
Subject: Re: Locating sequence of bytes within binary file
Posted by on Fri, 18 Jun 2010 16:47:59 GMT
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Wow, I had read in Coyote's website that JD Smith always finds amazing solutions ;), but this is over any expectation!! I am simply amazed. Not only I see all possible solutions for my problem and their drawbacks, but I also learn a lot!

I spent some time to understand the methods, managed now...

> As usual, we can (over-)use IDL's array strengths to brute-force this
> using REBIN and dimensional TOTAL:

The problem of this solution might be the size of the variable quill for a large "needle" (not my case). And also the speed, as you acknowledge...

> That motivates another deeply unsatisfying, but resoundingly faster
> (20-50x) option: simply replace all 0b's with 1b's in both input byte
> array and search array, and just double-check for spurious matches as
> you go:

This is good, but it just uses double the amount of memory to preserve the original and the modified array. Works for me, but could be bad for others. And, honestly, it is really not so elegant.

> We might also lobby ITT to let STRPOS and its sort accept byte arrays
> (since frankly there is very little difference between them
> internally).

This would be by far the best solution. I believe a VIP like you have more options to lobby ITT than I do :) Maybe creating a "BYTPOS" or actually "ANYDATAFORMAT_POS" function would be good. A similar problem might arise looking for a sequence of integers instead of bytes...

My problem is small, and solved by any of the solutions which were proposed. But it would be good to have a fast and memory-efficient option available for future IDL-users :) Next time then I do not need to be ashamed of saying that IDL does virtually everything with arrays.

Thanks so much!!!
