

[Community Platform incorporated into Camera Find](#)

[Added](#)

[Screenshots](#)

[More forgiving URL path input](#)

[Changed](#)

[Purpose](#)

[Usage](#)

[Improved alarm handling for inactive IVS \(motion detection and object tracking\)](#)

[Changed](#)

[Purpose](#)

[Usage](#)

[Simplified motion detection configuration](#)

[Added](#)

[Purpose](#)

[Usage](#)

[Automatic recovery from critical disk Error \(Storage Monitor\)](#)

[Added](#)

[Purpose](#)

[Limitation](#)

[Usage](#)

[Added: Connect to remote NVR using domain name](#)

[Added](#)

[Purpose](#)

[Issue: Lite edition - 5x5 matrix layout won't save in pattern page](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: Internet Explorer will not open under Windows 8](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: PacketBufSize sometimes not working](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: Cannot change admin password](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[How to read Genius Vision Software Changes](#)

[Table "Changes"](#)

[Table "IssueVersionGrid"](#)

[Video aspect minor bug](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: Corrupted slot after Windows restart](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Add ET02 for ONVIF InitialTerminationTime issue](#)

[Status](#)

[Purpose](#)

[MaxSize_GB default value issue for non-HDD drives](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: ONVIF PTZ free mode sends stop first](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Issue: ONVIF PTZ number precision not enough](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Updated x64 Enterprise packaging](#)

[Introduction to 64-bit Architecture](#)

[Status](#)

[x64 CmE Edition](#)

[x64 Enterprise Edition](#)

[Product Licensing Comparison](#)

[New License Type Explained](#)

[x64 \(Enterprise\) System Limit Extension](#)

[MobileOptions for MatrixView](#)

[Related Changes](#)

[Reference screenshots](#)

[Multiple client instances with same profile could crash the system](#)

[Background](#)

[Fix](#)

[PacketBufSize auto resize](#)

[Added](#)

[Purpose](#)

[Usage](#)

[MainStreamIndex \(Recording Stream\)](#)

[Added](#)

[Purpose](#)

[Usage](#)

[TCP Connections setup issue](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Edit of Administrators group could lock-up the system](#)

[Background](#)

[Fix](#)

[2nd stream might not work](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Fixed ONVIF config change checking for Stream 2](#)

[Fixed ONVIF missing SessionTimeout for SetVideoEncoderConfiguration \(technical\)](#)

[Add credential info in tooltip for NVR channel](#)

[Fixed an issue that IP-address control is too short](#)

[Workaround](#)

[License manager issue under Win XP](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[SyncPlay pause may cause memory overflow](#)

[First Occurrence](#)

[Reported by](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Fixed IE embedded full console cannot change to full screen](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[IVS indication problem](#)

[First Occurrence](#)

[Affected Functions](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Added MobileOptions to reduce mobile APP bandwidth](#)

[Added](#)

[Purpose](#)

[Usage](#)

[Fixed ONVIF-find support for non-standard HTTP port](#)

[Status](#)

[Symptoms](#)

[Workaround](#)

[Fixed a ONVIF issue that GetOptions is missing VideoSourceToken. Also added imaging20 compatibility.](#)

[Synopsis](#)

[GetOptions is missing VideoSourceToken](#)

[Added imaging20 compatibility](#)

[Changed driver list to alphabet order](#)

[Enhanced FileSize MB strategy for StorageConfig and changed its validation.](#)

[Added](#)

[Purpose](#)

[Usage](#)

Community Platform incorporated into Camera Find

Added

Version 916

Screenshots

The screenshot shows the 'System Configuration' window with the 'Community Assisted Camera Find' section active. The left sidebar contains various configuration options, and the main area displays a table of discovered cameras with their IP addresses, descriptions, and MAC addresses. A 'Find and share with Community...' button is visible in the top right of the main area.

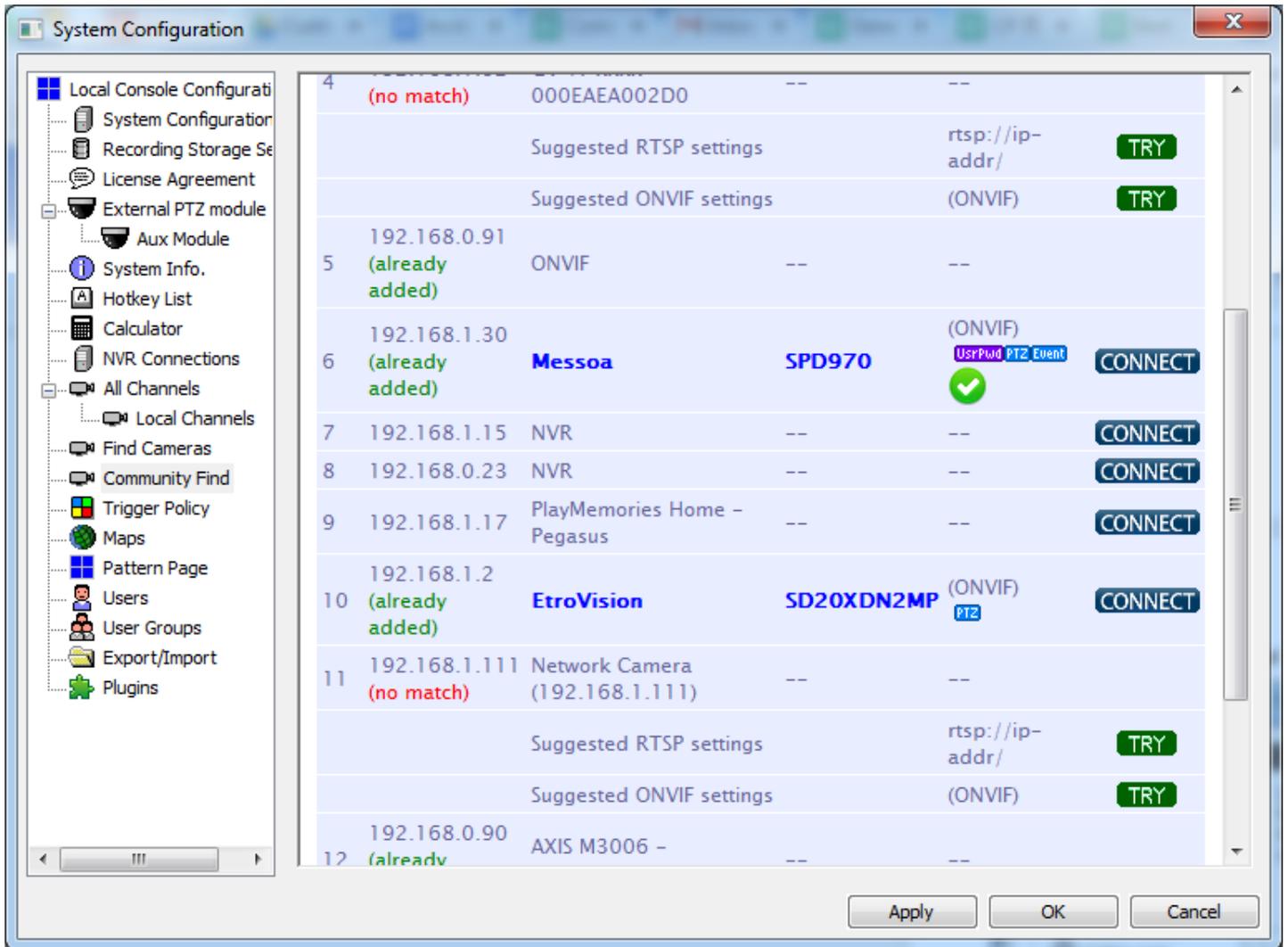
Community Assisted Camera Find

Community Platform is an initiative to improve global IP camera compatibility. By sharing IP camera find/discovery information, you can contribute to the IP video community to help everyone connecting to the same type of camera you're using. You also benefit from the knowledge shared by others. Visit our official website for more information: <http://geniusvision.net/cp>

Find and share with Community...

IP	Description	MAC
192.168.0.23	192.168.0.23//CH_001	ac:cc:8e:0d:e1:fa
192.168.0.23	192.168.0.23//StarDot_001	00:30:f4:00:f0:ff
0.0.0.0	AVerMedia HD Capture C985 ...	@device:pn:pci#ven_1af...
0.0.0.0	USB 視訊裝置	@device:pn:usb#vid_04...
192.168.0.15	NVR	30:85:A9:40:B5:73
192.168.0.23	NVR	50:46:5D:71:CC:46
192.168.1.17	PlayMemories Home - Pegasus	90:2B:34:5F:4C:E3
192.168.0.25	NVR	F0:DE:F1:9A:F2:33
192.168.1.15	NVR	30:85:A9:40:B5:73
192.168.0.17	PlayMemories Home - Pegasus	90:2B:34:5F:4C:E3
192.168.1.111	Network Camera (192.168.1....	A8:1B:18:2D:E2:51
192.168.1.30	ONVIF	18:4E:94:00:77:32
192.168.1.32	GV-A-xxxx - 000EAEA002D0	00:0E:AE:A0:02:D0
192.168.0.90	AXIS M3006 - ACCC8E0DE1FA	AC:CC:8E:0D:E1:FA
192.168.0.91	ONVIF	00:30:F4:00:F0:FF
192.168.1.2	Network Camera (192.168.1.2)	A8:1B:18:2D:E2:4D
192.168.0.115	DVS-8301 1-Ch Video Server - ...	00:02:AB:0D:3F:12

Apply OK Cancel

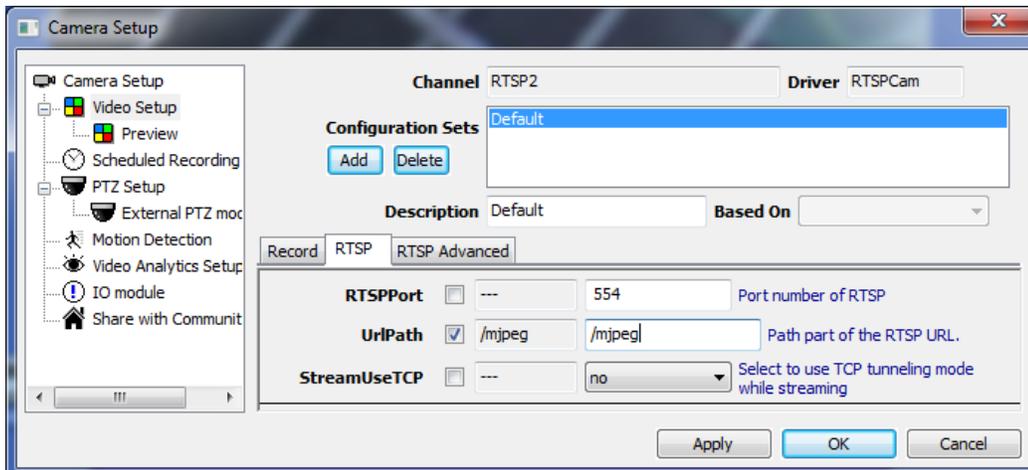


More fogging URL path input

Changed

915

Purpose



When inputting URL relative path there are two forms; starting with or without a slash. For example:

With slash	/mjpeg
Without slash	mjpeg

Both forms seem correct but only the later works. If the one with slash is used, NVR will compose a URL like this and fail:

```
rtsp://192.168.0.101:8558//mjpeg
```

In version 915, auto check is added for RTSPCam, HTTPCamera, and GenericCamera. Now user inputted URLs with or without slash both work as intended.

Usage

NVR automatically composes correct URLs and there's nothing needed to be done by users.

Improved alarm handling for inactive IVS (motion detection and object tracking)

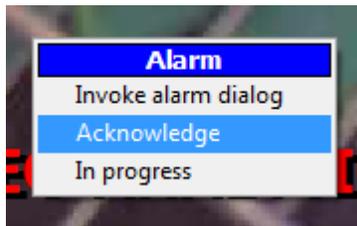
Changed

915

Purpose

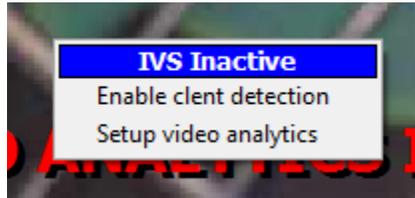


If users setup video analytics but it's not running, NVR fires an alarm of "VIDEO ANALYTICS INACTIVE". There's a problem with this alarm because the state of being inactive is persistent. The alarm will be fired again immediately after users acknowledging it. Users must either enable detection or reset analytics configuration or the alarm can't be dismissed.



In version 915 an improved menu is created specifically for this alarm for users to manage it easily.

Usage



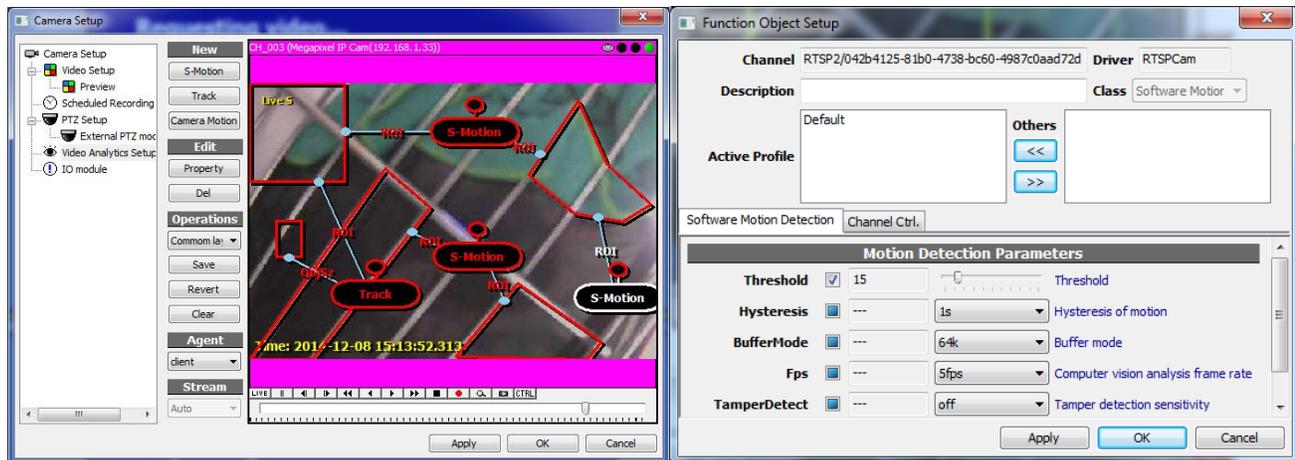
When the alarm is active, the alarm menu is replaced with IVS Inactive menu. Users can enable client detection or open video analytics setup dialog. Enabling client detection immediately dismisses the alarm. In video analytics setup dialog, users can reset configuration (if video analytics is not wanted) or enable server-side detection. (which consumes significant system resource in background)

Simplified motion detection configuration

Added

915

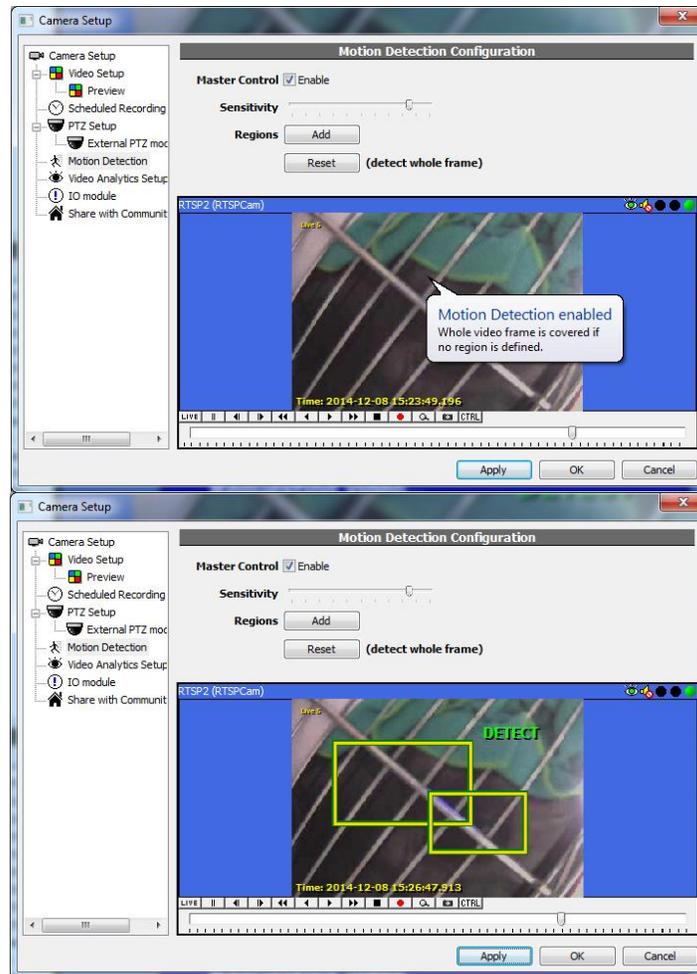
Purpose



Genius Vision NVR has a very flexible and powerful video analytics configuration that supports multiple instances of detection, multiple ROIs (region of interest), and shared ROIs for multiple instances of detection with different parameters. But this is unnecessarily overwhelming for users who just want simple motion detection (VMD). And the learning curve is steep even for simplest detection.

In version 915 a simple configuration for motion detection is added.

Usage



In Motion Detection Configuration (just above the original Video Analytics Setup) there're only limited (and most used) options for users:

Enable/disable motion detection

Change sensitivity

Add ROIs (region of interest)

Reset ROIs (detect whole video)

Automatic recovery from critical disk Error (Storage Monitor)

Added

Version 915

Purpose

When storage encounters a critical error (be it hardware malfunction, driver error, or OS error), NVR storage subsystem may fail to mount, making NVR unable to record any video. Storage monitor add corrupted file to a blacklist and avoid it to make sure storage subsystem works.

Limitation

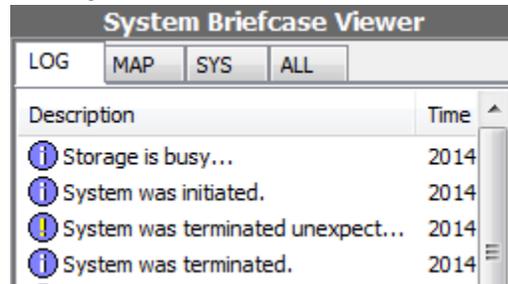
Storage monitor only prevents NVR from accessing corrupted data that stalls storage subsystem. It does not...

1. Fix hard drive malfunction.
2. Recover corrupted data.
3. Detect corrupted video and recover it.

Disk space will be lost for any corrupted file blacklisted.

Usage

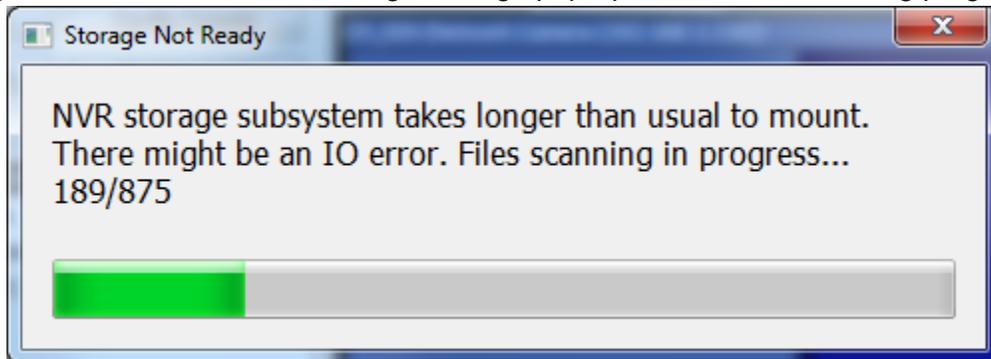
On NVR start, storage is busy scanning files...



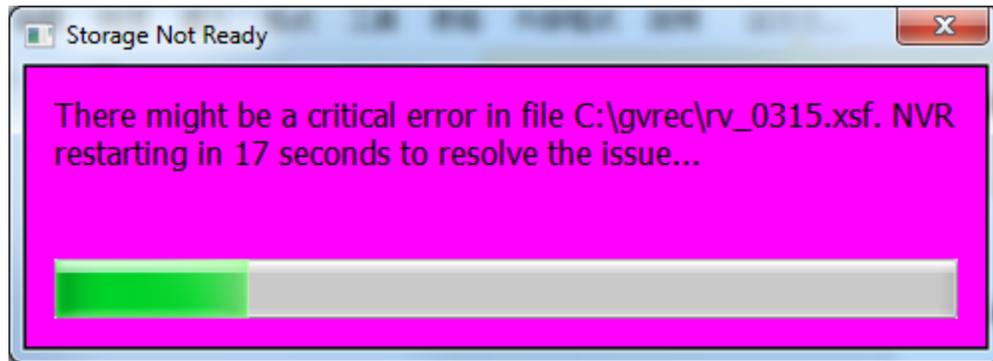
The screenshot shows the 'System Briefcase Viewer' window with a table of system events. The table has columns for 'Description' and 'Time'. The events listed are:

Description	Time
Storage is busy...	2014
System was initiated.	2014
System was terminated unexpect...	2014
System was terminated.	2014

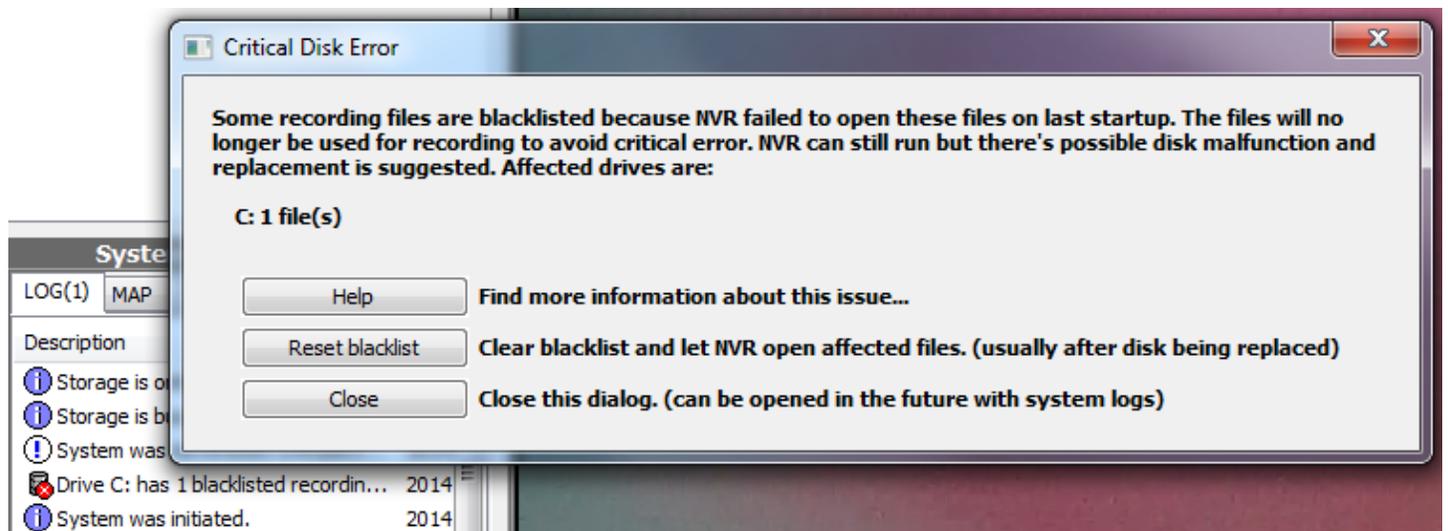
If it takes longer than usual to finish, warning message pop-ups and shows scanning progress.



If any file takes too much time to be opened, NVR blacklists that file and restarts. After restart, the file will be skipped to avoid a critical error.

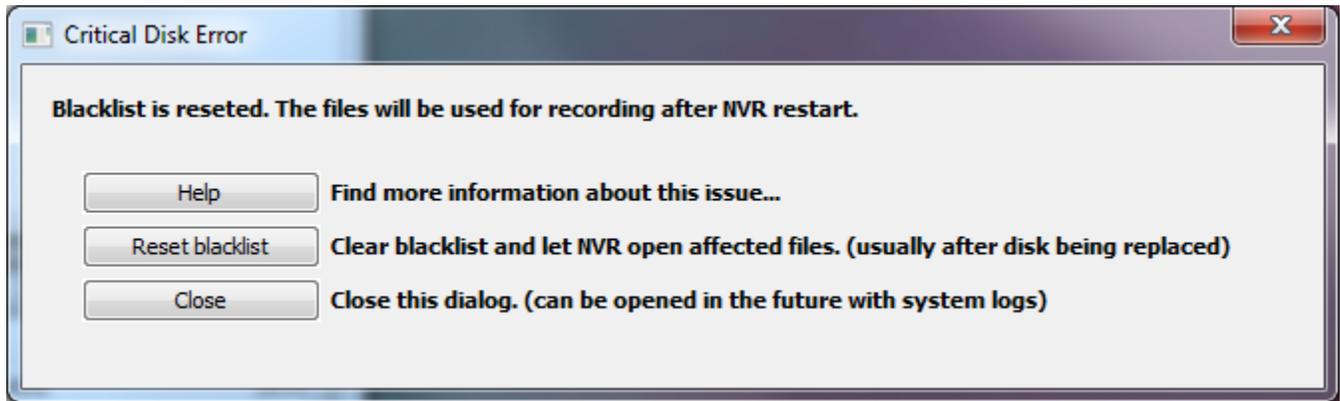


On NVR startup, if there's any blacklisted file, Critical Disk Error dialog pops up and in system logs all affected drives are listed.

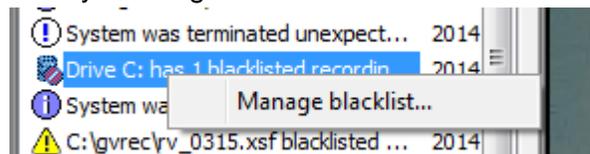


NVR probably already blacklisted all affected files and storage may come online. But this message usually indicates that there's a critical error in hard drive, possibly caused by hardware malfunction. There's a high risk that recording will fail or recorded video will be lost. Users are suggested to do the following procedure...

- Find which hard disk drives the affected logical drives are located on
- Replace all affected hard disk drives except system one (usually C:)
- Run NVR and click "Reset blacklist" in Critical Disk Error dialog
- Restart NVR
- If system drive is affected, avoid using it for recording



The dialog can also be opened in system logs.



Replacing problematic hard disk drives is the only way to fix critical disk error and keep NVR stable and healthy.



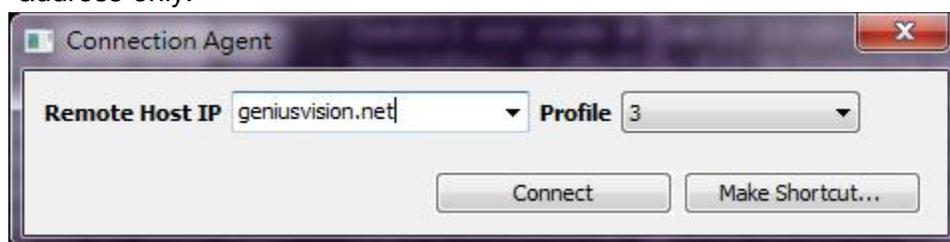
Added: Connect to remote NVR using domain name

Added

Added in 879

Purpose

Suggested by a number of user feedback, now we allow connecting to remote NVR using domain names, in addition to IP-address-only.



Issue: Lite edition - 5x5 matrix layout won't save in pattern page

First Occurrence

Long-standing

Affected Functions

This issue only affects Lite edition.

Status

Fixed in 879

Symptoms

When changing to 5x5 matrix layout in pattern page, the state of the page will not be auto-saved. So next time you open the console, that page won't exist.

Workaround

Instead of using 5x5, you can use 6x6, which still can be auto-saved.

Issue: Internet Explorer will not open under Windows 8

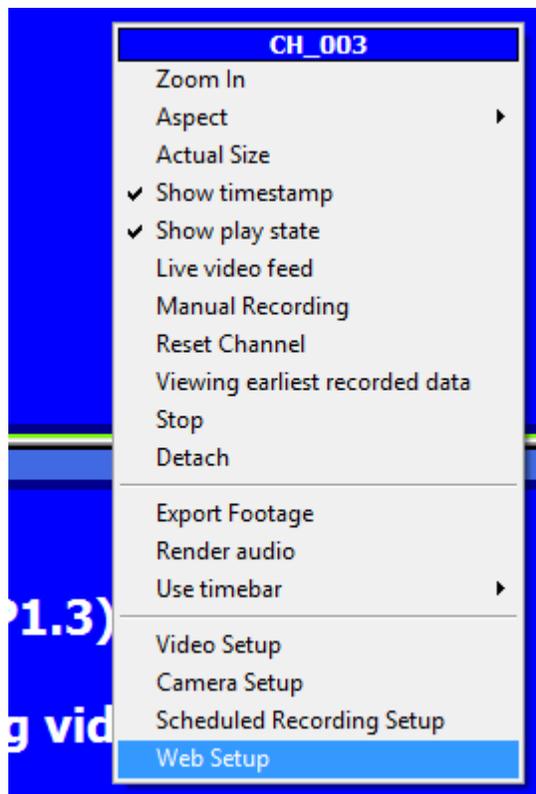
First Occurrence

This is a long-standing issue.

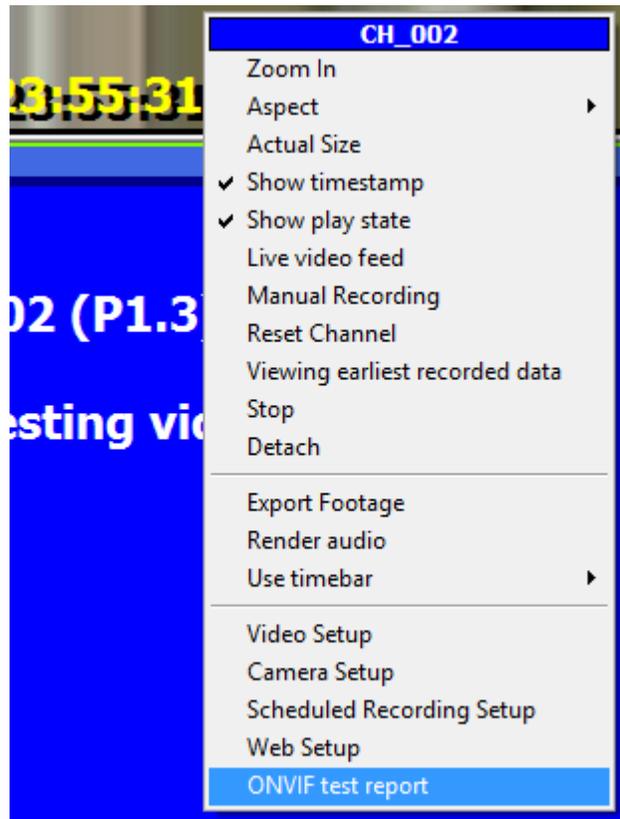
Affected Functions

It's known to affect functions that involves opening a full window Internet Explorer to show something, that under Windows 8, the browser window will not open. Including:

1. Web Setup



2. ONVIF test report



Status

Fixed in 878

Symptoms

The browser window will not open, no error message is given.

Workaround

Under Windows 8, there is no known workaround. The only way is not to use it.

Issue: PacketBufSize sometimes not working

First Occurrence

Version 873

Affected Functions

RTSP buffer overflow auto-resolve

Status

Fixed in 878

Symptoms

In some cameras, overflow occurs rarely. At the checkpoint of auto-resolve mechanism, there may not be overflow and buffer size is not increased.

Workaround

Increase buffer size manually.

Issue: Cannot change admin password

First Occurrence

Version 873

Affected Functions

User management for default user "admin"

Status

Fixed in 877

Symptoms

Password/description for default user "admin" cannot be changed. Upon OK/Apply, system logs "System config changed" but not "User 'admin' changed". The change is not saved.

Image 1. Before 873, successful change of user 'admin'.

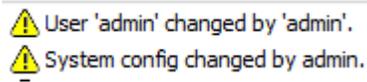
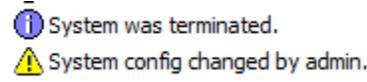


Image 2. Bugged behavior. User 'admin' is not changed.



Workaround

Install version 872 and change password

How to read Genius Vision Software Changes

There are 2 tables in Software Changes: [Changes](#) and [IssueVersionGrid](#).

Table "Changes"

This lists known issues and their fix, if it's fixed. The **IDs** are coded as following:

- **TA - Technical Articles** are usually for engineers regarding integration or testing.
- **A - Articles** are for end-users providing information on operations or setup.
- **KI - Known Issues** are issues affecting only certain versions of software.
- **LI - Long-standing Issues** are issues that exist since early stage of software and almost affect all users.

Taking the 3rd row "**KI:MaxSzNonHdd**" issue as an example:

- It's introduced in version **873**. So if you are using **872** than you are not affected, but if you are using **874**, then you are affected.
- Column "**Changed**" usually means fixed if the item is a KI. So if you are using **873**, update to **875** can solve the issue.
- If the version number shows as **Upcoming**, it means a version containing that change is yet to be released and will likely to be released in next version.
- Click "**Information**" for more detail about the issue. Sometimes there're workarounds if you don't want to update software or if a fix is not available yet. You also need the details to explain to customers.

Genius Vision Software Changes

Changes IssueVersionGrid

ID [1]	Description	Since	Changed [2]	Severity	Information
TA:OV-UserManual	Setup Genius Vision NVR for ONVIF Testing		-		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:ET02-OV	Add ET02 for ONVIF InitialTerminationTime issue		875		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
KI:MaxSzNonHdd	StgConfig MaxSize_GB issue with non-HDD drives	873	875	High	https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
LI:RestartCrptSlot	Restart Windows causes corrupted recording file		875		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
LI:OV-free-RStop	Issue: ONVIF PTZ free mode sends stop first		875		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
LI:OV-PTZ-NP	Issue: ONVIF PTZ number precision not enough		875		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
TA:ONVIF-PTZ	How to operate ONVIF PTZ?		-		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:x64EntPkg	Updated x64 Enterprise packaging.		874		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:MobOptForMV	Added 20x20 layout for x64 Enterprise, MobileOptions for MV		874		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
LI:MultiClntOpen	Multiple client instances with same profile crash the system		873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
LI:AdmGrpChg	Edit of Administrators group could lock-up the system		873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
KI:TCP-setup-prob	A:TCP-setup known issue	857	873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:RecStreamIdx	Added MainStreamIndex (RecStream) option.		873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:IncConStgMon64	Increase connection, storage, monitor limits for x64.		873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
A:PktBufSzDet	PacketBufSz resize auto-detection		873		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
TA:SetupOVDIO	How to setup & verify ONVIF DIO (Digital Input/Relay Output)		-		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
KI:2ndStream	2nd stream might not work	865	872	High	https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111
TA:SysIntManual	System Integrator's Manual		-		https://docs.google.com/spreadsheets/d/0AnmAMRiHiy2fdERfdmpKYk/edit#gid=1024111111

Table "IssueVersionGrid"

The table visualized affected versions. "X" means the issue is present. "<" means the issue is fixed. Bugs can be introduced during software development and you may not be satisfied with every change of newer versions. So don't blindly update to the latest version. Use the table to find the issues that currently bother you and install **"Suggested Upgrade"** to fix the active issues without changing the system dramatically.

The screenshot shows a Google Docs spreadsheet with the following data:

Published Issues [1]	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	859	858	857	856	855
Suggested Upgrade	-	875	875	-	872	872	872	872	872	872	872	-	-	863	863	863	863	863	863	863
Defective [2]																				
KI:MaxSzNonHdd	<	X	X																	
KI:TCP-setup-prob			<	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
KI:2ndStream				<	X	X	X	X	X	X	X									
KI:XP+Organizer									<	X	X	X	X	X	X	X	X	X	X	X
KI:IVSIndicProb																		<	X	X
KI:PanoNptzIfVloss																				

[1] "X" means the issue is present. "<" means the issue is fixed since that version.
 [2] If "Defective" is indicated "X", it means the specified build contains critical problems and shouldn't be used.

Published by Google Drive – Report Abuse – Updated automatically every 5 minutes

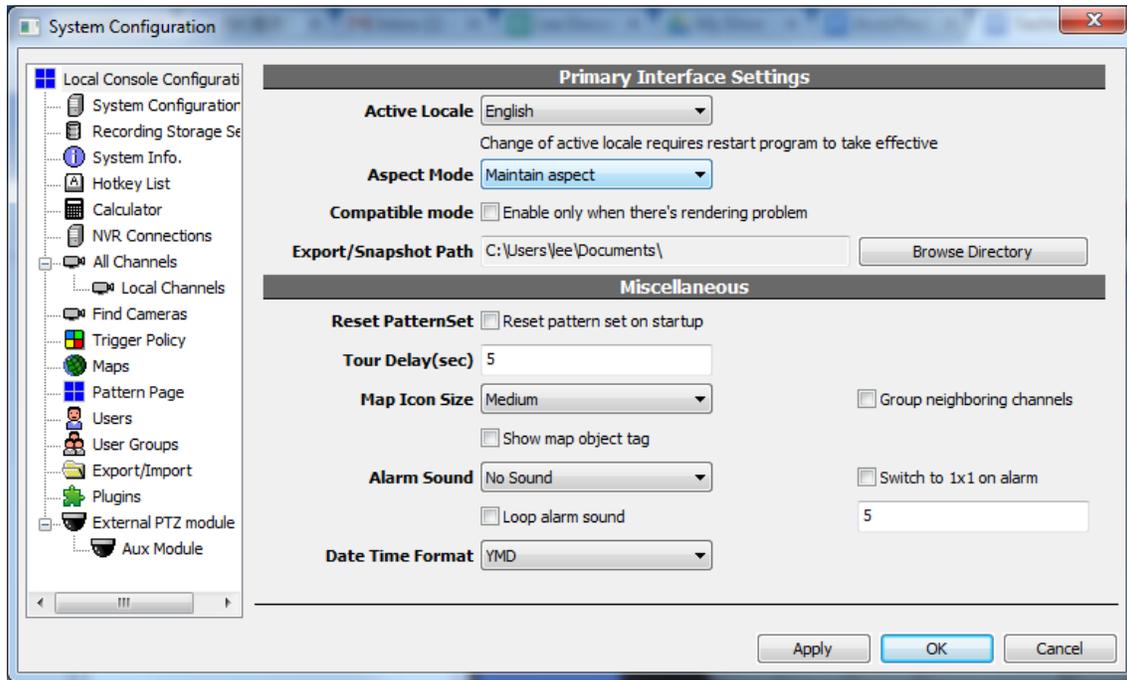
Video aspect minor bug

First Occurrence

Version 741

Affected Functions

Video rendering, only when **Maintain aspect** is selected and player window size is twice larger (any of the two sides) than actual video. This bug rarely occur on megapixel cameras.

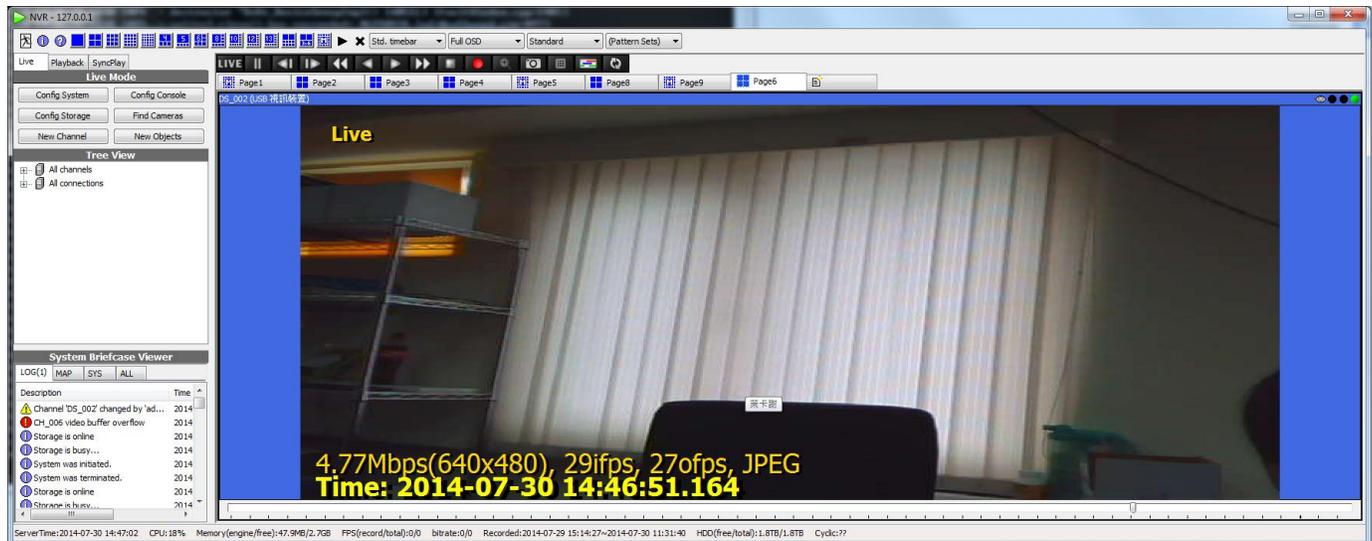


Status

Fixed in 876

Symptoms

When player is twice larger (any of the two sides) than actual video, player no longer maintain aspect ratio of the video.



Workaround

- Select Aspect Mode other than **Maintain aspect**.
- Increase video resolution so it better fits the resolution of monitor.

Issue: Corrupted slot after Windows restart

First Occurrence

Long-standing

Affected Functions

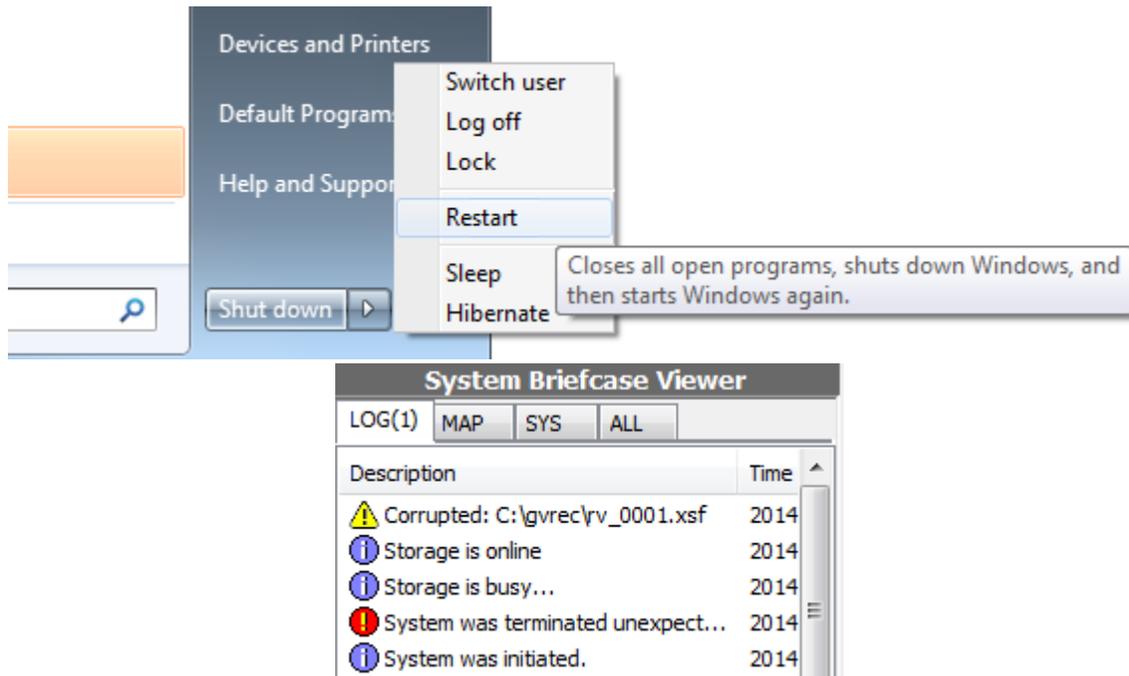
Service mode only. (Hybrid is not affected)

Status

Fixed in 875

Symptoms

After Windows restart by user request, system appears to be terminated abnormally and there's corrupted slot.



Workaround

Shutdown NVR engine manually before shutdown or restart Windows.

Add ET02 for ONVIF InitialTerminationTime issue

Status

This is added in 875

Purpose

The reason for this parameter is detailed in the following technical article:

- [What is the InitialTerminationTime issue](#)

The difference between **ET01** and **ET02** can be illustrated in the following XML:

ET01

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:tt="http://www.onvif.org/ver10/schema"
xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:tds="http://www.onvif.org/ver10/device/wsd"
xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:wsd="http://schemas.xmlsoap.org/ws/2005/04/discovery" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd" xmlns:wsu="http://docs.oasis-
```

```

open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:trt="http://www.onvif.org/ver10/media/wsd"
xmlns:wsdp="http://schemas.xmlsoap.org/ws/2006/02/devprof"
xmlns:timg="http://www.onvif.org/ver10/imaging/wsd"
xmlns:ovi20="http://www.onvif.org/ver20/imaging/wsd"
xmlns:ove="http://www.onvif.org/ver10/events/wsd" xmlns:wsnt="http://docs.oasis-open.org/wsn/b-2"
xmlns:ovio="http://www.onvif.org/ver10/deviceIO/wsd" xmlns:ovz="http://www.onvif.org/ver10/ptz/wsd"
xmlns:ovz20="http://www.onvif.org/ver20/ptz/wsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
  <soap:Body>
    <ove:CreatePullPointSubscription>
      <ove:InitialTerminationTime>PT30S</ove:InitialTerminationTime>
    </ove:CreatePullPointSubscription>
  </soap:Body>
</soap:Envelope>

```

ET02

```

<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:tt="http://www.onvif.org/ver10/schema"
xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:tds="http://www.onvif.org/ver10/device/wsd"
xmlns:wsa="http://www.w3.org/2005/08/addressing"
xmlns:wsd="http://schemas.xmlsoap.org/ws/2005/04/discovery" xmlns:wsse="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd" xmlns:wsu="http://docs.oasis-
open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-1.0.xsd"
xmlns:trt="http://www.onvif.org/ver10/media/wsd"
xmlns:wsdp="http://schemas.xmlsoap.org/ws/2006/02/devprof"
xmlns:timg="http://www.onvif.org/ver10/imaging/wsd"
xmlns:ovi20="http://www.onvif.org/ver20/imaging/wsd"
xmlns:ove="http://www.onvif.org/ver10/events/wsd" xmlns:wsnt="http://docs.oasis-open.org/wsn/b-2"
xmlns:ovio="http://www.onvif.org/ver10/deviceIO/wsd" xmlns:ovz="http://www.onvif.org/ver10/ptz/wsd"
xmlns:ovz20="http://www.onvif.org/ver20/ptz/wsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance">
  <soap:Body>
    <ove:CreatePullPointSubscription>
      <ove:InitialTerminationTime xsi:nil="true" />
    </ove:CreatePullPointSubscription>
  </soap:Body>
</soap:Envelope>

```

MaxSize_GB default value issue for non-HDD drives

First Occurrence

Version 873

Affected Functions

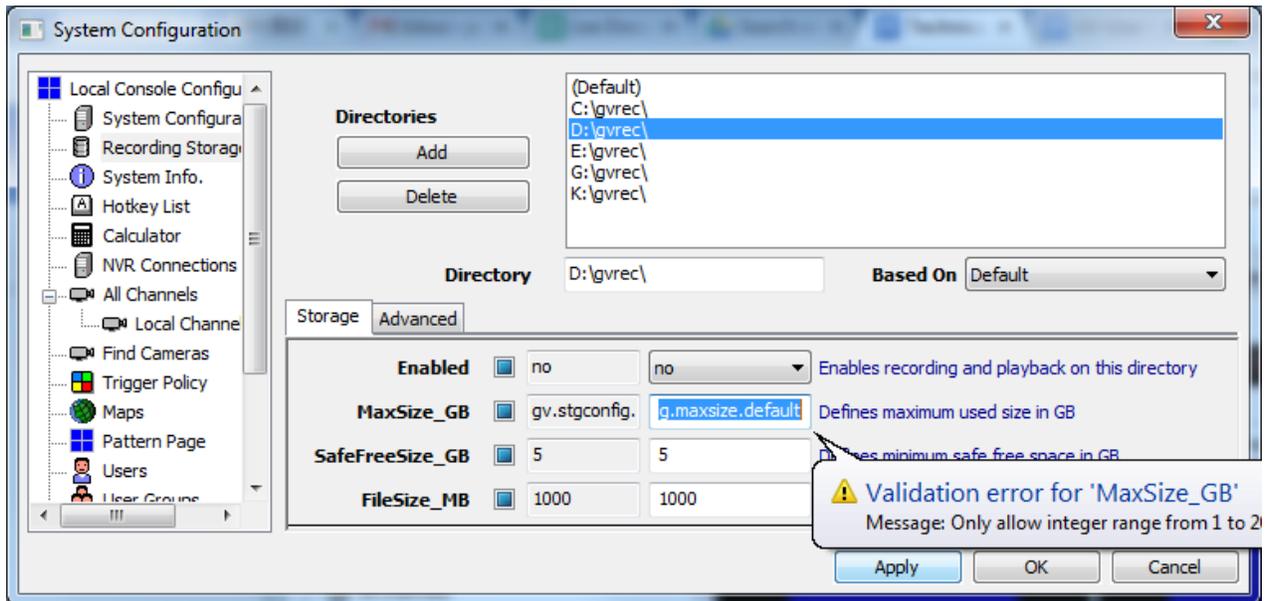
Storage Configuration, read-only drives.

Status

Fixed in 875

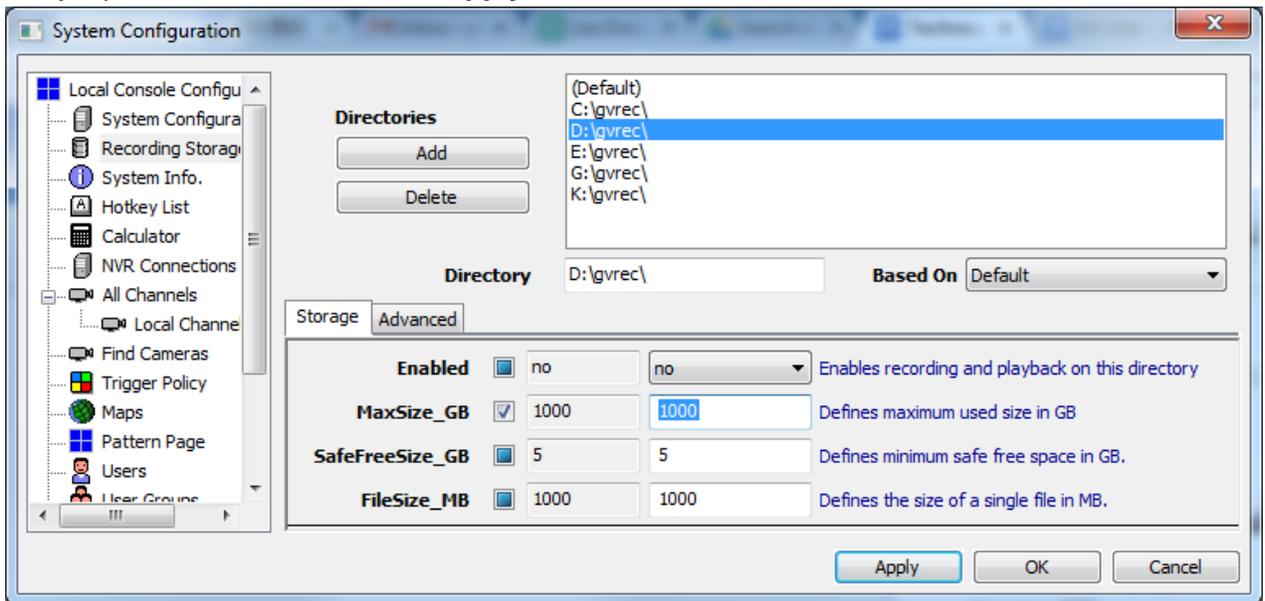
Symptoms

When a read-only drive is selected in **Storage Config**, non-numerical text appears in **MaxSize_GB** and it's can't be saved because it's not a valid value.



Workaround

Manually input a valid value and click **Apply**.



Issue: ONVIF PTZ free mode sends stop first

Affected Functions

ONVIF PTZ.

Status

Fixed in 875

Symptoms

At random times, the NVR software will send a **ContinuousMove** command with $x=0$, $y=0$ prior to actual commands. Some PTZ camera will treat such command as **Stop** command and will introduce additional delay.

Workaround

There is no known workaround on the NVR side, except to upgrade to newer version.

Issue: ONVIF PTZ number precision not enough

Affected Functions

ONVIF PTZ.

Status

Fixed in 875

Symptoms

NVR will send ONVIF **ContinuousMove** command with $x=0$, $y=0$, where in reality x and y can be a very small number. Some PTZ camera will treat such command as **Stop** command and will introduce additional delay.

Workaround

There is no known workaround on the NVR side, except to upgrade to newer version.

Updated x64 Enterprise packaging

Introduction to 64-bit Architecture

- See presentation: [Genius Vision 64-bit Architecture](#)

Status

- Starting from version 874, x64 Enterprise enters BETA trial.

x64 CmE Edition

- No additional requirement, same license packaging as CmE 32-bit.

x64 Enterprise Edition

- Require an additional per/server Enterprise license: **copye**
- Per-channel license is compatible with Commercial Edition (32-bit): **pro, ipr, pano**
- Demo mode: if demo code is used, minimum number of channel Professional, Intelligent, and Panorama is 8, for proper trial to work.

Product Licensing Comparison

	Requires additional copye license	Per Camera Commercial License (pro, ipr, pano)
Commercial Edition (32-bit)	No	Yes
Enterprise Edition (64-bit)	Yes	Yes
Community Edition 32-bit	No	Not applicable
Community Edition 64-bit	No	Not applicable

New License Type Explained

- **New license type: copye** is a new license type that will be available for purchase. License fee will be defined somewhere else.
- **License applicability & installation:** For Enterprise Edition, one server (PC) requires exactly one unit of **copye** to function correctly, otherwise "Protection lock error" will be encountered and the software won't start. This special license code will be asked at installation time (see **Image 4**).
- **Trial & production mode:** In demo mode, **copye** comes with 8-channel of trial license with IVS and panorama features enabled to facilitate trial purpose. In product mode (non-trial), **copye** does not bring additional per-camera license. Therefore additional per camera license (such as **pro, ipr, pano**) must be purchased and installed separately.

x64 (Enterprise) System Limit Extension

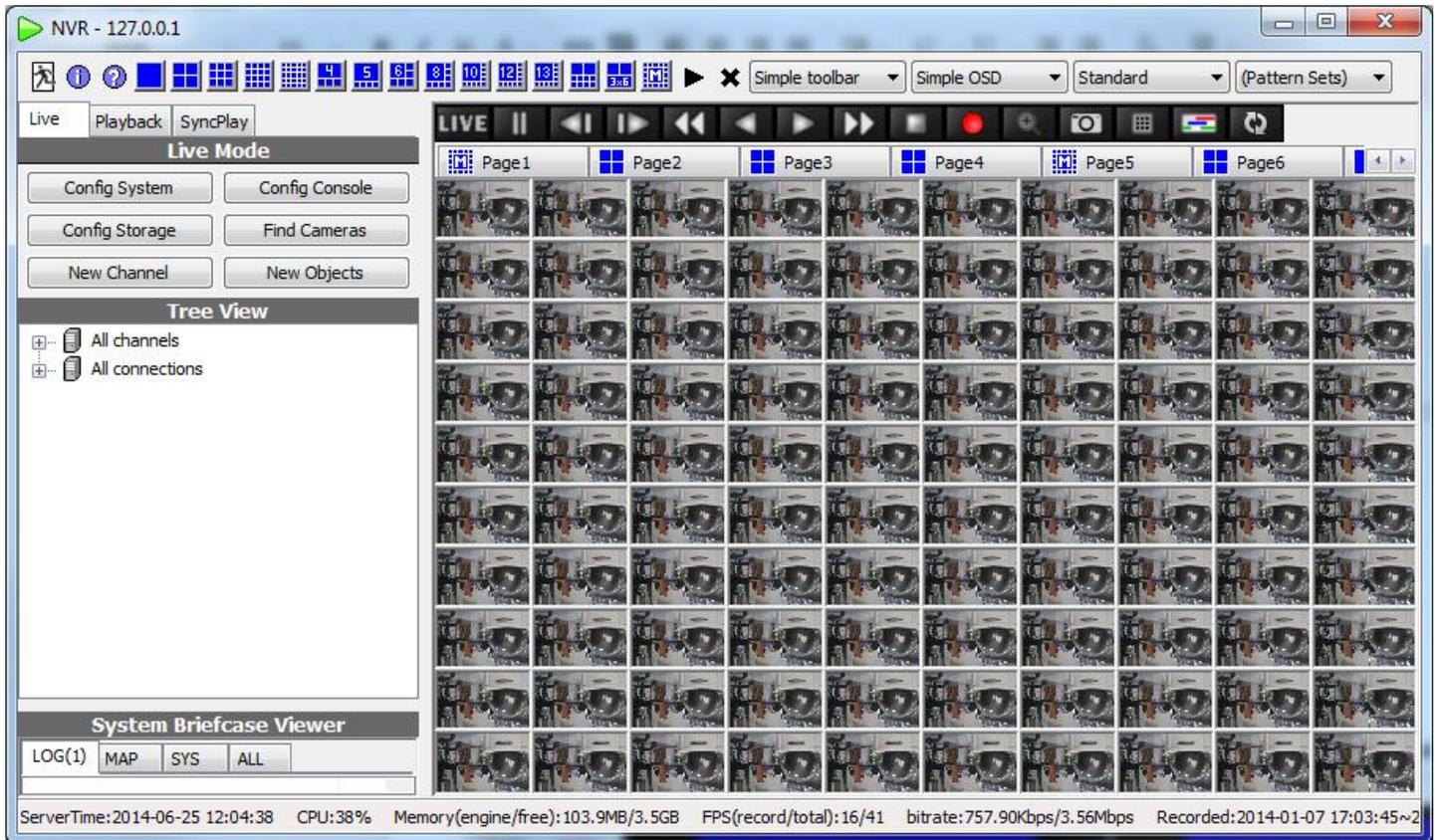
Due to the fact that x64-based system comes with more available system resource (if configured properly), x64 build of NVR software has extended several system limits and/or default values, as illustrated below:

	32 bit	64 bit
Maximum allowed TCPConnections (Image 1)	1,000	2,000
Default TCPConnections	150	1,000
Storage MaxSize_GB per directory (Image 2)	20,000	80,000
Default MaxSize_GB per directory	1,000	1,000
Maximum number of monitors supported (Image 3)	6	8
Maximum number of matrix view	256 (16x16)	400 (20x20)

MobileOptions for MatrixView

After version 874, matrix layout 20x20 is added to utilize full power of 64 bit Enterprise Edition . To increase system stability, layout larger than 10x10 request stream with [MobileOptions](#) with an interval of 3 seconds, which means video is limited at maximum of 1/3 FPS.

So far the mechanism is automatic and there's no option or configuration for it.



Related Changes

- A:AppMobileOpt

Reference screenshots

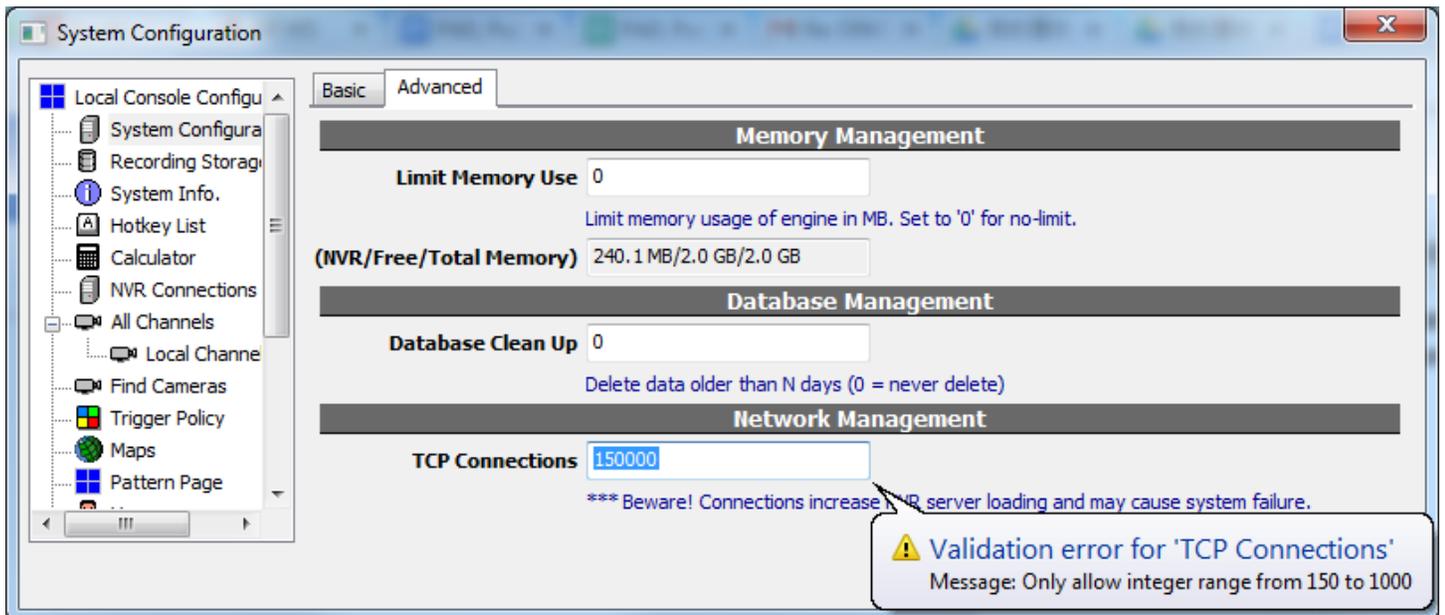


Image 1

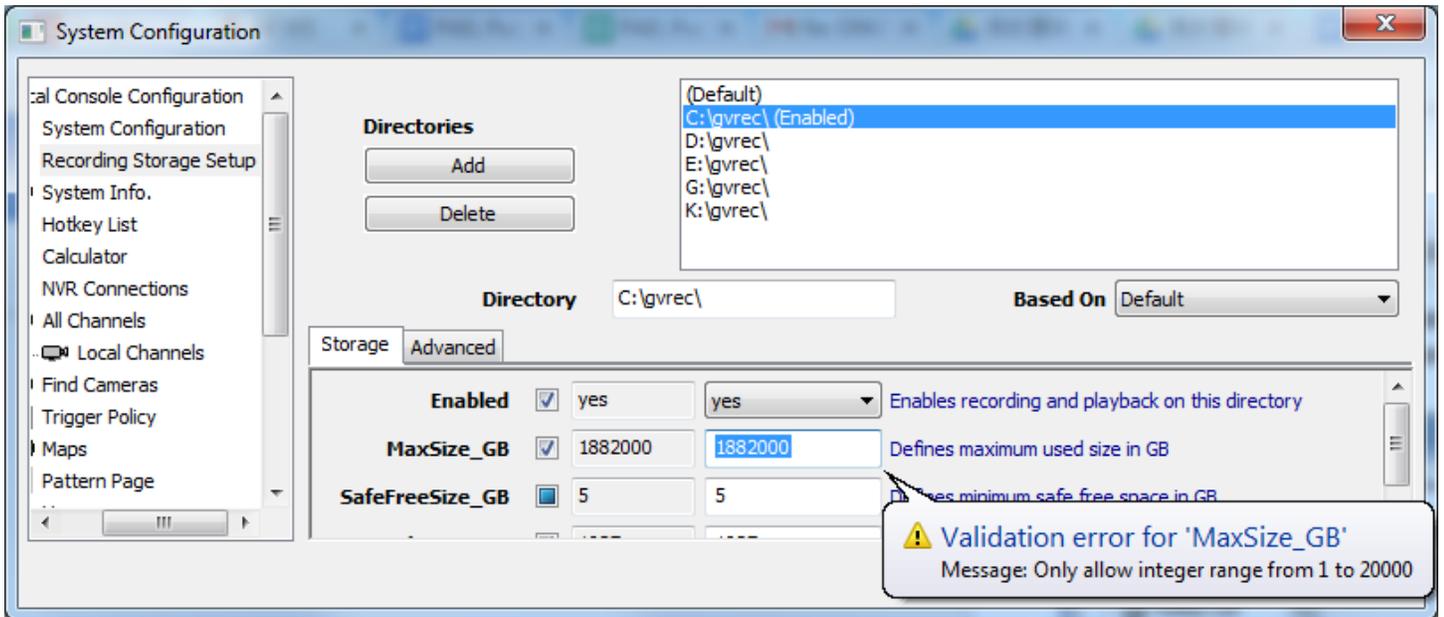


Image 2

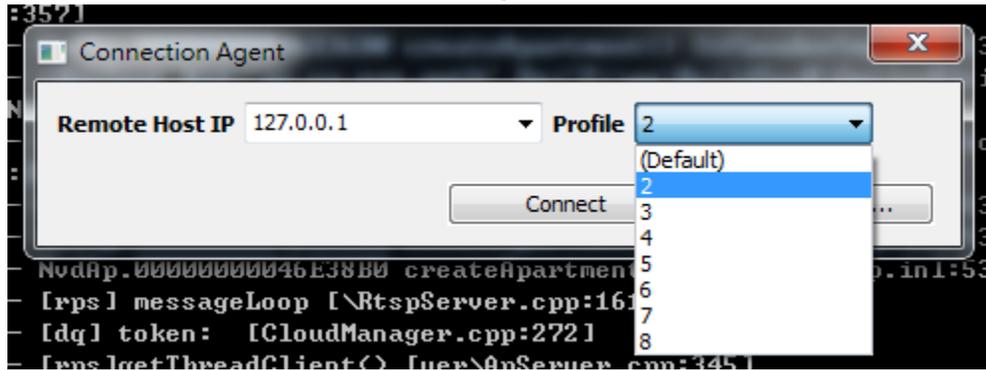


Image 3

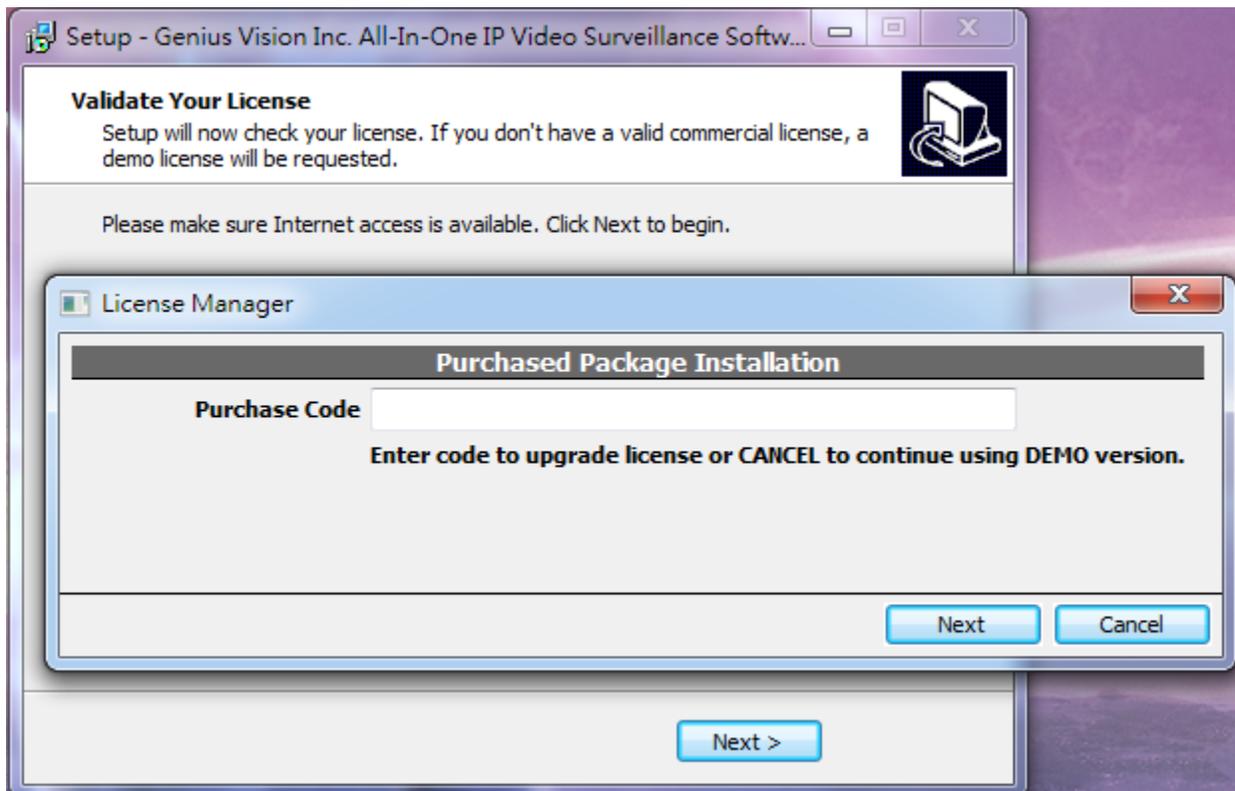
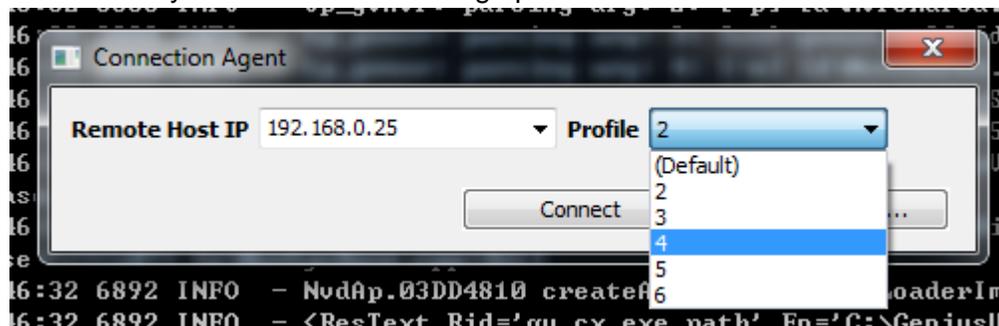


Image 4

Multiple client instances with same profile could crash the system

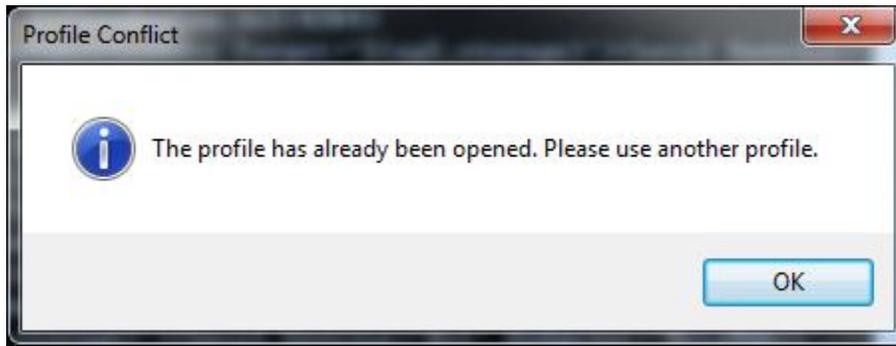
Background

Genius Vision NVR provides the function to open multiple consoles on single PC, which is usually needed for multiple monitors. When opening consoles, users can select different profiles so states like layout, window position, attached channels, etc, will be stored separately. If 2 or more consoles are opened with same profile, consoles may crash due to conflicting operations on database.



Fix

As of version 874, one profile can only be opened with one console.



PacketBufSize auto resize

Added

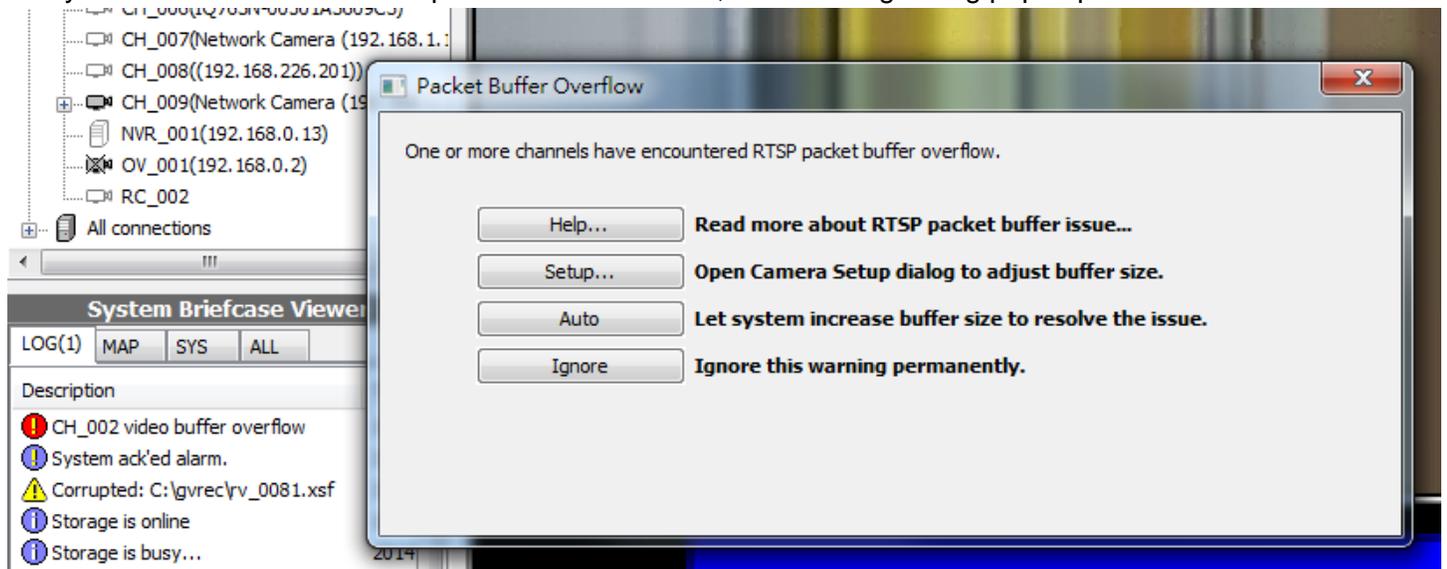
Version 874

Purpose

This fix addresses the packet buffer overflow causing video image to corrupt at bottom by providing semi-automatic hint to adjust packet buffer size. More details please refer to [Technical FAQ](#).

Usage

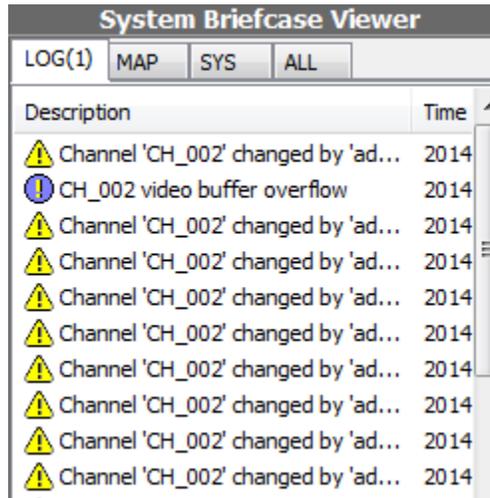
If any of the channels encounter packet buffer overflow, the following dialog pops up.



There're 4 actions:

- **Help**
Opens the document that explains RTSP packet buffer size issue.
- **Setup**
Opens Camera Setup dialog for user to configure buffer size manually.
- **Auto**
Let NVR to increase buffer size automatically.
- **Ignore**
NVR no longer shows this dialog in the future. The warning can still be seen in system logs.

If **Auto** is selected, NVR increases buffer size to resolve the issue automatically. Because NVR can never know exactly how many bytes are required, it will increase buffer size incrementally until video data is not truncated.



MainStreamIndex (Recording Stream)

Added

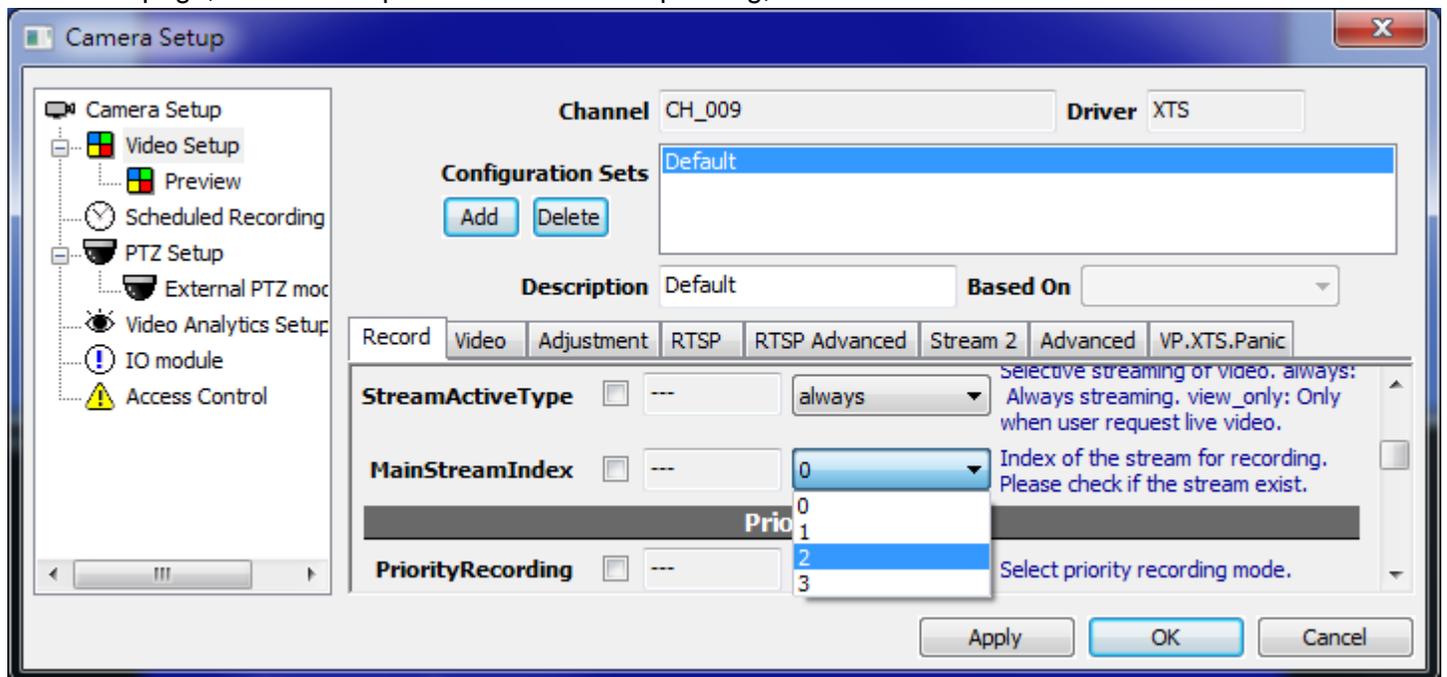
Version 874

Purpose

By default NVR records first stream, which usually has higher quality and data rate. If user wants to record stream other than first one, MainStreamIndex needs to be configured.

Usage

In Record page, Video Setup tab of Camera Setup dialog, find MainStreamIndex.



There're always 4 options no matter how many streams the camera support. 0 is the default value. Please check if the stream exist before selecting. If the selected stream does not exist, NVR will still record first stream. (stream 0)

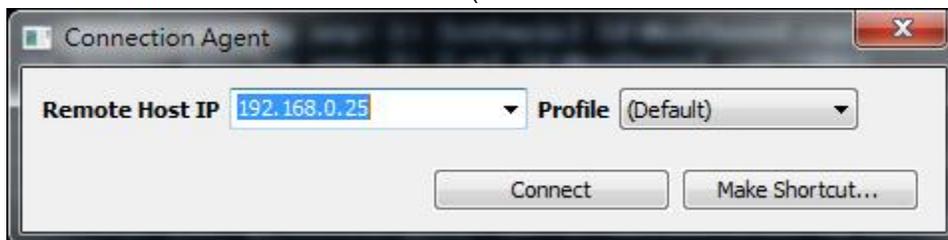
TCP Connections setup issue

First Occurrence

Version 857 (2013-11-4)

Affected Functions

Configuring TCP Connections limit of remote NVR. (client and server run on different computers)

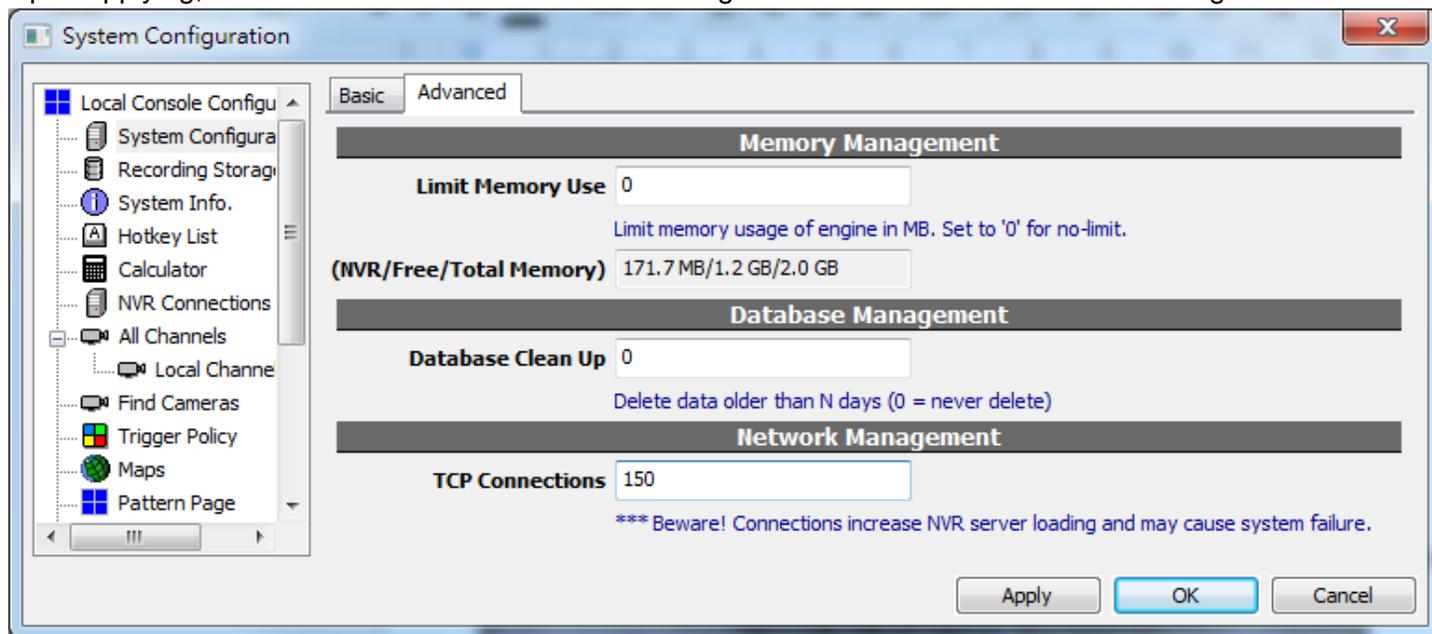


Status

This issue is fixed in version 874

Symptoms

Upon applying, TCP Connections will be reverted to original value. The value cannot be changed.



Workaround

Configure TCP Connections on NVR server, instead of from remote client.

Edit of Administrators group could lock-up the system

Background

An issue has been reported and confirmed to be an issue of Genius Vision NVR software that if an administrator who belongs to Administrators group and tries to disable the "Manage System" access right,

this could potentially leads to lock-up to an entire NVR server. Removing auto-created user "admin" from Administrators group could also lead to lock-up.

Image 1. Administrator privilege is removed from **Administrators** group

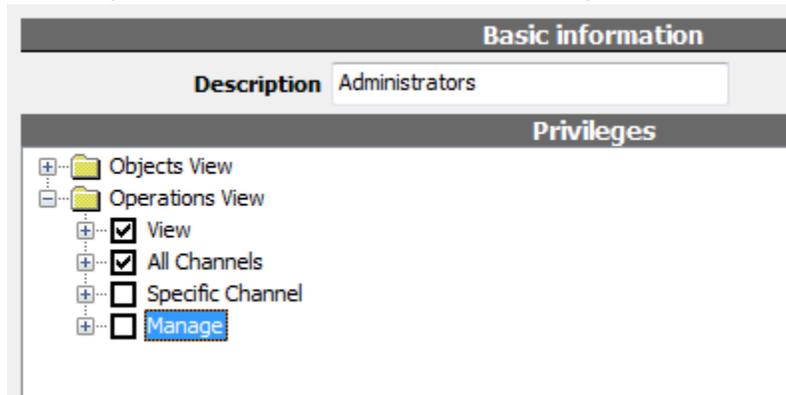
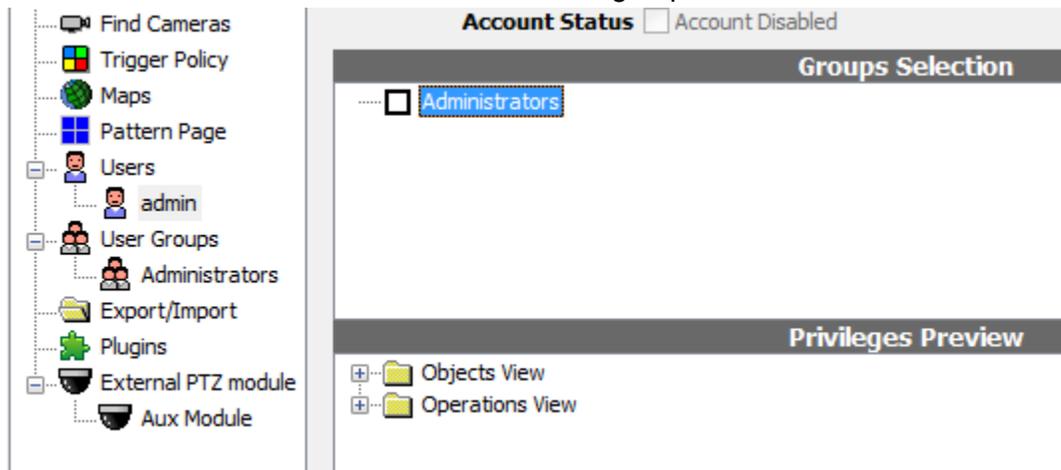


Image 2. User "admin" is removed from **Administrators** group



Fix

As of version 874, user "admin" and user group "Administrators" can no longer be edited. They always have administrator privileges. Previously locked system will also be fixed. To protect the system, users **MUST** change default password of user "admin". Please do **NOT** use common default passwords like 1234, pass, root, 9999, 0000, etc.

Image 3. Check boxes are grayed out. Privileges can not be edited.

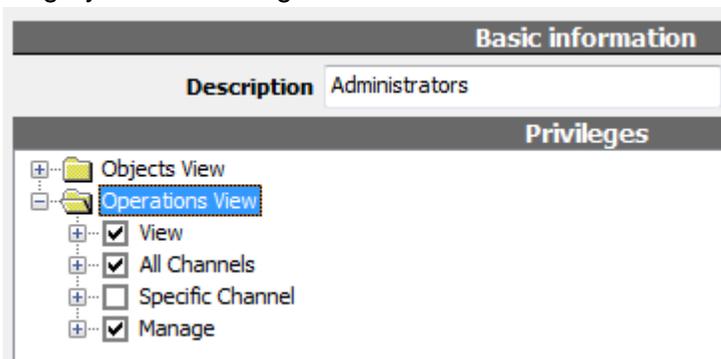
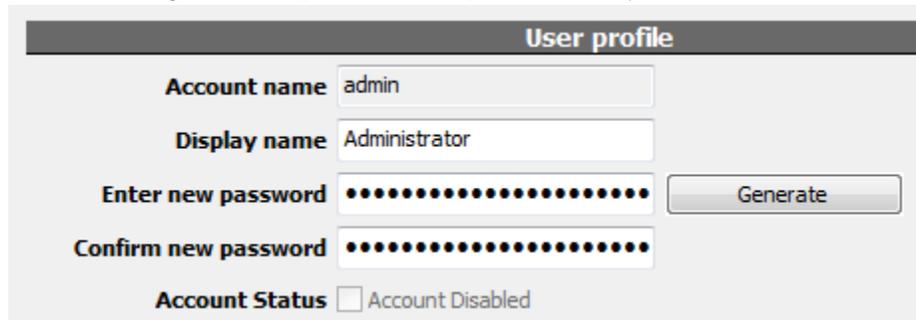


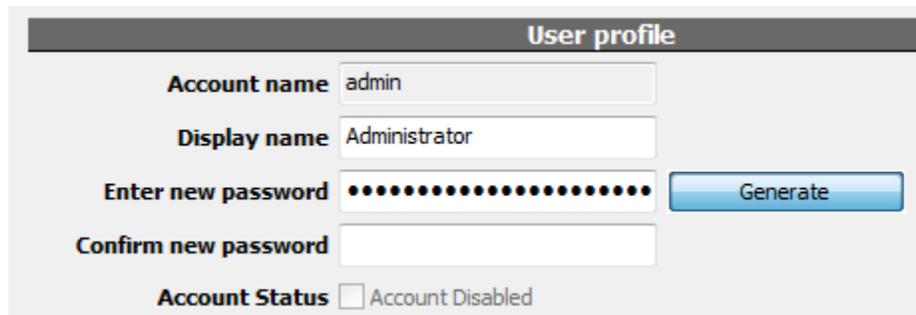
Image 4. Remember to change default password to protect the system.



The screenshot shows a 'User profile' form with the following fields and controls:

- Account name:** admin
- Display name:** Administrator
- Enter new password:** A field filled with 12 black dots, with a 'Generate' button to its right.
- Confirm new password:** A field filled with 12 black dots.
- Account Status:** Account Disabled

Behavior of generating password is also changed. Before the change, when using the button to generating password, **Confirm new password** is filled automatically. Now users have to paste generated password in.



The screenshot shows the same 'User profile' form as above, but with the following differences:

- Enter new password:** A field filled with 12 black dots, with a blue 'Generate' button to its right.
- Confirm new password:** An empty text input field.
- Account Status:** Account Disabled

2nd stream might not work

First Occurrence

Version 865 (2013-12-23)

Affected Functions

2nd stream for all channels, this includes:

- **Stream selection by user request**
 - Both local and remote channel are affected
- **Layout auto-switch of streams**
 - Both local and remote channel are affected
 - Both matrix and full players are affected
 - Only layout of 3x3 or more are affected
- **Video analytic**
 - Preview in configuration dialog is affected
 - Server-side detect is affected

Status

This issue has been fixed in version 872.

Symptoms

1st stream is always displayed even when 2nd stream is selected, by user or layout auto-switch. And in this state only the first frame of 1st stream is displayed. The video will not update.

Resetting channel sometimes fixes the state temporarily. It's broke again if stream or layout is switched.

No known configuration can fix this state so far.

For video analytic, if 2nd stream or auto is selected for server-side detect, software motion will be constantly triggered even without any motion. (probably it messes frames from both streams?) Selecting **main stream** can fix this.

Image 1. From left to right: main, secondary, auto. They all display 1st stream (2nd stream is JPEG CIF). Top row is local channel and 2nd is remote channel.



Image 2. Video analytic is also affected.

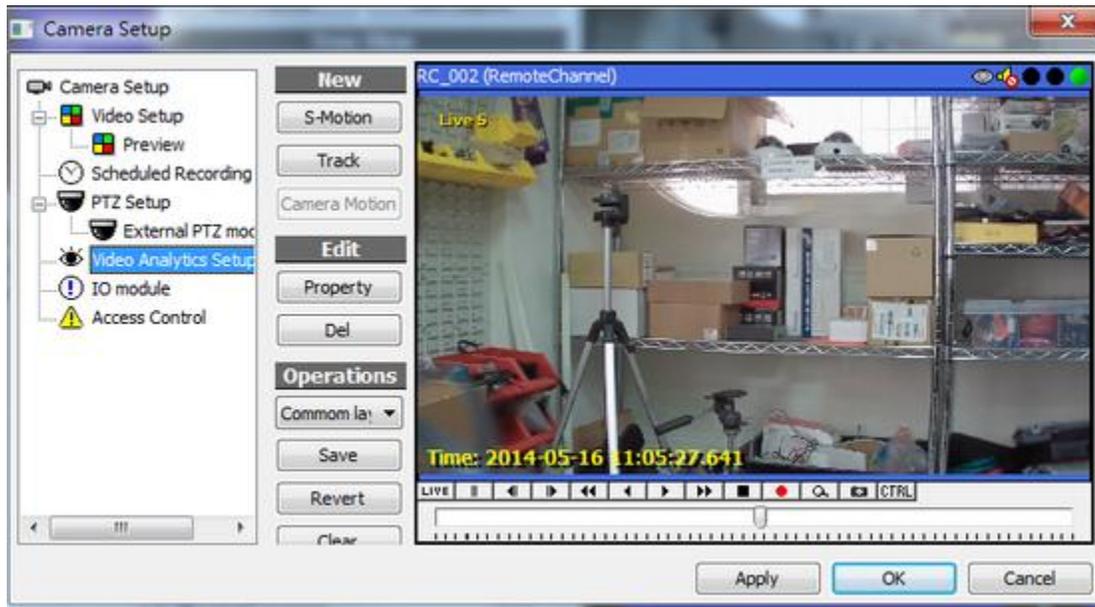
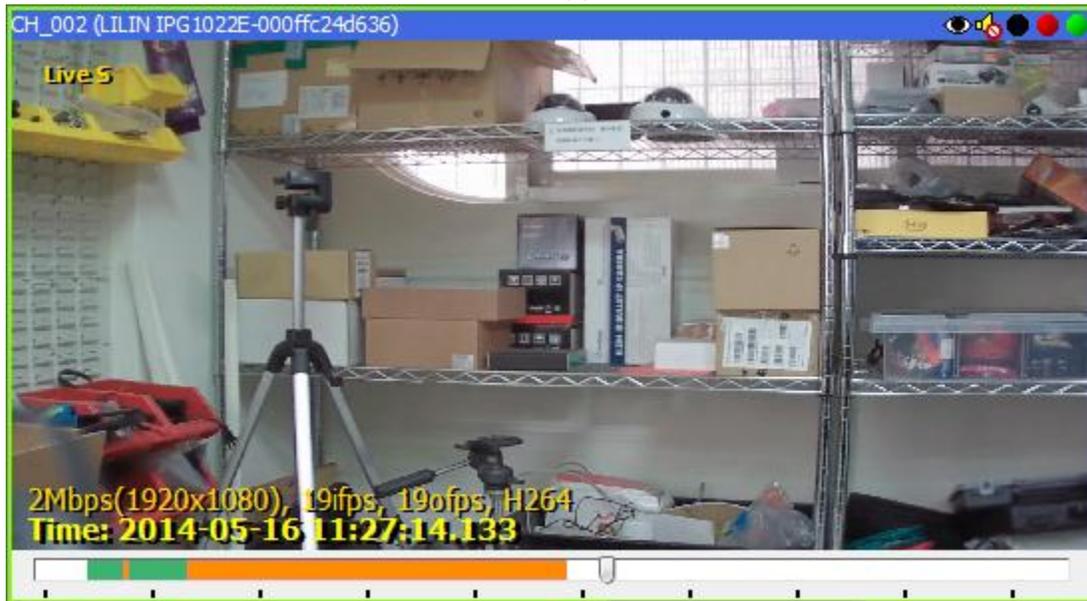
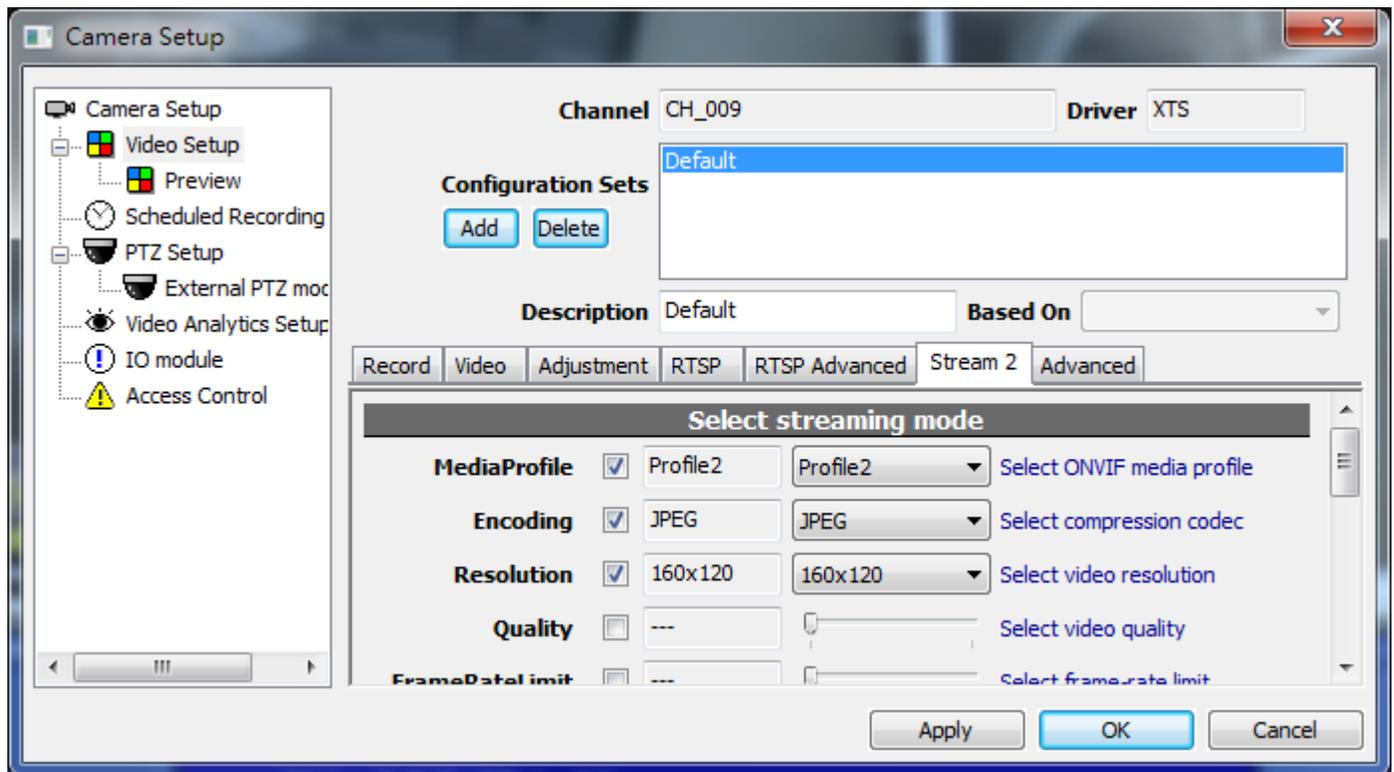


Image 3. Server-side software motion is constantly triggered without any motion.



Fixed ONVIF config change checking for Stream 2

Before version 869, SetVideoEncoderConfiguration for stream 2 does not work properly. Stream 2 ignores user configuration and streams with default encoding/resolution only.



Fixed ONVIF missing SessionTimeout for SetVideoEncoderConfiguration (technical)

Before version 869, SessionTimeout in SetVideoEncoderConfiguration is missing. Some cameras consider this invalid request and encoding/resolution/quality can not be configured at all.

```

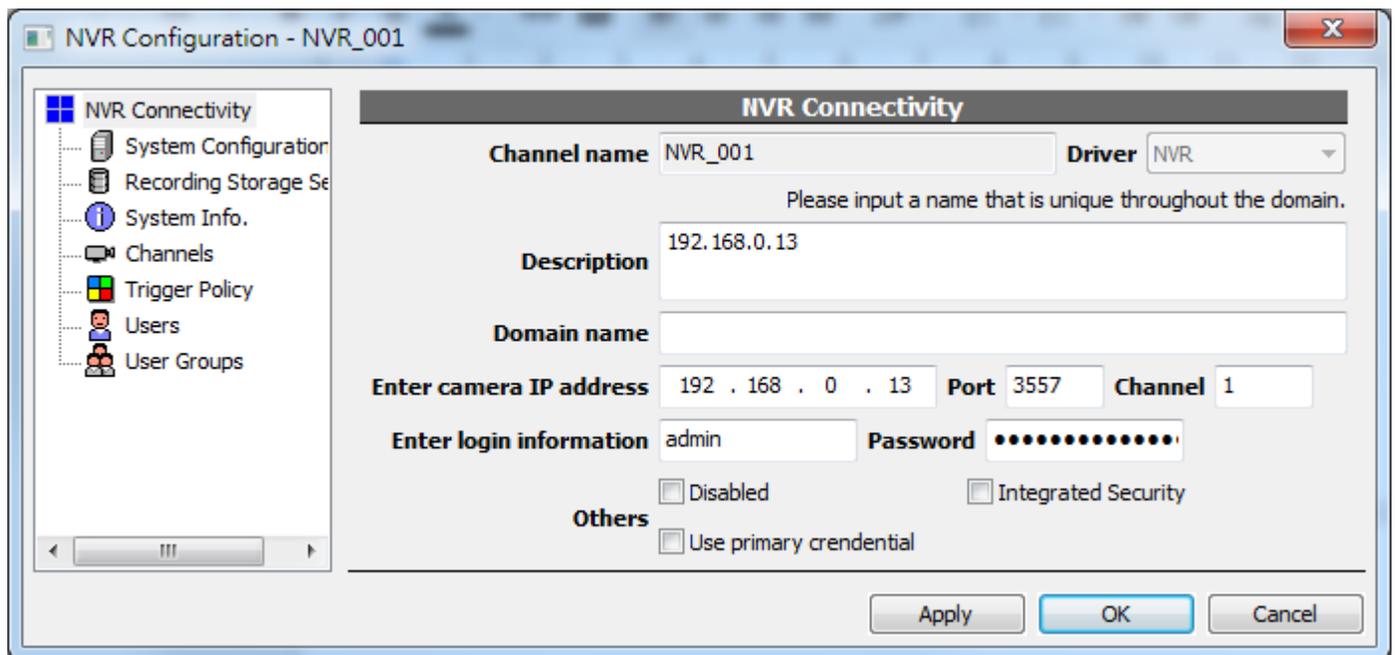
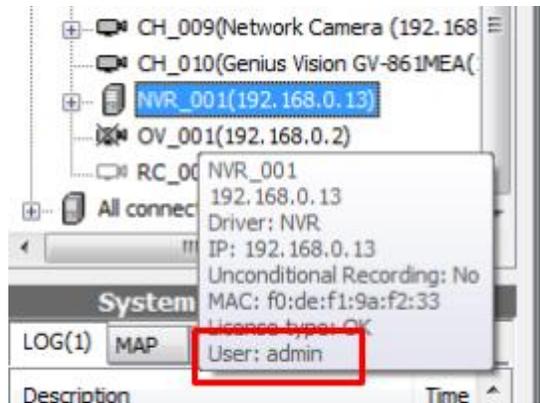
<trt:SetVideoEncoderConfiguration>
  <trt:Configuration token="VideoEncoderConfiguration1">
    <tt:Name>VideoEncoderConfiguration1</tt:Name>
    <tt:UseCount>1</tt:UseCount>
    <tt:Encoding>MPEG4</tt:Encoding>
    <tt:Resolution>
      <tt:Width>160</tt:Width>
      <tt:Height>120</tt:Height>
    </tt:Resolution>
    <tt:Quality>3</tt:Quality>
    <tt:RateControl>
      <tt:FrameRateLimit>1</tt:FrameRateLimit>
      <tt:EncodingInterval>1</tt:EncodingInterval>
      <tt:BitrateLimit>1000</tt:BitrateLimit>
    </tt:RateControl>
    <tt:Multicast>
      <tt:Address>
        <tt:Type>IPv4</tt:Type>
        <tt:IPv4Address>0.0.0.0</tt:IPv4Address>
      </tt:Address>
      <tt:Port>10</tt:Port>
      <tt:TTL>255</tt:TTL>
      <tt:AutoStart>true</tt:AutoStart>
    </tt:Multicast>
    <tt:SessionTimeout>PT30M</tt:SessionTimeout>
  </trt:Configuration>
</trt:SetVideoEncoderConfiguration>

```

```
</trt:Configuration>  
</trt:SetVideoEncoderConfiguration>
```

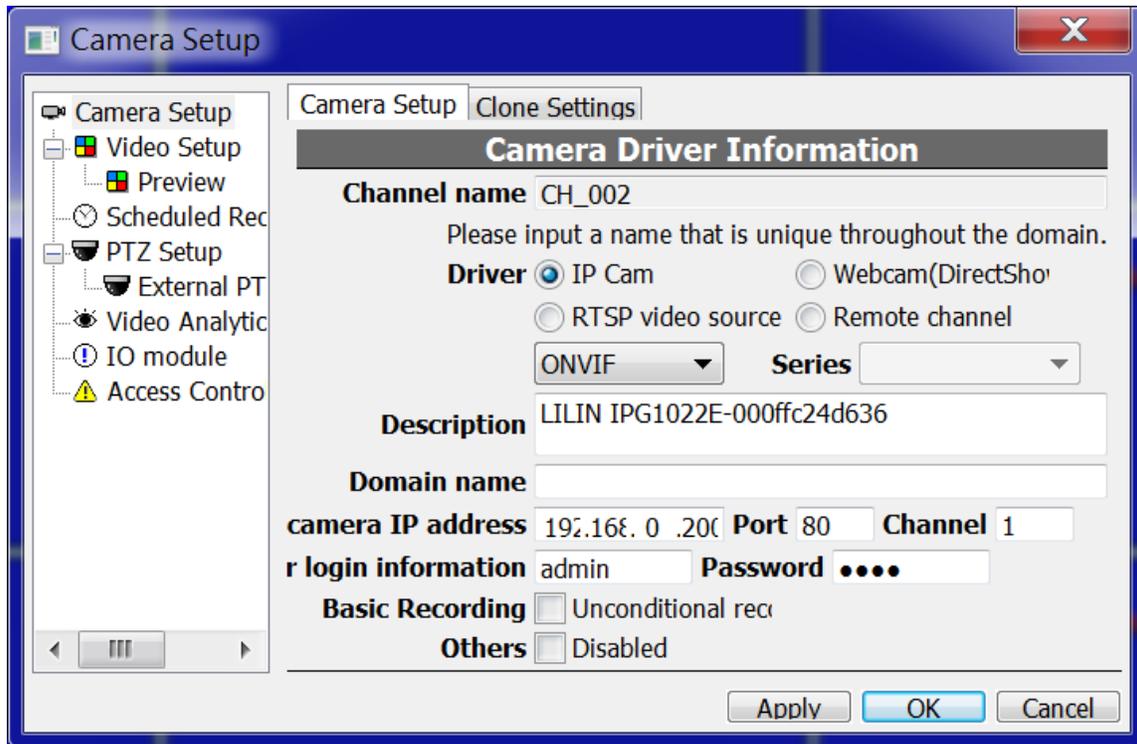
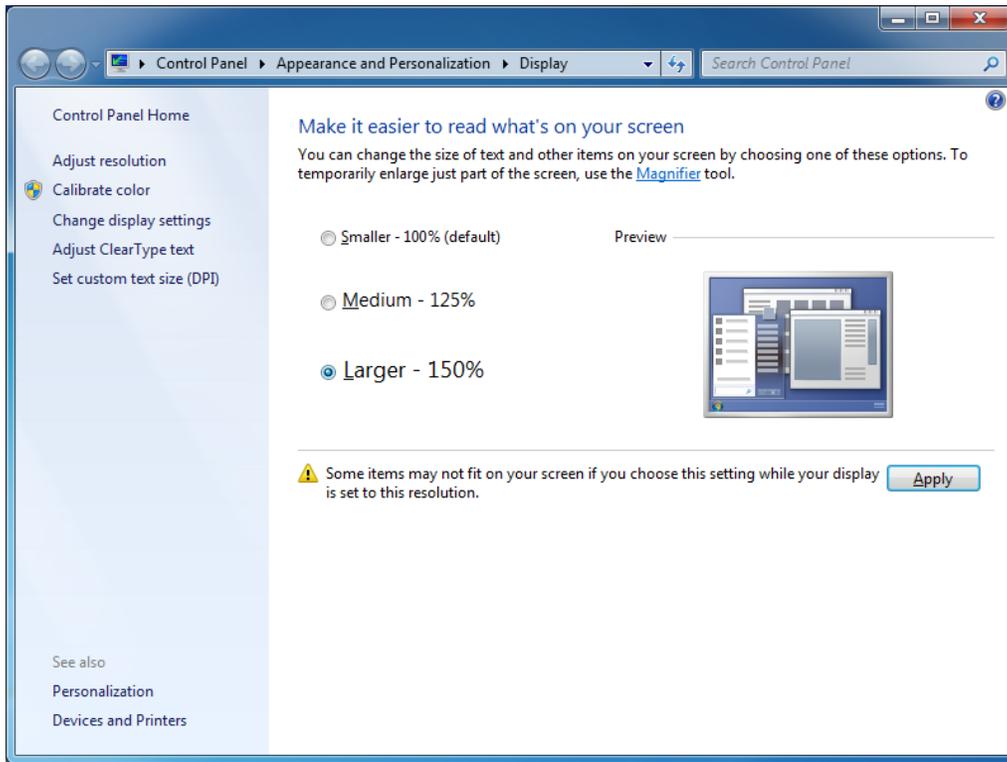
Add credential info in tooltip for NVR channel

NVR channel (CMS) can be logged on with current user or any specified user in NVR Configuration. To make sure the correct user is logged onto the NVR, hover on NVR channel in Tree View to check active user. This is especially crucial if different users with different privileges are used for local and remote NVR.



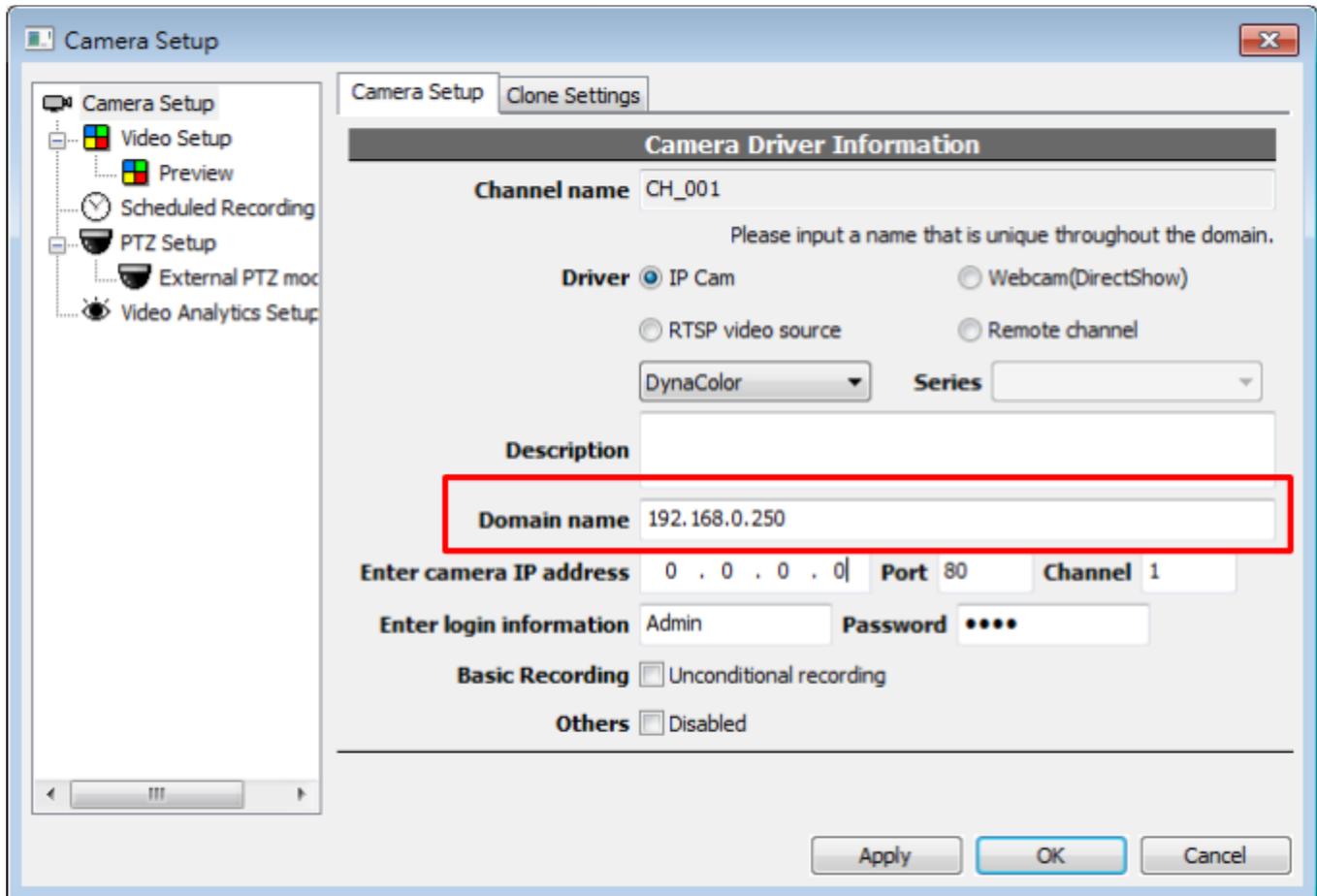
Fixed an issue that IP-address control is too short

Before version 868 (2014-02-25), IP address edit in large font is too short for 3-digit numbers. This is not only a display issue, it also makes it almost impossible to setup NVR because Windows does not allow input of 3-digit numbers. User have to change to small font (system default) to setup channels.

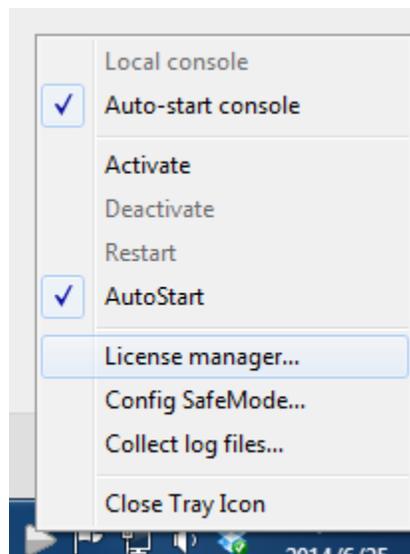


Workaround

Input IP address in **Domain name** field instead, as shown below.



License manager issue under Win XP



Affected Functions

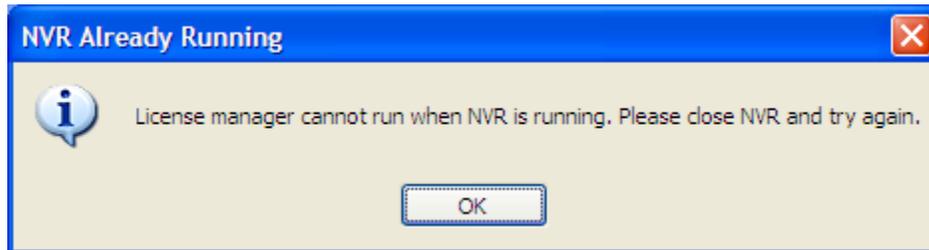
License manager, only under Windows XP

Status

Fixed in version 867 (2014-01-06)

Symptoms

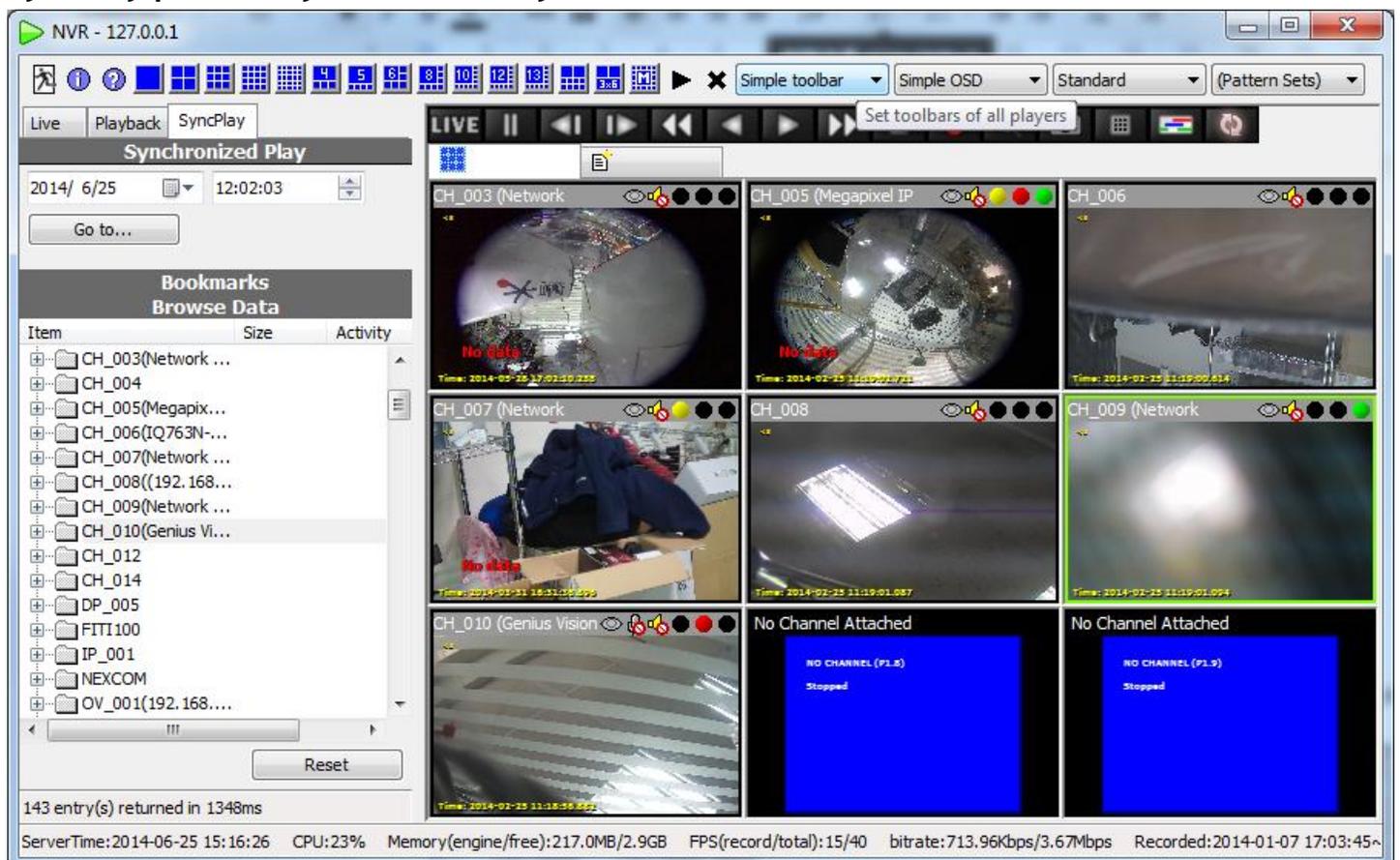
In Windows XP, license manager can only be invoked once. The following error pops up if it has been invoked before, even if it's closed now.



Workaround

Close all Genius Vision processes including organizer. Restart organizer and run license manager.

SyncPlay pause may cause memory overflow



First Occurrence

Version 853 (2013-09-19)

Reported by

Affected Functions

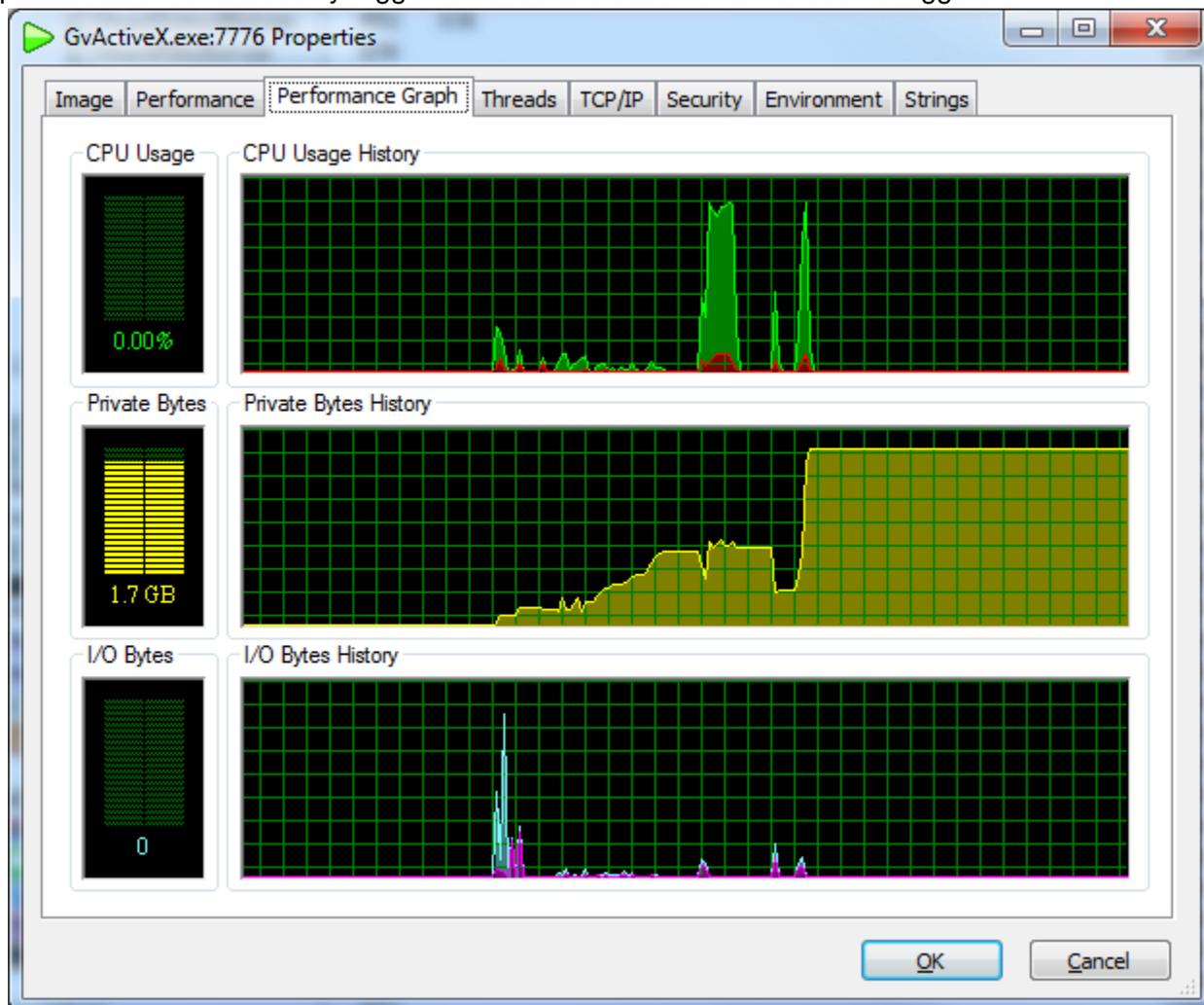
Synchronized playback, playback tab. Both pure IP and hybrid. This problem does not seem to appear on most users.

Status

Fixed in version 863 (2013-12-13)

Symptoms

Random, sudden onset of memory overflow when operating synchronized playback. Related to pause, but pause does not necessarily trigger it. Pause and attach channel seems triggers it.



Fixed IE embedded full console cannot change to full screen

Affected Functions

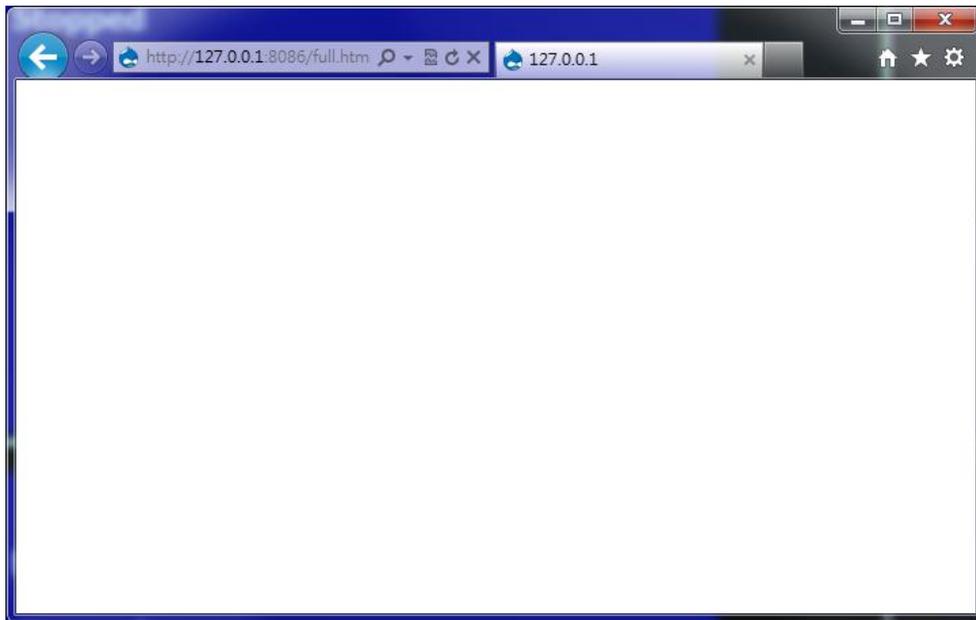
IE remote console.

Status

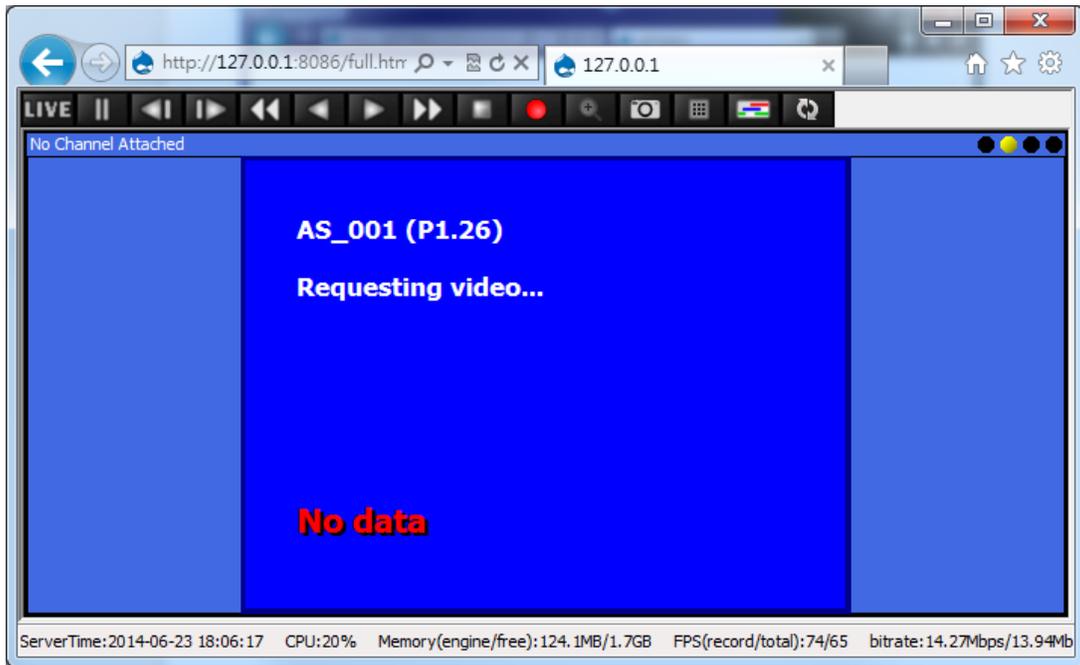
Fixed in version 868.

Symptoms

In IE embedded mode, pressing F10 to switch to full screen makes this blank window.



User can resize window to recover from the bugged state...



IVS indication problem

First Occurrence

Version 827 (2013-02-18)

Affected Functions

Object tracking, client detection

Status

Fixed in version 857 (2013-11-04)

Symptoms

Text of object tracking is missing.

NVR - 127.0.0.1

Event timebar Simple OSD Standard (Pattern Sets)

Live Playback SyncPlay

Live Mode

Config System Config Console
Config Storage Find Cameras
New Channel New Objects

Tree View

- All channels
 - CH_002(LILIN IPG1022E-000ffc24d)
 - CH_003(Network Camera (192.168
 - CH_005(Megapixel IP Cam(192.168
 - CH_006(IQ763N-00501A3609C3)
 - CH_007(Network Camera (192.168
 - CH_008((192.168.226.201))
 - CH_009(Network Camera (192.168
 - CH_010(Genius Vision GV-861MEA(
 - NVR_001(192.168.0.13)
 - OV_001(192.168.0.2)
 - OV_002(SPD970-N2-US-MES)

System Briefcase Viewer

LOG(2) MAP SYS ALL

Description Time

LIVE Page1 Page2 Page3 Page4 Page5 Page8

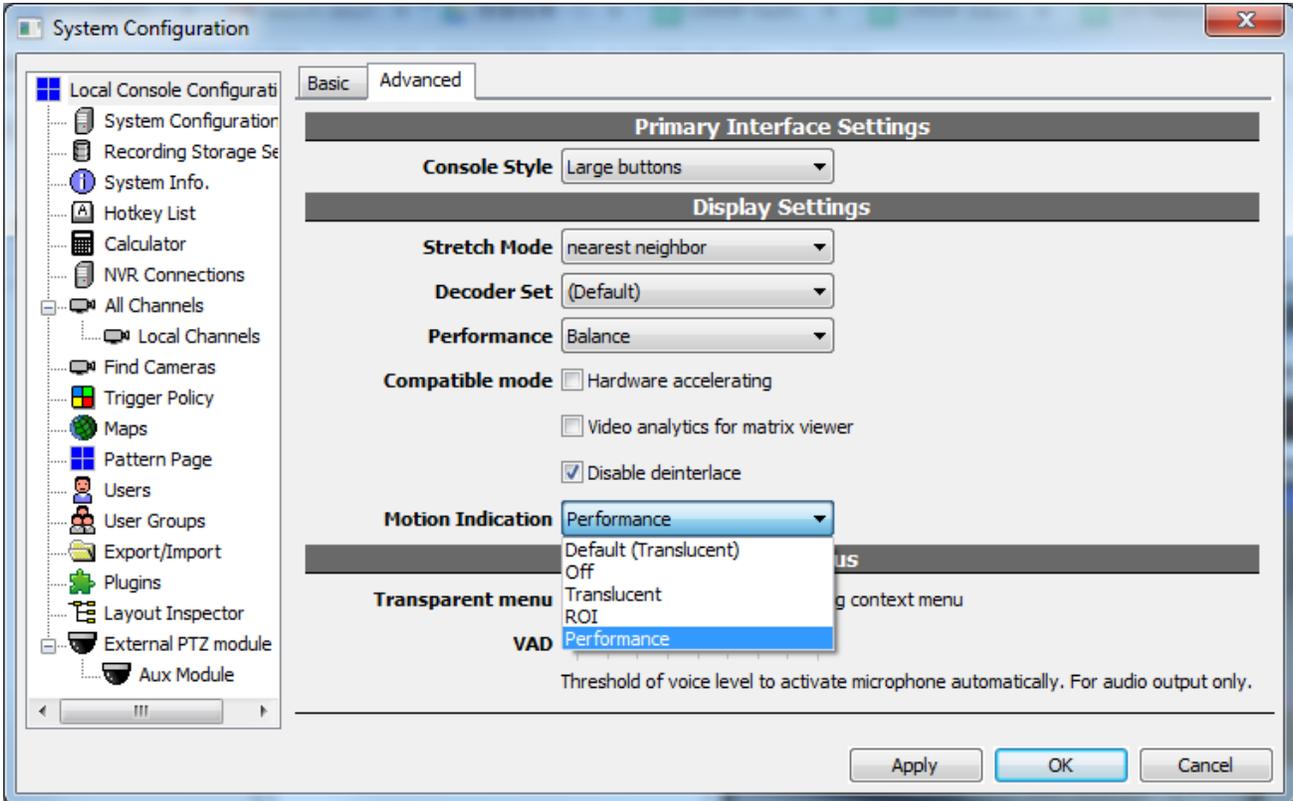
CH_002 (LILIN IPG1022E-000ffc24d636)

Live 9

1.95Mbps(1920x1080), 19ifps, 19ofps, H264
Time: 2014-06-25 15:43:34.855

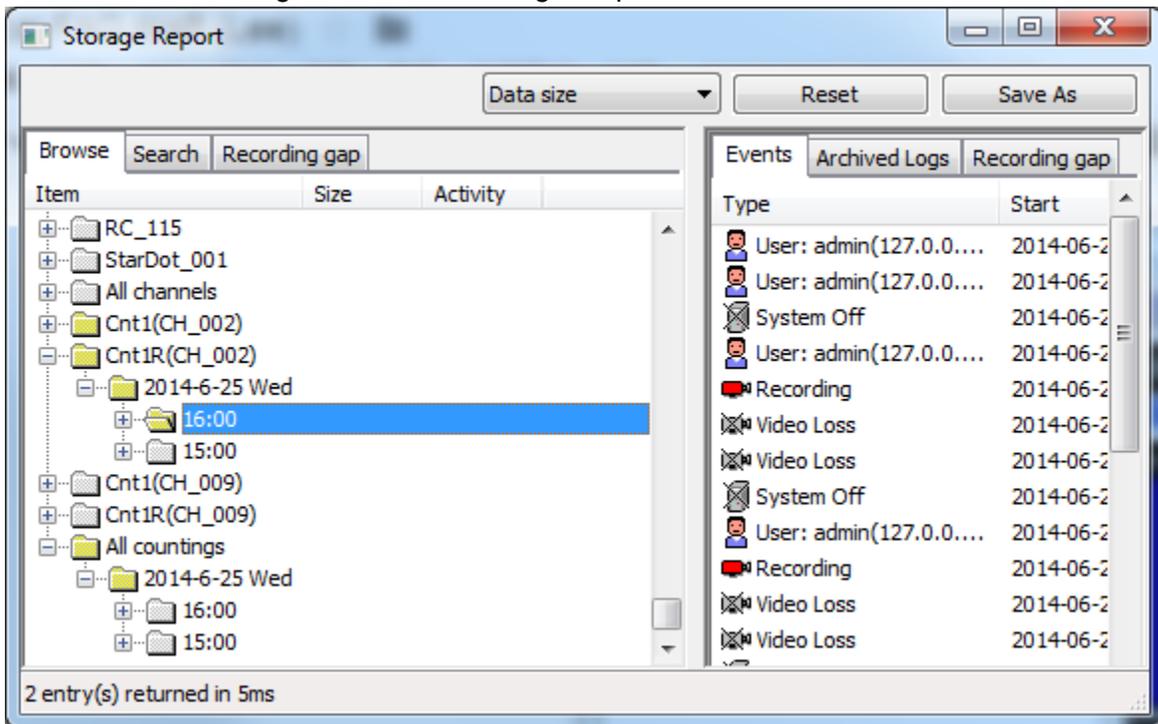
ServerTime:2014-06-25 15:43:34 CPU:18% Memory(engine/free):93.0MB/3.1GB FPS(record/total):14/34 bitrate:7.77Mbps/9.83Mbps Recorded:2014-01-07 17:03:45~20

And display config is ignored. Indication is always translucent.



Workaround

Users can still check counting in timebar or storage map.



Added MobileOptions to reduce mobile APP bandwidth

Added

Version 841, for b80

Version 792, for b70

Purpose

To reduce bandwidth usage, a protocol option is added to NVR server to reduce network usage by transmitting only I-frames at a specified interval, such as 5 seconds. This will keep the video frame updating, without consuming too much bandwidth. This is especially useful when video packets are transmitted over mobile Internet such as 3G mobile network.

Usage

This function is used automatically when mobile APP uses video list view.



Fixed ONVIF-find support for non-standard HTTP port

Status

Version 841

Symptoms

An issue has been identified that the NVR ONVIF-find implementation cannot properly deal with ONVIF camera with non-standard HTTP port (80). This issue has been fixed.

Workaround

Use only standard HTTP port for ONVIF cameras, or manually add camera without using camera find.

Fixed a ONVIF issue that GetOptions is missing VideoSourceToken. Also added imaging20 compatibility.

Synopsis

This change address two ONVIF compatibility issue.

GetOptions is missing VideoSourceToken

A spec-mandatory element **VideoSourceToken** was missing from **GetOptions** of NVR implementation. The fix has addressed this issue.

```
<soap:Envelope xmlns:tt="http://www.onvif.org/ver10/schema"
xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:tds="http://www.onvif.org/ver10/device/wsd"
xmlns:timg="http://www.onvif.org/ver10/imaging/wsd"
  <soap:Body>
    <timg:GetOptions>
      <timg:VideoSourceToken>VideoSource0</timg:VideoSourceToken>
    </timg:GetOptions>
  </soap:Body>
</soap:Envelope>
```

Added imaging20 compatibility

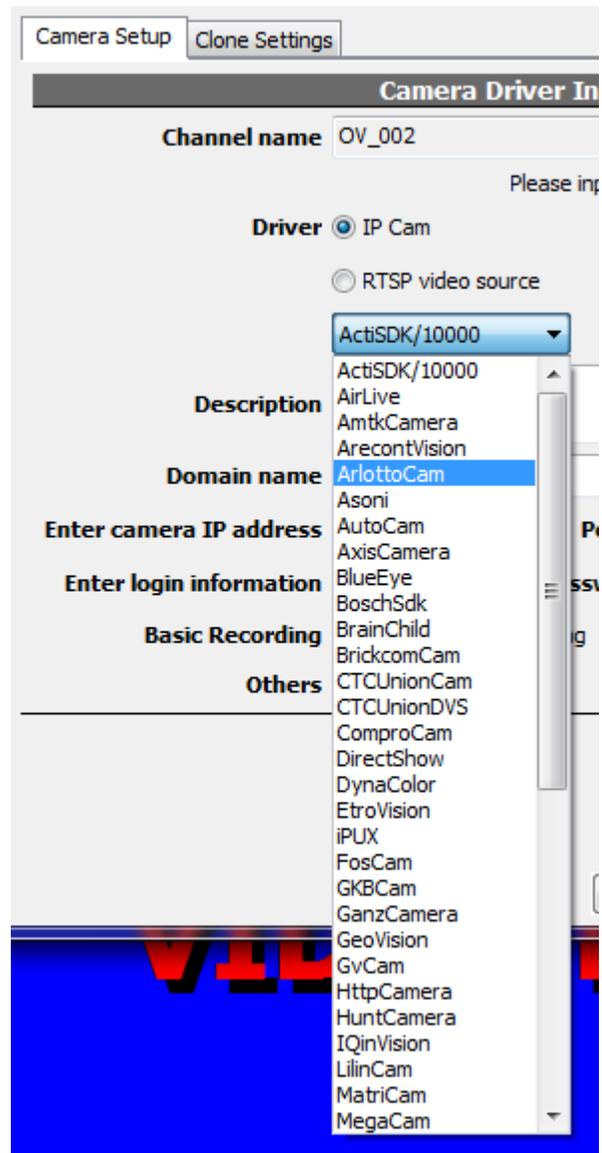
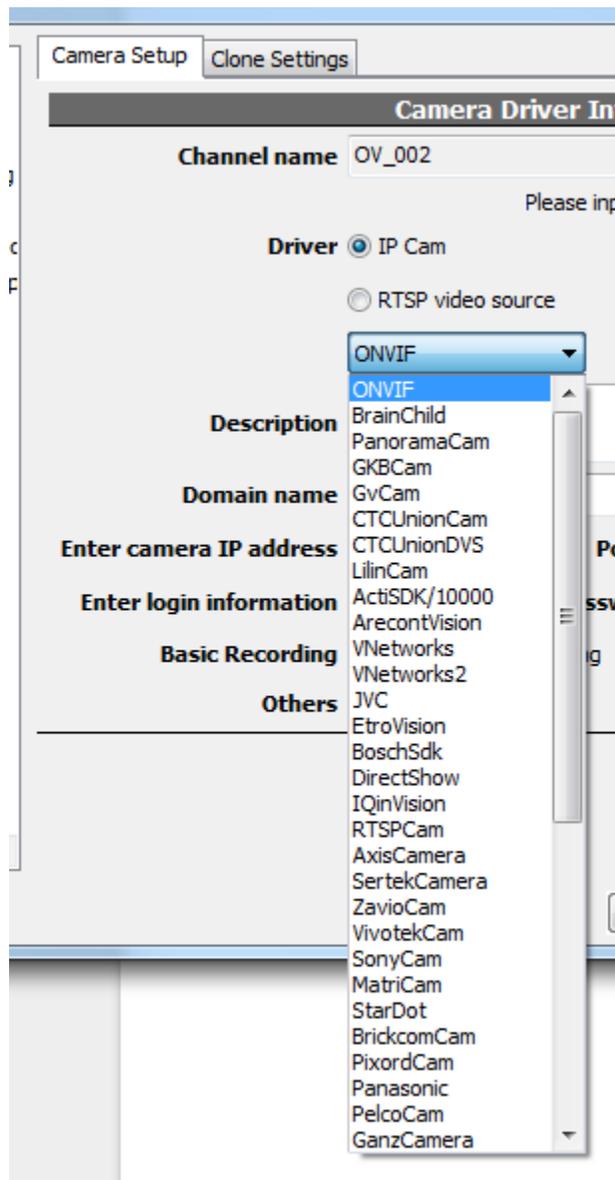
The implementation added as follows:

1. Try Imaging service 1.0 namespace: <http://www.onvif.org/ver10/imaging/wsd>
2. If for any reasons Imaging requests failed, it will try Imaging service 2.0 namespace: <http://www.onvif.org/ver20/imaging/wsd>

Thereby acheive automatic detection compatibility.

Changed driver list to alphabet order

Since version 838, drivers are sorted alphabetically.



Enhanced FileSize_MB strategy for StorageConfig and changed its validation.

Added

Version 824

Purpose

In Storage Config, **FileSize_MB** defines file size for auto-split of recorded data. The value was capped at 2,000 before version 824. If the storage is very large, there will be too many files. NVR maintains a list of files in memoery. Increasing file numbers put a heavy loading on NVR and makes it unstable. To reduce file numbers, in version 824 FileSize_MB cap was increased to 10,000. Also the initial value is calculated based on total available space to maintain a healthy number of files, which is around 1,000.

Image 1. **FileSize_MB** is defined in **Storage Configuration** dialog.

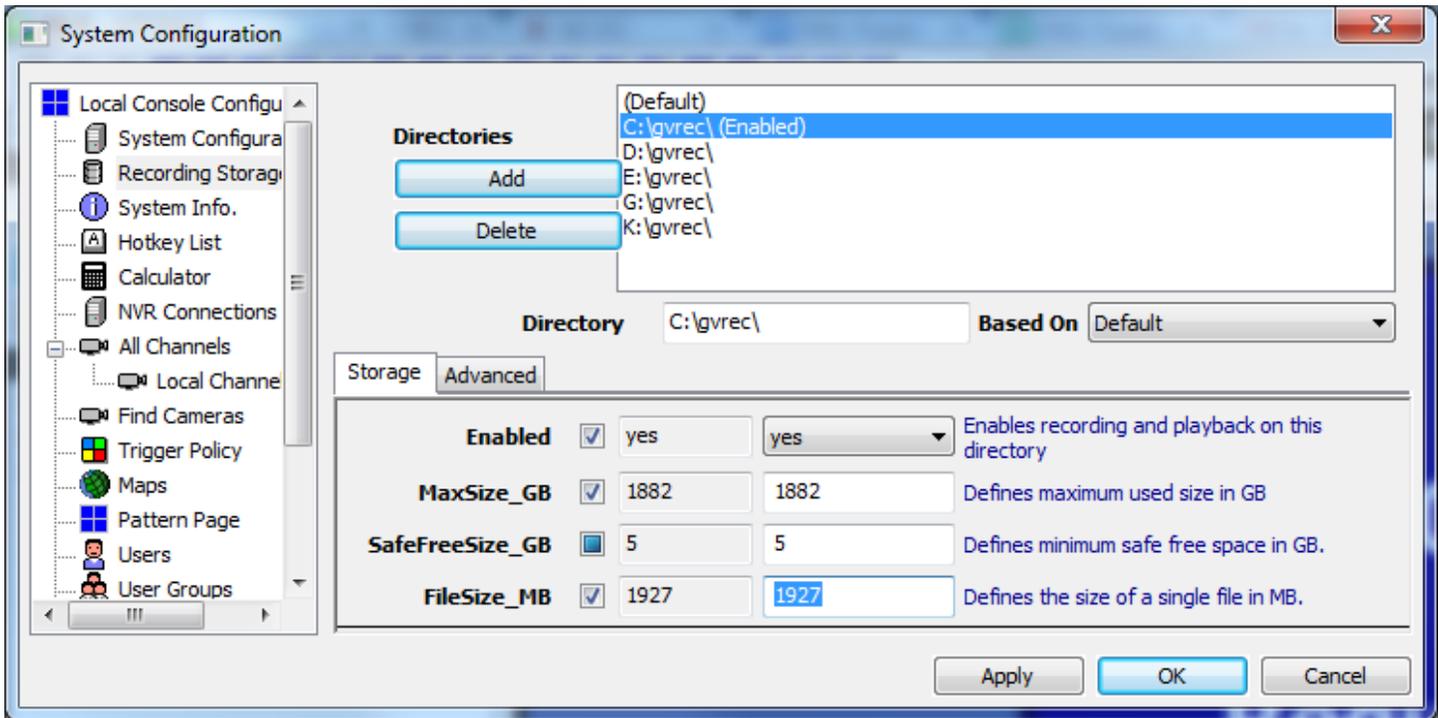


Image 2. Recorded data are splitted according to the value of **FileSize_MB**. It's not exactly the same because the difference of 1,024 and 1,000 in calculation.

Name	Date modified	Type	Size
rv_0111.xsf	2014/6/30 下午 03:22	XSF File	876,904 KB
rv_0110.xsf	2014/6/30 下午 12:23	XSF File	1,974,232 KB
rv_0109.xsf	2014/6/30 上午 06:41	XSF File	1,974,090 KB
rv_0108.xsf	2014/6/30 上午 12:24	XSF File	1,974,036 KB
rv_0107.xsf	2014/6/29 下午 06:20	XSF File	1,973,986 KB
rv_0106.xsf	2014/6/29 上午 11:55	XSF File	1,973,975 KB
rv_0105.xsf	2014/6/29 上午 05:31	XSF File	1,974,028 KB
rv_0104.xsf	2014/6/28 下午 11:19	XSF File	1,974,106 KB
rv_0103.xsf	2014/6/28 下午 05:08	XSF File	1,973,927 KB
rv_0102.xsf	2014/6/28 上午 10:39	XSF File	1,974,106 KB
rv_0101.xsf	2014/6/28 上午 04:18	XSF File	1,976,440 KB
rv_0100.xsf	2014/6/27 下午 01:56	XSF File	1,978,519 KB
rv_0099.xsf	2014/6/27 下午 12:04	XSF File	1,974,114 KB
rv_0098.xsf	2014/6/26 上午 11:22	XSF File	1,977,904 KB
rv_0097.xsf	2014/6/25 下午 03:56	XSF File	1,974,887 KB
rv_0096.xsf	2014/6/25 下午 02:16	XSF File	1,974,525 KB

Usage

In most cases, users need to do nothing to be benefited from this change.

