Dodatko Alexander

November 2012

How many moths does the year consist of?

What is the first day of the year?

Which day is the beginning of the week?

Right, but did you know that ...

Jewish calendar consists of 13 months. And month #6 is a leaping one.

In Japan the calendar may return to year #1 at the day of the emperor's death

In Russia week starts on Monday.

In the USA the first day is Sunday

Dates must look in the way the user expects

iPod
13:39
International
Calendar
Gregorian
Japanese
Buddhist

iPod
13:38
General
Date & Time
24-Hour Time
ON
Set Automatically
ON
Time Zone
Kiev

The Typical Solution

```
-(NSDate*)parseDate:( NSString* )date_
{
   NSDateFormatter* df_ = [ NSDateFormatter new ];
   df_.dateFormat = @"yyyy-MM-dd";


   return [ df_ dateFromString: date_ ];
}
```

WRONG !

```
-(NSDate*)parseDate:( NSString* )date_
{
   NSDateFormatter* df_ = [ NSDateFormatter new ];
   df_.dateFormat = @"yyyy-MM-dd";


   return [ df_ dateFromString: date_ ];
}
```

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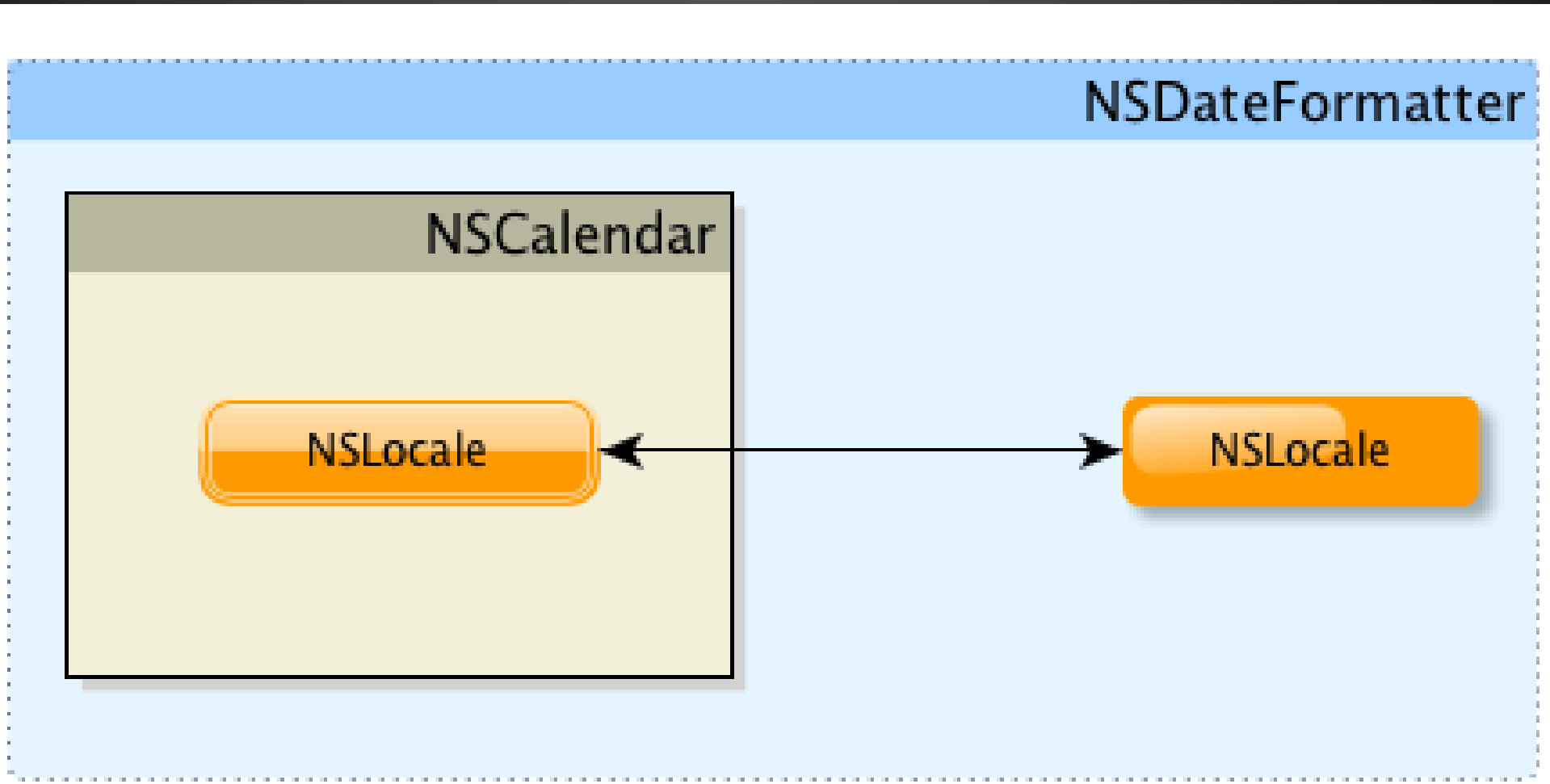
Use en_US_POSIX locale for dates from the network

Use Gregorian calendar too

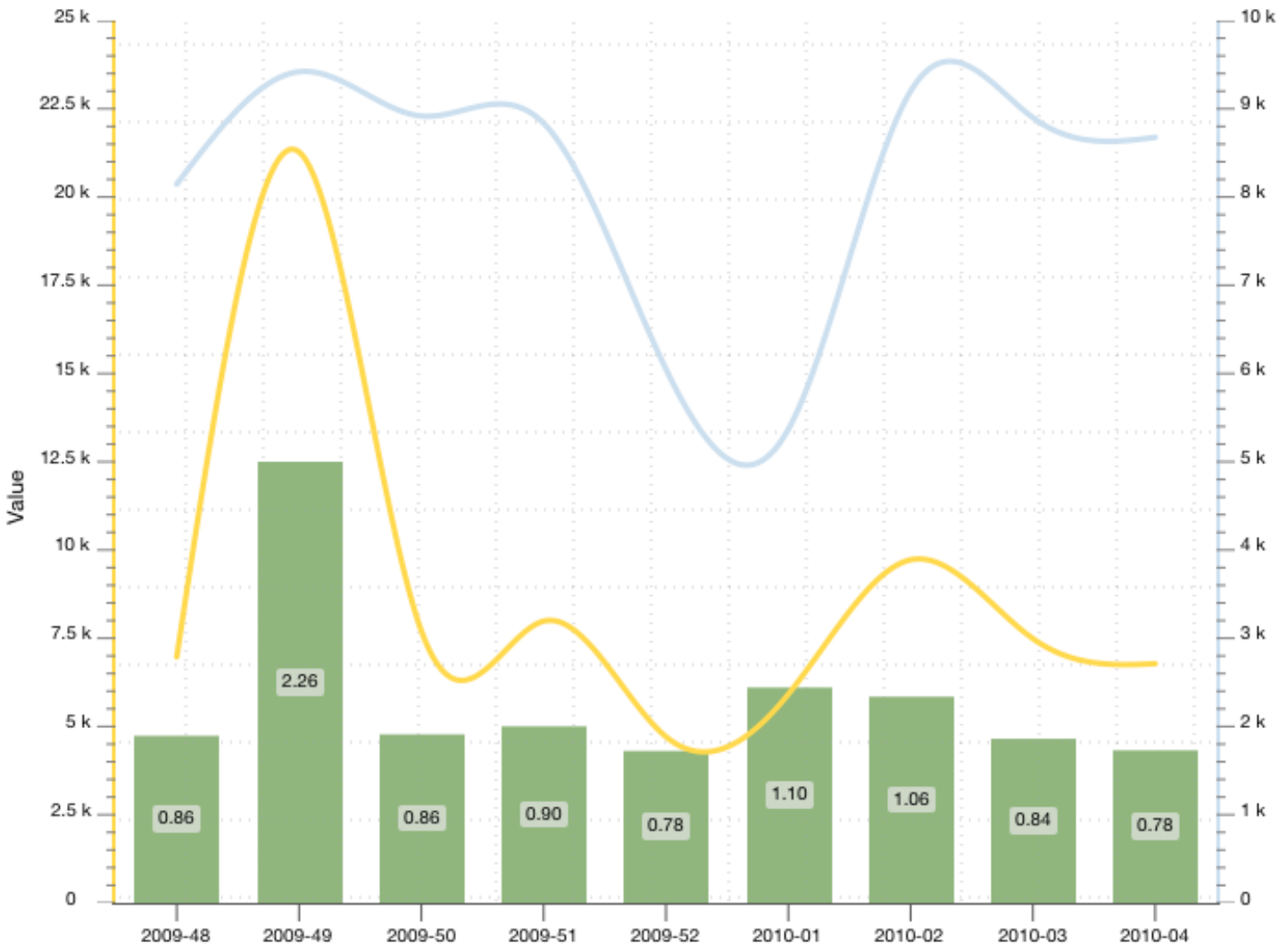

NSDateFormatter
NSCalendar
NSLocale
NSLocale

Do not forget to set
the same Locale
for both NSCalendar and
NSDateFormatter

Or let my library do it for you

dodikk / ESLocale

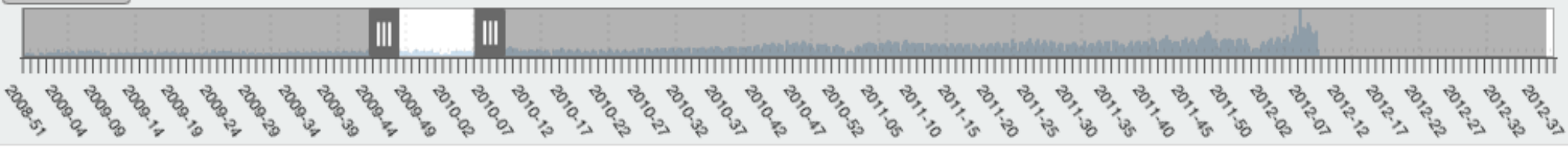
Ok. How about SQLite?



Updated 1 second ago

at 09/20/2012 08:13:06 AM GMT (UTC)

Week Time range W48 2009 - W4 2010 (Sunday, November 22, 09 - Saturday, January 23, 10)



```
SELECT SUM( Visits)
FROM VisitsLog
WHERE Date BETWEEN
x AND y
GROUP BY week
```

What should I take as week ?

```
SELECT SUM( Visits)
FROM VisitsLog
WHERE Date BETWEEN x AND y
GROUP BY

Strftime('%Y-%W', Date )
```

```
SELECT SUM( Visits)
FROM VisitsLog
WHERE Date BETWEEN x AND y
GROUP BY


Strftime('%Y-%W', Date )
```

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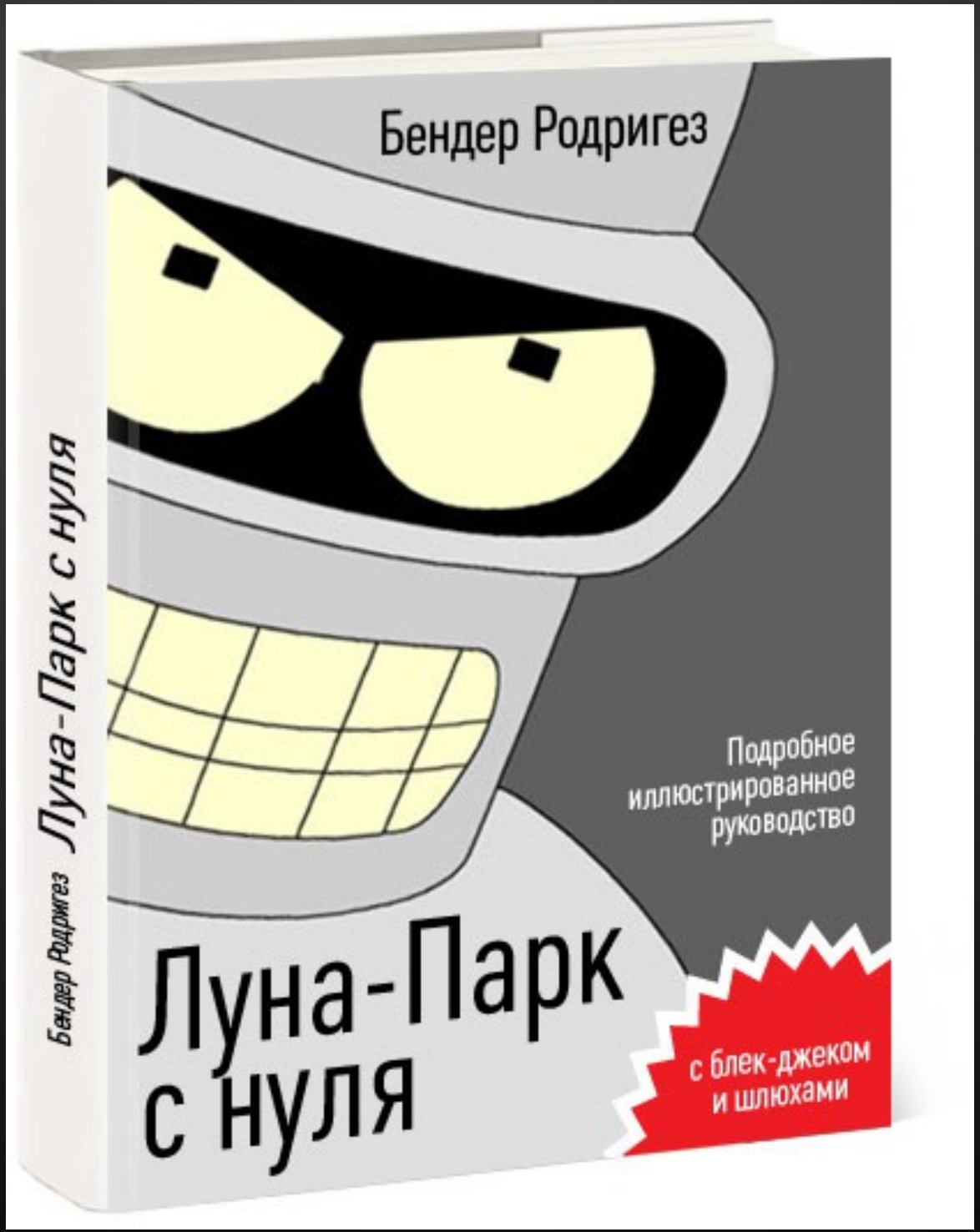
```
SELECT SUM( Visits)
FROM VisitsLog
WHERE Date BETWEEN x AND y
GROUP BY

ObjcFormatDate('YYYY-ww',
Date, 'en_US_POSIX' )
```


Бендер Родригез
Луна-Парк с нуля
Бендер Родригез
Подробное
иллюстрированное
руководство
Луна-Парк
с нуля
с блек-джеком
и шлюхами

```
int sqlite3_create_function(
      dbHandle,
      "ObjcFormatDate",
      3, //int nArg,
      SQLITE_UTF8,
      NULL, // sqlite user data
void (*xFunc)
(sqlite3_context*,int,sqlite3_value**),
  NULL, NULL // for aggregates
);
```

Plan of attack

Convert C strings to NSString

Convert date string to NSDate

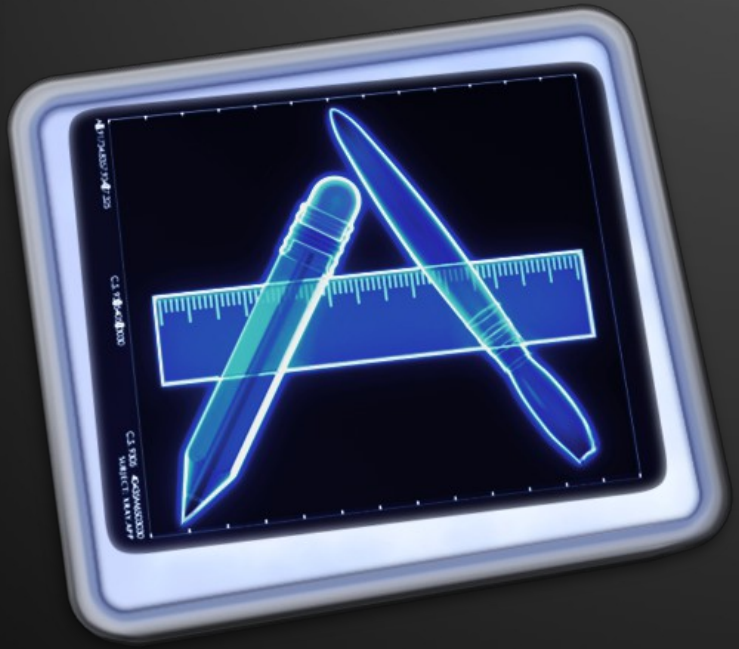
Format NSDate using locale

SQLite uses ANSI format

yyyy-MM-dd

Demo

One More Thing



JUL
17

1000 times slower than strftime

10K records

Creating NSDateFormatter on-the-fly

THE SINGLETON
AGED 12 YEARS
OF DUFFTOWN
TRADE MARK
THE SINGLETON
Single Malt Scotch Whisky
of Dufftown
GLEN ORD
ESTD 1838
MATURED FOR 12 YEARS
12
PRODUCT OF SCOTLAND
DISTILLED MATURED AND BOTTLED IN SCOTLAND
PERFECTLY BALANCED, NATURALLY RICH & SMOOTH
DUFFTOWN DISTILLERY, DUFFTOWN, KEITH
BANFFSHIRE AB55 4BR

Same speed as strftime

Singletone NSDateFormatter

Same 10K records

Thread Safety

dodikk / ESLocale

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https://github.com/dodikk

https://github.com/EmbeddedSources