

English ▼

# Document Object Model (DOM)

The **Document Object Model (DOM)** connects web pages to scripts or programming languages by representing the structure of a document—such as the HTML representing a web page—in memory. Usually, that means JavaScript, although modeling HTML, SVG, or XML documents as objects are not part of the core JavaScript language, as such.

The DOM represents a document with a logical tree. Each branch of the tree ends in a node, and each node contains objects. DOM methods allow programmatic access to the tree. With them, you can change the document's structure, style, or content.

Nodes can also have event handlers attached to them. Once an event is triggered, the event handlers get executed.

**To learn more** about what the DOM is and how it represents documents, see our article [Introduction to the DOM](#).

## DOM interfaces

Attr	DocumentType
CDATASection	DOMError
CharacterData	DOMException
ChildNode	DOMImplementation
Comment	DOMString
CustomEvent	DOMTimeStamp
Document	DOMStringList
DocumentFragment	DOMTokenList

Element	ProcessingInstruction
Event	Selection
EventTarget	Range
HTMLCollection	Text
MutationObserver	TextDecoder
MutationRecord	TextEncoder
NamedNodeMap	TimeRanges
Node	TreeWalker
NodeFilter	URL
NodeIterator	Window
NodeList	Worker
NonDocumentTypeChildNode	XMLDocument
ParentNode	

## Obsolete DOM interfaces

The Document Object Model has been highly simplified. To achieve this, the following interfaces present in the different DOM level 3 or earlier specifications have been removed. It is uncertain whether some may be reintroduced in the future or not, but for the time being they should be considered obsolete and should be avoided:

DocumentTouch	DOMUserData
DOMConfiguration	ElementTraversal
DOMErrorHandler	Entity
DOMImplementationList	EntityReference
DOMImplementationRegistry	NameList
DOMImplementationSource	Notation
DOMLocator	TypeInfo
DOMObject	UserDataHandler
DOMSettableTokenList	

# HTML DOM

A document containing HTML is described using the `Document` interface, which is extended by the HTML specification to include various HTML-specific features. In particular, the `Element` interface is enhanced to become `HTMLElement` and various subclasses, each representing one of (or a family of closely related) elements.

The HTML DOM API provides access to various browser features such as tabs and windows, CSS styles and stylesheets, browser history, and so forth. These interfaces are discussed further in the [HTML DOM API documentation](#).

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## SVG interfaces

### SVG element interfaces

<code>SVGAElement</code>	<code>SVGDescElement</code>
<code>SVGAltGlyphElement</code>	<code>SVGElement</code>
<code>SVGAltGlyphDefElement</code>	<code>SVGEllipseElement</code>
<code>SVGAltGlyphItemElement</code>	<code>SVGFEBlendElement</code>
<code>SVGAnimationElement</code>	<code>SVGFEColorMatrixElement</code>
<code>SVGAnimateElement</code>	<code>SVGFEComponentTransferElement</code>
<code>SVGAnimateColorElement</code>	<code>SVGFECompositeElement</code>
<code>SVGAnimateMotionElement</code>	<code>SVGFEConvolveMatrixElement</code>
<code>SVGAnimateTransformElement</code>	<code>SVGFEDiffuseLightingElement</code>
<code>SVGCircleElement</code>	<code>SVGFEDisplacementMapElement</code>
<code>SVGClipPathElement</code>	<code>SVGFEDistantLightElement</code>
<code>SVGColorProfileElement</code>	<code>SVGFEDropShadowElement</code>
<code>SVGComponentTransferFunctionElement</code>	<code>SVGFEFloodElement</code>
<code>SVGCursorElement</code>	<code>SVGFFuncAElement</code>
<code>SVGDefsElement</code>	<code>SVGFFuncBElement</code>

SVGFEFuncElement	SVGImageElement
SVGFEFuncRElement	SVGLinearGradientElement
SVGFEGaussianBlurElement	SVGLineElement
SVGFElement	SVGMarkerElement
SVGFEMergeElement	SVGMaskElement
SVGFEMergeNodeElement	SVGMeshElement
SVGFEMorphologyElement	SVGMeshGradientElement
SVGFEOffsetElement	SVGMeshpatchElement
SVGFEPointLightElement	SVGMeshrowElement
SVGFESpecularLightingElement	SVGMetadataElement
SVGFESpotLightElement	SVGMissingGlyphElement
SVGFETileElement	SVGMPathElement
SVGFETurbulenceElement	SVGPathElement
SVGFilterElement	SVGPatternElement
SVGFilterPrimitiveStandardAttributes	SVGPolylineElement
SVGFontElement	SVGPolygonElement
SVGFontFaceElement	SVGRadialGradientElement
SVGFontFaceFormatElement	SVGRectElement
SVGFontFaceNameElement	SVGScriptElement
SVGFontFaceSrcElement	SVGSetElement
SVGFontFaceUriElement	SVGSolidcolorElement
SVGForeignObjectElement	SVGStopElement
SVGGElement	SVGStyleElement
SVGGeometryElement	SVGSVGElement
SVGGlyphElement	SVGSwitchElement
SVGGlyphRefElement	SVGSymbolElement
SVGGradientElement	SVGTextContentElement
SVGGraphicsElement	SVGTextElement
SVGHatchElement	SVGTextPathElement
SVGHatchpathElement	SVGTextPositioningElement
SVGHKernElement	SVGTitleElement

`SVGRefElement``SVGViewElement``SVGSpanElement``SVGVKernElement``SVGUseElement``SVGUnknownElement`

## SVG data type interfaces

Here are the DOM APIs for data types used in the definitions of SVG properties and attributes.

### Static type

`SVGAngle``SVGPathSegCurvetoQuadraticRel``SVGColor``SVGPathSegArcAbs``SVGICCColor``SVGPathSegArcRel``SVGElementInstance``SVGPathSegLinetoHorizontalAbs``SVGElementInstanceList``SVGPathSegLinetoHorizontalRel``SVGLength``SVGPathSegLinetoVerticalAbs``SVGLengthList``SVGPathSegLinetoVerticalRel``SVGMatrix``SVGPathSegCurvetoCubicSmoothAbs``SVGNameList``SVGPathSegCurvetoCubicSmoothRel``SVGNumber``SVGPathSegCurvetoQuadraticSmoothAbs``SVGNumberList``SVGPathSegCurvetoQuadraticSmoothRel``SVGPaint``SVGPathSegList``SVGPathSeg``SVGPoint``SVGPathSegClosePath``SVGPointList``SVGPathSegMovetoAbs``SVGPreserveAspectRatio``SVGPathSegMovetoRel``SVGRect``SVGPathSegLinetoAbs``SVGStringList``SVGPathSegLinetoRel``SVGTransform``SVGPathSegCurvetoCubicAbs``SVGTransformList``SVGPathSegCurvetoCubicRel``SVGPathSegCurvetoQuadraticAbs`

## Animated type

SVGAnimatedAngle

SVGAnimatedBoolean

SVGAnimatedEnumeration

SVGAnimatedInteger

SVGAnimatedLength

SVGAnimatedLengthList

SVGAnimatedNumber

SVGAnimatedNumberList

SVGAnimatedPathData

SVGAnimatedPoints

SVGAnimatedPreserveAspectRatio

SVGAnimatedRect

SVGAnimatedString

SVGAnimatedTransformList

## SMIL-related interfaces

ElementTimeControl

TimeEvent

## Other SVG interfaces

GetSVGDocument

ShadowAnimation

SVGColorProfileRule

SVGCSSRule

SVGDocument

SVGException

SVGExternalResourcesRequired

SVGFitToViewBox

SVGLangSpace

SVGLocatable

SVGRenderingIntent

SVGStylable

SVGTests

SVGTransformable

SVGUnitTypes

SVGUseElementShadowRoot

SVGURIReference

SVGViewSpec

SVGZoomAndPan

SVGZoomEvent

## Specifications

Specification	Status	Comment
DOM	<a href="#">LS</a> Living Standard	

## See also

- DOM Examples
- CSS Object Model (CSSOM)

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## Related Topics

### Document Object Model

#### ▼ Guides

Introduction to the DOM

Using the W3C DOM Level 1 Core

Traversing an HTML table with JavaScript and DOM Interfaces

Locating DOM elements using selectors

How to create a DOM tree

Events and the DOM

How whitespace is handled by HTML, CSS, and in the DOM

Examples of web and XML development using the DOM

#### ▼ Interfaces

`AbortController`

AbortSignal  
AbstractRange  
Attr  
ByteString  
CDATASection  
CharacterData  
ChildNode  
CSSPrimitiveValue  
CSSValue  
CSSValueList  
Comment  
CustomEvent  
Document  
DocumentFragment  
DocumentType  
DOMConfiguration  
DOMError  
DOMErrorHandler  
DOMException  
DOMImplementation  
DOMImplementationList  
DOMImplementationRegistry  
DOMImplementationSource  
DOMLocator  
DOMObject  
DOMParser  
DOMPoint  
DOMPointInit  
DOMPointReadOnly  
DOMRect  
DOMString



DOMTimeStamp

DOMTokenList

DOMUserData

Element

ElementTraversal

Entity

EntityReference

Event

EventTarget

HTMLCollection

MutationObserver

Node

NodeFilter

NodeIterator

NodeList

NonDocumentTypeChildNode

ProcessingInstruction

PromiseResolver

Range

StaticRange

Text

TextDecoder

TextEncoder

TimeRanges

TreeWalker

TypeInfo

UserDataHandler

USVString

XMLDocument



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