

Netscape Navigator Object Road Map and Compatibility Guide

The following pages contain the text of a handy pamphlet whose Adobe Acrobat (.pdf) file you'll find on the companion CD-ROM. The arrangement of the following material has been modified for printing in this appendix. The .pdf file on the CD-ROM, which you can print it out for quick reference, offers a more compact arrangement. With this compact guide, you can see at a glance the breadth of each object's properties, methods, and event handlers. You can also see which language's words are compatible with each scriptable browser through the level 4 browsers. For instructions on printing and assembling this pamphlet, see the howtoprt.txt readme file on the CD-ROM.



Netscape Navigator 4 Object Road Map

window		
closed ^{N3,M4}	alert("msg")	onBlur= ^{N3,M4}
defaultStatus	back() ^{N4}	onDragDrop= ^{N4,(S)}
document	blur() ^{N3,M4}	onFocus= ^{N3,M4}
frames[i]	captureEvents(<i>type</i>) ^{N4}	onLoad=
history	clearInterval(<i>ID</i>) ^{N4,M4}	onMove= ^{N4}
innerHeight ^{N4,(S)}	clearTimeout(<i>ID</i>)	onResize= ^{N4,M4}
innerWidth ^{N4,(S)}	close()	onUnload=
location	confirm("msg")	
locationbar ^{N4,(S)}	disableExternalCapture() ^{N4,(S)}	
menubar ^{N4,(S)}	enableExternalCapture() ^{N4,(S)}	
name	find(["str"][<i>case</i> , <i>bkwd</i>]) ^{N4}	
onerror ^{N3,M4}	focus() ^{N3,M4}	
opener ^{N3,M3}	forward() ^{N4}	
outerHeight ^{N4,(S)}	handleEvent(<i>event</i>) ^{N4}	
outerWidth ^{N4,(S)}	home() ^{N4}	
pageXOffset ^{N4}	moveBy($\Delta x, \Delta y$) ^{N4,(S)}	
pageYOffset ^{N4}	moveTo(<i>x, y</i>) ^{N4,(S)}	
parent	open(<i>URL</i> , " <i>name</i> ", " <i>specs</i> ") ^{(1),(S)}	
personalbar ^{N4,(S)}	print() ^{N4}	
scrollbars ^{N4,(S)}	prompt("msg", " <i>reply</i> ")	
self	releaseEvents(<i>type</i>) ^{N4}	
status	resizeBy($\Delta x, \Delta y$) ^{N4,(S)}	
statusbar ^{N4,(S)}	resizeTo(<i>width, height</i>) ^{N4,(S)}	
toolbar ^{N4,(S)}	routeEvent(<i>event</i>) ^{N4}	
top	scroll(<i>x, y</i>) ^{N3,M4}	
window	scrollBy($\Delta x, \Delta y$) ^{N4}	
	scrollTo(<i>x, y</i>) ^{N4}	
	setInterval(<i>func, msec</i> [, <i>args</i>]) ^{N4,M4,(2)}	
	setTimeout(<i>func, msec</i> [, <i>args</i>]) ^{N4,M4,(3)}	
	stop() ^{N4}	

⁽¹⁾New window specs for all browsers: height, width, toolbar, location, directories, status, menubar, scrollbars, resizable, copyhistory. Additional specs for Navigator 4: alwaysLowered(S), alwaysRaised(S), dependent, hotkeys, innerHeight, innerWidth, outerHeight, outerWidth, screenX, screenY, titlebar(S), z-lock(S).

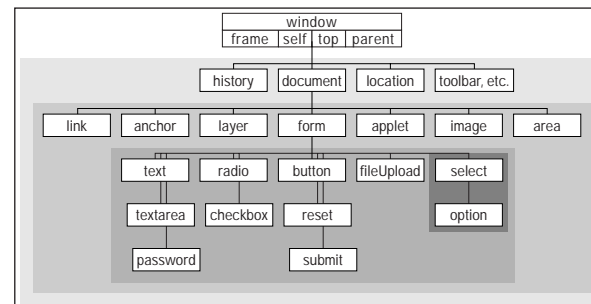
⁽²⁾Optional args parameter added to N4; 3rd parameter in M4 is for scripting language.

⁽³⁾Third parameter in N4 for args; in M4 for scripting language.

locationbar ^{N4} , menubar ^{N4} , personalbar ^{N4} , scrollbars ^{N4} , statusbar ^{N4} , toolbar ^{N4}		
visible	(None)	(None)

history		
length	back()	(None)
current ^{(S),(1)}	forward()	
next ^{(S),(1)}	go(<i>int</i> " <i>URL</i> ")	
previous ^{(S),(1)}		

⁽¹⁾Introduced in Navigator 3.0 for use with a trial security method no longer in use. Available in Navigator 4 with signed scripts.



Netscape Navigator 4 Document Object Model Containment Hierarchy

document		
alinkColor	captureEvents(<i>type</i>) ^{N4}	(None)
anchors[i]	clear()	
applets[i] ^{N3,M4}	close()	
bgColor	getSelection() ^{N4,(2)}	
cookie	handleEvent(<i>event</i>) ^{N4}	
domain ^{N3,M4}	open(" <i>mimetype</i> " [, <i>replace</i>]) ⁽³⁾	
embeds[i] ^{N3,M4}	releaseEvents(<i>type</i>) ^{N4}	
fgColor	routeEvent(<i>event</i>) ^{N4}	
forms[i]	write("string")	
images[i] ^{N3,M4}	writeln("string")	
lastModified		
layers[i] ^{N4}		
linkColor		
links[i]		
location ⁽¹⁾		
referrer		
title		
URL ^{N3,M4}		
vlinkColor		

⁽¹⁾Replaced by the URL property in Navigator 3.

⁽²⁾M4 has a document.selection property to retrieve the currently selected text.

⁽³⁾*mimetype* parameter new in M4, but only "text/html" type supported.

location		
hash	assign(" <i>URL</i> ")	(None)
host	reload([<i>unconditional</i>]) ^{N3,M4}	
hostname	replace(" <i>URL</i> ") ^{N3,M4}	
href		
pathname		
port		
protocol		
search		

layer ^{N4}		
above	load(" <i>filename</i> ", <i>y</i>)	onBlur=
background	moveAbove(<i>layerObj</i>)	onFocus=
below	moveBelow(<i>layerObj</i>)	onLoad=
bgColor	moveBy($\Delta x, \Delta y$)	onMouseOut=
clip.top	moveTo(<i>x, y</i>)	onMouseOver=
clip.left	moveToAbsolute(<i>x, y</i>)	onMouseUp=
clip.right	resizeBy($\Delta x, \Delta y$)	
clip.bottom	resizeTo(<i>width, height</i>)	
clip.width		
clip.height		
document		
left		
name		
pageX		
pageY		
parentLayer		
siblingAbove		
siblingBelow		
src		
top		
visibility		
zIndex		

How to Use This Map

The hierarchy diagram shows the relationships among various HTML-generated objects in Netscape Navigator 4. Follow the dark lines to create references to objects:

```
window.document.formName.textName.value
```

The three columns in the individual object listings show the properties, methods, and event handlers for the object.

Netscape Navigator 4 Object Road Map

area^{N3,M4}	
hash	onClick= ^{N4}
host	onMouseDown= ^{N4,M4}
hostname	onMouseOver= ^{N4,M4}
href	
pathname	
port	
protocol	
search	
target	

applet^{N3,M3}	
(Java vars) (Java methods)	(None)

JavaScript Levels
 JavaScript has gone through three versions. The following browsers support features from the corresponding JavaScript level:

Browser	JavaScript Level
Netscape Navigator 2.0x	1.0
MS Internet Explorer 3.0x	1.0
Netscape Navigator 3.0x	1.1
Netscape Navigator 4.0x	1.2
MS Internet Explorer 4.0x	1.2

No other mainstream browsers support JavaScript.

radio	
checked	click()
defaultChecked	handleEvent(ev) ^{N4}
length	onMouseDown= ^{N4,M4}
name	onClick= ^{N4,M4}
type ^{N3,M4}	onMouseDown= ^{N4,M4}
value	

fileUpload^{N3,M4,(1)}	
name	blur()
value	focus()
	handleEvent(ev) ^{N4}
	select()
	onBlur= ^{N4,M4}
	onFocus= ^{N4,M4}
	onSelect= ^{N4,M4}

⁽¹⁾IE4 does not use Netscape's "fileUpload" terminology, but both objects refer to the same kind of <INPUT type="file"> tag.

link ()	
hash	onClick= ^{N4,M4}
host	onDbClick= ^{N4,(1),M4}
hostname	onMouseDown= ^{N4,M4}
href	onMouseOut= ^{N3,M4}
pathname	onMouseOver= ^{N4,M4}
port	onMouseUp= ^{N4,M4}
protocol	
search	
target	
text ^{N4}	
x ^{N4}	
y ^{N4}	

⁽¹⁾Not implemented for Macintosh Navigator 4.

anchor ()	
name ^{N4,M4}	(None)
text ^{N4}	
x ^{N4}	
y ^{N4}	

form	
action	handleEvent(ev) ^{M4}
elements[]	reset() ^{N3,M4}
encoding	onReset= ^{N3,M4}
length	onSubmit= ^{N4,M4}
method	
name	
target	

text, textarea, password, hidden	
defaultValue	blur()
form	focus()
name	onChange= ^{N4,M4}
type ^{N3,M4}	handleEvent(event) ^{M4}
value ⁽¹⁾	select()
	onKeyDown= ^{N4,M4}
	onKeyPress= ^{N4,M4}
	onKeyUp= ^{N4,M4}
	onSelect= ^{N4,M4}

⁽¹⁾Password value returns empty string in Navigator 2.

checkbox	
checked	click()
defaultChecked	handleEvent(ev) ^{N4}
name	onMouseDown= ^{N4,M4}
type ^{N3,M4}	onMouseUp= ^{N4,M4}
value	

image^{N3,(1),M4}	
border	onAbort= ^{N4,M4}
complete	onError= ^{N4,M4}
height	onLoad= ^{N4,M4}
hspace	
lowsrc	
name	
src	
vspace	
width	
x ^{N4}	
y ^{N4}	

⁽¹⁾Implemented in MSIE 3 for Macintosh, but not Windows.

Browser Compatibility Guide

This map is a Netscape-centric view of JavaScript. No items unique to Microsoft Internet Explorer (MSIE) are listed, but Netscape-only items are. Items that have no superscript notation are available to all JavaScript-enabled browsers, including Navigator 2 and MSIE 3. Superscript notations are keyed as follows:

- N3 — New in Netscape 3
- N4 — New in Netscape Navigator 4
- M3 — New in Netscape 3 and MSIE 3
- M4 — New in MSIE 4
- J2 — New in MSIE 3, JScript.dll Version 2
- (S) — Requires Netscape Navigator 4 Signed Scripts

If an item shows N3 or N4 but not M3 or M4, it means that the feature is Netscape-only, and is not available in MSIE.

select	
length	blur() ^{N3,M4}
name	focus() ^{N3,M4}
options[]	onChange= ^{N4,M4}
options[] defaultSelected	handleEvent(ev) ^{N4}
options[] index	
options[] selected	
options[] text	
options[] value	
selectedIndex	
type ^{N3,M4}	

button, reset, submit	
name	click()
type ^{N3,M4}	onClick= ^{N4,M4}
value	onMouseDown= ^{N4,M4}
	onMouseUp= ^{N4,M4}

Netscape Navigator 4 Global Objects

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Math	
E	abs(<i>val</i>)
LN2	acos(<i>val</i>)
LN10	asin(<i>val</i>)
LOG2E	atan(<i>val</i>)
LOG10E	atan2(<i>val1</i> , <i>val2</i>)
PI	ceil(<i>val</i>)
SQRT1_2	cos(<i>val</i>)
SQRT2	exp(<i>val</i>)
	floor(<i>val</i>)
	log(<i>val</i>)
	max(<i>val1</i> , <i>val2</i>)
	min(<i>val1</i> , <i>val2</i>)
	pow(<i>val1</i> , <i>power</i>)
	random()
	round(<i>val</i>)
	sin(<i>val</i>)
	sqrt(<i>val</i>)
	tan(<i>val</i>)

Date	
prototype ^{N3}	get/set[UTC]Date()
	get/set[UTC]Day()
	get/set[UTC]Hours()
	get/set[UTC]Minutes()
	get/set[UTC]Month()
	get/set[UTC]Seconds()
	get/set[UTC]Time()
	get/set[Full]Year()
	getTimezoneOffset()
	parse("dateString")
	toGMTString()
	toLocaleString()
	toString()
	UTC(<i>date vals</i>)

[UTC] and [Full] add-ons available in N4,M4.

screen ^{N4,M4,(1)}	
availHeight	(None)
availLeft ⁽²⁾	
availTop ⁽²⁾	
availWidth	
colorDepth	
height	
width	
pixelDepth ⁽²⁾	

⁽¹⁾Contained by window object in M4
⁽²⁾Not in M4

String	
length	anchor("anchorName")
prototype ^{N3}	big()
	blink()
	bold()
	charAt(<i>index</i>)
	charCodeAt(<i>i</i>) ^{N4,M4}
	concat(<i>string2</i>) ^{N4,M4}
	fixed()
	fontcolor("#rrggbb")
	fontSize(1to7)
	fromCharCode(<i>n1...</i>) ^{N4,M4}
	indexOf("str" [, <i>i</i>])
	italics()
	lastIndexOf("str" [, <i>i</i>])
	link(URL)
	match(<i>regexp</i>) ^{N4,M4}
	replace(<i>regexp</i> , <i>str</i>) ^{N4,M4}
	search(<i>regexp</i>) ^{N4,M4}
	slice(<i>i,j</i>) ^{N4,J2}
	small()
	split(<i>char</i>) ^{N3,(1),M4}
	sub()
	substr(<i>start,length</i>) ^{N4,M4}
	substring(<i>intA</i> , <i>intB</i>)
	sup()
	toLowerCase()
	toUpperCase()

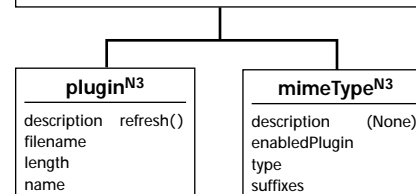
⁽¹⁾Added behavior in N4 includes: ability to accept a *regexp* parameter; second parameter (limit integer) to limit the number of splits to be included; a space string parameter signifying any white space character.

Array ^{N3,J2}	
length ^{J2}	concat(<i>array2</i>) ^{N4,M4}
prototype ^{N3,J2}	join("char") ^{J2}
	push() ^{N4}
	pop() ^{N4}
	reverse() ^{J2}
	shift() ^{N4}
	slice(<i>i,j</i>) ^{N4,M4}
	sort(<i>compareFunc</i>) ^{J2}
	unshift() ^{N4}

Number ^{N3,J2}	
MAX_VALUE	toString()
MIN_VALUE	
NaN	
NEGATIVE_INFINITY	
POSITIVE_INFINITY	
prototype	

navigator ⁽¹⁾	
appName	javaEnabled() ^{N3,M4}
appName	preference(<i>name</i> [, <i>val</i>]) ^{N4,(S),(2)}
appVersion	taintEnabled() ^{N3,M4}
language ^{N4}	
mimeTypes ^[i] ^{N3}	
platform ^{N4}	
plugins ^[i] ^{N3}	
userAgent	

⁽¹⁾Contained by window object in M4
⁽²⁾Preference names: general.always_load_images; security.enable_java; javascript.enabled; browser.enable_style_sheets; autoupdate.enabled; network.cookie.cookieBehavior; network.cookie.warnAboutCookies



function ^{N3,J2}	
arguments []	(None)
arity ^{N4}	
caller	
prototype	

RegExp ^{N4,M4}	
input	(None)
multiline	
lastMatch	
lastParen	
leftContext	
rightContext	
\$1...\$9	

Regular Expression ^{N4,M4}	
global	compile(<i>regexp</i>)
ignoreCase	exec("string") ⁽¹⁾
lastIndex	test("string")
source	str.match(<i>regexp</i>) ⁽¹⁾
	str.replace(<i>regexp</i> , <i>str</i>) ⁽¹⁾
	str.search(<i>regexp</i>)
	str.split(<i>regexp</i> , <i>limit</i>)

⁽¹⁾Returns an array with properties: index, input, [0], [1], ...[n]

Event ^{N4}	
ALT_MASK	(None)
CONTROL_MASK	
SHIFT_MASK	
META_MASK	
MOUSEDOWN	
MOUSEUP	
MOUSEOVER	
MOUSEOUT	
MOUSEMOVE	
MOUSEDROP	
CLICK	
DBLCLICK	
KEYDOWN	
KEYUP	
KEYPRESS	
DRAGDROP	
FOCUS	
BLUR	
SELECT	
CHANGE	
RESET	
SUBMIT	
SCROLL	
LOAD	
UNLOAD	
XFER_DONE	
ABORT	
ERROR	
LOCATE	
MOVE	
RESIZE	
FORWARD	
HELP	
BACK	

event ^{N4}	
data ⁽¹⁾	(None)
layerX	
layerY	
modifiers ⁽²⁾	
pageX	
pageY	
screenX	
screenY	
target	
type	
which ⁽³⁾	

⁽¹⁾URL of dragdrop event
⁽²⁾Event.ALT_MASK, Event.CONTROL_MASK, Event.SHIFT_MASK, Event.META_MASK
⁽³⁾Mouse button (1=left; 3=right); Key char code

Operators	
Comparison	
==	Equals
!=	Does not equal
>	Is greater than
>=	Is greater than or equal to
<	Is less than
<=	Is less than or equal to
Arithmetic	
+	Plus (and string concat.)
-	Minus
*	Multiply
/	Divide
%	Modulo
++	Increment
--	Decrement
-val	Negation
Assignment	
=	Equals
+=	Add by value
-=	Subtract by value
*=	Multiply by value
/=	Divide by value
%=	Modulo by value
<<=	Left shift by value
>>=	Right shift by value
>>=	Zero fill by value
&=	Bitwise AND by value
=	Bitwise OR by value
^=	Bitwise XOR by value
Boolean	
&&	AND
	OR
!	NOT
Bitwise	
&	Bitwise AND
	Bitwise OR
^	Bitwise XOR
~	Bitwise NOT
<<	Left shift
>>	Right shift
>>>	Zero fill right shift
Miscellaneous	
delete ^{N4,M4}	Property destroyer
new	Object creator
this	Object self-reference
typeof ^{N3,M3}	Value type
void ^{N3,M3}	Return no value

Control Statements	
if (<i>condition</i>) {	
<i>statementsIfTrue</i>	
}	
if (<i>condition</i>) {	
<i>statementsIfTrue</i>	
} else {	
<i>statementsIfFalse</i>	
}	
<i>result</i> = <i>condition</i> ? <i>expression1</i> : <i>expression2</i>	
for (<i>[init expr]</i> ; <i>[condition]</i> ; <i>[update expr]</i>) {	
<i>statements</i>	
}	
for (<i>var in object</i>) {	
<i>statements</i>	
}	
while (<i>condition</i>) {	
<i>statements</i>	
}	
with (<i>object</i>) {	
<i>statements</i>	
}	
do {	
<i>statements</i>	
} while (<i>condition</i>) ^{N4,M4}	
switch (<i>expression</i>) {	
case <i>label1</i> :	
<i>statements</i>	
[break]	
case <i>label2</i> :	
<i>statements</i>	
[break]	
...	
[default :	
<i>statements</i>]	
} ^{N4,M4}	
<i>label</i> : ^{N4,M4}	
continue [<i>label</i>] ^{N4,M4}	
break [<i>label</i>] ^{N4,M4}	

Global Functions	
escape("str" [,1])	eval(<i>expression</i>)
unescape("str")	isNaN(<i>expression</i>)
Boolean(<i>value</i>) ^{N4}	parseFloat("string")
Number("str") ^{N4}	parseInt("string")
String(<i>value</i>) ^{N4}	

Functions of All Objects	
watch(<i>id</i> , <i>handler</i>) ^{N4}	toString()
unwatch(<i>id</i>) ^{N4}	