



webOS TV

Web API Coverage

for webOS TV SDK - November 2019

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HTML, CSS Coverage on webOS TV

Last Updated: 06-NOV-2019

Level 1	Level 2	Level 3	Level 4	Level 5	webOS TV v4.0	webOS TV v3.x	webOS TV v1.2 / v2.x	Emulator v3.x	Remarks		
HTML5	1.HTML5 Video Audio	1. HTMLVideoElement	autoplay			Supported	Supported	Supported			
			controls			Supported	Supported	Supported			
			poster			Supported	Not supported	Supported			
			loop	1		Supported	Supported	Supported			
				loop		Supported	Supported	Supported			
			preload	auto		Supported	Supported	Supported			
				none		Not supported	Not supported	Not supported			
				metadata		Supported	Supported	Supported			
			src	http		Supported	Supported	Supported			
				file		Supported	Supported	Not supported			
				ftp		Not supported	Not supported	Not supported			
			mediagroup	group		Not supported	Not supported	Not supported			
		muted			Not supported	Not supported	Not supported				
		width	number		Supported	Supported	Not supported				
		height	number		Supported	Supported	Not supported				
		videoWidth	number		Supported	Supported	Not supported				
		videoHeight	number		Supported	Supported	Not supported				
		2. HTMLAudioElement	autoplay				Supported	Supported	Supported		
			controls				Supported	Supported	Supported		
			loop	1			Supported	Supported	Supported		
				loop			Supported	Supported	Supported		
			preload	auto			Supported	Supported	Supported		
				none			Not supported	Not supported	Not supported		
				metadata			Supported	Supported	Supported		
			src	http				Supported	Supported	Supported	
				file				Supported	Supported	Not supported	
				ftp				Not supported	Not supported	Not supported	
		mediagroup	group			Not supported	Not supported	Not supported			
		muted				Not supported	Not supported	Not supported			
		3. HTMLSourceElement	src	http			Supported	Supported	Supported		
				file			Supported	Supported	Not supported		
				ftp			Not supported	Not supported	Not supported		
			Video type	video/ogg				Not supported	Not supported	Not supported	
				video/mp4				Supported	Supported	Supported	
				video/webm				Supported	Not supported	Supported	
			Audio type	audio/ogg				Supported	Not supported	Supported	
				audio/mpeg				Supported	Supported	Not supported	
		audio/mp4					Supported	Supported	Supported		
		media	audio/webm				Supported	Not supported	Not supported		
		4. Web Audio	AudioContext				Supported	Supported	Supported		
			AudioNode	connect(audioNode)			Supported	Supported	Supported		
				disconnect			Supported	Supported	Supported		
			AudioBufferSourceNode	createBufferSource				Supported	Supported	Supported	
				buffer				Supported	Supported	Supported	
				playbackRate				Supported	Supported	Supported	
				loop				Supported	Supported	Supported	
				loopStart				Supported	Supported	Supported	
loopEnd						Supported	Supported	Supported			
onended						Supported	Supported	Supported			

			start		Supported	Supported	Supported		
			stop		Supported	Supported	Supported		
		AudioBuffer	createBuffer		Supported	Supported	Supported		
			decodeAudioData		Supported	Supported	Supported		
			sampleRate		Supported	Supported	Supported		
			length		Supported	Supported	Supported		
			duration		Supported	Supported	Supported		
			numberOfChannels		Supported	Supported	Supported		
			getChannelData		Supported	Supported	Supported		
2.HTML5 Track & Media	1. HTMLTrackElement	default	default		Supported	Supported	Supported		
		kind	captions		Supported	Supported	Supported		
			chapters		Supported	Supported	Supported		
			descriptions		Supported	Supported	Supported		
			metadata		Supported	Supported	Supported		
			subtitles		Supported	Supported	Supported		
		label	label		Supported	Supported	Supported		
		src	vtt		Supported	Supported	Supported		
		srclang	language_code		Supported	Supported	Supported		
		readyState			Supported	Supported	Supported		
	track			Supported	Supported	Supported			
		2. HTMLMediaElement	error state	error		Supported	Supported	Supported	
	network state		src		Supported	Supported	Supported		
			currentSrc		Supported	Supported	Supported		
			crossOrigin		Not supported	Not supported	Not supported		
			networkState		Supported	Supported	Supported		
			preload		Supported	Supported	Supported		
			buffered		Supported	Supported	Not supported		
			load()		Supported	Supported	Supported		
	canPlayType()			Supported	Supported	Supported			
	ready state		readyState		Supported	Supported	Supported		
			seeking		Supported	Supported	Supported		
	controls		controls		Supported	Supported	Supported		
			defaultMuted		Not supported	Not supported	Not supported		
			volume		Not supported	Not supported	Not supported		
	playback state		muted		Not supported	Not supported	Not supported		
			currentTime		Supported	Supported	Supported		
			duration		Supported	Supported	Supported		
			pause()		Supported	Supported	Supported		
			paused		Supported	Supported	Supported		
			ended		Supported	Supported	Supported		
			defaultPlaybackRate		Supported	Supported	Not supported		
			playbackRate		Supported	Supported	Supported		
			played		Supported	Supported	Supported		
			seekable		Supported	Supported	Supported		
			autoplay		Supported	Supported	Supported		
loop				Supported	Supported	Supported			
play()			Supported	Supported	Supported				
media controller	mediaGroup			Supported	Supported	Not supported			
	controller		Supported	Supported	Not supported				
multiple media tracks	textTracks		Supported	Supported	Supported				
	audioTracks		Supported	Supported	Supported				
	videoTracks		Supported	Supported	Supported				
	addTextTrack()		Supported	Supported	Supported				
		buffered		Not supported	Not supported	Not supported			
		seekable		Not supported	Not supported	Not supported			

MediaController	duration		Not supported	Not supported	Not supported	
	currentTime		Not supported	Not supported	Not supported	
	paused		Not supported	Not supported	Not supported	
	played		Not supported	Not supported	Not supported	
	pause()		Not supported	Not supported	Not supported	
	play()		Not supported	Not supported	Not supported	
	defaultPlaybackRate		Not supported	Not supported	Not supported	
	playbackRate		Not supported	Not supported	Not supported	
	volume		Not supported	Not supported	Not supported	
	muted		Not supported	Not supported	Not supported	
	playbackState		Not supported	Not supported	Not supported	
	unpause()		Not supported	Not supported	Not supported	
	VideoTrackList	length		Not supported	Not supported	Not supported
		VideoTrack()		Not supported	Not supported	Not supported
getTrackById			Not supported	Not supported	Not supported	
selectedIndex			Not supported	Not supported	Not supported	
onchange			Not supported	Not supported	Not supported	
onaddtrack			Not supported	Not supported	Not supported	
VideoTrack	id		Not supported	Not supported	Not supported	
	kind		Not supported	Not supported	Not supported	
	label		Not supported	Not supported	Not supported	
	language		Not supported	Not supported	Not supported	
AudioTrackList	length		Supported	Not supported	Not supported	
	AudioTrack()		Not supported	Not supported	Not supported	
	getTrackById		Not supported	Not supported	Not supported	
	onchange		Supported	Not supported	Not supported	
	onaddtrack		Supported	Not supported	Not supported	
	onremovetrack		Not supported	Not supported	Not supported	
AudioTrack	id		Not supported	Not supported	Not supported	
	kind		Not supported	Not supported	Not supported	
	label		Not supported	Not supported	Not supported	
	language		Not supported	Not supported	Not supported	
TextTrackList	enabled		Supported	Not supported	Not supported	
	length		Supported	Supported	Supported	
	TextTrack[]		Supported	Supported	Supported	
	onaddtrack		Supported	Supported	Supported	
TextTrack	onremovetrack		Supported	Not supported	Not supported	
	kind		Supported	Supported	Supported	
	label		Supported	Supported	Supported	
	language		Supported	Supported	Supported	
	inBandMetadataTrackDispatchType		Not supported	Not supported	Not supported	
	mode		Supported	Supported	Supported	
	cues		Supported	Supported	Supported	
	activeCues		Supported	Supported	Supported	
	addCue()		Supported	Supported	Not supported	
removeCue()		Supported	Supported	Not supported		
TextTrackCueList	oncuechange		Supported	Supported	Supported	
	length		Supported	Supported	Supported	
	TextTrackCue		Supported	Supported	Not supported	
	getCueById		Supported	Supported	Supported	
	track		Supported	Supported	Supported	
	id		Supported	Supported	Supported	
	startTime		Supported	Supported	Supported	

			<table border="1"> <tr><td>endTime</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>pauseOnExit</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>vertical[growing right]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>vertical[growing left]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>vertical[horizontal]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>snapToLines</td><td></td><td>Supported</td><td>Supported</td><td>Not supported</td></tr> <tr><td>line</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>position</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>size</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>align[end]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>align[middle]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>align[start]</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>text</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>getCueAsHTML</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>onenter</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>onexit</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> </table>	endTime		Supported	Supported	Supported	pauseOnExit		Supported	Supported	Supported	vertical[growing right]		Supported	Supported	Supported	vertical[growing left]		Supported	Supported	Supported	vertical[horizontal]		Supported	Supported	Supported	snapToLines		Supported	Supported	Not supported	line		Supported	Supported	Supported	position		Supported	Supported	Supported	size		Supported	Supported	Supported	align[end]		Supported	Supported	Supported	align[middle]		Supported	Supported	Supported	align[start]		Supported	Supported	Supported	text		Supported	Supported	Supported	getCueAsHTML		Supported	Supported	Supported	onenter		Supported	Supported	Supported	onexit		Supported	Supported	Supported			The 'TextTrackCue' constructor is deprecated on webOS 3.0(chromium). use 'VTTcue' instead.																															
endTime		Supported	Supported	Supported																																																																																																																	
pauseOnExit		Supported	Supported	Supported																																																																																																																	
vertical[growing right]		Supported	Supported	Supported																																																																																																																	
vertical[growing left]		Supported	Supported	Supported																																																																																																																	
vertical[horizontal]		Supported	Supported	Supported																																																																																																																	
snapToLines		Supported	Supported	Not supported																																																																																																																	
line		Supported	Supported	Supported																																																																																																																	
position		Supported	Supported	Supported																																																																																																																	
size		Supported	Supported	Supported																																																																																																																	
align[end]		Supported	Supported	Supported																																																																																																																	
align[middle]		Supported	Supported	Supported																																																																																																																	
align[start]		Supported	Supported	Supported																																																																																																																	
text		Supported	Supported	Supported																																																																																																																	
getCueAsHTML		Supported	Supported	Supported																																																																																																																	
onenter		Supported	Supported	Supported																																																																																																																	
onexit		Supported	Supported	Supported																																																																																																																	
		TextTrackCue(VTTCue)																																																																																																																			
			<table border="1"> <tr><td>loadstart</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>progress</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>suspend</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>abort</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>error</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>emptied</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>stalled</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>play</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>pause</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>loadedmetadata</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>loadeddata</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>waiting</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>playing</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>canplay</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>canplaythrough</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>seeking</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>seeked</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>timeupdate</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>ended</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>ratechange</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>durationchange</td><td></td><td>Supported</td><td>Supported</td><td>Supported</td></tr> <tr><td>volumechange</td><td></td><td>Not supported</td><td>Not supported</td><td>Not supported</td></tr> </table>	loadstart		Supported	Supported	Supported	progress		Supported	Supported	Supported	suspend		Supported	Supported	Supported	abort		Supported	Supported	Supported	error		Supported	Supported	Supported	emptied		Supported	Supported	Supported	stalled		Supported	Supported	Supported	play		Supported	Supported	Supported	pause		Supported	Supported	Supported	loadedmetadata		Supported	Supported	Supported	loadeddata		Supported	Supported	Supported	waiting		Supported	Supported	Supported	playing		Supported	Supported	Supported	canplay		Supported	Supported	Supported	canplaythrough		Supported	Supported	Supported	seeking		Supported	Supported	Supported	seeked			Supported	Supported	Supported	timeupdate		Supported	Supported	Supported	ended		Supported	Supported	Supported	ratechange		Supported	Supported	Supported	durationchange		Supported	Supported	Supported	volumechange		Not supported	Not supported	Not supported			
loadstart		Supported	Supported	Supported																																																																																																																	
progress		Supported	Supported	Supported																																																																																																																	
suspend		Supported	Supported	Supported																																																																																																																	
abort		Supported	Supported	Supported																																																																																																																	
error		Supported	Supported	Supported																																																																																																																	
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stalled		Supported	Supported	Supported																																																																																																																	
play		Supported	Supported	Supported																																																																																																																	
pause		Supported	Supported	Supported																																																																																																																	
loadedmetadata		Supported	Supported	Supported																																																																																																																	
loadeddata		Supported	Supported	Supported																																																																																																																	
waiting		Supported	Supported	Supported																																																																																																																	
playing		Supported	Supported	Supported																																																																																																																	
canplay		Supported	Supported	Supported																																																																																																																	
canplaythrough		Supported	Supported	Supported																																																																																																																	
seeking		Supported	Supported	Supported																																																																																																																	
seeked		Supported	Supported	Supported																																																																																																																	
timeupdate		Supported	Supported	Supported																																																																																																																	
ended		Supported	Supported	Supported																																																																																																																	
ratechange		Supported	Supported	Supported																																																																																																																	
durationchange		Supported	Supported	Supported																																																																																																																	
volumechange		Not supported	Not supported	Not supported																																																																																																																	
		Media Event																																																																																																																			
3. Communication	1.Web Messaging	MessageEvent	data	Supported	Supported	Supported																																																																																																															
			origin	Supported	Supported	Supported																																																																																																															
			lastEventId	Supported	Supported	Supported																																																																																																															
			source	Supported	Supported	Supported																																																																																																															
			ports	Supported	Supported	Supported																																																																																																															
		Cross-document messaging	window.postMessage(message, targetOrigin [, ports])	Supported	Supported	Supported																																																																																																															
		MessageChannel	channel.Port1	Supported	Supported	Supported																																																																																																															
			channel.Port2	Supported	Supported	Supported																																																																																																															
		MessagePort	port.postMessage(message [, ports])	Supported	Supported	Supported																																																																																																															
			port.start()	Supported	Supported	Supported																																																																																																															
	port.close()		Supported	Supported	Supported																																																																																																																
	2.WebSocket API	WebSocket	readyState	Supported	Supported	Supported																																																																																																															
			bufferedAmount	Supported	Supported	Supported																																																																																																															
			onopen	Supported	Supported	Supported																																																																																																															
			onerror	Supported	Supported	Supported																																																																																																															
onclose			Supported	Supported	Supported																																																																																																																
extensions			Supported	Supported	Supported																																																																																																																

			protocol		Supported	Supported	Supported	
			url		Supported	Supported	Supported	
			close()		Supported	Supported	Supported	
			onmessage		Supported	Supported	Supported	
			binaryType		Supported	Supported	Supported	
			send()		Supported	Supported	Supported	
		CloseEvent	wasClean		Supported	Supported	Supported	
			code		Supported	Supported	Supported	
			reason		Supported	Supported	Supported	
	3. Server-Sent Events		readyState		Supported	Supported	Supported	
			url		Supported	Supported	Supported	
		EventSource	withCredentials		Supported	Supported	Supported	
			onopen		Supported	Supported	Supported	
			onmessage		Supported	Supported	Supported	
			onerror		Supported	Supported	Supported	
			close()		Supported	Supported	Supported	
4. Graphic	1. HTMLCanvasElement	width	number		Supported	Supported	Supported	
		height	number		Supported	Supported	Supported	
		toDataURL			Supported	Supported	Supported	
		toBlob()			Not supported	Not supported	Not supported	
		getContext()			Supported	Supported	Supported	
	2. CanvasRenderingContext2D	reference	canvas		Supported	Supported	Supported	
		state	save() restore()		Supported	Supported	Supported	
		transformations	scale(x,y)		Supported	Supported	Supported	
			rotate(n)		Supported	Supported	Supported	
			translate(x,y)		Supported	Supported	Supported	
			transform(a,b,c,d,e,f) setTransform(a,b,c,d,e,f)		Supported	Supported	Supported	
		compositing	globalAlpha		Supported	Supported	Supported	
			globalCompositeOperation		Supported	Supported	Supported	
		colors and styles	strokeStyle		Supported	Supported	Not supported	
			fillStyle		Supported	Supported	Supported	
			createLinearGradient(x0,y0,x1,y1)		Supported	Supported	Supported	
			createRadialGradient(x0,y0,r0,x1,y1,r1) createPattern()		Supported	Partially supported	Supported	
		shadows	shadowOffsetX		Supported	Supported	Supported	
			shadowOffsetY		Supported	Supported	Supported	
			shadowBlur		Supported	Supported	Supported	
			shadowColor		Supported	Supported	Supported	
		rects	clearRect(x,y,w,h)		Supported	Supported	Supported	
			fillRect(x,y,w,h)		Supported	Supported	Supported	
			strokeRect(x,y,w,h)		Supported	Supported	Supported	
		path API	beginPath()		Supported	Supported	Supported	
			fill()		Supported	Supported	Supported	
			stroke()		Supported	Supported	Supported	
			drawSystemFocusRing()		Not supported	Not supported	Not supported	
			drawCustomFocusRing()		Not supported	Not supported	Not supported	
			scrollPathIntoView()		Not supported	Not supported	Not supported	
			clip()		Supported	Supported	Supported	
			isPointInPath(x,y)		Supported	Not supported	Not supported	
			fill(path)		Supported	Not supported	Not supported	
			stroke(path)		Supported	Not supported	Not supported	
		drawSystemFocusRing(path,)		Not supported	Not supported	Not supported		
		drawCustomFocusRing(path,)		Not supported	Not supported	Not supported		

		scrollPathIntoView(path)		Not supported	Not supported	Not supported
		clip(path)		Supported	Supported	Supported
		isPointInPath(path,x,y)		Supported	Not supported	Not supported
	text	fillText(text,x,y,maxWidth)		Supported	Supported	Supported
		strokeText(text,x,y,maxWidth)		Supported	Supported	Supported
		measureText(text)		Supported	Supported	Supported
	drawing images	drawImage(image,dx,dy)		Supported	Supported	Supported
		drawImage(image,dx,dy,dw,dh)		Supported	Supported	Supported
		drawImage(image,sx,sy,sw,sh,dx,dy,dw,dh)		Supported	Supported	Supported
	hit regions	addHitRegion()		Not supported	Not supported	Not supported
		removeHitRegion()		Not supported	Not supported	Not supported
	pixel manipulation	createImageData(sw,sh)		Supported	Supported	Supported
		createImageData(imagedata)		Supported	Supported	Supported
		getImageData(sx,sy,sw,sh)		Supported	Supported	Supported
		putImageData(imagedata,dx,dy,dirtyX,dirtyY,dirtyWidth,dirtyHeight)		Supported	Supported	Supported
		putImageData(imagedata,dx,dy)		Supported	Supported	Supported
3. CanvasDrawingStyles	line caps / joins	lineWidth		Supported	Partially supported	Supported
		lineCap		Supported	Supported	Supported
		lineJoin		Supported	Supported	Supported
		miterLimit		Supported	Supported	Supported
	text	font		Supported	Supported	Supported
		textAlign		Supported	Supported	Supported
		textBaseline		Supported	Supported	Supported
	dashed lines	setLineDash()		Supported	Supported	Supported
		getLineDash()		Supported	Supported	Supported
		lineDashOffset		Supported	Partially supported	Supported
4. CanvasPathMethods	Shared path API methods	closePath()		Supported	Supported	Supported
		moveTo(x,y)		Supported	Supported	Supported
		lineTo(x,y)		Supported	Supported	Supported
		quadraticCurveTo(cpx,cpy,x,y)		Supported	Supported	Supported
		bezierCurveTo(cp1x,cp1y,cp2x,cp2y,x,y)		Supported	Supported	Supported
		arcTo(x1,y1,x2,y2,r)		Supported	Supported	Supported
		arc(x,y,r,sAngle,eAngle,counterclockwise)		Supported	Supported	Supported
		rect(x,y,width,height)		Supported	Supported	Supported
		ellipse(x,y,radiusX,radiusY,rotation,startAngle,endAngle,anticlockwise)		Supported	Not supported	Supported
5. CanvasGradient	opaque object	addColorStop()		Supported	Supported	Supported
6. CanvasTextMetrics	x-direction	width		Supported	Supported	Supported
		actualBoundingBoxLeft		Not supported	Not supported	Not supported
		actualBoundingBoxRight		Not supported	Not supported	Not supported
	y-direction	fontBoundingBoxAscent		Not supported	Not supported	Not supported
		fontBoundingBoxDescent		Not supported	Not supported	Not supported
		actualBoundingBoxAscent		Not supported	Not supported	Not supported
		actualBoundingBoxDescent		Not supported	Not supported	Not supported
		emHeightAscent		Not supported	Not supported	Not supported
		emHeightDescent		Not supported	Not supported	Not supported
		hangingBaseline		Not supported	Not supported	Not supported
		alphabeticBaseline		Not supported	Not supported	Not supported
		ideographicBaseline		Not supported	Not supported	Not supported
7. CanvasImageData	basic element	width		Supported	Supported	Supported
		height		Supported	Supported	Supported
		data		Supported	Supported	Supported
8. CanvasPath	addPath()	addPath(path,transformation)		Not supported	Not supported	Not supported
	addPathByStrokingPath()			Not supported	Not supported	Not supported
	addText()	addText(text,styles,transformation,x,y,maxWidth)		Not supported	Not supported	Not supported
		addText(text, styles, transformation, path, maxWidth)		Not supported	Not supported	Not supported

		addPathByStrokingText()		Not supported	Not supported	Not supported
		addPathByStrokingText(text, styles, transformation, x, y, maxWidth)		Not supported	Not supported	Not supported
		addPathByStrokingText(text, styles, transformation, path, maxWidth)		Not supported	Not supported	Not supported
9. InlineSVG	colors and styles	linearGradient		Supported	Supported	Supported
		radialGradient		Supported	Supported	Supported
		pattern		Supported	Supported	Supported
	filters	feGaussianBlur		Supported	Supported	Supported
		feBlend		Supported	Supported	Supported
		feColorMatrix		Supported	Supported	Supported
		feComponentTransfer		Supported	Supported	Supported
		feOffset		Supported	Supported	Supported
	shapes	rect		Supported	Supported	Supported
		circle		Supported	Supported	Supported
		ellipse		Supported	Supported	Supported
		line		Supported	Supported	Supported
		polygon		Supported	Supported	Supported
		polyline		Supported	Supported	Supported
		path		Supported	Supported	Supported
		stroke		Supported	Supported	Supported
		text		Supported	Supported	Supported
		tspan		Supported	Supported	Supported
		textPath		Supported	Supported	Supported
		a		Supported	Supported	Supported
	g		Supported	Supported	Supported	
	animation	image		Supported	Supported	Supported
		animate		Supported	Supported	Supported
animateMotion			Supported	Supported	Supported	
clipping and mask	animateTransform		Supported	Supported	Supported	
	clipPath		Supported	Supported	Supported	
	mask		Supported	Supported	Supported	
10. WebGL	WebGLShader	createShader		Supported	Supported	Supported
	WebGLBuffer	createBuffer		Supported	Supported	Supported
	WebGLTexture	createTexture		Supported	Supported	Supported
	WebGLFramebuffer	createFramebuffer		Supported	Supported	Supported
	WebGLProgram	createProgram		Supported	Supported	Supported
	WebGLRenderingContext	vertexAttribPointer		Supported	Supported	Supported
		activeTexture		Supported	Supported	Supported
		attachShader		Supported	Supported	Supported
		bindBuffer		Supported	Supported	Supported
		bindFramebuffer		Supported	Supported	Supported
		bindRenderbuffer		Supported	Supported	Supported
		bindTexture		Supported	Supported	Supported
		bufferData		Supported	Supported	Supported
		clear		Supported	Supported	Supported
		clearColor		Supported	Supported	Supported
		clearDepth		Supported	Supported	Supported
		compileShader		Supported	Supported	Supported
		drawArrays		Supported	Supported	Supported
		drawElements		Supported	Supported	Supported
		enable		Supported	Supported	Supported
		enableVertexAttribArray		Supported	Supported	Supported
		framebufferRenderbuffer		Supported	Supported	Supported
		framebufferTexture2D		Supported	Supported	Supported
		generateMipmap		Supported	Supported	Supported
		getAttribLocation		Supported	Supported	Supported
	getExtension		Supported	Supported	Supported	

			getProgramParameter		Supported	Supported	Supported	
			getShaderInfoLog		Supported	Supported	Not supported	
			getShaderParameter		Supported	Supported	Supported	
			linkProgram		Supported	Supported	Supported	
			pixelStorei		Supported	Supported	Supported	
			renderbufferStorage		Supported	Supported	Supported	
			shaderSource		Supported	Supported	Supported	
			texImage2D		Supported	Supported	Supported	
			texParameteri		Supported	Supported	Supported	
			uniform1f		Supported	Supported	Supported	
			uniform3f		Supported	Supported	Supported	
			uniform1i		Supported	Supported	Supported	
			viewport		Supported	Supported	Supported	
			uniformMatrix3fv		Supported	Supported	Supported	
			uniformMatrix4fv		Supported	Supported	Supported	
			useProgram		Supported	Supported	Supported	
			vertexAttribPointer		Supported	Supported	Supported	
		WebGLRenderbuffer	createRenderbuffer		Supported	Supported	Supported	
		WebGLUniformLocation	getUniformLocation		Supported	Supported	Supported	
5.Web Applications	1.Offline Web Applications		status		Supported	Supported	Supported	
			update()		Supported	Supported	Supported	
			swapCache()		Supported	Supported	Supported	
			onchecking		Supported	Supported	Supported	
			onnoupdate		Supported	Supported	Supported	
			ondownloading		Supported	Supported	Supported	
			onprogress		Supported	Supported	Supported	
			oncached		Supported	Supported	Supported	
			onupdateready		Supported	Supported	Supported	
			onobsolete		Supported	Supported	Supported	
			onerror		Supported	Supported	Supported	
		ApplicationCache						
6.Web Storage	1.Storage	WindowSessionStorage	sessionStorage		Supported	Supported	Supported	
		WindowLocalStorage	localStorage		Supported	Supported	Not supported	
			length		Supported	Supported	Supported	
			key(index)		Supported	Supported	Supported	
			getItem(key)		Supported	Supported	Supported	
			setItem(key, value)		Supported	Supported	Supported	
			removeItem(key)		Supported	Supported	Supported	
			clear()		Supported	Supported	Supported	
			key		Supported	Supported	Supported	
			oldValue		Supported	Supported	Supported	
			newValue		Supported	Supported	Supported	
			url		Supported	Supported	Supported	
			storageArea		Supported	Supported	Supported	
		Event						
			key		Supported	Supported	Supported	
			oldValue		Supported	Supported	Supported	
			newValue		Supported	Supported	Supported	
			url		Supported	Supported	Supported	
			storageArea		Supported	Supported	Supported	
	2.IndexedDB Database	IDBFactory	open(name,version)		Supported	Supported	Not supported	
			deleteDatabase(name)		Supported	Supported	Not supported	
			cmp(first, second, result)		Supported	Supported	Not supported	
			name		Supported	Supported	Not supported	
			version		Supported	Supported	Not supported	
			objectStoreNames		Supported	Supported	Not supported	
			createObjectStore(name, optionalParameters)		Supported	Supported	Not supported	
			transaction(storeNames, mode)		Supported	Supported	Not supported	
			deleteObjectStore(name)		Supported	Not supported	Not supported	
			close()		Supported	Supported	Not supported	
			onversionchange		Supported	Not supported	Not supported	
			onerror		Supported	Not supported	Not supported	
		IDBDatabase						

	onabort		Supported	Not supported	Not supported
IDBIndex	name		Supported	Supported	Not supported
	objectStore		Supported	Supported	Not supported
	keyPath		Supported	Supported	Not supported
	multiEntry		Supported	Supported	Not supported
	count(key, retVal)		Supported	Supported	Not supported
	unique		Supported	Supported	Not supported
	get(key, retVal)		Supported	Supported	Not supported
	getKey(key)		Supported	Supported	Not supported
	openCursor(range, direction, retVal)		Supported	Supported	Not supported
openKeyCursor(range, direction)		Supported	Supported	Not supported	
IDBObjectStore	openCursor(range,direction, retVal)		Supported	Supported	Not supported
	put(value,key)		Supported	Supported	Not supported
	add(value,key)		Supported	Supported	Not supported
	get(key)		Supported	Supported	Not supported
	delete(key)		Supported	Supported	Not supported
	index(name)		Supported	Supported	Not supported
	clear()		Supported	Supported	Not supported
	count(key)		Supported	Supported	Not supported
	createIndex(name, keyPath, optionalParameters)		Supported	Supported	Not supported
	deleteIndex(indexName)		Supported	Supported	Not supported
	autoIncrement		Supported	Supported	Not supported
	transaction		Supported	Supported	Not supported
	indexNames		Supported	Supported	Not supported
	keyPath		Supported	Supported	Not supported
	name		Supported	Supported	Not supported
IDBCursor	source		Supported	Supported	Not supported
	direction		Supported	Supported	Not supported
	key		Supported	Supported	Not supported
	primaryKey		Supported	Supported	Not supported
	continue(key)		Supported	Supported	Not supported
	advance(count)		Supported	Supported	Not supported
	update(value)		Supported	Supported	Not supported
delete()		Supported	Supported	Not supported	
IDBCursorWithValue	value		Supported	Supported	Not supported
IDBTransaction	mode		Supported	Supported	Not supported
	error		Supported	Supported	Not supported
	db		Supported	Supported	Not supported
	objectStore(name)		Supported	Supported	Not supported
	abort()		Supported	Supported	Not supported
	onabort		Supported	Supported	Not supported
	oncomplete		Supported	Supported	Not supported
onerror		Supported	Supported	Not supported	
IDBRequest	error		Supported	Supported	Not supported
	onerror		Supported	Supported	Not supported
	onsuccess		Supported	Supported	Not supported
	readyState		Supported	Supported	Not supported
	result		Supported	Supported	Not supported
	source		Supported	Supported	Not supported
IDBOpenDBRequest	transaction		Supported	Supported	Not supported
	onblocked		Supported	Supported	Not supported
IDBVersionChangeEvent	onupgradeneeded		Supported	Supported	Not supported
	oldVersion		Supported	Not supported	Not supported
	newVersion		Supported	Not supported	Not supported
	lower		Supported	Supported	Not supported

		IDBKeyRange	lowerOpen		Supported	Supported	Not supported	
			upper		Supported	Supported	Not supported	
			upperOpen		Supported	Supported	Not supported	
			only(value)		Supported	Supported	Not supported	
			bound(lower, upper, lowerOpen, upperOpen)		Supported	Supported	Not supported	
			lowerBound(lower, open)		Supported	Supported	Not supported	
			upperBound(upper, open)		Supported	Supported	Not supported	
7.User Interaction	1.Drag & Drop	Attribute	draggable		Not supported	Not supported	Not supported	
			dropzone		Not supported	Not supported	Not supported	
		Events	drag		Not supported	Not supported	Not supported	
			dragstart		Not supported	Not supported	Not supported	
			dragenter		Not supported	Not supported	Not supported	
			dragover		Not supported	Not supported	Not supported	
			dragleave		Not supported	Not supported	Not supported	
			drop		Not supported	Not supported	Not supported	
			dragend		Not supported	Not supported	Not supported	
		DataTransfer	dropEffect		Not supported	Not supported	Not supported	
			effectAllowed		Not supported	Not supported	Not supported	
			items		Not supported	Not supported	Not supported	
			setDragImage()		Not supported	Not supported	Not supported	
			types		Not supported	Not supported	Not supported	
			setData()		Not supported	Not supported	Not supported	
			getData()		Not supported	Not supported	Not supported	
		DataTransferItemList	clearData()		Not supported	Not supported	Not supported	
			files		Not supported	Not supported	Not supported	
			length		Not supported	Not supported	Not supported	
			Items[index]		Not supported	Not supported	Not supported	
			clear()		Not supported	Not supported	Not supported	
		DataTransferItem	add()		Not supported	Not supported	Not supported	
			kind		Not supported	Not supported	Not supported	
			type		Not supported	Not supported	Not supported	
DragEvent	getAsString()		Not supported	Not supported	Not supported			
	getAsFile()		Not supported	Not supported	Not supported			
	dataTransfer		Not supported	Not supported	Not supported			
8.Supporteder	1.Web Workers	Worker	postMessage()		Supported	Supported	Supported	
			terminate()		Supported	Supported	Supported	
		2. Shared Workers	SharedWorkers	port		Supported	Supported	Supported
		3. Abstract Workers	AbstractWorkers	onerror		Supported	Supported	Supported
9.Files	1.File API	FileList	length		Not supported	Not supported	Not supported	
			item(index)		Not supported	Not supported	Not supported	
		Blob	size		Not supported	Not supported	Not supported	
			type		Not supported	Not supported	Not supported	
			slice()		Not supported	Not supported	Not supported	
			close()		Not supported	Not supported	Not supported	
		File	name		Not supported	Not supported	Not supported	
			lastModifiedDate		Not supported	Not supported	Not supported	
		FileReader	readAsArrayBuffer()		Not supported	Not supported	Not supported	
			readAsText()		Not supported	Not supported	Not supported	
			readAsDataURL()		Not supported	Not supported	Not supported	
			abort()		Not supported	Not supported	Not supported	
			readyState		Not supported	Not supported	Not supported	
			result		Not supported	Not supported	Not supported	
error			Not supported	Not supported	Not supported			
FileReader.onloadstart			Not supported	Not supported	Not supported			

				FileReader.onprogress		Not supported	Not supported	Not supported
				FileReader.onload		Not supported	Not supported	Not supported
				FileReader.onabort		Not supported	Not supported	Not supported
				FileReader.onerror		Not supported	Not supported	Not supported
				FileReader.onloadend		Not supported	Not supported	Not supported
			FileReaderSync	readAsArrayBuffer()		Not supported	Not supported	Not supported
				readAsText()		Not supported	Not supported	Not supported
				readAsDataURL()		Not supported	Not supported	Not supported
			URL	createObjectURL()		Not supported	Not supported	Not supported
				revokeObjectURL()		Not supported	Not supported	Not supported
10. History	1. Session history		History	length		Supported	Supported	Supported
				state		Supported	Supported	Supported
				go()		Supported	Supported	Supported
				back()		Supported	Supported	Supported
				forward()		Supported	Supported	Supported
				pushState()		Supported	Supported	Supported
				replaceState()		Supported	Supported	Supported
CSS	11. Static CSS	1. Background	Background-size	length(px)		Supported	Supported	Supported
				percentage(%)		Supported	Supported	Supported
				cover		Supported	Supported	Supported
				contain		Supported	Supported	Supported
				auto		Supported	Supported	Supported
			background-clip	padding-box		Supported	Supported	Supported
				border-box		Supported	Supported	Supported
				content-box		Supported	Supported	Supported
			background-origin	padding-box		Supported	Supported	Supported
				border-box		Supported	Supported	Supported
				content-box		Supported	Supported	Supported
			background-color	value		Supported	Supported	Supported
			background-image	url		Supported	Supported	Supported
			background-repeat	value, value		Supported	Supported	Supported
			background-attachment	value		Supported	Supported	Supported
			background-position	value		Supported	Supported	Supported
			background	value, value		Supported	Supported	Supported
		2. Borders and Outline	Box-shadow	h-shadow		Supported	Supported	Supported
				v-shadow		Supported	Supported	Supported
				blur		Supported	Supported	Supported
				spread		Supported	Supported	Supported
				color		Supported	Supported	Supported
				inset		Supported	Supported	Supported
			border-bottom-left-radius			Supported	Supported	Supported
			border-bottom-right-radius			Supported	Supported	Supported
			border-radius			Supported	Supported	Supported
			border-top-left-radius			Supported	Supported	Supported
			border-top-right-radius			Supported	Supported	Supported
			border-image	source slice width outset repeat		Supported	Supported	Supported
			border-image-source	url		Supported	Supported	Supported
			border-image-slice			Supported	Supported	Supported
			border-image-width			Supported	Supported	Supported
			border-image-outset			Supported	Supported	Supported
			border-image-repeat	stretch		Supported	Supported	Supported
				repeat		Supported	Supported	Supported
				round		Supported	Supported	Supported
			box-decoration-break	clone		Supported	Supported	Supported
				slice		Supported	Supported	Supported

3.Box	overflow-x	visible		Supported	Supported	Supported	
		hidden		Supported	Supported	Supported	
		scroll		Supported	Not supported	Supported	
		auto		Supported	Not supported	Supported	
	overflow-y	visible		Supported	Supported	Supported	
		hidden		Supported	Supported	Supported	
		scroll		Supported	Not supported	Supported	
		auto		Supported	Not supported	Supported	
	4.Color	color	RGB		Supported	Supported	Supported
			RGBA		Supported	Supported	Supported
			HSL		Supported	Supported	Supported
			HSLA		Supported	Supported	Supported
opacity			Supported	Supported	Supported		
gradient		linear-gradient		Supported	Supported	Supported	
		radial-gradient		Supported	Supported	Supported	
		repeating-linear-gradient		Supported	Supported	Supported	
		repeating-radial-gradient		Supported	Supported	Supported	
5.Columns		column-count			Supported	Supported	Supported
	column-gap			Supported	Supported	Supported	
	column-rule			Supported	Supported	Supported	
	column-rule-color	color		Supported	Supported	Supported	
		none		Supported	Supported	Supported	
	column-rule-style	hidden		Supported	Supported	Supported	
		dotted		Supported	Supported	Supported	
		dashed		Supported	Supported	Supported	
		solid		Supported	Supported	Supported	
		double		Supported	Supported	Supported	
		groove		Supported	Supported	Supported	
		ridge		Supported	Supported	Supported	
		inset		Supported	Supported	Supported	
		outset		Supported	Supported	Supported	
		column-rule-width	thin		Supported	Supported	Supported
	medium			Supported	Supported	Supported	
	thick			Supported	Supported	Supported	
	length			Supported	Supported	Supported	
	column-span	1		Supported	Supported	Supported	
		all		Supported	Supported	Supported	
	column-width			Supported	Supported	Supported	
	columns	width count		Supported	Supported	Supported	
	column-fill	auto		Not supported	Not supported	Not supported	
		balance		Not supported	Not supported	Not supported	
	break-inside	auto		Not supported	Not supported	Not supported	
		avoid		Not supported	Not supported	Not supported	
		avoid-column		Not supported	Not supported	Not supported	
	break-before	auto		Not supported	Not supported	Not supported	
		avoid		Not supported	Not supported	Not supported	
		column		Not supported	Not supported	Not supported	
	break-after	avoid-column		Not supported	Not supported	Not supported	
		auto		Not supported	Not supported	Not supported	
		avoid		Not supported	Not supported	Not supported	
		column		Not supported	Not supported	Not supported	
	6.Flexible Box	align-content	flex-start		Supported	Supported	Supported
			flex-end		Supported	Supported	Supported
			center		Supported	Supported	Supported

		space-between		Supported	Supported	Supported	
		space-around		Supported	Supported	Supported	
		stretch		Supported	Supported	Supported	
align-items		flex-start		Supported	Supported	Supported	
		flex-end		Supported	Supported	Supported	
		center		Supported	Supported	Supported	
		stretch		Supported	Supported	Supported	
		baseline		Supported	Supported	Supported	
align-self		flex-start		Supported	Supported	Supported	
		flex-end		Supported	Supported	Supported	
		center		Supported	Supported	Supported	
		stretch		Supported	Supported	Supported	
		baseline		Supported	Supported	Supported	
display		flex		Supported	Supported	Supported	
		inline-flex		Supported	Supported	Supported	
flex		<flex-grow> <flex-shrink> <flex-basis>		Supported	Supported	Supported	
flex-grow		value		Supported	Supported	Supported	
flex-shrink		value		Supported	Supported	Supported	
flex-basis		value		Supported	Supported	Supported	
flex-direction		row		Supported	Supported	Supported	
		row-reverse		Supported	Supported	Supported	
		column		Supported	Supported	Supported	
		column-reverse		Supported	Supported	Supported	
flex-flow		<flex-direction> <flex-wrap>		Supported	Supported	Supported	
flex-wrap		nowrap		Supported	Supported	Supported	
		wrap		Supported	Supported	Supported	
		wrap-reverse		Supported	Supported	Supported	
justify-content		flex-start		Supported	Supported	Supported	
		flex-end		Supported	Supported	Supported	
		center		Supported	Supported	Supported	
		space-between		Supported	Supported	Supported	
		space-around		Supported	Supported	Supported	
order				Supported	Supported	Supported	
7.Text	text-shadow		h-shadow v-shadow blur color		Supported	Supported	Supported
	text-overflow		clip		Supported	Supported	Supported
			ellipsis		Supported	Supported	Supported
	word-break		normal		Supported	Supported	Supported
			break-all		Supported	Supported	Supported
			keep-all		Not supported	Not supported	Not supported
	word-wrap		normal		Supported	Supported	Supported
			break-word		Supported	Supported	Supported
	hyphens		auto		Not supported	Not supported	Not supported
			manual		Supported	Supported	Supported
			none		Supported	Supported	Supported
	overflow-wrap		normal		Supported	Supported	Supported
			break-word		Supported	Supported	Supported
	text-align		left		Supported	Supported	Supported
			right		Supported	Supported	Supported
			center		Supported	Supported	Supported
			justify		Supported	Supported	Supported
			start		Supported	Supported	Supported
			end		Supported	Supported	Supported
			match-parent		Supported	Supported	Supported
	left		Supported	Supported	Supported		
		right		Not supported	Not supported	Not supported	

	text-align-last	center		Not supported	Not supported	Not supported
		justify		Not supported	Not supported	Not supported
		start		Not supported	Not supported	Not supported
		end		Not supported	Not supported	Not supported
8. Fonts	@font-face	font-family src		Supported	Supported	Supported
		font-style		Supported	Not supported	Supported
		font-weight		Not supported	Not supported	Not supported
		font-stretch		Not supported	Not supported	Supported
		font-variant		Supported	Supported	Supported
		unicode-range		Not supported	Not supported	Not supported
	font-size-adjust			Not supported	Not supported	Not supported
9.UI	box-sizing	border-box		Supported	Supported	Not supported
		padding-box		Not supported	Not supported	Not supported
		content-box		Supported	Supported	Supported
	resize	both		Not supported	Not supported	Not supported
		horizontal		Not supported	Not supported	Not supported
		vertical		Not supported	Not supported	Not supported
		none		Not supported	Not supported	Not supported
	outline-width	value		Supported	Supported	Supported
	outline-offset	value		Supported	Supported	Supported
	outline-style	none		Supported	Supported	Supported
		hidden		Supported	Supported	Supported
		dotted		Supported	Supported	Supported
		dashed		Supported	Supported	Supported
		solid		Supported	Supported	Supported
		double		Supported	Supported	Supported
		groove		Supported	Supported	Supported
		ridge		Supported	Supported	Supported
		inset		Supported	Supported	Supported
		outset		Supported	Supported	Supported
	outline-color	value		Supported	Supported	Supported
	outline	color style width		Supported	Supported	Supported
	nav-up			Supported	Supported	Supported
	nav-right			Supported	Supported	Supported
nav-down			Supported	Supported	Supported	
nav-left			Supported	Supported	Supported	
pseudo classes	:valid :invalid		Supported	Supported	Not supported	
	:in-range :out-of range		Supported	Supported	Supported	
	:required :optional		Supported	Supported	Supported	
	:read-only :read-write		Supported	Supported	Supported	
10. Media Queries	width	value		Supported	Supported	Supported
	height	value		Supported	Supported	Supported
	device-width	value		Supported	Supported	Supported
	device-height	value		Supported	Supported	Supported
	orientation	portrait landscape		Supported	Supported	Supported
	aspect-ratio	value		Supported	Supported	Supported
	device-aspect-ratio	value		Supported	Supported	Supported
11. Selectors	pseudo elements	::first-line		Supported	Supported	Supported
		::first-letter		Supported	Supported	Supported
		::before		Supported	Supported	Supported
		::after		Supported	Supported	Supported
		:target		Supported	Supported	Not supported
		:enabled		Supported	Supported	Supported
		:disabled		Supported	Supported	Supported
		:checked		Supported	Supported	Supported

				:root		Supported	Supported	Supported	
				:nth-child()		Supported	Supported	Supported	
				:nth-last-child()		Supported	Supported	Supported	
				:nth-of-type()		Supported	Supported	Supported	
				:nth-last-of-type()		Supported	Supported	Supported	
			pseudo classes	:first-child		Supported	Supported	Supported	
				:last-child		Supported	Supported	Supported	
				:first-of-type		Supported	Supported	Supported	
				:last-of-type		Supported	Supported	Supported	
				:only-child		Supported	Supported	Supported	
				:only-of-type		Supported	Supported	Supported	
				:empty		Supported	Supported	Supported	
				::selection		Not supported	Not supported	Not supported	
				:not(X)		Supported	Supported	Supported	
				simple selectors	[attribute^=value]		Supported	Supported	Supported
			[attribute\$=value]			Supported	Supported	Supported	
			[attribute*=value]			Supported	Supported	Supported	
			sibling combinators	element1~element2		Supported	Supported	Supported	
12.Dynamic CSS	1.Transforms	transform:scale		scale(x,y)		Supported	Supported	Supported	
				scaleX(n)		Supported	Supported	Supported	
				scaleY(n)		Supported	Supported	Supported	
				scaleZ(n)		Supported	Supported	Supported	
				scale3d(x,y,z)		Supported	Supported	Supported	
		transform:rotate		rotate(angle)		Supported	Supported	Supported	
				rotateX(angle)		Supported	Supported	Supported	
				rotateY(angle)		Supported	Supported	Supported	
				rotateZ(angle)		Supported	Supported	Supported	
				rotate3d(x,y,z,angle)		Supported	Supported	Supported	
		transform:translate		translate(x,y)		Supported	Supported	Supported	
				translateX(x)		Supported	Supported	Supported	
				translateY(y)		Supported	Supported	Supported	
				translateZ(z)		Supported	Supported	Supported	
				translate3d(x,y,z)		Supported	Supported	Supported	
		transform:skew		skew(x-angle,y-angle)		Supported	Supported	Supported	
				skewX(angle)		Supported	Supported	Supported	
				skewY(angle)		Supported	Supported	Supported	
	transform:matrix		matrix(n,n,n,n,n)		Supported	Supported	Supported		
			matrix3d(n,n,n,n,n,n,n,n,n,n,n,n)		Not supported	Not supported	Not supported		
	transform-style		preserve-3d		Supported	Supported	Supported		
			flat		Supported	Supported	Supported		
	transform-origin		x-axis		Supported	Supported	Supported		
			y-axis		Supported	Supported	Supported		
			x-axis y-axis z-axis		Supported	Supported	Supported		
	perspective				Supported	Supported	Supported		
			perspective-origin	x-axis y-axis		Supported	Supported	Supported	
	backface-visibility		visible		Supported	Supported	Supported		
			hidden		Supported	Supported	Supported		
	2.Transitions	transition-property		all		Supported	Supported	Supported	
			width		Supported	Supported	Supported		
			height		Supported	Supported	Supported		
transition-duration			time (s)		Supported	Supported	Supported		
transition-timing-function			linear / cubic-bezier(0,0,1,1)		Supported	Supported	Supported		
			ease / cubic-bezier(0.25,0.1,0.25,1)		Supported	Supported	Supported		
			ease-in / cubic-bezier(0.42,0,1,1)		Supported	Supported	Supported		
		ease-out / cubic-bezier(0,0,0.58,1)		Supported	Supported	Supported			

On webOS TV v1.2/v2.x/v3.x, 'transform: rotate' and 'transform: skew' do not support the video element, and 'transform: scale' only supports a fixed ratio for the video element.

			ease-in-out / cubic-bezier(0.42,0,0.58,1)		Supported	Supported	Supported	
		transition-delay	time (s)		Supported	Supported	Supported	
		transition	property duration timing-function delay		Supported	Supported	Supported	
3.Animation		@keyframes	animationname keyframes-selector {css-styles;}		Supported	Supported	Supported	
		animation-name	keyframename none		Supported	Supported	Supported	
		animation-duration	time (s)		Supported	Supported	Supported	
		animation-timing-function	linear		Supported	Supported	Supported	
			ease		Supported	Supported	Supported	
			ease-in		Supported	Supported	Supported	
			ease-out		Supported	Supported	Supported	
			ease-in-out		Supported	Supported	Supported	
			cubic-bezier		Supported	Supported	Supported	
		animation-delay	time (s)		Supported	Supported	Supported	
		animation-iteration-count	infinite		Supported	Supported	Supported	
		animation-direction	normal		Supported	Supported	Supported	
			alternate		Supported	Supported	Supported	
		animation-play-state	running		Supported	Supported	Supported	
			paused		Supported	Supported	Supported	
		animation-fill-mode	forwards		Supported	Supported	Supported	
			backwards		Supported	Supported	Supported	
	both			Supported	Supported	Supported		
	animation	name duration timing-function delay iteration-count direction		Supported	Supported	Supported		

ECMAScript Coverage on webOS TV

Last Updated: 06-NOV-2019

ECMAScript Version	Feature Name	Specific Feature Name	webOS 1.0	webOS 2.0	webOS 3.0	webOS 4.0	Remarks
ECMAScript 5	Object/array literal extensions	Getter accessors	Supported	Supported	Supported	Supported	
		Setter accessors	Supported	Supported	Supported	Supported	
		Trailing commas in object literals	Supported	Supported	Supported	Supported	
		Trailing commas in array literals	Supported	Supported	Supported	Supported	
		Reserved words as property names	Supported	Supported	Supported	Supported	
	Object static methods	Object.create	Supported	Supported	Supported	Supported	
		Object.defineProperty	Supported	Supported	Supported	Supported	
		Object.defineProperties	Supported	Supported	Supported	Supported	
		Object.getPrototypeOf	Supported	Supported	Supported	Supported	
		Object.keys	Supported	Supported	Supported	Supported	
		Object.seal	Supported	Supported	Supported	Supported	
		Object.freeze	Supported	Supported	Supported	Supported	
		Object.preventExtensions	Supported	Supported	Supported	Supported	
		Object.isSealed	Supported	Supported	Supported	Supported	
		Object.isFrozen	Supported	Supported	Supported	Supported	
		Object.isExtensible	Supported	Supported	Supported	Supported	
		Object.getOwnPropertyDescriptor	Supported	Supported	Supported	Supported	
		Object.getOwnPropertyNames	Supported	Supported	Supported	Supported	
	Array methods	Array.isArray	Supported	Supported	Supported	Supported	
		Array.prototype.indexOf	Supported	Supported	Supported	Supported	
		Array.prototype.lastIndexOf	Supported	Supported	Supported	Supported	
		Array.prototype.every	Supported	Supported	Supported	Supported	
		Array.prototype.some	Supported	Supported	Supported	Supported	
		Array.prototype.forEach	Supported	Supported	Supported	Supported	
		Array.prototype.map	Supported	Supported	Supported	Supported	
		Array.prototype.filter	Supported	Supported	Supported	Supported	
		Array.prototype.reduce	Supported	Supported	Supported	Supported	
		Array.prototype.reduceRight	Supported	Supported	Supported	Supported	
		Array.prototype.sort: compareFn must be function or undefined	Not supported	Not supported	Not supported	Not supported	
		Array.prototype.sort: compareFn may be explicit undefined	Supported	Supported	Supported	Supported	
		String properties and methods	Property access on strings	Supported	Supported	Supported	Supported
	String.prototype.trim		Supported	Supported	Supported	Supported	
	Date methods	Date.prototype.toISOString	Supported	Supported	Supported	Supported	
		Date.now	Supported	Supported	Supported	Supported	
		Date.prototype.toJSON	Not supported	Not supported	Supported	Supported	
	Function.prototype.bind	Function.prototype.bind	Supported	Supported	Supported	Supported	
	JSON	JSON	Supported	Supported	Supported	Supported	
		undefined	Supported	Supported	Supported	Supported	

	Immutable globals	NaN	Supported	Supported	Supported	Supported		
		Infinity	Supported	Supported	Supported	Supported		
	Miscellaneous	Function.prototype.apply permits array-likes	Supported	Supported	Supported	Supported		
		parseInt ignores leading zeros	Supported	Supported	Supported	Supported		
		Function "prototype" property is non-enumerable	Supported	Supported	Supported	Supported		
		Arguments toStringTag is "Arguments"	Supported	Supported	Supported	Supported		
		Zero-width chars in identifiers	Supported	Supported	Supported	Supported		
		Unreserved words	Supported	Supported	Supported	Supported		
		Enumerable properties can be shadowed by non-enumerables	Not supported	Not supported	Not supported	Not supported		
		Thrown functions have proper "this" values	Supported	Supported	Supported	Supported		
	Strict mode	reserved words	Supported	Supported	Supported	Supported		
		"this" is undefined in functions	Supported	Supported	Supported	Supported		
		"this" is not coerced to object in primitive methods	Supported	Supported	Supported	Supported		
		"this" is not coerced to object in primitive accessors	Supported	Supported	Supported	Supported		
		legacy octal is a SyntaxError	Supported	Supported	Supported	Supported		
		assignment to unresolvable identifiers is a ReferenceError	Supported	Supported	Supported	Supported		
		assignment to eval or arguments is a SyntaxError	Supported	Supported	Supported	Supported		
		assignment to non-writable properties is a TypeError	Supported	Supported	Not supported	Supported		
		eval or arguments bindings is a SyntaxError	Supported	Supported	Supported	Supported		
		arguments.caller removed or is a TypeError	Supported	Supported	Supported	Supported		
		arguments.caller is a TypeError	Supported	Supported	Supported	Supported		
		(function({})).caller and (function({})).arguments is a TypeError	Supported	Supported	Supported	Supported		
		arguments is unmapped	Supported	Supported	Supported	Supported		
		eval() can't create bindings	Supported	Supported	Supported	Supported		
		deleting bindings is a SyntaxError	Supported	Supported	Supported	Supported		
		deleting non-configurable properties is a TypeError	Supported	Supported	Supported	Supported		
		"with" is a SyntaxError	Supported	Supported	Supported	Supported		
		repeated parameter names is a SyntaxError	Supported	Supported	Supported	Supported		
		function expressions with matching name and argument are valid	Not supported	Not supported	Supported	Supported		
		ES5 compatibility			95%	95%	96%	97%
	ECMAScript 6	Optimisation	proper tail calls (tail call optimisation)	Not supported	Not supported	Not supported	Not supported	
			default function parameters	Not supported	Not supported	Not supported	Supported	
		Syntax	rest parameters	Not supported	Not supported	Not supported	Supported	
spread (...) operator			Not supported	Not supported	Not supported	Supported		
object literal extensions			Not supported	Not supported	Not supported	Supported		
for..of loops			Not supported	Not supported	Partially(6/9)	Supported		
octal and binary literals			Not supported	Not supported	Not supported	Supported		
template literals			Not supported	Not supported	Not supported	Supported		
RegExp "y" and "u" flags			Not supported	Not supported	Not supported	Supported		
destructuring, declarations			Not supported	Not supported	Not supported	Supported		
destructuring, assignment			Not supported	Not supported	Not supported	Supported		
destructuring, parameters			Not supported	Not supported	Not supported	Supported		
Unicode code point escapes			Not supported	Not supported	Not supported	Supported		

		new.target	Not supported	Not supported	Not supported	Supported	
Bindings		const	Partially(1/16)	Partially(1/16)	Partially(1/16)	Supported	
		let	Not supported	Not supported	Not supported	Supported	
		block-level function declaration	Not supported	Not supported	Not supported	Supported	
Functions		arrow functions	Not supported	Not supported	Not supported	Supported	
		class	Not supported	Not supported	Not supported	Supported	
		super	Not supported	Not supported	Not supported	Supported	
		generators	Not supported	Not supported	Not supported	Supported	
Built-ins		typed arrays	Partially(18/46)	Partially(18/46)	Partially(23/46)	Supported	
		Map	Partially(6/19)	Partially(6/19)	Partially(15/19)	Supported	
		Set	Partially(8/19)	Partially(8/19)	Partially(15/19)	Supported	
		WeakMap	Partially(7/12)	Partially(7/12)	Partially(9/12)	Supported	
		WeakSet	Not supported	Not supported	Partially(8/11)	Supported	
		Proxy	Not supported	Not supported	Not supported	Supported	
		Reflect	Not supported	Not supported	Not supported	Supported	
		Promise	Not supported	Not supported	Partially(5/8)	Supported	
		Symbol	Not supported	Not supported	Partially(9/12)	Supported	
		well-known symbols	Not supported	Not supported	Partially(2/26)	Supported	
Built-in extensions		Object static methods	Not supported	Not supported	Partially(3/4)	Supported	
		function "name" property	Partially(3/17)	Partially(3/17)	Partially(2/17)	Supported	
		String static methods	Not supported	Not supported	Not supported	Supported	
		String.prototype methods	Not supported	Not supported	Partially(2/10)	Supported	
		RegExp.prototype properties	Not supported	Not supported	Not supported	Supported	
		Array static methods	Not supported	Not supported	Not supported	Supported	
		Array.prototype methods	Not supported	Not supported	Partially(4/10)	Supported	
		Number properties	Not supported	Not supported	Supported	Supported	
		Math methods	Partially(1/17)	Partially(1/17)	Supported	Supported	
		Date.prototype[Symbol.toPrimitive]	Not supported	Not supported	Not supported	Supported	
Subclassing		Array is subclassable	Not supported	Not supported	Not supported	Supported	
		RegExp is subclassable	Not supported	Not supported	Not supported	Supported	
		Function is subclassable	Not supported	Not supported	Not supported	Supported	
		Promise is subclassable	Not supported	Not supported	Not supported	Supported	
		miscellaneous subclassables	Not supported	Not supported	Not supported	Supported	
Misc		prototype of bound functions	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'get' calls	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'set' calls	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'defineProperty' calls	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'deleteProperty' calls	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'getOwnPropertyDescriptor' calls	Not supported	Not supported	Not supported	Supported	
		Proxy, internal 'ownKeys' calls	Not supported	Not supported	Not supported	Supported	
		Object static methods accept primitives	Not supported	Not supported	Not supported	Supported	
		own property order	Partially(4/7)	Partially(4/7)	Partially(3/7)	Supported	
		miscellaneous	Partially(3/10)	Partially(3/10)	Partially(2/10)	Supported	

	Annex b	non-strict function semantics	Partially(2/3)	Partially(2/3)	Partially(2/3)	Supported
		__proto__ in object literals	Partially(1/5)	Partially(1/5)	Partially(1/5)	Supported
		Object.prototype.__proto__	Supported	Supported	Supported	Supported
		String.prototype HTML methods	Supported	Supported	Supported	Supported
		RegExp.prototype.compile	Partially(1/2)	Partially(1/2)	Partially(1/2)	Partially(1/2)
		RegExp syntax extensions	Supported	Supported	Supported	Supported
		HTML-style comments	Supported	Supported	Supported	Supported
ES6 compatibility			7%	7%	22%	97%
ECMAScript 2016+	2016 features	exponentiation (**) operator	Not supported	Not supported	Not supported	Supported
		Array.prototype.includes	Not supported	Not supported	Not supported	Supported
	2016 misc	generator functions can't be used with "new"	Not supported	Not supported	Not supported	Supported
		generator throw() caught by inner generator	Not supported	Not supported	Not supported	Supported
		strict fn w/ non-strict non-simple params is error	Not supported	Not supported	Not supported	Supported
		nested rest destructuring, declarations	Not supported	Not supported	Not supported	Supported
		nested rest destructuring, parameters	Not supported	Not supported	Not supported	Supported
		Proxy, "enumerate" handler removed	Not supported	Not supported	Not supported	Supported
		Proxy internal calls, Array.prototype.includes	Not supported	Not supported	Not supported	Supported
	2017 features	Object static methods	Not supported	Not supported	Not supported	Supported
		String padding	Not supported	Not supported	Not supported	Supported
		trailing commas in function syntax	Not supported	Not supported	Not supported	Supported
		async functions	Not supported	Not supported	Not supported	Supported
	2017 misc	shared memory and atomics	Not supported	Not supported	Not supported	Supported
		Proxy "ownKeys" handler, duplicate keys for non-extensible targets	Not supported	Not supported	Not supported	Supported
		RegExp "u" flag, case folding	Not supported	Not supported	Not supported	Supported
	2017 annex b	arguments.caller removed	Not supported	Not supported	Not supported	Supported
		Object.prototype getter/setter methods	Partially(12/16)	Partially(12/16)	Partially(10/16)	Partially(10/16)
		Proxy internal calls, getter/setter methods	Not supported	Not supported	Not supported	Partially(2/4)
	2018 features	assignments allowed in for-in head in non-strict mode	Not supported	Not supported	Supported	Supported
		template literal revision	Not supported	Not supported	Not supported	Not supported
2016+ compatibility			1%	1%	4%	36%