# Formatting Dates with Angular Date Pipe

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Angular Date Pipe allows us to format dates in Angular using the requested format, time zone & local information. It comes with built-in pre-defined formats. We can also customize the date format by creating custom format strings. We can set the time zone, country locale, etc. This tutorial shows how to use Date Pipe using examples.

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## **Using Date Pipe**

The Date uses the pipe operator i.e |. Specify the date\_expression, which you want to format in the left side of the |. On the right side specify date followed by the arguments. It accepts three arguments format, timezone & locale

```
1 2 {{ date_expression | date [ : format [ : timezone [ : locale ] ] ] }}
```

# Date Pipe Example

The following is the example of a date pipe it its simplest form.

```
Angular Date Pipe Example
```

# **Using Date Pipe**

Unformatted date: Sun May 24 2020 18:53:26 GMT+0530 (India Standard Time)

Formatted date: May 24, 2020

Date Pipe Example

# **Date Expression**

The Date Expression can be anything that evaluates to date. For example it can be a Date object, a number (milliseconds since UTC epoch), or an ISO string

```
1 | 2 |//Component
```

```
3 toDate: Date = new Date();
4 numDate=1590319189931;
5 strDate="Sun May 24 2020 19:16:23";
6
```

# Parameters to Date Pipe

The Date pipe accepts three arguments format, timezone & locale

Parameter	Data Type	Particulars
format	string	There are two types of format.  1. predefined formats  2. Custom format string
		Default: mediumDate.
timezone	string	Use
		A timezone offset (such as '+0430')
		Standard UTC/GMT
		continental timezone abbreviation.
		Default: End-users local system timezone
locale	string	A locale code for the locale format rules to use.  Default: The value of LOCALE_ID ( which is en-US)
		How to Change LOCALE_ID

# **Date Format**

There are two types formats options available

- 1. Pre defined Format
- 2. Custom Format string

#### Pre defined formats

The following are the Pre defined formats that you can use. We have also mentioned the corresponding custom formats next to it.

Format	Equivalent Custom Format	Example	Result
short	'M/d/yy, h:mm a'	{{toDate   date:'short'}}	5/24/20, 3:40 PM
medium	'MMM d, y, h:mm:ss a'	{{toDate   date:'medium'}}	May 24, 2020, 3:42:17 PM
long	'MMMM d, y, h:mm:ss a z'	{{toDate   date:'long'}}	May 24, 2020 at 3:42:17 PM GMT+5
full	'EEEE, MMMM d, y, h:mm:ss a zzzz'	{{toDate   date:'full'}}	Sunday, May 24, 2020 at 3:42:17 PM GMT+05:30
shortDate	'M/d/yy'	{{toDate   date:'shortDate'}}	5/24/20
mediumDate	'MMM d, y'	{{toDate   date:'mediumDate'}}	May 24, 2020
longDate	'мммм d, y'	{{toDate   date:'longDate'}}	May 24, 2020
fullDate	'EEEE, MMMM d, y'	{{toDate   date:'fullDate'}}	Sunday, May 24, 2020

Format	Equivalent Custom Format	Example	Result
shortTime	'h:mm a'	{{toDate   date:'shortTime'}}	3:42 PM
mediumTime	'h:mm:ss a'	{{toDate   date:'mediumTime'}}	3:42:17 PM
longTime	'h:mm:ss a z'	{{toDate   date:'longTime'}}	3:42:17 PM GMT+5
fullTime	'h:mm:ss a zzzz'	{{toDate   date:'fullTime'}}	3:42:17 PM GMT+05:30

### **Custom Format string**

The following is the complete list of custom formats that are available

Field type	Format	Description	Example Value
Era	G, GG & GGG	Abbreviated	AD
	GGGG	Wide	Anno Domini
	GGGGG	Narrow	A
Year	у	Numeric: minimum digits	2, 20, 201, 2017, 20173
	уу	umeric: 2 digits + zero padded	02, 20, 01, 17, 73
	ууу	Numeric: 3 digits + zero padded	002, 020, 201, 2017, 20173
	уууу	Numeric: 4 digits or more + zero padded	0002, 0020, 0201, 2017, 20173

Field type	Format	Description	Example Value
Month	М	Numeric: 1 digit	9, 12
	ММ	Numeric: 2 digits + zero padded	09, 12
	МММ	Abbreviated	Sep
	ММММ	Wide	September
	МММММ	Narrow	S
Month	L	Numeric: 1 digit	9, 12
standalone	LL	Numeric: 2 digits + zero padded	09, 12
	LLL	Abbreviated	Sep
	LLLL	Wide	September
	LLLLL	Narrow	S
Week of year	W	Numeric: minimum digits	1 53
	ww	Numeric: 2 digits + zero padded	01 53
Week of month	W	Numeric: 1 digit	1 5
Day of month	d	Numeric: minimum digits	1
,	dd	Numeric: 2 digits + zero padded	01
Week day	E, EE &	Abbreviated	Tue

Field type	Format	Description	Example Value
	EEEE	Wide	Tuesday
	EEEEE	Narrow	T
	EEEEEE	Short	Tu
Period	a, aa & aaa	Abbreviated	am/pm or AM/PM
	aaaa	Wide (fallback to a when missing)	ante meridiem/post meridiem
	aaaaa	Narrow	a/p
Period*	B, BB &	Abbreviated	mid
	BBBB	Wide	am, pm, midnight, noon, morning, afternoon, evening, night
	BBBBB	Narrow	md.
Period standalone*	b, bb &	Abbreviated	mid.
	bbbb	Wide	am, pm, midnight, noon, morning, afternoon, evening, night
	bbbbb	Narrow	md
Hour 1-12	h	Numeric: minimum digits	1, 12
	hh	Numeric: 2 digits + zero padded	01, 12
Hour 0-23	Н	Numeric: minimum digits	0, 23

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Field type	Format	Description	Example Value
	НН	Numeric: 2 digits + zero padded	00, 23
Minute	m	Numeric: minimum digits	8, 59
	mm	Numeric: 2 digits + zero padded	08, 59
Second	S	Numeric: minimum digits	0 59
	SS	Numeric: 2 digits + zero padded	00 59
Fractional	S	Numeric: 1 digit	0 9
seconds	SS	Numeric: 2 digits + zero padded	00 99
	SSS	Numeric: 3 digits + zero padded (= milliseconds)	000 999
Zone	z, zz & zzz	Short specific non location format (fallback to 0)	GMT-8
	ZZZZ	Long specific non location format (fallback to OOOO)	GMT-08:00
	Z, ZZ & ZZZ	ISO8601 basic format	-0800
	ZZZZ	Long localized GMT format	GMT-8:00
	ZZZZZ	ISO8601 extended format + Z indicator for offset 0 (= XXXXX)	-08:00
	0,00&	Short localized GMT format	GMT-8

Field type	Format	Description	Example Value
	000		
	0000	Long localized GMT format	GMT-08:00

### **Custom Format example**

```
1 {\{\table | \date: 'dd/MM/y'\}} //24/05/2020
3 4 {\{\table | \date: 'dd/MM/yy HH:mm'\}} //May 24, 2020, 7:17:26 PM
```

## Timezone Example

The following examples, shows how to use time zones

```
Date in India (IST Time Zone) : {{toDate | date:'short':'IST'}} //Date in India (IST Time)

Date in USA (CDT Time Zone) : {{toDate | date:'short':'CDT'}} //Date in USA (CDT Time)

Date in India (+0530) : {{toDate | date:'short':'+0530'}} //Date in India (+0530) : 5,

Date in USA (-0700) : {{toDate | date:'short':'-0500'}} //Date in USA (-0700) : 5/24/2
```

# **Country Locale Example**

The Country Locale is the third argument.

```
British date time is {{toDate | date:'dd/MM/yy HH:mm':'GMT':'en-GB'}} //British date t
```