

cf_timeline documentation

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Project Info:

<http://cfTimeline.riaforge.org>

cf_timeline

Description

Creates a DHTML widget for visualizing time-based events.

Category

Display management.

Syntax

```
<cf_timeline
  required
  id="String"
  optional
  bubbleHeight="Number"
  bubbleWidth="Number"
  jsonEvents="path"
  labelWidth="Number"
  start="DateTime"
  style="CSS style specification"
  syncBands="Boolean"
  theme="Classic"
  timelineHeight="Number"
  xmlEvents="path">

    required child tag (1 to n):
    <cf_timelineband>
      optional child tag (0 to n):
      <cf_timelinehotzone />
    </cftimelineband>

    optional child tags (0 to n):
    <cf_timelineevent />
</cf_timeline>
```

See Also:

cf_timelineband, cf_timelinehotzone, cf_timelineevent

History:

4/2007: Created Tag

Attributes:

Attribute	Req/Opt	Default	Description
id	Required		A string to identify the timeline. Must be unique to all elements on the page.
bubbleHeight	Optional	200	Height of the event detail popup window (in px).

Attribute	Req/Opt	Default	Description
bubbleWidth	Optional	250	Width of the event detail popup window (in px).
creationComplete	Optional		The name of a JavaScript function to call once the event source is loaded. Do not use parenthesis or quotes.
jsonEvents	Optional		Path to an external file which contains an array of JSON Encoded events. The array must match the event structure listed in usage below.
labelWidth	Optional	250	Width of the event label on the timeline (in px).
start	Optional	#now()#	Date on which the timeline should be centered initially.
syncBands	Optional	true	Boolean value indicating whether or not all timeline bands should be synchronized. Specifying false means that each band will drag independently of each other.
theme	Optional	Classic	A packaged style to apply to the timeline. Currently the only available packaged theme is classic.
timelineHeight	Optional	150	Height of the timeline container (in px).
xmlEvents	Optional		Path to an external file which contains events in an XML structure. The structure must match the event structure listed in usage below.

Usage:

XML Event Structure:

When using an external XML file to plot events on the timeline you must follow the event structure listed here:

```
<?xml version="1.0" encoding="UTF-8"?>
<data>
  <event
    start="DateTime"
    latestStart="DateTime"
    earliestEnd="DateTime"
    end="DateTime"
    isDuration="Boolean"
    title="String"
    image="url"
    link="url"
    icon="url"
    color="Hex"
  />
</data>
```

```

        textColor="Hex">
            Event details here (some HTML allowed)...
    </event>
</data>

```

JSON Event Structure:

When using an external file to plot JSON encoded events the file must follow the event structure listed here:

```

{
  'dateTimeFormat': 'utf-8',

  'events' : [
    {
      'start': 'DateTime',
      'latestStart': 'DateTime',
      'earliestEnd': 'DateTime',
      'end': '04/02/2007 13:00',
      'isDuration': 'Boolean',
      'title': 'String',
      'description': 'String',
      'image': 'url',
      'link': 'url',
      'icon': 'url',
      'color': 'Hex',
      'textColor': 'Hex'
    }
  ]
}

```

JS Helpers:

Documentation moved to separate page. See page #11.

Example:

```

<input type="button" name="xmlBtn" value="load xml"
onclick="cfTimeline.loadXML(test,'xmlEvents.cfm?key=foo')">
<cf_timeline id="test" timelineHeight="200"
  xmlEvents="xmlEvents.cfm" start="#createdatetime(2007,4,2,12,0,0)#"
  style="font-size: 8pt; font-family: Trebuchet MS, Helvetica, Arial, sans serif;
border: 1px solid #aaa;">
  <cf_timelineband bandHeight="80" showEventText="true" dateUnit="month"
intervalWidth="75">
    </cf_timelineband>
    <cf_timelineband bandHeight="20" showEventText="false" dateUnit="year"
intervalWidth="50" highlight="true" trackHeight="0.5" trackGap="0.2">
      </cf_timelineband>
      <cf_timelineevent start="#now()#" title="Cool event!!!">
    </cf_timeline>

```

cf_timelineband

Description

Defines a band of a cf_timeline on which events are plotted.

Category

Display management.

Syntax

```
<cf_timelineband
  required
  bandHeight="Number"
  dateUnit="millisecond|second|minute|hour|day|week|month|year|decade|century|
millennium|era"
  intervalWidth="Number"
  optional
  highlight="Boolean"
  showEvents="Boolean"
  showEventText="Boolean"
  trackGap="Number"
  trackHeight="Number">

    optional child tag (0 to n):
    <cf_timelinehotzone />

</cf_timelineband>
```

See Also:

cf_timeline, cf_timelinehotzone, cf_timelineevent

History:

4/2007: Created Tag

Attributes:

Attribute	Req/Opt	Default	Description
bandHeight	Required		Percentage of the overall timeline height this band should consume. All cf_timelineband tags must total 100.
dateUnit	Required		Date unit to be used for the current band. Must be one of the following: "millisecond second minute hour day week month year decade century millennium era".
intervalWidth	Required		Width between each dateUnit interval (in px).

Attribute	Req/Opt	Default	Description
highlight	Optional	False	Boolean value which specifies whether the band should contain a highlighted section which is representative of the viewable area of the band above itself.
showEvents	Optional	True	Boolean value which specifies whether the event data should be plotted on the current band.
showEventText	Optional	True	Boolean value which specifies whether the event data's label text should be plotted on the current band. Commonly only the band representing the "detailed view" of the data events will display the event text.
trackGap	Optional		The number of em (dependent on the current font) to be left between adjacent tracks on which events are displayed.
trackHeight	Optional		The height of each track in em (dependent on the current font).

Usage:

The `cf_timelineband` will be rendered in the order in which they are nested under the `cf_timeline` tag. Most `cf_timeline` widgets will present a better user experience if at least two `cf_timelinebands` are used. Commonly the upper band will utilize an appropriate `dateUnit` for the data being displayed. The lower band will display the events (`showEvents="true"`) but not the event text (`showEventText="false"`). The lower band will typically be an incrementally larger `dateUnit` – however your usage will dictate the ultimate solution. For example if the upper band displayed hours, the lower band might likely display days or possibly weeks. There is no limit to the amount of bands you can use under a `cf_timeline`. **Note:** The `cf_timelineband` must be closed. If you are not specifying children you may self close the tag.

Example:

```
<input type="button" name="xmlBtn" value="load xml"
onclick="cfTimeline.loadXML(test,'xmlEvents.cfm?key=foo')">

<cf_timeline id="test" timelineHeight="200"
  xmlEvents="xmlEvents.cfm"
  start="#createdatetime(2007,4,2,12,0,0)#"
  style="font-size: 8pt; font-family: Trebuchet MS, Helvetica, Arial, sans serif;
border: 1px solid #aaa;">
  <cf_timelineband bandHeight="80" showEventText="true" dateUnit="month"
intervalWidth="75">
    </cf_timelineband>
    <cf_timelineband bandHeight="20" showEventText="false" dateUnit="year"
intervalWidth="50" highlight="true" trackHeight="0.5" trackGap="0.2">
      </cf_timelineband>
      <cf_timelineevent start="#now()#" title="Cool event!!!">
    </cf_timelineevent>
  </cf_timeline>
```

cf_timelinehotzone

Description

Defines a 'hot zone' within a cf_timelineband. A 'hot zone' can alter the current bands dateUnit – giving the effect of 'zooming in' on a cluster of events.

Category

Display management.

Syntax

```
<cf_timelinehotzone
  required
  start="DateTime"
  dateUnit="millisecond|second|minute|hour|day|week|month|year|decade|century|
millennium|era"
  end="DateTime"
  magnification="Number"
  optional
  multiple="Number">
</cf_timelinehotzone>
```

See Also:

cf_timeline, cf_timelineband, cf_timelineevent

History:

4/2007: Created Tag

Attributes:

Attribute	Req/Opt	Default	Description
start	Required		DateTime on which the hot zone begins.
dateUnit	Required		Date unit to be used for the current hot zone. Must be one of the following: "millisecond second minute hour day week month year decade century millennium era".
end	Required		DateTime on which the hot zone ends.
magnification	Required		Number specifying the magnification of the timeline in this zone. A number greater than 1 causes more pixels to be mapped to the same interval, resulting in a zoom-in effect.
multiple	Optional		A label is painted for every multiple of dateUnit. For example, if dateUnit is minute and multiple is 15, then there is a label for every 15 minutes (I.E.- 15, 30, 45, etc).

Usage:

The `cf_timelinehotzone` is best suited for displaying static data. It would be difficult to determine the appropriate hot zones with dynamic data on the fly. When using the `cf_timelinehotzone` you would likely need to create several overlapping `cf_timelinehotzone` areas within a `cf_timelineband` to zoom from a high level `dateUnit` (year) to a very detailed `dateUnit` (day). See Example.

Example:

```
<input type="button" name="xmlBtn" value="load xml"
onclick="cfTimeline.loadXML(test,'xmlEvents.cfm?key=foo') ">

<cf_timeline
    id="test"
    timelineHeight="200"
    xmlEvents="xmlEvents.cfm"
    start="#createdatetime(2007,4,2,12,0,0)#"
    style="font-size: 8pt; font-family: Trebuchet MS, Helvetica, Arial, sans
serif; border: 1px solid #aaa;">

    <cf_timelineband bandHeight="80" showEventText="true" showEvents="true"
dateUnit="month" intervalWidth="75">
        <!-- break down april into weeks -->
        <cf_timelinehotzone start="#createDateTime(2007,4,1,12,0,0)#"
end="#createDateTime(2007,5,1,12,0,0)#" dateUnit="week" magnification="10" />
    </cf_timelineband>

    <cf_timelineband bandHeight="20" showEventText="false" dateUnit="year"
intervalWidth="50" highlight="true" trackHeight="0.5" trackGap="0.2">
    </cf_timelineband>

    <cf_timelineevent start="#now()#" title="Cool event!!!">
</cf_timeline>
```


cf_timelineevent

Description

Defines an event to be plotted on a cf_timeline.

Category

Display management.

Syntax

```
<cf_timelineevent
  required
  start="DateTime"
  title="String"
  optional
  color="Hex"
  description="String"
  earliestEnd="DateTime"
  end="DateTime"
  icon="url"
  image="url"
  isDuration="Boolean"
  link="url"
  textColor="Hex">
</cf_timelineevent>
```

See Also:

cf_timeline, cf_timelineband, cf_timelinehotzone

History:

4/2007: Created Tag

Attributes:

Attribute	Req/Opt	Default	Description
color	Optional		Hex value used to fill events that have a duration.
description	Optional		The text that will be displayed in the event detail popup when an event is clicked.
earliestEnd	Optional		If an exact end date is not known specify an earliestEnd.
end	Optional		DateTime on which the event ends.
icon	Optional		URL to an image that will be displayed next to the event title on the timeline. (Be careful with large images. They may not display).

Attribute	Req/Opt	Default	Description
image	Optional		URL to an image that will be displayed next to the title text in the event detail popup.
isDuration	Optional	False	Boolean value specifying if this event has both a start and an end.
link	Optional		URL that the event bubbles title text will become a hyperlink to.
start	Required		DateTime on which the event starts.
title	Required		String title for the event detail popup.
textColor	Optional		Hex value used to color the event label on the timeline.

Usage:

The `cf_timelineevent` can be used instead of an external XML or JSON encoded file to plot events on a `cf_timeline`.

Example:

```
<cf_timeline
    id="test"
    timelineHeight="200"
    start="#createDateTime(2007,4,2,12,0,0)#"
    style="font-size: 8pt; font-family: Trebuchet MS, Helvetica, Arial, sans
serif; border: 1px solid #aaa;">

    <cf_timelineband bandHeight="80" showEventText="true" showEvents="true"
dateUnit="month" intervalWidth="75">
        <!-- break down april into weeks -->
        <cf_timelinehotzone start="#createDateTime(2007,4,1,12,0,0)#"
end="#createDateTime(2007,5,1,12,0,0)#" dateUnit="week" magnification="10" />
    </cf_timelineband>

    <cf_timelineband bandHeight="20" showEventText="false" dateUnit="year"
intervalWidth="50" highlight="true" trackHeight="0.5" trackGap="0.2">
    </cf_timelineband>

    <cf_timelineevent start="#createDateTime(2007,4,15,12,0,0)#"
        title="lunch" icon="heart.jpg" description="Eat a nice sandwich." />
    <cf_timelineevent start="#createDateTime(2007,4,15,13,0,0)#"
        title="take over the world" link="http://cfsilence.com"
        textColor="##cc0000" icon="globe.jpg"
        description="lorem ipsum lorem ipsum lorem ipsum lorem"
        image="exclamation.jpg" />
</cf_timeline>
```

JavaScript Functions For cf_timeline

These utility functions will allow you to dynamically reload the events on a timeline.

Function:

`cfTimeline.loadXML(id,src, func)`

Description:

This function will load a new XML data set into the timeline.

Parameters:

id = id of the timeline to load events into

src = src of the XML containing the event data

func = function to call when data is done loading (pass function name only – see example)

Function:

`cfTimeline.loadJSON(id,src,func)`

Description:

This function will load a new JSON data set into the timeline.

Parameters:

id = id of the timeline to load events into

src = src of the JSON encoded event data

func = function to call when data is done loading (pass function name only – see example)

Function:

`cfTimeline.clearTimeline()`

Description:

This function will clear all events that are currently loaded on the timeline.

Parameters:

None.

Function:

`cfTimeline.setCenterVisibleDate(id,band,date)`

Description:

This function will center the timeline on the date passed to the function by jumping directly to the date without scrolling.

Parameters:

id = id of the timeline

band = numerical index of a timelineband of which the event lies within (if you have multiple bands that display events pass the index of any band). **Note: The index is zero-based.**

Function:

cfTimeline.scrollToCenter(id,band,date)

Description:

This function will center the timeline on the date passed to the function by scrolling the timeline until it reaches the date.

Parameters:

id = id of the timeline

band = numerical index of a timelineband of which the event lies within (if you have multiple bands that display events pass the index of any band). Note: The index is zero-based.

Function:

cfTimeline.getLatestDate(id,band)

Description:

This function will return the latest date that is currently plotted on the timelineband.

Parameters:

id = id of the timeline

band = numerical index of a timelineband of which the event lies within (if you have multiple bands that display events pass the index of any band). **Note: The index is zero-based.**

Function:

cfTimeline.getEarliestDate(id,band)

Description:

This function will return the earliest date that is currently plotted on the timelineband.

Parameters:

id = id of the timeline

band = numerical index of a timelineband of which the event lies within (if you have multiple bands that display events pass the index of any band). **Note: The index is zero-based.**