

WebCalendar White Paper

This whitepaper describes the concept and features introduced in WebCalendar.

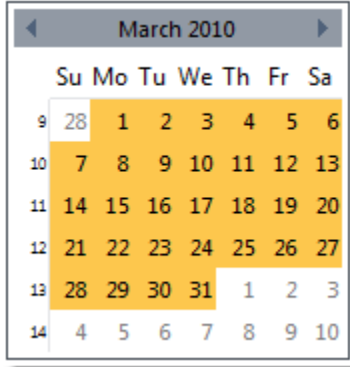
Table of Contents

View Customization	2
Behavioral Configuration	3
WorkWeekSettings	4
FirstDayOfWeek	4
FirstWeekOfYear	4
ShowWeekNumber	4
HighlightTodayDate	4
Navigation	5
Holiday	6
Localization and TextSettings	
Localization.....	7
TextSettings.....	7
Multiple Calendar	8
Multiple Columns.....	8
Keyboard Support	9
Multiple Selection	9
Integrated with FullPostBack and FlyPostBack (aka AJAX)	10
XHTML Compliance	10
Appearance and Styles.....	10
Comprehensive Client Side Events	11
Rich Client-side APIs.....	11

View Customization

Three view modes are provided, Month, Quarter, and Year.

Month View



March 2010							
	Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6
10	7	8	9	10	11	12	13
11	14	15	16	17	18	19	20
12	21	22	23	24	25	26	27
13	28	29	30	31	1	2	3
14	4	5	6	7	8	9	10

In any selected or active Month view, all dates will be selected. The highlighted date can be customized through `HighlightMode` property.

Quarter View

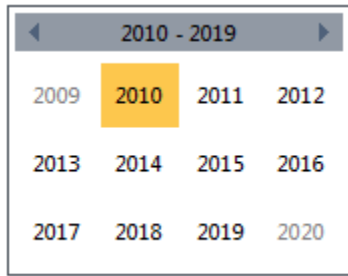


Q1 2010			
Jan	Feb	Mar	Apr
May	Jun	Jul	Aug
Sep	Oct	Nov	Dec

Instead of dates, Quarter View will display 12-month. Click on a month, and a quarter is selected. If the **ViewMode** is set to Quarter, user

can't navigate to Month View.

Year View



2010 - 2019			
2009	2010	2011	2012
2013	2014	2015	2016
2017	2018	2019	2020

Years are displayed in WebCalendar in Year view. If **ViewMode** is set to Year, navigation to month or quarter view is disabled.

Behavioral Configuration

Four date range highlight options are provided exclusively for Month View:

Month

March 2010		Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	
11	14	15	16	17	18	19	20	
12	21	22	23	24	25	26	27	
13	28	29	30	31	1	2	3	
14	4	5	6	7	8	9	10	

All dates of the active month will be selected.

Week

March 2010		Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	
11	14	15	16	17	18	19	20	
12	21	22	23	24	25	26	27	
13	28	29	30	31	1	2	3	
14	4	5	6	7	8	9	10	

The selected dates are highlighted according to the active week, which is based on **WeekViewMode** property.

Day

February 2010		Su	Mo	Tu	We	Th	Fr	Sa
5	31	1	2	3	4	5	6	
6	7	8	9	10	11	12	13	
7	14	15	16	17	18	19	20	
8	21	22	23	24	25	26	27	
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	

Only the selected date is highlighted.

Custom

March 2010		Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	
11	14	15	16	17	18	19	20	
12	21	22	23	24	25	26	27	
13	28	29	30	31	1	2	3	
14	4	5	6	7	8	9	10	

Custom date range is determined by **CustomHighlighterDays** property.

Additional settings are available when **HighlightMode** is set to *Week*. **WeekViewMode** property is used to determine how many days in a week will be highlighted. There are two options, full week and work week. As the name implies, full week will select all days (from Monday to Sunday), while work week will select specific days only according to **WorkWeekSettings** property (default is Monday to Friday).

March 2010		Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	
11	14	15	16	17	18	19	20	
12	21	22	23	24	25	26	27	
13	28	29	30	31	1	2	3	
14	4	5	6	7	8	9	10	

Full Week

March 2010		Su	Mo	Tu	We	Th	Fr	Sa
9	28	1	2	3	4	5	6	
10	7	8	9	10	11	12	13	
11	14	15	16	17	18	19	20	
12	21	22	23	24	25	26	27	
13	28	29	30	31	1	2	3	
14	4	5	6	7	8	9	10	

Work Week

WorkWeekSettings

User can easily specify workday through **WorkWeekSettings** property, which work in conjunction with the date selection when the **HighlightMode** is set to *Week* and **WeekViewMode** is *WorkWeek*.

FirstDayOfWeek

FirstDayOfWeek property indicates the starting day in a week. The default value is *Sunday*.

FirstWeekOfYear

The first week of year is also customizable according to your business requirement. Three options are available in **FirstWeekOfYear** properties:

- *First4DayWeek*
The first week is the week which has at least 4 days. This is WebCalendar's default value.
- *StartOn1January*
The first week always starts from January 1st.
- *FirstFullWeek*
The first week is the full week, which has exact 7 days.

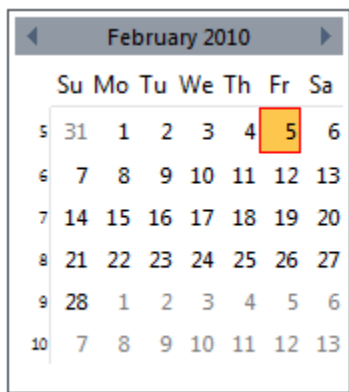
ShowWeekNumber

This property controls whether WebCalendar should show the week number or not. The week number depends on the **FirstWeekOfYear** property.

Note: This property is only applicable to Month ViewMode

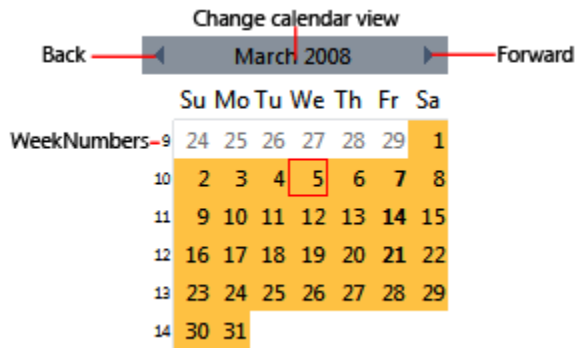
HighlightTodayDate

This feature determines whether WebCalendar should highlight today's date or not. The highlight style can be specified in **TodayStyle**.

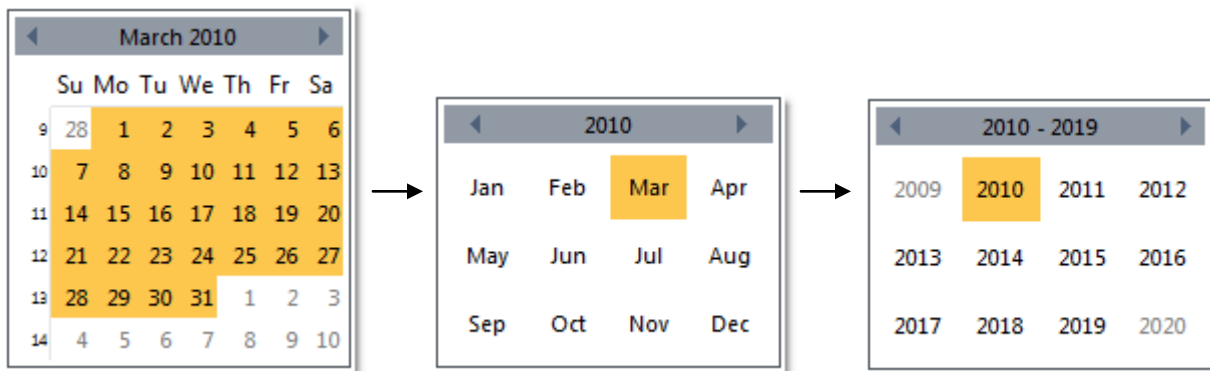


Note: This property is only applicable to Month ViewMode

Navigation



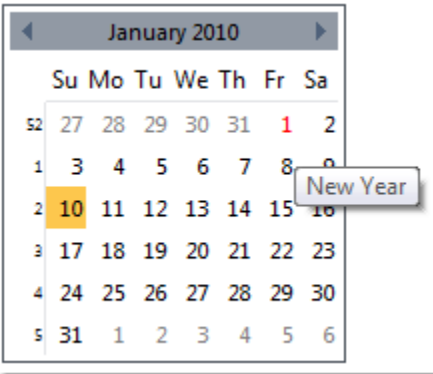
- Back and Forward
Back and forward buttons allows user to move backward or forward according to the active view.
- Changed calendar view
In addition to Month **ViewMode**, users can cycle through the views simply by clicking on the calendar's header. Three calendars views are available:
 - Day
All days in a month are shown.
 - Month
All 12 months in a year are displayed. The Quarter **ViewMode** also uses the same presentation; however, selecting a month in Quarter **ViewMode** will highlight a quarter.
 - Year
WebCalendar shows years in 10 year range.



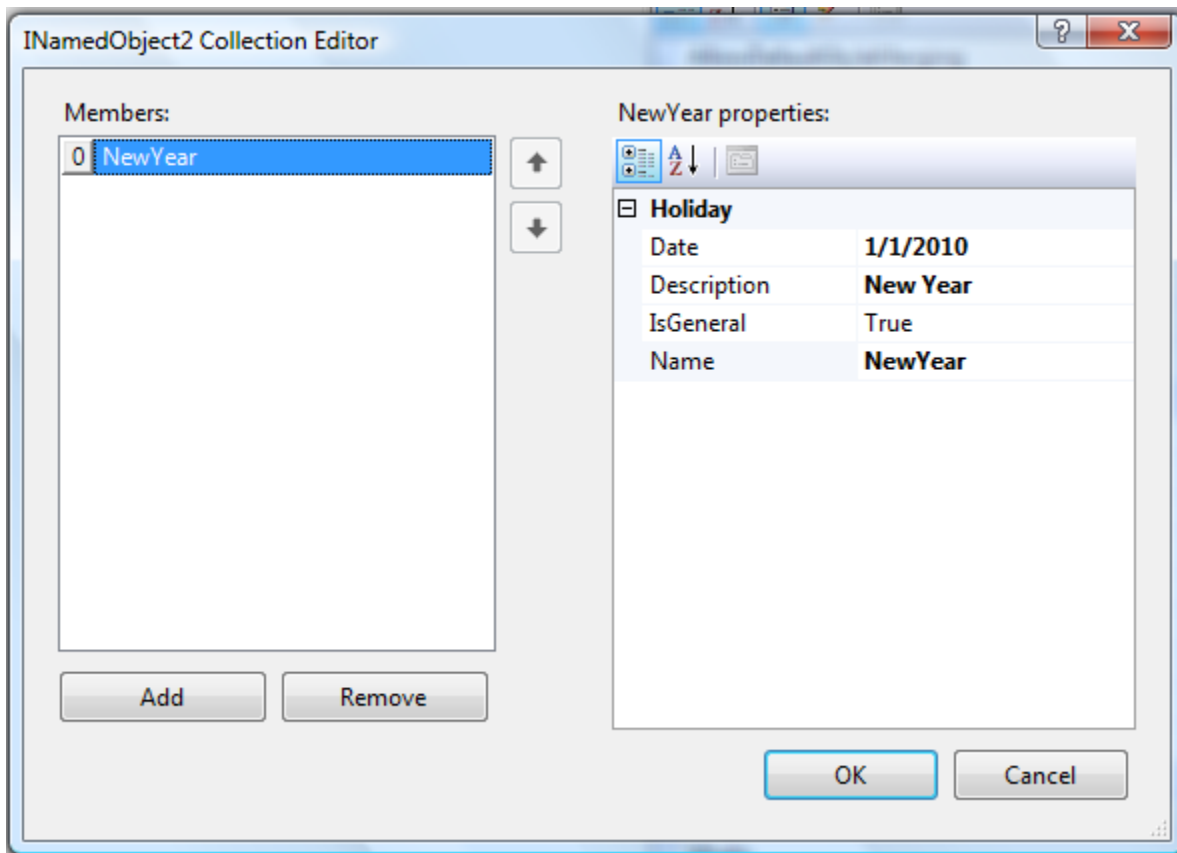
In Quarter **ViewMode**, users can not switch to Day view. In Year **ViewMode**, users can not switch to Day or Month view.

Holiday

WebCalendar provides holiday feature, which essentially enables you to define holiday easily. By default, a holiday is rendered in red. You can easily customize it in **HolidayStyle** property. When the cursor is over the holiday, a tooltip containing the specified description will be shown.



Holidays data collection can be specified in **Holidays** property.

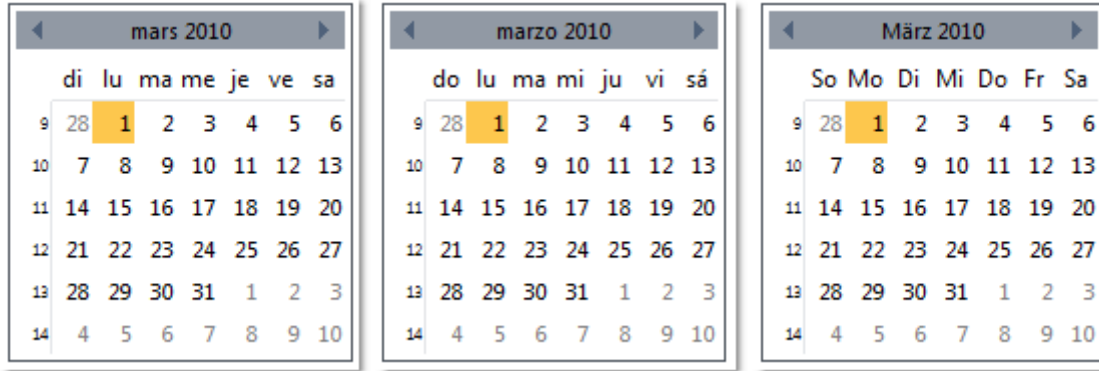


IsGeneral property indicates whether the holiday occurs annually or occasionally.

Localization and TextSettings

Localization

WebCalendar enables you select your most preferred culture format in **Culture** property. If no culture is specified, WebCalendar will automatically follow the server's configuration.



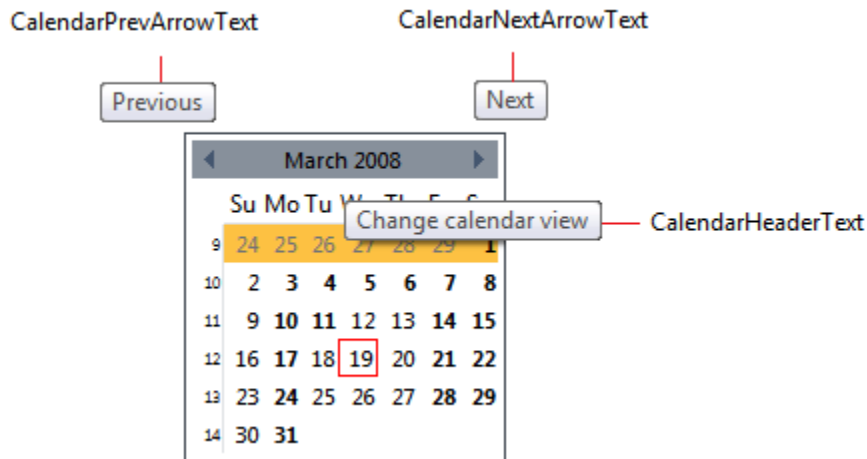
TextSettings

Developer also has the freedom to customize the textual context in WebCalendar, such as the navigation button's tooltip.

CalendarHeaderText property lets you set the tooltip text of the calendar's header.

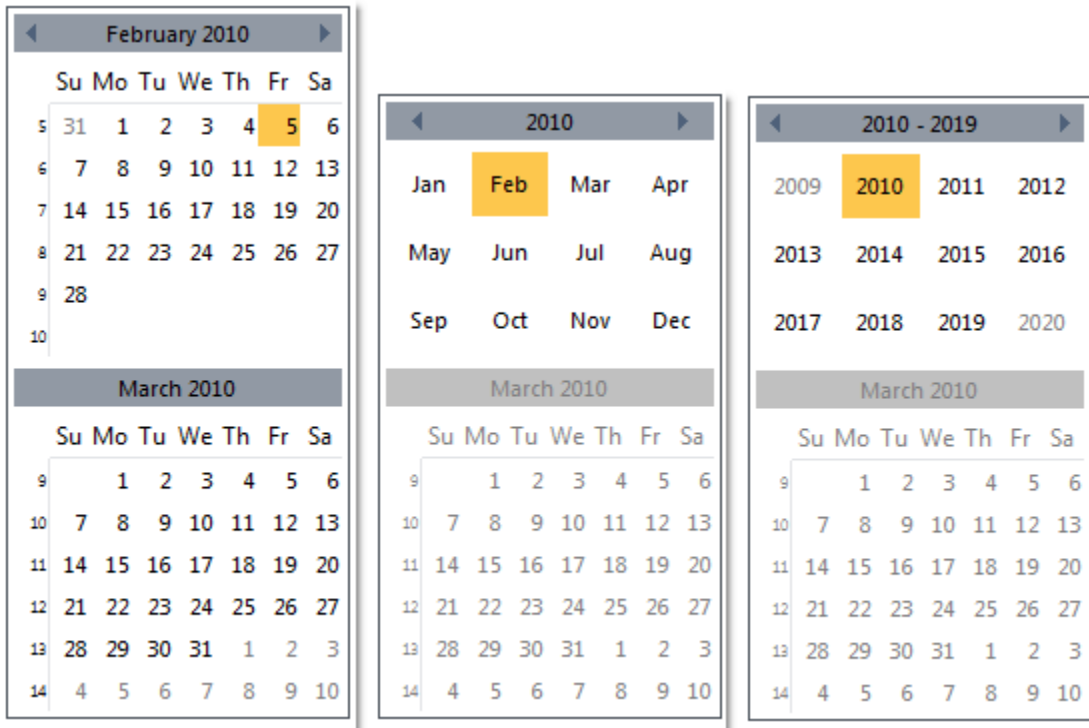
CalendarPrevArrowText property lets you set the previous navigation button's tooltip text.

CalendarNextArrowText property lets you set the next navigation button's tooltip text.



Multiple Calendar

Unlike similar calendar solutions, WebCalendar enables developer to display multiple calendars. This behavior is controlled by **NumberOfCalendarDisplayed** property. In multiple calendar mode, only 1 calendar will be active when switched to year view or month view.



Multiple Columns

Complementing the multiple calendars mode, WebCalendar also provides the multiple columns option – enabling to display more calendars horizontally. The **CalendarItemWidth** property controls the width of each WebCalendar and works in conjunction with WebCalendar’s **Width** property.

For example: you want to display 6 calendars in 2x3 configuration.

NumberOfCalendarDisplayed = 6.

CalendarItemWidth = 1/3 of the entire width. For example if the width of the entire WebCalendar is set to 300px, the **CalendarItemWidth** must be set to 100px to achieve the desired requirement. For the best result, **CalendarItemWidth**’s value must be exactly the division of the total columns on the entire width.

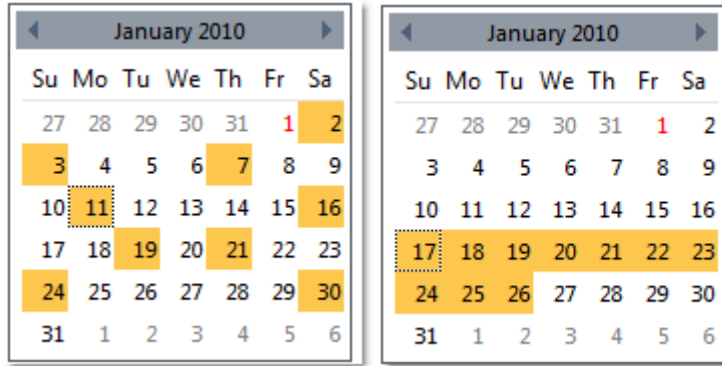
January 2010							February 2010							March 2010							April 2010							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
27	28	29	30	31	1	2	1	2	3	4	5	6	1	2	3	4	5	6						1	2	3		
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
24	25	26	27	28	29	30	28							28	29	30	31				25	26	27	28	29	30		
31																												
May 2010							June 2010							July 2010							August 2010							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
						1			1	2	3	4	5						1	2	3	1	2	3	4	5	6	7
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	
23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31	29	30	31					
30	31																											
September 2010							October 2010							November 2010							December 2010							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
			1	2	3	4						1	2	1	2	3	4	5	6						1	2	3	4
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30				26	27	28	29	30	31	1		
							31													2	3	4	5	6	7	8		

Keyboard Support

The strong keyboard support gives users an effortless navigation when working with dates. Simply set **EnableKeyboardSupport** property to *true*, and users can start using the directional keys to move between months and dates. [Enter] key is used to select a date and [Space] key is used to cycle through the available views (Day, Month, Year).

Multiple Selection

WebCalendar offers multiple selections for selecting multiple dates. This feature can be activated by setting **EnableMultipleSelection** property to *true*. Multiple selections can be performed using mouse only, keyboard only, or the combination of both. The behavior is exactly the same as performing multiple selections in desktop OS. Click and drag using mouse to select a range of dates, use the CTRL, SHIFT, or CTRL + SHIFT for more advanced randomized selections. Multiple selection feature is designed to work in Day view mode only and **EnableKeyboardSupport** property should be enabled for the best experience.



Integrated with FullPostBack and FlyPostBack (aka AJAX)

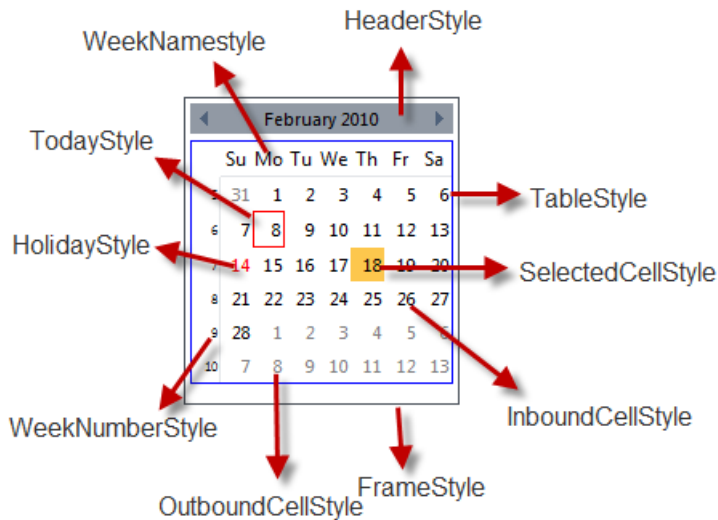
PostBack will occur when **SelectedDate** or **SelectedDates**, if you have multiple values, is changed and **OnSelectedDateChanged** server-side event is specified. WebCalendar offers two postback modes, FullPostBack and FlyPostBack (AJAX).

XHTML Compliance

WebCalendar is designed to fully comply with W3C's XHTML standard – providing identical rendering when running in different modern XHTML-ready browsers.

Appearance and Styles

Most of the visual and textual aspects of WebCalendar are easily customizable, giving you the flexibility to express your creativity.



Four predefined styles are offered in WebCalendar.

1. Microsoft Outlook 2007 Black
2. Microsoft Outlook 2007 Blue
3. Olive Green
4. Windows 7

Comprehensive Client Side Events

The following is the list of client side events in WebCalendar.

OnInitialized(*controlId*)

This client-side event will be invoked when WebCalendar is initialized.

OnViewChanged(*controlId*)

This client-side event will be invoked when WebCalendar's view is changed.

OnAfterRender(*controlId, calendarType*)

This client-side event will be invoked immediately after WebCalendar is rendered.

OnSelectedDateChanged(*controlId, oldDates, newDates*)

This client-side event will be invoked when the selected date is changed.

OnBeforeNavigation(*controlId, navigation, calendarType*)

This client-side event will be invoked before WebCalendar performs navigation.

OnAfterNavigation(*controlId, navigation, calendarType*)

This client-side event will be invoked after WebCalendar performs navigation.

OnCellClicked(*controlId, element, newDate*)

This client-side event will be invoked when a calendar cell is clicked.

OnResponse(*controlId, action*)

This client-side event will be invoked when response is returned after a FlyPostBack action.

Rich Client-side APIs

The following is the list of client side APIs in WebCalendar.

Functions	Description
GetElement()	Gets WebCalendar's element.
GetFrameElement()	Gets WebCalendar's frame element.
GetCalendarPreviousArrow()	Gets WebCalendar's previous arrow image element.

GetCalendarNextArrow	Gets WebCalendar's next arrow image element.
GetContainerCalendarPrev	Gets WebCalendar's previous arrow frame element.
GetContainerCalendarNext	Gets WebCalendar's next arrow frame element.
Refresh(<i>isOnlyPrimaryCalendar</i>)	Refreshes WebCalendar. <i>isOnlyPrimaryCalendar</i> is a Boolean value which control whether the first calendar is refreshed or not.
SetSelectedDate(<i>newDate</i>)	Jumps to a specific date immediately.
MoveDayBy(<i>n</i>)	Moves the selected date by <i>n</i> days from the current date.
GoToNextMonth(<i>n</i>)	Navigates to next month.
GoToPreviousMonth(<i>n</i>)	Navigates to previous month.
GoToNextQuarter(<i>n</i>)	Navigates to next quarter.
GoToPreviousQuarter(<i>n</i>)	Navigates to previous quarter.
GoToNextYear(<i>n</i>)	Navigates to next year.
GoToPreviousYear(<i>n</i>)	Navigates to previous year.
DisableNonPrimaryCalendars()	Disables non-primary calendars if you have more than 1 calendar.
EnableNonPrimaryCalendars()	Enables non-primary calendars if you have more than 1 calendar.
GetDayCellByDate(<i>date</i>)	Gets the day cell element by date.
GetMonthCellByMonth(<i>month</i>)	Gets the month cell element by month.
GetMonthCellsByQuarter(<i>quarter</i>)	Gets the month cell elements by quarter.
GetYearCell(<i>year</i>)	Gets the year cell element by year.