
Subject: Re: Memory Leakage.....(I think)
Posted by [a.fielding](#) on Wed, 01 May 2002 12:03:51 GMT
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Thanks for the comments regarding my problem. Someone suggested I post the code to clarify the problem so here it is.

This is a loop within a sub-procedure that is called (256*256) times from the main procedure. The count variable controlling the loop varies from a minimum of 0 up to 510 depending on the call. I am fairly certain the problem is with the arithmetic within the loop as removing it and replacing it with a simple statement results in the main program processing in around 2 minutes! Any hints/suggestions gratefully received.

Andrew

; Weighted Interpolation voxel density calculation

```
fval=0.0
sum=0.0

for i=0L,count-1 do begin
  index=ishft(X1,-14) + row[ishft(Y1,-14)] + slice[ishft(Z1,-14)]
  val=ctcube[index]
  if (val gt config.air) then begin
    d0= X1/SCALE - fix(X1/SCALE)
    d1= Y1/SCALE - fix(Y1/SCALE)
    d2= Z1/SCALE - fix(Z1/SCALE)
    fval=(1.0-d0)*(1.0-d1)*(1.0-d2)*float(val)
    fval=temporary(fval) + d0*(1.0-d1)*(1.0-d2)*float(ctcube[index+1])
    fval=temporary(fval) +
(1.0-d0)*d1*(1.0-d2)*float(ctcube[index+xdim])
    fval=temporary(fval) + d0*d1*(1.0-d2)*float(ctcube[index+1+xdim])
    index=temporary(index) + xdim*ydim
    fval=temporary(fval) + (1.0-d0)*(1.0-d1)*d2*float(ctcube[index])
    fval=temporary(fval) + d0*(1.0-d1)*d2*float(ctcube[index+1])
    fval=temporary(fval) + (1.0-d0)*d1*d2*float(ctcube[index+xdim])
    fval=temporary(fval) + d0*d1*d2*float(ctcube[index+1+xdim])

    val= fix(fval)
    sum=temporary(sum) + convert_ct2mu[val-(Hmin-1024)]
  endif

  X1=X1+dX
  Y1=Y1+dY
  Z1=Z1+dZ
endfor
```
