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

ConTEXt MkIV

global (alias: _G)

LUAVERSION	number	floats	table
MAJORVERSION	number	font	table
MINORVERSION	number	fontloader	table
arg	table	fonts	table
assert	function	format n	function
attributes	table	frozen	boolean
backends	table	functions	table
beginpage	function	getmetatable	function
bit32	table	getreadfilename	function
blobs	table	global	table
boolean	table	graphics	table
buffers	table	gzip	table
builders	table	imq	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
file	table	mathematics	table

table setmetatable mbox md5 table socket metapost table sorters table statistics mime module function status moduledata table storage modules table streams mplib table string newline function stripmath next function structures noads table swialib node table table nodes table tex number table texconfig optionalrequire function texio table thirddata function toboolean outputpagestree package table token pagebuilders table tokens pairs function tonumber parametersets table tostrina pattern userdata trace characters traceback pcall function pdf table tracers pdfscanner table trackers physics table tvpe print function typesetters table unicode profiler protect function unpack publications table url rawequal function userdata function utf rawget utilities function rawlen rawset function visualizers regimes table report characters function xml require function xmlconvert resolve fences function xpcall resolvers table zip zlib scripts table select function table set setcharacteralign function setinspector function

function

table

function

function

function

function

function

function

boolean

table

function

function

function

function

attributes (context)

<pre>colorintents table</pre>	F mpoptions	
N attribute	U none	
D data	F popset	
F enable	F processcolor	components
F handler	F pushset	
F register	F register	
D registered	D registered	
colors table	F registerspot	color
N attribute	F rgb	
F cmyk	F rgbtocmyk	
F cmyktogray	F rgbtogray	
F cmyktorgb	F rgbtohsv	
F colorcomponents	N selector	
B couple	F setlist	
D data	F setmodel	
N default	D sets	
F defineintermediatecolor	F spec	
F definemixcolor	F spot	
F definemultitonecolor	F spotcolornam	e
F defineprocesscolor	F spotcolorpar	ent
F definesimplegray	F spotcolorval	ıe
F definespotcolor	B supported	
F definetransparency	F transparency	components
F enable	B triggering	
F filter	F usecolors	
F forcedmodel	F value	
F forcesupport	D values	
F formatcolor	B weightgray	
F formatgray	define	function
F gray	effects	table
F graytohsv	N attribute	
F handler	D data	
F hsvtogray	F enable	
F hsvtorgb	F handler	
F iccprofile	F register	
F isblack	D registered	
N main	D values	
S model	handlers	table
D models	list	data table
F mpcolor	names	data table
F mpnamedcolor	negatives	table

N attribute
D data
F enable
F handler
F register

D registered

numbers data table
ofnode function
private function
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

F resolve_begin

F resolve_end

F resolve_step

D scopes

F setfeatures

F start

F stop

B supported

D values

backends (context)

F registerdocumentcloseaction

codeinjections table F registerdocumentopenaction F synchronizecolormodel F registeredsymbol current strina F registerpagecloseaction table defaults F registerpageopenaction T codeinjections F registersymbol T nodeiniections F setfieldcalculationset T registrations F setfigurealternative D tables F setfigurecolorspace install function F setfiguremask nodeinjections table F setformat F setformsmethod F restore F save F setpagetransition F transform F setupcanvas function nothina F setupidentity pdf table F setxmpfile T codeinjections F startlayer F addbookmarks F stoplayer F attachmentid F supportedformats F clonefield F useviewerlaver F definefield F validfield E definefieldset F validfieldcategory F defineviewerlaver F validfieldset F embedfile S comment F enabletags T nodeinjections F exportformdata F addtags F finalizepage F attachfile F finishreference F changestackedlayer F getdefaultfieldvalue F cmykcolor F getfieldcategory F comment F getfieldset F destination F getformatoption F effect F getoutputfilename F graycolor F getpreviewfigure F injectbitmap F insertrenderingwindow F insertmovie F mergereferences F insertsound F insertswf F mergeviewerlayers F prerollreference F insertu3d F knockout F presetsymbol F presetsymbollist F negative F processrendering 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

bit32 (basic lua)

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

blobs (context)

append	function
dimensions	function
dispose	function
new	function
pack	function
strdp	function
strhd	function
strht	function
strwd	function
tohpack	function
tohpackfast	function
tonodes	function
tovpack	function
tovpackfast	function
write	function

boolean (context)

tocontext function
tonumber function

buffers (context)

append function assign function collectcontent function erase function function exists function getcontent function getlines 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 kernina F ligaturing F mlist_to_hlist paragraphs table T constructors N attribute F define F disable F enable F handler T methods F basic F default F oneline D names D numbers F set F start F stop T expansion F trace F keeptogether F registertogether T solutions T splitters F define F optimize T registered F reset F set F split F start F stop F tag vspacing table F analyze D categories F collapsevbox

T data

D map D skip D snapmethods F definesnapmethod B fixed F pagehandler F resetprevdepth F setmap F setskip F snapbox F tocategories F tocategory F vboxhandler

caches (context)

ask boolean base string collapsecontent function configfiles function function contentstate 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 strina more relocate boolean savecontent function function savedata setfirstwritablefile function setluanames function tree string treehash function function usedpaths

callback (basic tex)

find function
list function

register overloaded function

callbacks (context)

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

catcodes (context)

characters (context)

activeoffset	number
adobename	function
bidi	data table
blockrange	function
blocks	data table
casemap	table
categories	data table
category	function
categorytags	data table
combined	data table
contextname	function
data	data table
decomposed	data table
define	function
description	function
descriptions	data table
directions	table
enccodes	data table
entities	data table
fallbacks	data table
filters	data table
fromnumber	function
fschars	data table
fscodes	data table
getrange	function
graphemes	data table
hangul	data table
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 minnene	data table
mirrors	table

otfscripts	data table	
ranges	data table	
registerentities	function	
remap_hangul_syllabe	function	
safechar	function	
setcodes	function	
shape	function	
shaped	function	
shchars	data table	
shcodes	data table	
showstring	function	
specialchars	data table	
specials	data table	
subscripts	table	
superscripts	table	
synonyms	data table	
tex	table	
.		

D accentmapping
F defineaccents

F toutf

textclasses
tonumber
ucchars
uccode
uccodes
unicodechar
upper

table
function
data table
function
data table
function
function

chemistry (context)

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

commands (context)

Almhahatia	function	accienhuffan	function
Alphabetic Character	function	assignbuffer autofinishstructurelevels	function
Characters	function	autonextspace	function
MPc	function	autonextspace autonextstructurelevel	function
MPd	function	autosetups	function
MPh	function	autosetups autostarttext	function
MP11	function	autostartiext	function
MPlr	function	averagecharwidth	function
MPls	function	bcolumn	function
MPn	function	boolcase	function
MPp	function	boxtostring	function
MPpardata	function	btxauthor	function
MPplus	function	btxcitevariant	function
MPpos	function	btxcollectlistentries	function
MPposset	function	btxdestination	function
MPr	function	btxdetail	function
MPrest	function	btxdoif	function
MPrs	function	btxdoifelse	function
MPul	function	btxdoifelselistentryplaced	function
MPur	function	btxdoifnot	function
MPw	function	btxfetchlistentries	function
MPx	function	btxfield	function
MPxy	function	btxflush	function
MPxywhd	function	btxflushlistentries	function
MPy	function	btxhandlecite	function
Romannumerals	function	btxhandlenocite	function
abjadnodotnumerals	function	btxlistvariant	function
abjadnumerals	function	btxreference	function
addbtxentry	function	btxregisterlistentry	function
addcounter	function	btxresolvelistreference	function
addlinklistelement	function	btxsetlistmethod	function
addreplacements	function	btxsingularorplural	function
addtojavascriptpreamble	function	character	function
addtolist	function	characters	function
allinputpaths	function	chardescription	function
alphabetic	function	checkcharactersinfont	function
analysefloatmethod	function	checkcountersetup	function
analyzelist	function	checkedconversion	function
applytochars	function	checkedpagefloat	function
applytofirstcharacter	function	checktwopassdata	function
applytowords	function	chemicalcomponent	function

chineseallnumerals function definefontfamily function chinesecapnumerals function definefontfeature function chinesenumerals function definefontsolution function cleanfontname function defineinsertion function cleanupbox function defineintermediatecolor function cleanuplayers function definelabels function colonefield function definelabels function collectfloat function definelanguage function collectfloat function definemarking function collecthelp function definemarking function colorcomponents function definematafont function concatcommalist function definemultitonecolor function consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparabuilder function cos function defineprocesscolor function cosd function defineperogram function countervalue function definereference function currentcomponent function definesectionlevels function currentcomponent function definesectionlevels function currentomulate function defineselectfont function currentomulate function defineseructureblock function currentproduct function definestructureset function currentproject function definestructureset function currentproject function definestructureset function currentproject function definetwopasslist function currentreferencedefault function defineviewerlayer function function currentreferencedefault function defineviewerlayer function currentreferenceoder
chinesenumeralsfunctiondefinefontsolutionfunctioncleanfontnamefunctiondefineinsertionfunctioncleanupboxfunctiondefineintermediatecolorfunctioncleanuplayersfunctiondefinelabelsfunctionclonefieldfunctiondefinelanguagefunctioncollectfloatfunctiondefinemarkingfunctioncollecthelpfunctiondefinemarkingfunctioncolorcomponentsfunctiondefinemultitonecolorfunctionconcatcommalistfunctiondefinenotefunctionconsultfloatfunctiondefineparallelfunctionconvertbtxdatasettoxmlfunctiondefineparallelfunctioncopypositionfunctiondefineparbuilderfunctioncosfunctiondefineprocesscolorfunctioncosdfunctiondefineprogramfunctioncountervaluefunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefinesectionlevelsfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructuresetfunctioncurrentproductfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
cleanfontnamefunctiondefineinsertionfunctioncleanupboxfunctiondefineintermediatecolorfunctioncleanuplayersfunctiondefinelabelsfunctionclonefieldfunctiondefinelanguagefunctioncollectfloatfunctiondefinemarkingfunctioncollecthelpfunctiondefinemetafontfunctioncolorcomponentsfunctiondefinemultitonecolorfunctionconcatcommalistfunctiondefinenotefunctionconsultfloatfunctiondefineparallelfunctionconvertbtxdatasettoxmlfunctiondefineparallelfunctioncopypositionfunctiondefineprocesscolorfunctioncosfunctiondefineprogramfunctioncosdfunctiondefinereferencefunctioncountervaluefunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinetransparencyfunctioncurrentprojectfunctiondefinetwopasslistfunction
cleanupbox function defineintermediatecolor function cleanuplayers function definelabels function clonefield function definelanguage function collectfloat function definelinkedlist function collecthelp function definemarking function colorcomponents function definemetafont function concatcommalist function definemultitonecolor function consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cos function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function defineselectfont function currentdate function definespotcolor function currentproduct function definestructureset function currentproduct function definestructureset function currentproject function definetwopasslist function currentreferencedefault function definetwopasslist function
cleanuplayers function definelabels function clonefield function definelanguage function collectfloat function definelinkedlist function collecthelp function definemarking function colorcomponents function definemetafont function concatcommalist function definemultitonecolor function consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cos function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function definespotcolor function currentdate function definespotcolor function currentproduct function definestructureset function currentproject function definetwopasslist function currentreferencedefault function definetwopasslist function
clonefieldfunctiondefinelanguagefunctioncollectfloatfunctiondefinelinkedlistfunctioncollecthelpfunctiondefinemarkingfunctioncolorcomponentsfunctiondefinemetafontfunctionconcatcommalistfunctiondefinemultitonecolorfunctionconsultfloatfunctiondefinenotefunctionconvertbtxdatasettoxmlfunctiondefineparallelfunctioncopypositionfunctiondefineparbuilderfunctioncosfunctiondefineprocesscolorfunctioncosdfunctiondefineprogramfunctioncountervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefinespotcolorfunctioncurrentdatefunctiondefinestructureblockfunctioncurrentenvironmentfunctiondefinestructuresetfunctioncurrentproductfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
collectfloat function definelinkedlist function collecthelp function definemarking function colorcomponents function definemetafont function concatcommalist function definemultitonecolor function consultfloat function definenote function convertbxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cos function defineprogram function countervalue function definesectionlevels function currentcomponent function definesectionlevels function currentdate function definespotcolor function currentdate function definestructureblock function currentproduct function definestructureset function currentproject function definestructureset function currentreferencedefault function definetwopasslist function
collecthelp function definemarking function colorcomponents function definemetafont function concatcommalist function definemultitonecolor function consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cosd function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function definespotcolor function currentdate function definespotcolor function currentproduct function definestructureblock function currentproduct function definestructureset function currentproject function definetwopasslist function currentreferencedefault function definetwopasslist function
colorcomponentsfunctiondefinemetafontfunctionconcatcommalistfunctiondefinemultitonecolorfunctionconsultfloatfunctiondefinenotefunctionconvertbtxdatasettoxmlfunctiondefineparallelfunctioncopypositionfunctiondefineparbuilderfunctioncosfunctiondefineprocesscolorfunctioncosdfunctiondefineprogramfunctioncountervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
concatcommalist function definemultitonecolor function consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cosd function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function defineselectfont function currentdate function definespotcolor function currentproduct function definestructureblock function currentproduct function definestructureset function currentproject function definestructureset function currentproject function definetwopasslist function currentproduct function definetwopasslist function
consultfloat function definenote function convertbtxdatasettoxml function defineparallel function copyposition function defineparbuilder function cos function defineprocesscolor function cosd function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function defineselectfont function currentdate function definespotcolor function currentproduct function definestructureblock function currentproduct function definestructureset function currentproject function definestructureset function currentreferencedefault function definetwopasslist function
convertbtxdatasettoxmlfunctiondefineparallelfunctioncopypositionfunctiondefineparbuilderfunctioncosfunctiondefineprocesscolorfunctioncosdfunctiondefineprogramfunctioncountervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
copypositionfunctiondefineparbuilderfunctioncosfunctiondefineprocesscolorfunctioncosdfunctiondefineprogramfunctioncountervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
cos function defineprocesscolor function cosd function defineprogram function countervalue function definereference function counttwopassdata function definesectionlevels function currentcomponent function defineselectfont function currentdate function definespotcolor function currentproduct function definestructureblock function currentproject function definestructureset function currentproject function definetransparency function currentprofect function definetwopasslist function
cosdfunctiondefineprogramfunctioncountervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
countervaluefunctiondefinereferencefunctioncounttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
counttwopassdatafunctiondefinesectionlevelsfunctioncurrentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
currentcomponentfunctiondefineselectfontfunctioncurrentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
currentdatefunctiondefinespotcolorfunctioncurrentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
currentenvironmentfunctiondefinestructureblockfunctioncurrentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
currentproductfunctiondefinestructuresetfunctioncurrentprojectfunctiondefinetransparencyfunctioncurrentreferencedefaultfunctiondefinetwopasslistfunction
<pre>currentproject function definetransparency currentreferencedefault function definetwopasslist function</pre>
<pre>currentreferencedefault function definetwopasslist function</pre>
<pre>currentreferenceorder function defineviewerlayer function</pre>
·
currentregimefunctiondefrostrandomseedfunction
<pre>currentsectiontolist function digits function</pre>
datasetvariable function disableautofontscript function
dayname function disableparbuilder function
defineattribute 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

doifelseintwopassdata	function	dostarttextfile	function
doifelsemarking	function	dostoptextfile	function
doifelsemessage	function	ecolumn	function
doifelsemultipar	function	elapsedtime	function
doifelseparallel	function	enableautofontscript	function
doifelsepositionsused	function	enablecolor	function
doifelserangeonpage	function	enablecolorintents	function
doifelsereference	function	enablefontcolorschemes	function
doifelsesavedfloat	function	enableparbuilder	function
doifelsespaces	function	enableregime	function
doifelseutfmathabove	function	enablespellchecking	function
doifelseutfmathaccent	function	enabletransparency	function
doifelseutfmathbelow	function	enhancelinkedlist	function
doifelsevisualizer	function	enhancelist	function
doiffieldcategoryelse	function	enhancereference	function
doiffieldelse	function	erasebuffer	function
doiffieldsetelse	function	expandcurrentreference	function
doiffiledefinedelse	function	exportformdata	function
doiffileexistelse	function	exportreferences	function
doiffirstcharelse	function	extensiblecode	function
doifinputfileelse	function	feature	function
doifinsetelse	function	featureattribute	function
doifleapyearelse	function	featurelist	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
doprocesstypescriptfile	function	firstinset	function
doreshapeframedbox	function	flushfloat	function

flushnotes	function	getrandomcounta	function
flushpostponedblocks	function	getrandomcountb	function
flushpostponednotes	function	getrandomseed	function
fontchar	function	getreadfilename	function
fontcollectionclone	function	getsubstring	function
fontcollectiondefine	function	gettexbuffer	function
fontcollectionprepare	function	gettwopassdata	function
fontcollectionregister	function	gettwopassdatalist	function
fontcollectionreport	function	geturl	function
fontcollectionreset	function	grabbuffer	function
fontlookupgetkey	function	hboxtovbox	function
fontlookupgetkeyofindex	function	helpaction	function
fontlookupinitialize	function	helpreference	function
fontlookupnoffound	function	hexstringtonumber	function
forceendjob	function	horizontalcode	function
forcequitjob	function	hour	function
format	function	hyphenatedlist	function
formatcolor	function	hyphenatedurl	function
formatgray	function	D characters	
freezerandomseed	function	N lefthyphenmin	
from	function	D mapping	
getbidimode	function	N righthyphenmin	
getbuffer	function	F setcharacters	
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

linenumbersstagetwo	function	nextcountervalue	function
listgroupindex	function	nextparallel	function
listlabel	function	nofdays	function
listlocation	function	nofitems	function
listprefixednumber	function	nofstackedfloats	function
listprefixedpage	function	notedeltapage	function
listrealpage	function	notelistindex	function
listsize	function	notenumberpage	function
listtitle	function	noteprefixednumber	function
listuserdata	function	notesymbolpage	function
loadbtxdefinitionfile	function	notetitle	function
loadexamodes	function	ntimes	function
loadfontgoodies	function	number	function
loadspellchecklist	function	numbers	function
loadtypescriptfile	function	objectnumber	function
loadvisualizer	function	objectpage	function
locatefilepath	function	octnumber	function
locfilename	function	octstringtonumber	function
lower	function	ordinal	function
makeactive	function	overloadbookmark	function
makebibauthorlist	function	<pre>page_injections_flush_after</pre>	function
markfonts	function	<pre>page_injections_flush_before</pre>	function
markregionbox	function	<pre>page_injections_save</pre>	function
math_frac	function	pagestaterealpage	function
mathrenderset	function	parpos	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

posplus	function	registerrendering	function
posstrut	function	registersoundclip	function
postponenotes	function	registerstructureprocessor	function
poswhd	function	registertransparency	function
posxy	function	registerunit	function
prepareMPvariable	function	relatemarking	function
preparedfile	function	remapentity	function
presetsymbollist	function	removemissingcharacters	function
presettabulate	function	renderingvar	function
prevcountervalue	function	replacemissingcharacters	function
processbuffer	function	replacepospxywhd	function
processcolorcomponents	function	resavefloat	function
processedfile	function	resetcharacteralign	function
processedfiles	function	resetcounter	function
processfile	function	resetfontfeature	function
processfilemany	function	resetfontsolution	function
processfilenone	function	resetmarking	function
processfileonce	function	resetmathattributes	function
processlist	function	resetmathitalics	function
processsplit	function	resetnullfont	function
pushfloat	function	resetparallel	function
pushitaliccorrection	function	resetprevdepth	function
pushlist	function	resetreference	function
pushreferenceprefix	function	resetstructureprocessor	function
pushregime	function	resettimer	function
pushsectionblock	function	restartcounter	function
rawcharacter	function	restorecounter	function
rawcountervalue	function	restorecurrentattributes	function
rawdate	function	restorenote	function
referencepagestate	function	romannumerals	function
referencerealpage	function	runbuffer	function
registerattachment	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

savetwopassdata	function	setmathattribute	function
second	function	setmathdirection	function
selectstructureblock	function	setmathitalics	function
setbreakpoints	function	setmathstyle	function
setbtxdataset	function	setnextinternalreference	function
setbtxentry	function	setnotestate	function
setcharacteralign	function	setnotesymbolpage	function
setcharactercasing	function	setobject	function
setcharactercleaning	function	setopendocumentaction	function
setcharacterkerning	function	setopenpageaction	function
setcharacterspacing	function	setowncounter	function
setcharacterstripping	function	setpagestate	function
setclosedocumentaction	function	setpagestaterealpageno	function
setclosepageaction	function	setpagetransition	function
setcolormodel	function	setparbuilder	function
setcounter	function	setpos	function
setdataset	function	setrandomseed	function
setdigitsmanipulation	function	setrealign	function
setdirection	function	setreferencearguments	function
setdocumentenvironments	function	setreferenceattribute	function
setdocumentfilenames	function	setreferenceoperation	function
setdocumentmodes	function	setreplacements	function
setdocumentmodules	function	setsectionblock	function
setfigurelookuporder	function	setstructureblockstate	function
setfirstline	function	settagcombination	function
setfontfeature	function	settagdescription	function
setfontofid	function	settagdescriptionsymbol	function
setfontsolution	function	settagfigure	function
setformat	function	settaghighlight	function
setformsmethod	function	settagitemgroup	function
setinitial	function	settagproperty	function
setinsertionlocation	function	settagsorting	function
setinterfaceconstant	function	settagsynonym	function
setinterfaceelement	function	settagtablecell	function
setinterfacemessage	function	settagtabulatecell	function
setinterfacemessages	function	setupbookmarks	function
setinterfacevariable	function	setupcanvas	function
setinternalreference	function	setupcharacterspacing	function
setlanguageexceptions	function	setupexport	function
setlanguagesynonym	function	setupfontexpansion	function
setlayer	function	setupfontprotrusion	function
setmarking	function	setupidentity	function
setmathalphabet	function	setupinsertion	function
setmathalternate	function	setupitaliccorrection	function

setvisualfunctionstorejavascriptcodefunctsetxmpfilefunctionstorejavascriptpreamblefunctshowassignerrorfunctionstorenotefunctshowattributesfunctionstrdpfunct	ion
showassignerror function storenote funct	
	ion
<pre>showattributes function strdp funct</pre>	
	ion
<pre>showbtxdatasetfields function strhd funct</pre>	ion
showcallbacks function strht funct	ion
<pre>showchardata function structureautocatcodedget funct</pre>	ion
<pre>showcounter function structurecatcodedget funct</pre>	ion
<pre>showfontparameters function structuregivencatcodedget funct</pre>	ion
<pre>showhyphenatedinlist function structurenumber funct</pre>	ion
<pre>showjustification function structuretitle funct</pre>	ion
<pre>showmessage function structureuservariable funct</pre>	ion
<pre>sin function structurevariable funct</pre>	ion
sind function strwd funct	ion
<pre>splitfilename function subcountervalues funct</pre>	ion
<pre>spotcolorname function synchronizecolormodel funct</pre>	ion
<pre>spotcolorparent function synchronizemarking funct</pre>	ion
<pre>spotcolorvalue function taggedmathfunction funct</pre>	ion
startchemical function tan funct	ion
startcolorset function tand funct	ion
<pre>startcomponent function testcase funct</pre>	ion
startenvironment function textime funct	ion
startfontsolution function thefirstcharacter funct	ion
<pre>startparbuilder function theremainingcharacters funct</pre>	ion
<pre>startproduct function thetexdefinition funct</pre>	ion
<pre>startproject function transparencycomponents funct</pre>	ion
startregime function triggereffect funct	
<pre>startsectionlevel function triggernegative funct</pre>	
starttag function truefilename funct	
starttext function typebuffer funct	
startviewerlayer function typefile funct	
stopchemicalfunctiontypestringfunct	
stopcolorset function uchexnumber funct	
<pre>stopcomponent function uchexnumbers funct</pre>	
stopenvironmentfunctionundefinechemicalfunct	
<pre>stopfontsolution function unicodechar funct</pre>	
stopparbuilder function unit funct	
<pre>stopproduct function unloadlanguage funct</pre>	
stopproject function upper funct	
<pre>stopregime function useMPlibrary funct</pre>	
<pre>stopsectionlevel function useanyfile funct</pre>	
stoptagfunctionusebtxdatasetfunct	
stoptext function usecldfile funct	ion

usecolors	function
usecomponent	function
useenvironment	function
usefile	function
usejavascriptpreamble	function
usejavascriptscripts	function
uselibrary	function
useluafile	function
useluamodule	function
usemodules	function
usepath	function
useproduct	function
useproject	function
usesubpath	function
usesymbols	function
usetexfile	function
useurl	function
usexmlfile	function
usezipfile	function
utfchar	function
utfmathclass	function
utfmathcommand	function
utfmathcommandabove	function
utfmathcommandbelow	function
utfmathfiller	function
utfmathstretch	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

function
function

containers (context)

cleanname	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		
lchexnumber	function		
lchexnumbers	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
files
files
getargument
getfilename
options
data table
table
function
function
table

T commandline

D environments

D modes
D modules

T ctxfile

D environments

D modes

D modules

setargument function
setdefaultargument function
setfilename function
variables data table

environment (context)

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

truefilename validengines

function data table

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 bases data table function bitmapimage boxnumber number cachepaths data table check function checkers data table data table converters function current defaultdepth number defaultheight number defaultsearch boolean defaultwidth number function done dummy function existers data table exists function formats data table found data table function get auess function hash function identifiers data table function identify 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 function pop preferquality boolean programs data table push function registerpattern function registerresource function

registersuffix resources scale setlookups setorder setpaths suffixes

used

function data table function function function function data table data table

file (basic lua)

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

floats (context)

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

font (basic tex)

current function define function each function fonts table frozen function 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 calculatescale
D initializers		F checkedfeatures
D methods		F checkedfilename
F setstate		F checkvirtualids
T states		F cleanuptable
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 useunicodemar	ks	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 encodingby	tes
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 mathitalic	S
S hfactor	S mode	
S mathsize	S name	
T protrusion	S noglyphnam	es
S auto	S nostackmat	h
S quad	S psname	
S scaledpoints	S textitalic	S
S scriptpercentage	S virtualize	d
S scriptscriptpercentage	D loadedfonts	
S size	S namemode	
S slantfactor	F newfeatures	
S slantperpoint	F newhandler	
T spacing	N noffontsloaded	i
S extra	N nofsharedfonts	5
S shrink	N nofsharedhashe	es
S stretch	N nofsharedvecto	ors
S width	N privateoffset	
T synonyms	F readanddefine	
S em	F registerfeatur	^e
S ex	B resolvevirtual	too
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	Ī
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 applypostproce	essors
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	<pre>handlers table</pre>	
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	
<pre>encodings table</pre>	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 defaultbasealte		
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 fontpatternhas	size
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 splitfontpatte	
F combine	iterators	table
T combiner	F characters	
D commands	F descriptions	
F find	F glyphs	
D helpers	loggers	table

F add_placeholde	ers	nulldata	data table
T category_to_p	laceholder	protrusions	data table
s II		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 definetypefac	е
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	2	F name	
F register		F selectfont	
F reportdefined	fonts	F simplefonts	
F reportusedfeat	tures	F spec	
mappings	table	F style	
F addtounicode		F registerfallb	ack
F fromunicode16		F searchfiles	
F loadfile		specifiers	table
F loadline		D contextmerged	
F loadlumtable		F contextnumber	
F makenameparse	r	D contextnumber	5
F reset		D contextsetups	
F tounicode16		F contexttostri	ng
F tounicode16sed	quence	F definecontext	
mp	table	F mergecontext	
D cache		F presetcontext	
B inline		F registerconte	xt
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
сору	function
immediatewrite	function
keys	function
new	function
node	function
ofindex	function
package	function
print	function
scan	function
serialize	function
totable	function
types	function
write	function

interactions (context)

```
attachments data table
fields
               table
   F clone
   F define
   F defineset
   F insert
general
               table
   F getidentity
   F setupidentity
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
               table
pages
   F setpagetransition
   F setupcanvas
references table
   F setclosedocument
   F setclosepage
   F setopendocument
   F setopenpage
              data table
renderings
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 function getmessage data table hashedsetups interfacedcommand function interfaces table invalidkev function function is command table namespaces

F define F list

registernamespace function setconstant function setelement function setformat function setmessage function function setmessages settranslation function function setuserinterface setvalidkeys function setvariable function function showmessage data table syntax 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 function o limiter o limiters table

T paranoid

open overloaded function

output function
pathseparator string

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

job (context)

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

- F region
- F replace
- F rightskip
- F set
- F setall
- F setdim
- D tobesaved
- F upperleft
- F upperright
- F width
- Fχ
- F xy
- Fу

register function save function

table

structure D collected

- T components
- T tobesaved
 - T branches
- S name
- S type

variables table

- D checksums
- D collected
- F getchecksum
- F makechecksum
- F 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 function current data data table define function table frequencies

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
replacements table

F add F handler F set

righthyphenmin function setexceptions function setsynonym function unload function version number words table

T data
F disable
F enable
T enablers

B enables

F check

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

isfile function lock function lock dir function mkdir function mkdirs function readlink function rmdir function function setmode function shortname 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 function convertstring einject function eprint function escape function finalized function finject function fprint function get function getvariables function htmfile function html table Fa

F td

F th include

function inherited table

> S color-background-four S color-background-one

S color-background-three

S color-background-two

S title

initialize function inject function **lmxfile** function loadedfile function function new overloaderror function popupfile function print function pν function report function reset function result function function set show function showdebuginfo function showerror function stripcss function tν function function type 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 function enable exporters table extendbanner function flush function function help function messenger new function newline function function poptarget function pushtarget report function reportbanner function function reporter table reporters

> F banner F export

F help

F info

Flines

F version

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

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

lpdf (context)

injectxmpinfo

action	function	insertxmpinfo	function
adddocumentcolorspace	function	javascript	function
adddocumentextgstate	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		

function

lpeg (basic lua)

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

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

ltn12 (extra lua)

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

F string

lua (basic tex)

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

luatex (context)

cleanuptempfiles function
registerstartactions function
registerstopactions
registertempfile function
starttime number

lxml (context)

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

math (basic lua)

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

mathematics (context)

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

resetitalics scaleparameters

setalternate function setitalics function syncboth function function syncname function syncstyle function toname tostyle function tweakaftercopyingfont function tweakbeforecopyingfont function tweaks table utfmathclass function utfmathcommand function utfmathfiller function utfmathstretch function

function

function

function

mbox (context)

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

md5 (extra lua)

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

metapost (context)

analyzeplugins	function	gettext	function
checkformat	function	graphic	function
checktexts	function	graphic_base_pass	function
collapse	boolean	instance	function
colorinitializer	function	intermediate	table
convert	function		table
defaultformat	string	T actions	
defaultinstance	•	F makempy lastlog	c+rina
defaultmethod	string	llx	string number
directrun	string function	lly	number
edefsxsy	function	load	function
•	function	makempy	table
escaped exectime	table	.,	table
exectime	data table	N nofconverted	
filterclippath	function	F processgraphics	
finder	function	F registerfile metafun	table
flush	function		table
flushers	table	F interpolate	
	table	F topath method	number
T pdf			table
F comment		mptopdf	table
F flushfigure		F convertmpstopdf	
F startfigure		N nofconverted	boolean
F stopfigure		multipass -	number
F textfigure flushliteral	function	n nvformat	function
	function	optimize	boolean
flushnormalpath flushreset	function	•	function
fonts	table	parse	function
	table	pdfliterals	function
F define		pluginactions	function
T flusher		process	function
F flushfigure		processplugins	function
F startfigure		processspecial	function
F stopfigure		quickanddirty	boolean
N instances		reducetogray	
F process	function	reporterror	function function
format		reset	
format_number	function	resetlastlog	function
<pre>format_string formatnumber</pre>	function	resetplugins	function
	function	resettextexts	function
getclippath	function	setextensions	function
getextensions	function	setoutercolor	function

settext function
settextexts function
showlog boolean
svformat function
tex table

F get
F reset
F set

boolean texerrors function textextsdata theclippath function function totable unload function untagvariable function urx number number ury variables table

mime (extra lua)

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

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 function process processors table T collapse F mlist_to_hlist T relocate T render T resize

T unscript

node (basic tex)

		for all an		
copy		function	F set_attribute	
copy_l		function	F setbox	
count		function	F setfield	
	-	function	F slide	
dimens		function	F tail	
direct		table	F todirect	
F co			F tonode	
	ppy_list		F tostring	
F co			F traverse	
	urrent_attr		F traverse_id	
	imensions		F unprotect_glyphs	
	o_ligature_n		F unset_attribute	
	nd_of_math		F usedlist	
	irst_glyph		F vpack	
	lush_list		F write	
	Lush_node		do_ligature_n	function
Ffr			end_of_math	function
F ge	etbox		family_font	function
-	etchar		fields	function
_	etfield		first_character	function
F ge	etfont		first_glyph	function
F ge			flush_list	function
F ge	etleader		flush_node	function
5	etlist		free	function
F ge	etnext		getchar	function
-	etprev		getfield	function
_	etsubtype		getfont	function
F ha	as_attribute		getid	function
	as_field		getleader	function
F ha	as_glyph		getlist	function
F hp			getnext	function
Fin	nsert_after		getprev	function
Fin	nsert_before		getsubtype	function
Fis	s_direct		has_attribute	function
Fis	s_node		has_field	function
Fla	ast_node		has_glyph	function
Fle	ength		hpack	function
F ne	ew		id	function
Fpr	rotect_glyphs		insert_after	function
Fpr	rotrusion_skippable		insert_before	function
Fre	emove		is_node	function

function
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	aetid	function
F buildpage_filter	tabte	getleader	function
F vpack_filter		getlist	function
codes	data table	getnext	function
concat	function	getprev	function
сору	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	hpack idstostring	function function

F handler

function

getattr

mathcodes F installnewkern mlist to hlist F setcursive F setkern new noadcodes F setmark nodecodes F setpair insert after function nopts insert before function nuts 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 kernina 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 firstalvph lines table F flush_list T boxed F flush node F register F free F setup F getattr F getattribute F stage_one 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

data table function function data table data table function table F insert list after F temp F is direct F textdir F usage F is_display_math F is node T userids F is nut N margins.inline F kerning N splitters.one F last_node N splitters.two F leftmarginwidth Fuserlist F usernumber F ligaturing F link F userstring F linked F usertokens F vlist F locate 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 setattribute F latelua F setattributes 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 userids	
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 serialize	function function
F kern F latelua		serializebox	function
F lineskip		set attribute	function
·		setattr	function
F pdfannotation F pdfdestination		setattribute	function
F pdfliteral		setattributes	function
F pdfsetmatrix		setbox	function
r purseumatrix		SELDOY	Tunction

setfield setunsetattributes	function function	<pre>textdir_is_opposite textdir_is_parallel</pre>	data table data table
shifts	table	tobasepoints	function
D data	table	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
		T -b	
F set		T characters	
F set striprange	function	F collect	
	function function		
striprange		F collect	
striprange tail	function	F collect F equal	
striprange tail tasks	function	F collect F equal F indices	
<pre>striprange tail tasks F actions</pre>	function	F collect F equal F indices F start	
<pre>striprange tail tasks F actions F appendaction</pre>	function	F collect F equal F indices F start F string	
<pre>striprange tail tasks F actions F appendaction F disableaction</pre>	function	F collect F equal F indices F start F string F unicodes T colors F reset	
<pre>striprange tail tasks F actions F appendaction F disableaction F disablegroup</pre>	function	F collect F equal F indices F start F string F unicodes T colors	
<pre>striprange tail tasks F actions F appendaction F disableaction F disablegroup F enablegroup F enablegroup F freeze</pre>	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist	
<pre>striprange tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup</pre>	function	F collect F equal F indices F start F string F unicodes T colors F reset F set	
<pre>striprange tail tasks F actions F appendaction F disableaction F disablegroup F enablegroup F enablegroup F freeze</pre>	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist	
<pre>striprange tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup</pre>	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F set F setlist F fontchar T frequencies F register	
striprange tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist F fontchar T frequencies	
striprange tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new F prependaction	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F set I f setlist F fontchar T frequencies F register T pool T nodes	
striprange tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new F prependaction F removeaction F restart F setaction	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule	
tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new F prependaction F removeaction F restart F setaction F showactions	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts	
tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new F prependaction F removeaction F restart F setaction F showactions F table	function table	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts F rule	
tail tasks F actions F appendaction F disableaction F disablegroup F enableaction F enablegroup F freeze F freezegroup F new F prependaction F removeaction F restart F setaction F showactions	function	F collect F equal F indices F start F string F unicodes T colors F reset F set F setlist F fontchar T frequencies F register T pool T nodes F rule T nuts	

F setlist F setproperties F start T steppers F check F codes F features 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 function traverse id table typesetters 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

vianuts

visualizebox

visualizers

F box
F handler
F markfonts
F setfont

F setlayer F setvisual

vpack function
whatcodes data table
whatsitcodes data table
writable_spec function
write function

function

function

function

table

number (context)

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

os (basic lua)

•	•	
getenv	function	
setenv	function	
binsuffix	string	
binsuffixes	table	
clock	function	
converttime	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	
_		

string

type

uname
uuid function
validdate function
weekday function
where function
which function

package (basic lua)

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

F resolve
F setmethod
T sorters

•			
addtexentry	function	F dataset	
analyze	function	F default	
authors	table	F short	
F concat		listvariants	table
F inverted		F default	
F invertedshort		F num	
F normal		F short	
F normalshort		load	function
F setsettings		loadbibdata	function
F short		loaders	table
F splitstring		F bib	
citeconcat	function	F endnote	
citevariants	table	F lua	
F author		F refman	
F authornum		F xml	
F authoryear		markasupdated	function
F authoryears		new	function
F default		refman_to_btx	function
F num		singularorplural	function
F page		statistics	table
F serial		N nofbytes	
F short		N nofdatasets	
collected	data table	N nofdefinitions	
converttoxml	function	N nofshortcuts	
datasets	table	tracers	table
endnotes_to_btx	function	T categories	
enhance	function	T citevariants	
getindex	function	T fields	
listconcat	function	T listvariants	
lists	table	F showdatasetfields	i
F collectentries			
F doifalreadyplace	d		
F fetchentries			
F filterall			
F flushentries			
F nofregistered			
F register			
F registerplaced			

regimes (context)

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

resolvers (context)

find_files

findbinfile

findctxfile

finders

allprefixes	function	findfile
appendhash	function	findfiles
automount	function	findgivenfile
automounted	table	findgivenfiles
booleanvariable	function	findpath
cacheversion	string	findtexfile
checkedvariable	function	findwildcardfile
cleanpath	function	findwildcardfiles
cleanpathlist	function	formatofsuffix
concatinators	data table	formatofvariable
configbanner	string	formats
criticalvars	data table	generators
dangerous	data table	getenv
datastate	function	getownpath
defaultsuffixes	table	getreadfilename
dowithfilesandreport	function	hashers
dowithfilesintree	function	homedir
dowithpath	function	inputstack
dowithvariable	function	installinputfilehandler
env	function	installinputlinehandler
executers	table	instance
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 loaderror
expansion	function	D order
extendtexmfvariable	function	B remember
find_file	function	B renewcache

function

function

function

data table

function data table data table function function function data table string table function function table

B renewtree

B savelists

D specification

D setups

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 cleanname	
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		•	
registerrite	function	variable	function

variableofformatorsuffix function wildcardpattern

function

scripts (context)

table

autofontfeature

F disable F enable F handler categorytonumber data table colors data table decomposehangul function defaults table N inter_char_half_shrink_factor N inter_char_half_stretch_factor N inter_char_hangul_penalty N inter_char_quarter_shrink_factor N inter char quarter stretch factor N inter char shrink factor N inter_char_stretch_factor N inter_word_stretch_factor handlers data table hash table injectors data table installdataset function installmethod function numbertocategory data table numbertodataset data table numbertohandler data table reset function set function splitters data table

set (context)

contains function
create function
tolist function
tonumber function
totable function

socket (extra lua)

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

S rece:	ived	sinkt	table	
S rece	ived-from-mta	F close-v	hen-done	
S refe	rences	F default		
S refe	rer	F http-chunked		
S remot	te-mta	F keep-op	F keep-open	
S reply	y-to	skip	function	
S repo	rting-mta	sleep	function	
S reser	nt-bcc	smtp	table	
S reser	nt-cc	S DOMAIN		
S reser	nt-date	N PORT		
S reser	nt-from	S SERVER		
S reser	nt-message-id	N TIMEOUT		
S reser	nt-reply-to	S ZONE		
S reser	nt-sender	F message	•	
S reser	nt-to	F open		
S retr	y-after	F send		
	rn-path	source	function	
S sende		sourcet	table	
S serve		F by-length		
	-remote-recipient	F default		
S stati		F http-chunked		
S subje	ect	F until-o		
S te		tcp	function	
S to		tcp6	function	
S trai		tp	table	
S transfer-encoding		N TIMEOUT		
S upgra		F connect		
S user	-agent	try	function	
S vary		udp udp6	function function	
S via	i	uupo url	table	
S warn:				
	S will-retry-until F absolute S www-authenticate F build		.e	
S x-ma:			na+h	
http	table	F escape	, a cii	
N PORT		F parse		
N TIMEOU	т		nath	
S USERAG		F parse_path F unescape		
F open				
F reques	t			
newtry	function			
protect	function			
select	function			
sink	function			

sorters (context)

comparers table

F basic

constants table

S defaultdigits

S defaultlanguage

S defaultmethod

N digitsmaximum

N digitsoffset

N ignoredoffset

N replacementoffset

definitions data table

firstofsplit function

setlanguage sort

function 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 number max min number **nofmodules** number noftables number register function shared data table boolean strip 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	F %f %f %f %f %f cm
autosingle	function	F %1,
booleanstring	function	F %p
byte	function	F %q,
bytepairs	function	F %s
bytes	function	F %s %s
char	function	F %s %s %s
	function	F %s %s %s %t
characters	function	F %s %s %s %s
checkedsplit	function	F %s Tc %s w %s Tr
•	function	F %s mul
count	function	F %s%s%s
dump	function	F %s,
escapedpattern	function	F %s%s
explode	function	F %s->%s->%s
find	function	F %s->%s->%s->%s->%s
format	function	F %s:%s
formatter	function	F %s:%s:%s
formatters	function	F %s=%q
F {%t},		F %s={
F %t (%t)		F %w%l,
F %tcycle		F %w%q,
F %-10s: %s		F %w%s,
F %-15s :		F %w[%l]=%l,
F %-15s : %s		F %w[%l]=%q,
F %-15s >		F %w[%l]=%s,
F %-15s >		F %w[%l]={
F %-15s > %s		F %w[%l]={%, t },
F %-15s > %s		F %w[%l]={},
F %-15s > %s >		F %w[%q]=%l,
F %-15s > %s >		F %w[%q]=%q,
F %-15s > %s > %	S	F %w[%q]=%s,
F %-15s > %s > %		F %w[%q]={
	%.3f k %.3f %.3f %.3f K	F %w[%q]={%, t },
	rg %.3f %.3f %.3f RG	F %w[%q]={},
F %.3f g %.3f G		F %w[%s]=%l,
F %0.1fpt		F %w[%s]=%q,
F %0.8f %0.8f %0	.8f %0.8f	F %w[%s]=%s,
F %U		F %w[%s]={
F %U (%s)		F %w[%s]={%, t },
F %a loaded		F %w[%s]={},

```
F %w{
                                                             S lua
                                                             S tex
F %w{%, t },
                                                             S unichr
F %w{},
F %w},
                                                             S xml
F (%p,%p)
                                                           F plib .b col(%q)
F /%s %s
                                                           F plib .b region(%q)
F /%s << %t >>
                                                           F _plib_.e_col()
F /%s [ %t ]
                                                           F plib .e region(%s)
F /%s cs /%s CS %s SCN %s scn
                                                           F plib .enhance(%q)
F /Tr%s qs
                                                           S preamble
F 1 0 0 0 1 %f %f cm
                                                           S type
F << %t >>
                                                           F a=%1.3f%st=%1.3f
F << /Type /Annot %s /Rect [%0.3f %0.3f %0.3f %0.3f] >>
                                                           F h.%s
F M-H-%H
                                                           F buffer.%s
F M-N-%H
                                                           F c:%s:%s:%s:%s
F MpSh%s
                                                           F c=%1.3f%sm=%1.3f%sy=%1.3f%sk=%1.3f
F Tr%s
                                                           F chem_%s%s(%s,%s,"\chemicaltext{%s}");
F U+%04X:%s
                                                           F chem %s%s(%s,%s,%s,%s,%s);
F [ %t ]
                                                           F chem %s(%s,%s,"");
F [%q]=
                                                           F chem %s(%s,%s,%s);
F [%a]=%l.
                                                           F chem c%s(%s,%s,"");
                                                           F chem set(%s);
F [%q]=%q,
F [%q]=%s,
                                                           F [%q] = {
                                                           F chem_symbol("\chemicalsymbol[equilibrium]{%s}{%s}");
F [%s]=
                                                           F chem symbol("\chemicalsymbol[gives]{%s}{%s}");
F [%s]=%l,
                                                           F chem symbol("\chemicalsymbol[mesomeric]{%s}{%s}");
                                                           F chem_symbol("\chemicaltext{%s}");
F [%s]=%q,
F [%s]=%s,
                                                           F chem trace boundingbox := %l;
F [%s][%s]
                                                           F d:%s:%s:%s
F \Umathchardef\%s "%X "%X "%X
                                                           F dup %s mul exch dup %s mul exch %s mul
F \convertnumber{%s}{%s}
                                                           F dup %s mul exch dup %s mul exch dup %s mul exch %s mul
F \ugdef\%s{\Udelimiter "%X "%X }
                                                           F e:%s
F \ugdef\%s{\Udelimiter 0 "%X "%X }
                                                           F flushing realpage %s, userpage %s
F \ugdef\%s{\Udelimiterover "%X "%X }
                                                           F jobname %a, input %a, result %a
F \uqdef\%s{\Udelimiterunder "%X "%X }
                                                           F lang-frg-%s.lua
F \ugdef\%s{\Umathaccent 0 "%X "%X }
                                                           F language %a is active
F \ugdef\%s{\Umathbotaccent 0 "%X "%X }
                                                           F mfun_tt_w[%i] := %f ; mfun_tt_h[%i] := %f ; mfun_tt_d[%i]
F \ugdef\%s{\Uradical "%X "%X }
                                                           F multilocs[%s] := %s ; multikind[%s] := "%s" ; multipars
F \ugdef\%s{\Uroot "%X "%X }
                                                           F multiregs[%s] := (%--t--cycle) shifted - %s;
F bpnf (%s,%s,%s,'%s')
                                                           F p:%s
                                                           F p:%s:%s:%s:%s
T _extensions_
                                                           F p=%1.3f
 S chruni
 S font:features
                                                           F p=%s
 S font:name
                                                           F path multiregs[], multipars[], multibox; string multik
```

```
F path posboxes[], posregions[]; numeric pospages[]; numapattemposboxes; កាំក្រោលទាំងសំណេះ := %s; %t;
   F pdf: q 1 0 %f 1 0 0 cm
                                                     totable
                                                                        function
   F pospages[%s] := %s ; posboxes[%s] := (%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)--cyflencthionegions[%s] := (%p,%p)--(%p,%p)
                                                     tracedchar
                                                                        function
   F processed mkvi file %a, delta %s
                                                     tracedchars
                                                                        table
   F q %f %f %f %f %f cm
                                                     unquote
                                                                        function
   F r:%s:%s:%s
                                                                        function
                                                     unquoted
   F r=%1.3f%sg=%1.3f%sb=%1.3f
   F region:%s
                                                     upper
                                                                        function
                                                     utfcharacters
                                                                        function
   F return {
   F return {%t}
                                                     utfvalues
                                                                        function
                                                     valid
                                                                        function
   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
                  function
asub
is boolean
                  function
is empty
                   function
itself
                   function
                   function
len
limit
                  function
longtostring
                  function
lower
                  function
match
                  function
                  table
nspaces
quote
                   function
                   function
quoted
rep
                   function
                   function
reverse
split
                  function
splitlines
                  function
splitup
                  function
strip
                  function
sub
                  function
tformat
                  function
toboolean
                  function
tocontext
                  function
todimen
                  function
tonodes
                  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 F userdata D stored F uservalue itemaroups table marks table F maxwidth D data F nofitems F define F exists F register lists table F fetch F addto F fetchallmarks F fetched F analyze B autoreorder F fetchonemark F fetchtwomarks D cached D collected F aet F discard F number F enhance F relate T enhancers F reset F filter F set F filtercollected F show F formulanumber F synchronize F groupindex F title F hasnumberdata T tracers F haspagedata F showtable table F hastitledata notes D internals F checkpagechange F iscached F define F label F doifonsamepageasprevious F location F get Fnumber F getdeltapage D ordered F getn F page F getnumberpage F popnesting F getstate F prefix F getsymbolpage F prefixednumber F hascontent F prefixedpage F internal F internalid F process F listindex D pushed F pushnesting F ordered F realpage F postpone F reordered F resetpostponed T result F restore D sectionblocks F save F sectionnumber F setstate F size F setsymbolpage F title D states D tobesaved F store

pages	table	F injectcurrentset
F analyze		D internals
D collected		F load
F is_odd		F loadpresets
F number		F mark
F save		D pages
D tobesaved		U prefixsplitter
references	table	D productdata
F analyze		T programs
F checkedfile		T data
F checkedfileorurl		F define
F checkedprogram		F get
F checkedrealpage		F realpageofpage
F checkedurl		U referencesplitter
D collected		D referred
U componentsplitter		F referredpage
F currentmetadata		F registerfinalizer
F currentorder		F registerinitializer
D currentset		F registerpage
F define		F reportproblems
D defined		F reset
D derived		T resolvers
F enableinteraction		F reference
F enhance		F section
F enhance D executers		
		F section
D executers		F section D runners
D executers F expandcurrent F export T files		F section D runners F set F setandgetattribute F setcomponent
D executers F expandcurrent F export T files T data		F section D runners F set F setandgetattribute F setcomponent F setinnermethod
D executers F expandcurrent F export T files T data F define		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference
D executers F expandcurrent F export T files T data F define F get		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal
D executers F expandcurrent F export T files T data F define F get F filter		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder
D executers F expandcurrent F export T files T data F define F get F filter F filterdefault		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder D specials
D executers F expandcurrent F export T files T data F define F get F filter F filterdefault D filters		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder D specials F splitcomponent
D executers F expandcurrent F export T files T data F define F get F filter F filterdefault D filters F from		F section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder D specials F splitcomponent F splitprefix
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 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
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 get F get F get F get F get		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
D executers F expandcurrent F export T files T data F define F get F filter F filters F from F get F getcurrentmetadata F getcurrentprefixspec		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
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 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
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		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
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 section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder D specials F splitcomponent F splitprefix F splitprefix F splitreference T testrunners F inner F special F special operation F special operation
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 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
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 section D runners F set F setandgetattribute F setcomponent F setinnermethod F setinternalreference F setnextinternal F setnextorder D specials F splitcomponent F splitprefix F splitprefix F splitreference T testrunners F inner F special F special operation F special operation

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 numberatdepth	
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 table tags 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
append	function
are_equal	function
autokey	function
compact	function
concat	function
contains	function
copy	function
count	function
derive	function
deserialize	function
drop	function
fastcopy	function
fastserialize	function
flattened	function
fromhash	function
getmetatablekey	function
has_one_entry	function
identical	function
imerge	function
imerged	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

setmetatablenewindex	function
sort	function
sorted	function
sortedhash	function
sortedhashkeys	function
sortedkeys	function
sortedpairs	function
strip	function
sub	function
swapped	function
tocontext	function
tocsv	function
tofile	function
tohandle	function
tohash	function
toxml	function
twowaymapper	function
unique	function
unnest	function
unpack	function
values	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	prtcatcodes	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 tpbcatcodes number tprint function trackers data table txtcatcodes number function type table uccode uniformdeviate function uprint function vrbcatcodes number write function

texconfig (basic tex)

error_line number expand_depth number formatname string half_error_line number hash extra number function init 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
    Fa
    F b
    F c
   F showtoken
   F test
   F trace
egroup
              table
              table
hbox
letter
              function
              function
letters
other
              function
vbox
              table
```

table

vtop

tracers (context)

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

T context
T internals
T scratch

name function
primitive function
printerror function
showlines function
strings table

S undefined

toks function
type function

trackers (context)

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

typesetters (context)

alignments	table	F installhandler	
F handler		F processmath	
F set		F set	
breakpoints	table	F setcolor	
F define		F setmath	
F handler		F tomode	
D mapping		firstlines	table
T methods		T actions	
T numbers		F default	
F set		F line	
F setreplacement		F word	
cases	table	F handler	
T actions		F set	
F handler		initials	table
F register		T actions	
F set		F default	
characteralign	table	F handler	
F handler		F set	
F resetcharacter	align	italics	table
F setcharacteral	ign	F forcevariant	
characters	table	F handler	
F handler		F reset	
F replacenbsp		F set	
F replacenbspace	s	kerns	table
checkers	table	D factors	
F handler		F handler	
F reset		F keepligature	
F set		B keeptogether	
cleaners	table	D mapping	
F handler		F set	
F set		margins	table
digits	table	F finalhandler	
T actions		F globalhandler	
F handler		F ha	
F set		F localhandler	
directions	table	F save	
F getfences		processors	table
F getglobal		F apply	
F getmethod		F register	
F handler		F reset	
T handlers		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

 ${\tt F} \ {\tt initialize_reflow_height}$

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	len
F byte	tubte		lower
F char			match
F dump			rep
F find			reverse
F forma	a†		sub
F gfind			upper
F gmate		utf8	
F gsub			byte
F len			char
F lower	r		characters
F match	h	F	chrlen
F rep		F	count
F reve	rse	F	dump
F sub		F	filetype
F upper	r	F	find
grapheme	e table	F	format
F byte		F	gfind
F char		F	gmatch
F dump		F	gsub
F find		F	is_valid
F forma	at	F	len
F gfind	d	F	length
F gmate	ch	F	lower
F gsub		F	magic
F len		F	match
F lower	r	F	remapper
F match	h	F	rep
F rep		F	replacer
F reve	rse	F	reverse
F sub			split
F upper			splitlines
latin1	table		sub
F byte			subtituter
F char			tocodes
F dump			toeight
F find			toentities
F forma			tostring
F gfind			totable
F gmate	LII		upper
F gsub		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	cheme 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	pars	sers	table
F disable		F	add_settings_to_a	array
F enable		F	arguments_to_tab	le
F savestats		F	array_to_string	
F showstats		F	csvsplitter	
formatters	table	F	getparameters	
F formatcolumns		F	hash_to_string	
F list		F	iterator	
F stripzeros		F	keq_to_hash	
garbagecollector	table	F	listitem	
F check		F	make_settings_to	_hash_pattern
N criterium		F	mergehashes	
B enabled		F	options_to_hash	
lua	table	Т	patterns	
B alwaysstripcode			U settings_to_arm	ay
F compile			U settings_to_has	sh_a
F loadedluacode			U settings_to_has	sh_b
F loadstripped			U settings_to_has	sh_c
N nofstrippedbytes			U unittotex	
N nofstrippedchunks	5	F	process_stripped	_settings
B stripcode		F	rfc4180splitter	
T strippedchunks		F	runtime	
F strippedloadstrin	ng	F	settings_to_arra	y
T suffixes		F	settings_to_arra	y_with_repeat
S lua		F	settings_to_hash	
S luc		F	settings_to_hash	_strict
S lui		F	settings_to_hash	_tolerant
S luj		F	settings_to_set	
S luv		F	simple_hash_to_s	tring
S tma		F	splitthousands	
S tmc		F	stepper	
S tua		F	stripped_setting	s_to_array
S tuc		F	unittotex	
packers	table	F	unittoxml	
F hashed		repo	ort	function
F new		sequ	iencers	table
F pack		F	appendaction	
F simplehashed		F	appendgroup	
F strip		F	compile	
F unpack		F	disableaction	
N version		F	disablegroup	

F enableaction F enablegroup D functions F localize F new F nodeprocessor F prependaction F prependgroup F removeaction F setkind F tostring table setters F disable F enable F initialize F list F new F register F report F reset F show stacker table F new storage table F allocate F checked F mark F marked F setinitializer F sparse strings table F collapsecrlf T formatters F add F new F newrepeater F nice F striplong F tabtospace T tracers tables table F accesstable

F definedtable F definetable

F encapsulate
F insertaftervalue
F insertbeforevalue
F migratetable

templates

F removevalue

table

mplates ta
F load
F replace
F replacer
F resolve

vf (context)

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

visualizers (context)

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

xml (context)

addentitiesdoctype	function	D toy	
after	function	D tex	
all	function	D texline	
applylpath	function	D texspace 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	cubic	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	
сору	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 chainattribute	

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	<pre>inject_element</pre>	function
F	tag	<pre>inject_element_after</pre>	function
F	tags	<pre>inject_element_before</pre>	function
F	text	injectafter	function
F	upper	injectbefore	function
F	upperall	insert	function
Τx	ml	insert_element	function
F	all	<pre>insert_element_after</pre>	function
F	att	<pre>insert_element_before</pre>	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
	lowerall	makestandalone	function
	match	match	function
	name	name	function
F	position	newhandlers	function
F	reverse	nodesettostring	function

originalload	function
package	function
parent	function
parsedentitylpeg	userdata
pihandlers	table
placeholders	table
F unknown_any_entity	
F unknown_dec_entity	
F unknown_hex_entity	
position	function
privatecodes	table
privatetoken	function
process	function
process_attributes	function
process_elements	function
processattributes	function
profiled	table
raw	function
registerentity	function
registerns	function
remap_name	function
remap_namespace	function
remap_tag	function
remapname	function
remapnamespace	function
remaptag	function
renamespace	function
replace	function
replace_element	function
resolvens	function
root	function
save	function
selection	function
separate	function
serialize	function
setcdata	function
sethandlersfunction	function
setproperty	function
settings	function
specialhandler	table
sprint	function
string	function

strip

strip_whitespace

stripelement function stripleadingspaces function table function function text function textonly texttocdata function tocdata function toelement function tostring function function toxml tprint function traverse function function unescaped unprivatized function withelement function withelements function function wrap xmlns table

function

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
crc32 function
decompress function
decompressobj function
version function