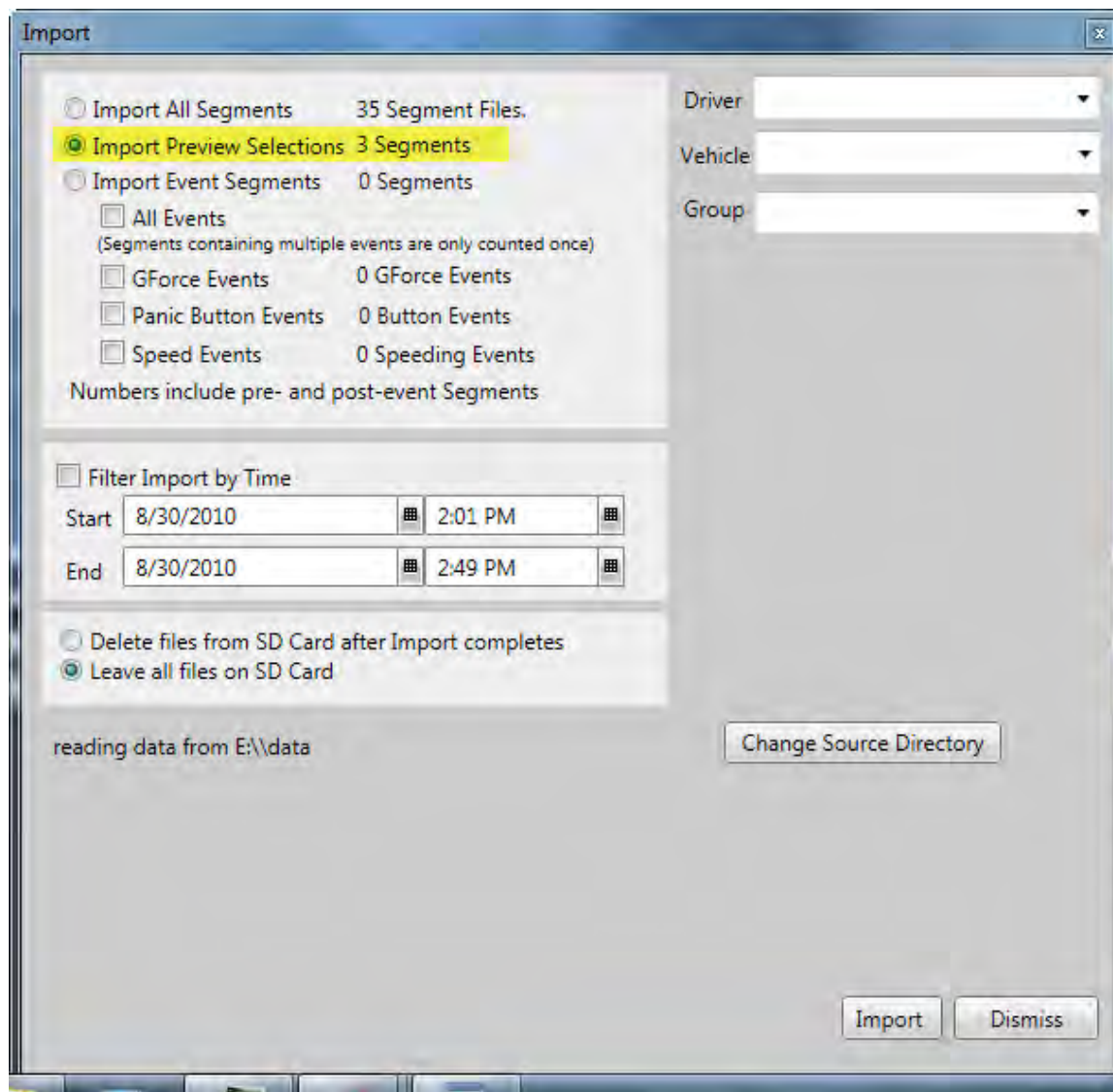
To import segments using Preview Mode:

1. Check the Import box for any file you wish to import
2. If you wish to permanently delete imported files from the SD card, check the Delete box for those segments.
3. Click the Import/SD button

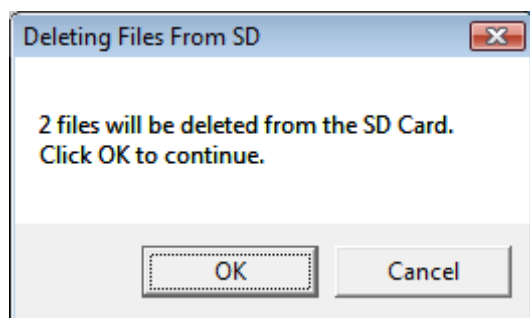


menu	Evt	G	P	S	Date	Filename	Imported	Import	Delete
					11/22/09 07:07 PM	I:\data\rec00000031.asd		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▶	⚠	✓			11/22/09 07:08 PM	I:\data\rec00000032.asd		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
					11/22/09 07:09 PM	I:\data\rec00000033.asd		<input type="checkbox"/>	<input type="checkbox"/>

The Import dialog will appear, with the number of Preview files to import indicated.





4. Identify the driver and vehicle (if necessary) and click Import to complete the operation.
5. If you have chosen to Delete files, you will receive a confirmation prompt after the import



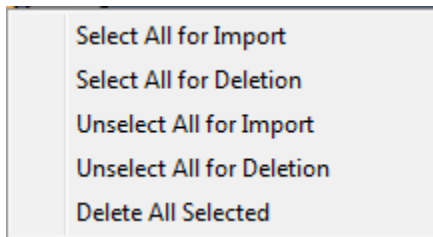
Click OK to permanently remove the files, or Cancel to keep them.

6. After Preview files have been imported, you will be returned to the standard display screen.
7. If the SD Card contains files that were imported previously (and not deleted), the Preview display will indicate those files with a checkmark, and the Import capability will be disabled.

 menu	Evt	G	P	S	Date	Filename	Imported	Import	Delete
					11/22/09 07:07 PM	I:\data\rec00000031.asd	✓		<input type="checkbox"/>
		✓			11/22/09 07:08 PM	I:\data\rec00000032.asd	✓		<input type="checkbox"/>

8. To return to the standard display, click the orange  icon at the top left corner of the Preview Display Grid.

9. Additionally, clicking the  button brings up the following menu:



From here you can -

Check all of the preview files for Import
 Check all of the preview files for Deletion
 Unselect (uncheck) any files previously checked for Import
 Unselect (uncheck) any files previously checked for Deletion
 Immediately Delete any files checked for Deletion.

DV-Pro Operation

Display



The Main Window provides the Dual-Vision Video display and operational controls.

Video Display Area

Shows front and rear video

Mode Indicator

Shows mode of DV-Pro. The possible modes are:

Database Mode Database Mode

Standard DV-Pro operation – segments displayed have been imported into the system, and all features are available.

Database Mode – Read Only Database Mode-RO

Segments can be read, searched and displayed, but importing and other functions that write to the database are disabled.

Preview Mode

Preview Mode

Segment information displayed as read directly from an SD card as described on page 39.

Configuration

Allows access to the configuration options

Preview Display

Switches display to Preview mode

Segment Menu

Provides selection, deletion and archive options for the segments displayed in the data grid

Single Frame Preview

Rolling over this icon displays the first frame of the segment in a fly-over window

Segment Data Grid

Presents data about imported segments

Player Controls

Operational controls for video display

Navigation Bar

Buttons provide access to other Dual-Vision DV-Pro functions

Video Display



As shown in the example above, visual indicators are given to illustrate the portion of a running segment where Events occur. The red bar which appears above the slider indicates that the accelerometer has recorded GForce values which exceeded the preset limits. The blue bar below the slider shows where the vehicle has been operated above the speed limit set in the Recorder configuration.

Player Controls



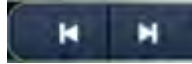
The video display of the segments is managed using the video controls illustrated below:

Slider and Frame Counter



Moves the video display to any selected frame. Activating the slider will automatically put the video display into Pause mode. Click the Pause button to continue play.

Frame forward and backward



Advances or moves the video backward by a single frame. When these buttons are used to control the video, the player goes into Pause mode automatically. In order to resume normal play, click the Pause button twice.

Play backward



Plays the segment in reverse, starting from the end. (Audio will not be heard.)

For video segments recorded with an ADR 3.X device or later, backward play is not available. This is indicated

with a red slash through the backward play control:



Play



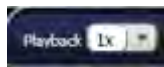
Play the video of the segment from the beginning. Also, double clicking on any row will play the video from that segment immediately.

Pause



When the video display is in Pause mode, this control will have a brown background, and clicking on it will resume play.

Playback speed



Use this control to speed up or slow down the video. (No audio will be heard unless display is running at 1x.)

Volume




Adjust or mute the audio volume of the displayed segment.

Vehicle Speed and Direction



If GPS information was available when a segment was recorded, the speed of the vehicle and direction it was travelling appear at the far right of the control bar.

Segment Display Grid



DB	menu	Pv	Evt	G	P	S	Date	Group	Driver	Vehicle	A	Tag	Note
							10/27/09 03:32 PM		Natan	Taxi			
							10/27/09 09:53 PM		Natan	Taxi			
							10/27/09 09:54 PM		Natan	Taxi			
							10/30/09 12:11 AM		Natan	Taxi			
							10/30/09 01:14 PM		Natan	Taxi			
							11/03/09 11:52 PM		Natan	Taxi			

The grid displays all segments meeting the criteria of your last search or import. It allows you to sort segments by Date, Driver, Vehicle, or Tag, mark segments as archived, see at a glance where events have occurred and play segments by selecting them and pressing the “Play” button on the control panel.

Selecting Segments

Segments can be selected by clicking on the row that they are in. A selected segment will turn “Dark Blue”.

Multiple segments can be selected by passing the cursor over them while holding the left mouse button down. By selecting multiple segments, a sequence of segments can be played.

Double clicking on a segment will play it, but if other segments are selected, only the double clicked segment will play. To Play multiple segments use the “Play” button on the “Player Controls” panel.

Color coding is used in the display to present status information about the segments presented in the grid.

- Unplayed and unselected segments use white text on a black background.
- When a segment is selected for play, its background color changes to a dark blue.
- When a group of segments has been selected, and have started playing, segments that remain to be played are shown with a yellow background.
- Finally, segments that have been played previously are presented with a light blue background.

The Main Window display provides information about trip segments that have been imported from SD cards. Each segment is identified by the following information:

Rollover Preview (Pv) – placing the mouse over this icon displays the first frame of this segment in a fly over window



Event (Evt) - Since the Dual-Vision device preserves a record of events leading up to an incident, the display distinguishes between those segments which include an actual, or “real” event, and those which are marked as adjacent events because they occurred immediately prior to a significant incident or after an incident.

Real Event - In the case of a segment with a real event, the alert symbol in the Event column will be presented with an orange background.

Adjacent to Event - Events that indicate a segment adjacent to a real event have a gray background. This icon may also appear with segments that were imported after configuration thresholds set at recording time are changed before importing, resulting in event data that may be inconsistent.

GForce (G) – if the accelerometer in the Dual-Vision device has recorded any variations which exceed its preset limits from the device configuration, a check mark will appear in this column

Panic (P) – if the Panic Button on the device has been pressed, a check mark will appear in this column

Speed (S) – if the speed of the vehicle has exceeded the limit set in the Recorder configuration, a check mark will appear in this column

Date/Time – when the segment was recorded

Group – as identified when the segment was imported

Driver – as identified when the segment was imported

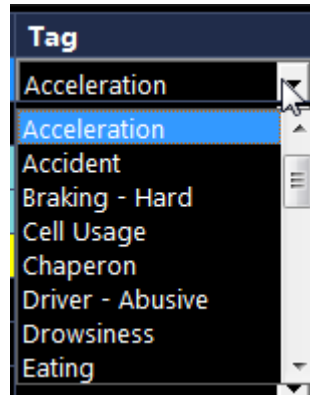
Vehicle – as identified in the Recorder configuration file, or when the segment was imported

Archive (A) – if a check mark appears in this column, a Purge operation will not normally delete this segment



Click the check box if you want to Archive a segment.

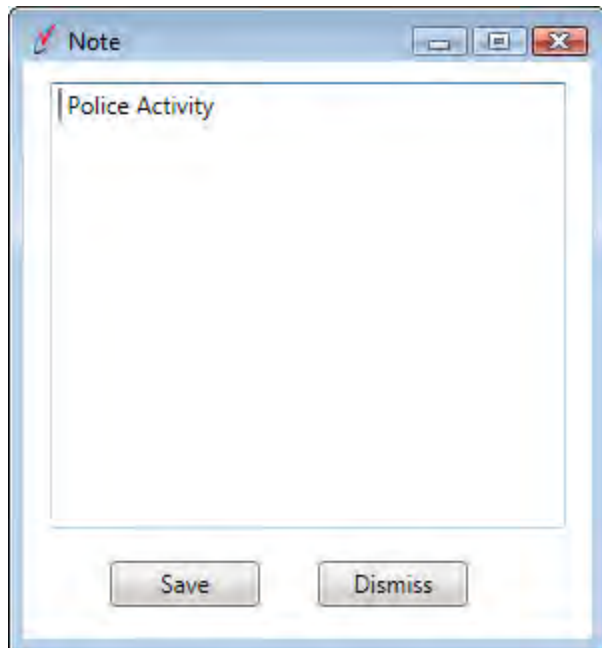
Tag – a drop-down box which enables the display of a number of pre-selected conditions.



Note – a text entry field allowing for specific descriptions of activities or conditions observed.



To add new text, double-click in the box to open a text entry window.

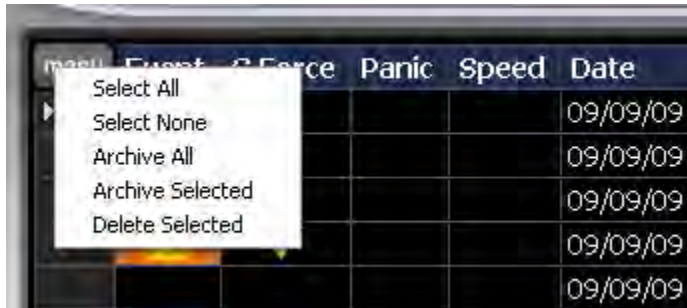


Click Save to add the text, or Dismiss to cancel.

Archive, Tag and Note features are not available to users who have Read Only access to the database.

Segment Menu

In order to manage the segments presented in the Display Grid, the Segment Menu is provided. Clicking on the Menu button presents the following choices:



Select All – choose every segment for play, archive or deletion operation

Select None – clear selection of all segments

Archive All – protect every currently displayed segment from a future Purge operation

Archive Selected - protect every currently selected segment from a future Purge operation

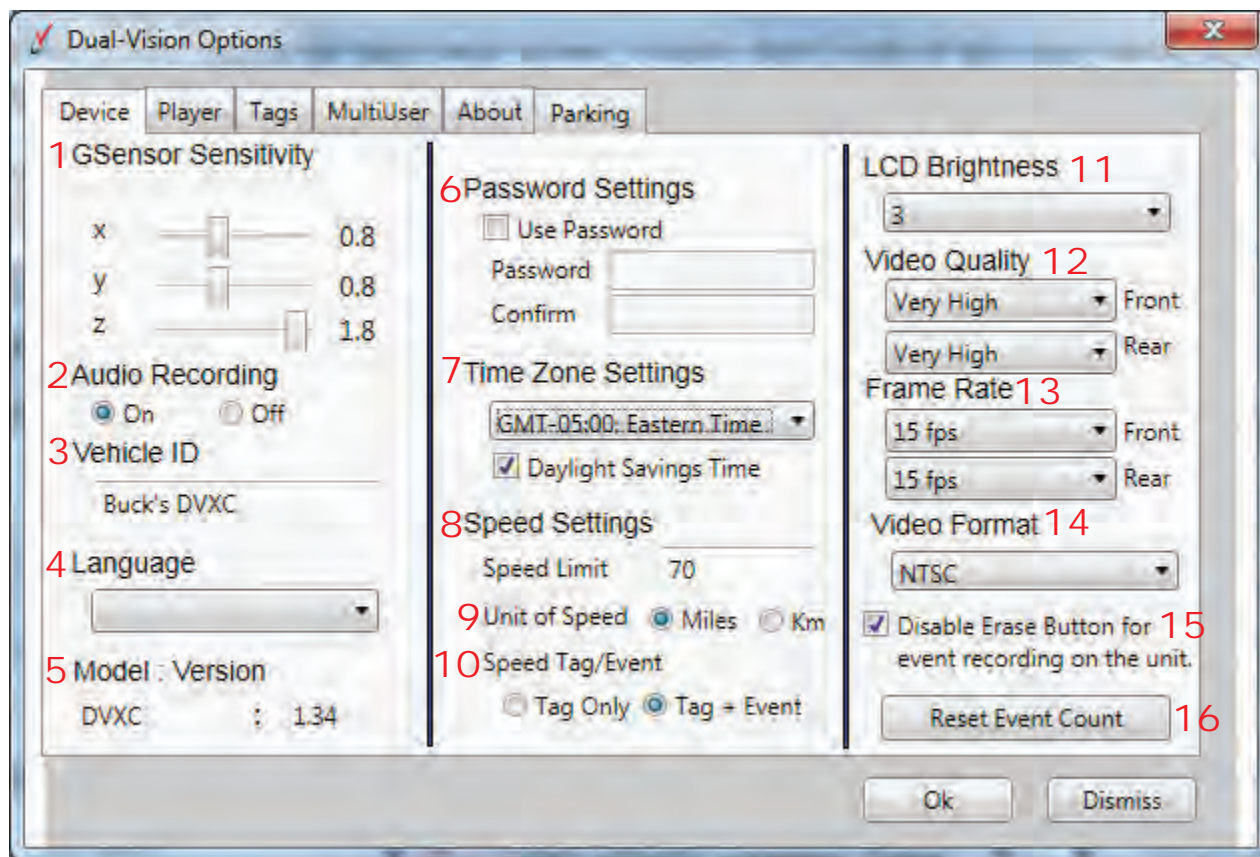
Delete Selected – immediately remove all selected segments from the Dual-Vision system

Archive and Delete features are not available to users who have Read Only access to the database.

Configuration

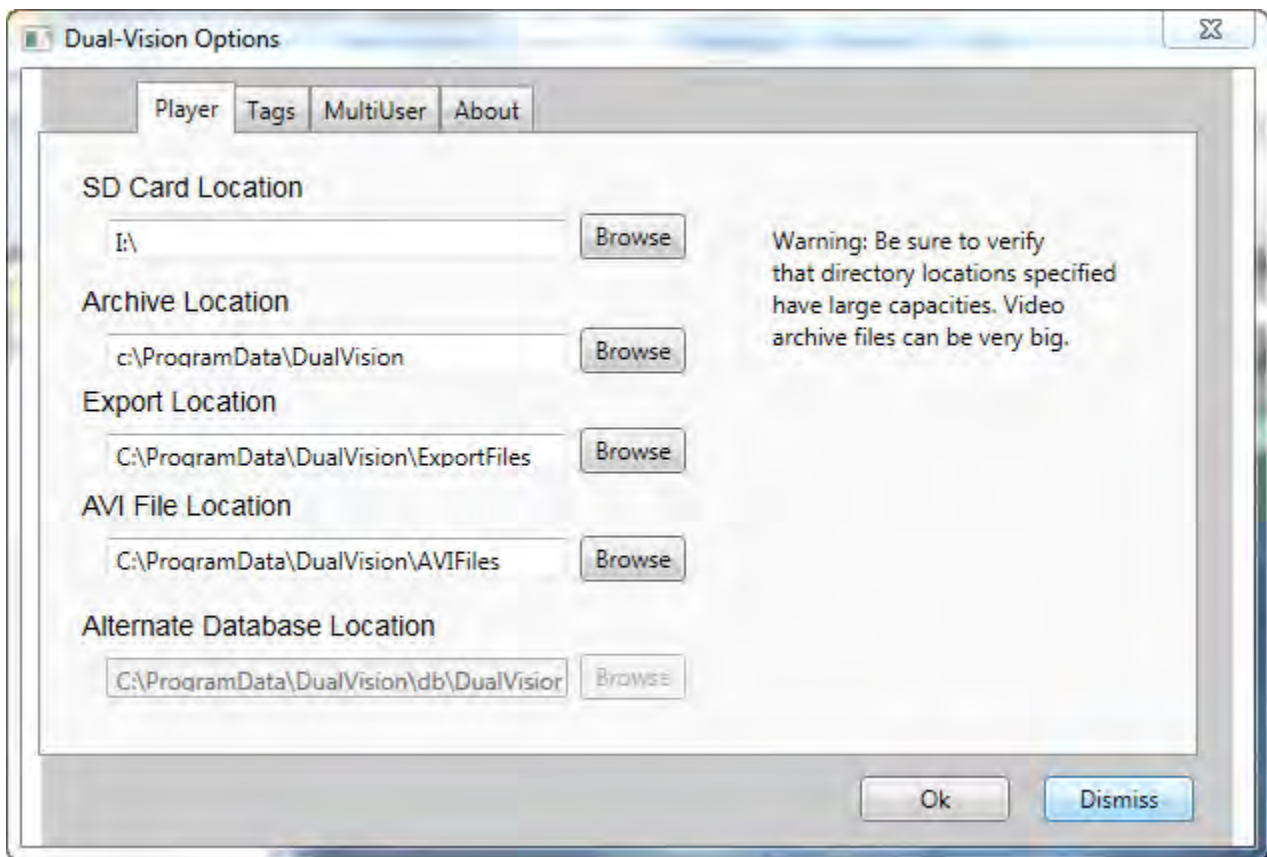


This function allows you to set parameters necessary for the operation of the Dual-Vision Recorder, and to specify storage locations for files need to operate Dual-Vision DV-Pro. If an SD card is not present in your computer, the **Device** tab will not appear.



Item	Name	Description
1	G Sensor Settings	Determines how extreme a deviation in acceleration or deceleration will qualify as an event. The checkbox indicates whether this feature is enabled, and the sliders set the x-, y- and z-axis sensitivity levels to .1 granularity. (Previous versions of DV-Pro provided .25 granularity.)
2	Audio Recording	Enables or Disables audio recording function.
3	Vehicle ID	Sets an identifying name or number for vehicle used with this recorder.
4	Language	Choose English or Korean.
5	Model:Version	Displays the model of the Dual-Vision device and its firmware version.
6	Password Settings	Sets a password to be used to access the configuration data. (Default: None)
7	Time Zone Settings	Sets the time zone that the vehicle will be operating in.
8	Speed Limit	Specifies the speed which will flag an Over Speed Limit Event
9	Unit of Speed	Sets the speed unit: MPH or KPH

10	Speed/Tag Event	If set to Tag + Event, will mark the first file of a speeding sequence as an overwrite-protected event.
11	LCD Brightness	Sets the intensity (0 - 5) of the LCD display on the recorder. Default: 3
12	Video Quality	Sets the video recording quality for Front and Rear cameras (Very Low, Normal, High or Very High; Default: Normal)
13	Frame Rate	Sets the recording frame rate of the front and rear camera. (0, 1, 2, 3, 5, 7.5, 10, 15; Default: 7.5)
14	Video Format	NTSC or PAL
15	Disable Erase Button	If checked, driver will not be able to remove Event override protection.
16	Reset Event Count	If clicked, will reset Speed and Event counters to 0.



Storage Settings

SD Card Location – where the Dual-Vision SD Card is located

Archive Location – storage area for Imported Dual-Vision files

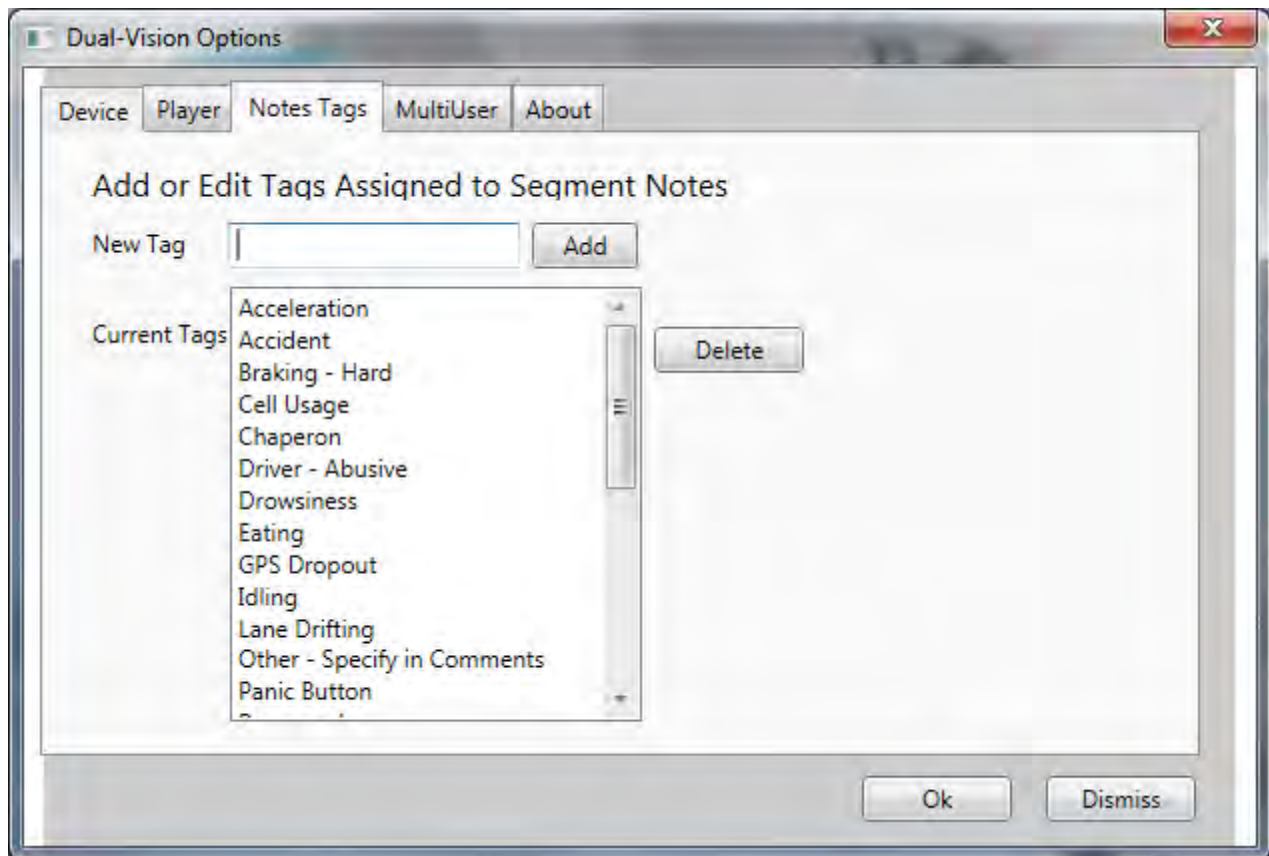
Export Location – storage area for Exported Dual-Vision files

AVI File Location – where video files are to be written as a result of a Convert To Video operation

Alternate Database Location – allows you to specify an alternative location for the internal Dual-Vision DV-Pro SQL Server database

Notes Tags

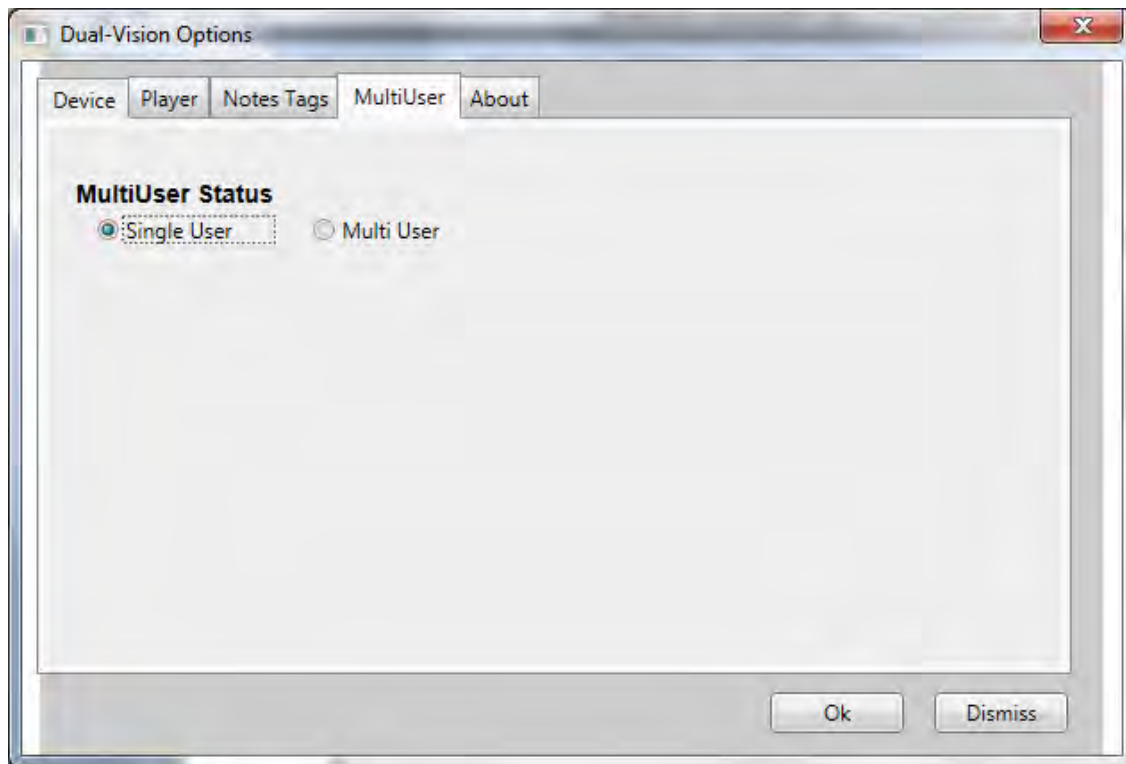
This feature makes it possible to create Custom tags that will appear in the Display Window. To Add a new tag to the list, make an entry in the New Tag text box and click the Add button. To Delete an existing tag, select it in the list and click the Delete button. You will not be able to Delete any tag which is currently associated with video segment stored in the database.



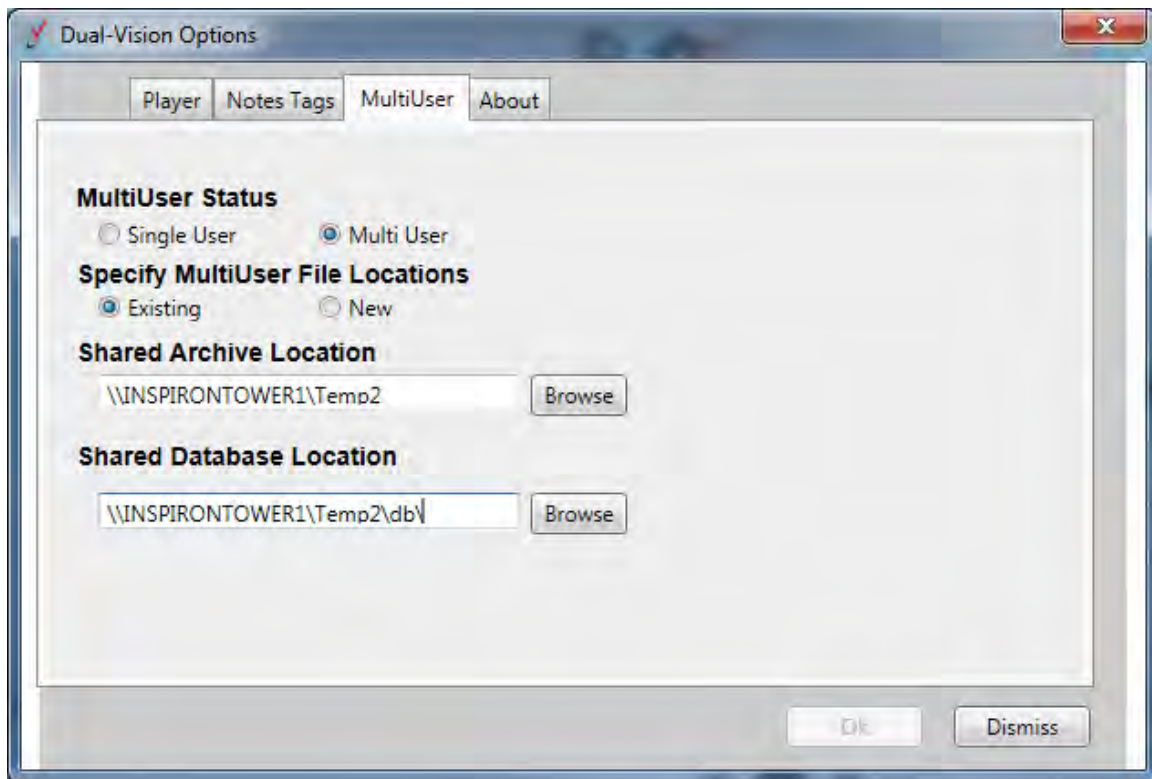
Multi User Options

Use these selections to switch between single and multi user database access, or to specify different Archive or Database locations. These options replicate the functionality of the startup wizard.

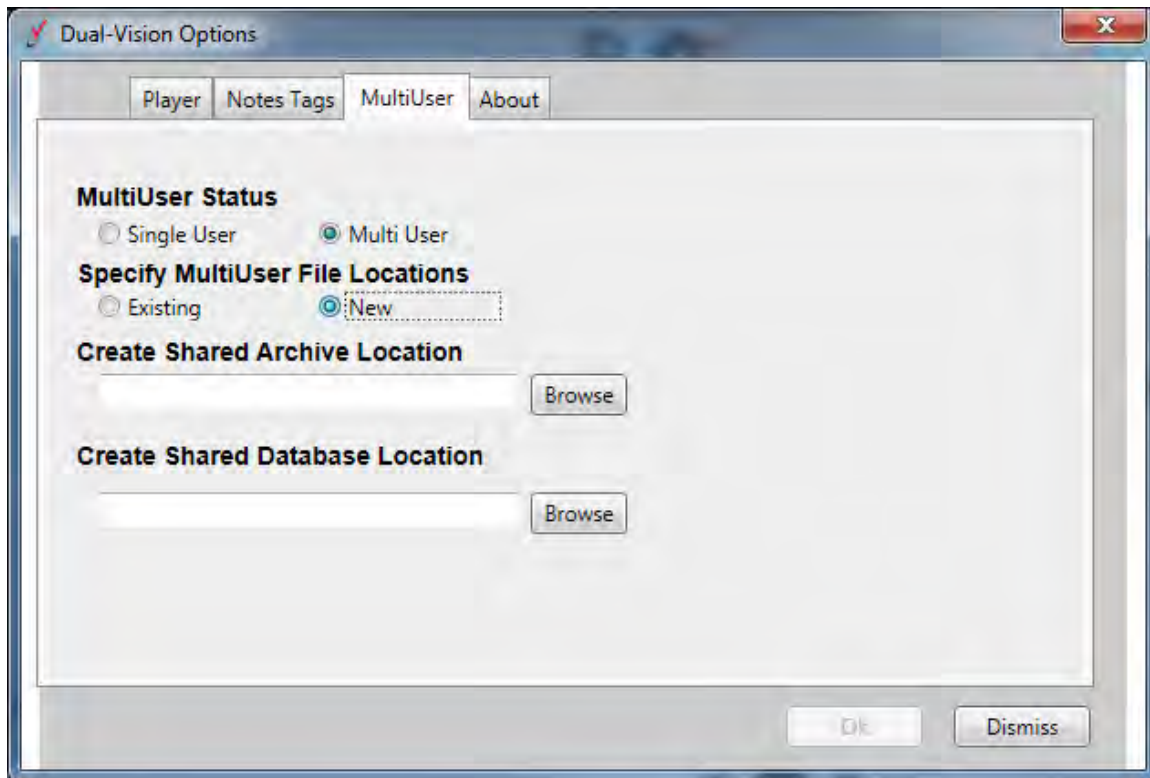
When switching from multi user to single user operation, none of the multi user options will be made available, as shown below.



1. Choose the **Existing** button to specify the location of existing archive and database locations. Choosing Existing Share will prompt the user to specify an existing database, which was set up by an administrator on the user's network; New Share will allow a new one to be created, which can be used by other users on the network. Specify an Archive Location (directory) where video segments will be stored, and the directory where the database to be shared resides. This directory should be accessible to other users and computers on the network who will be sharing the DV-Pro database and archive

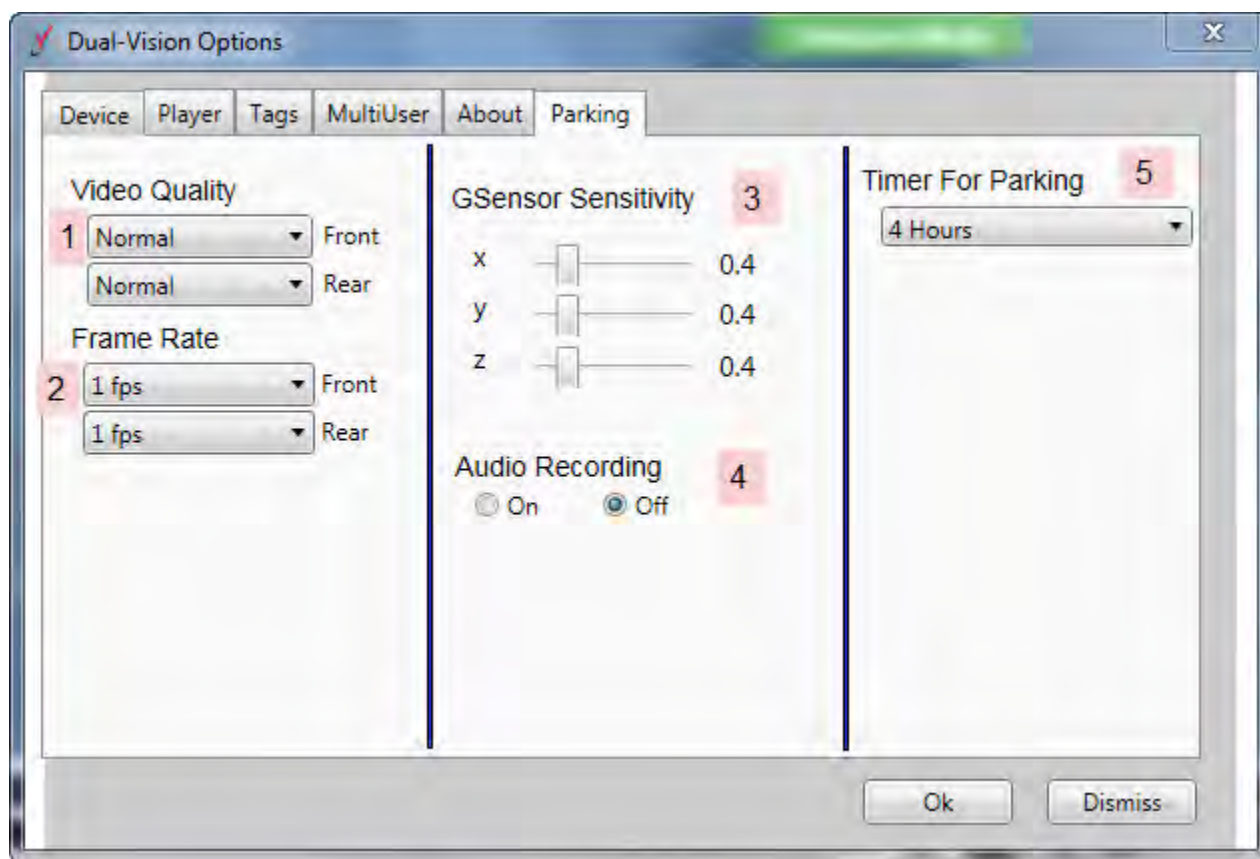


2. Selecting the **New** button will create a new DV-Pro database in the specified Remote Database Location directory. Specify an Archive Location (directory) where video segments will be stored, and the directory where the database to be shared will be created. This directory should be accessible to other users and computers on the network who will be sharing the DV-Pro database and archive.

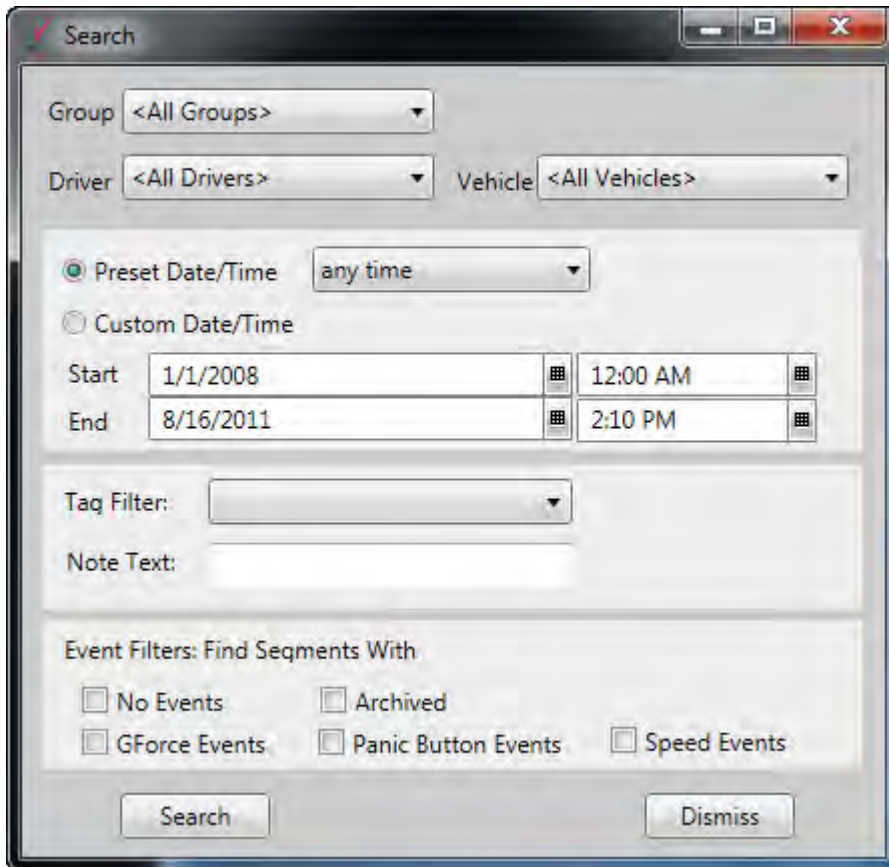


3. If, at any point, it is necessary to cancel these selections, clicking the Dismiss button on any dialog will terminate the operation and leave DV-Pro in the previously selected mode.

Parking Surveillance Settings



Item	Name	Description
1	Video Quality	Sets the video recording quality for Front and Rear cameras (Very Low, Normal, High or Very High; Default: Normal)
2	Frame Rate	Sets the recording frame rate of the front and rear camera. (0, 1, 2, 3, 5, 7.5, 10, 15; Default: 7.5)
3	G Sensor Settings	Determines how extreme a deviation in acceleration or deceleration will qualify as an event. The checkbox indicates whether this feature is enabled, and the sliders set the x-, y- and z-axis sensitivity levels to .1 granularity. (Previous versions of DV-Pro provided .25 granularity.)
4	Audio Recording	Enables or Disables audio recording function.
5	Timer for Parking	Sets the parking surveillance time (0 – 24 hrs).



In order to organize the display of segments presented, the search function allows you to apply filters which limit the number of segments made available at any one time. Filter criteria are:

Group: The Name of the group selected in the pull down. An empty value will find all groups

Driver: The Name of the driver selected in the pull down. An empty value will find all drivers

Vehicle: The Name of the vehicle selected in the pull down. An empty value will find all vehicles

Time -You can search by time in one of two ways:

Preset Date/Time - The time ranges (any time, today, yesterday, or the previous seven days) or

Custom Date/Time - The start and end times for the segments displayed. By default, the search function will not apply any time filter.

Tag Filter – Restrict the search results to those segments that have been marked with a standard descriptor

Event Filters: Find Segments With

No Events associated with them

You can also restrict to segments displayed to only those that contain a specific event

GForce Events – When any of the X, Y, Z axis of the GForce sensor exceeds the threshold in the configuration options.

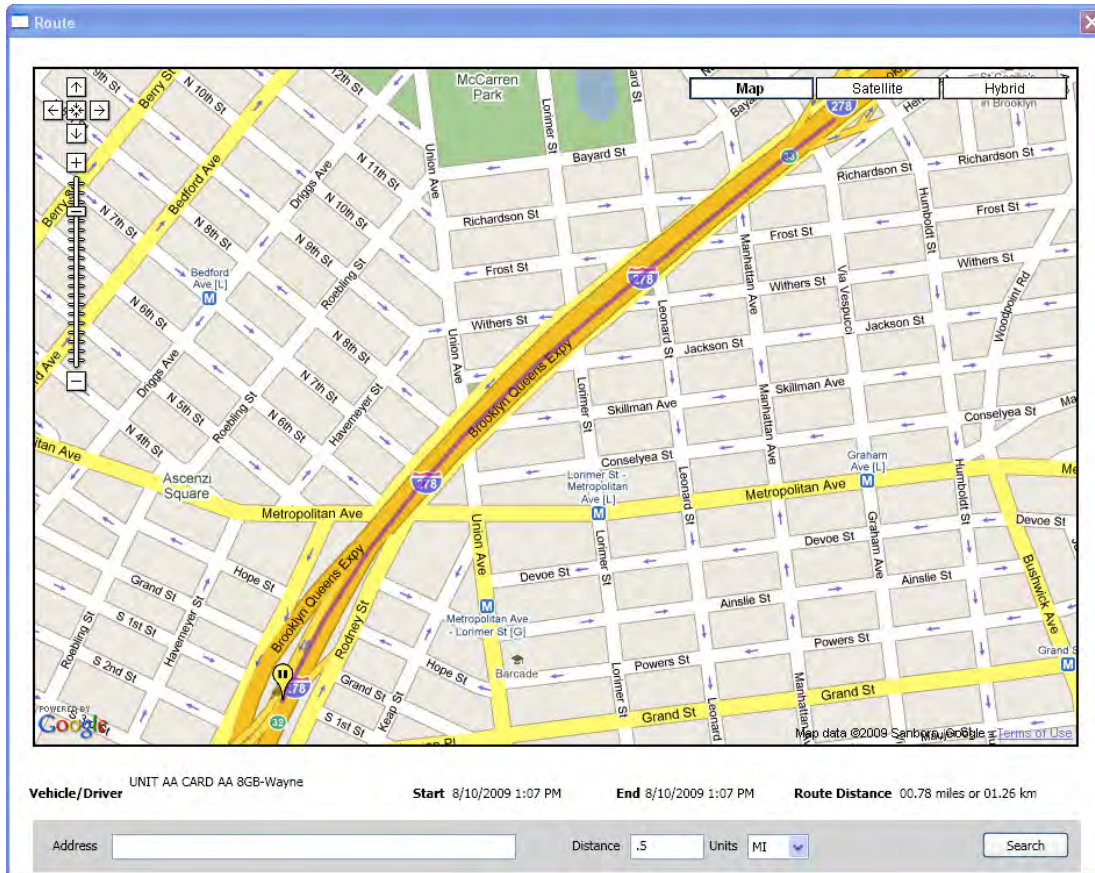
Panic Button Events – When the driver presses the panic button

Speed Events. – When the vehicle reaches or exceeds the speed set in the configuration options. If all segments, regardless of Event state, are to be shown, then none of the Event boxes should be set (this is the default condition.)

Archived – Show only those segments that have been marked for archiving.

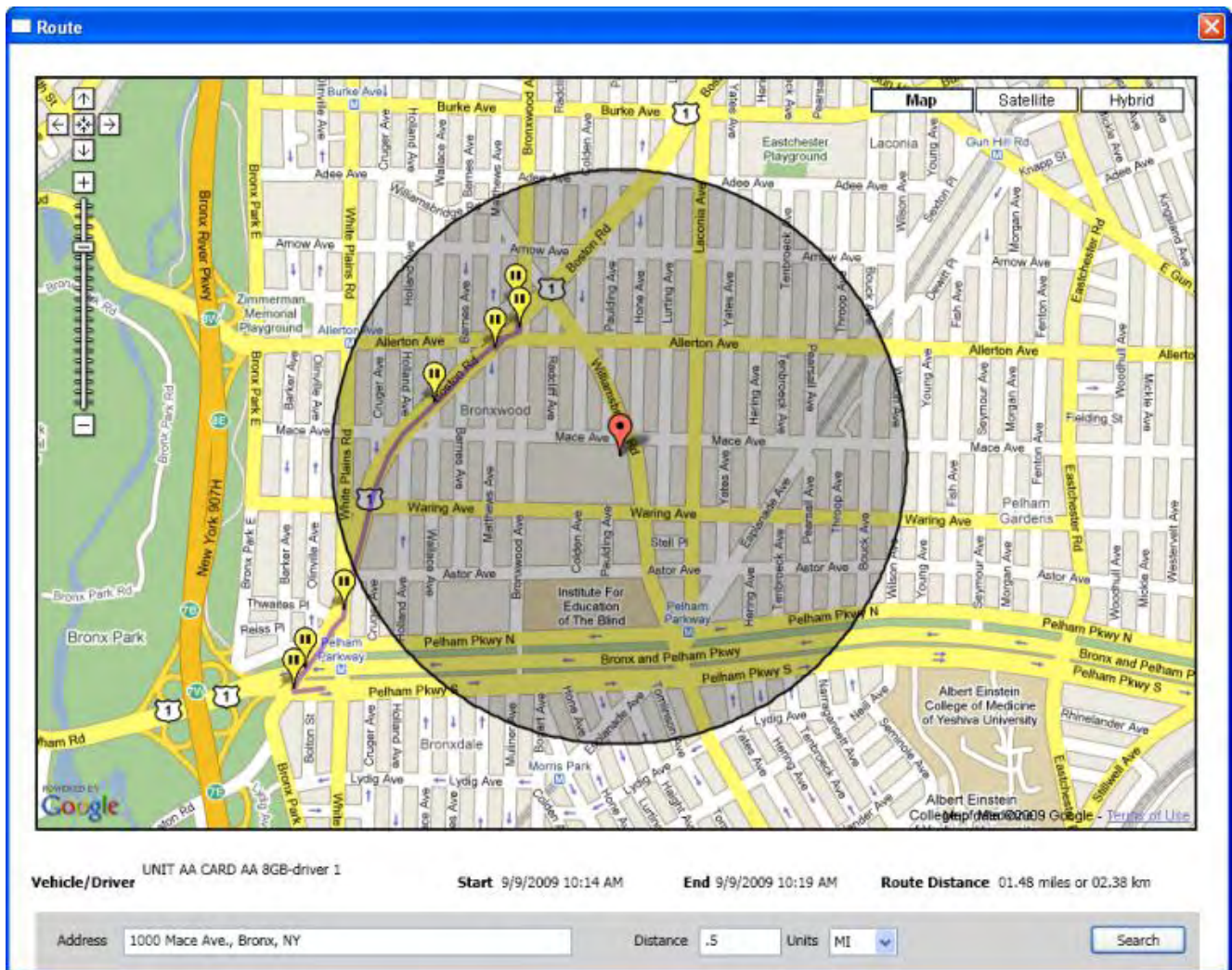
This feature is not available in Preview mode.

Route



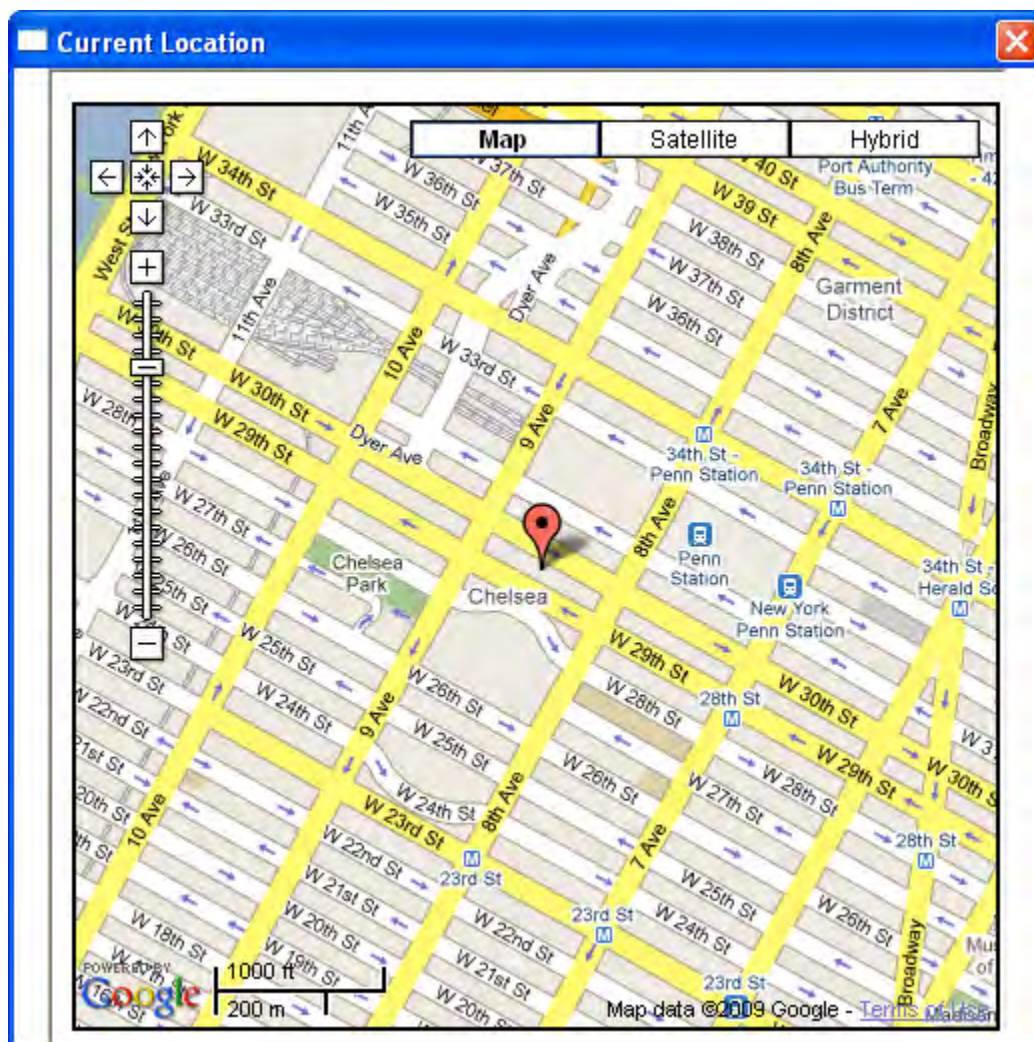
Clicking the Route button presents a Google map showing the route covered in the selected segments. The Start and End times of these segments are displayed along with the distance of the route.

This option will not be available when segments which have no GPS data associated with them are displayed.



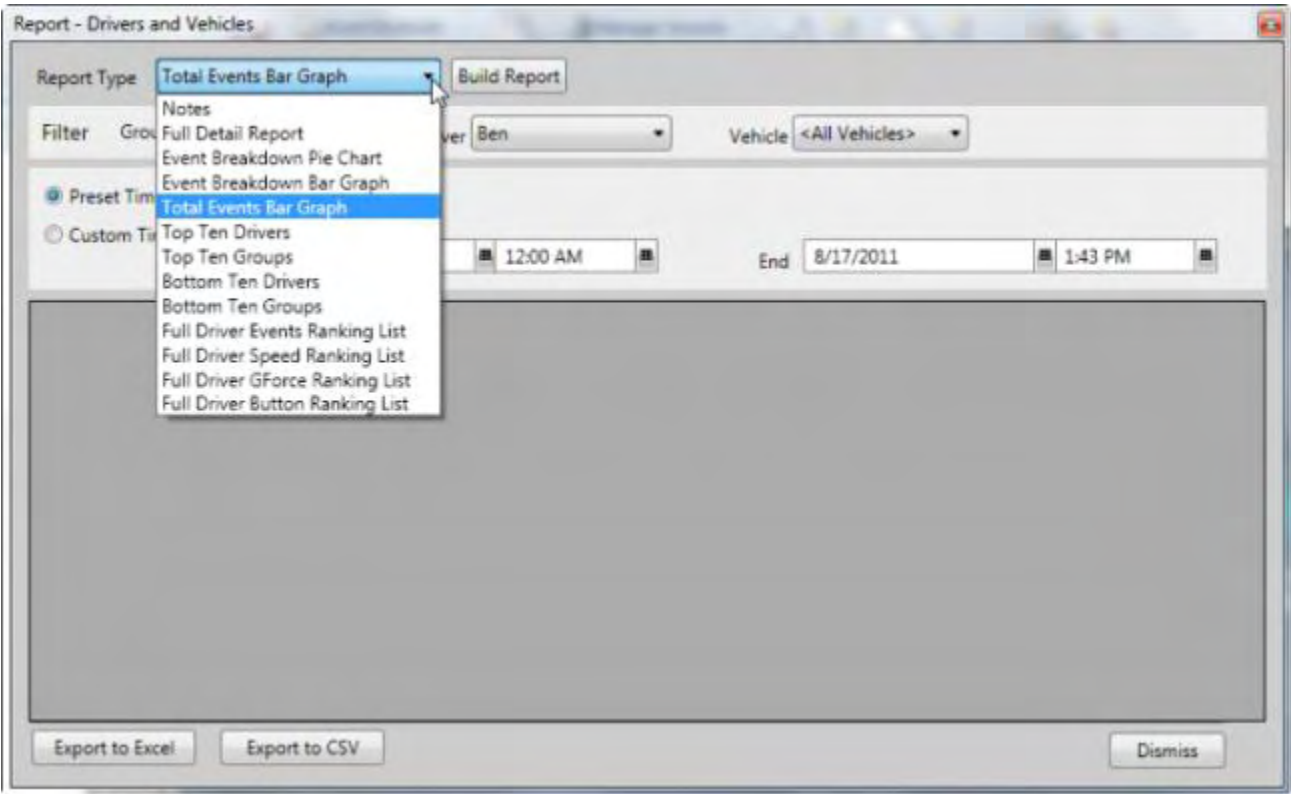
From the route map, an address search can be applied which will show how close the route comes to that specified address. Use commas to separate the address, city and state in the Address box; the shaded circle identifies the radius as specified in the Distance box.

This feature is not available in Preview mode.

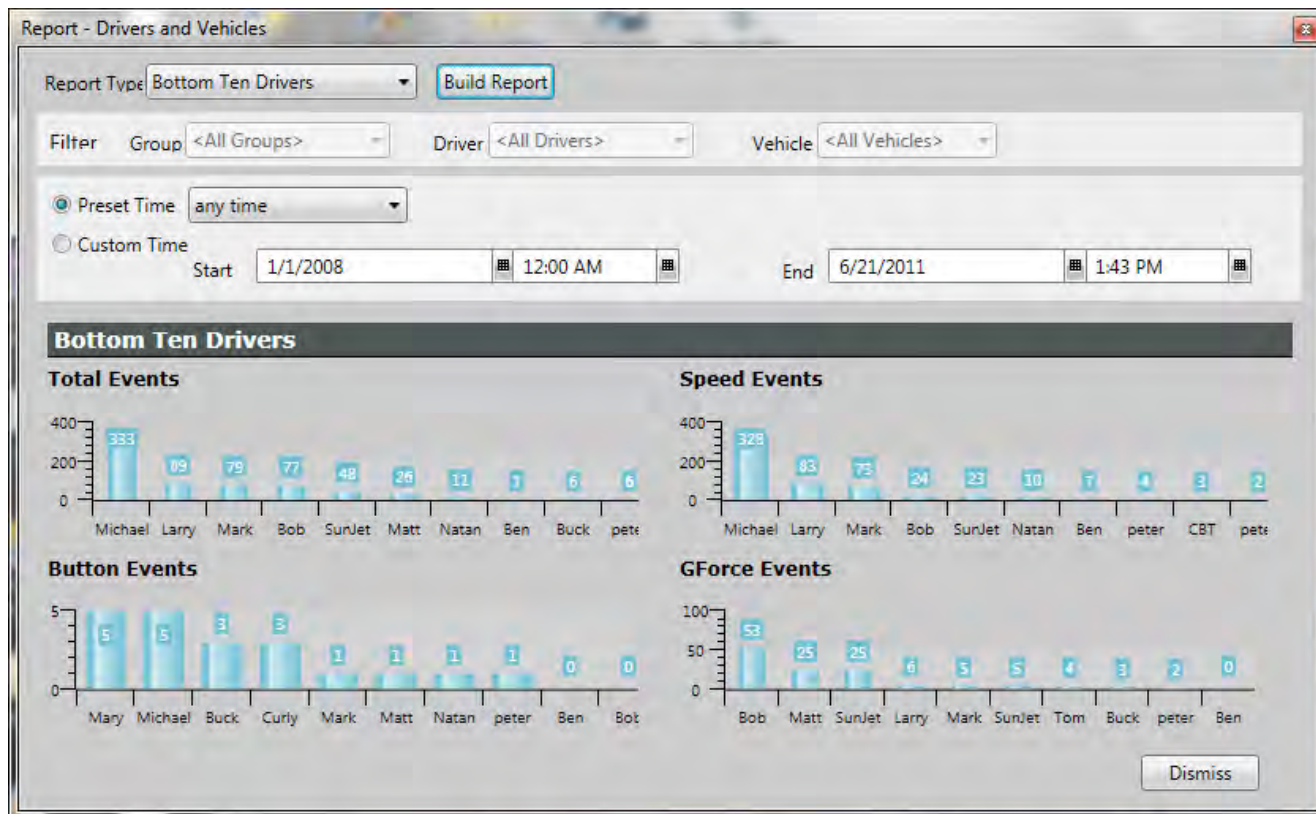


The Location button opens a window which allows you to visually track the location of the vehicle on a map as the segment video is displayed.

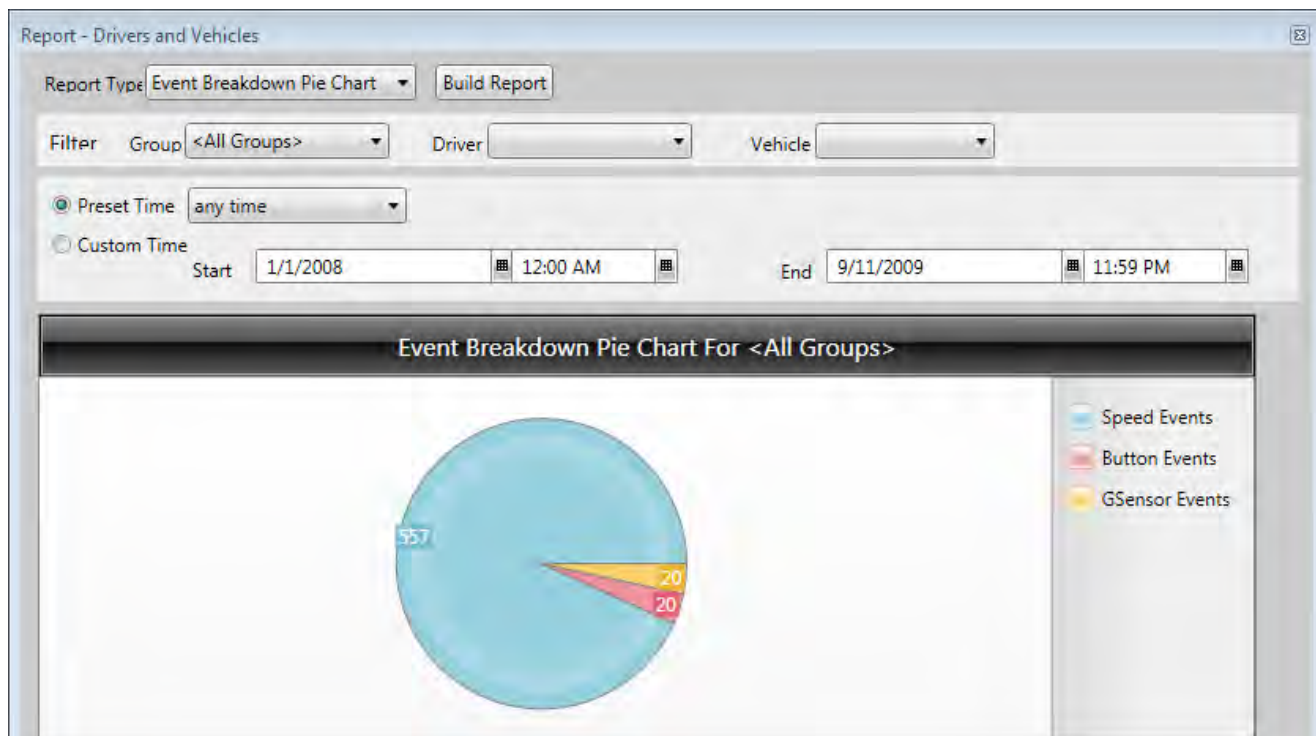
In order to assist with analysis of the data gathered in DV-Pro, various reporting options are made available. You can present aggregate information about the vehicles, drivers and groups that have been imported, or can construct reports for specific drivers, vehicles or groups (or you can show all of them). You can restrict the data presented by date and time. Both text and graphical reports can be generated.



Report Example – Bottom Ten Drivers



Report Example – Event Breakdown Pie Chart



Report Example – Full Detail Report

Report - Drivers and Vehicles

Report Type: Full Detail Report Build Report

Filter Group: <All Groups> Driver: <All Drivers> Vehicle: <All Vehicles>

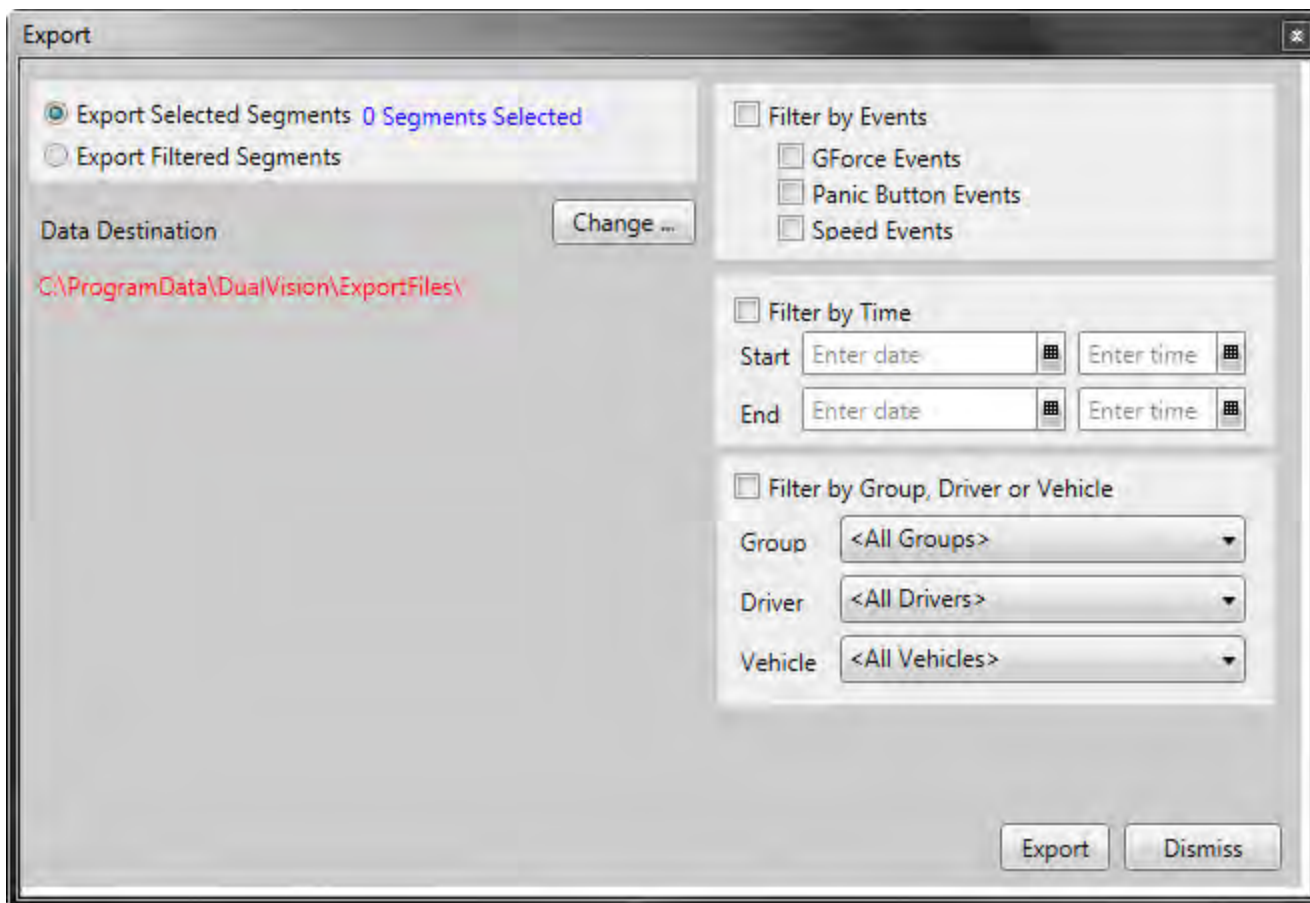
☒ Preset Time: any time

☐ Custom Time: Start: 1/1/2008 12:00 AM End: 6/21/2011 1:43 PM

	Vehicle Name	Driver	Group_Name	All Events	Speed Events	GForce Events	Button Events	Start Time	End Time
▶	Ben Englander	Ben		7	7	0	0	9/22/2009 7:53 AM	9/22/2009 8:00 AM
	#4268 Paratrans...	Bob	Rosco	77	24	53	0	9/18/2009 9:40 AM	9/18/2009 4:28 PM
	Andrew Buck	Buck		6	0	3	3	10/30/2009 7:00 PM	11/5/2009 7:14 PM
	CBT PARATRA...	CBT		3	3	0	0	9/9/2009 12:25 PM	9/9/2009 1:22 PM
	Bus	Curly	Night Shift	0	0	0	0	11/19/2010 4:50 PM	11/19/2010 10:07 PM
	unknown_vehicle	Curly	Night Shift	3	0	0	3	10/30/2009 7:04 PM	10/30/2009 10:24 PM
	CBT PARATRA...	George		0	0	0	0	8/30/2010 3:01 PM	8/30/2010 3:48 PM
	Bus	Joe	Taxi Garage	0	0	0	0	11/19/2010 4:43 PM	11/19/2010 10:07 PM
	Wayne's Car	Larry		89	83	6	0	11/20/2009 11:57 AM	3/5/2010 6:18 PM
	WAYNE'S CAR	Mark	Garage	79	73	5	1	11/22/2009 7:09 PM	11/25/2009 8:05 PM
	UNIT AA CARD ...	Mary		5	0	0	5	7/9/2009 8:58 AM	7/9/2009 9:09 AM

Export to Excel Export to CSV Dismiss

Once a text report has been generated, the data presented can be Exported to either an Excel (XLS) file, or to a comma-separated (CSV) file for further processing.

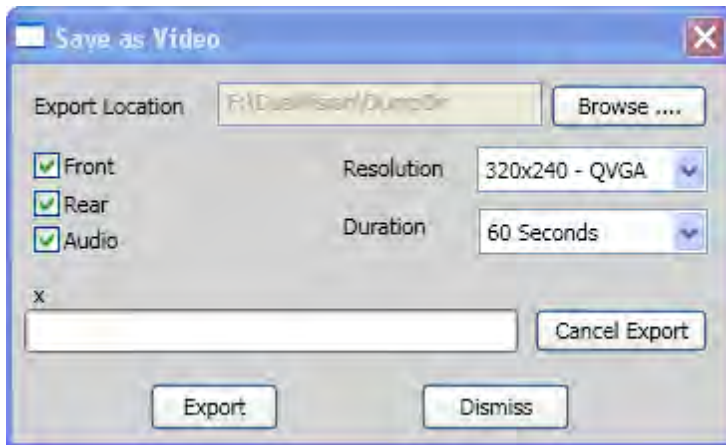


This feature allows you to take video segments and associated database information from DV-Pro and move them to an SD Card, for use on another DV-Pro installation or by someone needing to view these segments outside of DV-Pro.

A zip file containing the requested information is created and moved to the **Data Destination** directory. The zip file can be un-archived to create a disk with files in the same formats as those that are created by the DV-Pro recording device. These files can then be read and displayed by the Dual-Vision player, or can be imported into another instance of DV-Pro.

In a manner similar to the Import function, choices can be specified to restrict the segments to be exported based on Event, Time, or Driver, Group or Vehicle filters.

Save As Video



This operation allows you to export a selected segment as an AVI file for viewing in a different media player, or for sharing with other users. You have the options of preparing a video which includes only road and passenger compartment views, or both, and saving audio from the segment is also optional. You can also specify a storage location for the file, and choose between low and high resolution video. It is also possible to restrict the converted file to only showing part of the segment.

This feature is not available in Preview mode.

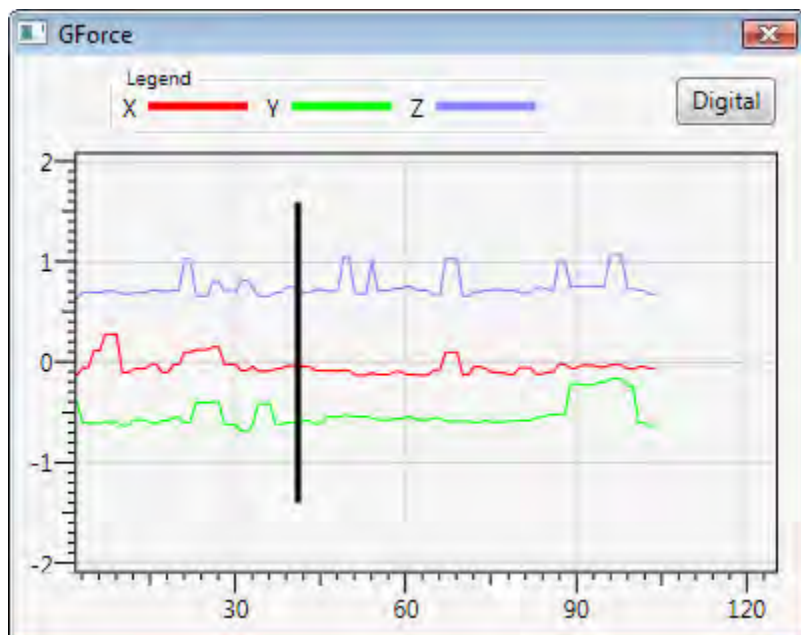
G Force



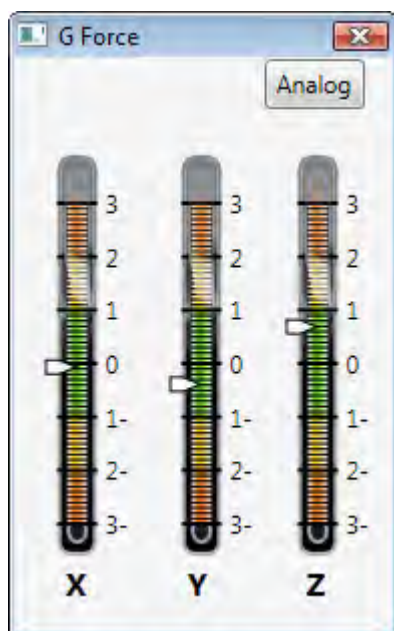
Clicking this button presents detailed accelerometer information generated during the recording of this segment.

Two different displays are available:

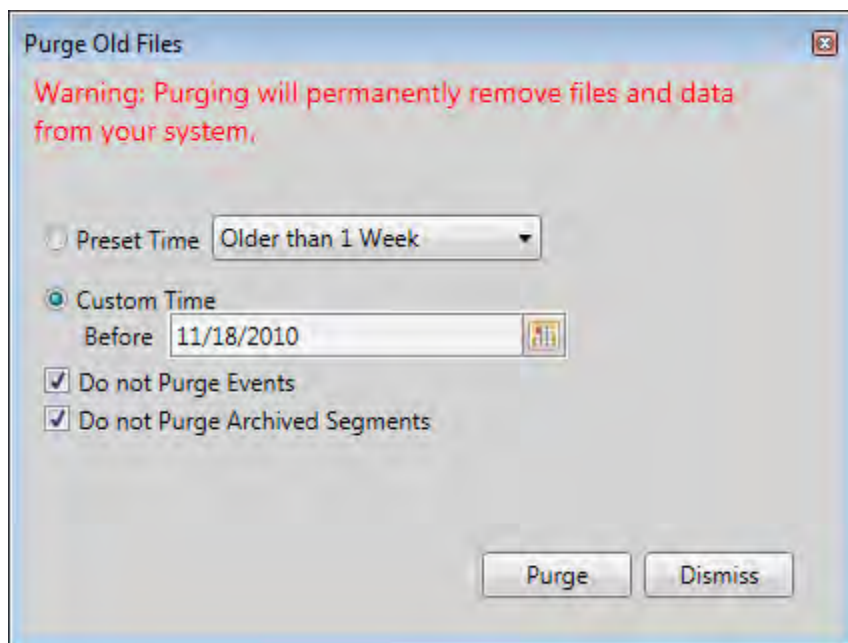
An analog rendering with a moving line to show the current position of the vehicle



A digital display shows the three accelerometer values side by side.



To switch between the displays, click the Analog or Digital button on the respective display.



The purge operation allows you to remove imported Dual-Vision data files from your system, freeing up disk storage space. You can automatically remove files that are older than 1 week, older than 2 weeks, older than 3 weeks, or older than 1 month. Alternately, you can set a specific date; all imported files which were recorded before that date will be purged.

You can optionally choose not to purge files that contain Events. If this option is chosen, only imported files which do not have Events will be purged.

You can also choose not to purge files that have been flagged as "Archive" in the Segment Display Grid. In this case, only imported files that have not been archived will be purged.

This feature is not available to users who have Read Only access to the database.

Frequently Asked Questions

Why can't segments be re-imported and identified with a different driver?

The Dual-Vision system recognizes individual segments and will not import them more than once. If a different driver needs to be assigned to previously imported segments, it will be necessary to delete them first, and then re-import to associate them with the new driver.

How do I import segments from the same card with a different driver?

Use the time filter feature to distinguish between different drivers of the same vehicle.

How much disk space is required to store Dual-Vision data files?

A typical Dual-Vision segment stores 50 seconds of data in 20 megabytes of disk space.

Time in Hours	Approximate Size in Gigabytes
1	1.5
8	12
16	24

After a vehicle has been operated for a long time, many of the earliest files do not seem to be available.

Why is this happening and what can be done about it?

The Dual-Vision Recorder is designed to overwrite files that do not hold Event information. Therefore, depending on the capacity of your SD Card, it is possible that files which had been recorded earlier will be replaced. This can be avoided by using larger capacity SD Cards, or by being less restrictive in defining the conditions which will qualify as Events.

What can I do to speed up the importing process?

The importing operation is dependent on system resources, so it will run more efficiently if your computer is not performing other tasks at the same time. Increasing your system's RAM memory will provide noticeable improvements. Also, make sure that your system is capable of operating USB 2.0, and that your SD Cards have the highest possible transfer rate.

Appendix: Information for Administrators Establishing Access Permissions for Multiple Users

DualVision DV-Pro 3.5 implements the capability for multiple users to access the same database concurrently, allowing different users in an organization to operate on common data at the same time. Since this database will typically be shared on a network within the organization, it requires that the DV-Pro administrator have additional awareness of the state of the database.

Administrators wishing to restrict write permission to the DV-Pro database for performance or security reasons may choose to give certain users Read Only access to the data.

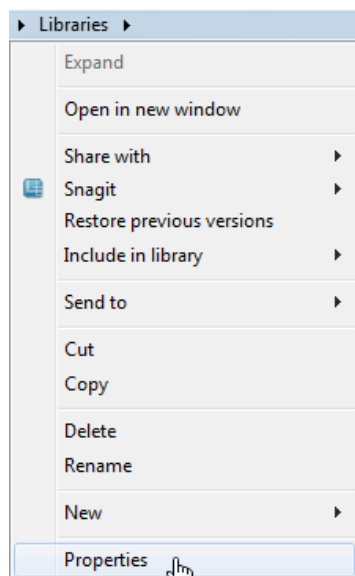
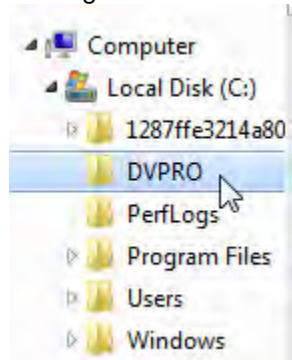
Users who have Read Only access to the database will not be able perform **Import** or **Purge** functions, nor will they be able to modify the **Notes** or **Tags** associated with Video segments, and they will not be able to order the **Archiving** or **Deletion** of any segment.

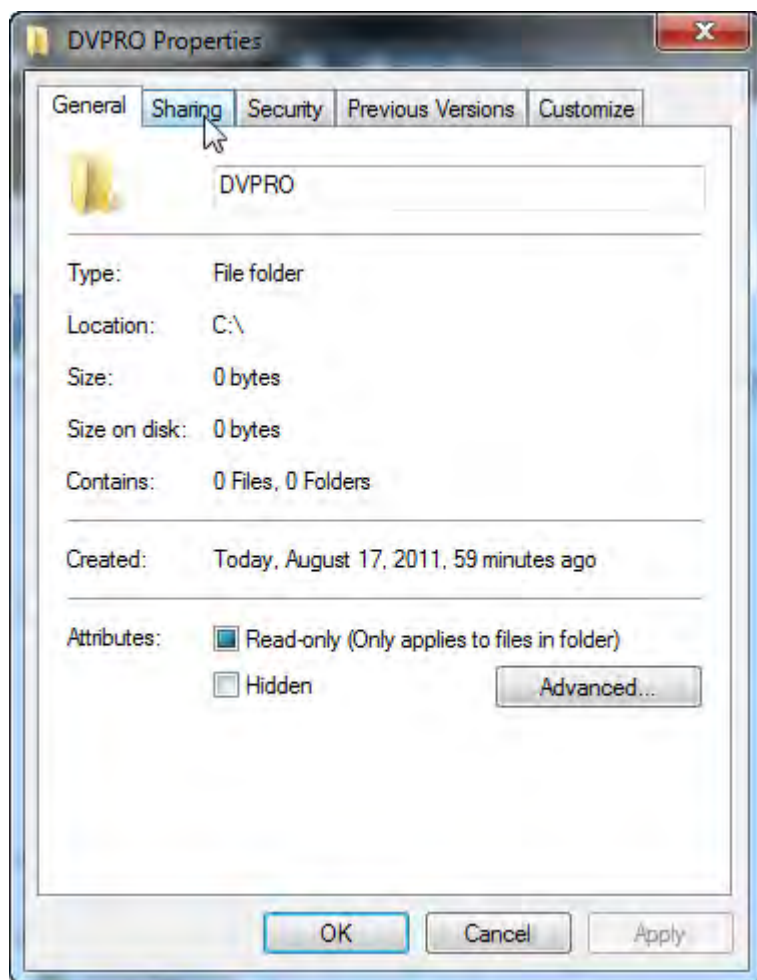
Creating Network Shares

Specifically, the administrator should be aware of network sharing procedures, and the manner in which access privileges are established and maintained. A network database location is usually defined with a UNC, or Universal Naming Convention string, of the form [\\Computername\SharedFolder\Resource](#). So, for example, a DualVision DV-Pro database might be identified as [\\INSPIRONTOWER1\DVPRO\dualvision.db3](#). This means that the db file. dualvision.db3, resides on a computer whose network name is INSPIRONTOWER1, in a shared folder named DVPRO.

A shared folder is typically set up from Windows Explorer. To create a shared folder, follow these steps:

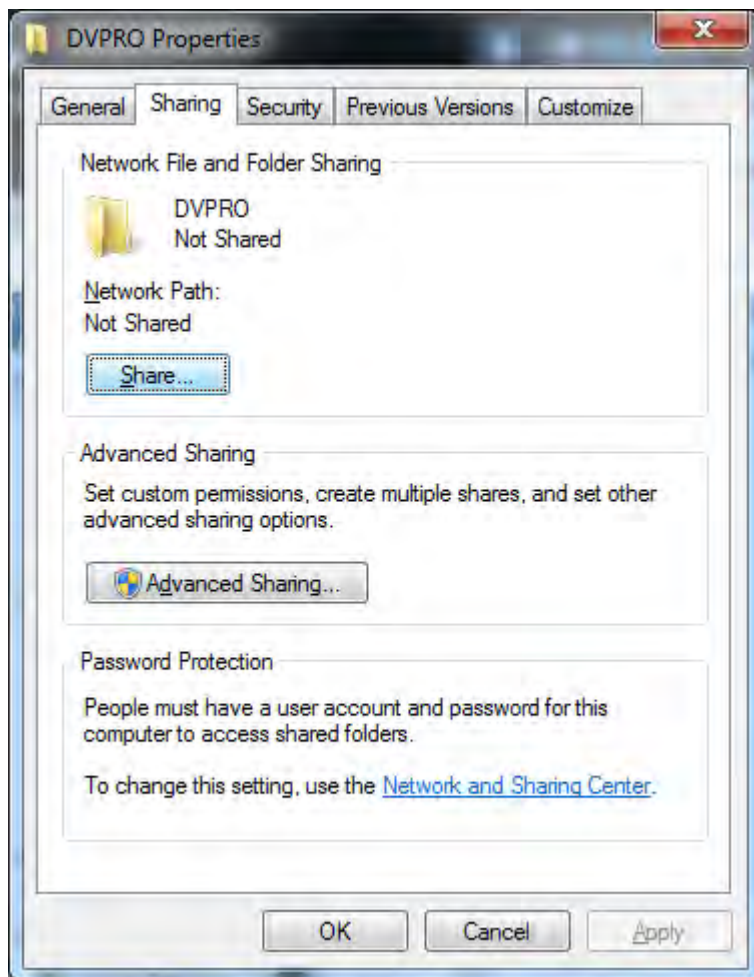
1. Right click on the name of the directory you wish to share, and choose **Properties** from the pop-up menu.



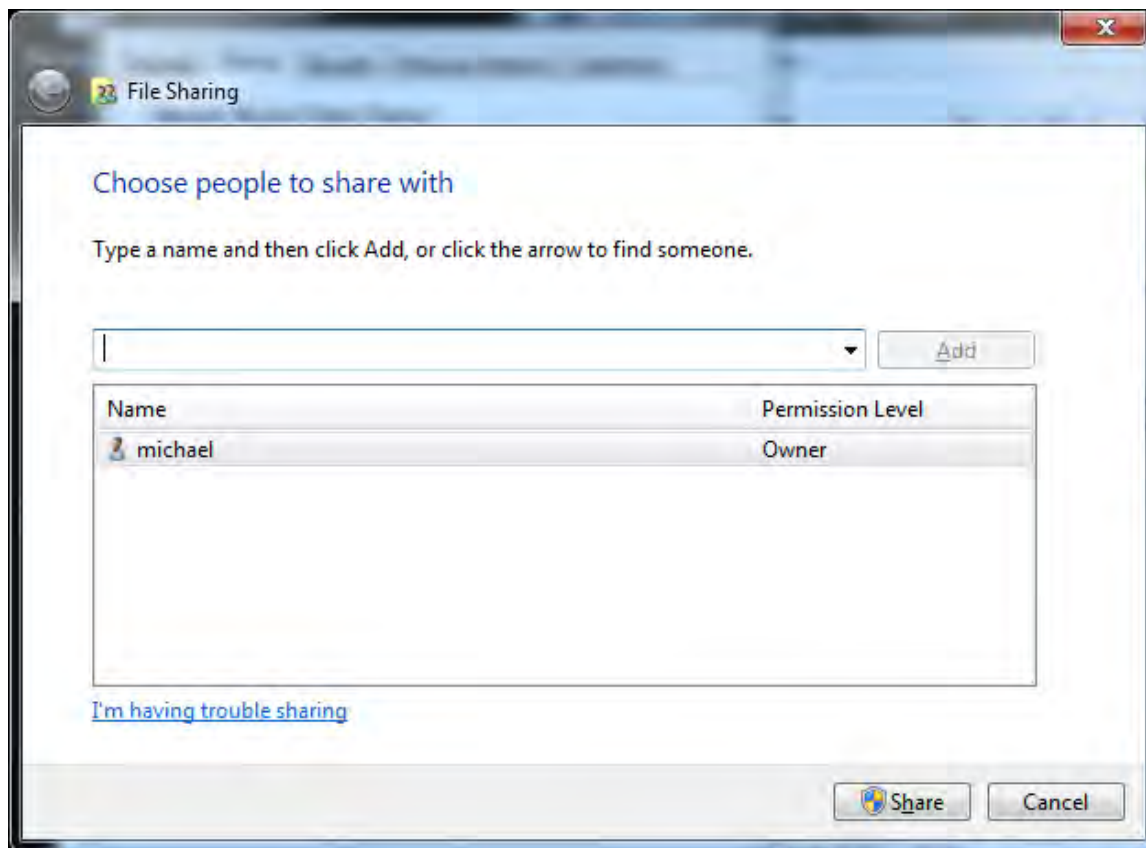


2. Click the Sharing tab.

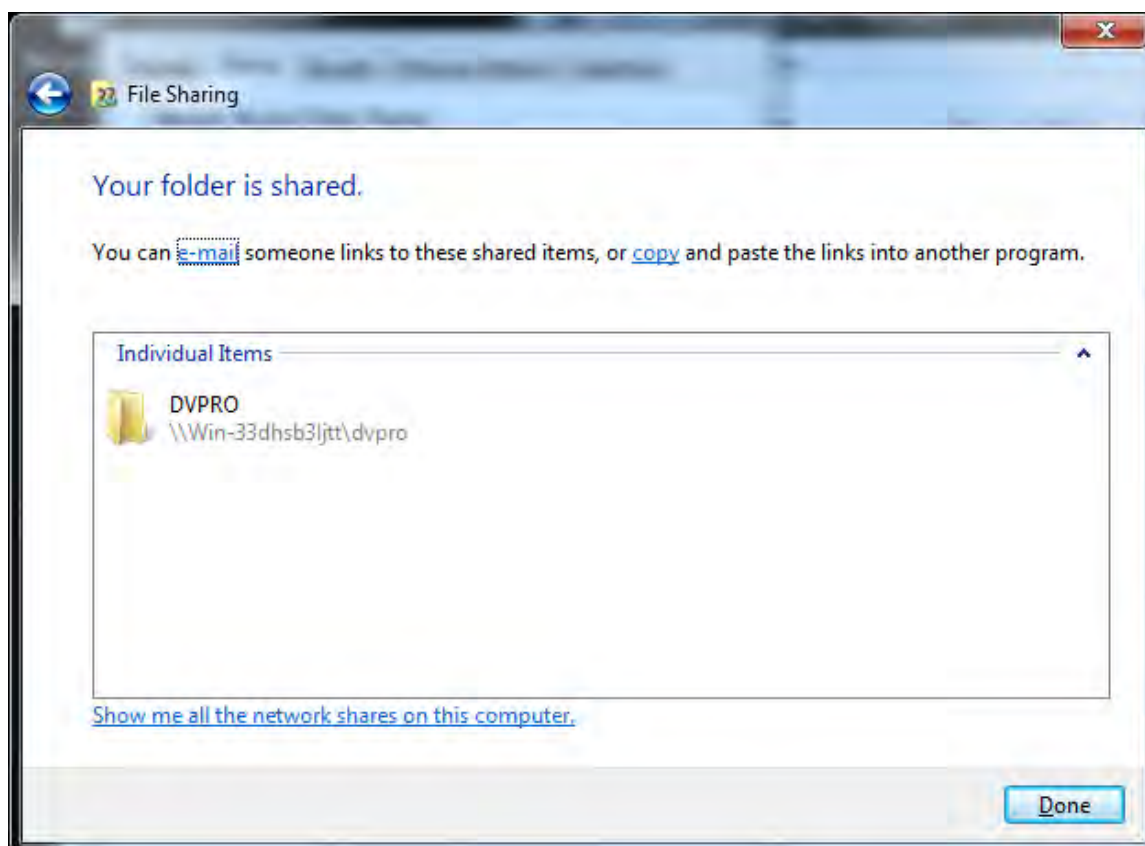
3. Next, click the **Share** button.



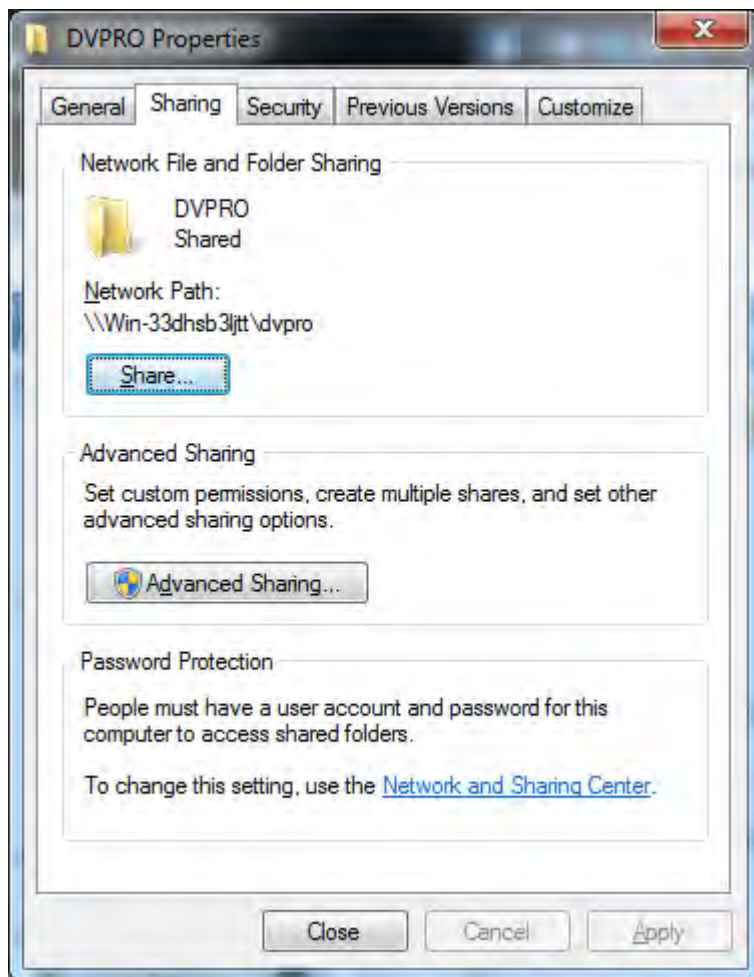
4. The File Sharing window will then be presented.



5. From here, users and groups can be chosen to have access to the directory. After making your selections, click **Share** to complete the operation. You will then be informed that the folder is shared.



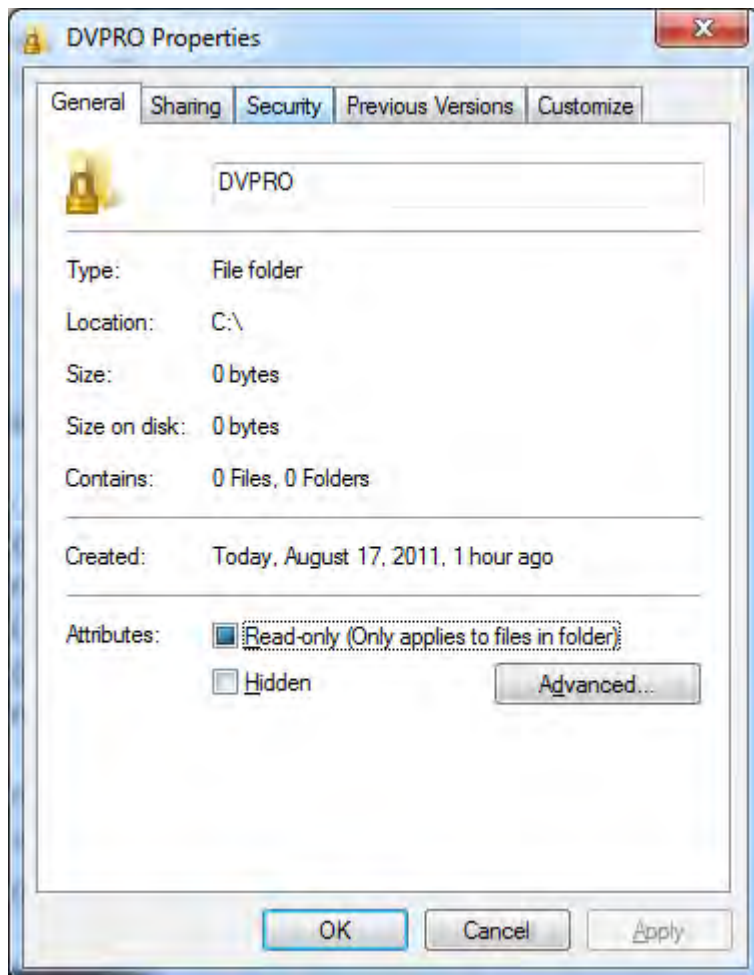
6. Click **Done** to return to the Properties dialog, where the network (UNC) path is now displayed.



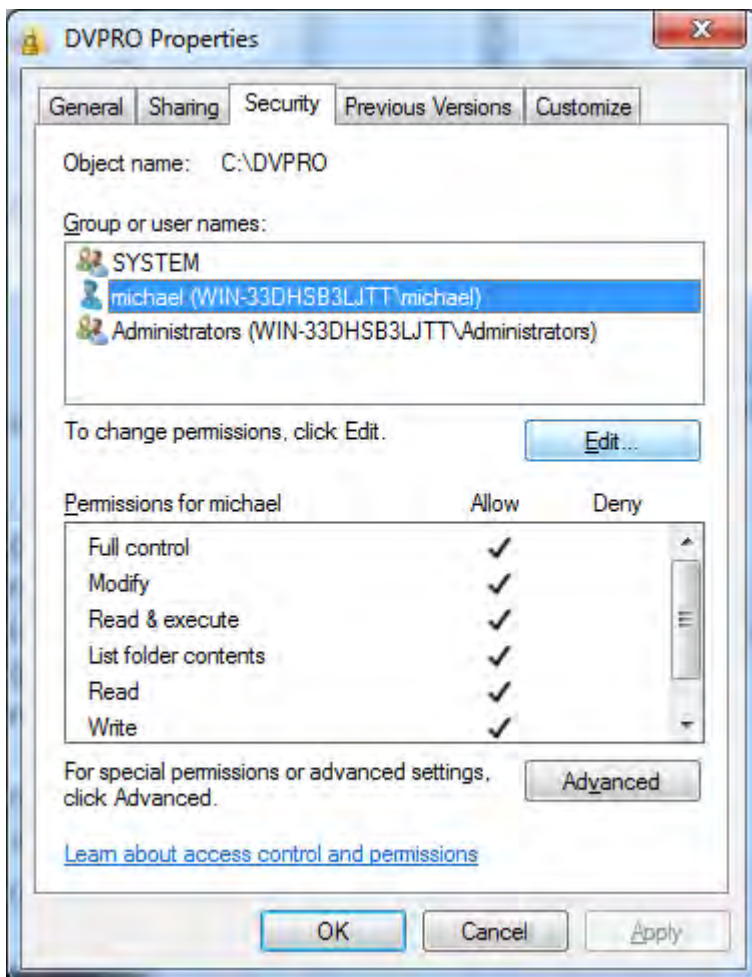
Defining Network Share Access Rights

To establish access permission, execute the following steps.

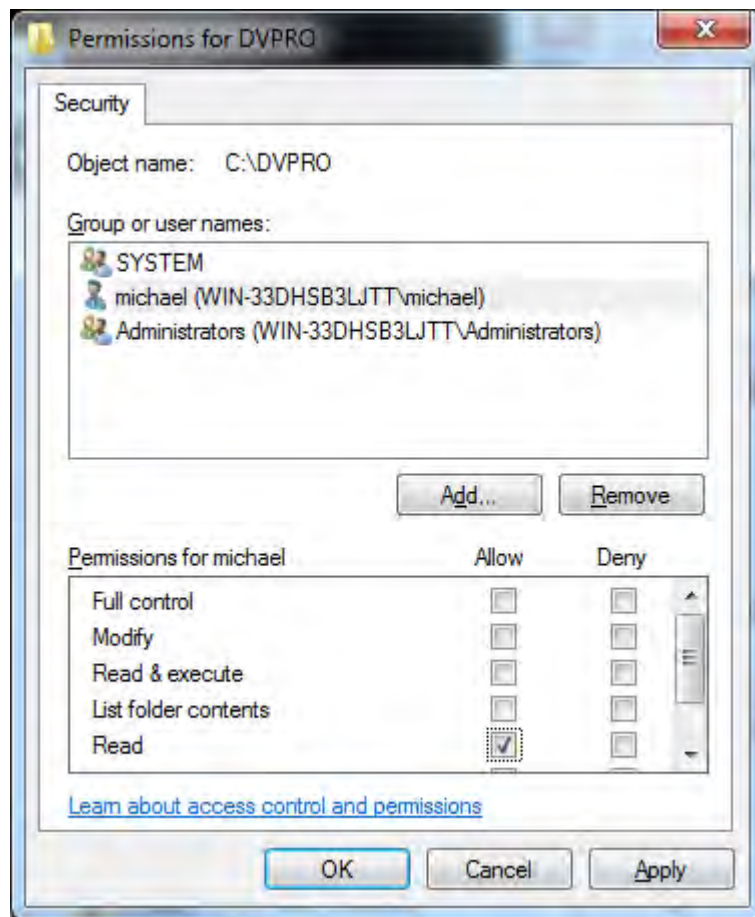
1. Right click on the shared directory in Windows Explorer, and choose **Properties** from the pop-up menu.



2. Click the Security tab.



3. From here, choose a Group or User in the Group or users names list, and click **Edit**.



4. The Permissions list for that chosen user or group is now active, and you can specify the required Permissions. Typically, a user or group will have the Allow box next to Full Control checked if they are expected to be able to write to the file; someone with Read Only permission would have the Allow box next to Read checked, with all of the other permissions being left blank.
5. Once the choice has been made, click the **Apply** button to implement the change.

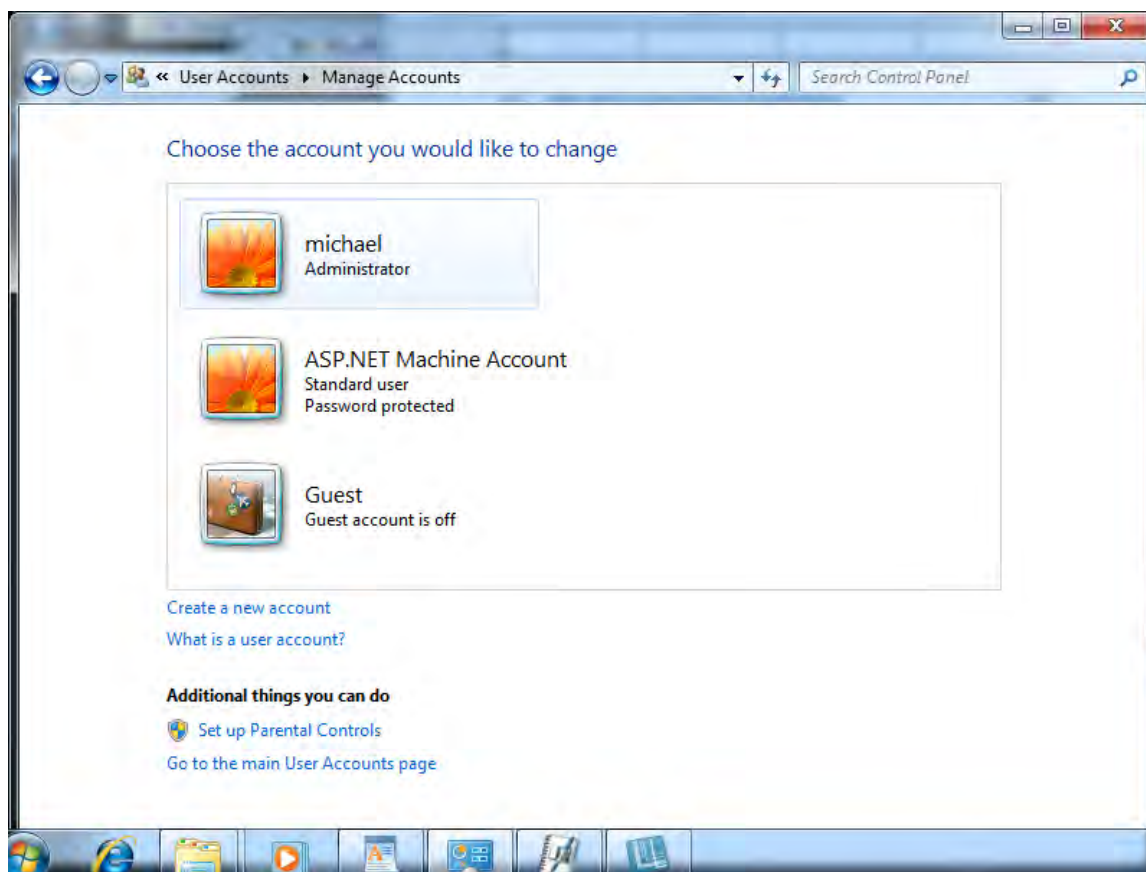
Creating New Users

User most circumstances, users are created by the Windows operating system when it is installed. To add new users, follow these steps:

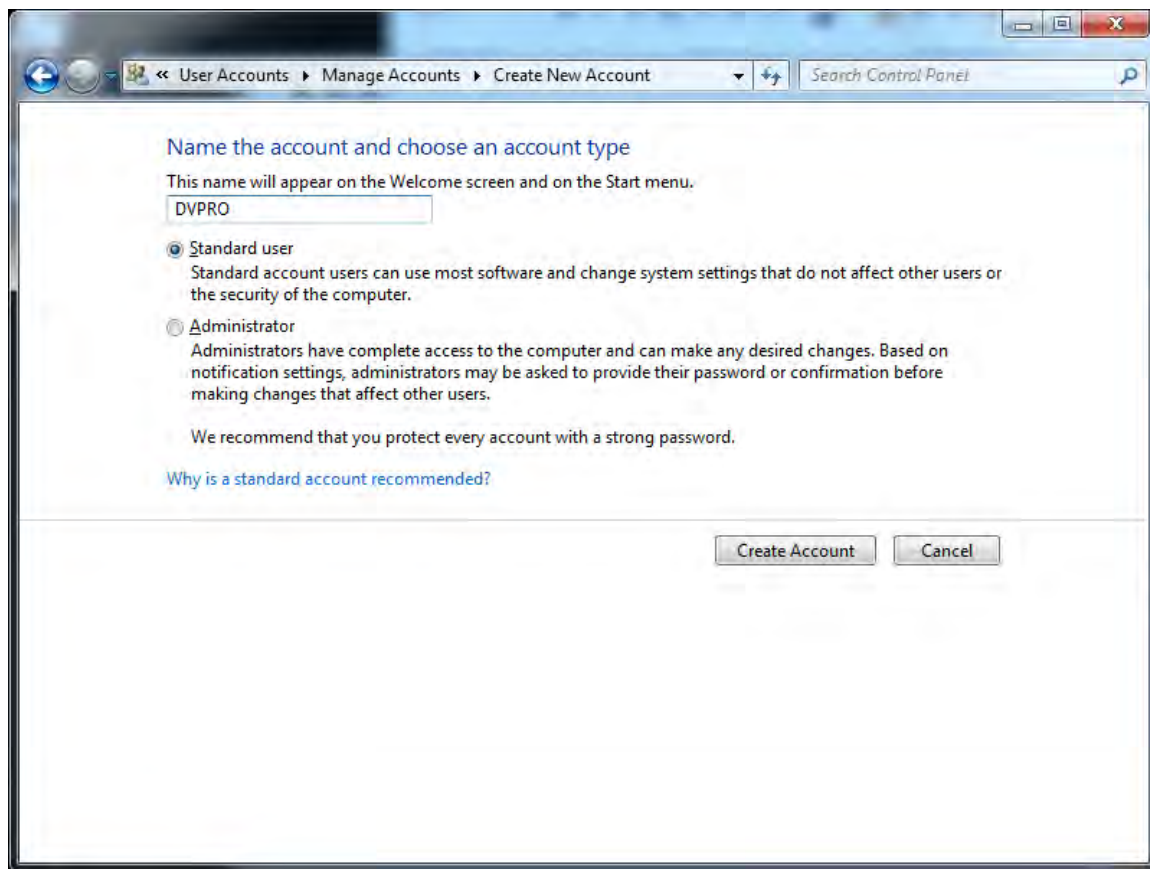
1. Go to the User Accounts and Family Safety section of the Control Panel.



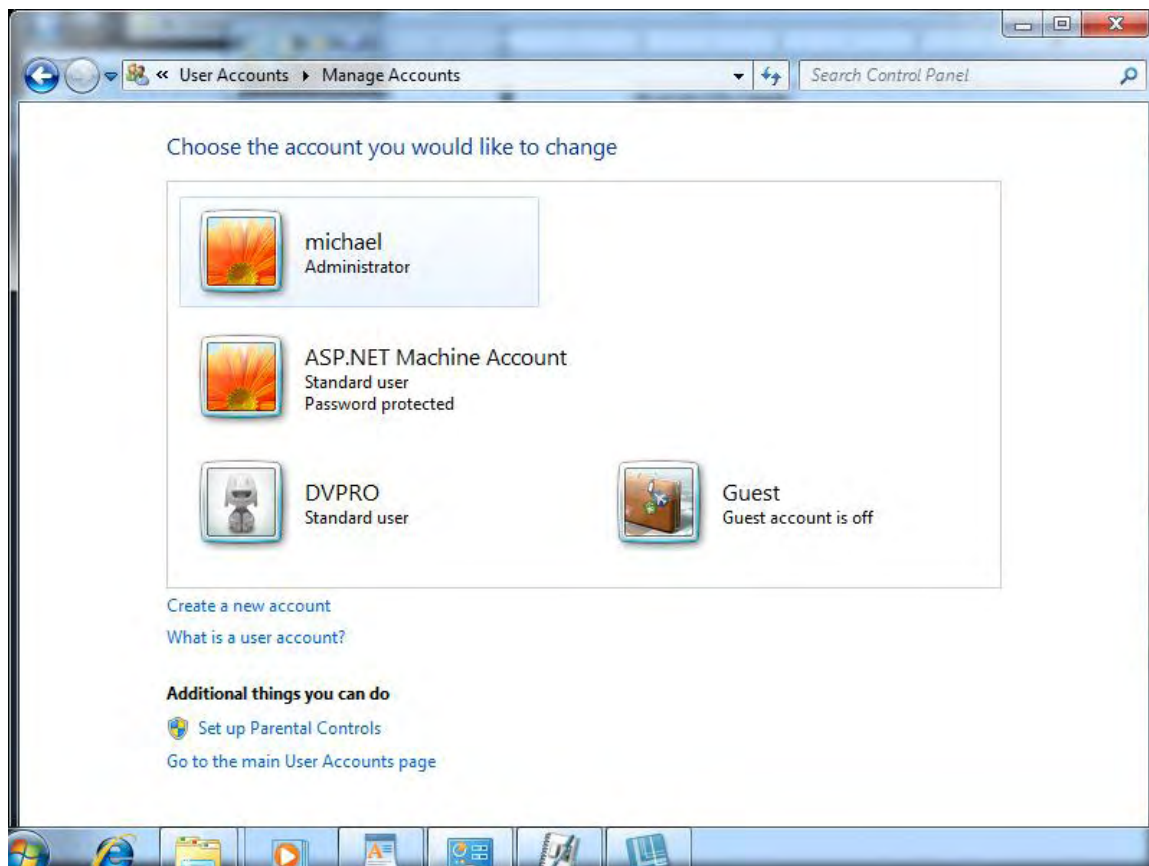
2. Click **Add or remove user accounts**.



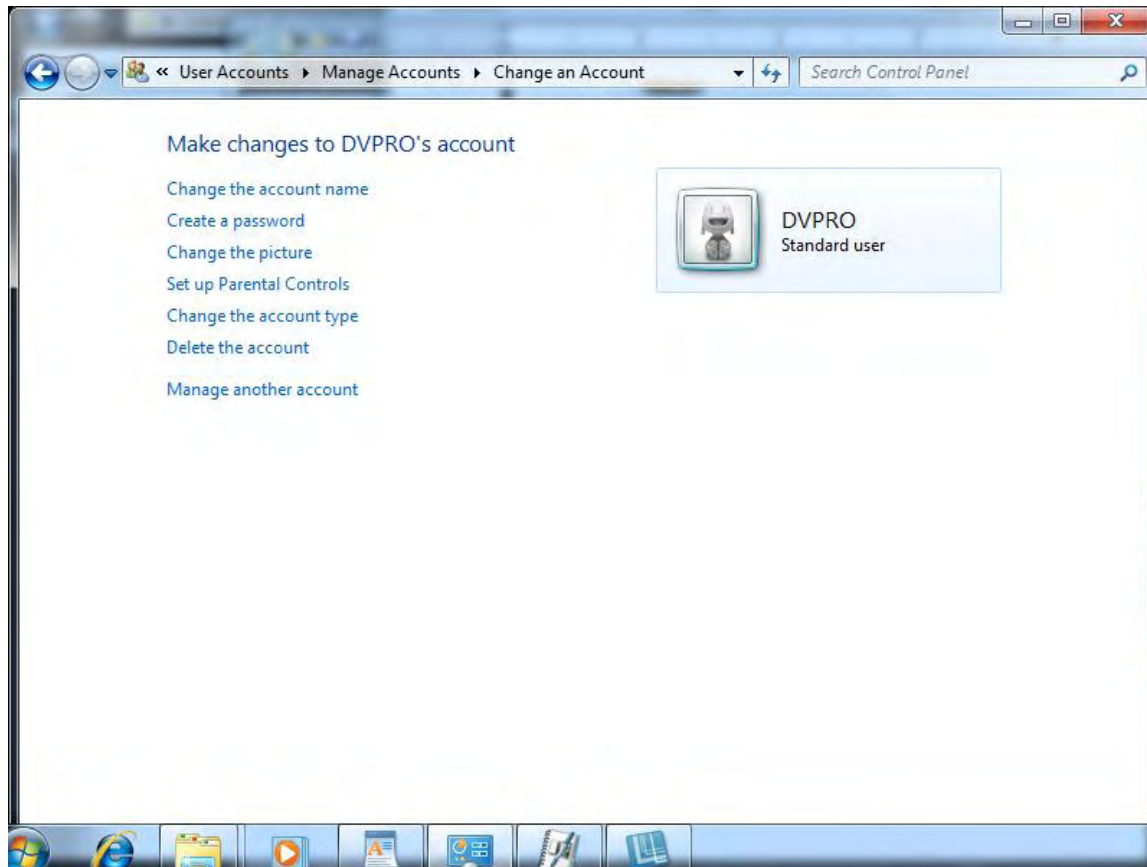
3. Click the **Create a new account** link.



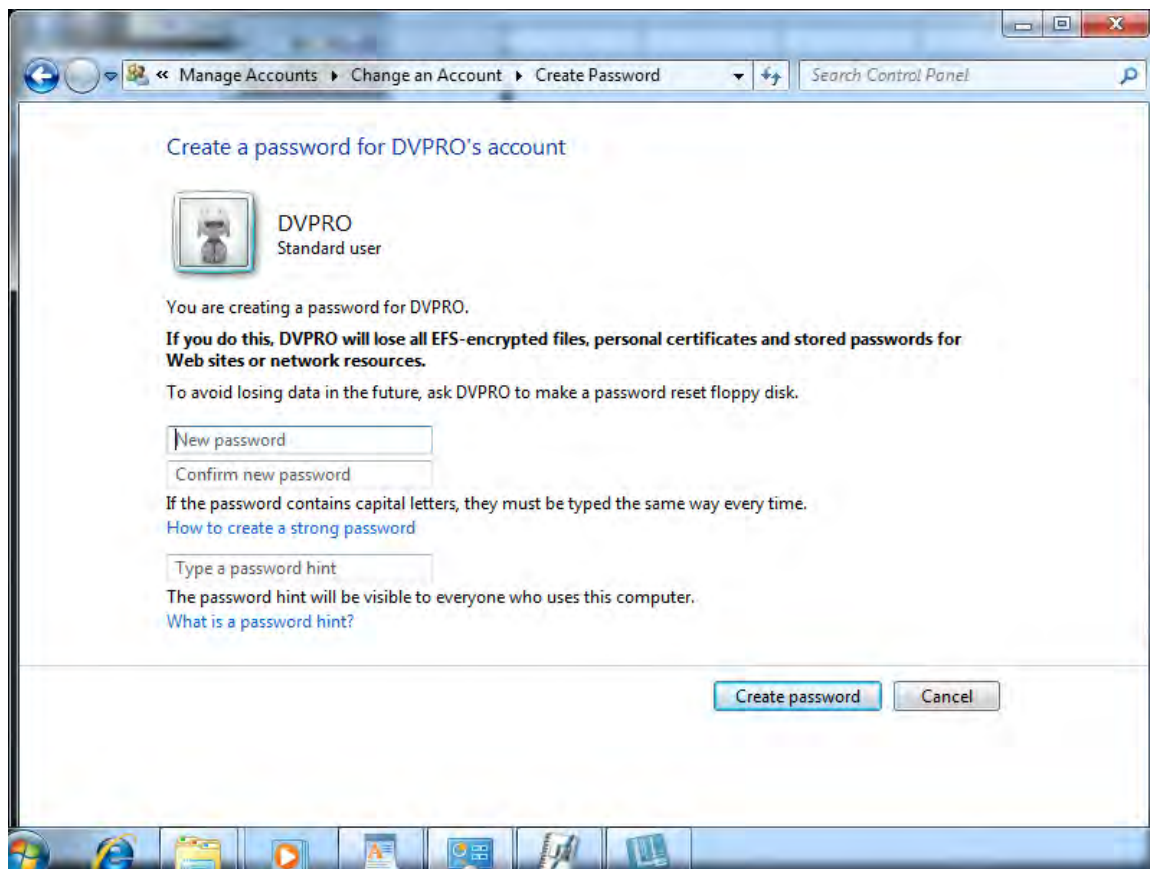
4. Enter a new User name and, typically, make it a Standard user account. Next, click the **Create Account** button. The new user (DVPRO, in this case) will appear in the user list displayed.



5. To assign a password to a new user, double-click that user's icon to get to the **Make changes to user's account** page.



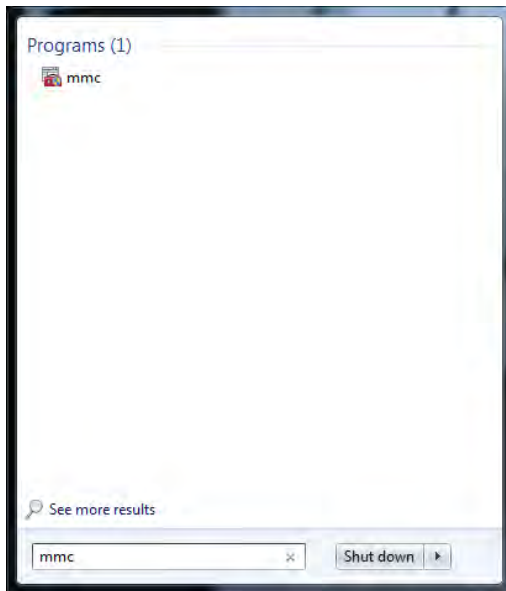
6. Click the **Create a password** link to open the **Create a password for user's account** page.



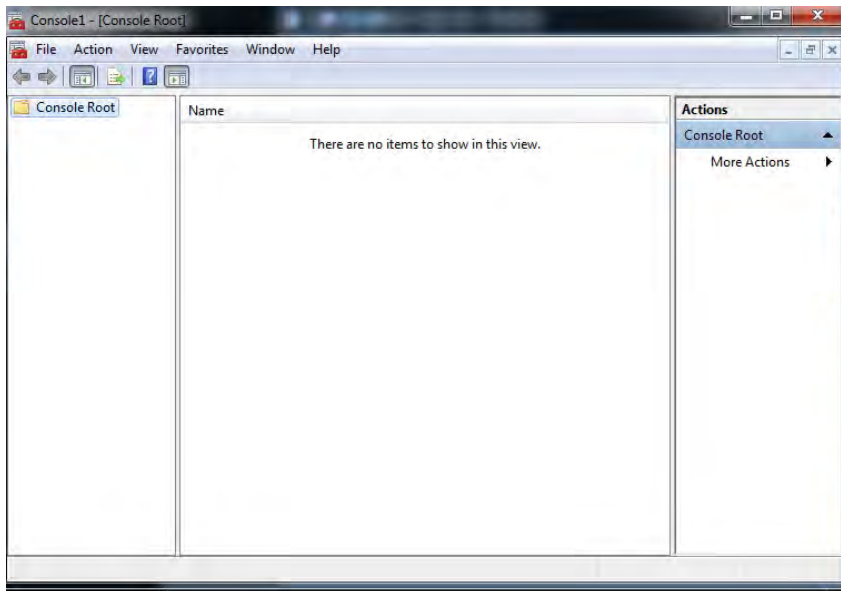
7. Enter the new password, confirm the password, type a hint, and click the **Create Password** button.

Creating Groups

In order to create a group, it is necessary to run the Microsoft Management Console, or mmc.exe. This can be done by using the search box to find mmc

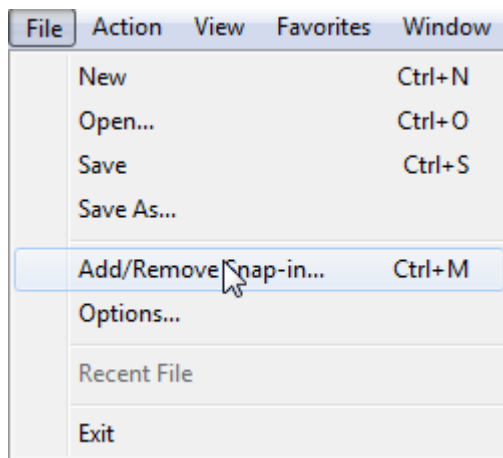


Open Microsoft Management Console by double-clicking on mmc.exe. A window titled Console1 will open.

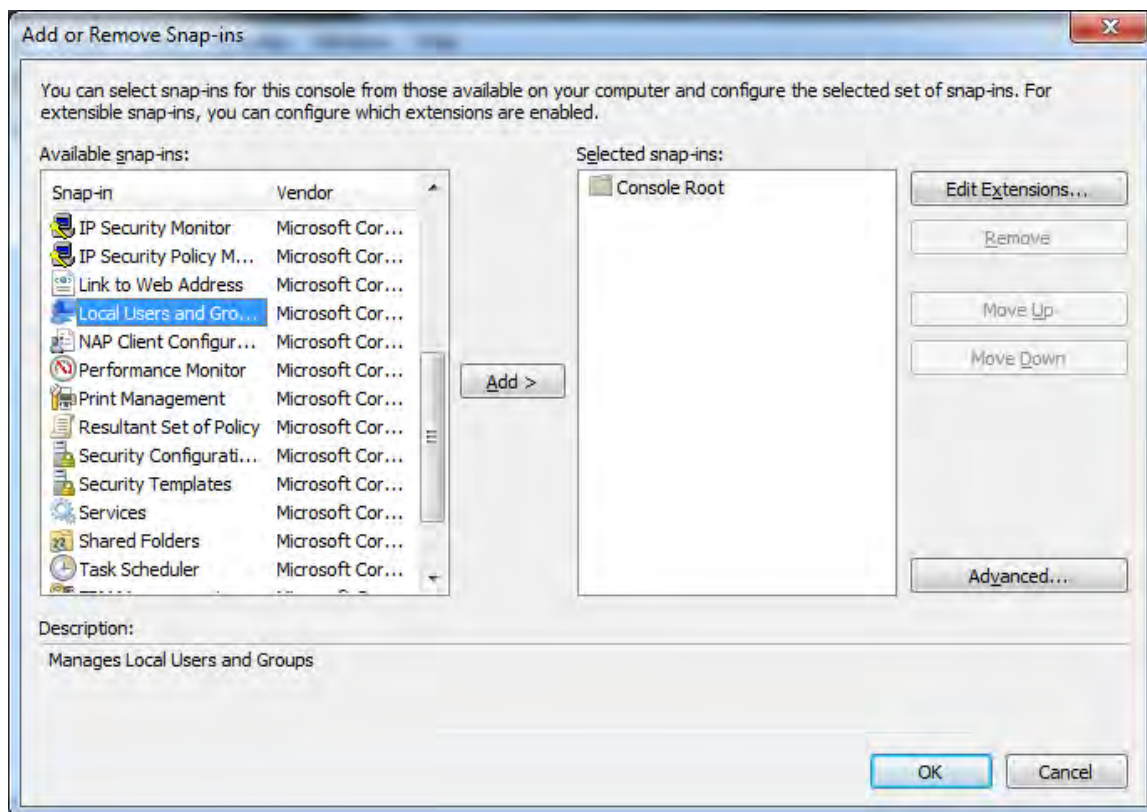


If the Local Users and Groups item is not present in the left pane, a snap-in will have to be installed. To do that, execute the following steps.

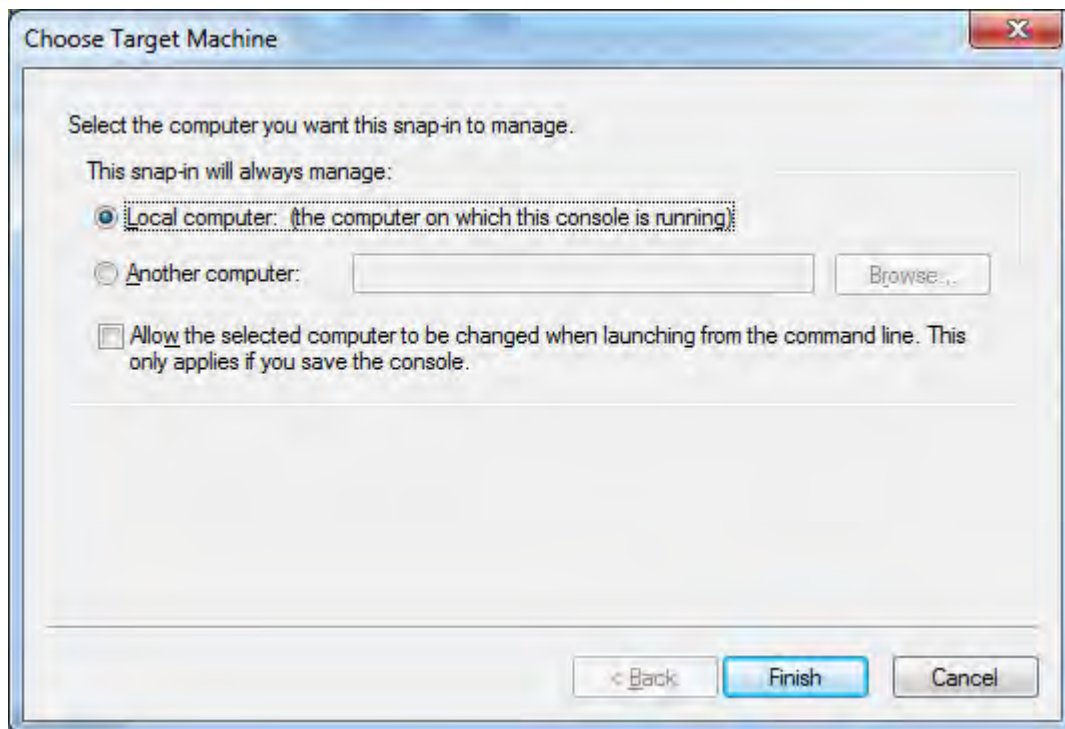
1. In Microsoft Management Console, click the File menu, and then click Add/Remove Snap-in.



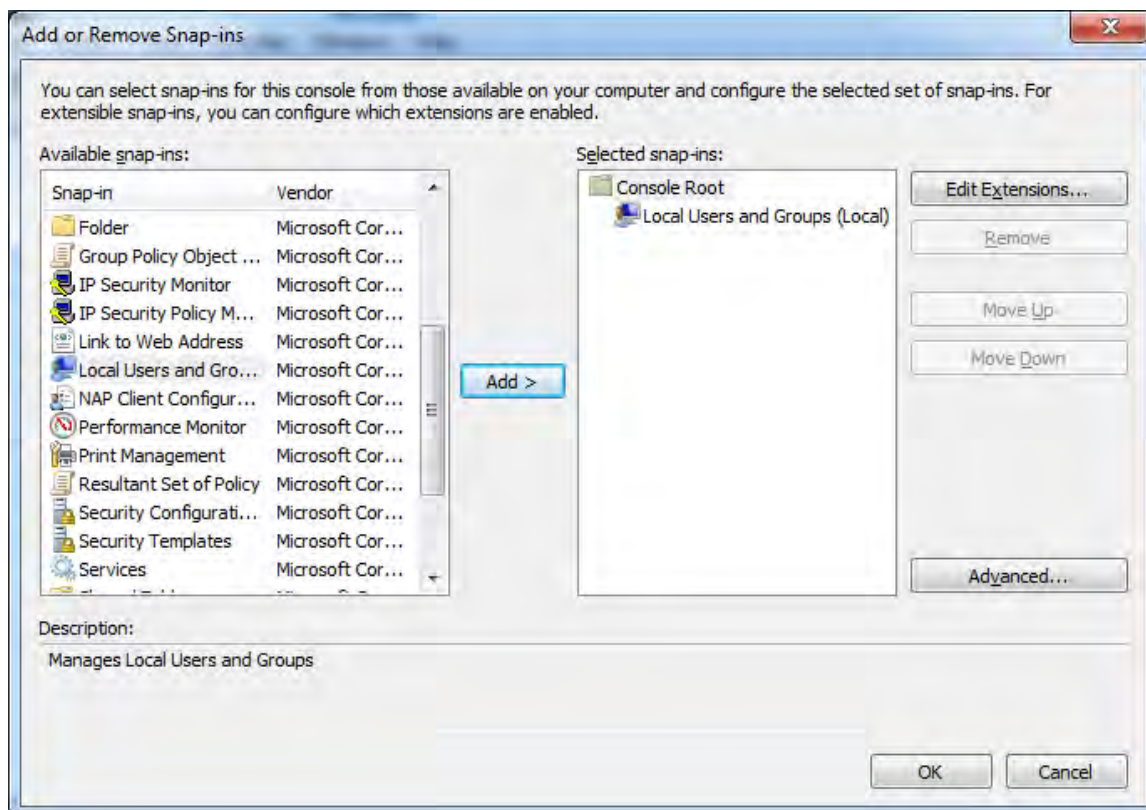
2. Click **Local Users and Groups** in the Available snap-ins list, and then click **Add**.



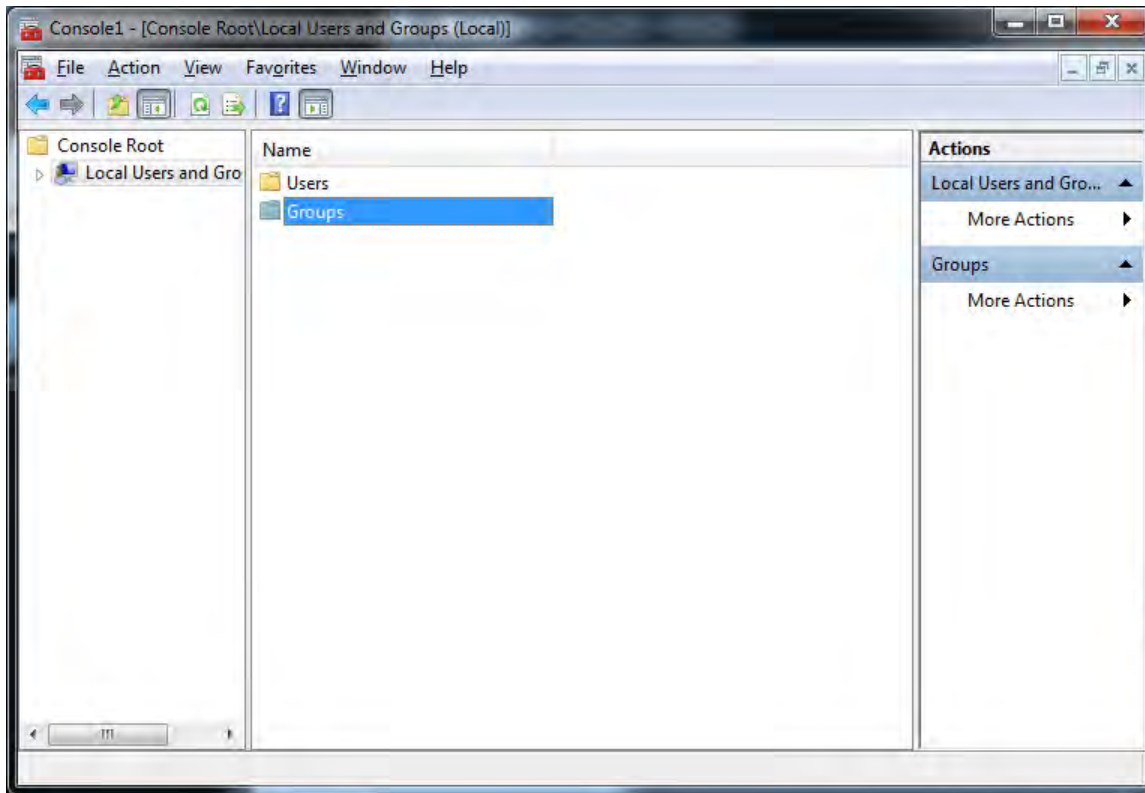
The Choose Target Machine window will open.



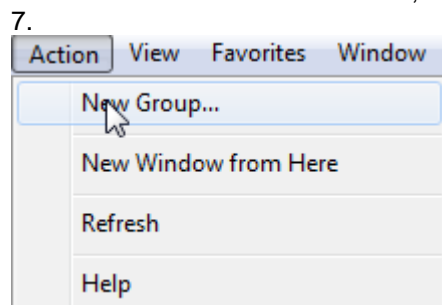
3. Choose the Local computer radio button, and then click Finish.
4. Click the OK button in the Add or Remove Snap-in window.



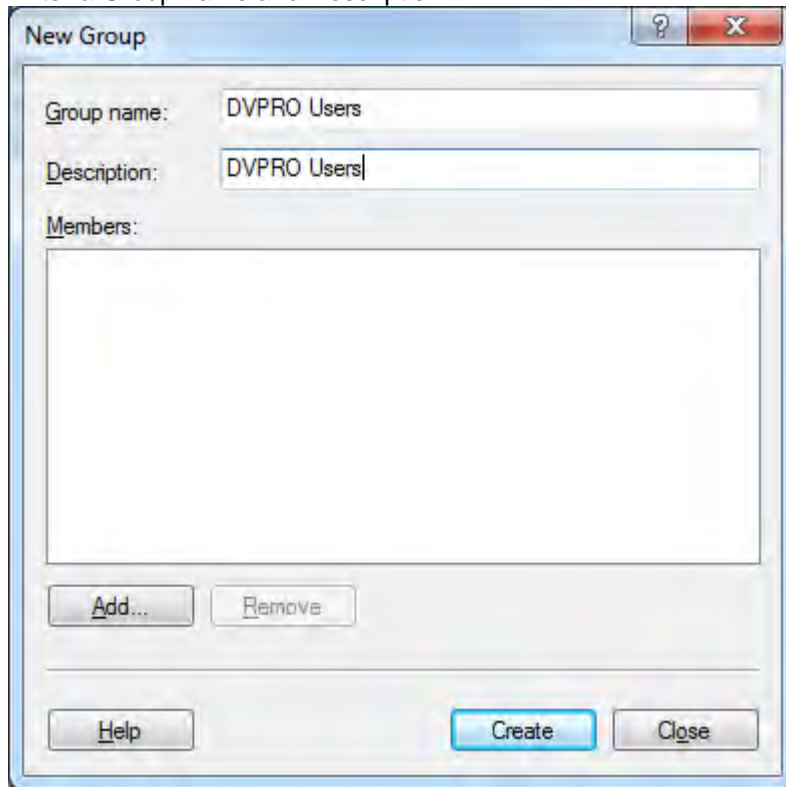
5. Once the snap-in is installed, you can choose Local Users and Groups in the left pane, and then highlight the Groups folder.



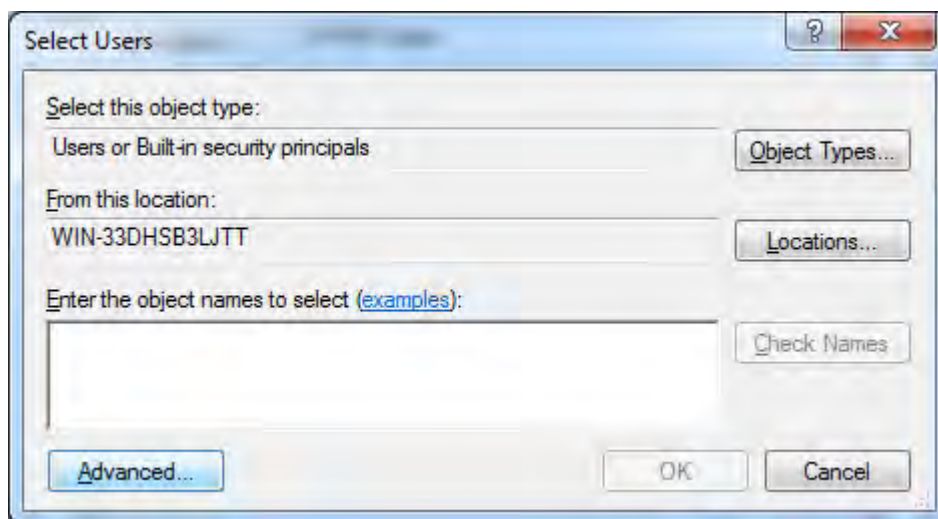
6. Choose Action from the Menu, and pick **New Group...**



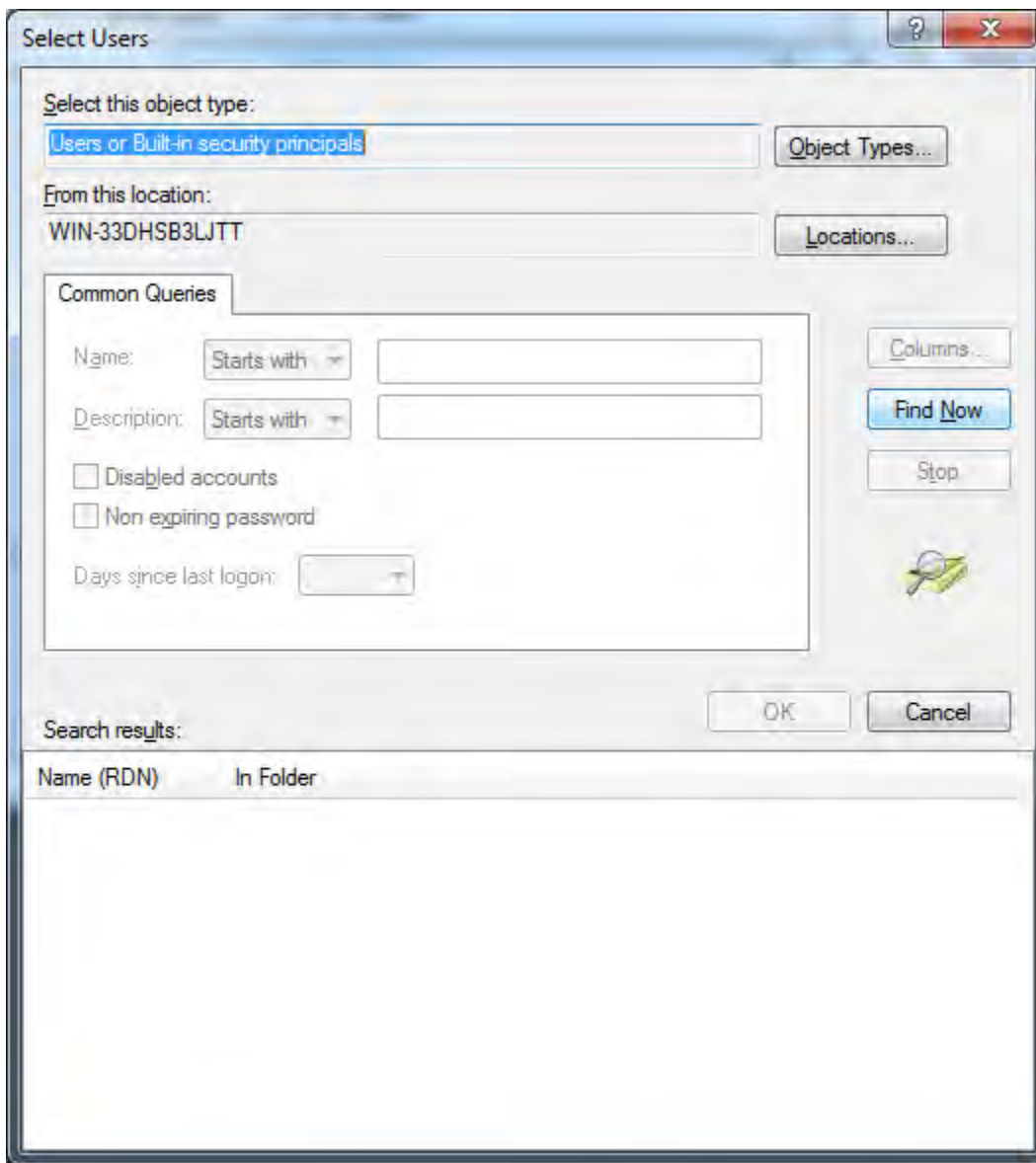
8. Enter a Group name and Description



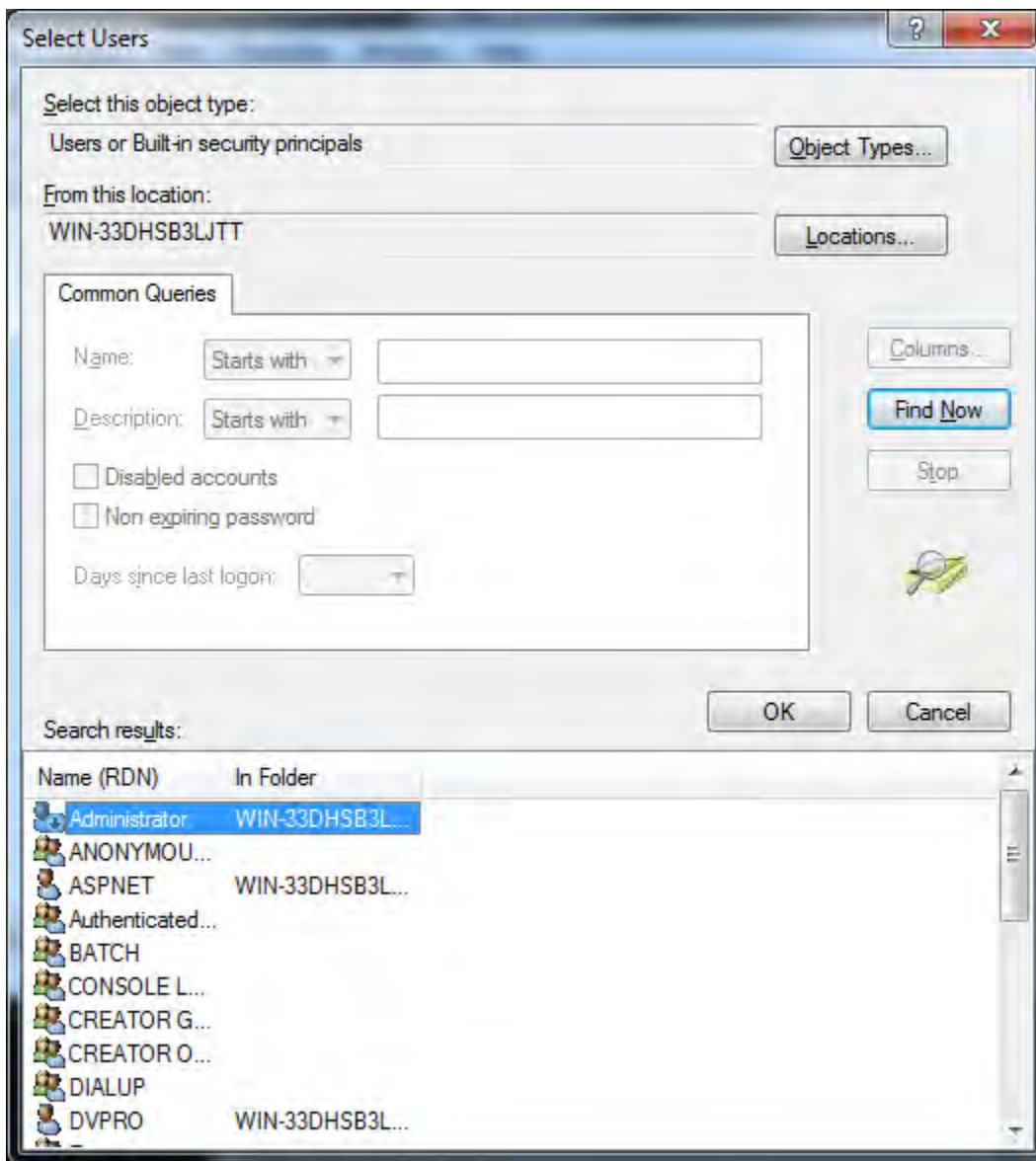
9. To add users to the group, click the Add button.



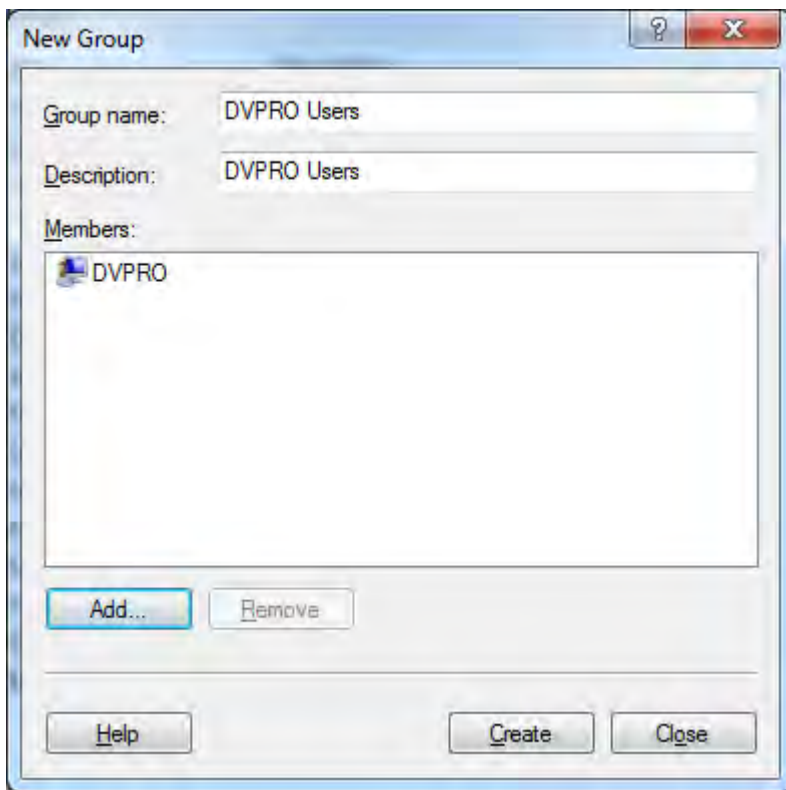
10. in the Select Users window, click the **Advanced** button.



11. Click the Find Now button on the right to get a list of users.



12. Double-click any of these users to add them to the group. Click **OK** to return to the New Group window.



13. Click **Create**, and then **Close**. The newly created group will now appear in the Group list. This group can then be chosen when assigning network permissions.
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