# Wisenet Wave - Displays The Warning - Network Issue?



# What is a Network Issue?

Wisenet Wave analyzes RTP packets received at each Server. If Wisenet Wave determines packets were lost and/or did not arrive as smoothly (in the correct order) as expected users will see a "Network Issue" notification.

# What will a user see in Wisenet Wave when a Network Issue occurs?

A notification will appear in the Notifications Panel each time the issue is detected.

The Wisenet Wave log file will also show a new entry indicating packet loss.

### What are possible causes of this issue?

Usually, a network issue is triggered by one or more of the following:

#### 1. Network Bandwidth is not adequate.

The bandwidth between the camera and the server is not sufficient and is causing RTP packet loss. There are many reasons why this may be the case. The most common include poor connectivity (slow networks) or capacity issues (too much data for existing network infrastructure).

#### 2. A camera / stream is not being received as expected.

Unstable / under-performing cameras may result in dropped frames or lost packets. Another possible reason may be that the affected camera is concurrently connected to a 3rd party system or interface which is competing for the camera's streams.

# 3. The networking devices are not configured properly or are incapable of handling the necessary traffic types.

When using **UDP** as the connection protocol between cameras and servers some PoE switches do not handle this protocol well. There are some inherent limitations of networking devices which may prevent adequate handling of traffic or throughput.

#### 4. There is an issue with network cabling.

Packet loss can be caused by cabling runs that are too long, use of the wrong type or quality of cabling, poor condition of cabling, or too many intermediate switches or connections.

Any one or any combination of the conditions above may result in a network issue.

## How to address a Network Issue?

1. Check your network bandwidth.

Drag & drop the Server experiencing the issue onto the Viewing Grid in the Desktop client and monitor the network traffic to look for any obvious issues.

- 2. **Try to isolate the problem camera / stream.** Try removing devices one by one and check if the issue is reproduced. Try rebooting the affected camera. If you are seeing this issue with an RTSP/HTTP stream you may want to remove and add the stream(s) again to see if that resolves the issue.
- 3. **Try VLC.** <u>Link Here</u> Try opening the camera streams in VLC (with logging) and check if the packets are lost there. The streams URL can be retrieved through Camera Settings form on the Advanced tab ("Primary Stream", "Secondary Stream").

# How to avoid this issue

- 1. Make sure your network is stable and that throughput is adequate between the affected camera and Server.
- 2. Choose stable, dependable cameras / streams.
- 3. Simplify the network architecture as much as possible so that the path between the camera / stream and Server is as direct as possible. The more routing you have the more likely a camera / stream is to be affected.
- 4. Make sure to use high quality cabling / wireless access points.