CREVIS

Installation Guide For Crevis GigE Cameras

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1. Minimum specification for GigE Camera Interfaces

- CPU : Intel Core 2 Duo, over 2.4GHz
- RAM : over 2GB
- LAN card : over Intel PRO/1000xT
- VGA : over PCI x 16, VRAM DDR2 RAM 256MB

2. Preparation for network organization

- CREVIS GigE Camera
  The manual for all CREVIS GigE Cameras.

- CREVIS Mcam40(SDK)
  Provided SDK was installed for using CREVIS GigE Camera on the PC.
  Download to here.

  http://www.crevis.co.kr/kor/support/download/MCam40_SDK.zip

- Network Cable - Over category 6 LAN cable

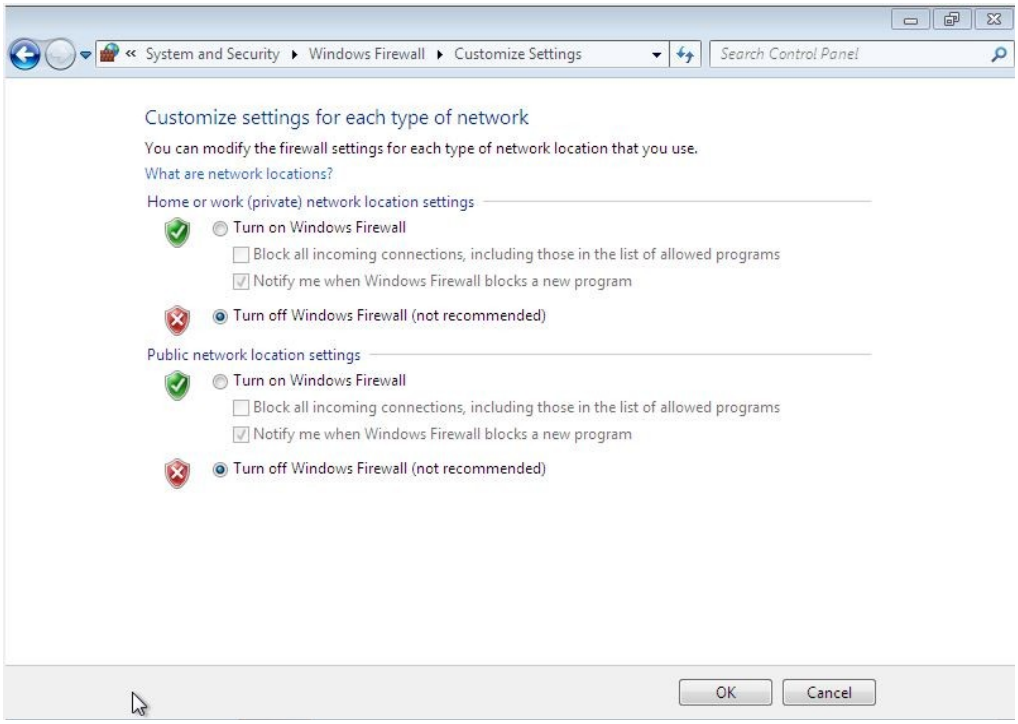
- Camera Power Cable
  12V Power for CREVIS GigE Camera.
  Not included the camera power cable in basic component.
  Does not need the power cable on using PoE.
  In case of xV20G, xV30G and xU10G, we suggest using PoE when you have measure of protection against heat.

3. Disabling the Windows Firewall

- CREVIS GigE software requires that the Windows firewall to be disabled on all interfaces where cameras are connected. To disable the Windows firewall via the traditional control panel:

  ### Windows XP
  Start > Control Panel > Security Center > Windows Firewall

  ### Windows 7
  Start > Control Panel > Security Center > Change Settings > Windows Firewall

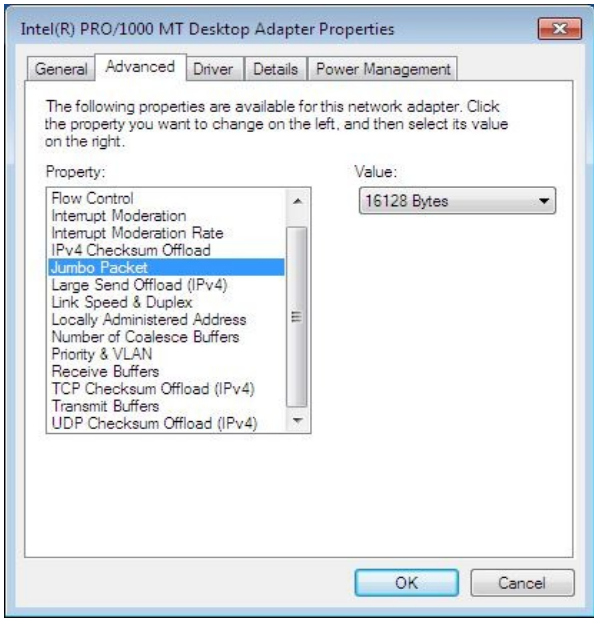


4. Install the CamGuide(SDK)

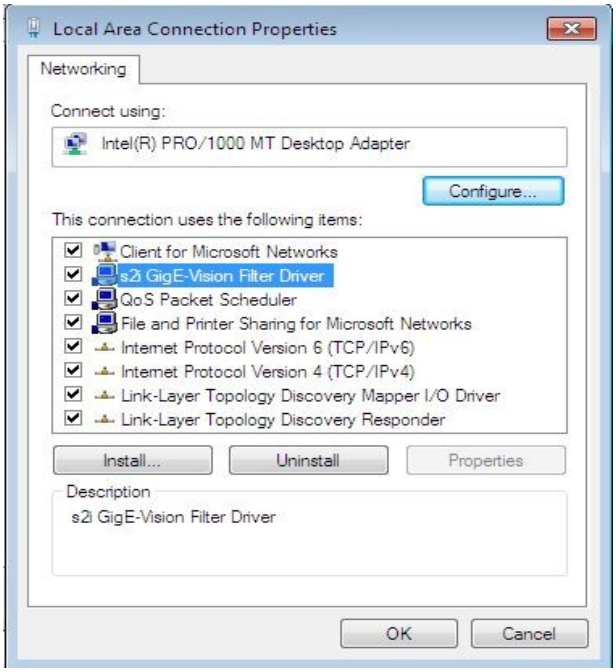
- Eliminate every Camera connected with the PC.
- Close all open Windows-based applications on your computer. We most strongly recommend that you close all open applications now.
- Reset the PC after installing CamGuide.

5. Network Cards setting

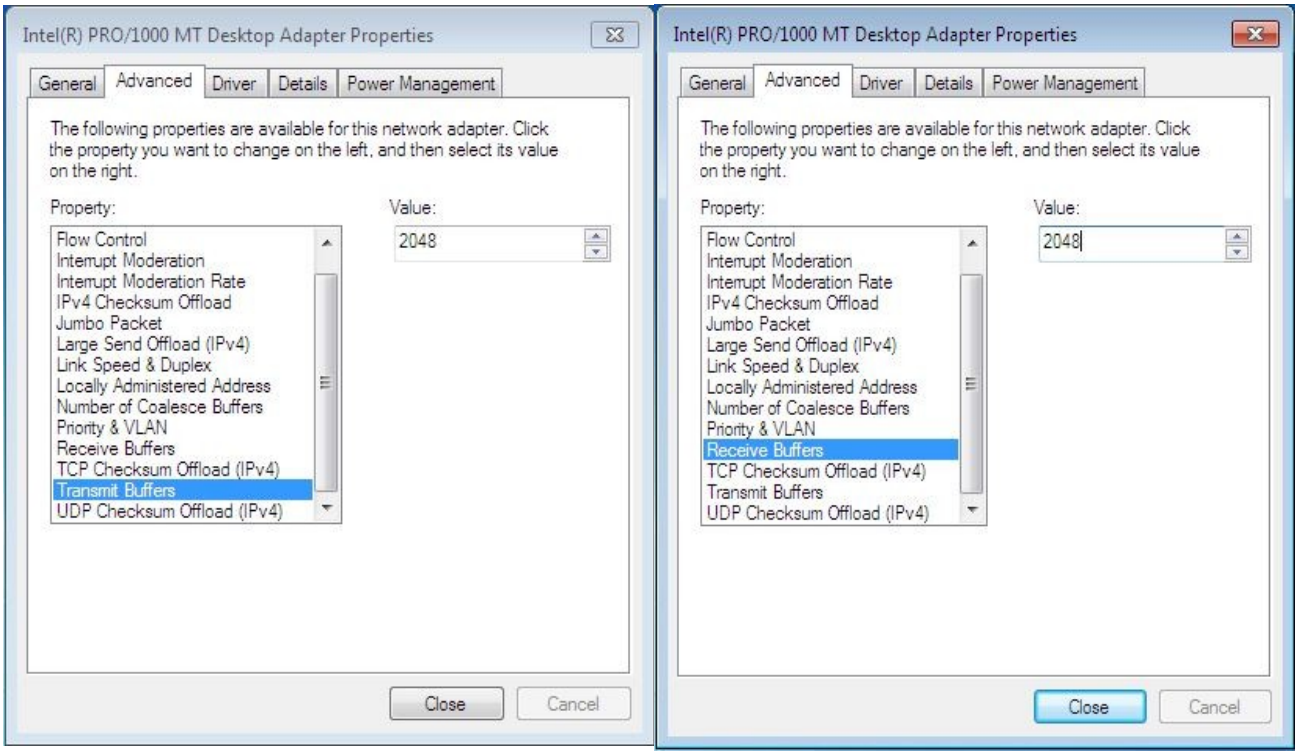
- Disable the unused network card for between Cameras and user's PC.
- LAN Card Controller Properties → Advanced → Jumbo packet → Set maximum size

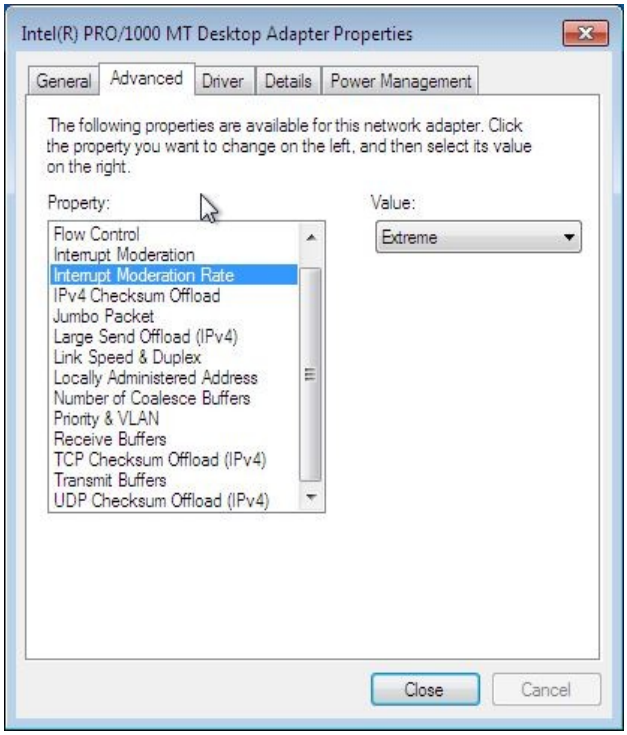


- Filter Driver
  To reduce GigE packet load on the CPU, CREVIS provides the Image Filter Driver.
  Not supported at 64Bit OS.



- Transmit, Receive Buffers and Interrupt Moderation Rate
  Set maximum value to Transmit, Receive Buffers and Interrupt Moderation Rate.





6. Caution

- The image packet will be lose getting higher CPU load on Gigabit Ethernet. We suggest CPU load control to under 50%.

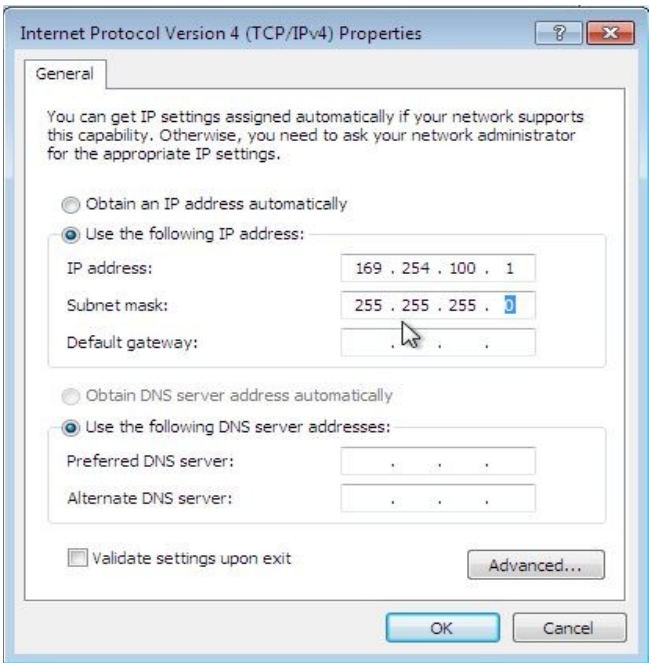
- When two more cameras connect on a port, problem of bandwidth could be happened.

- For smooth grab, fixed value should be adapted on Packet Delay.

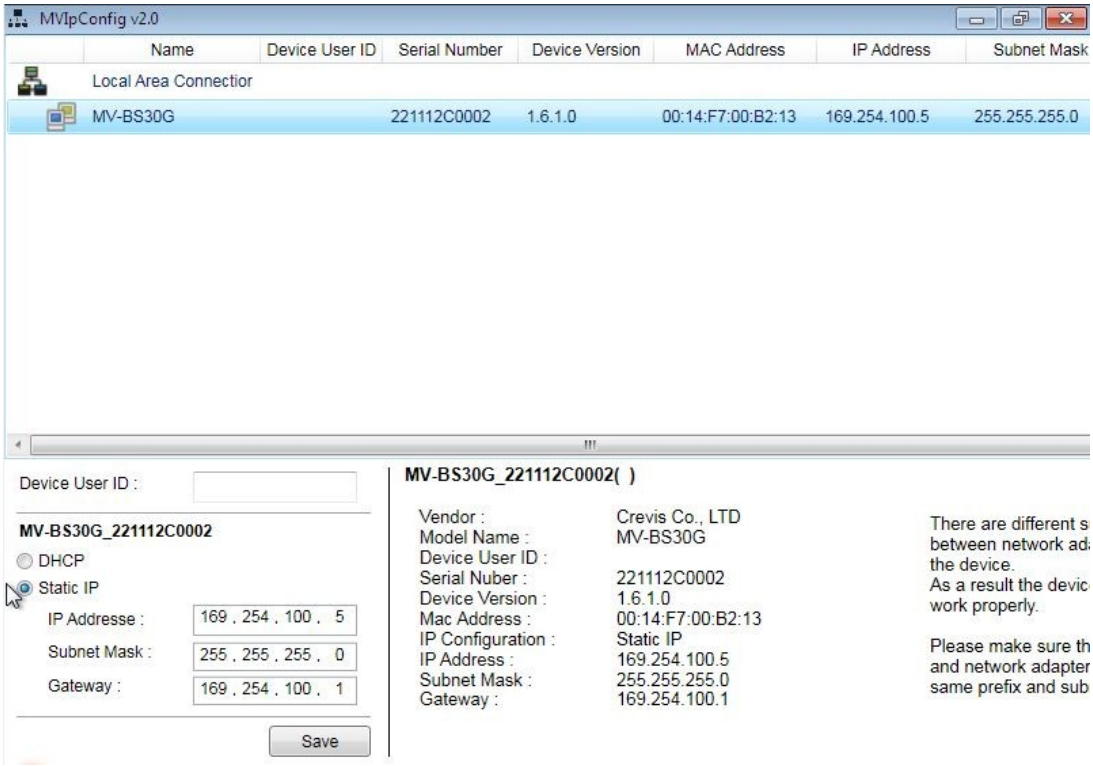
- Execute program with authority administrator, for Filter Drive on windows 7.
- Time Out happen that Breakpoints set longer than HeartBeatTimeout on Debugging. Use Debug after adapting HeartBeat Disable.

7. IP Setting with several cameras

- Fill in the TCP/IP properties as follow pictures.



- Start→ Program→ CREVIS→ MCam30→ EXE→ MVIPconfig → Set each cameras' IP address, Subnet Mask and Gateway.



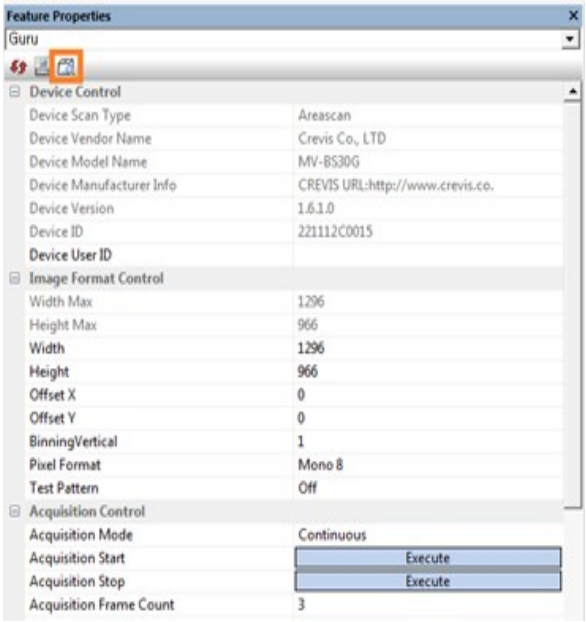
SubNet A	IP Address	Subnet Mask	Gateway
Host Adaptor 1	169.254.100.1	255.255.255.0	
Camera 1	169.254.100.2	255.255.255.0	169.254.100.1
Camera 2	169.254.100.3	255.255.255.0	169.254.100.1

SubNet B	IP Address	Subnet Mask	Gateway
Host Adaptor 2	169.254.200.1	255.255.255.0	
Camera 3	169.254.200.2	255.255.255.0	169.254.200.1
Camera 4	169.254.200.3	255.255.255.0	169.254.200.1

* Please refer to the sheet to several cameras' setting

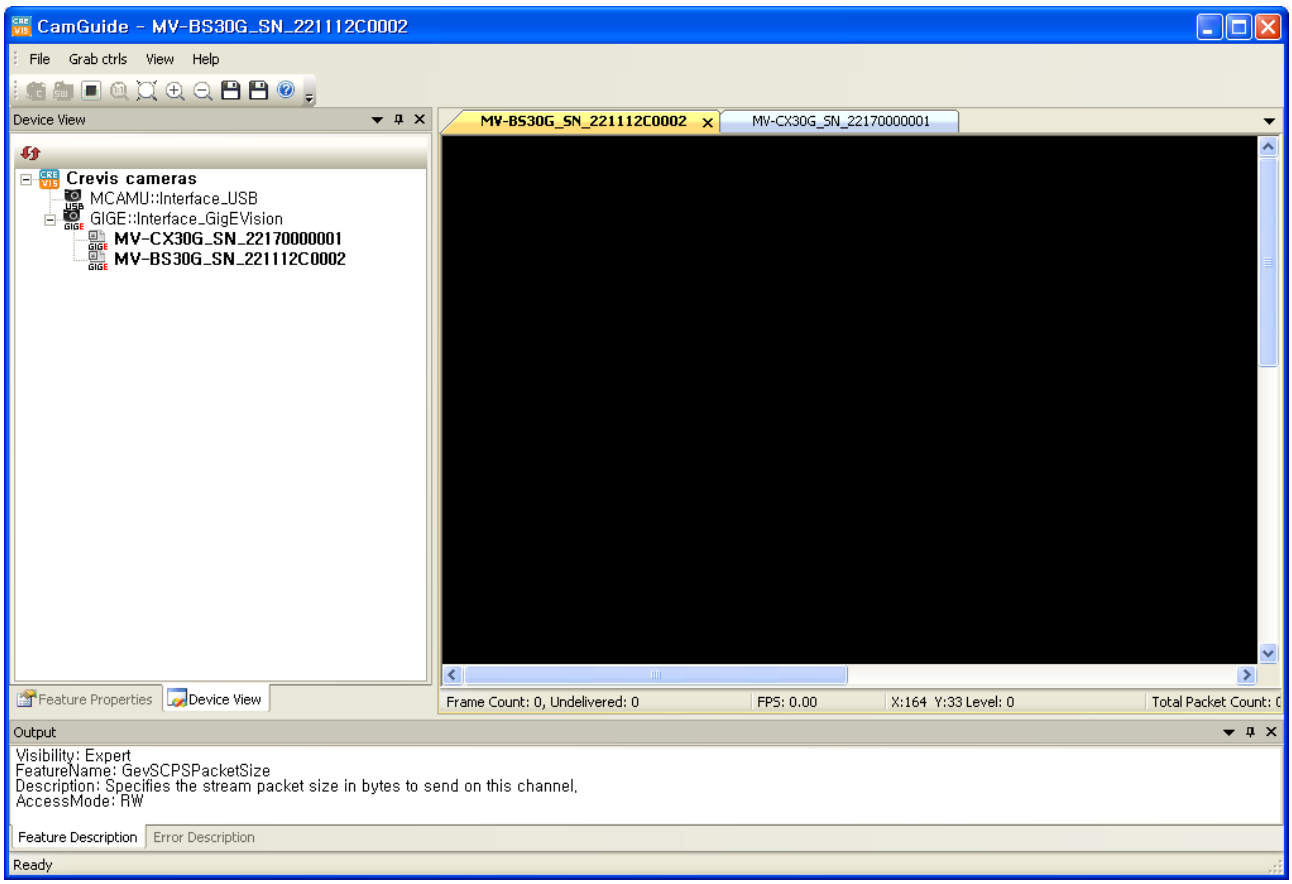
- It does not guaranteed transmission cause GigE Vision camera uses UDP(User Datagram Protocol). Do not use over bandwidth by packet size, packet delay and transfer delay.

- Packet loss rate will be decreased as Packet Size is higher. It should be not higher than jumbo frame as you set on network card. Automatic set maximum packet with following button.



8. Get images

- Get images after setting network adapter and IP of cameras
- CamGuide → Device View→ Double click connected devices→ Set mode on Feature Properties→ Continuous Grab or Software Grab



9. Trouble shooting

Q. How to know cameras have the Power?
A. Check LED on camera's back. Camera has the Power with bottom side Lighting.

Q. Set camera IP
A. A camera has only one IP address on same network. The camera and host controller have same Subnet Mask. The camera IP can set with DHCP and Static IP.

Q. No images on Screen.
A. Check windows fire wall and vaccine.

Q. Undelivered Images
A. Check jumbo frame,Packet Size and Packet Delay. The packet Delay value is 0 on range as frame rate does not decrease.
A. Check your LAN card. We suggest Intel LAN card.

Q. No reaction on debugging software
A. Disable Heartbeat timeout Enable Feature