

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

ConT_FExt MkIV

global (alias: _G)

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

mathematics	table	setinspector	function
mbox	table	setmetatable	function
md5	table	socket	table
metapost	table	sorters	table
mime	table	statistics	table
module	function	status	table
moduledata	table	storage	table
modules	table	streams	table
mplib	table	string	table
newline	function	stripmath	function
next	function	structures	table
noads	table	swiglib	function
node	table	table	table
nodes	table	tex	table
number	table	texconfig	table
optionalrequire	function	texio	table
os	table	thirddata	table
outputpagestree	function	toboollean	function
package	table	token	table
pagebuilders	table	tokens	table
pairs	function	tonumber	function
parametersets	table	tostring	function
pattern	userdata	trace_characters	boolean
pcall	function	traceback	function
pdf	table	tracers	table
pdfscanner	table	trackers	table
physics	table	type	function
print	function	typesetters	table
profiler	table	unicode	table
protect	function	unpack	function
publications	table	url	table
rawequal	function	userdata	table
rawget	function	utf	table
rawlen	function	utilities	table
rawset	function	vf	table
regimes	table	visualizers	table
report_characters	function	xml	table
require	function	xmlconvert	function
resolve_fences	function	xpcall	function
resolvers	table	zip	table
scripts	table	zlib	table
select	function		
set	table		
setcharacteralign	function		

attributes (context)

colorintents table

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

colors table

- N attribute
- F cmyk
- F cmyktogray
- F cmyktorgb
- F colorcomponents
- B couple
- D data
- N default
- F defineintermediatecolor
- F definemixcolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- F gray
- F graytohsv
- F handler
- F hsvtorgay
- F hsvtorgb
- F iccprofile
- F isblack
- N main
- S model
- D models
- F mpcolor
- F mpnamedcolor

- F mpoptions
- U none
- F popset
- F processcolorcomponents
- F pushset
- F register
- D registered
- F registerspotcolor
- F rgb
- F rgbtocmyk
- F rgbtorgay
- F rgbtohsv
- N selector
- F setlist
- F setmodel
- D sets
- F spec
- F spot
- F spotcolorname
- F spotcolorparent
- F spotcolorvalue
- B supported
- F transparencycomponents
- B triggering
- F usecolors
- F value
- D values
- B weightgray

define function effects table

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

handlers table list data table names data table negatives table

N attribute		F resolve_begin
D data		F resolve_end
F enable		F resolve_step
F handler		D scopes
F register		F setfeatures
D registered		F start
numbers	data table	F stop
ofnode	function	B supported
private	function	D values
showcurrent	function	
states	table	
F disabletriggering		
F enabletriggering		
F finalize		
F initialize		
F process		
F selective		
F stacked		
F stacker		
transparencies	table	
N attribute		
D data		
F enable		
F forcesupport		
F handler		
U none		
F register		
D registered		
B supported		
B triggering		
F value		
D values		
unsetvalue	number	
viewerlayers	table	
N attribute		
D data		
F define		
F enable		
F forcesupport		
F handler		
B hasorder		
D listwise		
F register		
D registered		

backends (context)

codeinjections table

F synchronizecolormodel

current string

defaults table

T codeinjections

T nodeinjections

T registrations

D tables

install function

nodeinjections table

F restore

F save

F transform

nothing function

pdf table

T codeinjections

F addbookmarks

F attachmentid

F clonefield

F definefield

F definefieldset

F defineviewerlayer

F embedfile

F enabletags

F exportformdata

F finalizepage

F finishreference

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getoutputfilename

F getpreviewfigure

F insertrenderingwindow

F mergereferences

F mergeviewerlayers

F prerollreference

F presetsymbol

F presetsymbollist

F processrendering

F registerdocumentcloseaction

F registerdocumentopenaction

F registeredsymbol

F registerpagecloseaction

F registerpageopenaction

F registersymbol

F setfieldcalculationset

F setfigurealternative

F setfigurecolorspace

F setfiguremask

F setformat

F setformsmethod

F setpagetransition

F setupcanvas

F setupidentity

F setxmpfile

F startlayer

F stoplayer

F supportedformats

F useviewerlayer

F validfield

F validfieldcategory

F validfieldset

S comment

T nodeinjections

F addtags

F attachfile

F changestackedlayer

F cmykcolor

F comment

F destination

F effect

F graycolor

F injectbitmap

F insertmovie

F insertsound

F insertswf

F insertu3d

F knockout

F negative

F overprint

F positive

- F reference
- F rgbcolor
- F spotcolor
- F 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

bibtex (context)

authorref function

authors table

- F concat
- F inverted
- F invertedshort
- F normal
- F normalshort
- F setsettings
- F short

authoryearref function

authoryearsref function

convert function

hacks table

- F add
- F doifalreadypaced
- F filterall
- F flush
- F nofregistered
- F process
- F register
- F registerplaced
- F reset
- F resolve

load function

new function

singularorplural function

statistics table

- N nofbytes
- N nofdefinitions
- N nofshortcuts

toxml function

bit32 (basic lua)

arshift	function
band	function
bnot	function
bor	function
btest	function
bxor	function
extract	function
lrotate	function
lshift	function
replace	function
rrotate	function
rshift	function

blobs (context)

append	function
dimensions	function
dispose	function
new	function
pack	function
strdp	function
strhd	function
strht	function
strwd	function
tohpack	function
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
exists	function
getcontent	function
getlines	function
loadcontent	function
parallel	table
F define	
F hassomecontent	
F next	
F place	
F reset	
F save	
prepend	function
raw	function

builders (context)

kernel table

F hyphenation
F kerning
F ligaturing
F mlist_to_hlist

paragraphs table

T constructors
 N attribute
 F define
 F disable
 F enable
 F handler
 T methods
 F default
 F oneline
D names
D numbers
F set
F start
F stop
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
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	function
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	otfscripts	data table
adobename	function	ranges	data table
bidirectional	data table	registerentities	function
blockrange	function	remap_hangul_syllable	function
blocks	data table	safechar	function
casemap	table	setcodes	function
categories	data table	shape	function
category	function	shaped	function
categorytags	data table	shchars	data table
combined	data table	shcodes	data table
contextname	function	showstring	function
data	data table	specialchars	data table
decomposed	data table	specials	data table
define	function	subscripts	table
description	function	superscripts	table
descriptions	data table	synonyms	data table
directions	table	tex	table
encodes	data table	D accentmapping	
entities	data table	F defineaccents	
fallbacks	data table	F toutf	
filters	data table	textclasses	table
fromnumber	function	tonumber	function
fschars	data table	ucchars	data table
fscodes	data table	uccode	function
getrange	function	uccodes	data table
graphemes	data table	unicodechar	function
hangul	data table	upper	function
initialize	function		
is_character	data table		
is_command	data table		
is_letter	data table		
is_mark	data table		
is_spacing	data table		
lcchars	data table		
lccode	function		
lccodes	data table		
lettered	function		
lower	function		
math	table		
mathpairs	data table		
mirrors	table		

chemistry (context)

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

commands (context)

Alphabetic	function	autonextspace	function
Character	function	autonextstructurelevel	function
Characters	function	autosetups	function
MPc	function	autostarttext	function
MPd	function	autostoptext	function
MPh	function	averagecharwidth	function
MPLl	function	bcolumn	function
MPlr	function	boolcase	function
MPls	function	boxtostring	function
MPn	function	character	function
MPp	function	characters	function
MPpardata	function	chardescription	function
MPplus	function	checkcharactersinfont	function
MPpos	function	checkcountersetup	function
MPposset	function	checkedconversion	function
MPr	function	checkedpagefloat	function
MPrest	function	checktwopassdata	function
MPrs	function	chemicalcomponent	function
MPul	function	chineseallnumerals	function
MPur	function	chinesecapnumerals	function
MPw	function	chinesenumerals	function
MPx	function	cleanfontname	function
MPxy	function	cleanupbox	function
MPxywhd	function	cleanupplayers	function
MPy	function	clonefield	function
Romannumerals	function	collectfloat	function
abjadnodotnumerals	function	collecthelp	function
abjadnumerals	function	colorcomponents	function
addcounter	function	concatcommalist	function
addlinklistelement	function	consultfloat	function
addtojavascriptpreamble	function	copyposition	function
addtolist	function	cos	function
allinputpaths	function	cosd	function
alphabetic	function	countervalue	function
analysefloatmethod	function	counttwopassdata	function
analyzelist	function	currentcomponent	function
applytochars	function	currentdate	function
applytofirstcharacter	function	currentenvironment	function
applytowords	function	currentproduct	function
assignbuffer	function	currentproject	function
autofinishstructurelevels	function	currentreferencedefault	function

currentreferenceorder	function	definewopasslist	function
currentregime	function	defineviewerlayer	function
currentsectiontolist	function	defrostrandomseed	function
datasetvariable	function	digits	function
dayname	function	disableautofontscript	function
defineattribute	function	disableparbuilder	function
definebibtexsession	function	disableregime	function
definebreakpoint	function	disablespellchecking	function
definebreakpoints	function	discardfromlist	function
definecharacterspacing	function	doanalyzeframedbox	function
definechemical	function	doif	function
defineconversion	function	doifblackelse	function
definecounter	function	doifcommonelse	function
definedviewerlayer	function	doifcounter	function
definefallbackfamily	function	doifdimenstringelse	function
definefield	function	doifdrawingblackelse	function
definefieldset	function	doifelse	function
definefilefallback	function	doifelsebuffer	function
definefilesynonym	function	doifelsecontinuewithfile	function
definefont_one	function	doifelsecounter	function
definefont_two	function	doifelsecurrentfonthasfeature	function
definefontfamily	function	doifelseintwopassdata	function
definefontfeature	function	doifelsemarking	function
definefontsolution	function	doifelsemessage	function
defineinsertion	function	doifelsemultipar	function
defineintermediatecolor	function	doifelseparallel	function
definelabels	function	doifelsepositionsused	function
definelanguage	function	doifelserangeonpage	function
definelinkedlist	function	doifelserreference	function
definemarking	function	doifelsesavedfloat	function
definemetafont	function	doifelsespaces	function
definemultitonecolor	function	doifelseutfmathabove	function
definenote	function	doifelseutfmathaccent	function
defineparallel	function	doifelseutfmathbelow	function
defineparbuilder	function	doifelsevisualizer	function
defineprocesscolor	function	doiffielddcategoryelse	function
defineprogram	function	doiffielddelse	function
definereference	function	doiffielddsetelse	function
definesectionlevels	function	doiffiledefinedelse	function
defineselectfont	function	doiffileexistelse	function
definespotcolor	function	doiffirstcharelse	function
definestructureblock	function	doifinputfileelse	function
definestructureset	function	doifinsetelse	function
definetransparency	function	doifleapyarelse	function

doiflisthasentry	function	feedback	function
doiflisthasnumberelse	function	fetchallmarks	function
doiflisthaspageelse	function	fetchmultipar	function
doiflisthastitleelse	function	fetchmultishape	function
doiflocfileelse	function	fetchonemark	function
doifnot	function	fetchposboxes	function
doifnotcounter	function	fetchtwomarks	function
doifnotecontent	function	figurefilename	function
doifnoteonsamepageasprevious	function	figurefilepath	function
doifobjectreferencefoundelse	function	figurefiletype	function
doifolderversionelse	function	figurerequest	function
doifoverlappingelse	function	figurestatus	function
doifparentfileelse	function	figureused	function
doifposition	function	figurevariable	function
doifpositionelse	function	filterdefaultreference	function
doifpositiononpage	function	filterreference	function
doifpositionsonsamepageelse	function	finalizebox	function
doifpositionsonthispageelse	function	findtwopassdata	function
doifurldefinedelse	function	firstcountervalue	function
doprocесstypescriptfile	function	firstinset	function
doreshapeframedbox	function	flushfloat	function
dostarttextfile	function	flushnotes	function
dostoptextfile	function	flushpostponedblocks	function
ecolumn	function	flushpostponednotes	function
elapsedtime	function	fontchar	function
enableautofontscript	function	fontcollectionclone	function
enablecolor	function	fontcollectiondefine	function
enablecolorintents	function	fontcollectionprepare	function
enablefontcolorschemas	function	fontcollectionregister	function
enableparbuilder	function	fontcollectionreport	function
enableregime	function	fontcollectionreset	function
enablespellchecking	function	fontlookupgetkey	function
enabletransparency	function	fontlookupgetkeyofindex	function
enhancelinkedlist	function	fontlookupinitialize	function
enhancelist	function	fontlookupnoffound	function
enhancereference	function	forceendjob	function
erasebuffer	function	forcequitjob	function
expandcurrentreference	function	format	function
exportformdata	function	formatcolor	function
exportreferences	function	formatgray	function
extensiblecode	function	freezerandomseed	function
feature	function	from	function
featureattribute	function	getbidimode	function
featurelist	function	getbuffer	function

getbufferctxlua	function	incrementedcounter	function
getbuffermkvi	function	initializetexdirectives	function
getcommandline	function	initializetextrackers	function
getctxfile	function	injectcurrentreference	function
getcurrentprefixspec	function	injectreference	function
getcurrentreferencemetadata	function	inlinechemical	function
getdefaultfieldvalue	function	insertattachment	function
getfieldcategory	function	insertcomment	function
getfirstcharacter	function	insertfield	function
getfirsttwopassdata	function	insertionnumber	function
getfloatvariable	function	insertrenderingwindow	function
getinternalreference	function	insertsoundclip	function
getlasttwopassdata	function	installedlanguages	function
getmarking	function	installtexdirective	function
getmessage	function	installtextracker	function
getmpextensions	function	languagenumber	function
getnotestate	function	lastcountervalue	function
getplaceholderchar	function	lchexnumber	function
getprivateattribute	function	lchexnumbers	function
getprivatechar	function	leapyear	function
getprogram	function	linenumbersstageone	function
getrandomcounta	function	linenumbersstagetwo	function
getrandomcountb	function	listgroupindex	function
getrandomseed	function	listlabel	function
getreadfilename	function	listlocation	function
getsubstring	function	listprefixednumber	function
gettexbuffer	function	listprefixedpage	function
gettwopassdata	function	listrealpage	function
gettwopassdatalist	function	listsize	function
geturl	function	listtitle	function
grabbuffer	function	listuserdata	function
hboxtovbox	function	loadexamodes	function
helpaction	function	loadfontgoodies	function
helpreference	function	loadspellchecklist	function
hexstringtonumber	function	loadtypescriptfile	function
horizontalcode	function	loadvisualizer	function
hour	function	locatefilepath	function
hyphenatedlist	function	locfilename	function
hyphenatedurl	function	lower	function
D characters		makeactive	function
N lefthyphenmin		markfonts	function
D mapping		markregionbox	function
N righthyphenmin		math_frac	function
F setcharacters		mathrenderset	function

maxitemwidth	function	pdfrotation	function
minute	function	pdfstartmatrix	function
mixcleanup	function	pdfstartmirroring	function
mixfinalize	function	pdfstartrotation	function
mixflushlist	function	pdfstartscaling	function
mixflushrest	function	pdfstopmatrix	function
mixgetsplit	function	pdfstopmirroring	function
mixsetsplit	function	pdfstoprotation	function
mixstate	function	pdfstopscaling	function
molecule	function	percentageof	function
month	function	pgfxcolorspec	function
monthmnem	function	placeparallel	function
monthname	function	popfloat	function
mpcolor	function	popitaliccorrection	function
mpoptions	function	poplist	function
mprunvar	function	popreferenceprefix	function
namedstructureuservariable	function	popregime	function
namedstructurevariable	function	popsectionblock	function
nbfs	function	pos	function
nextcountervalue	function	posplus	function
nextparallel	function	posstrut	function
nofdays	function	postponenotes	function
nofitems	function	poswhd	function
nofstackedfloats	function	posxy	function
notedeltapage	function	prepareMPvariable	function
notelistindex	function	preparebibtexsession	function
notenumberpage	function	preparedfile	function
noteprefixednumber	function	presetsymbollist	function
notesymbolpage	function	presettabulate	function
notetitle	function	prevcountervalue	function
ntimes	function	processbuffer	function
number	function	processcolorcomponents	function
numbers	function	processedfile	function
objectnumber	function	processedfiles	function
objectpage	function	processfile	function
octnumber	function	processfilemany	function
octstringtonumber	function	processfilenone	function
ordinal	function	processfileonce	function
overloadbookmark	function	processlist	function
page_injections_flush_after	function	processsplit	function
page_injections_flush_before	function	pushfloat	function
page_injections_save	function	pushitaliccorrection	function
pagestaterealpage	function	pushlist	function
parpos	function	pushreferenceprefix	function

pushregime	function	resetreference	function
pushsectionblock	function	resetstructureprocessor	function
rawcharacter	function	resettimer	function
rawcountervalue	function	restartcounter	function
rawdate	function	restorecounter	function
referencepagestate	function	restorecurrentattributes	function
referencerealpage	function	restorenote	function
registerattachment	function	romannumerals	function
registerbibtexentry	function	runbuffer	function
registerbibtexfile	function	safechar	function
registerbookmark	function	savebuffer	function
registerbuttons	function	savecounter	function
registercolor	function	savecurrentattributes	function
registercolorintent	function	savedlistnumber	function
registeredviewerlayer	function	savedlistprefixednumber	function
registerhelp	function	savedlisttitle	function
registeritemgroup	function	savefloat	function
registerlanguagefeatures	function	savenote	function
registerlinenumbering	function	saveobject	function
registermaintextcolor	function	saveparallel	function
registernamespace	function	savestructureblock	function
registerpostponedblock	function	savetaggedtwopassdata	function
registerrendering	function	savetwopassdata	function
registersoundclip	function	second	function
registerstructureprocessor	function	selectstructureblock	function
registertransparency	function	setbreakpoints	function
registerunit	function	setcharacteralign	function
relatemarking	function	setcharactercasing	function
remapentity	function	setcharactercleaning	function
removemissingcharacters	function	setcharacterkerning	function
renderingvar	function	setcharacterspacing	function
replacemissingcharacters	function	setcharacterstripping	function
replacepospxywhd	function	setcloseddocumentaction	function
resavefloat	function	setclosepageaction	function
resetcharacteralign	function	setcolormodel	function
resetcounter	function	setcounter	function
resetfontfeature	function	setdataset	function
resetfontsolution	function	setdigitsmanipulation	function
resetmarking	function	setdirection	function
resetmathattributes	function	setdocumentenvironments	function
resetmathitalics	function	setdocumentfilenames	function
resetnullfont	function	setdocumentmodes	function
resetparallel	function	setdocumentmodules	function
resetprevdepth	function	setfigurelookuporder	function

setfirstline	function	settagdescription	function
setfontfeature	function	settagdescriptionsymbol	function
setfontofid	function	settagfigure	function
setfontsolution	function	settaghighlight	function
setformat	function	settagitemgroup	function
setformsmethod	function	settagproperty	function
setinitial	function	settagsorting	function
setinsertionlocation	function	settagsynonym	function
setinterfaceconstant	function	settagtablecell	function
setinterfaceelement	function	settagtabulatecell	function
setinterfacemessage	function	setupbookmarks	function
setinterfacemessages	function	setupcanvas	function
setinterfacevariable	function	setupcharacterspacing	function
setinternalreference	function	setupexport	function
setlanguageexceptions	function	setupfontexpansion	function
setlanguagesynonym	function	setupfontprotrusion	function
setlayer	function	setupidentity	function
setmarking	function	setupinsertion	function
setmathalphabet	function	setupitaliccorrection	function
setmathalternate	function	setuplinenumbering	function
setmathattribute	function	setvisual	function
setmathdirection	function	setxmpfile	function
setmathitalics	function	showassignerror	function
setmathstyle	function	showattributes	function
setnextinternalreference	function	showcallbacks	function
setnotestate	function	showchardata	function
setnotesymbolpage	function	showcounter	function
setobject	function	showfontparameters	function
setopendocumentaction	function	showhyphenatedinlist	function
setopenpageaction	function	showjustification	function
setowncounter	function	showmessage	function
setpagestate	function	sin	function
setpagestaterealpageno	function	sind	function
setpagetransition	function	splitfilename	function
setparbuilder	function	spotcolorname	function
setpos	function	spotcolorparent	function
setrandomseed	function	spotcolorvalue	function
setrealign	function	startchemical	function
setreferencearguments	function	startcolorset	function
setreferenceattribute	function	startcomponent	function
setreferenceoperation	function	startenvironment	function
setsectionblock	function	startfontsolution	function
setstructureblockstate	function	startparbuilder	function
settagcombination	function	startproduct	function

startproject	function	transparencycomponents	function
startregime	function	triggereffect	function
startsectionlevel	function	triggernegative	function
starttag	function	truefilename	function
starttext	function	typebuffer	function
startviewerlayer	function	typefile	function
stopchemical	function	typestring	function
stopcolorset	function	uchexnumber	function
stopcomponent	function	uchexnumbers	function
stopenvironment	function	undefinechemical	function
stopfontsolution	function	unicodechar	function
stopparbuilder	function	unit	function
stopproduct	function	unloadlanguage	function
stopproject	function	upper	function
stopregime	function	useMPLibrary	function
stopsectionlevel	function	useanyfile	function
stoptag	function	usecldfilename	function
stoptext	function	usecolors	function
stopviewerlayer	function	usecomponent	function
storejavascriptcode	function	useenvironment	function
storejavascriptpreamble	function	usefile	function
storenote	function	usejavascriptpreamble	function
strdp	function	usejavascriptscripts	function
strhd	function	uselibrary	function
strht	function	useluafile	function
structureautocatcodedget	function	uselua module	function
structurecatcodedget	function	usemodules	function
structuregivencatcodedget	function	usepath	function
structurenumber	function	useproduct	function
structuretitle	function	useproject	function
structureuservariable	function	usesubpath	function
structurevariable	function	usesymbols	function
strwd	function	usetexfile	function
subcountervalues	function	useurl	function
synchronizecolormodel	function	usexmlfile	function
synchronizemarking	function	usezipfile	function
taggedmathfunction	function	utfchar	function
tan	function	utfmathclass	function
tand	function	utfmathcommand	function
testcase	function	utfmathcommandabove	function
textime	function	utfmathcommandbelow	function
thefirstcharacter	function	utfmathfiller	function
theremainingcharacters	function	utfmathstretch	function
thetexdefinition	function	vboxlisttohbox	function

verbose	function
visual	function
vspacing	function
vspacingcollapse	function
vspacingdefine	function
vspacingsetamount	function
vspacingsnap	function
way	function
weekday	function
weekdayname	function
writestatus	function
x_table_c	function
x_table_cleanup	function
x_table_construct	function
x_table_create	function
x_table_flush	function
x_table_init_construct	function
x_table_init_reflow_height	function
x_table_init_reflow_width	function
x_table_next_row	function
x_table_r	function
x_table_reflow_height	function
x_table_reflow_width	function
x_table_set_construct	function
x_table_set_reflow_height	function
x_table_set_reflow_width	function
year	function

containers (context)

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

converters (context)

Alphabetic	function	verbose	table
Character	function	D data	
Characters	function	F translate	
Romannumerals	function	weekday	function
abjadnodotnumerals	function	year	function
abjadnumerals	function		
alphabetic	function		
character	function		
characters	function		
chineseallnumerals	function		
chinesecapnumerals	function		
chinesenumerals	function		
chr	function		
chrs	function		
convert	function		
define	function		
hexstringtonumber	function		
hour	function		
isleapyear	function		
lhexnumber	function		
lhexnumbers	function		
leapyear	function		
maxchrs	function		
minute	function		
month	function		
nofdays	function		
number	function		
numbers	function		
octnumber	function		
octstringtonumber	function		
ordinal	function		
rawcharacter	function		
romannumerals	function		
second	function		
sequences	data table		
textime	function		
toabjad	function		
tochinese	function		
toroman	function		
uchexnumber	function		
uchexnumbers	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
gethook	function
getinfo	function
getlocal	function
getmetatable	function
getregistry	function
getupvalue	function
getuservalue	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 cmdline	
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)

argument	function	truefilename	function
arguments	data table	validengines	data table
basicengines	data table		
currentrun	number		
default_texmfcnf	string		
engineflags	data table		
filename	string		
files	table		
filesynonyms	data table		
getargument	function		
homedir	string		
initex	boolean		
initializearguments	function		
initializefilenames	function		
inputfilebarename	string		
inputfilename	string		
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	string		
rawarguments	data table		
reconstructcommandline	function		
relativepath	function		
setargument	function		
splitarguments	function		
suffix	string		
texfile	function		
texmfos	string		
texos	string		
texroot	string		

epdf (extra tex)

Array	function
Dict	function
Object	function
PDFRectangle	function
open	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	registersuffix	function
bases	data table	resources	data table
bitmapimage	function	scale	function
boxnumber	number	setlookups	function
cachepaths	data table	setorder	function
check	function	setpaths	function
checkers	data table	suffixes	data table
converters	data table	used	data table
current	function		
defaultdepth	number		
defaultheight	number		
defaultsearch	boolean		
defaultwidth	number		
done	function		
dummy	function		
exists	data table		
exists	function		
formats	data table		
found	data table		
get	function		
guess	function		
hash	function		
identifiers	data table		
identify	function		
include	function		
includers	data table		
initialize	function		
loaded	data table		
localpaths	data table		
magics	data table		
mergegoodies	function		
nofprocessed	number		
order	data table		
paths	data table		
patterns	data table		
pop	function		
preferquality	boolean		
programs	data table		
push	function		
registerpattern	function		
registerresource	function		

file (basic lua)

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

floats (context)

analysemethod	function
checkedpagefloat	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
getfont	overloaded function
id	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
info	function
open	function
to_table	function
totable	function

fonts (context)

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

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 quad	S psname	
S scaledpoints	S textitalics	
S scriptpercentage	S virtualized	
S scriptscriptpercentage	D loadedfonts	
S size	S namemode	
S slantfactor	F newfeatures	
S slantperpoint	F newhandler	
T spacing	N noffontsloaded	
S extra	N nofsharedfonts	
S shrink	N nofsharedhashes	
S stretch	N nofsharedvectors	
S width	N privateoffset	
T synonyms	F readanddefine	
S em	F registerfeature	
S ex	B resolvevirtualtoo	
S extra_space	F scale	
S extraspace	F scaled	
S slant	F setfactor	
S space	F setname	
S space_shrink	B sharefonts	
S space_stretch	F trytosharefont	
S spaceshrink	N version	
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	
S autoitalicamount	F checkedmode	
T cidinfo	F checkedscript	
S embedding	F current	

S defaultlookup		F mathematics	
F define		F protrusions	
F getspecification		F solutions	
F internal		F treatments	
F loadfont		F typefaces	
F makespecification		F load	
T methods		F prepare_features	
F install		F register	
D variants		F registerpostprocessor	
F read		F report	
F register		handlers	table
F registered		T afm	
F registersplit		B addkerns	
F resetnullfont		B addligatures	
F resolve		B addtexligatures	
T resolvers		B autoprefixed	
F file		D cache	
F name		D features	
F spec		T helpdata	
definetypeface	function	D bothkerned	
encodings	table	D leftkerned	
T agl		D ligatures	
D cache		D rightkerned	
F is_known		D texligatures	
D known		F load	
F load		F setfeatures	
F make_unicode_vector		B syncspace	
D math		N version	
N version		T otf	
expansions	data table	F addfeature	
formats	data table	D cache	
goodies	table	T chainhandlers	
D colorschemes		F normal	
D data		F verbose	
D designsizes		F collectlookups	
D filenames		F dataset	
F getcompositions		S defaultbasealternate	
T list		S defaultnodealternate	
F compositions		D enhancers	
F designsizes		D features	
F expansions		F fileformat	
F featureset		F getalternate	
F filenames		T glists	
F files		T handlers	

F contextchain	D math	
F devanagari_remove_joiners	D predefined	
F devanagari_reorder_matras	D whatever	
F devanagari_reorder_pre_base_reordering_consonants	hashes	table
F devanagari_reorder_reph	D characters	
F gpos_context	D csnames	
F gpos_contextchain	D descriptions	
F gpos_cursive	D dynamics	
F gpos_mark2base	D emwidths	
F gpos_mark2ligature	D exheights	
F gpos_mark2mark	D extensibles	
F gpos_pair	D features	
F gpos_single	D identifiers	
F gsub_alternate	D italics	
F gsub_context	D lastmathids	
F gsub_contextchain	D marks	
F gsub_ligature	D parameters	
F gsub_multiple	T processes	
F gsub_reversecontextchain	D properties	
F gsub_single	D quads	
F load	D resources	
F scriptandlanguage	T setdynamics	
F setcontextchain	D spaces	
F setdynamics	D spacings	
F setfeatures	D unicodes	
T statistics	D xheights	
D usedfeatures	helpers	table
T tables	F addprivate	
D baselines	F dimenfactor	
D features	F expandglyph	
D languages	F fontpatternhassize	
D scripts	F getdigitwidth	
N version	F getparameters	
T pfb	F getprivatenode	
T tfm	F hasprivate	
D features	F name	
F setfeatures	F nametoslot	
T vf	F setdigitwidth	
T combinations	F splitfontpattern	
F combine	iterators	table
T combiner	F characters	
D commands	F descriptions	
F find	F glyphs	
D helpers	loggers	table

F add_placeholders		nulldata	data table
T category_to_placeholder		protrusions	data table
S ll		readers	table
S lm		F afm	
S lo		F check_lua	
S lt		F check_tfm	
S lu		F dfont	
S mc		F lua	
S me		F opentype	
S mn		F otf	
S nd		F pfb	
S nl		D sequence	
S no		F tfm	
S pc		F ttc	
S pd		F ttf	
S pe		select	table
S pf		T data	
S pi		F definetypeface	
S po		T fallbacks	
S ps		F filterinput	
S sc		T methods	
S sk		F default	
S sm		F features	
S so		F file	
F format		F goodies	
F onetimemessage		F name	
F register		F selectfont	
F reportdefinedfonts		F simplefonts	
F reportusedfeatures		F spec	
mappings	table	F style	
F addtounicode		F registerfallback	
F fromunicodel6		F searchfiles	
F loadfile		specifiers	table
F loadline		D contextmerged	
F loadlumtable		F contextnumber	
F makenameparser		D contextnumbers	
F reset		D contextsetups	
F tounicodel6		F contexttostring	
F tounicodel6sequence		F definecontext	
mp	table	F mergecontext	
D cache		F presetcontext	
B inline		F registercontext	
N version		F showcontext	
names	data table	F splitcontext	

D synonyms
D variants
symbols table
F uselibrary
tables table
tracers table
treatments table
F applyfixes
D data
S filename
F ignoredfile
F report
F trace
typefaces 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
copy	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

help table

F collect

F reference

F register

javascripts table

F addtopreamble

F code

D codes

F flushpreambles

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

linkedlists data table

pages table

F setpagetransition

F setupcanvas

references table

F setcloseddocument

F setclosepage

F setopendocument

F setopenpage

renderings data table

soundclips data table

interfaces (context)

addvalidkeys	function
cachedsetups	data table
cachesetup	function
checkedspecification	function
complete	data table
constants	data table
corenamespaces	data table
definecommand	function
doifelsemessage	function
elements	data table
formats	data table
getcheckedparameters	function
getmessage	function
hashedsetups	data table
interfacedcommand	function
interfaces	table
invalidkey	function
is_command	function
namespaces	table
F define	
F list	
registernamespace	function
setconstant	function
setelement	function
setformat	function
setmessage	function
setmessages	function
settranslation	function
setuserinterface	function
setvalidkeys	function
setvariable	function
showmessage	function
syntax	data table
tolist	function
translations	data table
variables	data table

io (basic lua)

ask	function
bytes	function
characters	function
close	function
exists	function
fileseparator	string
flush	function
i_limiter	function
i_limiters	table
T paranoid	
input	function
limiter	function
lines	function
loadchunk	function
loaddata	function
loadlines	function
noflines	function
o_limiter	function
o_limiters	table
T paranoid	
open	overloaded function
output	function
pathseparator	string
popen	overloaded function
read	function
readall	function
readnumber	function
readstring	function
savedata	function
size	function
stderr	userdata
stdin	userdata
stdout	userdata
tmpfile	function
type	function
write	function

job (context)

comment	function
datasets	table
D collected	
F extend	
F getdata	
F setdata	
D tobesaved	

disablesave	function
files	table
D collected	
F context	
B forcerun	
F run	
D tobesaved	

initialize	function
load	function
loadother	function
objects	table
D collected	
F get	
F number	
F page	
F save	
F set	
D tobesaved	

pack	boolean
packversion	number
pagestates	table
D collected	
F extend	
F realpage	
F setstate	
D tobesaved	

passes	table
F check	
D collected	
F count	
F define	
F find	
F first	
F get	

	F getcollected
	F getdata
	F getfield
	F gettobesaved
	F inlist
	F last
	F list
	F save
	F savetagged
	D tobesaved
positions	table
	F b_col
	F b_region
	F c
	D collected
	F column
	F copy
	F depth
	F e_col
	F e_region
	F enhance
	F extra
	F get
	F getreserved
	F hangafter
	F hangindent
	F height
	F hsize
	F leftskip
	F lowerleft
	F lowerright
	F markregionbox
	F n
	F onsamepage
	F overlapping
	F p
	F page
	F paragraph
	F parindent
	F position
	F r

- F region
- F replace
- F rightskip
- F set
- F setall
- F setdim
- D tobesaved
- F upperleft
- F upperright
- F width
- F x
- F xy
- F y
- register** function
- save** function
- structure** table
 - D collected
 - T components
 - T tobesaved
 - T branches
 - S name
 - S type
- variables** table
 - D checksums
 - D collected
 - F getchecksum
 - F makechecksum
 - F save
 - F setchecksum
 - D tobesaved
- version** number

lang (basic tex)

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

languages (context)

associate	function
associated	data table
association	function
counters	data table
current	function
data	data table
define	function
frequencies	table

F averagecharwidth

F getdata

getnumber	function
hyphenate	function
installed	function
labels	table

F define

F split

lefthyphenmin	function
loadable	function
loadwords	function
logger	table

F report

numbers	data table
posthyphenchar	function
prehyphenchar	function
registered	data table
rightthyphenmin	function
setexceptions	function
setsynonym	function
unload	function
version	number
words	table

F check

T data

F disable

F enable

T enablers

B enables

F found

F load

T methods

N threshold

layouts (context)

status table

F isleftpage

F leftorrightpagection

lfs (extra lua)

attributes	function
chdir	function
currentdir	function
dir	function
isdir	overloaded function
isfile	function
lock	function
lock_dir	function
mkdir	function
makedirs	function
readlink	function
rmdir	function
setmode	function
shortname	function
symlinkattributes	function
touch	function
unlock	function

libraries (context)

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

lmx (context)

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

F a

F td

F th

include function
inherited table

S color-background-four

S color-background-one

S color-background-three

S color-background-two

S title

initialize function
inject function
lmxfile function
loadedfile function
new function
overloaderror function
popupfile function
print function
pv function
report function
reset function
result function
set function
show function
showdebuginfo function
showerror function
stripcss function

tv function
type function
urlescape function
variable function
variables table

S color-background-blue

S color-background-body

S color-background-green

S color-background-main

S color-background-purple

S color-background-yellow

S title-default

logs (context)

application	function
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
setlogfile	function
setmessenger	function
setprocessor	function
setprogram	function
settarget	function
settimedlog	function
settranslations	function
show	function
show_close	function
show_load	function
show_open	function
simple	function
simpleline	function

simplelines	function
start_page_number	function
status	function
stop_page_number	function
subdirect	function
subreport	function
system	function
texerrormessage	function
writer	function

lpdf (context)

action	function	insertxmpinfo	function
adddocumentcolorspace	function	javascript	function
adddocumenttextgstate	function	launch	function
adddocumentpattern	function	layerreference	function
adddocumentshade	function	limited	function
addtocatalog	function	linearshade	function
addtoinfo	function	link	function
addtonames	function	null	function
addtopageattributes	function	number	function
addtopageresources	function	pagedestination	function
addtopagesattributes	function	pagereference	function
addxmpinfo	function	pdfcolor	function
array	function	pdftimestamp	function
boolean	function	protectresources	boolean
checkedkey	function	reference	function
checkedvalue	function	registerannotation	function
circularshade	function	registerdocumentfinalizer	function
cmykcode	function	registerpagefinalizer	function
collectedresources	function	reserveannotation	function
color	function	reserveobject	function
colorspace	function	rgbcode	function
colorspaceconstants	data table	rotationcm	function
colorspec	function	shareobject	function
colorvalue	function	shareobjectreference	function
colorvalues	function	spotcode	function
constant	function	stream	function
delayedobject	function	string	function
dictionary	function	timestamp	function
epdf	table	toeight	function
F expand		tosixteen	function
F load		transparency	function
finalizedocument	function	transparencycode	function
finalizepage	function	transparencygroups	table
finishtransparencycode	function	B none	
flushobject	function	transparencyvalue	function
flushstreamfileobject	function	unicode	function
flushstreamobject	function	verbose	function
formats	data table		
graycode	function		
id	function		
injectxmpinfo	function		

lpeg (basic lua)

B	function	splitat	function
C	function	splitter	function
Carg	function	stripper	function
Cb	function	times	function
Cc	function	tsplitat	function
Cf	function	tsplitter	function
Cg	function	type	function
Cmt	function	utfchartabletopattern	function
Cp	function	version	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		
print	function		
replacer	function		
secondofsplit	function		
setmaxstack	function		
split	function		

ltn12 (extra lua)

BLOCKSIZE number

filter table

F chain

F cycle

pump table

F all

F step

sink table

F chain

F error

F file

F null

F simplify

F table

source table

F cat

F chain

F empty

F error

F file

F rewind

F simplify

F string

lua (basic tex)

bytecode	table
bytedata	data table
bytdone	table
collectgarbage	function
delay	function
finalize	function
firstbytecode	number
flush	function
flushdelayed	function
getbytecode	function
getluaname	function
lastbytecode	number
messages	data table
name	table
numbers	data table
registercode	function
registeredcodes	function
registerfinalizer	function
registername	function
setbytecode	function
setluaname	function
startupfile	string
version	string

luatex (context)

cleanuptempfiles	function
registerstartactions	function
registerstopactions	function
registertempfile	function
starttime	number

lxml (context)

addindex	function
all	function
applyfunction	function
att	function
attribute	function
chainattribute	function
checkindex	function
collected	function
command	function
concat	function
concatrange	function
content	function
context	function
convert	function
count	function
delete	function
direct	function
directives	table
F after	
F before	
F handle	
F load	
F setup	
displayverbatim	function
doif	function
doifelse	function
doifelsetext	function
doifnot	function
doifnottext	function
doiftext	function
element	function
elements	function
entities	data table
filter	function
filterlist	function
first	function
flush	function
flushlinewise	function
flushsetups	function
flushspacewise	function
get_id	function

getid	function
getindex	function
id	function
idsplitter	userdata
include	function
index	function
info	function
inlineverbatim	function
installsetup	function
last	function
load	function
loadbuffer	function
loaddata	function
loaded	table
loadregistered	function
main	function
match	function
name	function
namespace	function
nonspace	function
pos	function
position	function
raw	function
rawroot	function
register	function
registerentity	function
removesetup	function
resetcdata	function
resetsetups	function
resolvedentity	function
root	function
serialize	function
setaction	function
setcdata	function
setcommandtonone	function
setcommandtotext	function
setsetup	function
snippet	function
sorters	table
F add	
F compare	

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

math (basic lua)

abs	function
acos	function
asin	function
atan	function
atan2	function
ceil	function
cos	function
cosd	function
cosh	function
deg	function
div	function
even	function
exp	function
floor	function
fmod	function
frexp	function
huge	number
initialseed	number
ldexp	function
log	function
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	setalternate	function
alphabets	data table	setitalics	function
big	function	syncboth	function
boldmap	table	syncname	function
categories	table	syncstyle	function
D functions		toname	function
checkaccentbaseheight	function	tostyle	function
checkprivateparameters	function	tweakaftercopyingfont	function
classes	data table	tweakbeforecopyingfont	function
codes	data table	tweaks	table
define	function	utfmathclass	function
dimensions	function	utfmathcommand	function
extensiblecode	function	utfmathfiller	function
extensibles	data table	utfmathstretch	function
extrabase	number		
extras	table		
F add			
F copy			
fallbacks	table		
F apply			
F install			
fallbackstyleattr	function		
families	data table		
gaps	table		
getboth	function		
getstyle	function		
initializeparameters	function		
injectfallbacks	function		
makefont	function		
mapremap	data table		
overloaddimensions	function		
overloadparameters	function		
privatebase	number		
remapalphabets	function		
renderings	table		
D mappings			
D numbers			
D sets			
renderset	function		
resetitalics	function		
scaleparameters	function		

mbox (context)

parse	function
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
decrypt	function
exor	function
hex	function
sum	function
sumhexa	function

metapost (context)

analyzeplugins function
checkformat function
checktexts function
collapse boolean
colorinitializer function
convert function
defaultformat string
defaultinstance string
defaultmethod string
directrun function
edefsxsy function
escaped function
exectime table
extensiondata data table
filterclippath function
finder function
flush function
flushers table
 T pdf
 F comment
 F flushfigure
 F startfigure
 F stopfigure
 F textfigure
flushliteral function
flushnormalpath function
flushreset function
fonts table
 F define
 T flusher
 F flushfigure
 F startfigure
 F stopfigure
 N instances
 F process
format function
format_number function
format_string function
formatnumber function
getclippath function
getextensions function

gettext function
graphic function
graphic_base_pass function
instance function
intermediate table
 T actions
 F makempy
lastlog string
llx number
lly number
load function
makempy table
 N nofconverted
 F processgraphics
 F registerfile
metafun table
 F interpolate
 F topath
method number
mptopdf table
 F convertmptstopdf
 N nofconverted
multipass boolean
n number
nvformat function
optimize boolean
parse function
pdfliterals function
pluginactions function
process function
processplugins function
processspecial function
quickanddirty function
reducetogray boolean
reporterror function
reset function
resetlastlog function
resetplugins function
resettetexts function
setextensions function
setoutercolor function

settext	function
settetexts	function
showlog	boolean
svformat	function
tex	table
F get	
F reset	
F set	
texerrors	boolean
textextsdata	function
theclippath	function
totable	function
unload	function
untagvariable	function
urx	number
ury	number
variables	table

mime (extra lua)

b64 function

decode function

decodet table

F base64

F quoted-printable

dot function

encode function

encodet table

F base64

F quoted-printable

eol function

normalize function

qp function

qpwrp function

stuff function

unb64 function

unqp function

wrap function

wrapt table

F base64

F default

F quoted-printable

F text

wrp function

mplib (extra tex)

fields	function
finders	table
F file	
new	function
pen_info	function
preprocessed	function
version	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

process function

processors table

- T collapse
- F mlist_to_hlist
- T relocate
- T render
- T resize
- T unscript

node (basic tex)

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

kerning	function
last_node	function
length	function
ligaturing	function
mlist_to_hlist	function
new	function
next	function
prev	function
protect_glyphs	function
protrusion_skippable	function
remove	function
set_attribute	function
setfield	function
slide	function
subtype	function
tail	function
tostring	function
traverse	function
traverse_id	function
type	function
types	function
unprotect_glyphs	function
unset_attribute	function
usedlist	function
vpack	function
whatsits	function
write	function

nodes (context)

accentcodes	data table	getattribute	function
aligned	function	getbox	function
append	function	getchar	function
astable	function	getfield	function
basepoints	function	getfont	function
builders	table	getid	function
F buildpage_filter		getleader	function
F vpack_filter		getlist	function
codes	data table	getnext	function
concat	function	getprev	function
copy	function	getskip	function
copy_list	function	getsubtype	function
count	function	gluecodes	data table
current_attr	function	glyphcodes	data table
delete	function	glyphdir_is_equal	data table
destinations	table	glyphdir_is_opposite	data table
N attribute		glyphdir_is_orthogonal	data table
T done		gonuts	boolean
F handler		handlers	table
T stack		F accessibility	
dimensionfields	data table	F alignbackgrounds	
dimensions	function	F backgrounds	
dir_is_pop	data table	F characters	
dir_negation	data table	F checkforleaks	
disccodes	data table	F checkglyphs	
discretionarycodes	data table	F cleanupbox	
do_ligature_n	function	F cleanuppage	
end_of_math	function	F export	
fasthpack	function	F finalize	
fencecodes	data table	F migrate	
fields	function	F protectglyphs	
fillcodes	data table	F stripping	
first_character	function	F unprotectglyphs	
first_glyph	function	has_attribute	function
firstcharacter	function	has_field	function
firstcharinbox	function	has_glyph	function
firstglyph	function	hpack	function
flush_list	function	idstosting	function
flush_node	function	ignorablefields	data table
free	function	injections	table
getattr	function	F handler	

F installnewkern		mathcodes	data table
F setcursive		mlist_to_hlist	function
F setkern		new	function
F setmark		noadcodes	data table
F setpair		nodecodes	data table
insert_after	function	nopts	function
insert_before	function	nuts	table
insert_list_after	function	F append	
installattributehandler	function	F concat	
is_direct	function	F copy	
is_display_math	function	F copy_list	
is_mirrored	data table	F count	
is_node	function	F current_attr	
is_nut	function	F delete	
is_rotated	data table	F dimensions	
kerncodes	data table	F do_ligature_n	
kerining	function	F end_of_math	
keys	table	F fasthpack	
T whatsit		F first_glyph	
last_node	function	F firstcharacter	
leftmarginwidth	function	F firstcharinbox	
ligaturing	function	F firstglyph	
lines	table	F flush_list	
T boxed		F flush_node	
F register		F free	
F setup		F getattr	
F stage_one		F getattribute	
F stage_two		F getbox	
F stage_zero		F getchar	
D data		F getfield	
F finalize		F getfont	
F number		F getid	
N scratchbox		F getleader	
link	function	F getlist	
linked	function	F getnext	
list	function	F getprev	
listablefields	data table	F getskip	
listcodes	data table	F getsubtype	
listtoutf	function	F has_attribute	
load	function	F has_field	
locate	function	F has_glyph	
margincodes	data table	F hpack	
markers	table	F insert_after	
F get		F insert_before	

F insert_list_after	F temp
F is_direct	F textdir
F is_display_math	F usage
F is_node	T usersids
F is_nut	N margins.inline
F kerning	N splitters.one
F last_node	N splitters.two
F leftmarginwidth	F userlist
F ligaturing	F usernumber
F link	F userstring
F linked	F usertokens
F locate	F vlist
F mlist_to_hlist	F zeroglue
F new	F prepend
T pool	F protect_glyphs
F baselineskip	F protrusion_skippable
F cleanup	F reference
F disc	F remove
F fontkern	F repackhlist
F glue	F replace
F gluespec	F rightmarginwidth
F glyph	F set_attribute
F hlist	F setattr
F kern	F setattrtribute
F latelua	F setattrtributes
F leftmarginkern	F setbox
F leftskip	F setfield
F lineskip	F setunsetattributes
F noad	F slide
F pdfannotation	F somepenalty
F pdfdestination	F somespace
F pdfdirect	F tail
F pdfliteral	F tonode
F pdfrestore	F tonodes
F pdfsave	F tonut
F pdfsetmatrix	F toString
F penalty	F traverse
F register	F traverse_id
F rightmarginkern	T typesetters
F rightskip	F fast_hpack
F rule	F hpack
F shrink	F tohpack
F special	F tohpackfast
F stretch	F tonodes

F tovpack		F register	
F tovpackfast		F rule	
F vpack		F special	
F unprotect_glyphs		F usage	
F unset_attribute		T userside	
F unsetattribute		N margins.inline	
F unsetattributes		N splitters.one	
F usedlist		N splitters.two	
F vianodes		prepend	function
F vianuts		print	function
F vpack		processors	table
F writable_spec		B enabled	
F write		F hpack_filter	
packlist	function	F post_linebreak_filter	
pardir_is_equal	data table	F pre_linebreak_filter	
pardir_is_opposite	data table	F tracer	
pardir_is_parallel	data table	processwords	function
partextdir_is_equal	data table	protect_glyphs	function
penaltycodes	data table	protrusion_skippable	function
plugindata	table	pts	function
F finalizer		reference	function
F initializer		references	table
S name		N attribute	
T namespace		T done	
N attribute		F handler	
D data		T stack	
F enable		remove	function
F handler		repackhlist	function
F register		replace	function
D registered		report	function
D values		rightmarginwidth	function
F processor		rules	table
points	function	D data	
pool	table	F define	
F baselineskip		F enable	
F cleanup		F handler	
F glyph		save	function
F kern		serialize	function
F latelua		serializebox	function
F lineskip		set_attribute	function
F pdfannotation		setattr	function
F pdfdestination		setattribute	function
F pdfliteral		setattributes	function
F pdfsetmatrix		setbox	function

setfield	function	texmdir_is_opposite	data table
setunsetattributes	function	texmdir_is_parallel	data table
shifts	table	tobasepoints	function
D data		tocentimeters	function
F define		tociceros	function
F enable		todidots	function
F handler		todimen	function
show	function	toinches	function
showboxes	function	tomillimeters	function
showcodes	function	tonewciceros	function
showlist	function	tonewdidots	function
showsimplelist	function	tonode	function
skipcodes	data table	tonodes	function
slide	function	tonut	function
snapshots	table	topicas	function
F getparameters		topoints	function
F getsamples		toscaledpoints	function
F resetsamples		tosequence	function
F takesample		tostring	function
somepenalty	function	totable	function
somespace	function	totree	function
stripping	table	toutf	function
T glyphs		tracers	table
F set		T characters	
striprange	function	F collect	
tail	function	F equal	
tasks	table	F indices	
F actions		F start	
F appendaction		F string	
F disableaction		F unicodes	
F disablegroup		T colors	
F enableaction		F reset	
F enablegroup		F set	
F freeze		F setlist	
F freezegroup		F fontchar	
F new		T frequencies	
F prependaction		F register	
F removeaction		T pool	
F restart		T nodes	
F setaction		F rule	
F showactions		T nuts	
F table		F rule	
texmdir_is_equal	data table	F resetproperties	
texmdir_is_is	data table	F rule	

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			
F stop			
T transparencies			
F reset			
F set			
F setlist			
traverse	function		
traverse_id	function		
typesetters	table		
F hpack			
F tohpack			
F tohpackfast			
F tonodes			
F tovpack			
F tovpackfast			
F vpack			
unprotect_glyphs	function		
unset_attribute	function		
unsetattribute	function		
unsetattributes	function		
usedlist	function		
vianodes	function		
vianuts	function		
visualizebox	function		
visualizers	table		
F box			
F handler			
F markfonts			
F setfont			

number (context)

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

os (basic lua)

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

package (basic lua)

config	string
cpath	string
extralibpath	function
extralibpaths	function
extralupath	function
extralupaths	function
helpers	table
libpaths	function
loaded	table
loaders	table
loadlib	function
luapaths	function
path	string
preload	table
searchers	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)

immediateobj	function
mapfile	function
mapline	function
maxobjnum	function
obj	function
objtype	function
pageattributes	string
pageref	function
pageresources	string
pagesattributes	string
pdfmapfile	function
pdfmapline	function
print	function
refobj	function
registerannot	function
reserveobj	function

pdfscanner (context)

scan function

physics (context)

units table

D tables

profiler (extra lua)

pause function
resume function
start function
stop function

publications (context)

collected data table

regimes (context)

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

resolvers (context)

allprefixes	function	findfile	function
appendhash	function	findfiles	function
automount	function	findgivenfile	function
automounted	table	findgivenfiles	function
booleanvariable	function	findpath	function
cacheversion	string	findtexfile	function
checkedvariable	function	findwildcardfile	function
cleanpath	function	findwildcardfiles	function
cleanpathlist	function	formatofsuffix	function
concatinators	data table	formatofvariable	function
configbanner	string	formats	data table
criticalvars	data table	generators	data table
dangerous	data table	getenv	function
datastate	function	getownpath	function
defaultsuffixes	table	getreadfilename	function
dowithfilesandreport	function	hashers	data table
dowithfilesintree	function	homedir	string
dowithpath	function	inputstack	table
dowithvariable	function	installinputfilehandler	function
env	function	installinputlinehandler	function
executers	table	instance	table
F check		D data	
F exec		B diskcache	
F execute		D environment	
F finalize		D expansions	
F popen		D fakepaths	
F register		D files	
F spawn		B force_suffixes	
expandbraces	function	D found	
expandedpathfromlist	function	D foundintrees	
expandedpathlist	function	D hashed	
expandedpathlistfromvariable	function	D hashes	
expandpath	function	D lists	
expandpathfromvariable	function	B loadererror	
expansion	function	D order	
extendtexmfvariable	function	B remember	
find_file	function	B renewcache	
find_files	function	B renewtree	
findbinfile	function	B savelists	
findctxfile	function	D setups	
finders	data table	D specification	

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

<code>variableofformatorsuffix</code>	function
<code>wildcardpattern</code>	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
_DEBUG boolean
_SETSIZE number
bind function
choose function
connect function
connect4 function
connect6 function
dns table

F getaddrinfo
F gethostname
F getnameinfo
F tohostname
F toip

ftp table

S PASSWORD
N PORT
N TIMEOUT
S USER
F command
F get
F open
F put

gettime function
headers table

T canonic
S accept
S accept-charset
S accept-encoding
S accept-language
S accept-ranges
S action
S age
S allow
S alternate-recipient
S arrival-date
S authorization
S bcc
S cache-control
S cc
S comments

S connection
S content-description
S content-disposition
S content-encoding
S content-id
S content-language
S content-length
S content-location
S content-md5
S content-range
S content-transfer-encoding
S content-type
S date
S diagnostic-code
S dsn-gateway
S etag
S expect
S expires
S final-log-id
S final-recipient
S from
S host
S if-match
S if-modified-since
S if-none-match
S if-range
S if-unmodified-since
S in-reply-to
S keywords
S last-attempt-date
S last-modified
S location
S max-forwards
S message-id
S mime-version
S original-envelope-id
S original-recipient
S pragma
S proxy-authenticate
S proxy-authorization
S range

S received
 S received-from-mta
 S references
 S referer
 S remote-mta
 S reply-to
 S reporting-mta
 S resent-bcc
 S resent-cc
 S resent-date
 S resent-from
 S resent-message-id
 S resent-reply-to
 S resent-sender
 S resent-to
 S retry-after
 S return-path
 S sender
 S server
 S smtp-remote-recipient
 S status
 S subject
 S te
 S to
 S trailer
 S transfer-encoding
 S upgrade
 S user-agent
 S vary
 S via
 S warning
 S will-retry-until
 S www-authenticate
 S x-mailer

http table

N PORT
 N TIMEOUT
 S USERAGENT
 F open
 F request

newtry function
protect function
select function
sink function

sinkt table

F close-when-done
 F default
 F http-chunked
 F keep-open

skip function

sleep function

smtp table

S DOMAIN
 N PORT
 S SERVER
 N TIMEOUT
 S ZONE
 F message
 F open
 F send

source function

sourcet table

F by-length
 F default
 F http-chunked
 F until-closed

tcp function

tcp6 function

tp table

N TIMEOUT
 F connect

try function

udp function

udp6 function

url table

F absolute
 F build
 F build_path
 F escape
 F parse
 F parse_path
 F unescape

sorters (context)

comparers table

 F basic

constants table

 S defaultdigits

 S defaultlanguage

 S defaultmethod

 N digitmaximum

 N digitsoffset

 N ignoredoffset

 N replacementoffset

definitions data table

firstofsplit function

setlanguage function

sort function

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
max	number
min	number
nofmodules	number
noftables	number
register	function
shared	data table
strip	boolean
tofmodules	number
toftables	number

streams (context)

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

string (basic lua)

autodouble function
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

```
F {t},
F %t (%t)
F %-t--cycle
F %-10s: %s
F %-15s :
F %-15s : %s
F %-15s >
F %-15s >
F %-15s > %s
F %-15s > %s
F %-15s > %s >
F %-15s > %s >
F %-15s > %s > %s
F %.3f %.3f %.3f %.3f k %.3f %.3f %.3f %.3f K
F %.3f %.3f %.3f rg %.3f %.3f %.3f RG
F %.3f g %.3f G
F %0.1fpt
F %0.8f %0.8f %0.8f %0.8f
F %U
F %U (%s)
F %a loaded
```

```
F %f %f %f %f %f %f %f cm
F %l,
F %p
F %q,
F %s
F %S %s
F %S %S %s
F %S %S %S %t
F %S %S %S %S
F %S Tc %S w %S Tr
F %s mul
F %s%s%s
F %s,
F %s--%s
F %s->%s->%s
F %s->%s->%s->%s->%s->%s->%s
F %s:%s
F %s:%s:%s
F %s=%q
F %s={
F %w%l,
F %w%q,
F %w%S,
F %w[%l]=%l,
F %w[%l]=%q,
F %w[%l]=%s,
F %w[%l]={
F %w[%l]={%, t },
F %w[%l]={},
F %w[%q]=%l,
F %w[%q]=%q,
F %w[%q]=%s,
F %w[%q]={
F %w[%q]={%, t },
F %w[%q]={},
F %w[%s]=%l,
F %w[%s]=%q,
F %w[%s]=%s,
F %w[%s]={
F %w[%s]={%, t },
F %w[%s]={},
```

```
F %w{
F %w{% , t },
F %w{ },
F %w{ ,
F (%p,%p)
F /%s %s
F /%s << %t >>
F /%s [ %t ]
F /%s cs /%s CS %s SCN %s scn
F /Tr%s gs
F 1 0 0 0 1 %f %f cm
F << %t >>
F << /Type /Annot %s /Rect [%0.3f %0.3f %0.3f %0.3f] >>
F M-H-%H
F M-N-%H
F MpSh%s
F Tr%s
F U+%04X:%s
F [ %t ]
F [%q]=
F [%q]=%l,
F [%q]=%q,
F [%q]=%s,
F [%q]={
F [%s]=
F [%s]=%l,
F [%s]=%q,
F [%s]=%s,
F [%s][%s]
F \Umathchardef\s "%X "%X "%X
F \convertnumber{%s}{%s}
F \ugdef\s{\Udelimiter "%X "%X "%X }
F \ugdef\s{\Udelimiter 0 "%X "%X }
F \ugdef\s{\Udelimiterover "%X "%X }
F \ugdef\s{\Udelimiterunder "%X "%X }
F \ugdef\s{\Umathaccent 0 "%X "%X }
F \ugdef\s{\Umathbotaccent 0 "%X "%X }
F \ugdef\s{\Uradical "%X "%X }
F \ugdef\s{\Uroot "%X "%X }
F _bpnf_(%s,%s,%s,'%s')
T_extensions_
S chruni
S font:features
S font:name
```

[illegible]

```

F pdf: q 1 0 %f 1 0 0 cm
F pospages[%s] := %s ; posboxes[%s] := (%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)
F processed mkvi file %a, delta %s
F q %f %f %f %f %f %f cm
F r:s:s:s
F r=%1.3f%sg=%1.3f%sb=%1.3f
F region:%s
F return {
F return {%t}
F s:%s
F s=%1.3f
F setbounds currentpicture to multibox ;
F unknown reference %a
F using file %a
F visualizers.%s
F w:%s
F {
F }

gmatch      function
gsub        function
is_boolean  function
is_empty    function
itself      function
len         function
limit       function
longtostring function
lower       function
match       function
nspaces     table
quote       function
quoted      function
rep         function
reverse     function
split       function
splitlines  function
splitup     function
strip       function
sub         function
tformat     function
toboollean  function
tocontext   function
todimen     function
tonodes     function
topattern   function

```

```

totable     function
toupper     function
tracedchar  function
tracedchars table
unquote     function
unquoted    function
upper       function
utfcharacters function
utfvalues   function
valid       function

```

structures (context)

atlocation	function	F setlevel	
blocks	table	F setoffset	
D collected		F setown	
F define		F setstate	
F print		F setvalue	
F save		T specials	
F select		F userpage	
F setstate		F subs	
D states		D tobesaved	
D tobesaved		F value	
bookmarks	table	currentsectionnumber	function
F finalize		descriptions	table
F flatten		documents	table
S method		D data	
F overload		F initialize	
F place		F preset	
F register		F reset	
F setup		floats	table
counters	table	formulas	table
F add		F current	
F analyze		F simplify	
F check		F store	
D collected		helpers	table
F compact		F analyze	
F converted		F formulanumber	
F currentvalue		F merged	
D data		F page	
F define		F prefix	
F first		F prefixlastpage	
F get		F prefixpage	
F last		F simplify	
F next		F title	
F prev		F touserdata	
F previous		inserts	table
F raw		D data	
F record		F define	
F reset		F getdata	
F restart		F getlocation	
F restore		F getname	
F save		F getnumber	
F set		F setlocation	

F setup
D stored
itemgroups table
F maxwidth
F nofitems
F register

lists table
F addto
F analyze
B autoreorder
D cached
D collected
F discard
F enhance
T enhancers
F filter
F filtercollected
F formulanumber
F groupindex
F hasnumberdata
F haspagedata
F hastitledata
D internals
F iscached
F label
F location
F number
D ordered
F page
F popnesting
F prefix
F prefixednumber
F prefixedpage
F process
D pushed
F pushnesting
F realpage
F reordered
T result
D sectionblocks
F sectionnumber
F size
F title
D tobesaved

F userdata
F uservalue
marks table
D data
F define
F exists
F fetch
F fetchallmarks
F fetched
F fetchonemark
F fetchtwomarks
F get
F number
F relate
F reset
F set
F show
F synchronize
F title
T tracers
F showtable

notes table
F checkpagechange
F define
F doifonsamepageasprevious
F get
F getdeltapage
F getn
F getnumberpage
F getstate
F getsymbolpage
F hascontent
F internal
F internalid
F listindex
F ordered
F postpone
F resetpostponed
F restore
F save
F setstate
F setsymbolpage
D states
F store

pages

F analyze
D collected
F is_odd
F number
F save
D tobesaved

table

references

F analyze
F checkedfile
F checkedfileorurl
F checkedprogram
F checkedrealpage
F checkedurl
D collected
U componentsplitter
F currentmetadata
F currentorder
D currentset
F define
D defined
D derived
F enableinteraction
F enhance
D executers
F expandcurrent
F export
T files
 T data
 F define
 F get
F filter
F filterdefault
D filters
F from
F get
F getcurrentmetadata
F getcurrentprefixspec
F getinnermethod
F getinternalreference
D handlers
F identify
F import
F inject

table

F injectcurrentset
D internals
F load
F loadpresets
F mark
D pages
U prefixsplitter
D productdata
T programs
 T data
 F define
 F get
F realpageofpage
U referencesplitter
D referred
F referredpage
F registerfinalizer
F registerinitializer
F registerpage
F reportproblems
F reset
T resolvers
 F reference
 F section
D runners
F set
F setandgetattribute
F setcomponent
F setinnermethod
F setinternalreference
F setnextinternal
F setnextorder
D specials
F splitcomponent
F splitprefix
F splitreference
T testrunners
 F inner
 F special
 F special operation
 F special operation with arguments
T testspecials
 F deltapage
 F i

F internal		F getcurrentlevel	
F page		F getlevel	
F realpage		F getnumber	
F section		F internalreference	
F userpage		D levelmap	
D tobereferred		D levels	
D tobesaved		F load	
T urls		F matchingtilldepth	
T data		F numeratdepth	
F define		F numbers	
F get		F popblock	
F valid		F prefixedconverted	
F whatfrom		F pushblock	
registers	table	F register	
F analyze		D registered	
F analyzed		F reportstructure	
D collected		F save	
F compare		T sectionblockdata	
F define		T bodypart	
F enhance		S bookmark	
F extend		F set	
F filter		F setblock	
F filtercollected		F setchecker	
F finalize		F setlevel	
F flush		F setnumber	
F prepare		F somelevel	
F process		F structuredata	
F sort		F title	
F store		D tobesaved	
D tobesaved		F typesetnumber	
F unique		F userdata	
F userdata		B verbose	
sections	table	sets	table
F autodepth		F define	
F cct		F get	
D collected		F getall	
F current		D setlist	
F currentblock		specials	table
F currentid		D collected	
F currentlevel		F retrieve	
F depthnumber		F store	
F finddata		D tobesaved	
F findnumber		synonyms	table
F fullnumber		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

tags

table

T data
F detailedtag
F getid
F handler
D labels
F last
F lastinchain
T metadata
D properties
F registerdata
F registermetadata
F restart
F setattributehash
F setcombination
F setdescription
F setdescriptionsymbol
F setfigure
F sethighlight
F setitemgroup
F setproperty
F setsorting
F setsynonym
F settablecell
F settabulatecell
F start
F stop
D taglist
T userdata

table (basic lua)

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

tex (basic tex)

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

shipout	function
skip	table
sp	function
sprint	function
systemmodes	data table
texcatcodes	number
toks	table
tpacatcodes	number
tpbcacodes	number
tprint	function
trackers	data table
txtcatcodes	number
type	function
uccode	table
uniformdeviate	function
uprint	function
vrbcacodes	number
write	function

texconfig (basic tex)

error_line	number
expand_depth	number
formatname	string
half_error_line	number
hash_extra	number
init	function
kpse_init	boolean
max_in_open	number
max_print_line	number
max_strings	number
nest_size	number
param_size	number
save_size	number
shell_escape	string
stack_size	number

texio (basic tex)

`write` function

`write_nl` function

token (basic tex)

command_id	function
command_name	function
create	function
csname_id	function
csname_name	function
expand	function
get_next	function
is_activechar	function
is_expandable	function
is_protected	function
lookup	function

tokens (context)

bgroup table

collectors table

 T data

 F defaultwords

 F dowithwords

 F flush

 F handle

 F install

 F register

 T registered

 T remapper

 F convert

 T data

 F store

 F show

 T show_methods

 F a

 F b

 F c

 F showtoken

 F test

 F trace

egroup table

hbox table

letter function

letters function

other function

vbox table

vtop table

tracers (context)

count	function
cs	function
dimen	function
knownlist	function
lists	table

T context

T internals

T scratch

name	function
primitive	function
printerror	function
showlines	function
strings	table

S undefined

toks	function
type	function

trackers (context)

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

typesetters (context)

alignments table

- F handler
- F set

breakpoints table

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

cases table

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

characteralign table

- F handler
- F resetcharacteralign
- F setcharacteralign

characters table

- F handler
- F replacensp
- F replacenspaces

checkers table

- F handler
- F reset
- F set

cleaners table

- F handler
- F set

digits table

- T actions
- F handler
- F set

directions table

- F getfences
- F getglobal
- F getmethod
- F handler
- T handlers

F installhandler

F processmath

F set

F setcolor

F setmath

F tomode

firstlines table

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

initials table

- T actions
- F default
- F handler
- F set

italics table

- F forcevariant
- F handler
- F reset
- F set

kerns table

- D factors
- F handler
- F keeppligature
- B keptogether
- D mapping
- F set

margins table

- F finalhandler
- F globalhandler
- F ha
- F localhandler
- F save

processors table

- F apply
- F register
- F reset
- F split

F startapply

F stopapply

F stripped

F toString

spacings table

F define

F handler

D mapping

T numbers

 T frenchpunctuation

 T characters

 S name

 N number

F reset

F set

F setup

xtables table

F cleanup

F construct

F create

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_width

unicode (extra lua)

ascii table

F byte
F char
F dump
F find
F format
F gfind
F gmatch
F gsub
F len
F lower
F match
F rep
F reverse
F sub
F upper

grapheme table

F byte
F char
F dump
F find
F format
F gfind
F gmatch
F gsub
F len
F lower
F match
F rep
F reverse
F sub
F upper

latin1 table

F byte
F char
F dump
F find
F format
F gfind
F gmatch
F gsub

F len
F lower
F match
F rep
F reverse
F sub
F upper

utf8 table

F byte
F char
F characters
F chrln
F count
F dump
F filetype
F find
F format
F gfind
F gmatch
F gsub
F is_valid
F len
F length
F lower
F magic
F match
F remapper
F rep
F replacer
F reverse
F split
F splitlines
F sub
F subtituter
F tocodes
F toeight
F toentities
F toString
F totable
F upper
F ustring

F utf16_to_utf8
F utf16_to_utf8_be
F utf16_to_utf8_le
F utf32_to_utf8
F utf32_to_utf8_be
F utf32_to_utf8_le
F utf8_to_utf16
F utf8_to_utf16_be
F utf8_to_utf16_le
F utf8_to_utf8
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

F disable
F enable
F savestats
F showstats

formatters table

F formatcolumns
F list
F stripzeros

garbagecollector table

F check
N criterium
B enabled

lua table

B alwaysstripcode
F compile
F loadedluacode
F loadstripped
N nofstrippedbytes
N nofstrippedchunks
B stripcode
T strippedchunks
F strippedloadstring
T suffixes
S lua
S luc
S lui
S luj
S luv
S tma
S tmc
S tua
S tuc

packers table

F hashed
F new
F pack
F simplehashed
F strip
F unpack
N version

parsers table

F add_settings_to_array
F arguments_to_table
F array_to_string
F csvsplitter
F getparameters
F hash_to_string
F iterator
F keq_to_hash
F listitem
F make_settings_to_hash_pattern
F mergehashes
F options_to_hash
T patterns
U settings_to_array
U settings_to_hash_a
U settings_to_hash_b
U settings_to_hash_c
U unittotex
F process_stripped_settings
F rfc4180splitter
F runtime
F settings_to_array
F settings_to_array_with_repeat
F settings_to_hash
F settings_to_hash_strict
F settings_to_hash_tolerant
F settings_to_set
F simple_hash_to_string
F splitthousands
F stepper
F stripped_settings_to_array
F unittotex
F unittotxml

report function

sequencers table

F appendaction
F appendgroup
F compile
F disableaction
F disablegroup

F enableaction		F encapsulate	
F enablegroup		F insertaftervalue	
D functions		F insertbeforevalue	
F localize		F migratetable	
F new		F removevalue	
F nodeprocessor		templates	table
F prependaction		F load	
F prependgroup		F replace	
F removeaction		F replacer	
F setkind		F resolve	
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			
F striplong			
F tabtospace			
T tracers			
tables	table		
F accesstable			
F definedtable			
F definetable			

vf (context)

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

visualizers (context)

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

xml (context)

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

F bibtexshort	F position	
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	index	function
F position	inheritedconvert	function
F reverse	inject	function
F stripped	inject_element	function
F tag	inject_element_after	function
F tags	inject_element_before	function
F text	injectafter	function
F upper	injectbefore	function
F upperall	insert	function
T xml	insert_element	function
F all	insert_element_after	function
F att	insert_element_before	function
F attribute	insertafter	function
F attributes	insertbefore	function
F cdata	insertcomment	function
F chainattribute	inspect	function
F count	is_valid	function
F default	kind	function
F elements	last	function
F empty	load	function
F first	lpath	function
F function	lpathcached	function
F index	lpathcalls	function
F last	lshow	function
F lowerall	makestandalone	function
F match	match	function
F name	name	function

newhandlers	function	strip	function
nodesettostring	function	strip_whitespace	function
originalload	function	stripelement	function
package	function	stripleadingspaces	function
parent	function	table	function
parsedentitylpeg	userdata	text	function
pihandlers	table	textonly	function
placeholders	table	texttocdata	function
F unknown_any_entity		tocdata	function
F unknown_dec_entity		toelement	function
F unknown_hex_entity		tostring	function
position	function	toxml	function
privatecodes	table	tprint	function
privatetoken	function	traverse	function
process	function	unescaped	function
process_attributes	function	unprivatized	function
process_elements	function	withelement	function
processattributes	function	withelements	function
profiled	table	wrap	function
raw	function	xmlns	table
registerentity	function		
registers	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		
sethandlersfunction	function		
setproperty	function		
settings	function		
specialhandler	table		
sprint	function		
string	function		

zip (extra lua)

archives	table
close	function
closearchive	function
open	function
openarchive	function
openfile	function
registeredfiles	table
type	function

zlib (extra lua)

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