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

noads	table	streams	table
node	table	string	table
nodes	table	stripmath	function
number	table	structures	table
os	table	table	table
outputpagestree	function	tex	table
package	table	texconfig	table
pairs	function	texio	table
parametersets	table	toboolean	function
pcall	function	tocontext	function
pdf	table	token	table
physics	table	tokens	table
print	function	tonumber	function
profiler	table	tostring	function
protect	function	trace_characters	boolean
rawequal	function	traceback	function
rawget	function	tracers	table
rawset	function	trackers	table
regimes	table	type	function
report_characters	function	typesetters	table
require	function	unicode	table
resolvers	table	unpack	function
scripts	table	url	table
select	function	utf	table
set	table	utilities	table
setfenv	function	visualizers	table
setmetatable	function	xml	table
socket	table	xmlconvert	function
sorters	table	xpcall	function
statistics	table	zip	table
status	table	zlib	table
storage	table		

attributes (context)

colorintents	table	F	pushset
N	attribute	F	register
D	data	D	registered
F	enable	F	registerspotcolor
F	handler	F	rgb
F	register	F	rgbtocmyk
D	registered	F	rgbtogray
colors	table	F	rgbtohsv
N	attribute	N	selector
F	cmyk	F	setlist
F	cmyktogray	F	setmodel
F	cmyktorgb	D	sets
F	colorcomponents	F	spot
B	couple	F	spotcolorname
D	data	F	spotcolorparent
N	default	F	spotcolorvalue
F	defineintermediatecolor	B	supported
F	definemixcolor	F	transparencycomponents
F	definemultitonecolor	B	triggering
F	defineprocesscolor	F	usecolors
F	definesimplegray	F	value
F	definespotcolor	D	values
F	definetransparency	B	weightgray
F	enable	**define**	function
F	filter	**effects**	table
F	forcedmodel	N	attribute
F	forcesupport	D	data
F	formatcolor	F	enable
F	formatgray	F	handler
F	gray	F	register
F	graytohsv	D	registered
F	handler	D	values
F	hsvtogray	**handlers**	table
F	hsvtorgb	**list**	data table
F	iccprofile	**names**	data table
F	isblack	**negatives**	table
N	main	N	attribute
S	model	D	data
F	mpcolor	F	enable
F	mpoptions	F	handler
U	none	F	register
F	popset	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	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 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                        T blue
  F stoplayer                         T gray
  F switchlayer                       T green
  F transparency                      T red
  F typesetfield                      T rulecolors
T registrations                         T black
  F cmykindexcolor                      T blue
  F cmykspotcolor                       T gray
  F getspotcolorreference               T green
  F grayindexcolor                      T paleblue
  F grayspotcolor                       T palegray
  F rgbindexcolor                       T palegreen
  F rgbspotcolor                        T palered
  F spotcolorname                       T red
  F transparency                      F startslant
T tables                              T stopslant
  T vfspecials                   registrations   table
    T black                      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 define
     F disable
     F enable
     F handler
     T methods
      F default
      F oneline
     D names
     D numbers
     F set
     F start
     F stop
    F keeptogether
    F registertogether
    T solutions
     T splitters
      F define

    F optimize
    T registered
    F reset
    F set
    F split
    F start
    F stop
   F tag
vspacing   table
    F analyze
    D categories
    F collapsevbox
    T data
     D map
     D skip
     D snapmethods
    F definesnapmethod
    B fixed
    F pagehandler
    F 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	autonextspace	function
Character	function	autonextstructurelevel	function
Characters	function	autosetups	function
MPc	function	autostarttext	function
MPd	function	autostoptext	function
MPh	function	bcolumn	function
MPll	function	boolcase	function
MPlr	function	character	function
MPls	function	characters	function
MPn	function	checkcharactersinfont	function
MPp	function	checkcountersetup	function
MPpardata	function	checkedconversion	function
MPplus	function	checkedpagefloat	function
MPpos	function	checktwopassdata	function
MPposset	function	chineseallnumerals	function
MPr	function	chinesecapnumerals	function
MPrest	function	chinesenumerals	function
MPrs	function	cleanfontname	function
MPul	function	clonefield	function
MPur	function	collectfloat	function
MPw	function	collecthelp	function
MPx	function	colorcomponents	function
MPxy	function	consultfloat	function
MPxywhd	function	copyfiletolog	function
MPy	function	copyposition	function
Romannumerals	function	countervalue	function
abjadnodotnumerals	function	counttwopassdata	function
abjadnumerals	function	currentcomponent	function
addcounter	function	currentdate	function
addff	function	currentenvironment	function
addfs	function	currentproduct	function
addlinklistelement	function	currentproject	function
addtojavascriptpreamble	function	currentregime	function
addtolist	function	datasetvariable	function
allinputpaths	function	dayname	function
alphabetic	function	defineattribute	function
analysefloatmethod	function	definebibtexsession	function
analyzelist	function	definebreakpoint	function
applytochars	function	definebreakpoints	function
applytowords	function	definecharacterspacing	function
assignbuffer	function	defineconversion	function
autofinishstructurelevels	function	definecounter	function

definedviewerlayer	function	doifelserangeonpage	function
definefield	function	doifelsesavedfloat	function
definefieldset	function	doifelsespaces	function
definefilefallback	function	doifelsevisualizer	function
definefilesynonym	function	doiffieldcategoryelse	function
definefont_one	function	doiffieldelse	function
definefont_two	function	doiffieldsetelse	function
definefontfeature	function	doiffiledefinedelse	function
definefontsolution	function	doiffileexistelse	function
defineintermediatecolor	function	doiffirstcharelse	function
definelinkedlist	function	doifinputfileelse	function
definemarking	function	doifinsetelse	function
definemultitonecolor	function	doifleapyearelse	function
defineparallel	function	doiflisthasentry	function
defineparbuilder	function	doiflisthasnumberelse	function
defineprocesscolor	function	doiflisthaspageelse	function
definesectionlevels	function	doiflisthastitleelse	function
definespotcolor	function	doiflocfileelse	function
definestructureblock	function	doifnot	function
definestructureset	function	doifnotcounter	function
definetransparency	function	doifobjectreferencefoundelse	function
definetwopasslist	function	doiffolderversionelse	function
defineviewerlayer	function	doifoverlappingelse	function
defrostrandomseed	function	doifparentfileelse	function
digits	function	doifposition	function
disableparbuilder	function	doifpositionelse	function
disableregime	function	doifpositiononpage	function
disablespellchecking	function	doifpositionsonsamepageelse	function
discardfromlist	function	doifpositionsonthispageelse	function
doanalyzeframedbox	function	doifurldefinedelse	function
doif	function	doprocesstypescriptfile	function
doifblackelse	function	doreshapeframedbox	function
doifcommonelse	function	dostarttextfile	function
doifcounter	function	dostoptextfile	function
doifdimenstringelse	function	ecolumn	function
doifdrawingblackelse	function	elapsedtime	function
doifelse	function	enablecolor	function
doifelsebuffer	function	enablecolorintents	function
doifelsecounter	function	enablefontcolorschemes	function
doifelsecurrentfonthasfeature	function	enableparbuilder	function
doifelseintwopassdata	function	enableregime	function
doifelsemarking	function	enablespellchecking	function
doifelsemultipar	function	enabletransparency	function
doifelseparallel	function	enhancelinkedlist	function
doifelsepositionsused	function	enhancelist	function

erasebuffer	function	**getinternalreference**	function
exportformdata	function	**getlasttwopassdata**	function
featureattribute	function	**getmarking**	function
featurelist	function	**getprivateattribute**	function
feedback	function	**getprivatechar**	function
fetchallmarks	function	**getrandomcounta**	function
fetchmultipar	function	**getrandomcountb**	function
fetchmultishape	function	**getrandomseed**	function
fetchonemark	function	**getreadfilename**	function
fetchposboxes	function	**gettexbuffer**	function
fetchtwomarks	function	**gettwopassdata**	function
filterreference	function	**gettwopassdatalist**	function
finalizebox	function	**geturl**	function
findtwopassdata	function	**grabbuffer**	function
firstcountervalue	function	**helpaction**	function
firstinset	function	**helpreference**	function
flushfloat	function	**hexstringtonumber**	function
flushpostponedblocks	function	**hour**	function
fontchar	function	**hyphenatedlist**	function
fontcollectionclone	function	**hyphenatedurl**	function
fontcollectiondefine	function	D characters	
fontcollectionprepare	function	N lefthyphenmin	
fontcollectionregister	function	D mapping	
fontcollectionreport	function	N righthyphenmin	
fontcollectionreset	function	F setcharacters	
fontlookupgetkey	function	**incrementedcounter**	function
fontlookupgetkeyofindex	function	**insertattachment**	function
fontlookupinitialize	function	**insertcomment**	function
fontlookupnoffound	function	**insertfield**	function
forceendjob	function	**insertrenderingwindow**	function
forcequitjob	function	**insertsoundclip**	function
format	function	**isleapyear**	function
formatcolor	function	**languagenumber**	function
formatgray	function	**lastcountervalue**	function
freezerandomseed	function	**lchexnumber**	function
getbuffer	function	**lchexnumbers**	function
getbufferctxlua	function	**leapyear**	function
getbuffermkvi	function	**listlabel**	function
getcommandline	function	**listlocation**	function
getctxfile	function	**listprefixednumber**	function
getdefaultfieldvalue	function	**listprefixedpage**	function
getfieldcategory	function	**listrealpage**	function
getfirstcharacter	function	**listsize**	function
getfirsttwopassdata	function	**listtitle**	function
getfloatvariable	function	**listuserdata**	function

loadexamodes	function	pos	function
loadfontgoodies	function	posplus	function
loadspellchecklist	function	posstrut	function
loadtypescriptfile	function	poswhd	function
loadvisualizer	function	posxy	function
locatefilepath	function	prepareMPvariable	function
locfilename	function	preparebibtexsession	function
logoptions	function	preparedfile	function
markregionbox	function	presetsymbollist	function
mathrenderset	function	presettabulate	function
maxitemwidth	function	prevcountervalue	function
minute	function	processbuffer	function
molecule	function	processedfile	function
month	function	processedfiles	function
monthmnem	function	processfile	function
monthname	function	processfilemany	function
mpcolor	function	processfilenone	function
mpoptions	function	processfileonce	function
namedstructureuservariable	function	processlist	function
namedstructurevariable	function	pushfloat	function
nbfs	function	pushitaliccorrection	function
nextcountervalue	function	pushlist	function
nextparallel	function	rawcharacter	function
nofdays	function	rawcountervalue	function
nofitems	function	rawdate	function
nofstackedfloats	function	referencepagestate	function
noteprefixednumber	function	referencerealpage	function
notetitle	function	registerattachment	function
ntimes	function	registerbibtexentry	function
number	function	registerbibtexfile	function
objectnumber	function	registerbookmark	function
objectpage	function	registerbuttons	function
octnumber	function	registercolor	function
octstringtonumber	function	registercolorintent	function
ordinal	function	registeredviewerlayer	function
overloadbookmark	function	registerhelp	function
pagestaterealpage	function	registeritemgroup	function
parpos	function	registermaintextcolor	function
pdfrotation	function	registernamespace	function
percentageof	function	registerpostponedblock	function
pgfxcolorspec	function	registersoundclip	function
placeparallel	function	registerstructureprocessor	function
popfloat	function	registertransparency	function
popitaliccorrection	function	registerunit	function
poplist	function	relatemarking	function

removemissingcharacters	function	setdocumentenvironments	function
replacemissingcharacters	function	setdocumentmodes	function
replacepospxywhd	function	setdocumentmodules	function
resavefloat	function	setfigurelookuporder	function
resetcounter	function	setfontfeature	function
resetfontfeature	function	setfontofid	function
resetfontsolution	function	setfontsolution	function
resetmarking	function	setformat	function
resetmathitalics	function	setformsmethod	function
resetnullfont	function	setinternalreference	function
resetparallel	function	setmarking	function
resetstructureprocessor	function	setmathalphabet	function
resettimer	function	setmathalternate	function
restartcounter	function	setmathattribute	function
restorecounter	function	setmathitalics	function
restorecurrentattributes	function	setmathstyle	function
romannumerals	function	setobject	function
runbuffer	function	setopendocumentaction	function
savebuffer	function	setopenpageaction	function
savecounter	function	setowncounter	function
savecurrentattributes	function	setpagestate	function
savedlistnumber	function	setpagestaterealpageno	function
savedlistprefixednumber	function	setpagetransition	function
savedlisttitle	function	setparbuilder	function
savefloat	function	setpos	function
saveobject	function	setrandomseed	function
saveparallel	function	setrealign	function
savestructureblock	function	setreferencearguments	function
savetaggedtwopassdata	function	setreferenceoperation	function
savetwopassdata	function	setstructureblockstate	function
second	function	settagcombination	function
selectstructureblock	function	settagdescription	function
setbreakpoints	function	settagdescriptionsymbol	function
setcharactercasing	function	settagfigure	function
setcharactercleaning	function	settaghighlight	function
setcharacterkerning	function	settagitemgroup	function
setcharacterspacing	function	settagproperty	function
setcharacterstripping	function	settagsorting	function
setclosedocumentaction	function	settagsynonym	function
setclosepageaction	function	settagtablecell	function
setcolormodel	function	settagtabulatecell	function
setcounter	function	setupbookmarks	function
setdataset	function	setupcanvas	function
setdigitsmanipulation	function	setupcharacterspacing	function
setdirection	function	setupexport	function

setupfontexpansion	function	structureuservariable	function
setupfontprotrusion	function	structurevariable	function
setupidentity	function	subcountervalues	function
setupitaliccorrection	function	subff	function
setxmpfile	function	subfs	function
showattributes	function	synchronizecolormodel	function
showchardata	function	synchronizemarking	function
showcounter	function	taggedmathfunction	function
showfontparameters	function	testcase	function
showhyphenatedinlist	function	textime	function
splitfilename	function	transparencycomponents	function
spotcolorname	function	triggereffect	function
spotcolorparent	function	triggernegative	function
spotcolorvalue	function	truefilename	function
startcolorset	function	typebuffer	function
startcomponent	function	typefile	function
startenvironment	function	typestring	function
startfontsolution	function	uchexnumber	function
startparbuilder	function	uchexnumbers	function
startproduct	function	unicodechar	function
startproject	function	unit	function
startregime	function	updatefilenames	function
startsectionlevel	function	useMPlibrary	function
starttag	function	useanyfile	function
starttext	function	usecldfile	function
startviewerlayer	function	usecolors	function
stopcolorset	function	usecomponent	function
stopcomponent	function	useenvironment	function
stopenvironment	function	usefile	function
stopfontsolution	function	usejavascriptpreamble	function
stopparbuilder	function	usejavascriptscripts	function
stopproduct	function	uselibrary	function
stopproject	function	useluafile	function
stopregime	function	usemodules	function
stopsectionlevel	function	usepath	function
stoptag	function	useproduct	function
stoptext	function	useproject	function
stopviewerlayer	function	usesubpath	function
storejavascriptcode	function	usesymbols	function
storejavascriptpreamble	function	usetexfile	function
structureautocatcodedget	function	useurl	function
structurecatcodedget	function	usexmlfile	function
structuregivencatcodedget	function	usezipfile	function
structurenumber	function	utfchar	function
structuretitle	function	utfmathclass	function

utfmathcommand	function	**x_table_construct**	function
utfmathfiller	function	**x_table_create**	function
utfmathstretch	function	**x_table_flush**	function
vspacing	function	**x_table_init_construct**	function
vspacingcollapse	function	**x_table_init_reflow_height**	function
vspacingdefine	function	**x_table_init_reflow_width**	function
vspacingsetamount	function	**x_table_next_row**	function
vspacingsnap	function	**x_table_reflow_height**	function
weekday	function	**x_table_reflow_width**	function
weekdayname	function	**x_table_set_construct**	function
widthofstring	function	**x_table_set_reflow_height**	function
writestatus	function	**x_table_set_reflow_width**	function
x_table_cleanup	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

ctxrunner (context)

load   function
prepfiles data table
resolve   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   D modules
files   table   T ctxfile
getargument   function   D environments
getfilename   function   D modes
options   table   D modules
    T commandline   **setargument**   function
      D environments   **setdefaultargument** function
      D modes   **setfilename**   function

environment (context)

argument	function	**luafile**	function
arguments	data table	**luafilechunk**	function
engineflags	data table	**originalarguments**	data table
files	table	**outputfilename**	string
filesynonyms	data table	**ownbin**	string
getargument	function	**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

epdf (extra tex)

Array	function		**PDFRectangle**	function
Dict	function		**open**	function
Object	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		**magics**	data table
bitmapimage	function	**mergegoodies**	function
boxnumber	number	**nofprocessed**	number
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	**setorder**	function
formats	data table	**setpaths**	function
found	data table	**suffixes**	data table
get	function	**tprint**	function
guess	function	**used**	data table

file (basic lua)

addsuffix	function	**loadchecksum**	function
basename	function	**nameonly**	function
checksum	function	**nametotable**	function
collapsepath	function	**needs_updating**	function
copy	function	**needsupdating**	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
joinpath	function	**syncmtimes**	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                          current        function
        S extra_space                 currentid      function
        S extraspace                  definers       table
        S slant                         F addlookup
        S space                         F analyze
        S space_shrink                  F applypostprocessors
        S space_stretch                 F checkedmode
        S spaceshrink                   F checkedscript
        S spacestretch                  F current
        S x_height                      S defaultlookup
      S units                           F define
      S vfactor                         F getspecification
      S xheight                         F loadfont
    T properties                        F makespecification
      S autoitalicamount                T methods
      T cidinfo                           F install
      S embedding                         D variants
      S encodingbytes                   F read
      S filename                        F register
      S finalized                       F registered
      S fontname                        F registersplit
      S format                          F resetnullfont
      S fullname                        F resolve
      S hasitalics                      T resolvers
      S hasmath                           F file
      S mathitalics                       F name
      S mode                              F spec
      S name                        definetypeface function
      S noglyphnames                encodings      table
      S nostackmath                     T agl
      S psname                          D cache
      S textitalics                     F is_known
      S virtualized                     D known
  D loadedfonts                         F load
  S namemode                            F make_unicode_vector
  F newfeatures                         D math
  N privateoffset                       N version
  F readanddefine                 expansions     data table
  F registerfeature               formats        data table
  B resolvevirtualtoo             goodies        table
  F scale                             T colorschemes
  F scaled                              F coloring
  F setfactor                           T data
  F setname                             F enable
  N version                           T designsizes
```

```
        D data                                  F load
        F filename                              F scriptandlanguage
        F register                              F setcontextchain
    F getcompositions                           F setdynamics
    T list                                      F setfeatures
        F compositions                          T tables
        F designsizes                               D baselines
        F expansions                                D features
        F featureset                                D languages
        F files                                     D scripts
        F mathematics                           N version
        F protrusions                       T pfb
        F solutions                         T tfm
        F typefaces                             D features
    F load                                      F setfeatures
    F prepare_features                      T vf
    F register                                  T combinations
    F registerpostprocessor                     F combine
    F report                                    T combiner
handlers          table                             D commands
    T afm                                       F find
        B addkerns                              D helpers
        B addligatures                          D math
        B addtexligatures                       D predefined
        B autoprefixed                          D whatever
        D cache                         hashes            table
        D features                          D characters
        F load                              D csnames
        F setfeatures                       D descriptions
        B syncspace                         T dynamics
        N version                           D identifiers
    T otf                                   D italics
        F addfeature                        D lastmathids
        D cache                             D marks
        T chainhandlers                     D parameters
            F normal                        T processes
            F verbose                       D properties
        F collectlookups                    D quads
        F dataset                           D resources
        S defaultbasealternate              T setdynamics
        S defaultnodealternate              D xheights
        D enhancers                     helpers           table
        D features                          F addprivate
        F getalternate                      F dimenfactor
        T glists                            F getdigitwidth
```

```
    F getparameters                          F reset
    F getprivatenode                         F tounicode16
    F hasprivate                             F tounicode16sequence
    F nametoslot                         names            table
    F setdigitwidth                          S basename
iterators        table                       B be_clever
    F characters                             D cache
    F descriptions                           F cleanfilename
    F glyphs                                 F cleanname
loggers          table                       F collect
    T category_to_placeholder                F collectfiles
      S ll                                   F collectspec
      S lm                                   T data
      S lo                                   B enabled
      S lt                                   F exists
      S lu                                   T filters
      S mc                                     F afm
      S me                                     F dfont
      S mn                                     T list
      S nd                                     T names
      S nl                                     F otf
      S no                                     T paths
      S pc                                     F pfb
      S pd                                     F ttc
      S pe                                     F ttf
      S pf                                   S fontconfigfile
      S pi                                   F getfilename
      S po                                   F getlookupkey
      S ps                                   F getlookups
      S sc                                   F getpaths
      S sk                                   F identify
      S sm                                   F is_permitted
      S so                                   F list
    F format                                 F load
    F onetimemessage                         B loaded
    F register                               F lookup
    F reportdefinedfonts                     F noflookups
    F reportusedfeatures                     S osfontdirvariable
mappings         table                       F readdata
    F addtounicode                           F register
    F fromunicode16                          F registered
    F loadfile                               F resolve
    F loadline                               F resolvedspecification
    F loadlumtable                           F resolvespec
    F makenameparser                         B saved
```

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

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

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	**o_limiters**	table
bytes	function	T paranoid	
characters	function	**open**	overloaded function
close	function	**open_ro**	function
exists	function	**output**	function
fileseparator	string	**pathseparator**	string
flush	function	**popen**	overloaded function
i_limiter	function	**read**	function
i_limiters	table	**readnumber**	function
T paranoid		**readstring**	function
input	function	**savedata**	function
limiter	function	**size**	function
lines	function	**stderr**	userdata
loadchunk	function	**stdin**	userdata
loaddata	function	**stdout**	userdata
loadlines	function	**tmpfile**	function
noflines	function	**type**	function
o_limiter	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 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                              D collected
    F setall                           T components
    F setdim                           T tobesaved
    D tobesaved                          T branches
    F upperleft                          S name
    F upperright                         S type
    F width                        variables    table
    F x                                D checksums
    F xy                               D collected
    F y                                F save
register    function                   D tobesaved
save        function              version      number
structure   table
```

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

F	show	**tag**	function
F	sort	**text**	function
splitid	function	**tofile**	function
startraw	function	**toparameters**	function
stopraw	function	**toverbatim**	function
store	function	**verbatim**	function
strip	function	**withindex**	function
stripped	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	**overloadparameters**	function
alphabets	data table	**privatebase**	number
big	function	**remapalphabets**	function
boldmap	table	**renderings**	table
categories	table	D mappings	
D functions		D numbers	
checkaccentbaseheight	function	D sets	
checkprivateparameters	function	**renderset**	function
classes	data table	**resetitalics**	function
codes	data table	**scaleparameters**	function
define	function	**setalternate**	function
dimensions	function	**setitalics**	function
extrabase	number	**syncboth**	function
extras	table	**syncname**	function
F add		**syncstyle**	function
F copy		**toname**	function
fallbacks	table	**tostyle**	function
F apply		**tweakaftercopyingfont**	function
F install		**tweakbeforecopyingfont**	function
families	data table	**tweaks**	table
gaps	table	F fixbadprime	
getboth	function	**utfmathclass**	function
getstyle	function	**utfmathcommand**	function
initializeparameters	function	**utfmathfiller**	function
makefont	function	**utfmathstretch**	function

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

partextdir_is_equal	data table
penaltycodes	data table
pool	table
F baselineskip	
F cleanup	
F disc	
F fontkern	
F glue	
F gluespec	
F glyph	
F kern	
F latelua	
F leftmarginkern	
F leftskip	
F lineskip	
F noad	
F pdfannotation	
F pdfdestination	
F pdfdirect	
F pdfliteral	
F pdfrestore	
F pdfsave	
F pdfsetmatrix	
F penalty	
F register	
F rightmarginkern	
F rightskip	
F rule	
F shrink	
F special	
F stretch	
F temp	
F textdir	
F usage	
T userids	
N margins.inline	
N splitters.one	
N splitters.two	
F userlist	
F usernumber	
F userstring	
F usertokens	
F zeroglue	
print	function
processors	table

B enabled	
F hpack_filter	
F post_linebreak_filter	
F pre_linebreak_filter	
F tracer	
processwords	function
reference	function
references	table
N attribute	
T done	
F handler	
T stack	
remove	function
repackhlist	function
replace	function
report	function
rightmarginwidth	function
rules	table
D data	
F define	
F enable	
F handler	
save	function
serialize	function
serializebox	function
setattribute	function
setattributes	function
setunsetattributes	function
shifts	table
D data	
F define	
F enable	
F handler	
show	function
showboxes	function
showcodes	function
showlist	function
showsimplelist	function
skipcodes	data table
somepenalty	function
somespace	function
stripping	table
T glyphs	
F set	
striprange	function

tasks	table	
F actions		
F appendaction		
F disableaction		
F disablegroup		
F enableaction		
F enablegroup		
F freeze		
F freezegroup		
F new		
F prependaction		
F removeaction		
F restart		
F showactions		
F table		
textdir_is_equal	data table	
textdir_is_is	data table	
textdir_is_opposite	data table	
textdir_is_parallel	data table	
tonodes	function	
tosequence	function	
totable	function	
toutf	function	
tracers	table	
T characters		
F collect		
F equal		
F indices		

F start		
F string		
F unicodes		
T colors		
F reset		
F set		
F fontchar		
F start		
T steppers		
F check		
F codes		
F features		
F glyphs		
F message		
F messages		
F nofsteps		
F register		
F reset		
F start		
F stop		
F stop		
unsetattribute	function	
unsetattributes	function	
visualizebox	function	
whatcodes	data table	
whatsitcodes	data table	
writable_spec	function	

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		**resolvers**	table
__setenv__	function		**resultof**	function
binsuffix	string		**runtime**	function
binsuffixes	table		**selfdir**	string
clock	function		**setenv**	overloaded function
date	function		**setlocale**	overloaded function
difftime	function		**sleep**	function
env	data table		**spawn**	overloaded function
exec	overloaded function		**time**	function
execute	overloaded function		**times**	function
exit	function		**timezone**	function
getenv	overloaded function		**tmpdir**	function
gettimeofday	function		**tmpname**	function
launch	function		**type**	string
libsuffix	string		**uname**	function
name	string		**uuid**	function
platform	string		**where**	function
remove	function		**which**	function
rename	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                              S ^-1
    T tables                               S ^-2
      T shortcuts                          S ^-3
        T operators                        S ^1
          S *                              S ^2
          S .                              S ^3
          S /                            T units
          S :                              S A
        T prefixes                         S B
          S E                              S Hz
          S G                              S W
          S M                              S b
          S P                              S g
          S T                              S h
          S Y                              S hz
          S Z                              S l
          S a                              S lx
          S c                              S m
          S d                              S n
          S da                             S s
          S f                              S t
          S h                              S v
          S k                              S ℃
          S m                              S
          S n                          T units
          S p                            T operators
          S u                              S OutOf
          S y                              S Per
          S z                              S Solidus
        T suffixes                         S Times
          S +1                           T packaged
          S +2                             S Micron
          S +3                             S mmHg
          S -1                           T prefixes
          S -2                             S Atto
          S -3                             S Centi
          S 1                              S Deca
          S 2                              S Deci
          S 3                              S Exa
          S ^+1                            S Exbi
          S ^+2                            S Femto
          S ^+3                            S Gibi
```

```
  S Giga                                    S Astronomical Unit
  S Hecto                                   S Atm
  S Kibi                                    S Atmosphere
  S Kilo                                    S Atomic Mass Unit
  S Mebi                                    S Bar
  S Mega                                    S Barn
  S Micro                                   S Baud
  S Milli                                   S Bel
  S Nano                                    S Bequerel
  S Pebi                                    S Bit
  S Peta                                    S Byte
  S Pico                                    S Cal
  S Root                                    S Calorie
  S Tebi                                    S Candela
  S Tera                                    S Celsius
  S Yobi                                    S Coulomb
  S Yocto                                   S Dalton
  S Yotta                                   S Day
  S Zebi                                    S Degree Celsius
  S Zepto                                   S Degree Fahrenheit
  S Zetta                                   S Degrees Celsius
T suffixes                                  S Degrees Fahrenheit
  S Cubic                                   S Dyne
  S ICubic                                  S Electron Volt
  S ILinear                                 S Erg
  S ISquare                                 S Erlang
  S Inverse                                 S Fahrenheit
  S Linear                                  S Farad
  S Square                                  S Foot
T symbols                                   S Gal
  S %                                       S Gauss
  S ArcMinute                               S Gon
  S ArcSecond                               S Grad
  S Degree                                  S Gram
  S Degrees                                 S Gray
  S Percent                                 S Hectare
  S Permille                                S Henry
  S Promille                                S Hertz
  S °                                       S Hg
  S                                         S Hour
  S                                         S Inch
T units                                     S Joule
  S AMU                                     S Katal
  S Ampere                                  S Kelvin
  S Angstrom                                S Knot
```

S Liter

S Litre

S Lumen

S Lux

S Maxwell

S Meter

S Metre

S Metric Ton

S Minute

S Mol

S Mole

S Nautical Mile

S Neper

S Newton

S Oersted

S Ohm

S Pascal

S Phot

S Poise

S Radian

S Rev

S Revolution

S Second

S Siemens

S Sievert

S Steradian

S Stilb

S Stokes

S Tesla

S Tonne

S Volt

S Watt

S Weber

S eV

profiler (extra lua)

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

regimes (context)

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

resolvers (context)

allprefixes	function	**findfiles**	function
appendhash	function	**findgivenfile**	function
automount	function	**findgivenfiles**	function
automounted	table	**findpath**	function
booleanvariable	function	**findtexfile**	function
cacheversion	string	**findwildcardfile**	function
checkedvariable	function	**findwildcardfiles**	function
cleanpath	function	**formatofsuffix**	function
cleanpathlist	function	**formatofvariable**	function
concatinators	data table	**formats**	data table
configbanner	string	**generators**	data table
criticalvars	data table	**getenv**	function
dangerous	data table	**getownpath**	function
datastate	function	**getreadfilename**	function
defaultsuffixes	table	**hashers**	data table
dowithfilesandreport	function	**homedir**	string
dowithfilesintree	function	**inputstack**	table
dowithpath	function	**installinputfilehandler**	function
dowithvariable	function	**installinputlinehandler**	function
env	function	**instance**	table
executers	table	D data	
F check		B diskcache	
F exec		D environment	
F execute		D expansions	
F finalize		D fakepaths	
F popen		D files	
F register		B force_suffixes	
F spawn		D found	
expandbraces	function	D foundintrees	
expandedpathfromlist	function	D hashed	
expandedpathlist	function	D hashes	
expandedpathlistfromvariable	function	D lists	
expandpath	function	B loaderror	
expandpathfromvariable	function	D order	
expansion	function	B remember	
extendtexmfvariable	function	B renewcache	
~~**find_file**~~	~~function~~	B renewtree	
~~**find_files**~~	~~function~~	B savelists	
findbinfile	function	D setups	
findctxfile	function	D specification	
finders	data table	D variables	
findfile	function	**jobs**	table

	F currentcomponent	
	F currentenvironment	
	F currentproduct	
	F currentproject	
	F justacomponent	
	D processors	
	F productcomponent	
	F usefile	
joinpath	function
load	function
loadbinfile	function
loaders	data table
loadlualib	function
loadtexfile	function
loadtime	function
locateformat	function
locators	data table
luacnfname	string
luacnfspec	string
luacnfstate	string
macros	table
	F convertfile	
	F decodecomment	
	F enablecomment	
	F encodecomment	
	F preprocessed	
	F processmkvi	
	F version	
maxreadlevel	number
methodhandler	function
newinstance	function
openbinfile	function
openers	data table
openfile	function
opentexfile	function
ownpath	string
prefixes	data table
prependhash	function
registerextrapath	function
registerfile	function
registerfilehash	function
registerintrees	function
registermethod	function

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

scripts (context)

categorytonumber	data table	**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	quote	function
bytepairs	function	quoted	function
bytes	function	rep	function
char	function	reverse	function
characterpairs	function	split	function
characters	function	splitlines	function
checkedsplit	function	splitup	function
count	function	strip	function
dump	function	sub	function
escapedpattern	function	toboolean	function
explode	function	tocontext	function
find	function	todimen	function
format	function	topattern	function
gfind	function	toutf	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
lower	function	valid	function
match	function	validutf	function

structures (context)

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

```
    F nofitems                                  F fetchonemark
    F register                                  F fetchtwomarks
lists                      table                F get
    F addto                                     F number
    F analyze                                   F relate
    D cached                                    F reset
    D collected                                 F set
    F discard                                   F show
    F enhance                                   F synchronize
    T enhancers                                 F title
    F filter                                    T tracers
    F filtercollected                               F showtable
    F formulanumber                         notes                      table
    F hasnumberdata                             F checkpagechange
    F haspagedata                               F define
    F hastitledata                              F deltapage
    D internals                                 F doifcontent
    F iscached                                  F doifonsamepageasprevious
    F label                                     F flush
    F location                                  F flushpostponed
    F number                                    F get
    D ordered                                   F getn
    F page                                      F getnumberpage
    F popnesting                                F getstate
    F prefix                                    F getsymbolpage
    F prefixednumber                            F internal
    F prefixedpage                              F internalid
    F process                                   F listindex
    D pushed                                     F ordered
    F pushnesting                               F postpone
    F realpage                                  F resetpostponed
    T result                                    F restore
    F sectionnumber                             F save
    F size                                      F setstate
    F title                                     F setsymbolpage
    D tobesaved                                 D states
    F userdata                                  F store
    F uservalue                             pages                      table
marks                      table                F analyze
    D data                                      D collected
    F define                                    F is_odd
    F exists                                    F number
    F fetch                                     F save
    F fetchallmarks                             D tobesaved
    F fetched                               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
D internals
F load
F loadpresets
F mark
D pages
U prefixsplitter
D productdata
T programs

T data
F define
F get
F realpageofpage
U referencesplitter
D referred
F referredpage
F registerfinalizer
F registerinitializer
F registerpage
F reportproblems
F reset
T resolvers
  F reference
  F section
D runners
F set
F setandgetattribute
F setcomponent
F setinnermethod
F setinternalreference
F setnextinternal
F setnextorder
D specials
F splitcomponent
F splitprefix
F splitreference
T testrunners
  F inner
  F special
  F special operation
  F special operation with arguments
T testspecials
  F deltapage
  F i
  F internal
  F page
  F realpage
  F section
  F userpage
D tobereferred
D tobesaved
T urls
  T data
  F define
```

F get		F pushblock	
F whatfrom		F register	
registers	table	D registered	
F analyze		F reportstructure	
F analyzed		F save	
D collected		F set	
F compare		F setblock	
F define		F setchecker	
F enhance		F setlevel	
F extend		F setnumber	
F filter		F somelevel	
F filtercollected		F structuredata	
F finalize		F title	
F flush		D tobesaved	
F prepare		F typesetnumber	
F process		F userdata	
F sort		B verbose	
F store		F way	
D tobesaved		**sets**	table
F unique		F define	
F userdata		F get	
sections	table	F getall	
F autodepth		D setlist	
F cct		**specials**	table
T collected		D collected	
F current		F retrieve	
F currentblock		F store	
F currentid		D tobesaved	
F currentlevel		**synonyms**	table
F depthnumber		F analyzed	
F finddata		D collected	
F findnumber		F compare	
F fullnumber		F define	
F getcurrentlevel		F filter	
F getlevel		F finalize	
F getnumber		F flush	
F internalreference		F meaning	
D levelmap		F prepare	
D levels		F process	
F load		F register	
F matchingtilldepth		F registerused	
F numberatdepth		F sort	
F numbers		F synonym	
F popblock		D tobesaved	
F prefixedconverted		**tags**	table

```
T data                          F setdescription
F detailedtag                   F setdescriptionsymbol
F getid                         F setfigure
F handler                       F sethighlight
D labels                        F setitemgroup
F last                          F setproperty
F lastinchain                   F setsorting
T metadata                      F setsynonym
D properties                    F settablecell
F registerdata                  F settabulatecell
F registermetadata             F start
F restart                       F stop
F setattributehash             D taglist
F setcombination                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
loweredkeys	function	toxml	function
maxn	function	unique	function
merge	function	unnest	function
merged	function	unpack	function
prepend	function		

tex (basic tex)

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

skip	table	**tprint**	function
sp	function	**txtcatcodes**	number
sprint	function	**type**	function
systemmodes	data table	**uccode**	table
texcatcodes	number	**uniformdeviate**	function
toks	table	**uprint**	function
tpacatcodes	number	**vrbcatcodes**	number
tpbcatcodes	number	**write**	function

texconfig (basic tex)

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

texio (basic tex)

write   function
write_nl function

token (basic tex)

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

tokens (context)

bgroup   table
collectors table
    T data
    F defaultwords
    F dowithwords
    F flush
    F handle
    F install
    F register
    T registered
    T remapper
      F convert
      T data
      F store
    F show

    T show_methods
      F a
      F b
      F c
    F showtoken
    F test
    F trace
egroup   table
hbox   table
letter   function
letters   function
other   function
vbox   table
vtop   table

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 reflow_height
F flush                         F reflow_width
F initialize_construct          F set_construct
F initialize_reflow_height      F set_reflow_height
F initialize_reflow_width       F set_reflow_width
F next_row
```

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

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

F concatrange	F text
F context	F texts
F count	F upperall
F ctxtext	**first** function
F default	**found** function
F first	**functions** table
F function	**getbuffer** function
F index	**gethandlers** function
F last	**gethandlersfunction** function
F lettered	**include** function
F lower	**index** function
F lowerall	**inheritedconvert** function
F match	**inject** function
F name	~~**inject_element**~~ ~~function~~
F position	~~**inject_element_after**~~ ~~function~~
F reverse	~~**inject_element_before**~~ ~~function~~
F stripped	**injectafter** function
F tag	**injectbefore** function
F tags	**insert** function
F text	**insert_element** function
F upper	~~**insert_element_after**~~ ~~function~~
F upperall	~~**insert_element_before**~~ ~~function~~
T xml	**insertafter** function
F all	**insertbefore** function
F att	**insertcomment** function
F attribute	**inspect** function
F attributes	**is_valid** function
F cdata	**kind** function
F chainattribute	**last** function
F count	**load** function
F default	**lpath** function
F elements	**lpathcached** function
F empty	**lpathcalls** function
F first	**lshow** function
F function	**makestandalone** function
F index	**match** function
F last	**name** function
F lowerall	**newhandlers** function
F match	**nodesettostring** function
F name	**originalload** function
F position	**package** function
F reverse	**parent** function
F table	**parsedentitylpeg** userdata
F tag	**pihandlers** table
F tags	**placeholders** table

F unknown_any_entity		**serialize**	function
F unknown_dec_entity		**setcdata**	function
F unknown_hex_entity		**sethandlersfunction**	function
position	function	**setproperty**	function
privatecodes	table	**settings**	function
privatetoken	function	**specialhandler**	table
process	function	**sprint**	function
~~**process_attributes**~~	~~function~~	**string**	function
~~**process_elements**~~	~~function~~	**strip**	function
processattributes	function	~~**strip_whitespace**~~	~~function~~
profiled	table	**stripelement**	function
raw	function	**stripleadingspaces**	function
registerentity	function	**table**	function
registerns	function	**text**	function
~~**remap_name**~~	~~function~~	**textonly**	function
~~**remap_namespace**~~	~~function~~	**texttocdata**	function
~~**remap_tag**~~	~~function~~	**tocdata**	function
remapname	function	**toelement**	function
remapnamespace	function	**tostring**	function
remaptag	function	**toxml**	function
renamespace	function	**tprint**	function
replace	function	**traverse**	function
replace_element	function	**unescaped**	function
resolvens	function	**unprivatized**	function
root	function	**withelement**	function
save	function	**withelements**	function
selection	function	**wrap**	function
separate	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			