

MP attributes backends basexx bit32 blobs  
boolean buffers builders caches callback  
callbacks catcodes characters chemistry  
commands containers context converters  
coroutine ctxrunner debug dir directives  
document documentdata drivers environment  
experiments figures file fio floats font fonts  
functions global graphics gzip images  
interactions interfaces io job lang languages  
layouts lfs libraries lmx logs lpdf lpeg lua  
luatex lxml math mathematics md5 metapost mime  
moduledata modules mp mplib noads node nodes  
number objects optional os package  
pagebuilders parametersets pdf pdfdecode pdfe  
physics pngdecode publications regimes  
resolvers sandbox scripts set sha2 sio socket  
sorters statistics status storage streams  
string structures table tex texconditionals  
texconfig texconstants texifs texio  
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token tokens tracers trackers typesetters  
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visualizers xcomplex xdecimal xmath xml xzip  
zip zlib

# ConTeXt LMTX

# global (alias: \_G)

CONTEXTLMTXMODE	number	directives	table
FFISUPPORTED	boolean	document	table
INITEXMODE	boolean	documentdata	table
LUAMAJORVERSION	number	dofile	function
LUAMINORVERSION	number	drivers	table
LUATEXENGINE	string	environment	table
LUATEXFORMATID	number	error	function
LUATEXFUNCTIONALITY	number	experiments	table
LUATEXVERSION	number	figures	table
LUAVERSION	number	file	table
MP	function	fio	table
arg	table	floats	table
assert	function	flushfontchar	function
attributes	table	flushsimplerule	function
backends	table	font	table
basexx	table	fonts	table
bit32	table	functions	table
blobs	table	getmetatable	function
blockrequire	function	getpos	function
boolean	table	getscriptstatus	function
buffers	table	global	table
builders	table	graphics	table
caches	table	gregorian_to_jalali	function
callback	table	grid_to_mp	function
callbacks	table	gzip	table
catcodes	table	images	table
characters	table	inspect	function
checkimage	function	interactions	table
chemistry	table	interfaces	table
collectgarbage	function	io	table
commands	table	ipairs	function
containers	table	jalali_to_gregorian	function
context	function	job	table
converters	table	lang	table
coroutine	table	languages	table
createmask	function	layouts	table
ctxrunner	table	lfs	table
data	table	libraries	table
debug	table	lmx	table
dimen	function	load	function
dir	table	loadfile	function

loadstring	function	regimes	table
logs	table	require	function
lpdf	table	required	function
lpeg	table	resolvers	table
lua	table	ruledspace	function
luatex	table	sandbox	table
lxml	table	scanarray	function
math	table	scanhash	function
mathematics	table	scripts	table
md5	table	select	function
metapost	table	set	table
mime	table	setinspector	function
moduledata	table	setmetatable	function
modules	table	sha2	table
mp	function	shipbox_ref_h	number
mplib	table	shipbox_ref_v	number
next	function	sio	table
noods	table	socket	table
node	table	sorters	table
nodes	table	statistics	table
number	table	status	table
objects	table	storage	table
optional	table	streams	table
optionalrequire	function	string	table
os	table	structures	table
package	table	table	table
pagebuilders	table	tex	table
pairs	function	texconditionals	data table
parametersets	table	texconfig	table
pcall	function	texconstants	data table
pdf	table	texifs	data table
pdfdecode	table	texio	table
pdfde	table	texisdefined	data table
physics	table	texmodes	data table
pngdecode	table	texsystemmodes	data table
poporientation	function	thirddata	table
print	function	tobolean	function
publications	table	todecimal	function
pushorientation	function	token	table
rawequal	function	tokens	table
rawget	function	tonumber	function
rawlen	function	tostring	function
rawset	function	tracers	table
readarray	function	trackers	table

<b>type</b>	function	<b>visualizers</b>	table
<b>typesetters</b>	table	<b>warn</b>	function
<b>unpack</b>	function	<b>xcomplex</b>	table
<b>updaters</b>	table	<b>xdecimal</b>	table
<b>url</b>	table	<b>xmath</b>	table
<b>userdata</b>	table	<b>xml</b>	table
<b>utf</b>	table	<b>xpcall</b>	function
<b>utf8</b>	table	<b>xzip</b>	table
<b>utilities</b>	table	<b>zip</b>	table
<b>v</b>	string	<b>zlib</b>	table

# attributes (context)

<b>applyoverloads</b>	function	F inbetween
<b>cleanup</b>	function	F justone
<b>colorintents</b>	table	F hsvtogram
N attribute		F hsvtorgb
D data		F hwbtorgb
F enable		F iccprofile
F handler		F isblack
F register		N main
D registered		S model
<b>colors</b>	table	D models
N attribute		F mpicolor
F cmyk		F mpnamedcolor
F cmyktogray		F mpoptions
F cmyktorgb		F namedcolorattributes
F colorcomponents		N none
D counts		F popset
B couple		F processcolorcomponents
F currentmodel		F pushset
F currentnamedmodel		F register
D data		D registered
N default		F registerspotcolor
F defineintermediatecolor		F rgb
F definemultitonecolor		F rgbtocmyk
F defineprocesscolor		F rgbtogray
F defineprocesscolordirect		F rgtohsv
F definesimplegray		N selector
F definespotcolor		F setlist
F definetransparency		F setmodel
F enable		F setpagecolormodel
F filter		D sets
N forced		F spec
F forcedmodel		F spot
F forcesupport		F spotcolorname
F formatcolor		F spotcolorparent
F formatgray		F spotcolorvalue
F getpagecolormodel		B supported
F gray		F toattributes
F graytohsv		F transparencycomponents
F handler		B triggering
T helpers		F usecolors
F complement		D valid

F value		N attribute
D values		D data
B weightgray		F enable
<b>define</b>	function	F forcesupport
<b>effects</b>	table	F handler
N attribute		T names
D data		N color
F enable		N colorburn
F handler		N colordodge
F register		N darken
D registered		N difference
D values		N exclusion
<b>handlers</b>	table	N hardlight
<b>list</b>	data table	N hue
<b>markasoverload</b>	function	N lighten
<b>names</b>	data table	N luminosity
<b>negatives</b>	table	N multiply
N attribute		N none
D data		N normal
F enable		N overlay
F handler		N saturation
F register		N screen
D registered		N softlight
F set		N none
<b>numbers</b>	data table	F register
<b>ofnode</b>	function	D registered
<b>private</b>	function	B supported
<b>public</b>	function	F toattribute
<b>registercleaner</b>	function	B triggering
<b>restore</b>	function	F value
<b>save</b>	function	D values
<b>showcurrent</b>	function	<b>unsetvalue</b> number
<b>states</b>	table	<b>viewerlayers</b> table
F disabletriggering		N attribute
F enabletriggering		F cleanup
F finalize		D data
F initialize		F define
F process		F definedlayoutcomponent
F selective		F enable
F stacked		F forcesupport
F stacker		F handler
<b>system</b>	function	B hasorder
<b>tooverloads</b>	function	D listwise
<b>transparencies</b>	table	F register

D registered  
F resolve\_begin  
F resolve\_end  
F resolve\_reset  
F resolve\_step  
D scopes

F setfeatures  
F start  
F stop  
B supported  
D values

# backends (context)

<b>closeout</b>	function	F embedimage
<b>codeinjections</b>	table	F enabletags
F boxresourcedimensions		F exportformdata
F registerboxresource		F fieldsurrounding
F restoreboxresource		F flushmergelayern
<b>current</b>	string	F getbookmarks
<b>defaults</b>	table	F getdefaultfieldvalue
T codeinjections		F getfieldcategory
F getpagedimensions		F getfieldset
F getpageorigin		F getformatoption
F lmtxmode		F getidentityvariable
F setpagedimensions		F getinfo
F setpageorigin		F getpreviewfigure
T nodeinjections		F insertrenderingwindow
T registrations		F maptag
D tables		F mergebookmarks
<b>included</b>	table	F mergecomments
B context		F mergefields
B date		F mergereferences
B id		F mergeviewerlayers
B metadata		F newimage
B pdf		F prerollreference
<b>install</b>	function	F presymbol
<b>latelua</b>	function	F presymbolslist
<b>nodeinjections</b>	table	F processrendering
<b>noflatelua</b>	function	F registerdocumentcloseaction
<b>nothing</b>	function	F registerdocumentopenaction
<b>openout</b>	function	F registeredsymbol
<b>pdf</b>	table	F registerpagecloseaction
T codeinjections		F registerpageopenaction
F addbookmarks		F registersymbol
F analyzenormalsymbol		F scanimage
F analyzesymbol		F setattachmentsupport
F attachmentid		F setfieldcalculationset
F bitmap		F setfigurealternative
F clonefield		F setfigurecolorspace
F copyimage		F setfiguremask
F definefield		F setformat
F definefieldset		F setformsmethod
F defineviewerlayer		F setpagetransition
F embedfile		F settaggingsupport

F setupcanvas	F insertu3d
F setupidentity	F knockout
F setxmpfile	F negative
F startlayer	F overprint
F startunicodetoactualtext	F positive
F startunicodetoactualtextdirect	F reference
F stoplayer	F rgbcolor
F stopunicodetoactualtext	F spotcolor
F stopunicodetoactualtextdirect	F startlayer
F supportedformats	F startstackedlayer
F unicodetoactualtext	F stoplayer
F useviewerlayer	F stopstackedlayer
F validfield	F transparency
F validfieldcategory	F typesetfield
F validfieldset	T registrations
F wrapimage	F cmykindexcolor
S comment	F cmykspotcolor
T nodeinjections	F getspotcolorreference
F addtags	F grayindexcolor
F annotation	F grayspotcolor
F attachfile	F rgbindexcolor
F changestackedlayer	F rgbspotcolor
F cmykcolor	F spotcolorname
F comment	F transparency
F destination	T tables
F effect	D vfspecials
F graycolor	<b>registrations</b> table
F injectbitmap	<b>tables</b> table
F insertmovie	<b>timestamp</b> function
F insertsound	<b>writeout</b> function
F insertswf	

## basexx (extra lua)

<b>decode16</b>	function	<b>encode16</b>	function
<b>decode64</b>	function	<b>encode64</b>	function
<b>decode85</b>	function	<b>encode85</b>	function
<b>decodeLZW</b>	function	<b>encodeLZW</b>	function
<b>decodeRL</b>	function	<b>encodeRL</b>	function

## bit32 (basic lua)

<b>arshift</b>	function	<b>extract</b>	function
<b>band</b>	function	<b>lrotate</b>	function
<b>bnot</b>	function	<b>lshift</b>	function
<b>bor</b>	function	<b>replace</b>	function
<b>btest</b>	function	<b>rrotate</b>	function
<b>bxor</b>	function	<b>rshift</b>	function

## blobs (context)

<b>append</b>	function	<b>strht</b>	function
<b>dimensions</b>	function	<b>strwd</b>	function
<b>dispose</b>	function	<b>tohpack</b>	function
<b>new</b>	function	<b>tonodes</b>	function
<b>pack</b>	function	<b>tovpack</b>	function
<b>strdp</b>	function	<b>write</b>	function
<b>strhd</b>	function		

## boolean (context)

**tocontext** function

**tonumber** function

## buffers (context)

<b>append</b>	function	F define
<b>assign</b>	function	F hassomecontent
<b>collectcontent</b>	function	F next
<b>erase</b>	function	F place
<b>exists</b>	function	F reset
<b>get</b>	function	F save
<b>getcontent</b>	function	<b>prepend</b> function
<b>getlines</b>	function	<b>raw</b> function
<b>gettextbuffer</b>	function	<b>run</b> function
<b>loadcontent</b>	function	<b>samplefile</b> function
<b>parallel</b>	table	<b>indent</b> function

# builders (context)

<b>checksidefloat</b>	function	F start
<b>kernel</b>	table	F stop
F hyphenating		F tag
F hyphenation		<b>profiling</b> table
F kerning		F add
F ligaturing		F distance
F mlist_to_hlist		F fixedprofile
<b>paragraphs</b>	table	F get
T constructors		F list
N attribute		F pagehandler
F define		F profilebox
F disable		F set
F enable		<b>vspacing</b> table
F handler		F analyze
T methods		D categories
F basic		F collapsevbox
F default		T data
F hpack		D map
F oneline		D skip
D names		D snapmethods
D numbers		F definesnapmethod
F set		B fixed
F start		F forcepageflush
F stop		F forcestrutdepth
T expansion		F getnofpreviouslines
F trace		F pagehandler
F keeptogether		F pageoverflow
F registertogether		F popatsame
T solutions		F pushatsame
T splitters		F setmap
F define		F setskip
F optimize		F snapbox
T registered		F synchronizepage
F reset		F tocATEGORIES
F set		F tocATEGORY
F split		F vboxhandler

## caches (context)

<b>base</b>	string	<b>loadcontent</b>	function
<b>collapsecontent</b>	function	<b>loaddata</b>	function
<b>configfiles</b>	function	<b>more</b>	string
<b>contentstate</b>	function	<b>savecontent</b>	function
<b>defaults</b>	table	<b>savedata</b>	function
<b>getfirstreadablefile</b>	function	<b>setfirstwritablefile</b>	function
<b>getreadablepaths</b>	function	<b>setluanames</b>	function
<b>getwritablepath</b>	function	<b>treehash</b>	function
<b>hashed</b>	function	<b>usedpaths</b>	function
<b>is_writable</b>	function		

## callback (basic tex)

**find** function  
**known** function

**list** function  
**register** overloaded function

# callbacks (context)

<b>freeze</b>	function	B ligaturing
<b>functions</b>	table	B linebreak_filter
F process_rule		B make_extensible
F start_page_number		B mlist_to_hlist
F stop_page_number		B new_graf
<b>known</b>	function	B open_data_file
<b>list</b>	data table	B post_linebreak_filter
<b>pop</b>	function	B pre_dump
<b>push</b>	function	B pre_linebreak_filter
<b>register</b>	function	B pre_output_filter
<b>report</b>	function	B process_jobname
<b>supported</b>	table	B read_data_file
B append_to_vlist_filter		B show_error_hook
B build_page_insert		B show_error_message
B buildpage_filter		B show_lua_error_hook
B contribute_filter		B show_warning_message
B define_font		B show_whatsit
B find_data_file		B start_file
B find_format_file		B start_run
B find_log_file		B stop_file
B handle_error_hook		B stop_run
B hpack_filter		B terminal_input
B hpack_quality		B vpack_filter
B hyphenate		B vpack_quality
B insert_local_par		B wrapup_run
B kerning		

## catcodes (context)

**names** data table  
**numbers** data table

**register** function

# characters (context)

activeoffset	number	T anudatta
adobename	function	T before_half
bidi	data table	T before_main
blockrange	function	T before_postscript
blocks	data table	T before_subscript
casemap	table	T below_mark
categories	data table	T consonant
category	function	T dependent_vowel
categorytags	data table	T halant
classifiers	table	T independent_vowel
collapsed	data table	T nukta
contextname	function	T post_mark
csletters	data table	T pre_mark
data	data table	T ra
decomposed	data table	T stress_tone_mark
description	function	T twopart_mark
descriptions	data table	T vowel_modifier
detailtags	data table	<b>initialize</b> function
directions	table	<b>is_character</b> data table
emoji	table	<b>is_command</b> data table
	F compact	<b>is_letter</b> data table
	F known	<b>is_mark</b> data table
	F resolve	<b>is_punctuation</b> data table
emojized	function	<b>is_spacing</b> data table
encodes	data table	<b>is_symbol</b> data table
entities	data table	<b>lcchars</b> data table
fallbacks	data table	<b>lccode</b> function
filters	data table	<b>lccodes</b> data table
fractions	table	<b>lettered</b> function
fromnumber	function	<b>lhash</b> data table
fschars	data table	<b>linebreaks</b> data table
fscodes	data table	<b>lower</b> function
getrange	function	<b>mathlists</b> data table
graphemes	data table	<b>mirrors</b> table
hangul	data table	<b>otfscripts</b> data table
indicgroups	table	<b>private</b> table
	T above_mark	<b>ranges</b> data table
	T after_half	<b>registerentities</b> function
	T after_main	<b>remap_hangul_syllabe</b> function
	T after_postscript	<b>setactivecatcodes</b> function
	T after_subscript	<b>setlettercatcodes</b> function

<b>shape</b>	function	D accentmapping
<b>shaped</b>	function	D commandmapping
<b>shash</b>	data table	F defineaccents
<b>shchars</b>	data table	F safechar
<b>shcodes</b>	data table	F toutf
<b>showstring</b>	function	F toutfpattern
<b>specialchars</b>	data table	<b>textclasses</b> table
<b>specials</b>	data table	<b>tonumber</b> function
<b>splits</b>	table	<b>ucchars</b> data table
T char		<b>uccode</b> function
T compat		<b>uccodes</b> data table
<b>subscripts</b>	table	<b>uhash</b> data table
<b>superscripts</b>	table	<b>unicodechar</b> function
<b>synonyms</b>	data table	<b>upper</b> function
<b>tex</b>	table	

## chemistry (context)

<b>component</b>	function	<b>method</b>	string
<b>define</b>	function	<b>molecule</b>	function
<b>definitions</b>	data table	<b>moleculeparser</b>	userdata
<b>format</b>	string	<b>start</b>	function
<b>inlinechemical</b>	function	<b>stop</b>	function
<b>instance</b>	string	<b>undefine</b>	function

## containers (context)

<b>cleanname</b>	function	<b>is_valid</b>	function
<b>content</b>	function	<b>read</b>	function
<b>define</b>	function	<b>usecache</b>	boolean
<b>is_usable</b>	function	<b>write</b>	function

# converters (context)

A	function	cn-c	function
A:es	function	convert	function
A:ru	function	decimals	function
A:sl	function	define	function
AK	function	hebrewnumerals	function
Alphabetic	function	helpers	table
Alphabetic:es	function	hexstringtonumber	function
Alphabetic:ru	function	i	function
Alphabetic:sl	function	isleapyear	function
Character	function	lchexnumber	function
Characters	function	lchexnumbers	function
I	function	leapyear	function
KA	function	lower	function
KR	function	max	function
R	function	maxchr	function
RK	function	nicenumber	function
Romannumerals	function	nofdays	function
Russiannumerals	function	number	function
Sloveniannumerals	function	numbers	function
Spanishnumerals	function	octnumber	function
Word	function	octstringtonumber	function
Words	function	ordinal	function
a	function	r	function
a:es	function	rawcharacter	function
a:ru	function	romannumerals	function
a:sl	function	russiannumerals	function
abjadnodotnumerals	function	sequences	data table
abjadnumerals	function	settime	function
alphabetic	function	sloveniannumerals	function
alphabetic:es	function	spaceddigits	function
alphabetic:ru	function	spanishnumerals	function
alphabetic:sl	function	textime	function
character	function	toabjad	function
characters	function	tochinese	function
chineseallnumerals	function	tohebrew	function
chinesecapnumerals	function	toroman	function
chinesenumerals	function	totime	function
chr	function	uchexnumber	function
chrs	function	uchexnumbers	function
cn	function	upper	function
cn-a	function	verbose	table

D data

F translate

**weekday**

**word**

**words**

function

function

function

## coroutine (basic lua)

<b>close</b>	function	<b>running</b>	function
<b>create</b>	function	<b>status</b>	function
<b>isyieldable</b>	function	<b>wrap</b>	function
<b>resume</b>	function	<b>yield</b>	function

## ctxrunner (context)

<b>load</b>	function	<b>preffiles</b>	data table
<b>preparedfile</b>	function	<b>resolve</b>	function

## data (context)

<b>action</b>	function	<b>prerolled</b>	string
<b>depth</b>	number	<b>width</b>	number
<b>height</b>	number		

## dir (context)

<b>collectpattern</b>	function	<b>globpattern</b>	function
<b>current</b>	function	<b>ls</b>	function
<b>expandname</b>	function	<b>makedirs</b>	function
<b>found</b>	function	<b>mkdirs</b>	function
<b>glob</b>	function	<b>pop</b>	function
<b>globdirs</b>	function	<b>push</b>	function
<b>globfiles</b>	function		

## directives (context)

<b>data</b>	data table	<b>name</b>	string
<b>default</b>	function	<b>register</b>	function
<b>disable</b>	function	<b>report</b>	function
<b>done</b>	table	<b>reset</b>	function
<b>enable</b>	function	<b>show</b>	function
<b>list</b>	function	<b>value</b>	function

# document (context)

<b>arguments</b>	data table	D modes
<b>files</b>	table	D modules
<b>functions</b>	table	
<b>getargument</b>	function	<b>setargument</b> function
<b>getfilename</b>	function	<b>setcommandline</b> function
<b>options</b>	table	<b>setdefaultargument</b> function
		<b>setenvironments</b> function
T commandline		<b>setfilename</b> function
D environments		<b>setfilenames</b> function
D modes		<b>setmodes</b> function
D modules		<b>setmodules</b> function
T ctxfile		<b>variables</b> data table
D environments		

## documentdata (context)

**variable** function

# drivers (context)

<b>convert</b>	function	F cleanup
<b>converters</b>	table	F convert
	F engine	F finalize
	F lmtx	F initialize
<b>enable</b>	function	F outputfilename
<b>gethpos</b>	function	F prepare
<b>getpos</b>	function	F wrapup
<b>getrpos</b>	function	T flushers
<b>getvpos</b>	function	F character
<b>helpers</b>	table	F rule
	F tomatrix	F updatefontstate
<b>install</b>	function	S name
<b>instances</b>	table	T lua
	T default	T actions
	T actions	F cleanup
	F convert	F convert
	F outputfilename	F finalize
	T flushers	F initialize
	S name	F outputfilename
	T empty	F prepare
	T actions	F wrapup
	F convert	T flushers
	F prepare	F character
	T flushers	F rule
	S name	F updatefontstate
	T js	S name
	T actions	T mps
	F cleanup	T actions
	F convert	F cleanup
	F finalize	F convert
	F initialize	F finalize
	F outputfilename	F initialize
	F prepare	F outputfilename
	F wrapup	F prepare
	T flushers	F wrapup
	F character	T flushers
	F rule	F character
	F updatefontstate	F rule
	S name	F simplerule
	T json	F updatefontstate
	T actions	S name

T none	F group
T actions	F image
T flushers	F literal
S name	F poporientation
T pdf	F pushorientation
T actions	F restore
F cleanup	F rule
F convert	F save
F finalize	F setmatrix
F initialize	F simplerule
F outputfilename	F updatefontstate
F prepare	S name
F wrapup	<b>lmtxversion</b> number
T flushers	<b>outputfilename</b> function
F character	<b>report</b> function
F fontchar	

# environment (context)

<b>argument</b>	function	<b>luofile</b>	function
<b>arguments</b>	data table	<b>luofilechunk</b>	function
<b>basicengines</b>	data table	<b>luatexengine</b>	string
<b>currentrun</b>	number	<b>luatexfunctionality</b>	number
<b>definefilefallback</b>	function	<b>luatexversion</b>	number
<b>definefilesynonym</b>	function	<b>maxnofruns</b>	number
<b>engineflags</b>	data table	<b>oldhome</b>	string
<b>filename</b>	string	<b>originalarguments</b>	data table
<b>filenames</b>	table	<b>outputfilename</b>	string
<b>files</b>	table	<b>ownbin</b>	string
<b>filesynonyms</b>	data table	<b>ownmain</b>	string
<b>forcedruns</b>	number	<b>ownname</b>	string
<b>getargument</b>	function	<b>ownpath</b>	string
<b>homedir</b>	string	<b>prerollrun</b>	boolean
<b>initex</b>	boolean	<b>rawarguments</b>	data table
<b>initexmode</b>	boolean	<b>reconstructcommandline</b>	function
<b>initializearguments</b>	function	<b>relativepath</b>	function
<b>initializefilenames</b>	function	<b>setargument</b>	function
<b>inputfilebarename</b>	string	<b>splitarguments</b>	function
<b>inputfilename</b>	string	<b>suffix</b>	string
<b>inputfilesuffix</b>	string	<b>texfile</b>	function
<b>jobfullname</b>	string	<b>texmfos</b>	string
<b>jobfilename</b>	string	<b>texos</b>	string
<b>jobfilesuffix</b>	string	<b>texroot</b>	string
<b>jobname</b>	string	<b>truefilename</b>	function
<b>kindofrun</b>	number	<b>useluamodule</b>	function
<b>lmtxmode</b>	number	<b>usemodules</b>	function
<b>loadexamodes</b>	function	<b>validengines</b>	data table
<b>loadluofile</b>	function	<b>version</b>	string

## experiments (context)

<b>data</b>	data table	<b>register</b>	function
<b>default</b>	function	<b>report</b>	function
<b>disable</b>	function	<b>reset</b>	function
<b>enable</b>	function	<b>show</b>	function
<b>list</b>	function	<b>value</b>	function
<b>name</b>	string		

# figures (context)

<b>applyratio</b>	function	B bleed
<b>badname</b>	function	B crop
<b>bases</b>	data table	B media
<b>bitmapimage</b>	function	B none
<b>boxnumber</b>	number	B trim
<b>cachepaths</b>	data table	F totable
<b>check</b>	function	T types
<b>checkers</b>	data table	N jbig2
<b>converters</b>	data table	N jp2
<b>current</b>	function	N jpg
<b>defaultdepth</b>	number	N memstream
<b>defaultheight</b>	number	N none
<b>defaultsearch</b>	boolean	N pdf
<b>defaultwidth</b>	number	N png
<b>done</b>	function	N stream
<b>dummy</b>	function	F wrap
<b>existers</b>	data table	<b>include</b> function
<b>exists</b>	function	<b>includers</b> data table
<b>formats</b>	data table	<b>initialize</b> function
<b>found</b>	data table	<b>loaded</b> data table
<b>get</b>	function	<b>localpaths</b> data table
<b>getinfo</b>	function	<b>magics</b> data table
<b>getpdfinfo</b>	function	<b>mergegoodies</b> function
<b>getrealpage</b>	function	<b>nofmissing</b> number
<b>guess</b>	function	<b>nofprocessed</b> number
<b>guessfromstring</b>	function	<b>order</b> data table
<b>hash</b>	function	<b>paths</b> data table
<b>identifiers</b>	data table	<b>patterns</b> data table
<b>identify</b>	function	<b>pop</b> function
<b>images</b>	table	<b>preferquality</b> boolean
F check		<b>programs</b> data table
F checksize		<b>push</b> function
F copy		<b>registerpattern</b> function
F create		<b>registerresource</b> function
F embed		<b>registersuffix</b> function
T keys		<b>remappers</b> data table
F print		<b>resources</b> data table
F scan		<b>scale</b> function
F serialize		<b>set</b> function
T sizes		<b>setlookups</b> function
B art		<b>setmemstream</b> function

<b>setorder</b>	function	<b>suffixes</b>	data table
<b>setpaths</b>	function	<b>used</b>	data table

## file (basic lua)

<b>addsuffix</b>	function	<b>needsupdating</b>	function
<b>basename</b>	function	<b>pathpart</b>	function
<b>checksum</b>	function	<b>readdata</b>	function
<b>collapsepath</b>	function	<b>removesuffix</b>	function
<b>copy</b>	function	<b>replacesuffix</b>	function
<b>dirname</b>	function	<b>reslash</b>	function
<b>expandname</b>	function	<b>robustname</b>	function
<b>extname</b>	function	<b>savechecksum</b>	function
<b>is_qualified_path</b>	function	<b>savedata</b>	function
<b>is_readable</b>	function	<b>size</b>	function
<b>is_rootbased_path</b>	function	<b>splitbase</b>	function
<b>is_writable</b>	function	<b>splitname</b>	function
<b>isreadable</b>	function	<b>splitpath</b>	function
<b>iswritable</b>	function	<b>strip</b>	function
<b>join</b>	function	<b>suffix</b>	function
<b>joinpath</b>	function	<b>suffixes</b>	function
<b>loadchecksum</b>	function	<b>suffixesonly</b>	function
<b>nameonly</b>	function	<b>suffixonly</b>	function
<b>nametotable</b>	function	<b>syncmtimes</b>	function
<b>needs_updating</b>	function	<b>withinbase</b>	function

## fio (extra lua)

<b>getposition</b>	function	<b>readinteger2le</b>	function
<b>read2dot14</b>	function	<b>readinteger3</b>	function
<b>readbytes</b>	function	<b>readinteger3le</b>	function
<b>readbytetable</b>	function	<b>readinteger4</b>	function
<b>readcardinal1</b>	function	<b>readinteger4le</b>	function
<b>readcardinal1le</b>	function	<b>readintegertable</b>	function
<b>readcardinal2</b>	function	<b>readline</b>	function
<b>readcardinal2le</b>	function	<b>setposition</b>	function
<b>readcardinal3</b>	function	<b>skipposition</b>	function
<b>readcardinal3le</b>	function	<b>writecardinal1</b>	function
<b>readcardinal4</b>	function	<b>writecardinal1le</b>	function
<b>readcardinal4le</b>	function	<b>writecardinal2</b>	function
<b>readcardinaltable</b>	function	<b>writecardinal2le</b>	function
<b>readfixed2</b>	function	<b>writecardinal3</b>	function
<b>readfixed4</b>	function	<b>writecardinal3le</b>	function
<b>readinteger1</b>	function	<b>writecardinal4</b>	function
<b>readinteger1le</b>	function	<b>writecardinal4le</b>	function
<b>readinteger2</b>	function		

## floats (context)

<b>analysemethod</b>	function	<b>nofstacked</b>	function
<b>checkedpagefloat</b>	function	<b>pop</b>	function
<b>collect</b>	function	<b>push</b>	function
<b>consult</b>	function	<b>resave</b>	function
<b>flush</b>	function	<b>save</b>	function
<b>getvariable</b>	function	<b>stacked</b>	function
<b>hasstacked</b>	function		

## font (basic tex)

<b>addcharacters</b>	function	<b>id</b>	function
<b>current</b>	function	<b>max</b>	function
<b>define</b>	function	<b>nextid</b>	function
<b>each</b>	function	<b>setfont</b>	function
<b>getfont</b>	function		

# fonts (context)

<b>analyzers</b>	table	F collectprocessors D features D initializers D methods F setstate D states B useunicodemarks	F currentfonthasfeature D designsizes D dontembed F enhanceparameters T enhancers T afm
<b>checkers</b>	table	F getmissing F missing F placeholder	F apply F patch T patches F register
<b>cid</b>	table	F getmap F loadfile	F report F register F report
<b>collections</b>	table	F checkenabled F clonevector F define T definitions F found F prepare F process F registermain F report F reset T vectors	T otf F addfeature F apply F enhance F patch T patches F register F report F register F report T tfm F apply F patch
<b>constructors</b>	table	F addcharacters F addcoreunicodes B addtounicode F aftercopyingcharacters F applymanipulators F assignmathparameters B autocleanup F beforecopyingcharacters D cache B cacheintex F calculatescale F checkedfeatures F checkedfilename F cleanuptable	T patches F register F report F register F report N factor T features D afm D otf D tfm F finalize B fixprotrusion F getfeatureaction F getmathparameter

F getprivate	F featuresinitializer
T handlers	F featuresprocessor
T afm	F getactualtext
B autoprefixed	F getalternate
D cache	F getgsub
D features	F getkern
F getkern	F getmultiple
T helpdata	F getstreamhash
D bothkerned	F getsubstitution
D leftkerned	T handlers
D ligatures	F devanagari_remove_joiners
D rightkerned	F devanagari_reorder_matras
D texligatures	F devanagari_reorder_pre_base_reordered_consonants
F load	F devanagari_reorder_reph
T readers	F gpos_context
F getinfo	F gpos_contextchain
F loadfont	F gpos_cursive
F loadshapes	F gpos_mark2base
F setfeatures	F gpos_mark2ligature
B syncspace	F gpos_mark2mark
N version	F gpos_pair
T otf	F gpos_single
F addfeature	F gsub_alternate
F basemodeinitializer	F gsub_context
D cache	F gsub_contextchain
F collectlookups	F gsub_ligature
T coverup	F gsub_multiple
T actions	F gsub_reversecontextchain
F alternate	F gsub_single
F chainposition	F trigger_space_kerns
F chainsubstitution	T helpers
F kern	F blockligatures
F ligature	F pardirstate
F multiple	F txtdirstate
F pair	F load
F single	F loadoutlinedata
F substitution	F loadstreamdata
F register	F modeinitializer
S stepkey	D mpscache
F dataset	D pdfcache
F datasetpositionprocessor	F plugininitializer
S defaultbasealternate	F pluginprocessor
S defaultnodealternate	T plugins
D features	D pngcache

B pngenabled	F reversechainedcontextsingle
T readers	F single
F addunicodetable	F gvar
F avar	F head
F cbdt	T helpers
F cbdc	F axisoftfactors
F cff	F cleanname
F cff2	F getaxissscale
F cffcheck	F getfactors
T cffencoder	F getscales
F checkhash	F gotodataitable
F cmap	F normalizedaxis
F colr	T normalizedaxishash
F compact	F readvariationdata
F cpal	F reportskipedtable
F ebdt	F setvariabledata
F eblc	F hhea
F ebsc	F hmtx
F expand	F hvar
F extend	F kern
F fvar	F loadfont
F gdef	F loadshapes
F getcomponents	F loca
F getinfo	F math
F glyf	F maxp
F gpos	F mvar
T gposhandlers	F name
F chainedcontext	F os/2
F context	F pack
F cursive	F parsecharstrings
F extension	F post
F marktobase	F registerextender
F marktoligature	F rehash
F marktomark	F sbix
F pair	F stat
F single	T streamreader
F.gsub	F close
T gsubhandlers	F getposition
F alternate	F getsize
F chainedcontext	F look
F context	F open
F extension	F read2dot14
F ligature	F readybyte
F multiple	F readybytes

F readbytetable	F writeinteger2
F readcardinal	F writeinteger2le
F readcardinal1	F writeinteger3
F readcardinal1le	F writeinteger3le
F readcardinal2	F writeinteger4
F readcardinal2le	F writeinteger4le
F readcardinal3	F writestring
F readcardinal3le	F stripredundant
F readcardinal4	F svg
F readcardinal4le	N tableversion
F readcardinaltable	F unifymissing
F readchar	F unpack
F readfixed2	F vhea
F readfixed4	F vmtx
F readinteger	F vorg
F readinteger1	F vvar
F readinteger1le	F woff2otf
F readinteger2	F registerpalette
F readinteger2le	F registerplugin
F readinteger3	F reorderlookups
F readinteger3le	F scriptandlanguage
F readinteger4	F setdynamics
F readinteger4le	F setfeatures
F readintegertable	T statistics
F readsignedbyte	D usedfeatures
F readstring	D svgcache
F readtag	B svgenabled
F setposition	T tables
F size	D baselines
F skip	D features
F skiplong	D featuretypes
F skipposition	D languages
F skipshort	D scripts
F writebyte	N version
F writecardinal1	T pfb
F writecardinal1le	F loadvector
F writecardinal2	T tfm
F writecardinal2le	D cache
F writecardinal3	D features
F writecardinal3le	N maxnestingdepth
F writecardinal4	N maxnestingsize
F writecardinal4le	T readers
F writeinteger1	F loadpk
F writeinteger1le	F loadtfm

F loadtfmvf	S scriptpercentage
F loadvf	S scripts scriptpercentage
F pktopdf	S size
F showpk	S slantfactor
F reencode	S slantperpoint
F setfeatures	T spacing
N version	S extra
T vf	S shrink
T combinations	S stretch
F combine	S width
T combiner	S units
D commands	S vfactor
D helpers	S width
D math	S xheight
D predefined	T properties
N version	S autoitalicamount
D whatever	S cidinfo
F hashfeatures	T effect
F hashinstance	S ddelta
T hashmethods	S effect
F normal	S factor
F virtual	S hdelta
F initializefeatures	S hfactor
T keys	S vfactor
T characters	S wdelta
T descriptions	S width
T parameters	S embedding
S ascender	S encodingbytes
S descender	S filename
S designsize	S finalized
T expansion	S fontname
S auto	S format
S shrink	S fullname
S step	S hasitalics
S stretch	S hasmath
S extendfactor	S mathitalics
S factor	S mode
S hfactor	S name
S mathsize	S nostackmath
S mode	S psname
T protrusion	S textitalics
S auto	S virtualized
S quad	D loadedfonts
S scaledpoints	S namemode

N noffontsloaded	F name
Nnofsharedfonts	F spec
Nnofsharedhashes	<b>definetypeface</b> function
Nnofsharedvectors	<b>dropins</b> table
Nprivateoffset	F clone
Dprivateslots	F nextid
Freadanddefine	F provide
Fregisterfeature	Fregisterglyph
Fresetfeature	Fregisterglyphs
Bresolvevirtualtoo	Fswap
Fscale	<b>encodings</b> table
Fscaled	T agl
Fsetfactor	Dctxcodes
Fsetfeature	Dextras
Fsetmathparameter	Dnames
Fsetname	Dsynonyms
Bsharefonts	Dunicodes
Ftrytosharefont	Dcache
Nversion	Fis_known
<b>current</b> function	Dknown
<b>currentid</b> function	Fload
<b>definers</b> table	Fmake_unicode_vector
Faddlookup	Dmath
Fanalyze	Nversion
Fapplypostprocessors	<b>enhanceid</b> function
Fcheckedmode	<b>expansions</b> data table
Fcheckedscrip	<b>formats</b> data table
Sdefaultlookup	<b>getalternate</b> function
Fdefine	<b>getindices</b> function
Fgetspecification	<b>getkern</b> function
Finternal	<b>getmultiple</b> function
Floadfont	<b>getsubstitution</b> function
Fmakespecification	<b>getters</b> table
Tmethods	Talternate
Finstall	Fopentype
Dvariants	Tkern
Fread	Fopentype
Fregister	Ftype1
Fregistered	Ftype3
Fregistersplit	Tmultiple
Fresethnullfont	Fopentype
Fresolve	Tsubstitution
Tresolvers	Fopentype
Ffile	<b>goodies</b> table

D colorschemes	D parameters
T data	T processes
T dejavu-math	D properties
S author	D quads
S comment	D resources
S copyright	T setdynamics
B initialized	T shapes
T mathematics	D spaces
T alternates	D spacings
T dotless	T streams
S comment	D unicodes
S feature	D variants
N value	D xheights
T kerns	<b>helpers</b> table
S name	F addextraprivate
S version	F addprivate
D designsizes	F appendcommands
D filenames	F appendcommandtable
F getcompositions	F checkflags
T list	F checkmerge
F load	F checksteps
F prepare_features	F collectanchors
F register	D commands
F registerpostprocessor	F descriptiontoslot
F report	F dimenfactor
T suffixes	F expandglyph
<b>handlers</b> table	T extraprivates
<b>hashes</b> table	F fontpatternhassize
D characters	F getcoloredglyphs
D classes	F getdigitwidth
D csnames	F getinstancespec
D descriptions	F getparameters
D dynamics	F getprivatecharornode
D emwidths	F getprivatenode
D exheights	F getprivates
D extensibles	F getprivateslot
D features	F hasprivate
D identifiers	F indextoslot
D italics	F name
D lastmathids	F nametoslot
D marks	F newprivateslot
D mathparameters	F prependcommands
D modes	F prependcommandtable
D originals	F privateslot

F	setdigitwidth	B	keepnames
F	splitfontpattern	N	mathbase
F	tochar	N	mathextrabase
<b>infofont</b>	function	N	textbase
<b>iterators</b>	table	N	textextrabase
F	characters	<b>protrusions</b>	data table
F	descriptions	<b>readers</b>	table
F	glyphs	F	afm
<b>loggers</b>	table	F	check_lua
F	add_placeholders	F	check_tfm
D	category_to_placeholder	F	lua
F	format	F	ofm
F	onetimemessage	F	opentype
F	register	F	otf
F	reportdefinedfonts	F	pfb
F	reportusedfeatures	D	sequence
<b>mappings</b>	table	F	tfm
F	addtounicode	F	ttc
F	fromunicode16	F	ttf
F	loadfile	F	woff
F	loadline	<b>reserveid</b>	function
F	makenameparser	<b>select</b>	table
D	overloads	D	alternatives
F	reset	F	bodyfont
F	tounicode	D	data
F	tounicode16	F	default
F	tounicode16sequence	D	defaults
<b>metapost</b>	table	F	definefallbackfamily
F	boundingbox	F	definefontfamily
F	boxtomp	F	definefontfamilypreset
F	draw	D	extras
F	fill	F	fallback
F	maxbounds	D	fallbacks
F	output	F	features
F	paths	F	filefallback
F	widthline	F	fontdata
F	zeroline	F	fontfallback
<b>mp</b>	table	F	fontsynonym
D	cache	F	goodies
B	inline	F	mathfallback
N	version	D	methods
<b>names</b>	data table	D	presets
<b>nulldata</b>	data table	F	registerfallback
<b>privateoffsets</b>	table	F	registerfiles

F registerfontalternative  
F registerfontfamily  
F textfallback  
F typeface  
F typescript  
F userdata  
**specifiers**      table  
D contextmerged  
F contextnumber  
D contextnumbers  
D contextsetups  
F contexttostring  
F definecontext  
F mergecontext  
F presetcontext  
F registercontext  
F showcontext  
F splitcontext  
D synonyms

D variants  
**symbols**      table  
T emoji  
F checked  
F resolved  
F uselibrary  
**tables**      table  
D data  
F savefont  
F saveoriginal  
**tracers**      table  
**treatments**      table  
F applyfixes  
D data  
S filename  
F ignoredfile  
F report  
F trace  
**typefaces**      table

## functions (context)

**dummy** function

# graphics (context)

<b>backgrounds</b> table	F placeholder
F fetchmultipar	
F pair	F tocontext
F path	
F point	
<b>bitmaps</b> table	<b>identifiers</b> table
F flush	F bitmap
F new	F jp2
	F jpg
	F png
	<b>identify</b> function

## gzip (extra lua)

**compress**    function  
**compressed**    function  
**decompress**    function

**load**        function  
**save**        function  
**suffix**        function

## images (context)

<b>check</b>	function	B none
<b>checksize</b>	function	B trim
<b>copy</b>	function	<b>totable</b> function
<b>create</b>	function	<b>types</b> table
<b>embed</b>	function	N jbig2
<b>keys</b>	table	N jp2
<b>print</b>	function	N jpg
<b>scan</b>	function	N memstream
<b>serialize</b>	function	N none
<b>sizes</b>	table	N pdf
		N png
		N stream
B art		
B bleed		
B crop		<b>wrap</b> function
B media		

## interactions (context)

<b>attachments</b>	data table	D functions
<b>fields</b>	table	D preambles
F clone		F setpreamble
F define		F storecode
F defineset		F storepreamble
F insert		F usepreamblenow
<b>general</b>	table	F usescripts
F getidentity		<b>linkedlists</b> data table
F setupidentity		<b>pages</b> table
<b>help</b>	table	F setpagetransition
F collect		F setupcanvas
F reference		<b>references</b> table
F register		F setclosedocument
<b>javascripts</b>	table	F setclosepage
F addtopreamble		F setopendocument
F code		F setopenpage
D codes		<b>renderings</b> data table
F flushpreambles		<b>soundclips</b> data table

# interfaces (context)

<b>addvalidkeys</b>	function	<b>namespaces</b>	table
<b>arrays</b>	table	<b>F define</b>	
<b>cachedsetups</b>	data table	<b>F list</b>	
<b>cachesetup</b>	function	<b>numbers</b>	table
<b>cardinals</b>	table	<b>registernamespace</b>	function
<b>checkedspecification</b>	function	<b>registerscanner</b>	function
<b>complete</b>	data table	<b>scanners</b>	data table
<b>constants</b>	data table	<b>setconstant</b>	function
<b>corenamespaces</b>	data table	<b>setcount</b>	function
<b>currentinterface</b>	string	<b>setdimen</b>	function
<b>currentresponse</b>	string	<b>setelement</b>	function
<b>definecommand</b>	function	<b>setformat</b>	function
<b>defined</b>	function	<b>setmacro</b>	function
<b>doifelsemessage</b>	function	<b>setmessage</b>	function
<b>elements</b>	data table	<b>setmessages</b>	function
<b>floats</b>	table	<b>settranslation</b>	function
<b>formats</b>	data table	<b>setupstrings</b>	data table
<b>getcheckedparameters</b>	function	<b>setuserinterface</b>	function
<b>getmessage</b>	function	<b>setvalidkeys</b>	function
<b>getnamespace</b>	function	<b>setvariable</b>	function
<b>getsetupstring</b>	function	<b>showmessage</b>	function
<b>hashedsetups</b>	data table	<b>storedscanners</b>	data table
<b>implement</b>	function	<b>syntax</b>	data table
<b>integers</b>	table	<b>tolist</b>	function
<b>interfacedcommand</b>	function	<b>translations</b>	data table
<b>interfaces</b>	table	<b>usednamespaces</b>	data table
<b>invalidkey</b>	function	<b>variables</b>	data table
<b>knownscanner</b>	function	<b>writestatus</b>	function
<b>message</b>	function		

## io (basic lua)

<b>ask</b>	function	<b>output</b>	overloaded function
<b>bytes</b>	function	<b>pathseparator</b>	string
<b>characters</b>	function	<b>popen</b>	overloaded function
<b>close</b>	function	<b>read</b>	function
<b>copydata</b>	function	<b>readall</b>	function
<b>exists</b>	function	<b>readnumber</b>	function
<b>fileseparator</b>	string	<b>readstring</b>	function
<b>flush</b>	function	<b>savedata</b>	function
<b>input</b>	overloaded function	<b>size</b>	function
<b>lines</b>	overloaded function	<b>stderr</b>	userdata
<b>loadchunk</b>	function	<b>stdin</b>	userdata
<b>loaddata</b>	function	<b>stdout</b>	userdata
<b>loadlines</b>	function	<b>tmpfile</b>	function
<b>newreader</b>	function	<b>type</b>	function
<b>noflines</b>	function	<b>write</b>	function
<b>open</b>	overloaded function		

# job (context)

<b>comment</b>	function	D tobesaved
<b>datasets</b>	table	<b>passes</b> table
D collected		F check
F extend		D collected
F getdata		F count
F setdata		F define
D tobesaved		F find
<b>disablesave</b>	function	F first
<b>embedded</b>	table	F get
D collected		F getcollected
D tobesaved		F getdata
<b>fileobj</b>	table	F getfield
<b>references</b>		F gettobesaved
D collected		F inlist
D tobesaved		F last
<b>files</b>	table	F list
D collected		F save
F context		F savetagged
B forcerun		D tobesaved
F run		
D tobesaved		
<b>getrandomseed</b>	function	<b>positions</b> table
<b>initialize</b>	function	F b_column
<b>load</b>	function	F b_region
<b>loadother</b>	function	F c
<b>objects</b>	table	D collected
D collected		F column
F get		F columnofpos
F number		F copy
F page		F depth
F save		F e_column
F set		F e_region
D tobesaved		F enhance
<b>pack</b>	boolean	F extra
<b>packversion</b>	number	F get
<b>pagestates</b>	table	F getfree
D collected		F gethpos
F countervalue		F getpos
F extend		F getreserved
F realpage		F getrpos
F realpageorder		F gettobesaved
F setstate		F getvpos
		F hangafter

F hangindent	F uppright
F height	F used
F hsize	F whd
F leftskip	F width
F lowerleft	F x
F lowerright	F xy
F markregionbox	F y
F n	<b>prepare</b> function
F onsamepage	<b>register</b> function
F overlapping	<b>save</b> function
F p	<b>structure</b> table
F page	D collected
T pagedata	T components
F paragraph	T tobesaved
F parindent	T branches
F position	S name
F r	S type
F region	<b>variables</b> table
F registerhandlers	D checksums
F replace	D collected
F rightskip	F getchecksum
F set	F makechecksum
F setall	F restore
F setregionbox	F save
F setspec	F setchecksum
F settobesaved	D tobesaved
D tobesaved	<b>version</b> number
F upperleft	

## lang (basic tex)

<code>clean</code>	function	<code>id</code>	function
<code>clear_hyphenation</code>	function	<code>new</code>	function
<code>clear_patterns</code>	function	<code>patterns</code>	function
<code>exceptions</code>	function	<code>postexhyphenchar</code>	function
<code>gethjcode</code>	function	<code>posthyphenchar</code>	function
<code>has_language</code>	function	<code>preehyphenchar</code>	function
<code>hyphenate</code>	function	<code>prehyphenchar</code>	function
<code>hyphenation</code>	function	<code>sethjcode</code>	function
<code>hyphenationmin</code>	function		

# languages (context)

<b>associate</b>	function	F registerpattern
<b>associated</b>	data table	F setfeatures
<b>association</b>	function	<b>installed</b>
<b>counters</b>	data table	<b>labels</b>
<b>current</b>	function	F define
<b>data</b>	data table	F split
<b>decimals</b>	data table	<b>loadable</b>
<b>define</b>	function	<b>loadwords</b>
<b>explicithyphen</b>	function	<b>logger</b>
<b>flatten</b>	function	F report
<b>frequencies</b>	table	<b>nofflattened</b>
	F averagecharwidth	<b>numbers</b>
	F getdata	<b>postexhyphenchar</b>
<b>getdata</b>	function	<b>posthyphenchar</b>
<b>getnumber</b>	function	<b>preehyphenchar</b>
<b>hjcounts</b>	table	<b>prehypenchar</b>
<b>hyphenate</b>	function	<b>registered</b>
<b>hyphenators</b>	table	<b>replacements</b>
	T dictionaries	F add
	D featuresets	F addlist
	F handler	F handler
	T methods	F set
	F expanded	<b>serializediscretionary</b>
	B none	<b>setexceptions</b>
	F original	<b>setsynonym</b>
	F tex	<b>showdiscretionaries</b>
	F traditional	<b>unload</b>
	F popmethod	<b>urls</b>
	F pushmethod	D characters
	F setmethod	N lefthyphenmin
	F setup	D mapping
	F showhyphenationtrace	B packslashes
	T traditional	N righthyphenmin
	F definefeatures	F setcharacters
	F gettrace	<b>version</b>
	F hyphenate	<b>visualizediscretionaries</b>
	F injecthyphens	<b>words</b>
	F installmethod	F check
	F lasttrace	T data
	F loadpatterns	F disable
	F registerexception	F enable

T enablers

B enables

F found

F load

T methods

N threshold

# layouts (context)

**status** table

F leftorrightpageaction

F isleftpage

## lfs (extra lua)

<b>attributes</b>	overloaded function	<b>iswriteablefile</b>	function
<b>chdir</b>	overloaded function	<b>link</b>	overloaded function
<b>currentdir</b>	function	<b>mkdir</b>	overloaded function
<b>dir</b>	overloaded function	<b>mkdirs</b>	function
<b>isdir</b>	overloaded function	<b>modification</b>	function
<b>isfile</b>	overloaded function	<b>readlink</b>	function
<b>isfound</b>	function	<b>rmdir</b>	overloaded function
<b>isreadabledir</b>	function	<b>setexecutable</b>	function
<b>isreadablefile</b>	function	<b>symlink</b>	function
<b>iswriteabledir</b>	function	<b>touch</b>	overloaded function

## libraries (context)

**basiclua** data table  
**basictex** data table  
**builtin** data table  
**extralua** data table

**extratex** data table  
**functions** data table  
**globals** data table

# lmx (context)

<b>color</b>	function	<b>loadedfile</b>	function
<b>convert</b>	function	<b>make</b>	function
<b>convertfile</b>	function	<b>new</b>	function
<b>convertstring</b>	function	<b>overloadererror</b>	function
<b>inject</b>	function	<b>popupfile</b>	function
<b>eprint</b>	function	<b>print</b>	function
<b>escape</b>	function	<b>pv</b>	function
<b>finalized</b>	function	<b>report</b>	function
<b>finject</b>	function	<b>reset</b>	function
<b>fprint</b>	function	<b>result</b>	function
<b>get</b>	function	<b>set</b>	function
<b>getvariables</b>	function	<b>show</b>	function
<b>htmfile</b>	function	<b>showdebuginfo</b>	function
<b>html</b>	table	<b>showerror</b>	function
F a		<b>stripcss</b>	function
F td		<b>tv</b>	function
F th		<b>type</b>	function
<b>include</b>	function	<b>urlescape</b>	function
<b>inherited</b>	table	<b>variable</b>	function
S color-background-four		<b>variables</b>	table
S color-background-one		S color-background-blue	
S color-background-three		S color-background-body	
S color-background-two		S color-background-green	
S title		S color-background-main	
<b>initialize</b>	function	S color-background-purple	
<b>inject</b>	function	S color-background-yellow	
<b>lmxfile</b>	function	S title-default	

## logs (context)

<b>application</b>	function	<b>reportline</b>	function
<b>categories</b>	function	<b>reportlines</b>	function
<b>direct</b>	function	<b>setformats</b>	function
<b>disable</b>	function	<b>setformatters</b>	function
<b>enable</b>	function	<b>setlogfile</b>	function
<b>exporters</b>	table	<b>setmessenger</b>	function
<b>extendbanner</b>	function	<b>setprocessor</b>	function
<b>finalactions</b>	function	<b>setprogram</b>	function
<b>flush</b>	function	<b>settargt</b>	function
<b>help</b>	function	<b>settimedlog</b>	function
<b>loggingerrors</b>	function	<b>settranslations</b>	function
<b>messenger</b>	function	<b>show</b>	function
<b>new</b>	function	<b>simple</b>	function
<b>newline</b>	function	<b>simpleline</b>	function
<b>poptarget</b>	function	<b>simplelines</b>	function
<b>pushtarget</b>	function	<b>start_page_number</b>	function
<b>registerfinalactions</b>	function	<b>starterrorlogging</b>	function
<b>report</b>	function	<b>startfilelogging</b>	function
<b>reportbanner</b>	function	<b>status</b>	function
<b>reporter</b>	function	<b>stop_page_number</b>	function
<b>reporters</b>	table	<b>stoperrorlogging</b>	function
F banner		<b>stopfilelogging</b>	function
F export		<b>subdirect</b>	function
F help		<b>subreport</b>	function
F info		<b>system</b>	function
F lines		<b>texerrormessage</b>	function
F version		<b>writer</b>	function

# lpdf (context)

<b>action</b>	function	<b>destinationspecification</b>	function
<b>adddocumentcolorspace</b>	function	<b>dictionary</b>	function
<b>adddocumenttextgstate</b>	function	<b>docstring</b>	function
<b>adddocumentpattern</b>	function	<b>epdf</b>	table
<b>adddocumentshade</b>	function	F analyzefonts	
<b>addtocatalog</b>	function	F contenttotext	
<b>addtoinfo</b>	function	F expanded	
<b>addtonames</b>	function	F getpagecontent	
<b>addtopageattributes</b>	function	F getstructure	
<b>addtopageresources</b>	function	T image	
<b>addtopagesattributes</b>	function	F close	
<b>addxmpinfo</b>	function	F copy	
<b>annotationspecification</b>	function	F new	
<b>array</b>	function	F open	
<b>attachmentsymbols</b>	function	F query	
<b>boolean</b>	function	F load	
<b>border</b>	function	F parsecontent	
<b>checkedkey</b>	function	F plugin	
<b>checkedvalue</b>	function	T resolvers	
<b>circularshade</b>	function	F destinations	
<b>cmykcode</b>	function	F embeddedfiles	
<b>collectedresources</b>	function	F javascripts	
<b>color</b>	function	F layers	
<b>colorspace</b>	function	F pages	
<b>colorspaceconstants</b>	data table	F structure	
<b>colorspec</b>	function	F widgets	
<b>colorvalue</b>	function	F stripcontent	
<b>colorvalues</b>	function	F unload	
<b>commentsymbols</b>	function	<b>escaped</b>	function
<b>compresslevel</b>	function	<b>finalizedocument</b>	function
<b>constant</b>	function	<b>finalizefonts</b>	function
<b>copyarray</b>	function	<b>finalizepage</b>	function
<b>copyboolean</b>	function	<b>finishtransparencycode</b>	function
<b>copyconstant</b>	function	<b>flags</b>	table
<b>copydictionary</b>	function	T annotations	
<b>copyfloat</b>	function	N AutoView	
<b>copyinteger</b>	function	N Hidden	
<b>copynumber</b>	function	N Invisible	
<b>copystring</b>	function	N Locked	
<b>copyunicode</b>	function	N LockedContents	
<b>delayedobject</b>	function	N NoRotate	

N NoView	<b>frompdfdoc</b>	function
N NoZoom	<b>fromsixteen</b>	function
N Print	<b>getcatalog</b>	function
N Printable	<b>getcompression</b>	function
N ReadOnly	<b>getfontname</b>	function
N ToggleNoView	<b>getfontobjnumber</b>	function
N auto	<b>getinfo</b>	function
N hidden	<b>getmapentry</b>	function
N printable	<b>getmetadata</b>	function
T widgets	<b>getnofpages</b>	function
N Comb	<b>getpageproperties</b>	function
N CommitOnSelChange	<b>getpagetags</b>	function
N DoNotScroll	<b>getversion</b>	function
N DoNotSpellCheck	<b>getxformname</b>	function
N Edit	<b>graycode</b>	function
N FileSelect	<b>id</b>	function
N MultiLine	<b>immediateobj</b>	function
N NoExport	<b>includechar</b>	function
N NoToggleToOff	<b>includecharlist</b>	function
N Password	<b>includefont</b>	function
N PopUp	<b>includeimage</b>	function
N PushButton	<b>injectors</b>	table
N Radio		F bitmap
N RadiosInUnison		F jp2
N ReadOnly		F jpg
N Required		F png
N RichText	<b>injectxmpinfo</b>	function
N Sort	<b>insertxmpinfo</b>	function
N file	<b>layerreference</b>	function
N fixed	<b>limited</b>	function
N nocheck	<b>linearshade</b>	function
N protected	<b>literal</b>	function
N readonly	<b>majorversion</b>	function
N required	<b>makenametree</b>	function
N sorted	<b>minorversion</b>	function
N unavailable	<b>nofpages</b>	function
<b>flushfonts</b>	function	null
<b>flushgroup</b>	function	number
<b>flushobject</b>	function	obj
<b>flushstreamfileobject</b>	function	<b>objectcompresslevel</b>
<b>flushstreamobject</b>	function	<b>pagerefERENCE</b>
<b>formats</b>	data table	<b>patternstream</b>
<b>frombytes</b>	function	<b>pdfcolor</b>
<b>fromeight</b>	function	<b>pdftimestamp</b>

<b>permitdetail</b>	function	<b>setpagetag</b>	function
<b>print</b>	function	<b>setsuppressooptionalinfo</b>	function
<b>procset</b>	function	<b>settime</b>	function
<b>protectresources</b>	boolean	<b>settrailerid</b>	function
<b>rectangle</b>	function	<b>setversion</b>	function
<b>reference</b>	function	<b>shareobject</b>	function
<b>registerannotation</b>	function	<b>shareobjectreference</b>	function
<b>registerdestination</b>	function	<b>spotcode</b>	function
<b>registerdocumentfinalizer</b>	function	<b>stream</b>	function
<b>registerfont</b>	function	<b>string</b>	function
<b>registerpagefinalizer</b>	function	<b>toeight</b>	function
<b>registerpattern</b>	function	<b>topdfdoc</b>	function
<b>reserveobject</b>	function	<b>tosixteen</b>	function
<b>rgbcode</b>	function	<b>transparency</b>	function
<b>rotationcm</b>	function	<b>transparencycode</b>	function
<b>setcompression</b>	function	<b>transparencygroups</b>	table
<b>setdates</b>	function	B none	
<b>setmapfile</b>	function	<b>transparencyvalue</b>	function
<b>setmapline</b>	function	<b>unicode</b>	function
<b>setomitcharset</b>	function	<b>usedcharacters</b>	table
<b>setomitcidset</b>	function	<b>verbose</b>	function
<b>setpageorder</b>	function	<b>vfimage</b>	function

# lpeg (basic lua)

B	function	firstofssplit	function
C	function	frontstripper	function
Carg	function	instrchecker	function
Cb	function	is_lpeg	function
Cc	function	keeper	function
Cf	function	locale	function
Cg	function	match	function
Cmt	function	oneof	function
Cp	function	patterns	data table
Cs	function	pcode	function
Ct	function	print	function
P	function	ptree	function
R	function	replacer	function
S	function	secondofssplit	function
UP	function	setmaxstack	function
UR	function	setutfcasers	function
US	function	split	function
V	function	splitat	function
afterprefix	function	splitter	function
anywhere	function	stripper	function
append	function	times	function
balancer	function	tsplitat	function
beforesuffix	function	tsplitter	function
checkedsplit	function	type	function
containsws	function	utfchartabletopattern	function
counter	function	utfreplacer	function
endstripper	function	version	function
finder	function		

# lua (basic tex)

bytecode	table	macros	table
bytedata	data table	B enabled	
bytedone	table	F loaded	
callbytecode	function	F required	
collectgarbage	function	F reset	
delay	function	F resolvestring	
finalize	function	F resolving	
firstbytecode	number	F showdefinitions	
flush	function	mask	string
flushdelayed	function	messages	data table
get_functions_table	function	newindex	function
getbytecode	function	newtable	function
getcurrenttime	function	numbers	data table
getfunctionstable	overloaded function	registercode	function
getpreciseseconds	function	registeredcodes	function
getpreciseticks	function	registerfinalizer	function
getruntime	function	registername	function
getstacktop	function	setbytecode	function
getstartupfile	function	setexitcode	function
getversion	function	startupfile	string
lastbytecode	number	version	string

# luatex (context)

<b>abort</b>	function	F finish
<b>cleanup</b>	function	F pause
<b>cleanuptempfiles</b>	function	F popline
<b>currentfile</b>	function	F pushline
<b>registerdumpactions</b>	function	F registerdisabler
<b>registerpageactions</b>	function	F registerenabler
<b>registerstartactions</b>	function	F resetfilename
<b>registerstopactions</b>	function	F resume
<b>register tempfile</b>	function	F setfilename
<b>starttime</b>	number	F setup
<b>synctex</b>	table	F start
F blockfilename		F stop
F collect		F wrapup
F disable		
F enable		
		<b>wrapup</b> function

# lxml (context)

<b>addindex</b>	function	<b>first</b>	function
<b>all</b>	function	<b>flush</b>	function
<b>applyfunction</b>	function	<b>flushlinewise</b>	function
<b>applyselectors</b>	function	<b>flushsetups</b>	function
<b>att</b>	function	<b>flushspacewise</b>	function
<b>attribute</b>	function	<b>get_id</b>	function
<b>badirclusions</b>	function	<b>getid</b>	function
<b>chainattribute</b>	function	<b>getindex</b>	function
<b>checkindex</b>	function	<b>id</b>	function
<b>collected</b>	function	<b>idsplitter</b>	userdata
<b>command</b>	function	<b>include</b>	function
<b>concat</b>	function	<b>inclusion</b>	function
<b>concatrange</b>	function	<b>inclusions</b>	function
<b>content</b>	function	<b>index</b>	function
<b>context</b>	function	<b>inlineverbatim</b>	function
<b>convert</b>	function	<b>installsetup</b>	function
<b>count</b>	function	<b>last</b>	function
<b>delete</b>	function	<b>lastatt</b>	function
<b>depth</b>	function	<b>lastmatch</b>	function
<b>direct</b>	function	<b>lastpar</b>	function
<b>directives</b>	table	<b>load</b>	function
F after		<b>loadbuffer</b>	function
F before		<b>loaddata</b>	function
F handle		<b>loaded</b>	table
F load		<b>main</b>	function
F setup		<b>match</b>	function
<b>displayverbatim</b>	function	<b>name</b>	function
<b>doif</b>	function	<b>namespace</b>	function
<b>doifelse</b>	function	<b>nonspace</b>	function
<b>doifelseempty</b>	function	<b>par</b>	function
<b>doifelsestext</b>	function	<b>param</b>	function
<b>doisempty</b>	function	<b>parameter</b>	function
<b>doifnot</b>	function	<b>path</b>	function
<b>doifnotempty</b>	function	<b>popmatch</b>	function
<b>doifnottext</b>	function	<b>pos</b>	function
<b>doiftext</b>	function	<b>position</b>	function
<b>element</b>	function	<b>pure</b>	function
<b>elements</b>	function	<b>pushmatch</b>	function
<b>entities</b>	data table	<b>raw</b>	function
<b>filter</b>	function	<b>rawroot</b>	function
<b>filterlist</b>	function	<b>rawtex</b>	function

<b>refatt</b>	function	F add
<b>register</b>	function	F compare
<b>registerentity</b>	function	F flush
<b>removesetup</b>	function	F reset
<b>replace</b>	function	F show
<b>resetcdata</b>	function	F sort
<b>resetsetups</b>	function	<b>splitid</b> function
<b>resolvedentity</b>	function	<b>startraw</b> function
<b>root</b>	function	<b>startunescape</b> function
<b>save</b>	function	<b>stopraw</b> function
<b>serialize</b>	function	<b>stopunescape</b> function
<b>setaction</b>	function	<b>store</b> function
<b>setatt</b>	function	<b>strip</b> function
<b>setattribute</b>	function	<b>stripped</b> function
<b>setcdata</b>	function	<b>tag</b> function
<b>setcommandtonone</b>	function	<b>text</b> function
<b>setcommandtotext</b>	function	<b>tobuffer</b> function
<b>setpar</b>	function	<b>tofile</b> function
<b>setparam</b>	function	<b>toparameters</b> function
<b>setparameter</b>	function	<b>toverbatim</b> function
<b>setup</b>	function	<b>verbatim</b> function
<b>snippet</b>	function	<b>withindex</b> function
<b>sorters</b>	table	<b>xmltexhandler</b> data table

## math (basic lua)

<b>abs</b>	function	<b>min</b>	function
<b>acos</b>	function	<b>mininteger</b>	number
<b>asin</b>	function	<b>mod</b>	function
<b>atan</b>	function	<b>modf</b>	function
<b>atan2</b>	function	<b>odd</b>	function
<b>ceil</b>	function	<b>pi</b>	number
<b>ceiling</b>	function	<b>pow</b>	function
<b>cos</b>	function	<b>rad</b>	function
<b>cosd</b>	function	<b>random</b>	overloaded function
<b>cosh</b>	function	<b>randomseed</b>	function
<b>deg</b>	function	<b>round</b>	function
<b>div</b>	function	<b>setrandomseedi</b>	function
<b>even</b>	function	<b>sin</b>	function
<b>exp</b>	function	<b>sind</b>	function
<b>floor</b>	function	<b>sinh</b>	function
<b>fmod</b>	function	<b>sqrt</b>	function
<b>huge</b>	number	<b>tan</b>	function
<b>initialseed</b>	number	<b>tand</b>	function
<b>ldexp</b>	function	<b>tanh</b>	function
<b>log</b>	function	<b>tointeger</b>	function
<b>log10</b>	function	<b>type</b>	function
<b>max</b>	function	<b>ult</b>	function
<b>maxinteger</b>	number		

# mathematics (context)

<b>addfallbacks</b>	function	<b>mapremap</b>	data table
<b>alphabets</b>	data table	<b>overloaddimensions</b>	function
<b>alternatives</b>	data table	<b>overloadparameters</b>	function
<b>big</b>	function	<b>privatebase</b>	number
<b>boldmap</b>	data table	<b>registerdomain</b>	function
<b>categories</b>	table	<b>registerfallbackid</b>	function
D functions		<b>remapalphabets</b>	function
<b>charactersets</b>	data table	<b>renderings</b>	table
<b>checkaccentbaseheight</b>	function	D mappings	
<b>checkprivateparameters</b>	function	D numbers	
<b>classes</b>	data table	D sets	
<b>codes</b>	data table	<b>renderset</b>	function
<b>define</b>	function	<b>resetattributes</b>	function
<b>dimensions</b>	function	<b>resetitalics</b>	function
<b>domains</b>	table	<b>resolvefallbacks</b>	function
<b>extensiblecode</b>	function	<b>scaleparameters</b>	function
<b>extensibles</b>	data table	<b>setdomain</b>	function
<b>extrabase</b>	number	<b>setitalics</b>	function
<b>extras</b>	table	<b>setridofprime</b>	function
F add		<b>sets</b>	data table
F copy		<b>styles</b>	data table
<b>fallbacks</b>	table	<b>syncboth</b>	function
F apply		<b>syncname</b>	function
F install		<b>syncstyle</b>	function
<b>fallbackstyleattr</b>	function	<b>toname</b>	function
<b>families</b>	data table	<b>tostyle</b>	function
<b>finishfallbacks</b>	function	<b>tweakaftercopyingfont</b>	function
<b>gaps</b>	data table	<b>tweakbeforecopyingfont</b>	function
<b>getboth</b>	function	<b>tweaks</b>	table
<b>getdomain</b>	function	<b>utfmathaccent</b>	function
<b>getitalics</b>	function	<b>utfmathclass</b>	function
<b>getridofprime</b>	function	<b>utfmathcommand</b>	function
<b>getstyle</b>	function	<b>utfmathfiller</b>	function
<b>horizontalcode</b>	function	<b>utfmathstretch</b>	function
<b>initializeparameters</b>	function	<b>virtualize</b>	function
<b>makefont</b>	function	<b>virtualized</b>	data table

## md5 (extra lua)

<b>HEX</b>	function	<b>sum</b>	function
<b>dec</b>	function	<b>sumHEXA</b>	function
<b>hex</b>	function	<b>sumhexa</b>	function

# metapost (context)

<b>checkformat</b>	function	N newinternal
<b>cm</b>	function	N nullary
<b>codes</b>	table	N numeric
N addto		N of
N ampersand		N ofbinary
N and		N outertag
N assignment		N parametertype
N atleast		N plus_or_minus
N begingroup		N primarybinary
N btex		N primarydef
N capsule		N randomseed
N colon		N relax
N comma		N repeat_loop
N controls		N rightbrace
N curl		N rightbracket
N cycle		N rightdelimter
N declare		N runscript
N def		N save
N definedmacro		N scantokens
N delimiters		N scope
N endgroup		N secondarybinary
N equals		N secondarydef
N etex		N semicolon
N everyjob		N setbounds
N exitif		N shipout
N expandafter		N show
N fi_or_else		N skip
N if		N slash
N input		N special
N interim		N step
N internal		N stop
N iteration		N str
N join		N string
N leftbrace		N tag
N leftbracket		N tension
N leftdelimter		N tertiarybinary
N let		N tertiarydef
N macrospecial		N thingstoadd
N maketext		N to
N message		N unary
N mode		N undefinedcs

N until		getparameter	function
N void		getparameterset	function
N with		getstatistics	function
N within		gettext	function
N write		graphic	function
<b>colorinitializer</b>	function	<b>graphic_base_pass</b>	function
<b>comment</b>	function	<b>includesvgbuffer</b>	function
<b>convert</b>	function	<b>includesvgfile</b>	function
<b>currentmpx</b>	function	<b>installplugin</b>	function
<b>currentmpxstatus</b>	function	<b>isobject</b>	function
<b>defaultformat</b>	string	<b>lastlog</b>	string
<b>defaultinstance</b>	string	<b>load</b>	function
<b>defaultmethod</b>	string	<b>maketext</b>	function
<b>directrun</b>	function	<b>metafun</b>	table
<b>escaped</b>	function	F interpolate	
<b>execetime</b>	table	F topath	
<b>extensiondata</b>	data table	<b>mptopdf</b>	table
<b>filterclippath</b>	function	F convertmpstopdf	
<b>flush</b>	function	Nnofconverted	
<b>flushers</b>	table	<b>n</b>	number
T pdf		<b>nofruns</b>	number
F comment		<b>nofscriptruns</b>	function
F flushfigure		<b>nvformat</b>	function
F startfigure		<b>pdfliterals</b>	function
F stopfigure		<b>pluginactions</b>	function
F textfigure		<b>popformat</b>	function
<b>flushliteral</b>	function	<b>popscriptrunner</b>	function
<b>flushnormalpath</b>	function	<b>popvariable</b>	function
<b>flushreset</b>	function	<b>popvariables</b>	function
<b>fonts</b>	table	<b>preparetexttextsdata</b>	function
F define		<b>process</b>	function
T flusher		<b>processing</b>	function
F flushfigure		<b>processplugins</b>	function
F startfigure		<b>processspecial</b>	function
F stopfigure		<b>properties</b>	table
N instances		<b>pushformat</b>	function
F process		<b>pushscriptrunner</b>	function
<b>format_number</b>	function	<b>pushvariable</b>	function
<b>format_string</b>	function	<b>pushvariables</b>	function
<b>formatnumber</b>	function	<b>reducetogray</b>	boolean
<b>getclippath</b>	function	<b>registerscript</b>	function
<b>getextensions</b>	function	<b>remappedtext</b>	function
<b>getextradata</b>	function	<b>remaptext</b>	function
<b>getjobdata</b>	function	<b>reporterror</b>	function

<b>reportsvgfonts</b>	function	F	setfrombuffer
<b>reset</b>	function	<b>texerrors</b>	boolean
<b>resetlastlog</b>	function	<b>texexp</b>	function
<b>resetplugins</b>	function	<b>theclippath</b>	function
<b>run</b>	function	<b>tographic</b>	function
<b>runscript</b>	function	<b>totable</b>	function
<b>scanparameters</b>	function	<b>types</b>	table
<b>scripterror</b>	function	N	boolean
<b>scriptindex</b>	function	N	cmykcolor
<b>setextensions</b>	function	N	color
<b>setoutercolor</b>	function	N	dependent
<b>setparameterset</b>	function	N	independent
<b>settext</b>	function	N	known
<b>setvariable</b>	function	N	numeric
<b>showlog</b>	boolean	N	pair
<b>showsvgpage</b>	function	N	path
<b>simple</b>	function	N	pen
<b>splitprescript</b>	function	N	picture
<b>startgraphic</b>	function	N	protodependent
<b>startsvghashing</b>	function	N	string
<b>stopgraphic</b>	function	N	structured
<b>stopsvghashing</b>	function	N	suffixedmacro
<b>svformat</b>	function	N	tokenlist
<b>svgcolorremapper</b>	function	N	transform
<b>svgglyphtomp</b>	function	N	unknownboolean
<b>svgshapestomp</b>	function	N	unknownpath
<b>svgshapestopdf</b>	function	N	unknownpen
<b>svgsplitcolor</b>	function	N	unknownpicture
<b>svgtomp</b>	function	N	unknownstring
<b>svgtopdf</b>	function	N	unsuffixedmacro
<b>sxsy</b>	function	N	vacuous
<b>tex</b>	table	<b>typesvgpage</b>	function
F get		<b>unload</b>	function
F reset		<b>untagvariable</b>	function
F set		<b>variables</b>	table

## **mime** (extra lua)

<b>b64</b>	function	<b>qpwrp</b>	function
<b>decode</b>	function	<b>report</b>	function
<b>decodet</b>	table	<b>stuff</b>	function
	F base64	<b>unb64</b>	function
	F quoted-printable	<b>unqp</b>	function
<b>dot</b>	function	<b>wrap</b>	function
<b>encode</b>	function	<b>wrapt</b>	table
<b>encodet</b>	table		F base64
	F base64		F default
	F quoted-printable		F quoted-printable
<b>eol</b>	function		F text
<b>normalize</b>	function	<b>wrp</b>	function
<b>qp</b>	function		

# mp (context)

<b>_get_count_</b>	function	<b>color</b>	function
<b>_get_dimen_</b>	function	<b>dataset</b>	function
<b>_get_macro_</b>	function	<b>datasets</b>	function
<b>_get_toks_</b>	function	F load	
<b>_set_count_</b>	function	<b>dimension</b>	function
<b>_set_dimen_</b>	function	<b>direct</b>	function
<b>_set_macro_</b>	function	<b>direct1</b>	function
<b>_set_toks_</b>	function	<b>direct2</b>	function
<b>autoinject</b>	function	<b>direct3</b>	function
<b>aux</b>	table	<b>direct4</b>	function
F boolean		<b>disposehash</b>	function
F color		<b>draw</b>	function
F direct		<b>fill</b>	function
F direct1		<b>flatten</b>	function
F direct2		<b>flush</b>	function
F direct3		<b>format</b>	function
F direct4		<b>formatted</b>	function
F draw		<b>fprint</b>	function
F fill		<b>fromhash</b>	function
F flush		<b>get</b>	table
F fprintf		<b>getcount</b>	function
F integer		<b>getdimen</b>	function
F number		<b>getmacro</b>	function
F numeric		<b>gettoks</b>	function
F pair		<b>graphformat</b>	function
F pairpoints		<b>inhash</b>	function
F path		<b>inject</b>	function
F pathpoints		F boolean	
F points		F cmykcolor	
F print		F color	
F quadruple		F integer	
F quadruplerepoints		F number	
F quoted		F numeric	
F size		F pair	
F string		F path	
F transform		F string	
F triplet		F transform	
F tripletpoints		F whatever	
F vprint		<b>integer</b>	function
<b>boolean</b>	function	<b>isarray</b>	function
<b>cleaned</b>	function	<b>isobject</b>	function

<code>lmt_color_functions</code>	table	<code>mf_blob_raw_content</code>	function
<code>F shade</code>		<code>mf_blob_raw_dimensions</code>	function
<code>F step</code>		<code>mf_blob_raw_reset</code>	function
<code>lmt_contours_bitmap_get</code>	function	<code>mf_blob_raw_toutf</code>	function
<code>lmt_contours_bitmap_set</code>	function	<code>mf_blob_raw_wipe</code>	function
<code>lmt_contours_cleanup</code>	function	<code>mf_blob_size</code>	function
<code>lmt_contours_color</code>	function	<code>mf_blob_width</code>	function
<code>lmt_contours_edge_get_band</code>	function	<code>mf_external_figure</code>	function
<code>lmt_contours_edge_get_cell</code>	function	<code>mf_finish_saving_data</code>	function
<code>lmt_contours_edge_paths</code>	function	<code>mf_formatted_text</code>	function
<code>lmt_contours_edge_set</code>	function	<code>mf_get_outline_text</code>	function
<code>lmt_contours_edge_set_by_band</code>	function	<code>mf_graphic_text</code>	function
<code>lmt_contours_edge_set_by_cell</code>	function	<code>mf_inject_blob</code>	function
<code>lmt_contours_format</code>	function	<code>mf_made_text</code>	function
<code>lmt_contours_function</code>	function	<code>mf_map_move</code>	function
<code>lmt_contours_maxmean</code>	function	<code>mf_map_text</code>	function
<code>lmt_contours_maxz</code>	function	<code>mf_named_color</code>	function
<code>lmt_contours_minmean</code>	function	<code>mf_outline_text</code>	function
<code>lmt_contours_minz</code>	function	<code>mf_save_data</code>	function
<code>lmt_contours_novalues</code>	function	<code>mf_script_index</code>	function
<code>lmt_contours_nx</code>	function	<code>mf_some_text</code>	function
<code>lmt_contours_ny</code>	function	<code>mf_start_saving_data</code>	function
<code>lmt_contours_range</code>	function	<code>mf_stop_saving_data</code>	function
<code>lmt_contours_shade_paths</code>	function	<code>mf_tb_dimensions</code>	function
<code>lmt_contours_shade_set</code>	function	<code>mf_tt_dimensions</code>	function
<code>lmt_contours_shape_paths</code>	function	<code>mf_tt_initialize</code>	function
<code>lmt_contours_start</code>	function	<code>mode</code>	function
<code>lmt_contours_stop</code>	function	<code>n</code>	function
<code>lmt_contours_value</code>	function	<code>newhash</code>	function
<code>lmt_contours_xrange</code>	function	<code>number</code>	function
<code>lmt_contours_yrange</code>	function	<code>numeric</code>	function
<code>lmt_do_remaptext</code>	function	<code>pair</code>	function
<code>lmt_function_x</code>	function	<code>pairpoints</code>	function
<code>lmt_mesh_set</code>	function	<code>path</code>	function
<code>lmt_mesh_update</code>	function	<code>pathpoints</code>	function
<code>lmt_poisson_generate</code>	function	<code>points</code>	function
<code>lmt_register_glyph</code>	function	<code>positionanchor</code>	function
<code>lmt_register_glyphs</code>	function	<code>positionbox</code>	function
<code>lmt_surface_do</code>	function	<code>positioncurve</code>	function
<code>lmt_svg_include</code>	function	<code>positionpage</code>	function
<code>mf_blob_add</code>	function	<code>positionpath</code>	function
<code>mf_blob_dimensions</code>	function	<code>positionpxy</code>	function
<code>mf_blob_index</code>	function	<code>positionregion</code>	function
<code>mf_blob_new</code>	function	<code>positionwhd</code>	function

<b>positionxy</b>	function	F symbol	
<b>prefix</b>	function	F token	
<b>print</b>	function	F transform	
<b>processingmode</b>	function	<b>set</b>	table
<b>quadruple</b>	function	<b>setcount</b>	function
<b>quadruplerepoints</b>	function	<b>setdimen</b>	function
<b>quoted</b>	function	<b>setmacro</b>	function
<b>report</b>	function	<b>settoks</b>	function
<b>scan</b>	table	<b>size</b>	function
F boolean		<b>string</b>	function
F cmykcolor		<b>systemmode</b>	function
F color		<b>texstr</b>	function
F expression		<b>textextanchor</b>	function
F integer		<b>texvar</b>	function
F next		<b>tohash</b>	function
F number		<b>transform</b>	function
F numeric		<b>triplet</b>	function
F pair		<b>tripletpoints</b>	function
F path		<b>utflen</b>	function
F pen		<b>utfsub</b>	function
F string		<b>vprint</b>	function

## mplib (extra tex)

<b>codes</b>	function	<b>scan_boolean</b>	function
<b>execute</b>	function	<b>scan_cmykcolor</b>	function
<b>fields</b>	function	<b>scan_color</b>	function
<b>finder</b>	function	<b>scan_expression</b>	function
<b>finders</b>	table	<b>scan_integer</b>	function
F file		<b>scan_next</b>	function
F mpstemplate		<b>scan_number</b>	function
<b>finish</b>	function	<b>scan_numeric</b>	function
<b>inject_boolean</b>	function	<b>scan_pair</b>	function
<b>inject_cmykcolor</b>	function	<b>scan_path</b>	function
<b>inject_color</b>	function	<b>scan_pen</b>	function
<b>inject_integer</b>	function	<b>scan_string</b>	function
<b>inject_number</b>	function	<b>scan_symbol</b>	function
<b>inject_numeric</b>	function	<b>scan_token</b>	function
<b>inject_pair</b>	function	<b>scan_transform</b>	function
<b>inject_path</b>	function	<b>solve_path</b>	function
<b>inject_string</b>	function	<b>statistics</b>	function
<b>inject_transform</b>	function	<b>status</b>	function
<b>inject_whatever</b>	function	<b>types</b>	function
<b>new</b>	overloaded function	<b>version</b>	function
<b>pen_info</b>	function		

# noads (context)

<b>handlers</b>	table	
F align		F resize
F alternates		F showtree
F autofences		F tags
F classes		F unscript
F collapse		F unstack
F domains		F variants
F families		<b>process</b> function
F fixscripts		<b>processnested</b> function
F italics		<b>processors</b> table
F kernpairs		F mlist_to_hlist
F makeup		T unscript
F relocate		T unstack
F render		<b>processouter</b> function

## node (basic tex)

<b>check_discretionaries</b>	function	F getfont
<b>check_discretionary</b>	function	F getglue
<b>copy</b>	function	F getglyphdata
<b>copy_list</b>	function	F getheight
<b>count</b>	function	F getid
<b>current_attr</b>	function	F getkern
<b>dimensions</b>	function	F getlang
<b>direct</b>	table	F getleader
F check_discretionaries		F getlist
F check_discretionary		F getnext
F copy		F getnormalizedline
F copy_list		F getnucleus
F copy_only		F getoffsets
F count		F getorientation
F current_attr		F getpenalty
F dimensions		F getpost
F effective_glue		F getpre
F end_of_math		F getprev
F exchange		F getproperty
F find_attribute		F getreplace
F find_attribute_range		F getscript
F find_node		F getshift
F first_glyph		F getstate
F flatten_discretionaries		F getsub
F flush_list		F getsupre
F flush_node		F getsubtype
F free		F getsup
F get_attribute		F getsuppre
F get_properties_table		F getwhd
F get_syntex_fields		F getwidth
F getattributelist		F glyphdimensions
F getboth		F has_attribute
F getbox		F has_dimensions
F getchar		F has_field
F getdata		F has_glyph
F getdepth		F hpack
F getdirection		F hyphenating
F getdisc		F ignore_math_skip
F getexpansion		F insert_after
F getfam		F insert_before
F getfield		F is_char

F <code>is_direct</code>	F <code>setoffsets</code>	
F <code>is_glyph</code>	F <code>setorientation</code>	
F <code>is_node</code>	F <code>setpenalty</code>	
F <code>is_valid</code>	F <code>setpost</code>	
F <code>is_zero_glue</code>	F <code>setpre</code>	
F <code>kerning</code>	F <code>setprev</code>	
F <code>last_node</code>	F <code>setProperty</code>	
F <code>length</code>	F <code>setreplace</code>	
F <code>ligaturing</code>	F <code>setscript</code>	
F <code>make_extensible</code>	F <code>setshift</code>	
F <code>mlist_to_hlist</code>	F <code>setsplit</code>	
F <code>naturalwidth</code>	F <code>setstate</code>	
F <code>new</code>	F <code>setsub</code>	
F <code>prepend_prevdepth</code>	F <code>setsupre</code>	
F <code>protect_glyph</code>	F <code>setsubtype</code>	
F <code>protect_glyphs</code>	F <code>setsup</code>	
F <code>protrusion_skippable</code>	F <code>setsupre</code>	
F <code>rangedimensions</code>	F <code>setwhd</code>	
F <code>remove</code>	F <code>setwidth</code>	
F <code>reverse</code>	F <code>slide</code>	
F <code>set_attribute</code>	F <code>start_of_par</code>	
F <code>set_syncTeX_fields</code>	F <code>tail</code>	
F <code>setattributelist</code>	F <code>todirect</code>	
F <code>setboth</code>	F <code>tonode</code>	
F <code>setbox</code>	F <code>tostring</code>	
F <code>setchar</code>	F <code>tovaliddirect</code>	
F <code>setdata</code>	F <code>traverse</code>	
F <code>setdepth</code>	F <code>traverse_char</code>	
F <code>setdirection</code>	F <code>traverse_glyph</code>	
F <code>setdisc</code>	F <code>traverse_id</code>	
F <code>setexpansion</code>	F <code>traverse_list</code>	
F <code>setfam</code>	F <code>type</code>	
F <code>setfield</code>	F <code>unprotect_glyph</code>	
F <code>setfont</code>	F <code>unprotect_glyphs</code>	
F <code>setglue</code>	F <code>unset_attribute</code>	
F <code>setglyphdata</code>	F <code>usedlist</code>	
F <code>setheight</code>	F <code>uses_font</code>	
F <code>setkern</code>	F <code>vertical_break</code>	
F <code>setlang</code>	F <code>vpack</code>	
F <code>setleader</code>	F <code>write</code>	
F <code>setlink</code>	<b>effective_glue</b>	function
F <code>setlist</code>	<b>end_of_math</b>	function
F <code>setnext</code>	<b>family_font</b>	function
F <code>setnucleus</code>	<b>fields</b>	function

find_attribute	function	optimize_unset_attribute	function
first_glyph	function	prepend_prevdepth	function
fix_node_lists	function	protect_glyph	function
flatten_discretionaries	function	protect_glyphs	function
flush_list	function	protrusion_skippable	function
flush_node	function	rangedimensions	function
free	function	remove	function
get_attribute	function	set_attribute	function
get_glue	function	set_glue	function
get_properties_table	function	setfield	function
getfield	function	setnormalizeline	function
getnormalizeline	function	setProperty	function
getproperty	function	slide	function
has_attribute	function	subtypes	function
has_field	function	tail	function
has_glyph	function	tostring	function
hpack	function	traverse	function
hyphenating	function	traverse_char	function
id	function	traverse_glyph	function
insert_after	function	traverse_id	function
insert_before	function	traverse_list	function
inuse	function	type	function
is_node	function	types	function
is_zero_glue	function	unprotect_glyph	function
kerning	function	unprotect_glyphs	function
last_node	function	unset_attribute	function
length	function	usedlist	function
ligaturing	function	uses_font	function
make_extensible	function	values	function
mlist_to_hlist	function	vpack	function
new	function	write	function

# nodes (context)

<b>accentcodes</b>	data table	<b>discretionarycodes</b>	data table
<b>aligned</b>	function	<b>effective_glue</b>	function
<b>append</b>	function	<b>end_of_math</b>	function
<b>apply</b>	function	<b>fencecodes</b>	data table
<b>applyvisuals</b>	function	<b>fields</b>	function
<b>astable</b>	function	<b>fillcodes</b>	data table
<b>basepoints</b>	function	<b>find_attribute</b>	function
<b>boundarycodes</b>	data table	<b>first_glyph</b>	function
<b>boxes</b>	table	<b>firstcharacter</b>	function
F dimensions		<b>firstcharinbbox</b>	function
F direct		<b>firstdirinbbox</b>	function
F found		<b>firstglyph</b>	function
F reset		<b>flatten_discretionaries</b>	function
F restore		<b>flush</b>	function
F save		<b>flush_list</b>	function
F savenode		<b>flush_node</b>	function
<b>builders</b>	table	<b>free</b>	function
F buildpage_filter		<b>fullhpack</b>	function
F vpack_filter		<b>getattr</b>	function
<b>check_discretionaries</b>	function	<b>getattribute</b>	function
<b>codes</b>	data table	<b>getboth</b>	function
<b>concat</b>	function	<b>getbox</b>	function
<b>copy</b>	function	<b>getchar</b>	function
<b>copy_list</b>	function	<b>getfield</b>	function
<b>copy_node</b>	function	<b>getfont</b>	function
<b>count</b>	function	<b>getid</b>	function
<b>countall</b>	function	<b>getleader</b>	function
<b>current_attr</b>	function	<b>getlist</b>	function
<b>delete</b>	function	<b>getnext</b>	function
<b>destinations</b>	table	<b>getnormalizeline</b>	function
N attribute		<b>getprev</b>	function
T done		<b>getsubtype</b>	function
F handler		<b>gluecodes</b>	data table
T stack		<b>gluevalues</b>	data table
<b>dimensionfields</b>	data table	<b>glyphcodes</b>	data table
<b>dimensions</b>	function	<b>handlers</b>	table
<b>dircodes</b>	data table	F accessibility	
<b>directioncodes</b>	data table	F backgrounds	
<b>directionvalues</b>	data table	F backgroundspage	
<b>dirvalues</b>	data table	F backgroundsvbox	
<b>disccodes</b>	data table	F characters	

F checkforLeaks		is_direct	function
F checkglyphs		is_display_math	function
F checkparcounter		is_node	function
F cleanupbox		is_nut	function
F cleanuppage		is_zero_glue	function
F export		kerncodes	data table
F finalizebox		kerning	function
F flatten		keys	table
F flattenline			T whatsit
F migrate		last_node	function
F protectglyphs		leadercodes	data table
F stripping		leftmarginwidth	function
F textbackgrounds		length	function
F unprotectglyphs		ligaturing	function
<b>has_attribute</b>	function	linefillers	table
<b>has_field</b>	function		D data
<b>has_glyph</b>	function		F define
<b>hpack</b>	function		F enable
<b>hyphenating</b>	function		F filler
<b>idsandsubtypes</b>	function		F handler
<b>idstostring</b>	function	<b>lines</b>	table
<b>ignorablefields</b>	data table		T boxed
<b>injections</b>	table		F register
F copy			F setup
F getligaindex			F stage_one
F getthreshold			F stage_two
F handler			D data
F installgetspaceboth			F finalize
F installnewkern			F number
F isspace			N scratchbox
F keepcounts		<b>link</b>	function
F reset		<b>linked</b>	function
F resetcounts		<b>list</b>	function
F setcursive		<b>listablefields</b>	data table
F setkern		<b>listcodes</b>	data table
F setligaindex		<b>listtoutf</b>	function
F setmark		<b>literalvalues</b>	data table
F setmove		<b>load</b>	function
F setposition		<b>localparcodes</b>	data table
F setspacekerns		<b>locate</b>	function
<b>insert_after</b>	function	<b>margincodes</b>	data table
<b>insert_before</b>	function	<b>marginkerncodes</b>	data table
<b>insert_list_after</b>	function	<b>markers</b>	table
<b>installattributehandler</b>	function		F get

<b>mathcodes</b>	data table	F firstcharacter
<b>maxboxwidth</b>	function	F firstcharinbox
<b>mlist_to_hlist</b>	function	F firstglyph
<b>new</b>	function	F flatten_discretionaries
<b>noadcodes</b>	data table	F flush
<b>noadoptions</b>	table	F flush_list
N axis		F flush_node
N exact		F free
N left		F fullhpack
N middle		F get_components
N no_axis		F get_synctex_fields
N right		F getattr
N set		F getattribute
N unused_1		F getattributelist
N unused_2		F getatrrlist
<b>nodecodes</b>	data table	F getboth
<b>nopts</b>	function	F getbox
<b>nuts</b>	table	F getboxglue
F append		F getchar
F apply		F getcomponents
F applyvisuals		F getdata
F check_discretionaries		F getdepth
F concat		F getdirection
F copy		F getdisc
F copy_list		F getdiscretionary
F copy_no_components		F getexpansion
F copy_node		F getfam
F copy_only		F getfield
F copy_only_glyphs		F getfont
F copy_properties		F getglue
F copyvisual		F getglyphdata
F count		F getheight
F count_components		F getid
F countall		F getkern
F current_attr		F getlang
F delete		F getlanguage
F dimensions		F getleader
F dirdimensions		F getlist
F effective_glue		F getnext
F end_of_math		F getnormalizedline
F exchange		F getnucleus
F find_attribute		F getoffsets
F find_node		F getorientation
F first_glyph		F getpenalty

F getpost	F nestedtracedslide
F getpre	F new
F getprev	T pool
F getprop	F accent
F getreplace	F baselineskip
F getruledata	F boundary
F getscript	F choice
F getshift	F cleanup
F getstate	F delim
F getsub	F delimiter
F getsubpre	F direction
F getsubtype	F directliteral
F getsup	F disc
F getsuppre	F emptyrule
F getsurround	F fence
F getvalue	F fontkern
F getwhd	F fraction
F getwidth	F glue
F has_attribute	F gluespec
F has_dimensions	F glyph
F has_field	F hlist
F has_glyph	F indentskip
F hpack	F italic kern
F hyphenating	F kern
F insert_after	F latelua
F insert_before	F leader
F insert_list_after	F lefthangskip
F is_direct	F leftmarginkern
F is_display_math	F leftskip
F is_node	F lineskip
F is_nut	F literal
F is_zero_glue	F mathchar
F ischar	F mathtextchar
F isdone	F negatedglue
F isglyph	F noad
F kerning	F originliteral
F last_node	F outlinerule
F leftmarginwidth	F pageliteral
F length	F penalty
F ligaturing	F radical
F link	F rawliteral
F linked	F register
F locate	F restore
F mlist_to_hlist	F righthangskip

F rightmarginkern	F set_components
F rightskip	F set_syntex_fields
F rule	F setattr
F save	F setattribute
F savepos	F setattributelist
F setmatrix	F setattributes
F shrink	F setattrlist
F stretch	F setboth
F subbox	F setbox
F submlist	F setboxglue
F temp	F setchar
F usage	F setcomponents
T userids	F setdata
N margins.inline	F setdepth
N splitters.one	F setdirection
N splitters.two	F setdisc
F usernode	F setdiscretionary
F userrule	F setexpansion
F vlist	F setfam
F wordboundary	F setfield
F prepend	F setfont
F processranges	F setglue
F processwords	F setglyphdata
F protect_glyph	F setheight
F protect_glyphs	F setkern
F protrusion_skippable	F setlang
F rangedimensions	F setlanguage
F rawprop	F setleader
F reference	F setlink
F rehpack	F setlist
F remove	F setnext
F repackhlist	F setnucleus
F replace	F setoffsets
F reverse	F setorientation
F rightmarginwidth	F setparproperty
T rules	F setpenalty
T ruleactions	F setpost
F box	F setpre
F draw	F setprev
F fill	F setprop
F mp	F setreplace
F stroke	F setruledata
F userrule	F setscript
F set_attribute	F setshift

F setsplit	F list
F setstate	F next
F setsub	F node
F setsubpre	F vlist
F setsubtype	F whatsit
F setup	T typesetters
F setsuppre	F tohbox
F setsurround	F tohpack
F setunsetattributes	F tonodes
F setvalue	F tovbox
F setvisual	F tovpack
F setvisuals	F unprotect_glyph
F setwhd	F unprotect_glyphs
F setwidth	F unset_attribute
F slide	F unsetattribute
F somepenalty	F unsetattributes
F somespace	F untracedslide
F splitbox	F usedlist
F start_of_par	F uses_font
F striprange	F vianodes
F tail	F vianuts
F takeattr	F vpack
F takebox	F write
F takelist	<b>packlist</b> function
F theprop	<b>penaltycodes</b> data table
F tonode	<b>plugindata</b> table
F tonodes	F finalizer
F tonut	F initializer
F tosequence	S name
F tostring	T namespace
F tracedslide	N attribute
F traverse	D data
F traverse_char	F enable
F traverse_glyph	F handler
F traverse_id	F register
F traverse_list	D registered
T traversers	D values
F boundary	F processor
F char	<b>points</b> function
F dir	<b>pool</b> table
F disc	F baselineskip
F glue	F cleanup
F glyph	F directliteral
F hlist	F glyph

F hlist		rules	table
F latelua		D data	
F lineskip		F define	
F literal		F enable	
F originliteral		F handler	
F register		F userrule	
F restore		<b>save</b>	function
F rule		<b>serialize</b>	function
F save		<b>serializebox</b>	function
F savepos		<b>set_attribute</b>	function
F setmatrix		<b>setattr</b>	function
F special		<b>setattribute</b>	function
F usage		<b>setattributes</b>	function
F vlist		<b>setboth</b>	function
<b>prepend</b>	function	<b>setbox</b>	function
<b>print</b>	function	<b>setboxtonaturalwd</b>	function
<b>processors</b>	table	<b>setchar</b>	function
F contribute_filter		<b>setfield</b>	function
B enabled		<b>setfont</b>	function
F hpack_filter		<b>setleader</b>	function
F post_linebreak_filter		<b>setlink</b>	function
F pre_linebreak_filter		<b>setlist</b>	function
F tracer		<b>setnext</b>	function
<b>properties</b>	table	<b>setnormalizeline</b>	function
T data		<b>setprev</b>	function
<b>protect_glyph</b>	function	<b>unsetattributes</b>	function
<b>protect_glyphs</b>	function	<b>shifts</b>	table
<b>protrusion_skippable</b>	function	D data	
<b>pts</b>	function	F define	
<b>radicalcodes</b>	data table	F enable	
<b>rangedimensions</b>	function	F handler	
<b>reference</b>	function	<b>show</b>	function
<b>references</b>	table	<b>showboxes</b>	function
N attribute		<b>showcodes</b>	function
T done		<b>showlist</b>	function
F handler		<b>showsimplelist</b>	function
T stack		<b>skipcodes</b>	data table
<b>repack</b>	function	<b>skipvalues</b>	data table
<b>remove</b>	function	<b>slide</b>	function
<b>repackhlist</b>	function	<b>snapshots</b>	table
<b>replace</b>	function	F getparameters	
<b>report</b>	function	F getsamples	
<b>rightmarginwidth</b>	function	F resetsamples	
<b>rulecodes</b>	data table	F takesample	

<b>somenpenalty</b>	function	<b>tosequence</b>	function
<b>somespace</b>	function	<b>tostring</b>	function
<b>splitbox</b>	function	<b>totable</b>	function
<b>start_of_par</b>	function	<b>totree</b>	function
<b>stripdiscretionaries</b>	function	<b>touft</b>	function
<b>stripping</b>	table	<b>tracers</b>	table
T glyphs		T characters	
F set		F collect	
<b>subtypes</b>	data table	F equal	
<b>tail</b>	function	F start	
<b>takeattr</b>	function	F string	
<b>takebox</b>	function	F unicodes	
<b>tasks</b>	table	T colors	
F actions		F reset	
F appendaction		F set	
F disableaction		F setlist	
F disablegroup		F directions	
F enableaction		F fontchar	
F enablegroup		T frequencies	
F freeze		F register	
F freezegroup		T pool	
F new		T nodes	
F prependaction		F rule	
F removeaction		T nuts	
F replaceaction		F rule	
F restart		F resetproperties	
F setaction		F rule	
F showactions		F setlist	
F table		F setproperties	
<b>tobasepoints</b>	function	F start	
<b>tocentimeters</b>	function	T steppers	
<b>tociceros</b>	function	F check	
<b>todidots</b>	function	F codes	
<b>todimen</b>	function	F features	
<b>toinches</b>	function	F font	
<b>tomillimeters</b>	function	F glyphs	
<b>tonewciceros</b>	function	F message	
<b>tonewdidots</b>	function	F messages	
<b>tonode</b>	function	F nofsteps	
<b>tonodes</b>	function	F register	
<b>tonut</b>	function	F reset	
<b>topicas</b>	function	F start	
<b>topoints</b>	function	F stop	
<b>toscaledpoints</b>	function	F stop	

T transparencies		<b>unset_attribute</b>	function
F reset		<b>unsetattribute</b>	function
F set		<b>unsetattributes</b>	function
F setlist		<b>usedlist</b>	function
<b>traverse</b>	function	<b>usercodes</b>	data table
<b>traverse_char</b>	function	<b>uses_font</b>	function
<b>traverse_glyph</b>	function	<b>vianodes</b>	function
<b>traverse_id</b>	function	<b>vianuts</b>	function
<b>traverse_list</b>	function	<b>visualizebox</b>	function
<b>traversers</b>	table	<b>visualizers</b>	table
F char		F attribute	
F glyph		T attributes	
F list		F box	
F node		F handler	
<b>typesetters</b>	table	F markfonts	
F hbox		F register	
F hpack		F setfont	
F tohbox		F setlayer	
F tohpack		F setruledglyph	
F tonodes		F setvisual	
F tovbox		<b>vpack</b>	function
F tovpack		<b>whatcodes</b>	data table
F vpack		<b>whatsitcodes</b>	data table
<b>unprotect_glyph</b>	function	<b>write</b>	function
<b>unprotect_glyphs</b>	function		

## number (context)

	function		tobitstring	function
<b>basepoints</b>	function		<b>tocentimeters</b>	function
<b>bytetodecimal</b>	function		<b>tociceros</b>	function
<b>compactfloat</b>	function		<b>tocontext</b>	function
<b>decimaltobyte</b>	function		<b>todidots</b>	function
<b>dimenfactors</b>	data table		<b>todimen</b>	function
<b>formatted</b>	function		<b>toevenhex</b>	function
<b>formattedfloat</b>	function		<b>toinches</b>	function
<b>idiv</b>	function		<b>tomillimeters</b>	function
<b>maxdimen</b>	number		<b>tonewciceros</b>	function
<b>nopts</b>	function		<b>tonewdidots</b>	function
<b>percent</b>	function		<b>tonumberf</b>	function
<b>points</b>	function		<b>tonumberg</b>	function
<b>pts</b>	function		<b>topicas</b>	function
<b>signed</b>	function		<b>topoints</b>	function
<b>sparseexponent</b>	function		<b>toscaled</b>	function
<b>splitdimen</b>	function		<b>toscaledpoints</b>	function
<b>to16dot16</b>	function		<b>valid</b>	function
<b>tobasepoints</b>	function			

## objects (context)

**data**        table  
**dimensions** function  
**found**        function  
**n**            number

**page**        function  
**reference** function  
**register**      function  
**restore**      function

# optional (context)

<b>curl</b>	table	F setseekfile
		F escape
		F fetch
		F getversion
		F initialize
		F unescape
<b>ghostscript</b>	table	F open
		F execute
		F initialize
<b>graphicsmagick</b>	table	F close
		F execute
		F initialize
<b>loaded</b>	table	F getmessage
<b>mujs</b>	table	F initialize
		F open
		F dofile
		F execute
		F initialize
		F reset
		F setclosefile
		F setconsole
		F setfindfile
		F setopenfile
		F setreadfile
<b>mysql</b>	table	F execute
		F getmessage
		F initialize
<b>postgres</b>	table	F initialize
		F open
<b>sqlite</b>	table	F close
		F execute
		F getmessage
		F initialize
		F open
<b>zint</b>	table	F execute
		F initialize

## os (basic lua)

<b>__getenv__</b>	function	<b>rename</b>	overloaded function
<b>__setenv__</b>	function	<b>resolvers</b>	table
<b>binsuffix</b>	string	<b>F</b>	bits
<b>binsuffixes</b>	table	<b>resultof</b>	function
<b>clock</b>	function	<b>runtime</b>	function
<b>converttime</b>	function	<b>selfarg</b>	table
<b>date</b>	overloaded function	<b>selfbase</b>	string
<b>difftime</b>	function	<b>selfbin</b>	string
<b>enableansi</b>	function	<b>selfcore</b>	string
<b>env</b>	data table	<b>selfdir</b>	string
<b>execute</b>	overloaded function	<b>selfname</b>	string
<b>exit</b>	overloaded function	<b>selfpath</b>	string
<b>fulltime</b>	function	<b>setenv</b>	overloaded function
<b>getcodepage</b>	function	<b>setexitcode</b>	function
<b>getenv</b>	overloaded function	<b>setlocale</b>	overloaded function
<b>gettimeofday</b>	function	<b>sleep</b>	function
<b>isleapyear</b>	function	<b>time</b>	function
<b>launch</b>	function	<b>timezone</b>	function
<b>libsuffix</b>	string	<b>tmpname</b>	function
<b>localtime</b>	function	<b>today</b>	function
<b>name</b>	string	<b>type</b>	string
<b>newline</b>	string	<b>uname</b>	function
<b>nofdays</b>	function	<b>uuid</b>	function
<b>now</b>	function	<b>validdate</b>	function
<b>pipeto</b>	function	<b>weekday</b>	function
<b>platform</b>	string	<b>where</b>	function
<b>remove</b>	overloaded function	<b>which</b>	function

## package (basic lua)

<b>config</b>	string	<b>loadlib</b>	function
<b>cpath</b>	string	<b>luapaths</b>	function
<b>extralibpath</b>	function	<b>path</b>	string
<b>extralibpaths</b>	function	<b>poplibpath</b>	function
<b>extraluapath</b>	function	<b>popluapath</b>	function
<b>extraluapaths</b>	function	<b>preload</b>	table
<b>helpers</b>	table	<b>pushlibpath</b>	function
<b>libpaths</b>	function	<b>pushluapath</b>	function
<b>loaded</b>	table	<b>searchers</b>	table
<b>loaders</b>	table	<b>searchpath</b>	function

# pagebuilders (context)

<b>columnsets</b>	table	
F add		F setsize
F block		F sethspan
F check		F setlines
F currentcolumn		F setproperties
F define		F setstart
F finishflush		F setvsize
F flushareas		<b>injections</b> table
F flushcolumn		F flushafter
F flushrest		F flushbefore
F goto		F save
F noto		<b>mixedcolumns</b> table
F prepareflush		F cleanup
F put		F finalize
F registerarea		F getlist
F reset		F getrest
F setarea		F getsplit
		F setsplit

## pdf (basic tex)

**immediateobj** function

## pdfe (extra tex)

arraytotable	function	getnumber	function
close	function	getpage	function
closestream	function	getpages	function
dictionarytotable	function	getsize	function
encryptioncodes	data table	getstatus	function
getarray	function	getstream	function
getboolean	function	getstring	function
getbox	function	gettrailer	function
getcatalog	function	getversion	function
getdictionary	function	new	function
getfromarray	function	objectcodes	data table
getfromdictionary	function	open	function
getfromreference	function	openfile	function
getfromstream	function	openstream	function
getinfo	function	pagestotable	function
getinteger	function	readfromstream	function
getmemoryusage	function	readwholestream	function
getname	function	type	function
getnofobjects	function	unencrypt	function
getnofpages	function		

# physics (context)

**units** table  
F registerunit

D tables

## pngdecode (extra tex)

<b>applyfilter</b>	function	<b>splitmask</b>	function
<b>expand</b>	function	<b>tocmyk</b>	function
<b>interlace</b>	function		

# publications (context)

<b>addtexentry</b>	function	<b>converttoxml</b>	function
<b>analyze</b>	function	<b>currentspecification</b>	table
<b>anywhere</b>	function	S author	
<b>authorcache</b>	data table	T categories	
<b>authorcollapsers</b>	data table	T article	
<b>authorhashers</b>	table	S category	
F invertedshort		T extra	
F normal		T fields	
F normalinverted		S author	
F normalshort		S editor	
F sequential		S journal	
F sequentialshort		S keywords	
F short		S note	
<b>authormap</b>	data table	S number	
<b>authortoregister</b>	function	S pages	
<b>casters</b>	table	S title	
F author		S volume	
F keyword		S year	
F pagenumber		T optional	
F range		T required	
<b>checkeddataset</b>	function	T sets	
<b>citevariants</b>	table	T author	
F author		T virtual	
F authornum		T book	
F authoryear		S category	
F authoryears		T extra	
F category		T fields	
F default		S address	
F entry		S author	
F index		S edition	
F keywords		S editor	
F num		S keywords	
F page		S note	
F short		S number	
F tag		S publisher	
F textnum		S subtitle	
F year		S title	
<b>collected</b>	data table	S volume	
<b>components</b>	table	S year	
F author		T optional	
<b>concatstate</b>	function	T required	

T sets	S pages
T author	S volume
T editionset	S version
T virtual	D virtual
T demo-a	T virtualfields
S category	B authornum
T extra	B authoryear
T fields	B authoryears
S author	B num
S institution	B suffix
S organization	<b>datasets</b>
S subtitle	table
S title	<b>detailed</b>
S year	table
T optional	<b>endnotes_to_btx</b>
T required	function
T sets	<b>enhancer</b>
T author	table
T virtual	S arguments
T demo-b	T skip
S category	B dirty
T extra	T gskip
T fields	T kind
S author	T list
S institution	T system
S organization	T order
S subtitle	N steps
S title	<b>enhancers</b>
S year	table
F details	F details
F order	F order
F suffixes	F suffixes
T optional	<b>finder</b>
T required	function
T sets	<b>firstofrange</b>
T authors	function
T virtual	<b>found</b>
S comment	function
S copyright	<b>get</b>
T fields	<b>getcasted</b>
S name	function
T types	<b>getdetail</b>
S author	function
S editor	<b>getdirect</b>
S keywords	function
S number	<b>getfaster</b>
S page	<b>getfield</b>
	<b>getfuzzy</b>
	<b>getindex</b>
	<b>inspectors</b>
	<b>journals</b>
	F abbreviated
	F add
	F expanded
	F load

F save		F lua
<b>lastofrange</b>	function	F refman
<b>lists</b>	table	F registercleaner
F collectentries		F xml
F combinlist		<b>loadreplacementfile</b> function
F fetchentries		<b>new</b> function
F filterall		<b>okay</b> function
F flushcombi		<b>oneorrange</b> function
F flushentry		<b>parenttag</b> function
F flushtag		<b>permitted</b> function
T methods		<b>prerollcmdstring</b> function
F dataset		<b>refman_to_btx</b> function
F force		<b>resolvedname</b> function
F global		<b>save</b> function
F local		<b>savers</b> table
F nogregistered		F bib
F prepareentries		F lua
F register		F xml
F sameasprevious		<b>search</b> function
T sorters		<b>setcategory</b> function
F cite		<b>setspecification</b> function
F dataset		<b>singularorplural</b> function
F default		<b>sortedentries</b> function
F index		<b>sortmethods</b> table
F list		T authoryear
F reference		T sequence
F short		<b>specifications</b> table
F used		T default
F uservariable		S author
<b>listvariants</b>	table	S comment
F default		S copyright
F index		S name
F num		S version
F short		D virtual
F tag		<b>splitauthor</b> function
<b>load</b>	function	<b>splitoneauthor</b> function
<b>loadbibdata</b>	function	<b>statistics</b> table
<b>loaddefinitionfile</b>	function	N nofbytes
<b>loaders</b>	table	N nofdatasets
F bbl		N nofdefinitions
F bib		N nofshortcuts
F buffer		<b>tables</b> table
F endnote		D implicits
F json		D origins

D privates		F showtables
D sets		F showvariants
D specials		<b>typesetters</b>
D types		F author
D virtuals		F string
<b>tags</b>	function	<b>useddataset</b>
<b>tracers</b>	table	<b>usedentries</b>
		<b>writers</b>
		F author
		F keyword
		F pagenumber
		F range
F showdatasetauthors		
F showdatasetcompleteness		
F showdatasetfields		
F showentry		
F showfields		
F showhashedauthors		

## regimes (context)

**backmapping** data table  
**cleanup** function  
**disable** function  
**enable** function  
**fromregime** function  
**list** function

**mapping** data table  
**pop** function  
**process** function  
**push** function  
**toregime** function  
**translate** function

# resolvers (context)

allprefixes	function	findpk	function
appendhash	function	findtexfile	function
automount	function	findwildcardfile	function
booleanvariable	function	findwildcardfiles	function
cacheversion	string	formatofsuffix	function
checkedvariable	function	formatofvariable	function
cleanedpathlist	function	formats	data table
cleanpath	function	foundintree	function
cleanpathlist	function	foundintrees	function
concatinators	data table	generators	data table
configbanner	string	get_from_content	function
configurationfiles	function	getenv	function
dangerous	data table	getextrapaths	function
datastate	function	getfilehashes	function
defaultsuffixes	table	gethashes	function
dirstatus	function	getownpath	function
dowithfilesandreport	function	getreadfilename	function
dowithfilesintree	function	hashers	data table
dowithpath	function	homadir	string
dowithvariable	function	initialized	function
executers	table	installinputfilehandler	function
expandbraces	function	installinputlinehandler	function
expandedpathfromlist	function	jobpath	function
expandedpathlist	function	jobs	table
expandedpathlistfromvariable	function	F currentcomponent	
expandpath	function	F currentenvironment	
expandpathfromvariable	function	F currentproduct	
expansion	function	F currentproject	
extendtexmfvariable	function	F justacomponent	
filtered_from_content	function	D processors	
find_file	function	F productcomponent	
find_files	function	F usefile	
findbinfile	function	joinpath	function
findctxfile	function	knownvariables	function
finders	data table	libraries	table
findfile	function	F optionalloaded	
findfiles	function	F validoptional	
findgivenfile	function	load	function
findgivenfiles	function	loadbinfile	function
findlib	function	loaders	data table
findpath	function	loadlualib	function

<b>loadtexfile</b>	function	<b>resetextrapaths</b>	function
<b>loadtime</b>	function	<b>resetmemstream</b>	function
<b>locateformat</b>	function	<b>resetresolve</b>	function
<b>locators</b>	data table	<b>resolve</b>	function
<b>luacnffallback</b>	string	<b>savers</b>	data table
<b>luacnfname</b>	string	<b>scandata</b>	function
<b>luacnfspec</b>	string	<b>scanfiles</b>	function
<b>luacnfstate</b>	string	<b>schemes</b>	table
<b>macros</b>	table		
F convertfile		T cleaners	
F decodecomment		F md5	
F enablecomment		F none	
F encodecomment		F strip	
F preprocessed		F cleanname	
F processmk		F fetchstring	
F processmklx		F fetchtable	
F processmkvi		F install	
F version			
<b>maxreadlevel</b>	number	<b>setdynamic</b>	function
<b>methodhandler</b>	function	<b>setenv</b>	function
<b>openbinfile</b>	function	<b>setmemstream</b>	function
<b>openers</b>	data table	<b>showpath</b>	function
<b>openfile</b>	function	<b>simplescanfiles</b>	function
<b>opentexfile</b>	function	<b>splitconfigurationpath</b>	function
<b>ownpath</b>	string	<b>splitexpansions</b>	function
<b>popextrapath</b>	function	<b>splitmethod</b>	function
<b>popinputname</b>	function	<b>splitpath</b>	function
<b>poppath</b>	function	<b>stackpath</b>	function
<b>prefixes</b>	data table	<b>starttiming</b>	function
<b>prependhash</b>	function	<b>stoptiming</b>	function
<b>pushextrapath</b>	function	<b>suffixes</b>	data table
<b>pushinputname</b>	function	<b>suffixmap</b>	data table
<b>pushpath</b>	function	<b>suffixofformat</b>	function
<b>registerextrapath</b>	function	<b>texdatablob</b>	function
<b>registerfile</b>	function	<b>toppath</b>	function
<b>registerfilehash</b>	function	<b>unexpandedpath</b>	function
<b>registerintrees</b>	function	<b>unexpandedpathlist</b>	function
<b>registermethod</b>	function	<b>unresolve</b>	function
<b>registerzipfile</b>	function	<b>updaterelations</b>	function
<b>relations</b>	data table	<b>updatescript</b>	function
<b>renew</b>	function	<b>uselibrary</b>	function
<b>renewcache</b>	function	<b>usertypes</b>	data table
<b>repath</b>	function	<b>usezipfile</b>	function
<b>reset</b>	function	<b>validatedpath</b>	function
		<b>variable</b>	function
		<b>variableofformat</b>	function

<b>variableofformatorsuffix</b>	function
<b>wildcardpattern</b>	function

## sandbox (context)

<b>disablelibraries</b>	function	<b>possiblepath</b>	function
<b>disablerunners</b>	function	<b>redefine</b>	function
<b>enable</b>	function	<b>register</b>	function
<b>filehandlerone</b>	function	<b>registerbinary</b>	function
<b>filehandlertwo</b>	function	<b>registerlibrary</b>	function
<b>finalizer</b>	function	<b>registerroot</b>	function
<b>getrunner</b>	function	<b>registerrunner</b>	function
<b>initializer</b>	function	<b>report</b>	function
<b>iohandler</b>	function	<b>setfilename logger</b>	function
<b>logcalls</b>	function	<b>setlogger</b>	function
<b>logfiles</b>	function	<b>setreporter</b>	function
<b>original</b>	function	<b>settrace</b>	function
<b>overload</b>	function	<b>validfilename</b>	function

# scripts (context)

<b>autofontfeature</b>	table	
F disable		
F enable		
F handler		
<b>colors</b>	data table	
<b>decomposehangul</b>	function	
<b>defaults</b>	table	
N inter_char_half_shrink_factor		
N inter_char_half_stretch_factor		
N inter_char_hangul_penalty		
N inter_char_quarter_shrink_factor		
N inter_char_quarter_stretch_factor		
N inter_char_shrink_factor		
N inter_char_stretch_factor		
N inter_word_stretch_factor		
<b>getdata</b>	function	
<b>getinjector</b>	function	
<b>getsplitter</b>	function	
<b>getstatus</b>	function	
<b>handlers</b>	data table	
<b>hash</b>	table	
<b>injectors</b>	data table	
<b>inserters</b>	table	
F nobreakspace_after		
F nobreakspace_before		
F space_after		
F space_before		
F zerowidthspace_after		
F zerowidthspace_before		
<b>installdataset</b>	function	
<b>installmethod</b>	function	
<b>numbertodataset</b>	data table	
<b>numbertohandler</b>	data table	
<b>reset</b>	function	
<b>set</b>	function	
<b>setstatus</b>	function	
<b>splitters</b>	data table	

## set (context)

**contains** function  
**create** function  
**tolist** function

**tonumber** function  
**totable** function

## sha2 (extra lua)

<b>HASH256</b>	function	<b>hash256</b>	function
<b>HASH384</b>	function	<b>hash384</b>	function
<b>HASH512</b>	function	<b>hash512</b>	function
<b>HEX256</b>	function	<b>hex256</b>	function
<b>HEX384</b>	function	<b>hex384</b>	function
<b>HEX512</b>	function	<b>hex512</b>	function
<b>digest256</b>	function	<b>sum256</b>	function
<b>digest384</b>	function	<b>sum384</b>	function
<b>digest512</b>	function	<b>sum512</b>	function

## sio (extra lua)

<b>read2dot14</b>	function	<b>readfixed2</b>	function
<b>readbytes</b>	function	<b>readfixed4</b>	function
<b>readbytetable</b>	function	<b>readinteger1</b>	function
<b>readcardinal1</b>	function	<b>readinteger1_le</b>	function
<b>readcardinal1le</b>	function	<b>readinteger2</b>	function
<b>readcardinal2</b>	function	<b>readinteger2_le</b>	function
<b>readcardinal2le</b>	function	<b>readinteger3</b>	function
<b>readcardinal3</b>	function	<b>readinteger3_le</b>	function
<b>readcardinal3le</b>	function	<b>readinteger4</b>	function
<b>readcardinal4</b>	function	<b>readinteger4_le</b>	function
<b>readcardinal4le</b>	function	<b>readintegertable</b>	function
<b>readcardinaltable</b>	function		

# socket (extra lua)

<b>BLOCKSIZE</b>	number	S content-md5
<b>DATAGRAMSIZE</b>	number	S content-range
<b>SETSIZE</b>	number	S content-transfer-encoding
<b>SOCKETINVALID</b>	number	S content-type
<b>bind</b>	function	S cookie
<b>choose</b>	function	S date
<b>connect</b>	function	S diagnostic-code
<b>connect4</b>	function	S dsn-gateway
<b>connect6</b>	function	S etag
<b>dns</b>	table	S expect
	F getaddrinfo	S expires
	F gethostname	S final-log-id
	F getnameinfo	S final-recipient
	F tohostname	S from
	F toip	S host
<b>gettime</b>	function	S if-match
<b>headers</b>	table	S if-modified-since
	T canonic	S if-none-match
	S accept	S if-range
	S accept-charset	S if-unmodified-since
	S accept-encoding	S in-reply-to
	S accept-language	S keywords
	S accept-ranges	S last-attempt-date
	S action	S last-modified
	S age	S location
	S allow	S max-forwards
	S alternate-recipient	S message-id
	S arrival-date	S mime-version
	S authorization	S original-envelope-id
	S bcc	S original-recipient
	S cache-control	S pragma
	S cc	S proxy-authenticate
	S comments	S proxy-authorization
	S connection	S range
	S content-description	S received
	S content-disposition	S received-from-mta
	S content-encoding	S references
	S content-id	S referer
	S content-language	S remote-mta
	S content-length	S reply-to
	S content-location	S reporting-mta

S resent-bcc	
S resent-cc	
S resent-date	
S resent-from	
S resent-message-id	
S resent-reply-to	
S resent-sender	
S resent-to	
S retry-after	
S return-path	
S sender	
S server	
S smtp-remote-recipient	
S status	
S subject	
S te	
S to	
S trailer	
S transfer-encoding	
S upgrade	
S user-agent	
S vary	
S via	
S warning	
S will-retry-until	
S www-authenticate	
S x-mailer	
F lower	
F normalize	
<b>http</b>	table
N TIMEOUT	
S USERAGENT	
F genericform	
F open	
F request	
<b>newtry</b>	function
<b>protect</b>	function
<b>report</b>	function
<b>select</b>	function
<b>sink</b>	function
<b>sinkt</b>	table
	F close-when-done
	F default
	F http-chunked
	F keep-open
<b>skip</b>	function
<b>sleep</b>	function
<b>source</b>	function
<b>sourcet</b>	table
	F by-length
	F default
	F http-chunked
	F until-closed
<b>tcp</b>	function
<b>tcp4</b>	function
<b>tcp6</b>	function
<b>tp</b>	table
	N TIMEOUT
	F connect
<b>try</b>	function
<b>udp</b>	function
<b>udp4</b>	function
<b>udp6</b>	function
<b>url</b>	table
	F absolute
	F build
	F build_path
	F escape
	F parse
	F parse_path
	F unescape

## sorters (context)

<b>basicsorter</b>	function	B pm
<b>comparers</b>	table	B uc
F basic		B zc
<b>constants</b>	table	B zm
S defaultdigits		<b>definitions</b> data table
S defaultlanguage		<b>firstofsplit</b> function
S defaultmethod		<b>packch</b> function
N digitsmaximum		<b>packuc</b> function
N digitoffset		<b>replacementlist</b> function
N ignoredoffset		<b>setlanguage</b> function
N replacementoffset		<b>sort</b> function
T validmethods		<b>splitters</b> table
B ch		F utf
B mc		<b>strip</b> function
B mm		<b>tracers</b> data table
B pc		<b>update</b> function

## statistics (context)

<b>benchmarktimer</b>	function	<b>memused</b>	function
<b>callbacks</b>	function	<b>register</b>	function
<b>checkfmtstatus</b>	function	<b>resettiming</b>	function
<b>currenttime</b>	function	<b>runtime</b>	function
<b>elapsed</b>	function	<b>savefmtstatus</b>	function
<b>elapsedindeed</b>	function	<b>show</b>	function
<b>elapsedseconds</b>	function	<b>starttiming</b>	function
<b>elapsedtime</b>	function	<b>stoptiming</b>	function
<b>enable</b>	boolean	<b>threshold</b>	number
<b>formatruntime</b>	function	<b>timed</b>	function
<b>hastiming</b>	function	<b>tracefunction</b>	function

## status (basic tex)

<b>constants</b>	function	<b>resetmessages</b> function
<b>list</b>	function	

## storage (context)

<b>allocate</b>	function	<b>noftables</b>	number
<b>data</b>	table	<b>register</b>	function
<b>mark</b>	function	<b>shared</b>	data table
<b>marked</b>	function	<b>storedfunctions</b>	data table
<b>max</b>	number	<b>strip</b>	boolean
<b>min</b>	number	<b>tofmodules</b>	number
<b>nofmodules</b>	number	<b>toftables</b>	number

## streams (context)

<b>collect</b>	function	<b>push</b>	function
<b>disable</b>	function	<b>start</b>	function
<b>enable</b>	function	<b>stop</b>	function
<b>flush</b>	function	<b>synchronize</b>	function
<b>initialize</b>	function		

## string (basic lua)

autodouble	function	nspaces	table
autosingle	function	optionalquoted	function
booleanstring	function	pack	function
byte	function	packsize	function
bytelpairs	function	quote	function
bytes	function	quoted	function
bytetable	function	rep	function
char	function	replacenewlines	function
characterpairs	function	reverse	function
characters	function	split	function
checkedsplit	function	splitlines	function
collapsespaces	function	splitup	function
containsws	function	strip	function
count	function	sub	function
dawson	function	tformat	function
dump	function	toHEX	function
erf	function	tobool	function
erfc	function	tobytes	function
erfcx	function	tocontext	function
erfi	function	todec	function
escapedpattern	function	todimen	function
escapedquotes	function	tohex	function
explode	function	tonodes	function
f6	function	topattern	function
find	function	totable	function
format	function	tounicode16	function
formatter	function	toutf	function
formatters	function	toutf32	function
fullstrip	function	toutf8	function
gmatch	function	tracedchar	function
gsub	function	tracedchars	table
is_boolean	function	unpack	function
is_empty	function	unquote	function
itself	function	unquoted	function
len	function	upper	function
limit	function	utfcharacter	function
linetable	function	utfcharacters	function
longtostring	function	utfcharactertable	function
lower	function	utflen	function
match	function	utfpadd	function
nospaces	function	utfpadding	function

<b>utfvalue</b>	function	<b>valid</b>	function
<b>utfvalues</b>	function	<b>voigt</b>	function
<b>utfvaluetable</b>	function	<b>voigt_hwhm</b>	function

# structures (context)

<b>atlocation</b>	function	F next
<b>blocks</b>	table	F prev F previous
D collected		F raw
F define		F record
F print		F reset
F save		F restart
F select		F restore
F setstate		F save
D states		F set
D tobesaved		F setlevel
F uservariable		F setoffset
<b>bookmarks</b>	table	F setown
T extras		F setstate
F get		F setvalue
F mergesections		T specials
F register		F userpage
F reset		F subs
F tosections		D tobesaved
F finalize		F value
F flatten		F way
F installhandler		<b>currentsectionnumber</b> function
F merge		<b>descriptions</b> table
S method		<b>documents</b> table
F overload		D data
F place		F initialize
F register		F preset
F setopened		F reset
F setup		<b>floats</b> table
<b>counters</b>	table	<b>formulas</b> table
F add		<b>helpers</b> table
F analyze		F analyze
F check		F formulanumber
D collected		F merged
F compact		F page
F converted		F pageofinternal
F currentvalue		F prefix
D data		F prefixlastpage
F define		F prefixpage
F first		F simplify
F get		F title
F last		

F touserdata		F reordered
<b>inserts</b>	<b>table</b>	T result
D data		F savedlistnumber
F define		F savedlistprefixednumber
F getdata		F savedlisttitle
F getlocation		D sectionblocks
F getname		F sectionnumber
F getnumber		F size
F setlocation		F title
F setup		D tobesaved
D stored		F userdata
<b>itemgroups</b>	<b>table</b>	F uservalue
<b>lists</b>	<b>table</b>	<b>marks</b> <b>table</b>
F addto		D data
F analyze		F define
B autoreorder		F exists
D cached		F fetch
D collected		F fetchallmarks
F discard		F fetched
F enhance		F fetchonemark
T enhancers		F fetchtwomarks
F filter		F get
F formulanumber		F number
F getresult		F relate
F groupindex		F reset
F hasnumberdata		F set
F haspagedata		F show
F hastitledata		F synchronize
F iscached		F title
D kinds		T tracers
F label		F showtable
F location		<b>notes</b> <b>table</b>
D names		F check_spacing
F number		F checkpagechange
D ordered		F define
F page		F doifonsamepageasprevious
F popnesting		F get
F prefix		F getdeltapage
F prefixednumber		F getinternal
F prefixedpage		F getn
F process		F getstate
D pushed		F hascontent
F pushnesting		F internal
F realpage		F internalid

F listindex	T files
T numbers	T data
F ordered	F define
F postpone	F found
F resetpostponed	F get
F restore	F filter
F save	F filterdefault
F setstate	D filters
D states	D flaginternals
F store	F from
<b>pages</b>	<b>table</b>
F allmarked	D functions
F analyze	F get
D collected	F getcurrentmetadata
F fraction	F getcurrentprefixspec
F in_body	F getinnermethod
F is_odd	F getinternalcachedlistreference
F mark	F getinternallistreference
F marked	F getinternalreference
N npages	F getoutermethod
F number	D handlers
F on_right	F identify
F save	F import
D tobesaved	F inject
F toranges	F injectcurrentset
<b>references</b>	<b>table</b>
F analyze	S innermethod
F checkedfile	D internals
F checkedfileorurl	F load
F checkedprogram	F loadpresets
F checkedrealpage	F mark
F checkedurl	S outermethod
D collected	D pages
U componentsplitter	U prefixsplitter
F currentmetadata	D productdata
F currentorder	T programs
D currentset	T data
F define	F define
D defined	F get
D derived	F realpageofpage
F enhance	U referencesplitter
D executers	D referred
F expandcurrent	F referredpage
F export	F registerfinalizer
	F registerinitializer
	F registerpage

F reset	F define
D runners	F enhance
F set	F extend
F setandgetattribute	F filter
F setcomponent	F filtercollected
F setinternalreference	F finalize
F setlinkmethod	F findinternal
F setnextinternal	F flush
F setnextorder	F get
F setreferencerealpage	F prepare
D specials	F process
F splitcomponent	F setmethod
F splitprefix	F sort
F splitreference	F store
F synchronizepage	D tobesaved
T testrunners	F unique
F inner	F userdata
F special	<b>sections</b>
F special operation	table
F special operation with arguments	F autodepth
T testspecials	F cct
F deltapage	D collected
F i	F current
F internal	F currentblock
F page	F currentid
F realpage	F currentlevel
F section	F currentsectionindex
F userpage	F depthnumber
D tobereferrals	F finddata
D tobesaved	F findnumber
D tracedpages	F fullnumber
T urls	F getcurrentlevel
T data	F getlevel
F define	F getnumber
F found	F internalreference
F get	D levelmap
F untex	D levels
D usedinternals	F matchingtilldepth
D usedviews	F numberatdepth
F valid	F numbers
<b>registers</b>	<b>table</b>
F analyze	F popblock
D collected	F prefixedconverted
F compare	F pushblock
	F register
	D registered

F reportstructure	F registerused
F save	F resetshown
T sectionblockdata	F resetused
T bodypart	F sort
S bookmark	F synonym
F set	D tobesaved
F setblock	<b>tags</b>
F setchecker	F current
F setentry	F elementtag
F setinitialblock	F finishexport
F setlevel	F getextradata
F setnumber	F getid
F showstructure	F getmetadata
F structuredata	F gettablecell
F title	F gettabulatecell
D tobesaved	F handler
F typesetnumber	F initializeexport
F userdata	D labels
B verbose	F last
<b>sets</b>	<b>table</b>
F define	F lastinchain
F get	F locatedtag
F getall	T patterns
D setlist	U splitter
<b>specials</b>	<b>table</b>
D collected	D properties
F retrieve	F registerextradata
F store	F registermetadata
D tobesaved	F restart
<b>synonyms</b>	<b>table</b>
F analyzed	F setaspect
D collected	F setattributehash
F compare	F setcombination
F define	F setconstruct
F filter	F setfigure
F finalize	F setfloat
F flush	F setformulacontent
F isshown	F sethighlight
F isused	F setitem
F meaning	F setitemgroup
F prepare	F setlist
F process	F setnotation
F register	F setnotationsymbol
F registershow	F setparagraph
	F setproperty
	F setpublication
	F setregister

F setsorting	D specifications
F setsynonym	F start
F settablecell	F stop
F settabulatecell	F strip
F settagdelimitedsymbol	D taglist
F settagsubsentencesymbol	T usewithcare
F setupexport	T images
F setuserproperties	

# table (basic lua)

allkeys	function	pack	function
append	function	prepend	function
are_equal	function	print	function
collapsed	function	remove	function
collapsedhash	function	reverse	function
compact	function	reversed	function
concat	function	save	function
contains	function	sequenced	function
copy	function	serialize	function
count	function	setmetatablecall	function
derive	function	setmetatableindex	function
deserialize	function	setmetatableindices	function
drop	function	setmetatablekey	function
fastcopy	function	setmetatablenewindex	function
fastserialize	function	sort	function
filtered	function	sorted	function
flattened	function	sortedhash	function
fromhash	function	sortedhashkeys	function
getmetatablekey	function	sortedhashonly	function
getn	function	sortedindexonly	function
has_one_entry	function	sortedkeys	function
hashed	function	sortedpairs	function
identical	function	sparse	function
imerge	function	strip	function
imerged	function	sub	function
insert	function	swapped	function
is_empty	function	tocontext	function
is_simple_table	function	tocsv	function
keys	function	tofile	function
load	function	tohandle	function
loweredkeys	function	tohash	function
makeweak	function	toxml	function
merge	function	twoWayMapper	function
merged	function	unique	function
mirrored	function	unnest	function
move	function	unpack	function
ordered	function	values	function
orderedhash	function		

# tex (basic tex)

<b>attribute</b>	table	<b>getdelcode</b>	function
<b>badness</b>	function	<b>getdelcodes</b>	function
<b>box</b>	table	<b>getdimen</b>	function
<b>boxresources</b>	table	<b>getfontoffamily</b>	function
F getbox		<b>getglue</b>	function
F getdimensions		<b>getglyphdata</b>	function
F save		<b>getglyphscript</b>	function
F use		<b>getglyphstate</b>	function
<b>catcode</b>	table	<b>gethelptext</b>	function
<b>chardef</b>	function	<b>getinteraction</b>	function
<b>conditionals</b>	data table	<b>getlccode</b>	function
<b>constants</b>	data table	<b>getlinedir</b>	function
<b>count</b>	table	<b>getlist</b>	function
<b>cprint</b>	function	<b>getlocallevel</b>	function
<b>ctdcatcodes</b>	number	<b>getmark</b>	function
<b>ctxcatcodes</b>	number	<b>getmath</b>	function
<b>definefont</b>	function	<b>getmathcode</b>	function
<b>delcode</b>	table	<b>getmathcodes</b>	function
<b>dimen</b>	table	<b>getmathdir</b>	function
<b>directives</b>	data table	<b>getmodevalues</b>	function
<b>enableprimitives</b>	function	<b>getmuglue</b>	function
<b>error</b>	function	<b>getmuskip</b>	function
<b>extraprimitives</b>	function	<b>getnest</b>	function
<b>fatalerror</b>	function	<b>getpagestate</b>	function
<b>fontidentifier</b>	function	<b>getpardir</b>	function
<b>fontname</b>	function	<b>getsfcode</b>	function
<b>force_syntex_line</b>	function	<b>getskip</b>	function
<b>force_syntex_tag</b>	function	<b>gettextdir</b>	function
<b>forcehmode</b>	function	<b>gettoks</b>	function
<b>fprint</b>	function	<b>getuccode</b>	function
<b>get</b>	function	<b>glue</b>	table
<b>get_syntex_line</b>	function	<b>hashtokens</b>	function
<b>get_syntex_mode</b>	function	<b>ifs</b>	data table
<b>get_syntex_tag</b>	function	<b>inicatcodes</b>	number
<b>getattribute</b>	function	<b>isattribute</b>	function
<b>getbox</b>	function	<b>isbox</b>	function
<b>getboxdir</b>	function	<b>iscount</b>	overloaded function
<b>getboxresourcebox</b>	function	<b>isdefined</b>	function
<b>getboxresourcedimensions</b>	function	<b>isdimen</b>	overloaded function
<b>getcatcode</b>	function	<b>isglue</b>	function
<b>getcount</b>	function	<b>ismuglue</b>	function

<b>ismuskip</b>	overloaded function	<b>setbox</b>	function
<b>isskip</b>	overloaded function	<b>setboxdir</b>	function
<b>istoken</b>	function	<b>setcatcode</b>	function
<b>istoks</b>	function	<b>setcount</b>	function
<b>lastnodetype</b>	function	<b>setdelcode</b>	function
<b>lccode</b>	table	<b>setdimen</b>	function
<b>linebreak</b>	function	<b>setglue</b>	function
<b>lists</b>	table	<b>setglyphdata</b>	function
<b>luacatcodes</b>	number	<b>setglyphscript</b>	function
<b>magicconstants</b>	table	<b>setglyphstate</b>	function
N maxdimen		<b>setinteraction</b>	function
N running		<b>setlccode</b>	function
N trueinch		<b>setlinedir</b>	function
<b>mathchardef</b>	function	<b>setlist</b>	function
<b>mathcode</b>	table	<b>setmath</b>	function
<b>modelevels</b>	table	<b>setmathcode</b>	function
N horizontal		<b>setmathdir</b>	function
N math		<b>setmuglue</b>	function
N unset		<b>setmuskip</b>	function
N vertical		<b>setnest</b>	function
<b>modes</b>	data table	<b>setpardir</b>	function
<b>muglue</b>	table	<b>setsfcode</b>	function
<b>muskip</b>	table	<b>setskip</b>	function
<b>nest</b>	table	<b>settextdir</b>	function
<b>nilcatcodes</b>	number	<b>settoks</b>	function
<b>notcatcodes</b>	number	<b>setuccode</b>	function
<b>number</b>	function	<b>sfcode</b>	table
<b>primitives</b>	function	<b>shipout</b>	function
<b>print</b>	function	<b>show_context</b>	function
<b>prtcatcodes</b>	number	<b>skip</b>	table
<b>quittoks</b>	function	<b>sp</b>	function
<b>resetparagraph</b>	function	<b>splitbox</b>	function
<b>roman numeral</b>	function	<b>sprint</b>	function
<b>round</b>	function	<b>systemmodes</b>	data table
<b>runtoks</b>	function	<b>takebox</b>	function
<b>saveboxresource</b>	function	<b>texcatcodes</b>	number
<b>scale</b>	function	<b>toks</b>	table
<b>scantoks</b>	function	<b>tonumber</b>	function
<b>set</b>	function	<b>toscaled</b>	function
<b>set_synctex_line</b>	function	<b>tpacatcodes</b>	number
<b>set_synctex_mode</b>	function	<b>tpbacatcodes</b>	number
<b>set_synctex_no_files</b>	function	<b>tprint</b>	function
<b>set_synctex_tag</b>	function	<b>trackers</b>	data table
<b>setattribute</b>	function	<b>triggerbuildpage</b>	function

<b>txtcatcodes</b>	number	<b>useboxresource</b>	function
<b>type</b>	function	<b>vrbcatcodes</b>	number
<b>uccode</b>	table	<b>write</b>	function
<b>uprint</b>	function		

## texconfig (basic tex)

<b>error_line</b>	number	<b>max_in_open</b>	number
<b>expand_depth</b>	number	<b>max_print_line</b>	number
<b>fix_mem_init</b>	number	<b>max_strings</b>	number
<b>formatname</b>	string	<b>nest_size</b>	number
<b>function_size</b>	number	<b>param_size</b>	number
<b>half_error_line</b>	number	<b>properties_size</b>	number
<b>hash_extra</b>	number	<b>save_size</b>	number
<b>init</b>	overloaded function	<b>shell_escape</b>	string
<b>kpse_init</b>	boolean	<b>stack_size</b>	overloaded number

## texio (basic tex)

<code>closeinput</code>	function	<code>write_nl</code>	function
<code>write</code>	function		

## token (basic tex)

<code>biggest_char</code>	function	<code>put_back</code>	function
<code>command_id</code>	function	<code>put_next</code>	function
<code>create</code>	function	<code>scan_argument</code>	function
<code>expand</code>	function	<code>scan_box</code>	function
<code>future_expand</code>	function	<code>scan_char</code>	function
<code>get_active</code>	function	<code>scan_code</code>	function
<code>get_cmdchrcs</code>	function	<code>scan_cspathname</code>	function
<code>get_cmdname</code>	function	<code>scan_delimited</code>	function
<code>get_command</code>	function	<code>scan_dimen</code>	function
<code>get_cspathname</code>	function	<code>scan_float</code>	function
<code>get_cstoken</code>	function	<code>scan_glue</code>	function
<code>get_data</code>	function	<code>scan_int</code>	function
<code>get_expandable</code>	function	<code>scan_key</code>	function
<code>get_frozen</code>	function	<code>scan_keyword</code>	function
<code>get_id</code>	function	<code>scan_keyword_cs</code>	function
<code>get_index</code>	function	<code>scan_letters</code>	function
<code>get_macro</code>	function	<code>scan_luocardinal</code>	function
<code>get_meaning</code>	function	<code>scan_luainteger</code>	function
<code>get_mode</code>	function	<code>scan_luanumber</code>	function
<code>get_next</code>	function	<code>scan_real</code>	function
<code>get_next_char</code>	function	<code>scan_skip</code>	function
<code>get_next_token</code>	function	<code>scan_string</code>	function
<code>get_pool_list</code>	function	<code>scan_token</code>	function
<code>get_protected</code>	function	<code>scan_token_code</code>	function
<code>get_range</code>	function	<code>scan_tokenlist</code>	function
<code>get_tok</code>	function	<code>scan_toks</code>	function
<code>get_user</code>	function	<code>scan_value</code>	function
<code>gobble_dimen</code>	function	<code>scan_word</code>	function
<code>gobble_int</code>	function	<code>set_char</code>	function
<code>is_defined</code>	function	<code>set_data</code>	function
<code>is_next_char</code>	function	<code>set_lua</code>	function
<code>is_token</code>	function	<code>set_macro</code>	function
<code>new</code>	function	<code>skip_next</code>	function
<code>peek_next_char</code>	function	<code>to_string</code>	function
<code>pop_macro</code>	function	<code>type</code>	function
<code>primitives</code>	function	<code>values</code>	function
<code>push_macro</code>	function		

# tokens (context)

<b>astable</b>	function	U loadfoundtypescriptfile
<b>bgroup</b>	userdata	U resetctxscanner
<b>bits</b>	table	U rlap
N active		U scratchcounter
N alignment		U scratchdimen
N begingroup		U scratchmuskip
N character		U scratchskip
N close		U scratchtoken
N comment		U secondoftwoarguments
N endgroup		U setfalsevalue
N endofline		U setsectionblock
N escape		U setupsystem
N ignore		U startcolumns
N invalid		U starttabulate
N letter		U starttitle
N mathshift		U startxtitle
N open		U stopcolumns
N other		U stoptabulate
N parameter		U stoptitle
N space		U stopxtitle
N subscript		U texsetup
N superscript		U xmlw
N whitespace		
<b>cache</b>	table	<b>collectors</b> table
U NC		T data
U NR		F defaultwords
U bf		F dowithwords
U color		F flush
U colordefalc		F install
U colordefflc		F register
U colordefflt		T registered
U colordefrlt		F show
U dofinishreference		F test
U dostarttext		
U finishjob		<b>commands</b> data table
U firstofoneargument		<b>compile</b> function
U firstoftwoarguments		<b>constant</b> function
U gobbleoneargument		<b>converters</b> table
U goto		S toboolean
U iftrue		S todimen
U input		S togue
		S tonumber
		S tostring

<b>create</b>	function	F bracketedasis
<b>defined</b>	function	F char
<b>egroup</b>	userdata	F code
<b>getdata</b>	function	F conditional
<b>getters</b>	table	F count
	F box	F csname
	F count	F delimited
	F dimen	F dimen
	F glue	F dimension
	F macro	F float
	F meaning	F glue
	F skip	F gluespec
	F token	F hash
<b>hbox</b>	userdata	F hbox
<b>isdefined</b>	function	F integer
<b>istoken</b>	function	F ischar
<b>letter</b>	function	F key
<b>letters</b>	function	F keyword
<b>new</b>	function	F keywordcs
<b>other</b>	function	F letters
<b>pickup</b>	function	F list
<b>popmacro</b>	function	F luocardinal
<b>presets</b>	table	F luainteger
	T 1 argument	F luanumber
	T 1 string	F lxmlid
	T 2 arguments	F number
	T 2 strings	F optional
	T 3 arguments	F peek
	T 3 strings	F real
	T 4 arguments	F scanclose
	T 4 strings	F scanopen
	T 5 strings	F skip
	T 6 strings	F string
	T 7 strings	F table
	T 8 strings	F token
<b>printlist</b>	function	F tokencode
<b>pushmacro</b>	function	F tokenlist
<b>scanners</b>	table	F tokens
	F argument	F toks
	F argumentasis	F value
	F array	F vbox
	F boolean	F verbatim
	F box	F vtop
	F bracketed	F whd

F word	
<b>setdata</b>	function
<b>setters</b>	table
F box	
F char	
F count	
F dimen	
F glue	
F lua	
F macro	
F skip	
<b>shortcuts</b>	table
T bits	
N active	
N alignment	
N begingroup	
N character	
N close	
N comment	
N endgroup	
N endofline	
N escape	
N ignore	
N invalid	
N letter	
N mathshift	
N open	
N other	
N parameter	
N space	
N subscript	
N superscript	
N whitespace	
N close	
F inspect	
N open	
F report	
F scanargument	
F scanargumentasis	
F scanarray	
F scanboolean	
F scanbox	
F scanbracketed	
F scanbracketedasis	
	F scandclose
	F scancode
	F scanconditional
	F scancsname
	F scandelimited
	F scandimen
	F scandimension
	F scanhash
	F scanbox
	F scaninteger
	F scankeyword
	F scankeywordcs
	F scanletters
	F scanlist
	T scanners
	F argument
	F argumentasis
	F array
	F boolean
	F box
	F bracketed
	F bracketedasis
	F char
	F code
	F conditional
	F count
	F cname
	F delimited
	F dimen
	F dimension
	F float
	F glue
	F gluespec
	F hash
	F hbox
	F integer
	F ischar
	F key
	F keyword
	F keywordcs
	F letters
	F list
	F luocardinal
	F luainteger

F luanumber	U colordefflc
F lxmlid	U colordefflt
F number	U colordefrlt
F optional	U dofinishreference
F peek	U dostarttext
F real	U finishjob
F scanclose	U firstofoneargument
F scanopen	U firstoftwoarguments
F skip	U gobbleoneargument
F string	U goto
F table	U iftrue
F token	U input
F tokencode	U loadfoundtypescriptfile
F tokenlist	U resetctxscanner
F tokens	U rlap
F toks	U scratchcounter
F value	U scratchdimen
F vbox	U scratchmuskip
F verbatim	U scratchskip
F vtop	U scratchtoken
F whd	U secondoftwoarguments
F word	U setfalsevalue
F scannumber	U setsectionblock
F scanopen	U setupsystem
F scanoptional	U startcolumns
F scanstring	U starttabulate
F scantable	U starttitle
F scantokenlist	U startxtitle
F scantoks	U stopcolumns
F scanvbox	U stoptabulate
F scanverbatim	U stoptitle
F scanvtop	U stopxtitle
F scanword	U texsetup
F toboolean	U xmlw
F todimen	T collectors
T tokens	F defaultwords
F astable	F dowithwords
U bgroup	F flush
T cache	F install
U NC	F register
U NR	F show
U bf	F test
U color	D commands
U colordefalc	F compile

F constant	F inspect
T converters	N open
S toboolean	F report
S todimen	F scanargument
S toglike	F scanargumentasis
S tonumber	F scanarray
S tostring	F scanboolean
F create	F scanbox
F defined	F scanbracketed
U egroup	F scanbracketedasis
F getdata	F scanclose
T getters	F scande
F box	F scanconditional
F count	F scancsname
F dimen	F scandelimited
F glue	F scandimen
F macro	F scandimension
F meaning	F scanhash
F skip	F scanhbox
F token	F scaninteger
U hbox	F scankeyword
F isdefined	F scankeywordcs
F istoken	F scanletters
F letter	F scanlist
F letters	F scannumber
F new	F scanopen
F other	F scanoptional
F pickup	F scanstring
F popmacro	F scantable
T presets	F scantokenlist
F printlist	F scantoks
F pushmacro	F scanvbox
F setdata	F scanverbatim
T setters	F scanvtop
F box	F scanword
F char	F toboolean
F count	F todimen
F dimen	F tonumber
F glue	F tostring
F lua	D values
F macro	U vbox
F skip	U vtop
T shortcuts	F tonumber
N close	F tostring

**values**  
**vbox**

data table  
userdata

**vtop**

userdata

## tracers (context)

<b>count</b>	function	<b>primitive</b>	function	
<b>cs</b>	function	<b>printerror</b>	function	
<b>dimen</b>	function	<b>printwarning</b>	function	
<b>knownlist</b>	function	<b>showlines</b>	function	
<b>lists</b>	table	<b>strings</b>	table	
	T context		S undefined	
	T internals		<b>toks</b>	function
	T scratch		<b>type</b>	function
<b>name</b>	function			

## trackers (context)

<b>data</b>	data table	<b>name</b>	string
<b>default</b>	function	<b>register</b>	function
<b>disable</b>	function	<b>report</b>	function
<b>done</b>	table	<b>reset</b>	function
<b>dumphashstofile</b>	function	<b>savehash</b>	function
<b>enable</b>	function	<b>show</b>	function
<b>list</b>	function	<b>value</b>	function

# typesetters (context)

<b>alignments</b>	table	T handlers F installhandler F processmath F set F setcolor F setmath F tomode
<b>breakpoints</b>	table	F define F handler D mapping T methods T numbers F set F setreplacement
<b>cases</b>	table	T actions F handler F register F set
<b>characteralign</b>	table	F handler F resetcharacteralign F setcharacteralign
<b>characters</b>	table	F handler T methods F replacenbsp F replacenbspaces
<b>checkers</b>	table	F handler F reset F set
<b>cleaners</b>	table	F handler F set
<b>digits</b>	table	T actions F handler F set
<b>directions</b>	table	F getfences F getglobal F getmethod F handler
<b>firstlines</b>	table	T actions F default F line F word
<b>fontkerns</b>	table	F handler
<b>initials</b>	table	T actions F default F addanchortoline F addtoline F calculatedelta F checkline F handler F moveinline F normalize F set
<b>injectors</b>	table	F check T list F mark F reset F set F show
<b>italics</b>	table	F enablemath F enabletext F forcevariant F handler F reset F set

<b>kerns</b>	table	F apply F register F reset F split F startapply F stopapply F stripped F tostring
D factors		
F handler		
F keepligature		
D mapping		
F set		
<b>manipulators</b>	table	
F apply		
F applicyspecification		
T methods		
F Word		
F Words		
F abbreviatedjournal		
F expandedjournal		
F lowercase		
F stripperiod		
F uppercase		
T patterns		
U list		
U pair		
F splitspecification		
<b>margins</b>	table	
F finalhandler		
F globalhandler		
F localhandler		
F save		
<b>marksuspects</b>	function	
<b>paragraphs</b>	table	
F addanchortoline		
F addtoline		
F calculatedelta		
F checkline		
F handler		
F moveinline		
F normalize		
F set		
<b>periodkerns</b>	table	
D factors		
F handler		
D mapping		
F set		
<b>processors</b>	table	
<b>rubies</b>	table	
F attach		
F check		
<b>showsuspects</b>	function	
<b>spacings</b>	table	
F define		
F handler		
D mapping		
T numbers		
T frenchpunctuation		
T characters		
S name		
N number		
F reset		
F set		
F setup		
<b>wrappers</b>	table	
F handler		
<b>xtables</b>	table	
F cleanup		
F construct		
F create		
F finish_row		
F flush		
F initialize_construct		
F initialize_reflow_height		
F initialize_reflow_width		
F next_row		
F reflow_height		
F reflow_width		
F set_construct		
F set_reflow_height		
F set_reflow_width		

## updaters (context)

**apply**    function  
**register** function

## url (context)

<b>addscheme</b>	function	<b>hashed</b>	function
<b>barepath</b>	function	<b>hasscheme</b>	function
<b>construct</b>	function	<b>query</b>	function
<b>decode</b>	function	<b>split</b>	function
<b>encode</b>	function	<b>toquery</b>	function
<b>escape</b>	function	<b>unescape</b>	function
<b>filename</b>	function	<b>unescapeget</b>	function

## utf8 (basic lua)

**char**        function  
**charpattern** string  
**codepoint**    function

**codes**        function  
**len**           function  
**offset**        function

# utilities (context)

<b>debugger</b>	table	F readtag F setposition F size F skip F skiplong F skipposition F skipshort F writebyte F writecardinal1 F writecardinal1le F writecardinal2 F writecardinal2le F writecardinal3 F writecardinal3le F writecardinal4 F writecardinal4le F writeinteger1 F writeinteger1le F writeinteger2 F writeinteger2le F writeinteger3 F writeinteger3le F writeinteger4 F writeinteger4le F writestring
<b>files</b>	table	F close F getposition F getsize F look F open F read2dot14 F readbyte F readbytes F readbytetable F readcardinal F readcardinal1 F readcardinal1le F readcardinal2 F readcardinal2le F readcardinal3 F readcardinal3le F readcardinal4 F readcardinal4le F readcardinaltable F readchar F readfixed2 F readfixed4 F readinteger F readinteger1 F readinteger1le F readinteger2 F readinteger2le F readinteger3 F readinteger3le F readinteger4 F readinteger4le F readintegertable F readsignedbyte F readstring
		F formatcolumns F list F stripzeros
	<b>formatters</b>	table
	<b>garbagecollector</b>	table
	<b>ghostscript</b>	table
	<b>graphicmagick</b>	table
	<b>graphicsmagick</b>	table

F statistics		B leftpage
<b>lua</b>	table	B page
B alwaysstripcode		B paper
F checkmemory		B rightpage
F compile		B text
F loadedluacode		F iterator
F loadstring		F keq_to_hash
F loadstripped		F listitem
N n of strippedbytes		F make_settings_to_hash_pattern
N n of strippedchunks		F mergehashes
F registerfinalizer		F options_to_array
B stripcode		F options_to_hash
T strippedchunks		T patterns
F strippedloadstring		U settings_to_array
T suffixes		U settings_to_hash_a
S lua		U settings_to_hash_b
S luc		U settings_to_hash_c
S lui		U settings_to_hash_d
S luj		U unittotex
S luv		F process_stripped_settings
S tma		F rfc4180splitter
S tmc		F runtime
S tua		F settings_to_array
S tuc		F settings_to_array_obey_fences
<b>packers</b>	table	F settings_to_array_with_repeat
F hashed		F settings_to_hash
F new		F settings_to_hash_colon_too
F pack		F settings_to_hash_strict
F simplehashed		F settings_to_hash_tolerant
F strip		F settings_to_numbers
F unpack		F settings_to_set
N version		F simple_hash_to_string
<b>parsers</b>	table	F splitmethod
F add_settings_to_array		F splitthousands
F arguments_to_table		F stepper
F array_to_string		F stripped_settings_to_array
F csvsplitter		F totime
F getparameters		F unittotex
F groupedsplitat		F unittoxml
F hash_to_string		
T hashes		<b>randomizer</b>
T settings_to_set		table
T text,hidden,paper,page,leftpage,rightpage		F get
B hidden		F getnumber
		F getseed
		F popseed

F pushseed		<b>streams</b>	table
F reuseseed		F close	
F setseed		F getposition	
F setseedi		F getsize	
<b>randomizers</b>	table	F getstring	
F poisson		F look	
<b>report</b>	function	F open	
<b>sequencers</b>	table	F openstring	
F appendaction		F read2dot14	
F appendgroup		F read2dot4	
F compile		F readbyte	
F disableaction		F readbytes	
F disablegroup		F readbytetable	
F enableaction		F readcardinal	
F enablegroup		F readcardinal1	
D functions		F readcardinal2	
F localize		F readcardinal2le	
F new		F readcardinal3	
F nodeprocessor		F readcardinal3le	
F prependaction		F readcardinal4	
F prepengroup		F readcardinal4le	
F removeaction		F readcardinaltable	
F replaceaction		F readchar	
F setkind		F readfixed2	
F tostring		F readfixed4	
<b>setters</b>	table	F readinteger	
F disable		F readinteger1	
F enable		F readinteger2	
F initialize		F readinteger2le	
F list		F readinteger3	
F new		F readinteger3le	
F register		F readinteger4	
F report		F readinteger4le	
F reset		F readintegertable	
F show		F readsignedbyte	
<b>stacker</b>	table	F readstring	
F new		F setposition	
<b>storage</b>	table	F size	
F allocate		F skip	
F checked		F skipbytes	
F mark		F skiplong	
F marked		F skipshort	
F setinitializer		<b>strings</b>	table
F sparse		F collapse	

F collapsecrlf	F definetable
T formatters	F encapsulate
F add	F insertaftervalue
F new	F insertbeforevalue
F newcollector	F migratetable
F newrepeater	F removevalue
F nice	F replacevalue
T striplinepatterns	<b>templates</b> table
U collapse	F load
U prune	F replace
U prune and collapse	F replacer
U prune and no empty	F resolve
U prune and to space	<b>zipfiles</b> table
U retain	F close
U retain and collapse	F found
U retain and no empty	F gunzipfile
F striplines	F hash
F striplong	F list
F tabtospace	F open
T tracers	F unzip
<b>tables</b> table	F unzipdir
F accesstable	F zipdir
F definedtable	

## visualizers (context)

<b>escapepatterns</b>	data table	<b>signal</b>	string
<b>getspecification</b>	function	<b>signalpattern</b>	userdata
<b>getvisualizer</b>	function	<b>specifications</b>	data table
<b>load</b>	function	<b>visualize</b>	function
<b>makenested</b>	function	<b>visualizebuffer</b>	function
<b>makepattern</b>	function	<b>visualizefile</b>	function
<b>newgrammar</b>	function	<b>visualizestring</b>	function
<b>newhandler</b>	function	<b>write</b>	function
<b>parsedxml</b>	function	<b>writeargument</b>	function
<b>pattern</b>	function	<b>writedefault</b>	function
<b>register</b>	function	<b>writeemptyline</b>	function
<b>registerescapecommand</b>	function	<b>writenewline</b>	function
<b>registerescapeline</b>	function	<b>writespace</b>	function
<b>registerescapepattern</b>	function		

# xcomplex (extra lua)

I	function	F sqrt
__add	function	F tan
__div	function	F tanh
__eq	function	F topair
__index	table	F tostring
F I		F __mul
F __add		S __name
F __div		F __pow
F __eq		F __sub
T __index		F __tostring
F I		F __unm
F __add		F abs
F __div		F acos
F __eq		F acosh
F __mul		F arg
S __name		F asin
F __pow		F asinh
F __sub		F atan
F __tostring		F atanh
F __unm		F conj
F abs		F cos
F acos		F cosh
F acosh		F exp
F arg		F i
F asin		F imag
F asinh		F log
F atan		F new
F atanh		F pow
F conj		F proj
F cos		F real
F cosh		F sin
F exp		F sinh
F i		F sqrt
F imag		F tan
F log		F tanh
F new		F topair
F pow		F tostring
F proj	function	__mul function
F real	string	__name string
F sin	function	__pow function
F sinh	function	__sub function

<b>__tostring</b>	function	<b>i</b>	function
<b>_unm</b>	function	<b>imag</b>	function
<b>abs</b>	function	<b>log</b>	function
<b>acos</b>	function	<b>new</b>	function
<b>acosh</b>	function	<b>pow</b>	function
<b>arg</b>	function	<b>proj</b>	function
<b>asin</b>	function	<b>real</b>	function
<b>asinh</b>	function	<b>sin</b>	function
<b>atan</b>	function	<b>sinh</b>	function
<b>atanh</b>	function	<b>sqrt</b>	function
<b>conj</b>	function	<b>tan</b>	function
<b>cos</b>	function	<b>tanh</b>	function
<b>cosh</b>	function	<b>topair</b>	function
<b>exp</b>	function	<b>tostring</b>	function

# xdecimal (context)

<u>__add</u>	function	F min
<u>__band</u>	function	F minus
<u>__bor</u>	function	F new
<u>__bxor</u>	function	F plus
<u>__div</u>	function	F pow
<u>__eq</u>	function	F rotate
<u>__index</u>	table	F setprecision
F __add		F shift
F __band		F sqrt
F __bor		F tonumber
F __bxor		F tostring
F __div		F trim
F __eq		F __le
T __index		F __lt
F __add		F __mul
F __band		S __name
F __bor		F __pow
F __bxor		F __shl
F __div		F __shr
F __eq		F __sub
F __le		F __tostring
F __lt		F __unm
F __mul		F abs
S __name		F band
F __pow		F bor
F __shl		F bxor
F __shr		F conj
F __sub		F copy
F __tostring		F exp
F __unm		F getprecision
F abs		F ln
F band		F log
F bor		F max
F bxor		F min
F conj		F minus
F copy		F new
F exp		F plus
F getprecision		F pow
F ln		F rotate
F log		F setprecision
F max		F shift

F sqrt  
F tonumber  
F tostring  
F trim  
**\_le** function  
**\_lt** function  
**\_mul** function  
**\_name** string  
**\_pow** function  
**\_shl** function  
**\_shr** function  
**\_sub** function  
**\_tostring** function  
**\_unm** function  
**abs** function  
**band** function  
**bor** function  
**bxor** function  
**conj** function

**copy** function  
**exp** function  
**getprecision** function  
**ln** function  
**log** function  
**max** function  
**min** function  
**minus** function  
**new** function  
**plus** function  
**pow** function  
**rotate** function  
**setprecision** function  
**shift** function  
**sqrt** function  
**tonumber** function  
**tostring** function  
**trim** function

## xmath (extra lua)

<b>acos</b>	function	<b>isnormal</b>	function
<b>acosh</b>	function	<b>j0</b>	function
<b>asin</b>	function	<b>j1</b>	function
<b>asinh</b>	function	<b>jn</b>	function
<b>atan</b>	function	<b>ldexp</b>	function
<b>atan2</b>	function	<b>lgamma</b>	function
<b>atanh</b>	function	<b>log</b>	function
<b>cbrt</b>	function	<b>log10</b>	function
<b>ceil</b>	function	<b>log1p</b>	function
<b>copysign</b>	function	<b>log2</b>	function
<b>cos</b>	function	<b>logb</b>	function
<b>cosh</b>	function	<b>modf</b>	function
<b>deg</b>	function	<b>nan</b>	number
<b>erf</b>	function	<b>nearbyint</b>	function
<b>erfc</b>	function	<b>nextafter</b>	function
<b>exp</b>	function	<b>pi</b>	number
<b>exp2</b>	function	<b>pow</b>	function
<b>expm1</b>	function	<b>rad</b>	function
<b>fabs</b>	function	<b>remainder</b>	function
<b>fdim</b>	function	<b>remquo</b>	function
<b>floor</b>	function	<b>round</b>	function
<b>fma</b>	function	<b>scalbn</b>	function
<b>fmax</b>	function	<b>sin</b>	function
<b>fmin</b>	function	<b>sinh</b>	function
<b>fmod</b>	function	<b>sqrt</b>	function
<b>frexp</b>	function	<b>tan</b>	function
<b>gamma</b>	function	<b>tanh</b>	function
<b>hypot</b>	function	<b>tgamma</b>	function
<b>inf</b>	number	<b>trunc</b>	function
<b>isfinite</b>	function	<b>y0</b>	function
<b>isinf</b>	function	<b>y1</b>	function
<b>isnan</b>	function	<b>yn</b>	function

# xml (context)

<b>addentities</b>	function	F fontspecification
<b>addspecialcode</b>	function	F mappedstylevalue
<b>after</b>	function	F padding
<b>all</b>	function	F size
<b>applylpath</b>	function	F style
<b>applyselector</b>	function	F stylevalue
<b>assign</b>	function	F todimension
<b>attribute</b>	function	F variant
<b>bardinclusions</b>	function	F weight
<b>before</b>	function	<b>defaulthandlers</b> table
<b>body</b>	function	D file
<b>builtinentities</b>	table	D parsedxml
B amp		D string
B apos		D tex
B gt		D texline
B lt		D texspace
B quot		D verbose
<b>cdata</b>	function	<b>defaultprotocol</b> string
<b>cdatatotext</b>	function	<b>delete</b> function
<b>checkbox</b>	function	<b>delete_element</b> function
<b>checkerror</b>	function	<b>despecialized</b> function
<b>checknamespace</b>	function	<b>each</b> function
<b>checkns</b>	function	<b>each_element</b> function
<b>cleansed</b>	function	<b>elements</b> function
<b>collect</b>	function	<b>elementtodata</b> function
<b>collect_elements</b>	function	<b>empty</b> function
<b>collect_tags</b>	function	<b>entities</b> data table
<b>collect_texts</b>	function	<b>erase</b> function
<b>collected</b>	function	<b>errorhandler</b> function
<b>collecttexts</b>	function	<b>escaped</b> function
<b>compactelement</b>	function	<b>expressions</b> table
<b>content</b>	function	F attribute
<b>convert</b>	function	F boolean
<b>copy</b>	function	F child
<b>count</b>	function	F contains
<b>cprint</b>	function	F count
<b>css</b>	table	F error
F applyselector		F find
F colorspecification		F hasclass
F dimension		F idstring
F family		F lower

F name		F upperall
F number		F xml
F oneof		T xml
F print		F all
F quit		F att
F tag		F attribute
F text		F attributes
F undefined		F cdata
F upper		F chainattribute
<b>fillin</b>	function	F count
<b>filter</b>	function	F default
<b>finalizers</b>	table	F elements
F paragraphs		F empty
T tex		F first
F all		F function
F attribute		F index
F chainattribute		F last
F chainpath		F lowerall
F command		F match
F concat		F name
F concatrange		F position
F context		F reverse
F count		F table
F ctxttext		F tag
F default		F tags
F depth		F text
F first		F texts
F function		F upperall
F index		<b>first</b>
F last		function
F lettered		<b>found</b>
F lower		function
F lowerall		<b>functions</b>
F match		table
F name		F classes
F param		F hasclass
F parameter		<b>getbuffer</b>
F position		function
F reverse		<b>gethandlers</b>
F stripped		function
F tag		<b>gethandlersfunction</b>
F tags		function
F text		<b>helpers</b>
F upper		table
		F recusetext
		<b>include</b>
		function
		<b>inclusion</b>
		function
		<b>inclusions</b>
		function
		<b>index</b>
		function
		<b>inheritattributes</b>
		function
		<b>inheritedconvert</b>
		function

<b>inject</b>	function	<b>process</b>	function
<b>inject_element</b>	function	<b>process_attributes</b>	function
<b>inject_element_after</b>	function	<b>process_elements</b>	function
<b>inject_element_before</b>	function	<b>processattributes</b>	function
<b>injectafter</b>	function	<b>profiled</b>	table
<b>injectbefore</b>	function	<b>pure</b>	function
<b>insert</b>	function	<b>pushmatch</b>	function
<b>insert_element</b>	function	<b>raw</b>	function
<b>insert_element_after</b>	function	<b>registerentity</b>	function
<b>insert_element_before</b>	function	<b>registersns</b>	function
<b>insertafter</b>	function	<b>reindex</b>	function
<b>insertbefore</b>	function	<b>remap_name</b>	function
<b>insertcdata</b>	function	<b>remap_namespace</b>	function
<b>insertcomment</b>	function	<b>remap_tag</b>	function
<b>inspect</b>	function	<b>remapname</b>	function
<b>is_valid</b>	function	<b>remapnamespace</b>	function
<b>kind</b>	function	<b>remaptag</b>	function
<b>last</b>	function	<b>rename</b>	function
<b>lastmatch</b>	function	<b>renamespace</b>	function
<b>load</b>	function	<b>reparsedentitylpeg</b>	userdata
<b>lpath</b>	function	<b>replace</b>	function
<b>lpathcached</b>	function	<b>replace_element</b>	function
<b>lpathcalls</b>	function	<b>resetinjectors</b>	function
<b>lshow</b>	function	<b>resolvens</b>	function
<b>makestandalone</b>	function	<b>root</b>	function
<b>match</b>	function	<b>save</b>	function
<b>name</b>	function	<b>selection</b>	function
<b>newhandlers</b>	function	<b>separate</b>	function
<b>nodesettoString</b>	function	<b>serialize</b>	function
<b>originalload</b>	function	<b>serializetotext</b>	function
<b>package</b>	function	<b>setCDATA</b>	function
<b>parent</b>	function	<b>setcomment</b>	function
<b>parsedentitylpeg</b>	userdata	<b>setHandlersFunction</b>	function
<b>pihandlers</b>	table	<b>setInjectors</b>	function
F injector		<b>setProperty</b>	function
F tex		<b>settings</b>	function
<b>placeholders</b>	table	<b>specialcodes</b>	table
F unknown_any_entity		S "	
F unknown_dec_entity		S #	
F unknown_hex_entity		S \$	
<b>popmatch</b>	function	S %	
<b>position</b>	function	S &	
<b>privatecodes</b>	table	S '	
<b>privatetoken</b>	function	S <	

s >		tocdata	function
s \		toelement	function
s {		tostring	function
s		totable	function
s }		toxml	function
s ~		tprint	function
<b>specialhandler</b>	table	traverse	function
<b>sprint</b>	function	unescape	function
<b>string</b>	function	unescapeentitylpeg	userdata
<b>strip</b>	function	unprivatized	function
<b>strip whitespace</b>	function	unspecialized	function
<b>stripelement</b>	function	wipe	function
<b>stripleadingspaces</b>	function	withelement	function
<b>table</b>	function	withelements	function
<b>text</b>	function	wrap	function
<b>textonly</b>	function	xmlns	table
<b>texttocdata</b>	function		

## xzip (extra lua)

<b>adler32</b>	function	
<b>compress</b>	function	<b>decompress</b> function
<b>crc32</b>	function	<b>expandsize</b> function

## zip (extra lua)

<b>archives</b>	table	<b>openarchive</b>	function
<b>closearchive</b>	function	<b>registeredfiles</b>	table

## **zlib (extra lua)**

<b>adler32</b>	function	<b>decompress</b> function
<b>compress</b>	function	<b>expandsize</b> function
<b>crc32</b>	function	