Subject: Re: How to improve the efficiency of IDL on cluster
Posted by Craig Markwardt on Tue, 04 Jun 2013 04:14:21 GMT
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On Monday, June 3, 2013 11:09:00 AM UTC-4, Chang Liao wrote:
> Due to the massive mount of remote sensing dataset, it takes days to finish just one year's calculation.
>
> I can specific the computer node, memory(48G/96G), and cores(24 cores) for my QBS job. So I am thinking shall I use multi-threading or other ways to speedup the calculation.

I guess it's an obvious question but I'll ask it any way: have you already vectorized your IDL code?

I see many scientist types who prefer to write IDL code like this,

```
  for i = 0, n_elements(v)-1 do begin
    v[i] = a[i] + b[i]
  endfor
```

even though the obvious vectorized IDL version is,

```
  v = a + b
```

which is both faster *and* easier to read.

The first step is to vectorize the inner loops of your calculations.

Use the profiler to find out where your computational bottlenecks are.

Craig