

## Multicasting

Prosilica's GigE Vision cameras - [GC](#) and [GE](#) series support multicasting. This feature is available with [Prosilica's GigE Sample Viewer](#) and can be added to an application using [Prosilica's GigE SDK](#). Multicasting is supported under all operating systems supported by the SDK. When multicasting is enabled, the camera broadcasts image data to a multicast address. Any device on the local network can receive a multicast broadcast. As a result, several computers can receive image data from the same camera. Common applications include:

- Assigning a different image processing task to each device and increasing functionality by having more processing power
- System monitoring

### To enable multicasting with the Prosilica viewer:

1. Connect the camera to the network and start the viewer application.
2. Open the camera control window by selecting the wrench icon. <sup>1</sup>
3. Configure the camera to the maximum bandwidth and packet size supported by your network. Do not begin streaming from the camera. <sup>2</sup>
4. QNX and Linux operating systems require an entry to the routing table, so that multicast packets can be received. Run the following command (as root) on your system:

```
Route -n add -net 224.0.0.0 169.254.100.66 -netmask 240.0.0.0
```

\*Replace 169.254.100.66, with the IP address of your GigE adapter.

5. Enable multicasting <sup>3</sup> and start streaming from the camera. Once streaming is initiated by the master, additional application instances can monitor <sup>4</sup> image data.

### Notes:

1. The viewer or application instance that first opens the camera becomes the master control application. The master retains control of camera parameters and attributes.
2. Multicast packet support for switch devices may be lower than rated for standard data transfer. Lower this value if you experience dropped packets.
3. MutlicastEnable = ON cannot be saved to camera memory and will need to be reinitialized if the camera is power cycled.
4. The monitor application will be able to receive camera images and inquire about camera parameters. This application instance will NOT be able to change camera parameters.