Subject: Re: Transferring image pixel values to a DICOM file
Posted by Vivek on Wed, 20 Jul 2011 14:52:08 GMT
View Forum Message <> Reply to Message

On Jul 20, 6:37 am, David Platten <dplat...@gmail.com> wrote:
> Hi Vivek,
>
> I used to use another method to create computed tomography DICOM files containing my own image data. I took an existing DICOM image, opened it, and then wrote my new image data over the existing image data in the file, and then saved the file. It was a nasty way to do it, but it worked. The CT images I was working on always had 512x512 pixels. An example of the code is below. There must be a more elegant way of doing this!
>
> Regards,
>
> David
>
> PRO modifyDICOM
>
>   ; create an array to hold the generated image
>   x_dim = 512
>   y_dim = 512
>   new_data = INTARR(x_dim,y_dim)
>   new_data[*,*] = 0
>
>   ; generate some test data to write to the image
>   ; a diagonal cross
>   FOR x = 0, (x_dim-1) DO BEGIN
>   new_data[x,x] = 1000
>   new_data[(x_dim-1)-x,x] = 1000
>   ENDFOR
>
>   ; Or you could load in a tif file with your image data:
>   ;image_array = read_tiff('c:\TEMP\StraightEdgeReallyBlurred.tif', channels=1)
>   ;new_data = fix(image_array)
>
>   ; Open an existing DICOM file to modify. This must have the
>   ; same pixel dimensions as the one you want to create.
>   dicomFile = DIALOG_PICKFILE(/MUST_EXIST)
>
>   ; open the file for writing
>   OPENU, dcmfile, dicomFile, /GET_LUN, /Append
>   POINT_LUN, -dcmfile, a
>
>   ;position file pointer 512*512 from end of file
>   POINT_LUN, dcmfile, a-(512l*512*2)
>
>   ; replace the pixel data with the generated data

```
>    WRITEU, dcmfile, new_data
>
>    ; close the file and free the lun
>    CLOSE,    dcmfile
>    FREE_LUN, dcmfile
> END
```

Hi David,

I managed to get around with my issues thankfully :) But thanks for
the suggestion. I shall keep this in mind as well.

Regards,

Vivek