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	xmlconvert	function
texconfig	table	xpcall	function
texio	table	zip	table
toboolean	function	zlib	table

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 synchronizecolormodel
current   string
defaults   table
    T codeinjections
    T nodeinjections
    T registrations
    D tables
install   function
nodeinjections table
    F restore
    F save
    F transform
nothing   function
pdf   table
    T codeinjections
      F addbookmarks
      F attachmentid
      F clonefield
      F definefield
      F definefieldset
      F defineviewerlayer
      F embedfile
      F enabletags
      F exportformdata
      F finalizepage
      F finishreference
      F getdefaultfieldvalue
      F getfieldcategory
      F getfieldset
      F getformatoption
      F getoutputfilename
      F getpreviewfigure
      F insertrenderingwindow
      F mergereferences
      F mergeviewerlayers
      F prerollreference
      F presetsymbol
      F presetsymbollist
      F processrendering
      F registerdocumentcloseaction
      F registerdocumentopenaction
      F registeredsymbol
      F registerpagecloseaction
      F registerpageopenaction
      F registersymbol
      F setfieldcalculationset
      F setfigurealternative
      F setfigurecolorspace
      F setfiguremask
      F setformat

      F setformsmethod
      F setpagetransition
      F setupcanvas
      F setupidentity
      F setxmpfile
      F startlayer
      F stoplayer
      F supportedformats
      F useviewerlayer
      F validfield
      F validfieldcategory
      F validfieldset
    S comment
    T nodeinjections
      F addtags
      F attachfile
      F cmykcolor
      F comment
      F destination
      F effect
      F graycolor
      F injectbitmap
      F insertmovie
      F insertsound
      F insertswf
      F insertu3d
      F knockout
      F negative
      F overprint
      F positive
      F reference
      F rgbcolor
      F spotcolor
      F startlayer
      F stoplayer
      F switchlayer
      F transparency
      F typesetfield
    T registrations
      F cmykindexcolor
      F cmykspotcolor
      F getspotcolorreference
      F grayindexcolor
      F grayspotcolor
      F rgbindexcolor
      F rgbspotcolor
      F spotcolorname
      F transparency
    T tables
      T vfspecials
        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

authors   table

    F concat

    F inverted

    F invertedshort

    F normal

    F normalshort

    F setsettings

    F short

authoryearref   function

authoryearsref   function

convert   function

hacks   table

    F add

    F doifalreadyplaced

    F filterall

    F flush

    F nofregistered

    F process

    F register

    F registerplaced

    F reset

    F resolve

load   function

new   function

singularorplural   function

statistics   table

    N nofbytes

    N nofdefinitions

    N nofshortcuts

toxml   function

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	datasetvariable	function
Romannumerals	function	dayname	function
abjadnodotnumerals	function	defineattribute	function
abjadnumerals	function	definebibtexsession	function
addcounter	function	definebreakpoint	function
addff	function	definebreakpoints	function
addfs	function	definecharacterspacing	function
addlinklistelement	function	defineconversion	function
addtojavascriptpreamble	function	definecounter	function
addtolist	function	definedviewerlayer	function
allinputpaths	function	definefield	function
alphabetic	function	definefieldset	function
analysefloatmethod	function	definefilefallback	function
analyzelist	function	definefilesynonym	function
applytochars	function	definefont_one	function
applytowords	function	definefont_two	function
assignbuffer	function	definefontfeature	function
autofinishstructurelevels	function	defineintermediatecolor	function
autonextspace	function	definelinkedlist	function
autonextstructurelevel	function	definemarking	function
autosetups	function	definemultitonecolor	function
autostarttext	function	defineparallel	function
autostoptext	function	defineprocesscolor	function
bcolumn	function	definesectionlevels	function
boolcase	function	definespotcolor	function
Character	function	definestructureblock	function
Characters	function	definestructureset	function

definetransparency	function	doreshapeframedbox	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

getfloatvariable	function	markregionbox	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	pagestaterealpage	function
insertattachment	function	parpos	function
insertcomment	function	pdfrotation	function
insertfield	function	percentageof	function
insertrenderingwindow	function	placeparallel	function
insertsoundclip	function	popfloat	function
isleapyear	function	popitaliccorrection	function
languagenumber	function	poplist	function
lastcountervalue	function	pos	function
lchexnumber	function	posplus	function
lchexnumbers	function	posstrut	function
leapyear	function	poswhd	function
listlabel	function	posxy	function
listlocation	function	prepareMPvariable	function
listprefixednumber	function	preparebibtexsession	function
listprefixedpage	function	preparedfile	function
listrealpage	function	presetsymbollist	function
listsize	function	presettabulate	function
listtitle	function	prevcountervalue	function
listuserdata	function	processbuffer	function
loadctxpreplist	function	processedfile	function
loadexamodes	function	processedfiles	function
loadfontgoodies	function	processfile	function
loadspellchecklist	function	processfilemany	function
loadtypescriptfile	function	processfilenone	function
loadvisualizer	function	processfileonce	function
locatefilepath	function	processlist	function
locfilename	function	pushfloat	function

pushitaliccorrection	function	selectstructureblock	function
pushlist	function	setbreakpoints	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	setdataset	function
registercolor	function	setdigitsmanipulation	function
registercolorintent	function	setfontfeature	function
registeredviewerlayer	function	setfontofid	function
registerhelp	function	setformat	function
registeritemgroup	function	setformsmethod	function
registermaintextcolor	function	setinternalreference	function
registernamespace	function	setmarking	function
registerpostponedblock	function	setmathalphabet	function
registersoundclip	function	setmathalternate	function
registerstructureprocessor	function	setmathattribute	function
registertransparency	function	setmathitalics	function
registerunit	function	setmathstyle	function
relatemarking	function	setopendocumentaction	function
removemissingcharacters	function	setopenpageaction	function
replacemissingcharacters	function	setowncounter	function
replacepospxywhd	function	setpagestate	function
resavefloat	function	setpagestaterealpageno	function
resetcounter	function	setpagetransition	function
resetfontfeature	function	setpos	function
resetmarking	function	setrandomseed	function
resetmathitalics	function	setrealign	function
resetnullfont	function	setreferencearguments	function
resetparallel	function	setreferenceoperation	function
resetstructureprocessor	function	setstructureblockstate	function
resettimer	function	settagcombination	function
restartcounter	function	settagdescription	function
restorecounter	function	settagdescriptionsymbol	function
restorecurrentattributes	function	settagfigure	function
romannumerals	function	settaghighlight	function
runbuffer	function	settagitemgroup	function
savebuffer	function	settagproperty	function
savecounter	function	settagsorting	function
savecurrentattributes	function	settagsynonym	function
savedlistnumber	function	settagtablecell	function
savedlistprefixednumber	function	settagtabulatecell	function
savedlisttitle	function	setupbookmarks	function
savefloat	function	setupcanvas	function
saveparallel	function	setupcharacterspacing	function
savestructureblock	function	setupexport	function
savetaggedtwopassdata	function	setupfontexpansion	function
savetwopassdata	function	setupfontprotrusion	function
second	function	setupidentity	function

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

x_table_set_reflow_width   function
year   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		

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
        S finalized
        S fontname
        S format
        S fullname
        S hasitalics
        S hasmath
        S mathitalics
        S mode
        S name
        S noglyphnames
        S nostackmath
        S psname
        S textitalics
        S virtualized
      D loadedfonts
      S namemode
      F newfeatures
      N privateoffset
      F readanddefine
      F registerfeature
      B resolvevirtualtoo
      F scale
      F scaled
      F setfactor
      F setname
      N version
current        function
currentid      function
definers       table
      F addlookup
      F analyze
      F applypostprocessors
      F checkedmode
      F checkedscript
      F current
      S defaultlookup
      F define
      F getspecification
      F loadfont
      F makespecification
      T methods
        F install
        D variants
      F read
      F register
      F registered
      F registersplit
      F resetnullfont
      F resolve
      T resolvers
        F file
        F name
        F spec

definetypeface function
encodings      table
      T agl
      D cache
      F is_known
      D known
      F load
      F make_unicode_vector
      D math
      N version
expansions     data table
formats        data table
goodies        table
      T colorschemes
        F coloring
        T data
        F enable
      T designsizes
        D data
        F filename
        F register
      F getcompositions
      T list
        F compositions
        F designsizes
        F expansions
        F featureset
        F files
        F mathematics
        F protrusions
        F solutions
        F typefaces
      F load
      F prepare_features
      F register
      F registerpostprocessor
      F report
handlers       table
      T afm
        B addkerns
        B addligatures
        B addtexligatures
        B autoprefixed
        D cache
        D features
        F load
        F setfeatures
        B syncspace
        N version
      T otf
        F addfeature
        D cache
        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 calculatemultipar

    F fetchmultipar

F pair

F path

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

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
datasets   table
     D collected
     F extend
     F getdata
     F setdata
     D tobesaved
disablesave function
files   table
     D collected
     F context
     B forcerun
     F run
     D tobesaved
initialize   function
load   function
loadother   function
objects   table
     D collected
     F doifelse
     F get
     F number
     F page
     F save
     F set
     D tobesaved
pack   boolean
pagestates   table
     D collected
     F extend
     F realpage
     F setstate
     D tobesaved
passes   table
     F check
     D collected
     F count
     F define
     F find
     F first
     F get
     F getcollected
     F getdata
     F getfield
     F gettobesaved
     F inlist
     F last
     F list
     F save
     F savetagged
     D tobesaved

positions   table
     F b_col
     F b_region
     F c
     D collected
     F column
     F copy
     F depth
     F e_col
     F e_region
     F enhance
     F extra
     F get
     F getreserved
     F hangafter
     F hangindent
     F height
     F hsize
     F leftskip
     F lowerleft
     F lowerright
     F markregionbox
     F n
     F onsamepage
     F overlapping
     F p
     F page
     F paragraph
     F parindent
     F position
     F r
     F region
     F replace
     F rightskip
     F set
     F setall
     F setdim
     D tobesaved
     F upperleft
     F upperright
     F width
     F x
     F xy
     F y
register   function
save   function
structure   table
     D collected
     T components
     T tobesaved
      T branches

S name   D collected
        S type   F save
variables   table   D tobesaved
        D checksums   **version**   number

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

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

metapost (context)

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 Fahrenheit
S Zepto	S Farad
S Zetta	S Foot
T suffixes	S Gal
S Cubic	S Gauss
S ICubic	S Gon
S ILinear	S Grad
S ISquare	S Gram
S Inverse	S Gray
S Linear	S Hectare
S Square	S Henry
T symbols	S Hertz
S %	S Hg
S ArcMinute	S Hour
S ArcSecond	S Inch
S Degree	S Joule
S Degrees	S Katal
S Percent	S Kelvin
S Permille	S Knot
S Promille	S Liter
S °	S Litre
S	S Lumen
S	S Lux
T units	S Maxwell
S AMU	S Meter
S Ampere	S Metre
S Angstrom	S Metric Ton
S Astronomical Unit	S Minute
S Atm	S Mol
S Atmosphere	S Mole
S Atomic Mass Unit	S Nautical Mile
S Bar	S Neper
S Barn	S Newton
S Baud	S Oersted
S Bel	S Ohm
S Bequerel	S Pascal
S Bit	S Phot
S Byte	S Poise
S Cal	S Radian
S Calorie	S Rev
S Candela	S Revolution
S Celsius	S Second
S Coulomb	S Siemens
S Dalton	S Sievert
S Day	S Steradian
S Degree Celsius	S Stilb
S Degree Fahrenheit	S Stokes
S Degrees Celsius	S Tesla
S Degrees Fahrenheit	S Tonne
S Dyne	S Volt
S Electron Volt	S Watt
S Erg	S Weber
S Erlang	S eV

profiler (extra lua)

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

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		**schemes**	table
F enablecomment		T cleaners	
F encodecomment		F md5	
F preprocessed		F none	
F processmkvi		F strip	
F version		F cleanname	
maxreadlevel	number	F install	
methodhandler	function	N threshold	
newinstance	function	**setenv**	function
openbinfile	function	**setinstance**	function
openers	data table	**settrace**	function
openfile	function	**showpath**	function
opentexfile	function	**simplescanfiles**	function
ownpath	string	**splitconfigurationpath**	function
prefixes	data table	**splitexpansions**	function
prependhash	function	**splitmethod**	function
registerextrapath	function	**splitpath**	function
registerfile	function	**suffixes**	data table
registerfilehash	function	**suffixmap**	data table
registerintrees	function	**suffixofformat**	function
registermethod	function	**texdatablob**	function
registerzipfile	function	**unexpandedpath**	function
relations	data table	**unexpandedpathlist**	function
renew	function	**unresolve**	function
repath	function	**updaterelations**	function
reset	function	**updatescript**	function
resetextrapath	function	**usezipfile**	function
resetresolve	function	**validatedpath**	function
resolve	function	**variable**	function
savers	data table	**variableofformat**	function
scandata	function	**variableofformatorsuffix**	function
scanfiles	function	**wildcardpattern**	function

scripts (context)

categorytonumber	data table		**handlers**	data table
colors	data table		**hash**	table
defaults	table		**installdataset**	function
N inter_char_half_shrink_factor			**installmethod**	function
N inter_char_half_stretch_factor			**numbertocategory**	data table
N inter_char_hangul_penalty			**numbertodataset**	data table
N inter_char_quarter_shrink_factor			**preprocess**	function
N inter_char_quarter_stretch_factor			**reset**	function
N inter_char_shrink_factor			**set**	function
N inter_char_stretch_factor				

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
    F basic
constants   table
    S defaultdigits
    S defaultlanguage
    S defaultmethod
    N digitsmaximum
    N digitsoffset
    N ignoredoffset
    N replacementoffset

definitions data table
firstofsplit function
setlanguage function
sort   function
splitters   table
     F utf
strip   function
tracers   data table
update   function

statistics (context)

checkfmtstatus	function	**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 location

F number

D ordered

F page

F popnesting

F prefix

F prefixednumber

F prefixedpage

F process

D pushed

F pushnesting

F realpage

T result

F sectionnumber

F size

F title

D tobesaved

F userdata

F uservalue

marks   table

D data

F define

F exists

F fetch

F fetchallmarks

F fetched

F fetchonemark

F fetchtwomarks

F get

F number

F relate

F reset

F set

F show

F synchronize

F title

T tracers

  F showtable

notes   table

F checkpagechange

F define

F deltapage

F doifcontent

F doifonsamepageasprevious

F flush

F flushpostponed

F get

F getn

F getnumberpage

F getstate

F getsymbolpage

F internal

F internalid

F listindex

F ordered

F postpone

F resetpostponed

F restore

F save

F setstate

F setsymbolpage

D states

F store

pages   table

F analyze

D collected

F is_odd

F number

F save

D tobesaved

references   table

F analyze

F checkedfile

F checkedfileorurl

F checkedprogram

F checkedrealpage

F checkedurl

D collected

U componentsplitter

F currentmetadata

F currentorder

D currentset

F define

D defined

D derived

F doifelse

F enableinteraction

F enhance

D executers

F expandcurrent

F export

T files

  T data

  F define

  F get

F filter

D filters

F from

F get

F getcurrentmetadata

F getcurrentprefixspec

F getinnermethod

F getinternalreference

D handlers

F identify

F import

F inject

```
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

texio (basic tex)

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 register
    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			