Subject: Re: HELP with systime()
Posted by Brian Jackel on Wed, 11 Feb 1998 08:00:00 GMT
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Mark Elliott asked:

> Is there a way to convert a binary time value like the one
> returned by
>
> timeval = systime(1)
>
> into a date string like
>
> DOW MON DD HH:MM:SS YEAR ?
>
> I've found bin_date() but it accepts only the ascii_time format
> for input. I'd like to convert the number of seconds since 1/1/1970
> into the month,day,year,... that it corresponds to.
>

A couple years ago I wrote some code to do what you're asking about. However, I recently discovered an easier way of doing things, using the CDF_EPOCH function, which is part of the Common Data Format library included with IDL. It can do two things

1) Given a year,month,day etc. return the time in milliseconds since a reference time (0 AD). Use this to find out when the standard Unix reference time started:

```
CDF_EPOCH,UnixEpoch,1970,1,1,0,0,0,/COMPUTE_EPOCH
```

2) Turn a reference time back into year, month, day etc. Add the number of milliseconds given by SYSTIME to the Unix reference time

```
CurrentEpoch= UnixEpoch + SYSTIME(1) * 1000.0d0
```

Then recover the information you want

```
CDF_EPOCH,CurrentEpoch,year,month,day,hour,minute,second, $
          /BREAKDOWN_EPOCH
```

which you can format as needed. Hope this helps. Oh, there's one little problem. The CDF stuff works in Universal Time, while SYSTIME tends to correct for the current time zone. Be careful...