attributes backends bibtex bit32 blobs
boolean buffers builders caches callback
callbacks catcodes characters chemistry
commands containers context converters
coroutine ctxrunner debug dir directives
document documentdata environment epdf
experiments figures file floats font
fontloader fonts functions global
graphics gzip img interactions
interfaces io job lang languages layouts
lfs libraries lmx logs lpdf lpeg ltn12
lua luatex lxml math mathematics mbox
md5 metapost mime moduledata modules
mplib noads node nodes number os package
pagebuilders parametersets pdf
pdfscanner physics profiler regimes
resolvers scripts set socket sorters
statistics status storage streams string
structures table tex texconfig texio
thirddata token tokens tracers trackers
typesetters unicode url userdata
utilities vf visualizers xml zip zlib

ConTEXt MkIV

global (alias: _G)

_LUAVERSION	number		**floats**	table
_MAJORVERSION	number		**font**	table
_MINORVERSION	number		**fontloader**	table
arg	table		**fonts**	table
assert	function		**frozen**	boolean
attributes	table		**functions**	table
backends	table		**getmetatable**	function
beginpage	function		**getreadfilename**	function
bibtex	table		**global**	table
bit32	table		**graphics**	table
blobs	table		**gzip**	table
boolean	table		**img**	table
buffers	table		**inspect**	function
builders	table		**interactions**	table
caches	table		**interfaces**	table
callback	table		**io**	table
callbacks	table		**ipairs**	function
catcodes	table		**job**	table
characters	table		**lang**	table
chemistry	table		**languages**	table
collectgarbage	function		**layouts**	table
commands	table		**lfs**	table
containers	table		**libraries**	table
context	function		**lmx**	table
converters	table		**lmxconvert**	function
coroutine	table		**lmxnew**	function
ctxrunner	table		**load**	function
debug	table		**loadfile**	function
dimen	function		**loadstring**	function
dir	table		**logs**	table
directives	table		**lp_fastpos_n**	userdata
document	table		**lp_fastpos_p**	userdata
documentdata	table		**lpdf**	table
dofile	function		**lpeg**	table
endpage	function		**ltn12**	table
environment	table		**lua**	table
epdf	table		**luatex**	table
error	function		**lxml**	table
experiments	table		**math**	table
figures	table		**mathematics**	table
file	table		**mbox**	table

md5	table		**setmetatable**	function
metapost	table		**socket**	table
mime	table		**sorters**	table
module	function		**statistics**	table
moduledata	table		**status**	table
modules	table		**storage**	table
mplib	table		**streams**	table
newline	function		**string**	table
next	function		**stripmath**	function
noads	table		**structures**	table
node	table		**swiglib**	function
nodes	table		**table**	table
number	table		**tex**	table
optionalrequire	function		**texconfig**	table
os	table		**texio**	table
outputpagestree	function		**thirddata**	table
package	table		**toboolean**	function
pagebuilders	table		**token**	table
pairs	function		**tokens**	table
parametersets	table		**tonumber**	function
pcall	function		**tostring**	function
pdf	table		**trace_characters**	boolean
pdfscanner	table		**traceback**	function
physics	table		**tracers**	table
print	function		**trackers**	table
process	function		**type**	function
profiler	table		**typesetters**	table
protect	function		**unicode**	table
rawequal	function		**unpack**	function
rawget	function		**url**	table
rawlen	function		**userdata**	table
rawset	function		**utf**	table
regimes	table		**utilities**	table
report_characters	function		**vf**	table
require	function		**visualizers**	table
resolvers	table		**xml**	table
scripts	table		**xmlconvert**	function
select	function		**xpcall**	function
set	table		**zip**	table
setinspector	function		**zlib**	table

attributes (context)

colorintents   table
- N attribute
- D data
- F enable
- F handler
- F register
- D registered

colors   table
- N attribute
- F cmyk
- F cmyktogray
- F cmyktorgb
- F colorcomponents
- B couple
- D data
- N default
- F defineintermediatecolor
- F definemixcolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- F gray
- F graytohsv
- F handler
- F hsvtogray
- F hsvtorgb
- F iccprofile
- F isblack
- N main
- S model
- D models
- F mpcolor
- F mpnamedcolor
- 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 spec
- 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	D	registered
F	enable	B	supported
F	handler	B	triggering
F	register	F	value
D	registered	D	values

numbers	data table	**unsetvalue**	number
ofnode	function	**viewerlayers**	table
private	function	N	attribute
showcurrent	function	D	data
states	table	F	define
F	disabletriggering	F	enable
F	enabletriggering	F	forcesupport
F	finalize	F	handler
F	initialize	B	hasorder
F	process	D	listwise
F	selective	F	register
F	stacked	D	registered
F	stacker	F	resolve_begin
transparencies	table	F	resolve_end
N	attribute	F	resolve_step
D	data	D	scopes
F	enable	F	setfeatures
F	forcesupport	F	start
F	handler	F	stop
U	none	B	supported
F	register	D	values

backends (context)

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

    F registerdocumentopenaction
    F registeredsymbol
    F registerpagecloseaction
    F registerpageopenaction
    F registersymbol
    F setfieldcalculationset
    F setfigurealternative
    F setfigurecolorspace
    F setfiguremask
    F setformat
    F setformsmethod
    F setpagetransition
    F setupcanvas
    F setupidentity
    F setxmpfile
    F startlayer
    F stoplayer
    F supportedformats
    F useviewerlayer
    F validfield
    F validfieldcategory
    F validfieldset
   S comment
   T nodeinjections
    F addtags
    F attachfile
    F changestackedlayer
    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

registrations table

tables   table

bibtex (context)

authorref function
authors table
    F concat
    F inverted
    F invertedshort
    F normal
    F normalshort
    F setsettings
    F short
authoryearref function
authoryearsref function
convert function
hacks table
    F add
    F doifalreadyplaced
    F filterall

    F flush
    F nofregistered
    F process
    F register
    F registerplaced
    F reset
    F resolve
load function
new function
singularorplural function
statistics table
    N nofbytes
    N nofdefinitions
    N nofshortcuts
toxml function

bit32 (basic lua)

arshift	function	**extract**	function
band	function	**lrotate**	function
bnot	function	**lshift**	function
bor	function	**replace**	function
btest	function	**rrotate**	function
bxor	function	**rshift**	function

blobs (context)

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

boolean (context)

tocontext function   **tonumber** function

buffers (context)

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

builders (context)

kernel   table
- F hyphenation
- F kerning
- F ligaturing
- F mlist_to_hlist

paragraphs   table
- T constructors
  - N attribute
  - F define
  - F disable
  - F enable
  - F handler
  - T methods
    - F default
    - F oneline
  - D names
  - D numbers
  - F set
  - F start
  - F stop
- F keeptogether
- F registertogether
- T solutions
  - T splitters
    - F define

- F optimize
- T registered
- F reset
- F set
- F split
- F start
- F stop
- F tag

vspacing   table
- F analyze
- D categories
- F collapsevbox
- T data
  - D map
  - D skip
  - D snapmethods
- F definesnapmethod
- B fixed
- F pagehandler
- F setmap
- F setskip
- F snapbox
- F tocategories
- F tocategory
- F vboxhandler

caches (context)

ask	boolean	**is_writable**	function
base	string	**loadcontent**	function
collapsecontent	function	**loaddata**	function
configfiles	function	**more**	string
contentstate	function	**relocate**	boolean
defaults	table	**savecontent**	function
define	function	**savedata**	function
direct	boolean	**setfirstwritablefile**	function
force	boolean	**setluanames**	function
getfirstreadablefile	function	**tree**	string
getreadablepaths	function	**treehash**	function
getwritablepath	function	**usedpaths**	function
hashed	function		

callback (basic tex)

find   function   **register** overloaded function
list   function

callbacks (context)

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

catcodes (context)

names data table   **register** function
numbers data table

characters (context)

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

chemistry (context)

component	function	**moleculeparser**	userdata
define	function	**start**	function
definitions	data table	**stop**	function
format	string	**structures**	number
instance	string	**undefine**	function
molecule	function		

commands (context)

Alphabetic	function	**autonextstructurelevel**	function
Character	function	**autosetups**	function
Characters	function	**autostarttext**	function
MPc	function	**autostoptext**	function
MPd	function	**averagecharwidth**	function
MPh	function	**bcolumn**	function
MPll	function	**boolcase**	function
MPlr	function	**character**	function
MPls	function	**characters**	function
MPn	function	**checkcharactersinfont**	function
MPp	function	**checkcountersetup**	function
MPpardata	function	**checkedconversion**	function
MPplus	function	**checkedpagefloat**	function
MPpos	function	**checktwopassdata**	function
MPposset	function	**chemicalcomponent**	function
MPr	function	**chineseallnumerals**	function
MPrest	function	**chinesecapnumerals**	function
MPrs	function	**chinesenumerals**	function
MPul	function	**cleanfontname**	function
MPur	function	**cleanuplayers**	function
MPw	function	**clonefield**	function
MPx	function	**collectfloat**	function
MPxy	function	**collecthelp**	function
MPxywhd	function	**colorcomponents**	function
MPy	function	**concatcommalist**	function
Romannumerals	function	**consultfloat**	function
abjadnodotnumerals	function	**copyposition**	function
abjadnumerals	function	**cos**	function
addcounter	function	**cosd**	function
addlinklistelement	function	**countervalue**	function
addtojavascriptpreamble	function	**counttwopassdata**	function
addtolist	function	**currentcomponent**	function
allinputpaths	function	**currentdate**	function
alphabetic	function	**currentenvironment**	function
analysefloatmethod	function	**currentproduct**	function
analyzelist	function	**currentproject**	function
applytochars	function	**currentreferencedefault**	function
applytowords	function	**currentreferenceorder**	function
assignbuffer	function	**currentregime**	function
autofinishstructurelevels	function	**currentsectiontolist**	function
autonextspace	function	**datasetvariable**	function

dayname	function	**discardfromlist**	function
defineattribute	function	**doanalyzeframedbox**	function
definebibtexsession	function	**doif**	function
definebreakpoint	function	**doifblackelse**	function
definebreakpoints	function	**doifcommonelse**	function
definecharacterspacing	function	**doifcounter**	function
definechemical	function	**doifdimenstringelse**	function
defineconversion	function	**doifdrawingblackelse**	function
definecounter	function	**doifelse**	function
definedviewerlayer	function	**doifelsebuffer**	function
definefield	function	**doifelsecontinuewithfile**	function
definefieldset	function	**doifelsecounter**	function
definefilefallback	function	**doifelsecurrentfonthasfeature**	function
definefilesynonym	function	**doifelseintwopassdata**	function
definefont_one	function	**doifelsemarking**	function
definefont_two	function	**doifelsemessage**	function
definefontfeature	function	**doifelsemultipar**	function
definefontsolution	function	**doifelseparallel**	function
defineinsertion	function	**doifelsepositionsused**	function
defineintermediatecolor	function	**doifelserangeonpage**	function
definelabels	function	**doifelsereference**	function
definelanguage	function	**doifelsesavedfloat**	function
definelinkedlist	function	**doifelsespaces**	function
definemarking	function	**doifelseutfmathaccent**	function
definemultitonecolor	function	**doifelsevisualizer**	function
definenote	function	**doiffieldcategoryelse**	function
defineparallel	function	**doiffieldelse**	function
defineparbuilder	function	**doiffieldsetelse**	function
defineprocesscolor	function	**doiffiledefinedelse**	function
defineprogram	function	**doiffileexistelse**	function
definereference	function	**doiffirstcharelse**	function
definesectionlevels	function	**doifinputfileelse**	function
definespotcolor	function	**doifinsetelse**	function
definestructureblock	function	**doifleapyearelse**	function
definestructureset	function	**doiflisthasentry**	function
definetransparency	function	**doiflisthasnumberelse**	function
definetwopasslist	function	**doiflisthaspageelse**	function
defineviewerlayer	function	**doiflisthastitleelse**	function
defrostrandomseed	function	**doiflocfileelse**	function
digits	function	**doifnot**	function
disableautofontscript	function	**doifnotcounter**	function
disableparbuilder	function	**doifnotecontent**	function
disableregime	function	**doifnoteonsamepageasprevious**	function
disablespellchecking	function	**doifobjectreferencefoundelse**	function

doifolderversionelse	function	**figurerequest**	function
doifoverlappingelse	function	**figurestatus**	function
doifparentfileelse	function	**figureused**	function
doifposition	function	**figurevariable**	function
doifpositionelse	function	**filterdefaultreference**	function
doifpositiononpage	function	**filterreference**	function
doifpositionsonsamepageelse	function	**finalizebox**	function
doifpositionsonthispageelse	function	**findtwopassdata**	function
doifurldefinedelse	function	**firstcountervalue**	function
doprocesstypescriptfile	function	**firstinset**	function
doreshapeframedbox	function	**flushfloat**	function
dostarttextfile	function	**flushnotes**	function
dostoptextfile	function	**flushpostponedblocks**	function
ecolumn	function	**flushpostponednotes**	function
elapsedtime	function	**fontchar**	function
enableautofontscript	function	**fontcollectionclone**	function
enablecolor	function	**fontcollectiondefine**	function
enablecolorintents	function	**fontcollectionprepare**	function
enablefontcolorschemes	function	**fontcollectionregister**	function
enableparbuilder	function	**fontcollectionreport**	function
enableregime	function	**fontcollectionreset**	function
enablespellchecking	function	**fontlookupgetkey**	function
enabletransparency	function	**fontlookupgetkeyofindex**	function
enhancelinkedlist	function	**fontlookupinitialize**	function
enhancelist	function	**fontlookupnoffound**	function
enhancereference	function	**forceendjob**	function
erasebuffer	function	**forcequitjob**	function
expandcurrentreference	function	**format**	function
exportformdata	function	**formatcolor**	function
exportreferences	function	**formatgray**	function
extensiblecode	function	**freezerandomseed**	function
feature	function	**from**	function
featureattribute	function	**getbuffer**	function
featurelist	function	**getbufferctxlua**	function
feedback	function	**getbuffermkvi**	function
fetchallmarks	function	**getcommandline**	function
fetchmultipar	function	**getctxfile**	function
fetchmultishape	function	**getcurrentprefixspec**	function
fetchonemark	function	**getcurrentreferencemetadata**	function
fetchposboxes	function	**getdefaultfieldvalue**	function
fetchtwomarks	function	**getfieldcategory**	function
figurefilename	function	**getfirstcharacter**	function
figurefilepath	function	**getfirsttwopassdata**	function
figurefiletype	function	**getfloatvariable**	function

getinternalreference	function	**installedlanguages**	function
getlasttwopassdata	function	**installtexdirective**	function
getmarking	function	**installtextracker**	function
getmessage	function	**languagenumber**	function
getmpextensions	function	**lastcountervalue**	function
getnotestate	function	**lchexnumber**	function
getplaceholderchar	function	**lchexnumbers**	function
getprivateattribute	function	**leapyear**	function
getprivatechar	function	**linenumbersstageone**	function
getprogram	function	**linenumbersstagetwo**	function
getrandomcounta	function	**listgroupindex**	function
getrandomcountb	function	**listlabel**	function
getrandomseed	function	**listlocation**	function
getreadfilename	function	**listprefixednumber**	function
getsubstring	function	**listprefixedpage**	function
gettexbuffer	function	**listrealpage**	function
gettwopassdata	function	**listsize**	function
gettwopassdatalist	function	**listtitle**	function
geturl	function	**listuserdata**	function
grabbuffer	function	**loadexamodes**	function
helpaction	function	**loadfontgoodies**	function
helpreference	function	**loadspellchecklist**	function
hexstringtonumber	function	**loadtypescriptfile**	function
horizontalcode	function	**loadvisualizer**	function
hour	function	**locatefilepath**	function
hyphenatedlist	function	**locfilename**	function
hyphenatedurl	function	**makeactive**	function
D characters		**markfonts**	function
N lefthyphenmin		**markregionbox**	function
D mapping		**math_frac**	function
N righthyphenmin		**mathrenderset**	function
F setcharacters		**maxitemwidth**	function
incrementedcounter	function	**minute**	function
initializetexdirectives	function	**mixcleanup**	function
initializetextrackers	function	**mixfinalize**	function
injectcurrentreference	function	**mixflushlist**	function
injectreference	function	**mixflushrest**	function
inlinechemical	function	**mixgetsplit**	function
insertattachment	function	**mixsetsplit**	function
insertcomment	function	**mixstate**	function
insertfield	function	**molecule**	function
insertionnumber	function	**month**	function
insertrenderingwindow	function	**monthmnem**	function
insertsoundclip	function	**monthname**	function

mpcolor	function	**posxy**	function
mpoptions	function	**prepareMPvariable**	function
namedstructureuservariable	function	**preparebibtexsession**	function
namedstructurevariable	function	**preparedfile**	function
nbfs	function	**presetsymbollist**	function
nextcountervalue	function	**presettabulate**	function
nextparallel	function	**prevcountervalue**	function
nofdays	function	**processbuffer**	function
nofitems	function	**processedfile**	function
nofstackedfloats	function	**processedfiles**	function
notedeltapage	function	**processfile**	function
notelistindex	function	**processfilemany**	function
notenumberpage	function	**processfilenone**	function
noteprefixednumber	function	**processfileonce**	function
notesymbolpage	function	**processlist**	function
notetitle	function	**pushfloat**	function
ntimes	function	**pushitaliccorrection**	function
number	function	**pushlist**	function
numbers	function	**pushregime**	function
objectnumber	function	**pushsectionblock**	function
objectpage	function	**rawcharacter**	function
octnumber	function	**rawcountervalue**	function
octstringtonumber	function	**rawdate**	function
ordinal	function	**referencepagestate**	function
overloadbookmark	function	**referencerealpage**	function
page_injections_flush_after	function	**registerattachment**	function
page_injections_flush_before	function	**registerbibtexentry**	function
page_injections_save	function	**registerbibtexfile**	function
pagestaterealpage	function	**registerbookmark**	function
parpos	function	**registerbuttons**	function
pdfrotation	function	**registercolor**	function
percentageof	function	**registercolorintent**	function
pgfxcolorspec	function	**registeredviewerlayer**	function
placeparallel	function	**registerhelp**	function
popfloat	function	**registeritemgroup**	function
popitaliccorrection	function	**registerlanguagefeatures**	function
poplist	function	**registerlinenumbering**	function
popregime	function	**registermaintextcolor**	function
popsectionblock	function	**registernamespace**	function
pos	function	**registerpostponedblock**	function
posplus	function	**registerrendering**	function
posstrut	function	**registersoundclip**	function
postponenotes	function	**registerstructureprocessor**	function
poswhd	function	**registertransparency**	function

registerunit	function	**setcharacterkerning**	function
relatemarking	function	**setcharacterspacing**	function
remapentity	function	**setcharacterstripping**	function
removemissingcharacters	function	**setclosedocumentaction**	function
renderingvar	function	**setclosepageaction**	function
replacemissingcharacters	function	**setcolormodel**	function
replacepospxywhd	function	**setcounter**	function
resavefloat	function	**setdataset**	function
resetcounter	function	**setdigitsmanipulation**	function
resetfontfeature	function	**setdirection**	function
resetfontsolution	function	**setdocumentenvironments**	function
resetmarking	function	**setdocumentfilenames**	function
resetmathattributes	function	**setdocumentmodes**	function
resetmathitalics	function	**setdocumentmodules**	function
resetnullfont	function	**setfigurelookuporder**	function
resetparallel	function	**setfontfeature**	function
resetreference	function	**setfontofid**	function
resetstructureprocessor	function	**setfontsolution**	function
resettimer	function	**setformat**	function
restartcounter	function	**setformsmethod**	function
restorecounter	function	**setinsertionlocation**	function
restorecurrentattributes	function	**setinterfaceconstant**	function
restorenote	function	**setinterfaceelement**	function
romannumerals	function	**setinterfacemessage**	function
runbuffer	function	**setinterfacemessages**	function
safechar	function	**setinterfacevariable**	function
savebuffer	function	**setinternalreference**	function
savecounter	function	**setlanguageexceptions**	function
savecurrentattributes	function	**setlanguagesynonym**	function
savedlistnumber	function	**setlayer**	function
savedlistprefixednumber	function	**setmarking**	function
savedlisttitle	function	**setmathalphabet**	function
savefloat	function	**setmathalternate**	function
savenote	function	**setmathattribute**	function
saveobject	function	**setmathitalics**	function
saveparallel	function	**setmathstyle**	function
savestructureblock	function	**setnextinternalreference**	function
savetaggedtwopassdata	function	**setnotestate**	function
savetwopassdata	function	**setnotesymbolpage**	function
second	function	**setobject**	function
selectstructureblock	function	**setopendocumentaction**	function
setbreakpoints	function	**setopenpageaction**	function
setcharactercasing	function	**setowncounter**	function
setcharactercleaning	function	**setpagestate**	function

setpagestaterealpageno	function	**sind**	function
setpagetransition	function	**splitfilename**	function
setparbuilder	function	**spotcolorname**	function
setpos	function	**spotcolorparent**	function
setrandomseed	function	**spotcolorvalue**	function
setrealign	function	**startchemical**	function
setreferencearguments	function	**startcolorset**	function
setreferenceattribute	function	**startcomponent**	function
setreferenceoperation	function	**startenvironment**	function
setsectionblock	function	**startfontsolution**	function
setstructureblockstate	function	**startparbuilder**	function
settagcombination	function	**startproduct**	function
settagdescription	function	**startproject**	function
settagdescriptionsymbol	function	**startregime**	function
settagfigure	function	**startsectionlevel**	function
settaghighlight	function	**starttag**	function
settagitemgroup	function	**starttext**	function
settagproperty	function	**startviewerlayer**	function
settagsorting	function	**stopchemical**	function
settagsynonym	function	**stopcolorset**	function
settagtablecell	function	**stopcomponent**	function
settagtabulatecell	function	**stopenvironment**	function
setupbookmarks	function	**stopfontsolution**	function
setupcanvas	function	**stopparbuilder**	function
setupcharacterspacing	function	**stopproduct**	function
setupexport	function	**stopproject**	function
setupfontexpansion	function	**stopregime**	function
setupfontprotrusion	function	**stopsectionlevel**	function
setupidentity	function	**stoptag**	function
setupinsertion	function	**stoptext**	function
setupitaliccorrection	function	**stopviewerlayer**	function
setuplinenumbering	function	**storejavascriptcode**	function
setvisual	function	**storejavascriptpreamble**	function
setxmpfile	function	**storenote**	function
showassignerror	function	**structureautocatcodedget**	function
showattributes	function	**structurecatcodedget**	function
showcallbacks	function	**structuregivencatcodedget**	function
showchardata	function	**structurenumber**	function
showcounter	function	**structuretitle**	function
showfontparameters	function	**structureuservariable**	function
showhyphenatedinlist	function	**structurevariable**	function
showjustification	function	**subcountervalues**	function
showmessage	function	**synchronizecolormodel**	function
sin	function	**synchronizemarking**	function

taggedmathfunction	function	**usetexfile**	function
tan	function	**useurl**	function
tand	function	**usexmlfile**	function
testcase	function	**usezipfile**	function
textime	function	**utfchar**	function
transparencycomponents	function	**utfmathclass**	function
triggereffect	function	**utfmathcommand**	function
triggernegative	function	**utfmathfiller**	function
truefilename	function	**utfmathstretch**	function
typebuffer	function	**verbose**	function
typefile	function	**visual**	function
typestring	function	**vspacing**	function
uchexnumber	function	**vspacingcollapse**	function
uchexnumbers	function	**vspacingdefine**	function
undefinechemical	function	**vspacingsetamount**	function
unicodechar	function	**vspacingsnap**	function
unit	function	**way**	function
unloadlanguage	function	**weekday**	function
useMPlibrary	function	**weekdayname**	function
useanyfile	function	**widthofstring**	function
usecldfile	function	**writestatus**	function
usecolors	function	**x_table_cleanup**	function
usecomponent	function	**x_table_construct**	function
useenvironment	function	**x_table_create**	function
usefile	function	**x_table_flush**	function
usejavascriptpreamble	function	**x_table_init_construct**	function
usejavascriptscripts	function	**x_table_init_reflow_height**	function
uselibrary	function	**x_table_init_reflow_width**	function
useluafile	function	**x_table_next_row**	function
useluamodule	function	**x_table_reflow_height**	function
usemodules	function	**x_table_reflow_width**	function
usepath	function	**x_table_set_construct**	function
useproduct	function	**x_table_set_reflow_height**	function
useproject	function	**x_table_set_reflow_width**	function
usesubpath	function	**year**	function
usesymbols	function		

containers (context)

cleanname	function	**is_valid**	function
content	function	**read**	function
define	function	**usecache**	boolean
is_usable	function	**write**	function

converters (context)

Alphabetic	function	**minute**	function
Character	function	**month**	function
Characters	function	**nofdays**	function
Romannumerals	function	**number**	function
abjadnodotnumerals	function	**numbers**	function
abjadnumerals	function	**octnumber**	function
alphabetic	function	**octstringtonumber**	function
character	function	**ordinal**	function
characters	function	**rawcharacter**	function
chineseallnumerals	function	**romannumerals**	function
chinesecapnumerals	function	**second**	function
chinesenumerals	function	**sequences**	data table
chr	function	**textime**	function
chrs	function	**toabjad**	function
convert	function	**tochinese**	function
define	function	**toroman**	function
hexstringtonumber	function	**uchexnumber**	function
hour	function	**uchexnumbers**	function
isleapyear	function	**verbose**	table
lchexnumber	function	D data	
lchexnumbers	function	F translate	
leapyear	function	**weekday**	function
maxchrs	function	**year**	function

coroutine (basic lua)

create	function	**status**	function
resume	function	**wrap**	function
running	function	**yield**	function

ctxrunner (context)

load   function   **resolve**   function
prepfiles data table

debug (basic lua)

debug	function		**sethook**	function
gethook	function		**setlocal**	function
getinfo	function		**setmetatable**	function
getlocal	function		**setupvalue**	function
getmetatable	function		**setuservalue**	function
getregistry	function		**traceback**	function
getupvalue	function		**upvalueid**	function
getuservalue	function		**upvaluejoin**	function

dir (context)

collectpattern	function	**globpattern**	function
current	function	**ls**	function
expandname	function	**makedirs**	function
found	function	**mkdirs**	function
glob	function	**pop**	function
globfiles	function	**push**	function

directives (context)

data	data table		**name**	string
default	function		**register**	function
disable	function		**report**	function
enable	function		**show**	function
list	function		**value**	function

document (context)

arguments   data table

                             T ctxfile

files   table

                                D environments

getargument   function

                                D modes

getfilename   function

                                D modules

options   table

     T commandline

       D environments

       D modes

       D modules

setargument   function

setdefaultargument   function

setfilename   function

variables   data table

environment (context)

argument	function	**luafile**	function
arguments	data table	**luafilechunk**	function
basicengines	data table	**maxnofruns**	number
currentrun	number	**originalarguments**	data table
default_texmfcnf	string	**outputfilename**	string
engineflags	data table	**ownbin**	string
filename	string	**ownmain**	string
files	table	**ownname**	string
filesynonyms	data table	**ownpath**	string
getargument	function	**rawarguments**	data table
homedir	string	**reconstructcommandline**	function
initex	boolean	**relativepath**	function
initializearguments	function	**setargument**	function
initializefilenames	function	**splitarguments**	function
inputfilebarename	string	**suffix**	string
inputfilename	string	**texfile**	function
inputfilesuffix	string	**texmfos**	string
jobfilename	string	**texos**	string
jobfilesuffix	string	**texroot**	string
kindofrun	number	**truefilename**	function
loadluafile	function	**validengines**	data table

epdf (extra tex)

Array	function	**PDFRectangle**	function
Dict	function	**open**	function
Object	function	**type**	function

experiments (context)

data	data table		**name**	string
default	function		**register**	function
disable	function		**report**	function
enable	function		**show**	function
list	function		**value**	function

figures (context)

applyratio	function	**includers**	data table
bases	data table	**initialize**	function
bitmapimage	function	**loaded**	data table
boxnumber	number	**localpaths**	data table
cachepaths	data table	**magics**	data table
check	function	**mergegoodies**	function
checkers	data table	**nofprocessed**	number
converters	data table	**order**	data table
current	function	**paths**	data table
defaultdepth	number	**patterns**	data table
defaultheight	number	**pop**	function
defaultsearch	boolean	**preferquality**	boolean
defaultwidth	number	**programs**	data table
done	function	**push**	function
dummy	function	**registerpattern**	function
existers	data table	**registerresource**	function
exists	function	**registersuffix**	function
formats	data table	**resources**	data table
found	data table	**scale**	function
get	function	**setlookups**	function
guess	function	**setorder**	function
hash	function	**setpaths**	function
identifiers	data table	**suffixes**	data table
identify	function	**used**	data table
include	function		

file (basic lua)

addsuffix	function	**needsupdating**	function
basename	function	**pathpart**	function
checksum	function	**readdata**	function
collapsepath	function	**removesuffix**	function
copy	function	**replacesuffix**	function
dirname	function	**reslash**	function
expandname	function	**robustname**	function
extname	function	**savechecksum**	function
is_qualified_path	function	**savedata**	function
is_readable	function	**size**	function
is_rootbased_path	function	**splitbase**	function
is_writable	function	**splitname**	function
isreadable	function	**splitpath**	function
iswritable	function	**strip**	function
join	function	**suffix**	function
joinpath	function	**suffixes**	function
loadchecksum	function	**suffixesonly**	function
nameonly	function	**suffixonly**	function
nametotable	function	**syncmtimes**	function
needs_updating	function		

floats (context)

analysemethod	function	**nofstacked**	function
checkedpagefloat	function	**pop**	function
collect	function	**push**	function
consult	function	**resave**	function
flush	function	**save**	function
getvariable	function	**stacked**	function

font (basic tex)

current	function		**id**	function
define	function		**max**	function
each	function		**nextid**	function
fonts	table		**read_tfm**	function
frozen	function		**read_vf**	function
getfont	overloaded function		**setfont**	function

fontloader (extra tex)

apply_afmfile	function	**info**	function
apply_featurefile	function	**open**	function
close	function	**to_table**	function
fields	function	**totable**	function
fullinfo	function		

fonts (context)

analyzers   table
- T features
  - N fina
  - N init
  - N isol
  - N medi
- D initializers
- D methods
- F setstate
- T states
  - N blwf
  - N fina
  - N half
  - N init
  - N isol
  - N mark
  - N medi
  - N pref
  - N pstf
  - N rest
  - N rphf
- B useunicodemarks

checkers   table
- F getmissing
- 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 checkvirtualids
F cleanuptable
F collectprocessors
D designsizes
D dontembed
F enhanceparameters
N factor
F finalize
F getfeatureaction
F hashfeatures
F hashinstance
T hashmethods
  F normal
  F virtual
F initializefeatures
T keys
  T character
    S depth
    S height
    S italic
    S width
  T description
    T boundingbox
    S depth
    S height
    S width
  T parameters
    S ascender
    S descender
    S designsize
    T expansion
      S auto
      S shrink
      S step

S	stretch	S	hasitalics
S	extendfactor	S	hasmath
S	factor	S	mathitalics
S	hfactor	S	mode
S	mathsize	S	name
T	protrusion	S	noglyphnames
S	auto	S	nostackmath
S	quad	S	psname
S	scaledpoints	S	textitalics
S	scriptpercentage	S	virtualized
S	scriptscriptpercentage	D	loadedfonts
S	size	S	namemode
S	slantfactor	F	newfeatures
S	slantperpoint	F	newhandler
T	spacing	N	privateoffset
S	extra	F	readanddefine
S	shrink	F	registerfeature
S	stretch	B	resolvevirtualtoo
S	width	F	scale
T	synonyms	F	scaled
S	em	F	setfactor
S	ex	F	setname
S	extra_space	N	version

current	function	
currentid	function	
definers	table	

S	extraspace	F	addlookup
S	slant	F	analyze
S	space	F	applypostprocessors
S	space_shrink	F	checkedmode
S	space_stretch	F	checkedscript
S	spaceshrink	F	current
S	spacestretch	S	defaultlookup
S	x_height	F	define
S	units	F	getspecification
S	vfactor	F	internal
S	xheight	F	loadfont
T	properties	F	makespecification
S	autoitalicamount	T	methods
T	cidinfo	F	install
S	embedding	D	variants
S	encodingbytes	F	read
S	filename	F	register
S	finalized	F	registered
S	fontname		
S	format		
S	fullname		

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**	
	D	colorschemes
	D	data
	D	designsizes
	D	filenames
	F	getcompositions
	T	list
	F	compositions
	F	designsizes
	F	expansions
	F	featureset
	F	filenames
	F	files
	F	mathematics
	F	protrusions
	F	solutions
	F	treatments
	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	
T	helpdata	
	D	bothkerned
	D	leftkerned
	D	ligatures
	D	rightkerned
	D	texligatures
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
	T	handlers
		F contextchain
		F devanagari_remove_joiners
		F devanagari_reorder_matras
		F devanagari_reorder_pre_base_reordering_consonants
		F devanagari_reorder_reph
		F gpos_context
		F gpos_contextchain
		F gpos_cursive
		F gpos_mark2base
		F gpos_mark2ligature
		F gpos_mark2mark
		F gpos_pair
		F gpos_single

F	gsub_alternate		D	lastmathids
F	gsub_context		D	marks
F	gsub_contextchain		D	parameters
F	gsub_ligature		T	processes
F	gsub_multiple		D	properties
F	gsub_reversecontextchain		D	quads
F	gsub_single		D	resources
F	load		T	setdynamics
F	scriptandlanguage		D	spaces
F	setcontextchain		D	spacings
F	setdynamics		D	xheights

helpers   table

F	addprivate
F	dimenfactor
F	fontpatternhassize
F	getdigitwidth
F	getparameters
F	getprivatenode
F	hasprivate
F	nametoslot
F	setdigitwidth
F	splitfontpattern

iterators   table

F	characters
F	descriptions
F	glyphs

loggers   table

F	add_placeholders
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

Left column:

F	load
F	scriptandlanguage
F	setcontextchain
F	setdynamics
F	setfeatures
T	statistics
D	usedfeatures
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
D	dynamics
D	emwidths
D	exheights
D	extensibles
D	identifiers
D	italics

S pi	F dfont
S po	F lua
S ps	F opentype
S sc	F otf
S sk	F pfb
S sm	D sequence
S so	F tfm
F format	F ttc
F onetimemessage	F ttf
F register	**specifiers** table
F reportdefinedfonts	D contextmerged
F reportusedfeatures	F contextnumber
mappings table	D contextnumbers
F addtounicode	D contextsetups
F fromunicode16	F contexttostring
F loadfile	F definecontext
F loadline	F mergecontext
F loadlumtable	F presetcontext
F makenameparser	F registercontext
F reset	F showcontext
F tounicode16	F splitcontext
F tounicode16sequence	D synonyms
names data table	D variants
nulldata data table	**symbols** table
protrusions data table	F uselibrary
readers table	**tables** table
F afm	**tracers** table
F check_lua	**treatments** data table
F check_tfm	**typefaces** data table

functions (context)

dummy function

graphics (context)

backgrounds table

    F calculatemultipar

    F fetchmultipar

F pair

F path

F point

gzip (extra lua)

close function   **open**   function
lines function   **save**   function
load   function   **suffix** function

img (basic tex)

boxes	function	**ofindex**	function
check	function	**package**	function
checksize	function	**print**	function
clone	function	**scan**	function
copy	function	**serialize**	function
immediatewrite	function	**totable**	function
keys	function	**types**	function
new	function	**write**	function
node	function		

interactions (context)

attachments table
- F insert
- F register

fields   table
- F clone
- F define
- F defineset
- F insert

general   table
- F getidentity
- F setupidentity

help   table
- F collect
- F reference
- F register

javascripts table
- F addtopreamble
- F code
- D codes
- F flushpreambles
- D functions
- D preambles
- F setpreamble
- F storecode
- F storepreamble
- F usepreamblenow
- F usescripts

linkedlists table

pages   table
- F setpagetransition
- F setupcanvas

references table
- F setclosedocument
- F setclosepage
- F setopendocument
- F setopenpage

renderings table
- F register
- F rendering
- F var

soundclips table
- F insert
- F register

interfaces (context)

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

io (basic lua)

ask	function	**o_limiters**	table
bytes	function		T paranoid
characters	function	**open**	overloaded function
close	function	**output**	function
exists	function	**pathseparator**	string
fileseparator	string	**popen**	overloaded function
flush	function	**read**	function
i_limiter	function	**readall**	function
i_limiters	table	**readnumber**	function
	T paranoid	**readstring**	function
input	function	**savedata**	function
limiter	function	**size**	function
lines	function	**stderr**	userdata
loadchunk	function	**stdin**	userdata
loaddata	function	**stdout**	userdata
loadlines	function	**tmpfile**	function
noflines	function	**type**	function
o_limiter	function	**write**	function

job (context)

comment function
datasets table
    D collected
    F extend
    F getdata
    F setdata
    D tobesaved
disablesave function
files table
    D collected
    F context
    B forcerun
    F run
    D tobesaved
initialize function
load function
loadother function
objects table
    D collected
    F get
    F number
    F page
    F save
    F set
    D tobesaved
pack boolean
packversion number
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	**save**	function
F	replace	**structure**	table
F	rightskip	D	collected
F	set	T	components
F	setall	T	tobesaved
F	setdim	T	branches
D	tobesaved	S	name
F	upperleft	S	type
F	upperright	**variables**	table
F	width	D	checksums
F	x	D	collected
F	xy	F	save
F	y	D	tobesaved
register	function	**version**	number

lang (basic tex)

clean	function	**new**	function
clear_hyphenation	function	**patterns**	function
clear_patterns	function	**postexhyphenchar**	function
exceptions	function	**posthyphenchar**	function
hyphenate	function	**preexhyphenchar**	function
hyphenation	function	**prehyphenchar**	function
id	function		

languages (context)

associate	function	**numbers**	data table
associated	data table	**posthyphenchar**	function
association	function	**prehyphenchar**	function
counters	data table	**registered**	data table
current	function	**righthyphenmin**	function
data	data table	**setexceptions**	function
define	function	**setsynonym**	function
frequencies	table	**unload**	function
F averagecharwidth		**version**	number
F getdata		**words**	table
getnumber	function	F check	
hyphenate	function	T data	
installed	function	F disable	
labels	table	F enable	
F define		T enablers	
F split		B enables	
lefthyphenmin	function	F found	
loadable	function	F load	
loadwords	function	T methods	
logger	table	N threshold	
F report			

layouts (context)

status table

F isleftpage

F leftorrightpagection

lfs (extra lua)

attributes	function	**mkdirs**	function
chdir	function	**readlink**	function
currentdir	function	**rmdir**	function
dir	function	**setmode**	function
isdir	overloaded function	**shortname**	function
isfile	function	**symlinkattributes**	function
lock	function	**touch**	function
lock_dir	function	**unlock**	function
mkdir	function		

libraries (context)

basiclua	data table	**extratex**	data table
basictex	data table	**functions**	data table
builtin	data table	**globals**	data table
extralua	data table		

lmx (context)

color	function		**loadedfile**	function
convert	function		**new**	function
convertfile	function		**overloaderror**	function
convertstring	function		**popupfile**	function
einject	function		**print**	function
eprint	function		**pv**	function
escape	function		**report**	function
finalized	function		**reset**	function
finject	function		**result**	function
fprint	function		**set**	function
get	function		**show**	function
getvariables	function		**showdebuginfo**	function
htmfile	function		**showerror**	function
html	table		**stripcss**	function
F a			**tv**	function
F td			**type**	function
F th			**urlescape**	function
include	function		**variable**	function
inherited	table		**variables**	table
S color-background-four			S color-background-blue	
S color-background-one			S color-background-body	
S color-background-three			S color-background-green	
S color-background-two			S color-background-main	
S title			S color-background-purple	
initialize	function		S color-background-yellow	
inject	function		S title-default	
lmxfile	function			

logs (context)

application	function		F version
categories	function	**reportline**	function
direct	function	**reportlines**	function
disable	function	**setformats**	function
enable	function	**setmessenger**	function
exporters	table	**setprogram**	function
extendbanner	function	**settarget**	function
flush	function	**settranslations**	function
help	function	**show**	function
messenger	function	**show_close**	function
new	function	**show_load**	function
newline	function	**show_open**	function
poptarget	function	**simple**	function
pushtarget	function	**simpleline**	function
report	function	**simplelines**	function
reportbanner	function	**start_page_number**	function
reporter	function	**status**	function
reporters	table	**stop_page_number**	function
F banner		**subdirect**	function
F export		**subreport**	function
F help		**system**	function
F info		**texerrormessage**	function
F lines		**writer**	function

lpdf (context)

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

lpeg (basic lua)

B	function	**finder**	function
C	function	**firstofsplit**	function
Carg	function	**frontstripper**	function
Cb	function	**instringchecker**	function
Cc	function	**is_lpeg**	function
Cf	function	**keeper**	function
Cg	function	**locale**	function
Cmt	function	**match**	function
Cp	function	**oneof**	function
Cs	function	**patterns**	data table
Ct	function	**print**	function
P	function	**replacer**	function
R	function	**secondofsplit**	function
S	function	**setmaxstack**	function
UP	function	**split**	function
UR	function	**splitat**	function
US	function	**splitter**	function
V	function	**stripper**	function
anywhere	function	**times**	function
append	function	**tsplitat**	function
balancer	function	**tsplitter**	function
checkedsplit	function	**type**	function
counter	function	**utfchartabletopattern**	function
endstripper	function	**version**	function

ltn12 (extra lua)

BLOCKSIZE number
filter   table
    F chain
    F cycle
pump   table
    F all
    F step
sink   table
    F chain
    F error
    F file
    F null

    F simplify
    F table
source   table
    F cat
    F chain
    F empty
    F error
    F file
    F rewind
    F simplify
    F string

lua (basic tex)

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

luatex (context)

cleanuptempfiles	function	**registertempfile**	function
registerstartactions	function	**starttime**	number
registerstopactions	function		

lxml (context)

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

	F flush	**stripped**	function
	F reset	**tag**	function
	F show	**text**	function
	F sort	**tofile**	function
splitid	function	**toparameters**	function
startraw	function	**toverbatim**	function
stopraw	function	**verbatim**	function
store	function	**withindex**	function
strip	function	**xmltexhandler**	data table

math (basic lua)

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

mathematics (context)

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

mbox (context)

parse	function	**parse_message**	function
parse_from	function	**split_headers**	function
parse_header	function	**split_mbox**	function
parse_headers	function	**split_message**	function

md5 (extra lua)

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

metapost (context)

analyzeplugins	function	**lastlog**	string
checkformat	function	**load**	function
checktexts	function	**makempy**	table
collapse	boolean	N nofconverted	
colorinitializer	function	F processgraphics	
convert	function	**metafun**	table
defaultformat	string	F interpolate	
defaultinstance	string	F topath	
defaultmethod	string	**method**	number
directrun	function	**mptopdf**	table
edefsxsy	function	F convertmpstopdf	
escaped	function	N nofconverted	
exectime	table	**multipass**	boolean
extensiondata	data table	**n**	number
filterclippath	function	**optimize**	boolean
finder	function	**parse**	function
flush	function	**pdfliterals**	function
flushers	table	**pluginactions**	function
T pdf		**process**	function
F comment		**processplugins**	function
F flushfigure		**reducetogray**	boolean
F startfigure		**reporterror**	function
F stopfigure		**reset**	function
F textfigure		**resetlastlog**	function
flushliteral	function	**resetplugins**	function
flushnormalpath	function	**resettextexts**	function
flushreset	function	**setextensions**	function
format	function	**setoutercolor**	function
formatnumber	function	**settext**	function
getclippath	function	**showlog**	boolean
getextensions	function	**tex**	table
gettext	function	F get	
graphic	function	F reset	
graphic_base_pass	function	F set	
graphic_extra_pass	function	**texerrors**	boolean
instance	function	**textextsdata**	function
intermediate	table	**theclippath**	function
T actions		**totable**	function
F makempy		**unload**	function
B needed			

mime (extra lua)

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

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

mplib (extra tex)

fields	function		**pen_info**	function
finders	table		**preprocessed**	function
	F file		**version**	function
new	function			

noads (context)

handlers   table
- F check
- F collapse
- F families
- F italics
- F relocate
- F render
- F resize
- F tags
- F unscript

- F variants

process   function
processors   table
- T collapse
- F mlist_to_hlist
- T relocate
- T render
- T resize
- T unscript

node (basic tex)

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

nodes (context)

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

margincodes	data table		F penalty
markers	table		F register
F get			F rightmarginkern
mathcodes	data table		F rightskip
noadcodes	data table		F rule
nodecodes	data table		F shrink
packlist	function		F special
pardir_is_equal	data table		F stretch
pardir_is_opposite	data table		F temp
pardir_is_parallel	data table		F textdir
partextdir_is_equal	data table		F usage
penaltycodes	data table		T userids
plugindata	table		N margins.inline
S name			N splitters.one
T namespace			N splitters.two
N attribute			F userlist
T droppers			F usernumber
F freeze			F userstring
F set			F usertokens
F handler			F vlist
F set			F zeroglue
F processor		**print**	function
pool	table	**processors**	table
F baselineskip		B enabled	
F cleanup		F hpack_filter	
F disc		F post_linebreak_filter	
F fontkern		F pre_linebreak_filter	
F glue		F tracer	
F gluespec		**processwords**	function
F glyph		**reference**	function
F hlist		**references**	table
F kern		N attribute	
F latelua		T done	
F leftmarginkern		F handler	
F leftskip		T stack	
F lineskip		**remove**	function
F noad		**repackhlist**	function
F pdfannotation		**replace**	function
F pdfdestination		**report**	function
F pdfdirect		**rightmarginwidth**	function
F pdfliteral		**rules**	table
F pdfrestore		D data	
F pdfsave		F define	
F pdfsetmatrix		F enable	

F handler		**textdir_is_equal**	data table
save	function	**textdir_is_is**	data table
serialize	function	**textdir_is_opposite**	data table
serializebox	function	**textdir_is_parallel**	data table
setattribute	function	**tonodes**	function
setattributes	function	**tosequence**	function
setunsetattributes	function	**totable**	function
shifts	table	**toutf**	function
D data		**tracers**	table
F define		T characters	
F enable		F collect	
F handler		F equal	
show	function	F indices	
showboxes	function	F start	
showcodes	function	F string	
showlist	function	F unicodes	
showsimplelist	function	T colors	
skipcodes	data table	F reset	
snapshots	table	F set	
F getparameters		F setlist	
F getsamples		F fontchar	
F resetsamples		T frequencies	
F takesample		F register	
somepenalty	function	F start	
somespace	function	T steppers	
stripping	table	F check	
T glyphs		F codes	
F set		F features	
striprange	function	F font	
tasks	table	F glyphs	
F actions		F message	
F appendaction		F messages	
F disableaction		F nofsteps	
F disablegroup		F register	
F enableaction		F reset	
F enablegroup		F start	
F freeze		F stop	
F freezegroup		F stop	
F new		T transparencies	
F prependaction		F reset	
F removeaction		F set	
F restart		F setlist	
F showactions		**unsetattribute**	function
F table		**unsetattributes**	function

visualizebox	function		F setlayer	
visualizers	table		F setvisual	
F box			**whatcodes**	data table
F handler			**whatsitcodes**	data table
F markfonts			**writable_spec**	function
F setfont				

number (context)

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

os (basic lua)

__getenv__	function	**remove**	function
__setenv__	function	**rename**	function
binsuffix	string	**resolvers**	table
binsuffixes	table	**resultof**	function
clock	function	**runtime**	function
converttime	function	**selfdir**	string
date	function	**setenv**	overloaded function
difftime	function	**setlocale**	overloaded function
env	data table	**sleep**	function
exec	overloaded function	**spawn**	overloaded function
execute	overloaded function	**time**	function
exit	function	**times**	function
fulltime	function	**timezone**	function
getenv	overloaded function	**tmpdir**	function
gettimeofday	function	**tmpname**	function
launch	function	**today**	function
libsuffix	string	**type**	string
localtime	function	**uname**	function
name	string	**uuid**	function
now	function	**where**	function
platform	string	**which**	function

package (basic lua)

config	string	**loaders**	table
cpath	string	**loadlib**	function
extralibpath	function	**luapaths**	function
extralibpaths	function	**path**	string
extraluapath	function	**preload**	table
extraluapaths	function	**searchers**	table
helpers	table	**searchpath**	function
libpaths	function	**seeall**	function
loaded	table		

pagebuilders (context)

injections   table
    F flushafter
    F flushbefore
    F save

mixedcolumns   table
    F cleanup

F finalize
F getlist
F getrest
F getsplit
F setsplit

pdf (basic tex)

immediateobj	function		**pageresources**	string
mapfile	function		**pagesattributes**	string
mapline	function		**pdfmapfile**	function
maxobjnum	function		**pdfmapline**	function
obj	function		**print**	function
objtype	function		**refobj**	function
pageattributes	string		**registerannot**	function
pageref	function		**reserveobj**	function

pdfscanner (context)

scan function

physics (context)

units table   D tables

profiler (extra lua)

pause function   **start** function

resume function   **stop** function

regimes (context)

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

resolvers (context)

allprefixes	function	**findfile**	function
appendhash	function	**findfiles**	function
automount	function	**findgivenfile**	function
automounted	table	**findgivenfiles**	function
booleanvariable	function	**findpath**	function
cacheversion	string	**findtexfile**	function
checkedvariable	function	**findwildcardfile**	function
cleanpath	function	**findwildcardfiles**	function
cleanpathlist	function	**formatofsuffix**	function
concatinators	data table	**formatofvariable**	function
configbanner	string	**formats**	data table
criticalvars	data table	**generators**	data table
dangerous	data table	**getenv**	function
datastate	function	**getownpath**	function
defaultsuffixes	table	**getreadfilename**	function
dowithfilesandreport	function	**hashers**	data table
dowithfilesintree	function	**homedir**	string
dowithpath	function	**inputstack**	table
dowithvariable	function	**installinputfilehandler**	function
env	function	**installinputlinehandler**	function
executers	table	**instance**	table

F check	D data
F exec	B diskcache
F execute	D environment
F finalize	D expansions
F popen	D fakepaths
F register	D files
F spawn	B force_suffixes

expandbraces	function	D found	
expandedpathfromlist	function	D foundintrees	
expandedpathlist	function	D hashed	
expandedpathlistfromvariable	function	D hashes	
expandpath	function	D lists	
expandpathfromvariable	function	B loaderror	
expansion	function	D order	
extendtexmfvariable	function	B remember	
~~**find_file**~~	~~function~~	B renewcache	
~~**find_files**~~	~~function~~	B renewtree	
findbinfile	function	B savelists	
findctxfile	function	D setups	
finders	data table	D specification	

D variables		**registerintrees**	function
jobs	table	**registermethod**	function
F currentcomponent		**registerzipfile**	function
F currentenvironment		**relations**	data table
F currentproduct		**renew**	function
F currentproject		**repath**	function
F justacomponent		**reset**	function
D processors		**resetextrapath**	function
F productcomponent		**resetresolve**	function
F usefile		**resolve**	function
joinpath	function	**savers**	data table
load	function	**scandata**	function
loadbinfile	function	**scanfiles**	function
loaders	data table	**schemes**	table
loadlualib	function	T cleaners	
loadtexfile	function	F md5	
loadtime	function	F none	
locateformat	function	F strip	
locators	data table	F cleanname	
luacnfname	string	F fetchstring	
luacnfspec	string	F fetchtable	
luacnfstate	string	F install	
macros	table	**setenv**	function
F convertfile		**setinstance**	function
F decodecomment		**showpath**	function
F enablecomment		**simplescanfiles**	function
F encodecomment		**splitconfigurationpath**	function
F preprocessed		**splitexpansions**	function
F processmk		**splitmethod**	function
F processmkvi		**splitpath**	function
F version		**suffixes**	data table
maxreadlevel	number	**suffixmap**	data table
methodhandler	function	**suffixofformat**	function
newinstance	function	**texdatablob**	function
openbinfile	function	**toppath**	function
openers	data table	**unexpandedpath**	function
openfile	function	**unexpandedpathlist**	function
opentexfile	function	**unresolve**	function
ownpath	string	**updaterelations**	function
prefixes	data table	**updatescript**	function
prependhash	function	**usezipfile**	function
registerextrapath	function	**validatedpath**	function
registerfile	function	**variable**	function
registerfilehash	function	**variableofformat**	function

variableofformatorsuffix function **wildcardpattern** function

scripts (context)

autofontfeature   table
     F disable
     F enable
     F handler
categorytonumber   data table
colors   data table
defaults   table
     N inter_char_half_shrink_factor
     N inter_char_half_stretch_factor
     N inter_char_hangul_penalty
     N inter_char_quarter_shrink_factor
     N inter_char_quarter_stretch_factor
     N inter_char_shrink_factor

     N inter_char_stretch_factor
     N inter_word_stretch_factor
handlers   data table
hash   table
injectors   data table
installdataset   function
installmethod   function
numbertocategory   data table
numbertodataset   data table
numbertohandler   data table
reset   function
set   function
splitters   data table

set (context)

contains function
create   function
tolist   function

tonumber function
totable   function

socket (extra lua)

BLOCKSIZE	number	S	connection
_DEBUG	boolean	S	content-description
_SETSIZE	number	S	content-disposition
bind	function	S	content-encoding
choose	function	S	content-id
connect	function	S	content-language
connect4	function	S	content-length
connect6	function	S	content-location
dns	table	S	content-md5
F	getaddrinfo	S	content-range
F	gethostname	S	content-transfer-encoding
F	getnameinfo	S	content-type
F	tohostname	S	date
F	toip	S	diagnostic-code
ftp	table	S	dsn-gateway
S	PASSWORD	S	etag
N	PORT	S	expect
N	TIMEOUT	S	expires
S	USER	S	final-log-id
F	command	S	final-recipient
F	get	S	from
F	open	S	host
F	put	S	if-match
gettime	function	S	if-modified-since
headers	table	S	if-none-match
T	canonic	S	if-range
S	accept	S	if-unmodified-since
S	accept-charset	S	in-reply-to
S	accept-encoding	S	keywords
S	accept-language	S	last-attempt-date
S	accept-ranges	S	last-modified
S	action	S	location
S	age	S	max-forwards
S	allow	S	message-id
S	alternate-recipient	S	mime-version
S	arrival-date	S	original-envelope-id
S	authorization	S	original-recipient
S	bcc	S	pragma
S	cache-control	S	proxy-authenticate
S	cc	S	proxy-authorization
S	comments	S	range

S	received
S	received-from-mta
S	references
S	referer
S	remote-mta
S	reply-to
S	reporting-mta
S	resent-bcc
S	resent-cc
S	resent-date
S	resent-from
S	resent-message-id
S	resent-reply-to
S	resent-sender
S	resent-to
S	retry-after
S	return-path
S	sender
S	server
S	smtp-remote-recipient
S	status
S	subject
S	te
S	to
S	trailer
S	transfer-encoding
S	upgrade
S	user-agent
S	vary
S	via
S	warning
S	will-retry-until
S	www-authenticate
S	x-mailer

http   table

N	PORT
N	TIMEOUT
S	USERAGENT
F	open
F	request

newtry   function

protect   function
select   function
sink   function
sinkt   table

F	close-when-done
F	default
F	http-chunked
F	keep-open

skip   function
sleep   function
smtp   table

S	DOMAIN
N	PORT
S	SERVER
N	TIMEOUT
S	ZONE
F	message
F	open
F	send

source   function
sourcet   table

F	by-length
F	default
F	http-chunked
F	until-closed

tcp   function
tcp6   function
tp   table

N	TIMEOUT
F	connect

try   function
udp   function
udp6   function
url   table

F	absolute
F	build
F	build_path
F	escape
F	parse
F	parse_path
F	unescape

sorters (context)

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

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

statistics (context)

checkfmtstatus	function	**register**	function
elapsed	function	**resettiming**	function
elapsedindeed	function	**runtime**	function
elapsedseconds	function	**savefmtstatus**	function
elapsedtime	function	**show**	function
enable	boolean	**starttiming**	function
formatruntime	function	**stoptiming**	function
hastiming	function	**threshold**	number
memused	function	**timed**	function

status (basic tex)

list function

storage (context)

allocate	function	**noftables**	number
data	table	**register**	function
mark	function	**shared**	data table
marked	function	**strip**	boolean
max	number	**tofmodules**	number
min	number	**toftables**	number
nofmodules	number		

streams (context)

collect	function	**push**	function
disable	function	**start**	function
enable	function	**stop**	function
flush	function	**synchronize**	function
initialize	function		

string (basic lua)

autodouble	function	F %s %s
autosingle	function	F %s %s %s
booleanstring	function	F %s %s %s %t
byte	function	F %s %s %s %s
bytepairs	function	F %s Tc %s w %s Tr
bytes	function	F %s mul
char	function	F %s--%s
characterpairs	function	F %s->%s->%s
characters	function	F %s->%s->%s->%s->%s->%s
checkedsplit	function	F %s:%s
collapsespaces	function	F %s:%s:%s
count	function	F (%p,%p)
dump	function	F /%s %s
escapedpattern	function	F /%s << %t >>
explode	function	F /%s [%t]
find	function	F /%s cs /%s CS %s SCN %s scn
format	function	F /Tr%s gs
formatter	function	F 1 0 0 0 1 %f %f cm
formatters	function	F << %t >>

```
    F %t (%t)
    F %--t--cycle
    F %-15s :
    F %-15s : %s
    F %-15s >
    F %-15s >
    F %-15s > %s
    F %-15s > %s
    F %-15s > %s >
    F %-15s > %s >
    F %-15s > %s > %s
    F %-15s > %s > %s
    F %.3f %.3f %.3f %.3f k %.3f %.3f %.3f %.3f K
    F %.3f %.3f %.3f rg %.3f %.3f %.3f RG
    F %.3f g %.3f G
    F %0.1fpt
    F %U
    F %U (%s)
    F %a loaded
    F %f %f %f %f %f %f cm
    F %p
    F %s
```

```
    F << /Type /Annot %s /Rect [%0.3f %0.3f %0.3f %0.3f] >>
    F MpSh%s
    F Tr%s
    F U+%04X:%s
    F [ %t ]
    F [%s][%s]
    F \convertnumber{%s}{%s}
    F _bpnf_(%s,%s,%s,'%s')
    T _extensions_
      S chruni
      S font:features
      S font:name
      S tex
      S unichr
      S xml
    F _plib_.b_col(%q)
    F _plib_.b_region(%q)
    F _plib_.e_col()
    F _plib_.e_region(%s)
    F _plib_.enhance(%q)
    S _preamble_
    S _type_
```

F b:%s

F buffer.%s

F c:%s:%s:%s:%s

F chem_%s%s(%s,%s,"\chemicaltext{%s}");

F chem_%s%s(%s,%s,%s,%s,%s);

F chem_%s(%s,%s,"");

F chem_%s(%s,%s,%s);

F chem_c%s(%s,%s,"");

F chem_set(%s);

F chem_start_structure(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s);

F chem_symbol("\chemicalsymbol[equilibrium]{%s}{%s}");

F chem_symbol("\chemicalsymbol[gives]{%s}{%s}");

F chem_symbol("\chemicalsymbol[mesomeric]{%s}{%s}");

F chem_symbol("\chemicaltext{%s}");

F chem_trace_boundingbox := %l ;

F dup %s mul exch dup %s mul exch %s mul

F dup %s mul exch dup %s mul exch dup %s mul exch %s mul

F e:%s

F flushing realpage %s, userpage %s

F jobname %a, input %a, result %a

F lang-frq-%s.lua

F language %a is active

F mfun_tt_w[%i] := %f ; mfun_tt_h[%i] := %f ; mfun_tt_d[%i] := %f ;

F multilocs[%s] := %s ; multikind[%s] := "%s" ; multipars[%s] := %s ;

F multiregs[%s] := (%--t--cycle) shifted - %s ;

F p:%s

F p:%s:%s:%s:%s

F path multiregs[], multipars[], multibox ; string multikind[] ; numeric multilocs[], nofmultipars ; nofmultipars :=

F path posboxes[], posregions[] ; numeric pospages[] ; numeric nofposboxes ; nofposboxes := %s ; %t ;

F pdf: q 1 0 %f 1 0 0 cm

F pospages[%s] := %s ; posboxes[%s] := (%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)--cycle ; posregions[%s] := (%p,%p)--(%p,%p)

F processed mkvi file %a, delta %s

F q %f %f %f %f %f %f cm

F r:%s:%s:%s

F region:%s

F s:%s

F setbounds currentpicture to multibox ;

F unknown reference %a

F using file %a

F visualizers.%s

F w:%s

gmatch	function
gsub	function
is_boolean	function
is_empty	function
itself	function
len	function
limit	function
longtostring	function
lower	function
match	function
nspaces	table
quote	function
quoted	function
rep	function
reverse	function
split	function
splitlines	function
splitup	function
strip	function
sub	function
tformat	function
toboolean	function
tocontext	function
todimen	function
topattern	function
totable	function
toutf	function
tracedchar	function
tracedchars	table
unquote	function
unquoted	function
upper	function
utfcharacters	function
utfvalues	function
valid	function

structures (context)

atlocation   function
blocks   table
    D collected
    F define
    F print
    F save
    F select
    F setstate
    D states
    D tobesaved
bookmarks   table
    F finalize
    F flatten
    S method
    F overload
    F place
    F register
    F setup
counters   table
    F add
    F analyze
    F check
    D collected
    F compact
    F converted
    F currentvalue
    D data
    F define
    F first
    F get
    F last
    F next
    F prev
    F previous
    F raw
    F record
    F reset
    F restart
    F restore
    F save
    F set

    F setlevel
    F setoffset
    F setown
    F setstate
    F setvalue
    T specials
      F userpage
    F subs
    D tobesaved
    F value
currentsectionnumber   function
descriptions   table
documents   table
    D data
    F initialize
    F preset
    F reset
floats   table
formulas   table
    F current
    F simplify
    F store
helpers   table
    F analyze
    F formulanumber
    F merged
    F page
    F prefix
    F prefixlastpage
    F prefixpage
    F simplify
    F title
    F touserdata
inserts   table
    D data
    F define
    F getdata
    F getlocation
    F getname
    F getnumber
    F setlocation

F	setup			F	uservalue
D	stored		**marks**		table
itemgroups	table		D	data
F	maxwidth		F	define
F	nofitems		F	exists
F	register		F	fetch
lists	table		F	fetchallmarks
F	addto		F	fetched
F	analyze		F	fetchonemark
B	autoreorder		F	fetchtwomarks
D	cached		F	get
D	collected		F	number
F	discard		F	relate
F	enhance		F	reset
T	enhancers		F	set
F	filter		F	show
F	filtercollected		F	synchronize
F	formulanumber		F	title
F	groupindex		T	tracers
F	hasnumberdata			F	showtable
F	haspagedata		**notes**		table
F	hastitledata		F	checkpagechange
D	internals		F	define
F	iscached		F	doifonsamepageasprevious
F	label		F	get
F	location		F	getdeltapage
F	number		F	getn
D	ordered		F	getnumberpage
F	page		F	getstate
F	popnesting		F	getsymbolpage
F	prefix		F	hascontent
F	prefixednumber		F	internal
F	prefixedpage		F	internalid
F	process		F	listindex
D	pushed		F	ordered
F	pushnesting		F	postpone
F	realpage		F	resetpostponed
F	reordered		F	restore
T	result		F	save
F	sectionnumber		F	setstate
F	size		F	setsymbolpage
F	title		D	states
D	tobesaved		F	store
F	userdata		**pages**		table

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

F finalize	F registerdata
F flush	F registermetadata
F meaning	F restart
F prepare	F setattributehash
F process	F setcombination
F register	F setdescription
F registerused	F setdescriptionsymbol
F sort	F setfigure
F synonym	F sethighlight
D tobesaved	F setitemgroup

tags   table

T data	F setproperty
F detailedtag	F setsorting
F getid	F setsynonym
F handler	F settablecell
D labels	F settabulatecell
F last	F start
F lastinchain	F stop
T metadata	D taglist
D properties	T userdata

table (basic lua)

allkeys	function	**print**	function
append	function	**remove**	function
are_equal	function	**reverse**	function
autokey	function	**reversed**	function
compact	function	**save**	function
concat	function	**sequenced**	function
contains	function	**serialize**	function
copy	function	**setmetatablecall**	function
count	function	**setmetatableindex**	function
derive	function	**setmetatablekey**	function
deserialize	function	**setmetatablenewindex**	function
drop	function	**sort**	function
fastcopy	function	**sorted**	function
fastserialize	function	**sortedhash**	function
flattened	function	**sortedhashkeys**	function
fromhash	function	**sortedkeys**	function
getmetatablekey	function	**sortedpairs**	function
has_one_entry	function	**strip**	function
identical	function	**sub**	function
imerge	function	**swapped**	function
imerged	function	**tocontext**	function
insert	function	**tocsv**	function
is_empty	function	**tofile**	function
keys	function	**tohandle**	function
load	function	**tohash**	function
loweredkeys	function	**toxml**	function
merge	function	**twowaymapper**	function
merged	function	**unique**	function
mirrored	function	**unnest**	function
pack	function	**unpack**	function
prepend	function		

tex (basic tex)

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

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

texconfig (basic tex)

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

texio (basic tex)

write function

write_nl function

token (basic tex)

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

tokens (context)

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

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

tracers (context)

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

trackers (context)

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

typesetters (context)

alignments   table
   F handler
   F set
breakpoints table
   N attribute
   F define
   F handler
   D mapping
   T methods
   T numbers
   F set
   F setreplacement
cases   table
   T actions
   F handler
   F register
   F set
characters   table
   F handler
checkers   table
   F handler
   F reset
   F set
cleaners   table
   F handler
   F set
digits   table
   T actions
   N attribute
   F handler
   F set
directions   table
   F handler
   F process
   F set
fast_hpack   function
hpack   function
italics   table
   F forcevariant
   F handler
   F reset

   F set
kerns   table
   D factors
   F handler
   B keepligature
   B keeptogether
   D mapping
   F set
margins   table
   F finalhandler
   F globalhandler
   F ha
   F localhandler
   F save
paragraphs   table
   N attribute
   T droppers
    F freeze
    F set
   F handler
   F set
processors   table
   F apply
   F register
   F reset
   F split
   F startapply
   F stopapply
   F stripped
   F tostring
spacings   table
   N attribute
   F define
   F handler
   D mapping
   T numbers
   T frenchpunctuation
    T characters
    S name
    N number
   F reset

F set		F initialize_construct	
F setup		F initialize_reflow_height	
tonodes	function	F initialize_reflow_width	
vpack	function	F next_row	
xtables	table	F reflow_height	
F cleanup		F reflow_width	
F construct		F set_construct	
F create		F set_reflow_height	
F flush		F set_reflow_width	

unicode (extra lua)

ascii   table
- F byte
- F char
- F dump
- F find
- F format
- F gfind
- F gmatch
- F gsub
- F len
- F lower
- F match
- F rep
- F reverse
- F sub
- F upper

grapheme table
- F byte
- F char
- F dump
- F find
- F format
- F gfind
- F gmatch
- F gsub
- F len
- F lower
- F match
- F rep
- F reverse
- F sub
- F upper

latin1   table
- F byte
- F char
- F dump
- F find
- F format
- F gfind
- F gmatch
- F gsub
- F len
- F lower
- F match
- F rep
- F reverse
- F sub
- F upper

utf8   table
- F byte
- F char
- F characters
- F count
- F dump
- F filetype
- F find
- F format
- F gfind
- F gmatch
- F gsub
- F is_valid
- F len
- F length
- F lower
- F magic
- F match
- F remapper
- F rep
- F replacer
- F reverse
- F split
- F splitlines
- F sub
- F subtituter
- F tocodes
- F toentities
- F tostring
- F totable
- F upper
- F ustring
- F utf16_to_utf8
- F utf16_to_utf8_be

F utf16_to_utf8_le

F utf32_to_utf8

F utf32_to_utf8_be

F utf32_to_utf8_le

F utf8_to_utf16

F utf8_to_utf8

F values

F xstring

url (context)

addscheme	function	**hashed**	function
barepath	function	**hasscheme**	function
construct	function	**query**	function
escape	function	**split**	function
filename	function	**toquery**	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
- B alwaysstripcode
- F compile
- F loadedluacode
- F loadstripped
- N nofstrippedbytes
- N nofstrippedchunks
- B stripcode
- T strippedchunks
- F strippedloadstring
- T suffixes
  - S lua
  - S luc
  - S lui
  - S luj
  - S luv
  - S tma
  - S tmc
  - S tua
  - S tuc

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 csvsplitter
- F getparameters
- F hash_to_string
- F iterator
- F keq_to_hash
- F listitem
- F make_settings_to_hash_pattern
- F mergehashes
- T patterns
  - U settings_to_array
  - U settings_to_hash_a
  - U settings_to_hash_b
  - U settings_to_hash_c
  - U unittotex
- F rfc4180splitter
- F settings_to_array
- F settings_to_array_with_repeat
- F settings_to_hash
- F settings_to_hash_strict
- F settings_to_hash_tolerant
- F settings_to_set
- F simple_hash_to_string
- F splitthousands
- F stepper
- F unittotex
- F unittoxml

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 sparse	
F nodeprocessor		**strings**	table
F prependaction		F collapsecrlf	
F prependgroup		T formatters	
F removeaction		F add	
F setkind		F new	
F tostring		F newrepeater	
setters	table	F nice	
F disable		F striplong	
F enable		F tabtospace	
F initialize		T tracers	
F list		**tables**	table
F new		F accesstable	
F register		F definedtable	
F report		F definetable	
F reset		F encapsulate	
F show		F insertaftervalue	
stacker	table	F insertbeforevalue	
F new		F migratetable	
storage	table	F removevalue	
F allocate		**templates**	table
F checked		F load	
F mark		F replace	
F marked		F resolve	
F setinitializer			

vf (context)

char	function	**pop**	function
down	function	**push**	function
fontid	function	**right**	function
image	function	**rule**	function
node	function	**special**	function
nop	function		

visualizers (context)

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

xml (context)

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

F bibtexshort	F position
F chainattribute	F reverse
F command	F table
F concat	F tag
F concatrange	F tags
F context	F text
F count	F texts
F ctxtext	F upperall

F default	**first** function
F first	**found** function
F function	**functions** table
F index	**getbuffer** function
F last	**gethandlers** function
F lettered	**gethandlersfunction** function
F lower	**helpers** table
F lowerall	F recursetext
F match	
F name	**include** function
F position	**index** function
F reverse	**inheritedconvert** function
F stripped	**inject** function
F tag	**inject_element** ~~function~~
F tags	**inject_element_after** ~~function~~
F text	**inject_element_before** ~~function~~
F upper	**injectafter** function
F upperall	**injectbefore** function

T xml	**insert** function
F all	**insert_element** function
F att	**insert_element_after** ~~function~~
F attribute	**insert_element_before** ~~function~~
F attributes	**insertafter** function
F cdata	**insertbefore** function
F chainattribute	**insertcomment** function
F count	**inspect** function
F default	**is_valid** function
F elements	**kind** function
F empty	**last** function
F first	**load** function
F function	**lpath** function
F index	**lpathcached** function
F last	**lpathcalls** function
F lowerall	**lshow** function
F match	**makestandalone** function
F name	**match** function
	name function

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

zip (extra lua)

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

zlib (extra lua)

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