catcodes characters chemistry command containers context converters corouting ctxrunner debug dir dircodes directive document documentdata drivers environme experiments ffi figures file fio floats fonts functions global graphics gzip ima interactions interfaces io job la languages layouts <a href="https://libraries.lmx">libraries</a> lmx logs peg ltn12 lua luatex lxml math mathemat md5 metapost mime moduledata modules mp m noads mode nodes number objects os pack pagebuilders parametersets pdf pdfe pdfsc physics publications regimes resolvers sa scripts set sha2 sio socket sorters stati storage streams **string** structures texconditionals texconfig texconsta texifs texisdefined texmodes

texsystemmodes thirddata token tokens tra

trackers typesetters updaters url userd

utf8 utilities vf visualizers xml zip z

MP attributes backends bit32 blobs bool

buffers builders caches callback callba

### global (alias: \_G)

**FFISUPPORTED** 

**LUAMAJORVERSION** 

**INITEXMODE** 

debug

dimen

LUAMINORVERSION	number	dofile
LUATEXCOREVERSION	number	drivers
LUATEXENGINE	string	environment
LUATEXFUNCTIONALITY	number	error
LUATEXVERSION	number	experiments
LUAVERSION	number	ffi
MP	function	ffilib
_LUAVERSION	number	figures
anywhere	function	file
arg	table	fio
assert	function	floats
attributes	table	flushpdfimage
backends	table	font
bit32	table	fonts
blobs	table	frozen
blockrequire	function	functions
boolean	table	getmetatable
buffers	table	global
builders	table	<pre>grammar_parsed_text_one_nop</pre>
caches	table	grammar_parsed_text_one_yes
callback	table	grammar_parsed_text_two_nop
callbacks	table	grammar_parsed_text_two_yes
catcodes	table	grammar_unparsed_text_nop
characters	table	grammar_unparsed_text_yes
checkimage	function	graphics
chemistry	table	gregorian_to_jalali
collectgarbage	function	gzip
commands	table	images
containers	table	img
context	function	inspect
converters	table	interactions
coroutine	table	interfaces
createmask	function	io
ctxrunner	table	ipairs

table

function

function

boolean

number

directives

documentdata

document

ta

ta

ta

fι ta ta fι ta ta fι ta

ta ta fι ta ta bc

fι ta us us us us us us ta

ta ta ta fι ta ta

fι

fι

jalali\_to\_gregorian

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

table

function

toboolean

token

fι

ta

physics

poporientation

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

# attributes (context)

applyoverloads	function	N main	
colorintents	table	S model	
N attribute		D models	
D data		F mpcolor	
F enable		F mpnamedcolo	r
F handler		F mpoptions	
F register		F namedcolora	ttributes
D registered		N none	
colors	table	F popset	
N attribute		F processcolo	rcomponents
F cmyk		F pushset	
F cmyktogray		F register	
F cmyktorgb		D registered	
F colorcomponent	:s	F registerspo	tcolor
D counts		F rgb	
B couple		F rgbtocmyk	
F currentmodel		F rgbtogray	
F currentnamedmo	odel	F rgbtohsv	
D data		N selector	
N default		F setlist	
F defineintermed	Hiatecolor	F setmodel	
F definemultiton	necolor	F setpagecolo	rmodel
F defineprocesso	color	D sets	
F definesimplegr	ay	F spec	
F definespotcolo	or	F spot	
F definetranspar	rency	F spotcolorna	me
F enable		F spotcolorpa	rent
F filter		F spotcolorva	lue
N forced		B supported	
F forcedmodel		F toattribute	s
F forcesupport		F transparenc	ycomponents
F formatcolor		B triggering	
F formatgray		F usecolors	
F getpagecolormo	odel	D valid	
F gray		F value	
F graytohsv		D values	
F handler		B weightgray	
F hsvtogray		define	function
F heytorah		effects	table

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> numbe
states	table	<b>viewerlayers</b> table
F disabletrigger	ring	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

N colordodge

F resolve\_reset

F resolve\_step
D scopes

F enable

F forcesupport

F handler

T names

F stop D values

B supported

# backends (context)

 ${\sf F} \ {\sf exportformdata}$ 

E fieldsurrounding

codeinjections	table	F	getdefaultfieldvalue
F boxresourcedim	ensions	F	getfieldcategory
F registerboxres	ource	F	getfieldset
F restoreboxreso	urce	F	getformatoption
current	string	F	getinfo
defaults	table	F	getoutputfilename
T codeinjections		F	getpreviewfigure
F getpagedimen	sions	F	insertrenderingwindow
F lmtxmode		F	mergebookmarks
F setpagedimen	sions	F	mergecomments
T nodeinjections		F	mergefields
T registrations		F	mergereferences
D tables		F	mergeviewerlayers
included	table	F	prerollreference
B context		F	presetsymbol
B date		F	presetsymbollist
B id		F	print
B metadata		F	processrendering
B pdf		F	registerdocumentcloseaction
install	function	F	${\tt register document open action}$
nodeinjections	table	F	registeredsymbol
F restore		F	registerpagecloseaction
F save		F	registerpageopenaction
F transform		F	registersymbol
nothing	function	F	setfieldcalculationset
pdf	table	F	setfigurealternative
T codeinjections		F	setfigurecolorspace
F addbookmarks		F	setfiguremask
F analyzenorma	lsymbol	F	setformat
F analyzesymbo	l	F	setformsmethod
F attachmentid		F	setpagetransition
F clonefield		F	setupcanvas
F definefield		F	setupidentity
F definefields	et	F	setxmpfile
F defineviewer	layer	F	startlayer
F embedfile		F	startunicodetoactualtext
F enabletags		F	startunicodetoactualtextdirect

F stoplayer

E stanuni sadataastual taxt

F unicodetoactualtext	F reference	
F useviewerlayer	F rgbcolor	
F validfield	F spotcolor	
F validfieldcategory	F startlayer	
F validfieldset	F startstacked	llayer
S comment	F stoplayer	
T nodeinjections	F stopstacked	ayer
F addtags	F transparency	′
F annotation	F typesetfield	i
F attachfile	T registrations	
F changestackedlayer	F cmykindexcol	or
F cmykcolor	F cmykspotcolo	or
F comment	F getspotcolor	reference
F destination	F grayindexcol	or
F effect	F grayspotcolo	or
F graycolor	F rgbindexcolo	or
F injectbitmap	F rgbspotcolor	-
F insertmovie	F spotcolornam	ne
F insertsound	F transparency	′
F insertswf	T tables	
F insertu3d	D vfspecials	
F knockout	registrations	table
F negative	tables	table
F overprint	timestamp	function
F positive		

# 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
ctrhd	function		

### boolean (context)

tocontext function
tonumber function

# buffers (context)

append	function
assign	function
collectcontent	function
erase	function
exists	function
get	function
getcontent	function
getlines	function
gettexbuffer	function
loadcontent	function
parallel	table

F define
F hassomecontent
F next
F place
F reset
F save

prepend function
raw function
run function
samplefile function

function

undent

### builders (context)

checksidefloat	function		F split	
kernel	table		F start	
F hyphenating			F stop	
F hyphenation		F	tag	
F kerning		prof	iling	table
F ligaturing		F	add	
F mlist_to_hlist		F	distance	
paragraphs	table	F	fixedprofile	
T constructors		F	get	
N attribute		F	list	
F define		F	pagehandler	
F disable		F	profilebox	
F enable		F	set	
F handler		vspa	cing	table
T methods		F	analyze	
F basic		D	categories	
F default		F	collapsevbox	
F hpack		Т	data	
F oneline			D map	
D names			D skip	
D numbers			D snapmethods	
F set		F	definesnapmetho	od
F start		В	fixed	
F stop		F	forcepageflush	
T expansion		F	forcestrutdepth	ı
F trace		F	getnofprevious	lines
F keeptogether		F	pagehandler	
F registertogethe	er	F	pageoverflow	
T solutions		F	setmap	
T splitters		F	setskip	
F define		F	snapbox	
F optimize		F	synchronizepage	9
T registered		F	tocategories	
F reset		F	tocategory	
F set		F	vboxhandler	

# caches (context)

ask	boolean	is_
base	string	loa
collapsecontent	function	loa
configfiles	function	mor
contentstate	function	rel
defaults	table	sav
define	function	sav
direct	boolean	set
force	boolean	set
getfirstreadablefile	function	tre
getreadablepaths	function	tre
getwritablepath	function	use
hashed	function	

is_writable	function
loadcontent	function
loaddata	function
more	string
relocate	boolean
savecontent	function
savedata	function
setfirstwritablefile	function
setluanames	function
tree	string
treehash	function
usedpaths	function

# callback (basic tex)

find function
list function

register overloaded function

### callbacks (context)

freeze	function	В	hyphenate
functions	table	В	insert_local_par
F process	_rule	В	kerning
F start_p	age_number	В	ligaturing
F stop_pa	ge_number	В	linebreak_filter
known	function	В	make_extensible
list	data table	В	mlist_to_hlist
pop	function	В	new_graf
push	function	В	open_read_file
register	function	В	page_objnum_provider
report	function	В	post_linebreak_filter
supported	table	В	pre_dump
B append_	to_vlist_filter	В	<pre>pre_linebreak_filter</pre>
B build_p	age_insert	В	pre_output_filter
B buildpa	ge_filter	В	process_input_buffer
B call_ed	it	В	process_jobname
B contrib	ute_filter	В	process_output_buffer
B define_	font	В	process_pdf_image_content
B find_ci	dmap_file	В	process_rule
B find_da	ta_file	В	read_cidmap_file
B find_en	c_file	В	read_data_file
B find_fo	nt_file	В	read_enc_file
B find_fo	rmat_file	В	read_font_file
B find_im	age_file	В	read_map_file
B find_ma	p_file	В	read_opentype_file
B find_op	entype_file	В	read_pk_file
B find_ou	tput_file	В	read_truetype_file
B find_pk	_file	В	read_type1_file
B find_re	ad_file	В	read_vf_file
B find_tr	ruetype_file	В	show_error_hook
B find_ty	pel_file	В	show_error_message
B find_vf	_file	В	show_lua_error_hook
B find_wr	ite_file	В	show_warning_message
B finish_	pdffile	В	start_file
B finish_	pdfpage	В	start_page_number
B finish_	synctex	В	start_run
B font_de	scriptor_objnum_provider	В	stop_file
B glyph_n	ot_found	В	stop_page_number
R alvah s	tream provider	R	ston run

B vpack\_quality

B wrapup\_run

#### catcodes (context)

 register function

#### characters (context)

number

function

data table

activeoffset

T after\_half

T after main

adobename

bidi

5141	data tabte	i berore_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 tabl
emoji	table	is_command	data tabl
F compact		is_letter	data tabl
F known		is_mark	data tabl
F resolve		is_punctuation	data tabl
emojized	function	is_spacing	data tabl
enccodes	data table	is_symbol	data tabl
entities	data table	lcchars	data tabl
fallbacks	data table	lccode	function
filters	data table	lccodes	data tabl
fractions	table	lettered	function
fromnumber	function	lhash	data tabl
fschars	data table	linebreaks	data tabl
fscodes	data table	lower	function
getrange	function	mathlists	data tabl
graphemes	data table	mirrors	table
hangul	data table	otfscripts	data tabl
indicgroups	table	private	table
T above_mark		ranges	data tabl

registerentities

reman hangul syllahe function

function

T anudatta

T before\_half

T before\_main

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

#### chemistry (context)

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

molecule
moleculeparser
start
stop
structures
undefine
function
function
function
function
function

# containers (context)

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

#### converters (context)

chinesecapnumerals function

function

function

function

chinesenumerals

chr

chre

A	function	cn-c	function
A:es	function	convert	function
A:ru	function	decimals	function
A:sl	function	define	function
AK	function	hexstringtonumber	function
Alphabetic	function	hour	function
Alphabetic:es	function	i	function
Alphabetic:ru	function	isleapyear	function
Alphabetic:sl	function	lchexnumber	function
Character	function	lchexnumbers	function
Characters	function	leapyear	function
I	function	lower	function
KA	function	max	function
KR	function	maxchrs	function
R	function	minute	function
RK	function	month	function
Romannumerals	function	nicenumber	function
Russiannumerals	function	nofdays	function
Sloveniannumerals	function	number	function
Spanishnumerals	function	numbers	function
Word	function	octnumber	function
Words	function	octstringtonumber	function
a	function	ordinal	function
a:es	function	r	function
a:ru	function	rawcharacter	function
a:sl	function	romannumerals	function

abjadnodotnumerals function russiannumerals function abjadnumerals function second function alphabetic function sequences data table alphabetic:es function settime function alphabetic:ru sloveniannumerals function function alphabetic:sl function spaceddigits function character spanishnumerals function function characters function textime function chineseallnumerals function toabjad function

tochinese

uchevnumber

toroman

totime

function

function

function

function

verbose	table	word	function
D data		words	function
F translate		year	function
weekday	function		

### coroutine (basic lua)

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

#### ctxrunner (context)

load function prepfiles data table
preparedfile function resolve function

# dir (context)

collectpattern	function
current	function
expandname	function
found	function
glob	function
globdirs	function
globfiles	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
T commandline

data table table table function function table

D modes
D modules

D environments
D modes
D modules
T ctxfile

D environments

setargument
setcommandline
setdefaultargument
setenvironments
setfilename
setfilenames
setmodes
setmodules
variables

function
function
function
function
function
function
function
function
data table

# documentdata (context)

variable function

#### drivers (context)

F rule

```
convert
                function
                                                              S name
gethpos
                function
                                                             T pdf
getpos
                function
                                                              T actions
qetvpos
                function
                                                                F closefile
install
                function
                                                                F finalize
instances
                table
                                                                F initialize
   T lua
                                                                F openfile
     T actions
                                                                F updatefontstate
      F fetch
                                                                F wrapup
      F finalize
                                                              T flushers
      F initialize
                                                                F character
      F reset
                                                                F latelua
     T flushers
                                                                F pdfimage
      F character
                                                                F pdfliteral
      F rule
                                                                F pdfrestore
                                                                F pdfsave
     S name
                                                                F pdfsetmatrix
   T mps
     T actions
                                                                F poporientation
      F fetch
                                                                F pushorientation
      F finalize
                                                                F rule
      F initialize
                                                                F simplerule
      F reset
                                                              S name
                                                         lmtxversion number
     T flushers
                                                         prepare
                                                                         function
      F character
```

function

wrapup

# environment (context)

argument

loadluafile

function

function

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

luafile

functio

# experiments (context)

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

### figures (context)

function

applyratio

F new

E nodo

badname	function	F check	
bases	data table	F checksize	
bitmapimage	function	F copy	
boxnumber	number	F create	
cachepaths	data table	F embed	
check	function	T keys	
checkers	data table	F print	
converters	data table	F scan	
current	function	F serialize	
defaultdepth	number	T sizes	
defaultheight	number	B art	
defaultsearch	boolean	B bleed	
defaultwidth	number	B crop	
done	function	B media	
dummy	function	B none	
existers	data table	B trim	
exists	function	F totable	
formats	data table	T types	
found	data table	N jbig2	
get	function	N jp2	
getinfo	function	N jpg	
getpdfinfo	function	N memstream	
getrealpage	function	N none	
guess	function	N pdf	
guessfromstring	function	N png	
hash	function	N stream	
identifiers	data table	F wrap	
identify	function	include	function
images	table	includers	data table
Timg		initialize	function
F boxes		loaded	data table
F copy		localpaths	data table
F fields		magics	data table
F immediatewrite		mergegoodies	function
F immediatewrite	object	nofmissing	number
F keys		nofprocessed	number

F write

order

nathe

data table

data tahla

preferquality	boolean		
programs	data table		
push	function		
registerpattern	function		
registerresource	function		
registersuffix	function		
resources	data table		
scale	function		
set	function		

setlookups function
setmemstream function
setorder function
setpaths function
suffixes data table
used data table

## file (basic lua)

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

## fio (extra lua)

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

## floats (context)

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

## font (basic tex)

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

## fonts (context)

-n-1,	table	
analyzers	table	F currentfonthasfeature
D features		D designsizes
D initializers		D dontembed
D methods		F enhanceparameters
F setstate		T enhancers
D states		T afm
B useunicodemarks		F apply
checkers	table	F patch
F getmissing		T patches
F missing		F register
F placeholder		F report
cid	table	F register
F getmap		F report
F loadfile		T otf
collections	table	F addfeature
F checkenabled		F apply
F clonevector		F enhance
F define		F patch
T definitions		T patches
F found		F register
F prepare		F report
F process		F register
F registermain		F report
F report		T tfm
F reset		F apply
T vectors		F patch
constructors	table	T patches
F addcharacters		F register
F addcoreunicodes		F report
F aftercopyingcha	racters	F register
F applymanipulato	rs	F report
F assignmathparame	eters	N factor
B autocleanup		T features
F beforecopyingcha	aracters	D afm
D cache		D otf
B cacheintex		D tfm
F calculatescale		F finalize
F checkedfeatures		F getfeatureaction
E shookedfilenome		F

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_r
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

D features

T png

F topdf

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 single

F read2dot14

F readbyte

T readers

F extension

F ligature

F readcardinal1	F registerplugin
F readcardinal2	F reorderlookups
F readcardinal2le	F scriptandlanguage
F readcardinal3	F setdynamics
F readcardinal3le	F setfeatures
F readcardinal4	T statistics
F readcardinal4le	D usedfeatures
F readcardinaltable	F storepdfdata
F readchar	T svg
F readfixed2	F filterglyph
F readfixed4	F topdf
F readinteger	D svgcache
F readinteger1	B svgenabled
F readinteger2	T tables
F readinteger2le	D baselines
F readinteger3	D features
F readinteger3le	D featuretypes
F readinteger4	D languages
F readinteger4le	D scripts
F readintegertable	N version
F readsignedbyte	T pfb
F readstring	F loadvector
F readtag	T tfm
F setposition	F addtounicode
F size	D cache
F skip	D features
F skiplong	N maxnestingdepth
F skipposition	N maxnestingsize
F skipshort	T readers
F writebyte	F loadpk
F writecardinal2	F loadtfm
F writecardinal4	F loadtfmvf
F writestring	F loadvf
F stripredundant	F pktopdf
F svg	F showpk
N tableversion	F reencode
F unifymissing	F setfeatures
F unpack	N version

F registerpalette

T vf

T combinations

F combine

F readcardinal

F vhea

F vmtx

F vorg

S xheight
T properties
S autoitalicamount
S cidinfo
T effect
S ddelta
S effect
S factor
S hdelta
S hfactor
S vfactor
S wdelta
S width
S embedding
S encodingbytes
S filename
S finalized
S fontname
S format
S fullname
S hasitalics
S hasmath
S mathitalics
S mode
S name
S noglyphnames
S nostackmath
S psname
S textitalics
S virtualized
D loadedfonts
S namemode
N noffontsloaded
N nofsharedfonts
N nofsharedhashes
N nofsharedvectors
N privateoffset
D privateslots

S width

F readanddefine

F resetfeature

F registerfeature

D helpers

S shrink

S stretch

S width

F scaled		D cache	
F setfactor		F is_known	
F setfeature	F setfeature		
F setmathparamete	r	F load	
F setname		F make_unicode_vec	tor
B sharefonts		D math	
F trytosharefont		N version	
N version		enhanceid	function
current	function	expansions	data table
currentid	function	formats	data table
definers	table	getalternate	function
F addlookup		getkern	function
F analyze		getmultiple	function
F applypostproces	sors	getsubstitution	function
F checkedmode		getters	table
F checkedscript		T alternate	
F current		F opentype	
S defaultlookup		T kern	
F define		F opentype	
F getspecificatio	in	F type1	
F internal		F type3	
F loadfont		T multiple	
F makespecificati	on	F opentype	
T methods		T substitution	
F install		F opentype	
D variants		goodies	table
F read		D colorschemes	
F register		T data	
F registered		T dejavu-math	
F registersplit		S author	
F resetnullfont		S comment	
F resolve		S copyright	
T resolvers		B initialized	
F file		T mathematics	
F name		T alternates	
F spec		T dotless	
definetypeface	function	S comment	
encodings	table	S feature	
T agl		N value	
		- ·	

T kerns

S version

S name

D ctxcodes

D extras

D names

	S copyright	Т	setdynamics
	B initialized	Т	shapes
	T mathematics	D	spaces
	T alternates	D	spacings
	T dotless	Т	streams
	S comment	D	unicodes
	S feature	D	variants
	N value	D	xheights
	T kerns	help	<b>ers</b> table
	S name	F	addextraprivate
	S version	F	addprivate
D d	esignsizes	F	appendcommands
D f	ilenames	F	appendcommandtable
Fg	etcompositions	F	checkflags
Τl	ist	F	checkmerge
Fl	oad	F	checksteps
Fp	repare_features	F	collectanchors
Fr	egister	D	commands
Fr	egisterpostprocessor	F	descriptiontoslot
Fr	eport	F	dimenfactor
T s	uffixes	F	expandglyph
handl	<b>ers</b> table	Т	extraprivates
hashe	<b>s</b> table	F	fontpatternhassize
D c	haracters	F	getcoloredglyphs
D c	lasses	F	getdigitwidth
D c	snames	F	getinstancespec
D d	escriptions	F	getparameters
D d	ynamics	F	getprivatecharornode
D e	mwidths	F	getprivatenode
D e	xheights	F	getprivates
D e	xtensibles	F	getprivateslot
D f	eatures	F	hasprivate
Dі	dentifiers	F	indextoslot
Dі	talics	F	name
Dι	astmathids	F	nametoslot
D m	arks	F	prependcommands
D m	athparameters	F	prependcommandtable
D m	odes	F	privateslot

D resources

F setdigitwidth

F tochar

F splitfontpattern

S comment

D originals

D parameters T processes

F characters		protrusions	data table
F descriptions		readers	table
F glyphs		F afm	
loggers	table	F check_lua	
F add_placeholde	rs	F check_tfm	
D category_to_pl	aceholder	F lua	
F format		F ofm	
F onetimemessage		F opentype	
F register		F otf	
F reportdefinedf	onts	F pfb	
F reportusedfeat	ures	D sequence	
mappings	table	F tfm	
F addtounicode		F ttc	
F fromunicode16		F ttf	
F loadfile		F woff	
F loadline		reserveid	function
F makenameparser		select	table
D overloads		D alternatives	
F reset		F bodyfont	
F tounicode		D data	
F tounicode16		F default	
F tounicode16seq	uence	D defaults	
metapost	table	F definefallback	rfamily
F boundingbox		F definefontfami	ily
F boxtomp		F definefontfami	llypreset
F draw		D extras	
F fill		F fallback	
F maxbounds		D fallbacks	
F output		F features	
F paths		F filefallback	
F widthline		F fontdata	
F zeroline		F fontfallback	
mp	table	F fontsynonym	
D cache		F goodies	
B inline		F mathfallback	
N version		D methods	
names	data table	D presets	
nulldata	data table	F registerfallba	ack
privateoffsets	table	F registerfiles	

B keepnames
N mathbase

N mathextrabase

F registerfontalternative

F registerfontfamily

F textfallback

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

## functions (context)

**dummy** function

## graphics (context)

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

## gzip (extra lua)

closefunctionopenfunctionlinesfunctionsavefunctionloadfunctionsuffixfunction

## images (context)

img	table	serialize	function
F boxes		sizes	table
F copy		B art	
F fields		B bleed	
F immedia	tewrite	B crop	
F immedia	tewriteobject	B media	
F keys		B none	
F new		B trim	
F node		totable	function
F scan		types	table
F types		N jbig2	
F write		N jp2	
check	function	N jpg	
checksize	function	N memstre	am
сору	function	N none	
create	function	N pdf	
embed	function	N png	
keys	table	N stream	
print	function	wrap	function
scan	function		

# img (basic tex)

boxes	overloaded	function	new	overload
сору	overloaded	function	node	overload
fields	overloaded	function	scan	overload
immediatewrite	overloaded	function	types	overload
immediatewriteobject	overloaded	function	write	overload

#### 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
                                                                      table
   F setupidentity
                                                       pages
help
               table
                                                          F setpagetransition
   F collect
                                                          F setupcanvas
   F reference
                                                       references
                                                                      table
   F register
                                                          F setclosedocument
javascripts table
                                                          F setclosepage
   F addtopreamble
                                                          F setopendocument
                                                          F setopenpage
   F code
                                                                      data table
                                                       renderings
   D codes
                                                       soundclips data table
   F flushpreambles
```

#### interfaces (context)

addvalidkeys

cachedsetups

F define

data table

data table

function

-		-	
cachesetup	function	scanners	data tabl
checkedspecification	function	setconstant	function
complete	data table	setcount	function
constants	data table	setdimen	function
corenamespaces	data table	setelement	function
currentinterface	string	setformat	function
currentresponse	string	setmacro	function
definecommand	function	setmessage	function
defined	function	setmessages	function
doifelsemessage	function	settranslation	function
elements	data table	setupstrings	data tabl
formats	data table	setuserinterface	function
getcheckedparameters	function	setvalidkeys	function
getmessage	function	setvariable	function
getnamespace	function	showmessage	function
getsetupstring	function	storedscanners	data tabl
hashedsetups	data table	strings	table
implement	function	syntax	data tabl
interfacedcommand	function	tolist	function
interfaces	table	translations	data tabl
invalidkey	function	usednamespaces	data tabl
message	function	variables	data tabl
namespaces	table	writestatus	function

F list

registernamespace

registerscanner

function

function

## io (basic lua)

ask	function	
bytes	function	
characters	function	
close	function	
copydata	function	
exists	function	
fileseparator	string	
flush	function	
input	overloaded	function
lines	overloaded	function
loadchunk	function	
loaddata	function	
loadlines	function	
noflines	function	
open	overloaded	function
output	overloaded	function

pathseparator	string	
popen	overloaded	func
read	function	
readall	function	
readnumber	function	
readstring	function	
saved_lines	function	
savedata	function	
size	function	
stderr	userdata	
stdin	userdata	
stdout	userdata	
tmpfile	function	
type	function	
write	function	

## job (context)

comment	function	D tobesaved	
datasets	table	passes	table
D collected		F check	
F extend		D collected	
F getdata		F count	
F setdata		F define	
D tobesaved		F find	
disablesave	function	F first	
embedded	table	F get	
D collected		F getcollected	
D tobesaved		F getdata	
fileobjreferences	table	F getfield	
D collected		F gettobesaved	
D tobesaved		F inlist	
files	table	F last	
D collected		F list	
F context		F save	
B forcerun		F savetagged	
F run		D tobesaved	
D tobesaved		positions	table
getrandomseed	function	F b_column	
initialize	function	F b_region	
load	function	Fc	
loadother	function	D collected	
objects	table		
	cabic	F column	
D collected	cubic	F column F copy	
D collected F get	table		
	Cable	F copy	
F get	Cabic	F copy F depth	
F get F number	Capite	F copy F depth F e_column	
F get F number F page		F copy F depth F e_column F e_region	
F get F number F page F save		F copy F depth F e_column F e_region F enhance	
F get F number F page F save F set	boolean	F copy F depth F e_column F e_region F enhance F extra	
F get F number F page F save F set D tobesaved		F copy F depth F e_column F e_region F enhance F extra T free	
F get F number F page F save F set D tobesaved pack	boolean	F copy F depth F e_column F e_region F enhance F extra T free F get	
F get F number F page F save F set D tobesaved pack packversion	boolean number	F copy F depth F e_column F e_region F enhance F extra T free F get F gethpos	
F get F number F page F save F set D tobesaved pack packversion pagestates	boolean number	F copy F depth F e_column F e_region F enhance F extra T free F get F gethpos F getpos	
F get F number F page F save F set D tobesaved pack packversion pagestates D collected	boolean number	F copy F depth F e_column F e_region F enhance F extra T free F get F gethpos F getpos F getreserved	

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

## lang (basic tex)

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

## languages (context)

 ${\sf F} \ {\tt installmethod}$ 

E lacttrace

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

F check

T data

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	
dir	overloaded	function
isdir	overloaded	function
isfile	overloaded	function
isfound	function	
link	overloaded	function
lock	function	
lock dir	overloaded	function

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

#### libraries (context)

 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-background-four			
S color-background-one			
S color-background-three			
S color-background-two			
S title			
initialize	function		
inject	function		
lmxfile	function		

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

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

# logs (context)

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

## lpdf (context)

copyfloat

copyinteger

convnumber

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

function

function

function

N Hidden

N. Lockod

N Invisible

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

data table

function

formats

frombytes

pdftimestamp

permitdetail

func

func

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

#### lpeg (basic lua)

B C

finder

function

function

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 tab
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	utfchartabletopatter	<b>n</b> function
counter	function	utfreplacer	function
endstripper	function	version	function

firstofsplit

frontstripper

function

function

#### ltn12 (extra lua)

<b>BLOCKSIZE</b>	number	F simplify	
filter	table	F table	
F chain		source	table
F cycle		F cat	
pump	table	F chain	
F all		F empty	
F step		F error	
sink	table	F file	
F chain		F rewind	i
F error		F simpl:	ify
F file		F string	9
F null			

### 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
getcalllevel	function
getluaname	function
getstacktop	function
lastbytecode	number
macros	table
B enabled	

F loaded

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

F required F reset

### luatex (context)

F enable

F finish

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

wrapup

function

## lxml (context)

addindex	function	flush	function
all	function	flushlinewise	function
applyfunction	function	flushsetups	function
applyselectors	function	flushspacewise	function
att	function	<del>get_id</del>	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

register	function	F compare	
registerentity	function	F flush	
removesetup	function	F reset	
replace	function	F show	
resetcdata	function	F sort	
resetsetups	function	splitid	function
resolvedentity	function	startraw	function
root	function	startunescaped	function
save	function	stopraw	function
serialize	function	stopunescaped	function
setaction	function	store	function
setatt	function	strip	function
setattribute	function	stripped	function
setcdata	function	tag	function
${\tt setcommandtonone}$	function	text	function
${\tt setcommandtotext}$	function	tobuffer	function
setpar	function	tofile	function
setparam	function	toparameters	function
setparameter	function	toverbatim	function
setsetup	function	verbatim	function
snippet	function	withindex	function
sorters	table	xmltexhandler	data table

## math (basic lua)

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

#### mathematics (context)

getridofprime

horizontalcode

initializeparameters

getstyle

makefont

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

utfmathcommand

utfmathfiller

utfmathstretch

virtualize

virtualized

functio

functio

functio

functio

data ta

function

function

function

function

function

### md5 (extra lua)

HEX	function
crypt	function
dec	function
decrypt	function
exor	function

hex function
sum function
sumHEXA overloaded function

sumhexa overloaded function

### metapost (context)

 ${\tt format\_number}$ 

format\_string

formatnumber

getclinnath

function

function

function

function

analyzeplugins	function	getstatistics	functio
checkformat	function	gettext	functio
checktexts	function	graphic	functio
cm	function	graphic_base_pass	functio
collapse	boolean	installplugin	functio
colorinitializer	function	intermediate	table
comment	function	T actions	
convert	function	F makempy	
defaultformat	string	isobject	functio
defaultinstance	string	lastlog	string
defaultmethod	string	load	functio
directrun	function	makempy	table
escaped	function	N nofconverted	
exectime	table	F processgraphics	
extensiondata	data table	F registerfile	
filterclippath	function	maketext	function
flush	function	metafun	table
flushers	table	F interpolate	
T pdf		F topath	
F comment		method	number
F flushfigure		mptopdf	table
F startfigure		F convertmpstopdf	
F stopfigure		N nofconverted	
F textfigure		n	number
flushliteral	function	nofscriptruns	functio
flushnormalpath	function	nvformat	functio
flushreset	function	optimize	boolear
fonts	table	parse	functio
F define		pdfliterals	functio
T flusher		pluginactions	functio
F flushfigure		popformat	functio
F startfigure		popscriptrunner	functio
F stopfigure		popvariable	functio
N instances		popvariables	functio

function

function
function

tahla

process

processplugins

processspecial

nroperties

pushvariable pushvariables quickanddirty reducetogray reporterror reset resetlastlog resetplugins run	function function function boolean function function function function function	startgraphic stopgraphic svformat sxsy tex F get F reset F set	function function function function table
runscript scripterror setextensions setoutercolor settext setvariable showlog simple splitprescript	function function function function function function function function boolean function function	texerrors texexp theclippath tographic totable unload untagvariable use_one_pass variables	boolean function function function function function function function tunction boolean table

### mime (extra lua)

function

F base64

b64

F quoted-printable **eol** function

normalize overloaded function

qp function

qpwrp function
report function

stuff overloaded function

unb64 function
unqp function

wrap overloaded function

F base64

F default

F quoted-printable

F text

wrp function

### mp (context)

**BackSpace** 

**BaseLineSkip** 

**BodyFontSize** 

**BottomHeight** 

**BottomDistance** 

OuterEdgeDistance

Bottomneight	Tunction	uvertayuttset	Tunctio
BottomSpace	function	<b>OverlayRegion</b>	functio
CurrentColumn	function	<b>OverlayWidth</b>	functio
CurrentHeight	function	PageDepth	functio
CurrentWidth	function	<b>PageFraction</b>	functio
CutSpace	function	PageNumber	functio
EmWidth	function	PageOffset	functio
ExHeight	function	PaperBleed	functio
FooterDistance	function	PaperHeight	functio
FooterHeight	function	PaperWidth	functio
HSize	function	PrintPaperHeight	functio
HeaderDistance	function	PrintPaperWidth	functio
HeaderHeight	function	RealPageNumber	functio
InPageBody	function	RightEdgeDistance	functio
InnerEdgeDistance	function	RightEdgeWidth	functio
InnerEdgeWidth	function	RightMarginDistance	functio
InnerMarginDistance	function	RightMarginWidth	functio
InnerMarginWidth	function	SpineWidth	functio
LastPageNumber	function	StrutDepth	functio
LayoutColumnDistance	function	StrutHeight	functio
LayoutColumnWidth	function	SubPageNumber	functio
LayoutColumns	function	TextHeight	functio
LeftEdgeDistance	function	TextWidth	functio
LeftEdgeWidth	function	TopDistance	functio
LeftMarginDistance	function	TopHeight	functio
LeftMarginWidth	function	TopSkip	functio
LineHeight	function	TopSpace	functio
MakeupHeight	function	VSize	functio
MakeupWidth	function	_f_	functio
NOfColumns	function	_get_count_	functio
<b>NOfPages</b>	function	_get_dimen_	functio
NOfSubPages	function	_get_macro_	functio
OnOddPage	function	_get_toks_	functio
OnRightPage	function	_set_count_	functio

function

function

function

function

function

function

functio

functio

functio

function function

functio

**OuterMarginWidth** 

**OverlayLineWidth** 

OverlayDepth

**OverlayHeight** 

**OverlayOffset** 

sat diman

F	boolean		integer	functio
F	flush		isarray	functio
F	fprint		isobject	functio
F	integer		mf_blob_add	functio
F	number		mf_blob_dimensions	functio
F	numeric		mf_blob_index	functio
F	pair		mf_blob_new	functio
F	pairpoints		mf_blob_raw_content	functio
F	path		mf_blob_raw_dimensions	functio
F	pathpoints		mf_blob_raw_reset	functio
F	points		mf_blob_raw_toutf	functio
F	print		mf_blob_raw_wipe	functio
F	quadruple		mf_blob_size	functio
F	quadruplepoints		mf_blob_width	functio
F	quoted		mf_default_color_model	functio
F	size		mf_external_figure	functio
F	string		mf_finish_saving_data	functio
F	triplet		mf_formatted_text	functio
F	tripletpoints		mf_get_outline_text	functio
F	vprint		mf_graphic_text	functio
boole	ean	function	mf_inject_blob	functio
clear	ned	function	mf_made_text	functio
datas	set	function	mf_named_color	functio
datas	sets	function	mf_outline_text	functio
F	load		mf_path_left	functio
dime	nsion	function	mf_path_length	functio
dispo	osehash	function	mf_path_point	functio
flusi	h	function	mf_path_reset	functio
forma	at	function	mf_path_right	functio
forma	atted	function	mf_save_data	functio
fpri	nt	function	mf_some_text	functio
froml	hash	function	mf_start_saving_data	functio
get		table	mf_stop_saving_data	functio
F	boolean		mf_tb_dimensions	functio
F	number		mf_tt_dimensions	functio
F	numeric		mf_tt_initialize	functio
F	path		mode	functio
F	string		n	functio

function

function

table

aux

getcount

getdimen

getmacro

inhash

newhash

number

numeric

functio

functio

functio

functio

		,	
pathlength	function	quadruple	functio
pathpoint	function	quadruplepoints	functio
pathpoints	function	quoted	functio
pathreset	function	report	functio
pathright	function	set	table
place_buffermake	function	F path	
place_buffersize	function	setcount	functio
place_bufferslot	function	setdimen	functio
place_bufferwipe	function	setmacro	functio
points	function	settoks	functio
positionanchor	function	size	functio
positionbox	function	string	functio
positioncurve	function	systemmode	functio
positionpage	function	texstr	functio
positionpath	function	textextanchor	functio
positionpxy	function	texvar	functio
positionregion	function	tohash	functio
positionwhd	function	triplet	functio
positionxy	function	tripletpoints	functio
prefix	function	vprint	functio

print

processingmode

function

function

path

pathleft

functio

functio

#### mplib (extra tex)

char depth function char height function char\_width function execute function fields function finder function finders table F file F mpstemplate finish function get\_boolean function

get numeric function get\_path function get\_string function overloaded functi new pen info function preprocessed function solve path function statistics function version function

function

get number

### noads (context)

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		process	function
F families		processnested	function
F fixscripts		processors	table
F italics		F mlist_to_hlis	t
F kernpairs		T unscript	
F makeup		T unstack	
F relocate		processouter	function
F render			

### node (basic tex)

E gotfom

<pre>check_discretionaries</pre>	function	F getglue
<pre>check_discretionary</pre>	function	F getheight
сору	function	F getid
copy_list	function	F getkern
count	function	F getlang
current_attr	function	F getleader
dimensions	function	F getlist
direct	table	F getnext
F check_discretionaries		F getnucleus
F check_discretionary		F getoffsets
F copy		F getpenalty
F copy_list		F getprev
F count		F getproperty
F current_attr		F getshift
F dimensions		F getsub
F effective_glue		F getsubtype
F end_of_math		F getsup
F find_attribute		F getwhd
F first_glyph		F getwidth
F flatten_discretionaries		F has_attribute
F flush_list		F has_field
F flush_node		F has_glyph
F flush_properties_table		F hpack
F free		F hyphenating
F get_attribute		F insert_after
F get_properties_table		F insert_before
F get_synctex_fields		F is_char
F getattributelist		F is_direct
F getboth		F is_glyph
F getbox		F is_node
F getchar		F is_zero_glue
F getcomponents		F kerning
F getdata		F last_node
F getdepth		F length
F getdir		F ligaturing
F getdirection		F new
F getdisc		F prepend_prevdepth
F getexpansion		F protect_glyph

E protect alumbs

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

F todirect

F tonode

has\_field

has\_glyph

functi

functi

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

### nodes (context)

accentcodes

aligned

append

apply	function	fields	functi
applyvisuals	function	fillcodes	data t
astable	function	find_attribute	functi
basepoints	function	first_glyph	functi
boundarycodes	data table	firstcharacter	functi
boxes	table	firstcharinbox	functi
F dimensions		firstdirinbox	functi
F direct		firstglyph	functi
F found		flatten_discretionaries	functi
F reset		flush	functi
F restore		flush_list	functi
F save		flush_node	functi
builders	table	free	functi
F buildpage_filter		fullhpack	functi
F vpack_filter		getattr	functi
check_discretionaries	function	getattribute	functi
codes	data table	getbox	functi
concat	function	getchar	functi
сору	function	getdisc	functi
copy_list	function	getfield	functi
copy_node	function	getfont	functi
count	function	getglue	functi
countall	function	getid	functi
current_attr	function	getleader	functi
delete	function	getlist	functi
destinations	table	getnext	functi
N attribute		getprev	functi
T done		getsubtype	functi
F handler		getwhd	functi
T stack		gluecodes	data 1
dimensionfields	data table	gluevalues	data 1
dimensions	function	glyphcodes	data 1
dircodes	data table	handlers	table
directioncodes	data table	F accessibility	
directionvalues	data table	F backgrounds	
di rval uec	data tablo	E hackgroundenage	

data table

function

function

effective\_glue

end\_of\_math

fencecodes

functi

functi

data t

F checkglyphs		is_direct	functi
F checkparcounter		is_display_math	functi
F cleanupbox		is_glyph	functi
F cleanuppage		is_node	functi
F export		is_nut	functi
F finalizebox		is_zero_glue	functi
F flatten		ischar	functi
F flattenline		isglyph	functi
F migrate		kerncodes	data t
F protectglyphs		kerning	functi
F stripping		keys	table
F textbackgrounds		T whatsit	
F unprotectglyphs		last_node	functi
has_attribute	function	leadercodes	data t
has_field	function	leftmarginwidth	functi
has_glyph	function	length	functi
hpack	function	ligaturing	functi
hyphenating	function	linefillers	table
idsandsubtypes	function	D data	
idstostring	function	F define	
ignorablefields	data table	F enable	
injections	table	F filler	
F copy		F handler	
F getligaindex		lines	table
F getthreshold		T boxed	
F handler		F register	
F installgetspaceboth		F setup	
F installnewkern		F stage_one	
F isspace		F stage_two	
F keepcounts		D data	
F reset		F finalize	
F resetcounts		F number	
F setcursive		N scratchbox	
F setkern		link	functi
F setligaindex		linked	functi
F setmark		list	functi
F setmove		listablefields	data t
F setposition		listcodes	data t
F setspacekerns		listtoutf	functi

function

literalvalues

load

F checkforleaks

insert\_after

insert\_before

is\_char

functi

data t

functi

F get		F flush
mathcodes	data table	F flush_list
maxboxwidth	function	F flush_node
mlist_to_hlist	function	F free
new	function	F fullhpack
noadcodes	data table	F get_synctex_fields
noadoptions	table	F getattr
N axis		F getattribute
N exact		F getattributelist
N left		F getattrlist
N middle		F getboth
N no_axis		F getbox
N right		F getboxglue
N set		F getchar
N unused_1		F getcomponents
N unused_2		F getdata
nodecodes	data table	F getdepth
nopts	function	F getdir
nuts	table	F getdirection
F append		F getdisc
F apply		F getdiscretionary
F applyvisuals		F getexpansion
F check_discretionaries		F getfam
F concat		F getfield
F copy		F getfont
F copy_list		F getglue
F copy_no_components		F getheight
F copy_node		F getid
F copy_only_glyphs		F getkern
F copy_properties		F getlang
F copyvisual		F getlanguage
F count		F getleader
F countall		F getlist
F current_attr		F getnext
F delete		F getnucleus
F dimensions		F getoffsets
F effective glue		F getorientation

data table

table

F firstglyph

F getpenalty

F getprev

F getprop

F flatten discretionaries

marginkerncodes

F end\_of\_math

F first\_glyph

F find\_attribute

markers

F getsubtype	F disc
F getsup	F emptyrule
F getsurround	F fence
F getvalue	F fontkern
F getwhd	F fraction
F getwidth	F glue
F has_attribute	F gluespec
F has_field	F glyph
F has_glyph	F hlist
F hpack	F italickern
F hyphenating	F kern
F insert_after	F latelua
F insert_before	F lateluafunction
F insert_list_after	F leader
F is_char	F leftmarginkern
F is_direct	F leftskip
F is_display_math	F lineskip
F is_glyph	F mathchar
F is_node	F mathtextchar
F is_nut	F negatedglue
F is_zero_glue	F noad
F ischar	F outlinerule
F isdone	F pdfannotation
F isglyph	F pdfdestination
F kerning	F pdfdirectliteral
F last_node	F pdfliteral
F leftmarginwidth	F pdforiginliteral
F length	F pdfpageliteral
F ligaturing	F pdfrawliteral
F link	F pdfrestore
F linked	F pdfsave
F locate	F pdfsetmatrix
F mlist_to_hlist	F penalty
F nestedtracedslide	F radical
F new	F register
T pool	F rightmarginkern
F accent	F rightskip
F baselineskip	F rule
F boundary	F savepos
F choice	F shrink

F stretch

F subbox

F cleanup

F delim

F usage	F setboth
F userattributes	F setbox
T userids	F setboxglue
N margins.inline	F setchar
N property	F setcomponents
N splitters.one	F setdata
N splitters.two	F setdepth
F userlist	F setdir
F userlua	F setdirection
F usernumber	F setdisc
F userrule	F setdiscretionary
F userstring	F setexpansion
F usertokens	F setfam
F vlist	F setfield
F wordboundary	F setfont
F prepend	F setglue
F processranges	F setheight
F processwords	F setkern
F protect_glyph	F setlang
F protect_glyphs	F setlanguage
F protrusion_skippable	F setleader
F rangedimensions	F setlink
F rawprop	F setlist
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 setshift
F box	F setsplit
F draw	F setsub
F fill	F setsubtype
F mp	F setsup
F stroke	F setsurround
F userrule	F setunsetattributes
F set_attribute	F setvalue

F setattrlist

F setvisual

F setvisuals

F setwhd

F textdir

F set\_synctex\_fields

F setattr

F setattribute

F somespace	F use_components	
F splitbox	F usedlist	
F striprange	F uses_font	
F tail	F vianodes	
F takeattr	F vianuts	
F takebox	F vpack	
F takelist	F write	
F theprop	packlist	functi
F tonode	penaltycodes	data t
F tonodes	plugindata	table
F tonut	F finalizer	
F tosequence	F initializer	
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	functi
F disc	pool	table
F glue	F baselineskip	
F glyph	F cleanup	
F hlist	F glyph	
F list	F hlist	
F next	F latelua	
F node	F lineskip	
F vlist	F pdfdirectliteral	
F whatsit	F pdfliteral	
T typesetters	F pdforiginliteral	
F tohbox	F pdfrestore	
F tohpack	F pdfsave	
F tonodes	F pdfsetmatrix	
F tovbox	F register	
F tovpack	F rule	
F unprotect_glyph	F savepos	

F untracedslide

F special

F usage

F somepenalty

F unprotect\_glyphs

F unset\_attribute

рт срени	ranceion	SC: IUCIICOX	Tuncti
print	function	set_attribute	functi
processors	table	setattr	functi
F contribute_filter		setattribute	functi
B enabled		setattributes	functi
F hpack_filter		setboth	functi
F post_linebreak_filter		setbox	functi
F pre_linebreak_filter		setboxtonaturalwd	functi
F tracer		setfield	functi
properties	table	setglue	functi
T actions		setlink	functi
F delayed		setlist	functi
F fdelayed		setnext	functi
F immediate		setprev	functi
F attach		setunsetattributes	functi
T data		setwhd	functi
F delayed		shifts	table
protect_glyph	function	D data	
protect_glyphs	function	F define	
protrusion_skippable	function	F enable	
pts	function	F handler	
radicalcodes	data table	show	functi
rangedimensions	function	showboxes	functi
reference	function	showcodes	functi
references	table	showlist	functi
N attribute		showsimplelist	functi
T done		skipcodes	data 1
F handler		skipvalues	data 1
T stack		slide	functi
rehpack	function	snapshots	table
remove	function	F getparameters	
repackhlist	function	F getsamples	
replace	function	F resetsamples	
report	function	F takesample	
rightmarginwidth	function	somepenalty	funct
rulecodes	data table	somespace	funct
rules	table	splitbox	funct
D data		stripdiscretionaries	funct
F define		stripping	table

prepend

F enable F handler

F userrule

serializebox

T glyphs

F set subtypes

functi

data t

Carebox	Tunction	r unicodes	
tasks	table	T colors	
F actions		F reset	
F appendaction		F set	
F disableaction		F setlist	
F disablegroup		F fontchar	
F enableaction		T frequencies	
F enablegroup		F register	
F freeze		T pool	
F freezegroup		T nodes	
F new		F rule	
F prependaction		T nuts	
F removeaction		F rule	
F replaceaction		F resetproperties	
F restart		F rule	
F setaction		F setlist	
F showactions		F setproperties	
F table		F start	
tobasepoints	function	T steppers	
tocentimeters	function	F check	
tociceros	function	F codes	
todidots	function	F features	
todimen	function	F font	
toinches	function	F glyphs	
tomillimeters	function	F message	
tonewciceros	function	F messages	
tonewdidots	function	F nofsteps	
tonode	function	F register	
tonodes	function	F reset	
tonut	function	F start	
topicas	function	F stop	
topoints	function	F stop	
toscaledpoints	function	T transparencies	
tosequence	function	F reset	
tostring	function	F set	
totable	function	F setlist	
totree	function	traverse	functi
toutf	function	traverse_char	functi
tracers	table	traverse_glyph	functi
T characters		traverse_id	functi

F unicodes

traverse\_list

traversers

functi

table

takebox

F collect

F equal

F list		vianodes	functi
F node		vianuts	functi
typesetters	table	visualizebox	functi
F hbox		visualizers	table
F hpack		F attribute	
F tohbox		T attributes	
F tohpack		F box	
F tonodes		F handler	
F tovbox		F markfonts	
F tovpack		F register	
F vpack		F setfont	
unprotect_glyph	function	F setlayer	
unprotect_glyphs	function	F setruledglyph	
unset_attribute	function	F setvisual	
unsetattribute	function	vpack	functi
unsetattributes	function	whatcodes	data t
usedlist	function	whatsitcodes	data t
usercodes	data table	write	functi

uses\_font

### number (context)

	function		
basepoints	function		
bytetodecimal	function		
compactfloat	function		
decimaltobyte	function		
dimenfactors	data table		
formatted	function		
formattedfloat	function		
idiv	function		
maxdimen	number		
nopts	function		
percent	function		
points	function		
pts	function		
signed	function		
sparseexponent	function		
splitdimen	function		
to16dot16	function		
tobasepoints	function		

tobitstring function tocentimeters function tociceros function tocontext function todidots function todimen function toevenhex function toinches function tomillimeters function tonewciceros function tonewdidots function tonumberf function tonumberg function topicas function topoints function toscaled function toscaledpoints function valid function

# objects (context)

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

### os (basic lua)

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

# package (basic lua)

config	string
cpath	string
extralibpath	function
extralibpaths	function
extraluapath	function
extraluapaths	function
helpers	table
libpaths	function
loaded	table
loaders	table
loadlib	function

function
string
function
function
table
function
function
table
function
function

# pagebuilders (context)

F setarea

columnsets	table	Fs	sethsize	
F add		Fs	sethspan	
F block		F	setlines	
F check		F	setpropertie	:S
F currentcolum	nn	F	setstart	
F define		F	setvsize	
F finishflush		injec	tions	table
F flushareas		F 1	flushafter	
F flushcolumn		F 1	flushbefore	
F flushrest		Fs	save	
F goto		mixed	<b>lcolumns</b>	table
F noto		F	cleanup	
F prepareflush	1	F 1	finalize	
F put		Fg	getlist	
F registerarea	a	Fg	getrest	
F reset		Fg	getsplit	

F setsplit

### pdf (basic tex)

function

function

function

function

function

function

function

getsuppressoptionalinfo functi

functi

functi

functi

functi

functi

functi

functi

functi

getthreadmargin

getxformattributes

gettrailer

getvpos

gettrailerid

getxformmargin

setmajorversion

catminorvarsion

disablecommand

flushpdfimage

fontname

fontsize

fontobjnum

getcatalog

getcompresslevel

getpkresolution

antnoc

· .		•	
getcreationdate	function	getxformname	functi
getdecimaldigits	function	getxformresources	functi
getdestmargin	function	hasmatrix	functi
getfontname	function	immediateobj	functi
getfontobjnum	function	includechar	functi
getfontsize	function	includefont	functi
getgentounicode	function	includeimage	functi
gethpos	function	mapfile	functi
getignoreunknownimages	function	mapline	functi
getimageresolution	function	maxobjnum	functi
getinclusionerrorlevel	function	newcolorstack	functi
getinfo	function	obj	functi
getlastannot	function	objtype	functi
getlastlink	function	pageref	functi
getlastobj	function	print	functi
getlinkmargin	function	refobj	functi
getmajorversion	function	registerannot	overlo
getmatrix	function	reserveobj	overlo
getmaxobjnum	function	setcatalog	overlo
getminorversion	function	setcompresslevel	functi
getnames	function	setdecimaldigits	functi
getnofobjects	function	setdestmargin	functi
getobjcompresslevel	function	setfontattributes	functi
getobjtype	function	setforcefile	functi
getomitcidset	function	setgentounicode	functi
getorigin	function	setignoreunknownimages	functi
getpageattributes	function	setimageresolution	functi
getpageref	function	setinclusionerrorlevel	functi
getpageresources	function	setinfo	overlo
getpagesattributes	function	setlinkmargin	functi

function

function

setomitcidset	overloaded function	settrailer	overlo
setorigin	function	settrailerid	overlo
setpageattributes	overloaded function	settypeonewidemode	functi
setpageresources	overloaded function	setxformattributes	functi
setpagesattributes	overloaded function	setxformmargin	functi
setpkresolution	function	setxformresources	functi
setrecompress	function	vfimage	functi
setsuppressoptionalinfo	function	xformname	functi
setthreadmargin	function		

# pdfe (context)

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

# pdfscanner (context)

scan function

# physics (context)

units table

F registerunit

D tables

# publications (context)

addtexentry	function	converttoxml	functi
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		S title	
collected	data table	S volume	
components	tahle	Swear	

function

1 5615	5 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 tabl
S author	journals	table

S pages

F abbreviated

F add

T sets

S editor S keywords

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	function
F tag <b>load</b>	function	splitauthor splitoneauthor	function
loadbibdata	function	statistics	table
loaddefinitionfile	function		table
loaders	table	N nofbytes N nofdatasets	
F bbl	cance	N nordatasets N nofdefinitions	
F DDC		N HOLDELTHICTORS	

N nofshortcuts

table

tables

F bib

F buffer

D privates		F showtables
D sets		F showvariants
D specials		typesetters
D types		F author
D virtuals		F string
tags	function	usedataset
tracers	table	usedentries
F showdatasetautho	ors	writers
F showdatasetcompl	leteness	F author
F showdatasetfield	ds	F keyword
F showentry		F pagenumber
F showfields		F range

F showhashedauthors

table

function

function table

# regimes (context)

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

## resolvers (context)

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

locators	data table	scandata	1
luacnffallback	string	scanfiles	f
luacnfname	string	schemes	t
luacnfspec	string	T cleaners	
luacnfstate	string	F md5	
macros	table	F none	
F convertfile		F strip	
F decodecomment		F cleanname	
F enablecomment		F fetchstring	
F encodecomment		F fetchtable	
F preprocessed		F install	
F processmk		setdynamic	1
F processmkvi		setenv	1
F version		setmemstream	1
maxreadlevel	number	showpath	1
methodhandler	function	simplescanfiles	1
openbinfile	function	splitconfigurationpath	1
openers	data table	splitexpansions	1
openfile	function	splitmethod	1
opentexfile	function	splitpath	1
ownpath	string	stackpath	1
popextrapath	function	starttiming	f
poppath	function	stoptiming	1
prefixes	data table	suffixes	C
prependhash	function	suffixmap	C
pushextrapath	function	suffixofformat	1
pushpath	function	texdatablob	f
registerextrapath	function	toppath	f
registerfile	function	unexpandedpath	f
registerfilehash	function	unexpandedpathlist	f
registerintrees	function	unresolve	1
registermethod	function	updaterelations	f
registerzipfile	function	updatescript	f
relations	data table	uselibrary	f
renew	function	usertypes	C
renewcache	function	usezipfile	1
repath	function	validatedpath	f
reset	function	variable	1

function

function

function

function

resolve

savers

variableofformat

variableofformatorsuffix

loadtime

locateformat

resetextrapaths

resetmemstream

## sandbox (context)

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

# scripts (context)

autofontfeature	table	hash	table
F disable		injectors	data table
F enable		inserters	table
F handler		F nobreakspace_afte	er
categorytonumber	data table	F nobreakspace_befo	ore
colors	data table	F space_after	
decomposehangul	function	F space_before	
defaults	table	F zerowidthspace_at	fter
N inter_char_half_s	shrink_factor	F zerowidthspace_before	
N inter_char_half_s	stretch_factor	installdataset	function
N inter_char_hangu	l_penalty	installmethod	function
N inter_char_quarte	er_shrink_factor	numbertocategory	data table
N inter_char_quarte	er_stretch_factor	numbertodataset	data table
N inter_char_shrink	<_factor	numbertohandler	data table
N inter_char_streto	ch_factor	reset	function
N inter_word_stretch_factor		set	function
handlers	data table	splitters	data table

#### set (context)

contains function
create function
tolist function

tonumber function
totable function

## sha2 (context)

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

## sio (context)

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

## socket (extra lua)

BLOCKSIZE	number		S cc	
_DATAGRAMSIZE	number		S com	ments
_DEBUG	boolean		S con	nection
_SETSIZE	number		S con	tent-description
_SOCKETINVALID	number		S con	tent-disposition
bind	overloaded	function	S con	tent-encoding
choose	overloaded	function	S con	tent-id
connect	function		S con	tent-language
connect4	overloaded	function	S con	tent-length
connect6	overloaded	function	S con	tent-location
dns	table		S con	tent-md5
F getaddrinfo			S con	tent-range
F gethostname			S con	tent-transfer-encoding
F getnameinfo			S con	tent-type
F tohostname			S coo	kie
F toip			S dat	e
ftp	table		S dia	gnostic-code
S PASSWORD			S dsn	-gateway
N TIMEOUT			S eta	g
S USER			S exp	ect
F command			S exp	ires
F genericform			S fin	al-log-id
F get			S fin	al-recipient
F open			S fro	m
F put			S hos	t
gettime	function		S if-	match
headers	overloaded	table	S if-	modified-since
T canonic			S if-	none-match
S accept			S if-	range
S accept-chars	et		S if-	unmodified-since
S accept-encod	ing		S in-	reply-to
S accept-langu	age		S key	words
S accept-ranges			S las	t-attempt-date
S action			S las	t-modified
S age			S loc	ation
S allow			S max	-forwards
S alternate-re	cipient		S mes	sage-id
S arrival-date			S mim	e-version
S authorization	n		Sori	ginal envelope id

3 proxy	/-authenticate	r request		
S proxy	y-authorization	newtry	function	
S range		protect	function	
S recei	ived	report	function	
S recei	ived-from-mta	select	function	
S refe	rences	sink	overloaded	func
S refe	rer	sinkt	overloaded	tabl
S remot	te-mta	F close-when-d	one	
S reply	/-to	F default		
S repor	rting-mta	F http-chunked		
S reser	nt-bcc	F keep-open		
S reser	nt-cc	skip	function	
S reser	nt-date	sleep	function	
S reser	nt-from	smtp	table	
S reser	nt-message-id	S DOMAIN		
S reser	nt-reply-to	N PORT		
S reser	nt-sender	S SERVER		
S reser	nt-to	N TIMEOUT		
S retry	/-after	S ZONE		
S retu	rn-path	F message		
S sende	er	F open		
S serve	er	F send		
S smtp-	remote-recipient	source	overloaded	func
S stati	ıs	sourcet	overloaded	tabl
S subje	ect	F by-length		
S te		F default		
S to		F http-chunked	I	
S trail	ler	F until-closed		
S trans	sfer-encoding	tcp	function	
S upgra	ade	tcp4	function	
S user-	agent	tcp6	function	
S vary		tp	overloaded	tabl
S via		N TIMEOUT		
S warni	ing	F connect		
S will-	retry-until	try	overloaded	func
S www-a	authenticate	udp	function	
S x-mai	iler	udp4	function	
F lower		udp6	function	
F normal		url	overloaded	tabl
http	overloaded table	F absolute		

F request

F build

F build\_path

S proxy-authenticate

N TIMEOUT
S USERAGENT

F parse\_path

F unescape

# sorters (context)

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

#### statistics (context)

callbacks	function
checkfmtstatus	function
currenttime	function
elapsed	function
elapsedindeed	function
elapsedseconds	function
elapsedtime	function
enable	boolean
formatruntime	function
hastiming	function
memused	function

register function resettiming function runtime function savefmtstatus function function show starttiming function stoptiming function threshold number timed function tracefunction function

## status (basic tex)

resetmessages function

## storage (context)

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

#### streams (context)

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

# string (basic lua)

autodouble	function	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 prev	
blocks	table	F previous	
D collected		F raw	
F define		F record	
F print		F reset	
F save		F restart	
F select		F restore	
F setstate		F save	
D states		F set	
D tobesaved		F setlevel	
F uservariable		F setoffset	
bookmarks	table	F setown	
T extras		F setstate	
F get		F setvalue	
F mergesections		T specials	
F register		F userpage	
F reset		F subs	
F tosections		D tobesaved	
F finalize		F value	
F flatten		F way	
F installhandler		currentsectionnumber	function
F merge		descriptions	table
S method		documents	table
F overload		D data	
F place		F initialize	
F register		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	
Faet		F simplify	

inserts	table	T result	
D data	cabec	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		table
F addto	tabte	D data	cabic
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		Freset	
F hasnumberdata		F set	
F haspagedata		F show	
F hastitledata		F synchronize	
Fiscached		F title	
D kinds		T tracers	
F label		F showtable	
F location			table
D names		F check_spacing	
F number		F checkpagechange	
D ordered		F define	
F page		F doifonsamepageasprevious	5
F popnesting		F get	
F prefix		F getdeltapage	
F prefixednumber		F getinternal	
F prefixedpage		F getn	
F process		F getstate	
		. 5-151415	

F hascontent

F internal

D pushed

F pushnesting

F ordered		F Touna	
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		S outermethod	
F checkedrealpage		D pages	
F checkedurl		U prefixsplitter	
D collected		D productdata	
U componentsplitter		T programs	
F currentmetadata		T data	
F currentorder		F define	
D currentset		F get	
F define		F realpageofpage	
D defined		U referencesplitter	
D derived		D referred	
F enhance		F referredpage	
D executers		F registerfinalizer	

T numbers F ordered

F expandcurrent

F export

F define

F found

F registerinitializer

F registerpage

F set	F extend
F setandgetattribute	F filter
F setcomponent	F filtercollected
F setinternalreference	F finalize
F setlinkmethod	F findinternal
F setnextinternal	F flush
F setnextorder	F get
F setreferencerealpage	F prepare
D specials	F process
F splitcomponent	F setmethod
F splitprefix	F sort
F splitreference	F store
F synchronizepage	D tobesaved
T testrunners	F unique
F inner	F userdata
F special	<b>sections</b> table
F special operation	F autodepth
F special operation with arguments	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
<b>registers</b> table	F prefixedconverted
F analyze	F pushblock

D collected

F compare

F register

D registered

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		F setconstruct	
synonyms	table	F setfigure	
F analyzed		F setfloat	
D collected		F setformulacontent	
F compare		F sethighlight	
F define		F setitem	
F filter		F setitemgroup	
F finalize		F setlist	
F flush		F setnotation	
F isshown		F setnotationsymbol	
F isused		F setproperty	
F meaning		F setpublication	
F prepare		F setregister	

F resetused

F setsorting

F setsynonym

F settablecell

T sectionblockdata

F process

F register

F registershown

F settagsubsentencesymbol
F setupexport

F setuserproperties

D specifications

F start

F stop

F strip D taglist

T usewithcare

T images

## table (basic lua)

function

function

function

allkeys

move

pack

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

prepend

values

function

function

#### tex (basic tex)

table

table

table

function

attribute

boxresources

getcatcode

detcount

badness

box

		9011201	
F getbox		getlocallevel	funct
F getdimensions		getmath	funct
F save		getmathcode	funct
F use		getmathcodes	funct
catcode	table	getmuglue	funct
conditionals	data table	getmuskip	funct
constants	data table	getnest	funct
count	table	getpagestate	funct
cprint	function	getsfcode	funct
ctdcatcodes	number	getskip	funct
ctxcatcodes	number	gettoks	funct
definefont	function	getuccode	funct
delcode	table	glue	table
dimen	table	hashtokens	funct
directives	data table	ifs	data
enableprimitives	function	inicatcodes	numbe
error	function	init_rand	funct
extraprimitives	function	isattribute	funct
finish	function	isbox	funct
fontidentifier	function	iscount	overl
fontname	function	isdefined	funct
force_synctex_line	function	isdimen	over
force_synctex_tag	function	isglue	funct
forcehmode	function	ismuglue	funct
fprint	function	ismuskip	overl
get	function	isskip	overl
get_synctex_line	function	istoken	funct
get_synctex_mode	function	istoks	funct
get_synctex_tag	function	lccode	table
getattribute	function	linebreak	funct
getbox	function	lists	table
getboxresourcebox	function	lua_math_random	funct
getboxresourcedimensions	function	lua_math_randomseed	funct
and the second s			

function

function

getdimen

getlccode

luacatcodes

magicconstants

getglue

getlist

funct

funct

funct

funct

numbe

table

N trueinch		setmath	funct
mathcode	table	setmathcode	funct
modes	data table	setmuglue	funct
muglue	table	setmuskip	funct
muskip	table	setnest	funct
nest	table	setsfcode	funct
nilcatcodes	number	setskip	funct
normal_rand	function	settoks	funct
notcatcodes	number	setuccode	funct
number	function	sfcode	table
primitives	function	shipout	funct
print	function	show_context	funct
prtcatcodes	number	skip	table
resetparagraph	function	sp	funct
romannumeral	function	splitbox	funct
round	function	sprint	funct
run	function	systemmodes	data
runtoks	function	takebox	funct
saveboxresource	function	texcatcodes	numbe
scale	function	toks	table
scantoks	function	tpacatcodes	numbe
set	function	tpbcatcodes	numbe
set_synctex_line	function	tprint	funct
set_synctex_mode	function	trackers	data
set_synctex_no_files	function	triggerbuildpage	funct
set_synctex_tag	function	txtcatcodes	numbe
setattribute	function	type	funct
setbox	function	uccode	table
setcatcode	function	uniform_rand	funct
setcount	function	uniformdeviate	func
setdelcode	function	uprint	funct
setdimen	function	useboxresource	funct

function

function

function

vrbcatcodes

write

numbe

funct

setglue

setlist

setlccode

#### texconfig (basic tex)

kpse\_init boolean
max\_in\_open number

max\_print\_line number
max\_strings number
nest\_size number
param\_size number
save\_size number
shell\_escape string
stack\_size overloaded num

## texio (basic tex)

closeinput function
setescape function
write function
write\_nl function

## token (basic tex)

biggest_char	function
command_id	function
commands	function
create	function
expand	function
<pre>get_active</pre>	function
get_cmdname	function
get_command	function
get_csname	function
get_expandable	function
get_id	function
get_index	function
get_macro	function
get_meaning	function
get_mode	function
get_next	function
get_protected	function
get_tok	function
is_defined	function
is_token	function
new	function

put_next	function
scan_argument	function
scan_code	function
scan_csname	function
scan_dimen	function
scan_float	function
scan_glue	function
scan_int	function
scan_keyword	function
scan_keyword_cs	function
scan_list	function
scan_real	function
scan_string	function
scan_token	function
scan_toks	function
scan_word	function
set_char	function
set_lua	function
set_macro	function
type	function

## tokens (context)

U gobbleoneargument

II aoto

astable	function	U loadfoundtypescriptfile
bgroup	userdata	U resetctxscanner
bits	table	U rlap
N activ	re	U scratchcounter
N align	ment	U scratchdimen
N begin	group	U scratchmuskip
N chara	octer	U scratchskip
N close	2	U scratchtoken
N comme	ent	U secondoftwoarguments
N endgr	oup	U setfalsevalue
N endof	line	U setsectionblock
N escap	oe e	U setupsystem
N ignor	re	U startcolumns
N inval	id	U starttabulate
N lette	er	U starttitle
N maths	hift	U startxtitle
N open		U stopcolumns
N other		U stoptabulate
N param	neter	U stoptitle
N space	2	U stopxtitle
N subsc	ript	U texsetup
N super	rscript	<pre>collectors table</pre>
N white	espace	T data
cache	table	F defaultwords
U NC		F dowithwords
U NR		F flush
U bf		F install
U color	•	F register
U color	defalc	T registered
U color	defflc	F show
U color	defflt	F test
U color	defrlt	<b>commands</b> data table
U dofin	ishreference	<b>compile</b> function
U dosta	rttext	<pre>constant function</pre>
U finis	hjob	<b>converters</b> table
U first	ofoneargument	S toboolean
U first	oftwoarguments	S todimen

S toglue

defined	function	F lxmlid
egroup	userdata	F number
getters	table	F real
F box		F scanclose
F count		F scanopen
F dimen		F skip
F glue		F string
F macro		F table
F meaning		F token
F skip		F tokens
F token		F toks
hbox	userdata	F word
isdefined	function	<b>setters</b> table
istoken	function	F box
letter	function	F char
letters	function	F count
new	function	F dimen
other	function	F glue
pickup	function	F lua
presets	table	F macro
T 1 string	g	F skip
T 2 string	gs	<b>shortcuts</b> table
T 3 string	gs	T bits
T 4 strin	gs	N active
T 5 string	gs	N alignment
T 6 strin	gs	N begingroup
T 7 strin	gs	N character
T 8 string	gs	N close
printlist	function	N comment
scanners	table	N endgroup
F argumen	t	N endofline
F boolean		N escape
F code		N ignore
F condition	onal	N invalid
F count		N letter
F csname		N mathshift
F dimen		N open
F dimensi	on	N other
F float		N parameter
F glue		N space

N subscript

N superscript

F integer

F keyword

N open	F scanword
F report	F toboolean
F scanboolean	F todimen
F scanclose	T tokens
F scancode	F astable
F scanconditional	U bgroup
F scancsname	T cache
F scandimen	U NC
F scandimension	U NR
F scaninteger	U bf
F scankeyword	U color
F scankeywordcs	U colordefalc
F scanlist	U colordefflc
T scanners	U colordefflt
F argument	U colordefrlt
F boolean	U dofinishreference
F code	U dostarttext
F conditional	U finishjob
F count	U firstofoneargument
F csname	U firstoftwoarguments
F dimen	U gobbleoneargument
F dimension	U goto
F float	U iftrue
F glue	U input
F integer	U loadfoundtypescriptfile
F keyword	U resetctxscanner
F keywordcs	U rlap
F list	U scratchcounter
F lxmlid	U scratchdimen
F number	U scratchmuskip
F real	U scratchskip
F scanclose	U scratchtoken
F scanopen	U secondoftwoarguments
F skip	U setfalsevalue
F string	U setsectionblock
F table	U setupsystem
F token	U startcolumns
F tokens	U starttabulate
F toks	U starttitle

F scantable

U startxtitle U stopcolumns

F inspect

F word

F scannumber

U stopxtitle	T setters
U texsetup	F box
T collectors	F char
F defaultwords	F count
F dowithwords	F dimen
F flush	F glue
F install	F lua
F register	F macro
F show	F skip
F test	T shortcuts
D commands	N close
F compile	F inspect
F constant	N open
T converters	F report
S toboolean	F scanboolean
S todimen	F scanclose
S toglue	F scancode
S tonumber	F scanconditional
S tostring	F scancsname
F create	F scandimen
F defined	F scandimension
U egroup	F scaninteger
T getters	F scankeyword
F box	F scankeywordcs
F count	F scanlist
F dimen	F scannumber
F glue	F scanopen
F macro	F scanstring
F meaning	F scantable
F skip	F scanword
F token	F toboolean
U hbox	F todimen
F isdefined	F tonumber
F istoken	F tostring
F letter	U vbox
F letters	U vtop
F new	F tonumber
F other	F tostring
F pickup	<b>vbox</b> userdata
	_

T presets
F printlist

vtop userdata

#### tracers (context)

count function
cs function
dimen function
knownlist function
lists table

T context
T internals
T scratch

name function

primitive function
printerror function
printwarning function
showlines function
strings table

S undefined

toks function
type function

## trackers (context)

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

# typesetters (context)

E gotglobal

-1	+abla		
alignments	table	T handlers	
F handler		F installhandler	•
Fset	4-61-	F processmath	
breakpoints	table	F set	
F define		F setcolor	
F handler		F setmath	
D mapping		F tomode	
T methods		firstlines	table
T numbers		T actions	
F set		F default	
F setreplacement		F line	
cases	table	F word	
T actions		F handler	
F handler		F set	
F register		fontkerns	table
F set		F handler	
characteralign	table	initials	table
F handler		T actions	
F resetcharacter	ralign	F default	
F setcharacteral	Lign	F addanchortolin	ie
characters	table	F addtoline	
F handler		F calculatedelta	ı
T methods		F checkline	
F replacenbsp		F handler	
F replacenbspace	es	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	

E handler

kerns	table	F apply	
D factors		F register	
F handler		F reset	
F keepligature	2	F split	
D mapping		F startapply	
F set		F stopapply	
manipulators	table	F stripped	
F apply		F tostring	
F applyspecifi	cation	<b>rubies</b> tabl	
T methods		F attach	
F Word		F check	
F Words		<b>showsuspects</b> func	
F abbreviate	djournal	<b>spacings</b> tabl	
F expandedjo	urnal	F define	
F lowercase		F handler	
F stripperio	d	D mapping	
F uppercase		T numbers	
T patterns		T frenchpunctuation	
U list		T characters	
U pair		S name	
F splitspecifi	cation	N number	
margins	table	F reset	
F finalhandler	-	F set	
F globalhandle	er	F setup	
F localhandler	-	<b>wrappers</b> tabl	
F save		F handler	
marksuspects	function	<b>xtables</b> tabl	
paragraphs	table	F cleanup	
F addanchortol	.ine	F construct	
F addtoline		F create	
F calculatedel	.ta	F finish_row	
F checkline		F flush	
F handler		F initialize_construct	
F moveinline		F initialize_reflow_hei	
F normalize		F initialize_reflow_wid	
F set		F next_row	
periodkerns	table	F reflow_height	
D factors		F reflow_width	

F set processors

table

F set\_reflow\_width

# updaters (context)

apply function
register function

## url (context)

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

# utf8 (context)

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

# utilities (context)

debugger	table	F	size	
F disable		F	skip	
F enable		F	skiplong	
F savestats		F	skipposition	
F showstats		F	skipshort	
F showtraceback		F	writebyte	
files	table	F	writecardinal2	
F close		F	writecardinal4	
F getposition		F	writestring	
F getsize		form	atters	table
F look		F	formatcolumns	
F open		F	list	
F read2dot14		F	stripzeros	
F readbyte		garb	agecollector	table
F readbytes		F	check	
F readbytetable		N	criterium	
F readcardinal		В	enabled	
F readcardinal1		lua		table
F readcardinal2		В	alwaysstripcode	
F readcardinal2le		F	checkmemory	
F readcardinal3		F	compile	
F readcardinal3le		F	loadedluacode	
F readcardinal4		F	loadstring	
F readcardinal4le		F	loadstripped	
F readcardinaltabl	e	N	${\tt nofstrippedbytes}$	
F readchar		N	nofstrippedchunks	5
F readfixed2		F	registerfinalize	-
F readfixed4		В	stripcode	
F readinteger		Т	strippedchunks	
F readinteger1		F	strippedloadstrin	ng
F readinteger2		Т	suffixes	
F readinteger2le			S lua	
F readinteger3			S luc	
F readinteger3le			S lui	
F readinteger4			S luj	
F readinteger4le			S luv	
F readintegertable			S tma	
F readsignedbyte			S tmc	
F readstring			S tua	

F strip		B latin-modern-light-designsize
F unpack		B modern-light
N version		T modern-mono, modern-base-mono
parsers	table	B modern-base-mono
F add_settin	gs_to_array	B modern-mono
F arguments_	to_table	T modern-variable,latin-modern-va
F array_to_s	tring	B latin-modern-variable
F csvsplitte	er	B latin-modern-variable-designsi
F getparamet	ers	B modern-variable
F groupedspl	itat	T modernvariable,modern-variable
F hash_to_st	ring	B modern-variable
T hashes		B modernvariable
T settings	_to_set	T modernvariablelight,modern-varia
T min,max	k,fit,broad,auto	B modern-variable-light
B auto		B modernvariablelight
B broad		T serif,sans,mono
B fit		B mono
B max		B sans
B min		B serif
T modern,	latin-modern	T text, hidden, paper, page, leftpage,
B latin	-modern	B hidden
B moder	n	B leftpage
T modern,	latin-modern,modern-variable,latin-modern	-variable,modeleprangecondensed,latin-modern-cond
B latin	-modern	B paper
B latin	-modern-condensed	B rightpage
B latin	-modern-variable	B text
B moder	n	F iterator
B moder	n-condensed	F keq_to_hash
B moder	n-variable	F listitem
T modern,	latin-modern-designsize,latin-modern	F make_settings_to_hash_pattern
B latin	-modern	F mergehashes
B latin	-modern-designsize	F options_to_array
B moder	n	F options_to_hash
T modern,	modern-base	T patterns
B moder		U settings_to_array
B moder	n-base	U settings to hash a

U settings\_to\_hash\_c

B latin-modern-condensed

B modern-condensed

B latin-modern-light

B modern-light-condensed

T modern-light, latin-modern-light

F hashed

F new

F pack

F simplehashed

F runtime		F tostring	
F settings_to_ar	ray	setters	table
F settings_to_ar	ray_obey_fences	F disable	
F settings_to_ar	ray_with_repeat	F enable	
F settings_to_has	sh	F initialize	
F settings_to_has	sh_colon_too	F list	
F settings_to_has	sh_strict	F new	
F settings_to_has	sh_tolerant	F register	
F settings_to_nur	mbers	F report	
F settings_to_se	t	F reset	
F simple_hash_to	_string	F show	
F splitmethod		stacker	table
F splitthousands		F new	
F stepper		storage	table
F stripped_setti	ngs_to_array	F allocate	
F unittotex		F checked	
F unittoxml		F mark	
randomizer	table	F marked	
F get		F setinitializer	
F getnumber		F sparse	
F getseed		streams	table
F popseed		F close	
F pushseed		F getposition	
F reuseseed		F look	
F setseed		F open	
F setseedi		F openstring	
report	function	F read2dot14	
sequencers	table	F read2dot4	
F appendaction		F readbyte	
F appendgroup		F readbytes	
F compile		F readbytetable	
F disableaction		F readcardinal	
F disablegroup		F readcardinal1	
F enableaction		F readcardinal2	
F enablegroup		F readcardinal2LE	
D functions		F readcardinal3	
F localize		F readcardinal3le	

F process\_stripped\_settings

F rfc4180splitter

F new

F nodeprocessor

F prependaction

F replaceaction

F readcardinal4

F readchar

F readcardinaltable

F setkind

F readinteger		U collapse
F readinteger1		U prune
F readinteger2		U prune and collapse
F readinteger2l	е	U prune and no empty
F readinteger3		U prune and to space
F readinteger3l	е	U retain
F readinteger4		U retain and collapse
F readinteger4l	е	U retain and no empty
F readintegerta	ble	F striplines
F readsignedbyt	е	F striplong
F readstring		F tabtospace
F setposition		T tracers
F size		<b>tables</b> table
F skip		F accesstable
F skipbytes		F definedtable
F skiplong		F definetable
F skipshort		F encapsulate
strings	table	F insertaftervalue
F collapse		F insertbeforevalue
F collapsecrlf		F migratetable
T formatters		F removevalue
F add		F replacevalue
F new		<b>templates</b> table
F newcollector		F load
F newrepeater		F replace
F nice		F replacer
T striplinepatt	erns	F resolve

# vf (context)

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

## visualizers (context)

escapepatterns	data table	signal	string
getspecification	function	signalpattern	userdata
getvisualizer	function	specifications	data tab
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
${\tt registerescape} {\tt pattern}$	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		delete_element	function
B gt		despecialized	function
B lt		each	function
B quot		each_element	function
cdata	function	elements	function
cdatatotext	function	elementtocdata	function
checkbom	function	empty	function
checkerror	function	entities	data tak
checknamespace	function	erase	function
checkns	function	errorhandler	function
cleansed	function	escaped	function
collect	function	expressions	table
collect_elements	<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	

	. uppe.		· count	
fi	llin	function	F default	
fi	lter	function	F elements	
fi	nalizers	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		<pre>inject_element_after</pre>	function
	T xml		<pre>inject_element_before</pre>	function
	F all		injectafter	function

F chainattribute

F count

injectbefore

insert

function

function

F undefined

F upper

F att

F attribute

Inscri_cccment_berore	Tunccion	registerns	Tunctio
insertafter	function	reindex	functio
insertbefore	function	remap_name	functio
insertcdata	function	remap_namespace	functio
insertcomment	function	remap_tag	functio
inspect	function	remapname	functio
is_valid	function	remapnamespace	functio
kind	function	remaptag	functio
last	function	rename	functio
lastmatch	function	renamespace	functio
load	function	reparsedentitylpeg	userdat
lpath	function	replace	functio
lpathcached	function	replace_element	functio
lpathcalls	function	resetinjectors	functio
lshow	function	resolvens	functio
makestandalone	function	root	functio
match	function	save	functio
name	function	selection	functio
newhandlers	function	separate	functio
nodesettostring	function	serialize	functio
originalload	function	serializetotext	functio
package	function	setcdata	functio
parent	function	setcomment	functio
parsedentitylpeg	userdata	sethandlersfunction	functio
pihandlers	table	setinjectors	functio
F injector		setproperty	functio
F tex		settings	functio
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 >	
process_attributes	function	S \	
<del>process_elements</del>	function	S {	
processattributes	function	S	
profiled	table	S }	

function

function

pure
pushmatch

registerns

specialhandler

table

function

insert\_element\_before function

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

function function function function userdata

function function function function function table

#### zip (extra lua)

archivestableopenarchivefunctionclosefunctionopenfilefunctionclosearchivefunctionregisteredfilestableopenoverloaded functiontypefunction

## zlib (extra lua)

adler32	function
compress	function
compressobj	function
crc32	function

decompress	function
decompressobj	function
version	function