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

ConT_EXt MkIV

global (alias: _G)

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

lpeg	table	require	function
tpeg ltn12	table	resolve_fences	function
lua	table	resolvers	table
luatex	table	scripts	table
lxml	table	select	function
math	table	set	table
mathematics	table	setcharacteralign	function
mbox	table	setfenv	function
md5	table	setinspector	function
metapost	table	setmetatable	function
mime	table	socket	table
module	function	sorters	table
moduledata	table	statistics	table
modules	table	status	table
mplib	table	storage	table
newline	function	streams	table
newproxy	function	string	table
next	function	stripmath	function
noads	table	structures	table
node	table	swialib	function
nodes	table	table	table
number	table	tex	table
optionalrequire	function	texconfig	table
os	table	texio	table
outputpagestree	function	thirddata	table
package	table	toboolean	function
pagebuilders	table	token	table
pairs	function	tokens	table
parametersets	table	tonumber	function
pattern	userdata	tostring	function
pcall	function	trace_characters	boolean
pdf	table	tracers	table
pdfscanner	table	trackers	table
physics	table	type	function
print	function	typesetters	table
profiler	table	unicode	table
protect	function	unpack	function
publications	table	url	table
rawequal	function	userdata	table
rawget	function	utf	table
rawlen	function	utilities	table
rawset	function	vf	table
regimes	table	visualizers	table
report_characters	function	xml	table

xmlconvert	function
xpcall	function
zip	table
zlib	table

attributes (context)

<pre>colorintents table</pre>	F mpoptions	
N attribute	U none	
D data	F popset	
F enable		orcomponents
F handler	F pushset	·
F register	F register	
D registered	D registered	
colors table	F registersp	
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 spotcolorn	ame
F defineprocesscolor	F spotcolorp	arent
F definesimplegray	F spotcolorv	alue
F definespotcolor	B supported	
F definetransparency	F transparen	cycomponents
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

 $\quad \hbox{function} \quad$

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)

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

- F injectbitmap
- F insertmovie
- F insertsound
- F insertswf
- F insertu3d
- F knockout
- F negative
- F overprint
- F positive
- F reference
- F rgbcolor
- F spotcolor
- F startlayer
- F startstackedlayer
- F stoplayer
- F stopstackedlayer
- F transparency
- F typesetfield

T registrations

- F cmykindexcolor
- F cmykspotcolor
- F getspotcolorreference
- F grayindexcolor
- F grayspotcolor
- F rgbindexcolor
- F rgbspotcolor
- F spotcolorname
- F transparency
- T tables
 - D vfspecials

registrations table

tables

table

bit (context)

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

bit32 (basic lua)

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

blobs (context)

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

boolean (context)

tocontext function
tonumber function

buffers (context)

```
append
                function
assign
                function
collectcontent function
erase
                function
                function
exists
                function
getcontent
                function
getlines
loadcontent
                function
parallel
                table
   F define
   F hassomecontent
   F next
   F place
   F reset
   F save
prepend
                function
```

function

raw

builders (context)

```
kernel
            table
                                                    D map
   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 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	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	

table

textclasses

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)

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

checktwopassdata	function	definefieldset	function
chemicalcomponent	function	definefilefallback	function
chineseallnumerals	function	definefilesynonym	function
chinesecapnumerals	function	definefont one	function
chinesenumerals	function	definefont two	function
cleanfontname	function	definefontfamily	function
cleanupbox	function	definefontfeature	function
cleanuplayers	function	definefontsolution	function
clonefield	function	defineinsertion	function
collectfloat	function	defineintermediatecolor	function
collecthelp	function	definelabels	function
colorcomponents	function	definelanguage	function
concatcommalist	function	definelinkedlist	function
consultfloat	function	definemarking	function
convertbtxdatasettoxml	function	definemetafont	function
copyposition	function	definemultitonecolor	function
cos	function	definenote	function
cosd	function	defineparallel	function
countervalue	function	defineparbuilder	function
counttwopassdata	function	defineprocesscolor	function
ctxfunction	function	defineprogram	function
currentcomponent	function	definereference	function
currentdate	function	defineregister	function
currentenvironment	function	definesectionlevels	function
currentproduct	function	defineselectfont	function
currentproject	function	definesnapmethod	function
currentreferencedefault	function	definespotcolor	function
currentreferenceorder	function	definestructureblock	function
currentregime	function	definestructureset	function
currentsectiontolist	function	definetransparency	function
datasetvariable	function	definetwopasslist	function
dayname	function	defineviewerlayer	function
deferredproperty	function	defrostrandomseed	function
defineattribute	function	depthnumber	function
definebreakpoint	function	digits	function
definebreakpoints	function	disableautofontscript	function
definecatcodetable	function	disableparbuilder	function
definecharacterspacing	function	disableregime	function
definechemical	function	disablespellchecking	function
defineconversion	function	discardfromlist	function
definecounter	function	doanalyzeframedbox	function
definedviewerlayer	function	doif	function
definefallbackfamily	function	doifblackelse	function
definefield	function	doifcommonelse	function

doifcounter	function	doifposition	function
doifdimenstringelse	function	doifpositionelse	function
doifdrawingblackelse	function	doifpositiononpage	function
doifelse	function	doifpositionsonsamepageelse	function
doifelsebuffer	function	doifpositionsonthispageelse	function
doifelsecontinuewithfile	function	doifurldefinedelse	function
doifelsecounter	function	doprocesstypescriptfile	function
${\tt doifelsecurrent fonthas feature}$	function	doreshapeframedbox	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	enhanceregister	function
doiffieldsetelse	function	erasebuffer	function
doiffiledefinedelse	function	expandcurrentreference	function
doiffileexistelse	function	exportformdata	function
doiffirstcharelse	function	exportreferences	function
doifinputfileelse	function	extendregister	function
doifinsetelse	function	extensiblecode	function
doifleapyearelse	function	feature	function
doiflisthasentry	function	featureattribute	function
doiflisthasnumberelse	function	featurelist	function
doiflisthaspageelse	function	feedback	function
doiflisthastitleelse	function	fetchallmarks	function
doiflocfileelse	function	fetchmultipar	function
doifnot	function	fetchmultishape	function
doifnotcounter	function	fetchonemark	function
doifnotecontent	function	fetchposboxes	function
doifnoteonsamepageasprevious	function	fetchtwomarks	function
doifobjectreferencefoundelse	function	figurefilename	function
doifolderversionelse	function	figurefilepath	function
doifoverlappingelse	function	figurefiletype	function
doifparentfileelse	function	figurerequest	function

figurestatus	function	getfloatvariable	function
figureused	function	getfullsectionnumber	function
figurevariable	function	getinternallistreference	function
filterdefaultreference	function	getinternalreference	function
filterreference	function	getlasttwopassdata	function
finalizebox	function	getmarking	function
findtwopassdata	function	getmessage	function
firstcountervalue	function	getmpextensions	function
firstinset	function	getnotestate	function
flushfloat	function	getplaceholderchar	function
flushnotes	function	getprivateattribute	function
flushpostponedblocks	function	getprivatechar	function
flushpostponednotes	function	getprogram	function
fontchar	function	getrandomcounta	function
fontcollectionclone	function	getrandomcountb	function
fontcollectiondefine	function	getrandomseed	function
fontcollectionprepare	function	getreadfilename	function
fontcollectionregister	function	getsectionnumber	function
fontcollectionreport	function	getstructuredata	function
fontcollectionreset	function	getsubstring	function
fontlookupgetkey	function	gettexbuffer	function
fontlookupgetkeyofindex	function	gettwopassdata	function
fontlookupinitialize	function	gettwopassdatalist	function
fontlookupnoffound	function	geturl	function
forceendjob	function	grabbuffer	function
forcequitjob	function	hboxtovbox	function
format	function	helpaction	function
formatcolor	function	helpreference	function
formatgray	function	hexstringtonumber	function
freezerandomseed	function	horizontalcode	function
from	function	hour	function
getbidimode	function	hyphenatedlist	function
getbuffer	function	hyphenatedurl	function
getbufferctxlua	function	D characters	
getbuffermkvi	function	N lefthyphenmin	
getcommandline	function	D mapping	
getctxfile	function	N righthyphenmin	
getcurrentprefixspec	function	F setcharacters	
getcurrentreferencemetadata	function	immediateproperty	function
getcurrentsectionlevel	function	incrementedcounter	function
getdefaultfieldvalue	function	initializetexdirectives	function
getfieldcategory	function	initializetextrackers	function
getfirstcharacter	function	injectcurrentreference	function
getfirsttwopassdata	function	injectreference	function

inlinechemical	function	minute	function
insertattachment	function	mixcleanup	function
insertcomment	function	mixfinalize	function
insertfield	function	mixflushlist	function
insertionnumber	function	mixflushrest	function
insertrenderingwindow	function	mixgetsplit	function
insertsoundclip	function	mixsetsplit	function
installedlanguages	function	mixstate	function
installtexdirective	function	molecule	function
installtextracker	function	month	function
languagenumber	function	monthmnem	function
lastcountervalue	function	monthname	function
lchexnumber	function	mpcolor	function
lchexnumbers	function	mpoptions	function
leapyear	function	mprunvar	function
linenumbersstageone	function	namedstructureuservariable	function
linenumbersstagetwo	function	namedstructurevariable	function
listgroupindex	function	nbfs	function
listlabel	function	nextcountervalue	function
listlocation	function	nextparallel	function
listprefixednumber	function	nofdays	function
listprefixedpage	function	nofitems	function
listrealpage	function	nofstackedfloats	function
listsize	function	notedeltapage	function
listtitle	function	notelistindex	function
listuserdata	function	notenumberpage	function
loadbtxdefinitionfile	function	noteprefixednumber	function
loadexamodes	function	notesymbolpage	function
loadfontgoodies	function	notetitle	function
loadspellchecklist	function	ntimes	function
loadtypescriptfile	function	number	function
loadvisualizer	function	F LuaSnippet	
locatefilepath	function	F LuaSnippetBoundary	
locfilename	function	F LuaSnippetComment	
lower	function	F LuaSnippetName	
makeactive	function	F LuaSnippetNameBase	
manipulated	function	<pre>F LuaSnippetNameCore</pre>	
markfonts	function	F LuaSnippetNameLibraries	
markingnumber	function	F LuaSnippetQuote	
markingtitle	function	F LuaSnippetSpecial	
markregionbox	function	F LuaSnippetString	
math_frac	function	F MPcolor	
mathrenderset	function	F MetapostSnippet	
maxitemwidth	function	F MetapostSnippetBoundary	

F bold F MetapostSnippetComment F MetapostSnippetConstructor F btxchecklistentry F MetapostSnippetName F btxcitevariantparameter F MetapostSnippetNameMetafun F btxdirectlink F MetapostSnippetNamePlain F btxdomarkcitation F MetapostSnippetNamePrimitive F btxhandlelistentry F MetapostSnippetQuote F btxlistparameter F MetapostSnippetSpecial F btxlistvariantparameter F MetapostSnippetString F callfunctiononce F NC F char F NR E chardef F color F ParsedXmlSnippetCdata F ParsedXmlSnippetComment F colordefage F ParsedXmlSnippetDoctype F colordefact F ParsedXmlSnippetElement F colordefalc F ParsedXmlSnippetInstruction F colordefalt F ParsedXmlSnippetKey F colordeffac F ParsedXmlSnippetValue F colordeffat F TexSnippet F colordefflc F TexSnippetBoundary F colordefflt F TexSnippetComment F colordefrac F colordefrat F TexSnippetGroup F colordefrlc F TexSnippetName F TexSnippetSpecial F colordefrlt F XmlSnippet F concat F XmlSnippetBoundary F constructcs F XmlSnippetCdata F constructcsonly F XmlSnippetComment F convertnumber F XmlSnippetEntity F ctxreport F XmlSnippetEqual F darkblue F darkgreen F XmlSnippetKey F darkred F XmlSnippetName F definefontsynonym F XmlSnippetString F flush T delayed F flushdirect F digitsdigit F flushlines F digitsfinalcomma F addaskedblankskip F digitsfinalperiod F addpredefinedblankskip F digitshighspace F applyprocessor F digitsintermediatecomma F beainhbox F digitsintermediateperiod F beginvbox F digitsminus F bf F digitsnegative F bgroup F digitsplus F blank F digitspositive

F diaitspower F fntsetnopsize F digitspowerminus F fntsetsomename F digitspowerplus F fntsetsomesize F digitsseparatorspace T formatted F digitssignspace F fprint F digitsspace T generics F digitszeropadding S starttabulate F direct S stoptabulate F directsetup F getlogger F dodirectfullreference F getvalue F dodisplavverbatimbeginline F alvph F gobbleoneargument F dodisplayverbatimemptyline F dodisplayverbatiminitialize F aoto F dodisplayverbatimnewline F hrule F dodisplayverbatimstart F input F dodisplayverbatimstop T knownfunctions F lateluafunction F dofastdefinetypeface E dofinishsomereference F letvaluerelax F doinlineverbatimbeginline F loadfile F doinlineverbatimemptyline F loadfoundtypescriptfile F doinlineverbatimnewline F luasetup F doinlineverbatimstart F m F doinlineverbatimstop T metafun F color F donestedtypingstart F donestedtypingstop T delayed F dostarttext F start F doverbatimspace F stop F egroup T nested F enablemode F markingcommand F endhbox F markingseparator F endvbox F newbox F environment F newcount F expandreferencearguments F newdimen F expandreferenceoperation F newindexer F finalizeautostructurelevel F newmuskip F finishjob F newskip F firstofoneargument F newtexthandler F firstoftwoarguments F newtoks F fixedblankskip F newverbosehandler F flexibleblankskip F nointerlineskip F flushblankhandling F normalatop F normalover F flushboxregister F flushnode F overstrike F fntsetdefname F par

F pdfliteral F startcomponentindeed F popcatcodes F startenvironmentindeed F poplogger F startfontclass F printlines F starthboxregister F processfilemany F startproductindeed F processfilenone F startprojectindeed F processfileonce F startreadingfile F protect F startregisterentries T puretext F startregisterentry F pushcatcodes F startregisteroutput F pushloager F startregisterpages F registerentry F startregistersection F registerfunction F startregisterseewords F registeronepage E starttabulate F registerpagerange F starttext F registerseeword F starttitle F reservefunction F startvboxregister F rlap F startxtitle F runfile F stopLuaSnippet F secondoftwoarguments F stopMetapostSnippet F stopParsedXmlSnippet F setblankcategory F setblankorder F stopTexSnippet F setblankpenalty F stopXmlSnippet F setconditional F stopblankhandling E setfalsevalue F stopcolumns F sethboxreaister F stopcomponentindeed F setsomevalue F stopenvironmentindeed F settabulateentry F stopfontclass F settabulatelastentry F stophboxregister F stopproductindeed F settracing F stopprojectindeed F setupsystem F setupwithargument F stopreadingfile F setvalue F stopregisterentries F setvboxregister F stopregisterentry F setxvalue F stopregisteroutput F space F stopregisterpages F sprint F stopregistersection F startLuaSnippet F stopregisterseewords F startMetapostSnippet F stoptabulate F startParsedXmlSnippet F stoptext F startTexSnippet F stoptitle F startXmlSnippet F stopvboxregister F startblankhandling F stopxtitle

F storenode

F startcolumns

F synonymentry F MetapostSnippetNamePlain F tabulaterow F MetapostSnippetNamePrimitive F tabulaterowbold F MetapostSnippetQuote F tabulaterowtvp F MetapostSnippetSpecial F MetapostSnippetString F tabulaterowtype F template F ParsedXmlSnippetCdata T templates F ParsedXmlSnippetComment F texsetup F ParsedXmlSnippetDoctvpe F tobuffer F ParsedXmlSnippetElement F tocontext F ParsedXmlSnippetInstruction F tolines F TexSnippetBoundary F unitsC F TexSnippetComment F unitsN F TexSnippetGroup F unitsNspace F TexSnippetName F unitsNstart F TexSnippetSpecial F unitsNstop F XmlSnippetBoundary F units0 F XmlSnippetCdata F unitsP F XmlSnippetComment F unitsPS F XmlSnippetEntity F unitsPU F XmlSnippetEqual F unitsPUS F XmlSnippetKev F units0 F XmlSnippetName F unitsS F XmlSnippetString F unitsU F ctxreport F viafile F unitsUS F unprotect F vrule F xmlcdataafter F unregisterfunction F usemodule F xmlcdatabefore F utfchar F xmlcdataobeyedline T verbatim F xmlcdataobevedspace F xmlprocessbuffer F LuaSnippetBoundary F xmlsetup F LuaSnippetComment F LuaSnippetName numbers function F LuaSnippetNameBase F LuaSnippet F LuaSnippetNameCore F LuaSnippetBoundary F LuaSnippetNameLibraries F LuaSnippetComment F LuaSnippetQuote F LuaSnippetName F LuaSnippetSpecial F LuaSnippetNameBase F LuaSnippetString F LuaSnippetNameCore F MetapostSnippetBoundary F LuaSnippetNameLibraries F MetapostSnippetComment F LuaSnippetQuote F MetapostSnippetConstructor F LuaSnippetSpecial F MetapostSnippetName F LuaSnippetString

F MPcolor

F MetapostSnippetNameMetafun

F MetapostSnippet F baroup F MetapostSnippetBoundary F blank F MetapostSnippetComment F hold F MetapostSnippetConstructor F btxchecklistentry F MetapostSnippetName F btxcitevariantparameter F MetapostSnippetNameMetafun F btxdirectlink F MetapostSnippetNamePlain F btxdomarkcitation F MetapostSnippetNamePrimitive F btxhandlelistentry F MetapostSnippetQuote F btxlistparameter F MetapostSnippetSpecial F btxlistvariantparameter F MetapostSnippetString F callfunctiononce F NC F char F NR F chardef F ParsedXmlSnippetCdata F color F ParsedXmlSnippetComment F colordefage F ParsedXmlSnippetDoctype F colordefagt F ParsedXmlSnippetElement F colordefalc F ParsedXmlSnippetInstruction F colordefalt F ParsedXmlSnippetKey F colordeffgc F ParsedXmlSnippetValue F colordeffqt F colordefflc F TexSnippet F TexSnippetBoundary F colordefflt F TexSnippetComment F colordefrac F TexSnippetGroup F colordefrat F colordefrlc F TexSnippetName F TexSnippetSpecial F colordefrlt F XmlSnippet F concat F XmlSnippetBoundary F constructcs F XmlSnippetCdata F constructcsonly F XmlSnippetComment F convertnumber F XmlSnippetEntity F ctxreport F XmlSnippetEqual F darkblue F XmlSnippetKey F darkgreen F XmlSnippetName F darkred F XmlSnippetString F definefontsynonym F flush T delayed F __flushdirect F digitsdigit F flushlines F digitsfinalcomma F addaskedblankskip F digitsfinalperiod F addpredefinedblankskip F digitshighspace F applyprocessor F digitsintermediatecomma

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F normalover

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F overstrike F startblankhandling F par F startcolumns F pdfliteral F startcomponentindeed F popcatcodes F startenvironmentindeed F poplogger F startfontclass F printlines F starthboxregister F processfilemany F startproductindeed F processfilenone F startprojectindeed F processfileonce F startreadingfile F protect F startregisterentries T puretext F startregisterentry F pushcatcodes F startregisteroutput F pushlogger F startregisterpages F registerentry F startregistersection F registerfunction F startregisterseewords F registeronepage F starttabulate F registerpagerange F starttext F registerseeword F starttitle E reservefunction F startvboxregister F rlap F startxtitle F runfile F stopLuaSnippet F secondoftwoarguments F stopMetapostSnippet F setblankcategory F stopParsedXmlSnippet F setblankorder F stopTexSnippet F setblankpenalty F stopXmlSnippet F setconditional F stopblankhandling F setfalsevalue F stopcolumns F sethboxregister F stopcomponentindeed F setsomevalue F stopenvironmentindeed F stopfontclass F settabulateentry F stophboxregister F settabulatelastentry F settracing F stopproductindeed F setupsystem F stopprojectindeed F setupwithargument F stopreadingfile F setvalue F stopregisterentries F setvboxregister F stopregisterentry F setxvalue F stopregisteroutput F space F stopregisterpages F sprint F stopregistersection F startLuaSnippet F stopregisterseewords F startMetapostSnippet F stoptabulate F startParsedXmlSnippet F stoptext F startTexSnippet F stoptitle

F stopyboxregister

F startXmlSnippet

F stopxtitle	F MetapostSnippetName	_	
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F tabulaterowtype	F MetapostSnippetString		
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T templates	F ParsedXmlSnippetComment		
F texsetup	F ParsedXmlSnippetDoctype	9	
F tobuffer	F ParsedXmlSnippetElement	F ParsedXmlSnippetElement	
F tocontext	F ParsedXmlSnippetInstruc	ction	
F tolines	F TexSnippetBoundary		
F unitsC	F TexSnippetComment		
F unitsN	F TexSnippetGroup		
F unitsNspace	F TexSnippetName		
F unitsNstart	F TexSnippetSpecial		
F unitsNstop	F XmlSnippetBoundary		
F unitsO	F XmlSnippetCdata		
F unitsP	F XmlSnippetComment		
F unitsPS	F XmlSnippetEntity		
F unitsPU	F XmlSnippetEqual		
F unitsPUS	F XmlSnippetKey		
F unitsQ	F XmlSnippetName		
F unitsS	F XmlSnippetString		
F unitsU	F ctxreport		
F unitsUS	F viafile		
F unprotect	F vrule		
F unregisterfunction	F xmlcdataafter		
F usemodule	F xmlcdatabefore		
F utfchar	F xmlcdataobeyedline		
T verbatim	F xmlcdataobeyedspace		
F LuaSnippetBoundary	F xmlprocessbuffer		
F LuaSnippetComment	F xmlsetup		
F LuaSnippetName	objectnumber	function	
F LuaSnippetNameBase	objectpage	function	
F LuaSnippetNameCore	octnumber	function	
F LuaSnippetNameLibraries	octstringtonumber	function	
F LuaSnippetQuote	ordinal function		
F LuaSnippetSpecial	overloadbookmark function		
F LuaSnippetString	page injections flush after function		
F MetapostSnippetBoundary	page injections flush before	function	
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F MetapostSnippetConstructor	pagestaterealpage	function	
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pdfrotation	function	pushitaliccorrection	function
pdfstartmatrix	function	pushlist	function
pdfstartmirroring	function	pushreferenceprefix	function
pdfstartrotation	function	pushregime	function
pdfstartscaling	function	pushsectionblock	function
pdfstopmatrix	function	rawcharacter	function
pdfstopmirroring	function	rawcountervalue	function
pdfstoprotation	function	rawdate	function
pdfstopscaling	function	referencepagestate	function
percentageof	function	referencerealpage	function
pgfxcolorspec	function	registerattachment	function
placeparallel	function	registerbookmark	function
popfloat	function	registerbuttons	function
popitaliccorrection	function	registercatcodetable	function
poplist	function	registercolor	function
popreferenceprefix	function	registercolorintent	function
popregime	function	registeredviewerlayer	function
popsectionblock	function	registerhelp	function
pos	function	registeritemgroup	function
posplus	function	registerlanguagefeatures	function
posstrut	function	registerlinenumbering	function
postponenotes	function	registermaintextcolor	function
poswhd	function	registernamespace	function
posxy	function	registerpostponedblock	function
prefixedconverted	function	registerrendering	function
prepareMPvariable	function	registersection	function
preparedfile	function	registersoundclip	function
presetsymbollist	function	registerstructureprocessor	function
presettabulate	function	registersynonym	function
prevcountervalue	function	registertransparency	function
processbuffer	function	registerunit	function
processcolorcomponents	function	registerusedsynonym	function
processedfile	function	registeruserdata	function
processedfiles	function	relatemarking	function
processfile	function	remapentity	function
processfilemany	function	removemissingcharacters	function
processfilenone	function	renderingvar	function
processfileonce	function	replacemissingcharacters	function
processlist	function	replacepospxywhd	function
processregister	function	reportstructure	function
processsplit	function	resavefloat	function
processsynonyms	function	resetcharacteralign	function
purefontname	function	resetcounter	function

resetfontfeature	function	setcharacterspacing	function
resetfontsolution	function	setcharacterstripping	function
resetmarking	function	setclosedocumentaction	function
resetmathattributes	function	setclosepageaction	function
resetmathitalics	function	setcolormodel	function
resetnullfont	function	setcounter	function
resetparallel	function	setdataset	function
resetprevdepth	function	setdigitsmanipulation	function
resetreference	function	setdirection	function
resetstructureprocessor	function	setdocumentenvironments	function
resettimer	function	setdocumentfilenames	function
restartcounter	function	setdocumentmodes	function
restorecounter	function	setdocumentmodules	function
restorecurrentattributes	function	setfigurelookuporder	function
restorenote	function	setfirstline	function
romannumerals	function	setfontfeature	function
runbuffer	function	setfontofid	function
safechar	function	setfontsolution	function
savebuffer	function	setformat	function
savecounter	function	setformsmethod	function
savecurrentattributes	function	setinitial	function
savedlistnumber	function	setinsertionlocation	function
savedlistprefixednumber	function	setinterfaceconstant	function
savedlisttitle	function	setinterfaceelement	function
savefloat	function	setinterfacemessage	function
savemargindata	function	setinterfacemessages	function
savenote	function	setinterfacevariable	function
saveobject	function	setinternalreference	function
savepagedata	function	setjobcomment	function
saveparallel	function	setlanguageexceptions	function
savestructureblock	function	setlanguagesynonym	function
savetaggedtwopassdata	function	setlayer	function
savetwopassdata	function	setmarking	function
savevariable	function	setmathalphabet	function
second	function	setmathalternate	function
selectstructureblock	function	setmathattribute	function
setbreakpoints	function	setmathdirection	function
setbtxdataset	function	setmathitalics	function
setbtxentry	function	setmathstyle	function
setcharacteralign	function	setnextinternalreference	function
setcharactercasing	function	setnextreferenceorder	function
setcharactercleaning	function	setnotestate	function
setcharactercodes	function	setnotesymbolpage	function
setcharacterkerning	function	setobject	function

setopendocumentaction	function	showattributes	function
setopenpageaction	function	showbtxdatasetcompleteness	function
setowncounter	function	showbtxdatasetfields	function
setpagestate	function	showcallbacks	function
setpagestaterealpageno	function	showchardata	function
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setparbuilder	function	showfontparameters	function
setpos	function	showhyphenatedinlist	function
setrandomseed	function	showjustification	function
setrealign	function	showmessage	function
setreferencearguments	function	sin	function
setreferenceattribute	function	sind	function
setreferenceoperation	function	splitfilename	function
setregistermethod	function	spotcolorname	function
setreplacements	function	spotcolorparent	function
setsectionblock	function	spotcolorvalue	function
setsectionentry	function	startchemical	function
setsectionlevel	function	startcolorset	function
setsectionnumber	function	startcomponent	function
setstructureblockstate	function	startenvironment	function
settagcombination	function	startfontsolution	function
settagdescription	function	startparbuilder	function
settagdescriptionsymbol	function	startproduct	function
settagfigure	function	startproject	function
settaghighlight	function	startregime	function
settagitemgroup	function	startsectionlevel	function
settagproperty	function	starttag	function
settagsorting	function	starttext	function
settagsynonym	function	startviewerlayer	function
settagtablecell	function	stopchemical	function
settagtabulatecell	function	stopcolorset	function
setupbookmarks	function	stopcomponent	function
setupcanvas	function	stopenvironment	function
setupcharacterspacing	function	stopfontsolution	function
setupexport	function	stopparbuilder	function
setupfontexpansion	function	stopproduct	function
setupfontprotrusion	function	stopproject	function
setupidentity	function	stopregime	function
setupinsertion	function	stopsectionlevel	function
setupitaliccorrection	function	stoptag	function
setuplinenumbering	function	stoptext	function
setvisual	function	stopviewerlayer	function
setxmpfile	function	storejavascriptcode	function
showassignerror	function	storejavascriptpreamble	function

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Tunction x_tubec_reasin runction	usebtxdataset	function	 x_table_flush	function

x_table_init_construct	function
x_table_init_reflow_height	function
x_table_init_reflow_width	function
x_table_next_row	function
x_table_r	function
x_table_reflow_height	function
x_table_reflow_width	function
x_table_set_construct	function
x_table_set_reflow_height	function
x_table_set_reflow_width	function
year	function

containers (context)

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

converters (context)

Alphabetic	function
Character	function
Characters	function
Romannumerals	function
abjadnodotnumerals	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
leapyear	function
maxchrs	function
minute	function
month	function
nofdays	function
number	function
numbers	function
octstringtonumber	function
ordinal	function
rawcharacter	function
romannumerals	function
second	function
sequences	data table
textime	function
toabjad	function
tochinese	function
toroman	function
verbose	table
D data	
F translate	

weekday function year function

coroutine (basic lua)

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

ctxrunner (context)

load function
prepfiles data table
resolve function

debug (basic lua)

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

dir (context)

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

directives (context)

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

document (context)

arguments data table
files table
getargument function
getfilename function
options table

T commandline

D environments

D modes

D modules

T ctxfile

D environments

D modes

D modules

setargument function
setdefaultargument function
setfilename function
variables data table

environment (context)

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

texroot truefilename validengines string function data table

epdf (extra tex)

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

floats (context)

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

font (basic tex)

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

getfont overloaded function

max function nextid function read_tfm function read_vf function setfont function

fontloader (extra tex)

apply_afmfile	function
apply_featurefile	function
close	function
fields	function
fullinfo	function
info	function
open	function
to_table	function
totable	function

fonts (context)

analyzers	table	F	report	
T features			reset	
N blwf		Т	vectors	
N fina		const	ructors	table
N half		F	aftercopy:	ingcharacters
N init		F	applymani	pulators
N isol		F	assignmat	hparameters
N medi		В	autoclean	up
N pref		F	beforecopy	yingcharacters
N pstf		D	cache	
N rphf		F	calculates	scale
D initiali:	zers	F	checkedfe	atures
D methods		F	checkedfi	lename
F setstate		F	checkvirt	ualids
T states		F	cleanuptal	ble
N blwf		F	collectpr	ocessors
N fina		D	designsize	es
N half		D	dontembed	
N init			enhancepa	rameters
N isol			factor	
N mark			finalize	
N medi			getfeature	
N pref		-	hashfeatu	
N pstf		•	hashinsta	
N rest		Т	hashmetho	ds
N rphf			F normal	
B useunico		_	F virtual	
checkers	table		initializ	efeatures
F getmissi	ng		keys	
F missing			T characte	er
cid	table		S depth	
F getmap			S height	
F loadfile collections	table		S italic S width	
F checkenal				ion
F clonevect			T descript T boundi	
F define	COT		S depth	ligbox
T definition	nns		S height	
F prepare	UIIJ		S width	
F process			T paramete	ers
F register	main		S ascend	
i icgistell	IIII III		J daceilu	C1

S descender	S encod	lingbytes
S designsize	S filen	
T expansion	S finalized	
S auto	S fontn	
S shrink	S forma	
S step	S fulln	
S stretch	S hasit	
S extendfactor	S hash	
S factor	S mathi	
S hfactor	S mode	.tatics
S mathsize	S name	
T protrusion		nhnamac
S auto	S nosta	phnames
S quad	S psnam S texti	
S scaledpoints		
S scriptpercentage	S virtu D loadedfo	
S scriptscriptpercentage		IILS
S size	S namemode F newfeatu	
S slantfactor		
S slantperpoint	F newhandl	
T spacing	N noffonts	
S extra	N nofshare	
S shrink	N nofshare	
S stretch	N nofshare	
S width	N privateo	
T synonyms	F readandd	
S em	F register	
S ex	B resolvev	ırtualtoo
S extra_space	F scale	
S extraspace	F scaled	
S slant	F setfacto	r
S space	F setname	
S space_shrink	B sharefon	
S space_stretch	F trytosha	refont
S spaceshrink	N version	
S spacestretch	current	function
S x_height	currentid	function
S units	definers	table
S vfactor	F addlooku	p
S xheight	F analyze	
T properties		tprocessors
S autoitalicamount	F checkedm	
T cidinfo	F checkeds	cript
S embedding	F current	

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

F contextchain	D math	
F devanagari_remove_joiners	D predefi	.ned
F devanagari_reorder_matras	D whateve	
F devanagari_reorder_pre_base_reorder	i nhashers sonants	table
F devanagari_reorder_reph	D characte	rs
F gpos_context	D csnames	
F gpos_contextchain	D descript:	ions
F gpos_cursive	D dynamics	
F gpos_mark2base	D emwidths	
F gpos mark2ligature	D exheight:	5
F gpos mark2mark	D extensib	
F gpos_pair	D features	
F gpos_single	D identifi	ers
F gsub_alternate	D italics	
F gsub_context	D lastmath:	ids
F gsub_contextchain	D marks	
F gsub_ligature	D paramete	rs
F gsub_multiple	T processe:	5
F gsub_reversecontextchain	D properti	es
F gsub_single	D quads	
F load	D resource:	5
F scriptandlanguage	T setdynam:	ics
F setcontextchain	D spaces	
F setdynamics	D spacings	
F setfeatures	D unicodes	
T statistics	D xheights	
D usedfeatures	helpers	table
T tables	F addpriva [.]	te
D baselines	F dimenfac	tor
D features	F expandgl	
D languages	F fontpatte	
D scripts	F getdigit	
N version	F getparam	
T pfb	F getpriva	
T tfm	F haspriva	te
D features	F name	
F setfeatures	F nametoslo	
T vf	F setdigit	
T combinations	F splitfon	
F combine	iterators	table
T combiner	F characte	_
D commands	F descript:	Lons
F find	F glyphs	
D helpers	loggers	table

F add_place T category_ S ll S lm S lo S lt S lu S mc S me S mn S nd S nl S no S pc	holders to_placeholder	nulldata protrusions readers F afm F check_lua F check_tfm F dfont F lua F opentype F otf F pfb D sequence F tfm F ttc	data table data table table
S pd		F ttf	
S pe		select	table
S pf		T data	table
S pi		F definetyp	eface
S po		T fallbacks	Clucc
S ps		F filterinp	u†
S sc		T methods	
S sk		F default	
S sm		F features	5
S so		F file	
F format		F goodies	
F onetimeme	essage	F name	
F register		F selectfo	ont
F reportdef	inedfonts	F simplefo	onts
F reportuse		F spec	
mappings	table	F style	
F addtounic	ode	F registerf	allback
F fromunico	de16	F searchfil	es
F loadfile		specifiers	table
F loadline		D contextme	rged
F loadlumta	ble	F contextnu	mber
F makenameparser		D contextnu	mbers
F reset		D contextse	tups
F tounicode		F contextto	string
F tounicode		F definecon	
mp	table	F mergecont	ext
D cache		F presetcon	
B inline		F registerc	
N version		F showconte	
names	data table	F splitcont	ext

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
            table
help
   F collect
   F reference
   F register
javascripts table
   F addtopreamble
   F code
   D codes
   F flushpreambles
   D functions
   D preambles
   F setpreamble
   F storecode
   F storepreamble
   F usepreamblenow
   F usescripts
linkedlists data table
            table
pages
   F setpagetransition
   F setupcanvas
references table
   F setclosedocument
   F setclosepage
   F setopendocument
   F setopenpage
renderings data table
soundclips data table
```

interfaces (context)

addvalidkeys function 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 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 o limiter function o limiters table

T paranoid

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

jit (context)

```
arch
             string
attach
             function
flush
             function
off
             function
             function
on
opt
             table
   F start
             string
os
             function
status
             table
util
   F funcbc
   F funcinfo
   F funck
   F funcuvname
   F ircalladdr
   F traceexitstub
   F traceinfo
   F traceir
   F tracek
   F tracemc
   F tracesnap
version
             string
version num number
```

job (context)

comment	function	F	getcoll	.ected
datasets	table	F	getdata	ì
D collect	ed	F	getfiel	.d
F extend		F	gettobe	esaved
F getdata		F	inlist	
F setdata		F	last	
D tobesav	red	F	list	
disablesave	function	F	save	
files	table	F	savetag	ged
D collect	ed		tobesav	
F context		posit	ions	table
B forceru	n	F	b_col	
F run		F	b_regio	n
D tobesav	red		c	
initialize	function	D	collect	ed
Load	function	F	column	
Loadother	function	F	сору	
objects	table	F	depth	
D collect	ed	F	e_col	
F get		F	e_regio	n
F number		F	enhance	2
F page		F	extra	
F save		F	get	
F set		F	getrese	rved
D tobesav	red	F	hangaft	er
pack	boolean	F	hangind	lent
packversion	number	F	height	
pagestates	table	F	hsize	
D collect	ed	F	leftski	.p
F extend		F	lowerle	eft
F realpag	e	F	lowerri	.ght
F setstat	е	F	markreg	jionbox
D tobesav	red	F	n	
oasses	table	F	onsamep	age
F check		F	overlap	ping
D collect	ed	F	p	
F count			page	
F define			paragra	
F find		F	parinde	ent
F first		F	positio	n
F aet		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
             function
save
            table
structure
   D collected
   T components
   T tobesaved
    T branches
    S name
    S type
            table
   D checksums
   D collected
```

variables

F getchecksum

F makechecksum

F restore

F save

F setchecksum

D tobesaved

version number

lang (basic tex)

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

languages (context)

associate function associated 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 table logger F report numbers data table posthyphenchar function function prehyphenchar data table registered replacements table F add F handler F set righthyphenmin function setexceptions function setsynonym function unload function version number table words F check T data E disable F enable T enablers B enables

F found F load T methods N threshold

layouts (context)

status table
 F isleftpage
 F leftorrightpagection

lfs (extra lua)

attributes function chdir function currentdir function dir function

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 convertstring function einject function eprint function escape function finalized function finject function function fprint aet 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 function print function pν report function reset function result function function set show function showdebuginfo function showerror function stripcss function

tv function
type function
urlescape function
variable function
variables table
 S color-background-blue
 S color-background-green
 S color-background-main
 S color-background-purple

S color-background-yellow

S title-default

logs (context)

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

F banner
F export
F help
F info

F lines F version

simpleline

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

function

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

lpdf (context)

action	function	getmatrix	function
adddocumentcolorspace	function	getpos	function
adddocumentextgstate	function	getvpos	function
adddocumentpattern	function	graycode	function
adddocumentshade	function	hasmatrix	function
addtocatalog	function	id	function
addtoinfo	function	injectxmpinfo	function
addtonames	function	insertxmpinfo	function
addtopageattributes	function	javascript	function
addtopageresources	function	launch	function
addtopagesattributes	function	layerreference	function
addxmpinfo	function	limited	function
annotationspecification	function	linearshade	function
array	function	link	function
boolean	function	nametree	function
checkedkey	function	null	function
checkedvalue	function	number	function
circularshade	function	pagedestinations	data table
cmykcode	function	pagereference	function
collectedresources	function	pagereferences	data table
color	function	pdfcolor	function
colorspace	function	pdftimestamp	function
colorspaceconstants	data table	protectresources	boolean
colorspec	function	rectangle	function
colorvalue	function	reference	function
colorvalues	function	registerannotation	function
constant	function	registerdestination	function
delayedobject	function	registerdocumentfinalizer	function
destinationspecification	function	registerpagefinalizer	function
dictionary	function	reserveobject	function
epdf	table	rgbcode	function
F expand		rotationcm	function
F load		shareobject	function
finalizedocument	function	shareobjectreference	function
finalizepage	function	spotcode	function
finishtransparencycode	function	stream	function
flushobject	function	string 	function
flushstreamfileobject	function	timestamp	function
flushstreamobject	function	toeight	function
formats	data table	tosixteen	function
gethpos	function	transform	function

transparency function
transparencycode function
transparencygroups table

B none

transparencyvalue function unicode function verbose function

lpeg (basic lua)

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

setmaxstack	function
split	function
splitat	function
splitter	function
stripper	function
times	function
tsplitat	function
tsplitter	function
type	function
${\tt utfchartabletopattern}$	function
version	function

ltn12 (extra lua)

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

lua (basic tex)

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

luatex (context)

cleanuptempfiles function
registerstartactions function
registerstopactions
registertempfile function
starttime number

lxml (context)

addindex	function	getid	function
all	function	getindex	function
applyfunction	function	id	function
att	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
log10	function
max	function
min	function
mod	function
modf	function
odd	function
pi	number
pow	function
rad	function
random	function
randomseed	function
round	function
setrandomseedi	function
sin	function
sind	function
sinh	function
sqrt	function
tan	function
tand	function
tanh	function

mathematics (context)

addfallbacks	function
alphabets	data table
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 сору	
fallbacks	table
F apply	
F install	
fallbackstyleattr	function
families	data table
gaps	table
getboth	function
getstyle	function
initializeparameters	function
injectfallbacks	function
makefont	function
mapremap	data table
overloaddimensions	function
overloadparameters	function
privatebase	number
remapalphabets	function
renderings	table
D mappings	
D numbers	
D sets	
renderset	function
resetitalics	function
_	

scaleparameters function

setalternate	function
setitalics	function
syncboth	function
syncname	function
syncstyle	function
toname	function
tostyle	function
tweakaftercopyingfont	function
tweakbeforecopyingfont	function
tweaks	table
utfmathaccent	function
utfmathclass	function
utfmathcommand	function
utfmathfiller	function
utfmathstretch	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	T actions	
defaultformat	string	F makempy	
defaultinstance	string	lastlog	string
defaultmethod	string	llx	number
directrun	function	lly	number
edefsxsy	function	load	function
escaped	function	makempy	table
exectime	table	N nofconverted	
extensiondata	data table	F processgraph:	ics
filterclippath	function	F registerfile	
finder	function	metafun	table
flush	function	F interpolate	
flushers	table	F topath	
T pdf		method	number
F comment		mptopdf	table
F flushfigure	2	F convertmpsto	pdf
F startfigure	2	N nofconverted	
F stopfigure		multipass	boolean
F textfigure		n	number
flushliteral	function	nvformat	function
flushnormalpath	function	optimize	boolean
flushreset	function	parse	function
fonts	table	pdfliterals	function
F define		pluginactions	function
T flusher		process	function
F flushfigure		processplugins	function
F startfigure	2	processspecial	function
F stopfigure		quickanddirty	function
N instances		reducetogray	boolean
F process		reporterror	function
format	function	reset	function
format_number	function	resetlastlog	function
format_string	function	resetplugins	function
formatnumber	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)

function

b64

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

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)

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

has_attribute	function
has_field	function
has_glyph	function
hpack	function
id	function
insert_after	function
insert_before	function
is_node	function
kerning	function
last_node	function
length	function
ligaturing	function
mlist_to_hlist	function
new	function
next	function
prev	function
protect_glyphs	function
<pre>protrusion_skippable</pre>	function
remove	function
set_attribute	function
set_properties_mode	function
setfield	function
setproperty	function
slide	function
subtype	function
tail	function
tostring	function
traverse	function
traverse_id	function
type	function
types	function
unprotect_glyphs	function
unset_attribute	function
usedlist	function
vpack	function
whatsits	function
write	function

nodes (context)

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

injections	table	markers	table
F handler		F get	
F installnewkern		mathcodes	data table
F setcursive		mlist_to_hlist	function
F setkern		new	function
F setmark		noadcodes	data table
F setpair		nodecodes	data table
insert_after	function	nopts	function
insert_before	function	nuts	table
insert_list_after	function	F append	
installattributehandler	function	F concat	
is_direct	function	F сору	
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	
kerning	function	F end_of_math	
keys	table	F fasthpack	
T whatsit		F first_glyph	
last_node	function	F firstcharacter	
leftmarginwidth	function	F firstcharinbox	
ligaturing	function	F firstglyph	
lines	table	F flush_list	
T boxed		F flush_node	
F register		F free	
F setup		F getattr	
F stage_one		F getattribute	
F stage_two		F getbox	
F stage_zero		F getchar	
D data		F getfield	
F finalize		F getfont	
F number		F getid	
N scratchbox		F getleader	
link	function	F getlist	
linked	function	F getnext	
list	function	F getprev	
listablefields	data table	F getprop	
listcodes	data table	F getskip	
listtoutf	function	F getsubtype	
load	function	F has_attribute	
locate	function	F has_field	
margincodes	data table	F has_glyph	

F hpack F rightskip F insert after F rule F insert before F shrink F insert list after F special F is direct F stretch F is display math F temp F is node F textdir F is nut F usage F kerning T userids F last node N margins.inline F leftmarginwidth N property F ligaturing N splitters.one F link N splitters.two F linked F userlist F locate F usernumber F mlist to hlist F userstring F nestedtracedslide F usertokens F new F vlist T pool F zeroglue F baselineskip F prepend F protect glyphs F cleanup F disc F protrusion_skippable F fontkern F reference F remove F glue F repackhlist F gluespec F glyph F replace F hlist F rightmarginwidth F kern F set attribute F latelua F setattr F lateluafunction F setattribute F leftmarginkern F setattributes F leftskip F setbox F setfield F lineskip F noad F setprop F pdfannotation F setunsetattributes F slide F pdfdestination F pdfdirect F somepenalty F pdfliteral F somespace F pdfrestore F tail F pdfsave F takebox F pdfsetmatrix F tonode F penalty F tonodes F register F tonut F rightmarginkern F tostring

F + manadalida		E basalinaskin	
F tracedslide		F baselineskip	
F traverse		F cleanup	
F traverse_id		F glyph	
T typesetters		F kern	
F fast_hpack		F latelua	
F hpack		F lateluafunction	
F tohpack		F lineskip	
F tohpackfast		F pdfliteral	
F tonodes		F pdfsetmatrix	
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 property	
F untracedslide		N splitters.one	
F usedlist		N splitters.two	
F vianodes		F usernumber	
F vianuts		prepend	function
F vpack		print	function
F writable_spec		processors	table
F write		B enabled	
packlist	function	F hpack_filter	
pardir_is_equal	data table	<pre>F post_linebreak_fil</pre>	.ter
pardir_is_opposite	data table	F pre_linebreak_filt	er
pardir_is_parallel	data table	F tracer	
partextdir_is_equal	data table	processwords	function
penaltycodes	data table	properties	table
plugindata	table	T actions	
F finalizer		F delayed	
F initializer		F fdelayed	
S name		F immediate	
T namespace		F attach	
N attribute		T data	
D data		F delayed	
F enable		protect_glyphs	function
F handler		protrusion_skippable	function
F register		pts	function
D registered		reference	function
D values		references	table
F processor		N attribute	
points	function	T done	
pool	table	F handler	

T stack		tail	function
remove	function	takebox	function
repackhlist	function	tasks	table
replace	function	F actions	
report	function	F appendaction	
rightmarginwidth	function	F disableaction	
rules	table	F disablegroup	
D data		F enableaction	
F define		F enablegroup	
F enable		F freeze	
F handler		F freezegroup	
save	function	F new	
serialize	function	F prependaction	
serializebox	function	F removeaction	
set_attribute	function	F restart	
setattr	function	F setaction	
setattribute	function	F showactions	
setattributes	function	F table	
setbox	function	textdir_is_equal	data table
setfield	function	textdir_is_is	data table
setunsetattributes	function	textdir_is_opposite	data table
shifts	table	textdir_is_parallel	data table
D data		tobasepoints	function
F define		tocentimeters	function
F enable		tociceros	function
F handler		todidots	function
show	function	todimen	function
showboxes	function	toinches	function
showcodes	function	tomillimeters	function
showlist	function	tonewciceros	function
showsimplelist	function	tonewdidots	function
skipcodes	data table	tonode	function
slide	function	tonodes	function
snapshots	table	tonut	function
F getparameters		topicas	function
F getsamples		topoints	function
F resetsamples		toscaledpoints	function
F takesample		tosequence	function
somepenalty	function	tostring	function
somespace	function	totable	function
stripping	table	totree	function
T glyphs		toutf	function
F set		tracers	table
striprange	function	T characters	

E collect F hpack F equal F tohpack F indices F tohpackfast F start F tonodes F string F tovpack F unicodes F tovpackfast T colors F vpack F reset unprotect glyphs function F set unset attribute function F setlist unsetattribute function F fontchar unsetattributes function T frequencies usedlist function vianodes F register function T pool vianuts function T nodes visualizebox function F rule visualizers table T nuts F box F handler F rule F markfonts F resetproperties F rule F setfont F setlist F setlaver F setproperties F setvisual F start vpack function data table T steppers whatcodes whatsitcodes F check data table E codes writable spec function write F features function F font F glyphs F message F messages F nofsteps F register F reset F start F stop F stop T transparencies F reset F set F setlist function traverse traverse_id function typesetters 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 data table env overloaded function exec execute overloaded function exit function fulltime function overloaded function aetenv gettimeofday function isleapyear function launch function libsuffix strina localtime function name string nofdays function function now strina platform function remove function rename resolvers table F bits resultof function runtime function selfdir string seteny overloaded function setlocale overloaded function sleep function spawn overloaded function function time times function timezone function tmpdir function function tmpname 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
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)

gethpos	function
getmatrix	function
getpos	function
getvpos	function
hasmatrix	function
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)

addtexentry	function	F setmethod		
analyze	function	T sorters		
authors	table	F author		
F concat		F dataset		
F inverted		F reference		
F invertedshor	t	F short		
F normal		listvariants	table	
F normalshort		F default		
F preparedsort		F num		
F setsettings		F short		
F short		load	function	
F sorted		loadbibdata	function	
F splitstring		loaders	table	
citeconcat	function	F bib		
citevariants	table	F endnote		
F author		F lua		
F authornum		F refman		
F authoryear		F xml		
F authoryears		markasupdated	function	
F default		new	function	
F num		refman_to_btx	function	
F page		singularorplural	function	
F serial		statistics table		
F short		N nofbytes		
collected	data table	N nofdatasets		
converttoxml	function	N nofdefinitions		
datasets	table	N nofshortcuts	5	
endnotes_to_btx	function	tracers	table	
enhance	function	T categories		
getindex	function	T article		
listconcat	function	T optional		
lists	table	T required		
F collectentri	es	T book		
F doifalreadyp	laced	T optional		
F fetchentries		T required		
F filterall		T booklet		
F flushentries		T optional		
F nofregistere	ed	T required		
F register		T inbook		
F registerplac	ed	T optional		
F resolve		T required		
F flushentries		T optional		
F register		T inbook		
•	ed	•		
riesotve		i required		

- T incollection
 - T optional
 - T required
- T inproceedings
 - T optional
 - T required
- T manual
 - T optional
- T required
- T mastersthesis
 - T optional
 - T required
- T misc
 - T optional
 - T required
- T phdthesis
 - T optional
 - T required
- T proceedings
 - T optional
- T required
- T techreport
 - T optional
 - T required
- T unpublished
 - T optional
 - T required
- T citevariants
- T fields
- T listvariants
- F showdatasetcompleteness
- F showdatasetfields

regimes (context)

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

resolvers (context)

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
find_files	function	B renewtree
findbinfile	function	B savelists
findctxfile	function	D setups
finders	data table	D specification

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

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 convertfile F decodecomment		showpath	function function
		showpath simplescanfiles	
F decodecomment F enablecomment F encodecomment		showpath simplescanfiles splitconfigurationpath	function
F decodecomment F enablecomment		showpath simplescanfiles splitconfigurationpath splitexpansions	function function
F decodecomment F enablecomment F encodecomment		showpath simplescanfiles splitconfigurationpath	function function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi		showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath	function function function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk		showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod	function function function function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel	number	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap	function function function function function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version	number function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes	function function function function function data table
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel		showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap	function function function function function data table data table
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler	function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat	function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance	function function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob	function function function function function data table data table function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile	function function function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath	function function function function function data table data table function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers	function function function data table	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve	function function function function function data table data table function function function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath	function function function data table function function string	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve updaterelations	function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath prefixes	function function function data table function function string data table	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve updaterelations updatescript	function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath prefixes prependhash	function function function data table function function string data table function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve updaterelations updatescript usezipfile	function function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath prefixes prependhash registerextrapath	function function function data table function function string data table function function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpath unexpandedpathlist unresolve updaterelations updatescript usezipfile validatedpath	function function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath prefixes prependhash registerextrapath registerfile	function function function data table function function string data table function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpathlist unresolve updaterelations updatescript usezipfile validatedpath variable	function function function function function function data table data table function
F decodecomment F enablecomment F encodecomment F preprocessed F processmk F processmkvi F version maxreadlevel methodhandler newinstance openbinfile openers openfile opentexfile ownpath prefixes prependhash registerextrapath	function function function data table function function string data table function function	showpath simplescanfiles splitconfigurationpath splitexpansions splitmethod splitpath suffixes suffixmap suffixofformat texdatablob toppath unexpandedpath unexpandedpath unexpandedpathlist unresolve updaterelations updatescript usezipfile validatedpath	function function function function function function data table data table function

variableofformatorsuffix function wildcardpattern

function

scripts (context)

```
autofontfeature
                  table
   F disable
   F enable
   F handler
categorytonumber data table
colors
                  data table
decomposehangul
                 function
defaults
                  table
   N inter char half shrink factor
   N inter_char_half_stretch_factor
   N inter_char_hangul_penalty
   N inter char quarter shrink factor
   N inter char quarter stretch factor
   N inter char shrink factor
   N inter char stretch factor
   N inter word stretch factor
handlers
                 data table
hash
                  table
injectors
                  data table
installdataset
                  function
installmethod
                  function
numbertocategory data table
numbertodataset
                data table
numbertohandler
                 data table
reset
                  function
set
                  function
splitters
                  data table
```

set (context)

contains function
create function
tolist function
tonumber function
totable function

socket (extra lua)

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

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

function

sink

sorters (context)

basicsorter function table comparers F basic constants table S defaultdigits S defaultlanguage S defaultmethod N digitsmaximum N digitsoffset N ignoredoffset N replacementoffset definitions data table firstofsplit function setlanguage function sort function splitters table F utf strip function tracers data table update function

statistics (context)

checkfmtstatus	function
elapsed	function
elapsedindeed	function
elapsedseconds	function
elapsedtime	function
enable	boolean
formatruntime	function
hastiming	function
memused	function
register	function
resettiming	function
runtime	function
savefmtstatus	function
show	function
starttiming	function
stoptiming	function
threshold	number
timed	function
tracefunction	function

status (basic tex)

list function

storage (context)

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

streams (context)

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

string (basic lua)

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

toboolean	function
tocontext	function
todimen	function
tonodes	function
topattern	function
totable	function
toutf	function
tracedchar	function
tracedchars	table
unquote	function
unquoted	function
upper	function
utfcharacters	function
utfvalues	function
valid	function

structures (context)

atlocationfunctionF setlevelblockstableF setoffsetD collectedF setownF defineF setstateF printF setvalueF saveT specialsF selectF userpageF setstateF subsD statesD tobesavedD tobesavedF valuebookmarkstablecurrentsectionnumberfunctionF finalizedescriptionstableF flattendocumentstableS methodD dataF overloadF initializeF placeF presetF registerF resetF setupfloatstablecounterstableF addF currentF analyzeF simplify
D collected F define F define F print F setvalue F save F save F select F setstate D states D tobesaved F value bookmarks table F flatten S method F overload F overload F register F setup F setup Counters F add F add F analyze F finalize F finalize F fourrent F finalize F fregister F reset F setup F setup F floats F current F simplify F simplify
F define F print F setvalue F save F save F select F setstate D states D tobesaved F value bookmarks T specials F subs D tobesaved F value bookmarks table Currentsectionnumber finalize F flatten S method F overload F overload F overload F setup F setup F setup F setup F setup F setup F floats F current F add F add F analyze F print is able F simplify
F print F save F save F select F select F setstate D states D tobesaved D tobesaved F value bookmarks table Currentsectionnumber F finalize F flatten S method F overload F overload F register F setup F setup Counters F add F add F add F analyze F simplify F simplify F simplify F setvalue F setvalue F setvalue Currentsectionnumber F unction descriptions table F unction F function Currentsectionnumber F unction F add F reset F register F flatten F simplify
F save F select F select F setstate D states D tobesaved F value bookmarks table F finalize F flatten S method F overload F overload F register F setup F setup Counters F add F analyze T specials F userpage F subs D tobesaved F value currentsectionnumber function descriptions table Currentsectionnumber function f function descriptions table F value Currentsectionnumber function F initialize F place F preset F reset F reset F reset F reset F reset F setup F current F simplify
F select F setstate F setstate D states D tobesaved F value bookmarks table Currentsectionnumber F finalize F flatten S method F overload F overload F place F register F setup F setup Counters T able Counters T able F add F analyze F simplify F simplify F simplify
F setstate D states D tobesaved F value bookmarks table Currentsectionnumber F finalize F flatten S method F overload F overload F place F register F setup F setup Counters T able F add F analyze F simplify F subs D tobesaved F value bookmarks F docurrentsectionnumber function descriptions table documents
D states D tobesaved F value bookmarks table Currentsectionnumber F finalize F flatten S method F overload F place F register F setup F setup Counters table D data F initialize F preset F reset F setup floats table formulas table F current F analyze
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
bookmarkstablecurrentsectionnumberfunctionF finalizedescriptionstableF flattendocumentstableS methodD dataF overloadF initializeF placeF presetF registerF resetF setupfloatstablecounterstableF currentF addF currentF simplify
F finalize F flatten Gocuments T able S method F overload F overload F place F register F setup F setup F add F add F analyze
F flatten S method D data F overload F place F register F setup floats table counters table formulas table F add F current F analyze table
S method F overload F place F place F register F setup floats table counters F add F analyze D data F initialize F preset F preset F preset F reset F reset floats table F current F simplify
F overload F initialize F place F register F setup F setup F add F add F analyze F initialize F preset F preset F reset F rese
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 register F setup counters F add F analyze F reset floats formulas F current F simplify
F setup floats table counters table formulas table F add F current F analyze F simplify
counters table formulas table F add F current F analyze F simplify
F add F current F analyze F simplify
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	uservalue	
D	stored		marks		table
itemg	roups	table	D	data	
F	maxwidth		F	define	
F	nofitems		F	exists	
F	register		F	fetch	
lists		table	F	fetchallmarks	
F	addto		F	fetched	
F	analyze		F	fetchonemark	
В	autoreorder		F	fetchtwomarks	
D	cached		F	get	
D	collected		F	number	
F	discard		F	relate	
F	enhance		F	reset	
Т	enhancers		F	set	
F	filter			show	
F	filtercollected		F	synchronize	
	formulanumber		F	title	
F	groupindex		Т	tracers	
F	hasnumberdata			F showtable	
F	haspagedata		notes		table
F	hastitledata		F	checkpagechange	
F	iscached			define	
F	label		F	doifonsamepageas	previous
F	location		F	get	
	number		F	getdeltapage	
D	ordered		F	getn	
F	page		F	getnumberpage	
F	popnesting		F	getstate	
	prefix			getsymbolpage	
	prefixednumber		F	hascontent	
	prefixedpage			internal	
	process			internalid	
	pushed			listindex	
	pushnesting		F	ordered	
	realpage			postpone	
	reordered			resetpostponed	
	result			restore	
	sectionblocks			save	
	sectionnumber			setstate	
	size			setsymbolpage	
	title			states	
	tobesaved		F	store	
F	userdata		pages		table

D collected F inject F is odd F injectcurrentset S innermethod N nofpages F number D internals F save F load D tobesaved F loadpresets F mark references table F analyze D pages F checkedfile U prefixsplitter F checkedfileorurl D productdata F checkedprogram T programs F checkedrealpage T data E checkedurl F define D collected F get U componentsplitter F realpageofpage F currentmetadata U referencesplitter F currentorder D referred D currentset F referredpage F define F registerfinalizer D defined F registerinitializer D derived F registerpage F enableinteraction F reportproblems F reset F enhance T resolvers D executers F expandcurrent F reference F export F section T files D runners T data F set F define F setandgetattribute F get F setcomponent F filter E setinnermethod F filterdefault E setinternal reference D filters F setnextinternal D flaginternals F setnextorder F from D specials F splitcomponent F get F getcurrentmetadata F splitprefix F getcurrentprefixspec F splitreference F getinnermethod T testrunners F getinternallistreference F inner F getinternalreference F special D handlers F special operation F identify F special operation with arguments

F import

F analyze

T testspecials		F	depthnumber
F deltapage			finddata
F i			findnumber
F internal			fullnumber
			getcurrentlevel
F page			
F realpage F section			getlevel
			getnumber internalreference
F userpage D tobereferred			
D tobereterred D tobesaved			levelmap levels
T urls T data			load
F define			matchingtilldepth
			numberatdepth
F get			numbers
D usedinternals			popblock
F valid			prefixedconverted
F whatfrom	4-61-		pushblock
registers	table		register
F analyze			registered
D collected			reportstructure
F compare			save
F define		ı	sectionblockdata
F enhance			T bodypart
F extend		_	S bookmark
F filter			set
F filtercollected			setblock
F finalize			setchecker
F flush			setentry
F prepare			setlevel
F process			setnumber
F setmethod			structuredata
F sort			title
F store		_	tobesaved
D tobesaved		F	typesetnumber
F unique		F	userdata
F userdata		В	verbose
sections	table	sets	table
F autodepth			define
F cct			get
D collected		F	getall
F current		D	setlist
F currentblock		speci	l als table
F currentid		D	collected
F currentlevel		F	retrieve

F store F stop D taglist D tobesaved synonyms table T userdata F analyzed D collected F compare F define F filter F finalize F flush F meaning F prepare F process F register F registerused F sort F synonym D tobesaved tags table T data F detailedtag F getid F handler D labels F last F lastinchain T metadata D properties F registerdata F registermetadata F restart E 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

table (basic lua)

allkeys	function
append	function
are_equal	$ \hbox{function} $
autokey	function
compact	$ \hbox{function} $
concat	$ \hbox{function} $
contains	function
сору	function
count	function
derive	function
deserialize	function
drop	function
fastcopy	$ \hbox{function} $
fastserialize	function
flattened	$ \hbox{function} $
foreach	function
foreachi	$ \hbox{function} $
fromhash	function
getmetatablekey	$ \hbox{function} $
getn	function
has_one_entry	function
identical	$ \hbox{function} $
imerge	function
imerged	function
insert	function
is_empty	function
keys	function
load	function
loweredkeys	function
maxn	function
merge	function
merged	function
mirrored	function
pack	function
prepend	function
print	function
remove	function
reverse	function
reversed	function
save	function
sequenced	function

serialize	function
setmetatablecall	function
setmetatableindex	function
setmetatablekey	function
setmetatablenewindex	function
sort	function
sorted	function
sortedhash	function
sortedhashkeys	function
sortedhashonly	function
sortedindexonly	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	isdefined	data table
badness	function	isdimen	function
box	table	isskip	function
catcode	table	istoken	function
conditionals	data table	lccode	table
constants	data table	linebreak	function
count	table	lists	table
ctdcatcodes	number	lua math random	function
ctxcatcodes	number	lua_math_randomseed	function
definefont	function	luacatcodes	number
delcode	table	mathcode	table
dimen	table	modes	data table
directives	data table	nest	table
enableprimitives	function	nilcatcodes	number
error	function	normal_rand	function
extraprimitives	function	notcatcodes	number
finish	function	number	function
fontidentifier	function	pdffontname	function
fontname	function	pdffontobjnum	function
fprint	function	pdffontsize	function
get	function	pdfpageref	function
getattribute	function	pdfxformname	function
getbox	function	primitives	function
getcatcode	function	print	function
getcount	function	printlist	function
getdelcode	function	prtcatcodes	number
getdimen	function	romannumeral	function
getlccode	function	round	function
getlist	function	run	function
getmath	function	scale	function
getmathcode	function	set	function
getnest	function	setattribute	function
getsfcode	function	setbox	function
getskip	function	setcatcode	function
gettoks	function	setcount	function
getuccode	function	setdelcode	function
hashtokens	function	setdimen	function
ifs	data table	setlccode	function
inicatcodes	number	setlist	function
init_rand	function	setmath	function
iscount	function	setmathcode	function

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

texconfig (basic tex)

error_line number expand depth number formatname string half_error_line number number hash extra init overloaded function kpse_init boolean max in open number max_print_line number max_strings number nest_size number param_size number save size number shell escape string stack size number

texio (basic tex)

write function
write_nl function

token (basic tex)

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

tokens (context)

```
table
bgroup
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)

function count function cs function dimen knownlist function lists table T context T internals T scratch function name primitive function printerror function showlines function strings table S undefined toks function type function

trackers (context)

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

typesetters (context)

alignments	table	F	installhan	dler
F handler		F	processmat	h
F set		F	set	
breakpoints	table	F	setcolor	
F define		F	setmath	
F handler		F	tomode	
D mapping		first	tlines	table
T methods		Т	actions	
T numbers			F default	
F set			F line	
F setreplace	ement		F word	
cases	table	F	handler	
T actions		-	set	
F handler		initi	ials	table
F register		Т	actions	
F set			F default	
characteralign	table	F	handler	
F handler		F	set	
F resetchara		itali		table
F setcharact	teralign	F	forcevaria	int
characters	table	F	handler	
F handler		F	reset	
F replacenbe	•	F	set	
F replacenbe		kerns		table
checkers	table	D	factors	
F handler			handler	
F reset			keepligatu	
F set			keeptogeth	er
cleaners	table		mapping	
F handler			set	
F set		margi		table
digits	table		finalhandl	
T actions			globalhand	ler
F handler		F	ha	
F set		F	localhandl	er
directions	table	F	save	
F getfences		-	essors	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
   F initialize reflow height
   F initialize_reflow_width
   F next_row
   F reflow_height
   F reflow width
   F set_construct
   F set_reflow_height
   F set_reflow_width
```

unicode (extra lua)

ascii	table	F	len
F	byte	F	lower
F	char	F	match
F	dump	F	rep
F	find	F	reverse
F	format	F	sub
F	gfind	F	upper
F	gmatch	utf8	table
F	gsub	F	byte
F	len	F	char
F	lower	F	characters
F	match	F	chrlen
F	rep	F	count
F	reverse	F	dump
F	sub	F	filetype
F	upper	F	find
graph	eme table	F	format
F	byte	F	gfind
F	char	F	gmatch
F	dump	F	gsub
F	find	F	is_valid
F	format	F	len
F	gfind	F	length
F	gmatch	F	lower
F	gsub	F	magic
F	len	F	match
F	lower	F	remapper
F	match	F	rep
F	rep	F	replacer
F	reverse	F	reverse
F	sub		split
F	upper	F	splitlines
latin	1 table	F	sub
F	byte	F	subtituter
F	char	F	tocodes
F	dump	F	toeight
F	find	F	toentities
F	format	F	tostring
F	gfind	F	totable
F	gmatch	F	upper
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	function
barepath	function
construct	function
escape	function
filename	function
hashed	function
hasscheme	function
query	function
split	function
toquery	function
unescapeget	function

utilities (context)

debugger	table	N version
F disable		parsers table
F enable		F add_settings_to_array
F savestats		F arguments_to_table
F showstats		F array_to_string
F showtraceba	ick	F csvsplitter
formatters	table	F getparameters
F formatcolum	nns	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 manipulated
B enabled		U manipulation
lua	table	T manipulators
B alwaysstrip	ocode	F lowercase
F compile		F stripperiod
F loadedluaco	ode	F uppercase
F loadstrippe	ed	F mergehashes
N nofstripped	lbytes	F options_to_hash
N nofstripped	Ichunks	T patterns
B stripcode		U settings_to_array
T strippedchu	ınks	U settings_to_hash_a
F strippedloa	ndstring	U settings_to_hash_b
T suffixes		U settings_to_hash_c
S lua		U unittotex
S luc		F process_stripped_settings
S lui		F rfc4180splitter
S luj		F runtime
S luv		F settings_to_array
S tma		F settings_to_array_with_repeat
S tmc		F settings_to_hash
S tua		F settings_to_hash_strict
S tuc		F settings_to_hash_tolerant
packers	table	F settings_to_set
F hashed		F simple_hash_to_string
F new		F splitthousands
F pack		F stepper
F simplehashe	ed	F stripped_settings_to_array
F strip		F unittotex
F unpack		F unittoxml

function T striplinepatterns report sequencers table U prune F appendaction U prune and collapse F appendgroup U prune and no empty F compile U retain F disableaction U retain and collapse F disablegroup U retain and no empty F enableaction F striplines F enablegroup F striplong D functions F tabtospace F localize T tracers F new tables table F nodeprocessor F accesstable F prependaction E definedtable F definetable F prependgroup F removeaction F encapsulate F setkind F insertaftervalue F tostring F insertbeforevalue setters table F migratetable F disable F removevalue F enable templates table F initialize F load F list F replace F new F replacer F register F resolve F report F reset F show stacker table F new table storage 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

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

xml (context)

	for all an	D. +	
addentitiesdoctype	function	D tex	
after	function	D texline	
all	function	D texspace	
applylpath	function	D verbose	
assign	function	defaultprotocol	string
attribute	function	delete	function
before	function	delete_element	function
body	function	each	function
builtinentities	table	each_element	function
B amp		elements	function
B apos		elementtocdata	function
B gt		empty 	function
B lt		entities	data table
B quot		erase	function
cdata	function	errorhandler	function
cdatatotext	function	escaped	function
checkbom	function	expressions	table
checkerror	function	F boolean	
checknamespace	function	F child	
checkns	function	F contains	
cleansed	function	F count	
collect	function	F error	
collect_elements	function	F find	
collect_tags	function	F lower	
collect_texts	function	F name	
collected	function	F number	
collecttexts	function	F oneof	
content	function	F print	
convert	function	F quit	
сору	function	F tag	
count	function	F text	
cprint	function	F undefined	
css	table	F upper	
F colorspecification	on	fillin	function
F dimension		filter	function
F fontspecification	n	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
	lowerall	F recursetext	
	match	include	function
F	name	index	function
F	position	inheritedconvert	function
	reverse	inject	function
F	stripped	inject_element	function
_	tag	inject_element_after	function
	tags	inject_element_before	function
	text	injectafter	function
F	upper	injectbefore	function
	upperall	insert	function
Гχ	ml	insert_element	function
F	all	insert_element_after	function
F	att	insert_element_before	function
F	attribute	insertafter	function
F	attributes	insertbefore	function
F	cdata	insertcomment	function
F	chainattribute	inspect	function
F	count	is_valid	function
F	default	kind	function
F	elements	last	function
F	empty	load	function
F	first	lpath	function
F	function	lpathcached	function
F	index	lpathcalls	function
F	last	lshow	function
F	lowerall	makestandalone	function
F	match	match	function
F	name	name	function
F	position	newhandlers	function
	reverse	nodesettostring	function
		_	

Т

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 function process process attributes function. process elements function. processattributes function profiled table raw function registerentity function registerns function **function** remap name **function** remap_namespace **function** remap tag function remapname function remapnamespace remaptag function function renamespace replace function replace element function resolvens function function root function save selection function separate function serialize function setcdata function sethandlersfunction function function setproperty settings function specialhandler table sprint function function string strip function strip whitespace **function**

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

table

xmlns

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