

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 **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 **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**

ConT_EXt MkIV

global (alias: _G)

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

<code>set</code>	<code>table</code>	<code>tokens</code>	<code>table</code>
<code>setfenv</code>	<code>function</code>	<code>tonumber</code>	<code>function</code>
<code>setmetatable</code>	<code>function</code>	<code>tostring</code>	<code>function</code>
<code>socket</code>	<code>table</code>	<code>tracers</code>	<code>table</code>
<code>sorters</code>	<code>table</code>	<code>trackers</code>	<code>table</code>
<code>statistics</code>	<code>table</code>	<code>type</code>	<code>function</code>
<code>status</code>	<code>table</code>	<code>typesetters</code>	<code>table</code>
<code>storage</code>	<code>table</code>	<code>unicode</code>	<code>table</code>
<code>streams</code>	<code>table</code>	<code>unpack</code>	<code>function</code>
<code>string</code>	<code>table</code>	<code>url</code>	<code>table</code>
<code>structures</code>	<code>table</code>	<code>utf</code>	<code>table</code>
<code>table</code>	<code>table</code>	<code>utilities</code>	<code>table</code>
<code>tex</code>	<code>table</code>	<code>visualizers</code>	<code>table</code>
<code>texconfig</code>	<code>table</code>	<code>xml</code>	<code>table</code>
<code>texio</code>	<code>table</code>	<code>xpcall</code>	<code>function</code>
<code>toboollean</code>	<code>function</code>	<code>zip</code>	<code>table</code>
<code>tocontext</code>	<code>function</code>	<code>zlib</code>	<code>table</code>
<code>token</code>	<code>table</code>		

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 defineduocolor
F defineintermediatecolor
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 graytohsb
F handler
F hsbtogray
F hsbtorgb
F iccprofile
F isblack
N main
S model
F mpcolor
U none
F register
D registered
F registerspotcolor
F rgb
F rgbtocmyk
F rgbtogray
F rgbtohsb
N selector
F setmodel
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

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 register
D registered
B supported
B triggering
F value

D values
unsetvalue number
viewerlayers table
N attribute
D data
F define
F enable
F forcesupport
F handler
B hasorder

D listwise
F register
D registered
D scopes
F setfeatures
F start
F stop
B supported
D values

backends (context)

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

registrations	table
tables	table

bibtex (context)

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

blobs (context)

append	function	pack	function
new	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
 T solutions
 T splitters
 F define
 F disable

 F enable

 F optimize

 F setup

 F split

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

cache (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	savadata	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)

<code>find</code>	function
<code>list</code>	function
<code>register</code>	overloaded function

callbacks (context)

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

catcodes (context)

<code>names</code>	data table
<code>numbers</code>	data table
<code>register</code>	function

characters (context)

activeoffset	number
adobename	function
bidirectional	data table
blocks	data table
casemap	table
categories	data table
category	function
categorytags	data table
contextname	function
data	data table
define	function
description	function
descriptions	data table
directions	data table
encodes	data table
fallbacks	data table
filters	data table
flush	function
fromnumber	function
fschars	data table
fscodes	data table
getrange	function
graphemes	data table
hangul	table
F decomposed	
F description	
F leadconsonant	
T remapped	
is_character	data table
is_command	data table

is_letter	data table
is_spacing	data table
lcchars	data table
lccode	function
lccodes	data table
lettered	function
lower	function
makeactive	function
math	table
mathpairs	data table
ranges	data table
remapentity	function
setcodes	function
shape	function
shaped	function
shchars	data table
shcodes	data table
specialchars	data table
synonyms	data table
tex	table
D accentmapping	
F defineaccents	
F toutf	
tonumber	function
ucchars	data table
uccode	function
uccodes	data table
unicodechar	function
upper	function

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	definelinkedlist	function
Character	function	definemarking	function
Characters	function	definemultitonecolor	function
MPd	function	defineparallel	function
MPh	function	defineprocesscolor	function
MPll	function	definespotcolor	function
MPlr	function	definetransparency	function
MPp	function	defineviewerlayer	function
MPplus	function	defrostrandomseed	function
MPpos	function	disableregime	function
MPrest	function	doanalyzeframedbox	function
MPul	function	doif	function
MPur	function	doifblackelse	function
MPw	function	doifcommonelse	function
MPx	function	doifdimenstringelse	function
MPxy	function	doifdrawingblackelse	function
MPy	function	doifelse	function
Romannumerals	function	doifelsebuffer	function
abjadnodotnumerals	function	doifelsecurrentfonthasfeature	function
abjadnumerals	function	doifelsemarking	function
addff	function	doifelseparallel	function
addfs	function	doifelsespaces	function
addlinklistelement	function	doifelsevisualizer	function
alphabetic	function	doiffielddcategoryelse	function
applytochars	function	doiffielddelse	function
applytowords	function	doiffielddsetelse	function
assignbuffer	function	doiffiledefinedelse	function
autonextspace	function	doiffileexistelse	function
auto setups	function	doifinputfileelse	function
boolcase	function	doifinsetelse	function
character	function	doifleapyearelse	function
characters	function	doifnot	function
checkedconversion	function	doifolderversionelse	function
checkfilename	function	doifoverlappingelse	function
chineseallnumerals	function	doifparentfileelse	function
chinesecapnumerals	function	doifpositionelse	function
chinesenumerals	function	doifpositionsonsamepageelse	function
cleanfontname	function	doifpositionsonthispageelse	function
clonefield	function	doifsavedfloatelse	function
collecthelp	function	doifurldefinedelse	function
colorcomponents	function	doprocесstypescriptfile	function
copyposition	function	doreadfile	function
currentdate	function	doreshapeframedbox	function
currentregime	function	elapsedtime	function
dayname	function	enablecolor	function
defineattribute	function	enablecolorintents	function
definebibtexsession	function	enableregime	function
defineconversion	function	enabletransparency	function
definefield	function	enhancelinkedlist	function
definefieldset	function	erasebuffer	function
defineintermediatecolor	function	featureattribute	function

feedback	function	monthname	function
fetchallmarks	function	mpcolor	function
fetchonemark	function	nbfs	function
fetchtwomarks	function	nextparallel	function
firstinlist	function	nofdays	function
fontchar	function	number	function
fontlookupgetkey	function	octnumber	function
fontlookupgetkeyofindex	function	octstringtonumber	function
fontlookupinitialize	function	ordinal	function
fontlookupnoffound	function	percentageof	function
formatcolor	function	placeparallel	function
formatgray	function	preparebibtexsession	function
freezerandomseed	function	preparedfile	function
getbuffer	function	presetsymbolist	function
getbufferctxlua	function	presettabulate	function
getbuffermkvi	function	processbuffer	function
getdefaultfieldvalue	function	processfile	function
getfieldcategory	function	rawcharacter	function
getmarking	function	readfilename	function
getprivateattribute	function	registerattachment	function
getrandomcounta	function	registerbibtexentry	function
getrandomcountb	function	registerbibtexfile	function
getrandomseed	function	registerbuttons	function
grabbuffer	function	registercolor	function
helpaction	function	registercolorintent	function
helpreference	function	registerhelp	function
hexstringtonumber	function	registermaintextcolor	function
hour	function	registersoundclip	function
hyphenatedlist	function	registertransparency	function
hyphenatedurl	function	relatemarking	function
D characters		replacepospxywhd	function
N lefthyphenmin		resetfontfeature	function
N righthyphenmin		resetmarking	function
F setcharacters		resetparallel	function
insertattachment	function	resettimer	function
insertcomment	function	romannumerals	function
insertfield	function	runbuffer	function
insertrenderingwindow	function	savebuffer	function
insertsoundclip	function	saveparallel	function
isleapyear	function	second	function
languagenumber	function	setcloseddocumentaction	function
lastexistingfile	function	setclosepageaction	function
lchexnumber	function	setcolormodel	function
lchexnumbers	function	setfontfeature	function
leapyear	function	setformat	function
loadctxprelist	function	setformsmethod	function
loadexamodes	function	setmarking	function
locatefilepath	function	setopendocumentaction	function
logoptionfile	function	setopenpageaction	function
maxreadlevel	function	setpagetransition	function
minute	function	setrandomseed	function
molecule	function	setrastercolor	function
month	function	setrealign	function
monthmnem	function	setreferencearguments	function

setreferenceoperation	function	transparencycomponents	function
setupcanvas	function	triggereffect	function
setupfontexpansion	function	triggernegative	function
setupfontprotrusion	function	typebuffer	function
setupidentity	function	typefile	function
setxmpfile	function	typestring	function
showchardata	function	uchexnumber	function
showfontparameters	function	uchexnumbers	function
showhyphenatedinlist	function	unicodechar	function
splitfilename	function	updatefilenames	function
splitfiletype	function	usecolors	function
spotcolorname	function	uselibrary	function
spotcolorparent	function	usemodules	function
spotcolorvalue	function	usepath	function
startregime	function	usesubpath	function
stopregime	function	usesymbols	function
subff	function	usezipfile	function
subfs	function	weekday	function
synchronizemarking	function	weekdayname	function
testcase	function	writestatus	function
textime	function	year	function
thesanitizedfilename	function		

containers (context)

<code>cleanname</code>	function
<code>content</code>	function
<code>define</code>	function
<code>is_usable</code>	function

<code>is_valid</code>	function
<code>read</code>	function
<code>usecache</code>	boolean
<code>write</code>	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)

<code>coco</code>	boolean	<code>running</code>	function
<code>create</code>	function	<code>status</code>	function
<code>cstacksize</code>	function	<code>wrap</code>	function
<code>resume</code>	function	<code>yield</code>	function

debug (basic lua)

<code>debug</code>	function
<code>getfenv</code>	function
<code>gethook</code>	function
<code>getinfo</code>	function
<code>getlocal</code>	function
<code>getmetatable</code>	function
<code>getregistry</code>	function

<code>getupvalue</code>	function
<code>setfenv</code>	function
<code>sethook</code>	function
<code>setlocal</code>	function
<code>setmetatable</code>	function
<code>setupvalue</code>	function
<code>traceback</code>	function

dir (context)

collectpattern	function	globpattern	function
current	function	ls	function
expandname	function	makedirs	function
glob	function	mkdirs	function
globfiles	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)

<code>argument</code>	function	<code>luafilechunk</code>	function
<code>arguments</code>	data table	<code>originalarguments</code>	data table
<code>engineflags</code>	data table	<code>outputfilename</code>	string
<code>files</code>	table	<code>ownbin</code>	string
<code>homedir</code>	string	<code>ownname</code>	string
<code>initex</code>	boolean	<code>ownpath</code>	string
<code>initializearguments</code>	function	<code>rawarguments</code>	data table
<code>inputfilebarename</code>	string	<code>reconstructcommandline</code>	function
<code>inputfilename</code>	string	<code>setargument</code>	function
<code>inputfilesuffix</code>	string	<code>splitarguments</code>	function
<code>jobfilename</code>	string	<code>texfile</code>	function
<code>jobfilesuffix</code>	string	<code>texmfos</code>	string
<code>loadedluacode</code>	function	<code>texos</code>	string
<code>loadluafile</code>	function	<code>texroot</code>	string
<code>luafile</code>	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	get	function
bases	table	hash	function
B enabled		identifiers	data table
F find		identify	function
T found		include	function
T list		includers	data table
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	registersuffix	function
defaultwidth	number	scale	function
done	function	setlookups	function
dummy	function	setpaths	function
existsers	data table	suffixes	data table
exists	function	tprint	function
formats	data table	used	data table
found	data table		

file (basic lua)

<code>addsuffix</code>	function	<code>joinpath</code>	function
<code>basename</code>	function	<code>loadchecksum</code>	function
<code>checksum</code>	function	<code>nameonly</code>	function
<code>collapsepath</code>	function	<code>needs Updating</code>	function
<code>copy</code>	function	<code>readdata</code>	function
<code>dirname</code>	function	<code>removesuffix</code>	function
<code>expandname</code>	function	<code>replacesuffix</code>	function
<code>extname</code>	function	<code>robustname</code>	function
<code>is_qualified_path</code>	function	<code>savechecksum</code>	function
<code>is_readable</code>	function	<code>savedata</code>	function
<code>is_rootbased_path</code>	function	<code>splitname</code>	function
<code>is_writable</code>	function	<code>splitpath</code>	function
<code>isreadable</code>	function	<code>strip</code>	function
<code>iswritable</code>	function	<code>suffix</code>	function
<code>join</code>	function		

floats (context)

<code>analysemethod</code>	<code>function</code>	<code>resave</code>	<code>function</code>
<code>collect</code>	<code>function</code>	<code>save</code>	<code>function</code>
<code>consult</code>	<code>function</code>	<code>stacked</code>	<code>function</code>
<code>flush</code>	<code>function</code>	<code>thecheckedpagefloat</code>	<code>function</code>
<code>pop</code>	<code>function</code>	<code>thestacked</code>	<code>function</code>
<code>push</code>	<code>function</code>	<code>thevar</code>	<code>function</code>

font (basic tex)

<code>current</code>	function
<code>define</code>	function
<code>each</code>	function
<code>fonts</code>	table
<code>frozen</code>	function
<code>getfont</code>	function

<code>id</code>	function
<code>max</code>	function
<code>nextid</code>	function
<code>read_tfm</code>	function
<code>read_vf</code>	function
<code>setfont</code>	function

fontloader (extra tex)

<code>apply_afmfile</code>	<code>function</code>
<code>apply_featurefile</code>	<code>function</code>
<code>close</code>	<code>function</code>
<code>fields</code>	<code>function</code>
<code>fullinfo</code>	<code>function</code>

<code>info</code>	<code>function</code>
<code>open</code>	<code>function</code>
<code>to_table</code>	<code>function</code>
<code>totable</code>	<code>function</code>

fonts (context)

analyzers table

D initializers
D methods
F setstate
B useunicodemarks

checkers table

B delete
F enable
B enabled
F missing

cid table

F getmap
F loadfile

collections table

F define
T definitions
F message
F prepare
F process
F reset
F stage_one
F stage_two
T vectors

constructors table

F applymanipulators
F assignmathparameters
B autocleanup
D cache
F calculatescale
F checkedfeatures
F checkedfilename
F cleanuptable
F collectprocessors
D designsizes
D dontembed
N factor
F finalize
F getfeatureaction
F hashfeatures
F hashinstance
T hashmethods
F normal
F virtual
F initializefeatures
D loadedfonts
T mathactions
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 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
F stage_one
F stage_two

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
F get

- F getcompositions
- T list
 - F compositions
 - F expansions
 - F featureset
 - F files
 - F mathematics
 - F protrusions
 - F solutions
 - F typefaces
- F prepare_features
- F register
- 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 collectlookups
 - F dataset
 - D enhancers
 - D features
 - F getalternate
 - T glists
 - F load
 - F scriptandlanguage
 - F setcontextchain
 - F setdynamics
 - F setfeatures
 - T tables
 - D baselines
 - D features
 - D languages
 - D scripts
 - N version
 - T pfb
 - T tfm
 - D features
 - F setfeatures
 - T vf
 - T combinations

- F combine
- T combiner
 - D commands
- F find
- D helpers
- D math
- D predefined
- D whatever
- hashes** table
 - D characters
 - T dynamics
 - D identifiers
 - D parameters
 - T processes
 - D quads
 - T setdynamics
 - D xheights
- helpers** table
 - F dimenfactor
 - F getdigitwidth
 - F getparameters
 - F nametoslot
 - F setdigitwidth
- iterators** table
 - F characters
 - F descriptions
 - F glyphs
- loggers** table
 - F format
 - F onetimemessage
 - F register
 - F reportdefinedfonts
 - F reportusedfeatures
- mappings** table
 - F addtounicode
 - F loadfile
 - F loadline
 - F loadlumtable
 - F makenameparser
 - F reset
 - F tounicode16
 - F tounicode16sequence
- names** table
 - S basename
 - B be_clever
 - D cache
 - F cleanfilename
 - F cleanname
 - F collect
 - F collectfiles
 - F collectspec
 - T data
 - B enabled
 - F exists

T filters
 F afm
 F dfont
 T list
 T names
 F otf
 T paths
 F pfb
 F ttc
 F ttf
 S fontconfigfile
 F getfilename
 F getlookupkey
 F getlookups
 F getpaths
 F identify
 F is_permitted
 F list
 F load
 B loaded
 F lookup
 F nofllookups
 S osfontdirvariable
 F readdata
 F register
 F registered
 F resolve
 F resolvedspecification
 F resolvespec
 B saved
 F specification
 D specifications
 F splitspec
 N version

 F writedata
protrusions data table
readers table
 F afm
 F check_lua
 F check_tfm
 F dfont
 F lua
 F opentype
 F otf
 F pfb
 D sequence
 F tfm
 F ttc
 F ttf
specifiers table
 D contextmerged
 F contextnumber
 D contextnumbers
 D contextsetups
 F contexttosting
 F mergecontext
 F presetcontext
 F registercontext
 F showcontext
 F splitcontext
 D synonyms
 D variants
symbols table
 F uselibrary
tables table
tracers table
typefaces data table

gzip (extra lua)

`close` function
`lines` function
`open` function

img (basic tex)

<code>boxes</code>	<code>function</code>
<code>checksize</code>	<code>function</code>
<code>clone</code>	<code>function</code>
<code>copy</code>	<code>function</code>
<code>immediatwrite</code>	<code>function</code>
<code>keys</code>	<code>function</code>
<code>new</code>	<code>function</code>
<code>node</code>	<code>function</code>

<code>ofindex</code>	<code>function</code>
<code>print</code>	<code>function</code>
<code>scan</code>	<code>function</code>
<code>serialize</code>	<code>function</code>
<code>totable</code>	<code>function</code>
<code>types</code>	<code>function</code>
<code>write</code>	<code>function</code>

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 setcloseddocument

F setclosepage

F setopendocument

F setopenpage

renderings table

F register

F rendering

F var

soundclips table

F insert

F register

interfaces (context)

addvalidkeys	function	F define	
cachedsetups	data table	F list	
cachesetup	function	setconstant	function
complete	data table	setelement	function
constants	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
namespaces	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
files table
 D collected
 F context
 B forcerun
 F run
 D tobesaved
initialize function
load function
objects table
 D collected
 F doifelse
 F get
 F number
 F page
 F save
 F set
 D tobesaved
pack boolean
passes table
 F check
 D collected
 F count
 F define
 F doifinlistelse
 F find
 F first
 F get
 F getcollected
 F getdata
 F getfield
 F gettobesaved
 F last

 F list
 F save
 F savedata
 F savetagged
 D tobesaved
positions table
 D collected
 F copy
 F depth
 F extra
 F height
 F lowerleft
 F lowerright
 F onsamepage
 F overlapping
 F page
 F position
 F replace
 D tobesaved
 F upperleft
 F upperright
 F width
 F x
 F xy
 F y
register function
save function
variables table
 D checksums
 D collected
 F save
 D tobesaved
version number

lang (basic tex)

<code>clean</code>	<code>function</code>	<code>new</code>	<code>function</code>
<code>clear_hyphenation</code>	<code>function</code>	<code>patterns</code>	<code>function</code>
<code>clear_patterns</code>	<code>function</code>	<code>postexhyphenchar</code>	<code>function</code>
<code>exceptions</code>	<code>function</code>	<code>posthyphenchar</code>	<code>function</code>
<code>hyphenate</code>	<code>function</code>	<code>preexhyphenchar</code>	<code>function</code>
<code>hyphenation</code>	<code>function</code>	<code>prehyphenchar</code>	<code>function</code>
<code>id</code>	<code>function</code>		

languages (context)

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

layouts (context)

```
status  table
      F isleftpage
      F leftorrightpagection
```


lfs (extra lua)

<code>attributes</code>	function	<code>mkdir</code>	function
<code>chdir</code>	function	<code>readlink</code>	function
<code>currentdir</code>	function	<code>rmdir</code>	function
<code>dir</code>	function	<code>setmode</code>	function
<code>isdir</code>	overloaded function	<code>shortname</code>	function
<code>isfile</code>	function	<code>symlinkattributes</code>	function
<code>lock</code>	function	<code>touch</code>	function
<code>lock_dir</code>	function	<code>unlock</code>	function

libraries (context)

`basiclua` data table
`basictex` data table
`builtin` data table

`extralua` data table
`extratex` 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)

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

lpdf (context)

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

lpeg (basic lua)

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

ltn12 (extra lua)

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

lua (basic tex)

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

luatex (context)

<code>cleanuptempfiles</code>	function	<code>showjobstat</code>	function
<code>registerstartactions</code>	function	<code>showtexstat</code>	function
<code>registerstopactions</code>	function	<code>starttime</code>	number
<code>registertempfile</code>	function		

lxml (context)

<code>addindex</code>	function	<code>load</code>	function
<code>all</code>	function	<code>loadbuffer</code>	function
<code>applyfunction</code>	function	<code>loaddata</code>	function
<code>att</code>	function	<code>loaded</code>	table
<code>attribute</code>	function	<code>loadregistered</code>	function
<code>chainattribute</code>	function	<code>main</code>	function
<code>checkindex</code>	function	<code>match</code>	function
<code>collected</code>	function	<code>name</code>	function
<code>command</code>	function	<code>namespace</code>	function
<code>concat</code>	function	<code>nonspace</code>	function
<code>concatrange</code>	function	<code>pos</code>	function
<code>content</code>	function	<code>position</code>	function
<code>context</code>	function	<code>raw</code>	function
<code>convert</code>	function	<code>rawroot</code>	function
<code>count</code>	function	<code>register</code>	function
<code>delete</code>	function	<code>removesetup</code>	function
<code>direct</code>	function	<code>resetcdata</code>	function
<code>directives</code>	table	<code>resetsetups</code>	function
F after		<code>root</code>	function
F before		<code>serialize</code>	function
F handle		<code>setaction</code>	function
F load		<code>setcdata</code>	function
F setup		<code>setcommandtonone</code>	function
<code>displayverbatim</code>	function	<code>setcommandtotext</code>	function
<code>doif</code>	function	<code>setsetup</code>	function
<code>doifelse</code>	function	<code>setverbatim</code>	function
<code>doifelsetext</code>	function	<code>snippet</code>	function
<code>doifnot</code>	function	<code>sorters</code>	table
<code>doifnottext</code>	function	F add	
<code>doiftext</code>	function	F compare	
<code>element</code>	function	F flush	
<code>elements</code>	function	F reset	
<code>filter</code>	function	F show	
<code>filterlist</code>	function	F sort	
<code>first</code>	function	<code>splitid</code>	function
<code>flush</code>	function	<code>startraw</code>	function
<code>flushsetups</code>	function	<code>stopraw</code>	function
<code>get_id</code>	function	<code>store</code>	function
<code>getid</code>	function	<code>strip</code>	function
<code>getindex</code>	function	<code>stripped</code>	function
<code>id</code>	function	<code>tag</code>	function
<code>idsplitter</code>	userdata	<code>text</code>	function
<code>include</code>	function	<code>tofile</code>	function
<code>index</code>	function	<code>toparameters</code>	function
<code>info</code>	function	<code>toverbatim</code>	function
<code>inlineverbatim</code>	function	<code>verbatim</code>	function
<code>installsetup</code>	function	<code>withindex</code>	function
<code>last</code>	function	<code>xmltexhandler</code>	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	privatebase	number
alphabets	data table	remapalphabets	function
big	function	scaleparameters	function
checkaccentbaseheight	function	setalternate	function
checkprivateparameters	function	syncboth	function
classes	data table	syncname	function
define	function	syncstyle	function
dimensions	function	toname	function
extrabase	number	tostyle	function
extras	table	utfmathclass	function
F add		utfmathcommand	function
F copy		utfmathfiller	function
families	data table	utfmathstretch	function
initializeparameters	function	xml	table
makefont	function	D entities	
overloadparameters	function	F registerentities	

md5 (extra lua)

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

metapost (context)

analyzeplugins	function
checkformat	function
checktexts	function
colorinitializer	function
convert	function
defaultformat	string
directrun	function
edefsxsy	function
escaped	function
exectime	table
filterclippath	function
finder	function
flush	function
flushers	table
T pdf	
F comment	
F flushfigure	
F startfigure	
F stopfigure	
F textfigure	
flushliteral	function
flushnormalpath	function
flushreset	function
format	function
getclippath	function
gettext	function
graphic	function
graphic_base_pass	function
graphic_extra_pass	function
intermediate	table
T actions	
F makempy	
B needed	
lastlog	string
load	function
makempy	table

N nofconverted	
F processgraphics	
metafun	table
F interpolate	
F topath	
method	number
mptopdf	table
F converttmpstopdf	
N nofconverted	
multipass	boolean
n	number
optimize	boolean
parse	function
pdfliterals	function
pluginactions	function
process	function
processplugins	function
reducetogray	boolean
reporterror	function
reset	function
resetlastlog	function
resetplugins	function
resettexttexts	function
setoutercolor	function
settext	function
showlog	boolean
tex	table
F get	
F reset	
F set	
texerrors	boolean
texttextsdata	function
theclippath	function
totable	function
unload	function
uselibrary	function

mime (extra lua)

b64 function
decode function
decodet table
 F base64
 F quoted-printable
dot function
encode function
encodet table
 F base64
 F quoted-printable
eol function
normalize function

qp function
qpwrp function
stuff function
unb64 function
unqp function
wrap function
wrapt table
 F base64
 F default
 F quoted-printable
 F text
wrp function

mplib (extra tex)

fields	function	pen_info	function
new	function	version	function

noads (context)

handlers	table	process	function
		processors	table
F check		T collapse	
F collapse		F mlist_to_hlist	
F relocate		T relocate	
F resize		T resize	
F respace		T respace	
F tags			

node (basic tex)

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

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
count	function	lines	table
delete	function	T boxed	
destinations	table	F register	
N attribute		F setup	
T done		F stage_one	
F handler		F stage_two	
T stack		F stage_zero	
dimensionfields	data table	D data	
dir_is_pop	data table	F finalize	
dir_negation	data table	F number	
fasthpack	function	N scratchbox	
fields	function	link	function
fillcodes	data table	list	function
firstcharacter	function	listablefields	data table
firstcharinbox	function	listcodes	data table
firstglyph	function	listtoutf	function
getattribute	function	load	function
gluecodes	data table	locate	function
glyphcodes	data table	mathcodes	data table
glyphdir_is_equal	data table	noadcodes	data table
glyphdir_is_opposite	data table	nodecodes	data table
glyphdir_is_orthogonal	data table	packlist	function
handlers	table	pardir_is_equal	data table
F accessibility		pardir_is_opposite	data table
F backgrounds		pardir_is_parallel	data table
F characters		partextdir_is_equal	data table
F checkforleaks		pool	table
F checkglyphs		F baselineskip	
F cleanuppage		F cleanup	
F export		F disc	
F finalize		F glue	
F graphicvadjust		F gluespec	
F migrate		F glyph	
F protectglyphs		F kern	
F stripping		F latelua	
F unprotectglyphs		F leftmarginkern	
has_attribute	function	F leftskip	
idstoring	function	F lineskip	
ignorablefields	data table	F noad	
injections	table	F pdfannotation	
F handler		F pdfdestination	
F setcursive		F pdfdirect	
F setkern		F pdfliteral	

F penalty		show	function
F register		showboxes	function
F rightmarginkern		showcodes	function
F rightskip		showlist	function
F rule		showsimplelist	function
F shrink		skipcodes	data table
F stretch		somepenalty	function
F temp		somespace	function
F textdir		stripping	table
F usage		F enable	
T userids		T glyphs	
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 freezegrup	
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	texmdir_is_equal	data table
references	table	texmdir_is_is	data table
N attribute		texmdir_is_opposite	data table
T done		texmdir_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	
setunsetattributes	function	T steppers	
shifts	table	F check	
D data		F codes	
F define		F features	
F enable		F glyphs	
F handler		F message	

F messages	unsetattribute	function
F nofsteps	unsetattributes	function
F register	visualizebox	function
F reset	whatcodes	data table
F start	whatsitcodes	data table
F stop	writable_spec	function
F stop		

number (context)

	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
percent	function	tonumberf	function
points	function	tonumberg	function
setbit	function	topicas	function
tobasepoints	function	topoints	function
tobitstring	function	toscaled	function
tocentimeters	function	toscaledpoints	function
tociceros	function	toset	function

os (basic lua)

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

package (basic lua)

<code>appendtolibpath</code>	function	<code>loaders</code>	table
<code>clibpaths</code>	function	<code>loadlib</code>	function
<code>config</code>	string	<code>path</code>	string
<code>cpath</code>	string	<code>preload</code>	table
<code>libpaths</code>	function	<code>prependtolibpath</code>	function
<code>loaded</code>	table	<code>seeall</code>	function

pdf (basic tex)

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

profiler (extra lua)

`pause` `function`
`resume` `function`

`start` `function`
`stop` `function`

regimes (context)

disable	function	process	function
enable	function	push	function
pop	function	translate	function

resolvers (context)

allprefixes	function	getownpath	function
appendhash	function	hashers	data table
automount	function	homedir	string
automounted	table	installinputfilehandler	function
booleanvariable	function	installinputlinehandler	function
cacheversion	string	instance	table
checkedvariable	function	D data	
cleanpath	function	B diskcache	
cleanpathlist	function	D environment	
concatinators	data table	D expansions	
configbanner	string	D fakepaths	
criticalvars	data table	D files	
dangerous	data table	B force_suffixes	
datastate	function	D found	
defaultsuffixes	table	D foundintrees	
dowithfilesandreport	function	D hashed	
dowithfilesintree	function	D hashes	
dowithpath	function	D lists	
dowithvariable	function	B loadererror	
env	function	D order	
executers	table	B remember	
F check		B renewcache	
F execute		B savelists	
F finalize		D setups	
F register		D specification	
expandbraces	function	D variables	
expandedpathfromlist	function	joinpath	function
expandedpathlist	function	load	function
expandedpathlistfromvariable	function	loadbinfile	function
expandpath	function	loaders	data table
expandpathfromvariable	function	loadlualib	function
expansion	function	loadtexfile	function
extendtexmfvariable	function	locateformat	function
find_file	function	locators	data table
find_files	function	luacnfname	string
findbinfile	function	luacnfspec	string
findctxfile	function	luacnfstate	string
finders	data table	macros	table
findfile	function	F convertfile	
findfiles	function	F preprocessed	
findgivenfile	function	F processmkvi	
findgivenfiles	function	F version	
findpath	function	maxreadlevel	number
findtexfile	function	methodhandler	function
findwildcardfile	function	newinstance	function
findwildcardfiles	function	openbinfile	function
formatofsuffix	function	openers	data table
formatofvariable	function	openfile	function
formats	data table	opentexfile	function
generators	data table	ownpath	string
getenv	function	prefixes	data table

prependhash	function	setenv	function
registerextrapath	function	setinstance	function
registerfile	function	settrace	function
registerfilehash	function	showpath	function
registerintrees	function	splitconfigurationpath	function
registermethod	function	splitexpansions	function
registerzipfile	function	splitmethod	function
relations	data table	splitpath	function
repath	function	suffixes	data table
reset	function	suffixmap	data table
resetextrapath	function	suffixofformat	function
resetresolve	function	texdatablob	function
resolve	function	unexpandedpath	function
savers	data table	unexpandedpathlist	function
scanfiles	function	unresolve	function
schemes	table	updaterelations	function
T cleaners		updatescript	function
F md5		usezipfile	function
F none		validatedpath	function
F strip		variable	function
F cleanname		variableofformat	function
F install		variableofformatorsuffix	function
N threshold		wildcardpattern	function

scripts (context)

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

set (context)

contains	function	tonumber	function
create	function	totable	function
tolist	function		

socket (extra lua)

BLOCKSIZE	number		F keep-open
_DEBUG	boolean		skip function
bind	function		sleep function
choose	function		smtp table
connect	function		S DOMAIN
dns	table		N PORT
	F gethostname		S SERVER
	F tohostname		N TIMEOUT
	F toip		S ZONE
ftp	table		F message
	S PASSWORD		F open
	N PORT		F send
	N TIMEOUT		source function
	S USER		sourcet table
	F command		F by-length
	F get		F default
	F open		F http-chunked
	F put		F until-closed
gettime	function		tcp function
http	table		tp table
	N PORT		N TIMEOUT
	N TIMEOUT		F connect
	S USERAGENT		try function
	F open		udp function
	F request		url table
newtry	function		F absolute
protect	function		F build
select	function		F build_path
sink	function		F escape
sinkt	table		F parse
	F close-when-done		F parse_path
	F default		F unescape
	F http-chunked		

sorters (context)

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

statistics (context)

<code>checkfmtstatus</code>	function	<code>resettiming</code>	function
<code>elapsedindeed</code>	function	<code>runtime</code>	function
<code>elapsedseconds</code>	function	<code>savefmtstatus</code>	function
<code>elapsedtime</code>	function	<code>show</code>	function
<code>enable</code>	boolean	<code>showjobstat</code>	function
<code>formatruntime</code>	function	<code>starttiming</code>	function
<code>hastiming</code>	function	<code>stoptiming</code>	function
<code>memused</code>	function	<code>threshold</code>	number
<code>register</code>	function	<code>timed</code>	function
<code>reportstorage</code>	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)

<code>collect</code>	function
<code>disable</code>	function
<code>enable</code>	function
<code>flush</code>	function
<code>initialize</code>	function

<code>push</code>	function
<code>start</code>	function
<code>stop</code>	function
<code>synchronize</code>	function

string (basic lua)

byte	function	lower	function
bytepairs	function	match	function
bytes	function	quote	function
char	function	quoted	function
characterpairs	function	rep	function
characters	function	reverse	function
checkedsplit	function	split	function
count	function	splitlines	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	unquote	function
gsub	function	unquoted	function
is_boolean	function	upper	function
is_empty	function	utfcharacters	function
len	function	utfsplitlines	function
limit	function	utfvalues	function

structures (context)

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

D ordered
 F page
 F popnesting
 F prefix
 F prefixednumber
 F prefixedpage
 F process
 F push
 D pushed
 F pushnesting
 F realpage
 T result
 F savednumber
 F savedprefixednumber
 F savedtitle
 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 number
 F ordered
 F postpone
 F resetpostponed
 F restore
 F save
 F setstate
 F setsymbolpage
 D states
 F store
 F title
pages table
 F analyze
 D collected
 F is_odd
 F number
 F save
 D tobesaved
processors table
 F apply
 F ignore
 F register
 F reset
 F split
 F sprint
references table
 F analyze
 F checkedfile
 F checkedfileorurl
 F checkedprogram
 F checkedurl
 D collected
 F currentmetadata
 F currentorder
 D currentset
 F define
 D defined
 D derived
 F doifelse
 F enableinteraction
 F enhance
 D executers
 F expandcurrent
 F export
 D exporters
 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
- D imported
- F inject
- F injectcurrentset
- D internals
- F load
- F mark
- D pages
- T programs
 - T data
 - F define
 - F get
- F realpage
- F realpageofpage
- D referred
- F referredpage
- F registerfinalizer
- F registerinitializer
- F registerpage
- F reportproblems
- F reset
- T resolvers
 - F description
 - F float
 - F formula
 - F note
 - F reference
 - F section
- D runners
- F sectionnumber
- F sectionpage
- F sectiontitle
- F set
- F setandgetattribute
- F setinnermethod
- F setinternalreference
- F setnextinternal
- F setnextorder
- D specials
- F split
- T testrunners
 - F inner
 - F special
 - F special operation
 - F special operation with arguments
- T testspecials
 - F i

- F internal
- F page
- F realpage
- F userpage
- D tobereferred
- D tobesaved
- T urls
 - T data
 - F define
 - F get
 - F whatfrom
- registers** table
 - F analyze
 - F analyzed
 - D collected
 - F compare
 - F define
 - F enhance
 - F extend
 - F filter
 - F filtercollected
 - F finalize
 - F flush
 - F prepare
 - F process
 - F sort
 - F store
 - D tobesaved
 - F unique
 - F userdata
- sections** table
 - F autodepth
 - F cct
 - T collected
 - F current
 - F currentblock
 - F currentid
 - F currentlevel
 - F defineautolevels
 - F depthnumber
 - F findnumber
 - F fullnumber
 - F getcurrentlevel
 - F getlevel
 - F getnumber
 - D levelmap
 - D levels
 - F load
 - F matchingtilldepth
 - F numberatdepth
 - F numbers
 - F popblock
 - F pushblock
 - F reportstructure

F save	
F set	
F setblock	
F setchecker	
F setlevel	
F setnumber	
F somelevel	
F startautolevel	
F stopautolevel	
F structuredata	
F title	
D tobesaved	
F typesetnumber	
F userdata	
B verbose	
F way	
sets	table
F define	
F get	
F getall	
D setlist	
specials	table
D collected	
F retrieve	
F store	
D tobesaved	
synonyms	table
F analyzed	
D collected	
F compare	

F define	
F filter	
F finalize	
F flush	
F meaning	
F prepare	
F process	
F register	
F registerused	
F sort	
F synonym	
D tobesaved	
tags	table
T data	
F getid	
F handler	
D labels	
F last	
F lastinchain	
D properties	
F registerdata	
F setdescriptionid	
F setitemgroup	
F setsorting	
F setsynonym	
F settagproperty	
F start	
F stop	
D taglist	
T userdata	

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
maxn	function	toxml	function
merge	function	unnest	function
merged	function	unpack	function
prepend	function		

tex (basic tex)

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

texconfig (basic tex)

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

texio (basic tex)

```
write      function  
write_nl   function
```

token (basic tex)

<code>command_id</code>	function	<code>get_next</code>	function
<code>command_name</code>	function	<code>is_activechar</code>	function
<code>create</code>	function	<code>is_expandable</code>	function
<code>csname_id</code>	function	<code>is_protected</code>	function
<code>csname_name</code>	function	<code>lookup</code>	function
<code>expand</code>	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 process
			F set
breakpoints	table	hpack	function
	N attribute	kerns	table
	F enable		D factors
	F handler		F handler
	D mapping		B keepligature
	T methods		B keptogether
	F set		D mapping
	F setreplacement		F set
cases	table	margins	table
	T actions		F finalhandler
	F handler		F globalhandler
	F set		F localhandler
cleaners	table		F save
	F handler	spacings	table
	F set		N attribute
digits	table		F handler
	T actions		D mapping
	N attribute		F set
	F handler		F setup
	F set	tonodes	function
directions	table	vpack	function

unicode (extra lua)

ascii	table		
F byte		F gfind	
F char		F gmatch	
F dump		F gsub	
F find		F len	
F format		F lower	
F gfind		F match	
F gmatch		F rep	
F gsub		F reverse	
F len		F sub	
F lower		F upper	
F match		utf16_to_utf8	function
F rep		utf16_to_utf8_be	function
F reverse		utf16_to_utf8_le	function
F sub		utf32_to_utf8	function
F upper		utf32_to_utf8_be	function
filetype	function	utf32_to_utf8_le	function
grapheme	table	utf8	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 sub		F string	
F upper		F sub	
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

url (context)

<code>addscheme</code>	function	<code>hasscheme</code>	function
<code>construct</code>	function	<code>query</code>	function
<code>filename</code>	function	<code>split</code>	function
<code>hashed</code>	function		

utilities (context)

debugger	table		F appendaction	
F disable			F appendgroup	
F enable			F autocompile	
F savestats			F compile	
F showstats			F disableaction	
formatters	table		F disablegroup	
F formatcolumns			F enableaction	
F list			F enablegroup	
F stripzeros			D functions	
garbagecollector	table		F localize	
F check			F nodeprocessor	
N criterium			F prependaction	
B enabled			F prependgroup	
lua	table		F removeaction	
F compile			F reset	
packers	table		F setkind	
F hashed			F tostring	
F new			setters	table
F pack			F disable	
F simplehashed			F enable	
F strip			F initialize	
F unpack			F list	
N version			F new	
parsers	table		F register	
F add_settings_to_array			F reset	
F arguments_to_table			F show	
F array_to_string			storage	table
F getparameters			F allocate	
F hash_to_string			F checked	
F listitem			F mark	
F make_settings_to_hash_pattern			F marked	
T patterns			F setinitializer	
U settings_to_array			F sparse	
U settings_to_hash_a			strings	table
U settings_to_hash_b			F collapseCrLf	
U settings_to_hash_c			F striplong	
F settings_to_array			F tabtospace	
F settings_to_hash			tables	table
F settings_to_hash_strict			F accesstable	
F settings_to_hash_tolerant			F definetable	
F settings_to_set			F insertaftervalue	
F simple_hash_to_string			F insertbeforevalue	
report	function		F removevalue	
sequencers	table			

visualizers (context)

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

xml (context)

after	function	F quit	
all	function	F tag	
applylpath	function	F text	
assign	function	F undefined	
attribute	function	F upper	
before	function	fillin	function
body	function	filter	function
checkbom	function	finalizers	table
checkerror	function	T tex	
checknamespace	function	F all	
checkns	function	F attribute	
cleansed	function	F bibtexconcat	
collect	function	F bibtexshort	
collect_elements	function	F chainattribute	
collect_tags	function	F command	
collect_texts	function	F concat	
collected	function	F concatrange	
collecttexts	function	F context	
content	function	F count	
convert	function	F ctxtext	
copy	function	F default	
count	function	F first	
cprint	function	F function	
defaulthandlers	table	F index	
D file		F last	
D parsedxml		F lettered	
D string		F lower	
D tex		F match	
D verbose		F name	
defaultprotocol	string	F position	
delete	function	F reverse	
delete_element	function	F stripped	
each	function	F tag	
each_element	function	F tags	
elements	function	F text	
empty	function	F upper	
entities	data table	T xml	
erase	function	F all	
escaped	function	F att	
expressions	table	F attribute	
F boolean		F attributes	
F child		F chainattribute	
F contains		F count	
F count		F default	
F error		F elements	
F find		F empty	
F lower		F first	
F name		F function	
F number		F index	
F oneof		F last	
F print		F match	

F name		F unknown_hex_entity	
F position		position	function
F reverse		process	function
F table		process_attributes	function
F tag		process_elements	function
F tags		processattributes	function
F text		profiled	table
F texts		raw	function
first	function	registerentity	function
found	function	registersns	function
functions	table	remap_name	function
getbuffer	function	remap_namespace	function
gethandlers	function	remap_tag	function
gethandlersfunction	function	remapname	function
include	function	remapnamespace	function
index	function	remaptag	function
inheritedconvert	function	renamespace	function
inject	function	replace	function
inject_element	function	replace_element	function
inject_element_after	function	resolvedentity	function
inject_element_before	function	resolvns	function
injectafter	function	root	function
injectbefore	function	save	function
insert	function	selection	function
insert_element	function	serialize	function
insert_element_after	function	sethandlersfunction	function
insert_element_before	function	setproperty	function
insertafter	function	settings	function
insertbefore	function	specialhandler	table
inspect	function	sprint	function
is_valid	function	string	function
last	function	strip	function
load	function	strip_whitespace	function
lpath	function	stripelement	function
lpathcached	function	stripleadingspaces	function
lpathcalls	function	table	function
lshow	function	text	function
makestandalone	function	textonly	function
match	function	tocdata	function
name	function	toelement	function
newhandlers	function	tostring	function
nodesettostring	function	toxml	function
originalload	function	tprint	function
package	function	traverse	function
parent	function	unescaped	function
parsedentitylpeg	userdata	withelement	function
pihandlers	table	withelements	function
placeholders	table	wrap	function
F unknown_dec_entity		xmlns	table

zip (extra lua)

<code>archives</code>	<code>table</code>	<code>openarchive</code>	<code>function</code>
<code>close</code>	<code>function</code>	<code>openfile</code>	<code>function</code>
<code>closearchive</code>	<code>function</code>	<code>registeredfiles</code>	<code>table</code>
<code>open</code>	<code>function</code>	<code>type</code>	<code>function</code>

zlib (extra lua)

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