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

ConTEXt MkIV

global (alias: _G)

1	table	interfaces	table
arg	table	io	table
assert	function	ipairs	function
attributes	table	job	table
backends	table	lang	table
beginpage	function	languages	table
bibtex	table	layouts	table
blobs	table	lfs	table
boolean	table	libraries	table
buffers	table	lmx	table
builders	table	load	function
caches	table	loadfile	function
callback	table	loadstring	function
callbacks	table	logs	table
catcodes	table	lpdf	table
characters	table	lpeg	table
chemicals	table	ltn12	table
collectgarbage	function	lua	table
commands	table	luatex	table
containers	table	lxml	table
context	function	math	table
converters	table	mathematics	table
coroutine	table	md5	table
debug	table	metapost	table
dimen	function	mime	table
dir	table	module	function
directives	table	moduledata	table
document	table	modules	table
documentdata	table	mplib	table
dofile	function	newline	function
endpage	function	newproxy	function
environment	table	next	function
epdf	table	noads	table
error	function	node	table
experiments	table	nodes	table
figures	table	number	table
file	table	os	table
floats	table	outputpagestree	function
font	table	package	table
fontloader	table	pairs	function
fonts	table	parametersets	table
gcinfo	function	pcall	function
getfenv	function	pdf	table
getmetatable	function	physics	table
getreadfilename	function	print	function
global	table	profiler	table
graphics	table	protect	function
gzip	table	rawequal	function
img	table	rawget	function
inspect	function	rawset	function
interactions	table	regimes	table

report_characters	function	tocontext	function
require	function	token	table
resolvers	table	tokens	table
scripts	table	tonumber	function
select	function	tostring	function
set	table	trace_characters	boolean
setfenv	function	traceback	function
setmetatable	function	tracers	table
socket	table	trackers	table
sorters	table	type	function
statistics	table	typesetters	table
status	table	unicode	table
storage	table	unpack	function
streams	table	url	table
string	table	utf	table
stripmath	function	utilities	table
structures	table	visualizers	table
table	table	xml	table
tex	table	xpcall	function
texconfig	table	zip	table
texio	table	zlib	table
toboolean	function		

attributes (context)

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

colors   table
- N attribute
- F cmyk
- F cmyktogray
- F cmyktorgb
- F colorcomponents
- B couple
- D data
- N default
- F defineintermediatecolor
- F definemixcolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- F gray
- F graytohsv
- F handler
- F hsvtogray
- F hsvtorgb
- F iccprofile
- F isblack
- N main
- S model
- F mpcolor
- F mpoptions
- U none
- F popset
- F pushset
- F register
- D registered
- F registerspotcolor
- F rgb
- F rgbtocmyk
- F rgbtogray
- F rgbtohsv
- N selector

- F setlist
- F setmodel
- D sets
- F spot
- F spotcolorname
- F spotcolorparent
- F spotcolorvalue
- B supported
- F transparencycomponents
- B triggering
- F usecolors
- F value
- D values
- B weightgray

define   function
effects   table
- N attribute
- D data
- F enable
- F handler
- F register
- D registered
- D values

handlers   table
list   data table
names   data table
negatives   table
- N attribute
- D data
- F enable
- F handler
- F register
- D registered

numbers   data table
ofnode   function
private   function
showcurrent function
states   table
- F disabletriggering
- F enabletriggering
- F finalize
- F initialize
- F process
- F selective
- F stacked

transparencies table
- N attribute
- D data
- F enable
- F forcesupport
- F handler

```
    U none                                  F forcesupport
    F register                              F handler
    D registered                            B hasorder
    B supported                             D listwise
    B triggering                            F register
    F value                                 D registered
    D values                                D scopes
unsetvalue       number                     F setfeatures
viewerlayers     table                      F start
    N attribute                             F stop
    D data                                  B supported
    F define                                D values
    F enable
```

backends (context)

codeinjections	table	F	setformsmethod
current	string	F	setpagetransition
defaults	table	F	setupcanvas
T	codeinjections	F	setupidentity
T	nodeinjections	F	setxmpfile
T	registrations	F	startlayer
D	tables	F	stoplayer
install	function	F	supportedformats
nodeinjections	table	F	useviewerlayer
F	restore	F	validfield
F	save	F	validfieldcategory
F	transform	F	validfieldset
nothing	function	S	comment
pdf	table	T	nodeinjections
T	codeinjections	F	addtags
F	addbookmarks	F	attachfile
F	addtransparencygroup	F	cmykcolor
F	attachmentid	F	comment
F	clonefield	F	destination
F	definefield	F	effect
F	definefieldset	F	graycolor
F	defineviewerlayer	F	injectbitmap
F	embedfile	F	insertmovie
F	enabletags	F	insertsound
F	exportformdata	F	insertswf
F	finalizepage	F	insertu3d
F	finishreference	F	knockout
F	getdefaultfieldvalue	F	negative
F	getfieldcategory	F	overprint
F	getfieldset	F	positive
F	getformatoption	F	reference
F	getoutputfilename	F	rgbcolor
F	getpreviewfigure	F	spotcolor
F	insertrenderingwindow	F	startlayer
F	mergereferences	F	stoplayer
F	mergeviewerlayers	F	switchlayer
F	prerollreference	F	transparency
F	presetsymbol	F	typesetfield
F	presetsymbollist	T	registrations
F	processrendering	F	cmykindexcolor
F	registerdocumentcloseaction	F	cmykspotcolor
F	registerdocumentopenaction	F	getspotcolorreference
F	registeredsymbol	F	grayindexcolor
F	registerpagecloseaction	F	grayspotcolor
F	registerpageopenaction	F	rgbindexcolor
F	registersymbol	F	rgbspotcolor
F	setfieldcalculationset	F	spotcolorname
F	setfigurealternative	F	transparency
F	setfigurecolorspace	T	tables
F	setfiguremask	T	vfspecials
F	setformat	T	black

```
T blue                              T paleblue
T gray                              T palegray
T green                             T palegreen
T red                               T palered
T rulecolors                        T red
  T black                       F startslant
  T blue                        T stopslant
  T gray              registrations    table
  T green             tables           table
```

bibtex (context)

authorref	function		F flush
authors	table		F nofregistered
	F concat		F process
	F inverted		F register
	F invertedshort		F registerplaced
	F normal		F reset
	F normalshort		F resolve
	F setsettings	**load**	function
	F short	**new**	function
authoryearref	function	**singularorplural**	function
authoryearsref	function	**statistics**	table
convert	function		N nofbytes
hacks	table		N nofdefinitions
	F add		N nofshortcuts
	F doifalreadyplaced	**toxml**	function
	F filterall		

blobs (context)

append	function		**new**	function
dimensions	function		**pack**	function
dispose	function		**write**	function

boolean (context)

tocontext	function
tonumber	function

buffers (context)

append	function	F	define
assign	function	F	hassomecontent
collectcontent	function	F	next
erase	function	F	place
exists	function	F	reset
getcontent	function	F	save
getlines	function	**raw**	function
parallel	table		

builders (context)

kernel   table
    F hyphenation
    F kerning
    F ligaturing
    F mlist_to_hlist

paragraphs table
    T constructors
      N attribute
      F disable
      F enable
      F handler
      T methods
        F default
        F oneline
      D names
      D numbers
      F register
      F set
    F keeptogether
    F registertogether
    T solutions
      T splitters
        F define

    F disable
    F enable
    F optimize
    F setup
    F split
  F tag

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

caches (context)

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

callback (basic tex)

find   function
list   function
register overloaded function

callbacks (context)

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

catcodes (context)

names	data table
numbers	data table
register	function

characters (context)

activeoffset	number	**is_mark**	data table
adobename	function	**is_spacing**	data table
bidi	data table	**lcchars**	data table
blocks	data table	**lccode**	function
casemap	table	**lccodes**	data table
categories	data table	**lettered**	function
category	function	**lower**	function
categorytags	data table	**makeactive**	function
combined	data table	**math**	table
contextname	function	**mathpairs**	data table
data	data table	**ranges**	data table
decomposed	data table	**registerentities**	function
define	function	**remap_hangul_syllabe**	function
description	function	**remapentity**	function
descriptions	data table	**setcodes**	function
directions	data table	**shape**	function
enccodes	data table	**shaped**	function
entities	data table	**shchars**	data table
fallbacks	data table	**shcodes**	data table
filters	data table	**specialchars**	data table
flush	function	**specials**	data table
fromnumber	function	**subscripts**	table
fschars	data table	**superscripts**	table
fscodes	data table	**synonyms**	data table
getrange	function	**tex**	table
graphemes	data table	D accentmapping	
hangul	table	F defineaccents	
F decomposed		F toutf	
F description		**tonumber**	function
F leadconsonant		**ucchars**	data table
T remapped		**uccode**	function
initialize	function	**uccodes**	data table
is_character	data table	**unicodechar**	function
is_command	data table	**upper**	function
is_letter	data table		

chemicals (context)

component	function	**moleculeparser**	userdata
define	function	**start**	function
format	string	**stop**	function
inline	function	**structures**	number
instance	string	**undefine**	function
molecule	function		

commands (context)

Alphabetic	function	checkcharactersinfont	function
Character	function	checkcountersetup	function
Characters	function	checkedconversion	function
MPc	function	checkedpagefloat	function
MPd	function	checktwopassdata	function
MPh	function	chineseallnumerals	function
MPll	function	chinesecapnumerals	function
MPlr	function	chinesenumerals	function
MPls	function	cleanfontname	function
MPn	function	clonefield	function
MPp	function	collectfloat	function
MPpardata	function	collecthelp	function
MPplus	function	colorcomponents	function
MPpos	function	consultfloat	function
MPposset	function	copyfiletolog	function
MPr	function	copyposition	function
MPrest	function	countervalue	function
MPrs	function	counttwopassdata	function
MPul	function	currentcomponent	function
MPur	function	currentdate	function
MPw	function	currentenvironment	function
MPx	function	currentproduct	function
MPxy	function	currentproject	function
MPxywhd	function	currentregime	function
MPy	function	dayname	function
Romannumerals	function	defineattribute	function
abjadnodotnumerals	function	definebibtexsession	function
abjadnumerals	function	definebreakpoint	function
addcounter	function	definebreakpoints	function
addff	function	definecharacterspacing	function
addfs	function	defineconversion	function
addlinklistelement	function	definecounter	function
addtojavascriptpreamble	function	definedviewerlayer	function
addtolist	function	definefield	function
allinputpaths	function	definefieldset	function
alphabetic	function	definefilefallback	function
analysefloatmethod	function	definefilesynonym	function
analyzelist	function	definefont_one	function
applytochars	function	definefont_two	function
applytowords	function	definefontfeature	function
assignbuffer	function	defineintermediatecolor	function
autofinishstructurelevels	function	definelinkedlist	function
autonextspace	function	definemarking	function
autonextstructurelevel	function	definemultitonecolor	function
autosetups	function	defineparallel	function
autostarttext	function	defineprocesscolor	function
autostoptext	function	definesectionlevels	function
bcolumn	function	definespotcolor	function
boolcase	function	definestructureblock	function
Character	function	definestructureset	function
Characters	function	definetransparency	function

definetwopasslist	function	dostarttextfile	function
defineviewerlayer	function	dostoptextfile	function
defrostrandomseed	function	ecolumn	function
digits	function	elapsedtime	function
disableregime	function	enablecolor	function
disablespellchecking	function	enablecolorintents	function
discardfromlist	function	enablefontcolorschemes	function
doanalyzeframedbox	function	enableregime	function
doif	function	enablespellchecking	function
doifblackelse	function	enabletransparency	function
doifcommonelse	function	enhancelinkedlist	function
doifcounter	function	enhancelist	function
doifdimenstringelse	function	erasebuffer	function
doifdrawingblackelse	function	exportformdata	function
doifelse	function	featureattribute	function
doifelsebuffer	function	featurelist	function
doifelsecounter	function	feedback	function
doifelsecurrentfonthasfeature	function	fetchallmarks	function
doifelseintwopassdata	function	fetchmultipar	function
doifelsemarking	function	fetchonemark	function
doifelsemultipar	function	fetchposboxes	function
doifelseparallel	function	fetchtwomarks	function
doifelsepositionsused	function	filterreference	function
doifelserangeonpage	function	finalizebox	function
doifelsesavedfloat	function	findtwopassdata	function
doifelsespaces	function	firstcountervalue	function
doifelsevisualizer	function	firstinset	function
doiffieldcategoryelse	function	flushfloat	function
doiffieldelse	function	flushpostponedblocks	function
doiffieldsetelse	function	fontchar	function
doiffiledefinedelse	function	fontcollectionclone	function
doiffileexistelse	function	fontcollectiondefine	function
doiffirstcharelse	function	fontcollectionprepare	function
doifinputfileelse	function	fontcollectionregister	function
doifinsetelse	function	fontcollectionreport	function
doifleapyearelse	function	fontcollectionreset	function
doiflisthasentry	function	fontlookupgetkey	function
doiflisthasnumberelse	function	fontlookupgetkeyofindex	function
doiflisthaspageelse	function	fontlookupinitialize	function
doiflisthastitleelse	function	fontlookupnoffound	function
doiflocfileelse	function	forceendjob	function
doifnot	function	forcequitjob	function
doifnotcounter	function	format	function
doifolderversionelse	function	formatcolor	function
doifoverlappingelse	function	formatgray	function
doifparentfileelse	function	freezerandomseed	function
doifposition	function	getbuffer	function
doifpositionelse	function	getbufferctxlua	function
doifpositiononpage	function	getbuffermkvi	function
doifpositionsonsamepageelse	function	getdefaultfieldvalue	function
doifpositionsonthispageelse	function	getfieldcategory	function
doifurldefinedelse	function	getfirstcharacter	function
doprocesstypescriptfile	function	getfirsttwopassdata	function
doreshapeframedbox	function	getfloatvariable	function

getinternalreference	function	mathrenderset	function
getlasttwopassdata	function	maxitemwidth	function
getmarking	function	minute	function
getprivateattribute	function	molecule	function
getprivatechar	function	month	function
getrandomcounta	function	monthmnem	function
getrandomcountb	function	monthname	function
getrandomseed	function	mpcolor	function
getreadfilename	function	mpoptions	function
gettexbuffer	function	namedstructureuservariable	function
gettwopassdata	function	namedstructurevariable	function
gettwopassdatalist	function	nbfs	function
geturl	function	nextcountervalue	function
grabbuffer	function	nextparallel	function
helpaction	function	nofdays	function
helpreference	function	nofitems	function
hexstringtonumber	function	nofstackedfloats	function
hour	function	noteprefixednumber	function
hyphenatedlist	function	notetitle	function
hyphenatedurl	function	ntimes	function
D characters		number	function
N lefthyphenmin		octnumber	function
D mapping		octstringtonumber	function
N righthyphenmin		ordinal	function
F setcharacters		overloadbookmark	function
incrementedcounter	function	parpos	function
insertattachment	function	pdfrotation	function
insertcomment	function	percentageof	function
insertfield	function	placeparallel	function
insertrenderingwindow	function	popfloat	function
insertsoundclip	function	popitaliccorrection	function
isleapyear	function	poplist	function
languagenumber	function	pos	function
lastcountervalue	function	posplus	function
lchexnumber	function	posstrut	function
lchexnumbers	function	poswhd	function
leapyear	function	posxy	function
listlabel	function	prepareMPvariable	function
listlocation	function	preparebibtexsession	function
listprefixednumber	function	preparedfile	function
listprefixedpage	function	presetsymbollist	function
listrealpage	function	presettabulate	function
listsize	function	prevcountervalue	function
listtitle	function	processbuffer	function
listuserdata	function	processedfile	function
loadctxpreplist	function	processedfiles	function
loadexamodes	function	processfile	function
loadfontgoodies	function	processfilemany	function
loadspellchecklist	function	processfilenone	function
loadtypescriptfile	function	processfileonce	function
loadvisualizer	function	processlist	function
locatefilepath	function	pushfloat	function
locfilename	function	pushitaliccorrection	function
markregionbox	function	pushlist	function

rawcharacter	function	setcharactercasing	function
rawcountervalue	function	setcharactercleaning	function
rawdate	function	setcharacterkerning	function
referencepagestate	function	setcharacterspacing	function
referencerealpage	function	setcharacterstripping	function
registerattachment	function	setclosedocumentaction	function
registerbibtexentry	function	setclosepageaction	function
registerbibtexfile	function	setcolormodel	function
registerbookmark	function	setcounter	function
registerbuttons	function	setdigitsmanipulation	function
registercolor	function	setfontfeature	function
registercolorintent	function	setfontofid	function
registeredviewerlayer	function	setformat	function
registerhelp	function	setformsmethod	function
registeritemgroup	function	setinternalreference	function
registermaintextcolor	function	setmarking	function
registernamespace	function	setmathalphabet	function
registerpostponedblock	function	setmathalternate	function
registersoundclip	function	setmathattribute	function
registerstructureprocessor	function	setmathitalics	function
registertransparency	function	setmathstyle	function
registerunit	function	setopendocumentaction	function
relatemarking	function	setopenpageaction	function
removemissingcharacters	function	setowncounter	function
replacemissingcharacters	function	setpagetransition	function
replacepospxywhd	function	setpos	function
resavefloat	function	setrandomseed	function
resetcounter	function	setrealign	function
resetfontfeature	function	setreferencearguments	function
resetmarking	function	setreferenceoperation	function
resetmathitalics	function	setstructureblockstate	function
resetnullfont	function	settagcombination	function
resetparallel	function	settagdescription	function
resetstructureprocessor	function	settagdescriptionsymbol	function
resettimer	function	settagfigure	function
restartcounter	function	settaghighlight	function
restorecounter	function	settagitemgroup	function
restorecurrentattributes	function	settagproperty	function
romannumerals	function	settagsorting	function
runbuffer	function	settagsynonym	function
savebuffer	function	settagtablecell	function
savecounter	function	settagtabulatecell	function
savecurrentattributes	function	setupbookmarks	function
savedlistnumber	function	setupcanvas	function
savedlistprefixednumber	function	setupcharacterspacing	function
savedlisttitle	function	setupexport	function
savefloat	function	setupfontexpansion	function
saveparallel	function	setupfontprotrusion	function
savestructureblock	function	setupidentity	function
savetaggedtwopassdata	function	setupitaliccorrection	function
savetwopassdata	function	setxmpfile	function
second	function	showattributes	function
selectstructureblock	function	showchardata	function
setbreakpoints	function	showcounter	function

showfontparameters	function	unit	function
showhyphenatedinlist	function	updatefilenames	function
splitfilename	function	useMPlibrary	function
spotcolorname	function	useanyfile	function
spotcolorparent	function	usecldfile	function
spotcolorvalue	function	usecolors	function
startcolorset	function	usecomponent	function
startcomponent	function	useenvironment	function
startenvironment	function	usefile	function
startproduct	function	usejavascriptpreamble	function
startproject	function	usejavascriptscripts	function
startregime	function	uselibrary	function
startsectionlevel	function	useluafile	function
starttag	function	usemodules	function
starttext	function	usepath	function
startviewerlayer	function	useproduct	function
stopcolorset	function	useproject	function
stopcomponent	function	usesubpath	function
stopenvironment	function	usesymbols	function
stopproduct	function	usetexfile	function
stopproject	function	useurl	function
stopregime	function	usexmlfile	function
stopsectionlevel	function	usezipfile	function
stoptag	function	utfchar	function
stoptext	function	utfmathclass	function
stopviewerlayer	function	utfmathcommand	function
storejavascriptcode	function	utfmathfiller	function
storejavascriptpreamble	function	utfmathstretch	function
structureautocatcodedget	function	vspacing	function
structurecatcodedget	function	vspacingcollapse	function
structuregivencatcodedget	function	vspacingdefine	function
structurenumber	function	vspacingsetamount	function
structuretitle	function	vspacingsnap	function
structureuservariable	function	weekday	function
structurevariable	function	weekdayname	function
subcountervalues	function	widthofstring	function
subff	function	writestatus	function
subfs	function	x_table_cleanup	function
synchronizemarking	function	x_table_construct	function
taggedmathfunction	function	x_table_create	function
testcase	function	x_table_flush	function
textime	function	x_table_init_construct	function
transparencycomponents	function	x_table_init_reflow_height	function
triggereffect	function	x_table_init_reflow_width	function
triggernegative	function	x_table_next_row	function
truefilename	function	x_table_reflow_height	function
typebuffer	function	x_table_reflow_width	function
typefile	function	x_table_set_construct	function
typestring	function	x_table_set_reflow_height	function
uchexnumber	function	x_table_set_reflow_width	function
uchexnumbers	function	year	function
unicodechar	function		

containers (context)

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

converters (context)

Alphabetic	function	**leapyear**	function
Character	function	**maxchrs**	function
Characters	function	**minute**	function
Romannumerals	function	**month**	function
abjadnodotnumerals	function	**nofdays**	function
abjadnumerals	function	**number**	function
alphabetic	function	**octnumber**	function
character	function	**octstringtonumber**	function
characters	function	**ordinal**	function
chineseallnumerals	function	**rawcharacter**	function
chinesecapnumerals	function	**romannumerals**	function
chinesenumerals	function	**second**	function
chr	function	**sequences**	data table
chrs	function	**textime**	function
convert	function	**toabjad**	function
define	function	**tochinese**	function
hexstringtonumber	function	**toroman**	function
hour	function	**uchexnumber**	function
isleapyear	function	**uchexnumbers**	function
lchexnumber	function	**weekday**	function
lchexnumbers	function	**year**	function

coroutine (basic lua)

coco	boolean		**running**	function
create	function		**status**	function
cstacksize	function		**wrap**	function
resume	function		**yield**	function

debug (basic lua)

debug	function		getupvalue	function
getfenv	function		setfenv	function
gethook	function		sethook	function
getinfo	function		setlocal	function
getlocal	function		setmetatable	function
getmetatable	function		setupvalue	function
getregistry	function		traceback	function

dir (context)

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

directives (context)

data	data table		**name**	string
disable	function		**register**	function
enable	function		**report**	function
list	function		**show**	function

document (context)

arguments	data table	**setargument**	function
files	table	**setdefaultargument**	function
getargument	function	**setfilename**	function
getfilename	function		

environment (context)

argument	function	**luafilechunk**	function
arguments	data table	**originalarguments**	data table
engineflags	data table	**outputfilename**	string
files	table	**ownbin**	string
filesynonyms	data table	**ownname**	string
homedir	string	**ownpath**	string
initex	boolean	**rawarguments**	data table
initializearguments	function	**reconstructcommandline**	function
inputfilebarename	string	**setargument**	function
inputfilename	string	**splitarguments**	function
inputfilesuffix	string	**texfile**	function
jobfilename	string	**texmfos**	string
jobfilesuffix	string	**texos**	string
loadedluacode	function	**texroot**	string
loadluafile	function	**truefilename**	function
luafile	function		

epdf (extra tex)

Annot	function		**Object**	function
Annots	function		**PDFRectangle**	function
Array	function		**open**	function
Dict	function		**type**	function

experiments (context)

data	data table		**name**	string
disable	function		**register**	function
enable	function		**report**	function
list	function		**show**	function

figures (context)

applyratio	function		**hash**	function
bases	table		**identifiers**	data table
B enabled			**identify**	function
F find			**include**	function
T found			**includers**	data table
T list			**initialize**	function
F locate			**loaded**	data table
F use			**localpaths**	data table
T used			**mergegoodies**	function
bitmapimage	function		**nofprocessed**	number
boxnumber	number		**order**	data table
cachepaths	data table		**paths**	data table
check	function		**patterns**	data table
checkers	data table		**pop**	function
converters	data table		**preferquality**	boolean
current	function		**programs**	data table
defaultdepth	number		**push**	function
defaultheight	number		**registerpattern**	function
defaultsearch	boolean		**registerresource**	function
defaultwidth	number		**registersuffix**	function
done	function		**resources**	data table
dummy	function		**scale**	function
existers	data table		**setlookups**	function
exists	function		**setpaths**	function
formats	data table		**suffixes**	data table
found	data table		**tprint**	function
get	function		**used**	data table

file (basic lua)

addsuffix	function	**joinpath**	function
basename	function	**loadchecksum**	function
checksum	function	**nameonly**	function
collapsepath	function	**nametotable**	function
copy	function	**needs_updating**	function
dirname	function	**readdata**	function
expandname	function	**removesuffix**	function
extname	function	**replacesuffix**	function
is_qualified_path	function	**robustname**	function
is_readable	function	**savechecksum**	function
is_rootbased_path	function	**savedata**	function
is_writable	function	**splitname**	function
isreadable	function	**splitpath**	function
iswritable	function	**strip**	function
join	function	**suffix**	function

floats (context)

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

font (basic tex)

current	function		**id**	function
define	function		**max**	function
each	function		**nextid**	function
fonts	table		**read_tfm**	function
frozen	function		**read_vf**	function
getfont	function		**setfont**	function

fontloader (extra tex)

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

fontloader (extra tex)

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

fonts (context)

analyzers   table
- D initializers
- D methods
- F setstate
- B useunicodemarks

checkers   table
- F missing

cid   table
- F getmap
- F loadfile

collections   table
- F clonevector
- F define
- T definitions
- F prepare
- F process
- F registermain
- F report
- F reset
- T vectors

constructors   table
- F aftercopyingcharacters
- F applymanipulators
- F assignmathparameters
- B autocleanup
- F beforecopyingcharacters
- D cache
- F calculatescale
- F checkedfeatures
- F checkedfilename
- F cleanuptable
- F collectprocessors
- D designsizes
- D dontembed
- F enhanceparameters
- N factor
- F finalize
- F getfeatureaction
- F hashfeatures
- F hashinstance
- T hashmethods
  - F normal
  - F virtual
- F initializefeatures
- T keys
  - T character
    - S depth
    - S height
    - S italic
    - S width
  - T description

- T boundingbox
  - S depth
  - S height
  - S width
- T parameters
  - S ascender
  - S descender
  - S designsize
  - T expansion
    - S auto
    - S shrink
    - S step
    - S stretch
  - S extendfactor
  - S factor
  - S hfactor
  - S mathsize
  - T protrusion
    - S auto
  - S quad
  - S scaledpoints
  - S scriptpercentage
  - S scriptscriptpercentage
  - S size
  - S slantfactor
  - S slantperpoint
  - T spacing
    - S extra
    - S shrink
    - S stretch
    - S width
  - T synonyms
    - S em
    - S ex
    - S extra_space
    - S extraspace
    - S slant
    - S space
    - S space_shrink
    - S space_stretch
    - S spaceshrink
    - S spacestretch
    - S x_height
  - S units
  - S vfactor
  - S xheight
- T properties
  - S autoitalicamount
  - T cidinfo
  - S embedding
  - S encodingbytes

```
          S filename                    definetypeface  function
          S finalized                   encodings       table
          S fontname                       T agl
          S format                         D cache
          S fullname                       F is_known
          S hasitalics                     D known
          S hasmath                        F load
          S mathitalics                    F make_unicode_vector
          S mode                           D math
          S name                           N version
          S noglyphnames                encodings       data table
          S nostackmath                expansions      data table
          S psname                      formats         data table
          S textitalics                goodies         table
          S virtualized                    T colorschemes
       D loadedfonts                         F coloring
       S namemode                            T data
       F newfeatures                         F enable
       N privateoffset                    T designsizes
       F readanddefine                       D data
       F registerfeature                     F filename
       B resolvevirtualtoo                   F register
       F scale                            F getcompositions
       F scaled                           T list
       F setfactor                           F compositions
       F setname                             F designsizes
       N version                             F expansions
current         function                     F featureset
currentid       function                     F files
definers        table                        F mathematics
       F addlookup                            F protrusions
       F analyze                             F solutions
       F applypostprocessors                 F typefaces
       F checkedmode                      F load
       F checkedscript                     F prepare_features
       F current                          F register
       S defaultlookup                     F registerpostprocessor
       F define                            F report
       F getspecification            handlers        table
       F loadfont                         T afm
       F makespecification                   B addkerns
       T methods                             B addligatures
         F install                           B addtexligatures
         D variants                          B autoprefixed
       F read                                D cache
       F register                            D features
       F registered                          F load
       F registersplit                       F setfeatures
       F resetnullfont                       B syncspace
       F resolve                             N version
       T resolvers                        T otf
         F file                              F addfeature
         F name                              D cache
         F spec                              T chainhandlers
                                               F normal
```

```
          F verbose                                      F getprivatenode
       F collectlookups                                  F hasprivate
       F dataset                                         F nametoslot
       S defaultbasealternate                            F setdigitwidth
       S defaultnodealternate               iterators         table
       D enhancers                                       F characters
       D features                                        F descriptions
       F getalternate                                    F glyphs
       T glists                             loggers          table
       F load                                            T category_to_placeholder
       F scriptandlanguage                                  S ll
       F setcontextchain                                    S lm
       F setdynamics                                        S lo
       F setfeatures                                        S lt
       T tables                                             S lu
          D baselines                                       S mc
          D features                                        S me
          D languages                                       S mn
          D scripts                                         S nd
       N version                                            S nl
    T pfb                                                   S no
    T tfm                                                   S pc
       D features                                           S pd
       F setfeatures                                        S pe
    T vf                                                    S pf
       T combinations                                       S pi
       F combine                                            S po
       T combiner                                           S ps
          D commands                                        S sc
       F find                                               S sk
       D helpers                                            S sm
       D math                                               S so
       D predefined                                      F format
       D whatever                                        F onetimemessage
hashes           table                                   F register
    D characters                                          F reportdefinedfonts
    D csnames                                             F reportusedfeatures
    D descriptions                          mappings          table
    T dynamics                                            F addtounicode
    D identifiers                                         F fromunicode16
    D italics                                             F loadfile
    D marks                                               F loadline
    D parameters                                          F loadlumtable
    T processes                                           F makenameparser
    D properties                                          F reset
    D quads                                               F tounicode16
    D resources                                           F tounicode16sequence
    T setdynamics                           names             table
    D xheights                                            S basename
helpers          table                                   B be_clever
    F addprivate                                          D cache
    F dimenfactor                                         F cleanfilename
    F getdigitwidth                                       F cleanname
    F getparameters                                       F collect
```

```
F collectfiles              D specifications
F collectspec               F splitspec
T data                      N version
B enabled                   F writedata
F exists             protrusions    data table
T filters            readers        table
  F afm                     F afm
  F dfont                   F check_lua
  T list                    F check_tfm
  T names                   F dfont
  F otf                     F lua
  T paths                   F opentype
  F pfb                     F otf
  F ttc                     F pfb
  F ttf                     D sequence
S fontconfigfile            F tfm
F getfilename               F ttc
F getlookupkey              F ttf
F getlookups         specifiers      table
F getpaths                  D contextmerged
F identify                  F contextnumber
F is_permitted              D contextnumbers
F list                      D contextsetups
F load                      F contexttostring
B loaded                    F mergecontext
F lookup                    F presetcontext
F noflookups                F registercontext
S osfontdirvariable         F showcontext
F readdata                  F splitcontext
F register                  D synonyms
F registered                D variants
F resolve            symbols         table
F resolvedspecification     F uselibrary
F resolvespec        tables          table
B saved              tracers         table
F specification      typefaces       data table
```

graphics (context)

backgrounds table   F pair

    F calculatemultipar   F path

    F fetchmultipar   F point

gzip (extra lua)

close   function
lines   function
open   function

img (basic tex)

boxes	function		**ofindex**	function
checksize	function		**package**	function
clone	function		**print**	function
copy	function		**scan**	function
immediatewrite	function		**serialize**	function
keys	function		**totable**	function
new	function		**types**	function
node	function		**write**	function

interactions (context)

attachments   table
- F insert
- F register

fields   table
- F clone
- F define
- F defineset
- F insert

general   table
- F getidentity
- F setupidentity

help   table
- F collect
- F reference
- F register

javascripts table
- F addtopreamble
- F code
- D codes
- F flushpreambles
- D functions
- D preambles

- F setpreamble
- F storecode
- F storepreamble
- F usepreamblenow
- F usescripts

linkedlists table

pages   table
- F setpagetransition
- F setupcanvas

references   table
- F setclosedocument
- F setclosepage
- F setopendocument
- F setopenpage

renderings   table
- F register
- F rendering
- F var

soundclips   table
- F insert
- F register

interfaces (context)

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

io (basic lua)

ask	function		**out**	table
bytes	function		F inhibit	
characters	function		D modes	
checkopeners	function		F permit	
close	function		**output**	function
exists	function		**pathseparator**	string
fileseparator	string		**popen**	overloaded function
finalizeopeners	function		**read**	function
flush	function		**readnumber**	function
inp	table		**readstring**	function
F inhibit			**registeropener**	function
D modes			**savedata**	function
F permit			**size**	function
input	function		**stderr**	userdata
lines	function		**stdin**	userdata
loaddata	function		**stdout**	userdata
noflines	function		**tmpfile**	function
open	function		**type**	function
open_ro	function		**write**	function

job (context)

comment   function
disablesave function
files   table
    D collected
    F context
    B forcerun
    F run
    D tobesaved
initialize function
load   function
loadother   function
objects   table
    D collected
    F doifelse
    F get
    F number
    F page
    F save
    F set
    D tobesaved
pack   boolean
passes   table
    F check
    D collected
    F count
    F define
    F find
    F first
    F get
    F getcollected
    F getdata
    F getfield
    F gettobesaved
    F inlist
    F last
    F list
    F save
    F savetagged
    D tobesaved
positions   table
    F b_col
    F b_region
    F c
    D collected
    F column
    F copy
    F depth
    F e_col
    F e_region

    F enhance
    F extra
    F get
    F getreserved
    F hangafter
    F hangindent
    F height
    F hsize
    F leftskip
    F lowerleft
    F lowerright
    F markregionbox
    F n
    F onsamepage
    F overlapping
    F p
    F page
    F paragraph
    F parindent
    F position
    F r
    F region
    F replace
    F rightskip
    F set
    F setall
    F setdim
    D tobesaved
    F upperleft
    F upperright
    F width
    F x
    F xy
    F y
register   function
save   function
structure   table
    D collected
    T components
    T tobesaved
      T branches
      S name
      S type
variables   table
    D checksums
    D collected
    F save
    D tobesaved
version   number

lang (basic tex)

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

languages (context)

associate	function		**numbers**	data table
associated	data table		**posthyphenchar**	function
association	function		**prehyphenchar**	function
counters	data table		**registered**	data table
current	function		**righthyphenmin**	function
data	data table		**setdirty**	function
define	function		**synonym**	function
exceptions	function		**version**	number
getnumber	function		**words**	table
hyphenate	function		F check	
installed	function		T data	
labels	table		F disable	
F define			F enable	
F split			T enablers	
lefthyphenmin	function		B enables	
loadable	function		F found	
loadwords	function		F load	
logger	table		T methods	
F report			N threshold	

layouts (context)

status table
    F isleftpage
    F leftorrightpagection

lfs (extra lua)

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

libraries (context)

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

lmx (context)

convert	function	pv	function
escape	function	reset	function
get	function	result	function
htmfile	function	set	function
include	function	show	function
lmxfile	function	showdebuginfo	function
loadedfile	function	showerror	function
make	function	tv	function
new	function	type	function
overloaderror	function	urlescape	function
popupfile	function	variable	function
print	function	variables	data table

logs (context)

application	function	setmessenger	function
categories	function	setprogram	function
direct	function	settarget	function
disable	function	settranslations	function
enable	function	show	function
extendbanner	function	show_close	function
flush	function	show_load	function
help	function	show_open	function
messenger	function	simple	function
new	function	simpleline	function
newline	function	simplelines	function
poptarget	function	start_page_number	function
pushtarget	function	status	function
report	function	stop_page_number	function
report_job_stat	function	subdirect	function
reportbanner	function	subreport	function
reporter	function	system	function
reportline	function	texerrormessage	function
reportlines	function	writer	function
setformats	function		

lpdf (context)

action	function	id	function
adddocumentcolorspace	function	injectxmpinfo	function
adddocumentextgstate	function	insertxmpinfo	function
adddocumentpattern	function	javascript	function
adddocumentshade	function	launch	function
addtocatalog	function	layerreference	function
addtoinfo	function	limited	function
addtonames	function	linearshade	function
addtopageattributes	function	link	function
addtopageresources	function	null	function
addtopagesattributes	function	number	function
addxmpinfo	function	pagedestination	function
array	function	pagereference	function
boolean	function	pdfcolor	function
checkedkey	function	pdftimestamp	function
checkedvalue	function	protectresources	boolean
circularshade	function	reference	function
cmykcode	function	registerannotation	function
collectedresources	function	registerdocumentfinalizer	function
color	function	registerpagefinalizer	function
colorspace	function	reserveannotation	function
colorspec	function	reserveobject	function
colorvalue	function	rgbcode	function
colorvalues	function	rotationcm	function
constant	function	shareobject	function
delayedobject	function	shareobjectreference	function
dictionary	function	spotcode	function
epdf	table	stream	function
F load		string	function
finalizedocument	function	timestamp	function
finalizepage	function	toeight	function
finishtransparencycode	function	tosixteen	function
flushobject	function	transparency	function
flushstreamfileobject	function	transparencycode	function
flushstreamobject	function	transparencyvalue	function
formats	data table	unicode	function
graycode	function	verbose	function

lpeg (basic lua)

C	function	endstripper	function
Carg	function	firstofsplit	function
Cb	function	frontstripper	function
Cc	function	is_lpeg	function
Cf	function	keeper	function
Cg	function	locale	function
Cmt	function	match	function
Cp	function	oneof	function
Cs	function	patterns	data table
Ct	function	print	function
P	function	replacer	function
R	function	secondofsplit	function
S	function	span	function
UP	function	split	function
UR	function	splitat	function
US	function	splitter	function
V	function	stripper	function
anywhere	function	tsplitat	function
append	function	tsplitter	function
balancer	function	type	function
checkedsplit	function	utfchartabletopattern	function
count	function	version	function
counter	function		

ltn12 (extra lua)

BLOCKSIZE   number
filter   table
    F chain
    F cycle
pump   table
    F all
    F step
sink   table
    F chain
    F error
    F file
    F null

    F simplify
    F table
source   table
    F cat
    F chain
    F empty
    F error
    F file
    F rewind
    F simplify
    F string

lua (basic tex)

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

luatex (context)

cleanuptempfiles	function	**showjobstat**	function
registerstartactions	function	**showtexstat**	function
registerstopactions	function	**starttime**	number
registertempfile	function		

lxml (context)

addindex	function		last	function
all	function		load	function
applyfunction	function		loadbuffer	function
att	function		loaddata	function
attribute	function		loaded	table
chainattribute	function		loadregistered	function
checkindex	function		main	function
collected	function		match	function
command	function		name	function
concat	function		namespace	function
concatrange	function		nonspace	function
content	function		pos	function
context	function		position	function
convert	function		raw	function
count	function		rawroot	function
delete	function		register	function
direct	function		registerentity	function
directives	table		removesetup	function
F after			resetcdata	function
F before			resetsetups	function
F handle			resolvedentity	function
F load			root	function
F setup			serialize	function
displayverbatim	function		setaction	function
doif	function		setcdata	function
doifelse	function		setcommandtonone	function
doifelsetext	function		setcommandtotext	function
doifnot	function		setsetup	function
doifnottext	function		snippet	function
doiftext	function		sorters	table
element	function		F add	
elements	function		F compare	
entities	data table		F flush	
filter	function		F reset	
filterlist	function		F show	
first	function		F sort	
flush	function		splitid	function
flushlinewise	function		startraw	function
flushsetups	function		stopraw	function
flushspacewise	function		store	function
~~get_id~~	~~function~~		strip	function
getid	function		stripped	function
getindex	function		tag	function
id	function		text	function
idsplitter	userdata		tofile	function
include	function		toparameters	function
index	function		toverbatim	function
info	function		verbatim	function
inlineverbatim	function		withindex	function
installsetup	function		xmltexhandler	data table

math (basic lua)

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

mathematics (context)

addfallbacks	function	**remapalphabets**	function
alphabets	data table	**renderings**	table
big	function	D mappings	
boldmap	table	D numbers	
categories	table	D sets	
D functions		**renderset**	function
checkaccentbaseheight	function	**resetitalics**	function
checkprivateparameters	function	**scaleparameters**	function
classes	data table	**setalternate**	function
codes	data table	**setitalics**	function
define	function	**syncboth**	function
dimensions	function	**syncname**	function
extrabase	number	**syncstyle**	function
extras	table	**toname**	function
F add		**tostyle**	function
F copy		**tweakaftercopyingfont**	function
families	data table	**tweakbeforecopyingfont**	function
gaps	table	**tweaks**	table
getboth	function	F fixbadprime	
getstyle	function	**utfmathclass**	function
initializeparameters	function	**utfmathcommand**	function
makefont	function	**utfmathfiller**	function
overloadparameters	function	**utfmathstretch**	function
privatebase	number		

md5 (extra lua)

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

analyzeplugins	function	**makempy**	table
checkformat	function	N nofconverted	
checktexts	function	F processgraphics	
colorinitializer	function	**metafun**	table
convert	function	F interpolate	
defaultformat	string	F topath	
directrun	function	**method**	number
edefsxsy	function	**mptopdf**	table
escaped	function	F convertmpstopdf	
exectime	table	N nofconverted	
filterclippath	function	**multipass**	boolean
finder	function	**n**	number
flush	function	**optimize**	boolean
flushers	table	**parse**	function
T pdf		**pdfliterals**	function
F comment		**pluginactions**	function
F flushfigure		**process**	function
F startfigure		**processplugins**	function
F stopfigure		**reducetogray**	boolean
F textfigure		**reporterror**	function
flushliteral	function	**reset**	function
flushnormalpath	function	**resetlastlog**	function
flushreset	function	**resetplugins**	function
format	function	**resettextexts**	function
formatnumber	function	**setoutercolor**	function
getclippath	function	**settext**	function
gettext	function	**showlog**	boolean
graphic	function	**tex**	table
graphic_base_pass	function	F get	
graphic_extra_pass	function	F reset	
intermediate	table	F set	
T actions		**texerrors**	boolean
F makempy		**textextsdata**	function
B needed		**theclippath**	function
lastlog	string	**totable**	function
load	function	**unload**	function

mime (extra lua)

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

mplib (extra tex)

fields	function		**pen_info**	function
new	function		**version**	function

noads (context)

handlers   table
- F check
- F collapse
- F families
- F italics
- F relocate
- F render
- F resize
- F respace
- F tags
- F unscript

- F variants

process   function

processors table
- T collapse
- F mlist_to_hlist
- T relocate
- T render
- T resize
- T respace
- T unscript

node (basic tex)

copy	function	ligaturing	function
copy_list	function	mlist_to_hlist	function
count	function	new	function
current_attr	function	next	function
dimensions	function	prev	function
do_ligature_n	function	protect_glyphs	function
family_font	function	protrusion_skippable	function
fields	function	remove	function
first_character	function	set_attribute	function
first_glyph	function	slide	function
flush_list	function	subtype	function
free	function	tail	function
has_attribute	function	traverse	function
has_field	function	traverse_id	function
hpack	function	type	function
id	function	types	function
insert_after	function	unprotect_glyphs	function
insert_before	function	unset_attribute	function
is_node	function	usedlist	function
kerning	function	vpack	function
last_node	function	whatsits	function
length	function	write	function

nodes (context)

after	function		F setmark	
aligned	function		F setpair	
astable	function	**installattributehandler**	function	
before	function	**is_display_math**	function	
builders	table	**is_mirrored**	data table	
F buildpage_filter		**is_rotated**	data table	
F vpack_filter		**kerncodes**	data table	
codes	data table	**leftmarginwidth**	function	
concat	function	**lines**	table	
count	function	T boxed		
delete	function	F register		
destinations	table	F setup		
N attribute		F stage_one		
T done		F stage_two		
F handler		F stage_zero		
T stack		D data		
dimensionfields	data table	F finalize		
dir_is_pop	data table	F number		
dir_negation	data table	N scratchbox		
fasthpack	function	**link**	function	
fields	function	**list**	function	
fillcodes	data table	**listablefields**	data table	
firstcharacter	function	**listcodes**	data table	
firstcharinbox	function	**listtoutf**	function	
firstglyph	function	**load**	function	
getattribute	function	**locate**	function	
gluecodes	data table	**mathcodes**	data table	
glyphcodes	data table	**noadcodes**	data table	
glyphdir_is_equal	data table	**nodecodes**	data table	
glyphdir_is_opposite	data table	**packlist**	function	
glyphdir_is_orthogonal	data table	**pardir_is_equal**	data table	
handlers	table	**pardir_is_opposite**	data table	
F accessibility		**pardir_is_parallel**	data table	
F backgrounds		**partextdir_is_equal**	data table	
F characters		**penaltycodes**	data table	
F checkforleaks		**pool**	table	
F checkglyphs		F baselineskip		
F cleanuppage		F cleanup		
F export		F disc		
F finalize		F fontkern		
F migrate		F glue		
F protectglyphs		F gluespec		
F stripping		F glyph		
F unprotectglyphs		F kern		
has_attribute	function	F latelua		
idstostring	function	F leftmarginkern		
ignorablefields	data table	F leftskip		
injections	table	F lineskip		
F handler		F noad		
F setcursive		F pdfannotation		
F setkern		F pdfdestination		

F pdfdirect		**setunsetattributes**	function
F pdfliteral		**shifts**	table
F pdfrestore		D data	
F pdfsave		F define	
F pdfsetmatrix		F enable	
F penalty		F handler	
F register		**show**	function
F rightmarginkern		**showboxes**	function
F rightskip		**showcodes**	function
F rule		**showlist**	function
F shrink		**showsimplelist**	function
F special		**skipcodes**	data table
F stretch		**somepenalty**	function
F temp		**somespace**	function
F textdir		**stripping**	table
F usage		T glyphs	
T userids		F set	
N margins.inline		**striprange**	function
N splitters.one		**tasks**	table
N splitters.two		F actions	
F userlist		F appendaction	
F usernumber		F disableaction	
F userstring		F disablegroup	
F usertokens		F enableaction	
F zeroglue		F enablegroup	
print	function	F freeze	
processors	table	F freezegroup	
B enabled		F new	
F hpack_filter		F prependaction	
F post_linebreak_filter		F removeaction	
F pre_linebreak_filter		F restart	
F tracer		F showactions	
processwords	function	F table	
reference	function	**textdir_is_equal**	data table
references	table	**textdir_is_is**	data table
N attribute		**textdir_is_opposite**	data table
T done		**textdir_is_parallel**	data table
F handler		**tonodes**	function
T stack		**tosequence**	function
remove	function	**totable**	function
repackhlist	function	**toutf**	function
replace	function	**tracers**	table
report	function	T characters	
rightmarginwidth	function	F collect	
rules	table	F equal	
D data		F indices	
F define		F start	
F enable		F string	
F handler		F unicodes	
save	function	T colors	
serialize	function	F reset	
serializebox	function	F set	
setattribute	function	F fontchar	
setattributes	function	F start	

```
T steppers                          F start
  F check                           F stop
  F codes                           F stop
  F features               unsetattribute        function
  F glyphs                 unsetattributes       function
  F message                visualizebox          function
  F messages               whatcodes             data table
  F nofsteps               whatsitcodes          data table
  F register               writable_spec         function
  F reset
```

number (context)

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

os (basic lua)

__getenv__	function		rename	function
__setenv__	function		resolvers	table
binsuffix	string		resultof	function
clock	function		runtime	function
date	function		selfdir	string
difftime	function		setenv	overloaded function
env	data table		setlocale	overloaded function
exec	overloaded function		sleep	function
execute	overloaded function		spawn	overloaded function
exit	function		time	function
getenv	overloaded function		times	function
gettimeofday	function		timezone	function
launch	function		tmpdir	function
libsuffix	string		tmpname	function
name	string		type	string
platform	string		uname	function
remove	function		uuid	function

package (basic lua)

appendtolibpath	function	**loaders**	table
clibpaths	function	**loadlib**	function
config	string	**path**	string
cpath	string	**preload**	table
libpaths	function	**prependtolibpath**	function
loaded	table	**seeall**	function

pdf (basic tex)

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

physics (context)

units table
- T tables
  - T shortcuts
    - T operators
      - S *
      - S .
      - S /
      - S :
    - T prefixes
      - S E
      - S G
      - S M
      - S P
      - S T
      - S Y
      - S Z
      - S a
      - S c
      - S d
      - S da
      - S f
      - S h
      - S k
      - S m
      - S n
      - S p
      - S u
      - S y
      - S z
    - T suffixes
      - S +1
      - S +2
      - S +3
      - S -1
      - S -2
      - S -3
      - S 1
      - S 2
      - S 3
      - S ^+1
      - S ^+2
      - S ^+3
      - S ^-1
      - S ^-2
      - S ^-3
      - S ^1
      - S ^2
      - S ^3
    - T units
      - S A
      - S B

- S Hz
- S W
- S b
- S g
- S h
- S hz
- S l
- S lx
- S m
- S n
- S s
- S t
- S v
- S ℃
- S
- T units
  - T operators
    - S OutOf
    - S Per
    - S Solidus
    - S Times
  - T packaged
    - S Micron
    - S mmHg
  - T prefixes
    - S Atto
    - S Centi
    - S Deca
    - S Deci
    - S Exa
    - S Exbi
    - S Femto
    - S Gibi
    - S Giga
    - S Hecto
    - S Kibi
    - S Kilo
    - S Mebi
    - S Mega
    - S Micro
    - S Milli
    - S Nano
    - S Pebi
    - S Peta
    - S Pico
    - S Root
    - S Tebi
    - S Tera
    - S Yobi
    - S Yocto
    - S Yotta

S Zebi
S Zepto
S Zetta
T suffixes
  S Cubic
  S ICubic
  S ILinear
  S ISquare
  S Inverse
  S Linear
  S Square
T symbols
  S %
  S ArcMinute
  S ArcSecond
  S Degree
  S Degrees
  S Percent
  S Permille
  S Promille
  S °
  S
  S
T units
  S AMU
  S Ampere
  S Angstrom
  S Astronomical Unit
  S Atm
  S Atmosphere
  S Atomic Mass Unit
  S Bar
  S Barn
  S Baud
  S Bel
  S Bequerel
  S Bit
  S Byte
  S Cal
  S Calorie
  S Candela
  S Celsius
  S Coulomb
  S Dalton
  S Day
  S Degree Celsius
  S Degree Fahrenheit
  S Degrees Celsius
  S Degrees Fahrenheit
  S Dyne
  S Electron Volt
  S Erg
  S Erlang

S Fahrenheit
S Farad
S Foot
S Gal
S Gauss
S Gon
S Grad
S Gram
S Gray
S Hectare
S Henry
S Hertz
S Hg
S Hour
S Inch
S Joule
S Katal
S Kelvin
S Knot
S Liter
S Litre
S Lumen
S Lux
S Maxwell
S Meter
S Metre
S Metric Ton
S Minute
S Mol
S Mole
S Nautical Mile
S Neper
S Newton
S Oersted
S Ohm
S Pascal
S Phot
S Poise
S Radian
S Rev
S Revolution
S Second
S Siemens
S Sievert
S Steradian
S Stilb
S Stokes
S Tesla
S Tonne
S Volt
S Watt
S Weber
S eV

profiler (extra lua)

pause   function   **start**   function
resume function   **stop**   function

regimes (context)

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

resolvers (context)

allprefixes	function	getownpath	function
appendhash	function	getreadfilename	function
automount	function	hashers	data table
automounted	table	homedir	string
booleanvariable	function	installinputfilehandler	function
cacheversion	string	installinputlinehandler	function
checkedvariable	function	instance	table
cleanpath	function	D data	
cleanpathlist	function	B diskcache	
concatinators	data table	D environment	
configbanner	string	D expansions	
criticalvars	data table	D fakepaths	
dangerous	data table	D files	
datastate	function	B force_suffixes	
defaultsuffixes	table	D found	
dowithfilesandreport	function	D foundintrees	
dowithfilesintree	function	D hashed	
dowithpath	function	D hashes	
dowithvariable	function	D lists	
env	function	B loaderror	
executers	table	D order	
F check		B remember	
F execute		B renewcache	
F finalize		B renewtree	
F register		B savelists	
expandbraces	function	D setups	
expandedpathfromlist	function	D specification	
expandedpathlist	function	D variables	
expandedpathlistfromvariable	function	jobs	table
expandpath	function	F currentcomponent	
expandpathfromvariable	function	F currentenvironment	
expansion	function	F currentproduct	
extendtexmfvariable	function	F currentproject	
~~find_file~~	~~function~~	F justacomponent	
~~find_files~~	~~function~~	D processors	
findbinfile	function	F productcomponent	
findctxfile	function	F usefile	
finders	data table	joinpath	function
findfile	function	load	function
findfiles	function	loadbinfile	function
findgivenfile	function	loaders	data table
findgivenfiles	function	loadlualib	function
findpath	function	loadtexfile	function
findtexfile	function	loadtime	function
findwildcardfile	function	locateformat	function
findwildcardfiles	function	locators	data table
formatofsuffix	function	luacnfname	string
formatofvariable	function	luacnfspec	string
formats	data table	luacnfstate	string
generators	data table	macros	table
getenv	function	F convertfile	

F decodecomment		
F enablecomment		
F encodecomment		
F preprocessed		
F processmkvi		
F version		
maxreadlevel	number	
methodhandler	function	
newinstance	function	
openbinfile	function	
openers	data table	
openfile	function	
opentexfile	function	
ownpath	string	
prefixes	data table	
prependhash	function	
registerextrapath	function	
registerfile	function	
registerfilehash	function	
registerintrees	function	
registermethod	function	
registerzipfile	function	
relations	data table	
renew	function	
repath	function	
reset	function	
resetextrapath	function	
resetresolve	function	
resolve	function	
savers	data table	
scandata	function	
scanfiles	function	

schemes	table
T cleaners	
F md5	
F none	
F strip	
F cleanname	
F install	
N threshold	
setenv	function
setinstance	function
settrace	function
showpath	function
simplescanfiles	function
splitconfigurationpath	function
splitexpansions	function
splitmethod	function
splitpath	function
suffixes	data table
suffixmap	data table
suffixofformat	function
texdatablob	function
unexpandedpath	function
unexpandedpathlist	function
unresolve	function
updaterelations	function
updatescript	function
usezipfile	function
validatedpath	function
variable	function
variableofformat	function
variableofformatorsuffix	function
wildcardpattern	function

scripts (context)

categorytonumber	data table		**numbertocategory**	data table
colors	data table		**numbertodataset**	data table
handlers	data table		**preprocess**	function
hash	table		**reset**	function
installdataset	function		**set**	function
installmethod	function			

set (context)

contains	function	**tonumber**	function
create	function	**totable**	function
tolist	function		

socket (extra lua)

BLOCKSIZE   number
_DEBUG   boolean
bind   function
choose   function
connect function
dns   table
    F gethostname
    F tohostname
    F toip
ftp   table
    S PASSWORD
    N PORT
    N TIMEOUT
    S USER
    F command
    F get
    F open
    F put
gettime function
http   table
    N PORT
    N TIMEOUT
    S USERAGENT
    F open
    F request
newtry   function
protect function
select   function
sink   function
sinkt   table
    F close-when-done
    F default
    F http-chunked

    F keep-open
skip   function
sleep   function
smtp   table
    S DOMAIN
    N PORT
    S SERVER
    N TIMEOUT
    S ZONE
    F message
    F open
    F send
source   function
sourcet table
    F by-length
    F default
    F http-chunked
    F until-closed
tcp   function
tp   table
    N TIMEOUT
    F connect
try   function
udp   function
url   table
    F absolute
    F build
    F build_path
    F escape
    F parse
    F parse_path
    F unescape

sorters (context)

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

statistics (context)

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

status (basic tex)

list function

storage (context)

allocate	function	**min**	number
data	table	**nofmodules**	number
evaluators	table	**noftables**	number
mark	function	**register**	function
marked	function	**shared**	data table
max	number		

streams (context)

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

string (basic lua)

byte	function	match	function
bytepairs	function	quote	function
bytes	function	quoted	function
char	function	rep	function
characterpairs	function	reverse	function
characters	function	split	function
checkedsplit	function	splitlines	function
count	function	splitup	function
dump	function	strip	function
escapedpattern	function	sub	function
explode	function	toboolean	function
find	function	tocontext	function
format	function	todimen	function
gfind	function	topattern	function
gmatch	function	toutf	function
gsub	function	unquote	function
is_boolean	function	unquoted	function
is_empty	function	upper	function
len	function	utfcharacters	function
limit	function	utfsplitlines	function
lower	function	utfvalues	function

structures (context)

atlocation		function	**currentsectionnumber**		function
blocks		table	**descriptions**		table
	D collected		**documents**		table
	F define			T data	
	F print			S block	
	F save			T blocks	
	F select			T checkers	
	F setstate			N depth	
	D states			T forced	
	D tobesaved			T numbers	
bookmarks		table		T ownnumbers	
	F finalize			T status	
	F flatten			F initialize	
	S method			F preset	
	F overload			F reset	
	F place		**floats**		table
	F register		**formulas**		table
	F setup			F current	
counters		table		F simplify	
	F add			F store	
	F analyze		**helpers**		table
	F check			F analyze	
	D collected			F formulanumber	
	F compact			F merged	
	F converted			F page	
	F currentvalue			F prefix	
	D data			F prefixlastpage	
	F define			F prefixpage	
	F first			F simplify	
	F get			F title	
	F last			F touserdata	
	F next		**itemgroups**		table
	F prev			F maxwidth	
	F previous			F nofitems	
	F raw			F register	
	F record		**lists**		table
	F reset			F addto	
	F restart			F analyze	
	F restore			D cached	
	F save			D collected	
	F set			F discard	
	F setlevel			F enhance	
	F setoffset			T enhancers	
	F setown			F filter	
	F setstate			F filtercollected	
	F setvalue			F formulanumber	
	T specials			F hasnumberdata	
	F userpage			F haspagedata	
	F subs			F hastitledata	
	D tobesaved			D internals	
	F value			F iscached	

F	label	F	listindex
F	location	F	ordered
F	number	F	postpone
D	ordered	F	resetpostponed
F	page	F	restore
F	popnesting	F	save
F	prefix	F	setstate
F	prefixednumber	F	setsymbolpage
F	prefixedpage	D	states
F	process	F	store

pages   table

D	pushed	F	analyze
F	pushnesting	D	collected
F	realpage	F	is_odd
T	result	F	number
F	sectionnumber	F	save
F	size	D	tobesaved

references   table

F	title	F	analyze
D	tobesaved	F	checkedfile
F	userdata	F	checkedfileorurl
F	uservalue	F	checkedprogram

marks   table

		F	checkedrealpage
D	data	F	checkedurl
F	define	D	collected
F	exists	U	componentsplitter
F	fetch	F	currentmetadata
F	fetchallmarks	F	currentorder
F	fetched	D	currentset
F	fetchonemark	F	define
F	fetchtwomarks	D	defined
F	get	D	derived
F	number	F	doifelse
F	relate	F	enableinteraction
F	reset	F	enhance
F	set	D	executers
F	show	F	expandcurrent
F	synchronize	F	export
F	title	T	files
T	tracers	T	data
	F	showtable	F	define

notes   table

		F	get
F	checkpagechange	F	filter
F	define	D	filters
F	deltapage	F	from
F	doifcontent	F	get
F	doifonsamepageasprevious	F	getcurrentmetadata
F	flush	F	getcurrentprefixspec
F	flushpostponed	F	getinnermethod
F	get	F	getinternalreference
F	getn	D	handlers
F	getnumberpage	F	identify
F	getstate	F	import
F	getsymbolpage	F	inject
F	internal		
F	internalid		

```
F injectcurrentset                   T urls
D internals                            T data
F load                                 F define
F loadpresets                          F get
F mark                               F whatfrom
D pages                          registers              table
U prefixsplitter                       F analyze
T productdata                          F analyzed
  T componentreferences                D collected
  T components                         F compare
  T productreferences                  F define
T programs                             F enhance
  T data                               F extend
  F define                             F filter
  F get                                F filtercollected
F realpageofpage                       F finalize
U referencesplitter                    F flush
D referred                             F prepare
F referredpage                         F process
F registerfinalizer                    F sort
F registerinitializer                  F store
F registerpage                         D tobesaved
F reportproblems                       F unique
F reset                                F userdata
T resolvers                      sections               table
  F reference                          F autodepth
  F section                            F cct
D runners                              T collected
F set                                  F current
F setandgetattribute                   F currentblock
F setcomponent                         F currentid
F setinnermethod                       F currentlevel
F setinternalreference                 F depthnumber
F setnextinternal                      F finddata
F setnextorder                         F findnumber
D specials                             F fullnumber
F splitcomponent                       F getcurrentlevel
F splitprefix                          F getlevel
F splitreference                       F getnumber
T testrunners                          F internalreference
  F inner                              D levelmap
  F special                            D levels
  F special operation                  F load
  F special operation with arguments   F matchingtilldepth
T testspecials                         F numberatdepth
  F deltapage                          F numbers
  F i                                  F popblock
  F internal                           F prefixedconverted
  F page                               F pushblock
  F realpage                           F register
  F section                            D registered
  F userpage                           F reportstructure
D tobereferred                         F save
D tobesaved                            F set
```

```
    F setblock                              F registerused
    F setchecker                            F sort
    F setlevel                              F synonym
    F setnumber                             D tobesaved
    F somelevel                         tags                    table
    F structuredata                         T data
    F title                                 F detailedtag
    D tobesaved                             F getid
    F typesetnumber                         F handler
    F userdata                              D labels
    B verbose                               F last
    F way                                   F lastinchain
sets                    table               T metadata
    F define                                D properties
    F get                                   F registerdata
    F getall                                F registermetadata
    D setlist                               F restart
specials                table               F setattributehash
    D collected                             F setcombination
    F retrieve                              F setdescription
    F store                                 F setdescriptionsymbol
    D tobesaved                             F setfigure
synonyms                table               F sethighlight
    F analyzed                              F setitemgroup
    D collected                             F setproperty
    F compare                               F setsorting
    F define                                F setsynonym
    F filter                                F settablecell
    F finalize                              F settabulatecell
    F flush                                 F start
    F meaning                               F stop
    F prepare                               D taglist
    F process                               T userdata
    F register
```

table (basic lua)

append	function	print	function
are_equal	function	remove	function
compact	function	reversed	function
concat	function	sequenced	function
contains	function	serialize	function
copy	function	setmetatablecall	function
count	function	setmetatableindex	function
derive	function	setmetatablekey	function
fastcopy	function	setmetatablenewindex	function
flattened	function	setn	function
foreach	function	sort	function
foreachi	function	sortedhash	function
fromhash	function	sortedhashkeys	function
getmetatablekey	function	sortedkeys	function
getn	function	sortedpairs	function
has_one_entry	function	strip	function
identical	function	sub	function
imerge	function	swapped	function
imerged	function	tocontext	function
insert	function	tofile	function
is_empty	function	tohandle	function
keys	function	tohash	function
loweredkeys	function	toxml	function
maxn	function	unique	function
merge	function	unnest	function
merged	function	unpack	function
prepend	function		

tex (basic tex)

attribute	table		number	function
badness	function		pdffontname	function
box	table		pdffontobjnum	function
catcode	table		pdffontsize	function
conditionals	data table		pdfpageref	function
constants	data table		pdfxformname	function
count	table		primitives	function
ctxcatcodes	number		print	function
definefont	function		printlist	function
delcode	table		prtcatcodes	number
dimen	table		romannumeral	function
enableprimitives	function		round	function
error	function		run	function
extraprimitives	function		scale	function
finish	function		set	function
fontidentifier	function		setattribute	function
fontname	function		setbox	function
fprint	function		setcatcode	function
get	function		setcount	function
getattribute	function		setdelcode	function
getbox	function		setdimen	function
getcatcode	function		setfalse	function
getcount	function		setlccode	function
getdelcode	function		setlist	function
getdimen	function		setmath	function
getlccode	function		setmathcode	function
getlist	function		setnest	function
getmath	function		setsfcode	function
getmathcode	function		setskip	function
getnest	function		settoks	function
getsfcode	function		settrue	function
getskip	function		setuccode	function
gettoks	function		sfcode	table
getuccode	function		shipout	function
hashtokens	function		skip	table
ifs	data table		sp	function
inicatcodes	number		sprint	function
iscount	function		systemmodes	data table
isdimen	function		texcatcodes	number
isskip	function		toks	table
istoken	function		tpacatcodes	number
lccode	table		tpbcatcodes	number
linebreak	function		tprint	function
lists	table		txtcatcodes	number
luacatcodes	number		type	function
mathcode	table		uccode	table
modes	data table		uniformdeviate	function
nest	table		uprint	function
nilcatcodes	number		vrbcatcodes	number
notcatcodes	number		write	function

texconfig (basic tex)

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

texio (basic tex)

write   function
write_nl function

token (basic tex)

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

tokens (context)

bgroup	table		T	show_methods	
collectors	table		F	a	
T	data		F	b	
F	defaultwords		F	c	
F	dowithwords		F	showtoken	
F	flush		F	test	
F	handle		F	trace	
F	install		**egroup**	table	
F	register		**hbox**	table	
T	registered		**letter**	function	
T	remapper		**letters**	function	
F	convert		**other**	function	
T	data		**vbox**	table	
F	store		**vtop**	table	
F	show				

tracers (context)

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

trackers (context)

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

typesetters (context)

alignments   table
- F handler
- F set

breakpoints   table
- N attribute
- F define
- F handler
- D mapping
- T methods
- T numbers
- F set
- F setreplacement

cases   table
- T actions
- F handler
- F set

characters   table
- F handler

cleaners   table
- F handler
- F set

digits   table
- T actions
- N attribute
- F handler
- F set

directions   table
- F handler
- F process
- F set

hpack   function

italics   table
- F forcevariant
- F handler
- F reset
- F set

kerns   table
- D factors
- F handler
- B keepligature
- B keeptogether
- D mapping
- F set

margins   table
- F finalhandler
- F globalhandler
- F ha

- F localhandler
- F save

paragraphs   table
- N attribute
- T droppers
  - F freeze
  - F set
- F handler
- F set

processors   table
- F apply
- F register
- F reset
- F split
- F startapply
- F stopapply
- F stripped
- F tostring

spacings   table
- N attribute
- F define
- F handler
- D mapping
- T numbers
  - T frenchpunctuation
    - T characters
    - S name
    - N number
- F reset
- F set
- F setup

tonodes   function

vpack   function

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 gmatch	
F byte			F gsub	
F char			F len	
F dump			F lower	
F find			F match	
F format			F rep	
F gfind			F reverse	
F gmatch			F sub	
F gsub			F upper	
F len			**ustring**	function
F lower			**utf16_to_utf8**	function
F match			**utf16_to_utf8_be**	function
F rep			**utf16_to_utf8_le**	function
F reverse			**utf32_to_utf8**	function
F sub			**utf32_to_utf8_be**	function
F upper			**utf32_to_utf8_le**	function
filetype	function		**utf8**	table
grapheme	table		F byte	
F byte			F char	
F char			F dump	
F dump			F find	
F find			F format	
F format			F gfind	
F gfind			F gmatch	
F gmatch			F gsub	
F gsub			F len	
F len			F lower	
F lower			F match	
F match			F rep	
F rep			F reverse	
F reverse			F string	
F sub			F sub	
F upper			F toentities	
latin1	table		F upper	
F byte			**utf8_to_utf16**	function
F char			**utf8_to_utf8**	function
F dump			**utfcodes**	function
F find			**utfname**	table
F format			**utftype**	function
F gfind			**xstring**	function

url (context)

addscheme	function		**hasscheme**	function
construct	function		**query**	function
filename	function		**split**	function
hashed	function			

utilities (context)

debugger   table
- F disable
- F enable
- F savestats
- F showstats

formatters   table
- F formatcolumns
- F list
- F stripzeros

garbagecollector   table
- F check
- N criterium
- B enabled

lua   table
- F compile

packers   table
- F hashed
- F new
- F pack
- F simplehashed
- F strip
- F unpack
- N version

parsers   table
- F add_settings_to_array
- F arguments_to_table
- F array_to_string
- F getparameters
- F hash_to_string
- F listitem
- F make_settings_to_hash_pattern
- T patterns
  - U settings_to_array
  - U settings_to_hash_a
  - U settings_to_hash_b
  - U settings_to_hash_c
- F settings_to_array
- F settings_to_hash
- F settings_to_hash_strict
- F settings_to_hash_tolerant
- F settings_to_set
- F simple_hash_to_string

report   function

sequencers   table
- F appendaction
- F appendgroup
- F compile
- F disableaction
- F disablegroup
- F enableaction
- F enablegroup
- D functions
- F localize
- F new
- F nodeprocessor
- F prependaction
- F prependgroup
- F removeaction
- F setkind
- F tostring

setters   table
- F disable
- F enable
- F initialize
- F list
- F new
- F register
- F reset
- F show

storage   table
- F allocate
- F checked
- F mark
- F marked
- F setinitializer
- F sparse

strings   table
- F collapsecrlf
- F newrepeater
- F nice
- F striplong
- F tabtospace

tables   table
- F accesstable
- F definetable
- F encapsulate
- F insertaftervalue
- F insertbeforevalue
- F migratetable
- F removevalue

visualizers (context)

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

xml (context)

addentitiesdoctype	function	**entities**	data table
after	function	**erase**	function
all	function	**errorhandler**	function
applylpath	function	**escaped**	function
assign	function	**expressions**	table
attribute	function	F boolean	
before	function	F child	
body	function	F contains	
builtinentities	table	F count	
B amp		F error	
B apos		F find	
B gt		F lower	
B lt		F name	
B quot		F number	
cdata	function	F oneof	
cdatatotext	function	F print	
checkbom	function	F quit	
checkerror	function	F tag	
checknamespace	function	F text	
checkns	function	F undefined	
cleansed	function	F upper	
collect	function	**fillin**	function
~~collect_elements~~	~~function~~	**filter**	function
collect_tags	function	**finalizers**	table
~~collect_texts~~	~~function~~	T tex	
collected	function	F all	
collecttexts	function	F attribute	
content	function	F bibtexconcat	
convert	function	F bibtexshort	
copy	function	F chainattribute	
count	function	F command	
cprint	function	F concat	
css	table	F concatrange	
F colorspecification		F context	
F fontspecification		F count	
F padding		F ctxtext	
defaulthandlers	table	F default	
D file		F first	
D parsedxml		F function	
D string		F index	
D tex		F last	
D texline		F lettered	
D texspace		F lower	
D verbose		F match	
defaultprotocol	string	F name	
delete	function	F position	
~~delete_element~~	~~function~~	F reverse	
each	function	F stripped	
~~each_element~~	~~function~~	F tag	
elements	function	F tags	
empty	function	F text	

F upper		**lshow**	function
T xml		**makestandalone**	function
F all		**match**	function
F att		**name**	function
F attribute		**newhandlers**	function
F attributes		**nodesettostring**	function
F cdata		**originalload**	function
F chainattribute		**package**	function
F count		**parent**	function
F default		**parsedentitylpeg**	userdata
F elements		**pihandlers**	table
F empty		**placeholders**	table
F first		F unknown_any_entity	
F function		F unknown_dec_entity	
F index		F unknown_hex_entity	
F last		**position**	function
F match		**privatecodes**	table
F name		**privatetoken**	function
F position		**process**	function
F reverse		~~**process_attributes**~~	~~function~~
F table		~~**process_elements**~~	~~function~~
F tag		**processattributes**	function
F tags		**profiled**	table
F text		**raw**	function
F texts		**registerentity**	function
first	function	**registerns**	function
found	function	~~**remap_name**~~	~~function~~
functions	table	~~**remap_namespace**~~	~~function~~
getbuffer	function	~~**remap_tag**~~	~~function~~
gethandlers	function	**remapname**	function
gethandlersfunction	function	**remapnamespace**	function
include	function	**remaptag**	function
index	function	**renamespace**	function
inheritedconvert	function	**replace**	function
inject	function	**replace_element**	function
~~**inject_element**~~	~~function~~	**resolvens**	function
~~**inject_element_after**~~	~~function~~	**root**	function
~~**inject_element_before**~~	~~function~~	**save**	function
injectafter	function	**selection**	function
injectbefore	function	**serialize**	function
insert	function	**setcdata**	function
insert_element	function	**sethandlersfunction**	function
~~**insert_element_after**~~	~~function~~	**setproperty**	function
~~**insert_element_before**~~	~~function~~	**settings**	function
insertafter	function	**specialhandler**	table
insertbefore	function	**sprint**	function
insertcomment	function	**string**	function
inspect	function	**strip**	function
is_valid	function	~~**strip_whitespace**~~	~~function~~
last	function	**stripelement**	function
load	function	**stripleadingspaces**	function
lpath	function	**table**	function
lpathcached	function	**text**	function
lpathcalls	function	**textonly**	function

tocdata	function	**unescaped**	function
toelement	function	**unprivatized**	function
tostring	function	**withelement**	function
toxml	function	**withelements**	function
tprint	function	**wrap**	function
traverse	function	**xmlns**	table

zip (extra lua)

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

zlib (extra lua)

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