 [Chart.js](http://docs.google.com/docs/3.9.1/)

[Home](http://docs.google.com/docs/3.9.1/)

[API](http://docs.google.com/docs/3.9.1/api/)

[Samples](http://docs.google.com/docs/3.9.1/samples/)

Ecosystem Ecosystem

* [Awesome (opens new window)](https://github.com/chartjs/awesome)
* [Slack (opens new window)](https://chartjs-slack.herokuapp.com/)
* [Stack Overflow (opens new window)](https://stackoverflow.com/questions/tagged/chart.js)

[GitHub (opens new window)](https://github.com/chartjs/Chart.js)

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* API
  + [Exports](http://docs.google.com/docs/3.9.1/api/)
  + Enumerations
  + Classes
  + Interfaces
    - [ActiveDataPoint](http://docs.google.com/docs/3.9.1/api/interfaces/ActiveDataPoint.html)
    - [ActiveElement](http://docs.google.com/docs/3.9.1/api/interfaces/ActiveElement.html)
    - [AnimationEvent](http://docs.google.com/docs/3.9.1/api/interfaces/AnimationEvent.html)
    - [ArcBorderRadius](http://docs.google.com/docs/3.9.1/api/interfaces/ArcBorderRadius.html)
    - [ArcElement](http://docs.google.com/docs/3.9.1/api/interfaces/ArcElement.html)
    - [ArcHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/ArcHoverOptions.html)
    - [ArcOptions](http://docs.google.com/docs/3.9.1/api/interfaces/ArcOptions.html)
    - [ArcProps](http://docs.google.com/docs/3.9.1/api/interfaces/ArcProps.html)
    - [BarControllerChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/BarControllerChartOptions.html)
    - [BarControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/BarControllerDatasetOptions.html)
    - [BarElement](http://docs.google.com/docs/3.9.1/api/interfaces/BarElement.html)
    - [BarHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/BarHoverOptions.html)
    - [BarOptions](http://docs.google.com/docs/3.9.1/api/interfaces/BarOptions.html)
    - [BarProps](http://docs.google.com/docs/3.9.1/api/interfaces/BarProps.html)
    - [BorderRadius](http://docs.google.com/docs/3.9.1/api/interfaces/BorderRadius.html)
    - [BubbleControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/BubbleControllerDatasetOptions.html)
    - [BubbleDataPoint](http://docs.google.com/docs/3.9.1/api/interfaces/BubbleDataPoint.html)
    - [CartesianScaleOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CartesianScaleOptions.html)
    - [CartesianScaleTypeRegistry](http://docs.google.com/docs/3.9.1/api/interfaces/CartesianScaleTypeRegistry.html)
    - [ChartArea](http://docs.google.com/docs/3.9.1/api/interfaces/ChartArea.html)
    - [ChartComponent](http://docs.google.com/docs/3.9.1/api/interfaces/ChartComponent.html)
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    - [ChartConfigurationCustomTypesPerDataset](http://docs.google.com/docs/3.9.1/api/interfaces/ChartConfigurationCustomTypesPerDataset.html)
    - [ChartData](http://docs.google.com/docs/3.9.1/api/interfaces/ChartData.html)
    - [ChartDataCustomTypesPerDataset](http://docs.google.com/docs/3.9.1/api/interfaces/ChartDataCustomTypesPerDataset.html)
    - [ChartDatasetProperties](http://docs.google.com/docs/3.9.1/api/interfaces/ChartDatasetProperties.html)
    - [ChartDatasetPropertiesCustomTypesPerDataset](http://docs.google.com/docs/3.9.1/api/interfaces/ChartDatasetPropertiesCustomTypesPerDataset.html)
    - [ChartEvent](http://docs.google.com/docs/3.9.1/api/interfaces/ChartEvent.html)
    - [ChartTypeRegistry](http://docs.google.com/docs/3.9.1/api/interfaces/ChartTypeRegistry.html)
    - [CommonElementOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CommonElementOptions.html)
    - [CommonHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CommonHoverOptions.html)
    - [ComplexFillTarget](http://docs.google.com/docs/3.9.1/api/interfaces/ComplexFillTarget.html)
    - [ControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/ControllerDatasetOptions.html)
    - [CoreChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CoreChartOptions.html)
    - [CoreInteractionOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CoreInteractionOptions.html)
    - [CoreScaleOptions](http://docs.google.com/docs/3.9.1/api/interfaces/CoreScaleOptions.html)
    - [DatasetControllerChartComponent](http://docs.google.com/docs/3.9.1/api/interfaces/DatasetControllerChartComponent.html)
    - [DateAdapter](http://docs.google.com/docs/3.9.1/api/interfaces/DateAdapter.html)
    - [Defaults](http://docs.google.com/docs/3.9.1/api/interfaces/Defaults.html)
    - [DoughnutAnimationOptions](http://docs.google.com/docs/3.9.1/api/interfaces/DoughnutAnimationOptions.html)
    - [DoughnutController](http://docs.google.com/docs/3.9.1/api/interfaces/DoughnutController.html)
    - [DoughnutControllerChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/DoughnutControllerChartOptions.html)
    - [DoughnutControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/DoughnutControllerDatasetOptions.html)
    - [DoughnutMetaExtensions](http://docs.google.com/docs/3.9.1/api/interfaces/DoughnutMetaExtensions.html)
    - [Element](http://docs.google.com/docs/3.9.1/api/interfaces/Element.html)
    - [ElementOptionsByType](http://docs.google.com/docs/3.9.1/api/interfaces/ElementOptionsByType.html)
    - [ExtendedPlugin](http://docs.google.com/docs/3.9.1/api/interfaces/ExtendedPlugin.html)
    - [FillerControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/FillerControllerDatasetOptions.html)
    - [FillerOptions](http://docs.google.com/docs/3.9.1/api/interfaces/FillerOptions.html)
    - [FontSpec](http://docs.google.com/docs/3.9.1/api/interfaces/FontSpec.html)
    - [GridLineOptions](http://docs.google.com/docs/3.9.1/api/interfaces/GridLineOptions.html)
    - [InteractionItem](http://docs.google.com/docs/3.9.1/api/interfaces/InteractionItem.html)
    - [InteractionModeMap](http://docs.google.com/docs/3.9.1/api/interfaces/InteractionModeMap.html)
    - [InteractionOptions](http://docs.google.com/docs/3.9.1/api/interfaces/InteractionOptions.html)
    - [LayoutItem](http://docs.google.com/docs/3.9.1/api/interfaces/LayoutItem.html)
    - [LegendElement](http://docs.google.com/docs/3.9.1/api/interfaces/LegendElement.html)
    - [LegendItem](http://docs.google.com/docs/3.9.1/api/interfaces/LegendItem.html)
    - [LegendOptions](http://docs.google.com/docs/3.9.1/api/interfaces/LegendOptions.html)
    - [LineControllerChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/LineControllerChartOptions.html)
    - [LineControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/LineControllerDatasetOptions.html)
    - [LineElement](http://docs.google.com/docs/3.9.1/api/interfaces/LineElement.html)
    - [LineHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/LineHoverOptions.html)
    - [LineOptions](http://docs.google.com/docs/3.9.1/api/interfaces/LineOptions.html)
    - [LineProps](http://docs.google.com/docs/3.9.1/api/interfaces/LineProps.html)
    - [ParsingOptions](http://docs.google.com/docs/3.9.1/api/interfaces/ParsingOptions.html)
    - [Plugin](http://docs.google.com/docs/3.9.1/api/interfaces/Plugin.html)
    - [PluginChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PluginChartOptions.html)
    - [PluginOptionsByType](http://docs.google.com/docs/3.9.1/api/interfaces/PluginOptionsByType.html)
    - [Point](http://docs.google.com/docs/3.9.1/api/interfaces/Point.html)
    - [PointElement](http://docs.google.com/docs/3.9.1/api/interfaces/PointElement.html)
    - [PointHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PointHoverOptions.html)
    - [PointOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PointOptions.html)
    - [PointPrefixedHoverOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PointPrefixedHoverOptions.html)
    - [PointPrefixedOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PointPrefixedOptions.html)
    - [PointProps](http://docs.google.com/docs/3.9.1/api/interfaces/PointProps.html)
    - [PolarAreaController](http://docs.google.com/docs/3.9.1/api/interfaces/PolarAreaController.html)
    - [PolarAreaControllerChartOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PolarAreaControllerChartOptions.html)
    - [PolarAreaControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/PolarAreaControllerDatasetOptions.html)
    - [RadarControllerDatasetOptions](http://docs.google.com/docs/3.9.1/api/interfaces/RadarControllerDatasetOptions.html)
    - [RadialLinearScale](http://docs.google.com/docs/3.9.1/api/interfaces/RadialLinearScale.html)
    - [RadialScaleTypeRegistry](http://docs.google.com/docs/3.9.1/api/interfaces/RadialScaleTypeRegistry.html)
    - [Registry](http://docs.google.com/docs/3.9.1/api/interfaces/Registry.html)
    - [ScaleTypeRegistry](http://docs.google.com/docs/3.9.1/api/interfaces/ScaleTypeRegistry.html)
    - [ScatterDataPoint](http://docs.google.com/docs/3.9.1/api/interfaces/ScatterDataPoint.html)
    - [ScriptableCartesianScaleContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableCartesianScaleContext.html)
    - [ScriptableChartContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableChartContext.html)
    - [ScriptableContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableContext.html)
    - [ScriptableLineSegmentContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableLineSegmentContext.html)
    - [ScriptableScaleContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableScaleContext.html)
    - [ScriptableScalePointLabelContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableScalePointLabelContext.html)
    - [ScriptableTooltipContext](http://docs.google.com/docs/3.9.1/api/interfaces/ScriptableTooltipContext.html)
    - [Segment](http://docs.google.com/docs/3.9.1/api/interfaces/Segment.html)
    - [Tick](http://docs.google.com/docs/3.9.1/api/interfaces/Tick.html)
    - [TickOptions](http://docs.google.com/docs/3.9.1/api/interfaces/TickOptions.html)
    - [TimeScale](http://docs.google.com/docs/3.9.1/api/interfaces/TimeScale.html)
    - [TitleOptions](http://docs.google.com/docs/3.9.1/api/interfaces/TitleOptions.html)
    - [Tooltip](http://docs.google.com/docs/3.9.1/api/interfaces/Tooltip.html)
    - [TooltipCallbacks](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipCallbacks.html)
    - [TooltipItem](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipItem.html)
    - [TooltipLabelStyle](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipLabelStyle.html)
    - [TooltipModel](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipModel.html)
    - [TooltipOptions](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipOptions.html)
    - [TooltipPosition](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipPosition.html)
    - [TooltipPositionerMap](http://docs.google.com/docs/3.9.1/api/interfaces/TooltipPositionerMap.html)
    - [TypedRegistry](http://docs.google.com/docs/3.9.1/api/interfaces/TypedRegistry.html)
    - [VisualElement](http://docs.google.com/docs/3.9.1/api/interfaces/VisualElement.html)

[**#**](#gjdgxs) Interface: LayoutItem

## [**#**](#30j0zll) Hierarchy

* **LayoutItem**  
  ↳ [Scale](http://docs.google.com/docs/3.9.1/api/classes/Scale.html)  
  ↳ [LegendElement](http://docs.google.com/docs/3.9.1/api/interfaces/LegendElement.html)

## [**#**](#1fob9te) Properties

### [**#**](#3znysh7) bottom

• **bottom**: number

Bottom edge of the item. Set by layout system and cannot be used in update

#### [**#**](#2et92p0) Defined in

[layout.d.ts:41 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L41)

### [**#**](#tyjcwt) fullSize

• **fullSize**: boolean

if true, and the item is horizontal, then push vertical boxes down

#### [**#**](#3dy6vkm) Defined in

[layout.d.ts:17 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L17)

### [**#**](#1t3h5sf) height

• **height**: number

Height of item. Must be valid after update()

#### [**#**](#4d34og8) Defined in

[layout.d.ts:25 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L25)

### [**#**](#2s8eyo1) left

• **left**: number

Left edge of the item. Set by layout system and cannot be used in update

#### [**#**](#17dp8vu) Defined in

[layout.d.ts:29 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L29)

### [**#**](#3rdcrjn) position

• **position**: [LayoutPosition](http://docs.google.com/docs/3.9.1/api/#layoutposition)

The position of the item in the chart layout. Possible values are

#### [**#**](#26in1rg) Defined in

[layout.d.ts:9 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L9)

### [**#**](#lnxbz9) right

• **right**: number

Right edge of the item. Set by layout system and cannot be used in update

#### [**#**](#35nkun2) Defined in

[layout.d.ts:37 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L37)

### [**#**](#1ksv4uv) top

• **top**: number

Top edge of the item. Set by layout system and cannot be used in update

#### [**#**](#44sinio) Defined in

[layout.d.ts:33 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L33)

### [**#**](#2jxsxqh) weight

• **weight**: number

The weight used to sort the item. Higher weights are further away from the chart area

#### [**#**](#z337ya) Defined in

[layout.d.ts:13 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L13)

### [**#**](#3j2qqm3) width

• **width**: number

Width of item. Must be valid after update()

#### [**#**](#1y810tw) Defined in

[layout.d.ts:21 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L21)

## [**#**](#4i7ojhp) Methods

### [**#**](#2xcytpi) beforeLayout

▸ Optional **beforeLayout**(): void

Called before the layout process starts

#### [**#**](#1ci93xb) Returns

void

#### [**#**](#3whwml4) Defined in

[layout.d.ts:46 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L46)

### [**#**](#2bn6wsx) draw

▸ **draw**(chartArea): void

Draws the element

#### [**#**](#qsh70q) Parameters

| Name | Type |
| --- | --- |
| chartArea | [ChartArea](http://docs.google.com/docs/3.9.1/api/interfaces/ChartArea.html) |

#### [**#**](#3as4poj) Returns

void

#### [**#**](#1pxezwc) Defined in

[layout.d.ts:50 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L50)

### [**#**](#49x2ik5) getPadding

▸ Optional **getPadding**(): [ChartArea](http://docs.google.com/docs/3.9.1/api/interfaces/ChartArea.html)

Returns an object with padding on the edges

#### [**#**](#2p2csry) Returns

[ChartArea](http://docs.google.com/docs/3.9.1/api/interfaces/ChartArea.html)

#### [**#**](#147n2zr) Defined in

[layout.d.ts:54 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L54)

### [**#**](#3o7alnk) isHorizontal

▸ **isHorizontal**(): boolean

returns true if the layout item is horizontal (ie. top or bottom)

#### [**#**](#23ckvvd) Returns

boolean

#### [**#**](#ihv636) Defined in

[layout.d.ts:58 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L58)

### [**#**](#32hioqz) update

▸ **update**(width, height, margins?): void

Takes two parameters: width and height.

#### [**#**](#1hmsyys) Parameters

| Name | Type |
| --- | --- |
| width | number |
| height | number |
| margins? | [ChartArea](http://docs.google.com/docs/3.9.1/api/interfaces/ChartArea.html) |

#### [**#**](#41mghml) Returns

void

#### [**#**](#2grqrue) Defined in

[layout.d.ts:64 (opens new window)](https://github.com/chartjs/Chart.js/blob/5ea4b3a/types/layout.d.ts#L64)

←  [InteractionOptions](http://docs.google.com/docs/3.9.1/api/interfaces/InteractionOptions.html)   [LegendElement](http://docs.google.com/docs/3.9.1/api/interfaces/LegendElement.html)  →