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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
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callbacks	table	logs	table
catcodes	table	lpdf	table
characters	table	lpeg	table
chemicals	table	ltn12	table
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endpage	function	newproxy	function
environment	table	next	function
epdf	table	noads	table
error	function	node	table
experiments	table	nodes	table
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file	table	os	table
floats	table	outputpagestree	function
font	table	package	table
fontloader	table	pairs	function
fonts	table	parametersets	table
gcinfo	function	pcall	function
getfenv	function	pdf	table
getmetatable	function	physics	table
getreadfilename	function	print	function
global	table	profiler	table
graphics	table	protect	function
gzip	table	rawequal	function
img	table	rawget	function
inspect	function	rawset	function
interactions	table	regimes	table

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

# attributes (context)

**colorintents**      table

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

**colors**            table

N attribute  
F cmyk  
F cmyktogray  
F cmyktorgb  
F colorcomponents  
B couple  
D data  
N default  
F defineintermediatecolor  
F definemixcolor  
F definemultitonecolor  
F defineprocesscolor  
F definesimplegray  
F definespotcolor  
F definetransparency  
F enable  
F filter  
F forcedmodel  
F forcesupport  
F formatcolor  
F formatgray  
F gray  
F graytohsv  
F handler  
F 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 rgbtogray  
F rgbtohsv  
N selector

F setlist

F setmodel

D sets

F spot

F spotcolorname

F spotcolorparent

F spotcolorvalue

B supported

F transparencycomponents

B triggering

F usecolors

F value

D values

B weightgray

**define**            function

**effects**           table

N attribute

D data

F enable

F handler

F register

D registered

D values

**handlers**        table

**list**            data table

**names**           data table

**negatives**       table

N attribute

D data

F enable

F handler

F register

D registered

**numbers**        data table

**ofnode**        function

**private**        function

**showcurrent**   function

**states**        table

F disabletriggering

F enabletriggering

F finalize

F initialize

F process

F selective

F stacked

**transparencies** table

N attribute

D data

F enable

F forcesupport

F handler

U none		F forcesupport
F register		F handler
D registered		B hasorder
B supported		D listwise
B triggering		F register
F value		D registered
D values		D scopes
<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)

**codeinjections** table

F synchronizecolormodel

**current** string

**defaults** table

T codeinjections

T nodeinjections

T registrations

D tables

**install** function

**nodeinjections** table

F restore

F save

F transform

**nothing** function

**pdf** table

T codeinjections

F addbookmarks

F attachmentid

F clonefield

F definefield

F definefieldset

F defineviewerlayer

F embedfile

F enabletags

F exportformdata

F finalizepage

F finishreference

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getoutputfilename

F getpreviewfigure

F insertrenderingwindow

F mergereferences

F mergeviewerlayers

F prerollreference

F presetsymbol

F presetsymbollist

F processrendering

F registerdocumentcloseaction

F registerdocumentopenaction

F registeredsymbol

F registerpagecloseaction

F registerpageopenaction

F registersymbol

F setfieldcalculationset

F setfigurealternative

F setfigurecolorspace

F setfiguremask

F setformat

F setformsmethod

F setpagetransition

F setupcanvas

F setupidentity

F setxmpfile

F startlayer

F stoplayer

F supportedformats

F useviewerlayer

F validfield

F validfieldcategory

F validfieldset

S comment

T nodeinjections

F addtags

F attachfile

F cmykcolor

F comment

F destination

F effect

F graycolor

F injectbitmap

F insertmovie

F insertsound

F insertswf

F insertu3d

F knockout

F negative

F overprint

F positive

F reference

F rgbcolor

F spotcolor

F startlayer

F stoplayer

F switchlayer

F transparency

F typesetfield

T registrations

F cmykindexcolor

F cmykspotcolor

F getspotcolorreference

F grayindexcolor

F grayspotcolor

F rgbindexcolor

F rgbspotcolor

F spotcolorname

F transparency

T tables

T vfspecials

T black

T blue	T paleblue
T gray	T palegray
T green	T palegreen
T red	T palered
T rulecolors	T red
T black	F startslant
T blue	T stopslant
T gray	<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)

```
find      function
list      function
register overloaded function
```

# callbacks (context)

<b>freeze</b>	function	<b>push</b>	function
<b>known</b>	function	<b>register</b>	function
<b>list</b>	data table	<b>report</b>	function
<b>pop</b>	function	<b>table</b>	function

## catcodes (context)

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



# characters (context)

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

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

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

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

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

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

## containers (context)

`cleanname` function  
`content` function  
`define` function  
`is_usable` function

`is_valid` function  
`read` function  
`usecache` boolean  
`write` 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)

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

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



# experiments (context)

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

## figures (context)

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

`current` function  
`define` function  
`each` function  
`fonts` table  
`frozen` function  
`getfont` function

`id` function  
`max` function  
`nextid` function  
`read_tfm` function  
`read_vf` function  
`setfont` function

## fontloader (extra tex)

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

# fonts (context)

**analyzers**            table

  D initializers

  D methods

  F setstate

  B useunicodemarks

**checkers**            table

  F missing

**cid**                    table

  F getmap

  F loadfile

**collections**        table

  F clonevector

  F define

  T definitions

  F prepare

  F process

  F registermain

  F report

  F reset

  T vectors

**constructors**    table

  F aftercopyingcharacters

  F applymanipulators

  F assignmathparameters

  B autocleanup

  F beforecopyingcharacters

  D cache

  F calculatescale

  F checkedfeatures

  F checkedfilename

  F cleanupable

  F collectprocessors

  D designsizes

  D dontembed

  F enhanceparameters

  N factor

  F finalize

  F getfeatureaction

  F hashfeatures

  F hashinstance

  T hashmethods

    F normal

    F virtual

  F initializefeatures

  T keys

    T character

      S depth

      S height

      S italic

      S width

  T description

  T boundingbox

  S depth

  S height

  S width

  T parameters

  S ascender

  S descender

  S designsize

  T expansion

    S auto

    S shrink

    S step

    S stretch

  S extendfactor

  S factor

  S hfactor

  S mathsize

  T protrusion

    S auto

  S quad

  S scaledpoints

  S scriptpercentage

  S scriptscriptpercentage

  S size

  S slantfactor

  S slantperpoint

  T spacing

    S extra

    S shrink

    S stretch

    S width

  T synonyms

    S em

    S ex

    S extra\_space

    S extraspace

    S slant

    S space

    S space\_shrink

    S space\_stretch

    S spaceshrink

    S spacestretch

    S x\_height

  S units

  S vfactor

  S xheight

  T properties

  S autoitalicamount

  T cidinfo

  S embedding

  S encodingbytes

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

**definetypeface** function  
**encodings** table  
 T agl  
 D cache  
 F is\_known  
 D known  
 F load  
 F make\_unicode\_vector  
 D math  
 N version  
**expansions** data table  
**formats** data table  
**goodies** table  
 T colorschemes  
 F coloring  
 T data  
 F enable  
 T designsizes  
 D data  
 F filename  
 F register  
 F getcompositions  
 T list  
 F compositions  
 F designsizes  
 F expansions  
 F featureset  
 F files  
 F mathematics  
 F protrusions  
 F solutions  
 F typefaces  
 F load  
 F prepare\_features  
 F register  
 F registerpostprocessor  
 F report  
**handlers** table  
 T afm  
 B addkerns  
 B addligatures  
 B addtexligatures  
 B autoprefixed  
 D cache  
 D features  
 F load  
 F setfeatures  
 B syncspace  
 N version  
 T otf  
 F addfeature  
 D cache  
 T chainhandlers  
 F normal



- F verbose
- F 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 calculatemultipar	F path
F fetchmultipar	F point

## gzip (extra lua)

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

## img (basic tex)

<b>boxes</b>	<b>function</b>	<b>ofindex</b>	<b>function</b>
<b>checksize</b>	<b>function</b>	<b>package</b>	<b>function</b>
<b>clone</b>	<b>function</b>	<b>print</b>	<b>function</b>
<b>copy</b>	<b>function</b>	<b>scan</b>	<b>function</b>
<b>immediatwrite</b>	<b>function</b>	<b>serialize</b>	<b>function</b>
<b>keys</b>	<b>function</b>	<b>totable</b>	<b>function</b>
<b>new</b>	<b>function</b>	<b>types</b>	<b>function</b>
<b>node</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 setcloseddocument

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	<b>F define</b>	
<b>cachesetup</b>	function	<b>F list</b>	
<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		savedata	function
F permit		size	function
input	function	stderr	userdata
lines	function	stdin	userdata
loaddata	function	stdout	userdata
noflines	function	tmpfile	function
open	function	type	function
open_ro	function	write	function



# job (context)

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

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

S name	D collected
S type	F save
<b>variables</b> table	D tobesaved
D checksums	<b>version</b> number

# lang (basic tex)

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

# languages (context)

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

# layouts (context)

`status table`

`F isleftpage`

`F lefttorrightpagection`

## 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>escape</code>	function
<code>get</code>	function
<code>htmfile</code>	function
<code>include</code>	function
<code>lmxfile</code>	function
<code>loadedfile</code>	function
<code>make</code>	function
<code>new</code>	function
<code>overloaderror</code>	function
<code>popupfile</code>	function
<code>print</code>	function

<code>pv</code>	function
<code>reset</code>	function
<code>result</code>	function
<code>set</code>	function
<code>show</code>	function
<code>showdebuginfo</code>	function
<code>showerror</code>	function
<code>tv</code>	function
<code>type</code>	function
<code>urlescape</code>	function
<code>variable</code>	function
<code>variables</code>	data table



# logs (context)

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

# lpdf (context)

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

# lpeg (basic lua)

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

<b>makempy</b>	table
N nofconverted	
F processgraphics	
<b>metafun</b>	table
F interpolate	
F topath	
<b>method</b>	number
<b>mptopdf</b>	table
F converttmpstopdf	
N nofconverted	
<b>multipass</b>	boolean
<b>n</b>	number
<b>optimize</b>	boolean
<b>parse</b>	function
<b>pdfliterals</b>	function
<b>pluginactions</b>	function
<b>process</b>	function
<b>processplugins</b>	function
<b>reducetogray</b>	boolean
<b>reporterror</b>	function
<b>reset</b>	function
<b>resetlastlog</b>	function
<b>resetplugins</b>	function
<b>resettexts</b>	function
<b>setoutercolor</b>	function
<b>settext</b>	function
<b>showlog</b>	boolean
<b>tex</b>	table
F get	
F reset	
F set	
<b>texerrors</b>	boolean
<b>texttextsdata</b>	function
<b>theclippath</b>	function
<b>totable</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)

`fields`    `function`  
`new`       `function`

`pen_info` `function`  
`version`  `function`

# noads (context)

## handlers table

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

## F variants

### process function

### processors table

- T collapse
- F mlist\_to\_hlist
- T relocate
- T render
- T resize
- T respace
- T unscript

## node (basic tex)

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

# 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>listtutf</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 cleanuppape		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
bit	function
bits	function
clearbit	function
dimenfactors	data table
hasbit	function
maxdimen	number
nopts	function
percent	function
points	function
pts	function
setbit	function
tobasepoints	function
tobitstring	function
tocentimeters	function

tociceros	function
todidots	function
todimen	function
toevenhex	function
toinches	function
tomillimeters	function
tonewciceros	function
tonewdidots	function
tonumberf	function
tonumberg	function
topicas	function
topoints	function
toscaled	function
toscaledpoints	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>clibpaths</code>	function
<code>config</code>	string
<code>cpath</code>	string
<code>libpaths</code>	function
<code>loaded</code>	table

<code>loaders</code>	table
<code>loadlib</code>	function
<code>path</code>	string
<code>preload</code>	table
<code>prependtolibpath</code>	function
<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)

`categorytonumber` data table  
`colors` data table  
`handlers` data table  
`hash` table  
`installdataset` function  
`installmethod` function

`numbertocategory` data table  
`numbertodataset` data table  
`preprocess` function  
`reset` function  
`set` function

## set (context)

`contains` function  
`create` function  
`tolist` function

`tonumber` function  
`totable` function

# socket (extra lua)

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

# 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 digitsoffset		<b>tracers</b>	data table
N ignoredoffset		<b>update</b>	function
N replacementoffset			



## statistics (context)

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

status (basic tex)

list function

## storage (context)

allocate	function
data	table
evaluators	table
mark	function
marked	function
max	number

min	number
nofmodules	number
noftables	number
register	function
shared	data table

## 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)

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

F label		F listindex	
F location		F ordered	
F number		F postpone	
D ordered		F resetpostponed	
F page		F restore	
F popnesting		F save	
F prefix		F setstate	
F prefixednumber		F setsymbolpage	
F prefixedpage		D states	
F process		F store	
D pushed		<b>pages</b>	<b>table</b>
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>	<b>table</b>
F userdata		F analyze	
F uservalue		F checkedfile	
<b>marks</b>	<b>table</b>	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>	<b>table</b>	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 internalid		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 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 set



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

## table (basic lua)

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

## url (context)

`addscheme` function  
`construct` function  
`filename` function  
`hashed` function

`hasscheme` function  
`query` function  
`split` function

# utilities (context)

**debugger** table

F disable  
F enable  
F savestats  
F showstats

**formatters** table

F formatcolumns  
F list  
F stripzeros

**garbagecollector** table

F check  
N criterium  
B enabled

**lua** table

F compile

**packers** table

F hashed  
F new  
F pack  
F simplehashed  
F strip  
F unpack  
N version

**parsers** table

F add\_settings\_to\_array  
F arguments\_to\_table  
F array\_to\_string  
F getparameters  
F hash\_to\_string  
F listitem  
F make\_settings\_to\_hash\_pattern  
T patterns  
  U settings\_to\_array  
  U settings\_to\_hash\_a  
  U settings\_to\_hash\_b  
  U settings\_to\_hash\_c  
F settings\_to\_array  
F settings\_to\_hash  
F settings\_to\_hash\_strict  
F settings\_to\_hash\_tolerant  
F settings\_to\_set  
F simple\_hash\_to\_string

**report** function

**sequencers** table

F appendaction

F appendgroup

F compile

F disableaction

F disablegroup

F enableaction

F enablegroup

D functions

F localize

F new

F nodeprocessor

F prependaction

F prependgroup

F removeaction

F setkind

F tostring

**setters** table

F disable

F enable

F initialize

F list

F new

F register

F reset

F show

**storage** table

F allocate

F checked

F mark

F marked

F setinitializer

F sparse

**strings** table

F collapseCrLf

F newrepeater

F nice

F striplong

F tabtospace

**tables** table

F accesstable

F definetable

F encapsulate

F insertaftervalue

F insertbeforevalue

F migratetable

F removevalue

## visualizers (context)

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

## xml (context)

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

## zip (extra lua)

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

# 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		