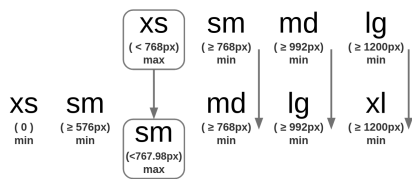


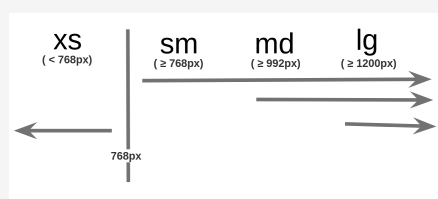
Mapping Bootstrap 3 into Bootstrap 4



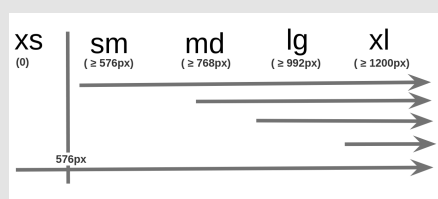
Varbase Media Mapping responsive images

Bootstrap 3	Bootstrap 4
XS max (< 768px)	SM max (< 767.98px)
SM min (>= 768px)	MD min (>= 768px)
MD min (>=992px)	LG min (>= 992px)
LG min (>=1200px)	XL min (>= 1200px)

Bootstrap 3 Breakpoints



Bootstrap 4 Breakpoints



Shifted Bootstrap 4 Breakpoints

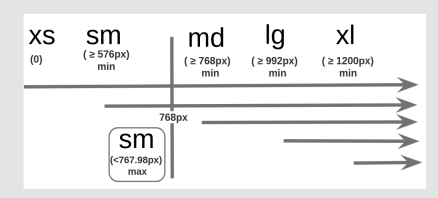


Image classes in Bootstrap 4

Bootstrap 3	Bootstrap 4
.img-responsive	.img-fluid
.img-circle	.rounded-circle
.img-rounded	.rounded

Directions in Bootstrap 4

Bootstrap 3	Bootstrap 4
.pull-right	.float-right
.pull-left	.float-left

Visibility classes in Bootstrap 4

Bootstrap 3	Bootstrap 4
.hidden-xs	.d-none
.hidden-sm	.d-sm-none
.hidden-md	.d-md-none
.hidden-lg	.d-lg-none
.visible-xs	.d-block.d-sm-none
.visible-sm	.d-none.d-sm-block.d-md-none
.visible-md	.d-none.d-md-block.d-lg-none
.visible-lg	.d-none.d-lg-block.d-xl-none

Form elements in Bootstrap 4

Bootstrap 3	Bootstrap 4
.btn-default	.btn-secondary
.form-horizontal	(removed)
.radio	.form-check
.checkbox	.form-check
.input-lg	.form-control-lg
.input-sm	.form-control-sm
.control-label	.col-form-label
.help-block	.form-text
.label	.badge
.tooltip	.bs-tooltip

Table and page in Bootstrap 4

Bootstrap 3	Bootstrap 4
.table-condensed	.table-sm
.pagination > li	.page-item
.pagination > li > a	.page-link

Panel to Card in Bootstrap 4

Bootstrap 3	Bootstrap 4
.panel	.card
.panel-heading	.card-header
.panel-title	.card-title
.panel-body	.card-body
.panel-footer	.card-footer
.panel-primary	.card.bg-primary.text-white
.panel-success	.card.bg-success.text-white
.panel-info	.card.text-white.bg-info
.panel-warning	.card.bg-warning
.panel-danger	.card.bg-danger.text-white
.well	.card.card-body
.thumbnail	.card.card-body
.item	.carousel-item

A tool to help convert to Bootstrap 4

<https://upgrade-bootstrap.bootply.com>

Created by Vardot



<http://www.vardot.com>



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New CSS classes with Bootstrap 4

- .d-flex
- .no-gutter
- .toast
- .d-print-*
- .spinner-border
- .bg-* with colors for background
- .d-* many variants to display
- .embed-responsive-21by9
- .embed-responsive-1by1
- .justify-content-* for start, end, center ... with flex
- .shadow
- .row-cols** classes for quickly specifying the number of columns across breakpoints. This one is huge for those of you who have asked for responsive card decks.

Text Display size in Bootstrap 4

- display-1
- display-2
- display-3
- display-4

Orders in Bootstrap 4

- .order-first
- .order-last
- .order-0
- .order-1
- .order-2
- .order-3
- .order-4
- .order-5
- .order-6
- .order-7
- .order-8

Orders in Bootstrap 4 (cont)

- .order-9
- .order-10
- .order-11
- .order-12
- Add sm, md, lg, xl to change order with responsive

Printing

- .d-print- *The class would overrule any other .d- class.*
- They are the same as the screen display

Removed from Bootstrap 4

- Glyph icons Halflings (No icon libraries)

Buttons in Bootstrap 4

Primary	btn btn-primary
Secondary	btn btn-secondary
Success	btn btn-success
Danger	btn btn-danger
Warning	btn btn-warning
Info	btn btn-info
Light	btn btn-light
Dark	btn btn-dark
Link	btn btn-link

Dark and **Light** are new, they cascaded in all BS4 components CSS classes

Border and Rounded in Bootstrap 4

- .border
- .border-left
- .border-right
- .border-top
- .border-bottom
- .border-0** reset borders
- .border-top-0
- .border-right-0

Border and Rounded in Bootstrap 4 (cont)

- .border-bottom-0
- .border-left-0
- .rounded
- .rounded-top
- .rounded-right
- .rounded-bottom
- .rounded-left
- .rounded-sm
- .rounded-lg
- .rounded-circle
- .rounded-pill
- .rounded-0** reset rounding

Changed in Vartheme BS4

Vartheme BS3	Vartheme BS4
bootstrap-print	Bootstrap 4 Print classes d-print-*
bootstrap-no-spacing	Bootstrap 4 Spacing classes m, p
Varbase Bootstrap Paragraphs colors	Varbase Bootstrap Paragraphs colors
.bg-edge2edge	.bg-edge2edge
.bs-callout	.bs-callout
.vb-tags	.vb-tags
.equal-height	.equal-height
Custom BS3 card component	Bootstrap 4 Card classes
Bootstrap-RTL	Minimal RTL with Bootstrap4

New with Vartheme BS4

Responsive Font Sizes (RFS)

<https://github.com/twbs/rfs>



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New with Vartheme BS4 (cont)

Use the front-size() mixin

Do not use

font-size: 18px;

use

font-size(18px);

<https://github.com/twbs/rfs/blob/v10/scss.scss>

Do not use with Vartheme BS4

Not to use any old Bootstrap 3 classes
Some of them will work, but they are for old sites only.

https://github.com/Vardot/vartheme_bs4/blob/8.x-6.x/scss/aliases.scss

Bootstrap 4 resource

Default CSS build Bootstrap 4

<https://github.com/twbs/bootstrap/blob/v4.4.0/dist/css/bootstrap.css>

Default SCSS variables

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/_variables.scss

Default SCSS mixins

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/_mixins.scss

Bootstrap 3 resources

Default CSS build Bootstrap 3

<https://github.com/twbs/bootstrap/blob/v3.4.1/dist/css/bootstrap.css>

Default LESS variables

<https://github.com/twbs/bootstrap/blob/v3.4.1/less/variables.less>

Default LESS mixins

<https://github.com/twbs/bootstrap/blob/v3.4.1/less/mixins.less>

Utility Mixines : Breakpoint sizes

breakpoint-next : Name of the next breakpoint, or null for the last breakpoint.

breakpoint-min : Minimum breakpoint width. Null for the smallest (first) breakpoint.

breakpoint-max : Maximum breakpoint width. Null for the largest (last) breakpoint.

breakpoint-infix : Returns a blank string if smallest breakpoint, otherwise returns the name with a dash in front. Useful for making responsive utilities.

media-breakpoint-up : Media of at least the minimum breakpoint width. No query for the smallest breakpoint.

media-breakpoint-down : Media of at most the maximum breakpoint width. No query for the largest breakpoint.

media-breakpoint-between : Media that spans multiple breakpoint widths.

media-breakpoint-only : Media between the breakpoint's minimum and maximum widths.

Breakpoint viewport sizes and media queries.

Breakpoints are defined as a map of (name: minimum width), order from small to large: (xs: 0, sm: 576px, md: 768px, lg: 992px, xl: 1200px)

The map defined in the `$grid-breakpoints` global variable is used as the `$breakpoints` argument by default.

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_breakpoints.scss

Utility Mixines : Clearfix

`clearfix`

Use this mixin, do not redo that in each needed calls, just call the mixin

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_clearfix.scss

Utility Mixines : Border radius

`border-radius($radius: $border-radius, $fallback-border-radius: false)`

`border-top-radius($radius)`

`border-right-radius($radius)`

`border-bottom-radius($radius)`

`border-left-radius($radius)`

`border-top-left-radius($radius)`

`border-top-right-radius($radius)`

`border-bottom-right-radius($radius)`

`border-bottom-left-radius($radius)`

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_border-radius.scss

Utility Mixines : Gradients

`gradient-bg($color)`

gradient-x : Horizontal gradient, from left to right

Creates two color stops, start and end, by specifying a color and position for each color stop.

gradient-y : Vertical gradient, from top to bottom

Creates two color stops, start and end, by specifying a color and position for each color stop.

`gradient-directional`

`gradient-x-three-colors`

`gradient-y-three-colors`

`gradient-radial`

`gradient-striped`

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_gradients.scss

Utility Mixines : Box Shadow

`box-shadow($shadow...)`

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_box-shadow.scss



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Utility Mixins : Hover

hover

hover-focus

plain-hover-focus

hover-focus-active

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_hover.scss

Utility Mixins : Background variant

bg-variant \$parent, \$color

bg-gradient-variant \$parent, \$color

Contextual backgrounds

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_background-variant.scss

Utility Mixins : Alert

alert-variant \$background, \$border, \$color

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_alert.scss

Utility Mixins : Badge

badge-variant \$bg

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_badge.scss

Utility Mixins : Button variants

button-variant

button-outline-variant

button-size

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_buttons.scss

Utility Mixins : Caret

caret(\$direction: down)

caret-down

caret-up

caret-right

caret-left

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_caret.scss

Created by Vardot

vardot

<http://www.vardot.com>

Utility Mixins : Form control state

form-control-focus

form-validation-state

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_forms.scss

Utility Mixins : Deprecate

deprecate(\$name, \$deprecate-version, \$remove-version, \$ignore-warning: false)

This mixin can be used to deprecate mixins or functions.

\$enable-deprecation-messages is a global variable, \$ignore-warning is a variable that can be passed to some deprecated mixins to suppress the warning (for example if the mixin is still be used in the current version of Bootstrap)
https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_deprecate.scss

Utility Mixins : Image

img-fluid Responsive image

img-retina Retina image

Utility Mixins : Resizable

resizable Resize anything

https://github.com/twbs/bootstrap/blob/v4.4.0/scss/mixins/_resize.scss#L3



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