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		lorcomponents
F enable	F pushset	
F handler	F register	
F register	D registere	ed
D registered	F registers	potcolor
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 spotcolor	name
F defineprocesscolor	F spotcolor	parent
F definesimplegray	F spotcolor	value
F definespotcolor	B supported	
F definetransparency	F transpare	ncycomponents
F enable	B triggerin	ıg
F filter	F usecolors	1
F forcedmodel	F value	
F forcesupport	D values	
F formatcolor	B weightgra	-
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	
Fisblack	D registere	ed
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 table

F disabletriggering
F enabletriggering

F finalize
F initialize
F process
F selective
F stacked

system function
transparencies table

N attribute

D data F enable

F stacker

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

 ${\tt B} \ {\tt supported}$

D values

backends (context)

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 getypos F processrendering 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 F setformat table pdf F setformsmethod T codeiniections F addbookmarks F setpagetransition F attachmentid F setupcanvas E clonefield F setupidentity E 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 validfieldcategorv F validfieldset F getfieldcategory F getfieldset S comment F getformatoption T nodeinjections F gethpos F addtags F getmatrix F annotation F getoutputfilename E attachfile F changestackedlayer F getpos F getpreviewfigure F cmykcolor F getypos F comment

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

registrations

table

tables table

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
                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)

activeoffset	number	S ai
adobename	function	S al
bidi	data table	S b2
blockrange	function	S ba
blocks	data table	S bb
casemap	table	S bk
categories	data table	S cb
category	function	S cj
categorytags	data table	S cl
collapsed	data table	S cm
combined	data table	S cp
contextname	function	S cr
data	data table	S ex
decomposed	data table	S gl
define	function	S h2
description	function	S h3
descriptions	data table	S hl
directions	table	S hy
enccodes	data table	S id
entities	data table	S in
fallbacks	data table	S is
filters	data table	S jl
fromnumber	function	S jt
fschars	data table	S jv
fscodes	data table	S lf
getrange	function	S nl
graphemes	data table	S ns
hangul	data table	S nu
initialize	function	S op
is_character	data table	S po
is_command	data table	S pr
is_letter	data table	S qu
is_mark 	data table	S ri
is_punctuation	data table	S sa
is_spacing	data table	S sg
lcchars	data table	S sp
lccode	function	S sy
lccodes	data table	S wj
lettered	function	S xx
lhash linebreaks	data table table	S zw
CTHENLEUKS	table	lower

function

math table mathpairs data table mirrors table otfscripts data table ranges data table registerentities function remap_hangul_syllabe function function setcodes shape function shaped function shash data table shchars data table shcodes data table showstring function data table specialchars data table specials splits table T char T compat subscripts table superscripts table synonyms data table tex table D accentmapping D commandmapping F defineaccents F safechar F toutf

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

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	function
AK	function	nofdays	function
Alphabetic	function	number	function
Character	function	numbers	function
Characters	function	octstringtonumber	function
Characters:es	function	ordinal	function
I	function	r	function
KA	function	rawcharacter	function
KR	function	romannumerals	function
R	function	second	function
RK	function	sequences	data table
Romannumerals	function	sloviannumerals	function
Sloviannumerals	function	spanishnumerals	function
Spanishnumerals	function	textime	function
Word	function	toabjad	function
Words	function	tochinese	function
a	function	toroman	function
abjadnodotnumerals	function	upper	function
abjadnumerals	function	verbose	table
alphabetic	function	D data	
character	function	F translate	
characters	function	weekday	function
characters:es	function	word	function
chineseallnumerals	function	words	function
chinesecapnumerals	function	year	function
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		

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)

debug	function
getfenv	function
gethook	function
getinfo	function
getlocal	function
getmetatable	function
getregistry	function
getupvalue	function
getuservalue	function
setfenv	function
sethook	function
setlocal	function
setmetatable	function
setupvalue	function
setuservalue	function
traceback	function
upvalueid	function
upvaluejoin	function

dir (context)

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

directives (context)

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

document (context)

arguments data table
files table
getargument function
getfilename function
options table

T commandline

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 string

texroot truefilename validengines string function data table

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 function badname function bases data table bitmapimage function boxnumber number cachepaths data table check function data table checkers data table converters function current defaultdepth number defaultheight number defaultsearch bool ean defaultwidth number done function dummy function existers data table exists function formats data table found data table aet function getrealpage function function quess hash function identifiers data table identify function images table F boxes

F clone
F copy
F immediatewrite
F keys
F new
F node
F ofindex
F package
F print
F scan
F serialize

F check F checksize F totable 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

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
is_rootbased_path	function
is_writable	function
isreadable	function
iswritable	function
join	function
joinpath	function
loadchecksum	function
nameonly	function
nametotable	function
needs_updating	function
needsupdating	function
pathpart	function
readdata	function
removesuffix	function
replacesuffix	function
reslash	function
robustname	function
savechecksum	function
savedata	function
size	function
splitbase	function
splitname	function
splitpath	function
strip	function
suffix	function
suffixes	function
suffixesonly	function
suffixonly	function
syncmtimes	function

floats (context)

analysemethod	function
${\tt checked page float}$	function
collect	function
consult	function
flush	function
getvariable	function
nofstacked	function
pop	function
push	function
resave	function
save	function
stacked	function

font (basic tex)

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

getfont overloaded function

max function 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)

1	±=61 =	F	
analyzers T foature	table		report reset
T feature N blwf	:5		
N fina			vectors ructors table
N TINA N half			addcoreunicodes
N init N isol			aftercopyingcharacters
			applymanipulators
N medi			assignmathparameters
N pref			autocleanup
N pstf			beforecopyingcharacters cache
N rphf D initial	izons	_	cacheintex
D methods			calculatescale
F setstat			checkedfeatures
T states	. C		checkedfilename
N blwf			checkvirtualids
N fina			cleanuptable
N half			collectprocessors
N init			currentfonthasfeature
N isol		•	designsizes
N mark			dontembed
N medi			enhanceparameters
N pref			factor
N pstf			finalize
N rest			getfeatureaction
N rphf			hashfeatures
B useunio	odemarks		hashinstance
checkers	table		hashmethods
F getmiss	ina		F normal
F missing	-		F virtual
cid	table	F	initializefeatures
F getmap		Т	keys
F loadfil	.e		T character
collections	table		S depth
F checken	abled		S height
F cloneve	ctor		S italic
F define			S width
T definit	ions		T description
F prepare	!		T boundingbox
F process			S depth
F registe	rmain		S height

S width S autoitalicamount T cidinfo T parameters S ascender S embedding S descender S encodingbytes S designsize S filename T expansion S finalized S auto S fontname S shrink S format S step S fullname 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 scriptpercentage S virtualized S scriptscriptpercentage D loadedfonts S size S namemode S slantfactor F newfeatures F newhandler S slantperpoint N noffontsloaded T spacing 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 F scale S extra space F scaled S extraspace S slant F setfactor S space F setname B sharefonts S space_shrink S space stretch F trytosharefont N version S spaceshrink S spacestretch current function S x height currentid function S units definers table S vfactor F addlookup S xheight F analyze T properties F applypostprocessors

F checkedmode N Escvrillic N Fitacvrillic F checkedscript 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 Jecvrillic 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 Niecvrillic N Ocyrillic D names N Odblacute T synonyms 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 daletgamats N Zecyrillic N daletgamatshebrew 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 doubleyodpatahhebrew N ayin N bet N edot N betdagesh N eightarabic N blackdownpointingtriangle N eighthnotebeamed N blackleftpointingpointer N etnahtafoukhhebrew N etnahtafoukhlefthebrew N blackrectangle N blackrightpointingpointer N etnahtahebrew N blacksmilingface N fathaarabic N blacksquare N finalkaf N blackuppointingtriangle N finalkafdagesh N finalkafhebrew N bulletinverse N cdot N finalkafgamats N finalkafgamatshebrew N compass N finalkafsheva N dagesh N finalmem N dalet 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 dalethirid N gcedilla N dalethirighebrew N qdot N daletholam N gimel N daletholamhebrew N gimeldagesh

N gravecmb

N daletpatah

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 hatafpatahguarterhebrew N lamedholam N hatafgamats N lamedholamdagesh N hatafgamats1b N lamedholamdageshhebrew N hatafgamats28 N laminitialarabic N hatafgamats34 N lammeemjeeminitialarabic N hatafaamatshebrew N lcedilla N hatafgamatsnarrowhebrew N logicalnotreversed N hatafgamatsquarterhebrew N mahapakhhebrew N hatafsegol N mem N hatafsegol17 N memdagesh N hatafsegol24 N merkhahebrew N hatafsegol30 N merkhakefulahebrew 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 het N noonhehinitialarabic N hiriq N nun N nundagesh N hiriq14 N hirig21 N odblacute N hiriq2d N onearabic N hirighebrew N overscore N hirignarrowhebrew N patah N hiriqquarterhebrew N patah11

N patah1d

N patah2a

N patahhebrew

N holam

N holam19

N holam26

N aubuts31 N patahnarrowhebrew N patahquarterhebrew N gubutshebrew N gubutsnarrowhebrew N pe N pedagesh N qubutsquarterhebrew N gamats N quoteleftreversed N gamats10 N rafe N rcedilla N gamatsla N reharabic N gamats1c N gamats27 N resh N gamats29 N reshhatafpatah N gamats33 N reshhatafpatahhebrew N reshhatafsegol N gamatsde N gamatshebrew N reshhatafsegolhebrew N gamatsnarrowhebrew N reshhebrew N gamatsgatanhebrew N reshhiriq N gamatsgatannarrowhebrew N reshhiriahebrew N reshholam N gamatsgatanguarterhebrew N gamatsgatanwidehebrew N reshholamhebrew N gamatsquarterhebrew N reshpatah N qof N reshpatahhebrew N qofdagesh N reshdamats N qofhatafpatah N reshgamatshebrew N gofhatafpatahhebrew N reshaubuts N gofhatafsegol N reshaubutshebrew N gofhatafsegolhebrew N reshseaol N aofhebrew N reshseaolhebrew N gofhirig N reshsheva N qofhiriqhebrew N reshshevahebrew N qofholam N reshtsere 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 gofqubutshebrew N segol2c N gofsegol N segolhebrew N qofsegolhebrew N segolnarrowhebrew N qofsheva N segolquarterhebrew N gofshevahebrew N sevenarabic N goftsere N sfthyphen N shaddaarabic N qubuts N qubuts18 N sheael N gubuts25 N sheva

N	sheva115	N yodda	agesh
	sheva15	N zayir	_
	sheva22	N zayir	
	sheva2e	N zdot	.aagee
	shevahebrew	N zeroa	rahic
	shevanarrowhebrew	D unicode	
	shevaquarterhebrew	D cache	
	shin	F is known	
	shindagesh	D known	
	shindageshshindot	F load	
	shindageshsindot		code_vector
	shinshindot	D math	
N	shinsindot	N version	
N	silughebrew	expansions	data table
	sixarabic	formats	data table
N	tav	goodies	table
N	tavdages	D colorsch	emes
N	tavdagesh	D data	
N	tcedilla	D designsi	zes
N	tchehinitialarabic	D filename	S
N	tet	F getcompo	sitions
Ν	tetdagesh	T list	
Ν	tevirhebrew	F compos	itions
N	thousandsseparatorarabic	F design:	sizes
N	threearabic	F expans	ions
N	tildecmb	F featur	eset
Ν	tipehahebrew	F filena	mes
N	tsadi	F files	
N	tsadidagesh	F mathem	atics
N	tsere	F protru	sions
	tsere12	F soluti	ons
N	tserele	F treatm	
N	tsere2b	F typefa	ces
	tserehebrew	F load	
	tserenarrowhebrew	F prepare_	
	tserequarterhebrew	F register	
	twoarabic		postprocessor
	udblacute	F report	
	vav	handlers	table
	vavdagesh	T afm	
	vavdagesh65	B addker	
	vavholam	B addliga	
	yerahbenyomohebrew		ligatures
N	yod	B autopr	etixed

D cache	F gsub_ligature
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
<pre>F devanagari_reorder_matras</pre>	D whatever
F devanagari_reorder_pre_base_reorderi n g	a<u>s</u>hæn sonants 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
F gsub_alternate	D italics
F gsub_context	D lastmathids
F gsub_contextchain	D marks

D modes	F loadlumta	able
D originals	F makename	•
D parameters	D overload:	S
T processes	F reset	
D properties	F tounicode	~
D quads	F tounicode	e16
D resources	F tounicode	e16sequence
T setdynamics	mp	table
D spaces	D cache	
D spacings	B inline	
D unicodes	N version	
D xheights	names	data table
helpers table	nulldata	data table
F addprivate	protrusions	data table
F dimenfactor	readers	table
F expandglyph	F afm	
F fontpatternhassize	F check_lua	a
F getdigitwidth	F check_tfr	m
F getparameters	F dfont	
F getprivatenode	F lua	
F hasprivate	F opentype	
F indextoslot	F otf	
F name	F pfb	
F nametoslot	D sequence	
F setdigitwidth	F tfm	
F splitfontpattern	F ttc	
F tochar	F ttf	
<pre>iterators table</pre>	select	table
F characters	T data	
F descriptions	F definety	peface
F glyphs	T fallback	S
loggers table	F filterin	put
F add_placeholders	T methods	
<pre>D category_to_placeholder</pre>	F default	-
F format	F feature	es
F onetimemessage	F file	
F register	F goodies	5
F reportdefinedfonts	F name	
F reportusedfeatures	F selectf	font
mappings table	F simplef	onts
F addtounicode	F spec	
F fromunicode16	F style	
F loadfile	F register	fallback
F loadline	F searchfi	les

speci	fiers	table	9
D	contextmer	ged	
F	contextnum	ber	
D	contextnum	bers	
D	contextset	ups	
F	contexttos	tring	l
F	definecont	ext	
F	mergeconte	xt	
F	presetcont	ext	
F	registerco	ntext	:
F	showcontex	t	
F	splitconte	xt	
D	synonyms		
D	variants		
symbo		table	9
	uselibrary		
table	:S	table	9
trace	ers	table	
treat	ments	table	9
F	applyfixes		
D	data		
S	filename		
F	ignoredfil	.e	
	report		
F	cracc		
typef	aces	data	table

functions (context)

dummy function

graphics (context)

backgrounds table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

gzip (extra lua)

```
close function
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
serialize	function
totable	function
types	function
write	function

interactions (context)

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

interfaces (context)

addvalidkeys	function	•	MPw
cachedsetups	data table	-	MPx
cachesetup	function		MPxy
checkedspecification			MPxywhd
complete	data table		MPy
constants	data table		addcounter
corenamespaces	data table	-	addfeature
definecommand	function	-	addtolist
doifelsemessage	function		analyzelist
elements	data table		assignbuffer
formats	data table		autofinishstructurelevels
getcheckedparameters	function		autonextstructurelevel
getmessage	function		bposcolumn
hashedsetups	data table		bposcolumnregistered
implement	function		btxauthorfield
interfacedcommand	function	-	btxdetail
interfaces	table		btxdirect
invalidkey	function		btxdoif
is_command	function		btxdoifelse
namespaces	table		btxdoifelsesameasprevious
F define		-	btxdoifnot
Flist		-	btxfield
registernamespace	function		btxfieldname
scanners	table		btxfieldtype
F MPc			btxfirstofrange
F MPd		-	btxflush
F MPh			btxfoundname
F MPll			btxfoundtype
F MPlr			btxoneorrange
F MPls			btxsingularplural
F MPn			checkcountersetup
F MPp			chemicalcomponent
F MPpardata			cleanupbox
F MPplus		F	colorcomponents
F MPpos			copyposition
F MPposset			countervalue
F MPr		F	currentbtxfirstnames
F MPrest			currentbtxinitials
F MPrs			currentbtxjuniors
F MPul			currentbtxsurnames
F MPur		F	currentbtxvons

F doifpositiononpageelse F currentsectiontolist F decrementcounter F doifpositionsonsamepageelse F decrementedcounter F doifpositionsonthispageelse E decrementsubcounter F dosaveposition F definecounter F dosavepositionplus F definefont one F dosavepositionwhd F definefont two F dosetposition E definefontfeature F dosetpositionbox E defineintermediatecolor F dosetpositionplus F definemarking F dosetpositionstrut F definemultitonecolorglobal F dosetpositionwhd F defineprocesscolordummv F enableregime F defineprocesscolorglobal F enhancelist F defineprocesscolorlocal F eposcolumn F definesnapmethod F eposcolumnregistered F definespotcolorglobal F erasebuffer F featureattribute F definetransparency F defrostrandomseed F featurelist F depthnumber F feedback F disableregime F fetchallmarks F discardfromlist F fetchmultipar F doifblackelse F fetchmultishape F doifcounter F fetchonemark F doifdrawingblackelse F fetchposboxes E doifelsebuffer F fetchtwomarks F doifelsecounter F figure check F doifelsecurrentfonthasfeature F figure done F doifelsemarking F figure dummy F doifelsemessage F figure identify F doifelsepositionsused F figure include F figure pop F doifelserangeonpage F doiffileexistelse F figure push E doifinelementelse F figure scale F doiflisthasentry F figurefilename F doiflisthasnumberelse F figurefilepath F doiflisthaspageelse F figurefiletype F doiflisthastitleelse F figurerequest F doifnotcounter F figurestatus F doifobjectreferencefoundelse F figureused F doifoverlappingelse F finalizebox F doifparentfileelse F firstcountervalue F doifpathexistelse F firstsubcountervalue F doifposition F fontchar

F fontcharbyindex

F doifpositionelse

F formatcolor F mpgettext F formatgray F mpgraphic F freezerandomseed F mpoptions F getbodyfontsizes F mprunset F getbuffer F mpruntab F getbufferctxlua F mprunvar F aetbuffermkvi F mpsetclippath F getelementtag F mpsetoutercolor F getfullstructurenumber F mpsetsxsy F getmarking F mpsettext F getmessage F mptexaet F mptexreset F getmpextensions F getrandomdimen F mptexset F getrandomfloat F mptexsetfrombuffer F getrandomnumber F namedstructureuservariable F namedstructurevariable F getrandomseed F getsomefullstructurenumber F nhfs F getsomestructurenumber E nextcountervalue F getspecificstructuretitle E nextsubcountervalue F getstructurelevel F objectnumber F getstructurenumber F objectpage F gettexbuffer F parpos F increment counter F pdfrotation F incrementedcounter F pdfstartmatrix F incrementsubcounter F pdfstartmirroring E lastcountervalue F pdfstartrotation F lastsubcountervalue F pdfstartscaling F listgroupindex F pdfstopmatrix F listlabel F pdfstopmirroring F listlocation F pdfstoprotation F listprefixednumber F pdfstopscaling F listprefixedpage F pgfxcolorspec F listrealpage F pickupbuffer F listsize F poplist F listtitle F popregime F listuserdata F popsectionblock F markingnumber F prefixedconverted F markingtitle F prevcountervalue F markregionbox F previoussubcountervalue F markregionboxcorrected F processbodyfontsizes F markregionboxtagged F processbuffer

F mpflushliteral F processlist
F mpflushreset F processsynonyms

F mpcolor

F processcolorcomponents

E setfontfeature F purefontname F pushlist F setfontofid F pushregime F setinterfaceconstant F pushsectionblock E setinterfaceelement E rawcountervalue F setinterfacemessage F rawsubcountervalue F setinterfacemessages F setinterfacevariable F registerbodyfontsize E setinternalreference F registerfigurepattern F registerfiguresuffix F setmarking F registerlanguagefeatures F setmathalphabet F registermaintextcolor F setmathattribute F setmathstyle F registernamespace F registersection F setmpextensions F registersynonym F setobject F registerusedsynonym F setowncounter F relatemarking F setownsubcounter F replacefeature F setrandomseed F replacepospxywhd E setsectionblock F reportstructure F setsectionentry F resetcounter F setstructurelevel F resetfeature F setstructurenumber F resetfontfeature F setsubcounter F resetmarking F settagaspect F resetprevdepth F settaggedmetadata F resetsubcounter F settagproperty E restartcounter F settagproperty b F restartsubcounter F settagproperty n F showassignerror E restorecounter E revivefeature F showcounter F runbuffer F showmessage F savebuffer F splitfilename F spotcolorname F savecounter F savedlistnumber F spotcolorparent F savedlistprefixednumber F spotcolorvalue F savedlisttitle F startcolorset F saveobject F startregime F savepagedata F starttag F setcharactercasing F starttag c F setcolormodel F starttag d F setcounter F starttag u F setelementuserproperties o F stopcolorset F setelementuserproperties t F stopregime F setfigurelookuporder F stoptag

F structureautocatcodedget

F setfigurepaths

F structurecatcodedget F xmlconcatrange F structuregivencatcodedget F xmlcontext F structurenumber F xmlcount F xmldelete E structuretitle F structureuservariable F xmldirect F structurevariable F xmldirectives F xmldirectivesafter F subcountervalue F xmldirectivesbefore E subcountervalues F subsubcountervalues F xmldisplayverbatim E subtractfeature F xmldoif F synchronizemarking F xmldoifelse F synonymmeaning F xmldoifelseemptv F synonymname F xmldoifelseselfempty F tochar F xmldoifelsetext F transparencycomponents F xmldoifemptv F type F xmldoifnot F xmldoifnotempty F typebuffer F typefile F xmldoifnotselfemptv F useMPlibrary F xmldoifnottext F usecolors F xmldoifselfempty F usefigurebase F xmldoiftext F vspacing F xmlelement F xmlfilter F vspacingcollapse F xmlfilterlist F vspacingdefine F vspacingsetamount F xmlfirst F vspacingsnap F xmlflush F way F xmlflushcontext F writestatus F xmlflushdocumentsetups F xmlafterdocumentsetup F xmlflushlinewise F xmlaftersetup F xmlflushspacewise F xmlall F xmlfunction F xmlappenddocumentsetup F xmlgetindex F xmlappendsetup F xmlinclude F xmlatt F xmlincludeoptions F xmlattdef F xmlinclusion F xmlattribute F xmlinclusions F xmlattributedef F xmlindex F xmlbeforedocumentsetup F xmlinfo F xmlbeforesetup F xmlinlineverbatim F xmlchainatt F xmllast F xmlchainattdef F xmlload F xmlloadbuffer F xmlchecknamespace F xml command F xmlloaddata F xmlconcat F xmlloaddirectives

F xmlloadregistered F xmlmain F xmlmatch F xmlname F xmlnamespace F xmlnonspace F xmlpos F xmlprependdocumentsetup F xmlprependsetup F xmlraw F xmlregisterns F xmlremapname 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 F xmlverbatim F xmlwithindex function setconstant

setcount

setdimen

function setelement setformat function setmacro function setmessage function setmessages function settranslation function setuserinterface function setvalidkevs function setvariable function showmessage function storedscanners data table data table svntax tolist function translations data table variables data table writestatus function

function

function

io (basic lua)

ask function bytes function characters function exists function fileseparator function function function function

loadchunk function
loaddata function
loadlines function
noflines function

pathseparator string

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

jit (context)

```
arch
             string
attach
             function
flush
             function
off
             function
             function
on
opt
             table
   F start
             string
os
             function
status
             table
util
   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)

comment	function	F	getcollected
datasets	table	F	getdata
D collect	red	F getfield	
F extend			gettobesaved
F getdata	1	F	inlist
F setdata			last
D tobesav	red	F	list
disablesave	function	F	save
files	table	F	savetagged
D collect	ed	D	tobesaved
F context		posit	: ions table
B forceru	ın	F	b_col
F run		F	b_region
D tobesav	ved	F	С
initialize	function	D	collected
load	function	F	column
loadother	function	F	сору
objects	table	F	depth
D collect	red	F	e_col
F get		F	e_region
F number		F	enhance
F page		F	extra
F save		F	get
F set		F	getreserved
D tobesav	ved	F	hangafter
pack	boolean	F	hangindent
packversion	number	F	height
pagestates	table	F	hsize
D collect	red	F	leftskip
F extend		F	lowerleft
F realpag	je	F lowerright	
F setstat	e	F	markregionbox
D tobesav	ved	F	n
passes	table	F	onsamepage
F check		F	overlapping
D collect	ed	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 Fγ register function save function table structure D collected T components T tobesaved T branches S name S type variables table 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)

F report

associate	function	numbers	data tabl
associated	data table	postexhyphenchar	function
association	function	posthyphenchar	function
counters	data table	preexhyphenchar	function
current	function	prehyphenchar	function
data	data table	registered	data tabl
define	function	replacements	table
expand	function	F add	
expanders	table	F handler	
frequencies	table	F set	
F averagecharwidth		righthyphenmin	function
F getdata		serializediscretionary	function
getdata	function	setexceptions	function
getnumber	function	setsynonym	function
hyphenate	function	unload	function
hyphenators	table	version	number
T dictionaries		visualizediscretionaries	function
D featuresets		words	table
F handler		F check	
F popmethod		T data	
F pushmethod		F disable	
F setmethod		F enable	
T traditional		T enablers	
F definefeatures		B enables	
F gettrace		F found	
F hyphenate		F load	
F injecthyphens		T methods	
F installmethod		N threshold	
F lasttrace			
F loadpatterns			
F registerexception			
F registerpattern			
installed	function		
labels	table		
F define			
F split			
lefthyphenmin	function		
loadable	function		
loadwords	function		
logger	table		
33			

data table function function function function data table 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 function finalized 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

function

function

function

function

function

function function

function

function

function

function

overloaderror function

showdebuginfo function

make

print

report

reset result

set

show

showerror

pν

popupfile

new

stripcss function
tv function
type function
urlescape function
variable function
variables table
 S color-background-blue
 S color-background-body

S color-background-blue
S color-background-body
S color-background-main
S color-background-purple
S color-background-yellow

S title-default

logs (context)

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

F export

F help F info

F lines

F version

reportline function reportlines function setformats function setformatters function function setlogfile setmessenger function setprocessor function function setprogram settarget function settimedlog function settranslations function show function show close function show load function function show open simple function simpleline function simplelines function start page number function status function function stop_page_number function subdirect 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
F load		shareobject	function
F unload		shareobjectreference	function
finalizedocument	function	spotcode	function

function stream string function function timestamp function toeight topdfdoc function tosixteen function transform function transparency function transparencycode function transparencygroups table B none

transparencyvalue function function unicode 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
${\tt utfchartabletopattern}$	function
version	function

ltn12 (extra lua)

```
BLOCKSIZE number
filter table
   F chain
   F cycle
       table
pump
   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)

bytecode table data table bytedata bytedone table B toks-new collectgarbage function function delav 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 registeredcodes function registerfinalizer function registername function setbytecode function

function

string

string

setluaname

startupfile

version

luatex (context)

cleanuptempfiles function
registerstartactions function
registerstopactions
registertempfile function
starttime number

lxml (context)

addindex	function	flushsetups	function
all	function	flushspacewise	function
applyfunction	function	get_id	function
att	function	getid	function
attribute	function	getindex	function
chainattribute	function	id	function
checkindex	function	idsplitter	userdata
collected	function	include	function
command	function	inclusion	function
concat	function	inclusions	function
concatrange	function	index	function
content	function	info	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

withindex

xmltexhandler

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

function

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
ехр	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	
F install fallbackstyleattr	function
. 1	function data table
fallbackstyleattr	
fallbackstyleattr families	data table
fallbackstyleattr families gaps	data table data table
fallbackstyleattr families gaps getboth getstyle initializeparameters	data table data table function
fallbackstyleattr families gaps getboth getstyle	data table data table function function
fallbackstyleattr families gaps getboth getstyle initializeparameters	data table data table function function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks	data table data table function function function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont	data table data table function function function function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap	data table data table function function function function function data table
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions	data table data table function function function function data table function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions overloadparameters privatebase remapalphabets	data table data table function function function function data table function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions overloadparameters privatebase	data table data table function function function function data table function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions overloadparameters privatebase remapalphabets	data table data table function function function function data table function function data table function function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions overloadparameters privatebase remapalphabets renderings	data table data table function function function function data table function function data table function function function
fallbackstyleattr families gaps getboth getstyle initializeparameters injectfallbacks makefont mapremap overloaddimensions overloadparameters privatebase remapalphabets renderings D mappings	data table data table function function function function data table function function data table function function function

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

mbox (context)

```
parse
parse_from function
parse_header function
parse_headers 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)

function

b64

```
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
wrapt
         table
   F base64
   F default
   F quoted-printable
   F text
          function
wrp
```

mp (context)

```
_f_
          function
dataset
         function
datasets table
   F load
format
          function
          table
get
   F boolean
   F number
   F numeric
   F string
          function
n
numeric
          function
pair
          function
path
          function
print
         function
quadruple function
quoted
          function
size
          function
triplet function
```

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		protect_glyphs	
copy_1	list	function		protrusion_skippab	le
count		function		remove	
	nt_attr	function		set_attribute	
dimens		function		set_properties_mod	le
direct		table		setbox	
	сору			setfield	
	copy_list			setproperty	
	count			slide	
	current_attr		-	tail	
	dimensions			todirect	
	do_ligature_n			tonode	
	end_of_math			tostring	
	first_glyph			traverse	
	flush_list			traverse_id	
	flush_node			unprotect_glyphs	
	flush_properties_t	able		unset_attribute	
	free	_		usedlist	
	get_properties_tab	le		vpack	
	getbox		-	write	
	getchar			.gature_n	function
	getfield		_	of_math	function
	getfont			y_font	function
	getid		field		function
	getleader			_character	function
	getlist			:_glyph 	function
	getnext			_list	function
	getprev			_node	function
	getproperty			_properties_table	
	getsubtype 		free		function
	has_attribute			roperties_table	function
	has_field		getch		function
	has_glyph 		getfi		function
	hpack		getfo		function
	insert_after		getio		function
	insert_before		getle		function
	is_direct		getli		function
	is_node		getne		function
	last_node		getpr		function
	length			operty	function
F	new		getsu	ıbtype	function

function
function

nodes (context)

accentcodes	data table	free_spec	function
aligned	function	getattr	function
append	function	getattribute	function
astable	function	getbox	function
basepoints	function	getchar	function
builders	table	getfield	function
F buildpage_filter		getfont	function
F vpack_filter		getid	function
codes	data table	getleader	function
concat	function	getlist	function
сору	function	getnext	function
copy list	function	getprev	function
copy spec	function	getskip	function
count	function	getsubtype	function
current attr	function	gluecodes	data table
delete	function	glyphcodes	data table
destinations	table	glyphdir_is_equal	data table
N attribute		glyphdir_is_opposite	data table
T done		glyphdir_is_orthogonal	data table
F handler		gonuts	boolean
T stack		handlers	table
dimensionfields	data table	F accessibility	
dimensions	function	F alignbackgrounds	
dir_is_pop	data table	F backgrounds	
dir_negation	data table	F characters	
disccodes	data table	F checkforleaks	
discretionarycodes	data table	F checkglyphs	
do_ligature_n	function	F cleanupbox	
end_of_math	function	F cleanuppage	
fasthpack	function	F export	
fencecodes	data table	F finalize	
fields	function	F migrate	
fillcodes	data table	F protectglyphs	
first_character	function	F stripping	
first_glyph	function	F unprotectglyphs	
firstcharacter	function	has_attribute	function
firstcharinbox	function	has_field	function
firstglyph	function	has_glyph	function
flush_list	function	hpack 	function
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	data table data table function function data table table data table function function function function function data table
insert_after	function	nodecodes	data table
insert_before	function	nopts	function
insert_list_after	function	nuts	table
installattributehandler		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 stage one		F flush_node F free	
F stage_one			
F stage_two		F getattr	
F stage_zero		F getattribute	
D data F finalize		F getbox	
F number		F getchar	
N scratchbox		F getfield	
N SCRALCHDOX	function	F getfont F getid	
linked	function	F getleader	
list	function	F getlist	

F getnext F pdfdestination F getprev F pdfdirect F getprop F pdfliteral F getskip F pdfrestore F getsubtype F pdfsave F has attribute F pdfsetmatrix F has field F penalty F has glyph F register F hpack F rightmarginkern F insert after F rightskip F insert before F rule F insert list after F shrink F is direct F special F is display math F stretch F is node F temp F is nut F textdir F usage F kerning F last node T userids 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 E nestedtracedslide F userstring F new F usertokens T pool F vlist F baselineskip F zeroglue F cleanup F prepend F disc F protect glyphs F fontkern F protrusion skippable F reference F glue F gluespec F remove F glyph F repackhlist F hlist F replace F kern F rightmarginwidth F latelua F set attribute F lateluafunction F setattr F leftmarginkern F setattribute F leftskip F setattributes F lineskip F setbox F setfield F negatedglue F noad F setprop

F setunsetattributes

F pdfannotation

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	10010
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_fil	ter
packlist	function	<pre>F pre_linebreak_filt</pre>	er
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	stripping	table
N attribute		T glyphs	
T done		F set	
F handler		striprange	function
T stack		tail	function
remove	function	takebox	function
repackhlist	function	tasks	table
replace	function	F actions	
report	function	F appendaction	
rightmarginwidth	function	F disableaction	
rules	table	F disablegroup	
D data		F enableaction	
F define		F enablegroup	
F enable		F freeze	
F handler		F freezegroup	
save	function	F new	
serialize	function	F prependaction	
serializebox	function	F removeaction	
set_attribute	function	F replaceaction	
setattr	function	F restart	
setattribute	function	F setaction	
setattributes	function	F showactions	
setbox	function	F table	
setfield	function	textdir_is_equal	data table
setunsetattributes	function	textdir_is_is	data table
shifts	table	textdir_is_opposite	data table
D data		textdir_is_parallel	data table
F define		tobasepoints	function
F enable		tocentimeters	function
F handler		tociceros	function
show	function	todidots	function
showboxes	function	todimen	function
showcodes	function	toinches	function
showlist	function	tomillimeters	function
showsimplelist	function	tonewciceros	function
skipcodes	data table	tonewdidots	function
slide	function	tonode	function
snapshots	table	tonodes	function
F getparameters		tonut	function
F getsamples		topicas	function

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			
F stop			

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 now function 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

function function

function string

tmpdir

tmpname today

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

overloaded function

settrailer

pdfscanner (context)

scan function

physics (context)

units table
 D tables

profiler (extra lua)

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

publications (context)

addtexentry	function	S editor
analyze	function	S journal
anywhere	function	S keywords
authorcache	table	S number
authorcollapsers	data table	S pages
casters	table	S title
F author		S volume
F keyword		S year
F pagenumber		T optional
F range		T required
citevariants	table	T sets
F author		T author
F authornum		T virtual
F authoryear		T book
F authoryears		S category
F category		T extra
F default		T fields
F entry		S address
Findex		S author
F key		S edition
F keywords		S editor
F num		S keywords
F page		S number
F serial		S publisher
F short		S subtitle
F tag		S title
F type		S volume
F year	d-4- 4-11-	S year
collected	data table	T optional
components	table	T required
F author	function	T sets
concatstate		T author T editionset
converttoxml	function table	T virtual
currentspecification S author	tabte	T demo-a
T categories		S category T extra
T article		T fields
S category T extra		S author
T fields		
S author		S institution
5 author		S organization

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		found	function
T fields		get	function
S author		getcasted	function
S institutio	n	getdetail	function
S organizati	on	getdirect	function
S subtitle		getfaster	function
S title		getfield	function
S year		getfuzzy	function
T optional		getindex	function
T required		inspectors	data table
T sets		journals	table
T authors		F abbrevia	ted
T virtual		F add	
S comment		F expanded	
S copyright		F load	
T fields		F save	
S name		lists	table
T types		F collecte	
S author		F fetchent	
S editor		F filteral	
S keywords		F flushent	ry
S number		T methods	
S page		F datase	Ε
S pages		F force	
S volume		F global	
S version		F local	
T virtual	4-61-	F nofregis	
datasets	table	F preparee	
detailed	table	F register	
endnotes_to_btx	function	F sameaspr	evious
<pre>enhancer S arguments</pre>	table	T sorters F datase	+
		F datase F defaul	
T askip			
B dirty		F refere	ice

F short			nofdatasets	
F uservariable			nofdefinitions	
listvariants	table		nofshortcuts	
F bib		table		table
F default			implicits	
F num		D	origins	
F page		D	privates	
F short		D	sets	
F yes		D	specials	
load	function	D	types	
loadbibdata	function	D	virtuals	
loaders	table	tags		function
F bbl		trace	ers	table
F bib		F	showdatasetautho	rs
F buffer		F	showdatasetcompl	.eteness
F endnote		F	showdatasetfield	ls
F lua		F	showentry	
F refman		F	showfields	
F registercleaner		F	showtables	
F xml		F	showvariants	
new	function	types	etters	table
okay	function	F	author	
parenttag	function	F	string	
permitted	function	usede	entries	function
refman_to_btx	function	write	ers	table
resolvedname	function	F	author	
save	function	F	keyword	
search	function	F	pagenumber	
setcategory	function	F	range	
setspecification	function			
singularorplural	function			
sortedentries	function			
sortmethods	table			
T authoryear				
T sequence				
specifications	table			
T default				
S author				
S comment				
S copyright				
S name				
S version				
statistics	table			
N nofbytes				

regimes (context)

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

resolvers (context)

-11	£	findtexfile	£
allprefixes	function function	findtexfile findwildcardfile	function function
appendhash			
automount	function table	findwildcardfiles formatofsuffix	function
automounted			function
booleanvariable	function	formatofvariable	function
cacheversion	string	formats	data table
checkedvariable	function	generators	data table
cleanedpathlist	function	<pre>get_from_content .</pre>	function
cleanpath	function	getenv	function
cleanpathlist	function	getownpath	function
concatinators	data table	getreadfilename 	function
configbanner	string	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	
expandedpathlistfromvariable	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		setenv setinstance	function
F encodecomment F preprocessed		setinstance showpath	
F encodecomment F preprocessed F processmk		setinstance showpath simplescanfiles	function function function
F encodecomment F preprocessed F processmk F processmkvi		setinstance showpath simplescanfiles splitconfigurationpath	function function function function
F encodecomment F preprocessed F processmk F processmkvi F version		setinstance showpath simplescanfiles splitconfigurationpath splitexpansions	function function function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel	number	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod	function function function function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler	function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath	function function function function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance	function function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath	function function function function function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile	function function function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes	function function function function function function function data table
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers	function function function data table	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap	function function function function function function function function data table data table
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile	function function function data table function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat	function function function function function function function function dunction dunction function function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile	function function function data table function function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob	function function function function function function function dunction function function data table data table function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath	function function function data table function function string	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath	function function function function function function function dunction data table data table function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath poppath	function function function data table function function string function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath	function function function function function function function dunction data table data table function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath poppath prefixes	function function function data table function function string function data table	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpathlist	function function function function function function function data table data table function function function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath proppath prefixes prependhash	function function data table function function string function data table function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve	function function function function function function function function data table data table function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath proppath prefixes prependhash pushpath	function function data table function function string function data table function data tole	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve updaterelations	function function function function function function function function data table data table function
F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath proppath prefixes prependhash	function function data table function function string function data table function	setinstance showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath stackpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve	function function function function function function function function data table data table function

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)

```
autofontfeature
                  table
   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
connect	function	S	content-language
connect4	function	S	content-length
connect6	function	S	content-location
dns	table	S	content-md5
F getad	drinfo	S	content-range
F getho	stname	S	${\tt content-transfer-encoding}$
F getna	meinfo	S	content-type
F tohos	tname	S	date
F toip		S	diagnostic-code
ftp	table	S	dsn-gateway
S PASSW	ORD	S	etag
N PORT		S	expect
N TIMEO	UT	S	expires
S USER		S	final-log-id
F comma	nd	S	final-recipient
F get		S	from
F open		S	host
F put		S	if-match
gettime	function	S	if-modified-since
headers	table	S	if-none-match
T canon	ic		if-range
S acc	ept	S	if-unmodified-since
	ept-charset	S	in-reply-to
S acc	ept-encoding	S	keywords
S acc	ept-language	S	last-attempt-date
S acc	ept-ranges	S	last-modified
S act	ion	S	location
S age			max-forwards
S all		S	message-id
S alt	ernate-recipient		mime-version
	ival-date		original-envelope-id
S aut	horization	S	original-recipient
S bcc			pragma
S cac	he-control	S	proxy-authenticate
S cc		S	proxy-authorization
S com	ments	ς	range

S re	ceived	sinkt		table
S re	ceived-from-mta	F	close	-when-done
S re	ferences	F	default	
S re	ferer	F	http-	chunked
S re	mote-mta	F	keep-	open
S re	ply-to	skip		function
S re	porting-mta	sleep		function
S re	sent-bcc	smtp		table
S re	sent-cc	S	DOMAI	N
S re	sent-date	N	P0RT	
S re	sent-from	S	SERVE	R
S re	sent-message-id	N	TIME0	UT
S re	sent-reply-to	S	ZONE	
S re	sent-sender	F	messa	ge
S re	sent-to	F	open	
S re	try-after	F	send	
S re	turn-path	sourc	е	function
S se	nder	sourc	et	table
S se	rver	F	by-le	ngth
S sm	tp-remote-recipient	F	defau	lt
S st	atus	F	http-	chunked
S su	bject	F	until	-closed
S te		tcp		function
S to		tcp6		function
S tr	ailer	tp		table
S tr	ansfer-encoding	N	TIME0	UT
•	grade	F	conne	ct
S us	er-agent	try		function
S va	ry	udp		function
S vi	a	udp6		function
S wa	rning	url		table
S wi	ll-retry-until	F	absol	ute
S ww	w-authenticate	F	build	
S x-	mailer		build	_,
http	table	F	escap	e
N PORT	Г	F	parse	
N TIME	EOUT	F	parse	_path
S USEF	RAGENT	F	unesc	ape
F oper				
F requ				
newtry	function			
protect	function			
select	function			

function

sink

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
start
            function
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		descriptions	table
S method		documents	table
F overload		D data	
F place		F initialize	
F register		F preset	
F setup		F reset	
counters	table	floats	table
F add		formulas	table
F analyze		F current	
F check		F simplify	
D collected		F store	
F compact		helpers	table
F converted		F analyze	
F currentvalue		F formulanumber	
D data		F merged	
F define		F page	
F first		F prefix	
F get		F prefixlastpage	
F last		F prefixpage	
F next		F simplify	
F prev		F title	

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

D functions F resetpostponed F restore F aet F save F getcurrentmetadata F setstate F getcurrentprefixspec F setsymbolpage F getinnermethod F getinternallistreference D states F getinternalreference F store D handlers pages table F analyze F identify D collected F import F is odd F inject F injectcurrentset N nofpages F number S innermethod F save D internals D tobesaved F load references F loadpresets table F mark F analyze 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 realpageofpage F currentmetadata E 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 D filters F setreferencerealpage D flaginternals D specials F from F splitcomponent

F splitprefix F unique F userdata F splitreference F synchronizepage sections table T testrunners F autodepth F inner F cct F special D collected F current F special operation F special operation with arguments F currentblock T testspecials F currentid F deltapage F currentlevel Εi F currentsectionindex F internal F depthnumber F finddata F page F realpage F findnumber F fullnumber F section F userpage F getcurrentlevel D tobereferred F getlevel D tobesaved F getnumber Turls F internal reference T data D levelmap F define D levels F aet F load D usedinternals F matchingtilldepth D usedviews F numberatdepth F valid F numbers F whatfrom F popblock registers table F prefixedconverted F analyze F pushblock D collected F register F compare D registered F define F reportstructure F enhance F save F extend T sectionblockdata F filter T bodypart F filtercollected S bookmark F finalize F set F flush F setblock F setchecker F get F prepare F setentry F process F setlevel F setmethod F setnumber F structuredata F sort F store F title D tobesaved 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 synonyms table 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 restart 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 start
F stop
D taglist

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
badness	function	isdimen	function
box	table	isskip	function
catcode	table	istoken	function
conditionals	data table	lccode	table
constants	data table	linebreak	function
count	table	lists	table
ctdcatcodes	number	lua math random	function
ctxcatcodes	number	lua math randomseed	function
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	<pre>set_experimental_code</pre>	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 boroup userdata bits table F count N active F token N alignment hbox userdata N begingroup istoken function N character letter function N close letters function N comment other function N endgroup pickup function N endofline printlist function N escape scanners table N ignore F boolean N invalid F code N letter F count N mathshift F dimen N open F dimension N other F glue N space F keyword N subscript F lxmlid N superscript F lxmlid N whitespace F scanclose collectors table F scancpen T data F skip F defaultwords F string F token F flush F token F token F register F word T registered scantable function F show setters table F token F count <		_		
bits table F dimen N active F token N alignment hbox userdata N begingroup istoken function N character letter function N close letters function N endofline printlist function N subscript printlist function N subscript printlist function N subscript printlist function				
N active N alignment N begingroup N character N close N endgroup N comment N endgroup N endofline N ignore N invalid N begingroup N mathshift N open N other N space N space N space N subscript N subscript N subscript N whitespace Collectors T data F defaultwords F flush F register T registered F stody F token F token F finstall F register F resunt F token F finstall F register F register F stody F token F test Compile F function F dimen F token F flush F token F flush F token F finstall F toks F register F token				
N alignment N begingroup N character N close N comment N comment N endgroup N endofline N ignore N invalid N open N open N other N open N space N subscript N superscript N superscript N whitespace Collectors T data F defaultwords F flush F registered F show F test F test Compile F tode F tode F tode F tode F tode F tode F count F scanopen F skip F token F flush F registered F scantable F toke F test Compile F tode F book F damen F scantable F count F show F test F test F test F test F token F flush F token F flush F token F flush F token F flush F token F scantable F token F stoing F token				
N begingroup N character N close N close N comment N comment N endgroup N endofline N escape N ignore N invalid N open N other N open N other N space N space N subscript N subscript N subscript N whitespace Collectors table F defaultwords F flush F install F coke F flush F install F register F register F test Compile F test Compile F todimen F down F down F down F down F down F token F token F toke F toke F tok				
N character N close N close N comment N comment N endgroup N endofline N escape N ignore N invalid N open N other N open N other N space N subscript N subscript N whitespace Collectors table F defaultwords F flush F finstall F register F rest F re				
N close N comment N comment N endgroup N endofline N escape N ignore N invalid N open N other N space N subscript N superscript N whitespace Collectors table F defaultwords F flush F register F finstall F register F register F response F town F token F show F token F t				
N comment pickup function N endofline printlist function N escape scanners table N ignore F boolean N invalid F code N letter F count N mathshift F dimen N open F dimension N other F glue N parameter F integer N space F keyword N subscript F lxmlid N superscript F lxmlid N superscript F number N whitespace F scanclose collectors table F scanopen T data F skip F defaultwords F string F dowithwords F token F flush F tokens F install F token F finstall F token F register F word T registered scantable function F show setters table F test Compile function F count Converters table F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment		cter		
N endgroup N endofline N escape Scanners N ignore N invalid N better N mathshift N open N parameter N space N subscript N subscript N whitespace Collectors F defaultwords F flush F finstall F register F registered F show F test F show F test F test F show F test Compile F stodimen F dimen F function F glue F count F skip F token F				
N endofline N escape Scanners N ignore N invalid N letter N nathshift N open N parameter N space N subscript N subscript N whitespace Collectors F defaultwords F flush F flush F finstall F register F registered F show F test F test Compile F tode F boolean F domen F dimen F dimen F sline F skip F string F dowithwords F token F flush F token F install F toks F show F test F boox F show F test F box F show F test F box F string F down F token F show F token				
N escape N ignore N invalid F code N letter F count N mathshift F dimen N open F dimension N other F glue N parameter F integer N space F keyword N subscript F lxmlid N superscript F number N whitespace F scanclose collectors table F defaultwords F defaultwords F flush F install F register F register F registered F scantable F token F token F test F test F box compile function converters table S todimen S toglue S tonumber S tostring egroup userdata F skoon F boolean F dimen F count F dimen F box F dimen F macro S toglue S tostring N active egroup egroup userdata	-	•		
N ignore N invalid F code N letter F count N mathshift F dimen N open F dimension N other F glue N parameter F integer N space F keyword N subscript F lxmlid N superscript F number N whitespace F scanclose collectors table F defaultwords F defaultwords F flush F token F flush F register T registered F register F toke F test Compile function converters table S todimen S todimen S toglue S tostring F count Coverters F toke F T bits S tostring F N active Egroup userdata F skip F book F token			•	
N invalid N letter N mathshift F code N letter N mathshift F dimen N open F dimension N other F glue N parameter F integer N space F keyword N subscript F lxmlid N superscript F number N whitespace F scanclose collectors table F defaultwords F defaultwords F flush F flush F token F flush F register T registered F register F word T registered F test F box compile function converters table F stodimen S todimen S todimen S toglue S tonumber S tostring egroup userdata F count F count F bits F macro S tostive egroup userdata F count F hits F box F macrive F dimen F macro S tostrive F stostrive	•			
N letter N mathshift F dimen N open N other F glue N parameter N space N subscript N superscript N whitespace F scanclose collectors table T data F defaultwords F flush F token F flush F register T registered F register F resonable F scantable F toks F test F test F test F tox F t	-			an
N mathshift N open N open N other N parameter N space N subscript N superscript N whitespace collectors table T data F defaultwords F dowithwords F flush F token F flush F register T registered F scantable F toks F toks F test Compile F tox S todimen S todimen S todimen S todimen S todimen S tostring F dimen F box F count Converters table F dimen F macro S toglue S tonumber S tostring N active egroup userdata				
N open N other N other N parameter N space N space N subscript N superscript N whitespace collectors table T data F defaultwords F downthwords F flush F token F flush F register T registered F register F register F toke F token F				
N other N parameter N space F keyword N subscript F lxmlid N superscript F number N whitespace F scanclose collectors table F defaultwords F dowithwords F flush F token F flush F register T registered F register F word T registered F scantable F toks F rest F toks F redister F box compile F tunction converters table F toks F dimen S todimen F stodimen F macro S toglue S tonumber F toks F install F toks F register F word F toks F toks F token F tok	N maths	hift		
N parameter N space N subscript N subscript N superscript N whitespace collectors table T data F skip F defaultwords F flush F token F install F register T registered F register F register F show F test F test F test F token F token F show F token F show F token F show F token F show F token F toks F register F word F registered F count F show F test F test F box Compile F toki F token	•			sion
N subscript N subscript N superscript N whitespace collectors table F defaultwords F dowithwords F flush F install F register T registered F register F show F test F test F test F test F town S todimen S todimen S toglue S tonumber S tostring F keyword F lxmlid F number F scanclose F scancl	N other		F glue	
N subscript N superscript N whitespace collectors table T data F skip F defaultwords F token F flush F install F register T registered F scanopen F token F fown F token F token F install F toks F register F word F show F test F test F test F test F test F token F toks F token F toks F register F word F show F token	N param	eter	F integ	er
N superscript N whitespace collectors table F scanopen T data F skip F defaultwords F dowithwords F flush F install F register F register F register F show F test F test F test F town Compile F unction Converters F table F town S todimen F town F macro S toglue S tonumber S tostring F number F number F skip F skip F skip F string F token F token F token F toks F toks F word F word F word F word F word F word F count F box F box Compile F dimen F dimen F dimen F dimen F dimen F dimen N active N active	N space		F keywo	rd
N whitespace F scanclose collectors table F scanopen T data F skip F defaultwords F string F dowithwords F token F flush F tokens F install F toks F register F word T registered scantable function F show setters table F test F box compile function F count converters table F dimen S todimen F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata	N subsc	ript	F lxmli	d
T data F skip F defaultwords F string F dowithwords F token F flush F tokens F install F toks F register F word T registered Scantable function F show Setters table F test F box compile function F count converters table F dimen S todimen F macro S toglue Shortcuts table S tonumber S tostring N active egroup userdata F skip F skip F token	N super	script	F numbe	r
T data F skip F defaultwords F dowithwords F flush F install F register F register F registered F show F show F test F test F test F test F town converters table S todimen S todimen S toglue S tonumber S tostring F skip F skip F token F	N white	space	F scanc	lose
F defaultwords F dowithwords F flush F flush F install F register F register F register F show F show F test F test F test F toks F toks F word F word F word F show F stount F show F test F box Compile F dimen F dimen F dimen F macro S toglue S tonumber F tount S tonumber F tount N active egroup userdata F string F token F word F token F word F word F word F tountion F show F tountion F tount	collectors	table	F scano	pen
F dowithwords F flush F flush F install F toks F register F register F word T registered F show F test F test F test F tox compile f unction F show F test F box compile F tount converters F dimen S todimen F macro S toglue S tonumber S tonumber S tostring N active egroup userdata F token F token F token F tooks F tooks F tooks F word F word F word F box setters F dimen F macro S toglue Shortcuts T bits N active	T data		F skip	
F flush F install F toks F register F register F word T registered F show F test F test F test F tox compile f function F count converters F table F timen S todimen S todimen S toglue S tonumber S tonumber S tostring N active egroup userdata F tokens F word F word F dunction F macro S toglue Shortcuts T bits N active	F defau	ltwords	F strin	g
F install F toks F register F word T registered Scantable function F show Setters table F test F box compile function F count converters table F dimen S todimen F macro S toglue Shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	F dowit	hwords	F token	
F register T registered F show F show F test F test F test F tount converters table F todimen S todimen S toglue S tonumber S tonumber S tostring F count F count F dimen F macro S toglue S tonumber N active egroup userdata F word F word F dunction F box F dimen F macro N active N alignment	F flush		F token	S
T registered scantable function F show setters table F test F box compile function F count converters table F dimen S todimen F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	F insta	ll	F toks	
F show F test F test compile function converters table S todimen S toglue S tonumber S tostring F shov F box F box F box F dimen F macro S togle shortcuts T bits T bits N active Regroup userdata	F regis	ter	F word	
F test F box compile function F count converters table F dimen S todimen F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	T regis	tered	scantable	function
compilefunctionF countconverterstableF dimenS todimenF macroS toglueshortcutstableS tonumberT bitsS tostringN activeegroupuserdataN alignment	F show		setters	table
converters table F dimen S todimen F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	F test		F box	
S todimen F macro S toglue shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	compile	function	F count	
S toglue Shortcuts table S tonumber T bits S tostring N active egroup userdata N alignment	converters	table	F dimen	
S tonumber T bits S tostring N active egroup userdata N alignment	S todim	en	F macro	
S tostring N active egroup userdata N alignment	S toglu	е	shortcuts	table
egroup userdata N alignment	S tonum	ber	T bits	
- 3p	S tostr	ing	N act:	ive
<pre>getters table N begingroup</pre>	egroup	userdata	N ali	gnment
	getters	table	N beg:	ingroup

F tokens N character F toks N close N comment F word F scannumber N endaroup N endofline F scanopen N escape F scanstring F scanword N ignore F todimen N invalid N letter T tokens N mathshift F astable N open U baroup N other T collectors F defaultwords N parameter 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 T converters F report F scanboolean S todimen F scanclose S toglue F scancode S tonumber E scandimen S tostrina 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 II 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 T setters F scanclose F box F scanopen F skip F count F string F dimen F macro F token

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

vbox userdata
vtop userdata

tracers (context)

function count function cs function dimen knownlist function lists table T context T internals T scratch function name 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)

alignments	table	F installhar	
F handler		F processmat	th
F set		F set	
breakpoints	table	F setcolor	
F define		F setmath	
F handler		F tomode	
D mapping		firstlines	table
T methods		T actions	
T numbers		F default	
F set		F line	
F setreplace		F word	
cases	table	F handler	
T actions		F set	
F handler		initials	table
F register		T actions	
F set		F default	
characteralign	table	F handler	
F handler		F set	
F resetchara		injectors	table
F setcharact	ceralign	F check	
characters	table	T list	
F handler		F mark	
F replacenbe		F reset	
F replacenbe	spaces	F set	
checkers	table	F show	
F handler		italics	table
F reset		F forcevaria	ant
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 handler		F keepligatı	ıre
F set		B keeptogeth	ner
directions	table	D mapping	
F getfences		F set	
F getglobal		manipulators	table
F getmethod		F apply	
F handler		F applyspeci	ification
T handlers		T methods	

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 ha 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 table F handler xtables table F cleanup

F Word

F Words

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_height
F set_reflow_height

unicode (extra lua)

ascii	. table	F	len
F	byte	F	lower
F	char	F	match
F	dump	F	rep
F	find	F	reverse
F	format	F	sub
F	gfind	F	upper
F	gmatch	utf8	table
F	gsub	F	byte
F	len	F	char
F	lower	F	characters
F	match	F	chrlen
F	rep	F	count
F	reverse	F	dump
F	sub	F	filetype
F	upper	F	find
graph	eme table	F	format
F	byte	F	gfind
F	char	F	gmatch
F	dump	F	gsub
F	find	F	is_valid
F	format	F	len
F	gfind	F	length
F	gmatch	F	lower
F	gsub	F	magic
F	len	F	match
F	lower	F	remapper
F	match	F	rep
F	rep	F	replacer
F	reverse	F	reverse
F	sub	F	split
F	upper	F	splitlines
latin	1 table	F	sub
F	byte	F	subtituter
F	char	F	tocodes
F	dump	F	toeight
F	find	F	toentities
F	format	F	tostring
F	gfind	F	totable
F	gmatch	F	upper
	gsub	F	ustring

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	version	
F disable		pars	ers	table
F enable		F	add_settings	_to_array
F savestats		F	arguments_to	_table
F showstats		F	array_to_str	ing
F showtracebac	ck	F	csvsplitter	
formatters	table	F	getparameter	S
F formatcolumn	าร	F	groupedsplit	at
F list		F	hash_to_stri	ng
F stripzeros		F	iterator	
garbagecollector	table	F	keq_to_hash	
F check		F	listitem	
N criterium		F	make_setting	s_to_hash_pattern
B enabled		F	mergehashes	
lua	table	F	options_to_h	ash
B alwaysstrip	code	T	patterns	
F compile			U settings_to	o_array
F loadedluacod	de		U settings_to	o_hash_a
F loadstripped	d		U settings_to	_hash_b
N nofstripped	oytes		U settings_to	o_hash_c
N nofstripped	chunks		U unittotex	
B stripcode		F	process_stri	pped_settings
T strippedchur	nks	F	rfc4180split	ter
F strippedload	dstring	F	runtime	
T suffixes		F	settings_to_	array
S lua				array_with_repeat
S luc			settings_to_	
S lui		F	settings_to_	hash_strict
S luj		F	settings_to_	hash_tolerant
S luv			settings_to_	
S tma		F	simple_hash_	to_string
S tmc			splitmethod	
S tua			splitthousan	ds
S tuc		F	stepper	
packers	table		• • •	tings_to_array
F hashed			unittotex	
F new		F	unittoxml	
F pack		repo		function
F simplehashed	d			table
F strip			appendaction	
F unpack		F	appendgroup	

F compile F disableaction F disablegroup F enableaction F enablegroup D functions F localize F new F nodeprocessor F prependaction F prependgroup F removeaction F replaceaction F setkind F tostring setters table F disable F enable F initialize F list F new F register F report F reset F show stacker table F new storage table F allocate F checked F mark F marked F setinitializer F sparse 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 E accesstable E 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	funct	tion
registerescapepattern	funct	tion
signal	stri	ng
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)

	£	D. tov	
addentitiesdoctype after	function function	D tex D texline	
all			
	function function	D texspace D verbose	
applylpath			
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 colorspecificati	on	F upper	
F dimension		fillin	function
F fontspecificatio	n	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	inject_element	function
F	text	<pre>inject_element_after</pre>	function
F	upper	<pre>inject_element_before</pre>	function
F	upperall	injectafter	function
- XI	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_entit	У	
F unknown_dec_entit	У	
F unknown_hex_entit	У	
position	function	
privatecodes	table	
privatetoken	function	
process	function	
<pre>process_attributes</pre>	function	
<pre>process_elements</pre>	function	
processattributes	function	
profiled	table	
raw	function	
registerentity	function	
registerns	function	
remap_name	function	
remap_namespace	function	
remap_tag	function	
remapname	function	
remapnamespace	function	
remaptag	function	
renamespace	function	
replace	function	
replace_element	function	
resolvens	function	
root	function	
save	function	
selection	function	
separate	function	
serialize	function	
setcdata	function	

setcomment

setproperty settings

sethandlersfunction

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

function

function
function

function

zip (extra lua)

archives table
close function
closearchive function

openarchive function
openfile function
registeredfiles table
type function

zlib (extra lua)

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