

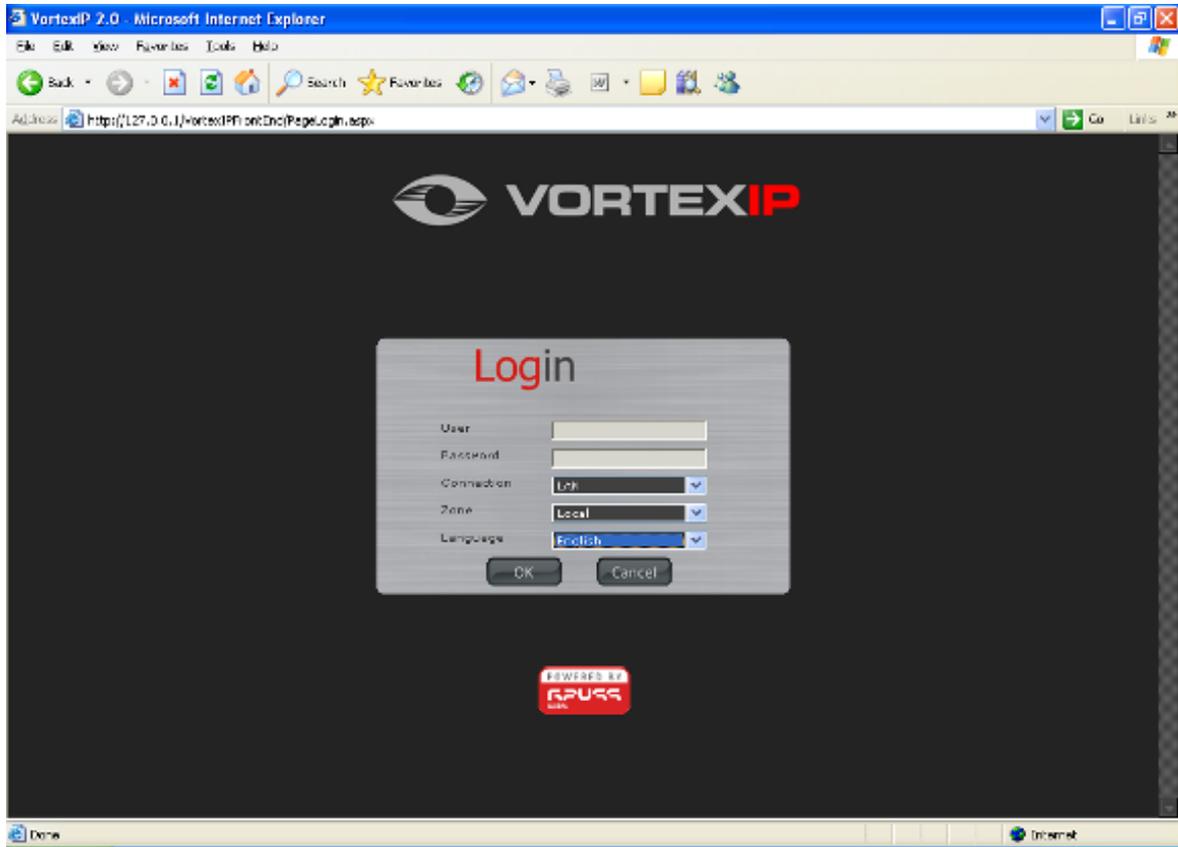
Operation Guide

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Authentication

To login to VortexIP, enter the URL or IP address of your server. The following screen will appear:



Enter your user name and password and select the type of connection you have: LAN, Broadband, MODEM or Recording (same speed and compression of the image to the one configured for the recording).

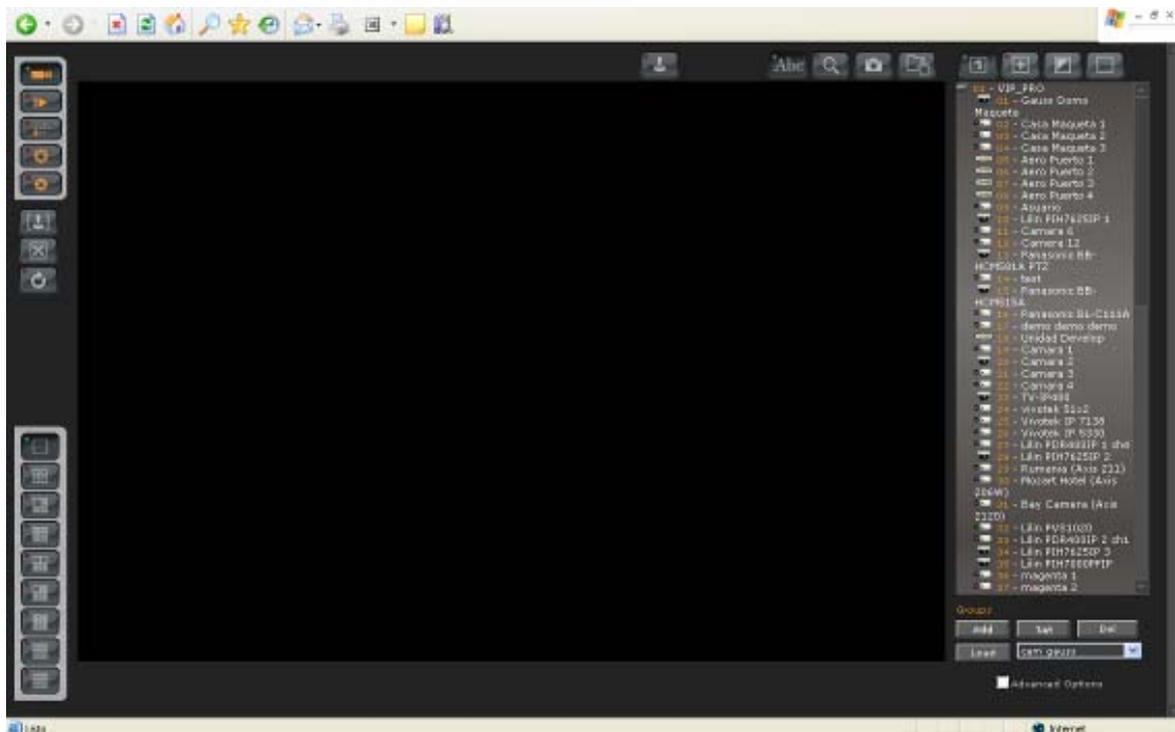
Under the zone option, choose **Local** or **Remote**. Local is for accessing it from the internal network. Remote is for accessing it from outside the network.

To change the Language, select the language that you prefer and then click **Ok**. By default, language is set to Spanish.

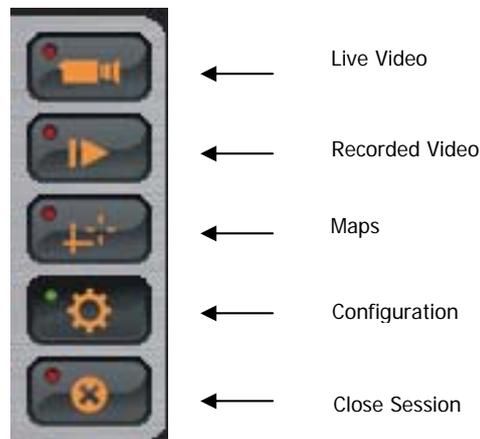


If this is the first time that you enter the system, remember that root is the user name by default. By default, there is no password.

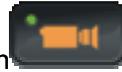
Once you have successfully entered the system, the following screen will appear. The following options will appear on the upper left hand side of the screen: Live Video, Recorded Video, Maps, Configuration and Close Session.



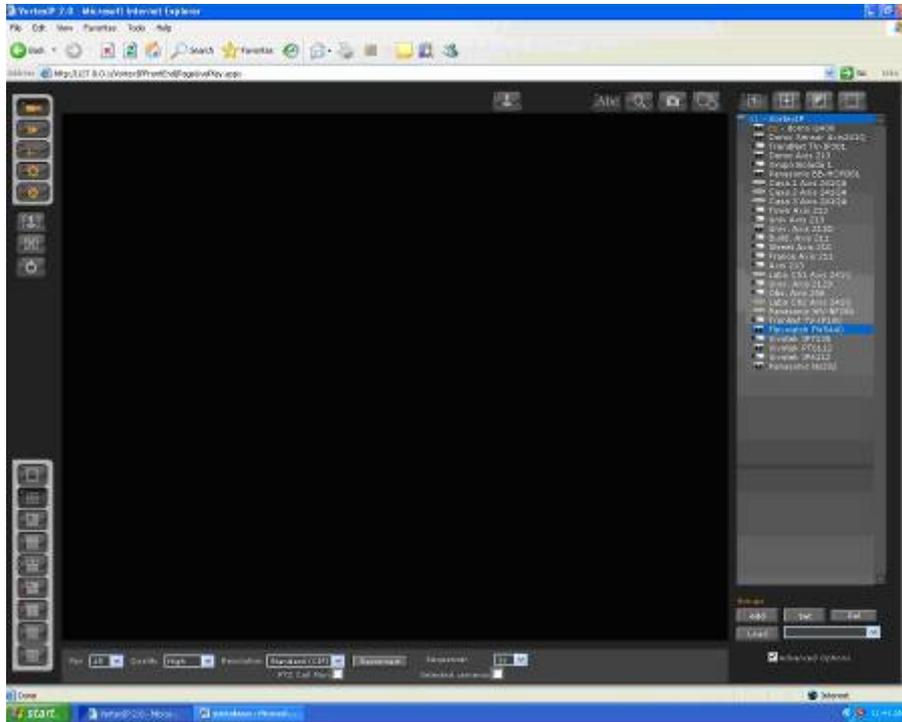
At any time, you will be able to use the side menu to access the desired function:



Live Video



To access cameras' live video, click on this icon



If you have not previously logged in to the system from the PC or laptop, you will have to install the ActiveX component for live video. Click **Install ActiveX Control**.

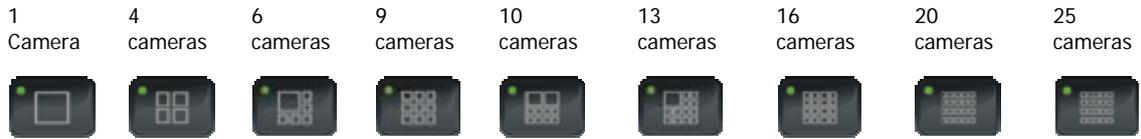


The following dialog box appears. Click **Install**.

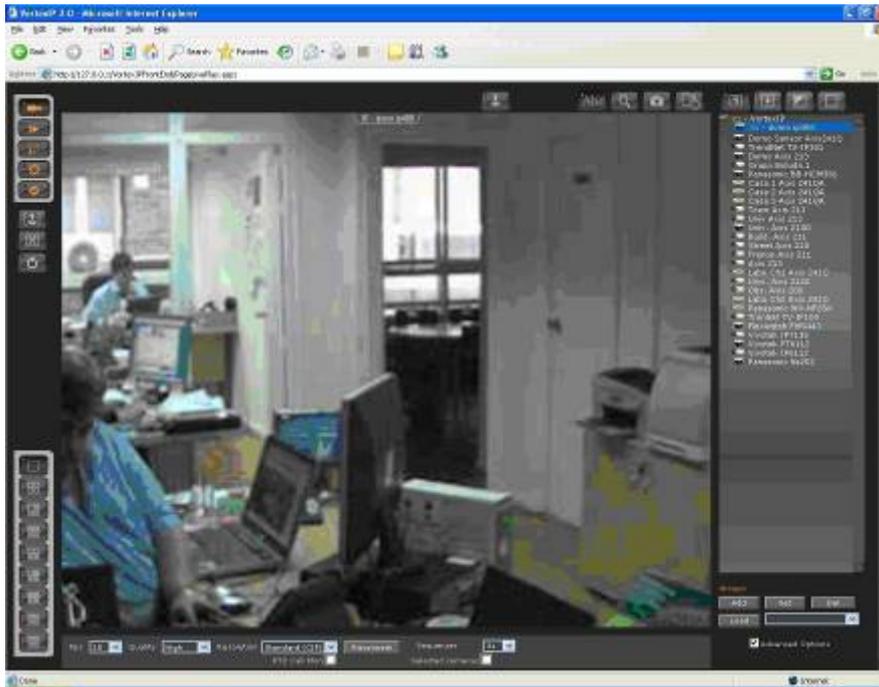


Once the installation is complete, you will be able to select the visualization mode for the cameras that you want to view. You may choose from the following:

Visualization Mode



Every time that you choose a visualization mode and/or camera, the system will automatically save these users' preferences.



Selection panel of cameras



↑	↑	↑	↑
Single Selection	Multiple Selection	Invert NVR Selection	Deselect All

On the list of cameras, the cameras that are being viewed are highlighted in blue.



If you want to view more than one camera, first select the multiple selection mode. Then click on the cameras that you want to view.

If you want to remove a camera, click on the camera you want to remove.



If you want to select all the cameras from a NVR, then, first click Deselect All  and then click **Invert Selection** .

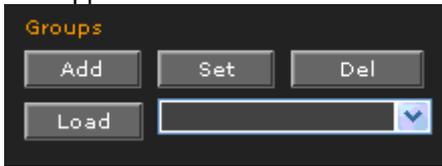
An example of visualization mode is shown:



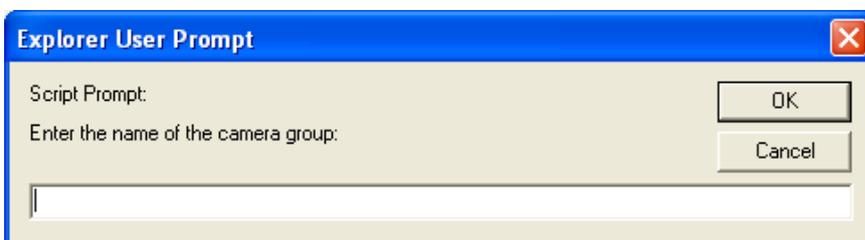
Visualization Mode x16

Camera Groups

The application allows the creation of groups of cameras in order to expedite surveillance.



First select the cameras that will belong to the group, and then click Load. The following window will appear:

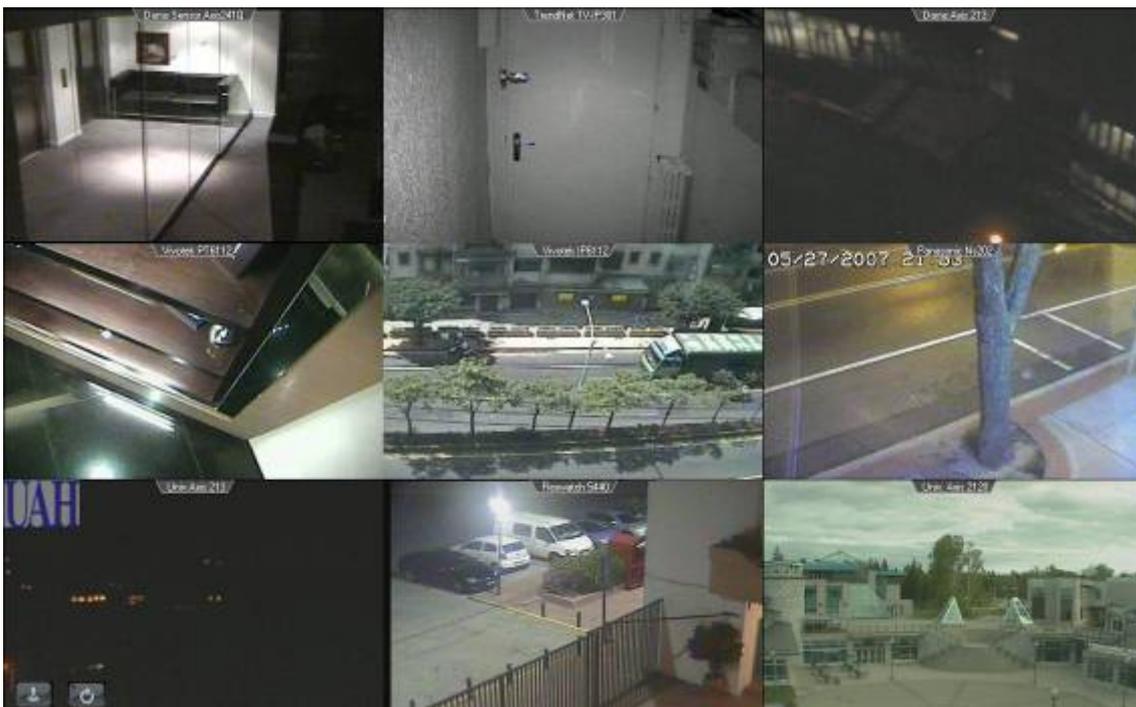


Enter a name for the group and then click **OK**.

Full Screen

If you want to view a group of cameras full screen, first choose the visualization mode and the

group that you want to see. Then click this icon .



To exit the full screen mode press **ESC**.

In full screen mode, you can activate camera sequencer  and the PTZ control .



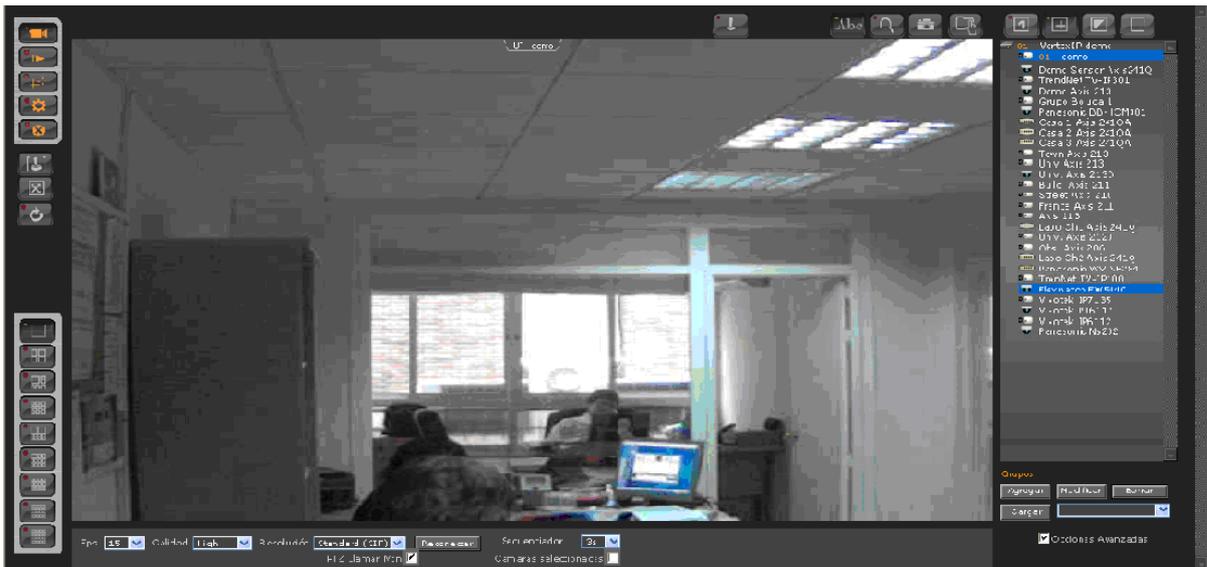
If you do not want to see frames or edge of the browser, add the IP address or host name as a trusted site in Internet Explorer.

Camera Sequencer

If you want to enable camera sequencer, click this icon . The cameras will be sequenced every 5 seconds.

Advanced Options

Check "**Advanced Options**" to view additional options.



Advanced Options Menu



If you check **Advanced Options**, the following options will appear:

- FPS – Frames per second
- Quality
- Resolution
- Reconnect
- Sequencer – select the sequencer interval
- PTZ Call Mon – allows the use of a USB joystick and the keyboard.
- Selected cameras -- If checked, only these cameras will be rotated.

PTZ control (mouse)



To manage IP cameras that support PTZ control, click this icon. The following window will appear:



Select the camera that you wish to control from the dropdown list.

Commands of the PTZ control



Up



Down



Left



Right



Zoom in



Zoom out



Near Focal Point.



Away from Focal Point.



Set the current position as preset.

First, you have to press the number for the preset.



Call a preset. First, you have to press the number for the preset.



Close the PTZ control panel.



If you do not have any Domo (Pan and Tilt) type camera selected, the PTZ control will not appear. To assign a camera as a Domo type, go to the configuration guide.

Joystick (USB)

Installing Keyboard and Joystick

VortexIP supports the use of a USB Joystick. It complementary combines with a numeric keyboard to obtain full functionality of a joystick

Get a USB Joystick and a numeric USB Keyboard and connect them to your computer:



Activating the Keyboard and Joystick

Access the VortexIP. When you access the live video page, there are two modes for the use of the Joystick:

- **Selection Mode**
- **Monitor Call Mode**

Selection Mode

The Keyboard and Joystick only act over the list of selected cameras on the camera tree. Whenever one camera is selected with the keyboard, the view will not be modified.

This is the default operation mode.

Monitor Call Mode

The Keyboard and Joystick act over the whole list of cameras of the camera tree. Whenever one camera is selected with the keyboard, the camera is brought to the first position on the grid.

If you wish to enable this mode, click **Live Video**, check **Advanced Options**, then check **PTZ Call Mon.**

Enabling the Keyboard and Joystick

To enable the operation of the keyboard and joystick click this icon . Once it has been enable the PTZ console will appear:



Keyboard Commands

The numeric keyboard has been redefined to be able to operate as a PTZ console.

Below is the keyboard mapping:



DVR Selection

In order to select the DVR you have to execute the following command

[DvrId] + [-]

For example:

If you press the following keyboard sequence:

[0][1][-]

The DVR with Id 01 will be selected

Camera Selection

In order to select the camera you have to execute the following command

[CamId] + [+]

For example:

If you press the following keyboard sequence:

[1][0][8][+]

The camera with Id 108 will be selected.

Preset Call

To invoke a camera preset you have to execute the following command

[NumPreset] + [*]

For example:

If you press the following keyboard sequence:

[1][9][*]

It calls preset 19 of the selected camera.

Initiate Monitoring

In order to initiate camera monitoring the following command has to be executed:

[NumPatrol] + [/]

For example:

If you press the following keyboard sequence:

[0][/]

Initiates the monitoring 0 of the selected camera

Stop Monitoring

In order to stop camera monitoring you have to execute the following command

[NumPatrol] + [/]

For example:

If you press the following keyboard sequence:

[2] + [/]

It stops the monitoring 2 of the selected camera.

Cancel Command

To undo an incomplete command or to correct a non executed command you have to press the following key:

[.]

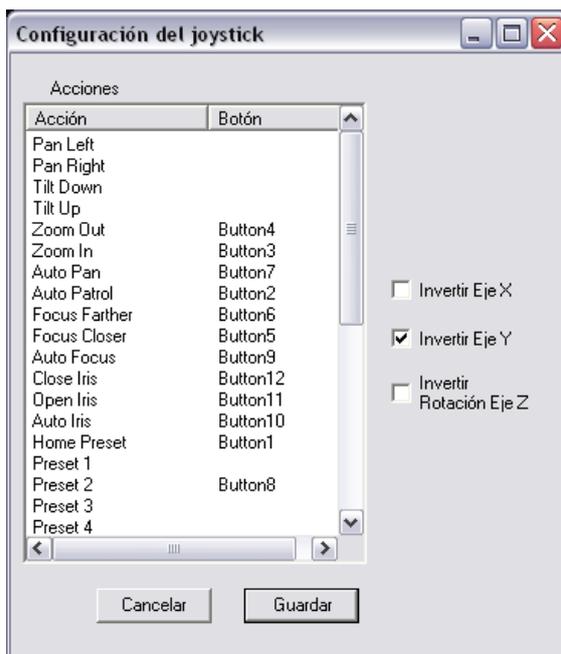
Joystick Commands

The custom programming of buttons and configuration is saved in the PC where the joystick is connected. Every time you change computers, you will have to configure it again.

In order to assign functions to the joystick for the buttons, you have to press the following button:



And the following configuration screen will appear:



Here you can program specific actions to buttons on the Joystick:

Initiate Auto Pan

In order to initiate the Auto Pan you have to press the programmed button on the USB Joystick.

Stop Auto Pan

In order to stop the Auto Pan you have to press the same programmed button to initiate the Auto Pan.

Activate AutoFocus

In order to activate Auto Focus you have to press the programmed button on the USB Joystick.

Go to Home Position

In order to call the Home position of the camera you have to press the programmed button on the USB Joystick.

Activate Auto Iris

In order to activate Auto Iris you have to press the programmed button on the USB Joystick.

Iris Open

In order to open the Iris you have to press the programmed button on the USB Joystick.

Iris Close

In order to close the Iris you have to press the programmed button on the USB Joystick.

Focus Near

For bringing near the focus you have press the programmed button on the USB Joystick.

Focus Far

For moving further away the focus you have to press the programmed button on the USB Joystick.

Zoom In

For zooming in you may use the programmed button on the USB Joystick.

Zoom Out

For zooming out you may use the programmed button on the USB Joystick

Capture Snapshots

If you click this icon  you will be able to capture an image instantaneous from all the cameras that you are viewing.

Snapshots Directory

If you want to define where to store your photos, click this icon . You will be able to define the directory's root. Then every time click the Capture Snapshots icon , images will be saved without bringing up the Save As dialog box.

Digital Zoom

If you click this icon  you will be able to enable digital zoom. To zoom in or zoom out, use the mouse wheel. You can also zoom in or zoom out by using the buttons shown on the screen:

 Zoom in,  Zoom out.

Show/Hide cameras' Name

If you click this icon  you will be able to show/hide the cameras' names.

Recorded Video



To access recorded video for one or more cameras, click this icon.

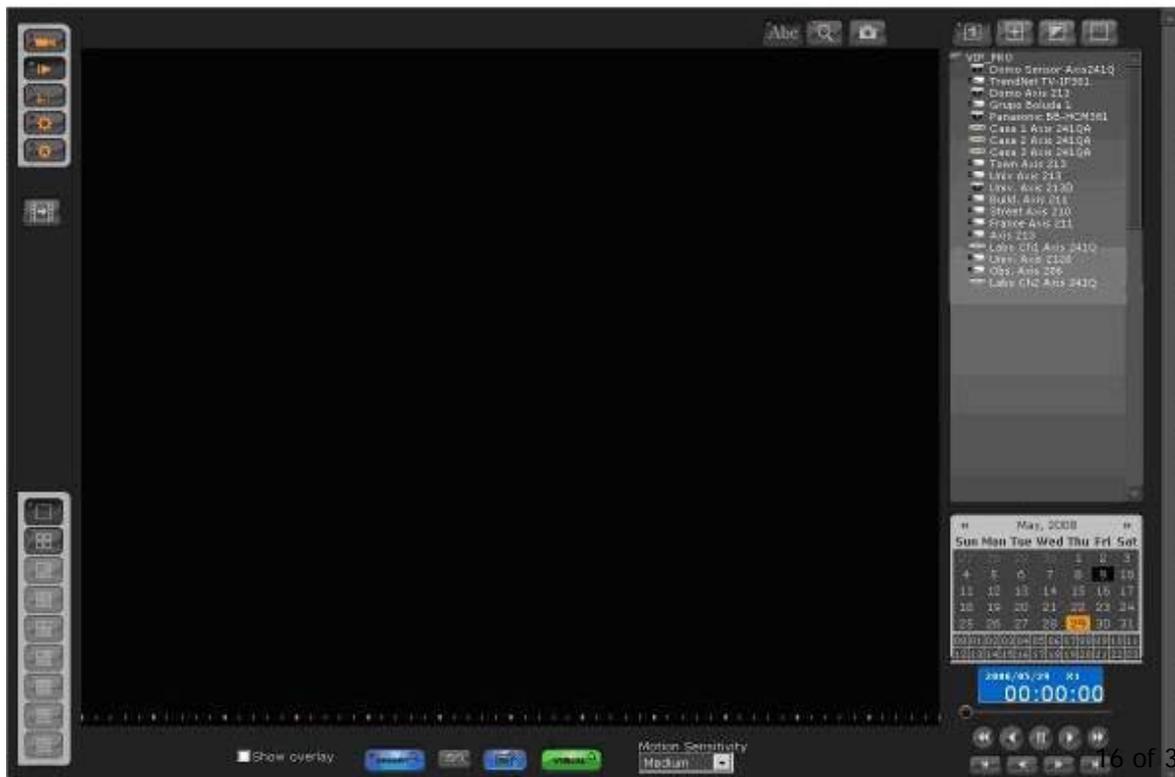
If you have not previously access the system from your PC or laptop, you need to install the ActiveX component for viewing recorded video.



Click Install Control ActiveX. The following dialog box will appear. Click **Install**:

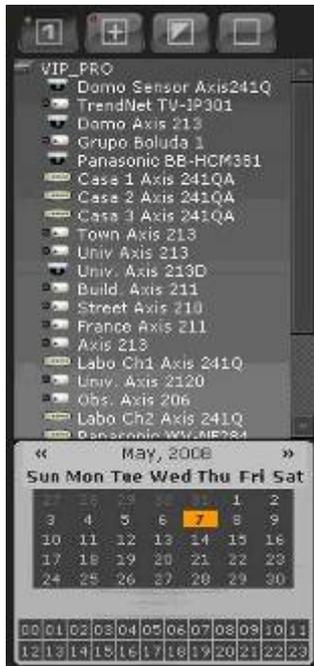


Once the installation is completed, the following screen will pop up:



Selection of the camera, Date/Hour

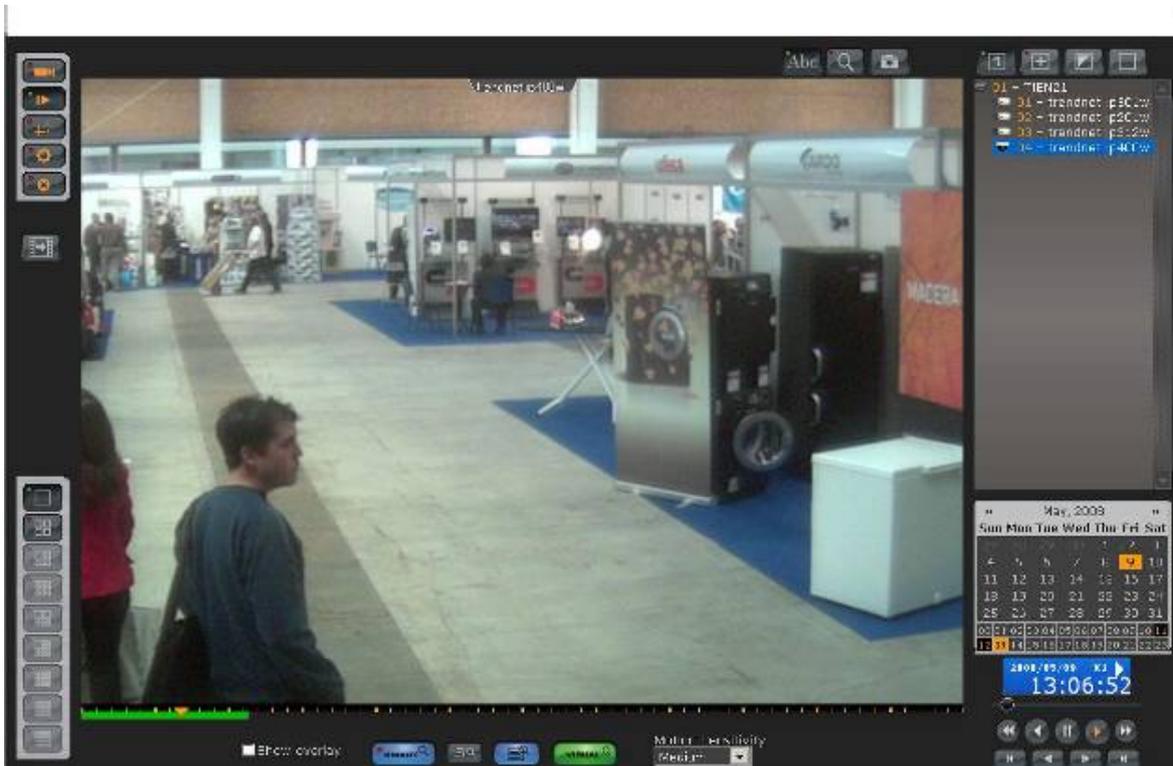
1. Select the camera/s



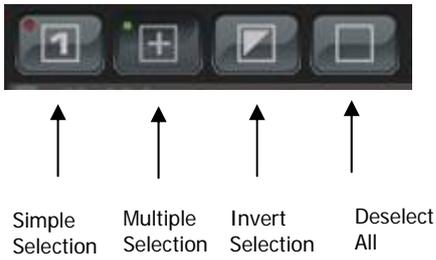
2. The system will mark the dates and hours where you have recorded video. Select the date and hour you want to view.



The selected video will automatically load as shown on the following screen:



Camera Selection Panel



On the camera tree, the cameras in blue will be viewed.



If you want to view multiple cameras, first select Multiple Selection mode. Then, click the name of the cameras that you want to view.

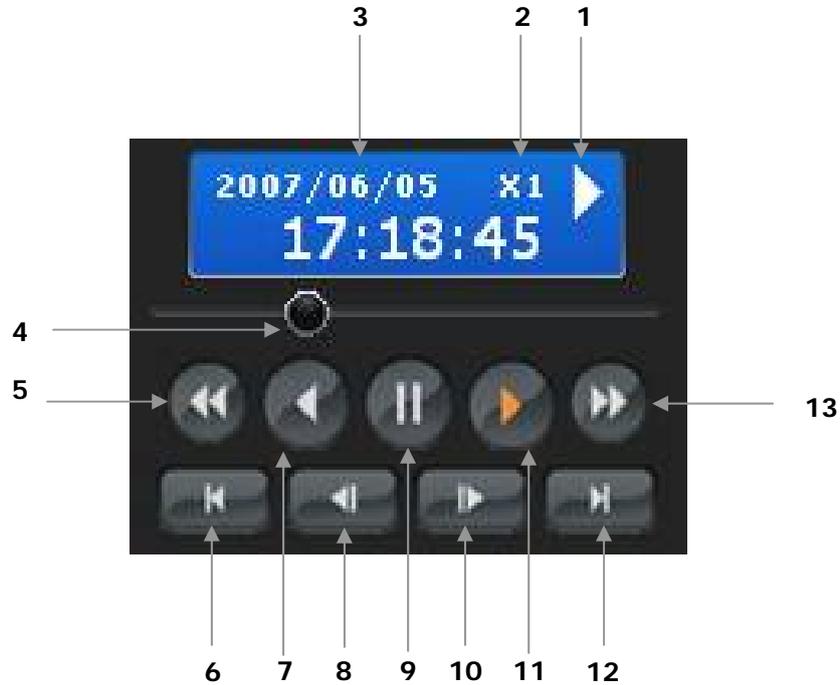
If you want to remove a camera, then click again on the camera you want to remove.

The example below displays recorded video for 4 cameras:



Viewing Controls

Next, the each control for viewing recorded video will be detailed:



1 Control Status Indicator: Fast-forward, ► Rewind, ◀

2 Video Playing Speed Indicator: To change this press one of the following buttons:



3 Displays the Date and Time of the recorded video that it is being played.

4 Control what part of the video to be played. To fast-forward or rewind, click the Knob, drag it to the specific point in the video that you are interested in view it and release the mouse button.

5 Rewind.

6 Go to the beginning of the Video.

7 Play backwards.

8 Previous frame.

9 Pause.

10 Next frame.

11 Play.

12 Go to the end of the Video.

13. Fast Forward.

Video's timeline bar

ActiveX Play Control has a video information bar. It covers a period of 1 hour and provides information on the video.



Video Status:

-  No Video recorded
-  Video recorded
-  Video recorded by event



At any time, you may scroll and drop the scrolling cursor  inside the video time bar.

You may also use the mouse wheel on the time bar to move the scrolling cursor forward or backwards.

After each hour, the control will automatically display the video time line to show information for the corresponding hour.

Capture Snapshots

If you click this icon  you will be able to capture an image instantaneous from all the cameras that you are viewing.

Digital Zoom

Click this icon  to enable the digital zoom. To zoom in or zoom out, use the mouse wheel. You can also zoom in or zoom out by using the buttons shown on the screen:

 zoom in,  zoom out.

Show/Hide the cameras' name

If you click this icon  you will be able to show or hide the cameras' name.

Video Smart Search

The system offers video smart search feature, saving you precious time finding a specific event or incident.

The smart search allows you to select an area of a recorded video for motion .

Video Smart Search is carried out on the server where VortexIP is running. No additional resources will be used on your computer.

There are two different methods for carrying out smart searches:

- Smart Search ONLINE: It searches in a concrete part of the image, the first occurrence of motion. Once the motion is detected, the search will be stopped.
- Smart Search OFFLINE: It searches in an hour range, in a concrete part of the image, all occurrence of motion. This search will list all detected events including date/hour.

Smart Search ONLINE

To use this function you have to be in single selection mode.

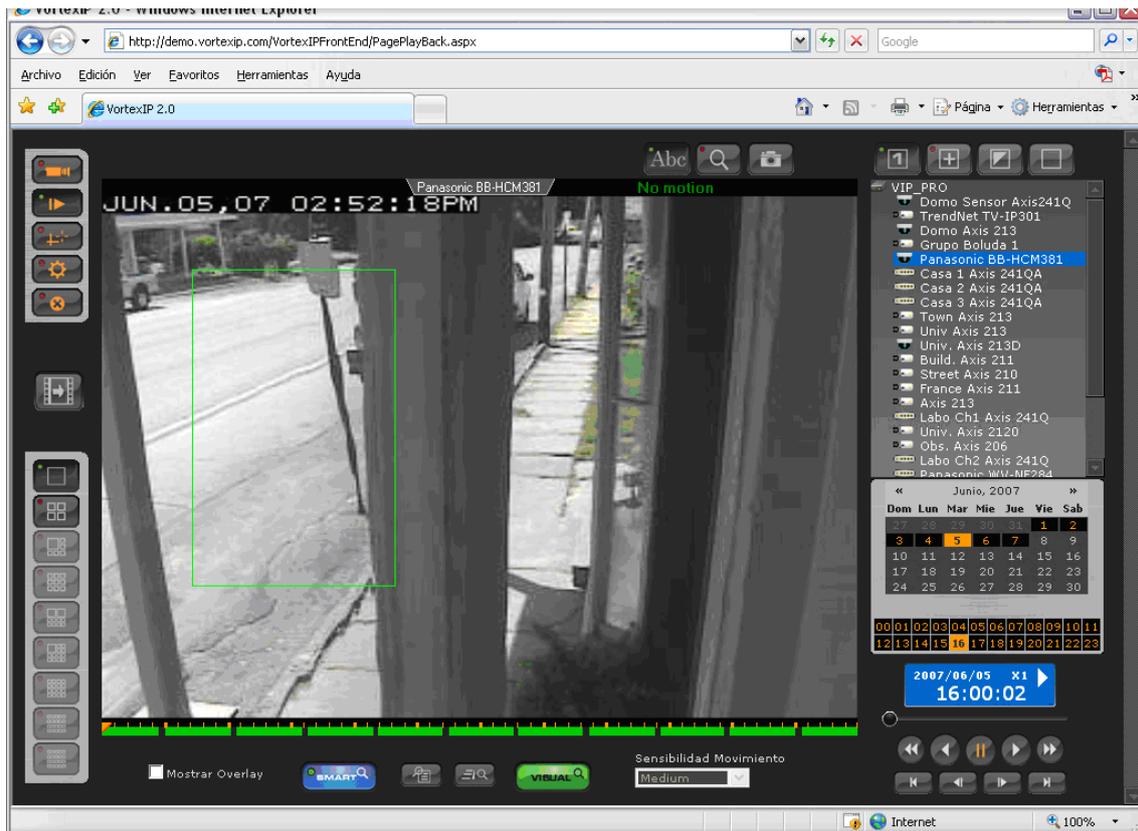
Then, choose a camera, date/hour that you are interested in and open the video.

You need to define the initial time from which you want to search in the video. It is mandatory to position the video by using  .

Then, click pause  once you have correctly selected the start time desired.

Before starting the search, you have to select the motion sensitivity: High, Medium, and Low.

Then, click **Smart**  . The following screen will appear:



Using the mouse, select the area to be searched.

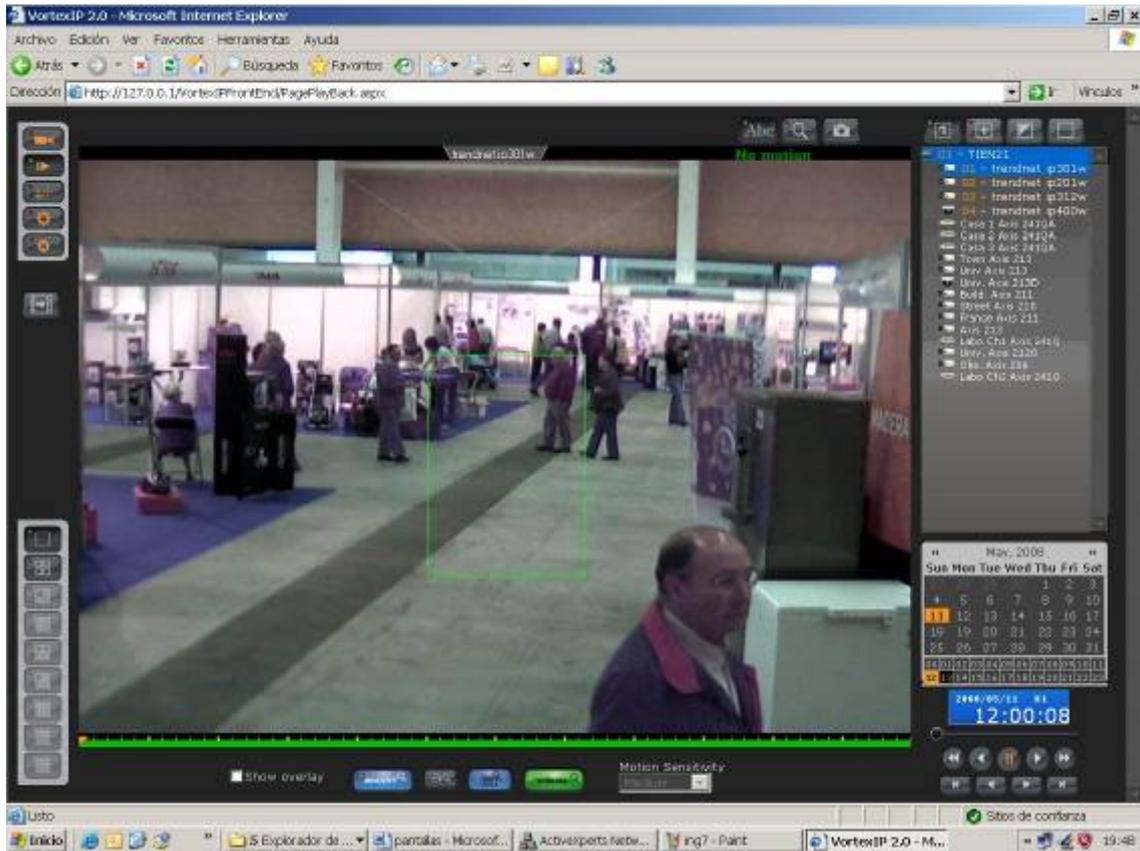


If you want to mark the detected movement areas within a search area, check Show Overlay.

To begin the search, click this icon .

While the search is taking place, the video will adjust to 1 frame per second, until it finds motion within the search area.

Once the event has been found, the search will automatically stop.



Click this icon  to look for the next occurrence of motion.

If you want to play the video normally, press this icon  to disable the search, and then click this icon .

Smart Search OFFLINE

Note: To use this function you have to be in Single Selection mode.

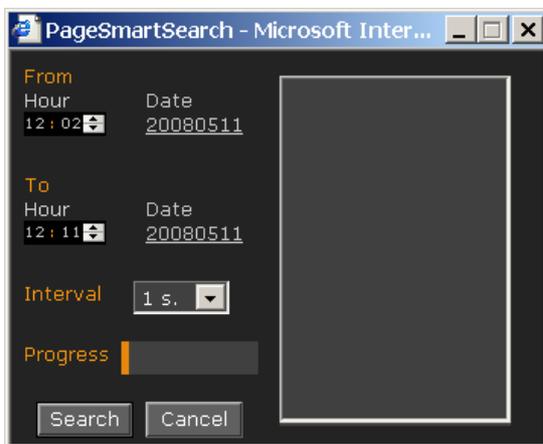
If you are not in this mode, click the Single Selection icon. Choose the desired camera, choose the desired date/hour and open the video.

Then click the Pause button .

Select the motion sensibility: High, Medium and Low.

Click **Smart**  and define the search area as shown on the previous section.

Then, click this icon . The following screen will appear:



Select:

- Start Date/hour.

If you click on Date, the calendar will appear. Select the desired start date, press **Ok**.

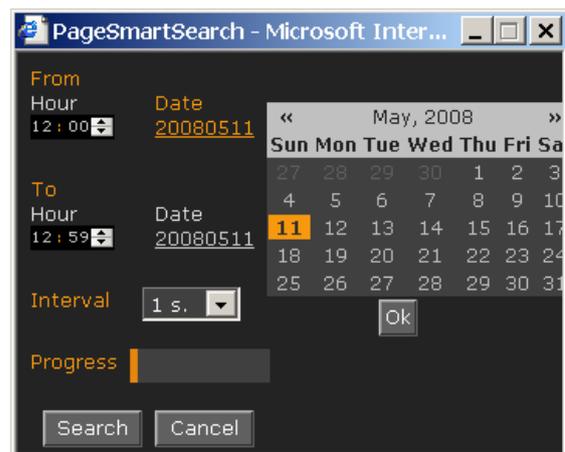
By pressing on  and  you will be able to adjust the start time.

- End Date/hour.

If you click on Date, the calendar will appear. Select the desired end date, press **Ok**.

By pressing on  and  you will be able to adjust the end time.

- Select the interval for the searching process.



Visual Video Search

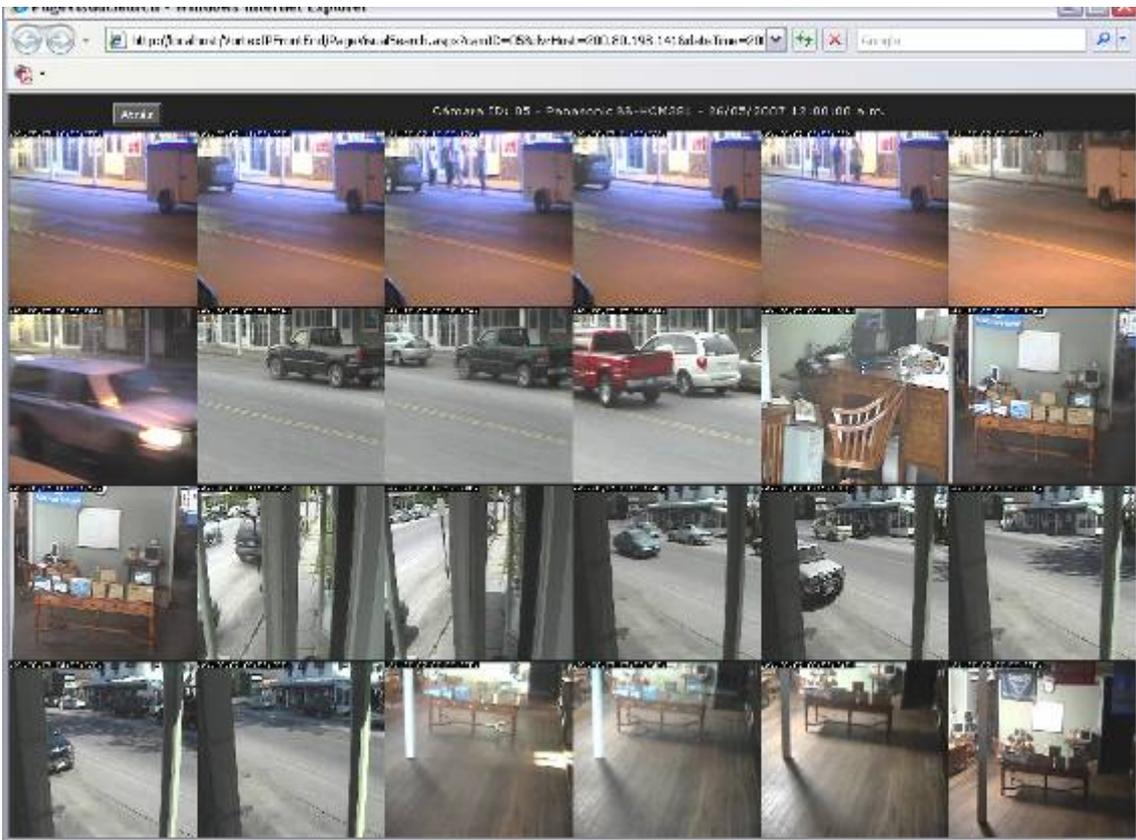
The visual search, allows you search the video based on images, so you will be able to save your valuable time to find incidents, especially when you do not know the date or hour exact of the event.

Video Smart Search is carried out on the server where VortexIP is running. No additional resources will be used on your computer.

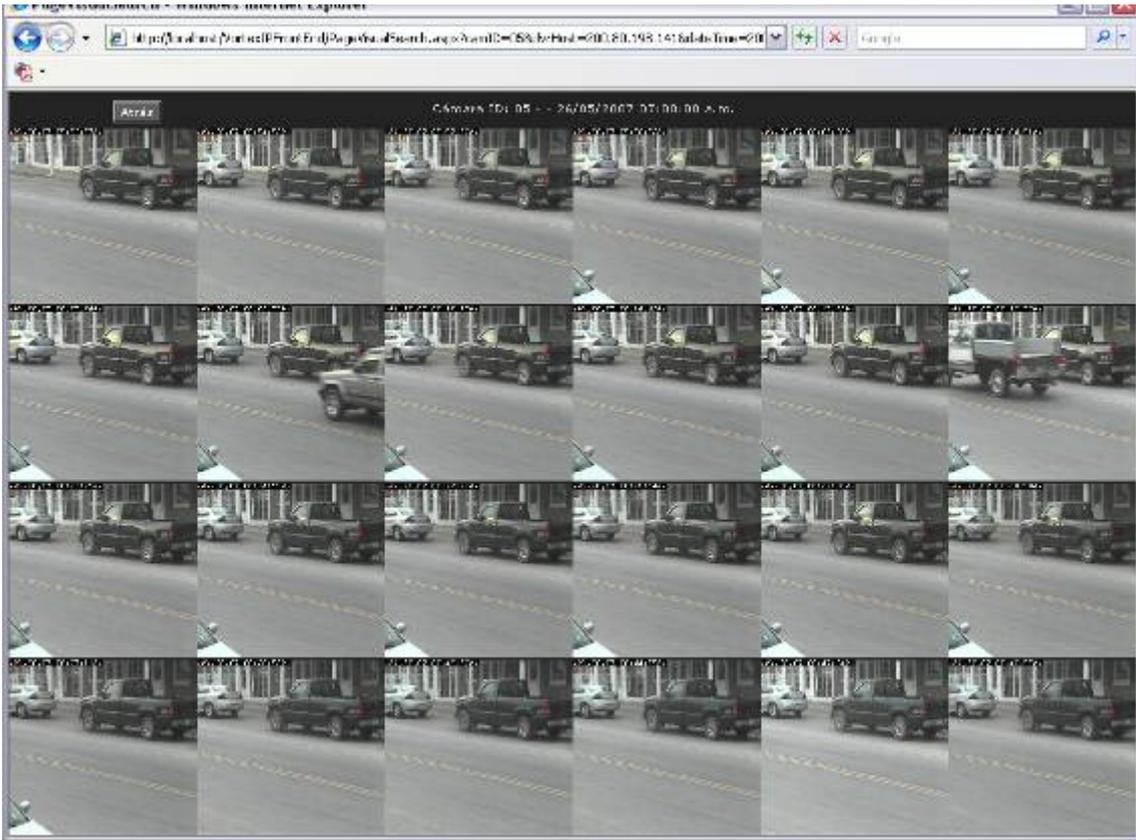
To use this function you have to be in single selection mode.

Then, choose a camera, date/hour that you are interested in and open the video.

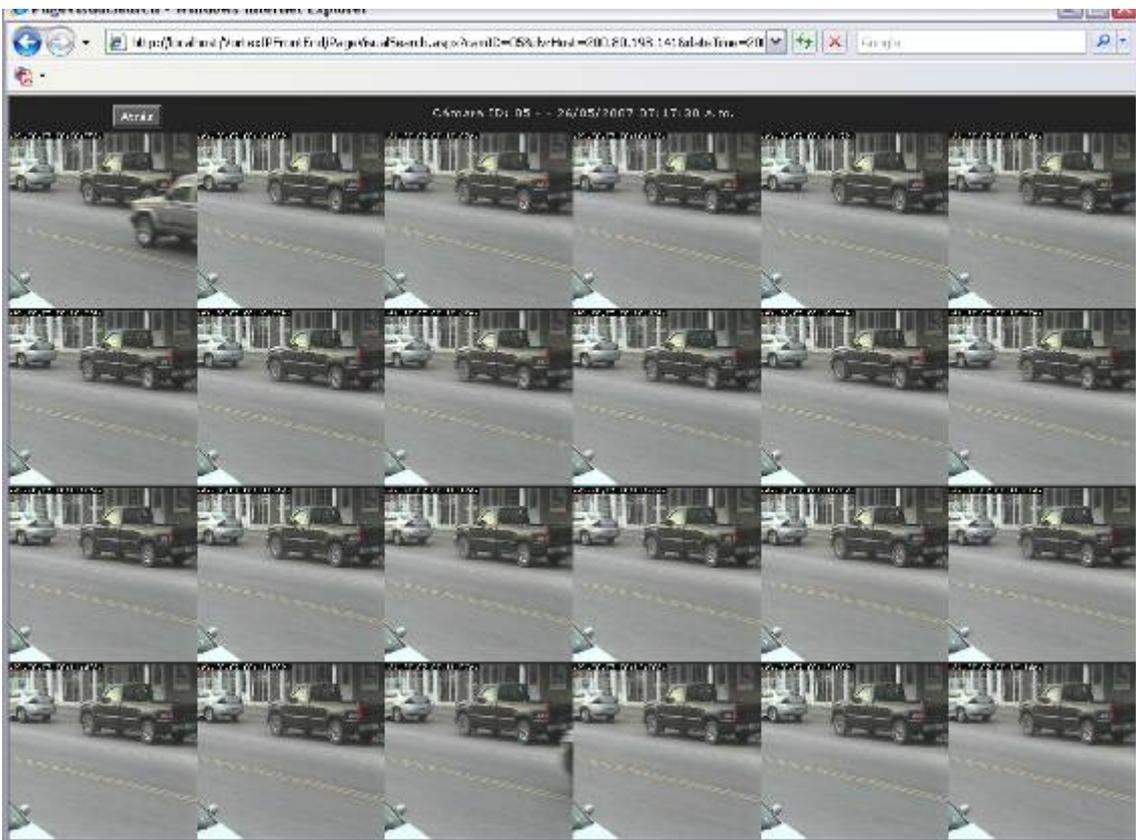
Then, click the **Visual Search** icon . The following screen will appear.



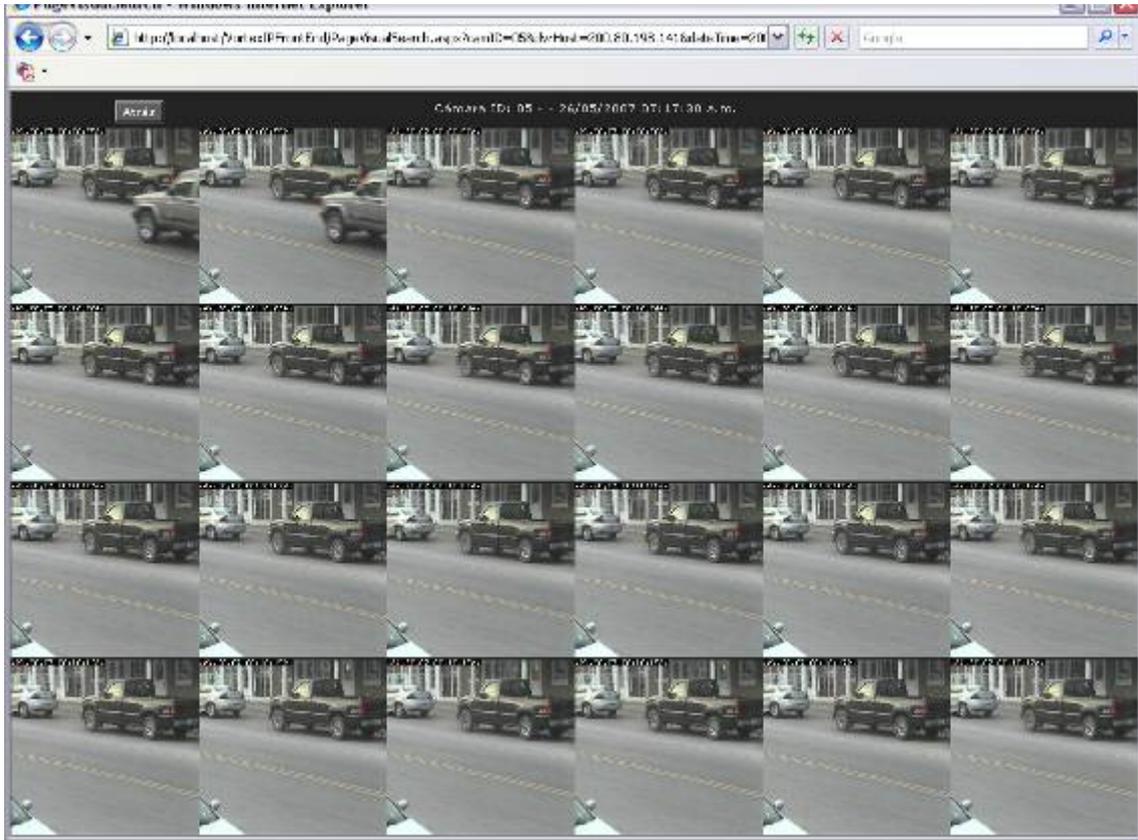
Select the image corresponding to the desired hour. The following screen will appear:



Images will appear in intervals of 2 minutes and 30 seconds. Select the desired image. The following screen will appear:



Images will appear in interval of 6 seconds. Select the desired image. The following screen will appear:

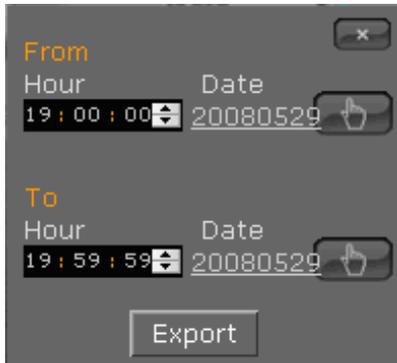


Images will appear in interval of 1 second. Click on the image to load the associated video.

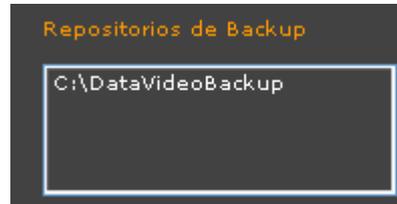
Click **Back** to go back.

Export videos

If you click on this icon,  video will be exported in Windows Media Player format.



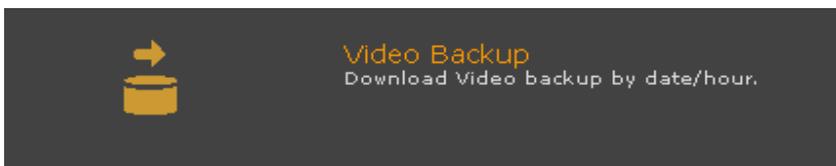
From ✕
Hour Date
19 : 00 : 00 20080529 
To
Hour Date
19 : 59 : 59 20080529 
Export

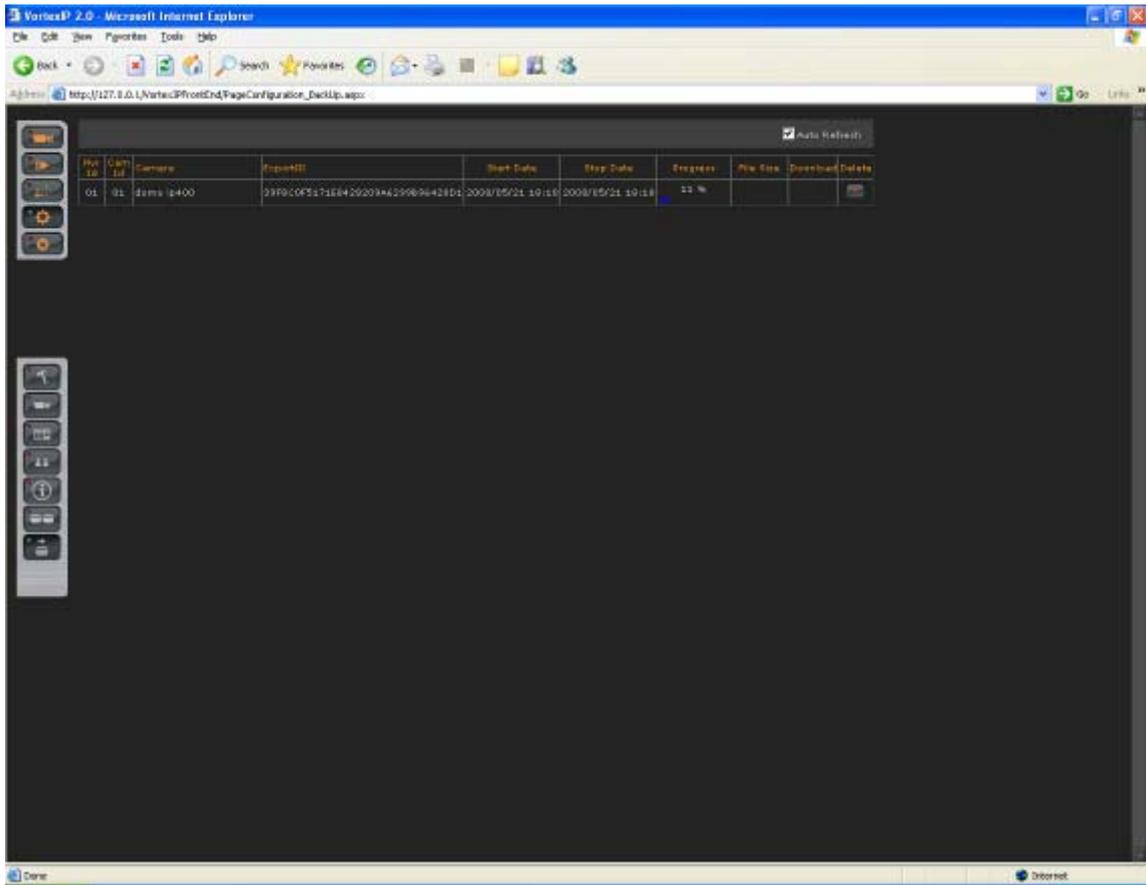


Define the date and the time of the video.

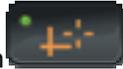
The new file will be saved in the Backup repository.

To view the exported files, click this icon  and then click on the Video Backup icon.





Electronic Map



To access the Electronic Map, click this icon.

This feature will allow you to upload and view a physical or logical map of your Internet Camera installations.

Using the map

To view the map, click on the map icon. If you move the cursor close to a certain camera, the camera name will appear.



Editing the map

If you have administrator privileges, you will be able to configure the cameras' positions and import the map's image.



Dragging and dropping cameras

For editing a camera's position, click this icon . Then, drag and drop the cameras to the desired position. If you want to remove a camera from the map, drag and drop it inside the grey screen and it will be automatically removed from the map.

Once the changes have been made, click this icon  to keep the configuration of the map.



Since the map has associated a logical or geographical distribution of the cameras, the map is common to all users.

Importing Electronic Map

To import the map's image, click **Examine**. Then, select the name of the file and click **Accept**. Map's compatible format is JPEG

To finish, click **Upload**.

Erasing Electronic Map

To erase a map, first select it from the menu and click this icon .

Exit the system

To exit, click this icon .

Appendix A – Error Messages

You do not have enough rights to access this page.

Every time that you access a resource of the system, VortexIP will verify if you have the proper permissions. If the user is not the root user, it has restrictions on certain resources (Electronic Map, Playing, Configuration, etc). The following screen will appear:



Appendix B – Problem Solving

1. I am not able to watch live video nor recorded video

- Check that you have correctly installed the .NET Framework 1.1.
- Check that ActiveX components both for live video and recorded video have been correctly installed.
- Check that you have Internet access, by trying to access any known website in Internet Explorer.

2. You are only able to watch live video

- Check that you have correctly installed the .NET Framework 1.1.
- Check that ActiveX component for live video is installed.
- Check that you have Internet access, by trying to access any known website in Internet Explorer.
- Check that you do not have a configured Proxy Server in the Internet Explorer. ActiveX live video allows you to connect the PC through a Proxy Server configured on your Internet Explorer, but ActiveX does not support connections by means of Proxy Server.

3. ActiveX components does not get installed

- Check that you have correctly installed .NET Framework 1.1.

4. The NVR does not register video

- Check that the NVR has direct connection to the Internet and try to access any known website in Internet Explorer.
- Ping the IP cameras that you want to record.
- Check that recording is already initialized.
- Check the cameras' recording schedule. If they are configured to record by event verify that the IP cameras are sending the events to the digital video recorder and that the events' reception port can be reached from the IP cameras to the VortexIP recorder.

5. Service cannot be initialized, stopped or restarted by Web access

- This functionality is only available when VortexIP recorded is installed on Windows XP Professional. If you are running Windows 2000 Server or Windows 2003 Server, then you will not be able to make decisions about the recording service from the Web access due to the security policy of the operating system.

6. Forgot my Administrator password

- For security reasons, passwords can not be restored. If you forget your root password, you need to reinstall the product. Remember that by default, there is no administrator password.

7. **VortexIP recorder works correctly, but whenever I want to watch a recorded video of an event that happened less than 10 seconds ago, images do not appear.**

- VortexIP recorder has a buffer cache to maximize the useful life of its rigid disc. Buffer's length is by default 512Kbytes and it cannot be modified. This means that if you are recording a camera at 1 FPS or less, then you will have to wait the equivalent time according to the image size in Kbytes.
To view images recorded by a camera at 1 FPS you have to wait about 10 seconds, which is the time that it takes to fill the buffer. This effect does not take place when the recording speed is higher than 1 FPS, the time to fill the buffer becomes negligible.

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