MP aes attributes backends basexx bit32 blobs
boolean buffers builders caches callback
callbacks catcodes characters chemistry
commands containers context converters
coroutine ctxrunner debug dir directives
document documentdata drivers environment
experiments figures file fio floats font fonts
functions graphics gzip helper images
interactions interfaces io job kpse language
languages layouts lfs libraries lmx loaders
logs lpdf lpeg lua luac luatex lxml math
mathematics md5 metapost mime moduledata
modules mp mplib noads node nodes number
objects optional os package pagebuilders
parametersets pdf pdfdecode pdfe physics
pngdecode posit potrace publications qrcodegen
regimes resolvers sandbox scripts serial set
sha2 sio socket sorters sparse statistics
status storage streams string structures table
tex texconditionals texconfig texconstants
texifs texio texisdefined texmodes
texsystemmodes thirddata token tokens tracers
trackers typesetters updaters url userdata
utf8 utilities vector visualizers xcomplex
xdecimal xmath xml xzip zip zlib

ConTEXt LMTX

global (alias: _G)

CONTEXTLMTXMODE	number	**ctxrunner**	table
LUAFORMAT	number	**debug**	table
LUAMAJORVERSION	number	**dimen**	function
LUAMINORVERSION	number	**dir**	table
LUATEXENGINE	string	**directives**	table
LUATEXFORMATID	number	**document**	table
LUATEXFUNCTIONALITY	number	**documentdata**	table
LUATEXVERBOSE	string	**dofile**	function
LUATEXVERSION	number	**drivers**	table
LUAVERSION	number	**environment**	table
MP	function	**error**	function
SAVEDREQUIRE	function	**experiments**	table
aes	table	**figures**	table
arg	table	**file**	table
asnumber_p	function	**fio**	table
assert	function	**floats**	table
attributes	table	**flushsimplerule**	function
backends	table	**flushspecialrule**	function
basexx	table	**font**	table
bit32	table	**fonts**	table
blobs	table	**functions**	table
blockrequire	function	**getdepthprofile**	function
boolean	table	**getheightprofile**	function
buffers	table	**gethvrpos**	function
builders	table	**getmetatable**	function
caches	table	**getscriptstatus**	function
callback	table	**graphics**	table
callbacks	table	**gzip**	table
catcodes	table	**handledefinitions**	function
characters	table	**handletransformstring**	function
checkimage	function	**helper**	table
chemistry	table	**images**	table
collectgarbage	function	**inspect**	function
collectstructure	function	**interactions**	table
combine	function	**interfaces**	table
commands	table	**io**	table
containers	table	**ipairs**	function
context	function	**job**	table
converters	table	**kpse**	table
coroutine	table	**language**	table
createmask	function	**languages**	table

last_pdf	number	**pdfdecode**	table
layouts	table	**pdfe**	table
lfs	table	physics	table
libraries	table	**pngdecode**	table
lmx	table	**popleaderlevel**	function
load	function	**posit**	table
loaders	data table	**potrace**	table
loadfile	function	potracefrompng	function
loadstring	function	**print**	function
logs	table	profilelines	function
longestcommon	function	publications	table
lpdf	table	pushleaderlevel	function
lpeg	table	**qrcodegen**	table
lua	table	**rawequal**	function
luac	table	**rawget**	function
luatex	table	**rawlen**	function
lxml	table	**rawset**	function
math	table	recolor	function
mathematics	table	regimes	table
mathshapekern	function	**require**	function
md5	table	resolvers	table
metapost	table	ruledspace	function
mime	table	sandbox	table
moduledata	table	scripts	table
modules	table	**select**	function
mp	function	**serial**	table
mplib	table	set	table
next	function	setinspector	function
noads	table	setmathparameters	function
node	table	**setmetatable**	function
nodes	table	**sha2**	table
number	table	shipbox_ref_h	number
objects	table	shipbox_ref_v	number
optional	table	**sio**	table
optionalrequire	function	**socket**	table
os	table	sorters	table
p_number_p	userdata	**sparse**	table
p_number_u	userdata	statistics	table
package	table	**status**	table
pagebuilders	table	**storage**	table
pairs	function	streams	table
parametersets	table	**string**	table
pcall	function	structures	table
pdf	table	**table**	table

tex	table	**unpack**	function
texconditionals	data table	**updaters**	table
texconfig	table	**url**	table
texconstants	data table	**userdata**	table
texifs	data table	**utf**	table
texio	table	**utf8**	table
texisdefined	data table	**utilities**	table
texmodes	data table	**vector**	table
texsystemmodes	data table	**visualizers**	table
thirddata	table	**warn**	function
toboolean	function	**width**	number
todecimal	function	**xcomplex**	table
token	table	**xdecimal**	table
tokens	table	**xmath**	table
tonumber	function	**xml**	table
tostring	function	**xpcall**	function
tracers	table	**xshift**	number
trackers	table	**xzip**	table
type	function	**zip**	table
typesetters	table	**zlib**	table

aes (extra lua)

decode function   **random** function
encode function

attributes (context)

alternates   table
- N attribute
- D data
- F enable
- F handler
- F register
- D registered
- D values

applyoverloads   function

checkvalues   function

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
- D counts
- B couple
- F currentmodel
- F currentnamedmodel
- D data
- N default
- F defineintermediatecolor
- F definemultitonecolor
- F defineprocesscolor
- F defineprocesscolordirect
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- N forced
- F forcedmodel
- F forcesupport

- F formatcolor
- F formatgray
- F formatluminance
- F formatluminanceratio
- F getpagecolormodel
- F gray
- F graytohsv
- F handler
- T helpers
  - F complement
  - F inbetween
  - F justone
- F hsvtogray
- F hsvtorgb
- F hwbtorgb
- F iccprofile
- F isblack
- F labtolch
- F labtorgb
- F labtoxyz
- F lchtolab
- F lchtorgb
- N main
- S model
- D models
- F mpcolor
- F mpnamedcolor
- F mpoptions
- F namedcolorattributes
- N none
- F popset
- F processcolorcomponents
- F pushset
- F register
- D registered
- F registerspotcolor
- F rgb
- F rgbbytes
- F rgbtocmyk
- F rgbtogray
- F rgbtohsv

F	rgbtoxyz	
N	selector	
F	setlist	
F	setmodel	
F	setpagecolormodel	
D	sets	
F	spec	
F	spot	
F	spotcolorname	
F	spotcolorparent	
F	spotcolorvalue	
B	supported	
F	toattributes	
F	transparencycomponents	
B	triggering	
F	usecolors	
D	valid	
F	value	
D	values	
B	weightgray	
F	xyztolab	
F	xyztorgb	

counts	data table	
define	function	
effects	table	
N	attribute	
D	data	
F	enable	
F	handler	
F	register	
D	registered	
D	values	
getvalue	function	
getvalues	function	
handlers	table	
hasvalues	function	
list	data table	
markasoverload	function	
names	data table	
negatives	table	
N	attribute	
D	data	
F	enable	
F	handler	

F	register	
D	registered	
F	set	

numbers	data table	
ofnode	function	
private	function	
public	function	
registervalue	function	
restore	function	
save	function	
setcleaner	function	
showcurrent	function	
states	table	
F	disabletriggering	
F	enabletriggering	
F	finalize	
F	initialize	
F	process	
F	selective	
F	simple	
F	stacked	
F	stacker	
system	function	
tooverloads	function	
transparencies	table	
N	attribute	
D	data	
F	enable	
F	forcesupport	
F	handler	
T	names	
N	color	
N	colorburn	
N	colordodge	
N	darken	
N	difference	
N	exclusion	
N	hardlight	
N	hue	
N	lighten	
N	luminosity	
N	multiply	
N	none	
N	normal	

N overlay		F definedlayoutcomponent	
N saturation		F enable	
N screen		F forcesupport	
N softlight		F handler	
N none		B hasorder	
F register		D listwise	
D registered		F register	
B supported		D registered	
F toattribute		F resolve_begin	
B triggering		F resolve_end	
F value		F resolve_reset	
D values		F resolve_step	

unsetvalue	number	
values	data table	
viewerlayers	table	

N attribute	D scopes
F cleanup	F setfeatures
D data	F setup
F define	F start
	F stop
	B supported
	D values

backends (context)

closeout	function
codeinjections	table
F registerboxresource	
F registerfont	
F restoreboxresource	
current	string
defaults	table
T codeinjections	
F prerollreference	
F setautoprefix	
F vfstartcolor	
F vfstopcolor	
T nodeinjections	
F cmykcolor	
F destination	
F graycolor	
F injectknockout	
F injectoverprint	
F reference	
F rgbcolor	
F spotcolor	
F transparency	
T registrations	
F transparency	
D tables	
getcallbackstate	function
included	table
B context	
B date	
B id	
B metadata	
B pdf	
initialize	function
latelua	function
nodeinjections	table
nothing	function
openout	function
registered	table
T pdf	
T codeinjections	
F addbookmarks	

F analyzenormalsymbol

F analyzesymbol

F attachmentid

F bitmap

F clonefield

F copyimage

F defaultprofile

F definefield

F definefieldset

F defineviewerlayer

F discardpages

F embedfile

F embedimage

F enabletags

F exportformdata

F fieldsurrounding

F flushmergelayer

F getbookmarks

F getboxresourcebox

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getinfo

F getlinkstructureparent

F getreferencestructureobject

F getrefobj

F insertrenderingwindow

F jp2

F jpg

F maptag

F mergebookmarks

F mergecomments

F mergefields

F mergereferences

F mergerenditions

F mergeviewerlayers

F newimage

F png

F prerollreference

F presetsymbol

F presetsymbollist	F useviewerlayer
F processrendering	F validcompactor
F registerdocumentcloseaction	F validfield
F registerdocumentopenaction	F validfieldcategory
F registeredsymbol	F validfieldset
F registerfiguremask	F vfstartcolor
F registerfigurerange	F vfstopcolor
F registerpagecloseaction	F wrapimage
F registerpageopenaction	S name
F registerpattern	T nodeinjections
F registersymbol	F addtags
F ruleactionbox	F annotation
F ruleactiondraw	F attachfile
F ruleactionfill	F changestackedlayer
F ruleactionmp	F cmykcolor
F ruleactionstroke	F comment
F saveboxresource	F destination
F scanimage	F effect
F setattachmentsupport	F getboxresourcedimensions
F setautoprefix	F graycolor
F setencryption	F injectbitmap
F setfieldcalculationset	F insertu3d
F setfigurecolorspace	F knockout
F setfiguremask	F negative
F setformat	F overprint
F setformsmethod	F positive
F setjobcomment	F reference
F setpagetransition	F rgbcolor
F settaggingsupport	F spotcolor
F setupviewerlayer	F startalternate
F setuserdata	F startlayer
F setxmpfile	F startstackedlayer
F startactualtext	F stopalternate
F startalternativetext	F stoplayer
F startlayer	F stopstackedlayer
F startunicodetoactualtext	F transparency
F startunicodetoactualtextdirect	F typesetfield
F stopactualtext	F useboxresource
F stopalternativetext	T registrations
F stoplayer	F cmykindexcolor
F stopunicodetoactualtext	F cmykspotcolor
F stopunicodetoactualtextdirect	F getspotcolorreference
F supportedformats	F grayindexcolor
F unicodetoactualtext	F grayspotcolor

F	rgbindexcolor	**registrations**	table
F	rgbspotcolor	**setencryption**	function
F	spotcolorname	**tables**	table
F	transparency	**writeout**	function
T	tables		

basexx (extra lua)

decode16	function	**encode16**	function
decode64	function	**encode64**	function
decode85	function	**encode85**	function
decodeLZW	function	**encodeLZW**	function
decodeRL	function	**encodeRL**	function

bit32 (context)

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	**strht**	function
dimensions	function	**strwd**	function
dispose	function	**tohpack**	function
new	function	**tonodes**	function
pack	function	**tovpack**	function
strdp	function	**write**	function
strhd	function		

boolean (context)

tocontext   function
tonumber   function

buffers (context)

append	function	**parallel**	table
assign	function	F define	
collectcontent	function	F hassomecontent	
empty	function	F next	
erase	function	F place	
exists	function	F reset	
get	function	F save	
getcontent	function	**prepend**	function
getctxlua	function	**raw**	function
getlines	function	**run**	function
getmkvi	function	**samplefile**	function
gettex	function	**splitsamplefile**	function
loadcontent	function	**undent**	function

builders (context)

checkparcontext	function		F start	
checksidefloat	function		F stop	
hpack	table		F tag	
F qualityactions			**parpassidentifier**	function
F report			**passnames**	data table
F show			**profiling**	table
kernel	table		F add	
F collapsing			F addrivers	
F hyphenating			F boxlinehandler	
F kerning			F distance	
F ligaturing			F fixedprofile	
F mlisttohlist			F get	
paragraphs	table		F getrivers	
T constructors			F list	
N attribute			F pagehandler	
F define			F pagelinehandler	
F disable			F profilebox	
F enable			F profilelines	
F handler			F set	
T methods			F setlines	
F basic			**registerpaspasscallback**	function
F default			**vpack**	table
F hpack			F qualityactions	
F oneline			F report	
D names			**vspacing**	table
D numbers			D categories	
F set			F checkstrutdepth	
F start			F collapsevbox	
F stop			T data	
T expansion			D map	
F trace			D skip	
F keeptogether			D snapmethods	
F registertogether			F definesnapmethod	
T solutions			B fixed	
T splitters			F flushcontributions	
F define			F forcepageflush	
F optimize			F forcestrutdepth	
T registered			F getnofpreviouslines	
F reset			F inject	
F set			F injectdisable	
F split			F injectpenalty	

F injectskip

F interceptsamepagecontent

F pagehandler

F pageoverflow

F popatsame

F pushatsame

F setmap

F setskip

F snapbox

F synchronizepage

F tocategories

F tocategory

F vboxhandler

caches (context)

base	string	**loadcontent**	function
collapsecontent	function	**loaddata**	function
configfiles	function	**more**	string
contentstate	function	**savecontent**	function
defaults	table	**savedata**	function
getfirstreadablefile	function	**setfirstwritablefile**	function
getreadablepaths	function	**setluanames**	function
getwritablepath	function	**treehash**	function
hashed	function	**usedpaths**	function
is_writable	function		

callback (basic tex)

find	function	**list**	function
getindex	function	**names**	function
getoptions	function	**register**	overloaded function
getoptionvalues	function	**setoptions**	function
getstate	function	**setstate**	function
getstatevalues	function	**testonly**	function
known	function	**usage**	function

callbacks (context)

freeze   function
functions   table
    F start_page_number
    F stop_page_number
known   function
optimizer   function
optioncodes table
    N direct
    N trace
pop   function
push   function

register   function
report   function
statecodes table
    N disabled
    N frozen
    N fundamental
    N private
    N selective
    N set
    N touched
    N tracing

catcodes (context)

names data table

numbers data table

register function

characters (context)

addcharacternames	function	T after_postscript	
adobename	function	T after_subscript	
bidi	data table	T anudatta	
blockrange	function	T before_half	
blocks	data table	T before_main	
can_have_space	data table	T before_postscript	
casemap	table	T before_subscript	
categories	data table	T below_mark	
category	function	T consonant	
categorytags	data table	T dependent_vowel	
classifiers	table	T halant	
collapsed	data table	T independent_vowel	
combined	data table	T nukta	
contextname	function	T post_mark	
csletters	data table	T pre_mark	
data	data table	T ra	
decomposed	data table	T stress_tone_mark	
description	function	T twopart_mark	
descriptions	data table	T vowel_modifier	
detailtags	data table	**initialize**	function
directions	table	**is_character**	data table
emoji	table	**is_command**	data table
F compact		**is_hyphenator**	data table
F known		**is_letter**	data table
F resolve		**is_mark**	data table
emojized	function	**is_nothing**	data table
enccodes	data table	**is_punctuation**	data table
entities	data table	**is_spacing**	data table
fallbacks	data table	**is_symbol**	data table
filters	data table	**lcchars**	data table
fractions	table	**lccode**	function
fromnumber	function	**lccodes**	data table
fschars	data table	**lettered**	function
fscodes	data table	**lhash**	data table
getrange	function	**linebreaks**	data table
graphemes	data table	**lower**	function
hangul	data table	**mathlists**	data table
indicgroups	table	**mirrors**	table
T above_mark		**otfscripts**	data table
T after_half		**ranges**	data table
T after_main		**registerentities**	function

remap_hangul_syllabe	function	**tex**	table
scripthash	table	D accentmapping	
setactivecatcodes	function	D commandmapping	
setlettercatcodes	function	F defineaccents	
setothercatcodes	function	F safechar	
shape	function	F strtextoutf	
shaped	function	F strtoutfpattern	
shash	data table	F toutf	
shchars	data table	F toutfpattern	
shcodes	data table	**textclasses**	table
showstring	function	**tonumber**	function
specialchars	data table	**ucchars**	data table
specials	data table	**uccode**	function
splits	table	**uccodes**	data table
T char		**uhash**	data table
T compat		**unicodechar**	function
subscripts	table	**upper**	function
superscripts	table	**verbosemarks**	data table
synonyms	data table		

chemistry (context)

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

containers (context)

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

converters (context)

A	function	**cn-a**	function
A:es	function	**cn-c**	function
A:ru	function	**cn-d**	function
A:sl	function	**convert**	function
AK	function	**decimals**	function
Alphabetic	function	**define**	function
Alphabetic:es	function	**gregorian_to_hebrew**	function
Alphabetic:ru	function	**gregorian_to_jalali**	function
Alphabetic:sl	function	**hebrewnumerals**	function
Character	function	**helpers**	table
Characters	function	**hexstringtonumber**	function
I	function	**i**	function
KA	function	**isleapyear**	function
KR	function	**jalali_to_gregorian**	function
R	function	**lchexnumber**	function
RK	function	**lchexnumbers**	function
Romannumerals	function	**leapyear**	function
Russiannumerals	function	**lower**	function
Sloveniannumerals	function	**max**	function
Spanishnumerals	function	**maxchrs**	function
Word	function	**nicenumber**	function
Words	function	**nofdays**	function
a	function	**number**	function
a:es	function	**numbers**	function
a:ru	function	**octnumber**	function
a:sl	function	**octstringtonumber**	function
abjadnodotnumerals	function	**ordinal**	function
abjadnumerals	function	**r**	function
alphabetic	function	**romannumerals**	function
alphabetic:es	function	**russiannumerals**	function
alphabetic:ru	function	**sequences**	data table
alphabetic:sl	function	**settime**	function
character	function	**sloveniannumerals**	function
characters	function	**spaceddigits**	function
chineseallnumerals	function	**spanishnumerals**	function
chinesecapnumerals	function	**textime**	function
chinesedatenumerals	function	**toabjad**	function
chinesenumerals	function	**tochinese**	function
chr	function	**tohebrew**	function
chrs	function	**toroman**	function
cn	function	**totime**	function

uchexnumber	function	F translate	
uchexnumbers	function	**weekday**	function
upper	function	**word**	function
verbose	table	**words**	function
D data			

coroutine (basic lua)

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

ctxrunner (context)

load	function	**prepfiles**	data table
preparedfile	function	**resolve**	function

debug (basic lua)

getinfo   function   **traceback** function
sethook   function

dir (context)

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

directives (context)

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

document (context)

arguments	data table	**pdf_cleanup_procsets**	function
files	table	**pdf_identify_content**	function
functions	table	**pdf_serialize_content**	function
getargument	function	**pdf_strip_content**	function
getfilename	function	**pdf_strip_page**	function
options	table	**setargument**	function
T commandline		**setcommandline**	function
D environments		**setdefaultargument**	function
D modes		**setenvironments**	function
D modules		**setfilename**	function
T ctxfile		**setfilenames**	function
D environments		**setmodes**	function
D modes		**setmodules**	function
D modules		**variables**	data table
pdf_cleanup_cidsets	function		

documentdata (context)

variable function

drivers (context)

applyanchor	function
applyorientation	function
convert	function
converters	table
F analyze	
F engine	
F lmtx	
F resyncbox	
enable	function
finalize	function
gethpos	function
gethvrpos	function
getpos	function
getrpos	function
getvpos	function
helpers	table
initialize	function
install	function
instances	table

  T empty
   T actions
    F convert
    F prepare
   T flushers
    F popleaderlevel
    F pushleaderlevel
    T whatsit
   S name
  T js
   T actions
    F cleanup
    F convert
    F finalize
    F initialize
    F outputfilename
    F prepare
    F wrapup
   T flushers
    F character
    F popleaderlevel
    F pushleaderlevel

F rule
F simplerule
F specialrule
F updatefontstate
T whatsit
S name
T json
 T actions
  F cleanup
  F convert
  F finalize
  F initialize
  F outputfilename
  F prepare
  F wrapup
 T flushers
  F character
  F popleaderlevel
  F pushleaderlevel
  F rule
  F setstate
  F simplerule
  F specialrule
  F updatefontstate
  T whatsit
 S name
T lua
 T actions
  F cleanup
  F convert
  F finalize
  F initialize
  F outputfilename
  F prepare
  F wrapup
 T flushers
  F character
  F popleaderlevel
  F pushleaderlevel
  F rule
  F simplerule

```
  F specialrule                            T pdf
  F updatefontstate                          T actions
  T whatsit                                    F cleanup
  S name                                       F convert
T mpo                                          F finalize
  T actions                                    F initialize
    F finalize                                 F outputfilename
    F initialize                               F prepare
  T flushers                                   F wrapup
    F character                              T flushers
    F popleaderlevel                           F character
    F pushleaderlevel                          F flushimage
    F rule                                     F fontchar
    F simplerule                               F group
    F specialrule                              F literal
    T whatsit                                  F popleaderlevel
  S name                                       F poporientation
T mps                                          F pushleaderlevel
  T actions                                    F pushorientation
    F cleanup                                  F restore
    F convert                                  F rule
    F finalize                                 F save
    F initialize                               F setmatrix
    F outputfilename                           F setstate
    F prepare                                  F simplerule
    F wrapup                                   F space
  T flushers                                   F specialrule
    F character                                F startclipping
    F popleaderlevel                           F startmatrix
    F pushleaderlevel                          F startmirroring
    F rule                                     F startrotation
    F simplerule                               F startscaling
    F specialrule                              F stopclipping
    F updatefontstate                          F stopmatrix
    T whatsit                                  F stopmirroring
  S name                                       F stoprotation
T none                                         F stopscaling
  T actions                                    F updatefontstate
  T flushers                                   T whatsit
    F popleaderlevel                         S name
    F pushleaderlevel            lmtxversion                  number
    T whatsit                    outputfilename               function
  S name                         report                       function
```

environment (context)

argument	function	**luafilechunk**	function
arguments	data table	**luatexengine**	string
basicengines	data table	**luatexfunctionality**	number
currentrun	number	**luatexverbose**	string
definefilefallback	function	**luatexversion**	number
definefilesynonym	function	**maxnofruns**	number
engineflags	data table	**oldhome**	string
filename	string	**originalarguments**	data table
filenames	table	**outputfilename**	string
files	table	**ownbin**	string
filesynonyms	data table	**ownmain**	string
forcedruns	number	**ownname**	string
getargument	function	**ownpath**	string
globfiles	function	**prerollrun**	boolean
homedir	string	**rawarguments**	data table
initex	boolean	**reconstructcommandline**	function
initexmode	boolean	**relativepath**	function
initializearguments	function	**setargument**	function
initializefilenames	function	**splitarguments**	function
inputfilebarename	string	**suffix**	string
inputfilename	string	**texfile**	function
inputfilesuffix	string	**texmfos**	string
jobfilefullname	string	**texos**	string
jobfilename	string	**texroot**	string
jobfilesuffix	string	**truefilename**	function
kindofrun	number	**useluamodule**	function
lmtxmode	number	**usemodules**	function
loadexamodes	function	**validengines**	data table
loadluafile	function	**version**	string
luafile	function		

experiments (context)

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

figures (context)

applyratio	function		F	resetstore
badname	function		F	scan
bases	data table		F	serialize
bitmapimage	function		T	sizes
boxnumber	number		B	art
cachepaths	data table		B	bleed
check	function		B	crop
checkers	data table		B	media
conversions	data table		B	none
converters	data table		B	trim
current	function		F	storedata
defaultdepth	number		F	totable
defaultheight	number		T	types
defaultsearch	boolean		N	jbig2
defaultwidth	number		N	jp2
done	function		N	jpg
dummy	function		N	none
existers	data table		N	pdf
exists	function		N	png
formats	data table		N	stream
found	data table		F	wrap
get	function		**include**	function
getinfo	function		**includers**	data table
getpdfinfo	function		**initialize**	function
getrealpage	function		**loaded**	data table
guess	function		**localpaths**	data table
guessfromstring	function		**magics**	data table
hash	function		**mergegoodies**	function
identifiers	data table		**nofmissing**	number
identify	function		**nofprocessed**	number
images	table		**order**	data table
F	check		**paths**	data table
F	checksize		**patterns**	data table
F	copy		**pop**	function
F	create		**preferquality**	boolean
F	embed		**programs**	data table
F	embedfromstore		**push**	function
F	fetchdata		**qrcode**	function
T	keys		**registerpattern**	function
F	print		**registerresource**	function
F	resetdata		**registersuffix**	function

remappers	data table	**setlookups**	function
resources	data table	**setorder**	function
scale	function	**setpaths**	function
set	function	**suffixes**	data table
setconversion	function	**used**	data table

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	**withinbase**	function

fio (extra lua)

getposition	function	**readinteger1le**	function
read2dot14	function	**readinteger2**	function
readbytes	function	**readinteger2le**	function
readbytetable	function	**readinteger3**	function
readcardinal1	function	**readinteger3le**	function
readcardinal1le	function	**readinteger4**	function
readcardinal2	function	**readinteger4le**	function
readcardinal2le	function	**readintegertable**	function
readcardinal3	function	**setposition**	function
readcardinal3le	function	**skipposition**	function
readcardinal4	function	**writecardinal1**	function
readcardinal4le	function	**writecardinal1le**	function
readcardinaltable	function	**writecardinal2**	function
readcline	function	**writecardinal2le**	function
readcstring	function	**writecardinal3**	function
readfixed2	function	**writecardinal3le**	function
readfixed4	function	**writecardinal4**	function
readinteger1	function	**writecardinal4le**	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
hasstacked	function		

font (basic tex)

addcharacters	function	**getmathspec**	function
addquality	function	**getparameterfields**	function
current	function	**gettextcharacterfields**	function
define	function	**id**	function
getfont	function	**max**	function
getfontdimen	function	**nextid**	function
getfontfields	function	**setfont**	function
getfontspec	function	**setfontdimen**	function
getmathcharacterfields	function	**xscaled**	function
getmathindex	function	**yscaled**	function

fonts (context)

analyzers   table
    D features
    D initializers
    D methods
    F setstate
    D states
    B useunicodemarks
callbacks   table
    F compile
    F devirtualize
checkers   table
    F getmissing
    D mapping
    F missing
    F placeholder
cid   table
    F getmap
    F loadfile
collections   table
    F checkenabled
    F clonevector
    F define
    T definitions
    F direct
    F found
    F prepare
    F process
    F register
    F registermain
    F report
    F reset
    T rscales
    T vectors
constructors   table
    F addcharacters
    F addcoreunicodes
    F aftercopyingcharacters
    F applyfinalizers
    F applymanipulators
    F assignmathparameters
    F beforecopyingcharacters

F beforepassingfonttotex
D cache
F calculatescale
F checkedfeatures
F checkedfilename
F collectprocessors
F currentfonthasfeature
D designsizes
F enhanceparameters
T enhancers
  T afm
    F apply
    F patch
    T patches
      F register
      F report
    F register
    F report
  T otf
    F addfeature
    F apply
    F enhance
    F patch
    T patches
      F register
      F report
    F register
    F report
  T tfm
    F apply
    F patch
    T patches
      F register
      F report
    F register
    F report
N factor
T features
  D afm
  D otf
  D tfm

```
F finalize                              S defaultbasealternate
F getfeatureaction                      S defaultnodealternate
F getmathparameter                      D features
F getprivate                            F featuresinitializer
T handlers                              F featuresprocessor
  T afm                                 T fixers
    B autoprefixed                      F getactualtext
    D cache                             F getalternate
    D features                          F getgsub
    F getkern                           F getkern
    T helpdata                          F getmultiple
      D bothkerned                      F getstreamhash
      D leftkerned                      F getsubstitution
      D ligatures                       T handlers
      D rightkerned                       F ctx_camelcasing
      D texligatures                      F devanagari_remove_joiners
    F load                                F devanagari_reorder_matras
    T readers                             F devanagari_reorder_pre_base_reordering_consonants
      F getinfo                           F devanagari_reorder_reph
      F loadfont                          F gpos_context
      F loadshapes                        F gpos_contextchain
    F setfeatures                         F gpos_cursive
    B syncspace                           F gpos_mark2base
    N version                             F gpos_mark2ligature
  T otf                                   F gpos_mark2mark
    F addfeature                          F gpos_pair
    F basemodeinitializer                 F gpos_single
    D cache                               F gsub_alternate
    F collectlookups                      F gsub_context
    T coverup                             F gsub_contextchain
      T actions                           F gsub_ligature
        F alternate                       F gsub_multiple
        F chainposition                   F gsub_reversecontextchain
        F chainsubstitution               F gsub_single
        F kern                            F trigger_space_kerns
        F ligature                      T helpers
        F multiple                        F blockligatures
        F pair                            F pardirstate
        F single                          F txtdirstate
        F substitution                  F load
      F register                        F loadoutlinedata
      S stepkey                         F loadstreamdata
    F dataset                           F modeinitializer
    F datasetpositionprocessor          D mpscache
```

```
D pdfcache                                    T gsubhandlers
F plugininitializer                             F alternate
F pluginprocessor                               F chainedcontext
T plugins                                       F context
  T text                                        F extension
D pngcache                                      F ligature
B pngenabled                                    F multiple
T readers                                       F reversechainedcontextsingle
  F addunicodetable                             F single
  F avar                                      F gvar
  F cbdt                                      F head
  F cblc                                      T helpers
  F cff                                         F axistofactors
  F cff2                                        F cleanname
  T cffencoder                                  F getaxisscale
  F checkhash                                   F getfactors
  F cmap                                        F getscales
  F colr                                        F gotodatatable
  F compact                                     F normalizedaxis
  F condense                                    T normalizedaxishash
  F cpal                                        F readvariationdata
  F dsig                                        F reportskippedtable
  F ebdt                                        F setvariabledata
  F eblc                                      F hhea
  F ebsc                                      F hmtx
  F expand                                    F hvar
  F extend                                    F kern
  F fvar                                      F loadfont
  F gdef                                      F loadshapes
  F getcomponents                             F loca
  F getinfo                                   F math
  F glyf                                      F maxp
  F gpos                                      F mvar
  T gposhandlers                              F name
    F chainedcontext                          F os/2
    F context                                 F pack
    F cursive                                 F parsecharstrings
    F extension                               F post
    F marktobase                              F potracetocff
    F marktoligature                          F registerextender
    F marktomark                              F rehash
    F pair                                    F sbix
    F single                                  F stat
  F gsub                                      T streamreader
```

```
F close                              F writecardinal1
F getposition                        F writecardinal1le
F getsize                            F writecardinal2
F look                               F writecardinal2le
F open                               F writecardinal3
F read2dot14                         F writecardinal3le
F readbyte                           F writecardinal4
F readbytes                          F writecardinal4le
F readbytetable                      F writeinteger1
F readcardinal                       F writeinteger1le
F readcardinal1                      F writeinteger2
F readcardinal1le                    F writeinteger2le
F readcardinal2                      F writeinteger3
F readcardinal2le                    F writeinteger3le
F readcardinal3                      F writeinteger4
F readcardinal3le                    F writeinteger4le
F readcardinal4                      F writestring
F readcardinal4le                  F stripredundant
F readcardinaltable                F svg
F readchar                         N tableversion
F readcline                        F unifymissing
F readcstring                      F unpack
F readfixed2                       F vhea
F readfixed4                       F vmtx
F readinteger                      F vorg
F readinteger1                     F vvar
F readinteger1le                   F woff2otf
F readinteger2                   F registerpalette
F readinteger2le                 F registerplugin
F readinteger3                   F reorderlookups
F readinteger3le                 F scriptandlanguage
F readinteger4                   F setdynamics
F readinteger4le                 F setfeatures
F readintegertable               T statistics
F readsignedbyte                   D usedfeatures
F readstring                     D svgcache
F readtag                        B svgenabled
F setposition                    T tables
F size                             D baselines
F skip                             D features
F skiplong                         D featuretypes
F skipposition                     D languages
F skipshort                        D scripts
F writebyte                      F texthandler
```

T vectors	F combine
T arab	T combiner
T gpos	D commands
N curs	D helpers
N kern	D math
N mark	D predefined
N mkmk	N version
T gsub	D whatever
N calt	F hashfeatures
N ccmp	F hashinstance
N cswh	T hashmethods
N dlig	F normal
N fina	F virtual
N init	F initializefeatures
N isol	D loadedfonts
N liga	N noffontsloaded
N medi	N nofsharedfonts
N mset	N nofsharedhashes
N rclt	N nofsharedvectors
N rlig	N privateoffset
N version	D privateslots
T pfb	F readanddefine
F filterencoding	F registerfeature
F filtermetadata	F registerscriptset
F loadvector	F resetfeature
N version	B resolvevirtualtoo
T tfm	F scale
D cache	F scaled
D features	F setfactor
N maxnestingdepth	F setfeature
N maxnestingsize	F setmathparameter
T readers	F setname
F loadpk	B sharefonts
F loadtfm	F trytosharefont
F loadtfmvf	N version
F loadvf	**current** function
F pktopdf	**currentid** function
F potracedtopdf	**definers** table
F showpk	F addlookup
F reencode	F analyze
F setfeatures	F applypostprocessors
N version	F checkedmode
T vf	F checkedscript
T combinations	S defaultlookup

F define	
F getspecification	
F internal	
F loadfont	
F makespecification	
T methods	
F install	
D variants	
F read	
F register	
F registered	
F registerfallbackfont	
F registersplit	
F resetnullfont	
F resolve	
T resolvers	
F file	
F name	
F spec	
definetypeface	function
dropins	table
F clone	
F getshape	
F getshapes	
F nextid	
F provide	
F registerglyph	
F registerglyphs	
F swap	
F swapone	
effects	table
encodings	table
T agl	
D ctxcodes	
D extras	
D synonyms	
D unicodes	
D cache	
F is_known	
D known	
F load	
F make_unicode_vector	
D math	
N version	

enhanceid	function
expansions	data table
formats	data table
getalternate	function
getindices	function
getkern	function
getmultiple	function
getsubstitution	function
getters	table
T alternate	
F opentype	
T kern	
F opentype	
F type1	
F type3	
T multiple	
F opentype	
T substitution	
F opentype	
goodies	table
D colorschemes	
T data	
T common-math.lfg	
S author	
S comment	
S copyright	
B initialized	
T mathematics	
T tweaks	
T presets	
F addmathkerns	
F braille	
F eulertocalligraphic	
F fallbacks	
F moderntocalligraphic	
F moveintegrals	
F moveitalics	
F pagellaradical	
F rsfstoscript	
F rsfsuprighttoscript	
F scripttocalligraphic	
F smalldigits	
F wipeanchors	
F wipeitalics	

```
        F xitsarabic                              D filenames
  S name                                          F getcompositions
  S version                                       T list
T dejavu-math                                     F load
  S author                                        F prepare_features
  S comment                                       F register
  S copyright                                     F registerpostprocessor
  B initialized                                   F report
  T mathematics                                   T suffixes
    T alternates                          handlers              table
      T dotless                           hashes                table
        S comment                                 D characters
        S feature                                 D classes
        N value                                   D csnames
    T bigslots                                    D descriptions
    T parameters                                  D dynamics
      N AccentBaseDepth                           D emwidths
      N AccentTopShiftUp                          D exheights
      N DelimiterDisplayPercent                   D features
      N DelimiterDisplayShortfall                 D identifiers
      N DelimiterPercent                          D italics
      N DelimiterShortfall                        D lastmathids
      N DisplayOperatorMinHeight                  D marks
      N FlattenedAccentTopShiftUp                 D mathparameters
      N FractionRuleThickness                     D modes
      S PrimeBaselineDropMax                      D originals
      S PrimeShiftUp                              D parameters
      S PrimeShiftUpCramped                       T processes
      N SubscriptShiftDown                        D properties
      S SubscriptShiftDownWithSuperscript         D quads
      N SuperscriptShiftUp                        D resources
    T tweaks                                      T setdynamics
    T aftercopying                                T shapes
  S name                                          D spaces
  S version                                       D spacings
T dejavu-text                                     T streams
  S author                                        D unicodes
  S comment                                       D unislots
  S copyright                                     D variants
  T extensions                                    D xheights
  B initialized                             helpers                table
  S name                                          F addextraprivate
  S version                                       F addprivate
D designsizes                                     F appendcommands
```

F appendcommandtable	F startcolor	
F checkflags	F stopcolor	
F checkmerge	T vfspecials	
F checksteps	T backgrounds	
F collectanchors	T outlines	
F combineglyphs	**infofont**	function
D commands	**iterators**	table
F composecharacters	F characters	
F descriptiontoslot	F descriptions	
F dimenfactor	F glyphs	
F expandglyph	**loggers**	table
D extraprivates	F format	
F fontpatternhassize	F onetimemessage	
F getcoloredglyphs	F register	
F getdigitwidth	F reportdefinedfonts	
F getinstancespec	F reportusedfeatures	
F getparameters	**mappings**	table
F getprivatecharornode	F addtounicode	
F getprivatenode	F fromunicode16	
F getprivates	F getentry	
F getprivateslot	F loadfile	
F glyphdimenfactor	F loadline	
F hasprivate	F makenameparser	
F indextoslot	D overloads	
F isprivate	F reset	
F mathscriptslots	F tounicode	
F name	F tounicode16	
F nametoslot	F tounicode16sequence	
F newprivateslot	**metapost**	table
F prependcommands	F baseline	
F prependcommandtable	F boundingbox	
F privateslot	F boxtomp	
F registerglyphbox	F draw	
F scalecommands	F fill	
F setboxdirectly	F glyph	
F setboxglyph	F maxbounds	
F setboxglyphs	F paths	
F setdigitwidth	F widthline	
F setmetaglyph	F zeroline	
F setmetaglyphs	**mode**	function
D sharedprivates	**names**	data table
F splitfontpattern	**nulldata**	data table
F tochar	**privateoffsets**	table
T vfinjectors	B keepnames	

N	mathbase	
N	mathextrabase	
N	textbase	
N	textextrabase	
protrusions	data table	
readers	table	
F	afm	
F	check_lua	
F	check_tfm	
F	lua	
F	ofm	
F	opentype	
F	otf	
F	pfb	
D	sequence	
F	tfm	
F	ttc	
F	ttf	
F	woff	
registersanitizer	function	
reserveid	function	
select	table	
D	alternatives	
F	bodyfont	
D	data	
F	default	
D	defaults	
F	definefallbackfamily	
F	definefontfamily	
F	definefontfamilypreset	
D	extras	
F	fallback	
D	fallbacks	
F	features	
F	filefallback	
F	fontdata	
F	fontfallback	
F	fontsynonym	
F	goodies	
F	mathfallback	
D	methods	
D	presets	
F	registerfallback	
F	registerfiles	

F	registerfontalternative	
F	registerfontfamily	
F	textfallback	
F	typeface	
F	typescript	
F	userdata	
specifiers	table	
D	contextmerged	
F	contextnumber	
D	contextnumbers	
D	contextsetups	
F	contexttostring	
F	definecontext	
F	mergecontext	
F	presetcontext	
F	registercontext	
T	scriptsets	
	T	af
	S	language
	N	number
	S	script
	T	always
	S	autolanguage
	S	autoscript
	B	checkmissing
	B	curs
	B	kern
	B	mark
	B	mkmk
	S	mode
	N	number
	S	script
	S	textcontrol
	B	wipemath
	T	arabic
	B	analyze
	S	autolanguage
	S	autoscript
	B	calt
	B	ccmp
	B	clig
	B	curs
	B	dlig
	B	fina

B init

B isol

B kern

S language

B liga

B mark

B medi

B mkmk

S mode

N number

B rlig

S script

T ba

S language

N number

S script

T bandw:overlay

B ccmp

B dist

N number

T bengali-one

B abvm

B abvs

B akhn

B blwf

B blwm

B blws

B calt

B cjct

B dist

B half

B haln

S indic

B init

B kern

S language

B locl

S mode

B nukt

N number

B pres

B pstf

B psts

B rphf

S script

B vatu

T bengali-two

B abvm

B abvs

B akhn

B blwf

B blwm

B blws

B calt

B cjct

B dist

B half

B haln

S indic

B init

B kern

S language

B locl

S mode

B nukt

N number

B pres

B pstf

B psts

B rphf

S script

B vatu

T boldened

S effect

N number

T boldened-10

S effect

N number

T boldened-15

S effect

N number

T boldened-20

S effect

N number

T boldened-25

S effect

N number

T boldened-30

S effect

N number

T ca

S language

N number

S script

T camelcasing

B camelcasing

N number

T cn

S language

N number

S script

T color

B ccmp

S color

B dist

N number

T color:bitmap

B ccmp

B dist

N number

B sbix

T color:overlay

B ccmp

B colr

B dist

N number

T color:svg

B ccmp

B dist

N number

B svg

T complete

S autolanguage

S autoscript

B checkmissing

B compose

B curs

B kern

B liga

B mark

B mkmk

S mode

N number

S script

S textcontrol

B wipemath

T cy

S language

N number

S script

T cz

S language

N number

S script

T de

S language

N number

S script

T default

S autolanguage

S autoscript

B checkmissing

B curs

B itlc

B kern

B liga

B mark

B mkmk

S mode

N number

S script

S textcontrol

B wipemath

T deo

S language

N number

S script

T devanagari-one

B abvm

B abvs

B akhn

B blwf

B blwm

B blws

B calt

B cjct

```
    B dist                              N number
    B half                              B unicoding
    B haln                            T es
    S indic                             S language
    B kern                              N number
    S language                          S script
    B locl                           T et
    S mode                              S language
    B nukt                              N number
    N number                            S script
    B pres                           T f:fractions
    B psts                              B frac
    B rkrf                              N number
    B rphf                           T f:inferiors
    S script                            N number
    B vatu                              B subs
  T devanagari-two                   T f:kern
    B abvm                              B kern
    B abvs                              N number
    B akhn                           T f:kerns
    B blwf                              B kern
    B blwm                              N number
    B blws                           T f:oldstyle
    B calt                              N number
    B cjct                              B onum
    B dist                           T f:smallcaps
    B half                              N number
    B haln                              B smcp
    S indic                          T f:superiors
    B kern                              N number
    S language                          B sups
    B locl                           T f:tabular
    S mode                              N number
    B nukt                              B tnum
    N number                         T fi
    B pres                              S language
    B psts                              N number
    B rkrf                              S script
    B rphf                           T followtext
    S script                            B liga
    B vatu                              N number
  T dingbats                         T fr
    S goodies                           S language
    S mode                              N number
```

S script	B cjct
T fullprotrusion	B dist
N number	B half
S protrusion	B haln
T gr	S indic
S language	B kern
N number	S language
S script	B locl
T grek	S mode
N number	B nukt
S script	N number
T gujarati-one	B pres
B abvm	B psts
B abvs	B rkrf
B akhn	B rphf
B blwf	S script
B blwm	B vatu
B blws	T gurmukhi-one
B calt	B abvm
B cjct	B abvs
B dist	B akhn
B half	B blwf
B haln	B blwm
S indic	B blws
B kern	B calt
S language	B cjct
B locl	B dist
S mode	B half
B nukt	B haln
N number	S indic
B pres	B kern
B psts	S language
B rkrf	B locl
B rphf	S mode
S script	B nukt
B vatu	N number
T gujarati-two	B pres
B abvm	B pstf
B abvs	B psts
B akhn	B rphf
B blwf	S script
B blwm	B vatu
B blws	T gurmukhi-two
B calt	B abvm

B abvs	B rlig
B akhn	S script
B blwf	T hr
B blwm	S language
B blws	N number
B calt	S script
B cjct	T hu
B dist	S language
B half	N number
B haln	S script
S indic	T indic-common
B kern	B abvm
S language	B abvs
B locl	B akhn
S mode	B blwm
B nukt	B blws
N number	B calt
B pres	B dist
B pstf	B haln
B psts	S indic
B rphf	B kern
S script	S language
B vatu	B locl
T hebrew	S mode
B analyze	B nukt
S autolanguage	N number
S autoscript	B pres
B calt	B psts
B ccmp	B rphf
B clig	T inlinenumbers
B curs	N number
B dlig	B pnum
B fina	B tnum
B init	T is
B isol	S language
B kern	N number
S language	S script
B liga	T it
B mark	S language
B medi	N number
B mkmk	S script
S mode	T ja
N number	S language
B reordercombining	N number

```
  S script                              B dist
T jamoforms                             B half
  B ljmo                                B haln
  N number                              S indic
  B tjmo                                B kern
  B vjmo                                S language
T just-os                               B locl
  S mode                                S mode
  N number                              B nukt
  B onum                                N number
T kannada-one                           B pref
  B abvm                                B pres
  B abvs                                B pstf
  B akhn                                B psts
  B blwf                                B rphf
  B blwm                                S script
  B blws                              T la
  B calt                                S language
  B cjct                                N number
  B dist                                S script
  B half                             T latn
  B haln                                N number
  S indic                               S script
  B kern                             T letterspacing
  S language                            B ccmp
  B locl                                B clig
  S mode                                B dlig
  B nukt                                S keepligatures
  N number                              B liga
  B pref                                N number
  B pres                                B rlig
  B pstf                             T ligatures
  B psts                                S autolanguage
  B rphf                                S autoscript
  S script                              B checkmissing
T kannada-two                           B curs
  B abvm                                B kern
  B abvs                                B liga
  B akhn                                B mark
  B blwf                                B mkmk
  B blwm                                S mode
  B blws                                N number
  B calt                                S script
  B cjct                                S textcontrol
```

```
B wipemath                          S indic
T lm-math-bold                      B kern
  S effect                          S language
  N number                          B locl
T lowercasing                       S mode
  B lowercasing                     B nukt
  N number                          N number
T malayalam-one                     B pref
  B abvm                            B pres
  B abvs                            B pstf
  B akhn                            B psts
  B blwf                            B rphf
  B blwm                            S script
  B blws                          T math
  B calt                            B compactmath
  B cjct                            B flattenaccents
  B dist                            B kern
  B half                            S language
  B haln                            B mathalternates
  S indic                           S mathexpansion
  B kern                            S mode
  S language                        N number
  B locl                            S script
  S mode                            B ssty
  B nukt                            B wipemath
  N number                        T math-script
  B pref                            B compactmath
  B pres                            B flattenaccents
  B pstf                            B kern
  B psts                            S language
  B rphf                            B mathalternates
  S script                          S mathexpansion
T malayalam-two                     S mode
  B abvm                            N number
  B abvs                            S script
  B akhn                            N ssty
  B blwf                            B wipemath
  B blwm                          T math-scriptscript
  B blws                            B compactmath
  B calt                            B flattenaccents
  B cjct                            B kern
  B dist                            S language
  B half                            B mathalternates
  B haln                            S mathexpansion
```

S mode	S mode
N number	S mset
S script	N number
N ssty	B rclt
B wipemath	B rlig
T math-text	S script
B compactmath	S textcontrol
B flattenaccents	B wipemath
B kern	T nl
S language	S language
B mathalternates	N number
S mathexpansion	S script
S mode	T none
N number	B features
S script	S mode
B ssty	N number
B wipemath	T oldstyle
T mathematics	S autolanguage
B compactmath	S autoscript
B flattenaccents	B checkmissing
B kern	B curs
S language	B kern
B mathalternates	B liga
S mathexpansion	B mark
S mode	B mkmk
N number	S mode
S script	N number
B wipemath	B onum
T mixed	S script
T mongolian	S textcontrol
S autolanguage	B wipemath
S autoscript	T oldstylenumbers
B calt	N number
B checkmissing	B onum
B curs	T original
B fina	S autolanguage
B init	S autoscript
B isol	B checkmissing
B itlc	B curs
B kern	B itlc
B liga	B kern
B mark	B liga
B medi	B mark
B mkmk	B mkmk

S mode	B nukt
N number	N number
S script	B pres
S textcontrol	B pstf
B wipemath	B psts
T oriya-one	B rphf
B abvm	S script
B abvs	T pl
B akhn	S language
B blwf	N number
B blwm	S script
B blws	T primes
B calt	N number
B cjct	B primes
B dist	T pt
B haln	S language
S indic	N number
B kern	S script
S language	T quality
B locl	S expansion
S mode	N number
B nukt	S protrusion
N number	T reordercombining
B pres	N number
B pstf	B reordercombining
B psts	T ro
B rphf	S language
S script	N number
T oriya-two	S script
B abvm	T ru
B abvs	S language
B akhn	N number
B blwf	S script
B blwm	T semitic-complete
B blws	B analyze
B calt	S autolanguage
B cjct	S autoscript
B dist	B calt
B haln	B ccmp
S indic	B clig
B kern	B curs
S language	B dlig
B locl	B fina
S mode	B init

```
  B isol                              N number
  B kern                              B rlig
  S language                          S script
  B liga                            T simplehebrew
  B mark                              B analyze
  B medi                              S autolanguage
  B mkmk                              S autoscript
  S mode                              B calt
  N number                            B ccmp
  B rlig                              B curs
T semitic-simple                      B fina
  B analyze                           B init
  S autolanguage                      B isol
  S autoscript                        B kern
  B calt                              S language
  B ccmp                              B mark
  B curs                              B medi
  B fina                              B mkmk
  B init                              S mode
  B isol                              N number
  B kern                              B rlig
  S language                          S script
  B mark                            T sk
  B medi                              S language
  B mkmk                              N number
  S mode                              S script
  N number                          T sl
  B rlig                              S language
T simplearabic                        N number
  B analyze                           S script
  S autolanguage                    T slanted
  S autoscript                        N number
  B calt                              N slant
  B ccmp                            T smallcaps
  B curs                              S autolanguage
  B fina                              S autoscript
  B init                              B checkmissing
  B isol                              B curs
  B kern                              B kern
  S language                          B mark
  B mark                              B mkmk
  B medi                              S mode
  B mkmk                              N number
  S mode                              S script
```

B smcp
S textcontrol
B wipemath
T sv
  S language
  N number
  S script
T syriac
  B analyze
  S autolanguage
  S autoscript
  B calt
  B ccmp
  B clig
  B curs
  B dlig
  B fin2
  B fin3
  B fina
  B init
  B isol
  B kern
  S language
  B liga
  B mark
  B med2
  B medi
  B mkmk
  S mode
  N number
  B rlig
  S script
T system:tabnum
  B lnum
  N number
  B tnum
T tabledigits
  N number
  B tabledigits
  B tnum
T tabularnumbers
  N number
  B pnum
  B tnum

T tamil-one
  B abvm
  B abvs
  B akhn
  B blwm
  B blws
  B calt
  B dist
  B half
  B haln
  S indic
  B kern
  S language
  B locl
  S mode
  B nukt
  N number
  B pref
  B pres
  B psts
  B rphf
  S script
T tamil-two
  B abvm
  B abvs
  B akhn
  B blwm
  B blws
  B calt
  B dist
  B half
  B haln
  S indic
  B kern
  S language
  B locl
  S mode
  B nukt
  N number
  B pref
  B pres
  B psts
  B rphf
  S script

```
T telugu-one                          B pref
  B abvm                              B pres
  B abvs                              B pstf
  B akhn                              B psts
  B blwf                              B rphf
  B blwm                              S script
  B blws                            T th
  B calt                              S language
  B cjct                              N number
  B dist                              S script
  B half                            T tibetan
  B haln                              B abvm
  S indic                             B abvs
  B kern                              S autolanguage
  S language                          S autoscript
  B locl                              B blwm
  S mode                              B blws
  B nukt                              B calt
  N number                            B ccmp
  B pref                              B checkmissing
  B pres                              B curs
  B pstf                              B kern
  B psts                              S language
  B rphf                              B liga
  S script                            B locl
T telugu-two                          B mark
  B abvm                              B mkmk
  B abvs                              S mode
  B akhn                              N number
  B blwf                              S script
  B blwm                              S textcontrol
  B blws                              B wipemath
  B calt                            T tr
  B cjct                              S language
  B dist                              N number
  B half                              S script
  B haln                            T uk
  S indic                             S language
  B kern                              N number
  S language                          S script
  B locl                            T uppercasing
  S mode                              N number
  B nukt                              B uppercasing
  N number                          T us
```

S language		F showcontext	
N number		F splitcontext	
S script		D synonyms	
T virtualmath		D variants	
B compactmath		**symbols**	table
B flattenaccents		T emoji	
B kern		F checked	
S language		F resolved	
B mathalternates		F uselibrary	
S mathexpansion		**tables**	table
S mode		**toeffect**	function
N number		**tracers**	table
S script		**treatments**	table
B wipemath		F applyfixes	
T vn		D data	
S language		S filename	
N number		F ignoredfile	
S script		F report	
T zero		F trace	
N number		**typefaces**	table
B zero			

functions (context)

dummy function

graphics (context)

backgrounds   table
- F fetchmultipar
- F pair
- F path
- F point

bitmaps   table
- F flush
- F new
- F placeholder
- F tocontext

bpsize   function
colorspaces   table
identifiers   table
- F bitmap
- F jp2
- F jpeg
- F jpg
- F png

identify   function
registerpdfcompactor   function
registerpdffont   function
synchronizers   table
- F collapse
- F collect
- F extend
- F getbottom
- F getd
- F geth
- F getkind
- F getsize
- F gettask
- F gettop
- F getw
- F getx
- F gety
- F prune

gzip (context)

compress	function	**load**	function
compressed	function	**save**	function
decompress	function	**suffix**	function

helper (context)

getprofile	function	**snaplist**	function
mathnested	function	**traversecharmethod**	function
mathprocess	function	**traverseglyphmethod**	function
mathstep	function	**traversehorizontal**	function
snapindeed	function	**traversevertical**	function

images (context)

check	function	B crop	
checksize	function	B media	
copy	function	B none	
create	function	B trim	
embed	function	**storedata**	function
embedfromstore	function	**totable**	function
fetchdata	function	**types**	table
keys	table	N jbig2	
print	function	N jp2	
resetdata	function	N jpg	
resetstore	function	N none	
scan	function	N pdf	
serialize	function	N png	
sizes	table	N stream	
B art		**wrap**	function
B bleed			

interactions (context)

attachments data table
fields   table
    F clone
    F define
    F defineset
    F insert
general   table
    F getidentity
    F getidentityvariable
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 data table
pages   table
    F setpagetransition
    F setupcanvas
references table
    F setclosedocumentaction
    F setclosepageaction
    F setopendocumentaction
    F setopenpageaction
renderings data table

interfaces (context)

arrays	table	**namesofscanners**	table
cachedsetups	data table	**namespaces**	table
cachesetup	function	F define	
cardinals	table	F list	
checkedspecification	function	**numbers**	table
complete	data table	**registernamespace**	function
constants	data table	**registerscanner**	function
corenamespaces	data table	**scanners**	data table
currentinterface	string	**setconstant**	function
currentresponse	string	**setcount**	function
definecommand	function	**setdimen**	function
defined	function	**setelement**	function
doifelsemessage	function	**setformat**	function
elements	data table	**setmacro**	function
floats	table	**setmessage**	function
formats	data table	**setmessages**	function
getmessage	function	**settranslation**	function
getnamespace	function	**setupstrings**	data table
getsetupstring	function	**setvariable**	function
hashedsetups	data table	**showmessage**	function
implement	function	**storedscanners**	data table
integers	table	**tolist**	function
interfacedcommand	function	**translations**	data table
interfaces	table	**usednamespaces**	data table
knownscanner	function	**variables**	data table
message	function	**writestatus**	function
nameofscanner	function		

io (basic lua)

ask	function	**open**	overloaded function
bytes	function	**output**	overloaded function
characters	function	**pathseparator**	string
close	function	**popen**	overloaded function
copydata	function	**read**	function
exists	function	**readall**	function
fileseparator	string	**readnumber**	function
flush	function	**readstring**	function
gobble	function	**savedata**	function
input	overloaded function	**size**	function
lines	overloaded function	**stderr**	userdata
loadchunk	function	**stdin**	userdata
loaddata	function	**stdout**	userdata
loadlines	function	**tmpfile**	function
newreader	function	**type**	function
noflines	function	**write**	function

job (context)

comment	function		D	collected
datasets	table		F	countervalue
D	collected		F	extend
F	extend		F	realpage
F	getdata		F	realpageorder
F	setdata		F	setstate
D	tobesaved		D	tobesaved
disablesave	function		**parwrappers**	table
embedded	table		D	collected
D	collected		D	tobesaved
D	tobesaved		**positions**	table
fileobjreferences	table		F	b_column
D	collected		F	b_region
D	tobesaved		F	c
files	table		D	collected
D	collected		F	column
F	context		F	columnofpos
B	forcerun		F	copy
F	run		F	depth
D	tobesaved		F	e_column
getrandomseed	function		F	e_region
initialize	function		F	enhance
linkedlists	table		F	extra
D	collected		F	get
D	tobesaved		F	getcolumndata
load	function		F	getfree
loadother	function		F	gethpos
meshedup	table		F	gethvrpos
D	collected		F	getpos
D	tobesaved		F	getreserved
objects	table		F	getrpos
D	collected		F	getsync
F	get		F	gettobesaved
F	number		F	getvpos
F	page		F	hangafter
F	save		F	hangindent
F	set		F	height
D	tobesaved		F	hsize
pack	boolean		N	lastr
packversion	number		N	lastx
pagestates	table		N	lasty

F leftskip		F whd	
F lowerleft		F width	
F lowerright		F x	
F markregionbox		F xy	
F n		F y	
F onsamepage		**register**	function
F overlapping		**save**	function
F p		**structure**	table
F page		D collected	
F paragraph		T components	
F parindent		T namestack	
F position		T tobesaved	
F r		T branches	
F region		S name	
F registerhandlers		S type	
F replace		**variables**	table
F rightskip		D checksums	
F set		D collected	
F setall		F getchecksum	
F setregionbox		F makechecksum	
F setspec		F restore	
F settobesaved		F save	
D tobesaved		F setchecksum	
F upperleft		D tobesaved	
F upperright		**version**	number
F used			

language (basic tex)

clean	function	**id**	function
clearhyphenation	function	**new**	function
clearpatterns	function	**patterns**	function
current	function	**postexhyphenchar**	function
gethjcode	function	**posthyphenchar**	function
has_language	function	**preexhyphenchar**	function
hyphenate	function	**prehyphenchar**	function
hyphenation	function	**sethjcode**	function
hyphenationmin	function	**setwordhandler**	function

languages (context)

addgoodiesdata	function		F installmethod
addgoodiesfile	function		F lasttrace
appliedoptions	table		F loadpatterns
associate	function		F registerexception
associated	data table		F registerpattern
association	function		F setfeatures
counters	data table	**installed**	function
current	function	**installhandler**	function
data	data table	**labels**	table
decimals	data table		F define
define	function		F split
explicithyphen	function	**loadable**	function
flatten	function	**loadwords**	function
frequencies	table	**logger**	table
	F averagecharwidth		F report
	F getdata	**nofflattened**	function
getdata	function	**numbers**	data table
getnumber	function	**postexhyphenchar**	function
goodiefiles	function	**posthyphenchar**	function
hjcounts	table	**preexhyphenchar**	function
hyphenate	function	**prehyphenchar**	function
hyphenators	table	**registered**	data table
	T dictionaries	**registeredactions**	table
	D featuresets	**replacements**	table
	F handler		F add
	T methods		F addlist
	F expanded		F handler
	B none		F set
	F original	**serializediscretionary**	function
	F tex	**setexceptions**	function
	F traditional	**setgoodieshandler**	function
	F popmethod	**setoptions**	function
	F pushmethod	**setpatterns**	function
	F setmethod	**setsynonym**	function
	F setup	**setwordhandler**	function
	F showhyphenationtrace	**showdiscretionaries**	function
	T traditional	**strippedgoodiewords**	function
	F definefeatures	**tolang**	function
	F gettrace	**transliteration**	table
	F hyphenate		F exception
	F injecthyphens		F handler

F register			**visualizediscretionaries**	function
F set			**words**	table
F use			F check	
unload	function		T data	
urls	table		F disable	
D characters			F enable	
N lefthyphenmin			T enablers	
D mapping			B enables	
B packslashes			F found	
N righthyphenmin			F load	
F setcharacters			T methods	
version	number		N threshold	

layouts (context)

getcanvas	function	**status**	table
getpagedimensions	function	F isleftpage	
setupcanvas	function	F leftorrightpageaction	

lfs (extra lua)

attributes	overloaded function	**link**	overloaded function
chdir	overloaded function	**mkdir**	overloaded function
currentdir	function	**mkdirs**	function
dir	overloaded function	**modification**	function
isdir	overloaded function	**readlink**	function
isfile	overloaded function	**rmdir**	overloaded function
isfound	function	**setexecutable**	function
isreadabledir	function	**symlink**	function
isreadablefile	function	**symlinktarget**	function
iswriteabledir	function	**touch**	overloaded function
iswriteablefile	function	**walkdir**	function

libraries (context)

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

lmx (context)

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

logs (context)

application	function	**setformats**	function
categories	function	**setformatters**	function
direct	function	**setlogfile**	function
disable	function	**setmessenger**	function
enable	function	**setprocessor**	function
finalactions	function	**settarget**	function
flush	function	**settimedlog**	function
loggingerrors	function	**settranslations**	function
messenger	function	**show**	function
new	function	**start_page_number**	function
newline	function	**start_run**	function
poplogfile	function	**starterrorlogging**	function
poptarget	function	**startfilelogging**	function
private	table	**status**	function
F enablepagetiming		**stop_page_number**	function
F getpagetiming		**stoperrorlogging**	function
pushlogfile	function	**stopfilelogging**	function
pushtarget	function	**subdirect**	function
registerfinalactions	function	**subreport**	function
report	function	**system**	function
reporter	function	**texerrormessage**	function
resetlogfile	function	**writer**	function

lpdf (context)

action	function	**copystring**	function
adddocumentcolorspace	function	**copyunicode**	function
adddocumentextgstate	function	**deferredobject**	function
adddocumentpattern	function	**delayedobject**	function
adddocumentshade	function	**destinationspecification**	function
addtocatalog	function	**dictionary**	function
addtoinfo	function	**docstring**	function
addtonames	function	**encodingvalues**	table
addtopageattributes	function	N base16	
addtopageresources	function	N base85	
addtopagesattributes	function	N decoded	
addxmpinfo	function	N encoded	
annotationspecification	function	N plain	
array	function	N utf16be	
attachmentsymbols	function	N utf16le	
boolean	function	**epdf**	table
border	function	F allcontent	
checkedkey	function	F analyzefonts	
checkedresources	function	F contentplugin	
checkedvalue	function	F contenttostring	
circularshade	function	F contenttotext	
close	function	D encryptioncodes	
cmykcode	function	F expanded	
collectedresources	function	F expandwidths	
color	function	F fontplugin	
colorspace	function	F getpagecontent	
colorspaceconstants	data table	F getstructure	
colorspec	function	T helpers	
colorvalue	function	F tounicodetable	
colorvalues	function	T image	
commentsymbols	function	F close	
compressdata	function	F copy	
compresslevel	function	F new	
constant	function	F open	
copyarray	function	F query	
copyboolean	function	F load	
copyconstant	function	F mergewidths	
copydictionary	function	D objectcodes	
copyfloat	function	F objectrange	
copyinteger	function	F objecttype	
copynumber	function	F pageplugin	

	F parsecontent		N Password
	F producer		N PopUp
	T resolvers		N PushButton
	F destinations		N Radio
	F embeddedfiles		N RadiosInUnison
	F javascripts		N ReadOnly
	F layers		N Required
	F pages		N RichText
	F structure		N Sort
	F widgets		N file
	F unload		N fixed
	F verboseobject		N nocheck
escaped	function		N protected
finalizedocument	function		N readonly
finalizepage	function		N required
finalizesignature	function		N sorted
finishtransparencycode	function		N unavailable
flags	table	**flushfonts**	function
	T annotations	**flushgroup**	function
	N AutoView	**flushobject**	function
	N Hidden	**flushstreamfileobject**	function
	N Invisible	**flushstreamobject**	function
	N Locked	**fonts**	table
	N LockedContents		F color_direct
	N NoRotate		F color_indirect
	N NoView	**formats**	data table
	N NoZoom	**frombytes**	function
	N Print	**fromeight**	function
	N Printable	**frompdfdoc**	function
	N ReadOnly	**fromsixteen**	function
	N ToggleNoView	**getcatalog**	function
	N auto	**getcompression**	function
	N hidden	**getfontname**	function
	N printable	**getfontobjectnumber**	function
	T widgets	**getformatoption**	function
	N Comb	**getinfo**	function
	N CommitOnSelChange	**getmatrix**	function
	N DoNotScroll	**getnofpages**	function
	N DoNotSpellCheck	**getpageproperties**	function
	N Edit	**getpagereference**	function
	N FileSelect	**getpagetags**	function
	N MultiLine	**getpos**	function
	N NoExport	**gettrailerid**	function
	N NoToggleToOff	**getversion**	function

getxformname	function		N assemble
graycode	function		N extract
h_hex_2	table		N fillin
S			N modify
S			N print
S			N quality
S		**preparesignature**	function
S		**print**	function
S		**procset**	function
S (		**protectresources**	boolean
S)		**quads**	function
S \		**rectangle**	function
h_hex_4	table	**reference**	function
hasmatrix	function	**registerannotation**	function
immediateobject	function	**registerdestination**	function
includeimage	function	**registerdocumentfinalizer**	function
initialize	function	**registerfontmethod**	function
injectors	table	**registerinitializer**	function
F bitmap		**registerpagefinalizer**	function
F jp2		**registerpattern**	function
F jpg		**registersignature**	function
F png		**replacexmpinfo**	function
injectxmpinfo	function	**reserveobject**	function
insertxmpinfo	function	**rgbcode**	function
lastreferredpage	function	**rotationcm**	function
layerreference	function	**setcompression**	function
limited	function	**setencryption**	function
linearshade	function	**setpageorder**	function
literal	function	**setpagestate**	function
majorversion	function	**setpagetag**	function
makenametree	function	**setversion**	function
minorversion	function	**sharedobject**	function
noffontregistries	function	**shareobject**	function
nofpages	function	**shareobjectreference**	function
null	function	**spotcode**	function
number	function	**stream**	function
object	function	**string**	function
objectcompresslevel	function	**supportedformats**	function
pagereference	function	**tocidset**	function
patternstream	function	**toeight**	function
pdfcolor	function	**topdfdoc**	function
pdftimestamp	function	**topermissions**	function
permissions	table	**tosixteen**	function
N access		**transparency**	function
N add			

transparencycode	function		N dejavusansmonoboldttf-1-0-0
transparencygroups	table	**usedfontobjects**	table
B none			N dejavusansmonoboldttf-1-0-0
transparencyvalue	function	**usedfontstreams**	data table
unicode	function	**usedindices**	table
usedcharacters	table		T dejavusansmonoboldttf-1-0-0
usedfontnames	table	**verbose**	function

lpeg (basic lua)

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

lua (basic tex)

addnibble	function	**getruntime**	function
bytecode	table	**getstacktop**	function
bytedata	data table	**getstartupfile**	function
bytedone	table	**getstringkeys**	function
callbytecode	function	**getversion**	function
comparekeys	function	**lastbytecode**	number
finalizeinitex	function	**messages**	data table
firstbytecode	number	**newindex**	function
get_functions_table	function	**newtable**	function
getallkeys	function	**numbers**	data table
getbytecode	function	**registercode**	function
getcheckedkeys	function	**registeredcodes**	function
getcurrenttime	function	**registerinitexfinalizer**	function
getdebuginfo	function	**registername**	function
getexitcode	function	**setbytecode**	function
getfunctionstable	overloaded function	**setexitcode**	function
getnibble	function	**setnibble**	function
getnumerickeys	function	**startupfile**	string
getpreciseseconds	function	**subnibble**	function
getpreciseticks	function	**version**	string

luac (extra lua)

inspect function
print function

luatex (context)

abort	function	F disable	
cleanup	function	F enable	
cleanuptempfiles	function	F finish	
currentfile	function	F pause	
currentlevel	function	F popline	
currenttotal	function	F pushline	
poprunstate	function	F registerdisabler	
pushrunstate	function	F registerenabler	
registerdumpactions	function	F resetfilename	
registerpageactions	function	F resume	
registerstartactions	function	F setfilename	
registerstopactions	function	F setup	
registertempfile	function	F start	
starttime	number	F stop	
synctex	table	F wrapup	
F blockfilename		**wrapup**	function
F collect			

lxml (context)

addindex	function		**filter**	function
all	function		**filterlist**	function
applyfunction	function		**first**	function
applyselectors	function		**flush**	function
att	function		**flushlinewise**	function
attribute	function		**flushsetups**	function
badinclusions	function		**flushspacewise**	function
chainattribute	function		~~**get_id**~~	~~function~~
checkindex	function		**getid**	function
collected	function		**getindex**	function
command	function		**id**	function
concat	function		**idsplitter**	userdata
concatrange	function		**ifatt**	function
content	function		**ifattempty**	function
context	function		**include**	function
convert	function		**inclusion**	function
count	function		**inclusions**	function
delete	function		**index**	function
depth	function		**inlineverbatim**	function
direct	function		**installsetup**	function
directives	table		**last**	function
F after			**lastatt**	function
F before			**lastmatch**	function
F handle			**lastpar**	function
F load			**load**	function
F setup			**loadbuffer**	function
displayverbatim	function		**loaddata**	function
doif	function		**loaded**	table
doifelse	function		**main**	function
doifelseempty	function		**match**	function
doifelsetext	function		**name**	function
doifempty	function		**namespace**	function
doifnot	function		**nonspace**	function
doifnotempty	function		**par**	function
doifnottext	function		**param**	function
doiftext	function		**parameter**	function
element	function		**path**	function
elements	function		**popmatch**	function
entities	data table		**pos**	function
fileline	function		**position**	function
filename	function		**pure**	function

pushmatch	function		**sorters**	table
raw	function			F add
rawroot	function			F compare
rawtex	function			F flush
refatt	function			F reset
register	function			F show
registerentity	function			F sort
removesetup	function		**splitid**	function
replace	function		**startraw**	function
resetcdata	function		**startunescaped**	function
resetsetups	function		**stopraw**	function
resolvedentity	function		**stopunescaped**	function
root	function		**store**	function
save	function		**strip**	function
serialize	function		**stripped**	function
setaction	function		**tag**	function
setatt	function		**texatt**	function
setattribute	function		**text**	function
setcdata	function		**tobuffer**	function
setcommandtonone	function		**tofile**	function
setcommandtotext	function		**toparameters**	function
setpar	function		**toverbatim**	function
setparam	function		**verbatim**	function
setparameter	function		**withindex**	function
setsetup	function		**xmltexhandler**	data table
snippet	function			

math (basic lua)

abs	function		**min**	function
acos	function		**mininteger**	number
asin	function		**mod**	function
atan	function		**modf**	function
atan2	function		**odd**	function
ceil	function		**pi**	number
ceiling	function		**pow**	function
cos	function		**rad**	function
cosd	function		**random**	overloaded function
cosh	function		**randomseed**	function
deg	function		**round**	function
div	function		**setrandomseedi**	function
even	function		**sin**	function
exp	function		**sind**	function
floor	function		**sinh**	function
fmod	function		**sqrt**	function
huge	number		**tan**	function
initialseed	number		**tand**	function
ldexp	function		**tanh**	function
log	function		**tointeger**	function
log10	function		**type**	function
max	function		**ult**	function
maxinteger	number			

mathematics (context)

addfallbacks	function	**familyname**	function
addvariant	function	**functiontype**	function
alphabets	data table	**gaps**	data table
alternatives	data table	**getblobindex**	function
beforepassingfonttotex	function	**getboth**	function
big	function	**getdomainname**	function
boldmap	data table	**getextensibledata**	function
categories	table	**getmathblob**	function
D functions		**getoptionallabel**	function
charactersets	data table	**getstyle**	function
checkaftercopyingfont	function	**gettextblob**	function
classes	data table	**getverboselabel**	function
classnames	data table	**horizontalcode**	function
codes	data table	**initializeparameters**	function
define	function	**makefont**	function
dictionaries	table	**mapremap**	data table
D data		**markblobindexdone**	function
D defaults		**overloadparameters**	function
D groups		**preset**	function
F groupset		**presets**	table
F groupsetgroup		T less	
F name		T more	
D names		T zero	
F registercharacter		**privatebase**	number
F registergroup		**registerextensible**	function
F registergroupset		**registersimplematrix**	function
D sets		**registerverboselabel**	function
D variants		**remapalphabets**	function
dimensions	function	**renderextensible**	function
disablecollecting	function	**renderings**	table
domainlabels	table	D mappings	
domainnames	table	D numbers	
N default		D sets	
enablecollecting	function	**renderset**	function
extensiblecode	function	**resetattributes**	function
extensibles	data table	**scaleparameters**	function
extrabase	number	**setextensibledata**	function
fallbacks	table	**setmathsymbol**	function
F apply		**sets**	data table
F install		**setsnapping**	function
fallbackstyleattr	function	**setvariant**	function

styles	data table
syncboth	function
syncname	function
syncstyle	function
tagging	table
B mfenced	
toengineclass	function
toname	function
tostyle	function
tweakaftercopyingfont	function
tweakbeforecopyingfont	function
tweaks	table

- F accentdimensions
- F action
- F addactuarian
- F addarrows
- F addbars
- F addcomposites
- F addequals
- F addfourier
- F addmirrors
- F addparts
- F addprivates
- F addrules
- F addscripts
- F bigslots
- F checkaccents
- F checkspacing
- F copyaccents
- T datasets
  - T accentdimensions
    - T accent
    - T over
    - T under
  - T addarrows
  - T addscripts
  - T checkspacing
  - T copyaccents
  - T fixprimes
  - T fixslashes
  - T wipecues
- F dimensions
- F extendaccents
- F fallbacks

- F fixaccents
- F fixellipses
- F fixintegrals
- F fixoldschool
- F fixprimes
- F fixradicals
- F fixslashes
- F fixvariants
- F flattenaccents
- F fontname
- F inspect
- F keepbases
- F kernpairs
- F kerns
- T kernsets
  - T .,
- F margins
- F message
- F moveitalics
- F movelimits
- F parameters
- F radicalbodymargins
- F radicaldegreeanchors
- F replace
- F replacealphabets
- F replacerules
- F setoptions
- F setovershoots
- F showinfo
- F simplifykerns
- F sortvariants
- F staircase
- T subsets
  - T acenorsuvxz
  - T bhklt
  - T d
  - T dotless
  - T f
  - T gjqy
  - T horizontalfences
  - T i
  - T integrals
  - T letterlike
  - T mw

T	p	**utfmathaccent**	function
F	substitute	**utfmathclass**	function
F	topanchors	**utfmathcommand**	function
F	tweaks	**utfmathfiller**	function
F	version	**utfmathstretch**	function
F	wipeanchors	**variantcode**	function
F	wipecues	**variantcount**	function
F	wipeitalics	**virtualize**	function
F	wipevariants	**virtualized**	data table

md5 (extra lua)

HEX	function		**sum**	function
dec	function		**sumHEXA**	function
hex	function		**sumhexa**	function

metapost (context)

checkformat	function
checktracingonline	function
cm	function
codes	table

N addto

N ampersand

N and

N assignment

N atleast

N begingroup

N btex

N capsule

N colon

N comma

N controls

N curl

N cycle

N definedmacro

N delimiters

N endgroup

N equals

N etex

N everyjob

N exittest

N expandafter

N fiorelse

N if

N input

N interim

N internal

N iteration

N leftbrace

N leftbracket

N leftdelimiter

N let

N macrodef

N macrospecial

N maketext

N message

N mode

N newbytemap

N newinternal

N nullary

N numeric

N of

N ofbinary

N onlyset

N parametertype

N pathconnect

N pathjoin

N plusorminus

N primarybinary

N primarydef

N property

N protection

N relax

N repeatloop

N rightbrace

N rightbracket

N rightdelimiter

N runscript

N save

N scantokens

N secondarybinary

N secondarydef

N semicolon

N setbounds

N shipout

N show

N slash

N step

N stop

N str

N string

N tag

N tension

N tertiarybinary

N tertiarydef

N thingstoadd

N to

N typename

N unary

N undefinedcs		**getparameter**	function
N until		**getparameterpreset**	function
N void		**getparameterset**	function
N with		**getrecord**	function
N within		**getstatistics**	function
N write		**gettext**	function
colorinitializer	function	**gettolerance**	function
convert	function	**graphic**	function
currentmpx	function	**graphic_base_pass**	function
currentmpxstatus	function	**hascurvature**	function
defaultformat	string	**includesvgbuffer**	function
defaultinstance	string	**includesvgfile**	function
defaultmethod	string	**installplugin**	function
directrun	function	**isobject**	function
escaped	function	**knownparameters**	table
exectime	table	**lastlog**	string
extensiondata	data table	**load**	function
filterclippath	function	**maketext**	function
flush	function	**mesh**	function
flushers	table	**metafonts**	table
T pdf		**metafun**	table
F flushfigure		F interpolate	
F startfigure		F topath	
F stopfigure		**mptopdf**	table
F textfigure		F convertmpstopdf	
F tocomment		N nofconverted	
flushnormalpath	function	**n**	number
fonts	table	**newlogger**	function
F define		**nofruns**	number
format_number	function	**nofscriptruns**	function
format_string	function	**nvformat**	function
formatnumber	function	**pdfliterals**	function
getbackendoption	function	**pluginactions**	function
getbendtolerance	function	**popformat**	function
getbuffer	function	**popscriptrunner**	function
getclippath	function	**popvariable**	function
getextensions	function	**popvariables**	function
getextradata	function	**preparetextextsdata**	function
gethashentries	function	**process**	function
getinstancebyname	function	**processing**	function
getinstanceinfo	function	**processplugins**	function
getinstancenames	function	**properties**	table
getjobdata	function	**pushformat**	function
getmovetolerance	function	**pushscriptrunner**	function

pushvariable	function	N bp	
pushvariables	function	N cm	
quitonerror	boolean	N em	
reducetogray	boolean	N ex	
registerdirect	function	N in	
registerscript	function	N mm	
registertokens	function	N pc	
remappedtext	function	N pt	
remaptext	function	N px	
reporterror	function		
reportsvgfonts	function	**svgglyphtomp**	function
reset	function	**svgshapestomp**	function
resetbackendoptions	function	**svgshapestopdf**	function
resetlastlog	function	**svgsplitcolor**	function
resetplugins	function	**svgtomp**	function
run	function	**svgtopdf**	function
runinternal	function	**sxsy**	function
runscript	function	**tex**	table
scanparameters	function	F get	
scriptindex	function	F reset	
setbendtolerance	function	F set	
setbuffer	function	F setfrombuffer	
setextensions	function		
setlogging	function	**texerrors**	boolean
setmovetolerance	function	**texexp**	function
setoutercolor	function	**theclippath**	function
setparameter	function	**tographic**	function
setparameterset	function	**totable**	function
setrecord	function	**types**	table
settext	function	N boolean	
settolerance	function	N cmykcolor	
setvariable	function	N color	
showlog	boolean	N dependent	
showsvgpage	function	N independent	
simple	function	N known	
splitprescript	function	N nep	
startgraphic	function	N numeric	
startsvghashing	function	N pair	
stopgraphic	function	N path	
stopsvghashing	function	N pen	
svformat	function	N picture	
svgcolorremapper	function	N protodependent	
svgfactors	table	N string	
N %		N structured	
		N suffixedmacro	
		N tokenlist	

N transform
N unknownboolean
N unknownnep
N unknownpath
N unknownpen
N unknownpicture
N unknownstring

N unsuffixedmacro
N vacuous

typesvgpage   function
unload   function
untagvariable   function
variables   table

mime (context)

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

mp (context)

autoinject	function	**format**	function
aux	function	**formatted**	function
F boolean		**fprint**	function
F color		**get**	table
F direct		F hashentry	
F draw		**getbytemap**	function
F fill		**getbytemapdata**	function
F flush		**getlastaddtype**	function
F fprint		**graphformat**	function
F integer		**inject**	function
F number		F boolean	
F numeric		F cmykcolor	
F pair		F color	
F pairpoints		F integer	
F path		F number	
F pathpoints		F numeric	
F points		F pair	
F print		F path	
F quadruple		F pt	
F quadruplepoints		F quadruplet	
F quoted		F string	
F size		F transform	
F string		F triplet	
F transform		F vector	
F triplet		F vectors	
F tripletpoints		F whatever	
F vprint		F whd	
boolean	function	F xy	
bytemap_load_from_file	function	**integer**	function
cleaned	function	**lmt_color_functions**	table
color	function	F shade	
dataset	function	F step	
datasets	function	**lmt_contours_bitmap_get**	function
F load		**lmt_contours_bitmap_set**	function
direct	function	**lmt_contours_cleanup**	function
draw	function	**lmt_contours_color**	function
expandtex	function	**lmt_contours_edge_get_band**	function
fill	function	**lmt_contours_edge_get_cell**	function
fillbytemap	function	**lmt_contours_edge_paths**	function
flatten	function	**lmt_contours_edge_set**	function
flush	function	**lmt_contours_edge_set_by_band**	function

lmt_contours_edge_set_by_cell	function	**mf_blob_dimensions**	function
lmt_contours_format	function	**mf_blob_index**	function
lmt_contours_function	function	**mf_blob_new**	function
lmt_contours_maxmean	function	**mf_blob_raw_content**	function
lmt_contours_maxz	function	**mf_blob_raw_dimensions**	function
lmt_contours_minmean	function	**mf_blob_raw_reset**	function
lmt_contours_minz	function	**mf_blob_raw_toutf**	function
lmt_contours_nofvalues	function	**mf_blob_raw_wipe**	function
lmt_contours_nx	function	**mf_blob_size**	function
lmt_contours_ny	function	**mf_blob_width**	function
lmt_contours_range	function	**mf_external_figure**	function
lmt_contours_shade_paths	function	**mf_finish_saving_data**	function
lmt_contours_shade_set	function	**mf_formatted_text**	function
lmt_contours_shape_paths	function	**mf_get_outline_text**	function
lmt_contours_start	function	**mf_graphic_text**	function
lmt_contours_stop	function	**mf_inject_blob**	function
lmt_contours_value	function	**mf_map_move**	function
lmt_contours_xrange	function	**mf_map_text**	function
lmt_contours_yrange	function	**mf_named_color**	function
lmt_function_x	function	**mf_outline_text**	function
lmt_glyphshape_accent	function	**mf_save_data**	function
lmt_glyphshape_baseline	function	**mf_script_index**	function
lmt_glyphshape_boundingbox	function	**mf_start_saving_data**	function
lmt_glyphshape_depth	function	**mf_stop_saving_data**	function
lmt_glyphshape_height	function	**mode**	function
lmt_glyphshape_italic	function	**n**	function
lmt_glyphshape_llx	function	**newbytemap**	function
lmt_glyphshape_n	function	**number**	function
lmt_glyphshape_path	function	**numeric**	function
lmt_glyphshape_start	function	**pair**	function
lmt_glyphshape_stop	function	**pairpoints**	function
lmt_glyphshape_usedbox	function	**path**	function
lmt_glyphshape_usedline	function	**pathpoints**	function
lmt_glyphshape_width	function	**points**	function
lmt_mesh_set	function	**print**	function
lmt_mesh_update	function	F boolean	
lmt_poisson_generate	function	F color	
lmt_start_potrace	function	F direct	
lmt_step_potrace	function	F draw	
lmt_stop_potrace	function	F fill	
lmt_surface_do	function	F flush	
lmt_svg_include	function	F fprint	
mesh_register	function	F integer	
mf_blob_add	function	F number	

F numeric		F next	
F pair		F number	
F pairpoints		F numeric	
F path		F pair	
F pathpoints		F path	
F points		F pen	
F print		F property	
F quadruple		F string	
F quadruplepoints		F symbol	
F quoted		F token	
F size		T tokenscanners	
F string		F transform	
F transform		T typescanners	
F triplet		F whatever	
F tripletpoints		**set**	table
F vprint		**setbytemap**	function
processingmode	function	**size**	function
quadruple	function	**skip**	table
quadruplepoints	function	F token	
quoted	function		
report	function	**solve**	function
scan	table	**string**	function
F boolean		**systemmode**	function
F cmykcolor		**transform**	function
F color		**triplet**	function
F expression		**tripletpoints**	function
F integer		**vprint**	function

mplib (extra tex)

execute	function	**injectpair**	function
expandtex	function	**injectpath**	function
fillbytemap	function	**injectstring**	function
finder	function	**injecttransform**	function
finders	table	**injectvector**	function
F file		**injectvectors**	function
F mpstemplate		**injectwhatever**	function
finish	function	**new**	overloaded function
getbytemap	function	**newbytemap**	function
getbytemapdata	function	**peninfo**	function
getcallbackstate	function	**propertycodes**	table
getcodes	function	**realtimelogging**	boolean
getcolormodels	function	**scanboolean**	function
getfields	function	**scancmykcolor**	function
gethashentries	function	**scancolor**	function
gethashentry	function	**scanexpression**	function
getinternalactions	function	**scaninteger**	function
getknotstates	function	**scannext**	function
getlastaddtype	function	**scannumber**	function
getlogtargets	function	**scannumeric**	function
getobjecttypes	function	**scanpair**	function
getresultstatus	function	**scanpath**	function
getscantypes	function	**scanpen**	function
getstates	function	**scanproperty**	function
getstatistics	function	**scanstring**	function
getstatus	function	**scansymbol**	function
gettolerance	function	**scantoken**	function
gettype	function	**scantransform**	function
gettypes	function	**setbytemap**	function
injectboolean	function	**settolerance**	function
injectcmykcolor	function	**showcontext**	function
injectcolor	function	**skiptoken**	function
injectinteger	function	**solvepath**	function
injectnumber	function	**version**	function
injectnumeric	function		

noads (context)

handlers   table
- F alternates
- F autofences
- F classes
- F collapse
- F dictionaries
- F export
- F families
- F fencing
- F intervals
- F kernpairs
- F makeup
- F normalize
- F numbers
- F relocate
- F render
- F showtree
- F snap
- F spacing
- F suspicious
- F tags
- F unscript
- F unstack
- F variants

process   function
processnested   function
processors   table
- T dictionaries
- T intervals
- T suspicious
- T unscript
- T unstack

processouter   function

node (basic tex)

checkdiscretionaries	function
checkdiscretionary	function
copy	function
copylist	function
count	function
currentattributes	function
dimensions	function
direct	table

F addmargins
F addxoffset
F addxymargins
F addyoffset
F appendaftertail
F appendcurrenttail
F beginofmath
F checkdiscretionaries
F checkdiscretionary
F collapsing
F copy
F copylist
F copyonly
F count
F currentattributes
F dimensions
F effectiveglue
F endofmath
F exchange
F fields
F findattribute
F findattributerange
F findnode
F firstchar
F firstglyph
F firstglyphnode
F firstitalicglyph
F flattendiscretionaries
F flattenleaders
F flushlist
F flushnode
F free
F freeze

F getanchors
F getattribute
F getattributelist
F getattributes
F getboth
F getbottom
F getbottomdelimiter
F getbox
F getcachestate
F getchar
F getchardict
F getcharspec
F getchoice
F getclass
F getcontrol
F getcornerkerns
F getcurrenttail
F getdata
F getdegree
F getdelimiter
F getdenominator
F getdepth
F getdirection
F getdisc
F getdiscpart
F getexcept
F getexpansion
F getfam
F getfield
F getfielderror
F getfirstdirectioninlist
F getfont
F getgeometry
F getglue
F getglyphdata
F getglyphdimensions
F getheight
F getid
F getidsubtype
F getidsubtypenext
F getindex

F getinputfields	F getusage
F getkern	F getusedattributes
F getkerndimension	F getweight
F getlanguage	F getwhd
F getleader	F getwidth
F getleftdelimiter	F getwordrange
F getlist	F getxscale
F getlistdimensions	F getxyscales
F getmvllist	F getyscale
F getnext	F gluetostring
F getnodes	F hasattribute
F getnormalizedline	F hasdimensions
F getnucleus	F hasdiscoption
F getnumerator	F hasfield
F getoffsets	F hasgeometry
F getoptions	F hasglyph
F getorientation	F hasglyphoption
F getparstate	F hasidsubtype
F getpenalty	F hasusage
F getpost	F hpack
F getpre	F hyphenating
F getprev	F id
F getprime	F ignoremathskip
F getpropertiestable	F insertafter
F getproperty	F insertbefore
F getreplace	F insertcurrenthead
F getrightdelimiter	F isboth
F getruledimensions	F ischar
F getscale	F isdirect
F getscales	F isglyph
F getscript	F isitalicglyph
F getscripts	F isloop
F getshift	F isnext
F getslant	F isnextchar
F getspeciallist	F isnextglyph
F getstate	F isnode
F getsub	F isprev
F getsubpre	F isprevchar
F getsubtype	F isprevglyph
F getsup	F issimilarglyph
F getsuppre	F isspeciallist
F gettop	F isvalid
F gettopdelimiter	F iszeroglue
F gettotal	F kerning

F lastnode
F length
F ligaturing
F makeextensible
F migrate
F mlisttohlist
F naturalhsize
F naturalwidth
F new
F newcontinuationatom
F newmathglyph
F newtextglyph
F patchattributes
F patchparshape
F prependbeforehead
F prependcurrenttail
F protectglyph
F protectglyphs
F protectglyphsbase
F protectglyphsnone
F protrusionskippable
F rangedimensions
F remove
F removefromlist
F repack
F reverse
F serialized
F setanchors
F setattribute
F setattributelist
F setattributes
F setboth
F setbottom
F setbottomdelimiter
F setbox
F setchar
F setchardict
F setchoice
F setclass
F setcontrol
F setcurrenttail
F setdata
F setdegree
F setdelimiter

F setdenominator
F setdepth
F setdirection
F setdisc
F setdiscpart
F setexcept
F setexpansion
F setfam
F setfield
F setfielderror
F setfont
F setgeometry
F setglue
F setglyphdata
F setheight
F setindex
F setinputfields
F setkern
F setlanguage
F setleader
F setleftdelimiter
F setlink
F setlist
F setnext
F setnucleus
F setnumerator
F setoffsets
F setoptions
F setorientation
F setpenalty
F setpost
F setpre
F setprev
F setprime
F setproperty
F setreplace
F setrightdelimiter
F setruledimensions
F setscale
F setscales
F setscript
F setscripts
F setshift
F setslant

F setspeciallist		F usesfont	
F setsplit		F vbalance	
F setstate		F verticalbreak	
F setsub		F vpack	
F setsubpre		F write	
F setsubtype		F xscaled	
F setsup		F yscaled	
F setsuppre		**effectiveglue**	function
F settop		**endofmath**	function
F settopdelimiter		**family_font**	function
F settotal		**fields**	function
F setweight		**findattribute**	function
F setwhd		**flattendiscretionaries**	function
F setwidth		**flushlist**	function
F show		**flushnode**	function
F size		**free**	function
F slide		**getattribute**	function
F softenhyphens		**getcachestate**	function
F startofpar		**getfield**	function
F subtypes		**getfielderror**	function
F tail		**getglue**	function
F todirect		**getpropertiestable**	function
F tonode		**getproperty**	function
F tostring		**gluetostring**	function
F tovaliddirect		**hasattribute**	function
F traverse		**hasfield**	function
F traversechar		**hasglyph**	function
F traversecontent		**hpack**	function
F traverseglyph		**hyphenating**	function
F traverseid		**id**	function
F traverseitalic		**insertafter**	function
F traverseleader		**insertbefore**	function
F traverselist		**instock**	function
F type		**inuse**	function
F types		**isnode**	function
F unprotectglyph		**iszeroglue**	function
F unprotectglyphs		**kerning**	function
F unsetattribute		**lastnode**	function
F unsetattributes		**length**	function
F updatefirstandbotmark		**ligaturing**	function
F updatefirstmarks		**makeextensible**	function
F updatemarks		**mlisttohlist**	function
F updatetopmarks		**new**	function
F usedlist		**protectglyph**	function

protectglyphs	function	**todirect**	function
protrusionskippable	function	**tonode**	function
rangedimensions	function	**tostring**	function
remove	function	**traverse**	function
serialized	function	**traverseid**	function
setattribute	function	**type**	function
setfield	function	**types**	function
setfielderror	function	**unprotectglyph**	function
setglue	function	**unprotectglyphs**	function
setproperty	function	**unsetattribute**	function
show	function	**usedlist**	function
size	function	**usesfont**	function
slide	function	**vpack**	function
subtypes	function	**write**	function
tail	function		

nodes (context)

accentcodes	data table	**directionvalues**	data table
adaptive	table	**dirvalues**	data table
F handlehorizontal		**disccodes**	data table
F handlevertical		**discretionarycodes**	data table
T methods		**fencecodes**	data table
F set		**fields**	function
aligned	function	**fieldtypes**	table
append	function	**fillcodes**	data table
apply	function	**fillvalues**	data table
applyvisuals	function	**firstdirinbox**	function
astable	function	**flush**	function
attributecodes	data table	**flushlist**	function
basepoints	function	**flushnode**	function
boundarycodes	data table	**fractioncodes**	data table
boxes	table	**fullhpack**	function
F count		**getattr**	function
F dimensions		**getattribute**	function
F direct		**getboth**	function
F dispose		**getbox**	function
F found		**getchar**	function
F prune		**getfield**	function
F reset		**getfont**	function
F restore		**getid**	function
F save		**getleader**	function
F savenode		**getlist**	function
builders	table	**getnext**	function
choicecodes	data table	**getprev**	function
concat	function	**getproperty**	function
copy	function	**getsubtype**	function
copy_node	function	**gluecodes**	data table
copylist	function	**glyphcodes**	data table
countall	function	**handlers**	table
currentattributes	function	F adjusters	
delete	function	F aligncharacter	
destinations	table	F backgrounds	
N attribute		F backgroundspage	
T done		F backgroundsvbox	
F handler		F characters	
T stack		F checkglyphs	
dircodes	data table	F checkparcounter	
directioncodes	data table	F cleanupbox	

F cleanuppage		**F setspacekerns**	
F export		**insertafter**	function
F finalizebox		**insertbefore**	function
F finalizelist		**insertlistafter**	function
F flatten		**installattributehandler**	function
F flattenline		**is_display_math**	function
T linebreakchecks		**isdirect**	function
F mathalignrelocate		**isnode**	function
F mathmatrixornaments		**isnut**	function
F mathmatrixrules		**kerncodes**	data table
F migrate		**leftmarginwidth**	function
F protectglyphs		**linefillers**	table
F recolor		F filler	
F show		F handler	
F showhyphenation		F set	
F showpreamble		**lines**	table
F stripping		T boxed	
F tabulateskip		F addlinenumbers	
F textbackgrounds		F register	
F unprotectglyphs		F setup	
F visualizehyphenation		D data	
F wipe		F finalize	
hasattribute	function	F number	
hasfield	function	**link**	function
hpack	function	**linked**	function
idsandsubtypes	function	**list**	function
idstostring	function	**listcodes**	data table
injections	table	**listtoutf**	function
F copy		**literalvalues**	data table
F getligaindex		**locate**	function
F getthreshold		**markcodes**	data table
F handler		**markers**	table
F installgetspaceboth		F get	
F installnewkern		F set	
F isspace		**mathcodes**	data table
F keepcounts		**mathvalues**	data table
F reset		**maxboxwidth**	function
F resetcounts		**migrations**	table
F setcursive		F setinserts	
F setkern		F setmarks	
F setligaindex		**new**	function
F setmark		**noadcodes**	data table
F setmove		**nodecodes**	data table
F setposition		**nopts**	function

nuts	table	F firstglyphnode
F addmargins		F firstitalicglyph
F addxoffset		F flattendiscretionaries
F addxymargins		F flattenleaders
F addyoffset		F flush
F append		F flushlist
F appendaftertail		F flushnode
F apply		F free
F applyvisuals		F freeze
F beginofmath		F fullhpack
F checkdiscretionaries		F getanchors
F checkdiscretionary		F getattr
F checkslide		F getattribute
F collapsing		F getattributelist
T colors		F getattributes
F set		F getattrlist
T components		F getattrs
F copynocomponents		F getboth
F copyonlyglyphs		F getbottom
F count		F getbottomdelimiter
F flush		F getbox
F get		F getboxglue
F set		F getchar
F concat		F getchardict
F copy		F getcharspec
F copy_properties		F getchoice
F copylist		F getclass
F copynode		F getcomponents
F copyonly		F getcornerkerns
F copyvisual		F getdata
F count		F getdegree
F countall		F getdelimiter
F currentattributes		F getdenominator
F delete		F getdepth
F dimensions		F getdirection
F dirdimensions		F getdisc
F effectiveglue		F getdiscpart
F endofmath		F getdiscretionary
F exchange		F getexcept
F findattribute		F getexpansion
F findattributerange		F getfam
F findnode		F getfield
F firstchar		F getfirstdirectioninlist
F firstglyph		F getfont

F getgeometry

F getglue

F getglyphdata

F getglyphdimensions

F getheight

F getid

F getidsubtype

F getidsubtypenext

F getindex

F getinputfields

F getkern

F getkerndimension

F getlang

F getlanguage

F getleader

F getleftdelimiter

F getlist

F getlistdimensions

F getmiddle

F getmiddledelimiter

F getmvllist

F getnext

F getnormalizedline

F getnucleus

F getnumerator

F getoffsets

F getoptions

F getorientation

F getparstate

F getpenalty

F getpost

F getpre

F getprev

F getprime

F getprop

F getreplace

F getrightdelimiter

F getruledata

F getruledimensions

F getscale

F getscales

F getscript

F getscripts

F getshift

F getslant

F getspeciallist

F getstate

F getsub

F getsubpre

F getsubtype

F getsup

F getsuppre

F getsurround

F gettop

F gettopdelimiter

F gettotal

F getusedattributes

F getvalue

F getweight

F getwhd

F getwidth

F getwordrange

F getxscale

F getxyscales

F getyscale

F gluetostring

F hasattribute

F hasdimensions

F hasdiscoption

F hasfield

F hasgeometry

F hasglyph

F hasglyphoption

F hasidsubtype

F hpack

F hyphenating

F ignoremathskip

F insertafter

F insertbefore

F insertlistafter

F is_display_math

F isboth

F ischar

F isdirect

F isdone

F isglyph

F isitalicglyph

F isnext

F isnextchar	F glue
F isnextglyph	F gluespec
F isnode	F glyph
F isnut	F hlist
F isprev	F imagerule
F isprevchar	F indentskip
F isprevglyph	F italiccorrection
F issimilarglyph	F italickern
F iszeroglue	F kern
F kerning	F latelua
F lastnode	F leader
F length	F lefthangskip
F ligaturing	F leftmarginkern
F link	F leftskip
F linked	F lineskip
F locate	F literal
F migrate	F luaboundary
F migratebox	F mathchar
F mlisttohlist	F mathtextchar
F naturalsize	F negatedglue
F naturalwidth	F noad
F nestedtracedslide	F originliteral
F new	F outlinerule
F newcontinuationatom	F pageliteral
F newmathglyph	F penalty
F openup	F radical
F patchattributes	F rawliteral
F patchparshape	F register
T pool	F restore
F accent	F righthangskip
F baselineskip	F rightmarginkern
F boundary	F rightskip
F boxrule	F rule
F choice	F save
F cleanup	F savepos
F delim	F setmatrix
F delimiter	F setstate
F direction	F shrink
F directliteral	F spacefontkern
F disc	F spacingrule
F emptyrule	F startrotation
F fence	F startscaling
F fontkern	F stock
F fraction	F stoprotation

F stopscaling

F stretch

F strutrule

F subbox

F submlist

F temp

F usage

F userdefined

T userids

F usernode

F userrule

F virtualrule

F vlist

F wordboundary

F prepend

F prependbeforehead

F processranges

F processwords

F protectglyph

F protectglyphs

F protectglyphsbase

F protectglyphsnone

F protrusionskippable

F rangedimensions

F rawprop

F reference

F rehpack

F remove

F removefromlist

F repack

F repackhlist

F replace

F reverse

T rules

  T ruleactions

    F box

    F draw

    F fill

    F mp

    F stroke

  F userrule

F serialized

F setanchors

F setattr

F setattribute

F setattributelist

F setattributes

F setattrlist

F setattrs

F setboth

F setbottom

F setbox

F setboxglue

F setchar

F setchardict

F setchoice

F setclass

F setcomponents

F setdata

F setdegree

F setdelimiter

F setdenominator

F setdepth

F setdirection

F setdisc

F setdiscpart

F setdiscretionary

F setexcept

F setexpansion

F setfam

F setfield

F setfont

F setgeometry

F setglue

F setglyphdata

F setheight

F setinputfields

F setkern

F setlang

F setlanguage

F setleader

F setleftdelimiter

F setlink

F setlist

F setmiddledelimiter

F setnext

F setnucleus

F setnumerator

F setoffsets	F tail
F setoptions	F takeattr
F setorientation	F takebox
F setparproperty	F takelist
F setpenalty	F theprop
F setpost	F tonode
F setpre	F tonodes
F setprev	F tonut
F setprime	F tosequence
F setprop	F tostring
F setreplace	F tracedslide
F setrightdelimiter	F traverse
F setruledata	F traversechar
F setruledimensions	F traversecontent
F setscale	F traverseglyph
F setscales	F traverseid
F setscript	F traverseitalic
F setscripts	F traverseleader
F setshift	F traverselist
F setslant	T traversers
F setspeciallist	F alignrecord
F setsplit	F boundary
F setstate	F char
F setsub	F content
F setsubpre	F dir
F setsubtype	F disc
F setsup	F glue
F setsuppre	F glyph
F setsurround	F hlist
F settop	F leader
F setvalue	F list
F setvisual	F mark
F setvisuals	F next
F setweight	F node
F setwhd	F penalty
F setwidth	F rule
F show	F unset
F slide	F vlist
F softenhyphens	F whatsit
F somepenalty	T treversers
F somespace	F char
F splitbox	F content
F startofpar	F glyph
F striprange	F leader

F list		F baselineskip	
F node		F cleanup	
T typesetters		F directliteral	
F tohbox		F glyph	
F tohpack		F hlist	
F tonodes		F latelua	
F tovbox		F leader	
F tovpack		F lineskip	
F unprotectglyph		F literal	
F unprotectglyphs		F originliteral	
F unsetattribute		F register	
F unsetattributes		F restore	
F untracedslide		F save	
F updatefirstandbotmark		F savepos	
F updatefirstmarks		F setmatrix	
F updatemarks		F stock	
F updatetopmarks		F usage	
F usedlist		F usernode	
F usesfont		F vlist	
F verticalbreak		**prepend**	function
F vianodes		**print**	function
F vianuts		**processors**	table
F vpack		F trace_glyph_run_a	
F write		F trace_glyph_run_b	
F xscaled		**properties**	table
F yscaled		T data	
packlist	function	**pts**	function
parcodes	data table	**radicalcodes**	data table
penaltycodes	data table	**references**	table
plugindata	table	N attribute	
F finalizer		T done	
F initializer		F handler	
S name		T stack	
T namespace		**rehpack**	function
N attribute		**remove**	function
D data		**repackhlist**	function
F enable		**replace**	function
F handler		**report**	function
F register		**rightmarginwidth**	function
D registered		**rulecodes**	data table
D values		**rules**	table
F processor		F handler	
points	function	F process	
pool	table	F set	

F userrule		**takeattr**	function
serialize	function	**takebox**	function
serializebox	function	**tasks**	table
serialized	function	F actions	
setattr	function	F appendaction	
setattribute	function	F disableaction	
setattrlist	function	F disablegroup	
setboth	function	F enableaction	
setbox	function	F enablegroup	
setboxtonaturalwd	function	F freeze	
setchar	function	F freezegroup	
setfield	function	F new	
setfont	function	F prependaction	
setleader	function	F removeaction	
setlink	function	F replaceaction	
setlist	function	F restart	
setnext	function	F setaction	
setprev	function	F showactions	
setproperty	function	F table	
shadows	table	**tobasepoints**	function
F handler		**tocentimeters**	function
F set		**tociceros**	function
shifts	table	**todidots**	function
F handler		**todimen**	function
F set		**toinches**	function
showboxes	function	**tomillimeters**	function
showlist	function	**tonode**	function
showsimplelist	function	**tonodes**	function
skipcodes	data table	**tonut**	function
snapshots	table	**topicas**	function
F getsamples		**topoints**	function
F resetsamples		**toscaledpoints**	function
F takesample		**tosequence**	function
somepenalty	function	**tostring**	function
somespace	function	**totable**	function
specialskipcodes	table	**totree**	function
splitbox	function	**toutf**	function
startofpar	function	**tracers**	table
stripdiscretionaries	function	T colors	
stripping	table	F reset	
T glyphs		F set	
F set		F setlist	
subtypes	data table	F directions	
tail	function	F fontchar	

T frequencies			**vianodes**	function
F register			**vianuts**	function
T pool			**visualizebox**	function
T nodes			**visualizers**	table
F rule			F attribute	
T nuts			T attributes	
F rule			F box	
F resetproperties			F definelayer	
F rule			F enable	
F setlist			T filters	
F setproperties			N continuation	
F start			N hglue	
T steppers			N hkern	
F check			N hpenalty	
F codes			N toddler	
F features			N vglue	
F font			N vkern	
F glyphs			N vpenalty	
F message			F getusedfont	
F messages			F handler	
F nofsteps			F markfonts	
F register			T modes	
F reset			N boundary	
F start			N depth	
F stop			N dir	
F stop			N discretionary	
T transparencies			N expansion	
F reset			N fontkern	
F set			N glue	
F setlist			N glyph	
traverse	function		N hbox	
traverseid	function		N hglue	
typesetters	table		N hkern	
F hbox			N hpenalty	
F hpack			N insert	
F tohbox			N italic	
F tohpack			N kern	
F tonodes			N line	
F tovbox			N marginkern	
F tovpack			N mark	
F vpack			N math	
unsetattribute	function		N mathglue	
upcomingproperties	function		N mathkern	
usedlist	function		N origin	

```
N par                              N vpenalty
N penalty                          N vtop
N simple                           N whatsit
N simplehbox                    F register
N simplevbox                    F registercache
N simplevtop                    F setfont
N space                         F setlayer
N strut                         F setruledglyph
N toddler                       F setvisual
N user
N vbox                  vpack                          function
N vglue                 whatsitcodes                 data table
N vkern                 write                          function
```

number (context)

	function	**to16dot16**	function
basepoints	function	**tobasepoints**	function
bytetodecimal	function	**tobitstring**	function
compactfloat	function	**tocentimeters**	function
decimaltobyte	function	**tociceros**	function
dimenfactors	data table	**tocontext**	function
formatted	function	**todidots**	function
formattedfloat	function	**todimen**	function
fractiontobyte	function	**toediths**	function
idiv	function	**toevenhex**	function
maxdimen	number	**toinches**	function
nopts	function	**tomillimeters**	function
nubasepoints	function	**tonumberf**	function
nupoints	function	**tonumberg**	function
percent	function	**topicas**	function
points	function	**topoints**	function
pts	function	**toscaled**	function
signed	function	**toscaledpoints**	function
sparseexponent	function	**totoves**	function
splitdimen	function	**valid**	function

objects (context)

data	table	**page**	function
dimensions	function	**reference**	function
found	function	**register**	function
n	number	**restore**	function

optional (context)

curl   table
- F escape
- F fetch
- F getversion
- F initialize
- F unescape

foreign   table
- F abivalues
- F getbuffer
- F initialize
- F load
- F newbuffer
- F totable
- F types

ghostscript   table
- F execute
- F initialize

graphicsmagick   table
- F execute
- F getnoisetypes
- F initialize

hb   table
- F getshapers
- F getversion
- F initialize
- F loadfont
- F shapestring

imagemagick   table
- F execute
- F initialize

kpse   table
- F expand_braces
- F expand_path
- F expand_var
- F find_file
- F find_files
- F get_file_types
- F initialize
- F readable_file
- F set_program_name
- F var_value

library   table
- F load

loaded   table

lz4   table
- F compress
- F decompresssize
- F framecompress
- F framedecompress
- F initialize

lzma   table
- F compress
- F decompress
- F initialize

lzo   table
- F compress
- F decompresssize
- F initialize

mujs   table
- F dofile
- F execute
- F initialize
- F reset
- F setclosefile
- F setconsole
- F setfindfile
- F setopenfile
- F setreadfile
- F setseekfile

mysql   table
- F close
- F execute
- F getmessage
- F initialize
- F open

openssl   table
- F getversion
- F initialize
- F sign
- F verify

postgress   table
- F close

F execute

F getmessage

F initialize

F open

sqlite   table

F close

F execute

F getmessage

F initialize

F open

zint   table

F execute

F initialize

zstd   table

F compress

F decompress

F initialize

os (basic lua)

__getenv__	function	**platform**	string
__setenv__	function	**remove**	overloaded function
binsuffix	string	**rename**	overloaded function
binsuffixes	table	**resultof**	function
bits	number	**runtime**	function
clock	function	**selfarg**	table
converttime	function	**selfbin**	string
date	overloaded function	**selfcore**	string
difftime	function	**selfdir**	string
enableansi	function	**selflink**	string
env	data table	**selfname**	string
execute	overloaded function	**selfpath**	string
exit	overloaded function	**serialwrite**	function
fulltime	function	**setenv**	overloaded function
getcodepage	function	**setexitcode**	function
getenv	overloaded function	**setlocale**	overloaded function
getnamevalues	function	**sleep**	function
gettimeofday	function	**startuptime**	function
gettypevalues	function	**time**	function
getunamefields	function	**timezone**	function
isleapyear	function	**tmpname**	function
launch	function	**today**	function
libsuffix	string	**type**	string
localtime	function	**uname**	function
name	string	**uuid**	function
newline	string	**validdate**	function
nofdays	function	**weekday**	function
now	function	**where**	function
pipeto	function	**which**	function

package (basic lua)

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

pagebuilders (context)

columnsets   table
  F add
  F addmvl
  F block
  F blockrows
  F check
  F clean
  T data
  F define
  F definesub
  F delayedsheet
  F finishflush
  F flushareas
  F flushcolumn
  F goto
  F gotoslot
  F limit
  F noto
  F prepareflush
  F presetsheets
  F presetspreadsheets
  F put
  F putdirect
  F registerarea
  F registersheet
  F registerspreadsheets
  F reset
  F resetdirect

  F reshape
  F setarea
  F setextra
  F sethsize
  F sethspan
  F setlines
  F setmvl
  F setpresent
  F setproperties
  F setstart
  F shape
  F showshape
  F state
  F status
  F submvl
  F submvlbalance
injections   table
  F flushafter
  F flushbefore
  F save
mixedcolumns   table
  F cleanup
  F finalize
  F getlist
  F getrest
  F getsplit
  F setsplit

pdf (context)

immediateobj function

pdfe (extra tex)

arraytotable	function	**getnumber**	function
close	function	**getobjectrange**	function
closestream	function	**getpage**	function
dictionarytotable	function	**getpages**	function
getarray	function	**getpermissions**	function
getboolean	function	**getsize**	function
getbox	function	**getstatus**	function
getcatalog	function	**getstatusvalues**	function
getdictionary	function	**getstream**	function
getencodingvalues	function	**getstring**	function
getfieldtypes	function	**gettrailer**	function
getfromarray	function	**getversion**	function
getfromdictionary	function	**new**	function
getfromobject	function	**open**	function
getfromreference	function	**openfile**	function
getfromstream	function	**openstream**	function
getinfo	function	**pagestotable**	function
getinteger	function	**readfromstream**	function
getmemoryusage	function	**readwholestream**	function
getname	function	**type**	function
getnofobjects	function	**unencrypt**	function
getnofpages	function		

physics (context)

units table

    F registershortcut

F registerunit

D tables

pngdecode (extra tex)

applyfilter	function	**splitmask**	function
expand	function	**tocmyk**	function
interlace	function	**tomask**	function
makemask	function		

posit (extra lua)

NaN	function		**exp2**	function
NaR	function		**expand**	function
__add	function		**floor**	function
__band	function		**frombyte**	function
__bor	function		**fromchar**	function
__bxor	function		**fromposit**	function
__div	function		**integer**	function
__eq	function		**log**	function
__le	function		**log10**	function
__lt	function		**log1p**	function
__mul	function		**log2**	function
__name	string		**logb**	function
__pow	function		**max**	function
__shl	function		**min**	function
__shr	function		**modf**	function
__sub	function		**new**	function
__tostring	function		**pow**	function
__unm	function		**rotate**	function
abs	function		**round**	function
acos	function		**rounded**	function
asin	function		**shift**	function
atan	function		**sin**	function
band	function		**sqrt**	function
bor	function		**tan**	function
bxor	function		**tobyte**	function
ceil	function		**tochar**	function
conj	function		**tonumber**	function
copy	function		**toposit**	function
cos	function		**tostring**	function
exp	function			

potrace (extra tex)

checked	function	**getnewfields**	function
concat	function	**getpolicyvalues**	function
contourplot	function	**getprocessfields**	function
convert	function	**new**	function
count	function	**process**	function
flush	function	**setbitmap**	function
free	function	**stripped**	function
fromfile	function	**totable**	function
getbitmap	function	**trace**	function

publications (context)

addtexentry	function	**concatstate**	function
analyze	function	**converttoxml**	function
anywhere	function	**currentspecification**	table
authorcache	data table	S author	
authorcollapsers	data table	T categories	
authorhashers	table	T article	
F invertedshort		S category	
F normal		T extra	
F normalinverted		T fields	
F normalshort		S author	
F sequential		S editor	
F sequentialshort		S journal	
F short		S keywords	
authormap	data table	S note	
authortoregister	function	S number	
btx	table	S pages	
casters	table	S title	
F author		S volume	
F keyword		S year	
F pagenumber		T optional	
F range		T required	
checkeddataset	function	T sets	
citevariants	table	T author	
F author		T virtual	
F authornum		T book	
F authoryear		S category	
F authoryears		T extra	
F category		T fields	
F default		S address	
F entry		S author	
F index		S edition	
F keywords		S editor	
F num		S keywords	
F page		S note	
F short		S number	
F tag		S publisher	
F textnum		S subtitle	
F year		S title	
collected	data table	S volume	
components	table	S year	
F author		T optional	

F load			F endnote	
F save			F json	
lastofrange	function		F lua	
lists	table		F refman	
F collectentries			F registercleaner	
F combiinlist			F xml	
F fetchentries		**loadreplacementfile**	function	
F filterall		**meanings**	table	
F flushcombi		**new**	function	
F flushentry		**okay**	function	
F flushtag		**oneorrange**	function	
T methods		**parenttag**	function	
F dataset		**permitted**	function	
F force		**prerollcmdstring**	function	
F global		**refman_to_btx**	function	
F label		**resolvedname**	function	
F local		**save**	function	
F nofregistered		**savers**	table	
F prepareentries		F bib		
F register		F lua		
F sameasprevious		F xml		
T sorters		**search**	function	
F cite		**setcategory**	function	
F dataset		**setspecification**	function	
F default		**singularorplural**	function	
F index		**sortedentries**	function	
F list		**sortmethods**	table	
F reference		T authortitle		
F short		T sequence		
F used		T authoryear		
F uservariable		T sequence		
listvariants	table		T dataset		
F default		T sequence		
F index		T key		
F num		T sequence		
F short		**specifications**	table	
F tag		T default		
load	function		S author		
loadbibdata	function		S comment		
loaddefinitionfile	function		S copyright		
loaders	table		S name		
F bbl		S version		
F bib		D virtual		
F buffer		**splitauthor**	function	

splitoneauthor	function	F showdatasetcompleteness	
statistics	table	F showdatasetfields	
N nofbytes		F showentry	
N nofdatasets		F showfields	
N nofdefinitions		F showhashedauthors	
N nofshortcuts		F showtables	
tables	table	F showvariants	
D implicits		**typesetters**	table
D origins		F author	
D privates		F string	
D sets		**usedataset**	function
D specials		**usedentries**	function
D types		**writers**	table
D virtuals		F author	
tags	function	F keyword	
tracers	table	F pagenumber	
F showdatasetauthors		F range	

qrcodegen (context)

bitmap   function
generate function

regimes (context)

backmapping	data table	**mapping**	data table
cleanup	function	**pop**	function
disable	function	**process**	function
enable	function	**push**	function
fromregime	function	**toregime**	function
list	function	**translate**	function

resolvers (context)

allprefixes	function	**findfiles**	function
appendhash	function	**findgivenfile**	function
automount	function	**findgivenfiles**	function
booleanvariable	function	**findlib**	function
cacheversion	string	**findpath**	function
checkedvariable	function	**findpk**	function
cleanedpathlist	function	**findtexfile**	function
cleaners	data table	**findwildcardfile**	function
cleanpath	function	**findwildcardfiles**	function
cleanpathlist	function	**formatofsuffix**	function
cleanupbinfile	function	**formatofvariable**	function
concatinators	data table	**formats**	data table
configbanner	string	**foundintree**	function
configurationfiles	function	**foundintrees**	function
dangerous	data table	**generators**	data table
datastate	function	**get_from_content**	function
decompressors	table	**getenv**	function
F register		**getextrapaths**	function
F unregister		**getfilehashes**	function
defaultsuffixes	table	**gethashes**	function
dirstatus	function	**getownpath**	function
dowithfilesandreport	function	**getreadfilename**	function
dowithfilesintree	function	**hashers**	data table
dowithpath	function	**homedir**	string
dowithvariable	function	**ignorelibrary**	function
executers	table	**initialized**	function
expandbraces	function	**installinputfilehandler**	function
expandedpathfromlist	function	**installinputlinehandler**	function
expandedpathlist	function	**jobpath**	function
expandedpathlistfromvariable	function	**jobs**	table
expandpath	function	F collectstructure	
expandpathfromvariable	function	F currentcomponent	
expansion	function	F currentenvironment	
extendtexmfvariable	function	F currentproduct	
filtered_from_content	function	F currentproject	
find_file	function	F currentstructure	
find_files	function	F justacomponent	
findbinfile	function	F namelist	
findctxfile	function	D processors	
finders	data table	F productcomponent	
findfile	function	F usefile	

joinpath	function	**registerfile**	function
knownvariables	function	**registerfilehash**	function
libraries	table	**registerintrees**	function
F optionalloaded		**registermethod**	function
F validoptional		**registerzipfile**	function
load	function	**relations**	data table
loadbinfile	function	**renew**	function
loaders	data table	**renewcache**	function
loadlualib	function	**repath**	function
loadtexfile	function	**reset**	function
loadtime	function	**resetextrapaths**	function
locateformat	function	**resetresolve**	function
locators	data table	**resolve**	function
luacnffallback	string	**savers**	data table
luacnfname	string	**scandata**	function
luacnfspec	string	**scanfiles**	function
luacnfstate	string	**schemes**	table
macros	table	T cleaners	
F convertfile		F md5	
F decodecomment		F none	
F enablecomment		F strip	
F encodecomment		F cleanname	
F preprocessed		F fetchstring	
F processmk		F fetchtable	
F processmklx		F install	
F processmkvi		**setdynamic**	function
F version		**setenv**	function
maxreadlevel	number	**showpath**	function
methodhandler	function	**simplescanfiles**	function
missinglibrary	function	**splitconfigurationpath**	function
openbinfile	function	**splitexpansions**	function
openers	data table	**splitmethod**	function
openfile	function	**splitpath**	function
opentexfile	function	**stackpath**	function
ownpath	string	**starttiming**	function
popextrapath	function	**stoptiming**	function
popinputname	function	**suffixes**	data table
poppath	function	**suffixmap**	data table
prefixes	data table	**suffixofformat**	function
prependhash	function	**texdatablob**	function
pushextrapath	function	**toppath**	function
pushinputname	function	**tracers**	data table
pushpath	function	**unexpandedpath**	function
registerextrapath	function	**unexpandedpathlist**	function

unresolve	function	**validatedpath**	function
updaterelations	function	**variable**	function
updatescript	function	**variableofformat**	function
uselibrary	function	**variableofformatorsuffix**	function
usertypes	data table	**wildcardpattern**	function
usezipfile	function		

sandbox (context)

disablelibraries	function	**possiblepath**	function
disablerunners	function	**redefine**	function
enable	function	**register**	function
filehandlerone	function	**registerbinary**	function
filehandlertwo	function	**registerlibrary**	function
finalizer	function	**registerroot**	function
getrunner	function	**registerrunner**	function
initializer	function	**report**	function
iohandler	function	**setfilenamelogger**	function
logcalls	function	**setlogger**	function
logfiles	function	**setreporter**	function
original	function	**settrace**	function
overload	function	**validfilename**	function

scripts (context)

autofontfeature table

    F disable

    F enable

    F handler

colors data table

decomposehangul function

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

getdata function

getinjector function

getsplitter function

getstatus function

handlers data table

helpers data table

injectors data table

inserters table

    F nobreakspace_after

    F nobreakspace_before

    F space_after

    F space_before

    F zerowidthspace_after

    F zerowidthspace_before

installdataset function

installmethod function

numbertodataset data table

numbertohandler data table

reset function

set function

setstatus function

splitters data table

serial (context)

__gc	function	**open**	function
__name	string	**send**	function
__tostring	function	**tostring**	function
close	function	**write**	function

set (context)

contains	function		**tonumber**	function
create	function		**totable**	function
tolist	function			

sha2 (extra lua)

HASH256	function	**hash256**	function
HASH384	function	**hash384**	function
HASH512	function	**hash512**	function
HEX256	function	**hex256**	function
HEX384	function	**hex384**	function
HEX512	function	**hex512**	function
digest256	function	**sum256**	function
digest384	function	**sum384**	function
digest512	function	**sum512**	function

sio (extra lua)

read2dot14	function	**readinteger1le**	function
readbytes	function	**readinteger2**	function
readbytetable	function	**readinteger2le**	function
readcardinal1	function	**readinteger3**	function
readcardinal1le	function	**readinteger3le**	function
readcardinal2	function	**readinteger4**	function
readcardinal2le	function	**readinteger4le**	function
readcardinal3	function	**readintegertable**	function
readcardinal3le	function	**tocardinal1**	function
readcardinal4	function	**tocardinal1le**	function
readcardinal4le	function	**tocardinal2**	function
readcardinaltable	function	**tocardinal2le**	function
readcline	function	**tocardinal3**	function
readcstring	function	**tocardinal3le**	function
readfixed2	function	**tocardinal4**	function
readfixed4	function	**tocardinal4le**	function
readinteger1	function		

socket (extra lua)

BLOCKSIZE	number
_SETSIZE	number
_SOCKETINVALID	number
bind	function
choose	function
connect	function
connect4	function
connect6	function
dns	table
F getaddrinfo	
F gethostname	
F getnameinfo	
F tohostname	
F toip	
gettime	function
headers	table
T canonic	
S accept	
S accept-charset	
S accept-encoding	
S accept-language	
S accept-ranges	
S action	
S age	
S allow	
S alternate-recipient	
S arrival-date	
S authorization	
S bcc	
S cache-control	
S cc	
S comments	
S connection	
S content-description	
S content-disposition	
S content-encoding	
S content-id	
S content-language	
S content-length	
S content-location	
S content-md5	

S content-range
S content-transfer-encoding
S content-type
S cookie
S date
S diagnostic-code
S dsn-gateway
S etag
S expect
S expires
S final-log-id
S final-recipient
S from
S host
S if-match
S if-modified-since
S if-none-match
S if-range
S if-unmodified-since
S in-reply-to
S keywords
S last-attempt-date
S last-modified
S location
S max-forwards
S message-id
S mime-version
S original-envelope-id
S original-recipient
S pragma
S proxy-authenticate
S proxy-authorization
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	**newtry**	function
S	resent-date	**protect**	function
S	resent-from	**report**	function
S	resent-message-id	**select**	function
S	resent-reply-to	**sink**	function
S	resent-sender	**sinkt**	table
S	resent-to	F close-when-done	
S	retry-after	F default	
S	return-path	F http-chunked	
S	sender	F keep-open	
S	server	**skip**	function
S	smtp-remote-recipient	**sleep**	function
S	status	**source**	function
S	subject	**sourcet**	table
S	te	F by-length	
S	to	F default	
S	trailer	F http-chunked	
S	transfer-encoding	F until-closed	
S	upgrade	**tcp**	function
S	user-agent	**tcp4**	function
S	vary	**tcp6**	function
S	via	**tp**	table
S	warning	N TIMEOUT	
S	will-retry-until	F connect	
S	www-authenticate	**try**	function
S	x-mailer	**url**	table
F	lower	F absolute	
F	normalize	F build	
http	table	F build_path	
N	TIMEOUT	F escape	
S	USERAGENT	F parse	
F	genericform	F parse_path	
F	open	F unescape	
F	request		

sorters (context)

basicsorter   function
comparers   table
  F basic
constants   table
  S defaultdigits
  S defaultlanguage
  S defaultmethod
  N digitsmaximum
  N digitsoffset
  N ignoredoffset
  N replacementoffset
  T validmethods
   B ch
   B mc
   B mm
   B pc

   B pm
   B uc
   B zc
   B zm
definitions   data table
firstofsplit   function
packch   function
packuc   function
replacementlist   function
setlanguage   function
sort   function
splitters   table
  F utf
strip   function
tracers   data table
update   function

sparse (extra lua)

concat	function		**range**	function
get	function		**restore**	function
max	function		**set**	function
min	function		**traverse**	function
new	function		**wipe**	function

statistics (context)

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

status (basic tex)

getbalancestate	function	**getluastate**	function
getbufferstate	function	**getmarkstate**	function
getcallbackstate	function	**getmvlstate**	function
getconstants	function	**getneststate**	function
geterrorlinestate	function	**getnodestate**	function
geterrorstate	function	**getparameterstate**	function
getexpandstate	function	**getpoolstate**	function
getfilestate	function	**getreadstate**	function
getfontstate	function	**getsavestate**	function
gethalferrorlinestate	function	**getsparsestate**	function
gethashstate	function	**getstringstate**	function
gethyphenationstate	function	**gettexstate**	function
getinputstate	function	**gettokenstate**	function
getinsertstate	function	**getwarningstate**	function
getlanguagestate	function	**iocodes**	table
getlinebreakstate	function	**list**	function
getlookupstate	function	**resetmessages**	function

storage (context)

allocate	function	**noftables**	number
data	table	**register**	function
mark	function	**shared**	data table
marked	function	**storedfunctions**	data table
max	number	**strip**	boolean
min	number	**tofmodules**	number
nofmodules	number	**toftables**	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		**octtointeger**	function
autosingle	function		**optionalquoted**	function
booleanstring	function		**pack**	function
byte	function		**packrowscolumns**	function
bytepairs	function		**packsize**	function
bytes	function		**quote**	function
bytetable	function		**quoted**	function
char	function		**rep**	function
characterpairs	function		**replacenewlines**	function
characters	function		**reverse**	function
checkedsplit	function		**split**	function
chrtointeger	function		**splitlines**	function
collapsespaces	function		**splitup**	function
containsws	function		**strip**	function
count	function		**sub**	function
dectointeger	function		**texhashed**	function
dump	function		**texnewlines**	function
escapedpattern	function		**tformat**	function
escapedquotes	function		**toHEX**	function
explode	function		**toboolean**	function
f6	function		**tobytes**	function
find	function		**tocontext**	function
format	function		**todec**	function
formatter	function		**todimen**	function
formatters	function		**tohex**	function
fullstrip	function		**tonodes**	function
gmatch	function		**topattern**	function
gsub	function		**totable**	function
hextocharacters	function		**tounicode16**	function
hextointeger	function		**toutf**	function
is_boolean	function		**toutf32**	function
is_empty	function		**toutf8**	function
itself	function		**tracedchar**	function
len	function		**tracedchars**	table
limit	function		**unescapedquotes**	function
linetable	function		**unpack**	function
longtostring	function		**unquote**	function
lower	function		**unquoted**	function
match	function		**upper**	function
nospaces	function		**utf16toutf8**	function
nspaces	table		**utfcharacter**	function

utfcharacters	function		**utfvalue**	function
utfcharactertable	function		**utfvalues**	function
utflength	function		**utfvaluetable**	function
utfpadd	function		**valid**	function
utfpadding	function		**wordsplitter**	function

structures (context)

atlocation	function	F last	
blocks	table	F next	
D collected		F prev	
F define		F previous	
F empty		F raw	
F print		F record	
F save		F reset	
F select		F restart	
F setstate		F restore	
D states		F save	
D tobesaved		F set	
F uservariable		F setlevel	
bookmarks	table	F setoffset	
T extras		F setown	
F get		F setstate	
F mergesections		F setvalue	
F register		T specials	
F reset		F userpage	
F tosections		F subs	
F finalize		D tobesaved	
F flatten		F value	
F installhandler		F way	
F merge		**currentsectionnumber**	function
S method		**descriptions**	table
F overload		**documents**	table
F place		D data	
F register		F initialize	
F setopened		F preset	
F setup		F reset	
counters	table	**floats**	table
F add		**formulas**	table
F analyze		**helpers**	table
F check		F analyze	
D collected		F formulanumber	
F compact		F merged	
F converted		F page	
F currentvalue		F pageofinternal	
D data		F prefix	
F define		F prefixlastpage	
F first		F prefixpage	
F get		F simplify	

F	title		F	prefix
F	touserdata		F	prefixednumber

<table>
<tr><td colspan="2">inserts</td><td>table</td></tr>
</table>

F	attach		F	prefixedpage
D	data		F	process
F	define		D	pushed
F	detach		F	pushnesting
F	getdata		F	rawnumber
F	getlocation		F	rawrealpage
F	getname		F	rawuserpage
F	getnumber		F	realpage
F	nofdetached		F	reorder
F	setlocation		F	reordered
F	setup		T	result
D	stored		F	savedlistnumber

<table>
<tr><td colspan="2">itemgroups</td><td>table</td></tr>
</table>

D	collected		F	savedlistprefixednumber
D	tobesaved		F	savedlisttitle

<table>
<tr><td colspan="2">lists</td><td>table</td></tr>
</table>

F	addto		D	sectionblocks
F	analyze		F	sectionnumber
D	cached		F	size
D	collected		F	title
F	discard		D	tobesaved
F	enhance		F	use
T	enhancers		F	userdata
F	external		F	userpage
F	filter		F	uservalue

<table>
<tr><td colspan="2">marks</td><td>table</td></tr>
</table>

F	formulanumber		F	number
F	getresult		F	title

<table>
<tr><td colspan="2">notes</td><td>table</td></tr>
</table>

F	groupindex		F	check_spacing
F	hasnumberdata		F	checkpagechange
F	haspagedata		F	define
F	hastitledata		F	doifonsamepageasprevious
F	integrate		F	flushrange
F	iscached		F	get
D	kinds		F	getdeltapage
F	label		F	getinternal
F	location		F	getn
D	names		F	getstate
F	number		F	hascontent
D	ordered		F	internal
F	page		F	internalid
F	popnesting		F	listindex
			D	numbers

F	ordered	T	files
F	postpone	T	data
F	resetpostponed	F	define
F	restore	F	found
F	save	F	get
F	setstate	F	filter
D	states	F	filterdefault
F	store	D	filters
pages	**table**	D	flaginternals
F	allmarked	F	forceinnermode
F	analyze	F	from
D	collected	D	functions
F	fraction	F	get
F	getlabels	F	getcurrentlabel
F	in_body	F	getcurrentmetadata
F	is_odd	F	getcurrentprefixspec
F	mark	F	getinnermethod
F	marked	F	getinternalcachedlistreference
F	markedlist	F	getinternallistreference
N	nofpages	F	getinternalreference
F	number	F	getoutermethod
F	on_right	D	handlers
F	save	F	identify
D	tobesaved	F	import
F	toranges	F	inject
references	**table**	F	injectcurrentset
F	analyze	S	innermethod
F	checked	F	integrate
F	checkedfile	D	internals
F	checkedfileorurl	F	load
F	checkedprogram	F	loadpresets
F	checkedrealpage	F	mark
F	checkedurl	S	outermethod
D	collected	F	pagefromhash
U	componentsplitter	D	pages
F	currentmetadata	U	prefixsplitter
F	currentorder	D	productdata
D	currentset	T	programs
F	define	T	data
D	defined	F	define
D	derived	F	get
F	enhance	F	realpageofpage
D	executers	U	referencesplitter
F	export	D	referred

F numberatdepth	F flush
F numbers	F isshown
F popblock	F isused
F prefixedconverted	F meaning
F pushblock	F pages
F register	F prepare
D registered	F process
F reportstructure	F register
F save	F registershown
T sectionblockdata	F registerused
T bodypart	F reset
S bookmark	F resetall
F set	F resetlist
F setblock	F resetshown
F setchecker	F resetused
F setentry	F sort
F setinitialblock	F synonym
F setlevel	D tobesaved
F setnumber	**tags** table
F showstructure	T backend
F structuredata	T checks
F title	F marginanchor
D tobesaved	F margintext
F typesetnumber	F math
F userdata	F mrow
B verbose	F mtable
sets table	T destinationhash
F define	T extras
F get	F adddestination
F getall	F addimplicit
D setlist	F addinternal
specials table	F addreference
D collected	F combination
F retrieve	F combinationpair
F store	F delimitedsymbol
D tobesaved	F description
synonyms table	F descriptionsymbol
F analyzed	F document
D collected	F float
F compare	F formulacontent
F define	F image
F enhance	F item
F filter	F itemgroup
F finalize	F link

F	listitem	F	gettablecell
F	mmultiscripts	F	gettabulatecell
F	mover	F	handler
F	msub	T	ignored
F	msubsup	F	initializeexport
F	msup	D	labels
F	munder	F	last
F	munderover	F	lastinchain
F	paragraph	F	localexport
F	publication	F	locatedtag
F	reference	D	overloads
F	registerlocation	T	patterns
F	registerpages	U	splitter
F	registerseparator	F	pop
F	section	D	properties
F	sorting	F	push
F	subsentencesymbol	F	registerextradata
F	synonym	F	registermetadata
F	tablecell	F	restart
F	tabulate	F	setaspect
F	tabulatecell	F	setattributehash
T	finalizers	F	setcodepoint
F	descriptions	F	setcombination
T	fixes	F	setcombinationpair
F	linenumber	F	setconstruct
F	fontfaced	F	setfigure
T	listdata	F	setfloat
T	referencehash	F	setformulacontent
F	setattribute	F	sethighlight
F	tofontface	F	setitem
T	usedimages	F	setitemgroup
T	image	F	setlist
T	usedstyles	F	setnotation
T	construct	F	setnotationsymbol
T	highlight	F	setparagraph
F	current	F	setproperty
F	elementtag	F	setpublication
F	enabled	F	setregister
F	exportbox	F	setsorting
F	finishexport	F	setsynonym
F	getextradata	F	settablecell
F	getid	F	settabulatecell
F	getitemgroup	F	settagdelimitedsymbol
F	getmetadata	F	settagsubsentencesymbol

F setupexport

F setuserproperties

D specifications

F start

F stop

F strip

D taglist

T usewithcare

table (basic lua)

allkeys	function	**orderedhash**	function
append	function	**pack**	function
are_equal	function	**prepend**	function
collapsed	function	**print**	function
collapsedhash	function	**remove**	function
combine	function	**reverse**	function
compact	function	**reversed**	function
concat	function	**save**	function
contains	function	**sequenced**	function
copy	function	**serialize**	function
count	function	**setmetatablecall**	function
create	function	**setmetatableindex**	function
derive	function	**setmetatableindices**	function
deserialize	function	**setmetatablekey**	function
drop	function	**setmetatablenewindex**	function
fastcopy	function	**sort**	function
fastserialize	function	**sorted**	function
filtered	function	**sortedhash**	function
flattened	function	**sortedhashkeys**	function
fromhash	function	**sortedhashonly**	function
getmetatablekey	function	**sortedindexonly**	function
getn	function	**sortedkeys**	function
has_one_entry	function	**sortedpairs**	function
hashed	function	**sparse**	function
identical	function	**strip**	function
imerge	function	**sub**	function
imerged	function	**swapped**	function
insert	function	**tocontext**	function
is_empty	function	**tocsv**	function
is_simple_table	function	**tofile**	function
keys	function	**tohandle**	function
load	function	**tohash**	function
loweredkeys	function	**toxml**	function
makeweak	function	**twowaymapper**	function
merge	function	**unique**	function
merged	function	**unnest**	function
mirrored	function	**unpack**	function
move	function	**values**	function
ordered	function		

tex (basic tex)

amcode	table	**discpartcodes**	data table
attribute	table	**dontcomplain**	function
automigrationcodes	data table	**doublescriptoptioncodes**	data table
autoparagraphcodes	data table	**enableprimitives**	function
badness	function	**error**	function
badnessmodecodes	data table	**expandasvalue**	function
balance	function	**experiments**	data table
balancecallbackcodes	data table	**extraprimitives**	function
boundaries	table	**fatalerror**	function
D names		**fillcodes**	data table
D numbers		**flagcodes**	data table
F system		**fontidentifier**	function
box	table	**fontname**	function
boxoptioncodes	data table	**forcehmode**	function
boxresources	table	**forceinputstatefile**	function
F getbox		**forceinputstateline**	function
F getdimensions		**fprint**	function
F save		**frozenparcodes**	data table
F use		**get**	function
breakcodes	data table	**getadjustoptionvalues**	function
buildcodes	data table	**getalignmentcontextvalues**	function
catcode	table	**getamcode**	function
cccode	table	**getappendadjustcontextvalues**	function
charactercontrolcodes	data table	**getappendmigratecontextvalues**	function
charactertagcodes	data table	**getattribute**	function
chardef	function	**getautomigrationvalues**	function
classoptioncodes	data table	**getautoparagraphvalues**	function
codes	table	**getbadnessmodevalues**	function
conditionals	data table	**getbalancecallbackvalues**	function
constants	data table	**getbalanceparameterfields**	function
count	table	**getbalanceresultfields**	function
cprint	function	**getbalancestepoptionvalues**	function
ctdcatcodes	number	**getbox**	function
ctxcatcodes	number	**getboxdir**	function
definefont	function	**getboxoptionvalues**	function
delcode	table	**getboxresourcebox**	function
dimen	table	**getboxresourcedimensions**	function
dimensiondef	function	**getbreakcontextvalues**	function
directioncodes	data table	**getbuildcontextvalues**	function
directives	data table	**getcardinalvalue**	function
discoptioncodes	data table	**getcatcode**	function

getcccode	function	**getinsertwidth**	function
getcharactercontrolvalues	function	**getintegervalue**	function
getcharactertagvalues	function	**getinteraction**	function
getcount	function	**getinteractionmodes**	function
getcurrentmvl	function	**getiovalues**	function
getdelcode	function	**getkerneloptionvalues**	function
getdelcodes	function	**getkernoptionvalues**	function
getdimen	function	**getlargestusedmark**	function
getdimensionvalue	function	**getlccode**	function
getdirectionvalues	function	**getlinebreakparameterfields**	function
getdiscoptionvalues	function	**getlinebreakresultfields**	function
getdiscpartvalues	function	**getlinebreakstatevalues**	function
getdoublescriptoptionvalues	function	**getlinedir**	function
getemptyparagraphmodevalues	function	**getlist**	function
geterrorvalues	function	**getlistanchorvalues**	function
getfillvalues	function	**getlistfields**	function
getflagvalues	function	**getlistgeometryvalues**	function
getfloat	function	**getlistsignvalues**	function
getfontoffamily	function	**getlocalbox**	function
getfrozenparvalues	function	**getlocalboxlocations**	function
getglue	function	**getlocallevel**	function
getglueoptionvalues	function	**getmark**	function
getglyphdata	function	**getmarknames**	function
getglyphdiscvalues	function	**getmath**	function
getglyphoptionvalues	function	**getmathclassoptionvalues**	function
getglyphprotectionvalues	function	**getmathcode**	function
getglyphscales	function	**getmathcodes**	function
getglyphscript	function	**getmathcontrolvalues**	function
getglyphstate	function	**getmathdir**	function
getgroupvalues	function	**getmathgluevalues**	function
gethccode	function	**getmathoptionvalues**	function
gethelptext	function	**getmathparametervalues**	function
gethmcode	function	**getmathscriptordervalues**	function
gethyphenationvalues	function	**getmathscriptsmodevalues**	function
getiftypes	function	**getmathstylenamevalues**	function
getinputstatefile	function	**getmathstylevalues**	function
getinputstateline	function	**getmathstylevariant**	function
getinputstatemode	function	**getmathsurroundvalues**	function
getinsertcontent	function	**getmathvariantpresets**	function
getinsertdepth	function	**getmathvariantvalues**	function
getinsertdistance	function	**getmeasure**	function
getinsertheight	function	**getmissingcharactervalues**	function
getinsertlimit	function	**getmode**	function
getinsertmultiplier	function	**getmodevalues**	function

getmuglue	function	**getusedmarks**	function
getmuskip	function	**getvsplitcontextvalues**	function
getmvloptionvalues	function	**glue**	table
getnest	function	**glueoptioncodes**	data table
getnestfields	function	**glyphdisccodes**	data table
getnestlevel	function	**glyphoptioncodes**	data table
getnoadoptionvalues	function	**groupcodes**	data table
getnormalizelinevalues	function	**hashtokens**	function
getnormalizeparvalues	function	**hccode**	table
getoutputactive	function	**hmcode**	table
getpacktypevalues	function	**hshcatcodes**	number
getpagecontextvalues	function	**hyphenationcodes**	data table
getpagestate	function	**ifs**	data table
getpagestatevalues	function	**inicatcodes**	number
getparametermodevalues	function	**integerdef**	function
getparcontextvalues	function	**interactioncodes**	data table
getpardataspecifications	function	**isattribute**	function
getpardir	function	**isbox**	function
getparmodevalues	function	**iscount**	function
getparstate	function	**isdefined**	function
getparstatefields	function	**isdimen**	function
getpartriggervalues	function	**isfloat**	function
getpenaltyoptionvalues	function	**isglue**	function
getpositvalue	function	**ismuglue**	function
getprepoststatevalues	function	**ismuskip**	function
getprimitiveorigins	function	**isprintable**	function
getprotrusionboundaryvalues	function	**isskip**	function
getregisterindex	function	**istoks**	function
getruleoptionvalues	function	**lastnodetype**	function
getrunstate	function	**lccode**	table
getrunstatevalues	function	**linebreak**	function
getsfcode	function	**linebreakstatecodes**	data table
getshapingpenaltiesvalues	function	**listanchorcodes**	data table
getskip	function	**listgeometrycodes**	data table
getsnappingvalues	function	**lists**	table
getspecialmathclassvalues	function	**listsigncodes**	data table
getspecification	function	**luacatcodes**	number
getspecificationoptionvalues	function	**magicconstants**	table
gettextcontrolvalues	function	S activecharacternamespace	
gettextdir	function	N allfitnessvalues	
gettoks	function	N assumedmathcontrol	
getuccode	function	N awfulbad	
getuleaderlocationvalues	function	N decentcriterion	
getunitclassvalues	function	N defaultcatcodetable	

N defaultcharactercontrol
N defaultdeadcycles
N defaulteqnogapstep
N defaulthangafter
N defaultoutputbox
N defaultpredisplaygap
N defaultrule
N defaultspacefactor
N defaulttolerance
N deplorable
N ejectpenalty
N ignoredepth
N infinitebad
N infinitepenalty
N infinity
N largewidthexcess
N loosecriterion
N mathallclass
N mathbeginclass
N mathdefaultpenalty
N mathendclass
N mathfirstuserclass
N mathlastuserclass
N maxattributeregisterindex
N maxboxregisterindex
N maxbytecodeindex
N maxcalculatedbadness
N maxcardinal
N maxcharactercode
N maxdatavalue
N maxdimen
N maxdimenregisterindex
N maxdimension
N maxdimensionregisterindex
N maxendlinecharacter
N maxfloatregisterindex
N maxfontadjustshrinkfactor
N maxfontadjuststep
N maxfontadjuststretchfactor
N maxfunctionreference
N maxglueregisterindex
N maxhalfvalue
N maxhalfword
N maxinteger

N maxintegerregisterindex
N maxintregisterindex
N maxlimitedscale
N maxmarkindex
N maxmathclasscode
N maxmathfamilyindex
N maxmathscalingfactor
N maxmathstylescale
N maxmuglueregisterindex
N maxmvlindex
N maxnewlinecharacter
N maxnofbytecodes
N maxnofcatcodetables
N maxnoffitnessvalues
N maxnoffonts
N maxnoflanguages
N maxnofmarks
N maxnofmathfamilies
N maxquarterword
N maxscalefactor
N maxsizeofword
N maxspacefactor
N maxtoksregisterindex
N maxtwinlength
N mincardinal
N mindatavalue
N mindimen
N mindimension
N minhalfword
N mininfinity
N mininteger
N minmvlindex
N minnoffitnessvalues
N minquarterword
N minscalefactor
N minspacefactor
N nocatcodetable
N null
N nullflag
N nullfont
N onebp
N presetrulethickness
N runningrule
N smallstretchability

N specialspacefactor		**preparelinebreak**	function
N texeqtbsize		**primitives**	function
N texhashprime		**print**	function
N texhashsize		**protrusionboundarycodes**	data table
N two		**prtcatcodes**	number
N undefinedmathparameter		**pushlocal**	function
N unity		**pushsavelevel**	function
N unusedattributevalue		**quitlocal**	function
N unusedmathfamily		**quittoks**	function
N unusedmathstyle		**resetparagraph**	function
N unusedscriptvalue		**rlncatcodes**	number
N unusedstatevalue		**romannumeral**	function
N zeroglue		**round**	function
mathchardef	function	**ruleoptioncodes**	data table
mathcode	table	**runlocal**	function
mathcontrolcodes	data table	**runstatecodes**	data table
mathoptioncodes	data table	**runstring**	function
mathparametercodes	data table	**runtoks**	function
mathscriptordercodes	data table	**saveboxresource**	function
mathscriptsmodecodes	data table	**scale**	function
modelevels	table	**scantoks**	function
N horizontal		**set**	function
N math		**setamcode**	function
N unset		**setattribute**	function
N vertical		**setbalanceshape**	function
modes	data table	**setbox**	function
mprint	function	**setboxdir**	function
muglue	table	**setcardinalvalue**	function
muskip	table	**setcatcode**	function
mvloptioncodes	data table	**setcccode**	function
nest	table	**setconditional**	function
nilcatcodes	number	**setcount**	function
noadoptioncodes	data table	**setdelcode**	function
normalizelinecodes	data table	**setdimen**	function
normalizeparcodes	data table	**setdimensionvalue**	function
notcatcodes	number	**setfloat**	function
number	function	**setglue**	function
parcontextcodes	data table	**setglyphdata**	function
partriggercodes	data table	**setglyphscript**	function
penaltyoptioncodes	data table	**setglyphstate**	function
poplocal	function	**sethccode**	function
popsavelevel	function	**sethmcode**	function
posit	table	**setinputstatefile**	function
positdef	function	**setinputstateline**	function

setinputstatemode	function	**skip**	table
setinsertcontent	function	**snappingcodes**	data table
setinsertdistance	function	**snapshotpar**	function
setinsertlimit	function	**sp**	function
setinsertmultiplier	function	**specialmathclasscodes**	data table
setintegervalue	function	**specificationoptioncodes**	data table
setinteraction	function	**splitbox**	function
setlccode	function	**splitcodes**	data table
setlinedir	function	**sprint**	function
setlist	function	**stringtocodesbitmap**	function
setlocalbox	function	**systemmodes**	data table
setmath	function	**takebox**	function
setmathcode	function	**texcatcodes**	number
setmathdir	function	**textcontrolcodes**	data table
setmuglue	function	**toks**	table
setmuskip	function	**tonumber**	function
setnest	function	**toscaled**	function
setpardir	function	**tpacatcodes**	number
setpositvalue	function	**tpbcatcodes**	number
setrunstate	overloaded function	**tprint**	function
setsfcode	function	**trackers**	data table
setskip	function	**triggerbuildpage**	function
settextdir	function	**txtcatcodes**	number
settoks	function	**uccode**	table
setuccode	function	uprint	function
sfcode	table	useboxresource	function
shapingpenaltiescodes	data table	**userdiscoptioncodes**	data table
shiftparshape	function	**userglyphoptioncodes**	data table
shipout	function	**vrbcatcodes**	number
showcontext	function	**write**	function

texconfig (basic tex)

buffersize	table		**languagesize**	table
N size			N size	
N step			N step	
errorlinesize	table		**marksize**	table
N size			N size	
expandsize	table		N step	
N size			**nestsize**	table
filesize	table		N size	
N size			N step	
N step			**nodesize**	table
firstline	string		N size	
fontsize	table		N step	
N size			**parametersize**	table
N step			N size	
formatname	string		N step	
functionsize	number		**poolsize**	table
halferrorlinesize	table		N size	
N size			N step	
hashsize	table		**propertiessize**	number
N size			**savesize**	table
N step			N size	
init	overloaded function		N step	
inputsize	table		**shell_escape**	string
N size			**stringsize**	table
N step			N size	
insertsize	table		N step	
N size			**tokensize**	table
N step			N size	
kpse_init	boolean		N step	

texio (basic tex)

closeinput	function	**write**	function
forceendoffile	function	**write_nl**	function
getinputindex	function	**writenl**	function
getselectorvalues	function	**writeselector**	function
getsourcefilename	function	**writeselectorlf**	function
setlogfile	function	**writeselectornl**	function
terminal	function		

token (basic tex)

create	function	**getexpandable**	function
expand	function	**getexpansion**	function
expand_macro	function	**getfields**	function
expandmacro	function	**getflags**	function
future_expand	function	**getfrozen**	function
futureexpand	function	**getfunctionvalues**	function
get_active	function	**getid**	function
get_cmdchrcs	function	**getimmutable**	function
get_cmdname	function	**getindex**	function
get_command	function	**getinstance**	function
get_csname	function	**getinteger**	function
get_cstoken	function	**getlength**	function
get_dimension	function	**getmacro**	function
get_expandable	function	**getmeaning**	function
get_fields	function	**getnoaligned**	function
get_flags	function	**getparameters**	function
get_frozen	function	**getpermanent**	function
get_id	function	**getprimitive**	function
get_immutable	function	**getprimitives**	function
get_index	function	**getprotected**	function
get_instance	function	**getrange**	function
get_integer	function	**gettok**	function
get_macro	function	**gettolerant**	function
get_meaning	function	**gobble**	function
get_noaligned	function	**gobble_dimension**	function
get_parameters	function	**gobble_integer**	function
get_permanent	function	**gobbledimension**	function
get_primitive	function	**gobbleinteger**	function
get_protected	function	**grab**	function
get_range	function	**is_defined**	function
get_tok	function	**is_next_char**	function
get_tolerant	function	**is_token**	function
getactive	function	**isactivestring**	function
getcmdchrcs	function	**isdefined**	function
getcmdname	function	**isnextchar**	function
getcommand	function	**istoken**	function
getcommandvalues	function	**locatemacro**	function
getconstant	function	**new**	function
getcsname	function	**peek_next**	function
getcstoken	function	**peek_next_char**	function
getdimension	function	**peek_next_expanded**	function

peeknext	function	**scan_value**	function
peeknextchar	function	**scan_word**	function
peeknextexpanded	function	**scanargument**	function
pop_macro	function	**scanbox**	function
popmacro	function	**scancardinal**	function
push_macro	function	**scanchar**	function
pushmacro	function	**scancmdchr**	function
put_back	function	**scancmdchrexpanded**	function
put_next	function	**scancode**	function
putback	function	**scancsname**	function
putnext	function	**scancstoken**	function
save_lua	function	**scandelimited**	function
savelua	function	**scandetokened**	function
scan_argument	function	**scandimen**	function
scan_box	function	**scandimenargument**	function
scan_cardinal	function	**scandimension**	function
scan_char	function	**scandimensionargument**	function
scan_cmdchr	function	**scanfloat**	function
scan_cmdchr_expanded	function	**scanglue**	function
scan_code	function	**scanint**	function
scan_csname	function	**scaninteger**	function
scan_delimited	function	**scanintegerargument**	function
scan_dimen	function	**scankey**	function
scan_float	function	**scankeyword**	function
scan_glue	function	**scankeywordcs**	function
scan_integer	function	**scanletters**	function
scan_key	function	**scanluacardinal**	function
scan_keyword	function	**scanluainteger**	function
scan_keyword_cs	function	**scanluanumber**	function
scan_letters	function	**scannext**	function
scan_luacardinal	function	**scannextchar**	function
scan_luainteger	function	**scannextexpanded**	function
scan_luanumber	function	**scanposit**	function
scan_next	function	**scanreal**	function
scan_next_char	function	**scanscale**	function
scan_next_expanded	function	**scanskip**	function
scan_real	function	**scanstring**	function
scan_scale	function	**scantoken**	function
scan_skip	function	**scantokencode**	function
scan_string	function	**scantokenlist**	function
scan_token	function	**scantokenstring**	function
scan_token_code	function	**scantoks**	function
scan_tokenlist	function	**scanvalue**	function
scan_toks	function	**scanword**	function

serialize	function	**setmacrofrommark**	function
set_dimension	function	**setmacrotonothing**	function
set_integer	function	**skip_next**	function
set_lua	function	**skip_next_expanded**	function
set_macro	function	**skipnext**	function
setdimension	function	**skipnextexpanded**	function
setinteger	function	**type**	function
setlua	function	**undefine_macro**	function
setmacro	function	**undefinemacro**	function

tokens (context)

accessors   table
   F active
   F cmd
   F cmdchrcs
   F cmdname
   F command
   F csname
   F expandable
   F frozen
   F index
   F name
   F protected
   F range

astable   function

bits   table
   N active
   N alignment
   N begingroup
   N character
   N close
   N comment
   N endgroup
   N endofline
   N escape
   N ignore
   N invalid
   N letter
   N mathshift
   N open
   N other
   N parameter
   N space
   N subscript
   N superscript
   N whitespace

cache   data table
commands   data table
compile   function
constant   function
converters   table
   S toboolean

   S todimen
   S toglue
   S tonumber
   S tostring

create   function
defined   function
flags   function
getinteger   function
getters   table
   F box
   F count
   F cstoken
   F dimen
   F glue
   F macro
   F meaning
   F skip
   F token

gobble   function
isactivestring   function
isdefined   function
istoken   function
new   function
pickup   function
popmacro   function
presets   table
   T 1 argument
   T 1 integer
   T 1 optional
   T 1 string
   T 2 arguments
   T 2 integers
   T 2 optionals
   T 2 strings
   T 3 arguments
   T 3 integers
   T 3 optionals
   T 3 strings
   T 4 arguments
   T 4 integers
   T 4 optionals

T 4 strings			F luainteger	
T 5 strings			F luanumber	
T 6 strings			F lxmlid	
T 7 strings			F next	
T 8 strings			F nextchar	
pushmacro	function		F nextexpanded	
scanners	table		F number	
F argument			F optional	
F argumentasis			F peek	
F array			F peekchar	
F boolean			F peekexpanded	
F box			F posit	
F bracketed			F real	
F bracketedasis			F scanclose	
F cardinal			F scanopen	
F char			F skip	
F cmdchr			F skipexpanded	
F cmdchrexpanded			F string	
F code			F table	
F conditional			F token	
F count			F tokencode	
F csname			F tokenlist	
F csnameunchecked			F tokens	
F delimited			F tokenstring	
F detokened			F toks	
F dimen			F value	
F dimension			F vbox	
F dimensionargument			F verbatim	
F float			F vtop	
F glue			F whd	
F gluespec			F word	
F gluevalues			**setinteger**	function
F hash			**setters**	table
F hbox			F box	
F integer			F char	
F integerargument			F count	
F ischar			F dimen	
F key			F glue	
F keyword			F lua	
F keywordcs			F macro	
F letters			F skip	
F list			**shortcuts**	table
F lua			T bits	
F luacardinal			N active	

previous 184 next

N alignment	F atan
N begingroup	F band
N character	F bor
N close	F bxor
N comment	F ceil
N endgroup	F conj
N endofline	F copy
N escape	F cos
N ignore	F exp
N invalid	F exp2
N letter	F expand
N mathshift	F floor
N open	F frombyte
N other	F fromchar
N parameter	F fromposit
N space	F integer
N subscript	F log
N superscript	F log10
N whitespace	F log1p
N close	F log2
F inspect	F logb
N open	F max
T posit	F min
F NaN	F modf
F NaR	F new
F __add	F pow
F __band	F rotate
F __bor	F round
F __bxor	F rounded
F __div	F shift
F __eq	F sin
F __le	F sqrt
F __lt	F tan
F __mul	F tobyte
S __name	F tochar
F __pow	F tonumber
F __shl	F toposit
F __shr	F tostring
F __sub	F report
F __tostring	F scanargument
F __unm	F scanargumentasis
F abs	F scanarray
F acos	F scanboolean
F asin	F scanbox

F scanbracketed	F detokened
F scanbracketedasis	F dimen
F scancardinal	F dimension
F scanclose	F dimensionargument
F scancode	F float
F scanconditional	F glue
F scancsname	F gluespec
F scancsnameunchecked	F gluevalues
F scandelimited	F hash
F scandetokened	F hbox
F scandimen	F integer
F scandimension	F integerargument
F scandimensionargument	F ischar
F scanfloat	F key
F scanglue	F keyword
F scangluespec	F keywordcs
F scangluevalues	F letters
F scanhash	F list
F scanhbox	F lua
F scaninteger	F luacardinal
F scanintegerargument	F luainteger
F scankeyword	F luanumber
F scankeywordcs	F lxmlid
F scanletters	F next
F scanlist	F nextchar
F scanlua	F nextexpanded
T scanners	F number
F argument	F optional
F argumentasis	F peek
F array	F peekchar
F boolean	F peekexpanded
F box	F posit
F bracketed	F real
F bracketedasis	F scanclose
F cardinal	F scanopen
F char	F skip
F cmdchr	F skipexpanded
F cmdchrexpanded	F string
F code	F table
F conditional	F token
F count	F tokencode
F csname	F tokenlist
F csnameunchecked	F tokens
F delimited	F tokenstring

F toks	S toglue
F value	S tonumber
F vbox	S tostring
F verbatim	F create
F vtop	F defined
F whd	F flags
F word	F getinteger
F scannumber	T getters
F scanopen	F box
F scanoptional	F count
F scanposit	F cstoken
F scanstring	F dimen
F scantable	F glue
F scantokenlist	F macro
F scantokenstring	F meaning
F scantoks	F skip
F scanvbox	F token
F scanverbatim	F gobble
F scanvtop	F isactivestring
F scanword	F isdefined
F toboolean	F istoken
F todimen	F new
T tokens	F pickup
T accessors	F popmacro
F active	T presets
F cmd	F pushmacro
F cmdchrcs	F setinteger
F cmdname	T setters
F command	F box
F csname	F char
F expandable	F count
F frozen	F dimen
F index	F glue
F name	F lua
F protected	F macro
F range	F skip
F astable	T shortcuts
D cache	N close
D commands	F inspect
F compile	N open
F constant	F report
T converters	F scanargument
S toboolean	F scanargumentasis
S todimen	F scanarray

F scanboolean	F scanletters
F scanbox	F scanlist
F scanbracketed	F scanlua
F scanbracketedasis	F scannumber
F scancardinal	F scanopen
F scanclose	F scanoptional
F scancode	F scanposit
F scanconditional	F scanstring
F scancsname	F scantable
F scancsnameunchecked	F scantokenlist
F scandelimited	F scantokenstring
F scandetokened	F scantoks
F scandimen	F scanvbox
F scandimension	F scanverbatim
F scandimensionargument	F scanvtop
F scanfloat	F scanword
F scanglue	F toboolean
F scangluespec	F todimen
F scangluevalues	F tonumber
F scanhash	F tostring
F scanhbox	D values
F scaninteger	F tonumber
F scanintegerargument	F tostring
F scankeyword	
F scankeywordcs	

values   data table

tracers (context)

printerror function   **showlines**   function
printwarning function

trackers (context)

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

typesetters (context)

alignments   table
    F handler
    F set
breakpoints   table
    F define
    F handler
    D mapping
    T methods
    T numbers
    F set
    F setreplacement
cases   table
    T actions
    F handler
    F register
    F set
characteralign   table
    F handler
    F resetcharacteralign
    F setcharacteralign
characters   table
    F handler
    T methods
    F replacenbsp
    F replacenbspaces
checkers   table
    F handler
    F reset
    F set
cleaners   table
    F handler
    F set
compare   table
    F handler
    F reset
    F set
    F setpair
    F setup
corrections   table
    F handler
digits   table

    T actions
    F handler
    F set
directions   table
    F getfences
    F getglobal
    F getmethod
    F handler
    T handlers
    F installhandler
    F set
    F setcolor
    F tomode
firstlines   table
    T actions
      F default
      F line
      F word
    F handler
    F set
fontkerns   table
    F handler
initials   table
    T actions
      F default
    F handler
    F set
injectors   table
    F check
    T list
    F mark
    F reset
    F set
    F show
italics   table
    F enablemath
    F enabletext
    F handler
kerns   table
    D factors
    F handler

F	keepligature			F	stripped
D	mapping			F	tostring
F	set		**rubies**		table
localboxes		table		F	attach
F	handler			F	check
manipulators		table	**showinvisibles**		function
F	apply		**showsuspects**		function
F	applyspecification		**spacings**		table
T	methods			F	define
	F	Word		F	handler
	F	Words		D	mapping
	F	abbreviatedjournal		T	numbers
	F	expandedjournal			T	frenchpunctuation
	F	lowercase				T	characters
	F	stripperiod				S	name
	F	uppercase				N	number
T	patterns			F	reset
	U	list			F	set
	U	pair			F	setup
F	splitspecification		**stacking**		table
margins		table		F	getindex
F	finalhandler			F	getselection
F	globalhandler			F	handler
F	localhandler		**swapping**		table
F	save			F	handler
marksuspects		function	**synchronize**		table
paragraphs		table		F	handler
F	addanchortoline		**tighten**		table
F	addtoline			F	handler
F	calculatedelta		**wrappers**		table
F	checkline		**xtables**		table
F	moveinline			F	cleanup
periodkerns		table		F	construct
D	factors			F	create
F	handler			F	finish_row
D	mapping			F	flush
F	set			F	initialize_construct
processors		table		F	initialize_reflow_height
F	apply			F	initialize_reflow_width
F	register			F	next_row
F	reset			F	reflow_height
F	split			F	reflow_width
F	startapply			F	set_construct
F	stopapply				

F set_reflow_height

F set_reflow_width

updaters (context)

apply   function
register function

url (context)

addscheme	function	**hashed**	function
barepath	function	**hasscheme**	function
construct	function	**query**	function
decode	function	**split**	function
encode	function	**toquery**	function
escape	function	**unescape**	function
filename	function	**unescapeget**	function

utf8 (basic lua)

char	function		**codes**	function
charpattern	string		**len**	function
codepoint	function		**offset**	function

utilities (context)

debugger   table
- F disable
- F enable
- F savestats
- F showstats
- F showtraceback

files   table
- F close
- F getposition
- F getsize
- F look
- F open
- F read2dot14
- F readbyte
- F readbytes
- F readbytetable
- F readcardinal
- F readcardinal1
- F readcardinal1le
- F readcardinal2
- F readcardinal2le
- F readcardinal3
- F readcardinal3le
- F readcardinal4
- F readcardinal4le
- F readcardinaltable
- F readchar
- F readcline
- F readcstring
- F readfixed2
- F readfixed4
- F readinteger
- F readinteger1
- F readinteger1le
- F readinteger2
- F readinteger2le
- F readinteger3
- F readinteger3le
- F readinteger4
- F readinteger4le
- F readintegertable

- F readsignedbyte
- F readstring
- F readtag
- F setposition
- F size
- F skip
- F skiplong
- F skipposition
- F skipshort
- F writebyte
- F writecardinal1
- F writecardinal1le
- F writecardinal2
- F writecardinal2le
- F writecardinal3
- F writecardinal3le
- F writecardinal4
- F writecardinal4le
- F writeinteger1
- F writeinteger1le
- F writeinteger2
- F writeinteger2le
- F writeinteger3
- F writeinteger3le
- F writeinteger4
- F writeinteger4le
- F writestring

formatters   table
- F formatcolumns
- F list
- F stripzeros

ghostscript   table
- F convert
- F statistics

graphicmagick   table
- F convert
- F statistics

graphicsmagick   table
- F convert
- F statistics

json   table

F	load		T hashes
F	tojson		T settings_to_list
F	tolua		T settings_to_set
F	tostring		T min,max,fit,broad,auto

lua   table
- B alwaysstripcode
- F checkmemory
- F compile
- F loadedluacode
- F loadstring
- F loadstripped
- N nofstrippedbytes
- N nofstrippedchunks
- F registerfinalizer
- B stripcode
- T strippedchunks
- F strippedloadstring
- T suffixes
  - S lmt
  - 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 groupedsplitat
- F hash_to_string

T hashes
- T settings_to_list
- T settings_to_set
  - T min,max,fit,broad,auto
    - B auto
    - B broad
    - B fit
    - B max
    - B min
  - T text,hidden,paper,page,leftpage,rightpage
    - B hidden
    - B leftpage
    - B page
    - B paper
    - B rightpage
    - B text
- F iterator
- F keq_to_hash
- F listitem
- F make_settings_to_hash_pattern
- F mergehashes
- F options_to_array
- F options_to_hash
- T patterns
  - U settings_to_array
  - U settings_to_hash_a
  - U settings_to_hash_b
  - U settings_to_hash_c
  - U settings_to_hash_d
  - U unittotex
- F process_stripped_settings
- F rfc4180splitter
- F runtime
- F settings_to_array
- F settings_to_array_obey_fences
- F settings_to_array_with_repeat
- F settings_to_hash
- F settings_to_hash_colon_too
- F settings_to_hash_strict
- F settings_to_hash_tolerant
- F settings_to_numbers
- F settings_to_set
- F simple_hash_to_string
- F splitmethod

F	splitthousands	F	new
F	stepper	F	register
F	stripped_settings_to_array	F	report
F	totime	F	reset
F	unittotex	F	show

randomizer   table
signals   table

F	get	S	configuration
F	getnumber	F	initialize
F	getrepeatable	F	loadstate
F	getrepeatableseed	F	report
F	getseed	F	savestate
F	newrepeatable	F	serialclose
F	popseed	F	serialfast
F	pushseed	F	serialopen
F	repeatable	F	serialsend
F	reuseseed	F	serialwrite
F	setseed	N	version
F	setseedi		

randomizers   table
stacker   table

F	poisson	F	new

sequencers   table
storage   table

F	appendaction	F	allocate
F	appendgroup	F	checked
F	compile	F	mark
F	disableaction	F	marked
F	disablegroup	F	setinitializer
F	enableaction	F	sparse
F	enablegroup		

streams   table

D	functions	F	close
F	localize	F	getposition
F	new	F	getsize
F	nodeprocessor	F	getstring
F	prependaction	F	look
F	prependgroup	F	open
F	removeaction	F	openstring
F	replaceaction	F	read2dot14
F	setkind	F	readbyte
F	tostring	F	readbytes
		F	readbytetable

setters   table

		F	readcardinal
		F	readcardinal1
F	disable	F	readcardinal1le
F	enable	F	readcardinal2
F	initialize	F	readcardinal2le
F	list	F	readcardinal3

F readcardinal3le	T striplinepatterns
F readcardinal4	U collapse
F readcardinal4le	U collapse all
F readcardinaltable	U prune
F readchar	U prune and collapse
F readcline	U prune and no empty
F readcstring	U prune and to space
F readfixed2	U retain
F readfixed4	U retain and collapse
F readinteger	U retain and no empty
F readinteger1	F striplines
F readinteger1le	F striplong
F readinteger2	F tabtospace
F readinteger2le	T tracers
F readinteger3	**tables** table
F readinteger3le	F accesstable
F readinteger4	F definedtable
F readinteger4le	F definetable
F readintegertable	F encapsulate
F readsignedbyte	F insertaftervalue
F readstring	F insertbeforevalue
F setposition	F migratetable
F size	F removevalue
F skip	F replacevalue
F skipbytes	**tar** table
F skiplong	T archives
F skipshort	F closearchive
F tocardinal1	T files
F tocardinal1le	F fetch
F tocardinal2	F hash
F tocardinal2le	F list
F tocardinal3	F pack
F tocardinal3le	F unpack
F tocardinal4	F openarchive
F tocardinal4le	T registeredfiles
strings table	T streams
F collapse	F fetch
F collapsecrlf	F hash
T formatters	F list
F add	F pack
F new	F unpack
F newcollector	T strings
F newrepeater	F fetch
F nice	F hash

F list		F close
F pack		F found
F unpack		F hash
templates	table	F list
F load		F open
F replace		F unzip
F replacer		F unzipdir
F resolve		F zipdir
zipfiles	table	

vector (context)

add	function		**identity**	function
append	function		**inner**	function
average	function		**insert**	function
ceiling	function		**inverse**	function
checkoverlap	function		**ismesh**	function
collectoverlap	function		**issingular**	function
concat	function		**isvector**	function
contour	table		**iszero**	function
F average			**mesh**	table
F checkoverlap			F get	
F collectoverlap			F getdimensions	
F getarea			F ismesh	
F getmesh			F new	
F overlapping			F set	
F show			F tostring	
F sort			F totable	
F triangulate			F type	
copy	function		**meshname**	function
crossproduct	function		**mul**	function
delete	function		**negate**	function
determinant	function		**new**	function
div	function		**normalize**	function
equal	function		**onecolumn**	function
exchange	function		**onerow**	function
floor	function		**product**	function
get	function		**remove**	function
getdimensions	function		**replace**	function
getepsilon	function		**round**	function
getmesh	function		**rowechelon**	function
getrc	function		**set**	function
getrow	function		**setnext**	function
getstacking	function		**setrc**	function
gettype	function		**setstacking**	function
helpers	table		**slice**	function
F points			**sort**	function
F transform			**sub**	function
F xrotation			**swap**	function
F xyzscale			**tostring**	function
F yrotation			**totable**	function
F zrotation			**transpose**	function
homogenize	function		**triangulate**	function

truncate	function
type	function

visualizers (context)

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

xcomplex (extra lua)

I	function		**erf**	function
__add	function		**erfc**	function
__div	function		**erfcx**	function
__eq	function		**erfi**	function
__mul	function		**exp**	function
__name	string		**i**	function
__pow	function		**imag**	function
__sub	function		**log**	function
__tostring	function		**new**	function
__unm	function		**pow**	function
abs	function		**proj**	function
acos	function		**real**	function
acosh	function		**sin**	function
arg	function		**sinh**	function
asin	function		**sqrt**	function
asinh	function		**tan**	function
atan	function		**tanh**	function
atanh	function		**topair**	function
conj	function		**tostring**	function
cos	function		**totable**	function
cosh	function		**voigt**	function
dawson	function		**voigt_hwhm**	function

xdecimal (extra lua)

__add	function	**bxor**	function
__band	function	**conj**	function
__bor	function	**copy**	function
__bxor	function	**exp**	function
__div	function	**getprecision**	function
__eq	function	**ln**	function
__idiv	function	**log**	function
__le	function	**max**	function
__lt	function	**min**	function
__mod	function	**minus**	function
__mul	function	**new**	function
__name	string	**plus**	function
__pow	function	**pow**	function
__shl	function	**rotate**	function
__shr	function	**setprecision**	function
__sub	function	**shift**	function
__tostring	function	**sqrt**	function
__unm	function	**toengstring**	function
abs	function	**tonumber**	function
band	function	**tostring**	function
bor	function	**trim**	function

xmath (extra lua)

acos	function		**isnormal**	function
acosh	function		**j0**	function
asin	function		**j1**	function
asinh	function		**jn**	function
atan	function		**ldexp**	function
atan2	function		**lgamma**	function
atanh	function		**log**	function
cbrt	function		**log10**	function
ceil	function		**log1p**	function
copysign	function		**log2**	function
cos	function		**logb**	function
cosh	function		**modf**	function
deg	function		**nan**	number
erf	function		**nearbyint**	function
erfc	function		**nextafter**	function
exp	function		**pi**	number
exp2	function		**pow**	function
expm1	function		**rad**	function
fabs	function		**remainder**	function
fdim	function		**remquo**	function
floor	function		**round**	function
fma	function		**scalbn**	function
fmax	function		**sin**	function
fmin	function		**sinh**	function
fmod	function		**sqrt**	function
frexp	function		**tan**	function
gamma	function		**tanh**	function
hypot	function		**tgamma**	function
inf	number		**trunc**	function
isfinite	function		**y0**	function
isinf	function		**y1**	function
isnan	function		**yn**	function

xml (context)

addentitiesdoctype	function	F family	
addspecialcode	function	F fontspecification	
after	function	F mappedstylevalue	
all	function	F padding	
applylpath	function	F size	
applyselector	function	F style	
assign	function	F stylevalue	
attribute	function	F todimension	
badinclusions	function	F variant	
before	function	F weight	
body	function	**defaulthandlers**	table
builtinentities	table	D file	
B amp		D parsedxml	
B apos		D string	
B gt		D tex	
B lt		D texline	
B quot		D texspace	
cdata	function	D verbose	
cdatatotext	function	**defaultprotocol**	string
checkbom	function	**delete**	function
checkedempty	function	~~delete_element~~	~~function~~
checkerror	function	**despecialized**	function
checknamespace	function	**each**	function
checkns	function	~~each_element~~	~~function~~
cleansed	function	**elements**	function
collect	function	**elementtocdata**	function
~~collect_elements~~	~~function~~	**empty**	function
collect_tags	function	**entities**	data table
~~collect_texts~~	~~function~~	**erase**	function
collected	function	**errorhandler**	function
collecttexts	function	**escaped**	function
compactelement	function	**expand**	function
content	function	**expressions**	table
convert	function	F attribute	
copy	function	F boolean	
count	function	F child	
cprint	function	F contains	
css	table	F count	
F applyselector		F error	
F colorspecification		F find	
F dimension		F hasclass	

	F idstring		F tags
	F lower		F text
	F name		F upper
	F number		F upperall
	F oneof		F url
	F print		F xml
	F quit	T xml	
	F tag		F all
	F text		F att
	F undefined		F attribute
	F upper		F attributes
fillin	function		F cdata
filter	function		F chainattribute
finalizers	table		F count
	F paragraphs		F default
T tex			F elements
	F all		F empty
	F attribute		F first
	F chainattribute		F function
	F chainpath		F index
	F collapsed		F last
	F command		F lowerall
	F concat		F match
	F concatrange		F name
	F context		F position
	F count		F reverse
	F ctxtext		F table
	F default		F tag
	F depth		F tags
	F first		F text
	F function		F texts
	F index		F tomacro
	F last		F upperall
	F lettered		F url
	F lower	**first**	function
	F lowerall	**found**	function
	F match	**functions**	table
	F name		F classes
	F param		F hasclass
	F parameter	**getbuffer**	function
	F position	**gethandlers**	function
	F reverse	**gethandlersfunction**	function
	F stripped	**helpers**	table
	F tag		F recursetext

include	function		F tex
inclusion	function	**placeholders**	table
inclusions	function		F unknown_any_entity
index	function		F unknown_dec_entity
inheritattributes	function		F unknown_hex_entity
inheritedconvert	function	**popmatch**	function
inject	function	**position**	function
~~**inject_element**~~	~~function~~	**privatecodes**	data table
~~**inject_element_after**~~	~~function~~	**privatetoken**	function
~~**inject_element_before**~~	~~function~~	**process**	function
injectafter	function	~~**process_attributes**~~	~~function~~
injectbefore	function	~~**process_elements**~~	~~function~~
insert	function	**processattributes**	function
insert_element	function	**profiled**	table
~~**insert_element_after**~~	~~function~~	**pure**	function
~~**insert_element_before**~~	~~function~~	**pushmatch**	function
insertafter	function	**raw**	function
insertbefore	function	**registerentity**	function
insertcdata	function	**registerns**	function
insertcomment	function	**reindex**	function
inspect	function	~~**remap_name**~~	~~function~~
is_valid	function	~~**remap_namespace**~~	~~function~~
kind	function	~~**remap_tag**~~	~~function~~
last	function	**remapname**	function
lastmatch	function	**remapnamespace**	function
load	function	**remaptag**	function
lpath	function	**rename**	function
lpathcached	function	**renamespace**	function
lpathcalls	function	**reparsedentitylpeg**	userdata
lshow	function	**replace**	function
makestandalone	function	~~**replace_element**~~	~~function~~
match	function	**resetinjectors**	function
mml	table	**resolvens**	function
F stripped		**root**	function
F verbose		**save**	function
name	function	**selection**	function
newhandlers	function	**separate**	function
nodesettostring	function	**serialize**	function
originalload	function	**serializetotext**	function
package	function	**setcdata**	function
parent	function	**setcomment**	function
parsedentitylpeg	userdata	**sethandlersfunction**	function
pihandlers	table	**setinjectors**	function
F injector		**setproperty**	function

settings	function	**tostring**	function
specialcodes	data table	**totable**	function
specialhandler	table	**toxml**	function
sprint	function	**tprint**	function
string	function	**traverse**	function
strip	function	**unescaped**	function
~~**strip_whitespace**~~	~~function~~	**unescapedentitylpeg**	userdata
stripelement	function	**unprivatized**	function
stripleadingspaces	function	**unspecialized**	function
table	function	**wipe**	function
text	function	**withelement**	function
textonly	function	**withelements**	function
texttocdata	function	**wrap**	function
tocdata	function	**xmlns**	table
toelement	function		

xzip (extra lua)

adler32   function   **crc32**   function
compress   function   **decompress**   function
compresssize function   **decompresssize** function

zip (context)

archives	table	**openarchive**	function
closearchive	function	**registeredfiles**	table

zlib (context)

adler32	function	**crc32**	function
compress	function	**decompress**	function
compresssize	function	**decompresssize**	function