MP attributes backends bit bit32 blobs boolean buffers builders caches callbacks catcodes characters chemistry commands containers context converters coroutine ctxrunner debug dir directives document documentdata environment epdf experiments figures **file** floats fontloader fonts functions global graphics gzip immg interactions interfaces io jit job languages layouts lfs libraries lmx logs lpdf lpeg ltn12 lua luatex lxml math mathematics mbox md5 metapost mime moduledata modules mp mplib newtoken noads nodes number os package pagebuilders parametersets pdfscanner physics profiler publications regimes resolvers sandbox scripts set socket sorters statistics status storage streams string structures table tex thirddata tokens tracers trackers typesetters unicode url userdata utilities vf visualizers xml zip zlib

ConT_EXt MkIV

global (alias: _G)

MP	table	figures	table
_LUAVERSION	number	file	table
_MAJORVERSION	number	floats	table
_MINORVERSION	number	font	table
arg	table	fontloader	table
assert	function	fonts	table
attributes	table	frozen	boolean
backends	table	functions	table
beginpage	function	gcinfo	function
bit	table	getfenv	function
bit32	table	getmetatable	function
blobs	table	getpos	function
boolean	table	getvpos	function
buffers	table	global	table
builders	table	graphics	table
caches	table	gzip	table
callback	table	img	table
callbacks	table	inspect	function
catcodes	table	interactions	table
characters	table	interfaces	table
chemistry	table	io	table
collectgarbage	function	ipairs	function
commands	table	jit	table
containers	table	job	table
context	function	lang	table
converters	table	languages	table
coroutine	table	layouts	table
ctx_doifelse	function	lfs	table
ctxrunner	table	libraries	table
debug	table	lmx	table
dimen	function	load	function
dir	table	loadfile	function
directives	table	loadstring	function
document	table	logs	table
documentdata	table	lpdf	table
dofile	function	lpeg	table
endpage	function	ltn12	table
environment	table	lua	table
epdf	table	luatex	table
error	function	lxml	table
experiments	table	math	table

mathematics table table mhox md5 table table metapost mime table module function moduledata table modules table table mp mplib table function newproxy newtoken tahle next function noads table table node nodes table number table optionalrequire function os table outputpagestree function table package pagebuilders table function pairs table parametersets pcall function pdf table pdfscanner table table physics function print profiler table protect function **publications** table rawequal function rawget function rawlen function rawset function regimes table require function resolvers table resolvestoredfunction function sandbox table scripts table function select set table

setfenv setinspector setmetatable socket sorters statistics status storage streams string structures swialib table tex texconfig texio thirddata toboolean tokens tonumber tostrina tracers trackers type typesetters unicode unpack url userdata utf utilities νf visualizers rm1 xpcall zip zlib

function function function table table table table table table table table function table table table table table function table function function table table function table table function table table table table table table table function table table

attributes (context)

colorintents table	U none	
N attribute	F popset	
D data	F processcolorc	omponents
F enable	F pushset	
F handler	F register	
F register	D registered	
D registered	F registerspotc	olor
colors table	F rgb	
N attribute	F rgbtocmyk	
F cmyk	F rgbtogray	
F cmyktogray	F rgbtohsv	
F cmyktorgb	N selector	
F colorcomponents	F setlist	
B couple	F setmodel	
D data	D sets	
N default	F spec	
F defineintermediatecolor	F spot	
F definemultitonecolor	F spotcolorname	
F defineprocesscolor	F spotcolorpare	nt
F definesimplegray	F spotcolorvalu	e
F definespotcolor	B supported	
F definetransparency	F transparencyc	omponents
F enable	B triggering	
F filter	F usecolors	
F forcedmodel	F value	
F forcesupport	D values	
F formatcolor	B weightgray	
F formatgray	define	function
F gray	effects	table
F graytohsv	N attribute	
F handler	D data	
F hsvtogray	F enable	
F hsvtorgb	F handler	
F iccprofile	F register	
F isblack	D registered	
N main	D values	
S model	handlers	table
D models	list	data table
F mpcolor	names	data table
F mpnamedcolor	negatives	table
F mpoptions	N attribute	

D data
F enable
F handler
F register
D registered

states tab

F disabletriggering

F enabletriggering

F finalize

F initialize

F process

F selective

F stacked

F stacker

system function
transparencies table

N attribute

D data

F enable

F forcesupport

F handler

U none

F register

D registered

B supported

B triggering

F value

D values

unsetvalue number
viewerlayers table

N attribute

D data

F define

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)

F getypos

codeinjections table F hasmatrix F synchronizecolormodel F insertrenderingwindow current strina F mergebookmarks defaults table F mergereferences T codeinjections F mergeviewerlayers F aethpos F prerollreference F getmatrix F presetsymbol F getpos F presetsymbollist F processrendering F getypos F hasmatrix F registerdocumentcloseaction T nodeiniections F registerdocumentopenaction T registrations F registeredsymbol D tables F registerpagecloseaction install function F registerpageopenaction nodeinjections table F registersymbol F restore F setfieldcalculationset F save F setfigurealternative F transform F setfigurecolorspace nothina function F setfiguremask table pdf F setformat F setformsmethod T codeiniections F addbookmarks F setpagetransition F attachmentid F setupcanvas F clonefield F setupidentity F definefield F setxmpfile F definefieldset F startlayer F defineviewerlayer F stoplayer F embedfile F supportedformats F enabletags F unicodetoactualtext F exportformdata F useviewerlayer F getbookmarks F validfield F getdefaultfieldvalue F validfieldcategory F getfieldcategory F validfieldset F getfieldset S comment F getformatoption T nodeinjections F gethpos F addtags F getmatrix F annotation F attachfile F getoutputfilename F changestackedlayer F getpos F getpreviewfigure F cmykcolor

F comment

- F destination
- F effect
- F graycolor
- F injectbitmap
- F insertmovie
- F insertsound
- F insertswf
- F insertu3d
- F knockout
- F negative
- F overprint
- F positive
- F reference
- i reference
- F rgbcolor
- F spotcolor
- F startlayer
- F startstackedlayer
- F stoplayer
- F stopstackedlayer
- F transparency
- F typesetfield
- T registrations
 - F cmykindexcolor
 - F cmykspotcolor
 - F getspotcolorreference
 - F grayindexcolor
 - F grayspotcolor
 - F rgbindexcolor
 - F rgbspotcolor
 - F spotcolorname
 - F transparency
- T tables
 - D vfspecials

registrations table tables table

bit (context)

```
arshift function
band
        function
        function
bnot
        function
bor
        function
bswap
        function
bxor
        function
lshift
rol
        function
ror
        function
rshift
        function
tobit
        function
tohex
        function
```

bit32 (basic lua)

```
arshift function
band
       function
       function
bnot
bor
       function
       function
btest
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
tohpackfast	function
tonodes	function
tovpack	function
tovpackfast	function
write	function

boolean (context)

tocontext function
tonumber function

buffers (context)

```
append
                function
assign
                function
collectcontent function
erase
                function
                function
exists
                function
getcontent
getlines
                function
loadcontent
                function
parallel
                table
```

F define

F hassomecontent

F next
F place
F reset
F save

prepend function
raw function
undent function

builders (context)

kernel table F hyphenation F kernina F ligaturing F mlist_to_hlist T originals F hyphenate F kerning F ligaturing paragraphs table T constructors N attribute F define F disable F enable F handler T methods F basic F default F oneline D names D numbers F set F start F stop T expansion F trace F keeptogether F registertogether T solutions T splitters F define F optimize T registered F reset F set F split F start F stop F tag

vspacing

table

F analyze D categories F collapsevbox T data D map D skip D snapmethods F definesnapmethod B fixed F pagehandler F resetprevdepth F setmap F setskip F snapbox F tocategories F tocategory F vboxhandler

caches (context)

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

callback (basic tex)

find function
list function

register overloaded function

callbacks (context)

freeze
known function
list data table
pop function
push function
register function
report function

catcodes (context)

names data table
numbers data table
register function

characters (context)

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activeoffset adobename	number function	N c
bidi	data table	N d
blockrange	function	N e N f
blocks	data table	
	table	Ng
casemap categories	data table	N h N i
	function	
category categorytags	data table	N j N k
collapsed	data table	
combined	data table	N l N m
contextname	function	
csletters	table	
N A	table	N o
N B		Νp
N C		N q N r
N D		
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N G		N v
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N S		ΝÄ
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N	descriptions	data table
N	directions	table
N	enccodes	data table
N	entities	data table
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N	filters	data table
N	fromnumber	function
N	fschars	data table
N	fscodes	data table
N	getrange	function
N	graphemes	data table
N	hangul	data table
N	initialize	function
N	is_character	data table
N	is_command	data table
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N	is_mark	data table
N	is_punctuation	data table
N	is_spacing	data table
N	lcchars	data table
N	lccode	function
N	lccodes	data table
N	lettered	function
N	lhash	data table
N	linebreaks	table
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S ex		showstring	function
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S h2		specials	data table
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S hy		T compat	
S id		subscripts	table
S in		superscripts	table
S is		synonyms	data table
S jl		tex	table
S jt		D accentmapping	
S jv		D commandmapping	
S lf		F defineaccents	
S nl		F safechar	
S ns		F toutf	
S nu		F toutfpattern	
S op		textclasses	table
S po		tonumber	function
S pr		ucchars	data table
S qu		uccode	function
S ri		uccodes	data table
S sa		uhash	data table
S sg		unicodechar	function
S sp		upper	function
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lower	function		
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mathpairs	data table		
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ranges	data table		
registerentities	function		
remap_hangul_syllabe	function		
setactivecatcodes	function		
setcodes	function		

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setlettercatcodes

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chemistry (context)

component function define function definitions data table format string instance string molecule function moleculeparser userdata start function stop function number structures undefine function

containers (context)

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

converters (context)

A	function	month
AK	function	nofdays
Alphabetic	function	number
Character	function	numbers
Characters	function	octstringtonumber
Characters:es	function	ordinal
I	function	r
KA	function	rawcharacter
KR	function	romannumerals
R	function	second
RK	function	sequences
Romannumerals	function	sloviannumerals
Sloviannumerals	function	spanishnumerals
Spanishnumerals	function	textime
Word	function	toabjad
Words	function	tochinese
a	function	toroman
abjadnodotnumerals	function	upper
abjadnumerals	function	verbose
alphabetic	function	D data
character	function	F translate
characters	function	weekday
characters:es	function	word
chineseallnumerals	function	words
chinesecapnumerals	function	year
chinesenumerals	function	
chr	function	
chrs	function	
cn	function	
cn-a	function	
cn-c	function	
convert	function	
define	function	
hexstringtonumber	function	
hour	function	
i	function	
isleapyear	function	
leapyear	function	
lower	function	
maxchrs	function	
minute	function	

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

function function function function

coroutine (basic lua)

```
create function
resume function
running function
status function
wrap function
yield function
```

ctxrunner (context)

load function
prepfiles data table
resolve function

debug (basic lua)

function
function
function
function
function
function
function
function
function
function
function
function
function
function
function
function
function
function

dir (context)

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

directives (context)

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document (context)

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getfilename function
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D environments

D modes

D modules

T ctxfile

D environments

D modes

D modules

setargument function
setdefaultargument function
setfilename function
variables data table

environment (context)

function argument arguments data table basicengines data table currentrun number default texmfcnf strina engineflags data table filename strina files table data table filesynonyms number forcedruns getargument function homedir string initex boolean **initializearguments** function initializefilenames function inputfilebarename string inputfilename strina **inputfilesuffix** string **jobfilename** string **jobfilesuffix** string kindofrun number loadluafile function luafile function luafilechunk function maxnofruns number originalarguments data table outputfilename string ownbin string ownmain string ownname string ownpath strina boolean prerollrun data table rawarguments reconstructcommandline function relativepath function setargument function **splitarguments** function suffix string texfile function texmfos string

texos

texroot truefilename validengines string function data table

string

epdf (extra tex)

Array function
Attribute function
AttributeOwner_Type function
Attribute_Type function
Dict function
Object function
PDFRectangle function
StructElement_Type function

type function

experiments (context)

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

figures (context)

applyratio badname bases bitmapimage boxnumber cachepaths check checkers converters current defaultdepth defaultheight defaultsearch defaultwidth done dummy existers exists formats found aet getrealpage quess hash identifiers identify images

F boxes
F check
F checksize
F clone
F copy
F immediatewrite
F keys
F new

F keys
F new
F node
F ofindex
F package
F print

F scan F serialize function function data table function number data table function data table data table function number number bool ean number function function data table function data table data table function function function function data table function

table

F types F write include includers initialize loaded localpaths magics mergegoodies nofprocessed order paths patterns pop preferguality programs push registerpattern registerresource registersuffix resources scale setlookups setorder setpaths suffixes

used

F totable

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

file (basic lua)

addsuffix	function
basename	function
checksum	function
collapsepath	function
сору	function
dirname	function
expandname	function
extname	function
is_qualified_path	function
is_readable	function
<pre>is_rootbased_path</pre>	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

floats (context)

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

font (basic tex)

function current define function each function fonts table frozen function getfont overloaded function id function function

max nextid function read_tfm function read_vf function setfont function

fontloader (extra tex)

apply_afmfile function
apply_featurefile function
close function
fields function
fullinfo function

to_table function
totable function

fonts (context)

analyzers	table	F report
T features		F reset
N blwf		T vectors
N fina		<pre>constructors table</pre>
N half		F addcoreunicodes
N init		F aftercopyingcharacters
N isol		F applymanipulators
N medi		F assignmathparameters
N pref		B autocleanup
N pstf		F beforecopyingcharacters
N rphf		D cache
D initializers		B cacheintex
D methods		F calculatescale
F setstate		F checkedfeatures
T states		F checkedfilename
N blwf		F checkvirtualids
N fina		F cleanuptable
N half		F collectprocessors
N init		F currentfonthasfeature
N isol		D designsizes
N mark		D dontembed
N medi		F enhanceparameters
N pref		N factor
N pstf		F finalize
N rest		F getfeatureaction
N rphf		F hashfeatures
B useunicodemark		F hashinstance
checkers	table	T hashmethods
F getmissing		F normal
F missing		F virtual
cid	table	F initializefeatures
F getmap		T keys
F loadfile	+abla	T character
collections	table	S depth
F checkenabled		S height
F clonevector		S italic
F define		S width
T definitions		T description
F prepare		T boundingbox
F process		S depth
F registermain		S height

S width S autoitalicamount T parameters T cidinfo S ascender S embedding S descender S encodingbytes S designsize S filename S finalized T expansion S auto S fontname S shrink S format S fullname S step S stretch S hasitalics S extendfactor S hasmath S factor S mathitalics S hfactor S mode S mathsize S name T protrusion S noglyphnames S auto S nostackmath S guad S psname S scaledpoints S textitalics S virtualized S scriptpercentage D loadedfonts S scriptscriptpercentage S size S namemode S slantfactor F newfeatures S slantperpoint F newhandler T spacing N noffontsloaded S extra N nofsharedfonts S shrink N nofsharedhashes S stretch N nofsharedvectors S width N privateoffset T synonyms F readanddefine S em F registerfeature S ex B resolvevirtualtoo S extra space F scale S extraspace F scaled S slant F setfactor F setname S space S space_shrink B sharefonts S space_stretch F trytosharefont N version S spaceshrink current function S spacestretch currentid function S x height S units definers table S vfactor F addlookup S xheight F analyze T properties F applypostprocessors

F checkedmode N Escvrillic F checkedscript N Fitacyrillic F current N Gcedilla S defaultlookup N Gdot F define N Gecyrillic F getspecification N Gheupturncyrillic F internal N Gjecyrillic F loadfont N Hardsigncyrillic F makespecification N IAcyrillic T methods N IUcyrillic F install N Icvrillic D variants N Idot F read N Iecyrillic F register N Iicyrillic F registered N Iishortcyrillic F registersplit N Iocyrillic F resetnullfont N Izhitsacyrillic F resolve N Jecyrillic T resolvers N Kacyrillic F file N Kcedilla F name N Khacvrillic F spec N Kjecyrillic definetypeface function N Lcedilla encodings table N Ljecyrillic T agl N Ncedilla D extras N Njecyrillic N Ocyrillic D names T synonyms N Odblacute N Acyrillic N Ohm N Becyrillic N Pecyrillic N Cdot N Rcedilla N Checyrillic N Shacyrillic N Decyrillic N Shchacyrillic N Djecyrillic N Softsigncyrillic N Dzecyrillic N Tcedilla N Dzhecyrillic N Tecyrillic N Ecyrillic N Tsecyrillic N Edot N Tshecyrillic N Efcyrillic N Ucyrillic N Elcyrillic N Udblacute N Emcyrillic N Ushortcyrillic N Encyrillic N Vecyrillic N Ercyrillic N Yatcyrillic N Ereversedcyrillic N Yericyrillic

N	Yicyrillic	N	daletpatahhebrew
N	Zdot	N	daletqamats
N	Zecyrillic	N	daletqamatshebrew
N	Zhecyrillic	N	daletqubuts
N	acutecmb	N	daletqubutshebrew
N	acyrillic	N	daletsegol
N	afii00208	N	daletsegolhebrew
N	afii08941	N	daletsheva
N	afii57694	N	daletshevahebrew
N	afii57695	N	dalettsere
N	afii57700	N	dammaarabic
N	afii57705	N	dammatanaltonearabic
N	afii57723	N	dargahebrew
N	alef	N	dbllowline
N	alefmaksurainitialarabic	N	decimalseparatorarabic
N	alefmaksuramedialarabic	N	dialytikatonos
N	approximatelyequal	N	dotbelowcmb
N	asteriskaltonearabic	N	doubleyodpatah
N	ayin	N	doubleyodpatahhebrew
N	bet	N	edot
N	betdagesh	N	eightarabic
N	blackdownpointingtriangle	N	eighthnotebeamed
N	blackleftpointingpointer	N	etnahtafoukhhebrew
N	blackrectangle	N	etnahtafoukhlefthebrew
N	blackrightpointingpointer	N	etnahtahebrew
N	blacksmilingface	N	fathaarabic
N	blacksquare	N	finalkaf
N	blackuppointingtriangle	N	finalkafdagesh
N	bulletinverse	N	finalkafhebrew
N	cdot	N	finalkafqamats
N	compass	N	finalkafqamatshebrew
N	dagesh	N	finalkafsheva
N	dalet	N	finalmem
N	daletdagesh	N	finalnun
N	dalethatafpatah	N	finalpe
N	dalethatafpatahhebrew	N	finaltsadi
N	dalethatafsegol	N	fivearabic
N	dalethatafsegolhebrew	N	forall
N	dalethebrew	N	fourarabic
N	dalethiriq	N	gcedilla
N	dalethiriqhebrew	N	gdot
N	daletholam	N	gimel
N	daletholamhebrew	N	gimeldagesh
N	daletpatah	N	gravecmb

N haaltonearabic N holam32 N hamzaarabic N holamhebrew N hamzadammaarabic N holamnarrowhebrew N hamzadammatanarabic N holamquarterhebrew N hamzafathaarabic N ilde N hamzafathatanarabic N integralbottom N hamzalowarabic N integraltop N hamzalowkasraarabic N kaf N hamzalowkasratanarabic N kafdagesh N hatafpatah N kashidaautoarabic N hatafpatah16 N kashidaautonosidebearingarabic N hatafpatah23 N kcedilla N hatafpatah2f N lamed N hatafpatahhebrew N lameddagesh N hatafpatahnarrowhebrew N lamedhebrew N hatafpatahquarterhebrew N lamedholam N hatafgamats N lamedholamdagesh N hatafqamats1b N lamedholamdageshhebrew N hatafqamats28 N laminitialarabic N hatafgamats34 N lammeemjeeminitialarabic N hatafgamatshebrew N lcedilla N hatafqamatsnarrowhebrew N logicalnotreversed N hatafqamatsquarterhebrew N mahapakhhebrew N hatafsegol N mem N hatafsegol17 N memdagesh N hatafsegol24 N merkhahebrew N merkhakefulahebrew N hatafsegol30 N hatafsegolhebrew N middot N hatafsegolnarrowhebrew N munahhebrew N hatafsegolguarterhebrew N nbspace N he N ncedilla N hedagesh N newshegelsign N hehfinalalttwoarabic N ninearabic N noonhehinitialarabic N het N hiriq N nun N hiriq14 N nundagesh N hirig21 N odblacute N hiriq2d N onearabic N hirighebrew N overscore N hirianarrowhebrew N patah N hiriqquarterhebrew N patah11 N holam N patahld N holam19 N patah2a N holam26 N patahhebrew

N patahnarrowhebrew N aubuts31 N patahguarterhebrew N gubutshebrew N gubutsnarrowhebrew N pe N pedagesh N qubutsquarterhebrew N gamats N quoteleftreversed N gamats10 N rafe N gamatsla N rcedilla N reharabic N gamats1c N gamats27 N resh N reshhatafpatah N gamats29 N gamats33 N reshhatafpatahhebrew N gamatsde N reshhatafsegol N gamatshebrew N reshhatafsegolhebrew N gamatsnarrowhebrew N reshhebrew N gamatsgatanhebrew N reshhiriq N qamatsqatannarrowhebrew N reshhirighebrew N qamatsqatanquarterhebrew N reshholam N reshholamhebrew N gamatsgatanwidehebrew N gamatsquarterhebrew N reshpatah N qof N reshpatahhebrew N qofdagesh N reshaamats N qofhatafpatah N reshgamatshebrew N qofhatafpatahhebrew N reshqubuts N gofhatafsegol N reshqubutshebrew N qofhatafsegolhebrew N reshseaol N qofhebrew N reshsegolhebrew N qofhiriq N reshsheva N qofhiriqhebrew N reshshevahebrew N reshtsere N qofholam N gofholamhebrew N reviahebrew N gofpatah N samekh N qofpatahhebrew N samekhdagesh N qofqamats N segol N gofgamatshebrew N segol13 N gofgubuts N segol1f N qofqubutshebrew N segol2c N gofsegol N segolhebrew N qofsegolhebrew N segolnarrowhebrew N qofsheva N segolquarterhebrew N qofshevahebrew N sevenarabic N goftsere N sfthyphen N shaddaarabic N qubuts N qubuts18 N sheqel N gubuts25 N sheva

N	sheval15	N yoddages	sh
N	sheva15	N zayin	
N	sheva22	N zayindag	gesh
N	sheva2e	N zdot	
N	shevahebrew	N zeroarab	oic
N	shevanarrowhebrew	D unicodes	
N	shevaquarterhebrew	D cache	
N	shin	F is_known	
N	shindagesh	D known	
N	shindageshshindot	F load	
N	shindageshsindot	F make_unicod	e_vector
N	shinshindot	D math	
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N	tavdagesh	D data	
N	tcedilla	D designsizes	
N	tchehinitialarabic	D filenames	
N	tet	F getcomposit	ions
N	tetdagesh	T list	
N	tevirhebrew	F compositi	ons
N	thousandsseparatorarabic	F designsiz	es
N	threearabic	F expansion	s
N	tildecmb	F featurese	t
N	tipehahebrew	F filenames	
N	tsadi	F files	
N	tsadidagesh	F mathemati	cs
N	tsere	F protrusio	ns
N	tsere12	F solutions	
N	tserele	F treatment	s
N	tsere2b	F typefaces	
N	tserehebrew	F load	
N	tserenarrowhebrew	F prepare_fea	tures
N	tserequarterhebrew	F register	
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N	vavdagesh65	B addkerns	
N	vavholam	B addligatu	res
N	yerahbenyomohebrew	B addtexlig	atures
	yod	B autoprefi	
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D features	F gsub_multiple
T helpdata	F gsub_reversecontextchain
D bothkerned	F gsub_single
D leftkerned	F load
D ligatures	F scriptandlanguage
D rightkerned	F setcontextchain
D texligatures	F setdynamics
F load	F setfeatures
F setfeatures	T statistics
B syncspace	D usedfeatures
N version	T tables
T otf	D baselines
F addfeature	D features
D cache	D languages
T chainhandlers	D scripts
F normal	N version
F verbose	T pfb
F collectlookups	T tfm
F dataset	D features
S defaultbasealternate	F setfeatures
S defaultnodealternate	T vf
D enhancers	T combinations
D features	F combine
F fileformat	T combiner
F getalternate	D commands
T glists	F find
T handlers	D helpers
F contextchain	D math
F devanagari_remove_joiners	D predefined
F devanagari_reorder_matras	D whatever
F devanagari_reorder_pre_base_reordering_consonants	hashes table
F devanagari_reorder_reph	D characters
F gpos_context	D csnames
F gpos_contextchain	D descriptions
F gpos_cursive	D dynamics
F gpos_mark2base	D emwidths
F gpos_mark2ligature	D exheights
F gpos_mark2mark	D extensibles
F gpos_pair	D features
F gpos_single	D identifiers
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F gsub_context	D lastmathids
F gsub_contextchain	D marks

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D parameters		D overloads	
T processes		F reset	
D properties		F tounicode	
D quads		F tounicode16	
D resources		F tounicode16	sequence
T setdynamics		mp	table
D spaces		D cache	
D spacings		B inline	
D unicodes		N version	
D xheights		names	data table
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F fontpatternha	ssize	F check_lua	
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F hasprivate		F opentype	
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F reportdefined	fonts	F name	
F reportusedfea		F selectfont	:
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F fromunicode16		F style	
		E	l ha ale
F loadfile		F registerfal	LDack

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dummy function

graphics (context)

backgrounds table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

gzip (extra lua)

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lines function
load function
open function
save function
suffix function
```

img (basic tex)

boxes	function
check	function
checksize	function
clone	function
сору	function
immediatewrite	function
keys	function
new	function
node	function
ofindex	function
package	function
print	function
scan	function
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totable	function
types	function
write	function

interactions (context)

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   F getidentity
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   F addtopreamble
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   F storepreamble
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   F setpagetransition
   F setupcanvas
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corenamespaces	data table	F addfeature
definecommand	function	F addtolist
doifelsemessage	function	F analysefloatmethod
elements	data table	F analyzelist
formats	data table	F assignbuffer
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getmessage	function	F autonextstructurelevel
hashedsetups	data table	F bposcolumn
implement	function	F bposcolumnregistered
interfacedcommand	function	F btxaddentry
interfaces	table	F btxauthor
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is_command	function	F btxcollectlistentries
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F define		F btxcurrentinitials
F list		F btxcurrentjuniors
registernamespace	function	F btxcurrentsurnames
scanners	table	F btxcurrentvons
F MPc		F btxdetail
F MPd		F btxdirect
F MPh		F btxdoif
F MPll		F btxdoifelse
F MPlr		${\tt F} \ {\tt btxdoifelsesameasprevious}$
F MPls		F btxdoifelseuservariable
F MPn		F btxdoifnot
F MPp		F btxfetchlistentries
F MPpardata		F btxfield
F MPplus		F btxfieldname
F MPpos		F btxfieldtype
F MPposset		F btxfirstofrange
F MPr		F btxflush
F MPrest		F btxflushlistentry
F MPrs		F btxflushmarked
F MPul		F btxflushpages
F MPur		F btxfoundname

F btxfoundtype F definespotcolorglobal F btxhandlecite F definetransparency F btxhandlenocite F defrostrandomseed F btxlastofrange F depthnumber F btxlistvariant F disableregime F btxloaddefinitionfile F discardfromlist F btxloadreplacementfile F doifblackelse F doifcounter F btxoneorrange F btxpreparelistentries F doifdrawingblackelse F btxsavedataset F doifelsehuffer F btxsetdataset F doifelsecounter F btxsetentry F doifelsecurrentfonthasfeature F btxsetregister F doifelsemarking F btxsetspecification F doifelsemessage F btxsingularorplural F doifelsepositionsused F btxtoregister F doifelserangeonpage F btxusedataset F doifelsestackedfloats F doiffileexistelse F btxuservariable F doifinelementelse F checkcountersetup F doiflisthasentry F checkedpagefloat F chemicalcomponent F doiflisthasnumberelse F cleanfontname F doiflisthaspageelse F doiflisthastitleelse F cleanupbox F collectfloat F doifnotcounter F colorcomponents F doifnotecontent F consultfloat F doifnoteonsamepageasprevious F copyposition F doifobjectreferencefoundelse F countervalue F doifoverlappingelse F currentsectiontolist F doifparentfileelse F decrementcounter F doifpathexistelse F decrementedcounter F doifposition E decrementsubcounter F doifpositionelse F definecounter F doifpositiononpageelse F definefont one F doifpositionsonsamepageelse F definefont two F doifpositionsonthispageelse F definefontfeature F dosaveposition F defineintermediatecolor F dosavepositionplus F definemarking F dosavepositionwhd F dosetposition F definemultitonecolorglobal F definenote F dosetpositionbox F defineprocesscolordummy F dosetpositionplus F defineprocesscolorglobal F dosetpositionstrut F defineprocesscolorlocal F dosetpositionwhd F definesnapmethod F enableregime

F enhancelist F getbufferctxlua F eposcolumn F getbuffermkvi F getelementtag F eposcolumnregistered F erasebuffer F getfloatvariable F featureattribute F getfullstructurenumber F featurelist F getmarking F feedback F getmessage F fetchallmarks F getmpextensions F fetchmultipar F getnotestate F fetchmultishape F getrandomdimen F fetchonemark F getrandomfloat F fetchposboxes F getrandomnumber F fetchtwomarks F getrandomseed F figure check F getsomefullstructurenumber F figure done F getsomestructurenumber F figure_dummy F getspecificstructuretitle F figure_identify F getstructurelevel F figure include F getstructurenumber F gettexbuffer F figure pop F figure push F incrementcounter F figure scale F incrementedcounter F figurefilename F incrementsubcounter F figurefilepath F lastcountervalue F figurefiletype F lastsubcountervalue F figurerequest F listaroupindex F figurestatus F listlabel F figureused F listlocation F finalizebox F listprefixednumber F firstcountervalue F listprefixedpage F firstsubcountervalue F listrealpage F flushfloat F listsize F flushlabeledfloat F listtitle F flushnotes F listuserdata F markingnumber F flushpostponednotes F fontchar F markingtitle F fontcharbyindex F markregionbox F fontlookupgetkey F markregionboxcorrected F fontlookupgetkeyofindex F markregionboxtagged F fontlookupnoffound F mpcolor F formatcolor F mpflushliteral F formatgray F mpflushreset F freezerandomseed F mpgettext

F mpgraphic

F mpoptions

F getbodyfontsizes

F getbuffer

F mprunset F prevcountervalue F previoussubcountervalue F moruntab F processbodyfontsizes F mprunvar F mpsetclippath F processbuffer F mpsetoutercolor F processcolorcomponents F mpsetsxsy F processlist F mpsettext F processsynonyms F purefontname F mptexaet F mptexreset F pushfloat F pushitaliccorrection F mptexset F mptexsetfrombuffer F pushlist F namedstructureuservariable F pushreaime F namedstructurevariable F pushsectionblock F nbfs F rawcountervalue F nextcountervalue F rawsubcountervalue F nextsubcountervalue F registerbodyfontsize F nofstackedfloats F registerfigurepattern F notedeltapage F registerfiguresuffix F notelistindex F registerlanguagefeatures F notenumberpage F registermaintextcolor F noteprefixednumber F registernamespace F notesymbolpage F registersection F notetitle F registersynonym F objectnumber F registerusedsynonym F objectpage F relatemarking F parpos F removepunctuation F pdfrotation F replacefeature F pdfstartmatrix F replacepospxywhd F pdfstartmirroring F reportstructure F pdfstartrotation F resavefloat F pdfstartscaling F resetcounter F pdfstopmatrix F resetfeature F pdfstopmirroring F resetfontfeature F resetitaliccorrection F pdfstoprotation F pdfstopscaling F resetmarking F pgfxcolorspec F resetprevdepth F pickupbuffer F resetsubcounter F popfloat F restartcounter F popitaliccorrection F restartsubcounter F poplist F restorecounter F popregime F restorenote

previous 166 next

F revivefeature
F runbuffer

F savebuffer

F popsectionblock

F postponenotes
F prefixedconverted

F savecounter F settaggedmetadata F savedlistnumber F settagproperty F savedlistprefixednumber F settagproperty b F savedlisttitle F settagproperty n F savefloat F setupitaliccorrection F savemargindata F showassignerror F savenote F showcounter F saveobiect F showmessage F savepagedata F splitfilename F savespecificfloat F spotcolorname F setcharactercasing F spotcolorparent F setcharacterkerning F spotcolorvalue F setcolormodel F startcolorset F setcounter F startregime F setelementuserproperties o F starttag F setelementuserproperties t F starttag c F setfigurelookuporder F starttag d F setfigurepaths F starttag u E setfontfeature F stopcolorset F setfontofid F stopregime F setinterfaceconstant F stoptag F setinterfaceelement F storenote F setinterfacemessage F structureautocatcodedget F setinterfacemessages F structurecatcodedget E setinterfacevariable F structuregivencatcodedget F setinternal reference F structurenumber F setitaliccorrection F structuretitle F setmarking F structureuservariable F setmathalphabet F structurevariable F setmathattribute F subcountervalue F setmathstyle F subcountervalues F setmpextensions F subsubcountervalues E setnotestate F subtractfeature F setnotesymbolpage F synchronizemarking F setobject F synonymmeaning F setowncounter F synonymname F setownsubcounter F tochar F setrandomseed F transparencycomponents F setsectionblock F type F typebuffer F setsectionentry F setstructurelevel F typefile F setstructurenumber F useMPlibrary F usecolors F setsubcounter

F usefigurebase

F settagaspect

F vspacing F xmlcount F vspacingcollapse F xmldelete F vspacingdefine F xmldirect F vspacingsetamount F xmldirectives F vspacingsnap F xmldirectivesafter F way F xmldirectivesbefore F writestatus F xmldisplayverbatim F xmldoif F x table c F x table cleanup F xmldoifelse F x table construct F xmldoifelseempty F x table create F xmldoifelseselfemptv F x table finish row F xmldoifelsetext F x table flush F xmldoifemptv F x table init construct F xmldoifnot F x table init reflow height F xmldoifnotempty F x_table_init_reflow_height_option F xmldoifnotselfemptv F xmldoifnottext F x_table_init_reflow_width F x table init reflow width option F xmldoifselfemptv F xmldoiftext F x table next row F x table next row option F xmlelement F x table r F xmlfilter F x table reflow height F xmlfilterlist F xmlfirst F x_table_reflow_width F xmlflush F x_table_set_construct F x table set reflow height F xmlflushcontext F x table set reflow width F xmlflushdocumentsetups F xmlafterdocumentsetup F xmlflushlinewise F xmlaftersetup F xmlflushspacewise F xmlfunction F xmlall F xmlappenddocumentsetup F xmlgetindex F xmlappendsetup F xmlinclude F xmlatt F xmlincludeoptions F xmlattdef F xmlinclusion F xmlinclusions F xmlattribute F xmlattributedef F xmlindex F xmlbeforedocumentsetup F xmlinfo F xmlinlineverbatim F xmlbeforesetup F xmlchainatt F xmllast F xmlchainattdef F xmlload F xmlchecknamespace F xmlloadbuffer F xmlcommand F xmlloaddata F xmlconcat F xmlloaddirectives F xmlloadregistered F xmlconcatrange

F xmlmain

F xmlcontext

F xmlmatch
F xmlname
F xmlnamespace
F xmlnonspace

F xmlprependdocumentsetup

F xmlprependsetup

F xmlraw

F xmlpos

F xmlregisterns

F xmlremapname

 ${\sf F}$ xmlremapnamespace

F xmlremovedocumentsetup

F xmlremovesetup

F xmlresetdocumentsetups

F xmlsave

F xmlsetcommandtonone

F xmlsetcommandtotext

F xmlsetentity

F xmlsetfunction

F xmlsetsetup

F xmlsnippet

F xmlstartraw

F xmlstarttiming

F xmlstopraw

F xmlstoptiming

F xmlstrip

F xmlstripanywhere

F xmlstripnolines

F xmlstripped

F xmlstrippednolines

F xmltag

F xmltexentity

F xmltext

F xmltobuffer

F xmltobufferverbose

F xmltofile

F xmltoparameters

 ${\sf F} \ {\sf xmlverbatim}$

F xmlwithindex

setconstant function
setcount function
setdimen function
setelement function
setformat function

function setmacro setmessage function function setmessages settranslation function setuserinterface function setvalidkeys function setvariable function showmessage function storedscanners data table syntax data table tolist function translations data table data table variables

function

writestatus

io (basic lua)

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

loadchunk function
loaddata function
loadlines function
noflines function

pathseparator string

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

jit (context)

```
arch string
attach function
flush function
off function
on function
opt table
```

F start

os string
status function
util table

F funcbc

F funcinfo

F funck

F funcuvname

F ircalladdr

F traceexitstub

F traceinfo

F traceir

F tracek

F tracemc

F tracesnap

version string
version_num number

job (context)

commont	function	-	+11+-	a.
comment datasets	table		getcollecte	a
	table		getdata	
D collected			getfield	
F extend			gettobesave	a
F getdata			inlist	
F setdata			last	
D tobesaved	£		list	
disablesave	function		save	
files	table		savetagged	
D collected			tobesaved	4-61-
F context		-		table
B forcerun			b_col	
F run			b_region	
D tobesaved			С	
initialize	function		collected	
load	function		column	
loadother	function		сору	
objects	table		depth	
D collected			e_col	
F get			e_region	
F number		F	enhance	
F page		F	extra	
F save		F	get	
F set		F	getreserved	l
D tobesaved		F	hangafter	
pack	boolean	F	hangindent	
packversion	number	F	height	
pagestates	table	F	hsize	
D collected		F	leftskip	
F extend		F	lowerleft	
F realpage		F	lowerright	
F setstate		F	markregionb	ox
D tobesaved		F	n	
passes	table	F	onsamepage	
F check		F	overlapping	l
D collected		F	p	
F count		F	page	
F define		F	paragraph	
F find		F	parindent	
F first		F	position	
F get		F	r	

F region F replace F rightskip F set F setall F setdim D tobesaved F upperleft F upperright S used F width Fχ F xy Fу register function function save table structure D collected T components T tobesaved T branches S name S type table

variables

D checksums

D collected

F getchecksum

F makechecksum

F restore

F save

F setchecksum

D tobesaved

version number

lang (basic tex)

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

languages (context)

associate function associated association function counters current function data define function function expand table expanders frequencies table F averagecharwidth F getdata qetdata function function getnumber hyphenate function hyphenators table T dictionaries D featuresets F handler T methods F expanded B none F original F tex F traditional B optimize F popmethod F pushmethod F setmethod T traditional F definefeatures F gettrace F hyphenate F injecthyphens F installmethod F lasttrace F loadpatterns F registerexception

data table data table data table

F define F split

lefthyphenmin loadable 1 oadwords logger F report

numbers postexhyphenchar posthyphenchar preexhyphenchar prehyphenchar registered replacements

F add F handler F set

righthyphenmin serializediscretionary setexceptions setsynonym unload version visualizediscretionaries function words

F check T data F disable F enable T enablers B enables F found F load

T methods

N threshold

function function function table

data table function function function function data table table

function function function function function number

table

F registerpattern installed labels

function table

layouts (context)

status table

F isleftpage

F leftorrightpagection

lfs (extra lua)

attributes overloaded function chdir overloaded function

currentdir function

lock function

mkdirs function

unlock function

libraries (context)

```
basiclua data table
basictex data table
builtin data table
extralua data table
extratex data table
functions data table
globals data table
```

lmx (context)

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

F td F th

include function
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 pν function report function function reset result function set function show function showdebuginfo function showerror function stripcss function
tv function
type function
urlescape function
variable function
variables table

S color-background-blue

S color-background-body

S color-background-green

S $\operatorname{color-background-main}$

S color-background-purple

S color-background-yellow

S title-default

logs (context)

application function categories function direct function disable function function enable exporters table extendbanner function function flush help function function messenger new function newline function function poptarget function pushtarget report function reportbanner function function reporter table reporters

> F banner F export

F help

F info

F lines

F version

function reportline reportlines function setformats function setformatters function setlogfile function setmessenger function function setprocessor function setprogram settarget function settimedlog function settranslations function show function show close function show load function show open function simple function simpleline function

simplelines function function start page number status function function stop_page_number subdirect function subreport function system function function texerrormessage writer function

lpdf (context)

action	function	finalizepage	function
adddocumentcolorspace	function	finishtransparencycode	function
adddocumentextgstate	function	flushobject	function
adddocumentpattern	function	flushstreamfileobject	function
adddocumentshade	function	flushstreamobject	function
addtocatalog	function	formats	data table
addtoinfo	function	frompdfdoc	function
addtonames	function	fromsixteen	function
addtopageattributes	function	gethpos	function
addtopageresources	function	getmatrix	function
addtopagesattributes	function	getpos	function
addxmpinfo	function	getvpos	function
annotationspecification	function	graycode	function
array	function	hasmatrix	function
boolean	function	id	function
border	function	injectxmpinfo	function
checkedkey	function	insertxmpinfo	function
checkedvalue	function	layerreference	function
circularshade	function	limited	function
cmykcode	function	linearshade	function
collectedresources	function	nametree	function
color	function	null	function
colorspace	function	number	function
colorspaceconstants	data table	pagedestinations	data table
colorspec	function	pagereference	function
colorvalue	function	pagereferences	data table
colorvalues	function	pdfcolor	function
constant	function	pdftimestamp	function
delayedobject	function	protectresources	boolean
destinationspecification	function	rectangle	function
dictionary	function	reference	function
docstring	function	registerannotation	function
epdf	table	registerdestination	function
F contenttotext		registerdocumentfinalizer	function
F expand		registerpagefinalizer	function
F expanded		reserveobject	function
F getpagecontent		rgbcode	function
F getstructure		rotationcm	function
Fload		shareobject	function
F unload	£	shareobjectreference	function
finalizedocument	function	spotcode	function

function stream string function function timestamp toeight function topdfdoc function tosixteen function transform function transparency function transparencycode function transparencygroups table

B none

transparencyvalue function
unicode function
verbose function

lpeg (basic lua)

В	function
C	function
Carg	function
Cb	function
Сс	function
Cf	function
Cg	function
Cmt	function
Ср	function
Cs	function
Ct	function
P	function
R	function
S	function
UP	function
UR	function
US	function
V	function
afterprefix	function
anywhere	function
append	function
balancer	function
beforesuffix	function
checkedsplit	function
counter	function
endstripper	function
finder	function
firstofsplit	function
frontstripper	function
instringchecker	function
is_lpeg	function
keeper	function
locale	function
match	function
oneof	function
patterns	data table
pcode	function
print	function
ptree	function
replacer	function
secondofsplit	function

setmaxstack function split function splitat function splitter function stripper function times function tsplitat function tsplitter function type function utfchartabletopattern function version function

ltn12 (extra lua)

```
BLOCKSIZE number
filter
             table
   F chain
   F cycle
pump
             table
   F all
   F step
sink
             table
   F chain
   F error
   F file
   F null
   F simplify
   F table
source
             table
   F cat
   F chain
   F empty
   F error
   F file
   F rewind
   F simplify
```

F string

lua (basic tex)

table **bytecode** data table bytedata bytedone table B toks-new collectgarbage function delay function finalize function firstbytecode number flush function flushdelayed function get_functions_table function getbytecode function getluaname function lastbytecode number mask string messages data table table name numbers data table registercode function function registeredcodes registerfinalizer function registername function setbytecode function

function

string

string

setluaname

version

startupfile

luatex (context)

cleanuptempfiles function
registerstartactions function
registerstopactions
registertempfile function
starttime number

lxml (context)

addindex	function	fluchcotung	function
all	function	flushsetups flushspacewise	function
-	function		function
applyfunction att	function	get_id getid	function
attribute	function	getindex	function
chainattribute	function	id	function
checkindex	function		userdata
collected	function	idsplitter include	function
collected	function	include inclusion	function
		inclusion	
concat	function	inclusions index	function
concatrange	function	info	function
content	function		function
context	function	inlineverbatim	function
convert	function	installsetup	function
count	function	last	function
delete	function	load	function
direct	function	loadbuffer	function
directives	table	loaddata	function
F after		loaded	table
F before		loadregistered	function
F handle		main	function
F load		match	function
F setup		name	function
displayverbatim	function	namespace	function
doif	function	nonspace	function
doifelse	function	pos	function
doifelseempty	function	position	function
doifelsetext	function	raw	function
doifempty	function	rawroot	function
doifnot	function	register	function
doifnotempty	function	registerentity	function
doifnottext	function	removesetup	function
doiftext	function	resetcdata	function
element	function	resetsetups	function
elements	function	resolvedentity	function
entities	data table	root	function
filter	function	save	function
filterlist	function	serialize	function
first	function	setaction	function
flush	function	setcdata	function
flushlinewise	function	setcommandtonone	function

setcommandtotext function
setsetup function
snippet function
sorters table

F add

F compare

F flush F reset

F show F sort

splitid function startraw function function stopraw store function strip function stripped function function tag text function tobuffer function tofile function toparameters function toverbatim function verbatim function withindex function xmltexhandler data table

math (basic lua)

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

mathematics (context)

addfallbacks	function
alphabets	data table
alternatives	data table
big	function
boldmap	data table
categories	table
D functions	
charactersets	data table
checkaccentbaseheight	function
checkprivateparameters	function
classes	data table
codes	data table
define	function
dimensions	function
extensiblecode	function
extensibles	data table
extrabase	number
extras	table
F add	
F copy	
fallbacks	table
F apply	
F install	
fallbackstyleattr	function
families	data table
gaps	data table

function

function

function

function

function data table

function

function

function table

number

resetitalics function scaleparameters function setalternate function setitalics function sets data table stvles data table syncboth function function synchame function syncstyle function toname tostyle function tweakaftercopyingfont function tweakbeforecopyingfont function table tweaks utfmathaccent function utfmathclass function utfmathcommand function utfmathfiller function utfmathstretch function

D mappings
D numbers
D sets

remapalphabets

privatebase

getboth

getstyle

makefont

mapremap

initializeparameters

injectfallbacks

overloaddimensions

overloadparameters

renderset function

mbox (context)

```
parse function
parse_from function
parse_header function
parse_message function
split_headers function
split_mbox function
split_message function
```

md5 (extra lua)

```
HEX function
crypt function
dec function
exor function
hex function
sum function
sumhexa function
```

metapost (context)

analyzeplugins	function	gettext	function
checkformat	function	graphic	function
checktexts	function	graphic_base_pass	function
collapse	boolean	initializescriptrunner	function
colorinitializer	function	instance	function
convert	function	intermediate	table
defaultformat	string	T actions	
defaultinstance	string	F makempy	
defaultmethod	string	lastlog	string
directrun	function	load	function
edefsxsy	function	makempy	table
escaped	function	N nofconverted	
exectime	table	F processgraphics	
extensiondata	data table	F registerfile	
filterclippath	function	maketext	function
flush	function	metafun	table
flushers	table	F interpolate	
T pdf		F topath	
F comment		method	number
F flushfigure		mptopdf	table
F startfigure		F convertmpstopdf	
F stopfigure		N nofconverted	
F textfigure		n	number
flushliteral	function	nvformat	function
flushnormalpath	function	optimize	boolean
flushreset	function	parse	function
fonts	table	pdfliterals	function
F define		pluginactions	function
T flusher		process	function
F flushfigure		processplugins	function
F startfigure		processspecial	function
F stopfigure		properties	table
N instances		quickanddirty	function
F process		reducetogray	boolean
format	function	reporterror	function
format_number	function	reset	function
format_string	function	resetlastlog	function
formatnumber	function	resetplugins	function
getclippath	function	runscript	function
getextensions	function	scripterror	function
getstatistics	function	setextensions	function

setoutercolorfunctionsettextfunctionshowlogbooleansvformatfunctiontextable

F get
F reset
F set

texerrors boolean
textextsdata function
theclippath function
totable function
unload function
untagvariable function
variables table

mime (extra lua)

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

mp (context)

f function dataset function datasets table F load format function get table F boolean F number F numeric F string function n numeric function pair function path function print function quadruple function quoted function

function

function

size

triplet

mplib (extra tex)

fields function
finder function
finders table

F file

get_boolean function
get_number function
get_numeric function
get_string function

new overloaded function

pen_info function
preprocessed function
version function

newtoken (basic tex)

create	function
get_next	function
is_token	function
scan_code	function
scan_dimen	function
scan_glue	function
scan_int	function
scan_keyword	function
scan_string	function
scan_token	function
scan_toks	function
scan_word	function
set_macro	function
type	function

noads (context)

handlers table F check F classes F collapse F families F italics F relocate F render F resize F showtree F tags F unscript F variants function process processors table T collapse F mlist_to_hlist T relocate T render T resize

T unscript

node (basic tex)

сору	function	F protect_glyphs	
copy_list	function	F protrusion_skippable	
count	function	F remove	
current_attr	function	F set_attribute	
dimensions	function	F set_properties_mode	
direct	table	F setbox	
F copy		F setfield	
F copy_list		F setproperty	
F count		F slide	
F current_attr		F tail	
F dimensions		F todirect	
F do_ligature_n		F tonode	
F end_of_math		F tostring	
F first_glyph		F traverse	
F flush_list		F traverse_id	
F flush_node		F unprotect_glyphs	
F flush_properties_table		F unset_attribute	
F free		F usedlist	
F get_properties_table		F vpack	
F getbox		F write	
F getchar		do_ligature_n	function
F getfield		end_of_math	function
F getfont		family_font	function
F getid		fields	function
F getleader		first_character	function
F getlist		first_glyph	function
F getnext		flush_list	function
F getprev		flush_node	function
F getproperty		flush_properties_table	function
F getsubtype		free	function
F has_attribute		get_properties_table	function
F has_field		getchar	function
F has_glyph		getfield	function
F hpack		getfont	function
F insert_after		getid	function
F insert_before		getleader	function
F is_direct		getlist	function
F is_node		getnext	function
F last_node		getprev	function
F length		getproperty	function
F new		getsubtype	function

function
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function
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function
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function
function

nodes (context)

acigned function getattr function append function getattribute function astable function gethox function basepoints function gethox function basepoints function gethox function builders table getfield function function gethox function function gethox function gethox function gethox function gethox function gethox function function getield function getield function getield function codes data table getleader function concat function gethox function gethox function copy function gethox function gethox function copy. Ist function gethox function gethox function copy. Function gethox function gethox function gethox function gethox function gethox function gurnent_attr function glyphodes data table destinations table glyphdir_is_equal data table destinations function glyphodes data table fhandler gonuts boolean fastable function func				
append stable function getbox function basepoints function getchar function basepoints function getfield function builders table getfield function getfont function function function getfont getfield function getid function getid function getid function codes data table getleader function concat function getlist function getnext function copy function getnext function copy_list function getskip function copy_spec function getskip function count function getskip function gurrent_attr function gluecodes data table delete function glyphcodes data table destinations table glyphdir_is_equal data table destinations table glyphdir_is_opposite data table fhandlers function function function function function function function function function function function function function function function function function falignbackgrounds function for alignbackgrounds function for alignbackgrounds function for alignbackgrounds function for feleanuppox function felds function felds function felds function felds function felds function felds function firstplyph function felds function felds function firstplyph function felds function fun	accentcodes	data table	free_spec	function
astable function getbox function basepoints function getchar function builders table getfield function function function getid function function getid function function getid function getid function codes data table getleader function copy function getlist function copy function getnext function copy function getnext function copy_spec function getskip function copy_spec function getskip function current_attr function gluecodes data table delete function glyphcodes data table destinations table glyphdir_is_opposite data table fhandler gnouts function gonuts function gonuts function function function function function function function gonuts function function function function function function function function function falt table dimensions function functi	5		•	
basepoints function getchar function builders table getfield function F buildpage_filter getid function F vyack_filter getid function Codes data table getleader function concat function getlist function copy function getnext function copy_list function getskip function copy_spec function getskip function current_attr function gluecodes data table delete function glyphodes data table M attribute J done F handler T done F handler T stack dimensionsiofields dir_negation dir_is_pop data table discretionarycodes data table fiercodes data table fiercodes data table fiercodes data table fiercodes fiencecodes function F cleanuppage fierst_glyph function F punctedtyphs first_character function firstglyph function f function firstglyph function f function firstglyph function function firstglyph function function flush_node function f function has_glyph function function firstglyph function function function has_glyph function function function function function function firstglyph function function function function function function function function firstglyph function function function function function function function function function function function firstglyph function fun	• •		•	
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destinationstableglyphdir_is_equal glyphdir_is_opposite glyphdir_is_opposite glyphdir_is_opposite glyphdir_is_orthogonal gonutsdata table data table data tableT done F handler T stackgonuts handlersbooleanT stackhandlerstabledimensionfieldsdata table functionF accessibility F alignbackgroundsdir_is_pop dir_negationdata table data table data table disccodesF characters Gata table f checkforleaksdisccodes discretionarycodes discretionarycodes do_ligature_n end_of_math fasthpack fencecodes fields fillcodes fields first_character fillcodes first_character functionF cleanuppox F cleanuppageF cleanuppagefirst_character first_character first_character functionF protectglyphs F protectglyphsF protectglyphsfirst_character first_character first_character functionF unprotectglyphsF unction function has_attributefunction function functionfirst_charinbox first_glyph functionfunction functionhas_glyph function hack functionfunctionflush_list flush_list functionfunction functionhpack functionfunction	_			
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<pre>end_of_math</pre>			F checkglyphs	
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flush_listfunctionhpackfunctionflush_nodefunctionidstostringfunction	firstcharinbox	function	has_field	function
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		function	hpack	function
free function ignorablefields data table	flush_node	function	idstostring	function
	free	function	ignorablefields	data table

injections F copy F getligaindex F handler F installnewkern F keepcounts F reset F resetcounts F setcursive F setkern F setligaindex F setmark F setpair	table	listablefields listcodes listtoutf load locate margincodes markers F get mathcodes maxboxwidth mlist_to_hlist new noadcodes
insert after	function	nodecodes
insert_before	function	nopts
insert_list_after	function	nuts
installattributehandler	function	F append
is_direct	function	F concat
is_display_math	function	F copy
is_mirrored	data table	F copy_list
is_node	function	F copy_properties
is_nut	function	F count
is_rotated	data table	F current_attr
kerncodes	data table	F delete
kerning	function	F dimensions
keys	table	F do_ligature_n
T whatsit		F end_of_math
last_node	function	F fasthpack
leftmarginwidth	function	F first_glyph
ligaturing	function	F firstcharacter
lines	table	F firstcharinbox
T boxed		F firstglyph
F register		F flush_list
F setup		F flush_node
F stage_one		F free
F stage_two		F getattr
F stage_zero		F getattribute
D data		F getbox
F finalize		F getchar
F number		F getfield
N scratchbox		F getfont
link	function	F getid
linked	function	F getleader
list	function	F getlist

data table data table function function function data table table

data table function function function data table data table function table F getnext F pdfdestination F getprev F pdfdirect F pdfliteral F getprop F getskip F pdfrestore F getsubtype F pdfsave F pdfsetmatrix F has attribute F has_field F penalty F has glyph F register F rightmarginkern F hpack F insert after F rightskip F insert before F rule F shrink F insert list after F is_direct F special F is display math F stretch F is node F temp F is_nut F textdir F kerning F usage T userids F last node F leftmarginwidth N margins.inline F ligaturing N property F link N splitters.one F linked N splitters.two F locate F userlist F mlist_to_hlist F usernumber F nestedtracedslide F userstring F new F usertokens F vlist T pool F baselineskip F zeroglue F cleanup F prepend F disc F protect_glyphs F fontkern F protrusion_skippable F glue F reference F gluespec F remove F repackhlist F glyph F hlist F replace F kern F rightmarginwidth F set_attribute F latelua F setattr F lateluafunction F leftmarginkern F setattribute F leftskip F setattributes F lineskip F setbox F negatedglue F setfield F noad F setprop F pdfannotation F setunsetattributes

F slide		N attribute	
F somepenalty		D data	
F somespace		F enable	
F tail		F handler	
F takebox		F register	
F tonode		D registered	
F tonodes		D values	
F tonut		F processor	
F tosequence		points	function
F tostring		pool	table
F tracedslide		F baselineskip	
F traverse		F cleanup	
F traverse_id		F glyph	
T typesetters		F kern	
F fast_hpack		F latelua	
F hpack		F lateluafunction	
F tohpack		F lineskip	
F tohpackfast		F pdfdirect	
F tonodes		F pdfliteral	
F tovpack		F pdfrestore	
F tovpackfast		F pdfsave	
F vpack		F pdfsetmatrix	
F unprotect_glyphs		F register	
F unset_attribute		F rule	
F unsetattribute		F special	
F unsetattributes		F usage	
F untracedslide		F usernumber	
F usedlist		prepend · .	function
F vianodes		print	function
F vianuts		processors	table
F vpack		B enabled	
F writable_spec		F hpack_filter	
F write	£	F post_linebreak_filter	
packlist	function	F pre_linebreak_filter	
pardir_is_equal	data table	F tracer	£
pardir_is_opposite	data table	processwords	function
pardir_is_parallel	data table	properties	table
partextdir_is_equal	data table	T actions	
penaltycodes	data table	F delayed	
plugindata	table	F fdelayed	
F finalizer		F immediate	
F initializer		F attach	
S name		T data	
T namespace		F delayed	

protect_glyphs	function	F resetsamples	
protrusion_skippable	function	F takesample	
pts	function	somepenalty	function
reference	function	somespace	function
references	table	stripdiscretionaries	function
N attribute		stripping	table
T done		T glyphs	
F handler		F set	
T stack		striprange	function
remove	function	tail	function
repackhlist	function	takebox	function
replace	function	tasks	table
report	function	F actions	
rightmarginwidth	function	F appendaction	
rules	table	F disableaction	
D data		F disablegroup	
F define		F enableaction	
F enable		F enablegroup	
F handler		F freeze	
save	function	F freezegroup	
serialize	function	F new	
serializebox	function	F prependaction	
set_attribute	function	F removeaction	
setattr	function	F replaceaction	
setattribute	function	F restart	
setattributes	function	F setaction	
setbox	function	F showactions	
setfield	function	F table	
setunsetattributes	function	textdir_is_equal	data table
shifts	table	textdir_is_is	data table
D data		textdir_is_opposite	data table
F define		textdir_is_parallel	data table
F enable		tobasepoints	function
F handler		tocentimeters	function
show 	function	tociceros	function
showboxes	function	todidots	function
showcodes	function	todimen	function
showlist	function	toinches	function
showsimplelist	function	tomillimeters	function
skipcodes	data table	tonewciceros	function
slide	function	tonewdidots	function
snapshots	table	tonode	function
F getparameters		tonodes	function
F getsamples		tonut	function

topicas	function	F stop	
topoints	function	F stop	
toscaledpoints	function	T transparencies	
tosequence	function	F reset	
tostring	function	F set	
totable	function	F setlist	
totree	function	traverse	function
toutf	function	traverse_id	function
tracers	table	typesetters	table
T characters		F hpack	
F collect		F tohpack	
F equal		F tohpackfast	
F start		F tonodes	
F string		F tovpack	
F unicodes		F tovpackfast	
T colors		F vpack	
F reset		unprotect_glyphs	function
F set		unset_attribute	function
F setlist		unsetattribute	function
F fontchar		unsetattributes	function
T frequencies		usedlist	function
F register		vianodes	function
T pool		vianuts	function
T nodes		visualizebox	function
F rule		visualizers	table
T nuts		F box	
F rule		F handler	
F resetproperties		F markfonts	
F rule		F setfont	
F setlist		F setlayer	
F setproperties		F setvisual	
F start		vpack	function
T steppers		whatcodes	data table
F check		whatsitcodes	data table
F codes		writable_spec	function
F features		write	function
F font			
F glyphs			
F message			
F messages			
F nofsteps			
F register			
F reset			
F start			

number (context)

function basepoints function bit function bits function clearbit function dimenfactors data table formatted function hasbit function maxdimen number function nopts percent function points function pts function function setbit signed function sparseexponent function **splitdimen** function tobasepoints function tobitstring function tocentimeters function tociceros function todidots function todimen function toevenhex function toinches function **tomillimeters** function tonewciceros function tonewdidots function tonumberf function tonumberg function topicas function topoints function toscaled function toscaledpoints function function toset valid function

os (basic lua)

__getenv function setenv function string binsuffix **binsuffixes** table clock function converttime function date function difftime function data table env overloaded function exec execute overloaded function exit function fulltime function overloaded function aetenv gettimeofday function isleapyear function launch function libsuffix strina localtime function name string nofdays function function now strina platform overloaded function remove overloaded function rename resolvers table F bits resultof function runtime function selfdir string seteny overloaded function setlocale overloaded function function sleep spawn overloaded function function time times function timezone function tmpdir function function tmpname today function

string

type

uname function
uuid function
validdate function
weekday function
where function
which function

package (basic lua)

config	string
cpath	string
extralibpath	function
extralibpaths	function
extraluapath	function
extraluapaths	function
helpers	table
libpaths	function
loaded	table
loaders	table
loadlib	function
luapaths	function
path	string
preload	table
searchpath	function
seeall	function

pagebuilders (context)

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)

getcatalog function gethpos function aetinfo function function getmatrix function getnames getpageattributes function getpageresources function getpagesattributes function function getpos gettrailer function getvpos function hasmatrix function immediateobi function mapfile function mapline function maxobinum function obj function objtype function pageref function print function function refobj registerannot overloaded function reserveobj function overloaded function setcatalog setinfo overloaded function setnames overloaded function setpageattributes overloaded function overloaded function setpageresources setpagesattributes overloaded function settrailer overloaded function

pdfscanner (context)

scan function

physics (context)

units table
 D tables

profiler (extra lua)

```
pause function
resume function
start function
stop function
```

publications (context)

T fields

addtexentry function S author analyze function S editor anywhere function S iournal table authorcache S keywords authorcollapsers data table S number casters table S pages S title F author F keyword S volume F pagenumber S year F range T optional checkeddataset function T required citevariants table T sets F author T author F authornum T virtual T book F authoryear F authoryears S category F category T extra F default T fields F entry S address F index S author S edition F key F keywords S editor S keywords F num S number F page F serial S publisher S subtitle F short S title F tag S volume F type F year S year collected data table T optional table components T required F author T sets concatstate function T author converttoxml function T editionset currentspecification table T virtual S author T demo-a T categories S category T article T extra T fields S category T extra S author

S institution

S organization		B dirty	
S subtitle		T gskip	
S title		T kind	
S year		T list	
T optional		T system	
T required		T order	
T sets		enhancers	table
T author		F details	
T virtual		F order	
T demo-b		F suffixes	
S category		finder	function
T extra		firstofrange	function
T fields		found	function
S author		get	function
S institution		getcasted	function
S organization		getdetail	function
S subtitle		getdirect	function
S title		getfaster	function
S year		getfield	function
T optional		getfuzzy	function
T required		getindex	function
T sets		inspectors	data table
T authors		journals	table
T virtual		F abbreviated	
S comment		F add	
S copyright		F expanded	
T fields		F load	
S name		F save	
T types		lastofrange	function
S author		lists	table
S editor		F collectentries	
S keywords		F fetchentries	
S number		F filterall	
S page		F flushentry	
S pages			
		T methods	
S volume		r methods F dataset	
S volume S version			
		F dataset	
S version	table	F dataset F force	
S version T virtual datasets detailed	table	F dataset F force F global	
S version T virtual datasets detailed endnotes_to_btx	table function	F dataset F force F global F local	
S version T virtual datasets detailed	table	F dataset F force F global F local F nofregistered	
S version T virtual datasets detailed endnotes_to_btx	table function	F dataset F force F global F local F nofregistered F prepareentries	

1 dataset		5 Comment	
F default		S copyright	
F reference		S name	
F short		S version	
F uservariable		statistics	table
listvariants	table	N nofbytes	
F bib		N nofdatasets	
F default		N nofdefinitions	
F num		N nofshortcuts	
F page		tables	table
F short		D implicits	
F yes		D origins	
load	function	D privates	
loadbibdata	function	D sets	
loaddefinitionfile	function	D specials	
loaders	table	D types	
F bbl		D virtuals	
F bib		tags	function
F buffer		tracers	table
F endnote		F showdatasetauthors	
F lua		F showdatasetcompleten	iess
F refman		F showdatasetfields	
F registercleaner		F showentry	
F xml		F showfields	
loadreplacementfile	function	F showtables	
new	function	F showvariants	
okay	function	typesetters	table
oneorrange	function	F author	
parenttag	function	F string	
permitted	function	usedataset	function
refman_to_btx	function	usedentries	function
resolvedname	function	writers	table
save	function	F author	
search	function	F keyword	
setcategory	function	F pagenumber	
setspecification	function	F range	
singularorplural	function		
sortedentries	function		
sortmethods	table		
T authoryear			
T sequence			
specifications	table		
T default			

S comment

F dataset

S author

regimes (context)

cleanup
disable function
enable function
fromregime function
pop function
process function
push function
toregime function
translate function

resolvers (context)

allprefixes	function	findtexfile	function
appendhash	function	findwildcardfile	function
automount	function	findwildcardfiles	function
automounted	table	formatofsuffix	function
booleanvariable	function	formatofvariable	function
cacheversion	string	formats	data table
checkedvariable	function	generators	data table
cleanedpathlist	function	get from content	function
cleanpath	function	getenv	function
cleanpathlist	function	getownpath	function
concatinators	data table	getreadfilename	function
configbanner	strina	hashers	data table
criticalvars	data table	homedir	string
dangerous	data table	inputstack	table
datastate	function	installinputfilehandler	function
defaultsuffixes	table	installinputlinehandler	function
dowithfilesandreport	function	instance	table
dowithfilesintree	function	D data	
dowithpath	function	B diskcache	
dowithvariable	function	D environment	
env	function	D expansions	
executers	table	D fakepaths	
expandbraces	function	D files	
expandedpathfromlist	function	B force_suffixes	
expandedpathlist	function	D found	
${\it expanded path list from variable}$	function	D foundintrees	
expandpath	function	D hashed	
expandpathfromvariable	function	D hashes	
expansion	function	D lists	
extendtexmfvariable	function	B loaderror	
filtered_from_content	function	D order	
find_file	function	D pathlists	
find_files	function	T pathstack	
findbinfile	function	B remember	
findctxfile	function	B renewcache	
finders	data table	B renewtree	
findfile	function	B savelists	
findfiles	function	D setups	
findgivenfile	function	D specification	
findgivenfiles	function	D variables	
findpath	function	jobpath	function

jobs	table	registerfilehash	function
F currentcomponent		registerintrees	function
F currentenvironment		registermethod	function
F currentproduct		registerzipfile	function
F currentproject		relations	data table
F justacomponent		renew	function
D processors		repath	function
F productcomponent		reset	function
F usefile		resetextrapath	function
joinpath	function	resetresolve	function
load	function	resolve	function
loadbinfile	function	savers	data table
loaders	data table	scandata	function
loadlualib	function	scanfiles	function
loadtexfile	function	schemes	table
loadtime	function	T cleaners	
locateformat	function	F md5	
locators	data table	F none	
luacnfname	string	F strip	
luacnfspec	string	F cleanname	
luacnfstate	string	F fetchstring	
macros	table	F fetchtable	
F convertfile		F install	
F decodecomment		setdynamic	function
F enablecomment		setenv	function
F encodecomment		setinstance	function
F preprocessed		showpath	function
F processmk		simplescanfiles	function
F processmkvi		splitconfigurationpath	function
F version		splitexpansions	function
maxreadlevel	number	splitmethod	function
methodhandler	function	splitpath	function
newinstance	function	stackpath	function
openbinfile	function	suffixes	data table
openers	data table	suffixmap	data table
openfile	function	suffixofformat	function
opentexfile	function	texdatablob	function
ownpath	string	toppath	function
poppath	function	unexpandedpath	function
prefixes	data table	unexpandedpathlist	function
prependhash	function	unresolve	function
pushpath	function	updaterelations	function
registerextrapath	function	updatescript	function
registerfile	function	usertypes	data table

usezipfile	function
validatedpath	function
variable	function
variableofformat	function
variableofformatorsuffix	function
wildcardpattern	function

sandbox (context)

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

scripts (context)

table

autofontfeature

F disable F enable F handler categorytonumber data table 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 handlers data table hash table injectors data table installdataset function installmethod function numbertocategory data table numbertodataset data table numbertohandler data table reset function set function splitters data table

set (context)

contains function
create function
tolist function
tonumber function
totable function

socket (extra lua)

BLOCKSIZE number S connection DEBUG boolean S content-description SETSIZE number S content-disposition bind function S content-encoding choose function S content-id function connect S content-language connect4 function S content-length connect6 function S content-location dns table S content-md5 F getaddrinfo S content-range F gethostname S content-transfer-encoding F getnameinfo S content-type F tohostname S date F toip S diagnostic-code ftp table S dsn-gateway S PASSWORD S etag N PORT S expect N TIMEOUT S expires S USER S final-log-id F command S final-recipient F get S from S host F open S if-match F put gettime function S if-modified-since headers table S if-none-match S if-range T canonic S accept S if-unmodified-since S accept-charset S in-reply-to S accept-encoding S keywords S accept-language S last-attempt-date S last-modified S accept-ranges S action S location S age S max-forwards S allow S message-id S alternate-recipient S mime-version S original-envelope-id S arrival-date S authorization S original-recipient S bcc S pragma S cache-control S proxy-authenticate S cc S proxy-authorization S comments S range

S recei	ived	sinkt	table	
S recei	ived-from-mta	F close-v	vhen-done	
S refe	rences	F default	:	
S refe	rer	F http-ch	F http-chunked	
S remot	te-mta	F keep-op	oen	
S reply	y-to	skip	function	
S repor	rting-mta	sleep	function	
S reser	nt-bcc	smtp	table	
S reser	nt-cc	S DOMAIN		
S reser	nt-date	N PORT		
S reser	nt-from	S SERVER		
S reser	nt-message-id	N TIMEOUT	Г	
S reser	nt-reply-to	S ZONE		
S reser	nt-sender	F message	2	
S reser	nt-to	F open		
S retry	y-after	F send		
S retu		source	function	
S sende		sourcet	table	
S serve		F by-leng		
	-remote-recipient	F default		
S stati		F http-chunked		
S subj€	ect	F until-closed		
S te		tcp	function	
S to		tcp6	function	
S trail		tp	table	
	sfer-encoding	N TIMEOUT		
S upgra		F connect		
S user-	-agent	try	function	
S vary		udp udp6	function function	
S via	·	url	table	
S warni		F absolut		
	retry-until authenticate	F build	.e	
S x-mai		F build p	nath	
http	table	F escape	, a cii	
N PORT	cab to	F parse		
N TIMEOU	Т	F parse_p	nath	
S USERAG		F unescap		
F open				
F reques	t			
newtry	function			
protect	function			
select	function			
sink	function			

sorters (context)

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

statistics (context)

checkfmtstatus	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
starttiming	function
stoptiming	function
threshold	number
timed	function
tracefunction	function

status (basic tex)

list function

storage (context)

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

streams (context)

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

string (basic lua)

autodouble	function
autosingle	function
booleanstring	function
byte	function
bytepairs	function
bytes	function
char	function
characterpairs	function
characters	function
checkedsplit	function
collapsespaces	function
count	function
dump	function
escapedpattern	function
explode	function
find	function
format	function
formatter	function
formatters	function
fullstrip	function
gmatch	function
gsub	function
is_boolean	function
is_empty	function
itself	function
len	function
limit	function
longtostring	function
lower	function
match	function
nspaces	table
optionalquoted	function
quote	function
quoted	function
rep	function
reverse	function
split	function
splitlines	function
splitup	function
strip	function
sub	function

tformat	function
toHEX	function
toboolean	function
tobytes	function
tocontext	function
todec	function
todimen	function
tohex	function
tonodes	function
topattern	function
totable	function
toutf	function
tracedchar	function
tracedchars	table
unquote	function
unquoted	function
upper	function
utfcharacters	function
utfvalues	function
valid	function

structures (context)

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

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

F listindex	D filters
F ordered	D flaginternals
F postpone	F from
F resetpostponed	D functions
F restore	F get
F save	F getcurrentmetadata
F setstate	F getcurrentprefixspec
F setsymbolpage	F getinnermethod
D states	F getinternallistreference
F store	F getinternalreference
pages table	D handlers
F analyze	F identify
D collected	F import
F is_odd	F inject
N nofpages	F injectcurrentset
F number	S innermethod
F save	D internals
D tobesaved	F load
references table	F loadpresets
F analyze	F mark
F checkedfile	D pages
F checkedfileorurl	U prefixsplitter
F checkedprogram	D productdata
F checkedrealpage	T programs
F checkedurl	T data
D collected	F define
U componentsplitter	F get
F currentmetadata	F realpageofpage
F currentorder	U referencesplitter
D currentset	D referred
F define	F referredpage
D defined	F registerfinalizer
D derived	F registerinitializer
F enableinteraction	F registerpage
F enhance	F reportproblems
D executers	F reset
F expandcurrent	D runners
F export	F set
T files	F setandgetattribute
T data	F setcomponent
F define	F setinnermethod
F get	F setinternalreference
F filter	F setnextinternal
F filterdefault	F setnextorder

F setreferencerealpage	F sort	
D specials	F store	
F splitcomponent	D tobesaved	
F splitprefix	F unique	
F splitreference	F userdata	
F synchronizepage	sections	table
T testrunners		table
F inner	F autodepth F cct	
	D collected	
F special F special operation	F current	
F special operation with arguments	F currentblock	
T testspecials	F currentid	
	F currentlu F currentlevel	
F deltapage F i		
r I F internal	F currentsectionindex	
	F depthnumber F finddata	
F page F realpage	F finduata F findnumber	
F section	F fullnumber	
F userpage	F getcurrentlevel	
D tobereferred	<u>-</u>	
D tobesaved	F getlevel	
T urls	F getnumber F internalreference	
T data		
r data F define	D levelmap	
	D levels	
F get	F load	
D usedinternals	F matchingtilldepth	
D usedviews	F numberatdepth	
F valid	F numbers	
F whatfrom registers table	F popblock	
	F prefixedconverted	
F analyze D collected	F pushblock	
	F register	
F compare F define	D registered F reportstructure	
F enhance	F save	
F extend	T sectionblockdata	
F filter		
F filtercollected	T bodypart S bookmark	
F finalize	F set	
F flush	F setblock	
F get	F setchecker	
F prepare	F setentry	
•	F setlevel	
F process		
F setmethod	F setnumber	

F structuredata F title D tobesaved F typesetnumber F userdata B verbose table sets F define F get F getall D setlist specials table D collected F retrieve F store D tobesaved table synonyms F analyzed D collected F compare F define F filter F finalize F flush F meaning F prepare F process F register F registerused F sort F synonym D tobesaved table tags F elementtag F getid F handler D labels F last F lastinchain F locatedtag T patterns U splitter D properties

F registermetadata

F setaspect F setattributehash F setcombination F setdescription F setdescriptionsymbol F setfigure F sethighlight F setitemgroup F setlist F setproperty F setregister F setsorting F setsynonym F settablecell F settabulatecell F setuserproperties D specifications F start F stop D taglist

F restart

table (basic lua)

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

tex (basic tex)

attribute	table	isdefined	function
hadness	function	isdimen	function
-	table	isskip	function
box catcode	table	istoken	function
conditionals			
	data table	lccode linebreak	table function
constants		lists	table
count	table		
ctdcatcodes ctxcatcodes	number number	lua_math_random	function function
		lua_math_randomseed	
definefont	function	luacatcodes	number
delcode	table	mathcode	table
dimen	table	modes	data table
directives	data table	nest	table
enableprimitives	function	nilcatcodes	number
error	function	normal_rand	function
extraprimitives	function	notcatcodes	number
finish	function	number	function
fontidentifier	function	pdffontname	function
fontname	function	pdffontobjnum	function
fprint	function	pdffontsize	function
get	function	pdfpageref	function
getattribute	function	pdfxformname	function
getbox	function	primitives	function
getcatcode	function	print	function
getcount	function	prtcatcodes	number
getdelcode	function	romannumeral	function
getdimen	function	round	function
getlccode	function	run	function
getlist	function	scale	function
getmath	function	set	function
getmathcode	function	set_experimental_code	function
getnest	function	setattribute	function
getsfcode	function	setbox	function
getskip	function	setcatcode	function
gettoks	function	setcount	function
getuccode	function	setdelcode	function
hashtokens	function	setdimen	function
ifs	data table	setlccode	function
inicatcodes	number	setlist	function
init_rand	function	setmath	function
iscount	function	setmathcode	function

setnest function setsfcode function setskip function settoks function setuccode function sfcode table shipout function function show context skip table sp function sprint function systemmodes data table takebox function texcatcodes number toks table tpacatcodes number tpbcatcodes number function tprint trackers data table txtcatcodes number function type uccode table uniform rand function uniformdeviate function uprint function vrbcatcodes number write function

texconfig (basic tex)

error_line number
expand_depth number
formatname string
half_error_line number
hash_extra number

kpse init boolean max in open number max print line number max_strings number nest_size number param_size number save size number shell escape string

texio (basic tex)

write function
write_nl function

tokens (context)

astable	function		F box		
bgroup	userdata		F count		
bits	table		F dimen		
N active			F token		
N alignmen	t	hbo	οx	userdata	
N begingro	up	is [.]	token	function	
N characte	r	le [.]	tter	function	
N close		le [.]	tters	function	
N comment		oti	her	function	
N endgroup		pi	ckup	function	
N endoflin	e	pr	intlist	function	
N escape		SC	anners	table	
N ignore			F boolean		
N invalid			F code		
N letter			F count		
N mathshif	t		F dimen		
N open			F dimension	n	
N other			F glue		
N paramete	r		F integer		
N space			F keyword		
N subscrip	t		F lxmlid		
N superscr	ipt		F number		
N whitespa	ce		F scanclose		
collectors	table		F scanopen		
T data			F skip		
F defaultw	ords		F string		
F dowithwo	rds		F token		
F flush			F tokens		
F install			F toks		
F register			F word		
T register	ed	SC	antable	function	
F show		se ⁻	tters	table	
F test			F box		
compile	function		F count		
converters	table		F dimen		
S todimen			F macro		
S toglue		sh	ortcuts	table	
S tonumber			T bits		
S tostring			N active		
egroup	userdata		N alignme	ent	
getters	table		N beging	oup	

N character	F tokens
N close	F toks
N comment	F word
N endgroup	F scannumber
N endofline	
	F scanopen F scanstring
N escape	-
N ignore	F scanword
N invalid	F todimen
N letter	T tokens
N mathshift	F astable
N open	U bgroup
N other	T collectors
N parameter	F defaultwords
N space	F dowithwords
N subscript	F flush
N superscript	F install
N whitespace	F register
N close	F show
F inspect	F test
N open	F compile
F report	T converters
F scanboolean	S todimen
F scanclose	S toglue
F scancode	S tonumber
F scandimen	S tostring
F scandimension	U egroup
F scaninteger	T getters
F scankeyword	F box
T scanners	F count
F boolean	F dimen
F code	F token
F count	U hbox
F dimen	F istoken
F dimension	F letter
F glue	F letters
F integer	F other
F keyword	F pickup
F lxmlid	F printlist
F number	F scantable
F scanclose	T setters
F scanopen	F box
F skip	F count
F string	F dimen
F token	F macro

T shortcuts N close F inspect N open F report F scanboolean F scanclose F scancode F scandimen F scandimension F scaninteger F scankeyword F scannumber F scanopen F scanstring F scanword F todimen F tonumber F tostring U vbox U vtop F tonumber F tostring userdata

userdata

vbox vtop

tracers (context)

```
count function
cs function
dimen function
knownlist function
lists table
```

T context
T internals
T scratch

name function
primitive function
printerror function
showlines function
strings table

S undefined

toks function
type function

trackers (context)

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

typesetters (context)

F handler F set F set F set F set F set F set F set F set F setcolor F define F handler F handler D mapping F methods T methods T methods T methods T numbers F set F set F set F set F set F set F set F handler T actions T actions T numbers F set F set F set F set F set F handler T actions F set F handler F register F set F register F set F resetcharacteralign F set F resetcharacteralign F resetcharacteralign F replacenbsp F set F replacenbsp F reset F handler F handler F handler F handler F handler F handler F handler F handler F replacenbspaces Checkers T actions F set Checkers F set F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F set F set Checkers T actions F handler F set F se				
F set breakpoints table F define F define F handler F handler D mapping F set T methods T numbers F set F set F set F set F set F set F set F set F set F set F handler F register F set F register F resetcharacteralign F resetcharacteralign F replacenbsp F handler F replacenbsp F handler F replacenbsp F replacenbsp F replacenbsp F reset F handler F set Character F handler F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F set Checkers F set Checkers F set F	alignments	table	F installhandler	
F define	F handler		F processmath	
F define F handler D mapping T methods T numbers F set F set F set F setreplacement T actions F handler F handler F handler F set F handler F set F handler F register F register F resetcharacteralign F resetcharacteralign F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F set F handler F set F resetcharacteralign F check Characters F handler F handler F handler F set F handler F handler F reset F resetcharacteralign F check Characters F set F handler F set F handler F set F handler F set F handler F set F handler F set F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F set F handler F set F handler F set F set F handler F set F set F handler F set F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F set F handler F set F handler F set F handler F set F set F handler F set F set F handler F set F set F set F handler F set F s			F set	
F handler D mapping T methods T methods T numbers F set F set F set F setreplacement Cases table F handler F register F set F handler F set F handler F set F handler F set F handler F register F set F handler F set F handler F set F handler F set F handler F set F handler F set F set F set F handler F set	breakpoints	table	F setcolor	
T methods T methods T numbers F set F set F set F setreplacement Cases	F define		F setmath	
T methods T numbers F set F set F set F set F set placement Cases T actions F set F default Characteralign T actions F set F set F set F resetcharacteralign F set F set F setcharacteralign F set F setcharacteralign F set F set F set F set F set F set F set F set F set F set F set F set F set F set Checkers F set Checkers T actions F set F	F handler		F tomode	
F set F line F setreplacement Cases table F handler T actions F handler F register F handler F handler F set F handler F set F handler F set F handler F set F handler F set F handler F handler F handler F handler F handler F handler F handler F handler F handler F set F resetcharacteralign F check Characters T list F handler F replacenbsp F replacenbspaces F replacenbspaces F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F set Checkers T list F handler F reset F replacenbspaces F set Checkers T able F handler F handler F handler F set F handler F handler F handler F handler F handler F handler F handler F handler F handler F handler F handle	D mapping		firstlines	table
F set F berreplacement Cases table F handler T actions F set F handler F register F set F handler F set F handler F set F handler F set F handler F set F default Characteralign F set F handler F resetcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacters F set F handler F mark F replacenbsp F reset F replacenbspaces F set Checkers F handler F set F handler F set F set F handler F set F set F handler F set F set F handler F set F set F handler F set F set F handler F set F set F set F handler F set F set F set F handler F set F set F handler F set F set F handler F set F set F handler F set F handler F set F handler F set F set F handler F set F handler F set F set F set F set F handler F set	T methods		T actions	
F setreplacement Cases table F handler T actions F set F handler F register F set F handler F set F handler F set F handler F set F default Characteralign T actions F set F handler F handler F handler F set F resetcharacteralign F setcharacteralign F setcharacteralign F set F replacenbsp F set F replacenbsp F replacenbsp F replacenbsp F reset F replacenbsp F set Checkers T actions F handler F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F set Cleaners F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set F handler F set	T numbers		F default	
cases table F handler T actions F set F handler initials table F register T actions F set F default Characteralign F handler F set F resetcharacteralign injectors table F setcharacteralign F check Characters table T list F handler F mark F reset F replacenbspaces F set Checkers table F show F handler F sondler F forcevariant F set F handler F reset F set F handler F set Cleaners table F reset F handler F set kerns table Cleaners table D factors F handler F set kerns table digits table D factors F set B keeptogether directions table F set B keeptogether directions table F getfences F set manipulators table F getfenthod F apply F apply F handler F applyspecification	F set		F line	
Tactions F set F handler F register F set Characteralign F set F resetcharacteralign F setcharacteralign F set set F set set F set set F	F setreplacement		F word	
F handler F register F register F set F default Characteralign table F handler F set F handler F set F default F handler F set F set F resetcharacteralign F check F handler F mark F handler F mark F replacenbsp F reset F replacenbspaces F set F handler F show F handler F set F handler F set F handler F handler F reset F forcevariant F set F handler F set F handler F set F handler F set F handler F set Kerns table Gigits table D factors F handler F keepligature F set B keeptogether directions table D mapping F getfences F set F getglobal D manipulators table F getmethod F apply F applyspecification F appl	cases	table	F handler	
F register F set Characteralign table F handler F handler F resetcharacteralign F set F resetcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacters F handler F handler F mark F replacenbsp F replacenbsp F replacenbsp F replacenbsp F reset F handler F handler F set Checkers Ch	T actions		F set	
F set characteralign table F handler F handler F resetcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacters T able F handler F handler F replacenbsp F replacenbsp F replacenbspaces F set Checkers T able F handler F handler F handler F reset F show F handler F reset F set F forcevariant F set F handler F set F handler F set F handler F set F handler F set F set Cleaners T actions F handler F set Gigits T actions F handler F set Gigetfences F getfences F getglobal F getmethod F getmethod F papplyspecification	F handler		initials	table
characteralign table F handler F resetcharacteralign injectors table F setcharacters f check characters table T list F handler F mark F mark F replacenbspaces F set Checkers table F show F handler F show F handler F forcevariant F set F handler F set F reset F handler F set R handler F set Gligits table D factors T actions F handler F keepligature F set B keeptogether directions table D mapping F set Girections table F getfences F set F getfences F set F getfences F set F getfenchod F apply F handler F apply F handler F apply F handler F apply F handler F apply	F register		T actions	
F handler F resetcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacteralign F setcharacters T actions F handler F set F set F set	F set		F default	
F resetcharacteralign F setcharacteralign F setcharacters table T list F handler F replacenbspp F replacenbspaces F set Checkers table F handler F handler F set F handler F set F set F handler F set F handler F set F handler F set F	characteralign	table	F handler	
F setcharacteralign Characters table F handler F replacenbsp F replacenbspaces Checkers table F handler F handler F reset F set Checkers table F handler F set F forcevariant F set F handler F set F handler F set F handler F set B keeptogether Chirections F set B keeptogether Chirections F set	F handler		F set	
characters table T list F handler F mark F replacenbsp F reset F replacenbspaces F set Checkers table F show F handler italics table F reset F forcevariant F set F set F handler F reset F handler F set kerns table Gigits table D factors T actions F handler F keepligature F handler F keepligature F keepligature F set B keeptogether directions table D mapping F getfences F set F getglobal manipulators table F getmethod F apply F handler F applyspecification	F resetcharacter	align	injectors	table
F handler F replacenbsp F replacenbspaces F replacenbspaces F replacenbspaces F set Checkers table F handler F reset F set F forcevariant F set F handler F set F handler F set F handler F set F handler F set F set F set F set F set F set F set F set F set F set F set F set F handler F set F set F handler F set F set F handler F set F handler F handler F handler F set F	F setcharacteral	ign	F check	
F replacenbspaces F replacenbspaces F replacenbspaces F set Checkers table F handler F reset F set F forcevariant F set F handler F set F handler F set F handler F set	characters	table	T list	
F replacenbspaces table F show F handler italics table F reset F forcevariant F set F handler Cleaners table F reset F handler F set F set Kerns table digits table D factors T actions F handler F set B keepligature F set directions table D mapping F getfences F getglobal F getmethod F getmethod F handler F apply F handler F applyspecification	F handler		F mark	
checkers table F show F handler italics table F reset F forcevariant F set F handler Cleaners table F reset F handler F set kerns table digits table D factors T actions F handler F keepligature F handler F keepligature F keepligature F set B keeptogether directions table D mapping F getfences F set F getglobal manipulators table F getmethod F apply F handler F applyspecification	F replacenbsp		F reset	
F handler F reset F reset F set F handler Cleaners F handler F set F handler F set F handler F set Kerns T actions F handler F set B keepligature F set directions F getfences F getglobal F getmethod F getmethod F handler F applyspecification	F replacenbspace	s	F set	
F reset F set F handler Cleaners table F handler F set F handler F set Kerns table digits T actions F handler F set B keepligature F set directions T able F getfences F getglobal F getmethod F handler F handler F set F getglobal F getmethod F handler F apply F handler F applyspecification	checkers	table	F show	
F set cleaners table F handler F set F set kerns table digits table T actions F handler F set B keepligature F set directions table F getfences F getglobal F getmethod F handler F handler F set F getmethod F handler F apply F handler F applyspecification	F handler		italics	table
cleaners table F reset F handler F set kerns table digits table D factors T actions F handler F keepligature F set B keeptogether directions table D mapping F getfences F set F getglobal manipulators table F getmethod F apply F handler F applyspecification	F reset		F forcevariant	
F handler F set kerns table digits table T actions F handler F handler F set B keeptogether directions table F getfences F getglobal F getmethod F handler F applyspecification	F set		F handler	
F set kerns table digits table D factors T actions F handler F handler F set B keeptogether directions table D mapping F getfences F getglobal manipulators table F getmethod F handler F handler F apply F handler F set papplyspecification	cleaners	table	F reset	
digits table D factors T actions F handler F handler F set B keeptogether directions table D mapping F getfences F getglobal manipulators table F getmethod F apply F handler F applyspecification	F handler		F set	
T actions F handler F handler F set directions F getfences F getglobal F getmethod F handler F handler F handler F handler F petmethod F apply F handler F applyspecification	F set		kerns	table
F handler F set directions F getfences F getglobal F getmethod F handler F handler F handler F keepligature F keepligature B keeptogether D mapping F set F set F apply F apply F applyspecification	digits	table	D factors	
F set directions F getfences F getglobal F getmethod F handler B keeptogether D mapping F set manipulators table F apply F applyspecification	T actions		F handler	
directions table D mapping F getfences F set F getglobal manipulators table F getmethod F apply F handler F applyspecification	F handler		F keepligature	
F getfences F set F getglobal manipulators table F getmethod F apply F handler F applyspecification	F set		B keeptogether	
F getglobal manipulators table F getmethod F apply F handler F applyspecification	directions	table	D mapping	
F getmethod F apply F handler F applyspecification	F getfences		F set	
F handler F applyspecification	F getglobal		manipulators	table
	F getmethod		F apply	
T handlers T methods	F handler		F applyspecifica	tion
i manuters	T handlers		T methods	

F Word F Words F abbreviatedjournal F expandedjournal F lowercase F stripperiod F uppercase T patterns U list U pair F splitspecification margins table F finalhandler F globalhandler F localhandler F save marksuspects function processors table F apply F register F reset F split F startapply F stopapply F stripped F tostring function showsuspects table spacings F define F handler D mapping T numbers T frenchpunctuation T characters S name N number

F reset
F set
F setup
wrappers

F handler **xtables**

F cleanup

table

table

F construct
F create
F finish_row
F flush
F initialize_construct
F initialize_reflow_height
F initialize_reflow_width
F next_row
F reflow_height
F reflow_width
F set_construct
F set_reflow_height
F set_reflow_height
F set_reflow_width

unicode (extra lua)

ascii	table	F	len
F byte			lower
F char			match
F dump			rep
F find			reverse
F forma	t	F	sub
F gfind		F	upper
F gmato	h	utf8	table
F gsub		F	byte
F len		F	char
F lower		F	characters
F match		F	chrlen
F rep		F	count
F rever	se	F	dump
F sub		F	filetype
F upper		F	find
grapheme	table	F	format
F byte		F	gfind
F char		F	gmatch
F dump		F	gsub
F find		F	is_valid
F forma	t	F	len
F gfind		F	length
F gmatc	h		lower
F gsub			magic
F len			match
F lower			remapper
F match			rep
F rep			replacer
F rever	se		reverse
F sub			split
F upper latin1	table		splitlines sub
F byte	table		subtituter
F char			tocodes
F dump			toeight
F find			toentities
F forma	+		tostring
F gfind			totable
F gmato			upper
F gsub			ustring
3,		·	3

- F utf16_to_utf8_be
- F utf16_to_utf8_be_t
- F utf16_to_utf8_le
- F utf16_to_utf8_le_t
- F utf16_to_utf8_t
- F utf32_to_utf8_be
- F utf32_to_utf8_be_t
- F utf32_to_utf8_le
- F utf32_to_utf8_le_t
- F utf32_to_utf8_t
- F utf8_to_utf16
- F utf8_to_utf16_be
- F utf8_to_utf16_le
- F utf8_to_utf8_t
- F values
- F xstring

url (context)

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

utilities (context)

debugger	table	N versio	n
F disable		parsers	table
F enable		F add_se	ttings_to_array
F savestats			nts_to_table
F showstats		F array_	to_string
F showtraceback		F csvspl	itter
formatters	table	F getpar	ameters
F formatcolumns		F groupe	dsplitat
F list		F hash_t	o_string
F stripzeros		F iterat	or
garbagecollector	table	F keq_to	_hash
F check		F listit	em
N criterium		F make_s	ettings_to_hash_pattern
B enabled		F mergeh	ashes
lua	table	F option	s_to_hash
B alwaysstripcode		T patter	ns
F compile		U setti	ings_to_array
F loadedluacode		U setti	ings_to_hash_a
F loadstripped		U setti	ings_to_hash_b
N nofstrippedbytes		U settings_to_hash_c	
N nofstrippedchunks		U unit	totex
B stripcode		F proces	s_stripped_settings
T strippedchunks		F rfc418	0splitter
F strippedloadstrin	g	F runtim	e
T suffixes		F settin	gs_to_array
S lua		F settin	gs_to_array_with_repeat
S luc		F settin	gs_to_hash
S lui		F settin	gs_to_hash_strict
S luj			gs_to_hash_tolerant
S luv			gs_to_set
S tma			_hash_to_string
S tmc		F splitm	
S tua		F splitt	
S tuc		F steppe	
packers	table		ed_settings_to_array
F hashed		F unitto	
F new		F unitto	
F pack		report	function
F simplehashed		sequencer	
F strip		F append	
F unpack		F append	group

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 table setters 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 strings table F collapsecrlf T formatters F add F new F newrepeater F nice T striplinepatterns U collapse U prune

U prune and collapse U prune and no empty 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

vf (context)

```
char
        function
down
        function
fontid
        function
        function
image
        function
node
        function
nop
        function
pop
push
        function
right
        function
rule
        function
special function
```

visualizers (context)

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

xml (context)

addentitiesdoctype	function	D tex	
after	function	D texline	
all	function	D texspace	
applylpath	function	D verbose	
assign	function	defaultprotocol	string
attribute	function	delete	function
before	function	delete element	function
body	function	each	function
builtinentities	table	each element	function
B amp		elements	function
B apos		elementtocdata	function
B gt		empty	function
B lt		entities	data table
B quot		erase	function
cdata	function	errorhandler	function
cdatatotext	function	escaped	function
checkbom	function	expressions	table
checkerror	function	• F boolean	
checknamespace	function	F child	
checkns	function	F contains	
cleansed	function	F count	
collect	function	F error	
collect_elements	function	F find	
collect_tags	function	F idstring	
collect_texts	function	F lower	
collected	function	F name	
collecttexts	function	F number	
content	function	F oneof	
convert	function	F print	
сору	function	F quit	
count	function	F tag	
cprint	function	F text	
CSS	table	F undefined	
F colorspecification		F upper	
F dimension		fillin	function
F fontspecification		filter	function
F padding		finalizers	table
defaulthandlers	table	F paragraphs	
D file		T tex	
D parsedxml		F all	
D string		F attribute	

F	chainattribute	F reverse	
F	command	F table	
F	concat	F tag	
F	concatrange	F tags	
F	context	F text	
F	count	F texts	
F	ctxtext	F upperall	
F	default	first	function
F	first	found	function
F	function	functions	table
F	index	getbuffer	function
F	last	gethandlers	function
F	lettered	gethandlersfunction	function
F	lower	helpers	table
F	lowerall	F recursetext	
F	match	include	function
F	name	inclusion	function
F	position	inclusions	function
F	reverse	index	function
F	stripped	inheritedconvert	function
F	tag	inject	function
F	tags	<pre>inject_element</pre>	function
F	text	<pre>inject_element_after</pre>	function
F	upper	<pre>inject_element_before</pre>	function
F	upperall	injectafter	function
T x	ml	injectbefore	function
F	all	insert	function
F	att	insert_element	function
F	attribute	<pre>insert_element_after</pre>	function
F	attributes	<pre>insert_element_before</pre>	function
F	cdata	insertafter	function
F	chainattribute	insertbefore	function
F	count	insertcdata	function
F	default	insertcomment	function
F	elements	inspect	function
F	empty	is_valid	function
F	first	kind	function
F	function	last	function
F	index	load	function
F	last	lpath	function
F	lowerall	lpathcached	function
F	match	lpathcalls	function
F	name	lshow	function
F	position	makestandalone	function

Т

match	function
name	function
newhandlers	function
nodesettostring	function
originalload	function
package	function
parent	function
parsedentitylpeg	userdata
pihandlers	table
placeholders	table
F unknown_any_entity	
E 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

F unknown_any_entity
F unknown_dec_entity
F unknown_hex_entity

position function privatecodes table privatetoken function function process process attributes function. process elements function processattributes function profiled table function raw registerentity function registerns function remap name function function remap_namespace **function** remap tag function remapname remapnamespace function function remaptag renamespace function function replace replace element function resolvens function function root function save selection function separate function serialize function setcdata function setcomment function sethandlersfunction function setproperty function

settings

specialhandler table sprint function string function function strip strip whitespace **function** stripelement function stripleadingspaces function function table text function textonly function texttocdata function tocdata function toelement function tostrina function totable function toxml function tprint function traverse function unescaped function unprivatized function withelement function withelements function function wrap

xmlns

table

function

zip (extra lua)

archivestableclosefunctionclosearchivefunction

openarchive function
openfile function
registeredfiles table
type function

zlib (extra lua)

adler32 function
compress function
crc32 function
decompress function
decompressobj function
version function