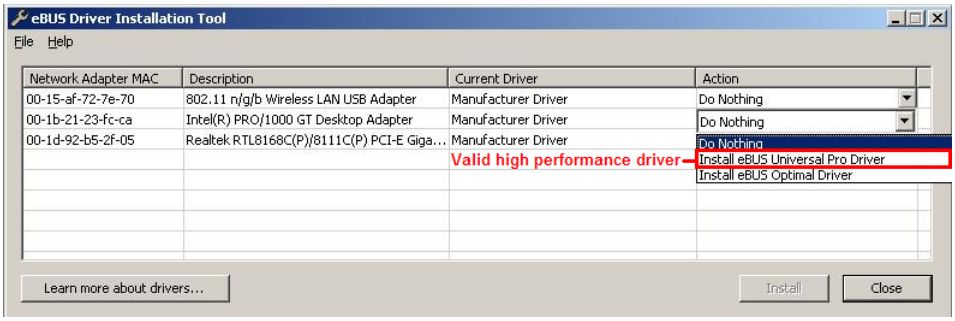
High Performance Driver Installation Instructions

With the new high performance driver, eBUS SDK 2.0.1.1951, there are no longer separate driver versions depending on the network adapter used. In previous Pleora releases two drivers existed, 'Universal' and 'Optimal', today these have been replaced by 'Universal Pro'. The new driver should work on all gigabit Ethernet adapters.

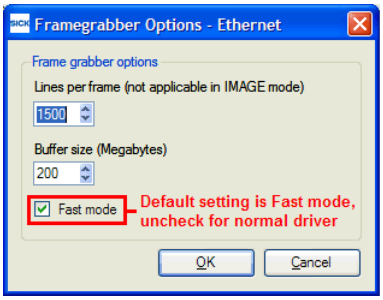


Please note that we still recommend network cards in the Intel PRO/1000 family. In particular, we recommend the following:

- Intel Gigabit CT Desktop Adapter
- Intel PRO/1000 GT Desktop Adapter
- Intel Gigabit ET Dual Port Server Adapter
- Intel PRO/1000 PT Quad Port Server Adapter

Default settings in Ranger Studio

In Ranger Studio the fast driver is selected by default. If you wish to use the standard driver, be sure to unselect the 'Fast mode' checkbox in 'Framegrabber Options' *(Menu -> Options -> Framegrabber Options ...)*.



Porting applications to FGEthernetFast

This page describes the changes needed to port code that uses FGEthernet framegrabber into code using the FGEthernetFast framegrabber.

- Change framegrabber type from FGEthernet to FGEthernetFast.

FGEthernet:

```
FrameGrabber *grabber = createFrameGrabber("FGEthernet", "MyGrabber");
```

FGEthernetFast:

```
FrameGrabber *grabber = createFrameGrabber("FGEthernetFast", "MyGrabber");
```

- Change framegrabber parameter class from FGEthernetParameters to FGEthernetFastParameters.

FGEthernet:

```
FGEthernetParameters* prms = dynamic_cast<FGEthernetParameters*>(grabber->getParameters());
```

FGEthernetFast:

```
FGEthernetFastParameters* prms = dynamic_cast<FGEthernetFastParameters*>(grabber->getParameters());
```

- When setting the camera communication parameters you now have to set data redundancy port number and data channel type in addition to camera IP number and data port.

FGEthernet:

```
cam->setComParameters(ip, prms->getFrameGrabberPort());
```

FGEthernetFast:

```
cam->setComParameters(ip, prms->getFrameGrabberPort(), prms->getRedundancyPort(), EthernetCamera::HIGH_PERFORMANCE_DATA_CHANNEL);
```

- The camera now has to know the height of the IconBuffers used in the framegrabber. First set the buffer height in the framegrabber with setNoScans(), then set the same height in the camera with setBufferHeight().

FGEthernet:

```
prms->setNoScans(512);
```

FGEthernetFast:

```
prms->setNoScans(512);
cam->setBufferHeight(prms->getNoScans());
```

- The framegrabber needs to know the data packet size the camera will use, in addition to the data format for the active configuration.

FGEthernet:

```
string dataformat;
cam->getDataFormat("", dataformat);
prms->setDataFormat(dataformat);
```

FGEthernetFast:

```
string dataformat;
cam->getDataFormat("", dataformat);
unsigned long packetSize;
cam->getPacketSize(packetSize);
prms->setDataFormat(dataformat, packetSize);
```