When attempting to determine geographic locations of website visitors, some webmasters look to the Time Zone offset value provided by the browser. This method is only somewhat reliable since the value provided is already adjusted for Daylight Saving Time. A visitor's browser may report 6.0 At first glance, it would appear the visitor is in the Central Time Zone. In fact, the visitor may be actually in Mountain Time "if" Daylight Saving Time is in effect. This example assumes the visitor is in the Northern Hemisphere.

In order to verify the actual Time Zone offset, one must confirm whether Daylight Saving Time is in effect. By comparing the current date with the start and end dates of Daylight Saving Time, this fact may be determined. The JavaScript object being used in this page allows for flexible definitions of start and end dates considering most areas of the world start and end DST on non-specific dates like the last Sunday of October.

Note: The JavaScript object assumes the Time Zone setting is correct.

Object Details

DST([dtcompare])

- Initializes object.
- dtcompare: [Optional] Object initialization may be over-loaded with date to be tested against the Start and End dates for Daylight Saving Time. Date must be specified in one of the following formats:
    a. yyyymmdd
    b. yyyy-mm-dd

- If object is not over-loaded, the current year, month and day are used.

  Example:

```
var curyear = new Date().getFullYear();

// Month MUST be zero-padded.
var curmon  = zeroPad( new Date().getMonth() + 1 );

// Day MUST be zero-padded.
var curday  = zeroPad( new Date().getDate() );

// Date format is yyyy-mm-dd or yyyymmdd
var dst = new DST( curyear + '-' + curmon + '-' + curday );
```

Methods

setStart(yr, mn, wkdy, n)

- Used to set the value for this.dtstart
- Default value = 0000-00-00
- yr: 4-digit representation of the year for the start of Daylight Saving Time.
  mn: Numeric representation of the month for the start of Daylight Saving Time.
  1 = Jan, 2 = Feb, etc.
  wkdy: Numeric representation of the week day for the start of Daylight Saving Time.
  1 = Sun, 2 = Mon, etc.
  n: Numeric representation of the position of the weekday in the month for the start of Daylight Saving Time.
  first = 1, second = 2, third = 3, fourth = 4, fifth = 5, last = -1

  Example:
  dst.setStart(curyear, apr, sun, first);

setEnd(yr, mn, wkdy, n)

- Used to set the value for this.dtend
- Default value = 0000-00-00
- yr: 4-digit representation of the year for the end of Daylight Saving Time.
  mn: Numeric representation of the month for the end of Daylight Saving Time.
  1 = Jan, 2 = Feb, etc.
  wkdy: Numeric representation of the week day for the end of Daylight Saving Time.
  1 = Sun, 2 = Mon, etc.
  n: Numeric representation of the position of the weekday in the month for the end of Daylight Saving Time.
  first = 1, second = 2, third = 3, fourth = 4, fifth = 5, last = -1

  Example:
  dst.setEnd(curyear, oct, sun, last);

setCmp(yr, mn, dy)

- Used to set the value for this.cmp (the date being tested)
- this.cmp is set when the DST object is initialized and may be changed later using this method.
- yr: 4-digit representation of the year for the end of Daylight Saving Time.
  mn: Numeric representation of the month for the end of Daylight Saving Time.
  1 = Jan, 2 = Feb, etc.
  dy: Numeric representation of the day of the month being tested. This value must be between 1 and 31 inclusive.

  Note: No error-checking is performed to see if the value is "valid" for the specified month. JavaScript automatically adjusts the date accordingly when larger values are specified in months where the value is not valid.

  Example:
  dst.setCmp(curyear, curmon, curday);

fmtDate(intxt, delim)

- Used to format a date value in the DST object for output. Object stores values in yyyymmdd format.
- Default delimiter is '-'

Example:

```
document.writeln( dst.fmtDate( dst.dtstart ) );
```

inDST()

- Used to perform date comparisons using the values specified for this.dtstart, this.dtend and this.dtcmp
- Method should be called only after this.dtstart, this.dtend (and possibly this.dtcmp) are set.
- If the date falls in specified date range, this.indst is set to true.

Example:

```
dst.inDST();
```

Properties

this.dtstart

- Value is the start date of Daylight Saving Time in yyyymmdd format.
- Default value = 0000-00-00
- Value is set using setStart()

this.dtend

- Value is the end date of Daylight Saving Time in yyyymmdd format.
- Default value = 0000-00-00
- Value is set using setEnd()

this.dtstart

- Value is the date being tested against start and end dates of Daylight Saving Time in yyyymmdd format.
- Default value = current date in yyyymmdd format if no value is specified when object is initialized.
- Value is also set using setCmp()

this.tzoffset

- Value is the Time Zone Offset (in hours) of the browser in decimal format.
- The value reported by the browser may already be "adjusted" for Daylight Saving Time.
- If an error occurs while reading the value from the browser, it is set to 100.00

this.indst

- Boolean indicating if the date being tested falls in the specified date range.
- Default value = false

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