MP attributes backends bit32 blobs boolean buffers builders caches callback callbacks catcodes characters chemistry commands containers context converters coroutine ctxrunner debug dir dircodes directives document documentdata drivers environment experiments ffi figures file fio floats fonts functions global graphics gzip images interactions interfaces io job languages layouts lfs libraries lmx logs lpdf peg ltn12 lua luaharfbuzz luatex lxml math mathematics md5 metapost mime moduledata modules mp mplib noads mode nodes number objects os package pagebuilders parametersets pdfe pdfscanner physics publications regimes resolvers sandbox scripts set sha2 sio socket sorters statistics status storage streams string structures table texconditionals texconfin texconstants texifs texisdefined texmodes texsystemmodes thirddata token tokens tracers trackers typesetters updaters url userdata utf8 utilities vf visualizers xml zip zlib

# ConT<sub>E</sub>Xt MkIV

## global (alias: \_G)

CONTEXTLMTXMODE	number	directives	table
FFISUPPORTED	function	document	table
INITEXMODE	boolean	documentdata	table
LUAMAJORVERSION	number	dofile	function
LUAMINORVERSION	number	drivers	table
LUATEXCOREVERSION	number	environment	table
LUATEXENGINE	string	error	function
LUATEXFORMATID	number	experiments	table
LUATEXFUNCTIONALITY	number	ffi	table
<b>LUATEXVERSION</b>	number	ffilib	function
LUAVERSION	number	figures	table
MP	function	file	table
anywhere	function	fio	table
arg	table	floats	table
assert	function	font	table
attributes	table	fonts	table
backends	table	frozen	boolean
bit32	table	functions	table
blobs	table	getmetatable	function
blockrequire	function	getrpos	function
boolean	table	global	table
buffers	table	<pre>grammar_parsed_text_one_nop</pre>	userdata
builders	table	<pre>grammar_parsed_text_one_yes</pre>	userdata
caches	table	<pre>grammar_parsed_text_two_nop</pre>	userdata
callback	table	<pre>grammar_parsed_text_two_yes</pre>	userdata
callbacks	table	grammar_unparsed_text_nop	userdata
catcodes	table	grammar_unparsed_text_yes	userdata
characters	table	graphics	table
checkimage	function	gregorian_to_jalali	function
chemistry	table	gzip	table
collectgarbage	function	images	table
commands	table	img	table
containers	table	inspect	function
context	function	interactions	table
converters	table	interfaces	table
coroutine	table	io	table
ctxrunner	table	ipairs	function
debug	table	jalali_to_gregorian	function
dimen	function	job	table
dir	table	lang	table
dircodes	data table	languages	table

layouts	table	rawequal	function
lfs	table	rawget	function
libraries	table	rawlen	function
lmx	table	rawset	function
load	function	readarray	function
loadfile	function	regimes	table
loadstring	function	require	function
logs	table	required	function
lpdf	table	requireswiglib	function
lpeg	table	resolvers	table
ltn12	table	ruledspace	function
lua	table	sandbox	table
luaharfbuzz	table	scripts	table
luatex	table	select	function
lxml	table	set	table
math	table	setinspector	function
mathematics	table	setmetatable	function
md5	table	sha2	table
metapost	table	sio	table
mime	table	socket	table
module	function	sorters	table
moduledata	table	statistics	table
modules	table	status	table
mp	function	storage	table
mplib	table	streams	table
next	function	string	table
noads	table	structures	table
node	table	swiglib	function
nodes	table	table	table
number	table	tex	table
objects	table	texconditionals	data table
optionalrequire	function	texconfig	table
os	table	texconstants	data table
package	table	texifs	data table
pagebuilders	table	texio	table
pairs	function	texisdefined	data table
parametersets	table	texmodes	data table
pcall	function	texsystemmodes	data table
pdf	table	thirddata	table
pdfe	table	toboolean	function
pdfscanner	table	token	table
physics	table	tokens	table
print	function	tonumber	function

table **tostring** 

function

publications

tracers	table	utf8	table
trackers	table	utilities	table
type	function	v	string
typesetters	table	vf	table
unpack	function	visualizers	table
updaters	table	xml	table
url	table	xpcall	function
userdata	table	zip	table
utf	table	zlib	table

## attributes (context)

applyoverloads	function	N	main	
colorintents	table		main	
	table		model	
N attribute			models	
D data			mpcolor	
F enable			mpnamedcolor	
F handler			mpoptions	
F register			namedcolorattr	ibutes
D registered	4-61-		none	
colors	table		popset	
N attribute			processcolorco	omponents
F cmyk			pushset	
F cmyktogray			register	
F cmyktorgb			registered	_
F colorcomponent	S		registerspotco	lor
D counts			rgb	
B couple			rgbtocmyk	
F currentmodel			rgbtogray	
F currentnamedmo	del		rgbtohsv	
D data			selector	
N default			setlist	
F defineintermed			setmodel	
F definemultiton			setpagecolormo	odel
F defineprocessc		D	sets	
F definesimplegr	-	F	spec	
F definespotcolo			spot	
F definetranspar	ency	F	spotcolorname	
F enable			spotcolorparer	
F filter			spotcolorvalue	2
N forced			supported	
F forcedmodel		F	toattributes	
F forcesupport		F	transparencyco	omponents
F formatcolor		В	triggering	
F formatgray		F	usecolors	
F getpagecolormo	del	D	valid	
F gray		F	value	
F graytohsv		D	values	
F handler			weightgray	
F hsvtogray		defi		function
F hsvtorgb		effe	ects	table
F iccprofile		N	attribute	
F isblack		D	data	

F			N1	
F enable			N colordodge	
F handler			N darken	
F register			N difference	
D registered			N exclusion	
D values handlers	table		N hardlight	
list			N hue	
	data table		N lighten	
markasoverload	function data table		N luminosity	
names			N multiply	
negatives	table		N none	
N attribute			N normal	
D data			N overlay	
F enable			N saturation	
F handler			N screen	
F register			N softlight	
D registered			none	
F set		F	register	
numbers	data table	D	registered	
ofnode	function	В	supported	
private	function	F	toattribute	
public	function	В	triggering	
restore	function	F	value	
save	function	D	values	
showcurrent	function	unse	tvalue	number
states	table	view	erlayers	table
F disabletrigger	ing	N	attribute	
F enabletriggeri	ng	F	cleanup	
F finalize		D	data	
F initialize		F	define	
F process		F	definedlayoutco	mponent
F selective		F	enable	
F stacked		F	forcesupport	
F stacker		F	handler	
system	function	В	hasorder	
tooverloads	function	D	listwise	
transparencies	table	F	register	
N attribute		D	registered	
D data		F	resolve_begin	
F enable		F	resolve_end	
F forcesupport		F	resolve_reset	
F handler		F	resolve_step	
T names		D	scopes	
N color		_		
		F	setfeatures	
N colorburn			start	

B supported

#### backends (context)

codeinjections table F getdefaultfieldvalue F boxresourcedimensions F getfieldcategory F getfieldset F registerboxresource F restoreboxresource F getformatoption current strina F getidentityvariable defaults table F getinfo T codeiniections F getpreviewfigure F insertrenderingwindow F getpagedimensions F lmtxmode F mergebookmarks F setpagedimensions F mergecomments T nodeiniections F meraefields T registrations F mergereferences D tables F mergeviewerlayers included table F newimage B context F prerollreference R date F presetsymbol Bid F presetsymbollist F processrendering B metadata B pdf F registerdocumentcloseaction install function F registerdocumentopenaction nodeinjections table F registeredsymbol noflatelua function F registerpagecloseaction nothina function F registerpageopenaction pdf table F registersymbol T codeinjections F scanimage F addbookmarks F setfieldcalculationset F analyzenormalsymbol F setfigurealternative F setfigurecolorspace F analyzesymbol F attachmentid F setfiguremask F clonefield F setformat F copyimage F setformsmethod F definefield F setpagetransition F definefieldset F setupcanvas F defineviewerlayer F setupidentity F embedfile F setxmpfile F embedimage F startlaver F enabletags F startunicodetoactualtext F startunicodetoactualtextdirect F exportformdata F fieldsurrounding F stoplayer F flushmergelayer F stopunicodetoactualtext F getbookmarks F stopunicodetoactualtextdirect

F supportedformats
F unicodetoactualtext
F useviewerlayer
F validfield

F validfieldcategory

F validfieldset
F wrapimage
S comment

T nodeinjections

F addtags
F annotation
F attachfile

F changestackedlayer

F cmykcolor
F comment
F destination
F effect
F graycolor
F injectbitmap
F insertmovie
F insertsound

F insertswf F insertu3d F knockout

F negative F overprint F positive
F reference
F rgbcolor
F spotcolor
F startlayer

F startstackedlayer

F stoplayer

F stopstackedlayer
F transparency
F typesetfield
T registrations
F cmykindexcolor
F cmykspotcolor

F getspotcolorreference

F grayindexcolor
F grayspotcolor
F rgbindexcolor
F rgbspotcolor
F spotcolorname
F transparency

T tables
D vfspecials

registrations table
tables table
timestamp function

## bit32 (basic lua)

arshift	function	extract	function
band	function	lrotate	function
bnot	function	lshift	function
bor	function	replace	function
btest	function	rrotate	function
bxor	function	rshift	function

## blobs (context)

append	function	strht	function
dimensions	function	strwd	function
dispose	function	tohpack	function
new	function	tonodes	function
pack	function	tovpack	function
strdp	function	write	function
strhd	function		

## boolean (context)

tocontext function
tonumber function

## buffers (context)

append	function	F define	
assign	function	F hassomecontent	
collectcontent	function	F next	
erase	function	F place	
exists	function	F reset	
get	function	F save	
getcontent	function	prepend	$ \hbox{function} $
getlines	function	raw	$ \hbox{function} $
gettexbuffer	function	run	function
loadcontent	function	samplefile	$ \hbox{function} $
parallel	table	undent	function

## builders (context)

checksidefloat	function	F start
kernel	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
paragraphs	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 registertogeth	ner	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)

ask	boolean	is_writable	function
base	string	loadcontent	function
collapsecontent	function	loaddata	function
configfiles	function	more	string
contentstate	function	relocate	boolean
defaults	table	savecontent	function
define	function	savedata	function
direct	boolean	setfirstwritablefile	function
force	boolean	setluanames	function
getfirstreadablefile	function	tree	string
getreadablepaths	function	treehash	function
getwritablepath	function	usedpaths	function
hashed	function		

#### callback (basic tex)

find function
list function

register overloaded function

#### callbacks (context)

freeze function B hyphenate functions table B insert local par F process rule B kerning B ligaturing F start page number F stop page number B linebreak filter known function B make\_extensible list data table B mlist\_to\_hlist gog function B new graf function push B open read file function register B page objnum provider function report B post linebreak filter supported table B pre dump B append to vlist filter B pre linebreak filter B build page insert B pre output filter B buildpage filter B process input buffer B call edit B process jobname B contribute\_filter B process\_output\_buffer B define font B process pdf image content B find cidmap file B process rule B find\_data\_file B read\_cidmap\_file B find\_enc\_file B read data file B find font file B read enc file B find format file B read font file B find\_image\_file B read map file B find map file B read opentype file B find opentype file B read pk file B find\_output\_file B read\_truetype\_file B find\_pk\_file B read\_type1\_file B find read file B read vf file B find\_truetype\_file B show\_error\_hook B find\_type1\_file B show\_error\_message B find\_vf\_file B show\_lua\_error\_hook B find write file B show warning message B finish pdffile B start file B finish\_pdfpage B start\_page\_number B finish\_synctex B start\_run B font descriptor objnum provider B stop file B glyph\_not\_found B stop\_page\_number B glyph\_stream\_provider B stop\_run B hpack filter B vpack filter B hpack\_quality B vpack\_quality

#### catcodes (context)

 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	initialize	function
directions	table	is_character	data table
emoji	table	is_command	data table
F compact		is_letter	data table
F known		is_mark	data table
F resolve		is_punctuation	data table
emojized	function	is_spacing	data table
enccodes	data table	is_symbol	data table
entities	data table	lcchars	data table
fallbacks	data table	lccode	function
filters	data table	lccodes	data table
fractions	table	lettered	function
fromnumber	function	lhash	data table
fschars	data table	linebreaks	data table
fscodes	data table	lower	function
getrange	function	mathlists	data table
graphemes	data table	mirrors	table
hangul	data table	otfscripts	data table
indicgroups	table	private	table
T above_mark		ranges	data table
T after_half		registerentities	function
T after_main		remap_hangul_syllabe	function
T after_postscript		setactivecatcodes	function
T after_subscript		setlettercatcodes	function

shape function shaped function shash data table data table shchars shcodes data table function showstring **specialchars** data table specials data table splits table

T char T compat

subscripts superscripts synonyms tex

table table data table table

D accentmapping D commandmapping F defineaccents F safechar

F toutf

F toutfpattern textclasses table tonumber function ucchars data table function uccode uccodes data table uhash data table unicodechar function function upper

#### chemistry (context)

component	function
define	function
definitions	data table
format	string
inlinechemical	function
instance	string
method	string

molecule
moleculeparser
start
stop
structures
undefine
function
function
number
function

## containers (context)

cleanname	function	is_valid	function
content	function	read	function
define	function	usecache	boolean
is_usable	function	write	function

#### converters (context)

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

uchexnumbers upper verbose

function function table weekday word words year function function function function

F translate

## coroutine (basic lua)

create	function	status	function
isyieldable	function	wrap	function
resume	function	yield	function
running	function		

#### ctxrunner (context)

load function prepfiles data table
preparedfile function resolve function

#### dir (context)

collectpattern	function	globpattern
current	function	ls
expandname	function	makedirs
found	function	mkdirs
glob	function	рор
globdirs	function	push
alohfiles	function	

function

function function function function

## directives (context)

data	data table	name	string
default	function	register	function
disable	function	report	function
done	table	reset	function
enable	function	show	function
list	function	value	function

#### document (context)

arguments files functions getargument getfilename options data table table table function function table D modes
D modules
etargument

function setargument setcommandline function setdefaultargument function setenvironments function setfilename function setfilenames function setmodes function setmodules function variables data table

D environments
D modes
D modules

T ctxfile

T commandline

D environments

## documentdata (context)

variable function

#### drivers (context)

convert function
converters table

F engine

enable function
helpers table

F tomatrix

install function
instances table

T default T actions F convert

F outputfilename

T flushers
S name
T empty
T actions

F convert

F prepare
T flushers
S name
T none

T actions T flushers S name

T pdf

T actions
F convert
F outputfilename

F prepare T flushers S name

lmtxversion number
outputfilename function
report function

## environment (context)

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

#### experiments (context)

data	data table
default	function
disable	function
enable	function
list	function
name	string

register function report function show function value function

#### figures (context)

T sizes

B art

applvratio function B bleed badname function B crop bases data table B media bitmapimage function R none boxnumber number B trim data table cachepaths F totable check function T types checkers data table N jbig2 converters data table N jp2 current function N ipq defaultdepth number N memstream defaultheight number N none defaultsearch hool ean N pdf defaultwidth number N png done function N stream function dummv F wrap existers data table include function exists includers data table function formats data table initialize function found data table loaded data table data table function localpaths get data table aetinfo function magics getpdfinfo function mergegoodies function getrealpage function nofmissing number nofprocessed function number auess data table guessfromstring order function function data table hash paths identifiers data table data table patterns identify function function gog table images preferguality boolean data table F check programs function F checksize push registerpattern function F copy registerresource function F create registersuffix function F embed data table resources T keys scale function F print set function F scan setlookups function F serialize

setmemstream

setorder

function

function

### file (basic lua)

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

# fio (extra lua)

checkpermission	function	readfixed4	function
getposition	function	readinteger1	function
read2dot14	function	readinteger2	function
readbytes	function	readinteger3	function
readbytetable	function	readinteger4	function
readcardinal1	function	readintegertable	function
readcardinal2	function	readline	function
readcardinal3	function	recordfilename	function
readcardinal4	function	setposition	function
readcardinaltable	function	skipposition	function
readfixed2	function		

# floats (context)

analysemethod	function	nofstacked	function
checkedpagefloat	function	pop	function
collect	function	push	function
consult	function	resave	function
flush	function	save	function
getvariable	function	stacked	function
hasstacked	function		

### font (basic tex)

addcharacters	function		id	function
current	function		max	function
define	function		nextid	function
each	overloaded	function	originaleach	function
fonts	table		read_tfm	function
frozen	function		read_vf	function
getfont	overloaded	function	setexpansion	function
getparameters	function		setfont	function

### fonts (context)

analyzers	table	F collectprocessors
D features		F currentfonthasfeature
D initializers		D designsizes
D methods		D dontembed
F setstate		F enhanceparameters
D states		T enhancers
B useunicodemarks		T afm
checkers	table	F apply
F getmissing		F patch
F missing		T patches
F placeholder		F register
cid	table	F report
F getmap		F register
F loadfile		F report
collections	table	T otf
F checkenabled		F addfeature
F clonevector		F apply
F define		F enhance
T definitions		F patch
F found		T patches
F prepare		F register
F process		F report
F registermain		F register
F report		F report
F reset		T tfm
T vectors		F apply
constructors	table	F patch
F addcharacters		T patches
F addcoreunicodes		F register
B addtounicode		F report
F aftercopyingcha	racters	F register
F applymanipulato	rs	F report
F assignmathparame	eters	N factor
B autocleanup		T features
F beforecopyingcha	aracters	D afm
D cache		D otf
B cacheintex		D tfm
F calculatescale		F finalize
F checkedfeatures		F getfeatureaction
F checkedfilename		F getmathparameter
F cleanuptable		F getprivate

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_reordering_consonants
Fload	F devanagari_reorder_reph
T readers	F gpos_context
F getinfo	F gpos_contextchain
Floadfont	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 pdfcache
F dataset	F plugininitializer
F datasetpositionprocessor	F pluginprocessor
S defaultbasealternate	T plugins
S defaultnodealternate	T png
D features	F topdf
F featuresinitializer	D pngcache

B pngenabled	F reversechainedcontextsingle
T readers	F single
F addunicodetable	F gvar
F avar	F head
F cbdt	T helpers
F cblc	F axistofactors
F cff	F cleanname
F cff2	F getaxisscale
F cffcheck	F getfactors
T cffencoder	F getscales
F checkhash	F gotodatatable
F cmap	F normalizedaxis
F colr	T normalizedaxishash
F compact	F readvariationdata
F cpal	F reportskippedtable
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 readbyte
F multiple	F readbytes

F readbytetable F vora F readcardinal F vvar F readcardinal1 F woff2otf F readcardinal2 F registerpalette F readcardinal2le F registerplugin F readcardinal3 F reorderlookups F readcardinal3le F scriptandlanguage F readcardinal4 F setdynamics F readcardinal4le F setfeatures F readcardinaltable T statistics F readchar D usedfeatures F readfixed2 F storepdfdata F readfixed4 T svq F readinteger F filterglyph F readinteger1 F topdf F readinteger2 D sygcache F readinteger2le B sygenabled F readinteger3 T tables F readinteger3le D baselines F readinteger4 D features F readinteger4le D featuretypes F readintegertable D languages F readsignedbyte D scripts F readstring N version F readtag T pfb F setposition F loadvector F size T tfm F skip D cache D features F skiplong F skipposition N maxnestingdepth F skipshort N maxnestingsize F writebyte T readers F writecardinal2 F loadpk F writecardinal2le F loadtfm F writecardinal4 F loadtfmvf F loadvf F writecardinal4le F pktopdf F writestring F showpk F stripredundant F sva F reencode N tableversion F setfeatures F unifymissing N version F unpack T vf T combinations F vhea F vmtx F combine

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
S scriptpercentage	N noffontsloaded
S scriptscriptpercentage	N nofsharedfonts
S size	N nofsharedhashes
S slantfactor	N nofsharedvectors
S slantperpoint	N privateoffset
T spacing	D privateslots
S extra	F readanddefine
S shrink	F registerfeature
S stretch	F resetfeature
S width	B resolvevirtualtoo
2 410(1)	D 1630tVCVII tuattou

F scale		D unicodes	
F scaled		D cache	
F setfactor		F is_known	
F setfeature		D known	
F setmathparamet	er	F load	
F setname		F make_unicode_ve	ctor
B sharefonts		D math	
F trytosharefont	:	N version	
N version		enhanceid	function
current	function	expansions	data table
currentid	function	formats	data table
definers	table	getalternate	function
F addlookup		getkern	function
F analyze		getmultiple	function
F applypostproce	essors	getsubstitution	function
F checkedmode		getters	table
F checkedscript		T alternate	
F current		F opentype	
S defaultlookup		T kern	
F define		F opentype	
F getspecificati	.on	F type1	
F internal		F type3	
F loadfont		T multiple	
F makespecificat	cion	F opentype	
T methods		T substitution	
F install		F opentype	
1 Instact		goodies	table
D variants		goodics	
		D colorschemes	
D variants			
D variants F read		D colorschemes	
D variants F read F register		D colorschemes T data	
D variants F read F register F registered		D colorschemes T data T dejavu-math	
D variants F read F register F registered F registersplit		D colorschemes T data T dejavu-math S author	
D variants F read F register F registered F registersplit F resetnullfont		D colorschemes T data T dejavu-math S author S comment	
D variants F read F register F registered F registersplit F resetnullfont F resolve		D colorschemes T data T dejavu-math S author S comment S copyright	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers		D colorschemes T data T dejavu-math S author S comment S copyright B initialized	
D variants F read F register F registersplit F resetnullfont F resolve T resolvers F file F name F spec		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec  definetypeface	function	D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates	
D variants F read F register F registersplit F resetnullfont F resolve T resolvers F file F name F spec	function table	D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec definetypeface encodings T agl		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless S comment	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec definetypeface encodings T agl D ctxcodes		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless S comment S feature	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec definetypeface encodings T agl		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless S comment S feature N value	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec definetypeface encodings T agl D ctxcodes		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless S comment S feature N value T kerns	
D variants F read F register F registered F registersplit F resetnullfont F resolve T resolvers F file F name F spec definetypeface encodings T agl D ctxcodes D extras		D colorschemes T data T dejavu-math S author S comment S copyright B initialized T mathematics T alternates T dotless S comment S feature N value T kerns S name	

S author		D	quads	
S comment		D	resources	
S copyright		Т	setdynamics	
B initialized		Т	shapes	
T mathematics		D	spaces	
T alternates		D	spacings	
T dotless		Т	streams	
S comment		D	unicodes	
S feature		D	variants	
N value		D	xheights	
T kerns		help	ers	table
S name		F	${\tt addextraprivate}$	
S version		F	addprivate	
D designsizes		F	appendcommands	
D filenames		F	appendcommandtab	le
F getcompositions		F	checkflags	
T list		F	checkmerge	
F load		F	checksteps	
F prepare_features		F	collectanchors	
F register		D	commands	
F registerpostproces	ssor	F	descriptiontoslo	t
F report		F	dimenfactor	
T suffixes		F	expandglyph	
<b>handlers</b> t	able	Т	extraprivates	
<b>hashes</b> t	able	F	fontpatternhassi	.ze
D characters		F	getcoloredglyphs	
D classes		F	getdigitwidth	
D csnames		F	getinstancespec	
D descriptions		F	getparameters	
D dynamics		F	getprivatecharor	node
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	prependcommands	
D mathparameters		F	prependcommandta	ble
D modes		F	privateslot	
D originals		F	setdigitwidth	
D parameters		F	splitfontpattern	ı
T processes		F	tochar	
D properties		info	font	function

iterators	table	N textextrabase	
F characters		protrusions	data table
F descriptions		readers	table
F glyphs		Fafm	
loggers	table	F check_lua	
F add_placeholde	rs	- F check_tfm	
D category_to_pl		– F lua	
F format		F ofm	
F onetimemessage		F opentype	
F register		Fotf	
F reportdefinedf	onts	F pfb	
F reportusedfeat		D sequence	
mappings	table	F tfm	
F addtounicode		F ttc	
F fromunicode16		F ttf	
F loadfile		F woff	
F loadline		reserveid	function
F makenameparser		select	table
D overloads		D alternatives	
F reset		F bodyfont	
F tounicode		D data	
F tounicodel6		F default	
F tounicodel6seq	uence	D defaults	
metapost	table	F definefallback	rfamily
F boundingbox		F definefontfami	ily
F boxtomp		F definefontfami	llypreset
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	
mp	table	F fontsynonym	
D cache		F goodies	
B inline		F mathfallback	
N version		D methods	
names	data table	D presets	
nulldata	data table	F registerfallba	ack
privateoffsets	table	F registerfiles	
B keepnames		F registerfontal	ternative
N mathbase		F registerfontfa	amily
N mathextrabase		F textfallback	
N textbase		F typeface	

F typescript		T emoji	
F userdata		F checked	
specifiers	table	F resolved	
D contextmerged		F uselibrary	
F contextnumber		tables	table
D contextnumbers		D data	
D contextsetups		F savefont	
F contexttostring		F saveoriginal	
F definecontext		tracers	table
F mergecontext		treatments	table
F presetcontext		F applyfixes	
F registercontext		D data	
F showcontext		S filename	
F splitcontext		F ignoredfile	
D synonyms		F report	
D variants		F trace	

typefaces table

symbols

table

### functions (context)

**dummy** function

### graphics (context)

#### backgrounds table F fetchmultipar

F pair F path F point

identifiers table

F bitmap

F jp2

F jpg F png

identify function

# gzip (extra lua)

close	function	open	function
lines	function	save	function
load	function	suffix	function

# images (context)

check	function	B none	
checksize	function	B trim	
сору	function	totable	function
create	function	types	table
embed	function	N jbig2	
keys	table	N jp2	
print	function	N jpg	
scan	function	N memstro	eam
serialize	function	N none	
sizes	table	N pdf	
B art		N png	
B bleed		N stream	
B crop		wrap	function
B media			

# img (basic tex)

new overloaded function

#### interactions (context)

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

#### interfaces (context)

data table function addvalidkeys cachedsetups data table function cachesetup checkedspecification function data table complete data table constants data table corenamespaces currentinterface string currentresponse string definecommand function defined function doifelsemessage function elements data table formats data table getcheckedparameters function function getmessage function getnamespace getsetupstring function hashedsetups data table function implement interfacedcommand function interfaces table invalidkey function function message namespaces table

F define

F list

registernamespace registerscanner scanners setconstant setcount setdimen setelement setformat setmacro setmessage setmessages settranslation setupstrings setuserinterface setvalidkevs setvariable showmessage storedscanners strings syntax tolist translations usednamespaces

variables

writestatus

function function data table function function function function function function function function function data table function function function function data table table data table function data table data table data table

function

#### io (basic lua)

ask function
bytes function
characters function
close function
copydata function
exists function
fileseparator string
flush function

loadchunk function
loaddata function
loadlines function
noflines function

open overloaded function
output overloaded function

pathseparator string

function read readall function readnumber function readstring function saved lines function savedata function size function stderr userdata stdin userdata stdout userdata function tmpfile function type write function

# job (context)

	function	_		
comment	function table		tobesaved	+-61-
datasets	table	pass		table
D collected			check	
F extend			collected	
F getdata			count	
F setdata			define	
D tobesaved	function		find	
disablesave	function		first	
embedded	table		get	
D collected			getcollected	
D tobesaved	+-h1-		getdata	
fileobjreferences	table		getfield	
D collected			gettobesaved	
D tobesaved	+oh1 o		inlist	
files	table		last	
D collected			list	
F context			save	
B forcerun			savetagged	
F run			tobesaved	4-61-
D tobesaved	for attack	-	tions	table
getrandomseed	function		b_column	
initialize	function		b_region	
load	function		С	
loadother	function		collected	
objects	table		column	
D collected			сору	
F get			depth	
F number			e_column	
F page			e_region	
F save			enhance	
F set			extra	
D tobesaved			free	
pack 	boolean		get	
packversion	number		gethpos	
pagestates	table		getpos	
D collected			getreserved	
F countervalue			getrpos	
F extend			gettobesaved	
F realpage			getvpos	
F realpageorder			hangafter	
F setstate		F	hangindent	

F height	S used	
F hsize	F whd	
F leftskip	F width	
F lowerleft	F x	
F lowerright	F xy	
F markregionbox	Fу	
Fn	prepare	function
F onsamepage	register	function
F overlapping	save	function
F p	structure	table
T page	D collected	
F paragraph	T components	
F parindent	T tobesaved	
F position	T branches	
Fr	S name	
F region	S type	
F registerhandlers	variables	table
F replace	D checksums	
F rightskip	D collected	
F set	F getchecksum	
F setall	F makechecksum	
F setregionbox	F restore	
F setspec	F save	
F settobesaved	F setchecksum	

D tobesaved

F upperleft

F upperright

D tobesaved

number

version

# lang (basic tex)

clean	function	id	function
clear_hyphenation	function	new	function
clear_patterns	function	patterns	function
exceptions	function	postexhyphenchar	function
gethjcode	function	posthyphenchar	function
hyphenate	function	preexhyphenchar	function
hyphenation	function	prehyphenchar	function
hyphenationmin	function	sethjcode	function

# languages (context)

	£ation		
associate	function	F registerpattern	
associated	data table	F setfeatures	£
association	function	installed	function
counters	data table	labels	table
current	function	F define	
data	data table	F split	£
decimals	data table	loadable	function
define	function	loadwords	function
explicithyphen	function	logger	table
flatten	function	F report	
frequencies	table	nofflattened	function
F averagecharwidth		numbers	data table
F getdata		postexhyphenchar	function
getdata	function	posthyphenchar 	function
getnumber	function	preexhyphenchar	function
hjcounts	table	prehyphenchar 	function
hyphenate	function	registered	data table
hyphenators	table	replacements	table
T dictionaries		F add	
D featuresets		F addlist	
F handler		F handler	
T methods		F set	
F expanded		serializediscretionary	function
B none		setexceptions	function
F original		setsynonym	function
F tex		showdiscretionaries	function
F traditional		unload	function
F popmethod		urls	table
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		version	number
F hyphenate		visualizediscretionaries	function
F injecthyphens		words	table
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 isleftpage

F leftorrightpageaction

#### lfs (extra lua)

lock dir

attributes overloaded function chdir overloaded function currentdir function dir overloaded function overloaded function isdir isfile overloaded function isfound function link overloaded function lock function

overloaded function

mkdir overloaded function mkdirs function readlink overloaded function rmdir overloaded function setmode overloaded function shortname overloaded function symlinkattributes overloaded function touch overloaded function unlock 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)

color	function
convert	function
convertfile	function
convertstring	function
einject	function
eprint	function
escape	function
finalized	function
finject	function
fprint	function
get	function
getvariables	function
htmfile	function
html	table
Fa	
F td	
F th	
include	function

- S color-background-four
  - S color-background-one

table

- S color-background-three
- S color-background-two
- S title

inherited

initialize	function
inject	function
lmxfile	function

loadedfile	function
make	function
new	function
overloaderror	function
popupfile	function
print	function
pv	function
report	function
reset	function
result	function
set	function
show	function
showdebuginfo	function
showerror	function
stripcss	function
tv	function
type	function
urlescape	function
variable	function
variables	table

- S color-background-blue
- S color-background-body
- S color-background-green
- S color-background-main
- S color-background-purple
- S color-background-yellow
- S title-default

# logs (context)

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

# lpdf (context)

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

N NoView			getcatalog	function
N NoZoom			getcompression	function
N Print			getfontname	function
N Printab	le		getfontobjnumber	function
N ReadOnl	у		getinfo	function
N ToggleN	oView		getmetadata	function
N auto			getpageproperties	function
N hidden			getversion	function
N printab	le		getxformname	function
T widgets			graycode	function
N Comb			id	function
N CommitO	nSelChange		immediateobj	function
N DoNotSc	roll		includechar	function
N DoNotSp	ellCheck		includecharlist	function
N Edit			includefont	function
N FileSel	ect		includeimage	function
N MultiLi	ne		injectxmpinfo	function
N NoExpor	t		insertxmpinfo	function
N NoToggl	eToOff		layerreference	function
N Passwor	d		limited	function
N PopUp			linearshade	function
N PushBut	ton		literal	function
N Radio			majorversion	function
N RadiosI	nUnison		minorversion	function
N ReadOnl	y		nametree	function
N Require	d		nofpages	function
N RichTex	t		null	function
N Sort			number	function
N file			obj	function
N fixed			objectcompresslevel	function
N nocheck			pagereference	function
N protect	ed		patternstream	function
N readonl	у		pdfcolor	function
N require	d		pdftimestamp	function
N sorted			permitdetail	function
N unavail	able		print	function
flushobject		function	procset	function
flushstreamfileobject		function	protectresources	boolean
flushstreamobject		function	rectangle	function
formats		data table	reference	function
frombytes		function	registerannotation	function
fromeight		function	registerdestination	function
frompdfdoc		function	registerdocumentfinalizer	function
fromsixteen		function	registerfont	function

registerpagefinalizer	function	shareobject	function
registerpattern	function	shareobjectreference	function
reserveobject	function	spotcode	function
rgbcode	function	stream	function
rotationcm	function	string	function
setcompression	function	toeight	function
setdates	function	topdfdoc	function
setmapfile	function	tosixteen	function
setmapline	function	transparency	function
setomitcharset	function	transparencycode	function
setomitcidset	function	transparencygroups	table
setsuppressoptionalinfo	function	B none	
settime	function	transparencyvalue	function
settrailerid	function	unicode	function
setversion	function	verbose	function

# lpeg (basic lua)

В	function	firstofsplit	function
C	function	frontstripper	function
Carg	function	instringchecker	function
Cb	function	is_lpeg	function
Cc	function	keeper	function
Cf	function	locale	function
Cg	function	match	function
Cmt	function	oneof	function
Ср	function	patterns	data table
Cs	function	pcode	function
Ct	function	print	function
P	function	ptree	function
R	function	replacer	function
S	function	secondofsplit	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		

### ltn12 (extra lua)

BLOCKSIZE	number	F simplify	F simplify	
filter	table	F table		
F chain		<b>source</b> t	able	
F cycle		F cat		
pump	table	F chain		
F all		F empty		
F step		F error		
sink	table	F file		
F chain		F rewind		
F error		F simplify		
F file		F string		
F null				

#### lua (basic tex)

bytecode
bytedata
bytedone
collectgarbage
delay
finalize
firstbytecode
flush
flushdelayed
get\_functions\_table
getbytecode
getcallevel
getfunctionstable

B enabled F loaded

getluaname

getstacktop

lastbytecode

macros

table
data table
table
function
function
number
function
function

function
function
overloaded function
function
function
function
function
function
function
function
tunction
tunction
tunction
tunction
tunction

F required
F reset
F resolvestring
F resolving
F showdefinitions

string mask data table messages table name newtable function numbers data table registercode function registeredcodes function registerfinalizer function function registername setbytecode function setluaname function startupfile string version string

### luaharfbuzz (context)

**Blob** table

F new

F new\_from\_file

**Buffer** table

F new

**Direction** table

F new

Face table

F new

F new\_from\_blob

Feature table

F new

Font table

F new

Language table

F new

Script table
 F from\_iso15924\_tag

F new

Tag table

F new

ot table
shape\_full function
shapers function

table

unicode F script

version function

### luatex (context)

F disable

F enable

abort function F finish cleanup function F pause cleanuptempfiles function F popline currentfile function F pushline registerdumpactions function F registerdisabler registerpageactions function F registerenabler registerstartactions function F resetfilename registerstopactions function F resume registertempfile function F setfilename starttime number F setup synctex table F start F blockfilename F stop F collect F wrapup

wrapup

function

# lxml (context)

- 4.42 - 4	f	£1	£ ±
addindex	function	flush	function
all	function	flushlinewise	function
applyfunction	function	flushsetups	function
applyselectors	function	flushspacewise	function
att	function	get_id	function
attribute	function	getid	function
badinclusions	function	getindex	function
chainattribute	function	id	function
checkindex	function	idsplitter	userdata
collected	function	include	function
command	function	inclusion	function
concat	function	inclusions	function
concatrange	function	index	function
content	function	inlineverbatim	function
context	function	installsetup	function
convert	function	last	function
count	function	lastatt	function
delete	function	lastmatch	function
direct	function	lastpar	function
directives	table	load	function
F after		loadbuffer	function
F before		loaddata	function
F handle		loaded	table
F load		main	function
F setup		match	function
displayverbatim	function	name	function
doif	function	namespace	function
doifelse	function	nonspace	function
doifelseempty	function	par	function
doifelsetext	function	param	function
doifempty	function	parameter	function
doifnot	function	path	function
doifnotempty	function	popmatch	function
doifnottext	function	pos	function
doiftext	function	position	function
element	function	pure	function
elements	function	pushmatch	function
entities	data table	raw	function
filter	function	rawroot	function
filterlist	function	rawtex	function
first	function	refatt	function

register	function
registerentity	function
removesetup	function
replace	function
resetcdata	function
resetsetups	function
resolvedentity	function
root	function
save	function
serialize	function
setaction	function
setatt	function
setattribute	function
setcdata	function
setcommandtonone	function
setcommandtotext	function
setpar	function
setparam	function
setparameter	function
setsetup	function
snippet	function
sorters	table

F reset F show F sort function splitid startraw function function startunescaped function stopraw stopunescaped function store function strip function stripped function tag function text function tobuffer function tofile function function toparameters toverbatim function verbatim function withindex function xmltexhandler data table

F compare F flush

## math (basic lua)

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

## mathematics (context)

addfallbacks	function	mapremap	data table
alphabets	data table	overloaddimensions	function
alternatives	data table	overloadparameters	function
big	function	privatebase	number
boldmap	data table	registerdomain	function
categories	table	registerfallbackid	function
D functions	cabec	remapalphabets	function
charactersets	data table	renderings	table
checkaccentbaseheight	function	D mappings	10010
checkprivateparameters	function	D numbers	
classes	data table	D sets	
codes	data table	renderset	function
define	function	resetattributes	function
dimensions	function	resetitalics	function
domains	table	resolvefallbacks	function
extensiblecode	function	scaleparameters	function
extensibles	data table	setdomain	function
extrabase	number	setitalics	function
extras	table	setridofprime	function
F add		sets	data table
F copy		styles	data table
fallbacks	table	syncboth	function
F apply		syncname	function
F install		syncstyle	function
fallbackstyleattr	function	toname	function
families	data table	tostyle	function
finishfallbacks	function	tweakaftercopyingfont	function
gaps	data table	tweakbeforecopyingfont	function
getboth	function	tweaks	table
getdomain	function	utfmathaccent	function
getitalics	function	utfmathclass	function
getridofprime	function	utfmathcommand	function
getstyle	function	utfmathfiller	function
horizontalcode	function	utfmathstretch	function
initializeparameters	function	virtualize	function
makefont	function	virtualized	data table

### md5 (extra lua)

HEX	function
crypt	function
dec	function
decrypt	function
exor	function

hex function
sum function

sumHEXA overloaded function
sumhexa overloaded function

# metapost (context)

checkformat	function	getstatistics	function
CM	function	gettext	function
colorinitializer	function	graphic	function
comment	function	graphic_base_pass	function
convert	function	installplugin	function
currentmpx	function	isobject	function
currentmpxstatus	function	lastlog	string
defaultformat	string	load	function
defaultinstance	string	maketext	function
defaultmethod	string	metafun	table
directrun	function	F interpolate	
escaped	function	F topath	
exectime	table	mptopdf	table
extensiondata	data table	F convertmpstopdf	
filterclippath	function	N nofconverted	
flush	function	n	number
flushers	table	nofscriptruns	function
T pdf		nvformat	function
F comment		pdfliterals	function
F flushfigure		pluginactions	function
F startfigure		popformat	function
F stopfigure		popscriptrunner	function
F textfigure		popvariable	function
flushliteral	function	popvariables	function
flushnormalpath	function	preparetextextsdata	function
flushreset	function	process	function
fonts	table	processplugins	function
F define		processspecial	function
T flusher		properties	table
F flushfigure		pushformat	function
F startfigure		pushscriptrunner	function
F stopfigure		pushvariable	function
N instances		pushvariables	function
F process		quickanddirty	function
format_number	function	reducetogray	boolean
format_string	function	registerscript	function
formatnumber	function	reporterror	function
getclippath	function	reset	function
getextensions	function	resetlastlog	function
getextradata	function	resetplugins	function
getjobdata	function	run	function

runscript	function	tex	table
scripterror	function	F get	
scriptindex	function	F reset	
setextensions	function	F set	
setoutercolor	function	F setfrombuffer	
settext	function	texerrors	boolean
setvariable	function	texexp	function
showlog	boolean	theclippath	function
simple	function	tographic	function
splitprescript	function	totable	function
startgraphic	function	unload	function
stopgraphic	function	untagvariable	function
svformat	function	variables	table
sxsy	function		

### mime (extra lua)

**b64** function

F base64

F quoted-printable

dot function

encode overloaded function
encodet overloaded table

F base64

F quoted-printable

eol function

normalize overloaded function

**qp** function

qpwrp function
report function

stuff overloaded function

unb64 function
unqp function

F base64 F default

F quoted-printable

F text

wrp function

# mp (context)

BackSpace	function	OuterMarginWidth	function
BaseLineSkip	function	OverlayDepth	function
BodyFontSize	function	OverlayHeight	function
BottomDistance	function	OverlayLineWidth	function
BottomHeight	function	0verlayOffset	function
BottomSpace	function	OverlayRegion	function
CurrentColumn	function	OverlayWidth	function
CurrentHeight	function	PageDepth	function
CurrentWidth	function	PageFraction	function
CutSpace	function	PageNumber	function
EmWidth	function	PageOffset	function
ExHeight	function	PaperBleed	function
FooterDistance	function	PaperHeight	function
FooterHeight	function	PaperWidth	function
HSize	function	PrintPaperHeight	function
HeaderDistance	function	PrintPaperWidth	function
HeaderHeight	function	RealPageNumber	function
InPageBody	function	RightEdgeDistance	function
InnerEdgeDistance	function	RightEdgeWidth	function
InnerEdgeWidth	function	RightMarginDistance	function
InnerMarginDistance	function	RightMarginWidth	function
InnerMarginWidth	function	SpineWidth	function
LastPageNumber	function	StrutDepth	function
LayoutColumnDistance	function	StrutHeight	function
LayoutColumnWidth	function	SubPageNumber	function
LayoutColumns	function	TextHeight	function
LeftEdgeDistance	function	TextWidth	function
LeftEdgeWidth	function	TopDistance	function
LeftMarginDistance	function	TopHeight	function
LeftMarginWidth	function	TopSkip	function
LineHeight	function	TopSpace	function
MakeupHeight	function	VSize	function
MakeupWidth	function	_f_	function
NOfColumns	function	_get_count_	function
NOfPages	function	_get_dimen_	function
NOfSubPages	function	_get_macro_	function
OnOddPage	function	_get_toks_	function
OnRightPage	function	_set_count_	function
OuterEdgeDistance	function	_set_dimen_	function
OuterEdgeWidth	function	_set_macro_	function
OuterMarginDistance	function	_set_toks_	function

aux	table	gettoks	function
F boolean		graphformat	function
F flush		inhash	function
F fprint		integer	function
F integer		isarray	function
F number		isobject	function
F numeric		mf_blob_add	function
F pair		mf_blob_dimensions	function
F pairpoints		mf_blob_index	function
F path		mf_blob_new	function
F pathpoints		mf_blob_raw_content	function
F points		mf_blob_raw_dimensions	function
F print		mf_blob_raw_reset	function
F quadruple		mf_blob_raw_toutf	function
F quadruplepoints		mf_blob_raw_wipe	function
F quoted		mf_blob_size	function
F size		mf_blob_width	function
F string		mf_external_figure	function
F triplet		mf_finish_saving_data	function
F tripletpoints		<pre>mf_formatted_text</pre>	function
F vprint		mf_get_outline_text	function
boolean	function	mf_graphic_text	function
cleaned	function	mf_inject_blob	function
dataset	function	mf_made_text	function
datasets	function	mf_named_color	function
F load		mf_outline_text	function
defaultcolormodel	function	mf_path_left	function
dimension	function	mf_path_length	function
disposehash	function	mf_path_point	function
flush	function	mf_path_reset	function
format	function	mf_path_right	function
formatted	function	mf_save_data	function
fprint	function	mf_script_index	function
fromhash	function	mf_some_text	function
get	table	mf_start_saving_data	function
F boolean		mf_stop_saving_data	function
F integer		mf_tb_dimensions	function
F number		mf_tt_dimensions	function
F numeric		mf_tt_initialize	function
F path		mode	function
F string		n	function
getcount	function	newhash	function
getdimen	function	number	function
getmacro	function	numeric	function

pair	function	F expression	
pairpoints	function	F integer	
path	function	F next	
pathleft	function	F number	
pathlength	function	F numeric	
pathpoint	function	F pair	
pathpoints	function	F path	
pathreset	function	F string	
pathright	function	F symbol	
points	function	F token	
positionanchor	function	F transform	
positionbox	function	set	table
positioncurve	function	F path	
positionpage	function	setcount	function
positionpath	function	setdimen	function
positionpxy	function	setmacro	function
positionregion	function	settoks	function
positionwhd	function	size	function
positionxy	function	string	function
prefix	function	systemmode	function
print	function	texstr	function
processingmode	function	textextanchor	function
quadruple	function	texvar	function
quadruplepoints	function	tohash	function
quoted	function	triplet	function
report	function	tripletpoints	function
scan	table	utflen	function
F boolean		utfsub	function
F cmykcolor		vprint	function

F color

### mplib (extra tex)

char\_depth
char\_height
char\_width
execute
fields
finder
finders

F file
function
function
function
function
function
fable

F mpstemplate

finish function

get\_boolean function
get\_number function
get\_path function
get\_string function

**new** overloaded function

pen\_info function
solve\_path function
statistics function
version function

## noads (context)

F render

ha	andlers	table	F	resize	
	F align		F	showtree	
	F alternates		F	tags	
	F autofences		F	unscript	
	F classes		F	unstack	
	F collapse		F	variants	
	F domains		proc	ess	function
	F families		proc	essnested	function
	F fixscripts		proc	essors	table
	F italics		F	mlist_to_hlis	t
	F kernpairs		Т	unscript	
	F makeup		Т	unstack	
	F relocate		proc	essouter	function

#### node (basic tex)

F getfont

check discretionaries function F aetalue check discretionary function F getheight copy function F getid copy list function F aetkern function count F getlang function current attr F getleader dimensions function F getlist direct table F getnext F check discretionaries F getnucleus F check discretionary F getoffsets F copy F getpenalty F copy list F getprev F getproperty F count F current attr F getshift F dimensions F aetsub F effective glue F getsubtype F end\_of\_math F getsup F find attribute F getwhd F getwidth F first glyph F flatten discretionaries F has attribute F flush list F has\_field F flush node F has glyph F flush properties table F hpack F hyphenating F free F get attribute F insert after F get\_properties\_table F insert before F get\_synctex\_fields F is\_char F is\_direct F getattributelist F aetboth F is glyph F getbox F is node F getchar F is\_zero\_glue F getcomponents F kerning F getdata F last node F getdepth F length F getdir F ligaturing F getdirection F getdisc F prepend prevdepth F getexpansion F protect\_glyph F getfam F protect\_glyphs F getfield F protrusion skippable

F rangedimensions

F remove	F traverse_char	
F set_attribute	F traverse_glyph	
F set_properties_mode	F traverse_id	
F set_synctex_fields	F traverse_list	
F setattributelist	F unprotect_glyph	
F setboth	F unprotect_glyphs	
F setbox	F unset_attribute	
F setchar	F usedlist	
F setcomponents	F uses_font	
F setdata	F vpack	
F setdepth	F write	
F setdir	effective_glue	function
F setdirection	end_of_math	function
F setdisc	family_font	function
F setexpansion	fields	function
F setfam	find_attribute	function
F setfield	first_glyph	function
F setfont	fix_node_lists	function
F setglue	flatten_discretionaries	function
F setheight	flush_list	function
F setkern	flush_node	function
F setlang	flush_properties_table	function
F setleader	free	function
F setlink	get_attribute	function
F setlist	get_properties_table	function
F setnext	getboth	function
F setnucleus	getchar	function
F setoffsets	getdisc	function
F setpenalty	getfield	function
F setprev	getfont	function
F setproperty	getglue	function
F setshift	getid	function
F setsplit	getleader	function
F setsub	getlist	function
F setsubtype	getnext	function
F setsup	getprev	function
F setwhd	getproperty	function
F setwidth	getsubtype	function
F slide	getwhd	function
F tail	has_attribute	function
F todirect	has_field	function
F tonode	has_glyph	function
F tostring	hpack	function
F traverse	hyphenating	function

id	function	setfield	function
insert_after	function	setglue	function
insert_before	function	setproperty	function
is_char	function	slide	function
is_glyph	function	subtype	function
is_node	function	subtypes	function
is_zero_glue	function	tail	function
kerning	function	tostring	function
last_node	function	traverse	function
length	function	traverse_char	function
ligaturing	function	traverse_glyph	function
make_extensible	function	traverse_id	function
mlist_to_hlist	function	traverse_list	function
new	function	type	function
next	function	types	function
prepend_prevdepth	function	unprotect_glyph	function
prev	function	unprotect_glyphs	function
protect_glyph	function	unset_attribute	function
protect_glyphs	function	usedlist	function
protrusion_skippable	function	uses_font	function
rangedimensions	function	values	function
remove	function	vpack	function
set_attribute	function	whatsits	function
set_properties_mode	function	write	function

## nodes (context)

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

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
has_attribute	function	linefillers	table
has_field	function	D data	
has_glyph	function	F define	
hpack	function	F enable	
hyphenating	function	F filler	
idsandsubtypes	function	F handler	
idstostring	function	lines	table
ignorablefields	data table	T boxed	
injections	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		link	function
F reset		linked	function
F resetcounts		list	function
F setcursive		listablefields	data table
F setkern		listcodes	data table
F setligaindex		listtoutf	function
F setmark		literalvalues	data table
F setmove		load	function
F setposition		locate	function
F setspacekerns		margincodes	data table
insert_after	function	marginkerncodes	data table
insert_before	function	markers	table
insert_list_after	function	F get	
installattributehandler		mathcodes	data table
is_direct	function	maxboxwidth	function

mlist to hlist function F flush node new function F free noadcodes data table F fullhpack table noadoptions F get synctex fields N axis F getattr N exact F getattribute N left F getattributelist N middle F getattrlist N no axis F getboth N right F getbox N set F getboxglue N unused 1 F getchar N unused 2 F getcomponents nodecodes data table F getdata nopts function F getdepth table nuts F getdir F append F getdirection F apply F getdisc F applyvisuals F getdiscretionary F check discretionaries F getexpansion F concat F getfam F copy F aetfield F getfont F copy\_list F getglue F copy\_no\_components F copy node F getglyphdata F copy\_only F getheight F getid F copy\_only\_glyphs F copy properties F getkern F getlang F copyvisual F count F getlanguage F countall F getleader F current\_attr F getlist F delete F getnext F dimensions F getnucleus F getoffsets F effective\_glue F end of math F getorientation F find\_attribute F getpenalty F first\_glyph F getpost F firstcharacter F getpre F firstcharinbox F getprev F firstglyph F getprop F flatten\_discretionaries F getreplace F getruledata F flush

F flush list

F getshift

F directliteral F aetsub F getsubtype F disc F emptyrule F getsup F fence F getsurround F getvalue F fontkern F fraction F getwhd F getwidth F alue F has attribute F glyph F hlist F has dimensions F has field F italickern F kern F has glyph F latelua F hpack F hyphenating F leader F insert after F leftmarginkern F insert before F leftskip F insert\_list\_after F lineskip F is\_direct F literal F mathchar F is display math F mathtextchar F is node F negatedglue F is nut F is\_zero\_glue F noad F ischar F originliteral F isdone F outlinerule F isglyph F pageliteral F kerning F penalty F last node F radical F leftmarginwidth F rawliteral F length F register F ligaturing F restore F link F rightmarginkern F linked F rightskip F locate Frule F mlist to hlist F save F nestedtracedslide F savepos F new F setmatrix T pool F shrink F accent F stretch F baselineskip F subbox F boundary F submlist F choice F temp F cleanup F textdir F delim F usage F delimiter T userids

N margins.inline

F direction

N splitters.one F setdisc N splitters.two F setdiscretionary F usernode F setexpansion F userrule F setfam F vlist F setfield F wordboundary F setfont F prepend F setalue F setglyphdata F processranges F processwords F setheight F protect\_glyph F setkern F protect glyphs F setland F protrusion skippable F setlanguage F rangedimensions F setleader F setlink F rawprop F reference F setlist F rehpack F setnext F remove F setnucleus F repackhlist F setoffsets F setorientation F replace 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 setshift F userrule F set attribute F setsplit F set\_synctex\_fields F setsub F setattr F setsubtype E setattribute F setsup F setattributelist F setsurround F setattributes F setunsetattributes F setattrlist F setvalue F setboth F setvisual F setvisuals F setbox F setwhd F setboxglue F setchar F setwidth F setcomponents F slide F setdata F somepenalty F setdepth F somespace F setdir F splitbox F setdirection F striprange

F tail	F vianodes	
F takeattr	F vianuts	
F takebox	F vpack	
F takelist	F write	
F theprop	packlist	function
F tonode	penaltycodes	data table
F tonodes	plugindata	table
F tonut	F finalizer	cabic
F tosequence	F initializer	
F tostring	S name	
F tracedslide		
F traverse	T namespace N attribute	
	D data	
F traverse_char	F enable	
F traverse_id	F handler	
F traverse_id		
F traverse_list T traversers	F register D registered	
	D registered D values	
F boundary F char		
F dir	F processor points	function
F disc	pool	table
	•	table
F glue	F baselineskip	
F glyph	F cleanup	
F hlist	F directliteral	
Flist	F glyph	
F next	F hlist	
F node	F latelua	
F vlist	F lineskip	
F whatsit	F literal	
T typesetters	F originliteral	
F tohbox	F register	
F tonadas	F restore	
F tonodes	F save	
F toybox	F savepos	
F tovpack	F setmatrix	
F unprotect_glyph	F special	
F unprotect_glyphs	F usage	
F unset_attribute	F vlist	function
F unsetattribute	prepend print	function
F unsetattributes	-	table
F untracedslide	processors	rante
F use_components	F contribute_filter B enabled	
F usedlist		
F uses_font	F hpack_filter	

F post_linebreak_filter		setleader	function
F pre_linebreak_filter		setlink	function
F tracer		setlist	function
properties	table	setnext	function
T data		setprev	function
protect_glyph	function	setunsetattributes	function
protect_glyphs	function	shifts	table
protrusion_skippable	function	D data	
pts	function	F define	
radicalcodes	data table	F enable	
rangedimensions	function	F handler	
reference	function	show	function
references	table	showboxes	function
N attribute		showcodes	function
T done		showlist	function
F handler		showsimplelist	function
T stack		skipcodes	data table
rehpack	function	skipvalues	data table
remove	function	slide	function
repackhlist	function	snapshots	table
replace	function	F getparameters	
report	function	F getsamples	
rightmarginwidth	function	F resetsamples	
rulecodes	data table	F takesample	
rules	table	somepenalty	function
D data		somespace	function
F define		splitbox	function
F enable		stripdiscretionaries	function
F handler		stripping	table
F userrule		T glyphs	
save	function	F set	
serialize	function	subtypes	data table
serializebox	function	tail	function
set_attribute	function	takeattr	function
setattr	function	takebox	function
setattribute	function	tasks	table
setattributes	function	F actions	
setboth	function	F appendaction	
setbox	function	F disableaction	
setboxtonaturalwd	function	F disablegroup	
setchar	function	F enableaction	
setfield	function	F enablegroup	
setfont	function	F freeze	
setglue	function	F freezegroup	

F new		F rule	
F prependaction		T nuts	
F removeaction		F rule	
F replaceaction		F resetproperties	
F restart		F rule	
F setaction		F setlist	
F showactions		F setproperties	
F table		F start	
tobasepoints	function	T steppers	
tocentimeters	function	F check	
tociceros	function	F codes	
todidots	function	F features	
todimen	function	F font	
toinches	function	F glyphs	
tomillimeters	function	F message	
tonewciceros	function	F messages	
tonewdidots	function	F nofsteps	
tonode	function	F register	
tonodes	function	F reset	
tonut	function	F start	
topicas	function	F stop	
topoints	function	F stop	
toscaledpoints	function	T transparencies	
tosequence	function	F reset	
tostring	function	F set	
totable	function	F setlist	
totree	function	traverse	function
toutf	function	traverse_char	function
tracers	table	traverse_glyph	function
T characters		traverse_id	function
F collect		traverse_list	function
F equal		traversers	table
F start		F char	
F string		F glyph	
F unicodes		F list	
T colors		F node	
F reset		typesetters	table
F set		F hbox	
F setlist		F hpack	
F fontchar		F tohbox	
T frequencies		F tohpack	
F register		F tonodes	
T pool		F tovbox	
T nodes		F tovpack	

F vpack		T attributes	
unprotect_glyph	function	F box	
unprotect_glyphs	function	F handler	
unset_attribute	function	F markfonts	
unsetattribute	function	F register	
unsetattributes	function	F setfont	
usedlist	function	F setlayer	
usercodes	data table	F setruledglyph	
uses_font	function	F setvisual	
vianodes	function	vpack	function
vianuts	function	whatcodes	data table
visualizebox	function	whatsitcodes	data table
visualizers	table	write	function

F attribute

## number (context)

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

# objects (context)

data	table	page	function
dimensions	function	reference	function
found	function	register	function
n	number	restore	function

## os (basic lua)

getenv	function	remove	overloaded function
setenv	function	rename	overloaded function
binsuffix	string	resolvers	table
binsuffixes	table	F bits	
clock	function	resultof	function
converttime	function	runtime	function
date	function	selfdir	string
difftime	function	setenv	overloaded function
env	data table	setexitcode	function
exec	overloaded function	setlocale	overloaded function
execute	overloaded function	sleep	function
exit	overloaded function	spawn	overloaded function
fulltime	function	time	function
getenv	overloaded function	timezone	function
gettimeofday	function	tmpdir	function
isleapyear	function	tmpname	function
launch	function	today	function
libsuffix	string	type	string
localtime	function	uname	function
name	string	uuid	function
newline	string	validdate	function
nofdays	function	weekday	function
now	function	where	function
pipeto	function	which	function
platform	string		

# package (basic lua)

config	string
cpath	string
extralibpath	$ \hbox{function} $
extralibpaths	function
extraluapath	$ \hbox{function} $
extraluapaths	function
helpers	table
libpaths	function
loaded	table
loaders	table
loadlib	function

luapaths	function
path	string
poplibpath	function
popluapath	function
preload	table
pushlibpath	function
pushluapath	function
searchers	table
searchpath	function
seeall	function

# pagebuilders (context)

F setarea

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

F setsplit

## pdf (basic tex)

immediateobj function

# pdfe (extra tex)

arraytotable	function	getnofpages	function
close	function	getnumber	function
closestream	function	getpage	function
dictionarytotable	function	getpages	function
encryptioncodes	data table	getsize	function
getarray	function	getstatus	function
getboolean	function	getstream	function
getbox	function	getstring	function
getcatalog	function	gettrailer	function
getdictionary	function	getversion	function
getfromarray	function	new	function
getfromdictionary	function	objectcodes	data table
getfromreference	function	open	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

# pdfscanner (context)

scan function

## physics (context)

units table

F registerunit

D tables

## publications (context)

addtexentry	function	converttoxml	function
analyze	function	currentspecification	table
anywhere	function	S author	
authorcache	data table	T categories	
authorcollapsers	data table	T article	
authorhashers	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	
authormap	data table	S number	
authortoregister	function	S pages	
casters	table	S title	
F author		S volume	
F keyword		S year	
F pagenumber		T optional	
F range		T required	
checkeddataset	function	T sets	
citevariants	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	d-4- 4-61-	S title	
collected	data table	S volume	
components	table	S year	
Fauthor	fatian	T optional	
concatstate	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	datasets	table
S subtitle	detailed	table
S title	endnotes_to_btx	function
S year	enhancer	table
T optional	S arguments	
T required	T askip	
T sets	B dirty	
T author	T gskip	
T virtual	T kind	
T demo-b	T list	
S category	T system	
T extra	T order	
T fields	N steps	
S author	enhancers	table
S institution	F details	
S organization	F order	
S subtitle	F suffixes	
S title	finder	function
S year	firstofrange	function
T optional	found	function
T required	get	function
T sets	getcasted	function
T authors	getdetail	function
T virtual	getdirect	function
S comment	getfaster	function
S copyright	getfield	function
T fields	getfuzzy	function
S name	getindex	function
T types	inspectors	data table
S author	journals	table
S editor	F abbreviated	
S keywords	F add	
S number	F expanded	
S page	F load	

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

D privates F showtables D sets F showvariants typesetters table D specials F author D types F string D virtuals function function tags usedataset table usedentries function tracers

F showdatasetauthors
F showdatasetcompleteness
F showdatasetfields
F showentry
F showfields

F showhashedauthors

F author
F keyword
F pagenumber
F range

table

writers

## regimes (context)

backmapping	data table	mapping	data table
cleanup	function	pop	function
disable	function	process	function
enable	function	push	function
fromregime	function	toregime	function
list	function	translate	function

## resolvers (context)

-11	f	£indon+h	£
allprefixes	function	findpath	function
appendhash	function	findpk findtexfile	function
automount	function		function
automounted	table	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
criticalvars	data table	getextrapaths	function
dangerous	data table	getfilehashes	function
datastate	function	gethashes	function
defaultsuffixes	table	getownpath	function
dowithfilesandreport	function	getreadfilename	function
dowithfilesintree	function	hashers	data table
dowithpath	function	homedir	string
dowithvariable	function	initialized	function
env	function	inputstack	table
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	<del>function</del>	F productcomponent	
find_files	<del>function</del>	F usefile	
findbinfile	function	joinpath	function
findctxfile	function	knownvariables	function
finders	data table	load	function
findfile	function	loadbinfile	function
findfiles	function	loaders	data table
findgivenfile	function	loadlualib	function
findgivenfiles	function	loadtexfile	function

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

wildcardpattern

function

function

function

resetmemstream

resetresolve

## sandbox (context)

disablelibraries	function	possiblepath	function
disablerunners	function	redefine	function
enable	function	register	function
filehandlerone	function	registerbinary	function
filehandlertwo	function	registerlibrary	function
finalizer	function	registerroot	function
getrunner	function	registerrunner	function
initializer	function	report	function
iohandler	function	setfilenamelogger	function
logcalls	function	setlogger	function
logfiles	function	setreporter	function
original	function	settrace	function
overload	function	validfilename	function

## scripts (context)

autofontfeature	table	hash	table
F disable		injectors	data table
F enable		inserters	table
F handler		F nobreakspace_afte	er
${\it categorytonumber}$	data table	F nobreakspace_befo	ore
colors	data table	F space_after	
decomposehangul	function	F space_before	
defaults	table	F zerowidthspace_a	fter
N inter_char_half_s	shrink_factor	F zerowidthspace_before	
N inter_char_half_s	N inter_char_half_stretch_factor installdataset functio		function
N inter_char_hangul_penalty installmethod funct		function	
N inter_char_quarte	er_shrink_factor	numbertocategory	data table
N inter_char_quarte	er_stretch_factor	numbertodataset	data table
N inter_char_shrin	<_factor	numbertohandler	data table
N inter_char_stretch_factor		reset	function
N inter_word_stret	ch_factor	set	function
handlers	data table	splitters	data table

## set (context)

contains function
create function
tolist function

tonumber function
totable function

## sha2 (context)

HASH256	function	digest512	function
HASH384	function	hash256	function
HASH512	function	hash384	function
digest256	function	hash512	function
digest384	function		

## sio (context)

read2dot14	function	readfixed2	function
readbytes	function	readfixed4	function
readbytetable	function	readinteger1	function
readcardinal1	function	readinteger2	function
readcardinal2	function	readinteger3	function
readcardinal3	function	readinteger4	function
readcardinal4	function	readintegertable	function
readcardinal table	function		

## socket (extra lua)

BLOCKSIZE	number		S cc
DATAGRAMSIZE	number		
_DATAGRAMS12E DEBUG	boolean		S comments
	number		S connection
_SETSIZE SOCKETINVALID	number		S content-description
		function	S content-disposition
bind	overloaded overloaded		S content-encoding
choose		Tunction	S content-id
connect	function	£	S content-language
connect4	overloaded		S content-length
connect6	overloaded	TUNCTION	S content-location
dns	table		S content-md5
F getaddrinfo			S content-range
F gethostname			S content-transfer-encoding
F getnameinfo			S content-type
F tohostname			S cookie
F toip			S date
ftp	table		S diagnostic-code
S PASSWORD			S dsn-gateway
N TIMEOUT			S etag
S USER			S expect
F command			S expires
F genericform			S final-log-id
F get			S final-recipient
F open			S from
F put			S host
gettime	function		S if-match
headers	overloaded	table	S if-modified-since
T canonic			S if-none-match
S accept			S if-range
S accept-chars	et		S if-unmodified-since
S accept-encod	ing		S in-reply-to
S accept-langua	age		S keywords
S accept-range	S		S last-attempt-date
S action			S last-modified
S age			S location
S allow			S max-forwards
S alternate-re	cipient		S message-id
S arrival-date			S mime-version
S authorization	n		S original-envelope-id
S bcc			S original-recipient
S cache-contro	l		S pragma

S	proxy-authenticate	F request		
S	proxy-authorization	newtry	function	
S	range	protect	function	
S	received	report	function	
S	received-from-mta	select	function	
S	references	sink	overloaded fo	unction
S	referer	sinkt	overloaded ta	able
S	remote-mta	F close-when-don	e	
S	reply-to	F default		
S	reporting-mta	F http-chunked		
S	resent-bcc	F keep-open		
S	resent-cc	skip	function	
S	resent-date	sleep	function	
S	resent-from	smtp	table	
S	resent-message-id	S DOMAIN		
S	resent-reply-to	N PORT		
S	resent-sender	S SERVER		
S	resent-to	N TIMEOUT		
S	retry-after	S ZONE		
S	return-path	F message		
S	sender	F open		
S	server	F send		
S	smtp-remote-recipient	source	overloaded fo	
S	status	sourcet	overloaded ta	able
S	subject	F by-length		
S	te	F default		
S	to	F http-chunked		
S	trailer	F until-closed		
S	transfer-encoding	tcp	function	
	upgrade	tcp4	function	
	user-agent	tcp6	function	
	vary	tp	overloaded ta	able
	via	N TIMEOUT		
	warning	F connect	1 1 6	
	will-retry-until	try	overloaded fu	unction
	www-authenticate	udp	function	
	x-mailer	udp4	function	
	ower	udp6	function	
	ormalize	url	overloaded ta	able
http	overloaded table	F absolute		
NI T	IMEOUT	F build		
S U	SERAGENT	F build_path		
S U F g				

 ${\tt F} \ {\tt parse\_path}$ 

F unescape

#### sorters (context)

basicsorter	function	B pm	
comparers	table	B uc	
F basic		B zc	
constants	table	B zm	
S defaultdigits		definitions	data table
S defaultlanguage		firstofsplit	function
S defaultmethod		packch	function
N digitsmaximum		packuc	function
N digitsoffset		replacementlist	function
N ignoredoffset		setlanguage	function
N replacementoffs	et	sort	function
T validmethods		splitters	table
B ch		F utf	
B mc		strip	function
B mm		tracers	data table
В рс		update	function

## statistics (context)

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

## status (basic tex)

list function setexitcode function

resetmessages function

## storage (context)

allocate	function
data	table
mark	function
marked	function
max	number
min	number
nofmodules	number

noftables	number	
register	function	
shared	data table	
storedfunctions	data tabl	
strip	boolean	
tofmodules	number	
toftables	number	

## streams (context)

collect	function	push	function
disable	function	start	function
enable	function	stop	function
flush	function	synchronize	function
initialize	function		

# string (basic lua)

autodouble	function	packsize	function
autosingle	function	quote	function
booleanstring	function	quoted	function
byte	function	rep	function
bytepairs	function	replacenewlines	function
bytes	function	reverse	function
bytetable	function	split	function
char	function	splitlines	function
characterpairs	function	splitup	function
characters	function	strip	function
checkedsplit	function	sub	function
collapsespaces	function	tformat	function
containsws	function	toHEX	function
count	function	toboolean	function
dump	function	tobytes	function
escapedpattern	function	tocontext	function
escapedquotes	function	todec	function
explode	function	todimen	function
find	function	tohex	function
format	function	tonodes	function
formatter	function	topattern	function
formatters	function	totable	function
fullstrip	function	toutf	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
longtostring	function	utfcharacters	function
lower	function	utflength	function
match	function	utfpadd	function
nospaces	function	utfpadding	function
nspaces	table	utfvalue	function
optionalquoted	function	utfvalues	function
pack	function	valid	function

## structures (context)

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

F touserdata		F reordered
inserts	table	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
itemgroups	table	F uservalue
lists	table	marks table
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> table
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
pages	table	D functions
F allmarked		F get
F analyze		F getcurrentmetadata
D collected		F getcurrentprefixspec
F fraction		F getinnermethod
F in_body		F getinternalcachedlistreference
F is_odd		F getinternallistreference
F mark		F getinternalreference
F marked		F getoutermethod
N nofpages		D handlers
F number		F identify
F on_right		F import
F save		F inject
D tobesaved		F injectcurrentset
F toranges		S innermethod
references	table	D internals
F analyze		F load
F checkedfile		F loadpresets
F checkedfileorurl		F mark
F checkedprogram		S outermethod
F checkedrealpage		D pages
F checkedurl		U prefixsplitter
D collected		D productdata
U componentsplitter		T programs
F currentmetadata		T data
F currentorder		F define
D currentset		F get
F define		F realpageofpage
D defined		U referencesplitter
D derived		D referred
F enhance		F referredpage
D executers		F registerfinalizer
F expandcurrent		F registerinitializer
F export		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	
Finner		F	userdata	
F special		sect	ions	table
F special operation		F	autodepth	
F special operation w	rith arguments	F	cct	
T testspecials		D	collected	
F deltapage		_		
r dettapage		F	current	
F i			current	
		F		
Fi		F F	currentblock	
F i F internal		F F	currentblock currentid	
F i F internal F page		F F F	currentblock currentid currentlevel	
F i F internal F page F realpage		F F F F	currentblock currentid currentlevel currentsectionindex	
F i F internal F page F realpage F section		F F F F	currentblock currentid currentlevel currentsectionindex depthnumber	
F i F internal F page F realpage F section F userpage		F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata	
F i F internal F page F realpage F section F userpage D tobereferred		F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved		F F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages		F F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls		F F F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data		F F F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define		F F F F F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found		F F F F F F D D	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get		F F F F F F D D	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get F untex D usedinternals D usedviews		F F F F F F D D F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth numbers	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get F untex D usedinternals D usedviews F valid		F F F F F D D F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth numbers popblock	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get F untex D usedinternals D usedviews F valid registers	table	F F F F F F D D F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth numbers popblock prefixedconverted	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get F untex D usedinternals D usedviews F valid registers F analyze	table	F F F F F D D F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth numbers popblock prefixedconverted pushblock	
F i F internal F page F realpage F section F userpage D tobereferred D tobesaved D tracedpages T urls T data F define F found F get F untex D usedinternals D usedviews F valid registers	table	F F F F F D D F F F F	currentblock currentid currentlevel currentsectionindex depthnumber finddata findnumber fullnumber getcurrentlevel getlevel getnumber internalreference levelmap levels matchingtilldepth numbers popblock prefixedconverted	

F renort	structure	F	registerused	
F save	structure		resetshown	
	nblockdata		resetused	
T body		·	sort	
	kmark			
F set	Killat K		synonym tobesaved	
	-1.	_		
F setblo		tags		
F setche			current	
F setent	ry tialblock		elementtag	
			finishexport	
F setlev			getextradata	
F setnum			getid	
F showst			getmetadata	
F struct	uredata		handler	
F title			initializeexport	
D tobesa			labels	
F typese			last	
F userda			lastinchain	
B verbos			locatedtag	
sets	table	Т	patterns	
F define		_	U splitter	
F get			properties	
F getall			registerextradata	
D setlis			registermetadata	
specials	table		restart	
D collec			setaspect	
F retrie	ve		setattributehash	
F store			setcombination	
D tobesa			setconstruct	
synonyms	table		setfigure	
F analyz			setfloat	
D collec			setformulacontent	
F compar			sethighlight	
F define			setitem	
F filter		F	setitemgroup	
F finali	ze	F	setlist	
F flush		F	setnotation	
Fisshow		F	setnotationsymbol	
F isused			setparagraph	
F meanin	-		setproperty	
F prepar			setpublication	
F proces	S	F	setregister	
F regist	er	F	setsorting	
F regist	ershown	F	setsynonym	

F settablecellF settabulatecellF settagdelimitedsymbolF settagsubsentencesymbol

F setupexport

 ${\sf F} \ {\sf setuserproperties}$ 

D specifications

F start F stop F strip

D taglist

T usewithcare

T images

## 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
сору	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)

attribute	table	getdimen	function
badness	function	getglue	function
box	table	getglyphdata	function
boxresources	table	getlccode	function
F getbox		getlist	function
F getdimensions		getlocallevel	function
F save		getmath	function
F use		getmathcode	function
catcode	table	getmathcodes	function
conditionals	data table	getmuglue	function
constants	data table	getmuskip	function
count	table	getnest	function
cprint	function	getpagestate	function
ctdcatcodes	number	getsfcode	function
ctxcatcodes	number	getskip	function
definefont	function	gettoks	function
delcode	table	getuccode	function
dimen	table	glue	table
directives	data table	hashtokens	function
enableprimitives	function	ifs	data table
error	function	inicatcodes	number
extraprimitives	function	init_rand	function
finish	function	isattribute	function
fontidentifier	function	isbox	function
fontname	function	iscount	overloaded function
force_synctex_line	function	isdefined	function
force_synctex_tag	function	isdimen	overloaded function
forcehmode	function	isglue	function
fprint	function	ismuglue	function
get	function	ismuskip	overloaded function
get_synctex_line	function	isskip	overloaded function
get_synctex_mode	function	istoken	function
get_synctex_tag	function	istoks	function
getattribute	function	lccode	table
getbox	function	linebreak	function
getboxresourcebox	function	lists	table
getboxresourcedimensions	function	lua_math_random	function
getcatcode	function	lua_math_randomseed	function
getcount	function	luacatcodes	number
getdelcode	function	magicconstants	table
getdelcodes	function	N maxdimen	

N runnina N trueinch mathcode table data table modes muglue table muskip table table nest nilcatcodes number normal rand function notcatcodes number number function primitives function print function prtcatcodes number resetparagraph function romannumeral function round function run function runtoks function saveboxresource function function scale scantoks function function set function set synctex line function set synctex mode set\_synctex\_no\_files function set synctex tag function setattribute function setbox function setcatcode function setcount function setdelcode function setdimen function setglue function setglyphdata function setlccode function

setlist setmath setmathcode setmualue setmuskip setnest setsfcode setskin settoks setuccode sfcode shipout show context skip sp splitbox sprint systemmodes takebox texcatcodes toks tpacatcodes tpbcatcodes tprint trackers triggerbuildpage txtcatcodes type uccode uniform rand uniformdeviate uprint useboxresource vrbcatcodes write

function table function function table function function function data table function number table number number function data table function number function table function function function function number function

## texconfig (basic tex)

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

## texio (basic tex)

closeinputfunctionwritefunctionsetescapefunctionwrite\_nlfunction

## token (basic tex)

biggest_char	function	put_next	function
command_id	function	scan_argument	function
commands	function	scan_box	function
create	function	scan_code	function
expand	function	scan_csname	function
get_active	function	scan_dimen	function
get_cmdname	function	scan_float	function
get_command	function	scan_glue	function
get_csname	function	scan_int	function
get_expandable	function	scan_keyword	function
get_id	function	scan_keyword_cs	function
get_index	function	scan_list	function
get_macro	function	scan_real	function
get_meaning	function	scan_string	function
get_mode	function	scan_token	function
get_next	function	scan_toks	function
get_protected	function	scan_word	function
get_tok	function	set_char	function
is_defined	function	set_lua	function
is_token	function	set_macro	function
new	function	type	function

#### tokens (context)

astable function U loadfoundtypescriptfile userdata bgroup U resetctxscanner bits table U rlap N active U scratchcounter N alignment U scratchdimen N begingroup U scratchmuskip N character U scratchskip U scratchtoken N close 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 U stoptitle N parameter N space U stopxtitle N subscript U texsetup N superscript II xmlw collectors table N whitespace cache table T data U NC F defaultwords U NR F dowithwords F flush U bf F install U color U colordefalc F register U colordefflc T registered U colordefflt F show U colordefrlt F test commands data table U dofinishreference compile function U dostarttext function constant U finishjob table U firstofoneargument converters U firstoftwoarguments S toboolean U gobbleoneargument S todimen U goto S toglue U iftrue S tonumber U input S tostring

anasta	function		5.1			
create	function		F keyword			
defined	function		-	F keywordcs		
egroup	userdata		F list			
getters	table		F lxmlid			
F box			F number			
F count			F real			
F dimen			F scanclos	е		
F glue			F scanopen			
F macro			F string			
F meaning			F table			
F skip			F token			
F token			F tokens			
hbox	userdata		F toks			
isdefined	function		F vbox			
istoken	function		F verbatim	ı		
letter	function		F vtop			
letters	function		F whd			
new	function		F word			
other	function		setters	table		
pickup	function		F box			
presets	table		F char			
T 1 string			F count			
T 2 strings			F dimen			
T 3 strings			F glue			
T 4 strings			F lua			
T 5 strings			F macro			
T 6 strings			F skip			
T 7 strings			shortcuts	table		
T 8 strings			T bits			
printlist	function		N active			
scanners	table		N alignm	ent		
F argument			N beging	roup		
F boolean			N charac	N character		
F box			N close			
F code	F code N comment		t			
F conditional			N endgroup			
F count	F count N endofline		ine			
F csname			N escape			
F dimen			N ignore			
F dimension	N invalid					
F float			N letter			
F glue			N mathshift			
F hbox			N open			
F integer			N other			
_						

N parameter	F scanopen
N space	F string
N subscript	F table
N superscript	F token
N whitespace	F tokens
N close	F toks
F inspect	F vbox
N open	F verbatim
F report	F vtop
F scanargument	F whd
F scanboolean	F word
F scanbox	F scannumber
F scanclose	F scanopen
F scancode	F scanstring
F scanconditional	F scantable
F scancsname	F scanvbox
F scandimen	F scanverbatim
F scandimension	F scanvtop
F scanhbox	F scanword
F scaninteger	F toboolean
F scankeyword	F todimen
F scankeywordcs	T tokens
F scanlist	F astable
T scanners	U bgroup
F argument	T cache
F boolean	U NC
F box	U NR
F code	U bf
F conditional	U color
F count	U colordefalc
F csname	U colordefflc
F dimen	U colordefflt
F dimension	U colordefrlt
F float	U dofinishreference
F glue	U dostarttext
F hbox	U finishjob
F integer	U firstofoneargument
F keyword	U firstoftwoarguments
F keywordcs	U gobbleoneargument
F list	U goto
F lxmlid	U iftrue
F number	U input
F real	U loadfoundtypescriptfile
F scanclose	U resetctxscanner

U rlap F glue U scratchcounter F macro U scratchdimen F meaning U scratchmuskip F skip U scratchskip F token U scratchtoken U hbox U secondoftwoarguments F isdefined U setfalsevalue F istoken U setsectionblock F letter U setupsystem F letters F new U startcolumns U starttabulate F other U starttitle F pickup U startxtitle T presets U stopcolumns F printlist U stoptabulate T setters U stoptitle F box F char U stopxtitle F count U texsetup F dimen U xmlw T collectors F alue F defaultwords F lua F dowithwords F macro F flush F skip F install T shortcuts F register N close F show F inspect F test N open D commands F report F compile F scanargument F constant F scanboolean T converters F scanbox S toboolean F scanclose S todimen F scancode F scanconditional S toglue S tonumber F scancsname S tostring F scandimen F create F scandimension F defined F scanhbox U egroup F scaninteger T getters F scankeyword F box F scankeywordcs F scanlist F count F dimen F scannumber

F scanopen F tonumber
F scanstring F tostring
F scantable U vbox
F scanvbox U vtop
F scanverbatim F tonumber
F scanvtop F tostring

F scanword vbox userdata F toboolean vtop userdata

F todimen

#### tracers (context)

count function
cs function
dimen function
knownlist function
lists table

T context

T internals
T scratch

name function

primitive function
printerror function
printwarning function
showlines function
strings table

S undefined

toks function
type function

### trackers (context)

data	data table	name	string
default	function	register	function
disable	function	report	function
done	table	reset	function
dumphashtofile	function	savehash	function
enable	function	show	function
list	function	value	function

## typesetters (context)

alignments	table	T handlers	
F handler		F installhandler	
F set		F processmath	
breakpoints	table	F set	
F define		F setcolor	
F handler		F setmath	
D mapping		F tomode	
T methods		firstlines	table
T numbers		T actions	
F set		F default	
F setreplacement		F line	
cases	table	F word	
T actions		F handler	
F handler		F set	
F register		fontkerns	table
F set		F handler	
characteralign	table	initials	table
F handler		T actions	
F resetcharacter	align	F default	
F setcharacteral	ign	F addanchortolin	е
characters	table	F addtoline	
F handler		F calculatedelta	
T methods		F checkline	
F replacenbsp		F handler	
F replacenbspace	s	F moveinline	
checkers	table	F normalize	
F handler		F set	
F reset		injectors	table
F set		F check	
cleaners	table	T list	
F handler		F mark	
F set		F reset	
digits	table	F set	
T actions		F show	
F handler		italics	table
F set		F enablemath	
directions	table	F enabletext	
F getfences		F forcevariant	
F getglobal		F handler	
F getmethod		F reset	
F handler		F set	

kerns	table	F apply	
D factors	cubic	F register	
F handler		F reset	
F keepligature		F split	
, -		F startapply	
D mapping F set		F startappty F stopapply	
manipulators	table	F stripped	
•	table	F tostring	
F apply	****	rubies	table
F applyspecifica T methods	111011	F attach	table
F Word		F attach	
			function
F Words		showsuspects	table
F abbreviatedj		spacings	table
F expandedjour	nal	F define	
F lowercase		F handler	
F stripperiod		D mapping	
F uppercase		T numbers	
T patterns		T frenchpunct	
U list		T characters	5
U pair		S name	
F splitspecifica		N number	
margins	table	F reset	
F finalhandler		F set	
F globalhandler		F setup	
F localhandler		wrappers	table
F save		F handler	
marksuspects	function	xtables	table
paragraphs	table	F cleanup	
F addanchortolin	ne	F construct	
F addtoline		F create	
F calculatedelta		F finish_row	
F checkline		F flush	
F handler		F initialize_co	
F moveinline		F initialize_re	
F normalize		F initialize_re	eflow_width
F set		F next_row	
periodkerns	table	F reflow_height	
D factors		F reflow_width	
F handler		F set_construct	
D mapping		F set_reflow_he	eight
F set		F set_reflow_wi	.dth
processors	table		

### updaters (context)

apply function
register function

### url (context)

addscheme	function	hashed	function
barepath	function	hasscheme	function
construct	function	query	function
decode	function	split	function
encode	function	toquery	function
escape	function	unescape	function
filename	function	unescapeget	function

## utf8 (context)

char	function	codes	function
charpattern	string	len	function
codepoint	function	offset	function

### utilities (context)

debugger	table	F	size	
F disable		F	skip	
F enable		F	skiplong	
F savestats		F	skipposition	
F showstats		F	skipshort	
F showtraceback		F	writebyte	
files	table	F	writecardinal2	
F close		F	writecardinal2le	
F getposition		F	writecardinal4	
F getsize		F	writecardinal4le	
F look		F	writestring	
F open		form	natters	table
F read2dot14		F	formatcolumns	
F readbyte		F	list	
F readbytes		F	stripzeros	
F readbytetable		garb	agecollector	table
F readcardinal		F	check	
F readcardinal1		N	criterium	
F readcardinal2		В	enabled	
F readcardinal2le		lua		table
F readcardinal3		В	alwaysstripcode	
F readcardinal3le		F	checkmemory	
F readcardinal4		F	compile	
F readcardinal4le		F	loadedluacode	
F readcardinaltable	2	F	loadstring	
F readchar		F	loadstripped	
F readfixed2		N	nofstrippedbytes	
F readfixed4		N	nofstrippedchunks	
F readinteger			registerfinalizer	
F readinteger1			stripcode	
F readinteger2			strippedchunks	
F readinteger2le		F	strippedloadstrin	g
F readinteger3		F	strippedloadstrin suffixes	g
F readinteger3 F readinteger3le		F	strippedloadstrin suffixes S lua	9
F readinteger3 F readinteger3le F readinteger4		F	strippedloadstrin suffixes S lua S luc	g
F readinteger3 F readinteger3le F readinteger4 F readinteger4le		F	strippedloadstrin suffixes S lua S luc S lui	g
F readinteger3 F readinteger3le F readinteger4 F readinteger4le F readintegertable		F	strippedloadstrin suffixes S lua S luc S lui S luj	9
F readinteger3 F readinteger4 F readinteger4le F readintegertable F readsignedbyte		F	strippedloadstrin suffixes S lua S luc S lui S luj S luj	g
F readinteger3 F readinteger4 F readinteger4le F readintegertable F readsignedbyte F readstring		F	strippedloadstrin suffixes S lua S luc S lui S luj S luy S tma	g
F readinteger3 F readinteger4 F readinteger4le F readintegertable F readsignedbyte		F	strippedloadstrin suffixes S lua S luc S lui S luj S luj	g

S tuc	U settings_to_h	ash_d
<b>packers</b> table	U unittotex	
F hashed	F process_strippe	d_settings
F new	F rfc4180splitter	•
F pack	F runtime	
F simplehashed	F settings_to_arr	ay
F strip	F settings_to_arr	ay_obey_fences
F unpack	F settings_to_arr	ay_with_repeat
N version	F settings_to_has	h
parsers table	F settings_to_has	h_colon_too
F add_settings_to_array	F settings_to_has	h_strict
F arguments_to_table	F settings_to_has	h_tolerant
F array_to_string	F settings_to_num	bers
F csvsplitter	F settings_to_set	
F getparameters	F simple_hash_to_	string
F groupedsplitat	F splitmethod	
F hash_to_string	F splitthousands	
T hashes	F stepper	
T settings_to_set	F stripped_settin	gs_to_array
T min,max,fit,broad,auto	F totime	
B auto	F unittotex	
B broad	F unittoxml	
B fit	randomizer	table
B max	F get	
B min	F getnumber	
T text,hidden,paper,page,leftpage,rightpage	F getseed	
B hidden	F popseed	
B leftpage	F pushseed	
B page	F reuseseed	
B paper	F setseed	
B rightpage	F setseedi	
B text	report	function
F iterator	sequencers	table
F keq_to_hash	F appendaction	
F listitem	F appendgroup	
F make_settings_to_hash_pattern	F compile	
F mergehashes	F disableaction	
F options_to_array	F disablegroup	
F options_to_hash	F enableaction	
T patterns	F enablegroup	
U settings_to_array	D functions	
U settings_to_hash_a	F localize	
U settings_to_hash_b	F new	

F nodeprocessor

U settings\_to\_hash\_c

F prependaction		F readcardinal4le
F prependgroup		F readcardinaltable
F removeaction		F readchar
F replaceaction		F readfixed2
F setkind		F readfixed4
F tostring		F readinteger
setters	table	F readinteger1
F disable		F readinteger2
F enable		F readinteger2le
F initialize		F readinteger3
F list		F readinteger3le
F new		F readinteger4
F register		F readinteger4le
F report		F readintegertable
F reset		F readsignedbyte
F show		F readstring
stacker	table	F setposition
F new		F size
storage	table	F skip
F allocate		F skipbytes
F checked		F skiplong
F mark		F skipshort
F marked	st	t <b>rings</b> table
F marked F setinitializer	si	tr <b>ings</b> table F collapse
	S1	
F setinitializer	s: table	F collapse
F setinitializer F sparse		F collapse F collapsecrlf
F setinitializer F sparse streams		F collapse F collapsecrlf T formatters
F setinitializer F sparse Streams F close		F collapse F collapsecrlf T formatters F add
F setinitializer F sparse  Streams F close F getposition		F collapse F collapsecrlf T formatters F add F new
F setinitializer F sparse  Streams F close F getposition F getstring		F collapse F collapsecrlf T formatters F add F new F newcollector
F setinitializer F sparse  Streams F close F getposition F getstring F look		F collapse F collapsecrlf T formatters F add F new F newcollector F newrepeater
F setinitializer F sparse  Streams F close F getposition F getstring F look F open		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice
F setinitializer F sparse  Streams F close F getposition F getstring F look F open F openstring		F collapse F collapsecrlf T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns
F setinitializer F sparse  Streams F close F getposition F getstring F look F open F openstring F read2dot14		F collapse F collapsecrlf T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse
F setinitializer F sparse  StreamS F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4		F collapse F collapsecrlf T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune
F setinitializer F sparse  Streams F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse
F setinitializer F sparse  Streams F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty
F setinitializer F sparse  Streams  F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes F readbytetable		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space
F setinitializer F sparse  Streams F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes F readbytetable F readcardinal		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space U retain
F setinitializer F sparse  Streams  F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbyte F readbyte F readbytes F readcardinal F readcardinal		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space U retain U retain and collapse
F setinitializer F sparse  Streams  F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes F readbytes F readbytetable F readcardinal F readcardinal1 F readcardinal2 F readcardinal3		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space U retain U retain and collapse U retain and no empty
F setinitializer F sparse  Streams  F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes F readbytes F readbytes F readcardinal F readcardinal2 F readcardinal2le		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space U retain U retain and collapse U retain and no empty F striplines
F setinitializer F sparse  Streams  F close F getposition F getstring F look F open F openstring F read2dot14 F read2dot4 F readbyte F readbytes F readbytes F readbytetable F readcardinal F readcardinal1 F readcardinal2 F readcardinal3		F collapse F collapsecrif T formatters F add F new F newcollector F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse U prune and no empty U prune and to space U retain U retain and collapse U retain and no empty F striplines F striplong

# tables table F removevalue F accesstable F replacevalue F definedtable templates table F definetable F load F encapsulate F replace F insertaftervalue F replacer

F resolve

F insertbeforevalue

F migratetable

### vf (context)

char	function	pdf	function
down	function	рор	function
fontid	function	push	function
image	function	right	function
node	function	rule	function
nop	function	special	function

### visualizers (context)

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

### xml (context)

addentitiesdoctype	function	E poddina	
addspecialcode	function	F padding	
after	function	F stylevalue	
all	function	F todimension  defaulthandlers	table
	function	D file	table
applylpath	function		
applyselector assign	function	D parsedxml	
assign attribute	function	D string	
badinclusions	function	D tex	
before	function	D texline	
	function	D texspace	
body builtinentities	table	D verbose	string
	table	defaultprotocol delete	string function
B amp		delete element	function
B apos		<del>-</del> -	function
B gt		despecialized each	function
B lt			function
B quot	function	<del>each_element</del> elements	
cdata cdatatotext	function function	elements	function function
checkbom	function		function
checkerror	function	empty entities	data table
	function		function
checknamespace checkns	function	erase errorhandler	function
cleansed	function		function
collect	function	escaped	table
	function	expressions	table
collect_elements	function	F boolean	
collect_tags	function	F child	
<del>collect_texts</del> collected	function	F contains	
collecttexts	function	F count F error	
content	function	r error F find	
convert	function	F find F hasclass	
	function		
copy count	function	F idstring	
cprint	function	F lower F name	
	table	r name F number	
CSS	table		
F applyselector		F one of	
F colorspecification		F print	
F dimension		F quit	
F fontspecification		F tag	
F mappedstylevalue		F text	

F undefined		F chainattribute	
F upper		F count	
fillin	function	F default	
filter	function	F elements	
finalizers	table	F empty	
F paragraphs		F first	
T tex		F function	
F all		F index	
F attribute		F last	
F chainattribute		F lowerall	
F chainpath		F match	
F command		F name	
F concat		F position	
F concatrange		F reverse	
F context		F table	
F count		F tag	
F ctxtext		F tags	
F default		F text	
F first		F texts	
F function		F upperall	
F index		first	function
F last		found	function
F lettered		functions	table
F lower		F classes	
F lowerall		F hasclass	
F match		getbuffer	function
F name		gethandlers	function
F param		gethandlersfunction	function
F parameter		helpers	table
F position		F recursetext	
F reverse		include	function
F stripped		inclusion	function
F tag		inclusions	function
F tags		index	function
F text		inheritedconvert	function
F upper		inject	function
F upperall		inject_element	function
F xml		<u>inject_element_after</u>	function
T xml		<pre>inject_element_before</pre>	function
F all		injectafter	function
F att		injectbefore	function
F attribute		insert	function
F attributes		insert_element	function
F cdata		<u>insert_element_after</u>	function

insert_element_before	function	registerns	function
insertafter	function	reindex	function
insertbefore	function	remap name	function
insertcdata	function	remap_namespace	function
insertcomment	function	· <del>-</del> · · ·	function
	function	remap_tag	function
inspect		remapname	
is_valid kind	function	remapnamespace	function
	function	remaptag	function
last	function	rename	function
lastmatch	function	renamespace	function
load	function	reparsedentitylpeg	userdata
lpath	function	replace	function
lpathcached	function	replace_element	<del>function</del>
lpathcalls	function	resetinjectors	function
lshow	function	resolvens	function
makestandalone	function	root	function
match	function	save	function
name	function	selection	function
newhandlers	function	separate	function
nodesettostring	function	serialize	function
originalload	function	serializetotext	function
package	function	setcdata	function
parent	function	setcomment	function
parsedentitylpeg	userdata	sethandlersfunction	function
pihandlers	table	setinjectors	function
F injector		setproperty	function
F tex		settings	function
placeholders	table	specialcodes	table
F unknown_any_entity		S "	
F unknown_dec_entity		S #	
F unknown_hex_entity		S \$	
popmatch	function	S %	
position	function	S &	
privatecodes	table	S '	
privatetoken	function	S <	
process	function	S >	
<pre>process_attributes</pre>	function	S \	
<del>process_elements</del>	<del>function</del>	S {	
processattributes	function	S	
profiled	table	S }	
pure	function	S ~	
pushmatch	function	specialhandler	table
raw	function	sprint	function
registerentity	function	string	function
<b>5</b> <del></del> <b>,</b>		•	

strip	function	toxml	function
strip_whitespace	<del>function</del>	tprint	function
stripelement	function	traverse	function
stripleadingspaces	function	unescaped	function
table	function	unescapedentitylpeg	userdata
text	function	unprivatized	function
textonly	function	unspecialized	function
texttocdata	function	withelement	function
tocdata	function	withelements	function
toelement	function	wrap	function
tostring	function	xmlns	table
totable	function		

### zip (extra lua)

archivestableopenarchivefunctionclosefunctionopenfilefunctionclosearchivefunctionregisteredfilestableopenoverloaded functiontypefunction

### zlib (extra lua)

adler32 function
compress function
compressobj function
crc32 function

decompress
decompressobj function
version function