
Subject: IDL asynchronous execution fails at >50 child processes

Posted by [trishb](#) on Mon, 11 Jul 2016 09:47:54 GMT

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Hello,

I wonder if there are any other people out there running IDL on highly multi-core machines with parallelised code. When I upgraded to an 88 core machine (single node), I ran into the following odd problem.

Here is a very simple programme that starts `n_proc` IDL child processes and sends a command for asynchronous execution:

```
n_proc = 50
pp = objarr(n_proc)
for i=0,n_proc-1 do pp[i]=obj_new('IDL_IDLBridge',output='')
for i=0,n_proc-1 do begin & print,i & pp[i]->execute,'wait,30',/nowait & end for
```

With `n_proc = 50` or lower, everything runs normal. However, if I choose `n_proc = 51`, the programme will halt when submitting job to process #50 with the error message

% IDL_IDLBRIDGE Error: Error executing asynchronous command.

What I found is the following: If `n_proc = 50`, then all 50 processes will run okay asynchronously. If `n_proc = 51`, then up to #49 will run ok. Here is a small table:

```
n_proc -- # up to which it runs ok
44 -- 44
50 -- 50
51 -- 49
52 -- 47
60 -- 29
```

So for each job above 50, it halts 2 earlier. I have no clue what could cause this. Any suggestions?

Cheers,
F.
