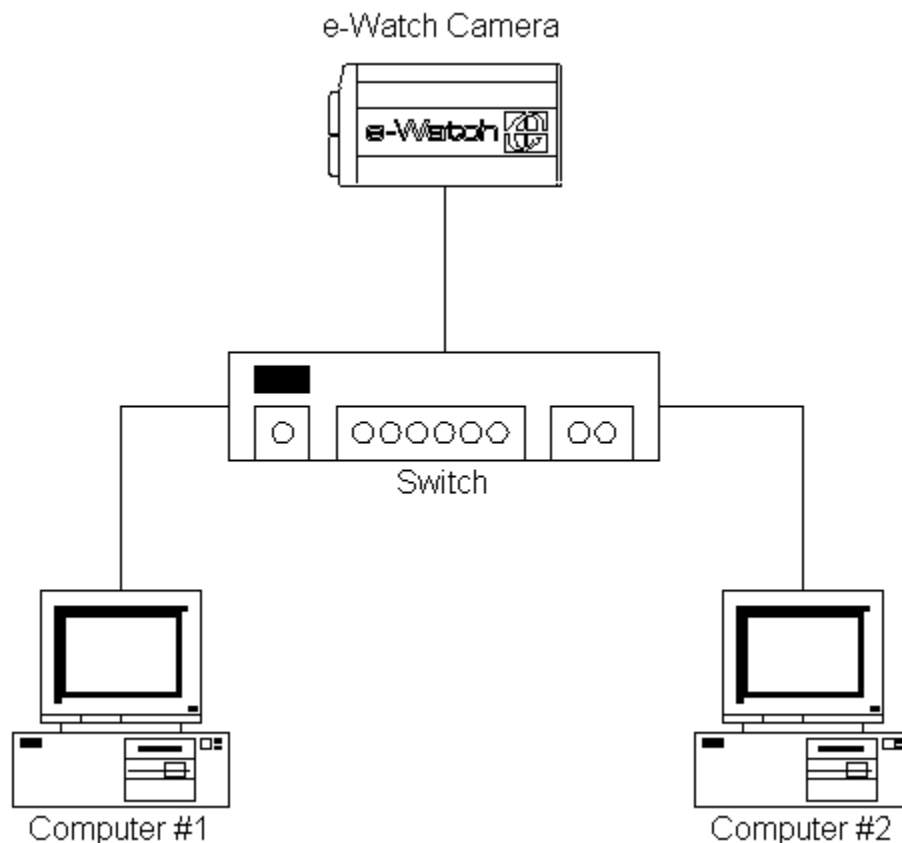


Testing Switches For Multicast Routing

Many multicast-aware switches are capable of performing multicast packet routing. PhotoTelesis Corporation recommends enabling multicast packet routing for networks with many cameras to prevent multicast flooding problems. You should consult your network support specialist for details about how to enable multicast routing. This document describes a simple test to verify that multicast routing is working as intended.

Multicast routing should be enabled on networks that support e-Watch cameras. Multicast routing can prevent multicast flooding problems by routing multicast packets only to network segments where the packets are needed. Multicast routing support varies with switch vendor and type, so you should consult your network support specialist for details about how to enable multicast routing.

After your network has been configured to support multicast routing, a simple test can verify that multicast routing is working as intended. Refer to the following diagram.



Install a packet sniffer on Computer #1 and Computer #2. If possible, configure the sniffer's packet filter to display only the camera's SIF MPEG stream packets. These packets will be UDP packets addressed to 239.194.X.Y where X and Y are the last two octets of the camera's IP address.

Run ViewWatch on both computers (use *logon.asp*), and configure ViewWatch to display only one video pane. Drag the camera into the ViewWatch video pane on Computer #1 and leave the ViewWatch video pane empty on Computer #2. The packet sniffer on Computer #1 should detect multicast packets and the camera's video should be visible. The packet sniffer on Computer #2 should **NOT** detect multicast packets addressed to 239.194.X.Y. If it does then multicast routing is not working as intended, and you should investigate why multicast packets are being routed to Computer #2.

Now drag the camera out of the video pane on Computer #1, and drag the camera into the video pane on Computer #2. The packet sniffer on Computer #2 should detect multicast packets and the camera's video should be visible. The packet sniffer on Computer #1 should **NOT** detect multicast packets addressed to 239.194.X.Y (it might take a short time for the multicast group to "timeout" and the packets to stop being detected). If multicast packets are still being detected on Computer #1 after a reasonable amount of time, then multicast routing is not working as intended, and you should investigate why multicast packets are being routed to Computer #1.

e-Watch Corporation
7800 IH-10 West, Suite 720
San Antonio, TX 78230
USA

tel: (210) 349-2000
fax: (210) 341-1020

For more information:

email:
sales@e-watch.com

website:
www.e-watch.com

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