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Converting string to date in js



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How can I convert a string to date in js?

```
var st = "date in some format"
var dt = new date();

var dt_st= //st in date format same as dt
```

javascript date

edited Oct 3 '13 at 1:20



mrjimoy_05

1,452 4 28 67

asked Apr 11 '11 at 9:21



jslearner

3,550 14 25 32

2 possible duplicate of [convert Java datestring to javascript date](#) and [a lot more](#) – [Felix Kling](#) Apr 11 '11 at 9:23

Oh I'm confused now. Do you want Date -> String or String -> Date ? – [Felix Kling](#) Apr 11 '11 at 9:57

2 consider [momentjs.com](#) – [hanshenrik](#) Mar 17 '15 at 11:23

26 Answers

The best string format for string parsing is the date ISO format together with the JavaScript Date object constructor.

Examples of ISO format: YYYY-MM-DD or YYYY-MM-DDTHH:MM:SS .

But wait! Just using the "ISO format" doesn't work reliably by itself. String are sometimes parsed as UTC and sometimes as localtime (based on browser vendor and version). The best practice should always be to store dates as UTC and make computations as UTC.

To parse a date as UTC, append a **Z** - e.g.: `new Date('2011-04-11T10:20:30Z')` .

To display a date in UTC, use `.toISOString()` ,
to display a date in user's local time, use `.toString()` .

More info on [MDN | Date](#) and [this answer](#).

For old Internet Explorer compatibility (IE versions less than 9 do not support ISO format in Date constructor), you should split datetime string representation to it's parts and then you can use constructor using datetime parts, e.g.: `new Date('2011', '04' - 1, '11', '11', '51', '00')` . Note that the number of the month must be 1 less.

Alternate method - use an appropriate library:

You can also take advantage of the library [Moment.js](#) that allows parsing date with the specified time zone.

edited Nov 24 at 1:49



Samuel Liew

33.2k 22 84 108

answered Apr 11 '11 at 9:53



Pavel Hodek

6,192 2 21 32

3 Doesn't seem to work in IE7. – [Paul Tomblin](#) Apr 5 '13 at 21:00

2

Paul: Thank you for info about an issue in IE7 (the same is in IE8), I have updated my answer. –
[Pavel Hodek](#) Apr 6 '13 at 18:27

- 3 Yeah, I was a little surprised because just about everything I read said to use `new Date` or `Date.parse` with no mention of compatibility issues. Imagine my surprise when my ie7 test showed "Nan" all over the screen. Fortunately I am already using jquery-UI datepicker and it has a nice `parseDate` function. –
[Paul Tomblin](#) Apr 7 '13 at 3:00

- 3 Letting `Date` parse a string is the **worst** way to create a `Date` object. Far better to parse the string manually and call `Date` as a constructor. Some browsers will treat an ISO string without timezone as UTC, others as local. – [RobG](#) Apr 26 '14 at 8:41

- 3 @Ben Taliadoros: Yes, it is invalid in all common browsers, `new Date('1970-30-02')` is invalid date because there is not 30 months in a year. You can't overflow months but when you overflow days then it resolves in *Chrome* and *Firefox* to a valid date: `new Date('1970-02-30')` is then the same day as `new Date('1970-03-02')`. – [Pavel Hodek](#) Jul 22 '15 at 6:43



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deal with life, we totally
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```
var st = "26.04.2013";
var pattern = /(\d{2})\.(\d{2})\.(\d{4})/;
var dt = new Date(st.replace(pattern, '$3-$2-$1'));
```

And the output will be:

```
dt => Date {Fri Apr 26 2013}
```

edited Apr 4 '14 at 5:20



[Roman Podlinov](#)

6,219 5 25 44

answered Apr 26 '13 at 11:27



[serega386](#)

767 5 4

- 2 Unfortunately there is an issue with this solution. Details here: stackoverflow.com/questions/17959660/... –
[Roman Podlinov](#) Apr 4 '14 at 6:36

Unfortunately I found out that

```
var mydate = new Date('2014-04-03');
console.log(mydate.toDateString());
```

returns "Wed Apr 02 2014". I know it's sounds crazy, but it happens for some users. The **bulletproof solution** is the following

```
var parts = '04/03/2014'.split('/');
//please put attention to the month (parts[0]), Javascript counts months from 0:
// January - 0, February - 1, etc
var mydate = new Date(parts[2], parts[0]-1, parts[1]);
```

edited Mar 2 '15 at 12:52

answered Apr 3 '14 at 10:55



[Roman Podlinov](#)

6,219 5 25 44

- 10 It's not crazy at all, the adjustment is most likely caused by *DST* kicking in. Dates in the format of `yyyy-MM-dd` are parsed as UTC and `toString` returns the *local* time therefore depending on the users timezone it can most definitely return different results. If always want the time as UTC then you should use `toUTCString`. – [James](#) Jun 11 '14 at 12:29

Been banging my head on this one. This seems to work, but I don't understand why you used `parts[0]-1` and not just `parts[0]`. – [Adam Youngers](#) Mar 2 '15 at 0:26

- 1 @AdamYoungers Due to Javascript counts months from 0: January - 0, February - 1, etc –
[Roman Podlinov](#) Mar 2 '15 at 12:44

```
function stringToDate(_date, _format, _delimiter)
{
    var formatLowerCase=_format.toLowerCase();
    var formatItems=formatLowerCase.split(_delimiter);
    var dateItems=_date.split(_delimiter);
    var monthIndex=formatItems.indexOf("mm");
    var dayIndex=formatItems.indexOf("dd");
    var yearIndex=formatItems.indexOf("yyyy");
    var month=parseInt(dateItems[monthIndex]);
    month-=1;
    var formattedDate = new Date(dateItems[yearIndex], month, dateItems[dayIndex]);
    return formattedDate;
}

stringToDate("17/9/2014", "dd/MM/yyyy", "/");
stringToDate("9/17/2014", "mm/dd/yyyy", "/")
stringToDate("9-17-2014", "mm-dd-yyyy", "-")
```

answered Sep 21 '14 at 17:28

[Kassem](#)



400 3 6

2 This is the best answer ever. It would work even if format is variable – [Sergey Panfilov](#) Jun 1 '15 at 7:02

This is an answer from the gods :L Handles dates from every variation not just US formatting – [Mark Jones](#)
Oct 27 '15 at 11:45

This works well!! – [Zusee Weekin](#) Aug 2 at 1:16

`new Date(2000, 10, 1)` will give you "Wed Nov 01 2000 00:00:00 GMT+0100 (CET)"

See that 0 for month gives you January

answered Apr 11 '11 at 9:25



[noiv](#)
3,163 2 12 15

Pass it as an argument to `Date()`:

```
var st = "date in some format"
var dt = new Date(st);
```

You can access the date, month, year using, for example: `dt.getMonth()` .

answered Apr 11 '11 at 9:26



[oblig](#)
1,193 7 12

If you can use the terrific [moment](#) library (e.g. in an Node.js project) you can easily parse your date using e.g.

```
var momentDate = moment("2014-09-15 09:00:00");
```

and can access the JS date object via

```
momentDate().toDate();
```

answered Sep 22 '14 at 9:08



[High6](#)
11.4k 6 42 52

2 please note that moment works just fine without node – [shaheer](#) Feb 9 '15 at 5:08

`Date.parse` almost gets you what you want. It chokes on the `am / pm` part, but with some hacking you can get it to work:

```
var str = 'Sun Apr 25, 2010 3:30pm',
    timestamp;

timestamp = Date.parse(str.replace(/([ap]m$/i, ''));

if(str.match(/pm$/i) >= 0) {
    timestamp += 12 * 60 * 60 * 1000;
}
```

answered Apr 11 '11 at 9:30



[niksvp](#)
4,061 15 34

If you want to convert from the format "dd/MM/yyyy". Here is an example:

```
var pattern = /^(\d{1,2})\/(\d{1,2})\/(\d{4})$/;
var arrayDate = stringDate.match(pattern);
var dt = new Date(arrayDate[3], arrayDate[2] - 1, arrayDate[1]);
```

This solution works in IE versions less than 9.

edited Apr 29 at 2:03

answered Jun 22 '15 at 14:29



[Alex N.](#)
406 6 16

check out `datejs` library <http://www.datejs.com/>

answered Apr 11 '11 at 9:22

z33m
4,100 17 43or momentjs.com – [hanshenrik](#) Mar 17 '15 at 11:23

Timestamps should be casted to a Number

```
var ts = '1471793029764';
ts = Number(ts); // cast it to a Number
var date = new Date(ts); // works

var invalidDate = new Date('1471793029764'); // does not work. Invalid Date
```

answered Aug 21 at 15:42

Lucky Soni
2,889 1 18 37It is very good for Timestamps. – [mehrddad](#) Sep 1 at 7:18

1 What about the undefined value? Like: var date = new Date(undefined) ? – [Benny Neugebauer](#) Nov 28 at 14:13

moment.js (<http://momentjs.com/>) is a complete and good package for use dates and supports ISO 8601 strings.

You could add string date and format.

```
moment("12-25-1995", "MM-DD-YYYY");
```

And you could check if date is valid.

```
moment("not a real date").isValid(); //Returns false
```

See documentation <http://momentjs.com/docs/#/parsing/string-format/>

edited Nov 23 at 19:37

answered Mar 7 at 15:47

Juan Caicedo
183 2 13

Just `new Date(st);`

Assuming that it's the proper format.

answered Apr 11 '11 at 9:23

zyklus
48.6k 15 113 156

```
var date = new Date(year, month, day);
```

or

```
var date = new Date('01/01/1970');
```

date string in format '01-01-1970' will not work in FireFox, So better use "/" instead of "-" in date format string.

edited Mar 17 '15 at 11:20

answered Mar 17 '15 at 11:13

Ravi
21 8

why i am getting negative mark to me? – [Ravi](#) Mar 17 '15 at 12:10

This does not provide an answer to the question. To critique or request clarification from an author, leave a comment below their post - you can always comment on your own posts, and once you have sufficient reputation you will be able to [comment on any post](#). – [Qualcuno](#) Mar 17 '15 at 15:04

1 date display formant is a matter of locale configuration – [Andrew](#) Mar 17 '15 at 15:10

my string is "2015/08/03 13:06:16" strill in FF it is not working – [debin](#) Aug 3 '15 at 8:36

For converting string to date in js i use <http://momentjs.com/>

```
moment().format('MMMM Do YYYY, h:mm:ss a'); // August 16th 2015, 4:17:24 pm
moment().format('dddd'); // Sunday
moment().format("MMM Do YY"); // Aug 16th 15
moment().format('YYYY [escaped] YYYY'); // 2015 escaped 2015
moment("20111031", "YYYYMMDD").fromNow(); // 4 years ago
moment("20120620", "YYYYMMDD").fromNow(); // 3 years ago
moment().startOf('day').fromNow(); // 16 hours ago
moment().endOf('day').fromNow(); // in 8 hours
```

answered Aug 16 '15 at 13:17



Alexey Popov

28 1 8

moment() by default takes current date. How to format a string which is in "2016-06-27 17:49:51.951602+05:30" format using moment. – Zoran777 Jun 28 at 8:17

If you need to check the contents of the string before converting to Date format:

```
// Convert 'M/D/YY' to Date()
mdyToDate = function(mdy) {
  var d = mdy.split(/[\/\-\.\.]/, 3);

  if (d.length != 3) return null;

  // Check if date is valid
  var mon = parseInt(d[0]),
      day = parseInt(d[1]),
      year = parseInt(d[2]);
  if (d[2].length == 2) year += 2000;
  if (day <= 31 && mon <= 12 && year >= 2015)
    return new Date(year, mon - 1, day);

  return null;
}
```

edited Dec 13 '15 at 3:49

answered Oct 16 '15 at 1:08



Adriano P

689 7 19

I have created a fiddle for this, you can use toDate() function on any date string and provide the date format. This will return you a Date object. <https://jsfiddle.net/Sushil231088/q56yd0rp/>

```
"17/9/2014".toDate("dd/MM/yyyy", "/")
```

answered Jun 23 at 14:18



Sushil Mahajan

21 2

For those who are looking for a tiny and smart solution:

```
String.prototype.toDate = function(format)
{
  var normalized      = this.replace(/[^a-zA-Z0-9]/g, '-');
  var normalizedFormat= format.toLowerCase().replace(/[^a-zA-Z0-9]/g, '-');
  var formatItems      = normalizedFormat.split('-');
  var dateItems        = normalized.split('-');

  var monthIndex  = formatItems.indexOf("mm");
  var dayIndex    = formatItems.indexOf("dd");
  var yearIndex   = formatItems.indexOf("yyyy");
  var hourIndex   = formatItems.indexOf("hh");
  var minutesIndex = formatItems.indexOf("ii");
  var secondsIndex = formatItems.indexOf("ss");

  var today = new Date();

  var year = yearIndex>-1 ? dateItems[yearIndex] : today.getFullYear();
  var month = monthIndex>-1 ? dateItems[monthIndex]-1 : today.getMonth()-1;
  var day = dayIndex>-1 ? dateItems[dayIndex] : today.getDate();

  var hour = hourIndex>-1 ? dateItems[hourIndex] : today.getHours();
  var minute = minutesIndex>-1 ? dateItems[minutesIndex] : today.getMinutes();
  var second = secondsIndex>-1 ? dateItems[secondsIndex] : today.getSeconds();

  return new Date(year,month,day,hour,minute,second);
};
```

Example:

```
"22/03/2016 14:03:01".toDate("dd/mm/yyyy hh:ii:ss");
"2016-03-29 18:30:00".toDate("yyyy-mm-dd hh:ii:ss");
```

edited Jul 26 at 17:05

answered Jul 26 at 15:14



Arivan Bastos

387 3 11

convert the string into date

```
var s = new Date('2013-01-17');
```

edited Jul 19 '13 at 4:01

answered Jan 17 '13 at 11:52



nrsharma

1,964 8 30

Are you sure about this? – Mikhail Jul 19 '13 at 3:13

@downvoter: answer updated. – nrsharma Jul 19 '13 at 4:01

ISO 8601-esque datestrings, as excellent as the standard is, are still not widely supported.

This is a great resource to figure out which datestring format you should use:

<http://dygraphs.com/date-formats.html>

Yes, that means that your datestring could be as simple as as opposed to

"2014/10/13 23:57:52" instead of "2014-10-13 23:57:52"

answered Oct 14 '14 at 2:28



taveras

377 1 11

Convert to format pt-BR:

```
var dateString = "13/10/2014";
var dataSplit = dateString.split('/');
var dateConverted;

if (dataSplit[2].split(" ").length > 1) {
    var hora = dataSplit[2].split(" ")[1].split(':');
    dataSplit[2] = dataSplit[2].split(" ")[0];
    dateConverted = new Date(dataSplit[2], dataSplit[1]-1, dataSplit[0], hora[0],
    hora[1]);
} else {
    dateConverted = new Date(dataSplit[2], dataSplit[1] - 1, dataSplit[0]);
}
```

I hope help somebody!!!

answered Nov 13 '14 at 18:11



Marcelo Rebouças

111 1 6

//Little bit of code for Converting dates

```
var dat1 = document.getElementById('inputDate').value;
var date1 = new Date(dat1)//converts string to date object
alert(date1);
var dat2 = document.getElementById('inputFinishDate').value;
var date2 = new Date(dat2)
alert(date2);
```

answered May 12 '15 at 14:34



Pec1983

112 7

In angularjs use \$filter service to change date into your needed format like given below

```
$filter('date')(response[19], 'dd-MMM-yyyy') // 31-Dec-2010
```

answered May 18 at 4:36



KARTHIKEYAN.A

192 1 3 21

```
var a = "13:15"
var b = toDate(a, "h:m")
alert(b);

function toDate(dStr, format) {
```

```
var now = new Date();
if (format == "h:m") {
    now.setHours(dStr.substr(0, dStr.indexOf(":")));
    now.setMinutes(dStr.substr(dStr.indexOf(":") + 1));
    now.setSeconds(0);
    return now;
} else
    return "Invalid Format";
}
```

[Run code snippet](#)[Expand snippet](#)

answered May 26 at 16:56

[kurenai Kunai](#)

1,278 1 5 20

use this format....

```
//get current date in javascript

var currentDate=new Date();

// for getting a date from a textbox as string format

var newDate=document.getElementById("<%=textBox1.ClientID%>").value;

// convert this date to date time

var MyDate=new Date(newDate);
```

answered Sep 30 '14 at 15:47

[Jeetendra singh negi](#)

9 1

You can also do: mydate.toLocaleDateString();

answered Mar 25 '15 at 21:14

[Avishai](#)

9

2 The question was about converting a string to a date, not the other way around. – [davidism](#) Mar 25 '15 at 21:20
