Subject: Re: Reading Wav files
Posted by Mike Alport on Thu, 22 Aug 2002 08:21:47 GMT
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Thanks guys - both your suggestions have worked. When I was first playing around with read_wav, I must have inavertently made it a variable. An explicit ".compile read_wav" then seems overide that earlier definition. I have now also learnt about STRICTARR.

Thanks again,

Mike

PS - now I just need to play .wav files from IDL - I see that Matt Feinstein asked the same question a few days ago wrt IDL_Tools.

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"JD Smith" <jdsmith@as.arizona.edu> wrote in message
news:pan.2002.08.21.20.24.41.192394.2937@as.arizona.edu...
> On Wed, 21 Aug 2002 09:08:35 -0700, Mike Alport wrote:
>
>> This seems a trivial problem: the IDL 5.5 documentation gives the
>> following syntax for reading sound .wav files: Result = READ_WAV (
>> Filename [, Rate] ) So, when I try it, I get: IDL> Result = READ WAV(
>> "ramsay0150.wav") % Variable is undefined: READ_WAV.
>>
>> Have they switched the calling procedure name on us? Thanks, Mike Alport
>
> This is probably related to the ()/[] degeneracy in IDL array indexing.
> I can replicate your error:
>
> IDL> result = read_wav('/usr/share/licq/sounds/fun/Auth.wav')
> % Compiled module: READ WAV.
> IDL> read wav=2
> IDL> result = read_wav('/usr/share/licq/sounds/fun/Auth.wav')
> IDL> help,result
> RESULT
                BYTE
                          = Array[5400]
  No problem thus far.. but what if I start IDL again with:
>
>
> IDL> read wav=1
> IDL> r=temporary(read_wav)
> IDL> help
> % At $MAIN$
            INT
                        167
> R
             INT
                          1
                   UNDEFINED = <Undefined>
 READ_WAV
> Uh, oh, an "undefined variable" READ WAV exists. You can imagine what
> will happen now:
```

```
>
> IDL> result = read wav('/usr/share/licg/sounds/fun/Auth.wav')
> % Variable is undefined: READ_WAV.
> % Execution halted at: $MAIN$
>
> IDL thinks you're trying to index an undefined variable! The problem
> is, variables sometimes exists as "undefined" zombies, even after you
> think they're gone. In this state, that can still "shadow" or overlap
> with function calls. A few options for solving the problem:
>
>
  1. Find out where the undefined variable READ_WAV is getting created,
    and eliminate that.
>
>
> 2. Use "compile_opt STRICTARR" at the beginning of your procedure, or
    at the main level:
>
>
    IDL> compile opt STRICTARR
>
    IDL> result = read_wav('/usr/share/licq/sounds/fun/Auth.wav')
>
    % Compiled module: READ WAV.
>
  3. Use "forward_function READ_WAV" to declare it a function.
>
  4. Clamor for RSI to make STRICTARR the default (though duck as Craig
    throws an eraser at your head.)
>
>
> You could also just put "compile_opt STRICTARR" in your startup file,
> and I think it then applies to all routines and interactive commands
> (anybody know for sure?).
>
> Good luck,
```

> JD