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Subject: Re: Best way to store a time-stamp  
Posted by [R.Bauer](#) on Tue, 10 Feb 2004 13:06:10 GMT  
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M. Katz wrote:

- > I'm interested to know what method people use for making a time-stamp.
- > With each datapoint I'd like to record the current time, store it, and
- > be able to read it and plot with it later.
- >
- > systime(0) gives a well-formatted string, but it would be difficult to
- > deconstruct back into abscissa values.
- >
- > systime(1) is great for relative and elapsed time, but is it easy to
- > convert it into absolute date and time down to fractions of a second?
- >
- > systime(1, /julian) seems to only change once per second.
- >
- > Ideally, I'd like a double-precision number that I can store, and a
- > function I can use to interpret the values as read-able date stamps.
- >
- > Thanks,
- > M. Katz

We are using Julian Seconds defined by Ray Sterner, (seconds since 2000-01-01 00:00:00)

```
x=string2js(/now)
print,x
print,js2string(x)
```

```
1.2973343e+08
2004-02-10 13:03:47 321
```

You could find both routines in our library. There are several output formats defined.

regards  
Reimar

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Reimar Bauer

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a IDL library at ForschungsZentrum Juelich  
[http://www.fz-juelich.de/icg/icg-i/idl\\_icglib/idl\\_lib\\_intro.html](http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html)  
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Subject: Re: Best way to store a time-stamp  
Posted by [btt](#) on Tue, 10 Feb 2004 14:06:01 GMT  
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M. Katz wrote:

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- > Thanks,
- > M. Katz

Hello,

I have a DLM that uses the system function `gettimeofday`. It returns the time of day as a Long64 integer in milliseconds. I have used it with video acquisition to timestamp each video frame. The long integer is easy to work with and to decomposed back into a julian day number. Send me an email and I will send it along if you're interested. Of course, there are two caveats (1) I'm a rather wobbly c-programmer and (2) it was written to work on MacOSX - but that shouldn't matter.

```
IDL> for i = 0, 9 do print, hbb_milliclock()  
1076420938927  
1076420938929  
1076420938931  
1076420938972  
1076420938974  
1076420938976  
1076420938981  
1076420938983
```

1076420938985  
1076420938987

Also, in the DLM is a seconds clock, but I haven't ever used it. A double precision value is returned.

```
IDL> for i = 0, 9 do print, hbb_secclock(), format = '(f20.4)'  
1076421825.6358  
1076421825.6379  
1076421825.6398  
1076421825.6797  
1076421825.6826  
1076421825.6846  
1076421825.6899  
1076421825.6919  
1076421825.6939  
1076421825.6959
```

On a similar note, I'm not sure what it means that IDL will become an "National Instruments Alliance Member", but I do know that LabView is very much clock dependent and has a wide variety of time functions. Perhaps IDL's time functions will be expanded to accomodate this connection with LabView.

Ben

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