Subject: IDL's PNG does not correctly interpret the "Number of significant bits" field
Posted by Georg Wiora on Wed, 15 May 2002 12:02:01 GMT

Hi everybody,

since the png-standart is wide spread and the libary is free I like to use that image format. Now I found out, that IDL
has problems interpreting several special cases of PNG-images.

In PNG you can specify the size of a pixel in bits and the number of significant bits in that pixel. When I try to load
an image with 16-Bit pixels and 12 sigificant bits per pixel, IDL-scales the resulting image down to 8 bit pixel
values. When you save a 16-Bit image from IDL, it is save with 16 significant bits and so you can read it back without
any problems. I know that it is a rare case when these two numbers are different, but it still should be handled
correctly. In our C++ applications we simply used the sample code from the PNG-library. That worked fine.

Probably it is simply a PNG-lib version problem. IDL has 1.0.5 included but the current one is 1.0.7 as far as I know.

Does anyone know about a workaround for that problems?

Another annoying thing about IDL's PNG-implementation is that it does not ignore unknown extensions in the file format.
That would be the proposed standard behavoir. In fact it refuses reading files containing extension.

If anyone needs some testfiles, I can supply them for you.

Regards,

Georg Wiora

Dr. Georg Wiora
DaimlerChrysler AG
Research Body and Powertrain
Modelling and Quality Technologies
Ulm
Germany
mailto:georg.wiora@DaimlerChrysler.com