Window.getComputedStyle()

The window.getcomputedstyle() method returns an object containing the values of all CSS properties of an element, after applying active stylesheets and resolving any basic computation those values may contain. Individual CSS property values are accessed through APIs provided by the object, or by indexing with CSS property names.

Syntax

```
var style = window.getComputedStyle(element [, pseudoElt]);
element
    The Element for which to get the computed style.
pseudoEltOptional
    A string specifying the pseudo-element to match. Omitted (or null) for real elements.
```

The returned style is a live casstyle peclaration object, which updates automatically when the element's styles are changed.

Throws

TypeError

If the passed object is not an Element or the pseudoElt is not a valid pseudo-element selector or is ::part() or ::slotted().

Note: Valid pseudo-element selector refers to syntactic validity, e.g. ::unsupported is considered valid, even though the pseudo-element itself is not supported.

Examples

In this example we style a $\leq p \geq$ element, then retrieve those styles using getComputedStyle(), and print them into the text content of the $\leq p >$.

HTML

Hello

CSS

```
p {
  width: 400px;
  margin: 0 auto;
  padding: 20px;
  font: 2rem/2 sans-serif;
  text-align: center;
  background: purple;
  color: white;
```

JavaScript

```
let para = document.querySelector('p');
let compStyles = window.getComputedStyle(para);
para.textContent = 'My computed font-size is ' +
compStyles.getPropertyValue('font-size') +
',\nand my computed line-height is ' +
compStyles.getPropertyValue('line-height') +
'.';
```

Result

Description

The returned object is the same CSSStyleDeclaration type as the object returned from the element's Style property. However, the two objects have different purposes:

- The object from <code>getComputedStyle</code> is read-only, and should be used to inspect the element's style including those set by a <code>style</code> element or an external stylesheet.
- The element.style object should be used to **set** styles on that element, or inspect styles directly added to it from JavaScript manipulation or the global style attribute.

The first argument must be an Element. non-elements, like a Text node, will throw an error.

defaultView

In many code samples, <code>getComputedStyle</code> is used from the <code>document.defaultView</code> object. In nearly all cases, this is needless, as <code>getComputedStyle</code> exists on the <code>window</code> object as well. It's likely the <code>defaultView</code> pattern was a combination of folks not wanting to write a testing spec for <code>window</code> and making an API that was also usable in Java.

Use with pseudo-elements

 ${\tt getComputedStyle} \ can \ pull \ style \ info \ from \ pseudo-elements \ (such \ as :: {\tt after}, :: {\tt before}, :: {\tt marker}, :: {\tt line-marker} - {\tt see} \ \underline{the} \ \underline{pseudo-element} \ \underline{spec}).$

```
<style>
h3::after {
    content: ' rocks!';
} </style>
<h3>Generated content</h3>
<script>
    var h3 = document.guerySelector('h3');
```

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```
var result = getComputedStyle(h3, ':after').content;
console.log('the generated content is: ', result);
</script>
```

Notes

- The returned CSSStyleDeclaration object contains active values for CSS property longhand names. For example, border=bottom=width instead of the border-width and border shorthand property names. It is safest to query values with only longhand names like font size. Shorthand names like font will not work with most browsers.
- CSS property values may be accessed using the getPropertyValue (propName) API or by indexing directly into the object such as obj['z-index'] or obj.zIndex.
- The values returned by <code>getComputedStyle</code> are <code>resolved_values</code>. These are usually the same as CSS 2.1's <code>computed_values</code>, but for some older properties like <code>width</code>, <code>height</code>, or <code>padding</code>, they are instead the same as <code>used_values</code>. Originally, CSS 2.0 defined the <code>computed values</code> as the "ready to be used" final values of properties after cascading and inheritance, but CSS 2.1 redefined them as pre-layout, and <code>used values</code> as post-layout. For CSS 2.0 properties, <code>getComputedStyle</code> returns the old meaning of computed values, now called <code>used values</code>. An example difference between pre- and post-layout values includes the resolution of percentages for <code>width</code> or <code>height</code>, as those will be replaced by their pixel equivalent only for <code>used values</code>.
- Returned values are sometimes deliberately inaccurate. To avoid the "CSS History Leak" security issue, browsers may lie about the computed styles for a visited link, returning values as if the user never visited the linked URL. See <u>Plugging the CSS History Leak</u> and <u>Privacy-related changes coming to CSS :visited</u> for examples of how this is implemented.
- During CSS transitions, getComputedStyle returns the original property value in Firefox, but the final property value in WebKit.
- In Firefox, properties with the value auto return the used value, not the value auto. So if you apply top:auto and bottom:0 on an element with height:30px and a containing block of height:100px, Firefox's computed style for top returns 70px, as 100 30 = 70.

Specifications

Specification	Status	Comment
CSS Object Model (CSSOM) The definition of 'getComputedStyle()' in that specification.	Working Draft	
Document Object Model (DOM) Level 2 Style Specification The definition of 'getComputedStyle()' in that specification.	Obsolete	Initial definition

Browser compatibility

The compatibility table in this page is generated from structured data. If you'd like to contribute to the data, please check out https://github.com/mdn/browser-compat-data and send us a pull request.

Update compatibility data on GitHub

	Desktop						Mobile			
	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari	Android webview	Chrome for Android	Firefox for Android	Oper for Andro
getComputedStyle	Chrome Full support 1	Edge Full support 12	Firefox Full support 1 Notes Full support 1 Notes Notes Before version 62 this function returned null when called on a Window with no presentation (e.g. an iframe with display: none; Set). Since 62 it returns a CSSStyleDeclaration object with length 0, containing empty strings (bug 1467722; also see bug 1471231 for further work).	IE.Full support 9	Opera Full support 7.2	Safari Full support 3	WebView Android Full support 1	Chrome Android Full support 18	Firefox Android Full support 4 Notes Full support 4 Notes Notes Before version 62 this function returned null when called on a Window with no presentation (e.g. an iframe with display: none; set). Since 62 it returns a CSSStyleDeclaration object with length 0, containing empty strings (bug 1467722; also see bug 1471231 for further work).	Opera Androi Full suppor 10.1
Pseudo- element support	Chrome Full support Yes	Edge Full support 12	Firefox Full support Yes	IE Full support 9	Opera Full support 15	Safari Full support Yes	WebView Android Full support Yes	Chrome Android Full support Yes	Firefox Android ?	Opera Androi ?

What happens next?

Our team will review your report. Once we verify the information you have supplied we will update this browser compatability table accordingly.

Can I keep track of my report?

You can join the GitHub repository to see updates and commits for this table data:

 $\underline{https://github.com/mdn/browser\text{-}compat\text{-}data}$

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Our goal is to provide accurate, real values for all our compatibility data tables. Notifying MDN of inaccurate data or supplying new data pushes us further towards our goal of providing 100% real values to the developer community. Thank you for helping.

Please select the browser or browsers which are affected.

Briefly outline the issue you are highlighting. Minimum 10 and maximum 1,000 characters.

Browser documentation and release notes are good supporting items to accompany your message. A demo hosted on services like Codepen or JSBin are perfect for providing real examples of your findings.

Connection error:Sorry, we can't seem to reach the server. We are working to fix the problem. Please try again later.

Legend

Full support
Full support
Compatibility unknown
Compatibility unknown
See implementation notes.
See implementation notes.

See also

- window.getDefaultComputedStyle
- resolved value

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