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

ConT<sub>E</sub>Xt MkIV

# global (alias: \_G)

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

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

toboolean function table utf token table utf8 table utilities tokens table table tonumber function string visualizers tostring function table tracers table function warn xcomplex trackers table table function xmath table type typesetters table xml table unpack function xpcall function zip updaters table table url table zlib table userdata 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	table		none .	
colors	table		popset	
N attribute			processcolorco	omponents
F cmyk			pushset	
F cmyktogray			register	
F cmyktorgb			registered	
F colorcomponent	S		registerspotco	olor
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			sets	
F definesimplegr	•		spec	
F definespotcolo			spot	
F definetranspar	ency		spotcolorname	
F enable			spotcolorparer	
F filter			spotcolorvalue	2
N forced			supported	
F forcedmodel		·	toattributes	
F forcesupport			transparencyco	omponents
F formatcolor			triggering	
F formatgray			usecolors	
F getpagecolormo	del		valid	
F gray			value	
F graytohsv			values	
F handler			weightgray	
F hsvtogray		defi		function
F hsvtorgb		effe		table
F iccprofile			attribute	
F isblack		D	data	

F enable		N colordodge	
F handler		N darken	
F register		N difference	
D registered		N exclusion	
D values		N hardlight	
handlers	table	N hue	
list	data table	N lighten	
markasoverload	function	N luminosity	
names	data table	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		N none	
F set		F register	
numbers	data table	D registered	
ofnode	function	B supported	
private	function	F toattribute	
public	function	B triggering	
restore	function	F value	
save	function	D values	
showcurrent	function	<b>unsetvalue</b> number	
states	table	<b>viewerlayers</b> table	
F disabletrigger	ing	N attribute	
F enabletriggeri	ng	F cleanup	
F finalize		D data	
F initialize		F define	
F process		F definedlayoutcomponent	
F selective		F enable	
F stacked		F forcesupport	
F stacker		F handler	
system	function	B 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		F start	

B supported

#### backends (context)

F enabletags

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

F startunicodetoactualtextdirect

F stoplayer

 ${\sf F} \ {\sf stopunicodetoactualtext}$ 

F stopunicodetoactualtextdirect

F supportedformats
F unicodetoactualtext
F useviewerlayer

F validfield

F validfieldcategory

F validfieldset
F wrapimage

T nodeinjections

S comment

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 startstackedlayer

F stoplayer

F startlayer

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
writeout function

## basexx (context)

decode16	function	encode16	function
decode64	function	encode64	function
decode85	function	encode85	function
decodeLZW	function	encodeLZW	function
decodeRL	function	encodeRL	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)

function	F define	
function	F hassomeconten	t
function	F next	
function	F place	
function	F reset	
function	F save	
function	prepend	function
function	raw	function
function	run	function
function	samplefile	function
table	undent	function
	function	function F hassomecontent function F next function F place function F reset function F save function prepend function raw function run function samplefile

# builders (context)

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

## 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 functions table F process rule F start page number F stop\_page\_number function known list data table pop function function push register function function report supported table B append to vlist filter B build page insert B buildpage\_filter B contribute filter B define font B find data file B find format file B find log file B hpack filter B hpack quality B hyphenate B insert local par

B kerning

B ligaturing B linebreak filter B make extensible B mlist to hlist B new graf B open data file B post linebreak filter B pre dump B pre linebreak filter B pre output filter B process\_jobname B read\_data\_file B show error hook B show error message B show\_lua\_error\_hook B show\_warning\_message B show whatsit B start file B start run B stop\_file B stop run B terminal input B vpack filter B vpack quality

B wrapup run

#### 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

upper

F toutfpattern textclasses tonumber ucchars uccode uccodes uhash unicodechar

table function data table function data table data table function function

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

upperfunctionweekdayfunctionverbosetablewordfunctionD datawordsfunctionF translateyearfunction

## coroutine (basic lua)

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

#### ctxrunner (context)

load function prepfiles data table
preparedfile function resolve function

#### data (context)

action function depth number height number prerolled string
width number

# dir (context)

collectpattern	function
current	function
expandname	function
found	function
glob	function
globdirs	function
alobfiles	function

globpattern	function
ls	function
makedirs	function
mkdirs	function
pop	function
push	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

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

T commandline D environments

D modes D modules T ctxfile

D environments

## documentdata (context)

variable function

#### drivers (context)

F initialize

convert function F reset function enable T flushers gethpos function F character getpos function F rule getvpos function S name table helpers T pdf F tomatrix T actions install function F cleanup instances table F convert T default F finalize F initialize T actions F convert F outputfilename F outputfilename F prepare T flushers F updatefontstate S name F wrapup T lua T flushers F character T actions F fetch F pdfimage F finalize F pdfliteral F initialize F pdfrestore F reset F pdfsave T flushers F pdfsetmatrix F character F poporientation F rule F pushorientation S name F rule T mps F simplerule T actions S name **lmtxversion** number F fetch outputfilename function F finalize

# environment (context)

argument	function	luafile	function
arguments	data table	luafilechunk	function
basicengines	data table	luatexengine	string
currentrun	number	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
loadluafile	function		

#### 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 cachepaths data table F totable check function T types checkers data table N jbig2 converters data table N jp2 current function N jpg defaultdepth number N memstream defaultheight number N none defaultsearch hool ean N pdf defaultwidth number N pnq 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 resources data table 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
$\verb"is_rootbased_path"$	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)

getposition	function
read2dot14	function
readbytes	function
reauby tes	Tunction
readbytetable	function
readcardinal1	function
readcardinal1le	function
readcardinal2	function
readcardinal2le	function
readcardinal3	function
readcardinal3le	function
readcardinal4	function
readcardinal4le	function
readcardinaltable	function
readfixed2	function
readfixed4	function
readinteger1	function
readinteger1le	function
readinteger2	function

readinteger2le	function
readinteger3	function
readinteger3le	function
readinteger4	function
readinteger4le	function
readintegertable	function
readline	function
setposition	function
skipposition	function
writecardinal1	function
writecardinal1le	function
writecardinal2	function
writecardinal2le	function
writecardinal3	function
writecardinal3le	function
writecardinal4	function
writecardinal4le	function

## flate (context)

flate_compress	function	update_adler32	function
flate_decompress	function	update_crc32	function
gz_compress	function	zip_compress	function
gz_decompress	function	zip_decompress	function

## floats (context)

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

## font (basic tex)

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

## fonts (context)

<b>analyzers</b> 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
<b>checkers</b> table	F apply
F getmissing	F patch
F missing	T patches
F placeholder	F register
<b>cid</b> table	F report
F getmap	F register
F loadfile	F report
<b>collections</b> 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
<b>constructors</b> table	F patch
F addcharacters	T patches
F addcoreunicodes	F register
B addtounicode	F report
F aftercopyingcharacters	F register
F applymanipulators	F report
F assignmathparameters	N factor
B autocleanup	T features
F beforecopyingcharacters	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

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
F load	F devanagari_reorder_reph
T readers	F gpos_context
F getinfo	F gpos_contextchain
F loadfont	F gpos_cursive
F loadshapes	F gpos_mark2base
F setfeatures	F gpos_mark2ligature
B syncspace	F gpos_mark2mark
N version	F gpos_pair
T otf	F gpos_single
F addfeature	F gsub_alternate
F basemodeinitializer	F gsub_context
D cache	F gsub_contextchain
F collectlookups	F gsub_ligature
T coverup	F gsub_multiple
T actions	F gsub_reversecontextchain
F alternate	F gsub_single
F chainposition	F trigger_space_kerns
F chainsubstitution	T helpers
F kern	F blockligatures
F ligature	F pardirstate
F multiple	F txtdirstate
F pair	F load
F single	F loadoutlinedata
F substitution	F loadstreamdata
F register	F modeinitializer
S stepkey	D 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

Т

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

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

S textitalics		F registersplit	
S virtualized		F resetnullfont	
D loadedfonts		F resolve	
S namemode		T resolvers	
N noffontsloaded		F file	
N nofsharedfonts		F name	
N nofsharedhashes		F spec	
N nofsharedvector	s	definetypeface	function
N privateoffset		encodings	table
D privateslots		T agl	
F readanddefine		D ctxcodes	
F registerfeature		D extras	
F resetfeature		D names	
B resolvevirtualt	00	D synonyms	
F scale		D unicodes	
F scaled		D cache	
F setfactor		F is_known	
F setfeature		D known	
F setmathparamete	r	F load	
F setname		F make_unicode_ve	ector
B sharefonts		D math	
F trytosharefont		N version	
N version		enhanceid	function
N VELZION			Tunction
current	function	expansions	data table
current currentid	function function	expansions formats	
current		expansions	data table
current currentid	function	expansions formats getalternate getkern	data table data table
current currentid definers	function	expansions formats getalternate getkern getmultiple	data table data table function function function
current currentid definers F addlookup	function table	expansions formats getalternate getkern	data table data table function function function
current currentid definers F addlookup F analyze	function table	expansions formats getalternate getkern getmultiple	data table data table function function function
current currentid definers F addlookup F analyze F applypostproces	function table	expansions formats getalternate getkern getmultiple getsubstitution	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode	function table	expansions formats getalternate getkern getmultiple getsubstitution getters T alternate F opentype	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript	function table	expansions formats getalternate getkern getmultiple getsubstitution getters T alternate	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F typel	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont F makespecificati T methods	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3 T multiple F opentype T substitution	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont F makespecificati T methods F install	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3 T multiple F opentype T substitution F opentype	data table data table function function function table
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont F makespecificati T methods F install D variants	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3 T multiple F opentype T substitution F opentype	data table data table function function function
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont F makespecificati T methods F install D variants F read	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3 T multiple F opentype T substitution F opentype goodies D colorschemes	data table data table function function function table
current currentid definers  F addlookup F analyze F applypostproces F checkedmode F checkedscript F current S defaultlookup F define F getspecificatio F internal F loadfont F makespecificati T methods F install D variants	function table sors	expansions formats getalternate getkern getmultiple getsubstitution getters  T alternate F opentype T kern F opentype F type1 F type3 T multiple F opentype T substitution F opentype	data table data table function function function table

S author		D. om vidtha
		D emwidths
S comment		D exheights
S copyright		D extensibles
B initialized		D features
T mathematics		D identifiers
T alternates	5	D italics
T dotless		D lastmathids
S comment		D marks
S feature	e	D mathparameters
N value		D modes
T kerns		D originals
S name		D parameters
S version		T processes
T schola-math		D properties
S author		D quads
S comment		D resources
S copyright		T setdynamics
B initialized		T shapes
T mathematics		D spaces
T alternates	5	D spacings
T dotless		T streams
S comment	t	D unicodes
3 Collillett	-	5 41120000
S feature		D variants
		D variants D xheights
S feature		D variants
S feature N value		D variants D xheights
S feature N value T kerns		D variants D xheights helpers table
S feature N value T kerns S name		D variants D xheights helpers table F addextraprivate
S feature N value T kerns S name S version		D variants D xheights helpers table F addextraprivate F addprivate
S feature N value T kerns S name S version D designsizes	е	D variants D xheights helpers table F addextraprivate F addprivate F appendcommands
S feature N value T kerns S name S version D designsizes D filenames	е	D variants D xheights helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable
S feature N value T kerns S name S version D designsizes D filenames F getcompositions	е	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list	e 5	D variants D xheights helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load	e 5	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature	e S	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register	e S	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors D commands
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F register F report T suffixes	e es ocessor	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors D commands F descriptiontoslot
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F register F register F report T suffixes handlers	e es ocessor table	D variants D xheights  helpers table  F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F register F report T suffixes	e es ocessor	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates F fontpatternhassize
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F register F registerpostpro F report T suffixes handlers hashes D characters	e es ocessor table	D variants D xheights  helpers table F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates F fontpatternhassize F getcoloredglyphs
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F registerpostpro F report T suffixes hashes	e es ocessor table	D variants D xheights  helpers table  F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates F fontpatternhassize F getcoloredglyphs F getdigitwidth
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F register F registerpostpro F report T suffixes handlers hashes D characters	e es ocessor table	D variants D xheights  helpers table  F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates F fontpatternhassize F getcoloredglyphs F getdigitwidth F getinstancespec
S feature N value T kerns S name S version D designsizes D filenames F getcompositions T list F load F prepare_feature F register F registerpostpro F report T suffixes handlers hashes D characters D classes	e es ocessor table	D variants D xheights  helpers table  F addextraprivate F addprivate F appendcommands F appendcommandtable F checkflags F checkmerge F checksteps F collectanchors D commands F descriptiontoslot F dimenfactor F expandglyph T extraprivates F fontpatternhassize F getcoloredglyphs F getdigitwidth

F getprivatenode		F paths	
F getprivates		F widthline	
F getprivateslot		F zeroline	
F hasprivate		mp	table
F indextoslot		D cache	
F name		B inline	
F nametoslot		N version	
F prependcommands	S	names	data table
F prependcommand	table	nulldata	data table
F privateslot		privateoffset	<b>s</b> table
F setdigitwidth		B keepnames	
F splitfontpatte	rn	N mathbase	
F tochar		N mathextrabas	e
infofont	function	N textbase	
iterators	table	N textextrabas	e
F characters		protrusions	data table
F descriptions		readers	table
F glyphs		F afm	
loggers	table	F check_lua	
F add_placeholde		F check_tfm	
D category_to_pla	aceholder	F lua	
F format		F ofm	
F onetimemessage		F opentype	
F register		F otf	
F reportdefinedfo		F pfb	
F reportusedfeatu		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	i
F reset		F bodyfont	
F tounicode F tounicode16		D data	
		F default	
F tounicode16seque metapost	table	D defaults	akfamil.
F boundingbox	cable	F definefallba F definefontfa	
F boxtomp		F definefontfa	•
F draw		D extras	ımı chhi eser
F draw F fill		F fallback	
F maxbounds		D fallbacks	
		F features	
F output		r rediures	

F filefallback	F presetcontext	
F fontdata	F registercontext	
F fontfallback	F showcontext	
F fontsynonym	F splitcontext	
F goodies	D synonyms	
F mathfallback	D variants	
D methods	symbols	table
D presets	T emoji	
F registerfallback	F checked	
F registerfiles	F resolved	
F registerfontalternative	F uselibrary	
F registerfontfamily	tables	table
F textfallback	D data	
F typeface	F savefont	
F typescript	F saveoriginal	
Fuserdata	tracers	table
,,	•	table table
F userdata	tracers	
F userdata specifiers table	tracers treatments	
F userdata  specifiers table  D contextmerged	tracers treatments F applyfixes	
F userdata  specifiers table  D contextmerged F contextnumber	tracers treatments F applyfixes D data	
F userdata specifiers table  D contextmerged F contextnumber D contextnumbers	tracers treatments F applyfixes D data S filename	
F userdata  specifiers table  D contextmerged F contextnumber D contextnumbers D contextsetups	tracers treatments F applyfixes D data S filename F ignoredfile	

F mergecontext

typefaces

table

## functions (context)

**dummy** function

## graphics (context)

backgrounds	table	F placeholde	r
F fetchmulti	par	F tocontext	
F pair		identifiers	table
F path		F bitmap	
F point		F jp2	
bitmaps	table	F jpg	
F flush		F png	
F new		identify	function

## gzip (extra lua)

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

## images (context)

check	function	1	B none	
checksize	function		B trim	
сору	function	tot	able	function
create	function	typ	es	table
embed	function		N jbig2	
keys	table		N jp2	
print	function		N jpg	
scan	function		N memstrea	am
serialize	function	1	N none	
sizes	table		N pdf	
B art		1	N png	
B bleed			N stream	
В сгор		wra	р	function
B media				

#### 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 code F setopenpage renderings data table D codes soundclips F flushpreambles data table

#### interfaces (context)

data table function addvalidkeys cachedsetups data table function cachesetup checkedspecification function data table complete constants data table data table corenamespaces currentinterface string currentresponse string definecommand function defined function **doifelsemessage** function elements data table formats data table getcheckedparameters function function getmessage getnamespace function 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	output	overloaded function
bytes	function	pathseparator	string
characters	function	popen	overloaded function
close	function	read	function
copydata	function	readall	function
exists	function	readnumber	function
fileseparator	string	readstring	function
flush	function	savedata	function
input	overloaded function	size	function
lines	overloaded function	stderr	userdata
loadchunk	function	stdin	userdata
loaddata	function	stdout	userdata
loadlines	function	tmpfile	function
noflines	function	type	function
open	overloaded function	write	function

## job (context)

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

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

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
has_language	function	preexhyphenchar	function
hyphenate	function	prehyphenchar	function
hyphenation	function	sethjcode	function
hyphenationmin	function		

## languages (context)

	£		
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)

attributes overloaded function chdir overloaded function currentdir function

isfound function
isreadabledir function
isreadablefile function
iswriteabledir function

iswriteablefile function

mkdirs function
readlink function

setexecutable function
symlink function

touch overloaded function

### libraries (context)

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

extratex data table
functions data table
globals data table

#### lmx (context)

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
inherited	table
S color-backgro	und-four
S color-background-one	

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

initialize	tunction
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	copyunicode	function
actions	function	delayedobject	function
adddocumentcolorspace	function	destinationspecification	function
adddocumentextgstate	function	dictionary	function
adddocumentpattern	function	docstring	function
adddocumentshade	function	epdf	table
addtocatalog	function	F analyzefonts	
addtoinfo	function	F contenttotext	
addtonames	function	F expanded	
addtopageattributes	function	F getpagecontent	
addtopageresources	function	F getstructure	
addtopagesattributes	function	T image	
addxmpinfo	function	F close	
annotationspecification	function	F copy	
array	function	F new	
attachmentsymbols	function	F open	
boolean	function	F query	
border	function	F load	
checkedkey	function	F parsecontent	
checkedvalue	function	F plugin	
circularshade	function	T resolvers	
cmykcode	function	F destinations	
collectedresources	function	F embeddedfiles	
color	function	F javascripts	
colorspace	function	F layers	
colorspaceconstants	data table	F pages	
colorspec	function	F structure	
colorvalue	function	F widgets	
colorvalues	function	F stripcontent	
commentsymbols	function	F unload	
compresslevel	function	escaped	function
constant	function	finalizedocument	function
convert	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	

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

	£	settime	£
print	function	331123	function
procset	function	settrailerid	function
protectresources	boolean	setversion	function
rectangle	function	shareobject	function
reference	function	shareobjectreference	function
registerannotation	function	spotcode	function
registerdestination	function	stream	function
registerdocumentfinalizer	function	string	function
registerfont	function	toeight	function
registerpagefinalizer	function	topdfdoc	function
registerpattern	function	tosixteen	function
reserveobject	function	transparency	function
rgbcode	function	transparencycode	function
rotationcm	function	transparencygroups	table
setcompression	function	B none	
setdates	function	transparencyvalue	function
setmapfile	function	unicode	function
setmapline	function	usedcharacters	table
setomitcharset	function	verbose	function
setomitcidset	function	vfimage	function
setsuppressoptionalinfo	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		

### lua (basic tex)

bytecode	table
bytedata	data table
bytedone	table
collectgarbage	function
delay	function
finalize	function
firstbytecode	number
flush	function
flushdelayed	function
<pre>get_functions_table</pre>	function
getbytecode	function
getcurrenttime	function
getfunctionstable	function
getpreciseseconds	function
getpreciseticks	function
getruntime	function
getstacktop	function
getstartupfile	function
getversion	function
lastbytecode	number
macros	table

В	enabled
F	loaded
F	required
F	reset
F	resolvestring
F	resolving
F	showdefinitions

mask string data table messages function newindex newtable function numbers data table registercode function registeredcodes function registerfinalizer function registername function setbytecode function setexitcode function startupfile string version string

### 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 function registertempfile F setfilename starttime number F setup synctex table F start F blockfilename F stop F collect F wrapup

wrapup

function

# lxml (context)

- 442 - 4	for this a	£1h	£ +
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)

function
function
number
number
function
function
function
function
number

min	function	
mininteger	number	
mod	function	
modf	function	
odd	function	
pi	number	
pow	function	
rad	function	
random	overloaded	function
randomseed	function	
round	function	
setrandomseedi	function	
sin	function	
sind	function	
sinh	function	
sqrt	function	
tan	function	
tand	function	
tanh	function	
tointeger	function	
type	function	

function

ult

### 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	casec	remapalphabets	function
charactersets	data table	renderings	table
checkaccentbaseheight	function	D mappings	
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	sum	function
dec	function	sumHEXA	function
hex	function	sumhexa	function

#### metapost (context)

N mode

checkformat function N newinternal function cm N nullary codes table N numeric N addto N of N ampersand N ofbinary N and N outertag N assignment N parametertype N atleast N plus or minus N begingroup N primarybinary N btex N primarydef N capsule N randomseed N colon N relax N comma N repeat loop N controls N rightbrace N curl N rightbracket N cycle N rightdelimiter N declare N runscript N def N save N definedmacro N scantokens N delimiters N scope N endgroup N secondarybinary N equals N secondarydef N etex N semicolon N setbounds N everyjob N exitif N shipout N expandafter N show N fi or else N skip Nif N slash N input N special N interim N step N internal N stop N iteration N str N join N string N leftbrace N tag N leftbracket N tension N leftdelimiter N tertiarybinary N let N tertiarydef N macrospecial N thingstoadd N maketext N to N message N unary

N undefinedcs

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

setvariable function showlog boolean simple function **splitprescript** function startgraphic function stopgraphic function svformat function function sxsy tex table F get

F reset
F set
F setfrombuffer

texerrors boolean
texexp function

texexp function
theclippath function
tographic function
totable function
types table

N boolean N cmykcolor N color

N dependent

N independent
N known
N numeric
N pair
N pathtype
N pen
N picture

N protodependent
N string
N structured
N suffixedmacro
N tokenlist
N transform
N unknownboolean
N unknownpath

N unknownpen

N unknownpicture
N unknownstring
N unsuffixedmacro
N vacuous

unload untagvariable variables function
function
table

### mime (extra lua)

b64 function
decode function
decodet table
 F base64
 F quoted-printable
dot function
encode function
encodet table
 F base64

r baseu4

F quoted-printable

eol function
normalize function
qp function

qpwrp function
report function
stuff function
unb64 function
unqp function
wrap function
wrapt table
 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	OverlayOffset	function
BottomSpace	function	OverlayRegion	function
CurrentColumn	function	OverlayWidth	function
CurrentHeight	function	•	function
CurrentWidth	function	PageDepth	function
CutSpace	function	PageFraction 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	inhash	function
F boolean		integer	function
F flush		isarray	function
F fprint		isobject	function
F integer		mf_blob_add	function
F number		mf_blob_dimensions	function
F numeric		mf_blob_index	function
F pair		mf_blob_new	function
F pairpoints		mf_blob_raw_content	function
F path		mf_blob_raw_dimensions	function
F pathpoints		mf_blob_raw_reset	function
F points		mf_blob_raw_toutf	function
F print		mf_blob_raw_wipe	function
F quadruple		mf_blob_size	function
F quadruplepoints		mf_blob_width	function
F quoted		mf_default_color_model	function
F size		mf_external_figure	function
F string		mf_finish_saving_data	function
F triplet		mf_formatted_text	function
F tripletpoints		mf_get_outline_text	function
F vprint		mf_graphic_text	function
boolean	function	mf_inject_blob	function
cleaned	function	mf_made_text	function
dataset	function	mf_named_color	function
datasets	function	mf_outline_text	function
F load		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_some_text	function
fromhash	function	mf_start_saving_data	function
get	table	mf_stop_saving_data	function
F boolean		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 function	number	function
getmacro		numeric	function
gettoks	function	pair	function
graphformat	function	pairpoints	function

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

F boolean

# mplib (extra tex)

execute	function	scan_cmykcolor	function
fields	function	scan_color	function
finder	function	scan_expression	function
finders	table	scan_next	function
F file		scan_number	function
F mpstemplate		scan_numeric	function
finish	function	scan_pair	function
get_boolean	function	scan_string	function
get_number	function	scan_symbol	function
get_numeric	function	scan_token	function
get_path	function	scan_transform	function
get_string	function	solve_path	function
new	overloaded function	statistics	function
pen_info	function	version	function
scan_boolean	function		

### noads (context)

F render

handlers	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		<pre>processors table</pre>		table
F italics		F	mlist_to_hlis	t
F kernpairs		Т	unscript	
F makeup		Т	unstack	
F relocate		proc	essouter	function

#### node (basic tex)

check\_discretionaries
check\_discretionary
copy
copy\_list
count
current\_attr
dimensions
direct
F check discretionaries

F check discretionary

function function function function function function tunction table F getglyphdata
F getheight
F getid
F getkern
F getlang
F getleader
F getlist
F getnucleus
F getoffsets
F getorientation
F getpenalty
F getprev
F getproperty

F getshift F getsub

F getsubtype

F getsup

F copy
F copy\_list
F count
F current\_attr
F dimensions
F effective\_glue
F end\_of\_math
F find\_attribute
F first\_glyph

F flatten\_discretionaries
F flush\_components
F flush\_list

F flush\_node
F free
F get\_attribute

F get\_properties\_table
F get\_synctex\_fields
F getattributelist
F getboth
F getbox

F getcomponents
F getdata
F getdepth
F getdirection
F getdisc
F getexpansion
F getfam

F getchar

F getfield F getfont F getglue F getwhd F getwidth F has attribute F has field F has glyph F hpack F hyphenating F insert after F insert before F is char F is direct F is glyph F is node F is valid F is zero glue F kerning

F length
F ligaturing
F mlist\_to\_hlist
F naturalwidth
F new

F last node

F new

F prepend\_prevdepth

F protect_glyph	F todirect	
F protect glyphs	F tonode	
F protrusion skippable	F tostring	
F rangedimensions	F traverse	
F remove	F traverse char	
F set attribute	F traverse glyph	
F set synctex fields	F traverse id	
F setattributelist	F traverse list	
F setboth	F unprotect glyph	
F setbox	F unprotect glyphs	
F setchar	F unset attribute	
F setcomponents	F usedlist	
F setdata	F uses font	
F setdepth	F vpack	
F setdirection	F write	
F setdisc	effective glue	function
F setexpansion	end of math	function
F setfam	family font	function
F setfield	fields	function
F setfont	find attribute	function
F setglue	first_glyph	function
F setglyphdata	fix_node_lists	function
F setheight	flatten_discretionaries	function
F setkern	flush list	function
F setlang	flush node	function
F setleader	free	function
F setlink	get_attribute	function
F setlist	<pre>get_properties_table</pre>	function
F setnext	getfield	function
F setnucleus	getglue	function
F setoffsets	getproperty	function
F setorientation	has_attribute	function
F setpenalty	has_field	function
F setprev	has_glyph	function
F setproperty	hpack	function
F setshift	hyphenating	function
F setsplit	id	function
F setsub	insert_after	function
F setsubtype	insert_before	function
F setsup	is_node	function
F setwhd	is_zero_glue	function
F setwidth	kerning	function
F slide	last_node	function
F tail	length	function

ligaturing	function	tostring	function
make_extensible	function	traverse	function
mlist_to_hlist	function	traverse_char	function
new	function	traverse_glyph	function
prepend_prevdepth	function	traverse_id	function
protect_glyph	function	traverse_list	function
protect_glyphs	function	type	function
protrusion_skippable	function	types	function
rangedimensions	function	unprotect_glyph	function
remove	function	unprotect_glyphs	function
set_attribute	function	unset_attribute	function
setfield	function	usedlist	function
setglue	function	uses_font	function
setproperty	function	values	function
slide	function	vpack	function
subtypes	function	write	function
tail	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 getdirection F getdisc F append F apply F getdiscretionary F applyvisuals F getexpansion F check discretionaries F getfam F concat F getfield F copy F aetfont F copy list F getglue F getglyphdata F copy no components F copy node F getheight F copy\_only\_glyphs F getid F copy properties F getkern F copyvisual F getlang F getlanguage F count 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 getprev F firstcharacter F getprop F firstcharinbox F getruledata F firstglyph F getshift F flatten discretionaries F getsub F getsubtype F flush F flush components F getsup

F flush list

F getsurround

F getvalue F fraction F getwhd F glue F getwidth F gluespec F has attribute F glyph F has field F hlist F italickern F has glyph F hpack F kern F hyphenating F latelua F leader F insert after F insert before F leftmarginkern F insert list after F leftskip F is direct F lineskip F is display math F literal F mathchar F is node F mathtextchar F is\_nut F is zero glue F negatedglue F ischar F noad F isdone F originliteral F outlinerule F isglyph F pageliteral F kerning F last node F penalty F leftmarginwidth F radical F length F rawliteral F ligaturing F register F link F restore F linked F rightmarginkern F locate F rightskip F mlist to hlist F rule F nestedtracedslide F save F new F savepos F setmatrix T pool F accent F shrink F baselineskip F stretch F subbox F boundary F choice F submlist F cleanup F temp F delim F textdir F delimiter F usage F direction T userids F directliteral N margins.inline F disc N splitters.one F emptyrule N splitters.two F fence F usernode

F userrule

F fontkern

F vlist F setfont F wordboundary F setglue F prepend F setglyphdata F processranges F setheight F processwords F setkern F protect glyph F setlang F protect\_glyphs F setlanguage F protrusion skippable F setleader F setlink F rangedimensions F setlist F rawprop F reference F setnext F rehpack F setnucleus F remove F setoffsets F repackhlist F setorientation F replace F setpenalty F rightmarginwidth F setprev T rules F setprop T ruleactions F setruledata F box F setshift F draw F setsplit F fill F setsub F mp F setsubtype F stroke F setsup F userrule F setsurround F set attribute F setunsetattributes F set synctex fields F setvalue F setattr F setvisual F setattribute F setvisuals F setattributelist F setwhd F setattributes F setwidth F setattrlist F slide F sethoth F somepenalty F setbox F somespace F setboxglue F splitbox F setchar F striprange F setcomponents F tail F setdata F takeattr F setdepth F takebox F setdirection F takelist F setdisc F theprop F setdiscretionary F tonode F setexpansion F tonodes F setfam F tonut

F tosequence

F setfield

F tostring		S name	
F tracedslide		T namespace	
F traverse		N attribute	
F traverse_char		D data	
F traverse_glyph		F enable	
F traverse_id		F handler	
F traverse_list		F register	
T traversers		D registered	
F boundary		D values	
F char		F processor	
F dir		points	function
F disc		pool	table
F glue		F baselineskip	
F glyph		F cleanup	
F hlist		F directliteral	
F list		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 tohpack		F restore	
F tonodes		F rule	
F tovbox		F save	
F tovpack		F savepos	
F unprotect_glyph		F setmatrix	
F unprotect_glyphs		F special	
F unset_attribute		F usage	
F unsetattribute		F vlist	£
F unsetattributes		prepend	function function
F untracedslide		print	table
F use_components		processors	table
F used fort		F contribute_filter B enabled	
F uses_font F vianodes		F hpack filter	
F vianoues F vianuts		· =	
F vianuts		<pre>F post_linebreak_filter F pre linebreak filter</pre>	
F write		F tracer	
packlist	function	properties	table
penaltycodes	data table	T data	cab cc
plugindata	table	protect_glyph	function
F finalizer		protect_glyphs	function
F initializer		protrusion skippable	function
. 1101001101		L	

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	
setleader	function	F new	
setlink	function	F prependaction	
setlist	function	F removeaction	
setnext	function	F replaceaction	
setprev	function	F restart	
setunsetattributes	function	F setaction	
shifts	table	F showactions	
D data		F table	

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 glyph	
F string		і усурп	
F string F unicodes		F list	
•			
F unicodes		F list	table
F unicodes T colors		F list F node	table
F unicodes T colors F reset		F list F node typesetters	table
F unicodes T colors F reset F set		F list F node typesetters F hbox	table
F unicodes T colors F reset F set F setlist		F list F node typesetters F hbox F hpack	table
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register		F list F node typesetters F hbox F hpack F tohbox F tohpack F tonodes	table
F unicodes T colors F reset F set F setlist F fontchar T frequencies		F list F node typesetters F hbox F hpack F tohbox F tohpack	table
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register		F list F node typesetters F hbox F hpack F tohbox F tohpack F tonodes	table
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule		F list F node typesetters F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack	
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts		F list F node typesetters F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph	function
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule		F list F node  typesetters F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph unprotect_glyphs	function function
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule F resetproperties		F list F node  typesetters  F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph unprotect_glyphs unset_attribute	function function function
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule F resetproperties F rule		F list F node typesetters  F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph unprotect_glyphs unset_attribute unsetattribute	function function function function
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule F resetproperties F rule F setlist		F list F node typesetters F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph unprotect_glyphs unset_attribute unsetattribute	function function function function function
F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule F resetproperties F rule		F list F node typesetters  F hbox F hpack F tohbox F tohpack F tonodes F tovbox F tovpack F vpack unprotect_glyph unprotect_glyphs unset_attribute unsetattribute	function function function function

uses\_font vianodes vianuts visualizebox visualizers table

function function function function

F register F setfont F setlayer F setruledglyph

F setvisual

F attribute T attributes F box F handler F markfonts

vpack function whatcodes data table whatsitcodes data table write function

### number (context)

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

# package (basic lua)

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

D tables

F registerunit

#### pngdecode (context)

applyfilter function
expand function

interlace function
splitmask function

## 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	
F author	function	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 writers table F showdatasetauthors F showdatasetcompleteness F author

F showdatasetauthors
F showdatasetcompleteness
F showdatasetfields
F showentry
F showfields
F showhashedauthors

F author
F keyword
F pagenumber
F range

## 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)

allprefixes	function	findpath	function
appendhash	function	findpk	function
automount	function	findtexfile	function
automounted	table	findwildcardfile	function
booleanvariable	function	findwildcardfiles	function
		formatofsuffix	
cacheversion checkedvariable	string function	formatofsuffix formatofvariable	function 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
${\it expanded path list from variable}$	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	function	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 locateformat function 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 encodecomment F fetchtable F preprocessed F install setdynamic function F processmk setenv function F processmkli 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 function popextrapath function stoptimina 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 function renewcache function variable function repath reset function variableofformat function variableofformatorsuffix function resetextrapaths function

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 F disable F enable	table	hash injectors inserters	table data table table
F handler		F nobreakspace_aft	er
categorytonumber	data table	F nobreakspace_bef	ore
colors	data table	F space_after	
decomposehangul	function	F space_before	
defaults	table	F zerowidthspace_a	fter
N inter_char_half	alf_shrink_factor F zerowidthspace_before		efore
N inter_char_half_stretch_factor installdataset function		function	
N inter_char_hang	ul_penalty	installmethod	function
N inter_char_quar	ter_shrink_factor	numbertocategory	data table
N inter_char_quar	ter_stretch_factor	numbertodataset	data table
N inter_char_shri	nk_factor	numbertohandler	data table
N inter_char_stretch_factor		reset	function
N inter_word_stre	tch_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	readinteger1_le	function
readcardinal1le	function	readinteger2	function
readcardinal2	function	readinteger2_le	function
readcardinal2le	function	readinteger3	function
readcardinal3	function	readinteger3_le	function
readcardinal3le	function	readinteger4	function
readcardinal4	function	readinteger4_le	function
readcardinal4le	function	readintegertable	function
readcardinaltable	function		

#### socket (extra lua)

S content-location

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

S reporting-mta

S resent-	bcc	protect	function
S resent-	сс	report	function
S resent-	date	select	function
S resent-	from	sink	function
S resent-	message-id	sinkt	table
S resent-	reply-to	F close-when-d	one
S resent-	sender	F default	
S resent-	to	F http-chunked	
S retry-a	fter	F keep-open	
S return-	path	skip	function
S sender		sleep	function
S server		source	function
S smtp-re	mote-recipient	sourcet	table
S status		F by-length	
S subject		F default	
S te		F http-chunked	
S to		F until-closed	
S trailer		tcp	function
S transfe	r-encoding	tcp4	function
S upgrade		tcp6	function
S user-ag	ent	tp	table
S vary		N TIMEOUT	
S via		F connect	
S warning		try	function
S will-re	try-until	udp	function
S www-autl	henticate	udp4	function
S x-maile	r	udp6	function
F lower		url	table
F normalize	!	F absolute	
http	table	F build	
N TIMEOUT		F build_path	
S USERAGENT	•	F escape	
F genericfo	rm	F parse	
F open		F parse_path	
F request		F unescape	
newtry	function		

## sorters (context)

basicsorter	function	B pm	
comparers	table	B uc	
F basic		B zc	
constants	table	B zm	
S defaultdigits		definitions	data table
S defaultlanguag	e	firstofsplit	function
S defaultmethod		packch	function
N digitsmaximum		packuc	function
N digitsoffset		replacementlist	function
N ignoredoffset		setlanguage	function
N replacementoff	set	sort	function
T validmethods		splitters	table
B ch		F utf	
B mc		strip	function
B mm		tracers	data table
Врс		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
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
initializa	function		

# string (basic lua)

autodouble	function	quote	function
autosingle	function	quoted	function
booleanstring	function	rep	function
byte	function	replacenewlines	function
bytepairs	function	reverse	function
bytes	function	split	function
bytetable	function	splitlines	function
char	function	splitup	function
characterpairs	function	strip	function
characters	function	sub	function
checkedsplit	function	tformat	function
collapsespaces	function	toHEX	function
containsws	function	toboolean	function
count	function	tobytes	function
dump	function	tocontext	function
escapedpattern	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
packsize	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 data
T numbers		F define
F ordered		F found
F postpone		F get
F resetpostponed		F filter
F restore		F filterdefault
F save		D filters
F setstate		D flaginternals
D states		F from
F store		D functions
pages	table	F get
F allmarked		F getcurrentmetadata
F analyze		F getcurrentprefixspec
D collected		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		F mark S outermethod
F checkedprogram F checkedrealpage		S outermethod D pages
F checkedprogram F checkedrealpage F checkedurl		S outermethod D pages U prefixsplitter
F checkedprogram F checkedrealpage F checkedurl D collected		S outermethod D pages U prefixsplitter D productdata
F checkedprogram F checkedrealpage F checkedurl D collected U componentsplitter		S outermethod D pages U prefixsplitter D productdata T programs
F checkedprogram F checkedrealpage F checkedurl D collected U componentsplitter F currentmetadata		S outermethod D pages U prefixsplitter D productdata T programs T data
F checkedprogram F checkedrealpage F checkedurl D collected U componentsplitter F currentmetadata F currentorder		S outermethod D pages U prefixsplitter D productdata T programs T data F define
F checkedprogram F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get
F checkedprogram F checkedrealpage F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset F define		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage
F checkedprogram F checkedural D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter
F checkedprogram F checkedrealpage F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined D derived		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter D referred
F checkedprogram F checkedural D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined D derived F enhance		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter D referred F referredpage
F checkedprogram F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined D derived F enhance D executers		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter D referred F referredpage F registerfinalizer
F checkedprogram F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined D derived F enhance D executers F expandcurrent		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter D referred F referredpage F registerfinalizer F registerinitializer
F checkedprogram F checkedurl D collected U componentsplitter F currentmetadata F currentorder D currentset F define D defined D derived F enhance D executers		S outermethod D pages U prefixsplitter D productdata T programs T data F define F get F realpageofpage U referencesplitter D referred F referredpage F registerfinalizer

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	<b>sections</b> table
F special operation	F autodepth
F special operation with argum	nents F cct
T testspecials	D collected
F deltapage	F current
Fi	F currentblock
F internal	F currentid
F page	F currentlevel
F realpage	F currentsectionindex
F section	F depthnumber
F userpage	F finddata
D tobereferred	F findnumber
D tobesaved	F fullnumber
D tracedpages	F getcurrentlevel
T urls	F getlevel
T data	F getnumber
F define	F internalreference
F found	D levelmap
F get	D levels
F untex	F matchingtilldepth
D usedinternals	F numberatdepth
D usedviews	F numbers
F valid	F popblock
registers table	·
F analyze	F pushblock
D collected	F register
F compare	D registered
F define	F reportstructure

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

F registerused

F settablecell

F settabulatecell	F start
F settagdelimitedsymbol	F stop
F settagsubsentencesymbol	F strip
F setupexport	D taglist
F setuserproperties	T usewithcare
D specifications	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	gethelptext	function
F getbox		getinteraction	function
F getdimensions		getlccode	function
F save		getlist	function
F use		getlocallevel	function
catcode	table	getmath	function
conditionals	data table	getmathcode	function
constants	data table	getmathcodes	function
count	table	getmuglue	function
cprint	function	getmuskip	function
ctdcatcodes	number	getnest	function
ctxcatcodes	number	getpagestate	function
definefont	function	getsfcode	function
delcode	table	getskip	function
dimen	table	gettoks	function
directives	data table	getuccode	function
enableprimitives	function	glue	table
error	function	hashtokens	function
extraprimitives	function	ifs	data table
fatalerror	function	inicatcodes	number
fontidentifier	function	isattribute	function
fontname	function	isbox	function
force_synctex_line	function	iscount	overloaded function
force_synctex_tag	function	isdefined	function
forcehmode	function	isdimen	overloaded function
fprint	function	isglue	function
get	function	ismuglue	function
<pre>get_synctex_line</pre>	function	ismuskip	overloaded function
get_synctex_mode	function	isskip	overloaded function
get_synctex_tag	function	istoken	function
getattribute	function	istoks	function
getbox	function	lccode	table
getboxresourcebox	function	linebreak	function
getboxresourcedimensions	function	lists	table
getcatcode	function	luacatcodes	number
getcount	function	magicconstants	table
getdelcode	function	N maxdimen	
getdelcodes	function	N running	

N trueinch		setlist	function
mathcode	table	setmath	function
modes	data table	setmathcode	function
muglue	table	setmathdir	function
muskip	table	setmuglue	function
nest	table	setmuskip	function
nilcatcodes	number	setnest	function
notcatcodes	number	setpardir	function
number	function	setsfcode	function
primitives	function	setskip	function
print	function	settextdir	function
prtcatcodes	number	settoks	function
resetparagraph	function	setuccode	function
romannumeral	function	sfcode	table
round	function	shipout	function
runtoks	function	show_context	function
saveboxresource	function	skip	table
scale	function	sp	function
scantoks	function	splitbox	function
set	function	sprint	function
set_synctex_line	function	systemmodes	data table
set_synctex_mode	function	takebox	function
set_synctex_no_files	function	texcatcodes	number
set_synctex_tag	function	toks	table
setattribute	function	tpacatcodes	number
setbox	function	tpbcatcodes	number
setboxdir	function	tprint	function
setcatcode	function	trackers	data table
setcount	function	triggerbuildpage	function
setdelcode	function	txtcatcodes	number
setdimen	function	type	function
setglue	function	uccode	table
setglyphdata	function	uprint	function
setinteraction	function	useboxresource	function
setlccode	function	vrbcatcodes	number
setlinedir	function	write	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)

closeinput function write function write\_nl function

## token (basic tex)

biggest_char	function	new	function
command_id	function	put_next	function
commands	function	scan_argument	function
create	function	scan_char	function
expand	function	scan_code	function
future_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_token_code	function
get_next_token	function	scan_tokenlist	function
get_protected	function	scan_toks	function
get_tok	function	scan_word	function
gobble_dimen	function	set_char	function
gobble_int	function	set_lua	function
is_defined	function	set_macro	function
is_next_char	function	to_string	function
is_token	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 U dostarttext compile function constant function 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

	£			
create	function	F list		
defined	function		F lxmlid	
egroup	userdata	F number	F number	
getters	table	F real		
F box		F scanclo	se	
F count		F scanope	en	
F dimen		F skip		
F glue		F string		
F macro		F table		
F meaning		F token		
F skip		F tokenco	ode	
F token		F tokenli	.st	
hbox	userdata	F tokens		
isdefined	function	F toks		
istoken	function	F verbati	.m	
letter	function	F whd		
letters	function	F word		
new	function	setters	table	
other	function	F box		
pickup	function	F char		
presets	table	F count		
T 1 string		F dimen		
T 2 strings		F glue		
T 3 strings		F lua		
T 4 strings		F macro		
T 5 strings		F skip		
T 6 strings		shortcuts	table	
T 7 strings		T bits		
T 8 strings		N activ	e	
printlist	function	N align	ment	
scanners	table	N begin	group	
F argument		N chara	cter	
F boolean		N close		
F code		N comment		
F condition	al	N endgroup		
F count		N endofline		
F csname		N escape		
F dimen		N ignore		
F dimension		N invalid		
F float		N letter		
F glue		N mathshift		
F integer		N open		
F keyword		N other		
F keywordcs		N param	eter	
		•		

N space	F tokencode
N subscript	F tokenlist
N superscript	F tokens
N whitespace	F toks
N close	F verbatim
Finspect	F whd
N open	F word
F report	F scannumber
F scanargument	F scanopen
F scanboolean	F scanstring
F scanclose	F scantable
F scancode	F scantokenlist
F scanconditional	F scanverbatim
F scancsname	F scanword
F scandimen	F toboolean
F scandimension	F todimen
F scaninteger	T tokens
F scankeyword	F astable
F scankeywordcs	U bgroup
F scanlist	T cache
T scanners	U NC
F argument	U NR
F boolean	U bf
F code	U color
F conditional	U colordefalc
F count	U colordefflc
F csname	U colordefflt
F dimen	U colordefrlt
F dimension	U dofinishreference
F float	U dostarttext
F glue	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
F scanopen	U rlap
F skip	U scratchcounter
F string	U scratchdimen
F table	U scratchmuskip
F token	U scratchskip

U scratchtoken U hbox U secondoftwoarguments F isdefined U setfalsevalue F istoken F letter U setsectionblock U setupsystem F letters F new U startcolumns U starttabulate F other II starttitle F pickup U startxtitle T presets U stopcolumns F printlist U stoptabulate T setters F box U stoptitle U stopxtitle F char U texsetup F count U xmlw F dimen T collectors F glue F defaultwords F lua F dowithwords F macro F flush F skip T shortcuts F install 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 scanclose S toboolean F scancode S todimen F scanconditional S toglue F scancsname F scandimen S tonumber S tostring F scandimension F create F scaninteger F defined F scankeyword F scankeywordcs U egroup T getters F scanlist F box F scannumber F count F scanopen F dimen F scanstring F glue F scantable F macro F scantokenlist F meaning F scanverbatim F scanword F skip F token F toboolean

F todimen
F tonumber
F tostring
U vbox

U vtop

F tonumber F tostring

vbox userdata
vtop userdata

#### tracers (context)

count function
cs function
dimen function
knownlist function
lists table

T context

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	table			
		F installhandler		
F set	table	F processmath		
breakpoints	tabte	F set		
F define		F setcolor		
F handler		F setmath		
D mapping		F tomode	±-61-	
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 addanchortoline	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	table	F appry F register	
F handler		F reset	
F keepligature		F split	
		F startapply	
D mapping F set		F startappty F stopapply	
manipulators	table	F stripped	
•	cabte	F tostring	
F apply F applyspecific	ation	rubies	table
T methods	acton	F attach	tabte
F Word		F check	
F Words		showsuspects	function
F abbreviatedj	aumal.	spacings	table
F expandedjour		F define	tabte
F lowercase	IIdt	F derine F handler	
F stripperiod		D mapping	
F uppercase		T numbers	
T patterns		T frenchpunct	uation
U list		T character	
U pair		S name	•
F splitspecific	ation	N number	
margins	table	F reset	
F finalhandler	cabic	F set	
F globalhandler		F setup	
F localhandler		wrappers	table
F save		F handler	10010
marksuspects	function	xtables	table
paragraphs	table	F cleanup	
F addanchortoli	ne	F construct	
F addtoline		F create	
F calculatedelta	a	F finish row	
F checkline		F flush	
F handler		F initialize_co	nstruct
F moveinline		F initialize_re	flow_height
F normalize		F initialize_re	flow_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)

function	hashed	function
function	hasscheme	function
function	query	function
function	split	function
function	toquery	function
function	unescape	function
function	unescapeget	function
	function function function function function	function hasscheme function query function split function toquery function unescape

# utf8 (context)

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

# utilities (context)

dohuggor	table	г.,	d+a	
debugger F disable	table		readtag	
F disable			etposition size	
F savestats			kip	
F showstats			kiplong	
F showtraceback files	table		kipposition	
F close	table		kipshort	
			ritebyte	
F getposition			ritecardinal1	
F getsize			ritecardinal1le	
F look			ritecardinal2	
F open			ritecardinal2le	
F read2dot14			ritecardinal3	
F readbyte			ritecardinal3le	
F readbytes			ritecardinal4	
F readbytetable			ritecardinal4le	
F readcardinal			riteinteger1	
F readcardinal1			riteinteger1le	
F readcardinal1le			riteinteger2	
F readcardinal2			riteinteger2le	
F readcardinal2le			riteinteger3	
F readcardinal3			riteinteger3le	
F readcardinal3le			riteinteger4	
F readcardinal4			riteinteger4le	
F readcardinal4le			ritestring	
F readcardinaltable		forma		table
F readchar			ormatcolumns	
F readfixed2		Fl	ist	
F readfixed4			tripzeros	
F readinteger			gecollector	table
F readinteger1		Fc	heck	
F readinteger1le		N c	riterium	
F readinteger2		Ве	enabled	
F readinteger2le		lua		table
F readinteger3		Ва	lwaysstripcode	
F readinteger3le		Fc	checkmemory	
F readinteger4		Fc	compile	
F readinteger4le		Fl	oadedluacode.	
F readintegertable		Fl	oadstring.	
F readsignedbyte		Fl	oadstripped.	
F readstring		N n	ofstrippedbytes	

N nofstrippedchunks	B rightpage
F registerfinalizer	B text
B stripcode	F iterator
T strippedchunks	F keq to hash
F strippedloadstring	F listitem
T suffixes	F make settings to hash pattern
S lua	F mergehashes
S luc	F options to array
S lui	F options to hash
S luj	T patterns
S luv	U settings to array
S tma	U settings_to_hash_a
S tmc	U settings_to_hash_b
S tua	U settings to hash c
S tuc	U settings_to_hash_d
<pre>packers table</pre>	U unittotex
F hashed	F process_stripped_settings
F new	F rfc4180splitter
F pack	F runtime
F simplehashed	F settings_to_array
F strip	F settings_to_array_obey_fences
F unpack	F settings_to_array_with_repeat
N version	F settings_to_hash
<pre>parsers table</pre>	F settings_to_hash_colon_too
F add_settings_to_array	F settings_to_hash_strict
F arguments_to_table	F settings_to_hash_tolerant
F array_to_string	F settings_to_numbers
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_settings_to_array
T min,max,fit,broad,auto	F totime
B auto	F unittotex
B broad	F unittoxml
B fit	<b>randomizer</b> 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

F setseedi		F open
report	function	F openstring
sequencers	table	F read2dot14
F appendaction		F read2dot4
F appendgroup		F readbyte
F compile		F readbytes
F disableaction		F readbytetable
F disablegroup		F readcardinal
F enableaction		F readcardinal1
F enablegroup		F readcardinal2
D functions		F readcardinal2le
F localize		F readcardinal3
F new		F readcardinal3le
F nodeprocessor		F readcardinal4
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		<b>strings</b> table
F setinitializer		F collapse
F sparse		F collapsecrlf
streams	table	T formatters
F close		F add
F getposition		F new
F getstring		F newcollector
F look		F newrepeater

F nice F insertbeforevalue T striplinepatterns F migratetable U collapse F removevalue F replacevalue U prune templates table U prune and collapse U prune and no empty F load U prune and to space F replace U retain F replacer U retain and collapse F resolve U retain and no empty zipfiles table F close F striplines F found F striplong F tabtospace F gunzipfile T tracers F hash tables table F list F accesstable F open F definedtable F unzip F definetable F unzipdir

F zipdir

F encapsulate

F insertaftervalue

## 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		

# xcomplex (context)

I	userdata	F pow
add	function	F proj
div	function	F real
eq	function	F sin
inde	ex table	F sinh
UI		F sqrt
F	_add	F tan
F	-	F tanh
F		F topair
Т_	_index	F tostring
U		F voigt
	add	F voigt_hwhm
	div	Fmul
	eq	Sname
F	mul	Fpow
S	name	Fsub
	pow	Ftostring
	sub	Funm
F	tostring	F abs
F	unm	F acos
F	abs	F acosh
F	acos	F arg
F	acosh	F asin
F	arg	F asinh
	asin	F atan
	asinh	F atanh
	atan	F conj
	atanh	F cos
	conj	F cosh
	COS	F dawson
	cosh	F erf
	dawson	F erfc
	erf	F erfcx
	erfc	F erfi
	erfcx	F exp
	erfi	Ui
	exp	F imag
U		F log
	imag	F new
	log	F pow
F	new	F proj

	cos	function
	cosh	function
	dawson	function
	erf	function
	erfc	function
	erfcx	function
	erfi	function
	exp	function
	i	userdata
m	imag	function
function	log	function
string	new	function
function	pow	function
function	proj	function
function	real	function
function	sin	function
function	sinh	function
function	sqrt	function
function	tan	function
function	tanh	function
function	topair	function
function	tostring	function
function	voigt	function
1	string function	Cosh   dawson   erf   erfc   erfc   erfcx   erfi   exp   i   imag   function   log   string   new   function   pow   function   proj   function   real   function   function   sin   function   function   sinh   function   function   tanh   function   function   tanh   function   function   tanh   function   function   topair   function   tostring

function

function

atanh conj voigt\_hwhm function

# xmath (context)

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

## xml (context)

addentitiesdoctype	function	F padding	
addspecialcode	function	F stylevalue	
after	function	F todimension	
all	function	defaulthandlers	table
applylpath	function	D file	
applyselector	function	D parsedxml	
assign	function	D string	
attribute	function	D tex	
badinclusions	function	D texline	
before	function	D texspace	
body	function	D verbose	
builtinentities	table	defaultprotocol	string
B amp		delete	function
B apos		<del>delete_element</del>	function
B gt		despecialized	function
B lt		each	function
B quot		each_element	<del>function</del>
cdata	function	elements	function
cdatatotext	function	elementtocdata	function
checkbom	function	empty	function
checkerror	function	entities	data table
checknamespace	function	erase	function
checkns	function	errorhandler	function
cleansed	function	escaped	function
collect	function	expressions	table
<pre>collect_elements</pre>	<del>function</del>	F boolean	
collect_tags	function	F child	
collect_texts	<del>function</del>	F contains	
collected	function	F count	
collecttexts	function	F error	
content	function	F find	
convert	function	F hasclass	
сору	function	F idstring	
count	function	F lower	
cprint	function	F name	
css	table	F number	
F applyselector		F oneof	
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
Fatt		injectbefore	function
F attribute		insert	function
F attributes		insert_element	function
F cdata		<del>insert_element_after</del>	function

insert_element_before	function	registerns	function
insertafter	function	reindex	function
insertbefore	function	remap name	function
insertcdata	function	remap_namespace	function
insertcomment	function	remap_tag	function
inspect	function	remap_tag remapname	function
is_valid	function	remaphamespace	function
kind	function	remaphamespace	function
last	function	rename	function
lastmatch	function	renamespace	function
load	function	reparsedentitylpeg	userdata
lpath	function	replace	function
lpathcached	function	replace_element	function
	function	<del>-</del>	function
lpathcalls lshow	function	resetinjectors resolvens	function
makestandalone	function		function
match	function	root	function
		save selection	
name newhandlers	function function		function function
		separate serialize	
nodesettostring	function		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

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)

archives table
closearchive function

openarchive function
registeredfiles table

#### zlib (extra lua)

adler32 function
compress function
compressobj function
crc32 function

decompress function
decompressobj function
version function