Quick Start Guide
Visionscape® GigE Camera

Step 1 — Check Hardware

Item	Description	Part Number
1	Visionscape GigE Camera	98-000XXX-01
2	Visionscape GigE Camera License*	VGL0-XDD0
3	Power Supply **or**	98-000138-01
	Camera Power M8-3 to Pigtail 5M	98-000129-01
5	CAT6 Ethernet with Jackscrews to RJ45 High Flex 2M **or**	98-000133-01
	CAT6 Ethernet with Jackscrews to RJ45 High Flex 5M	98-000134-01
7	Single Port GigE Network PCIe Interface Card	98-000140
8	C-Mount Lens	98-9280057X

*Important: Visionscape licenses are implemented by means of a USB hardware key. The key must be present in the host PC before Visionscape software will recognize Microscan GigE Cameras.

Note: The items listed above are for a standard, single-camera configuration. For additional configurations, refer to the *Visionscape GigE Camera Configuration Guide* and the *Visionscape GigE Camera Guide*. Consult with the Microscan Solutions Group for additional information.
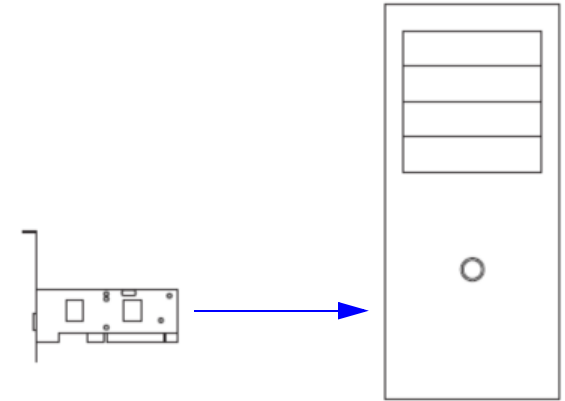
Minimum PC Requirements
- Intel Core 2 Duo Processor
- Internet Explorer 7 or higher
- 2GB RAM/128MB Video RAM (Windows 7); 1GB/128MB Video RAM (Windows XP)
- 750MB hard drive space
- 16-bit color display
- 3.0 Windows Experience Index

Step 2 — Install Network Interface Card

Install the Single Port Network PCIe Interface Card (or Dual Port, depending on your hardware configuration) in your PC.

Note: You may skip this step if your PC is already equipped with a GigE-capable network interface.

Note: Refer to the *Visionscape GigE Camera Guide* or the *Visionscape GigE Camera Configuration Guide* for additional configuration examples.

Step 3 — Install Visionscape

Visionscape Software can be found on the Tools Drive that is packaged with the Visionscape GigE Camera.

1. Verify that you are using a computer with an account that has administrator privileges. Also, be sure to disable any virus protection software that may be running.

   Note: Visionscape is installed to C:\Vscape by default. The software will not function correctly if it is saved to a location other than N:\Vscape, where 'N' is the selected drive.

2. Place the Tools Drive in your PC (Windows XP or Vista). Follow the prompts on the installation screen to install the current version of Visionscape. The installation process will place Visionscape FrontRunner and Visionscape AppRunner icons on your desktop.

   Note: Visionscape can also be installed from the **Download Center** at **www.microscan.com**.

3. Reboot PC.

Step 4 — Plug In USB License Key

Once Visionscape is installed and you have rebooted your PC, plug in your Visionscape USB license key. The license key can be used with any standard USB port.
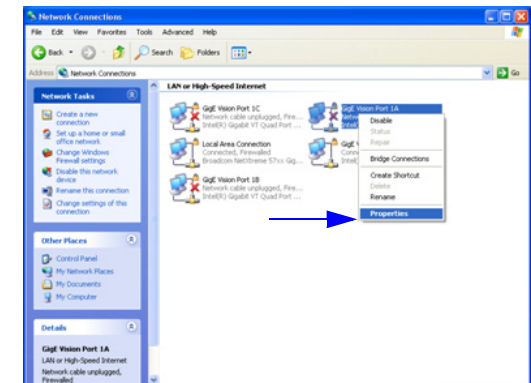

Important: The USB license key must be present in the host PC before Visionscape software will recognize Microscan GigE Cameras.

Step 5 — Configure Gigabit Ethernet

To maximize the speed and reliability of your GigE system, Microscan recommends that you set up a private network using Static IP addresses on the Gigabit Ethernet ports in your PC that will be connected to GigE cameras.
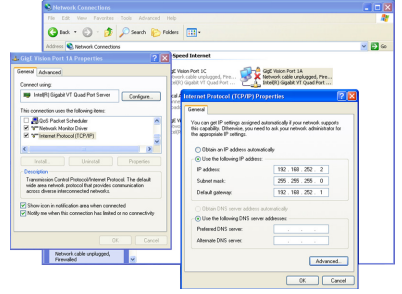
1. Navigate to the Control Panel in Windows and open the **Network Connections** view. The example below shows a 4-port Gigabit Ethernet adapter installed in the PC.

2. Right-click on one of the Gigabit Ethernet ports (GigE Vision Port 1A, for example) and select **Properties**.

Step 6 — Configure Network Properties

1. In the **Properties** dialog, select Internet Protocol (TCP/IP) and then click the **Properties** button.
2. On the General Tab select the **Use the following IP address** radio button and enter the IP address as 192.168.XXX.2 where XXX can be from 1 to 254. 192.168.XXX.UUU is a local private Class B network. The Subnet Mask is set for a Class C Network and the Default gateway is set to the same class C network with a host ID of 1.
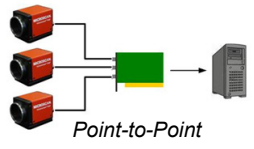
Network setup is now complete. Visionscape will automatically configure your GigE Cameras to be on the same network.
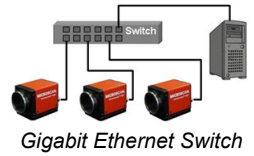
Step 7 — Connect the System

1. Connect the included power and Ethernet cables to the back of your Microscan GigE camera.

   Note: If you choose not to use the Ethernet cable supplied with your Microscan GigE camera, be sure to use a CAT5E or CAT6 cable. DO NOT USE CAT5 CABLES – they are not rated for GigE speeds.

2. **Point-to-Point:** Connect your Ethernet cables directly to the ports of the Gigabit Ethernet adapter(s) in your PC. If you choose this approach and you are using multiple cameras, you will either need to install multiple Gigabit Ethernet adapters in your PC, or use a multi-port adapter.
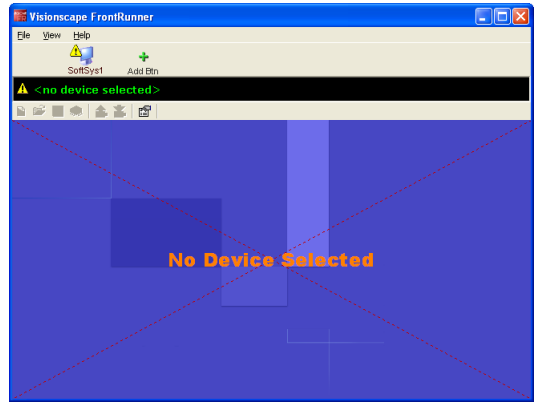
   Point-to-Point

   Note: Most current PCs already have a GigE Ethernet adapter installed.

   Gigabit Ethernet Switch: Use this configuration when you only have one Gigabit Ethernet port in your PC and you wish to use multiple cameras. Connect your cameras and your PC to the switch. Be sure to use a Gigabit Ethernet switch, such as Microscan part number 98-000131-01.

   Gigabit Ethernet Switch

Step 8 — Start Visionscape FrontRunner

Start Visionscape FrontRunner by going to the Windows Start Menu > All Programs > Microscan Visionscape > Visionscape FrontRunner. Assuming your license key is plugged in and your cameras have been detected, the FrontRunner screen should display the GigE Software System icon in the Device Toolbar.
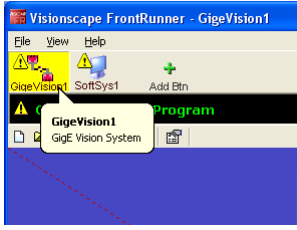
The BackPlane icon will also appear in the system tray at the bottom of the screen.
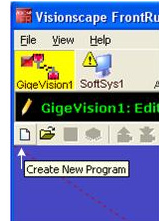
Step 9 — Launch GigE System and Create a New Job

FrontRunner provides a Device Toolbar at the top of the main window that lists all of the available Visionscape devices. A single GigE device, named "GigEVision1", is created to provide access to all of your GigE cameras. Before you can do anything, you must tell FrontRunner that you want to work with the GigE Device by selecting it on the toolbar.

Note: If you change the type or number of cameras connected, you must delete the DM configuration file in **C:\Vscape\DM**.
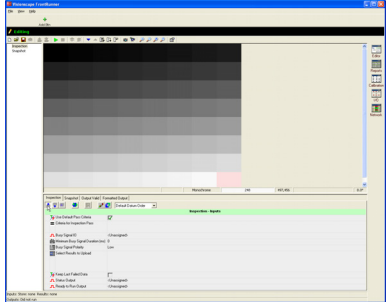
Before you can take pictures with your GigE Cameras, you must create a new vision Job to run on your GigE device. Do this by clicking on the **Create New Program** icon on the toolbar.
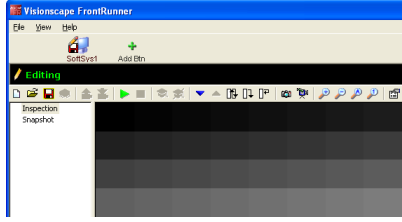
This will create a default job that contains a single inspection that contains a single **Snapshot Step**. The Snapshot Step is responsible for taking pictures. Refer to the *Visionscape FrontRunner User's Manual* and the *Visionscape Tools Reference* for more details on creating applications with Visionscape Step programs.

Step 10 — Take a Picture

Once you have a Job loaded, FrontRunner will look like this:

Take a single test picture with your GigE Camera by clicking on the Acquire icon on the Setup Toolbar:

For further information about using GigE Cameras in specific applications, refer to the documentation available on the Microscan Tools Drive and in the **Download Center** at **www.microscan.com**.