
Subject: Re: newbie question: redirect stdout?

Posted by [Liam Gumley](#) on Wed, 22 Sep 1999 07:00:00 GMT

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"Andreas V. Kadavanich" wrote:

> I'm running IDL 5.2.1 on a PowerMac
>
> I am running a batch program which takes about 5 hours per iteration (so I
> don't want to sit there watching) and generates a lot of output (mostly
> diagnostic messages) to stdout.
>
> I would like to log this output to a file, preferably by redirecting
> stdout (and stderr) to a file. I am stumped as to how to accomplish this
> within IDL short of changing all my print statements to explicitly write
> to a file (which wouldn't help with IDL generated messages).

On UNIX systems, you can use standard input and output, e.g.

```
% idl < input > output
```

but since you're on a Mac, this doesn't help.

One approach is to change your PRINT statements to PRINTF, and use the standard output logical unit number (-1) when you want output to the log window (IDL reserves the logical unit numbers 0, -1, -2 for stdin, stdout, stderr). Here's an example:

```
PRO MYPRO, OUTFILE=OUTFILE
```

```
;- Check output file keyword
```

```
if n_elements(outfile) eq 0 then begin  
  ;- No output file specified, so send output to stdout  
  outlun = -1  
endif else begin  
  ;- Output file was specified, so open it  
  openw, outlun, outfile, /get_lun  
endelse
```

```
;- Print startup message  
printf, outlun, 'Program started at ', systime(1)
```

```
;-*** Use PRINTF instead of PRINT in your program ***
```

```
;- Print finish message  
printf, outlun, 'Program finished at ', systime(1)
```

```
;- Close the output file if necessary
```

```
if outlun gt 0 then free_lun, outlun
```

END

For more information, consult the online help:

IDL> ? logical unit numbers

It is true that this won't re-direct any error messages from IDL to the output file. But messages from IDL are most likely to be either compilation messages or fatal error messages, and you'll see these in the command log window easily because all other output is going to a file. If you want to get really tricky, you can trap the IDL errors yourself. See David Fanning's tip at http://www.dfanning.com/tips/catch_trace.html

Cheers,
Liam.

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