


convert from GPS week number,time of week to datetime

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i have gps device that sending some objects including a gps time to my server. it's coming in format of week number,seconds into week. i want to convert that to a datetime format.i found some codes for that but all i found is how to convert week number to datenot including the second into week i found a web page <http://dominoc925.blogspot.com/2011/05/convert-gps-weekseconds-to-local-date.html> it's doing that but i can't find out how to do that in c# windows app code many thanks in advanced

sample data GPS Week number 1643 GPS second into week 377505

that should be 2011/07/07 10:51:44

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asked Jul 7 '11 at 8:54



[Ramah](#)

110 12

The referenced converter seems suspect. For example, 0,60 and 0,61 both give 1980/01/06 00:01:00, but the first leap second after the GPS epoch wasn't until 1981/07/01. – [jjlin](#) Feb 14 '12 at 0:35

1 Answer

If you know the DateTime that represents the week, just call AddSeconds to find the DateTime you need.

According to the calculator you linked to above, week 1643, 377505 should equate to 2011/07/07 07:51:44, not 10:51:44 (maybe it is a time zone offset?) Anyway, the following snippet will give you what you the same result as the calculator in the link when GMT is selected - for different timezones, you'll have to apply your own offsets.

```
DateTime GetFromGps(int weeknumber, int seconds)
{
    DateTime datum = new DateTime(1980,1,6,0,0,0);
    DateTime week = datum.AddDays(weeknumber * 7);
    DateTime time = week.AddSeconds(seconds);
    return time;
}
```

edited Jul 7 '11 at 9:25

answered Jul 7 '11 at 8:57



[ZombieSheep](#)

15.1k 3 31 73

yes .i find the error in my code..it was starting from 1980.1.1 – [Ramah](#) Jul 7 '11 at 9:39

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