

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

# ConT<sub>E</sub>Xt MkIV

# global (alias: \_G)

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

report_characters	function
require	function
resolvers	table
scripts	table
select	function
set	table
setfenv	function
setmetatable	function
socket	table
sorters	table
statistics	table
status	table
storage	table
streams	table
string	table
stripmath	function
structures	table
table	table
tex	table
texconfig	table
texio	table
toboolean	function

tocontext	function
token	table
tokens	table
tonumber	function
tostring	function
trace_characters	boolean
traceback	function
tracers	table
trackers	table
type	function
typesetters	table
unicode	table
unpack	function
url	table
utf	table
utilities	table
visualizers	table
xml	table
xpcall	function
zip	table
zlib	table

# attributes (context)

**colorintents**      table

N attribute  
D data  
F enable  
F handler  
F register  
D registered

**colors**            table

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

F setlist

F setmodel

D sets

F spot

F spotcolorname

F spotcolorparent

F spotcolorvalue

B supported

F transparencycomponents

B triggering

F usecolors

F value

D values

B weightgray

**define**            function

**effects**           table

N attribute

D data

F enable

F handler

F register

D registered

D values

**handlers**        table

**list**             data table

**names**            data table

**negatives**        table

N attribute

D data

F enable

F handler

F register

D registered

**numbers**        data table

**ofnode**           function

**private**         function

**showcurrent**    function

**states**           table

F disabletriggering

F enabletriggering

F finalize

F initialize

F process

F selective

F stacked

**transparencies** table

N attribute

D data

F enable

F forcesupport

F handler

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

# backends (context)

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

T blue		T paleblue	
T gray		T palegray	
T green		T palegreen	
T red		T palered	
T rulecolors		T red	
T black		F startslant	
T blue		T stopslant	
T gray		<b>registrations</b>	table
T green		<b>tables</b>	table

# bibtex (context)

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



# blobs (context)

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

# boolean (context)

tocontext    function  
tonumber    function

# buffers (context)

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

# builders (context)

**kernel**            table

- F hyphenation
- F kerning
- F ligaturing
- F mlist\_to\_hlist

**paragraphs**    table

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

- F disable

- F enable

- F optimize

- F setup

- F split

- F tag

**vspacing**        table

- F analyze

- D categories

- F collapsevbox

- T data

- D map

- D skip

- D snapmethods

- F definesnapmethod

- B fixed

- F pagehandler

- F setmap

- F setskip

- F snapbox

- F tocategories

- F tocategory

- F vboxhandler

## cache (context)

ask	boolean	is_writable	function
base	string	loadcontent	function
collapsecontent	function	loaddata	function
configfiles	function	more	string
contentstate	function	relocate	boolean
defaults	table	savecontent	function
define	function	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)

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

# callbacks (context)

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

# catcodes (context)

names	data table
numbers	data table
register	function



# characters (context)

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

## chemicals (context)

<b>component</b>	function	<b>moleculeparser</b>	userdata
<b>define</b>	function	<b>start</b>	function
<b>format</b>	string	<b>stop</b>	function
<b>inline</b>	function	<b>structures</b>	number
<b>instance</b>	string	<b>undefine</b>	function
<b>molecule</b>	function		

## commands (context)

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

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

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

referencepagestate	function	setcharacterspacing	function
referencerealpage	function	setcharacterstripping	function
registerattachment	function	setclosedocumentaction	function
registerbibtexentry	function	setclosepageaction	function
registerbibtexfile	function	setcolormodel	function
registerbookmark	function	setdigitsmanipulation	function
registerbuttons	function	setfontfeature	function
registercolor	function	setfontofid	function
registercolorintent	function	setformat	function
registeredviewerlayer	function	setformsmethod	function
registerhelp	function	setinternalreference	function
registeritemgroup	function	setmarking	function
registermaintextcolor	function	setmathalphabet	function
registernamespace	function	setmathalternate	function
registerpostponedblock	function	setmathattribute	function
registersoundclip	function	setmathitalics	function
registerstructureprocessor	function	setmathstyle	function
registertransparency	function	setopendocumentaction	function
registerunit	function	setopenpageaction	function
relatemarking	function	setownstructurecounter	function
removemissingcharacters	function	setpagetransition	function
replacemissingcharacters	function	setpos	function
replacepospxywhd	function	setrandomseed	function
resavefloat	function	setrealign	function
resetfontfeature	function	setreferencearguments	function
resetmarking	function	setreferenceoperation	function
resetmathitalics	function	setstructureblockstate	function
resetnullfont	function	setstructurecounter	function
resetparallel	function	settagcombination	function
resetstructurecounter	function	settagdescription	function
resetstructureprocessor	function	settagdescriptionsymbol	function
resettimer	function	settagfigure	function
restartstructurecounter	function	settaghighlight	function
restorecurrentattributes	function	settagitemgroup	function
restorestructurecounter	function	settagproperty	function
romannumerals	function	settagsorting	function
runbuffer	function	settagsynonym	function
savebuffer	function	settagtablecell	function
savecurrentattributes	function	settagtabulatecell	function
savelistnumber	function	setupbookmarks	function
savelistprefixednumber	function	setupcanvas	function
savelisttitle	function	setupcharacterspacing	function
savefloat	function	setupexport	function
saveparallel	function	setupfontexpansion	function
savestructureblock	function	setupfontprotrusion	function
savestructurecounter	function	setupidentity	function
savetaggedtwopassdata	function	setupitaliccorrection	function
savetwopassdata	function	setxmpfile	function
second	function	showattributes	function
selectstructureblock	function	showchardata	function
setbreakpoints	function	showfontparameters	function
setcharactercasing	function	showhyphenatedinlist	function
setcharactercleaning	function	showstructurecounter	function
setcharacterkerning	function	splitfilename	function

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

## containers (context)

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

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



## converters (context)

Alphabetic	function	leapyear	function
Character	function	maxchars	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
chars	function	textime	function
convert	function	toabjad	function
define	function	tochinese	function
hexstringtonumber	function	toroman	function
hour	function	uchexnumber	function
isleapyear	function	uchexnumbers	function
lchexnumber	function	weekday	function
lchexnumbers	function	year	function

## coroutine (basic lua)

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

## debug (basic lua)

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

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

## dir (context)

collectpattern	function
current	function
expandname	function
glob	function
globfiles	function
globpattern	function

ls	function
makedirs	function
mkdirs	function
pop	function
push	function

# directives (context)

<b>data</b>	data table	<b>name</b>	string
<b>disable</b>	function	<b>register</b>	function
<b>enable</b>	function	<b>report</b>	function
<b>list</b>	function	<b>show</b>	function

# document (context)

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

## environment (context)

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

# epdf (extra tex)

<b>Annot</b>	function	<b>Object</b>	function
<b>Annots</b>	function	<b>PDFRectangle</b>	function
<b>Array</b>	function	<b>open</b>	function
<b>Dict</b>	function	<b>type</b>	function



# experiments (context)

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

# figures (context)

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

## file (basic lua)

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

# floats (context)

<code>analysemethod</code>	<code>function</code>	<code>nofstacked</code>	<code>function</code>
<code>checkedpagefloat</code>	<code>function</code>	<code>pop</code>	<code>function</code>
<code>collect</code>	<code>function</code>	<code>push</code>	<code>function</code>
<code>consult</code>	<code>function</code>	<code>resave</code>	<code>function</code>
<code>flush</code>	<code>function</code>	<code>save</code>	<code>function</code>
<code>getvariable</code>	<code>function</code>	<code>stacked</code>	<code>function</code>

## font (basic tex)

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

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

## fontloader (extra tex)

<code>apply_afmfile</code>	<code>function</code>	<code>info</code>	<code>function</code>
<code>apply_featurefile</code>	<code>function</code>	<code>open</code>	<code>function</code>
<code>close</code>	<code>function</code>	<code>to_table</code>	<code>function</code>
<code>fields</code>	<code>function</code>	<code>totable</code>	<code>function</code>
<code>fullinfo</code>	<code>function</code>		

# fonts (context)

<b>analyzers</b>	table		T boundingbox
D initializers			S depth
D methods			S height
F setstate			S width
B useunicodemarks			T parameters
<b>checkers</b>	table		S ascender
F missing			S descender
<b>cid</b>	table		S designsize
F getmap			T expansion
F loadfile			S auto
<b>collections</b>	table		S shrink
F clonevector			S step
F define			S stretch
T definitions			S extendfactor
F prepare			S factor
F process			S hfactor
F registermain			S mathsize
F report			T protrusion
F reset			S auto
T vectors			S quad
<b>constructors</b>	table		S scaledpoints
F aftercopyingcharacters			S scriptpercentage
F applymanipulators			S scriptscriptpercentage
F assignmathparameters			S size
B autocleanup			S slantfactor
F beforecopyingcharacters			S slantperpoint
D cache			T spacing
F calculatescale			S extra
F checkedfeatures			S shrink
F checkedfilename			S stretch
F cleanup			S width
F collectprocessors			T synonyms
D designsizes			S em
D dontembed			S ex
F enhanceparameters			S extra_space
N factor			S extraspace
F finalize			S slant
F getfeatureaction			S space
F hashfeatures			S space_shrink
F hashinstance			S space_stretch
T hashmethods			S spaceshrink
F normal			S spacestretch
F virtual			S x_height
F initializefeatures			S units
T keys			S vfactor
T character			S xheight
S depth			T properties
S height			S autoitalicamount
S italic			T cidinfo
S width			S embedding
T description			S encodingbytes

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

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



- F verbose
- F collectlookups
- F dataset
- S defaultbasealternate
- S defaultnodealternate
- D enhancers
- D features
- F getalternate
- T glists
- F load
- F scriptandlanguage
- F setcontextchain
- F setdynamics
- F setfeatures
- T tables
  - D baselines
  - D features
  - D languages
  - D scripts
- N version
- T pfb
- T tfm
  - D features
  - F setfeatures
- T vf
  - T combinations
  - F combine
  - T combiner
    - D commands
  - F find
  - D helpers
  - D math
  - D predefined
  - D whatever
- hashes**                    table
  - D characters
  - D csnames
  - D descriptions
  - T dynamics
  - D identifiers
  - D italics
  - D marks
  - D parameters
  - T processes
  - D properties
  - D quads
  - D resources
  - T setdynamics
  - D xheights
- helpers**                    table
  - F addprivate
  - F dimenfactor
  - F getdigitwidth
  - F getparameters

- F getprivatenode
- F hasprivate
- F nametoslot
- F setdigitwidth
- iterators**                    table
  - F characters
  - F descriptions
  - F glyphs
- loggers**                    table
  - T category\_to\_placeholder
  - S ll
  - S lm
  - S lo
  - S lt
  - S lu
  - S mc
  - S me
  - S mn
  - S nd
  - S nl
  - S no
  - S pc
  - S pd
  - S pe
  - S pf
  - S pi
  - S po
  - S ps
  - S sc
  - S sk
  - S sm
  - S so
  - F format
  - F onetimemessage
  - F register
  - F reportdefinedfonts
  - F reportusedfeatures
- mappings**                    table
  - F addtounicode
  - F fromunicode16
  - F loadfile
  - F loadline
  - F loadlumtable
  - F makenameparser
  - F reset
  - F tounicode16
  - F tounicode16sequence
- names**                    table
  - S basename
  - B be\_clever
  - D cache
  - F cleanfilename
  - F cleannname
  - F collect

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

# graphics (context)

backgrounds	table	F pair
F calculate	multipar	F path
F fetch	multipar	F point

## gzip (extra lua)

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

## img (basic tex)

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

<b>ofindex</b>	<b>function</b>
<b>package</b>	<b>function</b>
<b>print</b>	<b>function</b>
<b>scan</b>	<b>function</b>
<b>serialize</b>	<b>function</b>
<b>totable</b>	<b>function</b>
<b>types</b>	<b>function</b>
<b>write</b>	<b>function</b>

# 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)

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

## io (basic lua)

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



# job (context)

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

F enhance  
F extra  
F get  
F getreserved  
F hangafter  
F hangindent  
F height  
F hsize  
F leftskip  
F lowerleft  
F lowerright  
F markregionbox  
F n  
F onsamepage  
F overlapping  
F p  
F page  
F paragraph  
F parindent  
F position  
F r  
F region  
F replace  
F rightskip  
F set  
F setall  
F setdim  
D tobesaved  
F upperleft  
F upperright  
F width  
F x  
F xy  
F y

**register**       function  
**save**          function  
**structure**    table  
    D collected  
    T components  
    T tobesaved  
    T branches  
    S name  
    S type  
**variables**    table  
    D checksums  
    D collected  
    F save  
    D tobesaved  
**version**       number

## lang (basic tex)

<code>clean</code>	function
<code>clear_hyphenation</code>	function
<code>clear_patterns</code>	function
<code>exceptions</code>	function
<code>hyphenate</code>	function
<code>hyphenation</code>	function
<code>id</code>	function

<code>new</code>	function
<code>patterns</code>	function
<code>postexhyphenchar</code>	function
<code>posthyphenchar</code>	function
<code>preexhyphenchar</code>	function
<code>prehyphenchar</code>	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)

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

# libraries (context)

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

`extralua` data table  
`extratex` data table  
`globals` data table

## lmx (context)

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

# logs (context)

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



# lpdf (context)

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

# lpeg (basic lua)

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

# ltn12 (extra lua)

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

# lua (basic tex)

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

# luatex (context)

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

# lxml (context)

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

## math (basic lua)

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

# mathematics (context)

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



# md5 (extra lua)

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

# metapost (context)

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

## mime (extra lua)

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

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

# mplib (extra tex)

<code>fields</code>	<code>function</code>	<code>pen_info</code>	<code>function</code>
<code>new</code>	<code>function</code>	<code>version</code>	<code>function</code>

# 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)

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

# nodes (context)

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

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



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

## number (context)

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

## os (basic lua)

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

## package (basic lua)

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

## pdf (basic tex)

<code>immediateobj</code>	<code>function</code>
<code>mapfile</code>	<code>function</code>
<code>mapline</code>	<code>function</code>
<code>maxobjnum</code>	<code>function</code>
<code>obj</code>	<code>function</code>
<code>objtype</code>	<code>function</code>
<code>pageattributes</code>	<code>string</code>
<code>pageref</code>	<code>function</code>

<code>pageresources</code>	<code>string</code>
<code>pagesattributes</code>	<code>string</code>
<code>pdfmapfile</code>	<code>function</code>
<code>pdfmapline</code>	<code>function</code>
<code>print</code>	<code>function</code>
<code>refobj</code>	<code>function</code>
<code>registerannot</code>	<code>function</code>
<code>reserveobj</code>	<code>function</code>

# physics (context)

units	table	S	Hz
T	tables	S	W
T	shortcuts	S	b
T	operators	S	g
S	*	S	h
S	.	S	hz
S	/	S	l
S	:	S	lx
T	prefixes	S	m
S	E	S	n
S	G	S	s
S	M	S	t
S	P	S	v
S	T	S	°C
S	Y	S	
S	Z	T	units
S	a	T	operators
S	c	S	OutOf
S	d	S	Per
S	da	S	Solidus
S	f	S	Times
S	h	T	packaged
S	k	S	Micron
S	m	S	mmHg
S	n	T	prefixes
S	p	S	Atto
S	u	S	Centi
S	y	S	Deca
S	z	S	Deci
T	suffixes	S	Exa
S	+1	S	Exbi
S	+2	S	Femto
S	+3	S	Gibi
S	-1	S	Giga
S	-2	S	Hecto
S	-3	S	Kibi
S	1	S	Kilo
S	2	S	Mebi
S	3	S	Mega
S	^+1	S	Micro
S	^+2	S	Milli
S	^+3	S	Nano
S	^-1	S	Pebi
S	^-2	S	Peta
S	^-3	S	Pico
S	^1	S	Root
S	^2	S	Tebi
S	^3	S	Tera
T	units	S	Yobi
S	A	S	Yocto
S	B	S	Yotta

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

## profiler (extra lua)

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

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



# regimes (context)

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

# resolvers (context)

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

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

# scripts (context)

<code>categorytonumber</code>	data table	<code>numbertocategory</code>	data table
<code>colors</code>	data table	<code>numbertodataset</code>	data table
<code>handlers</code>	data table	<code>preprocess</code>	function
<code>hash</code>	table	<code>reset</code>	function
<code>installdataset</code>	function	<code>set</code>	function
<code>installmethod</code>	function		

# set (context)

contains	function	tonumber	function
create	function	totable	function
tolist	function		

# socket (extra lua)

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

# sorters (context)

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

## statistics (context)

<code>checkfmtstatus</code>	function
<code>elapsedindeed</code>	function
<code>elapsedseconds</code>	function
<code>elapsedtime</code>	function
<code>enable</code>	boolean
<code>formatruntime</code>	function
<code>hastiming</code>	function
<code>memused</code>	function
<code>register</code>	function
<code>reportstorage</code>	function

<code>resettiming</code>	function
<code>runtime</code>	function
<code>savefmtstatus</code>	function
<code>show</code>	function
<code>showjobstat</code>	function
<code>starttiming</code>	function
<code>stoptiming</code>	function
<code>threshold</code>	number
<code>timed</code>	function



status (basic tex)

list function

# storage (context)

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

## streams (context)

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

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

## string (basic lua)

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

# structures (context)

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

F iscached		F internalid	
F label		F listindex	
F location		F ordered	
F number		F postpone	
D ordered		F resetpostponed	
F page		F restore	
F popnesting		F save	
F prefix		F setstate	
F prefixednumber		F setsymbolpage	
F prefixedpage		D states	
F process		F store	
D pushed		<b>pages</b>	table
F pushnesting		F analyze	
F realpage		D collected	
T result		F is_odd	
F sectionnumber		F number	
F size		F save	
F title		D tobesaved	
D tobesaved		<b>references</b>	table
F userdata		F analyze	
F uservalue		F checkedfile	
<b>marks</b>	table	F checkedfileorurl	
D data		F checkedprogram	
F define		F checkedrealpage	
F exists		F checkedurl	
F fetch		D collected	
F fetchallmarks		U componentsplitter	
F fetched		F currentmetadata	
F fetchonemark		F currentorder	
F fetchtwomarks		D currentset	
F get		F define	
F number		D defined	
F relate		D derived	
F reset		F doifelse	
F set		F enableinteraction	
F show		F enhance	
F synchronize		D executers	
F title		F expandcurrent	
T tracers		F export	
F showtable		T files	
<b>notes</b>	table	T data	
F checkpagechange		F define	
F define		F get	
F deltapage		F filter	
F doifcontent		D filters	
F doifonsamepageasprevious		F from	
F flush		F get	
F flushpostponed		F getcurrentmetadata	
F get		F getcurrentprefixspec	
F getn		F getinnermethod	
F getnumberpage		F getinternalreference	
F getstate		D handlers	
F getsymbolpage		F identify	
F internal		F import	

- F inject
- F injectcurrentset
- D internals
- F load
- F loadpresets
- F mark
- D pages
- U prefixsplitter
- T productdata
  - T componentreferences
  - T components
  - T productreferences
- 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 whatfrom
- registers** table
  - F analyze
  - F analyzed
  - D collected
  - F compare
  - F define
  - F enhance
  - F extend
  - F filter
  - F filtercollected
  - F finalize
  - F flush
  - F prepare
  - F process
  - F sort
  - F store
  - D tobesaved
  - F unique
  - F userdata
- sections** table
  - F autodepth
  - F cct
  - T collected
  - F current
  - F currentblock
  - F currentid
  - F currentlevel
  - F defineautolevels
  - F depthnumber
  - F finddata
  - F findnumber
  - F fullnumber
  - F getcurrentlevel
  - F getlevel
  - F getnumber
  - F internalreference
  - D levelmap
  - D levels
  - F load
  - F matchingtilldepth
  - F numberatdepth
  - F numbers
  - F popblock
  - F prefixedconverted
  - F pushblock
  - F register
  - D registered
  - F reportstructure

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



## table (basic lua)

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

## tex (basic tex)

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

# texconfig (basic tex)

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

## texio (basic tex)

```
write      function
write_nl   function
```

# token (basic tex)

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)

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

# tracers (context)

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

# trackers (context)

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



# typesetters (context)

**alignments** table

F handler

F set

**breakpoints** table

N attribute

F define

F handler

D mapping

T methods

T numbers

F set

F setreplacement

**cases** table

T actions

F handler

F set

**characters** table

F handler

**cleaners** table

F handler

F set

**digits** table

T actions

N attribute

F handler

F set

**directions** table

F handler

F process

F set

**hpack** function

**italics** table

F forcevariant

F handler

F reset

F set

**kerns** table

D factors

F handler

B keepligature

B keptogether

D mapping

F set

**margins** table

F finalhandler

F globalhandler

F ha

F localhandler

F save

**paragraphs** table

N attribute

T droppers

F freeze

F set

F handler

F set

**processors** table

F apply

F register

F reset

F split

F startapply

F stopapply

F stripped

F tostring

**spacings** table

N attribute

F define

F handler

D mapping

T numbers

T frenchpunctuation

T characters

S name

N number

F reset

F set

F setup

**tonodes** function

**vpack** function

**xtables** table

F cleanup

F construct

F create

F flush

F initialize\_construct

F initialize\_reflow\_height

F initialize\_reflow\_width

F next\_row

F reflow\_height

F reflow\_width

F set\_construct

F set\_reflow\_height

F set\_reflow\_width

# unicode (extra lua)

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

# url (context)

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

# utilities (context)

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

## visualizers (context)

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

## xml (context)

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

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

<code>tocdata</code>	<code>function</code>	<code>unescaped</code>	<code>function</code>
<code>toelement</code>	<code>function</code>	<code>unprivatized</code>	<code>function</code>
<code>tostring</code>	<code>function</code>	<code>withelement</code>	<code>function</code>
<code>toxml</code>	<code>function</code>	<code>withelements</code>	<code>function</code>
<code>tprint</code>	<code>function</code>	<code>wrap</code>	<code>function</code>
<code>traverse</code>	<code>function</code>	<code>xmlns</code>	<code>table</code>



## zip (extra lua)

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

## zlib (extra lua)

<code>adler32</code>	function	<code>decompress</code>	function
<code>compress</code>	function	<code>decompressobj</code>	function
<code>compressobj</code>	function	<code>version</code>	function
<code>crc32</code>	function		