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## **Preface**

Before you read any FAQ entries, please make sure you have read following documents in detail:

- System Integrator's Manual
- How to handle Out-of-Memory issue

Firstly, we are very sorry that you are experiencing one or more field issues. Let us express that our R&D team is prepared to help you within our ability, but please understand there is a limit to our problem-solving ability, and there is a certain ways in helping field problems. Some of the limit are simply the resource limit, as implied by the intrinsic nature of a software developer company such as ours.

Everything in this document is deducted from our <u>standard license terms</u> (which you have already agreed at the time of purchase), and from the experience of last decades' IT evolution. Since IP video is intrinsically an IT-derived technology, the users of our software must be familiar with the IT environment.

#### See also

IP video surveillance is not for everyone

# I am experiencing software crash recently, how can I do?

See An unknown cause in the field occurred that stopped the software from working normally. Can you help me?

# I am experiencing Out Of Memory error, what do I do?

We have collected some general direction about this problem in the following technical article:

## How to handle Out-of-Memory issue

Generally speaking, this is not a problem we can solve. If you indeed run out of memory then there is nothing we can do. Memory limit is a physical constraint, like if you only have a limited space in a warehouse you cannot put too many stuff inside that warehouse.

If you think there are other factors involved (that you think this is not actually an out-of-memory problem), you need to isolate the factor in the field to a level that the issue can be <u>recreated in the lab</u> or provide other <u>actionable information</u>, otherwise, there is still nothing we can do, because the problem is not necessarily caused by the software, it might be caused by improper system configuration or user operation, which we can't be made aware of.

# An unknown cause in the field has stopped the software from working normally. Can you help me?

We are not able to sort out field issues for anyone, unless you can provide <u>actionable information</u>. In other words, you have to isolate some possible causes.

You can either read various technical articles in the **See also** section below, or provide a reliable reproducible sequence that can help us to <u>recreate the exact problem</u> in our lab, so we can further work on the issue to see if there is something our software can improve.

If you are not able to provide <u>actionable information</u>, then we are pretty much **blind** on that issue, and thus won't be able to help you. That's why we offer trial evaluation for customers, so we reduce the risk of this situation happening.

We suggest users to <u>compare</u> the good ones (those without this problem) and bad ones and provide more clue for us to recreate the problem in the lab.

And no, we cannot assist you remotely using TeamViewer or similar methods, well at least not freely.

## See also

- Common steps to isolate field problems
- System Integrator's Manual
- How to handle Out-of-Memory issue
- Genius Vision Product Documentation
- Why can't you use TeamViewer to assist me remotely?

# What is "actionable information" for problem reporting?

## Examples of inactionable information

When looking at a field problem, we are often fed with *inactionable information*, meaning that we are told the fact that a field problem has occurred, but there isn't an action we can do about it.

Let us give a few examples of *inactionable information*:

- "Your software crashes very often! How to stop the crash and make it work normally?"
- "It looks sometimes audio is not recorded correctly, and happens randomly. How can I fix it?"
- "I'm experiencing Out Of Memory error and crash! Please fix it ASAP!"

"I'm using an IP camera with your software and I can't see video!"

The information given in these examples, though describing customer unsatisfaction *vividly*, does not provide us a clue for anything that is *actionable*. We are pretty much **blind** on these issues as you are. For us to be able to help you, you need to at least provide some "*actionable information*".

#### Guidelines

Following are some guidelines for this kind of information:

- 1. It should contain a list of possible causes for us to have a direction, in order to further investigate.
- 2. It should provide some clues that allow us to try to recreate the exact problem in the lab.
- 3. You can directly suggest what actions we can do about the issue.
- 4. You can tell us what you have done to the system that you are not sure that is correct. Sometimes you might have inadvertently tripped by some internal system conflict.

## Two sides of the story

A good piece of actionable information will have two sides of the story, *the good and the bad*. By analyzing and comparing the good and the bad often reveals some important clues among the unknowns.

A common error made by many users is that they only report problems, but forget to report what was before the problem or what is aside the problem. Let us give a few examples:

- A system can be running fine for 6 months and suddenly stopped working. Then the user just reports the system stopped working without mentioning it's been running 6 months fine. By analyzing what was done right before the system stopped working could reveal vital clues of any possible actions.
- A user could have installed 3 systems, and out of the 3, 2 is fine, and 1 has problem. Then the user just reports the 1 that has problem without mentioning the other 2 is fine. By comparing the three systems could reveal vital clues of any possible actions.

#### Resource issue

Please be noted, that even actionable information is provided, it doesn't necessarily mean the problem will be solved. It merely present a *possibility* that the problem could be solved through some actions, meaning that without it, it's not possible to do any actions, let alone solving any problems.

When actionable information is provided, there is still a matter of "how much resources" are involved, in order to perform that action. If your information is **too vague**, it could take impossible or unreasonable amount of resources to perform the action against the problem you reported. This is where you explain to our sales department how to justify the effort we put into resolving your issue. The more business information you provide, the more quickly we can decide how to schedule the task. For more information about task scheduling, please review: What are the task scheduling issue?

## See also

Why can't you use TeamViewer to assist me remotely?

# Recreating a problem in the lab is not possible, and I need your help!

If recreating a problem in the lab is not possible, then it's high unlikely the problem can be solved in any time soon. It's just like if a surgeon wants to fix a patient, he can't just open the body and cut a random vessel or nerve, it could lead to catastrophic result.

All we can do is to speculate the cause, and try to recreate the problem in the lab. Alternatively, you can try to provide <u>actionable information</u>.

# Why can't you use TeamViewer to assist me remotely?

Firstly, using TeamViewer to help anyone is a *very expensive* task for us. It disrupts all R&D <u>tasks</u> <u>scheduling</u> and often provides unreliable access (bandwidth & availability) to the target computer, making this an even more expensive task. If you insist on that we assist you remotely, you can <u>hire us</u> as consultant to do the job.

Secondly, even if our engineers managed to connect to your remote server and see the problem, we don't have the proper equipment we need to diagnose anything. In order words, there is very little chance for remote assistance to produce <u>actionable information</u>. Not to mention there are a lot of diagnostic factors that are unavailable to remote assistance, such as:

- Network bandwidth
- Network connectivity
- Access response time

In our experience, problems that can be diagnosed simply by remote assistance is very limited. Most of the time, it's just an inefficient use of our time. That's why it has became a <u>paid consultant service</u>.

For unknown field problems, we still think the best way to help is for you to provide us with <u>actionable</u> <u>information</u>.

# Common steps to isolate field problems

# Change a computer

This is always the first step that can effectively rule out many environment factors. Try not to blame the software first because no software can run perfectly in all combination of all computer components.

## Rebuild the whole system

If the system starts good, and became bad later, then it could be something or someone has *tampered* the system. It could be a good idea to rebuild the whole system from scratch to rule out tampering factors.

## Recording disks - periodic health check or replace

Hard disks are known to wear-out after **prolonged usage**. Building an NVR server with old disks is particularly risky because old disks may contains bad-sectors that may lead to data corruption. Some disks are equipped with self-repair function that automatically moves data from bad-sectors to good-sectors so it does not show damages in an obvious way, but the self-repairing mechanism takes time, and therefore reduces the overall bandwidth. The read-write-heads of a damaged disk could also cause the disk to become much slower.

To reduce this risk, you should periodically engage maintenance to your NVR system by measuring disk performances. If the performance is degraded since last measurement, it could mean a danger signal that the disk is about to be irreversibly damaged.

#### Examine network bandwidth

There are many readily available tools on the Internet that help you to do that. Example includes "iperf" and "NetMeter". It can give you the objective view of how much bandwidth you are giving into the NVR.

#### Utilize SafeMode

SafeMode is a NVR software feature that provide an alternative software startup sequence with certain functions disabled. Please refer to user's manual for more details.

## Read-through all technical documentation

Genius Vision NVR is a highly sophisticated professional software. It's possible the information you need is simply buried somewhere inside the <u>product documentation</u>. Most of the time, a user who isn't familiar with the software could be responsible for messing up a working system due to *user errors*, so it's *really a good idea* to get familiar with the software by reading through all its documentation.

# I am having emergency problem in the field, can you help me?

We are very sorry you are having an emergency problem. However, due to the <u>task scheduling issue</u>, we are not able to help any emergency problem, unless you hire us as <u>consultants</u>.

# What are the task scheduling issue?

The thing one must understand is that: we can't anticipate anyone's schedule. Our R&D is continuously in development and we can't just interrupt our task force whenever a user submit a request unexpectedly.

Just remember following simple rules:

- 1. Any efforts take time.
- 2. Anything that takes time needs to be **scheduled ahead**.
- Anything that must be put to engineer's schedule must have a good business cause. This is
  where you explain to our sales department how much effort we should put into resolving your
  issue. The more business information you provide, the more quickly we can decide how to
  schedule the task.

## What are consultant services?

<u>Consultant services</u> are **paid services** and are only available through our distributors. It creates a conduit to allow our strong R&D capability to help on high-profile projects.

<u>Contact us</u> if you want to understand how to become a distributor, and therefore get access to our consultant services.