

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

ConTEXT LMTX

global (alias: _G)

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

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

typesetters	table	warn	function
unpack	function	xcomplex	table
updaters	table	xdecimal	table
url	table	xmath	table
userdata	table	xml	table
utf	table	xpcall	function
utf8	table	xzip	table
utilities	table	zip	table
visualizers	table	zlib	table

attributes (context)

alternates table

N attribute
D data
F enable
F handler
F register
D registered
D values

applyoverloads function

colorintents table

N attribute
D data
F enable
F handler
F register
D registered

colors table

N attribute
F cmyk
F cmyktogray
F cmyktorgb
F colorcomponents
D counts
B couple
F currentmodel
F currentnamedmodel
D data
N default
F defineintermediatecolor
F definemultitonecolor
F defineprocesscolor
F defineprocesscolordirect
F definesimplegray
F definespotcolor
F definetransparency
F enable
F filter
N forced
F forcedmodel
F forcesupport
F formatcolor

F formatgray
F getpagecolormodel
F gray
F graytohsv
F handler
T helpers
F complement
F inbetween
F justone
F hsvtogray
F hsvtorgb
F hwbtorgb
F iccprofile
F isblack
F labtorgb
F labtoxyz
N main
S model
D models
F mpcolor
F mpnamedcolor
F mpoptions
F namedcolorattributes
N none
F popset
F processcolorcomponents
F pushset
F register
D registered
F registerspotcolor
F rgb
F rgbtocmyk
F rgbtogray
F rgbtohsv
F rgbtoxyz
N selector
F setlist
F setmodel
F setpagecolormodel
D sets
F spec

F spot		F disabletriggering	
F spotcolorname		F enabletriggering	
F spotcolorparent		F finalize	
F spotcolorvalue		F initialize	
B supported		F process	
F toattributes		F selective	
F transparencycomponents		F simple	
B triggering		F stacked	
F usecolors		F stacker	
D valid		system	function
F value		tooverloads	function
D values		transparencies	table
B weightgray		N attribute	
F xyztolab		D data	
F xyztorgb		F enable	
define	function	F forcesupport	
effects	table	F handler	
N attribute		T names	
D data		N color	
F enable		N colorburn	
F handler		N colordodge	
F register		N darken	
D registered		N difference	
D values		N exclusion	
handlers	table	N hardlight	
list	data table	N hue	
markasoverload	function	N lighten	
names	data table	N luminosity	
negatives	table	N multiply	
N attribute		N none	
D data		N normal	
F enable		N overlay	
F handler		N saturation	
F register		N screen	
D registered		N softlight	
F set		N none	
numbers	data table	F register	
ofnode	function	D registered	
private	function	B supported	
public	function	F toattribute	
restore	function	B triggering	
save	function	F value	
showcurrent	function	D values	
states	table	unsetvalue	number

viewerlayers table

N attribute
F cleanup
D data
F define
F definedlayoutcomponent
F enable
F forcesupport
F handler
B hasorder
D listwise
F register

D registered
F resolve_begin
F resolve_end
F resolve_reset
F resolve_step
D scopes
F setfeatures
F start
F stop
B supported
D values

backends (context)

closeout function

codeinjections table

F boxresourcedimensions

F registerboxresource

F restoreboxresource

current string

defaults table

T codeinjections

T nodeinjections

T registrations

D tables

getcallbackstate function

included table

B context

B date

B id

B metadata

B pdf

install function

latelua function

nodeinjections table

nothing function

openout function

pdf table

T codeinjections

F addbookmarks

F analyzenormalsymbol

F analyzesymbol

F attachmentid

F bitmap

F clonefield

F copyimage

F definefield

F definefieldset

F defineviewerlayer

F embedfile

F embedimage

F enabletags

F exportformdata

F fieldsurrounding

F flushmergelayer

F getbookmarks

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getidentityvariable

F getinfo

F getpreviewfigure

F insertrenderingwindow

F jp2

F jpg

F maptag

F mergebookmarks

F mergecomments

F mergefields

F mergereferences

F mergeviewerlayers

F newimage

F png

F prerollreference

F presetsymbol

F presetsymbollist

F processrendering

F registerdocumentcloseaction

F registerdocumentopenaction

F registeredsymbol

F registerpagecloseaction

F registerpageopenaction

F registerpattern

F registersymbol

F scanimage

F setattachmentsupport

F setfieldcalculationset

F setfigurealternative

F setfigurecolorspace

F setfiguremask

F setformat

F setformsmethod

F setpagetransition

F settaggingsupport

F setupidentity

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

basexx (extra lua)

decode16 function

decode64 function

decode85 function

decodeLZW function

decodeRL function

encode16 function

encode64 function

encode85 function

encodeLZW function

encodeRL function

bit32 (basic lua)

arshift function
band function
bnot function
bor function
btest function
bxor function

extract function
lrotate function
lshift function
replace function
rrotate function
rshift function

blobs (context)

append	function
dimensions	function
dispose	function
new	function
pack	function
strdp	function
strhd	function

strht	function
strwd	function
tohpack	function
tonodes	function
tovpack	function
write	function

boolean (context)

tocontext function

tonumber function

buffers (context)

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

builders (context)

checkparcontext function

checksidefloat function

kernel table

F collapsing

F hyphenating

F kerning

F ligaturing

F mlist_to_hlist

paragraphs table

T constructors

N attribute

F define

F disable

F enable

F handler

T methods

F basic

F default

F hpack

F oneline

D names

D numbers

F set

F start

F stop

T expansion

F trace

F keptogether

F registertogether

T solutions

T splitters

F define

F optimize

T registered

F reset

F set

F split

F start

F stop

F tag

profiling table

F add

F distance

F fixedprofile

F get

F list

F pagehandler

F profilebox

F set

vsparing table

D categories

F checkstrutdepth

F collapsevbox

T data

D map

D skip

D snapmethods

F definesnapmethod

B fixed

F forcepageflush

F forcestrutdepth

F getnofpreviouslines

F inject

F injectdisable

F injectpenalty

F injectskip

F pagehandler

F pageoverflow

F popatsame

F pushatsame

F setmap

F setskip

F snapbox

F synchronizepage

F tocategories

F tocategory

F vboxhandler

cache (context)

base	string	loadcontent	function
collapsecontent	function	loaddata	function
configfiles	function	more	string
contentstate	function	savecontent	function
defaults	table	savadata	function
getfirstreadablefile	function	setfirstwritablefile	function
getreadablepaths	function	setluanames	function
getwritablepath	function	treehash	function
hashed	function	usedpaths	function
is_writable	function		

callback (basic tex)

find function
known function
list function

register overloaded function
usage function

callbacks (context)

freeze function

functions table

F start_page_number

F stop_page_number

known function

list data table

pop function

push function

register function

report function

supported table

B append_to_vlist_filter

B begin_paragraph

B build_page_insert

B buildpage_filter

B contribute_filter

B define_font

B find_format_file

B find_log_file

B handle_overload

B hpack_filter

B hpack_quality

B hyphenate

B insert_par

B intercept_lua_error

B intercept_tex_error

B kerning

B ligaturing

B linebreak_filter

B make_extensible

B mlist_to_hlist

B open_data_file

B paragraph_context

B post_linebreak_filter

B pre_dump

B pre_linebreak_filter

B pre_output_filter

B process_jobname

B show_error_message

B show_lua_call

B show_warning_message

B show_whatsit

B start_file

B start_run

B stop_file

B stop_run

B trace_memory

B vpack_filter

B vpack_quality

B wrapup_run

catcodes (context)

names data table

numbers data table

register function

characters (context)

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

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

chemistry (context)

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

containers (context)

cleannname function
content function
define function
is_usable function

is_valid function
read function
usecache boolean
write function

converters (context)

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

uchexnumbers

upper

verbose

D data

function

function

table

F translate

weekday

word

words

function

function

function

coroutine (basic lua)

close function
create function
isyieldable function
resume function

running function
status function
wrap function
yield function

ctxrunner (context)

load	function	prepfiles	data table
preparedfile	function	resolve	function

data (context)

action	function	prerolled	string
depth	number	width	number
height	number		

debug (basic lua)

getinfo function

sethook function

traceback 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
default	function
disable	function
done	table
enable	function
list	function
name	string

register	function
report	function
reset	function
show	function
value	function
values	function

document (context)

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

documentdata (context)

variable function

drivers (context)

convert	function	F popleaderlevel
converters	table	F pushleaderlevel
F engine		F rule
F lmtx		F simplerule
enable	function	F specialrule
gethpos	function	F updatefontstate
getpos	function	T Whatsit
getrpos	function	S name
getvpos	function	T json
helpers	table	T actions
install	function	F cleanup
instances	table	F convert
T default		F finalize
T actions		F initialize
F convert		F outputfilename
F outputfilename		F prepare
T flushers		F wrapup
F popleaderlevel		T flushers
F pushleaderlevel		F character
T Whatsit		F popleaderlevel
S name		F pushleaderlevel
T empty		F rule
T actions		F simplerule
F convert		F specialrule
F prepare		F updatefontstate
T flushers		T Whatsit
F popleaderlevel		S name
F pushleaderlevel		T lua
T Whatsit		T actions
S name		F cleanup
T js		F convert
T actions		F finalize
F cleanup		F initialize
F convert		F outputfilename
F finalize		F prepare
F initialize		F wrapup
F outputfilename		T flushers
F prepare		F character
F wrapup		F popleaderlevel
T flushers		F pushleaderlevel
F character		F rule

F simplerule	S name	
F specialrule	T pdf	
F updatefontstate	T actions	
T whatsit	F cleanup	
S name	F convert	
T mpo	F finalize	
T actions	F initialize	
F finalize	F outputfilename	
F initialize	F prepare	
T flushers	F wrapup	
F character	T flushers	
F popleaderlevel	F character	
F pushleaderlevel	F fontchar	
F rule	F group	
F simplerule	F image	
F specialrule	F literal	
T whatsit	F popleaderlevel	
S name	F poporientation	
T mps	F pushleaderlevel	
T actions	F pushorientation	
F cleanup	F restore	
F convert	F rule	
F finalize	F save	
F initialize	F setmatrix	
F outputfilename	F setstate	
F prepare	F simplerule	
F wrapup	F specialrule	
T flushers	F startclipping	
F character	F startmatrix	
F popleaderlevel	F startmirroring	
F pushleaderlevel	F startrotation	
F rule	F startscaling	
F simplerule	F stopclipping	
F specialrule	F stopmatrix	
F updatefontstate	F stopmirroring	
T whatsit	F stoprotation	
S name	F stopscaling	
T none	F updatefontstate	
T actions	T whatsit	
T flushers	S name	
F popleaderlevel	lmtxversion	number
F pushleaderlevel	outputfilename	function
T whatsit	report	function

environment (context)

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

experiments (context)

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

figures (context)

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

scale	function	setpaths	function
set	function	suffixes	data table
setlookups	function	used	data table
setorder	function		

file (basic lua)

addsuffix	function
basename	function
checksum	function
collapsepath	function
copy	function
dirname	function
expandname	function
extname	function
is_qualified_path	function
is_readable	function
is_rootbased_path	function
is_writable	function
isreadable	function
iswritable	function
join	function
joinpath	function
loadchecksum	function
nameonly	function
nametotable	function
needs Updating	function

needsupdating	function
pathpart	function
readdata	function
removesuffix	function
replacesuffix	function
reslash	function
robustname	function
savechecksum	function
savedata	function
size	function
splitbase	function
splitname	function
splitpath	function
strip	function
suffix	function
suffixes	function
suffixesonly	function
suffixonly	function
syncmtimes	function
withinbase	function

fio (extra lua)

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

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

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
current	function
define	function
getfont	function
getfontdimen	function

id	function
max	function
nextid	function
setfont	function
setfontdimen	function

fonts (context)

analyzers	table	
D features		F currentfonthasfeature
D initializers		D designsizes
D methods		F enhanceparameters
F setstate		T enhancers
D states		T afm
B useunicodemarks		F apply
checkers	table	F patch
F getmissing		T patches
D mapping		F register
F missing		F report
F placeholder		F register
cid	table	F report
F getmap		T otf
F loadfile		F addfeature
collections	table	F apply
F checkenabled		F enhance
F clonevector		F patch
F define		T patches
T definitions		F register
F found		F report
F prepare		F register
F process		F report
F register		T tfm
F registermain		F apply
F report		F patch
F reset		T patches
T vectors		F register
constructors	table	F report
F addcharacters		F register
F addcoreunicodes		F report
F aftercopyingcharacters		N factor
F applyfinalizers		T features
F applymanipulators		D afm
F assignmathparameters		D otf
F beforecopyingcharacters		D tfm
D cache		F finalize
F calculatyscale		F getfeatureaction
F checkedfeatures		F getmathparameter
F checkedfilename		F getprivate
F collectprocessors		T handlers
		T afm

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

F addunicodetable
 F avar
 F cbdt
 F cblc
 F cff
 F cff2
 F cffcheck
 T cffencoder
 F checkhash
 F cmap
 F colr
 F compact
 F cpal
 F ebdt
 F eblc
 F ebsc
 F expand
 F extend
 F fvar
 F gdef
 F getcomponents
 F getinfo
 F glyf
 F gpos
 T gposhandlers
 F chainedcontext
 F context
 F cursive
 F extension
 F marktobase
 F marktoligature
 F marktomark
 F pair
 F single
 F gsub
 T gsubhandlers
 F alternate
 F chainedcontext
 F context
 F extension
 F ligature
 F multiple
 F reversechainedcontextsingle
 F single

F gvar
 F head
 T helpers
 F axistofactors
 F cleanname
 F getaxisscale
 F getfactors
 F getscales
 F gotodatatable
 F normalizedaxis
 T normalizedaxisishash
 F readvariationdata
 F reportskippedtable
 F setvariabledata
 F hhea
 F hmtx
 F hvar
 F kern
 F loadfont
 F loadshapes
 F loca
 F math
 F maxp
 F mvar
 F name
 F os/2
 F pack
 F parsecharstrings
 F post
 F registerextender
 F rehash
 F sbix
 F stat
 T streamreader
 F close
 F getposition
 F getsizes
 F look
 F open
 F read2dot14
 F readbyte
 F readbytes
 F readbytetable
 F readcardinal

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

F loadvf	
F pktopdf	
F showpk	
F reencode	
F setfeatures	
N version	
T vf	
T combinations	
F combine	
T combiner	
D commands	
D helpers	
D math	
N version	
D whatever	
F hashfeatures	
F hashinstance	
T hashmethods	
F normal	
F virtual	
F initializefeatures	
D loadedfonts	
N noffontsloaded	
N nofsharedfonts	
N nofsharedhashes	
N nofsharedvectors	
N privateoffset	
D privateslots	
F readanddefine	
F registerfeature	
F resetfeature	
B resolvevirtualtoo	
F scale	
F scaled	
F setfactor	
F setfeature	
F setmathparameter	
F setname	
B sharefonts	
F trytosharefont	
N version	
current	function
currentid	function
definers	table

F addlookup	
F analyze	
F applypostprocessors	
F checkedmode	
F checkedscript	
S defaultlookup	
F define	
F getspecification	
F internal	
F loadfont	
F makespecification	
T methods	
F install	
D variants	
F read	
F register	
F registered	
F registersplit	
F resetnullfont	
F resolve	
T resolvers	
F file	
F name	
F spec	
definetypface	function
dropins	table
F clone	
F getshape	
F getshapes	
F nextid	
F provide	
F registerglyph	
F registerglyphs	
F swap	
F swapone	
encodings	table
T agl	
D ctxcodes	
D extras	
D names	
D synonyms	
D unicodes	
D cache	
F is_known	

D known		D filenames	
F load		F getcompositions	
F make_unicode_vector		T list	
D math		F load	
N version		F prepare_features	
enhanceid	function	F register	
expansions	data table	F registerpostprocessor	
formats	data table	F report	
getalternate	function	T suffixes	
getindices	function	handlers	table
getkern	function	hashes	table
getmultiple	function	D characters	
getsubstitution	function	D classes	
getters	table	D csnames	
T alternate		D descriptions	
F opentype		D dynamics	
T kern		D emwidths	
F opentype		D exheights	
F type1		D extensibles	
F type3		D features	
T multiple		D identifiers	
F opentype		D italics	
T substitution		D lastmathids	
F opentype		D marks	
goodies	table	D mathparameters	
D colorschemes		D modes	
T data		D originals	
T dejavu-math		D parameters	
S author		T processes	
S comment		D properties	
S copyright		D quads	
B initialized		D resources	
T mathematics		T setdynamics	
T alternates		T shapes	
T dotless		D spaces	
S comment		D spacings	
S feature		T streams	
N value		D unicodes	
T kerns		D variants	
T *:0x1D449		D xheights	
T bottomright		helpers	table
S name		F addextraprivate	
S version		F addprivate	
D designsizes		F appendcommands	

- F appendcommandtable
- F checkflags
- F checkmerge
- F checksteps
- F collectanchors
- F combineglyphs
- D commands
- F composecharacters
- F descriptiontoslot
- F dimenfactor
- F expandglyph
- T extraprivates
- F fontpatternhassize
- F getcoloredglyphs
- F getdigitwidth
- F getinstancespec
- F getparameters
- F getprivatecharornode
- F getprivatenode
- F getprivates
- F getprivateslot
- F hasprivate
- F indextoslot
- F mathscriptslots
- F name
- F nametoslot
- F newprivateslot
- F prependcommands
- F prependcommandtable
- F privateslot
- F registerglyphbox
- F scalecommands
- F setboxglyph
- F setboxglyphs
- F setdigitwidth
- F setmetaglyph
- F setmetaglyphs
- F splitfontpattern
- F tochar
- T vfinjectors
 - F pdf
 - F startcolor
 - F stopcolor
- T vfspecials

- T backgrounds
- T outlines
- infofont** function
- iterators** table
 - F characters
 - F descriptions
 - F glyphs
- loggers** table
 - F format
 - F onetimemessage
 - F register
 - F reportdefinedfonts
 - F reportusedfeatures
- mappings** table
 - F addtounicode
 - F fromunicode16
 - F getentry
 - F loadfile
 - F loadline
 - F makenameparser
 - D overloads
 - F reset
 - F tounicode
 - F tounicode16
 - F tounicode16sequence
- metapost** table
 - F boundingbox
 - F boxtomp
 - F draw
 - F fill
 - F glyph
 - F maxbounds
 - F paths
 - F widthline
 - F zeroline
- names** data table
- nulldata** data table
- privateoffsets** table
 - B keepnames
 - N mathbase
 - N mathextrabase
 - N textbase
 - N textextrabase
- protrusions** data table

readers	table	F registerfiles	
F afm		F registerfontalternative	
F check_lua		F registerfontfamily	
F check_tfm		F textfallback	
F lua		F typeface	
F ofm		F typescript	
F opentype		F userdata	
F otf		specifiers	table
F pfb		D contextmerged	
D sequence		F contextnumber	
F tfm		D contextnumbers	
F ttc		D contextsetups	
F ttf		F contexttostring	
F woff		F definecontext	
reserveid	function	F mergecontext	
select	table	F presetcontext	
D alternatives		F registercontext	
F bodyfont		F showcontext	
D data		F splitcontext	
F default		D synonyms	
D defaults		D variants	
F definefallbackfamily		symbols	table
F definefontfamily		T emoji	
F definefontfamilypreset		F checked	
D extras		F resolved	
F fallback		F uselibrary	
D fallbacks		tables	table
F features		tracers	table
F filefallback		treatments	table
F fontdata		F applyfixes	
F fontfallback		D data	
F fontsynonym		S filename	
F goodies		F ignoredfile	
F mathfallback		F report	
D methods		F trace	
D presets		typefaces	table
F registerfallback			

functions (context)

dummy function

graphics (context)

backgrounds table

- F fetchmultipar
- F pair
- F path
- F point

bitmaps table

- F flush
- F new
- F placeholder
- F tocontext

identifiers table

- F bitmap
- F jp2
- F jpg
- F png

identify function

synchronizers table

- F collapse
- F collect
- F extend
- F getbottom
- F getd
- F geth
- F getkind
- F getsize
- F gettask
- F gettop
- F getw
- F getx
- F gety
- F prune

gzip (extra lua)

compress function
compressed function
decompress function

load function
save function
suffix function

images (context)

check	function		B crop	
checksize	function		B media	
copy	function		B none	
create	function		B trim	
embed	function		storedata	function
embedfromstore	function		totable	function
fetchdata	function		types	table
keys	table		N jbig2	
print	function		N jp2	
resetdata	function		N jpg	
resetstore	function		N none	
scan	function		N pdf	
serialize	function		N png	
sizes	table		N stream	
B art			wrap	function
B bleed				

interactions (context)

attachments data table

fields table

- F clone
- F define
- F defineset
- F insert

general table

- F getidentity
- F setupidentity

help table

- F collect
- F reference
- F register

javascripts table

- F addtopreamble
- F code
- D codes
- F flushpreambles

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

linkedLists data table

pages table

- F setpagetransition
- F setupcanvas

references table

- F setcloseddocument
- F setclosepage
- F setopendocument
- F setopenpage

renderings data table

soundclips data table

interfaces (context)

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

io (basic lua)

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

job (context)

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

F gettobesaved
 F getvpos
 F hangafter
 F hangindent
 F height
 F hsize
 N lastx
 N lasty
 F leftskip
 F lowerleft
 F lowerright
 F markregionbox
 F n
 F onsamepage
 F overlapping
 F p
 F page
 T pagedata
 F paragraph
 F parindent
 F position
 F r
 F region
 F registerhandlers
 F replace
 F rightskip
 F set
 F setall
 F setregionbox
 F setspec

F settobesaved
 D tobesaved
 F upperleft
 F upperright
 F used
 F whd
 F width
 F x
 F xy
 F y

register
save
structure

D collected
 T components
 T tobesaved
 T branches
 S name
 S type

variables

D checksums
 D collected
 F getchecksum
 F makechecksum
 F restore
 F save
 F setchecksum
 D tobesaved

version

function
 function
 table

table

number

language (basic tex)

clean	function
clear_hyphenation	function
clear_patterns	function
current	function
gethjcode	function
has_language	function
hyphenate	function
hyphenation	function
hyphenationmin	function

id	function
new	function
patterns	function
posttexhyphenchar	function
postthyphenchar	function
preexhyphenchar	function
prehyphenchar	function
sethjcode	function
setwordhandler	function

languages (context)

addgoodiesdata	function	F installmethod	
addgoodiesfile	function	F lasttrace	
appliedoptions	table	F loadpatterns	
associate	function	F registerexception	
associated	data table	F registerpattern	
association	function	F setfeatures	
counters	data table	installed	function
current	function	installhandler	function
data	data table	labels	table
decimals	data table	F define	
define	function	F split	
explicitthyphen	function	loadable	function
flatten	function	loadwords	function
frequencies	table	logger	table
F averagecharwidth		F report	
F getdata		nofflatted	function
getdata	function	numbers	data table
getnumber	function	postexhyphenchar	function
goodiefiles	function	posthyphenchar	function
hjcounts	table	preexhyphenchar	function
hyphenate	function	prehyphenchar	function
hyphenators	table	registered	data table
T dictionaries		registeredactions	table
D featuresets		replacements	table
F handler		F add	
T methods		F addlist	
F expanded		F handler	
B none		F set	
F original		serializediscretionary	function
F tex		setexceptions	function
F traditional		setgoodieshandler	function
F popmethod		setoptions	function
F pushmethod		setpatterns	function
F setmethod		setsynonym	function
F setup		setwordhandler	function
F showhyphenationtrace		showdiscretionaries	function
T traditional		strippedgoodiewords	function
F definefeatures		tolang	function
F gettrace		transliteration	table
F hyphenate		F define	
F injectthyphens		F handler	

F set		words	
unload	function	F check	table
urls	table	T data	
D characters		F disable	
N lefthyphenmin		F enable	
D mapping		T enablers	
B packslashes		B enables	
N righthyphenmin		F found	
F setcharacters		F load	
version	number	T methods	
visualizediscretionaries	function	N threshold	

layouts (context)

getcanvas	function	status	table
getpagedimensions	function	F isleftpage	
setupcanvas	function	F lefttorrightpageaction	

lfs (extra lua)

attributes	overloaded function
chdir	overloaded function
currentdir	function
dir	overloaded function
isdir	overloaded function
isfile	overloaded function
isfound	function
isreadabledir	function
isreadablefile	function
iswriteabledir	function

iswriteablefile	function
link	overloaded function
mkdir	overloaded function
makedirs	function
modification	function
readlink	function
rmdir	overloaded function
setexecutable	function
symlink	function
touch	overloaded function

libraries (context)

basiclua data table

basictex data table

builtin data table

extralua data table

extratex data table

functions data table

globals data table

lmx (context)

color	function
convert	function
convertfile	function
convertstring	function
einject	function
eprint	function
escape	function
finalized	function
finject	function
fprint	function
get	function
getvariables	function
htmfile	function
html	table
F a	
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
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	setformatters	function
categories	function	setlogfile	function
direct	function	setmessenger	function
disable	function	setprocessor	function
enable	function	settarget	function
finalactions	function	settimedlog	function
flush	function	settranslations	function
loggingerrors	function	show	function
messenger	function	start_page_number	function
new	function	start_run	function
newline	function	starterrorlogging	function
poptarget	function	startfilelogging	function
private	table	status	function
F enablepagetiming		stop_page_number	function
F getpagetiming		stoperrorlogging	function
pushtarget	function	stopfilelogging	function
registerfinalactions	function	subdirect	function
report	function	subreport	function
reporter	function	texerrormessage	function
setformats	function	writer	function

lpdf (context)

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

N NoRotate		F color_indirect	
N NoView		formats	data table
N NoZoom		frombytes	function
N Print		fromeight	function
N Printable		frompdfdoc	function
N ReadOnly		fromsixteen	function
N ToggleNoView		getcatalog	function
N auto		getcompression	function
N hidden		getfontname	function
N printable		getfontobjectnumber	function
T widgets		getinfo	function
N Comb		getmatrix	function
N CommitOnSelChange		getmetadata	function
N DoNotScroll		getnofpages	function
N DoNotSpellCheck		getpageproperties	function
N Edit		getpagereference	function
N FileSelect		getpagetags	function
N MultiLine		getpos	function
N NoExport		getversion	function
N NoToggleToOff		getxformname	function
N Password		graycode	function
N PopUp		hasmatrix	function
N PushButton		id	function
N Radio		immediateobject	function
N RadiosInUnison		includeimage	function
N ReadOnly		injectors	table
N Required		F bitmap	
N RichText		F jp2	
N Sort		F jpg	
N file		F png	
N fixed		injectxmpinfo	function
N nocheck		insertxmpinfo	function
N protected		lastreferredpage	function
N readonly		layerreference	function
N required		limited	function
N sorted		linearshade	function
N unavailable		literal	function
flushfonts	function	majorversion	function
flushgroup	function	makenametree	function
flushobject	function	minorversion	function
flushstreamfileobject	function	nofpages	function
flushstreamobject	function	null	function
fonts	table	number	function
F color_direct		object	function

objectcompresslevel	function	setomitcharset	function
pagereference	function	setomitcidset	function
patternstream	function	setpageorder	function
pdfcolor	function	setpagetag	function
pdftimestamp	function	settime	function
pdfvimage	function	setversion	function
permitdetail	function	shareobject	function
print	function	shareobjectreference	function
procset	function	spotcode	function
protectresources	boolean	stream	function
rectangle	function	string	function
reference	function	toeight	function
registerannotation	function	topdfdoc	function
registerdestination	function	tosixteen	function
registerdocumentfinalizer	function	transparency	function
registerfont	function	transparencycode	function
registerpagefinalizer	function	transparencygroups	table
registerpattern	function	B none	
reserveobject	function	transparencyvalue	function
rgbcode	function	unicode	function
rotationcm	function	usedcharacters	table
setcompression	function	verbose	function

lpeg (basic lua)

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

lua (basic tex)

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

luatex (context)

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

lxml (context)

addindex	function	first	function
all	function	flush	function
applyfunction	function	flushlinewise	function
applyselectors	function	flushsetups	function
att	function	flushspacewise	function
attribute	function	get_id	function
badinclusions	function	getid	function
chainattribute	function	getindex	function
checkindex	function	id	function
collected	function	idsplitter	userdata
command	function	include	function
concat	function	inclusion	function
concatrange	function	inclusions	function
content	function	index	function
context	function	inlineverbatimim	function
convert	function	installsetup	function
count	function	last	function
delete	function	lastatt	function
depth	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
displayverbatimim	function	name	function
doif	function	namespace	function
doifelse	function	nonspace	function
doifelseempty	function	par	function
doifelsetext	function	param	function
doifempty	function	parameter	function
doifnot	function	path	function
doifnotempty	function	popmatch	function
doifnottext	function	pos	function
doiftext	function	position	function
element	function	pure	function
elements	function	pushmatch	function
entities	data table	raw	function
filter	function	rawroot	function
filterlist	function	rawtex	function

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

F add	
F compare	
F flush	
F reset	
F show	
F sort	
splitid	function
startraw	function
startunesescaped	function
stopraw	function
stopunesescaped	function
store	function
strip	function
stripped	function
tag	function
text	function
tobuffer	function
tofile	function
toparameters	function
toverbatim	function
verbatim	function
withindex	function
xmltexhandler	data table

math (basic lua)

abs	function	min	function
acos	function	mininteger	number
asin	function	mod	function
atan	function	modf	function
atan2	function	odd	function
ceil	function	pi	number
ceiling	function	pow	function
cos	function	rad	function
cosd	function	random	overloaded function
cosh	function	randomseed	function
deg	function	round	function
div	function	setrandomseedi	function
even	function	sin	function
exp	function	sind	function
floor	function	sinh	function
fmod	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
maxinteger	number		

mathematics (context)

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

md5 (extra lua)

HEX	function
dec	function
hex	function

sum	function
sumHEXA	function
sumhexa	function

metapost (context)

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

N until		includesvgbuffer	function
N void		includesvgfile	function
N with		installplugin	function
N within		isobject	function
N write		knownparameters	table
colorinitializer	function	lastlog	string
convert	function	load	function
currentmpx	function	maketext	function
currentmpxstatus	function	metafonts	table
defaultformat	string	metafun	table
defaultinstance	string	F interpolate	
defaultmethod	string	F topath	
directrun	function	mptopdf	table
escaped	function	F convertmpstopdf	
exectime	table	N nofconverted	
extensiondata	data table	n	number
filterclippath	function	nofruns	number
flush	function	nofscriptruns	function
flushers	table	nvformat	function
T pdf		pdfliterals	function
F flushfigure		pluginactions	function
F startfigure		popformat	function
F stopfigure		popscriptrunner	function
F textfigure		popvariable	function
F tocomment		popvariables	function
flushnormalpath	function	preparetexttextsdata	function
fonts	table	process	function
F define		processing	function
format_number	function	processplugins	function
format_string	function	properties	table
formatnumber	function	pushformat	function
getbendtolerance	function	pushscriptrunner	function
getclippath	function	pushvariable	function
getextensions	function	pushvariables	function
getextradata	function	reducetogray	boolean
gethashentries	function	registerdirect	function
getinstancenames	function	registerscript	function
getjobdata	function	registertokens	function
getparameter	function	remappedtext	function
getparameterset	function	remaptext	function
getstatistics	function	reporterror	function
gettext	function	reportsvgfonts	function
graphic	function	reset	function
graphic_base_pass	function	resetlastlog	function

resetplugins	function
run	function
runscript	function
scanparameters	function
scripterror	function
scriptindex	function
setbendtolerance	function
setextensions	function
setoutercolor	function
setparameterset	function
settext	function
setvariable	function
showlog	boolean
showsvgpage	function
simple	function
splitprescript	function
startgraphic	function
startsvghashing	function
stopgraphic	function
stopsvghashing	function
svformat	function
svgcolorremapper	function
svgfactors	table
N %	
N bp	
N cm	
N em	
N ex	
N in	
N mm	
N pc	
N pt	
N px	
svgglyphtomp	function
svgshapestomp	function
svgshapestopdf	function
svgsplitcolor	function
svgtomp	function
svgtopdf	function
sxsy	function

tex	table
F get	
F reset	
F set	
F setfrombuffer	
texerrors	boolean
texexp	function
theclippath	function
tographic	function
totable	function
types	table
N boolean	
N cmykcolor	
N color	
N dependent	
N independent	
N known	
N numeric	
N pair	
N path	
N pen	
N picture	
N protodependent	
N string	
N structured	
N suffixedmacro	
N tokenlist	
N transform	
N unknownboolean	
N unknownpath	
N unknownpen	
N unknownpicture	
N unknownstring	
N unsuffixedmacro	
N vacuous	
typesvgpage	function
unload	function
untagvariable	function
variables	table

mime (extra lua)

b64 function

decode function

decodet table

F base64

F quoted-printable

dot function

encode function

encodet table

F base64

F quoted-printable

eol function

normalize function

qp function

qpwrp function

report function

stuff function

unb64 function

unqp function

wrap function

wrapt table

F base64

F default

F quoted-printable

F text

wrp function

mp (context)

autoinject	function	direct3	function
aux	table	direct4	function
F boolean		disposehash	function
F color		draw	function
F direct		expandtex	function
F direct1		fill	function
F direct2		flatten	function
F direct3		flush	function
F direct4		format	function
F draw		formatted	function
F fill		fprint	function
F flush		fromhash	function
F fprint		get	table
F integer		F hashentry	
F number		graphformat	function
F numeric		inhash	function
F pair		inject	function
F pairpoints		F boolean	
F path		F cmykcolor	
F pathpoints		F color	
F points		F integer	
F print		F number	
F quadruple		F numeric	
F quadruplepoints		F pair	
F quoted		F path	
F size		F quadruplet	
F string		F string	
F transform		F transform	
F triplet		F triplet	
F tripletpoints		F whatever	
F vprint		integer	function
boolean	function	isarray	function
cleaned	function	isobject	function
color	function	lmt_color_functions	table
dataset	function	F shade	
datasets	function	F step	
F load		lmt_contours_bitmap_get	function
dimension	function	lmt_contours_bitmap_set	function
direct	function	lmt_contours_cleanup	function
direct1	function	lmt_contours_color	function
direct2	function	lmt_contours_edge_get_band	function

lmt_contours_edge_get_cell	function	mf_graphic_text	function
lmt_contours_edge_paths	function	mf_inject_blob	function
lmt_contours_edge_set	function	mf_map_move	function
lmt_contours_edge_set_by_band	function	mf_map_text	function
lmt_contours_edge_set_by_cell	function	mf_named_color	function
lmt_contours_format	function	mf_outline_text	function
lmt_contours_function	function	mf_save_data	function
lmt_contours_maxmean	function	mf_script_index	function
lmt_contours_maxz	function	mf_start_saving_data	function
lmt_contours_minmean	function	mf_stop_saving_data	function
lmt_contours_minz	function	mf_tb_dimensions	function
lmt_contours_nofvalues	function	mf_tt_dimensions	function
lmt_contours_nx	function	mf_tt_initialize	function
lmt_contours_ny	function	mode	function
lmt_contours_range	function	n	function
lmt_contours_shade_paths	function	newhash	function
lmt_contours_shade_set	function	number	function
lmt_contours_shape_paths	function	numeric	function
lmt_contours_start	function	pair	function
lmt_contours_stop	function	pairpoints	function
lmt_contours_value	function	path	function
lmt_contours_xrange	function	pathpoints	function
lmt_contours_yrange	function	points	function
lmt_function_x	function	positionanchor	function
lmt_mesh_set	function	positionbox	function
lmt_mesh_update	function	positioncurve	function
lmt_poisson_generate	function	positionpage	function
lmt_surface_do	function	positionpath	function
lmt_svg_include	function	positionpxy	function
mf_blob_add	function	positionregion	function
mf_blob_dimensions	function	positionwhd	function
mf_blob_index	function	positionxy	function
mf_blob_new	function	prefix	function
mf_blob_raw_content	function	print	function
mf_blob_raw_dimensions	function	processingmode	function
mf_blob_raw_reset	function	quadruple	function
mf_blob_raw_toutf	function	quadruplepoints	function
mf_blob_raw_wipe	function	quoted	function
mf_blob_size	function	report	function
mf_blob_width	function	scan	table
mf_external_figure	function	F boolean	
mf_finish_saving_data	function	F cmykcolor	
mf_formatted_text	function	F color	
mf_get_outline_text	function	F expression	

F integer		size	function
F next		skip	table
F number		F token	
F numeric		solve	function
F pair		string	function
F path		systemmode	function
F pen		texstr	function
F property		texvar	function
F string		tohash	function
F symbol		transform	function
F token		triplet	function
F transform		tripletpoints	function
set	table	vprint	function

mplib (extra tex)

execute	function	inject_transform	function
expandtex	function	inject_whatever	function
finder	function	new	overloaded function
finders	table	pen_info	function
F file		propertycodes	table
F mpstemplate		realtime logging	boolean
finish	function	scan_boolean	function
get_tolerance	function	scan_cmykcolor	function
getcallbackstate	function	scan_color	function
getcodes	function	scan_expression	function
getfields	function	scan_integer	function
gethashentries	function	scan_next	function
gethashentry	function	scan_number	function
getstates	function	scan_numeric	function
getstatistics	function	scan_pair	function
getstatus	function	scan_path	function
gettype	function	scan_pen	function
gettypes	function	scan_property	function
inject_boolean	function	scan_string	function
inject_cmykcolor	function	scan_symbol	function
inject_color	function	scan_token	function
inject_integer	function	scan_transform	function
inject_number	function	set_tolerance	function
inject_numeric	function	showcontext	function
inject_pair	function	skip_token	function
inject_path	function	solve_path	function
inject_string	function	version	function

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_hlist	
F kernpairs		T unscript	
F makeup		T unstack	
F relocate		processouter	function
F render			

node (basic tex)

check_discretionaries	function	F getcharspec
check_discretionary	function	F getdata
copy	function	F getdepth
copy_list	function	F getdirection
count	function	F getdisc
current_attributes	function	F getdiscpart
dimensions	function	F getexpansion
direct	table	F getfam
F addmargins		F getfield
F addxoffset		F getfont
F addxymargins		F getglue
F addyoffset		F getglyphdata
F check_discretionaries		F getglyphdimensions
F check_discretionary		F getheight
F collapsing		F getid
F copy		F getindex
F copy_list		F getkern
F copy_only		F getkerndimension
F count		F getlanguage
F current_attributes		F getleader
F dimensions		F getlist
F effective_glue		F getnext
F end_of_math		F getnormalizedline
F exchange		F getnucleus
F fields		F getoffsets
F find_attribute		F getoptions
F find_attribute_range		F getorientation
F find_node		F getparstate
F first_glyph		F getpenalty
F flatten_discretionaries		F getpost
F flush_list		F getpre
F flush_node		F getprev
F free		F getproperty
F get_attribute		F getreplace
F get_attributes		F getscale
F get_properties_table		F getscales
F get_synctex_fields		F getscript
F getattributelist		F getshift
F getboth		F getstate
F getbox		F getsub
F getchar		F getsubpre

F getsubtype	F remove
F getsup	F reverse
F getsuppre	F set_attribute
F gettotal	F set_attributes
F getwhd	F set_synctex_fields
F getwidth	F setattributelist
F getxscale	F setboth
F getxyscales	F setbox
F getyscale	F setchar
F has_attribute	F setdata
F has_dimensions	F setdepth
F has_field	F setdirection
F has_glyph	F setdisc
F has_glyph_option	F setdiscpart
F hpack	F setexpansion
F hyphenating	F setfam
F id	F setfield
F ignore_math_skip	F setfont
F insert_after	F setglue
F insert_before	F setglyphdata
F is_char	F setheight
F is_direct	F setindex
F is_glyph	F setkern
F is_next_char	F setlanguage
F is_next_glyph	F setleader
F is_node	F setlink
F is_prev_char	F setlist
F is_prev_glyph	F setnext
F is_valid	F setnucleus
F is_zero_glue	F setoffsets
F kerning	F setoptions
F last_node	F setorientation
F length	F setpenalty
F ligaturing	F setpost
F make_extensible	F setpre
F migrate	F setprev
F mlist_to_hlist	F setproperty
F naturalhsize	F setreplace
F naturalwidth	F setscales
F new	F setscript
F protect_glyph	F setshift
F protect_glyphs	F setsplit
F protrusion_skippable	F setstate
F rangedimensions	F setsub

F setsubpre		flush_node	function
F setsubtype		free	function
F setup		get_attribute	function
F setsuppre		get_glue	function
F settotal		get_properties_table	function
F setwhd		getfield	function
F setwidth		getproperty	function
F show		has_attribute	function
F slide		has_field	function
F start_of_par		has_glyph	function
F subtypes		hpack	function
F tail		hyphenating	function
F todirect		id	function
F tonode		insert_after	function
F tostring		insert_before	function
F tovaliddirect		instock	function
F traverse		inuse	function
F traverse_char		is_node	function
F traverse_content		is_zero_glue	function
F traverse_glyph		kerning	function
F traverse_id		last_node	function
F traverse_list		length	function
F type		ligaturing	function
F types		make_extensible	function
F unprotect_glyph		mlist_to_hlist	function
F unprotect_glyphs		new	function
F unset_attribute		protect_glyph	function
F unset_attributes		protect_glyphs	function
F usedlist		protrusion_skippable	function
F uses_font		rangedimensions	function
F values		remove	function
F vertical_break		set_attribute	function
F vpack		set_glue	function
F write		setfield	function
F xscaled		setproperty	function
F yscaled		show	function
effective_glue	function	slide	function
end_of_math	function	subtypes	function
family_font	function	tail	function
fields	function	tostring	function
find_attribute	function	traverse	function
first_glyph	function	traverse_id	function
flatten_discretionaries	function	type	function
flush_list	function	types	function

unprotect_glyph
unprotect_glyphs
unset_attribute
usedlist

function
function
function
function

uses_font
values
vpack
write

function
function
function
function

nodes (context)

accentcodes	data table	fillvalues	data table
aligned	function	firstcharacter	function
append	function	firstcharinbox	function
apply	function	firstdirinbox	function
applyvisuals	function	flush	function
astable	function	flush_list	function
basepoints	function	flush_node	function
boundarycodes	data table	fullhpack	function
boxes	table	get_attribute	function
F dimensions		get_properties_table	function
F direct		getattr	function
F found		getattribute	function
F reset		getboth	function
F restore		getbox	function
F save		getchar	function
F savenode		getfield	function
builders	table	getfont	function
F buildpage_filter		getid	function
F vpack_filter		getleader	function
concat	function	getlist	function
copy	function	getnext	function
copy_list	function	getprev	function
copy_node	function	getproperty	function
countall	function	getsubtype	function
current_attributes	function	gluecodes	data table
delete	function	glyphcodes	data table
destinations	table	handlers	table
N attribute		F accessibility	
T done		F backgrounds	
F handler		F backgroundspage	
T stack		F backgroundsvbox	
dircodes	data table	F characters	
directioncodes	data table	F checkglyphs	
directionvalues	data table	F checkparcounter	
dirvalues	data table	F cleanuppage	
disccodes	data table	F export	
discretionarycodes	data table	F finalizebox	
fencecodes	data table	F flatten	
fields	function	F flattenline	
fieldtypes	table	F migrate	
fillcodes	data table	F protectglyphs	

F show		F define	
F showwhyphenation		F enable	
F stripping		F filler	
F textbackgrounds		F handler	
F unprotectglyphs		lines	table
F visualizehyphenation		T boxed	
F wipe		F addlinenumbers	
has_attribute	function	F register	
has_field	function	F setup	
hpack	function	D data	
idsandsubtypes	function	F finalize	
idstousing	function	F number	
injections	table	link	function
F copy		linked	function
F getligaindex		list	function
F getthreshold		listcodes	data table
F handler		listtoutf	function
F installgetspaceboth		literalvalues	data table
F installnewkern		locate	function
F isspace		markers	table
F keepcounts		F get	
F reset		mathcodes	data table
F resetcounts		mathvalues	data table
F setcursive		maxboxwidth	function
F setkern		migrations	table
F setligaindex		F setinserts	
F setmark		F setmarks	
F setmove		new	function
F setposition		noadcodes	data table
F setspacekerns		noadoptions	table
insert_after	function	N axis	
insert_before	function	N exact	
insert_list_after	function	N left	
installattributehandler	function	N middle	
is_direct	function	N no_axis	
is_display_math	function	N right	
is_node	function	N set	
is_nut	function	N unused_1	
kerncodes	data table	N unused_2	
keys	table	nodecodes	data table
T whatsit		nopts	function
leftmarginwidth	function	nuts	table
linefillers	table	F addmargins	
D data		F addxoffset	

F addxymargins	F getattrlist
F addyoffset	F getattr
F append	F getboth
F apply	F getbox
F applyvisuals	F getboxglue
F check_discretionaries	F getchar
F collapsing	F getcharspec
T colors	F getcomponents
F set	F getdata
F concat	F getdepth
F copy	F getdirection
F copy_list	F getdisc
F copy_no_components	F getdiscpart
F copy_node	F getdiscretionary
F copy_only	F getexpansion
F copy_only_glyphs	F getfam
F copy_properties	F getfield
F copyvisual	F getfont
F count	F getglue
F count_components	F getglyphdata
F countall	F getglyphdimensions
F current_attributes	F getheight
F delete	F getid
F dimensions	F getkern
F dirdimensions	F getkerndimension
F effective_glue	F getlang
F end_of_math	F getlanguage
F exchange	F getleader
F find_attribute	F getlist
F first_glyph	F getnext
F firstcharacter	F getnormalizedline
F firstcharinbox	F getnucleus
F firstglyph	F getoffsets
F flatten_discretionaries	F getoptions
F flush	F getorientation
F flush_components	F getpenalty
F flush_list	F getpost
F flush_node	F getpre
F free	F getprev
F fullhpack	F getprop
F get_components	F getreplace
F getattr	F getruledata
F getattribute	F getscale
F getattributelist	F getscales

F getscript
F getshift
F getstate
F getsub
F getsubpre
F getsubtype
F getsup
F getsuppre
F getsurround
F getsynctexfields
F gettotal
F getvalue
F getwhd
F getwidth
F getxscale
F getxyscales
F getyscale
F has_attribute
F has_dimensions
F has_field
F has_glyph
F has_glyph_option
F hpack
F hyphenating
F insert_after
F insert_before
F insert_list_after
F is_display_math
F is_node
F is_nut
F is_zero_glue
F ischar
F isdone
F isglyph
F isnextchar
F isnextglyph
F isprevchar
F isprevglyph
F kerning
F last_node
F length
F ligaturing
F link
F linked

F locate
F migrate
F mlist_to_hlist
F naturalhsize
F naturalwidth
F nestedtracedslide
F new
T pool
F accent
F baselineskip
F boundary
F choice
F cleanup
F delim
F delimiter
F direction
F directliteral
F disc
F emptyrule
F fence
F fontkern
F fraction
F glue
F gluespec
F glyph
F hlist
F indentskip
F italickern
F kern
F latelua
F leader
F lefthangskip
F leftmarginkern
F leftskip
F lineskip
F literal
F mathchar
F mathtextchar
F negatedglue
F noad
F originliteral
F outlinerule
F pageliteral
F penalty

F radical	F fill
F rawliteral	F mp
F register	F stroke
F restore	F userrule
F righthangskip	F set_attribute
F rightmarginkern	F set_components
F rightskip	F setattr
F rule	F setattribute
F save	F setattributelist
F savepos	F setattributes
F setmatrix	F setattrlist
F setstate	F setattrrs
F shrink	F setboth
F startrotation	F setbox
F stock	F setboxglue
F stretch	F setchar
F subbox	F setcomponents
F submlist	F setdata
F temp	F setdepth
F usage	F setdirection
F userdefined	F setdisc
T userids	F setdiscpart
F usernode	F setdiscretionary
F userrule	F setexpansion
F vlist	F setfam
F wordboundary	F setfield
F prepend	F setfont
F processranges	F setglue
F processwords	F setglyphdata
F protect_glyph	F setheight
F protect_glyphs	F setkern
F protrusion_skipable	F setlang
F rangedimensions	F setlanguage
F rawprop	F setleader
F reference	F setlink
F rehpick	F setlist
F remove	F setnext
F repackhlist	F setnucleus
F replace	F setoffsets
F reverse	F setoptions
T rules	F setorientation
T ruleactions	F setparproperty
F box	F setpenalty
F draw	F setpost

F setpre
F setprev
F setprop
F setreplace
F setruledata
F setscale
F setscales
F setscript
F setshift
F setsplit
F setstate
F setsub
F setsubpre
F setsubtype
F setup
F setsuppre
F setsurround
F setsyntexfields
F setunsetattributes
F setvalue
F setvisual
F setvisuals
F setwhd
F setwidth
F show
F slide
F somepenalty
F somespace
F splitbox
F start_of_par
F striprange
F tail
F takeattr
F takebox
F takelist
F theprop
F tonode
F tonodes
F tonut
F tosequence
F toString
F tracedslide
F traverse
F traverse_char

- F traverse_content
- F traverse_glyph
- F traverse_id
- F traverse_list
- T traversers
 - F boundary
 - F char
 - F content
 - F dir
 - F disc
 - F glue
 - F glyph
 - F hlist
 - F list
 - F next
 - F node
 - F vlist
 - F whatsit
- T typesetters
 - F tohbox
 - F tohpack
 - F tonodes
 - F toinbox
 - F toinbox
- F unprotect_glyph
- F unprotect_glyphs
- F unset_attribute
- F unset_attributes
- F unsetattribute
- F unsetattributes
- F untracedslide
- F usedlist
- F uses_font
- F vianodes
- F vianuts
- F vpack
- F write
- F xscaled
- F yscaled

cklist

rcodes

naltycodes

ugindata

- F finalizer

```
function
data table
data table
table
```

F initializer		references	table
S name		N attribute	
T namespace		T done	
N attribute		F handler	
D data		T stack	
F enable		reheap	function
F handler		remove	function
F register		repackhlist	function
D registered		replace	function
D values		report	function
F processor		rightmarginwidth	function
points	function	rulecodes	data table
pool	table	rules	table
F baselineskip		D data	
F cleanup		F define	
F directliteral		F enable	
F glyph		F handler	
F hlist		F process	
F latelua		F userrule	
F lineskip		serialize	function
F literal		serializebox	function
F originliteral		set_attribute	function
F register		setattr	function
F restore		setattribute	function
F rule		setattributes	function
F save		setboth	function
F savepos		setbox	function
F setmatrix		setboxtonaturalwd	function
F stock		setchar	function
F usage		setfield	function
F vlist		setfont	function
prepend	function	setleader	function
print	function	setlink	function
processors	table	setlist	function
F contribute_filter		setnext	function
B enabled		setprev	function
F hpack_filter		setProperty	function
F post_linebreak_filter		setunsetattributes	function
F pre_linebreak_filter		shifts	table
F tracer		D data	
properties	table	F define	
T data		F enable	
pts	function	F handler	
radicalcodes	data table	showboxes	function

showlist	function	tonode	function
showsimplelist	function	tonodes	function
skipcodes	data table	tonut	function
snapshots	table	topics	function
F getsamples		topoints	function
F resetsamples		toscaledpoints	function
F takesample		tosequence	function
somepenalty	function	tostring	function
somespace	function	totable	function
specialskipcodes	table	totree	function
splitbox	function	toutf	function
start_of_par	function	tracers	table
stripdiscretionaries	function	T colors	
stripping	table	F reset	
T glyphs		F set	
F set		F setlist	
subtypes	data table	F directions	
tail	function	F fontchar	
takeattr	function	T frequencies	
takebox	function	F register	
tasks	table	T pool	
F actions		T nodes	
F appendaction		F rule	
F disableaction		T nuts	
F disablegroup		F rule	
F enableaction		F resetproperties	
F enablegroup		F rule	
F freeze		F setlist	
F freezegroup		F setproperties	
F new		F start	
F prependaction		T steppers	
F removeaction		F check	
F replaceaction		F codes	
F restart		F features	
F setaction		F font	
F showactions		F glyphs	
F table		F message	
tobasepoints	function	F messages	
tocentimeters	function	F nofsteps	
toxiceros	function	F register	
todidots	function	F reset	
todimen	function	F start	
toinches	function	F stop	
tomillimeters	function	F stop	

T transparencies		usedlist	function
F reset		vianodes	function
F set		vianuts	function
F setlist		visualizebox	function
traverse	function	visualizers	table
traverse_id	function	F attribute	
typesetters	table	T attributes	
F hbox		F box	
F hpack		F handler	
F tohbox		F markfonts	
F tohpack		F register	
F tonodes		F setfont	
F tovbox		F setlayer	
F tovpack		F setruledglyph	
F vpack		F setvisual	
unset_attribute	function	vpack	function
unsetattribute	function	whatsitcodes	data table
unsetattributes	function	write	function

number (context)

	function	tol6dot16	function
basepoints	function	tobasepoints	function
bytetodecimal	function	tobitstring	function
compactfloat	function	tocentimeters	function
decimaltobyte	function	tociceros	function
dimenfactors	data table	tocontext	function
formatted	function	todidots	function
formattedfloat	function	todimen	function
idiv	function	toevenhex	function
maxdimen	number	toinches	function
nopts	function	tomillimeters	function
nubasepoints	function	tonumberf	function
nupoints	function	tonumberg	function
percent	function	topicsas	function
points	function	topoints	function
pts	function	toscaled	function
signed	function	toscaledpoints	function
sparseexponent	function	valid	function
splitdimen	function		

objects (context)

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

optional (context)

curl table

F escape
F fetch
F getversion
F initialize
F unescape

foreign table

F abivalues
F getbuffer
F initialize
F load
F newbuffer
F totable
F types

ghostscript table

F execute
F initialize

graphicsmagick table

F execute
F initialize

hb table

F getshapers
F getversion
F initialize
F loadfont
F shapestring

kpse table

F expand_braces
F expand_path
F expand_var
F find_file
F find_files
F get_file_types
F initialize
F readable_file
F set_program_name
F var_value

loaded table

lz4 table

F compress
F decompresssize

F framecompress
F framedecompress
F initialize

lzo table

F compress
F decompresssize
F initialize

mujs table

F dofile
F execute
F initialize
F reset
F setclosefile
F setconsole
F setfindfile
F setopenfile
F setreadfile
F setseekfile

mysql table

F close
F execute
F getmessage
F initialize
F open

postgress table

F close
F execute
F getmessage
F initialize
F open

sqlite table

F close
F execute
F getmessage
F initialize
F open

zint table

F execute
F initialize

zstd table

F compress

F decompress

F initialize

os (basic lua)

__getenv__	function
__setenv__	function
binsuffix	string
binsuffixes	table
clock	function
converttime	function
date	overloaded function
difftime	function
enableansi	function
env	data table
execute	overloaded function
exit	overloaded function
fulltime	function
getcodepage	function
getenv	overloaded function
gettimeofday	function
isleapyear	function
launch	function
libsuffix	string
localtime	function
name	string
newline	string
nofdays	function
now	function
pipeto	function
platform	string
remove	overloaded function

rename	overloaded function
resolvers	table
F bits	
resultof	function
runtime	function
selfarg	table
selfbase	string
selfbin	string
selfcore	string
selfdir	string
selfname	string
selfpath	string
setenv	overloaded function
setexitcode	function
setlocale	overloaded function
sleep	function
time	function
timezone	function
tmpname	function
today	function
type	string
uname	function
uuid	function
validdatetime	function
weekday	function
where	function
which	function

package (basic lua)

config	string	loadlib	function
cpath	string	luapaths	function
extralibpath	function	path	string
extralibpaths	function	poplibpath	function
extralupath	function	popluapath	function
extralupaths	function	preload	table
helpers	table	pushlibpath	function
libpaths	function	pushluapath	function
loaded	table	searchers	table
loaders	table	searchpath	function

pagebuilders (context)

columnsets table

- F add
- F block
- F check
- F currentcolumn
- F define
- F finishflush
- F flushareas
- F flushcolumn
- F flushrest
- F goto
- F noto
- F prepareflush
- F put
- F registerarea
- F reset
- F setarea

- F sethsize
- F sethspace
- F setlines
- F setproperties
- F setstart
- F setvsize

injections table

- F flushafter
- F flushbefore
- F save

mixedcolumns table

- F cleanup
- F finalize
- F getlist
- F getrest
- F getsplit
- F setsplit

pdf (basic tex)

immediateobj function

pdfe (extra tex)

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

physics (context)

units table

F registerunit

D tables

pngdecode (extra tex)

applyfilter function
expand function
interlace function

splitmask function
tocmyk function

publications (context)

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

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

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

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

regimes (context)

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

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

resolvers (context)

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

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

sandbox (context)

disablelibraries	function
disablerunners	function
enable	function
filehandlerone	function
filehandlertwo	function
finalizer	function
getrunner	function
initializer	function
iohandler	function
logcalls	function
logfiles	function
original	function
overload	function

possiblepath	function
redefine	function
register	function
registerbinary	function
registerlibrary	function
registerroot	function
registerrunner	function
report	function
setfilenamelogger	function
setlogger	function
setreporter	function
settrace	function
validfilename	function

scripts (context)

autofontfeature table

F disable
F enable
F handler

colors data table

decomposehangul function

defaults table

N inter_char_half_shrink_factor
N inter_char_half_stretch_factor
N inter_char_hangul_penalty
N inter_char_quarter_shrink_factor
N inter_char_quarter_stretch_factor
N inter_char_shrink_factor
N inter_char_stretch_factor
N inter_word_stretch_factor

getdata function

getinjector function

getsplitter function

getstatus function

handlers data table

hash table

injectors data table

inserters table

F nobreakspace_after

F nobreakspace_before

F space_after

F space_before

F zerowidthspace_after

F zerowidthspace_before

installdataset function

installmethod function

numbertodataset data table

numbertohandler data table

reset function

set function

setstatus function

splitters data table

set (context)

contains function

create function

tolist function

tonumber function

totable function

sha2 (extra lua)

HASH256	function
HASH384	function
HASH512	function
HEX256	function
HEX384	function
HEX512	function
digest256	function
digest384	function
digest512	function

hash256	function
hash384	function
hash512	function
hex256	function
hex384	function
hex512	function
sum256	function
sum384	function
sum512	function

sio (extra lua)

read2dot14	function
readbytes	function
readbytetable	function
readcardinal1	function
readcardinal1le	function
readcardinal2	function
readcardinal2le	function
readcardinal3	function
readcardinal3le	function
readcardinal4	function
readcardinal4le	function
readcardinaltable	function

readfixed2	function
readfixed4	function
readinteger1	function
readinteger1le	function
readinteger2	function
readinteger2le	function
readinteger3	function
readinteger3le	function
readinteger4	function
readinteger4le	function
readintegertable	function

socket (extra lua)

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

S resent-bcc
 S resent-cc
 S resent-date
 S resent-from
 S resent-message-id
 S resent-reply-to
 S resent-sender
 S resent-to
 S retry-after
 S return-path
 S sender
 S server
 S smtp-remote-recipient
 S status
 S subject
 S te
 S to
 S trailer
 S transfer-encoding
 S upgrade
 S user-agent
 S vary
 S via
 S warning
 S will-retry-until
 S www-authenticate
 S x-mailer
 F lower
 F normalize
http table
 N TIMEOUT
 S USERAGENT
 F genericform
 F open
 F request
newtry function

protect function
report function
select function
sink function
sinkt table
 F close-when-done
 F default
 F http-chunked
 F keep-open
skip function
sleep function
source function
sourcet table
 F by-length
 F default
 F http-chunked
 F until-closed
tcp function
tcp4 function
tcp6 function
tp table
 N TIMEOUT
 F connect
try function
udp function
udp4 function
udp6 function
url table
 F absolute
 F build
 F build_path
 F escape
 F parse
 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 digitmaximum		packuc	function
N digitoffset		replacementlist	function
N ignoredoffset		setlanguage	function
N replacementoffset		sort	function
T validmethods		splitters	table
B ch		F utf	
B mc		strip	function
B mm		tracers	data table
B pc		update	function

sparse (context)

concat	function
get	function
max	function
min	function
new	function

range	function
restore	function
set	function
traverse	function
wipe	function

statistics (context)

benchmarktimer	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
show	function
showmemory	function
showusage	function
starttiming	function
stoptiming	function
threshold	number
timed	function
tracefunction	function

status (basic tex)

getbufferstate	function	getmarksstate	function
getcallbackstate	function	getneststate	function
getconstants	function	getnodestate	function
geterrorlinestate	function	getparameterstate	function
geterrorstate	function	getpoolstate	function
getexpandstate	function	getreadstate	function
getextrastate	function	getsavestate	function
getfilestate	function	getsparsestate	function
getfontstate	function	getstringstate	function
gethalferrorlinestate	function	gettexstate	function
gethashstate	function	gettokenstate	function
getinputstate	function	getwarningstate	function
getlanguagestate	function	iocodes	table
getlookupstate	function	list	function
getluastate	function	resetmessages	function

storage (context)

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

streams (context)

collect	function
disable	function
enable	function
flush	function
initialize	function

push	function
start	function
stop	function
synchronize	function

string (basic lua)

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

utfvalue	function	valid	function
utfvalues	function	voigt	function
utfvaluetable	function	voigt_hwhm	function

structures (context)

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

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

- F listindex
- D numbers
- F ordered
- F postpone
- F resetpostponed
- F restore
- F save
- F setstate
- D states
- F store

pages table

- F allmarked
- F analyze
- D collected
- F fraction
- F has_changed
- F in_body
- F is_odd
- F mark
- F marked
- F markedlist
- N nopages
- F number
- F on_right
- F save
- D tobesaved
- F toranges

references table

- F analyze
- F checkedfile
- F checkedfileorurl
- F checkedprogram
- F checkedrealpage
- F checkedurl
- D collected
- U componentsplitter
- F currentmetadata
- F currentorder
- D currentset
- F define
- D defined
- D derived
- F enhance
- D executers

- F expandcurrent
- F export
- T files
 - T data
- F define
- F found
- F get
- F filter
- F filterdefault
- D filters
- D flaginternals
- F from
- D functions
- F get
- F getcurrentmetadata
- F getcurrentprefixspec
- F getinnermethod
- F getinternalcachedlistreference
- F getinternallistreference
- F getinternalreference
- F getoutermethod
- D handlers
- F identify
- F import
- F inject
- F injectcurrentset
- S innermethod
- D internals
- F load
- F loadpresets
- F mark
- S outermethod
- D pages
- U prefixsplitter
- D productdata
- T programs
 - T data
- F define
- F get
- F realpageofpage
- U referencesplitter
- D referred
- F referredpage
- F registerfinalizer

- F registerinitializer
- F registerpage
- F reset
- D runners
- F set
- F setandgetattribute
- F setcomponent
- F setinternalreference
- F setlinkmethod
- F setnextinternal
- F setnextorder
- F setreferencerealpage
- D specials
- F splitcomponent
- F splitprefix
- F splitreference
- F synchronizepage
- T testrunners
 - F inner
 - F special
 - F special operation
 - F special operation with arguments
- T testspecials
 - F deltapage
 - F i
 - F internal
 - F page
 - F realpage
 - F section
 - F userpage
- D tobereferred
- D tobesaved
- D tracedpages
- T urls
 - T data
 - F define
 - F found
 - F get
 - F untex
- D usedinternals
- D usedviews
- F valid

registers

- F analyze

table

- D collected
- F compare
- F define
- F enhance
- F extend
- F filter
- F filtercollected
- F finalize
- F findinternal
- F flush
- F get
- F prepare
- F process
- F setmethod
- F sort
- F store
- D tobesaved
- F unique
- F userdata

sections

table

- F autodepth
- F cct
- D collected
- F current
- F currentblock
- F currentid
- F currentlevel
- F currentsectionindex
- F depthnumber
- F finddata
- F findnumber
- F fullnumber
- F getcurrentlevel
- F getlevel
- F getnumber
- F internalreference
- D levelmap
- D levels
- F matchingtilldepth
- F numberatdepth
- F numbers
- F popblock
- F prefixedconverted
- F pushblock

- F register
- D registered
- F reportstructure
- F save
- T sectionblockdata
 - T bodypart
 - S bookmark
- F set
- F setblock
- F setchecker
- F setentry
- F setinitialblock
- F setlevel
- F setnumber
- F showstructure
- F structuredata
- F title
- D tobesaved
- F typesetnumber
- F userdata
- B verbose

sets table

- F define
- F get
- F getall
- D setlist

specials table

- D collected
- F retrieve
- F store
- D tobesaved

synonyms table

- F analyzed
- D collected
- F compare
- F define
- F filter
- F finalize
- F flush
- F isshown
- F isused
- F meaning
- F prepare
- F process

- F register
- F registershown
- F registerused
- F resetshown
- F resetused
- F sort
- F synonym
- D tobesaved

tags table

- T backend
- T checks
 - F marginanchor
 - F margintext
 - F math
 - F mrow
 - F mtable
- T destinationhash
- T extras
 - F adddestination
 - F addimplicit
 - F addinternal
 - F addreference
 - F combination
 - F delimitedsymbol
 - F description
 - F descriptionsymbol
 - F document
 - F float
 - F formulacontent
 - F image
 - F item
 - F itemgroup
 - F link
 - F listitem
 - F mi
 - F msub
 - F msup
 - F paragraph
 - F publication
 - F reference
 - F registerlocation
 - F registerpages
 - F registerseparator
 - F section

F sorting	F registerextradata
F subsentencesymbol	F registermetadata
F synonym	F restart
F tablecell	F setaspect
F tabulate	F setattributehash
F tabulatecell	F setcombination
T finalizers	F setconstruct
F descriptions	F setfigure
T fixes	F setfloat
F linenumber	F setformulacontent
T listdata	F sethighlight
T referencehash	F setitem
F setattribute	F setitemgroup
T usedimages	F setlist
T image	F setnotation
T usedstyles	F setnotationsymbol
T construct	F setparagraph
T highlight	F setproperty
F current	F setpublication
F elementtag	F setregister
F finishexport	F setsorting
F getextradata	F setsynonym
F getid	F settablecell
F getmetadata	F settabulatecell
F gettablecell	F settagdelimitedsymbol
F gettabulatecell	F settagsubsentencesymbol
F handler	F setupexport
F initializeexport	F setuserproperties
D labels	D specifications
F last	F start
F lastinchain	F stop
F locatedtag	F strip
T patterns	D taglist
U splitter	T usewithcare
D properties	

table (basic lua)

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

tex (basic tex)

attribute	table	getboxresourcebox	function
badness	function	getboxresourcedimensions	function
box	table	getcatcode	function
boxresources	table	getcount	function
F getbox		getdelcode	function
F getdimensions		getdelcodes	function
F save		getdimen	function
F use		getdimensionvalue	function
catcode	table	getdiscoptionvalues	function
chardef	function	geterrorvalues	function
codes	table	getflagvalues	function
conditionals	data table	getfontoffamily	function
constants	data table	getfrozenparvalues	function
count	table	getglue	function
cprint	function	getglyphdata	function
ctdcatcodes	number	getglyphoptionvalues	function
ctxcatcodes	number	getglyphscript	function
definefont	function	getglyphstate	function
delcode	table	getgroupvalues	function
dimen	table	gethelptext	function
dimensiondef	function	gethyphenationvalues	function
directives	data table	getintegervalue	function
discoptioncodes	data table	getinteraction	function
enableprimitives	function	getiovalues	function
error	function	getlargestusedmark	function
expandasvalue	function	getlccode	function
experiments	data table	getlinedir	function
extraprimitives	function	getlist	function
fatalerror	function	getlocallevel	function
flagcodes	data table	getmark	function
fontidentifier	function	getmath	function
fontname	function	getmathcode	function
forcehmode	function	getmathcodes	function
forcesynctexline	function	getmathdir	function
forcesynctextag	function	getmathvariantvalues	function
fprint	function	getmodevalues	function
frozenparcodes	data table	getmuglue	function
get	function	getmuskip	function
getattribute	function	getnest	function
getbox	function	getnormalizevalues	function
getboxdir	function	getoutputactive	function

getpagestate	function	mathchardef	function
getparbegin	function	mathcode	table
getparcontext	function	modelevels	table
getpardir	function	N horizontal	
getprimitiveorigins	function	N math	
getregisterindex	function	N unset	
getrunstatevalues	function	N vertical	
getsfcode	function	modes	data table
getskip	function	mprint	function
getsynctexline	function	muglue	table
getsynctexmode	function	muskip	table
getsynctextag	function	nest	table
gettextdir	function	nilcatcodes	number
gettoks	function	normalizecodes	data table
getuccode	function	notcatcodes	number
glue	table	number	function
glyphoptioncodes	data table	poplocal	function
groupcodes	data table	primitives	function
hashtokens	function	print	function
hyphenationcodes	data table	prtcacodes	number
ifs	data table	pushlocal	function
inicalcodes	number	quitlocal	function
integerdef	function	quittoks	function
isattribute	function	resetparagraph	function
isbox	function	rlncatcodes	number
iscount	overloaded function	romannumeral	function
isdefined	function	round	function
isdimen	overloaded function	runlocal	function
isglue	function	runtoks	function
ismuglue	function	saveboxresource	function
ismuskip	overloaded function	scale	function
isprintable	function	scantoks	function
isskip	overloaded function	set	function
istoken	function	setattribute	function
istoks	function	setbox	function
lastnodetype	function	setboxdir	function
lccode	table	setcatcode	function
linebreak	function	setcount	function
lists	table	setdelcode	function
luacatcodes	number	setdimen	function
magicconstants	table	setdimensionvalue	function
N maxdimen		setglue	function
N running		setglyphdata	function
N trueinch		setglyphscript	function

setglyphstate	function	shipout	function
setintegervalue	function	showcontext	function
setinteraction	function	skip	table
setlccode	function	sp	function
setlinedir	function	splitbox	function
setlist	function	sprint	function
setmath	function	systemmodes	data table
setmathcode	function	takebox	function
setmathdir	function	texcatcodes	number
setmuglue	function	toks	table
setmuskip	function	tonumber	function
setnest	function	toscaled	function
setpardir	function	tpacatcodes	number
setrunstate	overloaded function	tpbcacodes	number
setsfcode	function	tprint	function
setskip	function	trackers	data table
setsynctexline	function	triggerbuildpage	function
setsynctexmode	function	txtcatcodes	number
setsynctextag	function	type	function
settetxdir	function	uccode	table
settoks	function	uprint	function
setuccode	function	useboxresource	function
sfcode	table	vrbcacodes	number
shiftparshape	function	write	function

texconfig (basic tex)

buffer_size	number	max_pool	number
error_line	number	max_print_line	number
expand_depth	number	max_strings	number
firstline	string	nest_size	number
formatname	string	node_size	number
function_size	number	param_size	number
half_error_line	number	properties_size	number
hash_extra	number	save_size	number
init	overloaded function	shell_escape	string
kpse_init	boolean	stack_size	number
max_in_open	number	token_size	number

texio (basic tex)

closeinput function

terminal function

write function

write_nl function

token (basic tex)

accessors

F active
F cmd
F cmdchrsc
F cmdname
F command
F csname
F expandable
F frozen
F index
F name
F protected
F range

create function
expand function
expand_macro function
future_expand function
get_active function
get_cmdchrsc function
get_cmdname function
get_command function
get_csname function
get_cstoken function
get_dimension function
get_expandable function
get_fields function
get_flags function
get_frozen function
get_id function
get_immutable function
get_index function
get_instance function
get_integer function
get_macro function
get_meaning function
get_noaligned function
get_parameters function
get_permanent function
get_primitive function
get_protected function
get_range function

table

get_tok function
get_tolerant function
getcommandid function
getcommandvalues function
getfunctionvalues function
getprimitives function
gobble function
gobble_dimen function
gobble_integer function
is_defined function
is_next_char function
is_token function
new function
peek_next function
peek_next_char function
peek_next_expanded function
pop_macro function
push_macro function
put_back function
put_next function
save_lua function
scan_argument function
scan_box function
scan_cardinal function
scan_char function
scan_cmdchr function
scan_cmdchr_expanded function
scan_code function
scan_csname function
scan_delimited function
scan_dimen function
scan_dimen_argument function
scan_float function
scan_glue function
scan_integer function
scan_integer_argument function
scan_key function
scan_keyword function
scan_keyword_cs function
scan_letters function
scan_luacardinal function

scan_luainteger	function	scan_value	function
scan_luanumber	function	scan_word	function
scan_next	function	serialize	function
scan_next_char	function	set_char	function
scan_next_expanded	function	set_dimension	function
scan_real	function	set_integer	function
scan_scale	function	set_lua	function
scan_skip	function	set_macro	function
scan_string	function	skip_next	function
scan_token	function	skip_next_expanded	function
scan_token_code	function	type	function
scan_tokenlist	function	undefine_macro	function
scan_toks	function		

tokens (context)

astable	function	U input
bits	table	U loadfoundtypescriptfile
N active		U resetctxscanner
N alignment		U rlap
N begingroup		U secondoftwoarguments
N character		U setfalsevalue
N close		U setsectionblock
N comment		U setupsystem
N endgroup		U startcolumns
N endoffline		U starttabulate
N escape		U starttitle
N ignore		U startxtitle
N invalid		U stopcolumns
N letter		U stoptabulate
N mathshift		U stoptitle
N open		U stopxtitle
N other		U texsetup
N parameter		U xmlw
N space		commands data table
N subscript		compile function
N superscript		constant function
N whitespace		converters table
cache	table	S toboolean
U NC		S todimen
U NR		S toglue
U bf		S tonumber
U buff_finish		S toString
U c_font_compact		create function
U color		defined function
U colordefalc		flags function
U colordefflc		getinteger function
U colordefflt		getters table
U colordefrft		F box
U dofinishreference		F count
U dostarttext		F cstoken
U finishjob		F dimen
U firstofoneargument		F glue
U firstoftwoarguments		F macro
U gobbleoneargument		F meaning
U goto		F skip
U iftrue		F token

isdefined function
istoken function
new function
pickup function
popmacro function
presets table

T 1 argument
T 1 string
T 2 arguments
T 2 strings
T 3 arguments
T 3 strings
T 4 arguments
T 4 strings
T 5 strings
T 6 strings
T 7 strings
T 8 strings

pushmacro function
scanners table

F argument
F argumentasis
F array
F boolean
F box
F bracketed
F bracketedasis
F cardinal
F char
F cmdchr
F cmdchrexploded
F code
F conditional
F count
F csname
F delimited
F dimen
F dimenargument
F dimension
F float
F glue
F gluespec
F gluevalues
F hash

F hbox
F integer
F integerargument
F ischar
F key
F keyword
F keywordcs
F letters
F list
F luacardinal
F luainteger
F luanumber
F lxmlid
F next
F nextexpanded
F number
F optional
F peek
F peekchar
F peekexpanded
F real
F scanclose
F scanopen
F skip
F skipexpanded
F string
F table
F token
F tokencode
F tokenlist
F tokens
F toks
F value
F vbox
F verbatim
F vtop
F whd
F word

setinteger function
setters table

F box
F char
F count
F dimen

F glue	F scandimenargument
F lua	F scandimension
F macro	F scanglue
F skip	F scangluespec
shortcuts table	F scangluevalues
T bits	F scanhash
N active	F scanhbox
N alignment	F scaninteger
N begingroup	F scanintegerargument
N character	F scankeyword
N close	F scankeywordcs
N comment	F scanletters
N endgroup	F scanlist
N endofline	T scanners
N escape	F argument
N ignore	F argumentasis
N invalid	F array
N letter	F boolean
N mathshift	F box
N open	F bracketed
N other	F bracketedasis
N parameter	F cardinal
N space	F char
N subscript	F cmdchr
N superscript	F cmdchrexploded
N whitespace	F code
N close	F conditional
F inspect	F count
N open	F csname
F report	F delimited
F scanargument	F dimen
F scanargumentasis	F dimenargument
F scanarray	F dimension
F scanboolean	F float
F scanbox	F glue
F scanbracketed	F gluespec
F scanbracketedasis	F gluevalues
F scancardinal	F hash
F scanclose	F hbox
F scancode	F integer
F scanconditional	F integerargument
F scancsname	F ischar
F scandelimited	F key
F scandimen	F keyword

F keywordcs	F todimen
F letters	T tokens
F list	F astable
F luacardinal	T cache
F luainteger	U NC
F luanumber	U NR
F lxmlid	U bf
F next	U buff_finish
F nextexpanded	U c_font_compact
F number	U color
F optional	U colordefalc
F peek	U colordefflc
F peekchar	U colordefflt
F peekexpanded	U colordefrlt
F real	U dofinishreference
F scanclose	U dostarttext
F scanopen	U finishjob
F skip	U firstofoneargument
F skipexpanded	U firstoftwoarguments
F string	U gobbleoneargument
F table	U goto
F token	U iftrue
F tokencode	U input
F tokenlist	U loadfoundtypescriptfile
F tokens	U resetctxscanner
F toks	U rlap
F value	U secondoftwoarguments
F vbox	U setfalsevalue
F verbatim	U setsectionblock
F vtop	U setupsystem
F whd	U startcolumns
F word	U starttabulate
F scannumber	U starttitle
F scanopen	U startxtitle
F scanoptional	U stopcolumns
F scanstring	U stoptabulate
F scantable	U stoptitle
F scantokenlist	U stopxtitle
F scantoks	U texsetup
F scanvbox	U xmlw
F scanverbatim	D commands
F scanvtop	F compile
F scanword	F constant
F toboolean	T converters

S toboolean	F scanboolean
S todimen	F scanbox
S toglue	F scanbracketed
S tonumber	F scanbracketedasis
S toString	F scancardinal
F create	F scanclose
F defined	F scancode
F flags	F scanconditional
F getinteger	F scanscname
T getters	F scandelimited
F box	F scandimen
F count	F scandimenargument
F ctoken	F scandimension
F dimen	F scanglue
F glue	F scangluespec
F macro	F scangluevalues
F meaning	F scanhash
F skip	F scanhbox
F token	F scaninteger
F isdefined	F scanintegerargument
F istoken	F scankeyword
F new	F scankeywordcs
F pickup	F scanletters
F popmacro	F scanlist
T presets	F scannumber
F pushmacro	F scanopen
F setinteger	F scanoptional
T setters	F scanstring
F box	F scantable
F char	F scantokenlist
F count	F scantoks
F dimen	F scanvbox
F glue	F scanverbatim
F lua	F scanvtop
F macro	F scanword
F skip	F toboolean
T shortcuts	F todimen
N close	F tonumber
F inspect	F toString
N open	D values
F report	F tonumber
F scanargument	F toString
F scanargumentasis	values data table
F scanarray	

tracers (context)

printerror function
printwarning function

showlines function

trackers (context)

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

typesetters (context)

alignments table

- F handler
- F set

breakpoints table

- F define
- F handler
- D mapping
- T methods
- T numbers
- F set
- F setreplacement

cases table

- T actions
- F handler
- F register
- F set

characteralign table

- F handler
- F resetcharacteralign
- F setcharacteralign

characters table

- F handler
- T methods
- F replacensp
- F replacenspaces

checkers table

- F handler
- F reset
- F set

cleaners table

- F handler
- F set

digits table

- T actions
- F handler
- F set

directions table

- F getfences
- F getglobal
- F getmethod
- F handler

- T handlers
- F installhandler
- F processmath
- F set
- F setcolor
- F setmath
- F tomode

firstlines table

- T actions
- F default
- F line
- F word
- F handler
- F set

fontkerns table

- F handler

initials table

- T actions
- F default
- F addanchortoline
- F addtoline
- F calculatedelta
- F checkline
- F handler
- F moveinline
- F set

injectors table

- F check
- T list
- F mark
- F reset
- F set
- F show

italics table

- F enablemath
- F enabletext
- F forcevariant
- F handler
- F reset
- F set

kerns table

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

updaters (context)

apply function
register function

url (context)

addscheme	function
barepath	function
construct	function
decode	function
encode	function
escape	function
filename	function

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

utf8 (basic lua)

char function
charpattern string
codepoint function

codes function
len function
offset function

utilities (context)

debugger table

F disable
F enable
F savestats
F showstats
F showtraceback

files table

F close
F getposition
F getsize
F look
F open
F read2dot14
F readbyte
F readbytes
F readbytetable
F readcardinal
F readcardinal1
F readcardinal1le
F readcardinal2
F readcardinal2le
F readcardinal3
F readcardinal3le
F readcardinal4
F readcardinal4le
F readcardinaltable
F readchar
F readfixed2
F readfixed4
F readinteger
F readinteger1
F readinteger1le
F readinteger2
F readinteger2le
F readinteger3
F readinteger3le
F readinteger4
F readinteger4le
F readintegertable
F readsignedbyte
F readstring

F readtag
F setposition
F size
F skip
F skiplong
F skipposition
F skipshort
F writebyte
F writecardinal1
F writecardinal1le
F writecardinal2
F writecardinal2le
F writecardinal3
F writecardinal3le
F writecardinal4
F writecardinal4le
F writeinteger1
F writeinteger1le
F writeinteger2
F writeinteger2le
F writeinteger3
F writeinteger3le
F writeinteger4
F writeinteger4le
F writestring

formatters table

F formatcolumns
F list
F stripzeros

ghostscript table

F convert
F statistics

graphicmagick table

F convert
F statistics

graphicsmagick table

F convert
F statistics

lua table

B alwaysstripcode
F checkmemory

```

F compile
F loadedluacode
F loadstring
F loadstripped
N nofstrippedbytes
N nofstrippedchunks
F registerfinalizer
B stripcode
T strippedchunks
F strippedloadstring
T suffixes
  S lua
  S luc
  S lui
  S luj
  S luv
  S tma
  S tmc
  S tua
  S tuc
packers
  table
    F hashed
    F new
    F pack
    F simplehashed
    F strip
    F unpack
    N version
parsers
  table
    F add_settings_to_array
    F arguments_to_table
    F array_to_string
    F csvsplitter
    F getparameters
    F groupedsplitat
    F hash_to_string
    T hashes
    T settings_to_set
      T text,hidden,paper,page,leftpage,rightpage
        B hidden
        B leftpage
        B page
        B paper
        B rightpage

```

```

B text
F iterator
F keq_to_hash
F listitem
F make_settings_to_hash_pattern
F mergehashes
F options_to_array
F options_to_hash
T patterns
  U settings_to_array
  U settings_to_hash_a
  U settings_to_hash_b
  U settings_to_hash_c
  U settings_to_hash_d
  U unittotex
F process_stripped_settings
F rfc4180splitter
F runtime
F settings_to_array
F settings_to_array_obey_fences
F settings_to_array_with_repeat
F settings_to_hash
F settings_to_hash_colon_too
F settings_to_hash_strict
F settings_to_hash_tolerant
F settings_to_numbers
F settings_to_set
F simple_hash_to_string
F splitmethod
F splitthousands
F stepper
F stripped_settings_to_array
F totime
F unittotex
F unittotxml
randomizer
  table
    F get
    F getnumber
    F getseed
    F popseed
    F pushseed
    F reuseseed
    F setseed
    F setseedi

```

randomizers table

F poisson

sequencers table

F appendaction

F appendgroup

F compile

F disableaction

F disablegroup

F enableaction

F enablegroup

D functions

F localize

F new

F nodeprocessor

F prependaction

F prependgroup

F removeaction

F replaceaction

F setkind

F toString

setters table

F disable

F enable

F initialize

F list

F new

F register

F report

F reset

F show

stacker table

F new

storage table

F allocate

F checked

F mark

F marked

F setinitializer

F sparse

streams table

F close

F getposition

F getsize

F getstring

F look

F open

F openstring

F read2dot14

F read2dot4

F readbyte

F readbytes

F readbytetable

F readcardinal

F readcardinal1

F readcardinal2

F readcardinal2le

F readcardinal3

F readcardinal3le

F readcardinal4

F readcardinal4le

F readcardinaltable

F readchar

F readfixed2

F readfixed4

F readinteger

F readinteger1

F readinteger2

F readinteger2le

F readinteger3

F readinteger3le

F readinteger4

F readinteger4le

F readintegertable

F readsignedbyte

F readstring

F setposition

F size

F skip

F skipbytes

F skiplong

F skipshort

strings table

F collapse

F collapsecrlf

T formatters

F add

F new

F newcollector

- F newrepeater
- F nice
- T striplinepatterns
 - U collapse
 - U prune
 - U prune and collapse
 - U prune and no empty
 - U prune and to space
 - U retain
 - U retain and collapse
 - U retain and no empty
- F striplines
- F striplong
- F tabtospace
- T tracers

tables table

- F accesstable
- F definedtable
- F definetable
- F encapsulate

- F insertaftervalue
- F insertbeforevalue
- F migratetable
- F removevalue
- F replacevalue

templates table

- F load
- F replace
- F replacer
- F resolve

zipfiles table

- F close
- F found
- F gunzipfile
- F hash
- F list
- F open
- F unzip
- F unzipdir
- F zipdir

visualizers (context)

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

xcomplex (extra lua)

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

__pow	function	i	function
__sub	function	imag	function
__tostring	function	log	function
__unm	function	new	function
abs	function	pow	function
acos	function	proj	function
acosh	function	real	function
arg	function	sin	function
asin	function	sinh	function
asinh	function	sqrt	function
atan	function	tan	function
atanh	function	tanh	function
conj	function	topair	function
cos	function	tostring	function
cosh	function	totable	function
exp	function		

xdecimal (extra lua)

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

F plus		bor	function
F pow		bxor	function
F rotate		conj	function
F setprecision		copy	function
F shift		exp	function
F sqrt		getprecision	function
F tonumber		ln	function
F tostring		log	function
F trim		max	function
__le	function	min	function
__lt	function	minus	function
__mod	function	new	function
__mul	function	plus	function
__name	string	pow	function
__pow	function	rotate	function
__shl	function	setprecision	function
__shr	function	shift	function
__sub	function	sqrt	function
__tostring	function	tonumber	function
__unm	function	tostring	function
abs	function	trim	function
band	function		

xmath (extra lua)

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

xml (context)

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

F name		F upperall	
F number		F xml	
F oneof		T xml	
F print		F all	
F quit		F att	
F tag		F attribute	
F text		F attributes	
F undefined		F cdata	
F upper		F chainattribute	
fillin	function	F count	
filter	function	F default	
finalizers	table	F elements	
F paragraphs		F empty	
T tex		F first	
F all		F function	
F attribute		F index	
F chainattribute		F last	
F chainpath		F lowerall	
F command		F match	
F concat		F name	
F concatrange		F position	
F context		F reverse	
F count		F table	
F ctxtext		F tag	
F default		F tags	
F depth		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		inheritattributes	function
F upper		inheritedconvert	function

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

<code>S ></code>		<code>tocdata</code>	function
<code>S \</code>		<code>toelement</code>	function
<code>S {</code>		<code>tostring</code>	function
<code>S </code>		<code>totable</code>	function
<code>S }</code>		<code>toxml</code>	function
<code>S ~</code>		<code>tprint</code>	function
<code>specialhandler</code>	table	<code>traverse</code>	function
<code>sprint</code>	function	<code>unescaped</code>	function
<code>string</code>	function	<code>unescapedentitylpeg</code>	userdata
<code>strip</code>	function	<code>unprivatized</code>	function
<code>strip_whitespace</code>	function	<code>unspecialized</code>	function
<code>stripelement</code>	function	<code>wipe</code>	function
<code>stripleadingspaces</code>	function	<code>withelement</code>	function
<code>table</code>	function	<code>withelements</code>	function
<code>text</code>	function	<code>wrap</code>	function
<code>textonly</code>	function	<code>xmlns</code>	table
<code>texttocdata</code>	function		

xzip (extra lua)

adler32 function
compress function
compresssize function

crc32 function
decompress function
decompresssize function

zip (extra lua)

archives

table

closearchive

function

openarchive

function

registeredfiles

table

zlib (extra lua)

adler32 function

compress function

compresssize function

crc32 function

decompress function

decompresssize function