MP 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 global graphics gzip images
interactions interfaces io job lang languages
layouts lfs libraries lmx logs lpdf lpeg lua
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 publications regimes
resolvers sandbox scripts set sha2 sio socket
sorters 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
visualizers xcomplex xdecimal xmath xml xzip
zip zlib

ConTEXt LMTX

global (alias: _G)

CONTEXTLMTXMODE	number		**directives**	table
FFISUPPORTED	boolean		**document**	table
INITEXMODE	boolean		**documentdata**	table
LUAMAJORVERSION	number		**dofile**	function
LUAMINORVERSION	number		**drivers**	table
LUATEXENGINE	string		**environment**	table
LUATEXFORMATID	number		**error**	function
LUATEXFUNCTIONALITY	number		**experiments**	table
LUATEXVERSION	number		**figures**	table
LUAVERSION	number		**file**	table
MP	function		**fio**	table
arg	table		**floats**	table
assert	function		**flushfontchar**	function
attributes	table		**flushsimplerule**	function
backends	table		**font**	table
basexx	table		**fonts**	table
bit32	table		**functions**	table
blobs	table		**getmetatable**	function
blockrequire	function		**getrpos**	function
boolean	table		**global**	table
buffers	table		**graphics**	table
builders	table		**gregorian_to_jalali**	function
caches	table		**grid_to_mp**	function
callback	table		**gzip**	table
callbacks	table		**images**	table
catcodes	table		**inspect**	function
characters	table		**interactions**	table
checkimage	function		**interfaces**	table
chemistry	table		**io**	table
collectgarbage	function		**ipairs**	function
commands	table		**jalali_to_gregorian**	function
containers	table		**job**	table
context	function		**lang**	table
converters	table		**languages**	table
coroutine	table		**layouts**	table
createmask	function		**lfs**	table
ctxrunner	table		**libraries**	table
data	table		**lmx**	table
debug	table		**load**	function
dimen	function		**loadfile**	function
dir	table		**loadstring**	function

logs	table	**require**	function
lpdf	table	**required**	function
lpeg	table	**resolvers**	table
lua	table	**ruledspace**	function
luatex	table	**sandbox**	table
lxml	table	**scanarray**	function
math	table	**scanhash**	function
mathematics	table	**scripts**	table
md5	table	**select**	function
metapost	table	**set**	table
mime	table	**setinspector**	function
moduledata	table	**setmetatable**	function
modules	table	**sha2**	table
mp	function	**shipbox_ref_h**	number
mplib	table	**shipbox_ref_v**	number
next	function	**sio**	table
noads	table	**socket**	table
node	table	**sorters**	table
nodes	table	**statistics**	table
number	table	**status**	table
objects	table	**storage**	table
optional	table	**streams**	table
optionalrequire	function	**string**	table
os	table	**structures**	table
package	table	**table**	table
pagebuilders	table	**tex**	table
pairs	function	**texconditionals**	data table
parametersets	table	**texconfig**	table
pcall	function	**texconstants**	data table
pdf	table	**texifs**	data table
pdfdecode	table	**texio**	table
pdfe	table	**texisdefined**	data table
physics	table	**texmodes**	data table
pngdecode	table	**texsystemmodes**	data table
poporientation	function	**thirddata**	table
print	function	**toboolean**	function
publications	table	**todecimal**	function
pushorientation	function	**token**	table
rawequal	function	**tokens**	table
rawget	function	**tonumber**	function
rawlen	function	**tostring**	function
rawset	function	**tracers**	table
readarray	function	**trackers**	table
regimes	table	**type**	function

typesetters	table	**warn**	function
unpack	function	**xcomplex**	table
updaters	table	**xdecimal**	table
url	table	**xmath**	table
userdata	table	**xml**	table
utf	table	**xpcall**	function
utf8	table	**xzip**	table
utilities	table	**zip**	table
v	string	**zlib**	table
visualizers	table		

attributes (context)

applyoverloads	function
cleanup	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 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

  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 rgbtocmyk

  F rgbtogray

  F rgbtohsv

  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			N	attribute
D	values			D	data
B	weightgray			F	enable
define	**function**			F	forcesupport
effects	**table**			F	handler
N	attribute			T	names
D	data				N color
F	enable				N colorburn
F	handler				N colordodge
F	register				N darken
D	registered				N difference
D	values				N exclusion
handlers	**table**				N hardlight
list	**data table**				N hue
markasoverload	**function**				N lighten
names	**data table**				N luminosity
negatives	**table**				N multiply
N	attribute				N none
D	data				N normal
F	enable				N overlay
F	handler				N saturation
F	register				N screen
D	registered				N softlight
F	set			N	none
numbers	**data table**			F	register
ofnode	**function**			D	registered
private	**function**			B	supported
public	**function**			F	toattribute
registercleaner	**function**			B	triggering
restore	**function**			F	value
save	**function**			D	values
showcurrent	**function**		**unsetvalue**	**number**
states	**table**		**viewerlayers**	**table**
F	disabletriggering			N	attribute
F	enabletriggering			F	cleanup
F	finalize			D	data
F	initialize			F	define
F	process			F	definedlayoutcomponent
F	selective			F	enable
F	stacked			F	forcesupport
F	stacker			F	handler
system	**function**			B	hasorder
tooverloads	**function**			D	listwise
transparencies	**table**			F	register

D registered

F resolve_begin

F resolve_end

F resolve_reset

F resolve_step

D scopes

F setfeatures

F start

F stop

B supported

D values

backends (context)

closeout	function
codeinjections	table
F boxresourcedimensions	
F registerboxresource	
F restoreboxresource	
current	string
defaults	table
T codeinjections	
F getpagedimensions	
F getpageorigin	
F lmtxmode	
F setpagedimensions	
F setpageorigin	
T nodeinjections	
T registrations	
D tables	
included	table
B context	
B date	
B id	
B metadata	
B pdf	
install	function
latelua	function
nodeinjections	table
noflatelua	function
nothing	function
openout	function
pdf	table
T codeinjections	
F addbookmarks	
F analyzenormalsymbol	
F analyzesymbol	
F attachmentid	
F bitmap	
F clonefield	
F copyimage	
F definefield	
F definefieldset	
F defineviewerlayer	
F embedfile	

F embedimage
F enabletags
F exportformdata
F fieldsurrounding
F flushmergelayer
F getbookmarks
F getdefaultfieldvalue
F getfieldcategory
F getfieldset
F getformatoption
F getidentityvariable
F getinfo
F getpreviewfigure
F insertrenderingwindow
F maptag
F mergebookmarks
F mergecomments
F mergefields
F mergereferences
F mergeviewerlayers
F newimage
F prerollreference
F presetsymbol
F presetsymbollist
F processrendering
F registerdocumentcloseaction
F registerdocumentopenaction
F registeredsymbol
F registerpagecloseaction
F registerpageopenaction
F registersymbol
F scanimgage
F setattachmentsupport
F setfieldcalculationset
F setfigurealternative
F setfigurecolorspace
F setfiguremask
F setformat
F setformsmethod
F setpagetransition
F settaggingsupport

```
  F setupcanvas                              F insertu3d
  F setupidentity                            F knockout
  F setxmpfile                               F negative
  F startlayer                               F overprint
  F startunicodetoactualtext                 F positive
  F startunicodetoactualtextdirect           F reference
  F stoplayer                                F rgbcolor
  F stopunicodetoactualtext                  F spotcolor
  F stopunicodetoactualtextdirect            F startlayer
  F supportedformats                         F startstackedlayer
  F unicodetoactualtext                      F stoplayer
  F useviewerlayer                           F stopstackedlayer
  F validfield                               F transparency
  F validfieldcategory                       F typesetfield
  F validfieldset                          T registrations
  F wrapimage                                F cmykindexcolor
S comment                                    F cmykspotcolor
T nodeinjections                             F getspotcolorreference
  F addtags                                  F grayindexcolor
  F annotation                               F grayspotcolor
  F attachfile                               F rgbindexcolor
  F changestackedlayer                       F rgbspotcolor
  F cmykcolor                                F spotcolorname
  F comment                                  F transparency
  F destination                            T tables
  F effect                                   D vfspecials
  F graycolor
  F injectbitmap                      registrations    table
  F insertmovie                       tables           table
  F insertsound                       timestamp        function
  F insertswf                         writeout         function
```

basexx (extra lua)

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

bit32 (basic lua)

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

blobs (context)

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

builders (context)

checksidefloat function
kernel table
    F hyphenating
    F hyphenation
    F kerning
    F ligaturing
    F mlist_to_hlist
paragraphs table
    T constructors
    N attribute
    F define
    F disable
    F enable
    F handler
    T methods
      F basic
      F default
      F hpack
      F oneline
    D names
    D numbers
    F set
    F start
    F stop
    T expansion
    F trace
    F keeptogether
    F registertogether
    T solutions
    T splitters
      F define
      F optimize
      T registered
      F reset
      F set
      F split

    F start
    F stop
    F tag
profiling table
    F add
    F distance
    F fixedprofile
    F get
    F list
    F pagehandler
    F profilebox
    F set
vspacing table
    F analyze
    D categories
    F collapsevbox
    T data
    D map
    D skip
    D snapmethods
    F definesnapmethod
    B fixed
    F forcepageflush
    F forcestrutdepth
    F getnofpreviouslines
    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
known	function	**register**	overloaded function

callbacks (context)

freeze function
functions table
    F process_rule
    F start_page_number
    F stop_page_number
known function
list data table
pop function
push function
register function
report function
supported table
    B append_to_vlist_filter
    B build_page_insert
    B buildpage_filter
    B contribute_filter
    B define_font
    B find_data_file
    B find_format_file
    B find_log_file
    B handle_error_hook
    B hpack_filter
    B hpack_quality
    B hyphenate
    B insert_local_par
    B kerning

B ligaturing
B linebreak_filter
B make_extensible
B mlist_to_hlist
B new_graf
B open_data_file
B post_linebreak_filter
B pre_dump
B pre_linebreak_filter
B pre_output_filter
B process_jobname
B read_data_file
B show_error_hook
B show_error_message
B show_lua_error_hook
B show_warning_message
B show_whatsit
B start_file
B start_run
B stop_file
B stop_run
B terminal_input
B vpack_filter
B vpack_quality
B wrapup_run

catcodes (context)

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

characters (context)

activeoffset	number	T anudatta	
adobename	function	T before_half	
bidi	data table	T before_main	
blockrange	function	T before_postscript	
blocks	data table	T before_subscript	
casemap	table	T below_mark	
categories	data table	T consonant	
category	function	T dependent_vowel	
categorytags	data table	T halant	
classifiers	table	T independent_vowel	
collapsed	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_letter**	data table
F known		**is_mark**	data table
F resolve		**is_punctuation**	data table
emojized	function	**is_spacing**	data table
enccodes	data table	**is_symbol**	data table
entities	data table	**lcchars**	data table
fallbacks	data table	**lccode**	function
filters	data table	**lccodes**	data table
fractions	table	**lettered**	function
fromnumber	function	**lhash**	data table
fschars	data table	**linebreaks**	data table
fscodes	data table	**lower**	function
getrange	function	**mathlists**	data table
graphemes	data table	**mirrors**	table
hangul	data table	**otfscripts**	data table
indicgroups	table	**private**	table
T above_mark		**ranges**	data table
T after_half		**registerentities**	function
T after_main		**remap_hangul_syllabe**	function
T after_postscript		**setactivecatcodes**	function
T after_subscript		**setlettercatcodes**	function

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

content function

define function

is_usable function

is_valid function

read function

usecache boolean

write function

converters (context)

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

weekday	function
word	function
words	function

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

data (context)

action	function		**prerolled**	string
depth	number		**width**	number
height	number			

dir (context)

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

directives (context)

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

document (context)

arguments   data table

files   table

functions   table

getargument   function

getfilename   function

options   table

    T commandline

     D environments

     D modes

     D modules

    T ctxfile

     D environments

     D modes

     D modules

setargument   function

setcommandline   function

setdefaultargument function

setenvironments   function

setfilename   function

setfilenames   function

setmodes   function

setmodules   function

variables   data table

documentdata (context)

variable function

drivers (context)

convert	function
converters	table
F engine	
F lmtx	
enable	function
gethpos	function
getpos	function
getrpos	function
getvpos	function
helpers	table
F tomatrix	
install	function
instances	table

  T default
   T actions
    F convert
    F outputfilename
   T flushers
   S name
  T empty
   T actions
    F convert
    F prepare
   T flushers
   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 rule
    F updatefontstate
   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 rule
    F updatefontstate
   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 rule
    F updatefontstate
   S name
  T mps
   T actions
    F cleanup
    F convert
    F finalize
    F initialize
    F outputfilename
    F prepare
    F wrapup
   T flushers
    F character
    F rule
    F simplerule
    F updatefontstate
   S name

T none
  T actions
  T flushers
  S name
T pdf
  T actions
    F cleanup
    F convert
    F finalize
    F initialize
    F outputfilename
    F prepare
    F wrapup
  T flushers
    F character
    F fontchar

    F group
    F image
    F literal
    F poporientation
    F pushorientation
    F restore
    F rule
    F save
    F setmatrix
    F simplerule
    F updatefontstate
  S name

lmtxversion   number
outputfilename function
report   function

environment (context)

argument	function	**luafile**	function
arguments	data table	**luafilechunk**	function
basicengines	data table	**luatexengine**	string
currentrun	number	**luatexfunctionality**	number
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
homedir	string	**prerollrun**	boolean
initex	boolean	**rawarguments**	data table
initexmode	boolean	**reconstructcommandline**	function
initializearguments	function	**relativepath**	function
initializefilenames	function	**setargument**	function
inputfilebarename	string	**splitarguments**	function
inputfilename	string	**suffix**	string
inputfilesuffix	string	**texfile**	function
jobfilefullname	string	**texmfos**	string
jobfilename	string	**texos**	string
jobfilesuffix	string	**texroot**	string
jobname	string	**truefilename**	function
kindofrun	number	**useluamodule**	function
lmtxmode	number	**usemodules**	function
loadexamodes	function	**validengines**	data table
loadluafile	function	**version**	string

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		

figures (context)

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

| **setorder** | function | **suffixes** | data table |
| **setpaths** | 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	**readinteger2le**	function
read2dot14	function	**readinteger3**	function
readbytes	function	**readinteger3le**	function
readbytetable	function	**readinteger4**	function
readcardinal1	function	**readinteger4le**	function
readcardinal1le	function	**readintegertable**	function
readcardinal2	function	**readline**	function
readcardinal2le	function	**setposition**	function
readcardinal3	function	**skipposition**	function
readcardinal3le	function	**writecardinal1**	function
readcardinal4	function	**writecardinal1le**	function
readcardinal4le	function	**writecardinal2**	function
readcardinaltable	function	**writecardinal2le**	function
readfixed2	function	**writecardinal3**	function
readfixed4	function	**writecardinal3le**	function
readinteger1	function	**writecardinal4**	function
readinteger1le	function	**writecardinal4le**	function
readinteger2	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	**id**	function
current	function	**max**	function
define	function	**nextid**	function
each	function	**setfont**	function
getfont	function		

fonts (context)

analyzers   table
- D features
- D initializers
- D methods
- F setstate
- D states
- B useunicodemarks

checkers   table
- F getmissing
- F missing
- F placeholder

cid   table
- F getmap
- F loadfile

collections   table
- F checkenabled
- F clonevector
- F define
- T definitions
- F found
- F prepare
- F process
- F registermain
- F report
- F reset
- T vectors

constructors   table
- F addcharacters
- F addcoreunicodes
- B addtounicode
- F aftercopyingcharacters
- F applymanipulators
- F assignmathparameters
- B autocleanup
- F beforecopyingcharacters
- D cache
- B cacheintex
- F calculatescale
- F checkedfeatures
- F checkedfilename
- F cleanuptable

- F collectprocessors
- F currentfonthasfeature
- D designsizes
- D dontembed
- 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
- B fixprotrusion
- F getfeatureaction
- F getmathparameter

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

B pngenabled
T readers
  F addunicodetable
  F avar
  F cbdt
  F cblc
  F cff
  F cff2
  F cffcheck
  T cffencoder
  F checkhash
  F cmap
  F colr
  F compact
  F cpal
  F ebdt
  F eblc
  F ebsc
  F expand
  F extend
  F fvar
  F gdef
  F getcomponents
  F getinfo
  F glyf
  F gpos
  T gposhandlers
    F chainedcontext
    F context
    F cursive
    F extension
    F marktobase
    F marktoligature
    F marktomark
    F pair
    F single
  F gsub
  T gsubhandlers
    F alternate
    F chainedcontext
    F context
    F extension
    F ligature
    F multiple

    F reversechainedcontextsingle
    F single
  F gvar
  F head
  T helpers
    F axistofactors
    F cleanname
    F getaxisscale
    F getfactors
    F getscales
    F gotodatatable
    F normalizedaxis
    T normalizedaxishash
    F readvariationdata
    F reportskippedtable
    F setvariabledata
  F hhea
  F hmtx
  F hvar
  F kern
  F loadfont
  F loadshapes
  F loca
  F math
  F maxp
  F mvar
  F name
  F os/2
  F pack
  F parsecharstrings
  F post
  F registerextender
  F rehash
  F sbix
  F stat
  T streamreader
    F close
    F getposition
    F getsize
    F look
    F open
    F read2dot14
    F readbyte
    F readbytes

```
F readbytetable                    F writeinteger2
F readcardinal                     F writeinteger2le
F readcardinal1                    F writeinteger3
F readcardinal1le                  F writeinteger3le
F readcardinal2                    F writeinteger4
F readcardinal2le                  F writeinteger4le
F readcardinal3                    F writestring
F readcardinal3le                F stripredundant
F readcardinal4                  F svg
F readcardinal4le                N tableversion
F readcardinaltable              F unifymissing
F readchar                       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                    N version
F writecardinal1               T pfb
F writecardinal1le               F loadvector
F writecardinal2               T tfm
F writecardinal2le               D cache
F writecardinal3                 D features
F writecardinal3le               N maxnestingdepth
F writecardinal4                 N maxnestingsize
F writecardinal4le               T readers
F writeinteger1                    F loadpk
F writeinteger1le                  F loadtfm
```

```
  F loadtfmvf                              S scriptpercentage
  F loadvf                                 S scriptscriptpercentage
  F pktopdf                                S size
  F showpk                                 S slantfactor
F reencode                                 S slantperpoint
F setfeatures                            T spacing
N version                                  S extra
T vf                                       S shrink
  T combinations                           S stretch
  F combine                                S width
  T combiner                               S units
    D commands                             S vfactor
  D helpers                                S width
  D math                                   S xheight
  D predefined                           T properties
  N version                                S autoitalicamount
  D whatever                               S cidinfo
F hashfeatures                             T effect
F hashinstance                               S ddelta
T hashmethods                                S effect
  F normal                                   S factor
  F virtual                                  S hdelta
F initializefeatures                         S hfactor
T keys                                       S vfactor
  T characters                               S wdelta
  T descriptions                             S width
  T parameters                             S embedding
    S ascender                             S encodingbytes
    S descender                            S filename
    S designsize                           S finalized
    T expansion                            S fontname
      S auto                               S format
      S shrink                             S fullname
      S step                               S hasitalics
      S stretch                            S hasmath
    S extendfactor                         S mathitalics
    S factor                               S mode
    S hfactor                              S name
    S mathsize                             S nostackmath
    S mode                                 S psname
    T protrusion                           S textitalics
      S auto                               S virtualized
    S quad                               D loadedfonts
    S scaledpoints                       S namemode
```

N noffontsloaded		F name	
N nofsharedfonts		F spec	
N nofsharedhashes		**definetypeface**	function
N nofsharedvectors		**dropins**	table
N privateoffset		F clone	
D privateslots		F nextid	
F readanddefine		F provide	
F registerfeature		F registerglyph	
F resetfeature		F registerglyphs	
B resolvevirtualtoo		F swap	
F scale		**encodings**	table
F scaled		T agl	
F setfactor		D ctxcodes	
F setfeature		D extras	
F setmathparameter		D names	
F setname		D synonyms	
B sharefonts		D unicodes	
F trytosharefont		D cache	
N version		F is_known	
current function		D known	
currentid function		F load	
definers table		F make_unicode_vector	
F addlookup		D math	
F analyze		N version	
F applypostprocessors		**enhanceid**	function
F checkedmode		**expansions**	data table
F checkedscript		**formats**	data table
S defaultlookup		**getalternate**	function
F define		**getindices**	function
F getspecification		**getkern**	function
F internal		**getmultiple**	function
F loadfont		**getsubstitution**	function
F makespecification		**getters**	table
T methods		T alternate	
F install		F opentype	
D variants		T kern	
F read		F opentype	
F register		F type1	
F registered		F type3	
F registersplit		T multiple	
F resetnullfont		F opentype	
F resolve		T substitution	
T resolvers		F opentype	
F file		**goodies**	table

D	colorschemes	D	parameters
T	data	T	processes
T	dejavu-math	D	properties
S	author	D	quads
S	comment	D	resources
S	copyright	T	setdynamics
B	initialized	T	shapes
T	mathematics	D	spaces
T	alternates	D	spacings
T	dotless	T	streams
S	comment	D	unicodes
S	feature	D	variants
N	value	D	xheights

T	kerns	**helpers**	**table**
S	name	F	addextraprivate
S	version	F	addprivate
D	designsizes	F	appendcommands
D	filenames	F	appendcommandtable
F	getcompositions	F	checkflags
T	list	F	checkmerge
F	load	F	checksteps
F	prepare_features	F	collectanchors
F	register	D	commands
F	registerpostprocessor	F	descriptiontoslot
F	report	F	dimenfactor
T	suffixes	F	expandglyph
handlers	**table**	T	extraprivates
hashes	**table**	F	fontpatternhassize
D	characters	F	getcoloredglyphs
D	classes	F	getdigitwidth
D	csnames	F	getinstancespec
D	descriptions	F	getparameters
D	dynamics	F	getprivatecharornode
D	emwidths	F	getprivatenode
D	exheights	F	getprivates
D	extensibles	F	getprivateslot
D	features	F	hasprivate
D	identifiers	F	indextoslot
D	italics	F	name
D	lastmathids	F	nametoslot
D	marks	F	newprivateslot
D	mathparameters	F	prependcommands
D	modes	F	prependcommandtable
D	originals	F	privateslot

F setdigitwidth		B keepnames
F splitfontpattern		N mathbase
F tochar		N mathextrabase
infofont	function	N textbase
iterators	table	N textextrabase
F characters		**protrusions** data table
F descriptions		**readers** table
F glyphs		F afm
loggers	table	F check_lua
F add_placeholders		F check_tfm
D category_to_placeholder		F lua
F format		F ofm
F onetimemessage		F opentype
F register		F otf
F reportdefinedfonts		F pfb
F reportusedfeatures		D sequence
mappings	table	F tfm
F addtounicode		F ttc
F fromunicode16		F ttf
F loadfile		F woff
F loadline		**reserveid** function
F makenameparser		**select** table
D overloads		D alternatives
F reset		F bodyfont
F tounicode		D data
F tounicode16		F default
F tounicode16sequence		D defaults
metapost	table	F definefallbackfamily
F boundingbox		F definefontfamily
F boxtomp		F definefontfamilypreset
F draw		D extras
F fill		F fallback
F maxbounds		D fallbacks
F output		F features
F paths		F filefallback
F widthline		F fontdata
F zeroline		F fontfallback
mp	table	F fontsynonym
D cache		F goodies
B inline		F mathfallback
N version		D methods
names	data table	D presets
nulldata	data table	F registerfallback
privateoffsets	table	F registerfiles

F	registerfontalternative	D	variants
F	registerfontfamily	**symbols**	**table**
F	textfallback	T	emoji
F	typeface	F	checked
F	typescript	F	resolved
F	userdata	F	uselibrary
specifiers	**table**	**tables**	**table**
D	contextmerged	D	data
F	contextnumber	F	savefont
D	contextnumbers	F	saveoriginal
D	contextsetups	**tracers**	**table**
F	contexttostring	**treatments**	**table**
F	definecontext	F	applyfixes
F	mergecontext	D	data
F	presetcontext	S	filename
F	registercontext	F	ignoredfile
F	showcontext	F	report
F	splitcontext	F	trace
D	synonyms	**typefaces**	**table**

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

identifiers table

    F bitmap

    F jp2

    F jpg

    F png

identify   function

gzip (extra lua)

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

images (context)

check function
checksize function
copy function
create function
embed function
keys table
print function
scan function
serialize function
sizes table
   B art
   B bleed
   B crop
   B media

   B none
   B trim
totable function
types table
   N jbig2
   N jp2
   N jpg
   N memstream
   N none
   N pdf
   N png
   N stream
wrap function

interactions (context)

attachments data table
fields   table
   F clone
   F define
   F defineset
   F insert
general   table
   F getidentity
   F setupidentity
help   table
   F collect
   F reference
   F register
javascripts table
   F addtopreamble
   F code
   D codes
   F flushpreambles

   D functions
   D preambles
   F setpreamble
   F storecode
   F storepreamble
   F usepreamblenow
   F usescripts
linkedlists data table
pages   table
   F setpagetransition
   F setupcanvas
references   table
   F setclosedocument
   F setclosepage
   F setopendocument
   F setopenpage
renderings data table
soundclips data table

interfaces (context)

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

io (basic lua)

ask	function	**output**	overloaded function
bytes	function	**pathseparator**	string
characters	function	**popen**	overloaded function
close	function	**read**	function
copydata	function	**readall**	function
exists	function	**readnumber**	function
fileseparator	string	**readstring**	function
flush	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
open	overloaded function		

job (context)

comment   function
datasets   table
    D collected
    F extend
    F getdata
    F setdata
    D tobesaved
disablesave   function
embedded   table
    D collected
    D tobesaved
fileobjreferences   table
    D collected
    D tobesaved
files   table
    D collected
    F context
    B forcerun
    F run
    D tobesaved
getrandomseed   function
initialize   function
load   function
loadother   function
objects   table
    D collected
    F get
    F number
    F page
    F save
    F set
    D tobesaved
pack   boolean
packversion   number
pagestates   table
    D collected
    F countervalue
    F extend
    F realpage
    F realpageorder
    F setstate

    D tobesaved
passes   table
    F check
    D collected
    F count
    F define
    F find
    F first
    F get
    F getcollected
    F getdata
    F getfield
    F gettobesaved
    F inlist
    F last
    F list
    F save
    F savetagged
    D tobesaved
positions   table
    F b_column
    F b_region
    F c
    D collected
    F column
    F columnofpos
    F copy
    F depth
    F e_column
    F e_region
    F enhance
    F extra
    F get
    F getfree
    F gethpos
    F getpos
    F getreserved
    F getrpos
    F gettobesaved
    F getvpos
    F hangafter

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

lang (basic tex)

clean	function	**id**	function
clear_hyphenation	function	**new**	function
clear_patterns	function	**patterns**	function
exceptions	function	**postexhyphenchar**	function
gethjcode	function	**posthyphenchar**	function
has_language	function	**preexhyphenchar**	function
hyphenate	function	**prehyphenchar**	function
hyphenation	function	**sethjcode**	function
hyphenationmin	function		

languages (context)

associate	function		F registerpattern	
associated	data table		F setfeatures	
association	function	**installed**	function	
counters	data table	**labels**	table	
current	function	F define		
data	data table	F split		
decimals	data table	**loadable**	function	
define	function	**loadwords**	function	
explicithyphen	function	**logger**	table	
flatten	function	F report		
frequencies	table	**nofflattened**	function	
F averagecharwidth		**numbers**	data table	
F getdata		**postexhyphenchar**	function	
getdata	function	**posthyphenchar**	function	
getnumber	function	**preexhyphenchar**	function	
hjcounts	table	**prehyphenchar**	function	
hyphenate	function	**registered**	data table	
hyphenators	table	**replacements**	table	
T dictionaries		F add		
D featuresets		F addlist		
F handler		F handler		
T methods		F set		
F expanded		**serializediscretionary**	function	
B none		**setexceptions**	function	
F original		**setsynonym**	function	
F tex		**showdiscretionaries**	function	
F traditional		**unload**	function	
F popmethod		**urls**	table	
F pushmethod		D characters		
F setmethod		N lefthyphenmin		
F setup		D mapping		
F showhyphenationtrace		B packslashes		
T traditional		N righthyphenmin		
F definefeatures		F setcharacters		
F gettrace		**version**	number	
F hyphenate		**visualizediscretionaries**	function	
F injecthyphens		**words**	table	
F installmethod		F check		
F lasttrace		T data		
F loadpatterns		F disable		
F registerexception		F enable		

T enablers

B enables

F found

F load

T methods

N threshold

layouts (context)

status table

F isleftpage

F leftorrightpageaction

lfs (extra lua)

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

libraries (context)

basiclua data table
basictex data table
builtin   data table
extralua data table

extratex data table
functions data table
globals   data table

lmx (context)

color	function		**loadedfile**	function
convert	function		**make**	function
convertfile	function		**new**	function
convertstring	function		**overloaderror**	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		**showdebuginfo**	function
html	table		**showerror**	function
F a			**stripcss**	function
F td			**tv**	function
F th			**type**	function
include	function		**urlescape**	function
inherited	table		**variable**	function
S color-background-four			**variables**	table
S color-background-one			S color-background-blue	
S color-background-three			S color-background-body	
S color-background-two			S color-background-green	
S title			S color-background-main	
initialize	function		S color-background-purple	
inject	function		S color-background-yellow	
lmxfile	function		S title-default	

logs (context)

application	function	**reportline**	function
categories	function	**reportlines**	function
direct	function	**setformats**	function
disable	function	**setformatters**	function
enable	function	**setlogfile**	function
exporters	table	**setmessenger**	function
extendbanner	function	**setprocessor**	function
finalactions	function	**setprogram**	function
flush	function	**settarget**	function
help	function	**settimedlog**	function
loggingerrors	function	**settranslations**	function
messenger	function	**show**	function
new	function	**simple**	function
newline	function	**simpleline**	function
poptarget	function	**simplelines**	function
pushtarget	function	**start_page_number**	function
registerfinalactions	function	**starterrorlogging**	function
report	function	**startfilelogging**	function
reportbanner	function	**status**	function
reporter	function	**stop_page_number**	function
reporters	table	**stoperrorlogging**	function
F banner		**stopfilelogging**	function
F export		**subdirect**	function
F help		**subreport**	function
F info		**system**	function
F lines		**texerrormessage**	function
F version		**writer**	function

lpdf (context)

action	function	**destinationspecification**	function
adddocumentcolorspace	function	**dictionary**	function
adddocumentextgstate	function	**docstring**	function
adddocumentpattern	function	**epdf**	table
adddocumentshade	function	F analyzefonts	
addtocatalog	function	F contenttotext	
addtoinfo	function	F expanded	
addtonames	function	F getpagecontent	
addtopageattributes	function	F getstructure	
addtopageresources	function	T image	
addtopagesattributes	function	F close	
addxmpinfo	function	F copy	
annotationspecification	function	F new	
array	function	F open	
attachmentsymbols	function	F query	
boolean	function	F load	
border	function	F parsecontent	
checkedkey	function	F plugin	
checkedvalue	function	T resolvers	
circularshade	function	F destinations	
cmykcode	function	F embeddedfiles	
collectedresources	function	F javascripts	
color	function	F layers	
colorspace	function	F pages	
colorspaceconstants	data table	F structure	
colorspec	function	F widgets	
colorvalue	function	F stripcontent	
colorvalues	function	F unload	
commentsymbols	function	**escaped**	function
compresslevel	function	**finalizedocument**	function
constant	function	**finalizefonts**	function
copyarray	function	**finalizepage**	function
copyboolean	function	**finishtransparencycode**	function
copyconstant	function	**flags**	table
copydictionary	function	T annotations	
copyfloat	function	N AutoView	
copyinteger	function	N Hidden	
copynumber	function	N Invisible	
copystring	function	N Locked	
copyunicode	function	N LockedContents	
delayedobject	function	N NoRotate	

N NoView		**frompdfdoc**	function
N NoZoom		**fromsixteen**	function
N Print		**getcatalog**	function
N Printable		**getcompression**	function
N ReadOnly		**getfontname**	function
N ToggleNoView		**getfontobjnumber**	function
N auto		**getinfo**	function
N hidden		**getmapentry**	function
N printable		**getmetadata**	function
T widgets		**getnofpages**	function
N Comb		**getpageproperties**	function
N CommitOnSelChange		**getpagetags**	function
N DoNotScroll		**getversion**	function
N DoNotSpellCheck		**getxformname**	function
N Edit		**graycode**	function
N FileSelect		**id**	function
N MultiLine		**immediateobj**	function
N NoExport		**includechar**	function
N NoToggleToOff		**includecharlist**	function
N Password		**includefont**	function
N PopUp		**includeimage**	function
N PushButton		**injectors**	table
N Radio		F bitmap	
N RadiosInUnison		F jp2	
N ReadOnly		F jpg	
N Required		F png	
N RichText		**injectxmpinfo**	function
N Sort		**insertxmpinfo**	function
N file		**layerreference**	function
N fixed		**limited**	function
N nocheck		**linearshade**	function
N protected		**literal**	function
N readonly		**majorversion**	function
N required		**makenametree**	function
N sorted		**minorversion**	function
N unavailable		**nofpages**	function
flushfonts	function	**null**	function
flushgroup	function	**number**	function
flushobject	function	**obj**	function
flushstreamfileobject	function	**objectcompresslevel**	function
flushstreamobject	function	**pagereference**	function
formats	data table	**patternstream**	function
frombytes	function	**pdfcolor**	function
fromeight	function	**pdftimestamp**	function

permitdetail	function	**setpagetag**	function
print	function	**setsuppressoptionalinfo**	function
procset	function	**settime**	function
protectresources	boolean	**settrailerid**	function
rectangle	function	**setversion**	function
reference	function	**shareobject**	function
registerannotation	function	**shareobjectreference**	function
registerdestination	function	**spotcode**	function
registerdocumentfinalizer	function	**stream**	function
registerfont	function	**string**	function
registerpagefinalizer	function	**toeight**	function
registerpattern	function	**topdfdoc**	function
reserveobject	function	**tosixteen**	function
rgbcode	function	**transparency**	function
rotationcm	function	**transparencycode**	function
setcompression	function	**transparencygroups**	table
setdates	function	B none	
setmapfile	function	**transparencyvalue**	function
setmapline	function	**unicode**	function
setomitcharset	function	**usedcharacters**	table
setomitcidset	function	**verbose**	function
setpageorder	function	**vfimage**	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	**utfchartabletopattern**	function
counter	function	**utfreplacer**	function
endstripper	function	**version**	function
finder	function		

lua (basic tex)

bytecode	table	**macros**	table
bytedata	data table	B enabled	
bytedone	table	F loaded	
callbytecode	function	F required	
collectgarbage	function	F reset	
delay	function	F resolvestring	
finalize	function	F resolving	
firstbytecode	number	F showdefinitions	
flush	function	**mask**	string
flushdelayed	function	**messages**	data table
get_functions_table	function	**newindex**	function
getbytecode	function	**newtable**	function
getcurrenttime	function	**numbers**	data table
getfunctionstable	overloaded function	**registercode**	function
getpreciseseconds	function	**registeredcodes**	function
getpreciseticks	function	**registerfinalizer**	function
getruntime	function	**registername**	function
getstacktop	function	**setbytecode**	function
getstartupfile	function	**setexitcode**	function
getversion	function	**startupfile**	string
lastbytecode	number	**version**	string

luatex (context)

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

lxml (context)

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

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

   F add

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	**mapremap**	data table
alphabets	data table	**overloaddimensions**	function
alternatives	data table	**overloadparameters**	function
big	function	**privatebase**	number
boldmap	data table	**registerdomain**	function
categories	table	**registerfallbackid**	function
D functions		**remapalphabets**	function
charactersets	data table	**renderings**	table
checkaccentbaseheight	function	D mappings	
checkprivateparameters	function	D numbers	
classes	data table	D sets	
codes	data table	**renderset**	function
define	function	**resetattributes**	function
dimensions	function	**resetitalics**	function
domains	table	**resolvefallbacks**	function
extensiblecode	function	**scaleparameters**	function
extensibles	data table	**setdomain**	function
extrabase	number	**setitalics**	function
extras	table	**setridofprime**	function
F add		**sets**	data table
F copy		**styles**	data table
fallbacks	table	**syncboth**	function
F apply		**syncname**	function
F install		**syncstyle**	function
fallbackstyleattr	function	**toname**	function
families	data table	**tostyle**	function
finishfallbacks	function	**tweakaftercopyingfont**	function
gaps	data table	**tweakbeforecopyingfont**	function
getboth	function	**tweaks**	table
getdomain	function	**utfmathaccent**	function
getitalics	function	**utfmathclass**	function
getridofprime	function	**utfmathcommand**	function
getstyle	function	**utfmathfiller**	function
horizontalcode	function	**utfmathstretch**	function
initializeparameters	function	**virtualize**	function
makefont	function	**virtualized**	data table

md5 (extra lua)

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

metapost (context)

checkformat	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 declare
N def
N definedmacro
N delimiters
N endgroup
N equals
N etex
N everyjob
N exitif
N expandafter
N fi_or_else
N if
N input
N interim
N internal
N iteration
N join
N leftbrace
N leftbracket
N leftdelimiter
N let
N macrospecial
N maketext
N message
N mode

N newinternal
N nullary
N numeric
N of
N ofbinary
N outertag
N parametertype
N plus_or_minus
N primarybinary
N primarydef
N randomseed
N relax
N repeat_loop
N rightbrace
N rightbracket
N rightdelimiter
N runscript
N save
N scantokens
N scope
N secondarybinary
N secondarydef
N semicolon
N setbounds
N shipout
N show
N skip
N slash
N special
N step
N stop
N str
N string
N tag
N tension
N tertiarybinary
N tertiarydef
N thingstoadd
N to
N unary
N undefinedcs

	N until	**getparameter**	function
	N void	**getparameterset**	function
	N with	**getstatistics**	function
	N within	**gettext**	function
	N write	**graphic**	function
colorinitializer	function	**graphic_base_pass**	function
comment	function	**includesvgbuffer**	function
convert	function	**includesvgfile**	function
currentmpx	function	**installplugin**	function
currentmpxstatus	function	**isobject**	function
defaultformat	string	**lastlog**	string
defaultinstance	string	**load**	function
defaultmethod	string	**maketext**	function
directrun	function	**metafun**	table
escaped	function		F interpolate
exectime	table		F topath
extensiondata	data table	**mptopdf**	table
filterclippath	function		F convertmpstopdf
flush	function		N nofconverted
flushers	table	**n**	number
	T pdf	**nofruns**	number
	F comment	**nofscriptruns**	function
	F flushfigure	**nvformat**	function
	F startfigure	**pdfliterals**	function
	F stopfigure	**pluginactions**	function
	F textfigure	**popformat**	function
flushliteral	function	**popscriptrunner**	function
flushnormalpath	function	**popvariable**	function
flushreset	function	**popvariables**	function
fonts	table	**preparetextextsdata**	function
	F define	**process**	function
	T flusher	**processing**	function
	F flushfigure	**processplugins**	function
	F startfigure	**processspecial**	function
	F stopfigure	**properties**	table
	N instances	**pushformat**	function
	F process	**pushscriptrunner**	function
format_number	function	**pushvariable**	function
format_string	function	**pushvariables**	function
formatnumber	function	**reducetogray**	boolean
getclippath	function	**registerscript**	function
getextensions	function	**remappedtext**	function
getextradata	function	**remaptext**	function
getjobdata	function	**reporterror**	function

reportsvgfonts	function		F setfrombuffer
reset	function	**texerrors**	boolean
resetlastlog	function	**texexp**	function
resetplugins	function	**theclippath**	function
run	function	**tographic**	function
runscript	function	**totable**	function
scanparameters	function	**types**	table
scripterror	function		N boolean
scriptindex	function		N cmykcolor
setextensions	function		N color
setoutercolor	function		N dependent
setparameterset	function		N independent
settext	function		N known
setvariable	function		N numeric
showlog	boolean		N pair
showsvgpage	function		N path
simple	function		N pen
splitprescript	function		N picture
startgraphic	function		N protodependent
startsvghashing	function		N string
stopgraphic	function		N structured
stopsvghashing	function		N suffixedmacro
svformat	function		N tokenlist
svgcolorremapper	function		N transform
svgglyphtomp	function		N unknownboolean
svgshapestomp	function		N unknownpath
svgshapestopdf	function		N unknownpen
svgsplitcolor	function		N unknownpicture
svgtomp	function		N unknownstring
svgtopdf	function		N unsuffixedmacro
sxsy	function		N vacuous
tex	table	**typesvgpage**	function
F get		**unload**	function
F reset		**untagvariable**	function
F set		**variables**	table

mime (extra lua)

b64	function	**qpwrp**	function
decode	function	**report**	function
decodet	table	**stuff**	function
F base64		**unb64**	function
F quoted-printable		**unqp**	function
dot	function	**wrap**	function
encode	function	**wrapt**	table
encodet	table	F base64	
F base64		F default	
F quoted-printable		F quoted-printable	
eol	function	F text	
normalize	function	**wrp**	function
qp	function		

mp (context)

_get_count_	function	**color**	function
_get_dimen_	function	**dataset**	function
_get_macro_	function	**datasets**	function
_get_toks_	function	F load	
_set_count_	function	**dimension**	function
_set_dimen_	function	**direct**	function
_set_macro_	function	**direct1**	function
_set_toks_	function	**direct2**	function
autoinject	function	**direct3**	function
aux	table	**direct4**	function
F boolean		**disposehash**	function
F color		**draw**	function
F direct		**fill**	function
F direct1		**flatten**	function
F direct2		**flush**	function
F direct3		**format**	function
F direct4		**formatted**	function
F draw		**fprint**	function
F fill		**fromhash**	function
F flush		**get**	table
F fprint		**getcount**	function
F integer		**getdimen**	function
F number		**getmacro**	function
F numeric		**gettoks**	function
F pair		**graphformat**	function
F pairpoints		**inhash**	function
F path		**inject**	function
F pathpoints		F boolean	
F points		F cmykcolor	
F print		F color	
F quadruple		F integer	
F quadruplepoints		F number	
F quoted		F numeric	
F size		F pair	
F string		F path	
F transform		F string	
F triplet		F transform	
F tripletpoints		F whatever	
F vprint		**integer**	function
boolean	function	**isarray**	function
cleaned	function	**isobject**	function

lmt_color_functions	table	**mf_blob_raw_content**	function
F shade		**mf_blob_raw_dimensions**	function
F step		**mf_blob_raw_reset**	function
lmt_contours_bitmap_get	function	**mf_blob_raw_toutf**	function
lmt_contours_bitmap_set	function	**mf_blob_raw_wipe**	function
lmt_contours_cleanup	function	**mf_blob_size**	function
lmt_contours_color	function	**mf_blob_width**	function
lmt_contours_edge_get_band	function	**mf_external_figure**	function
lmt_contours_edge_get_cell	function	**mf_finish_saving_data**	function
lmt_contours_edge_paths	function	**mf_formatted_text**	function
lmt_contours_edge_set	function	**mf_get_outline_text**	function
lmt_contours_edge_set_by_band	function	**mf_graphic_text**	function
lmt_contours_edge_set_by_cell	function	**mf_inject_blob**	function
lmt_contours_format	function	**mf_made_text**	function
lmt_contours_function	function	**mf_map_move**	function
lmt_contours_maxmean	function	**mf_map_text**	function
lmt_contours_maxz	function	**mf_named_color**	function
lmt_contours_minmean	function	**mf_outline_text**	function
lmt_contours_minz	function	**mf_save_data**	function
lmt_contours_nofvalues	function	**mf_script_index**	function
lmt_contours_nx	function	**mf_some_text**	function
lmt_contours_ny	function	**mf_start_saving_data**	function
lmt_contours_range	function	**mf_stop_saving_data**	function
lmt_contours_shade_paths	function	**mf_tb_dimensions**	function
lmt_contours_shade_set	function	**mf_tt_dimensions**	function
lmt_contours_shape_paths	function	**mf_tt_initialize**	function
lmt_contours_start	function	**mode**	function
lmt_contours_stop	function	**n**	function
lmt_contours_value	function	**newhash**	function
lmt_contours_xrange	function	**number**	function
lmt_contours_yrange	function	**numeric**	function
lmt_do_remaptext	function	**pair**	function
lmt_function_x	function	**pairpoints**	function
lmt_mesh_set	function	**path**	function
lmt_mesh_update	function	**pathpoints**	function
lmt_poisson_generate	function	**points**	function
lmt_register_glyph	function	**positionanchor**	function
lmt_register_glyphs	function	**positionbox**	function
lmt_surface_do	function	**positioncurve**	function
lmt_svg_include	function	**positionpage**	function
mf_blob_add	function	**positionpath**	function
mf_blob_dimensions	function	**positionpxy**	function
mf_blob_index	function	**positionregion**	function
mf_blob_new	function	**positionwhd**	function

positionxy	function		F symbol	
prefix	function		F token	
print	function		F transform	
processingmode	function	**set**		table
quadruple	function	**setcount**		function
quadruplepoints	function	**setdimen**		function
quoted	function	**setmacro**		function
report	function	**settoks**		function
scan	table	**size**		function
F boolean		**string**		function
F cmykcolor		**systemmode**		function
F color		**texstr**		function
F expression		**textextanchor**		function
F integer		**texvar**		function
F next		**tohash**		function
F number		**transform**		function
F numeric		**triplet**		function
F pair		**tripletpoints**		function
F path		**utflen**		function
F pen		**utfsub**		function
F string		**vprint**		function

mplib (extra tex)

codes	function	**scan_boolean**	function
execute	function	**scan_cmykcolor**	function
fields	function	**scan_color**	function
finder	function	**scan_expression**	function
finders	table	**scan_integer**	function
F file		**scan_next**	function
F mpstemplate		**scan_number**	function
finish	function	**scan_numeric**	function
inject_boolean	function	**scan_pair**	function
inject_cmykcolor	function	**scan_path**	function
inject_color	function	**scan_pen**	function
inject_integer	function	**scan_string**	function
inject_number	function	**scan_symbol**	function
inject_numeric	function	**scan_token**	function
inject_pair	function	**scan_transform**	function
inject_path	function	**solve_path**	function
inject_string	function	**statistics**	function
inject_transform	function	**status**	function
inject_whatever	function	**types**	function
new	overloaded function	**version**	function
pen_info	function		

noads (context)

handlers   table

    F align
    F alternates
    F autofences
    F classes
    F collapse
    F domains
    F families
    F fixscripts
    F italics
    F kernpairs
    F makeup
    F relocate
    F render
    F resize
    F showtree
    F tags
    F unscript
    F unstack
    F variants

process   function
processnested   function
processors   table

    F mlist_to_hlist
    T unscript
    T unstack

processouter   function

node (basic tex)

check_discretionaries	function	F getfont
check_discretionary	function	F getglue
copy	function	F getglyphdata
copy_list	function	F getheight
count	function	F getid
current_attr	function	F getkern
dimensions	function	F getlang
direct	table	F getleader
F check_discretionaries		F getlist
F check_discretionary		F getnext
F copy		F getnormalizedline
F copy_list		F getnucleus
F copy_only		F getoffsets
F count		F getorientation
F current_attr		F getpenalty
F dimensions		F getpost
F effective_glue		F getpre
F end_of_math		F getprev
F exchange		F getproperty
F find_attribute		F getreplace
F find_attribute_range		F getshift
F find_node		F getstate
F first_glyph		F getsub
F flatten_discretionaries		F getsubpre
F flush_list		F getsubtype
F flush_node		F getsup
F free		F getsuppre
F get_attribute		F getwhd
F get_properties_table		F getwidth
F get_synctex_fields		F glyphdimensions
F getattributelist		F has_attribute
F getboth		F has_dimensions
F getbox		F has_field
F getchar		F has_glyph
F getdata		F hpack
F getdepth		F hyphenating
F getdirection		F ignore_math_skip
F getdisc		F insert_after
F getexpansion		F insert_before
F getfam		F is_char
F getfield		F is_direct

F is_glyph	F setorientation
F is_node	F setpenalty
F is_valid	F setpost
F is_zero_glue	F setpre
F kerning	F setprev
F last_node	F setproperty
F length	F setreplace
F ligaturing	F setshift
F make_extensible	F setsplit
F mlist_to_hlist	F setstate
F naturalwidth	F setsub
F new	F setsubpre
F prepend_prevdepth	F setsubtype
F protect_glyph	F setsup
F protect_glyphs	F setsuppre
F protrusion_skippable	F setwhd
F rangedimensions	F setwidth
F remove	F slide
F reverse	F start_of_par
F set_attribute	F tail
F set_synctex_fields	F todirect
F setattributelist	F tonode
F setboth	F tostring
F setbox	F tovaliddirect
F setchar	F traverse
F setdata	F traverse_char
F setdepth	F traverse_glyph
F setdirection	F traverse_id
F setdisc	F traverse_list
F setexpansion	F type
F setfam	F unprotect_glyph
F setfield	F unprotect_glyphs
F setfont	F unset_attribute
F setglue	F usedlist
F setglyphdata	F uses_font
F setheight	F vertical_break
F setkern	F vpack
F setlang	F write
F setleader	
F setlink	
F setlist	
F setnext	
F setnucleus	
F setoffsets	

effective_glue	function
end_of_math	function
family_font	function
fields	function
find_attribute	function
first_glyph	function

fix_node_lists	function	**prepend_prevdepth**	function
flatten_discretionaries	function	**protect_glyph**	function
flush_list	function	**protect_glyphs**	function
flush_node	function	**protrusion_skippable**	function
free	function	**rangedimensions**	function
get_attribute	function	**remove**	function
get_glue	function	**set_attribute**	function
get_properties_table	function	set_glue	function
getfield	function	**setfield**	function
getnormalizeline	function	**setnormalizeline**	function
getproperty	function	**setproperty**	function
has_attribute	function	**slide**	function
has_field	function	**subtypes**	function
has_glyph	function	**tail**	function
hpack	function	**tostring**	function
hyphenating	function	**traverse**	function
id	function	**traverse_char**	function
insert_after	function	**traverse_glyph**	function
insert_before	function	**traverse_id**	function
inuse	function	**traverse_list**	function
is_node	function	**type**	function
is_zero_glue	function	**types**	function
kerning	function	unprotect_glyph	function
last_node	function	unprotect_glyphs	function
length	function	**unset_attribute**	function
ligaturing	function	**usedlist**	function
make_extensible	function	uses_font	function
mlist_to_hlist	function	**values**	function
new	function	vpack	function
optimize_unset_attribute	function	**write**	function

nodes (context)

accentcodes	data table	**discretionarycodes**	data table
aligned	function	**effective_glue**	function
append	function	**end_of_math**	function
apply	function	**fencecodes**	data table
applyvisuals	function	**fields**	function
astable	function	**fillcodes**	data table
basepoints	function	**find_attribute**	function
boundarycodes	data table	**first_glyph**	function
boxes	table	**firstcharacter**	function
F dimensions		**firstcharinbox**	function
F direct		**firstdirinbox**	function
F found		**firstglyph**	function
F reset		**flatten_discretionaries**	function
F restore		**flush**	function
F save		**flush_list**	function
F savenode		**flush_node**	function
builders	table	**free**	function
F buildpage_filter		**fullhpack**	function
F vpack_filter		**getattr**	function
check_discretionaries	function	**getattribute**	function
codes	data table	**getboth**	function
concat	function	**getbox**	function
copy	function	**getchar**	function
copy_list	function	**getfield**	function
copy_node	function	**getfont**	function
count	function	**getid**	function
countall	function	**getleader**	function
current_attr	function	**getlist**	function
delete	function	**getnext**	function
destinations	table	**getnormalizeline**	function
N attribute		**getprev**	function
T done		**getsubtype**	function
F handler		**gluecodes**	data table
T stack		**gluevalues**	data table
dimensionfields	data table	**glyphcodes**	data table
dimensions	function	**handlers**	table
dircodes	data table	F accessibility	
directioncodes	data table	F backgrounds	
directionvalues	data table	F backgroundspage	
dirvalues	data table	F backgroundsvbox	
disccodes	data table	F characters	

F checkforleaks		**is_direct**	function
F checkglyphs		**is_display_math**	function
F checkparcounter		**is_node**	function
F cleanupbox		**is_nut**	function
F cleanuppage		**is_zero_glue**	function
F export		**kerncodes**	data table
F finalizebox		**kerning**	function
F flatten		**keys**	table
F flattenline		T whatsit	
F migrate		**last_node**	function
F protectglyphs		**leadercodes**	data table
F stripping		**leftmarginwidth**	function
F textbackgrounds		**length**	function
F unprotectglyphs		**ligaturing**	function
has_attribute	function	**linefillers**	table
has_field	function	D data	
has_glyph	function	F define	
hpack	function	F enable	
hyphenating	function	F filler	
idsandsubtypes	function	F handler	
idstostring	function	**lines**	table
ignorablefields	data table	T boxed	
injections	table	F register	
F copy		F setup	
F getligaindex		F stage_one	
F getthreshold		F stage_two	
F handler		D data	
F installgetspaceboth		F finalize	
F installnewkern		F number	
F isspace		N scratchbox	
F keepcounts		**link**	function
F reset		**linked**	function
F resetcounts		**list**	function
F setcursive		**listablefields**	data table
F setkern		**listcodes**	data table
F setligaindex		**listtoutf**	function
F setmark		**literalvalues**	data table
F setmove		**load**	function
F setposition		**localparcodes**	data table
F setspacekerns		**locate**	function
insert_after	function	**margincodes**	data table
insert_before	function	**marginkerncodes**	data table
insert_list_after	function	**markers**	table
installattributehandler	function	F get	

mathcodes	data table		F firstcharacter
maxboxwidth	function		F firstcharinbox
mlist_to_hlist	function		F firstglyph
new	function		F flatten_discretionaries
noadcodes	data table		F flush
noadoptions	table		F flush_list
	N axis		F flush_node
	N exact		F free
	N left		F fullhpack
	N middle		F get_components
	N no_axis		F get_synctex_fields
	N right		F getattr
	N set		F getattribute
	N unused_1		F getattributelist
	N unused_2		F getattrlist
nodecodes	data table		F getboth
nopts	function		F getbox
nuts	table		F getboxglue
	F append		F getchar
	F apply		F getcomponents
	F applyvisuals		F getdata
	F check_discretionaries		F getdepth
	F concat		F getdirection
	F copy		F getdisc
	F copy_list		F getdiscretionary
	F copy_no_components		F getexpansion
	F copy_node		F getfam
	F copy_only		F getfield
	F copy_only_glyphs		F getfont
	F copy_properties		F getglue
	F copyvisual		F getglyphdata
	F count		F getheight
	F count_components		F getid
	F countall		F getkern
	F current_attr		F getlang
	F delete		F getlanguage
	F dimensions		F getleader
	F dirdimensions		F getlist
	F effective_glue		F getnext
	F end_of_math		F getnormalizedline
	F exchange		F getnucleus
	F find_attribute		F getoffsets
	F find_node		F getorientation
	F first_glyph		F getpenalty

F getpost	F new
F getpre	T pool
F getprev	F accent
F getprop	F baselineskip
F getreplace	F boundary
F getruledata	F choice
F getshift	F cleanup
F getstate	F delim
F getsub	F delimiter
F getsubpre	F direction
F getsubtype	F directliteral
F getsup	F disc
F getsuppre	F emptyrule
F getsurround	F fence
F getvalue	F fontkern
F getwhd	F fraction
F getwidth	F glue
F has_attribute	F gluespec
F has_dimensions	F glyph
F has_field	F hlist
F has_glyph	F indentskip
F hpack	F italickern
F hyphenating	F kern
F insert_after	F latelua
F insert_before	F leader
F insert_list_after	F lefthangskip
F is_direct	F leftmarginkern
F is_display_math	F leftskip
F is_node	F lineskip
F is_nut	F literal
F is_zero_glue	F mathchar
F ischar	F mathtextchar
F isdone	F negatedglue
F isglyph	F noad
F kerning	F originliteral
F last_node	F outlinerule
F leftmarginwidth	F pageliteral
F length	F penalty
F ligaturing	F radical
F link	F rawliteral
F linked	F register
F locate	F restore
F mlist_to_hlist	F righthangskip
F nestedtracedslide	F rightmarginkern

F rightskip	F set_synctex_fields
F rule	F setattr
F save	F setattribute
F savepos	F setattributelist
F setmatrix	F setattributes
F shrink	F setattrlist
F stretch	F setboth
F subbox	F setbox
F submlist	F setboxglue
F temp	F setchar
F usage	F setcomponents
T userids	F setdata
N margins.inline	F setdepth
N splitters.one	F setdirection
N splitters.two	F setdisc
F usernode	F setdiscretionary
F userrule	F setexpansion
F vlist	F setfam
F wordboundary	F setfield
F prepend	F setfont
F processranges	F setglue
F processwords	F setglyphdata
F protect_glyph	F setheight
F protect_glyphs	F setkern
F protrusion_skippable	F setlang
F rangedimensions	F setlanguage
F rawprop	F setleader
F reference	F setlink
F rehpack	F setlist
F remove	F setnext
F repackhlist	F setnucleus
F replace	F setoffsets
F reverse	F setorientation
F rightmarginwidth	F setparproperty
T rules	F setpenalty
T ruleactions	F setpost
F box	F setpre
F draw	F setprev
F fill	F setprop
F mp	F setreplace
F stroke	F setruledata
F userrule	F setshift
F set_attribute	F setsplit
F set_components	F setstate

F setsub	F node
F setsubpre	F vlist
F setsubtype	F whatsit
F setsup	T typesetters
F setsuppre	F tohbox
F setsurround	F tohpack
F setunsetattributes	F tonodes
F setvalue	F tovbox
F setvisual	F tovpack
F setvisuals	F unprotect_glyph
F setwhd	F unprotect_glyphs
F setwidth	F unset_attribute
F slide	F unsetattribute
F somepenalty	F unsetattributes
F somespace	F untracedslide
F splitbox	F usedlist
F start_of_par	F uses_font
F striprange	F vianodes
F tail	F vianuts
F takeattr	F vpack
F takebox	F write

F takelist	**packlist** function
F theprop	**penaltycodes** data table
F tonode	**plugindata** table
F tonodes	F finalizer
F tonut	F initializer
F tosequence	S name
F tostring	T namespace
F tracedslide	N attribute
F traverse	D data
F traverse_char	F enable
F traverse_glyph	F handler
F traverse_id	F register
F traverse_list	D registered
T traversers	D values
F boundary	F processor
F char	**points** function
F dir	**pool** table
F disc	F baselineskip
F glue	F cleanup
F glyph	F directliteral
F hlist	F glyph
F list	F hlist
F next	F latelua

F lineskip		F define	
F literal		F enable	
F originliteral		F handler	
F register		F userrule	
F restore		**save**	function
F rule		**serialize**	function
F save		**serializebox**	function
F savepos		**set_attribute**	function
F setmatrix		**setattr**	function
F special		**setattribute**	function
F usage		**setattributes**	function
F vlist		**setboth**	function
prepend	function	**setbox**	function
print	function	**setboxonaturalwd**	function
processors	table	**setchar**	function
F contribute_filter		**setfield**	function
B enabled		**setfont**	function
F hpack_filter		**setleader**	function
F post_linebreak_filter		**setlink**	function
F pre_linebreak_filter		**setlist**	function
F tracer		**setnext**	function
properties	table	**setnormalizeline**	function
T data		**setprev**	function
protect_glyph	function	**setunsetattributes**	function
protect_glyphs	function	**shifts**	table
protrusion_skippable	function	D data	
pts	function	F define	
radicalcodes	data table	F enable	
rangedimensions	function	F handler	
reference	function	**show**	function
references	table	**showboxes**	function
N attribute		**showcodes**	function
T done		**showlist**	function
F handler		**showsimplelist**	function
T stack		**skipcodes**	data table
rehpack	function	**skipvalues**	data table
remove	function	**slide**	function
repackhlist	function	**snapshots**	table
replace	function	F getparameters	
report	function	F getsamples	
rightmarginwidth	function	F resetsamples	
rulecodes	data table	F takesample	
rules	table	**somepenalty**	function
D data		**somespace**	function

splitbox	function		totable	function
start_of_par	function		**totree**	function
stripdiscretionaries	function		**toutf**	function
stripping	table		**tracers**	table
T glyphs			T characters	
F set			F collect	
subtypes	data table		F equal	
tail	function		F start	
takeattr	function		F string	
takebox	function		F unicodes	
tasks	table		T colors	
F actions			F reset	
F appendaction			F set	
F disableaction			F setlist	
F disablegroup			F directions	
F enableaction			F fontchar	
F enablegroup			T frequencies	
F freeze			F register	
F freezegroup			T pool	
F new			T nodes	
F prependaction			F rule	
F removeaction			T nuts	
F replaceaction			F rule	
F restart			F resetproperties	
F setaction			F rule	
F showactions			F setlist	
F table			F setproperties	
tobasepoints	function		F start	
tocentimeters	function		T steppers	
tociceros	function		F check	
todidots	function		F codes	
todimen	function		F features	
toinches	function		F font	
tomillimeters	function		F glyphs	
tonewciceros	function		F message	
tonewdidots	function		F messages	
tonode	function		F nofsteps	
tonodes	function		F register	
tonut	function		F reset	
topicas	function		F start	
topoints	function		F stop	
toscaledpoints	function		F stop	
tosequence	function		T transparencies	
tostring	function		F reset	

F set		**unsetattribute**	function
F setlist		**unsetattributes**	function
traverse	function	**usedlist**	function
traverse_char	function	**usercodes**	data table
traverse_glyph	function	**uses_font**	function
traverse_id	function	**vianodes**	function
traverse_list	function	**vianuts**	function
traversers	table	**visualizebox**	function
F char		**visualizers**	table
F glyph		F attribute	
F list		T attributes	
F node		F box	
typesetters	table	F handler	
F hbox		F markfonts	
F hpack		F register	
F tohbox		F setfont	
F tohpack		F setlayer	
F tonodes		F setruledglyph	
F tovbox		F setvisual	
F tovpack		**vpack**	function
F vpack		**whatcodes**	data table
unprotect_glyph	function	**whatsitcodes**	data table
unprotect_glyphs	function	**write**	function
unset_attribute	function		

number (context)

	function	**tobitstring**	function
basepoints	function	**tocentimeters**	function
bytetodecimal	function	**tociceros**	function
compactfloat	function	**tocontext**	function
decimaltobyte	function	**todidots**	function
dimenfactors	data table	**todimen**	function
formatted	function	**toevenhex**	function
formattedfloat	function	**toinches**	function
idiv	function	**tomillimeters**	function
maxdimen	number	**tonewciceros**	function
nopts	function	**tonewdidots**	function
percent	function	**tonumberf**	function
points	function	**tonumberg**	function
pts	function	**topicas**	function
signed	function	**topoints**	function
sparseexponent	function	**toscaled**	function
splitdimen	function	**toscaledpoints**	function
to16dot16	function	**valid**	function
tobasepoints	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
ghostscript   table
   F execute
   F initialize
graphicsmagick table
   F execute
   F initialize
loaded   table
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
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

os (basic lua)

__getenv__	function		**rename**	overloaded function
__setenv__	function		**resolvers**	table
binsuffix	string			F bits
binsuffixes	table		**resultof**	function
clock	function		**runtime**	function
converttime	function		**selfarg**	table
date	overloaded function		**selfbase**	string
difftime	function		**selfbin**	string
enableansi	function		**selfcore**	string
env	data table		**selfdir**	string
execute	overloaded function		**selfname**	string
exit	overloaded function		**selfpath**	string
fulltime	function		**setenv**	overloaded function
getcodepage	function		**setexitcode**	function
getenv	overloaded function		**setlocale**	overloaded function
gettimeofday	function		**sleep**	function
isleapyear	function		**time**	function
launch	function		**timezone**	function
libsuffix	string		**tmpname**	function
localtime	function		**today**	function
name	string		**type**	string
newline	string		**uname**	function
nofdays	function		**uuid**	function
now	function		**validdate**	function
pipeto	function		**weekday**	function
platform	string		**where**	function
remove	overloaded 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 block
- F check
- F currentcolumn
- F define
- F finishflush
- F flushareas
- F flushcolumn
- F flushrest
- F goto
- F noto
- F prepareflush
- F put
- F registerarea
- F reset
- F setarea

- F sethsize
- F sethspan
- F setlines
- F setproperties
- F setstart
- F setvsize

injections   table
- F flushafter
- F flushbefore
- F save

mixedcolumns   table
- F cleanup
- F finalize
- F getlist
- F getrest
- F getsplit
- F setsplit

pdf (basic tex)

immediateobj function

pdfe (extra tex)

arraytotable	function	**getnumber**	function
close	function	**getpage**	function
closestream	function	**getpages**	function
dictionarytotable	function	**getsize**	function
encryptioncodes	data table	**getstatus**	function
getarray	function	**getstream**	function
getboolean	function	**getstring**	function
getbox	function	**gettrailer**	function
getcatalog	function	**getversion**	function
getdictionary	function	**new**	function
getfromarray	function	**objectcodes**	data table
getfromdictionary	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   D tables

   F registerunit

pngdecode (extra tex)

applyfilter function   **splitmask**   function
expand   function   **tocmyk**   function
interlace   function

publications (context)

addtexentry	function	**converttoxml**	function
analyze	function	**currentspecification**	table
anywhere	function	S author	
authorcache	data table	T categories	
authorcollapsers	data table	T article	
authorhashers	table	S category	
F invertedshort		T extra	
F normal		T fields	
F normalinverted		S author	
F normalshort		S editor	
F sequential		S journal	
F sequentialshort		S keywords	
F short		S note	
authormap	data table	S number	
authortoregister	function	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	
concatstate	function	T required	

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

D privates		F showtables	
D sets		F showvariants	
D specials		**typesetters**	table
D types		F author	
D virtuals		F string	
tags	function	**usedataset**	function
tracers	table	**usedentries**	function
F showdatasetauthors		**writers**	table
F showdatasetcompleteness		F author	
F showdatasetfields		F keyword	
F showentry		F pagenumber	
F showfields		F range	
F showhashedauthors			

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	**findpk**	function
appendhash	function	**findtexfile**	function
automount	function	**findwildcardfile**	function
booleanvariable	function	**findwildcardfiles**	function
cacheversion	string	**formatofsuffix**	function
checkedvariable	function	**formatofvariable**	function
cleanedpathlist	function	**formats**	data table
cleanpath	function	**foundintree**	function
cleanpathlist	function	**foundintrees**	function
concatinators	data table	**generators**	data table
configbanner	string	**get_from_content**	function
configurationfiles	function	**getenv**	function
dangerous	data table	**getextrapaths**	function
datastate	function	**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	**initialized**	function
executers	table	**installinputfilehandler**	function
expandbraces	function	**installinputlinehandler**	function
expandedpathfromlist	function	**jobpath**	function
expandedpathlist	function	**jobs**	table
expandedpathlistfromvariable	function	F currentcomponent	
expandpath	function	F currentenvironment	
expandpathfromvariable	function	F currentproduct	
expansion	function	F currentproject	
extendtexmfvariable	function	F justacomponent	
filtered_from_content	function	D processors	
find_file	function	F productcomponent	
find_files	function	F usefile	
findbinfile	function	**joinpath**	function
findctxfile	function	**knownvariables**	function
finders	data table	**libraries**	table
findfile	function	F optionalloaded	
findfiles	function	F validoptional	
findgivenfile	function	**load**	function
findgivenfiles	function	**loadbinfile**	function
findlib	function	**loaders**	data table
findpath	function	**loadlualib**	function

loadtexfile	function	**resetextrapaths**	function
loadtime	function	**resetmemstream**	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		

schemes:
- T cleaners
  - F md5
  - F none
  - F strip
- F cleanname
- F fetchstring
- F fetchtable
- F install

macros:
- F convertfile
- F decodecomment
- F enablecomment
- F encodecomment
- F preprocessed
- F processmk
- F processmklx
- F processmkvi
- F version

maxreadlevel	number	**setdynamic**	function
		setenv	function
methodhandler	function	**setmemstream**	function
openbinfile	function	**showpath**	function
openers	data table	**simplescanfiles**	function
openfile	function	**splitconfigurationpath**	function
opentexfile	function	**splitexpansions**	function
ownpath	string	**splitmethod**	function
popextrapath	function	**splitpath**	function
popinputname	function	**stackpath**	function
poppath	function	**starttiming**	function
prefixes	data table	**stoptiming**	function
prependhash	function	**suffixes**	data table
pushextrapath	function	**suffixmap**	data table
pushinputname	function	**suffixofformat**	function
pushpath	function	**texdatablob**	function
registerextrapath	function	**toppath**	function
registerfile	function	**unexpandedpath**	function
registerfilehash	function	**unexpandedpathlist**	function
registerintrees	function	**unresolve**	function
registermethod	function	**updaterelations**	function
registerzipfile	function	**updatescript**	function
relations	data table	**uselibrary**	function
renew	function	**usertypes**	data table
renewcache	function	**usezipfile**	function
repath	function	**validatedpath**	function
reset	function	**variable**	function
		variableofformat	function

variableofformatorsuffix   function

wildcardpattern   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
categorytonumber data table
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
handlers   data table

hash   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
numbertocategory   data table
numbertodataset   data table
numbertohandler   data table
reset   function
set   function
splitters   data table

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	**readfixed2**	function
readbytes	function	**readfixed4**	function
readbytetable	function	**readinteger1**	function
readcardinal1	function	**readinteger1_le**	function
readcardinal1le	function	**readinteger2**	function
readcardinal2	function	**readinteger2_le**	function
readcardinal2le	function	**readinteger3**	function
readcardinal3	function	**readinteger3_le**	function
readcardinal3le	function	**readinteger4**	function
readcardinal4	function	**readinteger4_le**	function
readcardinal4le	function	**readintegertable**	function
readcardinaltable	function		

socket (extra lua)

BLOCKSIZE	number
_DATAGRAMSIZE	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			**protect**	function
S resent-cc			**report**	function
S resent-date			**select**	function
S resent-from			**sink**	function
S resent-message-id			**sinkt**	table
S resent-reply-to			F close-when-done	
S resent-sender			F default	
S resent-to			F http-chunked	
S retry-after			F keep-open	
S return-path			**skip**	function
S sender			**sleep**	function
S server			**source**	function
S smtp-remote-recipient			**sourcet**	table
S status			F by-length	
S subject			F default	
S te			F http-chunked	
S to			F until-closed	
S trailer			**tcp**	function
S transfer-encoding			**tcp4**	function
S upgrade			**tcp6**	function
S user-agent			**tp**	table
S vary			N TIMEOUT	
S via			F connect	
S warning			**try**	function
S will-retry-until			**udp**	function
S www-authenticate			**udp4**	function
S x-mailer			**udp6**	function
F lower			**url**	table
F normalize			F absolute	
http	table		F build	
N TIMEOUT			F build_path	
S USERAGENT			F escape	
F genericform			F parse	
F open			F parse_path	
F request			F unescape	
newtry	function			

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

statistics (context)

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

status (basic tex)

constants   function   **resetmessages** function

list   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		**nspaces**	table
autosingle	function		**optionalquoted**	function
booleanstring	function		**pack**	function
byte	function		**packsize**	function
bytepairs	function		**quote**	function
bytes	function		**quoted**	function
bytetable	function		**rep**	function
char	function		**replacenewlines**	function
characterpairs	function		**reverse**	function
characters	function		**split**	function
checkedsplit	function		**splitlines**	function
collapsespaces	function		**splitup**	function
containsws	function		**strip**	function
count	function		**sub**	function
dawson	function		**tformat**	function
dump	function		**toHEX**	function
erf	function		**toboolean**	function
erfc	function		**tobytes**	function
erfcx	function		**tocontext**	function
erfi	function		**todec**	function
escapedpattern	function		**todimen**	function
escapedquotes	function		**tohex**	function
explode	function		**tonodes**	function
f6	function		**topattern**	function
find	function		**totable**	function
format	function		**tounicode16**	function
formatter	function		**toutf**	function
formatters	function		**toutf32**	function
fullstrip	function		**toutf8**	function
gmatch	function		**tracedchar**	function
gsub	function		**tracedchars**	table
is_boolean	function		**unpack**	function
is_empty	function		**unquote**	function
itself	function		**unquoted**	function
len	function		**upper**	function
limit	function		**utfcharacter**	function
linetable	function		**utfcharacters**	function
longtostring	function		**utfcharactertable**	function
lower	function		**utflength**	function
match	function		**utfpadd**	function
nospaces	function		**utfpadding**	function

utfvalue	function	**valid**	function
utfvalues	function	**voigt**	function
utfvaluetable	function	**voigt_hwhm**	function

structures (context)

atlocation	function	F next	
blocks	table	F prev	
D collected		F previous	
F define		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 last		F title	

F touserdata		F reordered		
inserts	table	T result		
D data		F savedlistnumber		
F define		F savedlistprefixednumber		
F getdata		F savedlisttitle		
F getlocation		D sectionblocks		
F getname		F sectionnumber		
F getnumber		F size		
F setlocation		F title		
F setup		D tobesaved		
D stored		F userdata		
itemgroups	table	F uservalue		
lists	table	**marks**	table	
F addto		D data		
F analyze		F define		
B autoreorder		F exists		
D cached		F fetch		
D collected		F fetchallmarks		
F discard		F fetched		
F enhance		F fetchonemark		
T enhancers		F fetchtwomarks		
F filter		F get		
F formulanumber		F number		
F getresult		F relate		
F groupindex		F reset		
F hasnumberdata		F set		
F haspagedata		F show		
F hastitledata		F synchronize		
F iscached		F title		
D kinds		T tracers		
F label		F showtable		
F location		**notes**	table	
D names		F check_spacing		
F number		F checkpagechange		
D ordered		F define		
F page		F doifonsamepageasprevious		
F popnesting		F get		
F prefix		F getdeltapage		
F prefixednumber		F getinternal		
F prefixedpage		F getn		
F process		F getstate		
D pushed		F hascontent		
F pushnesting		F internal		
F realpage		F internalid		

F reset		F define
D runners		F enhance
F set		F extend
F setandgetattribute		F filter
F setcomponent		F filtercollected
F setinternalreference		F finalize
F setlinkmethod		F findinternal
F setnextinternal		F flush
F setnextorder		F get
F setreferencerealpage		F prepare
D specials		F process
F splitcomponent		F setmethod
F splitprefix		F sort
F splitreference		F store
F synchronizepage		D tobesaved
T testrunners		F unique
F inner		F userdata

sections   table

F special	F autodepth
F special operation	F cct
F special operation with arguments	D collected
T testspecials	F current
F deltapage	F currentblock
F i	F currentid
F internal	F currentlevel
F page	F currentsectionindex
F realpage	F depthnumber
F section	F finddata
F userpage	F findnumber
D tobereferred	F fullnumber
D tobesaved	F getcurrentlevel
D tracedpages	F getlevel
T urls	F getnumber
T data	F internalreference
F define	D levelmap
F found	D levels
F get	F matchingtilldepth
F untex	F numberatdepth
D usedinternals	F numbers
D usedviews	F popblock
F valid	F prefixedconverted

registers   table

F analyze	F pushblock
D collected	F register
F compare	D registered

F	reportstructure		F	registerused
F	save		F	resetshown
T	sectionblockdata		F	resetused
T	bodypart		F	sort
S	bookmark		F	synonym
F	set		D	tobesaved
F	setblock			
F	setchecker		**tags**	table
F	setentry		F	current
F	setinitialblock		F	elementtag
F	setlevel		F	finishexport
F	setnumber		F	getextradata
F	showstructure		F	getid
F	structuredata		F	getmetadata
F	title		F	gettablecell
D	tobesaved		F	gettabulatecell
F	typesetnumber		F	handler
F	userdata		F	initializeexport
B	verbose		D	labels
			F	last
sets	table		F	lastinchain
F	define		F	locatedtag
F	get		T	patterns
F	getall		U	splitter
D	setlist		D	properties
			F	registerextradata
specials	table		F	registermetadata
D	collected		F	restart
F	retrieve		F	setaspect
F	store		F	setattributehash
D	tobesaved		F	setcombination
			F	setconstruct
synonyms	table		F	setfigure
F	analyzed		F	setfloat
D	collected		F	setformulacontent
F	compare		F	sethighlight
F	define		F	setitem
F	filter		F	setitemgroup
F	finalize		F	setlist
F	flush		F	setnotation
F	isshown		F	setnotationsymbol
F	isused		F	setparagraph
F	meaning		F	setproperty
F	prepare		F	setpublication
F	process		F	setregister
F	register			
F	registershown			

F setsorting

F setsynonym

F settablecell

F settabulatecell

F settagdelimitedsymbol

F settagsubsentencesymbol

F setupexport

F setuserproperties

D specifications

F start

F stop

F strip

D taglist

T usewithcare

  T images

table (basic lua)

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

tex (basic tex)

attribute	table	**getdelcode**	function
badness	function	**getdelcodes**	function
box	table	**getdimen**	function
boxresources	table	**getfontoffamily**	function
F getbox		**getglue**	function
F getdimensions		**getglyphdata**	function
F save		**gethelptext**	function
F use		**getinteraction**	function
catcode	table	**getlccode**	function
chardef	function	**getlinedir**	function
conditionals	data table	**getlist**	function
constants	data table	**getlocallevel**	function
count	table	**getmath**	function
cprint	function	**getmathcode**	function
ctdcatcodes	number	**getmathcodes**	function
ctxcatcodes	number	**getmathdir**	function
definefont	function	**getmodevalues**	function
delcode	table	**getmuglue**	function
dimen	table	**getmuskip**	function
directives	data table	**getnest**	function
enableprimitives	function	**getpagestate**	function
error	function	**getpardir**	function
extraprimitives	function	**getsfcode**	function
fatalerror	function	**getskip**	function
fontidentifier	function	**gettextdir**	function
fontname	function	**gettoks**	function
force_synctex_line	function	**getuccode**	function
force_synctex_tag	function	**glue**	table
forcehmode	function	**hashtokens**	function
fprint	function	**ifs**	data table
get	function	**inicatcodes**	number
get_synctex_line	function	**isattribute**	function
get_synctex_mode	function	**isbox**	function
get_synctex_tag	function	**iscount**	overloaded function
getattribute	function	**isdefined**	function
getbox	function	**isdimen**	overloaded function
getboxdir	function	**isglue**	function
getboxresourcebox	function	**ismuglue**	function
getboxresourcedimensions	function	**ismuskip**	overloaded function
getcatcode	function	**isskip**	overloaded function
getcount	function	**istoken**	function

istoks	function	**setcount**	function
lastnodetype	function	**setdelcode**	function
lccode	table	**setdimen**	function
linebreak	function	**setglue**	function
lists	table	**setglyphdata**	function
luacatcodes	number	**setinteraction**	function
magicconstants	table	**setlccode**	function
N maxdimen		**setlinedir**	function
N running		**setlist**	function
N trueinch		**setmath**	function
mathchardef	function	**setmathcode**	function
mathcode	table	**setmathdir**	function
modelevels	table	**setmuglue**	function
N horizontal		**setmuskip**	function
N math		**setnest**	function
N unset		**setpardir**	function
N vertical		**setsfcode**	function
modes	data table	**setskip**	function
muglue	table	**settextdir**	function
muskip	table	**settoks**	function
nest	table	**setuccode**	function
nilcatcodes	number	**sfcode**	table
notcatcodes	number	**shipout**	function
number	function	**show_context**	function
primitives	function	**skip**	table
print	function	**sp**	function
prtcatcodes	number	**splitbox**	function
quittoks	function	**sprint**	function
resetparagraph	function	**systemmodes**	data table
romannumeral	function	**takebox**	function
round	function	**texcatcodes**	number
runtoks	function	**toks**	table
saveboxresource	function	**tonumber**	function
scale	function	**toscaled**	function
scantoks	function	**tpacatcodes**	number
set	function	**tpbcatcodes**	number
set_synctex_line	function	**tprint**	function
set_synctex_mode	function	**trackers**	data table
set_synctex_no_files	function	**triggerbuildpage**	function
set_synctex_tag	function	**txtcatcodes**	number
setattribute	function	**type**	function
setbox	function	**uccode**	table
setboxdir	function	**uprint**	function
setcatcode	function	**useboxresource**	function

vrbcatcodes	number
write	function

texconfig (basic tex)

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

texio (basic tex)

closeinput function   **write_nl**   function
write   function

token (basic tex)

biggest_char	function	**push_macro**	function
command_id	function	**put_back**	function
create	function	**put_next**	function
expand	function	**scan_argument**	function
future_expand	function	**scan_box**	function
get_active	function	**scan_char**	function
get_cmdchrcs	function	**scan_code**	function
get_cmdname	function	**scan_csname**	function
get_command	function	**scan_dimen**	function
get_csname	function	**scan_float**	function
get_cstoken	function	**scan_glue**	function
get_data	function	**scan_int**	function
get_expandable	function	**scan_key**	function
get_frozen	function	**scan_keyword**	function
get_id	function	**scan_keyword_cs**	function
get_index	function	**scan_luacardinal**	function
get_macro	function	**scan_luainteger**	function
get_meaning	function	**scan_luanumber**	function
get_mode	function	**scan_real**	function
get_next	function	**scan_skip**	function
get_next_char	function	**scan_string**	function
get_next_token	function	**scan_token**	function
get_pool_list	function	**scan_token_code**	function
get_protected	function	**scan_tokenlist**	function
get_range	function	**scan_toks**	function
get_tok	function	**scan_value**	function
get_user	function	**scan_word**	function
gobble_dimen	function	**set_char**	function
gobble_int	function	**set_data**	function
is_defined	function	**set_lua**	function
is_next_char	function	**set_macro**	function
is_token	function	**skip_next**	function
new	function	**to_string**	function
peek_next_char	function	**type**	function
pop_macro	function	**values**	function
primitives	function		

tokens (context)

astable   function
bgroup   userdata
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   table

   U NC
   U NR
   U bf
   U color
   U colordefalc
   U colordefflc
   U colordefflt
   U colordefrlt
   U dofinishreference
   U dostarttext
   U finishjob
   U firstofoneargument
   U firstoftwoarguments
   U gobbleoneargument
   U goto
   U iftrue
   U input

   U loadfoundtypescriptfile
   U resetctxscanner
   U rlap
   U scratchcounter
   U scratchdimen
   U scratchmuskip
   U scratchskip
   U scratchtoken
   U secondoftwoarguments
   U setfalsevalue
   U setsectionblock
   U setupsystem
   U startcolumns
   U starttabulate
   U starttitle
   U startxtitle
   U stopcolumns
   U stoptabulate
   U stoptitle
   U stopxtitle
   U texsetup
   U xmlw

collectors   table

   T data
   F defaultwords
   F dowithwords
   F flush
   F install
   F register
   T registered
   F show
   F test

commands   data table
compile   function
constant   function
converters   table

   S toboolean
   S todimen
   S toglue
   S tonumber
   S tostring

create	function			F	dimension
defined	function			F	float
egroup	userdata			F	glue
getdata	function			F	gluespec
getters	table			F	hash
	F box			F	hbox
	F count			F	integer
	F dimen			F	ischar
	F glue			F	key
	F macro			F	keyword
	F meaning			F	keywordcs
	F skip			F	list
	F token			F	luacardinal
hbox	userdata			F	luainteger
isdefined	function			F	luanumber
istoken	function			F	lxmlid
letter	function			F	number
letters	function			F	peek
new	function			F	real
other	function			F	scanclose
pickup	function			F	scanopen
popmacro	function			F	skip
presets	table			F	string
	T 1 string			F	table
	T 2 strings			F	token
	T 3 strings			F	tokencode
	T 4 strings			F	tokenlist
	T 5 strings			F	tokens
	T 6 strings			F	toks
	T 7 strings			F	value
	T 8 strings			F	vbox
printlist	function			F	verbatim
pushmacro	function			F	vtop
scanners	table			F	whd
	F argument			F	word
	F array		**setdata**	function
	F boolean		**setters**	table
	F box			F	box
	F char			F	char
	F code			F	count
	F conditional			F	dimen
	F count			F	glue
	F csname			F	lua
	F dimen			F	macro

F skip

shortcuts table

T bits

  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

N close

F inspect

N open

F report

F scanargument

F scanarray

F scanboolean

F scanbox

F scanclose

F scancode

F scanconditional

F scancsname

F scandimen

F scandimension

F scanhash

F scanhbox

F scaninteger

F scankeyword

F scankeywordcs

F scanlist

T scanners

F argument

F array

F boolean

F box

F char

F code

F conditional

F count

F csname

F dimen

F dimension

F float

F glue

F gluespec

F hash

F hbox

F integer

F ischar

F key

F keyword

F keywordcs

F list

F luacardinal

F luainteger

F luanumber

F lxmlid

F number

F peek

F real

F scanclose

F scanopen

F skip

F string

F table

F token

F tokencode

F tokenlist

F tokens

F toks

F value

F vbox

F verbatim

F vtop

F whd

```
  F word                                U setupsystem
F scannumber                            U startcolumns
F scanopen                              U starttabulate
F scanstring                            U starttitle
F scantable                             U startxtitle
F scantokenlist                         U stopcolumns
F scanvbox                              U stoptabulate
F scanverbatim                          U stoptitle
F scanvtop                              U stopxtitle
F scanword                              U texsetup
F toboolean                             U xmlw
F todimen                             T collectors
T tokens                                F defaultwords
  F astable                             F dowithwords
  U bgroup                              F flush
  T cache                               F install
    U NC                                F register
    U NR                                F show
    U bf                                F test
    U color                           D commands
    U colordefalc                     F compile
    U colordefflc                     F constant
    U colordefflt                     T converters
    U colordefrlt                       S toboolean
    U dofinishreference                 S todimen
    U dostarttext                       S toglue
    U finishjob                         S tonumber
    U firstofoneargument                S tostring
    U firstoftwoarguments             F create
    U gobbleoneargument               F defined
    U goto                            U egroup
    U iftrue                          F getdata
    U input                           T getters
    U loadfoundtypescriptfile           F box
    U resetctxscanner                   F count
    U rlap                              F dimen
    U scratchcounter                    F glue
    U scratchdimen                      F macro
    U scratchmuskip                     F meaning
    U scratchskip                       F skip
    U scratchtoken                      F token
    U secondoftwoarguments            U hbox
    U setfalsevalue                   F isdefined
    U setsectionblock                 F istoken
```

```
F letter                          F scancsname
F letters                         F scandimen
F new                             F scandimension
F other                          F scanhash
F pickup                         F scanhbox
F popmacro                       F scaninteger
T presets                        F scankeyword
F printlist                      F scankeywordcs
F pushmacro                      F scanlist
F setdata                        F scannumber
T setters                        F scanopen
  F box                          F scanstring
  F char                         F scantable
  F count                        F scantokenlist
  F dimen                        F scanvbox
  F glue                         F scanverbatim
  F lua                          F scanvtop
  F macro                        F scanword
  F skip                         F toboolean
T shortcuts                      F todimen
  N close                        F tonumber
  F inspect                      F tostring
  N open                         D values
  F report                       U vbox
  F scanargument                 U vtop
  F scanarray                    F tonumber
  F scanboolean                  F tostring
  F scanbox             values        data table
  F scanclose          vbox          userdata
  F scancode           vtop          userdata
  F scanconditional
```

tracers (context)

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

trackers (context)

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

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

digits   table
  - T actions
  - F handler
  - F set

directions   table
  - F getfences
  - F getglobal
  - F getmethod
  - F handler

  - T handlers
  - F installhandler
  - F processmath
  - F set
  - F setcolor
  - F setmath
  - 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 addanchortoline
  - F addtoline
  - F calculatedelta
  - F checkline
  - F handler
  - F moveinline
  - F normalize
  - F set

injectors   table
  - F check
  - T list
  - F mark
  - F reset
  - F set
  - F show

italics   table
  - F enablemath
  - F enabletext
  - F forcevariant
  - F handler
  - F reset
  - F set

kerns table

D factors

F handler

F keepligature

D mapping

F set

manipulators table

F apply

F applyspecification

T methods

  F Word

  F Words

  F abbreviatedjournal

  F expandedjournal

  F lowercase

  F stripperiod

  F uppercase

T patterns

  U list

  U pair

F splitspecification

margins table

F finalhandler

F globalhandler

F localhandler

F save

marksuspects function

paragraphs table

F addanchortoline

F addtoline

F calculatedelta

F checkline

F handler

F moveinline

F normalize

F set

periodkerns table

D factors

F handler

D mapping

F set

processors table

F apply

F register

F reset

F split

F startapply

F stopapply

F stripped

F tostring

rubies table

F attach

F check

showsuspects function

spacings table

F define

F handler

D mapping

T numbers

  T frenchpunctuation

    T characters

    S name

    N number

F reset

F set

F setup

wrappers table

F handler

xtables table

F cleanup

F construct

F create

F finish_row

F flush

F initialize_construct

F initialize_reflow_height

F initialize_reflow_width

F next_row

F reflow_height

F reflow_width

F set_construct

F set_reflow_height

F set_reflow_width

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 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

garbagecollector table
- F check
- N criterium
- B enabled

ghostscript   table
- F convert
- F statistics

graphicmagick   table
- F convert
- F statistics

graphicsmagick   table
- F convert

F	statistics	B	leftpage
lua	**table**	B	page
B	alwaysstripcode	B	paper
F	checkmemory	B	rightpage
F	compile	B	text
F	loadedluacode	F	iterator
F	loadstring	F	keq_to_hash
F	loadstripped	F	listitem
N	nofstrippedbytes	F	make_settings_to_hash_pattern
N	nofstrippedchunks	F	mergehashes
F	registerfinalizer	F	options_to_array
B	stripcode	F	options_to_hash
T	strippedchunks	T	patterns
F	strippedloadstring	U	settings_to_array
T	suffixes	U	settings_to_hash_a
S	lua	U	settings_to_hash_b
S	luc	U	settings_to_hash_c
S	lui	U	settings_to_hash_d
S	luj	U	unittotex
S	luv	F	process_stripped_settings
S	tma	F	rfc4180splitter
S	tmc	F	runtime
S	tua	F	settings_to_array
S	tuc	F	settings_to_array_obey_fences
packers	**table**	F	settings_to_array_with_repeat
F	hashed	F	settings_to_hash
F	new	F	settings_to_hash_colon_too
F	pack	F	settings_to_hash_strict
F	simplehashed	F	settings_to_hash_tolerant
F	strip	F	settings_to_numbers
F	unpack	F	settings_to_set
N	version	F	simple_hash_to_string
parsers	**table**	F	splitmethod
F	add_settings_to_array	F	splitthousands
F	arguments_to_table	F	stepper
F	array_to_string	F	stripped_settings_to_array
F	csvsplitter	F	totime
F	getparameters	F	unittotex
F	groupedsplitat	F	unittoxml
F	hash_to_string	**randomizer**	**table**
T	hashes	F	get
T	settings_to_set	F	getnumber
T	text,hidden,paper,page,leftpage,rightpage	F	getseed
B	hidden	F	popseed

```
  F collapsecrlf                              F definetable
  T formatters                                F encapsulate
    F add                                     F insertaftervalue
    F new                                     F insertbeforevalue
  F newcollector                              F migratetable
  F newrepeater                               F removevalue
  F nice                                      F replacevalue
  T striplinepatterns         templates        table
    U collapse                                F load
    U prune                                   F replace
    U prune and collapse                      F replacer
    U prune and no empty                      F resolve
    U prune and to space        zipfiles       table
    U retain                                  F close
    U retain and collapse                     F found
    U retain and no empty                     F gunzipfile
  F striplines                                F hash
  F striplong                                 F list
  F tabtospace                                F open
  T tracers                                   F unzip
tables          table                         F unzipdir
  F accesstable                               F zipdir
  F definedtable
```

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
__add	function
__div	function
__eq	function
__index	table

```
F I
F __add
F __div
F __eq
T __index
  F I
  F __add
  F __div
  F __eq
  F __mul
  S __name
  F __pow
  F __sub
  F __tostring
  F __unm
  F abs
  F acos
  F acosh
  F arg
  F asin
  F asinh
  F atan
  F atanh
  F conj
  F cos
  F cosh
  F exp
  F i
  F imag
  F log
  F new
  F pow
  F proj
  F real
  F sin
  F sinh
  F sqrt
  F tan
  F tanh
  F topair
  F tostring
F __mul
S __name
F __pow
F __sub
F __tostring
F __unm
F abs
F acos
F acosh
F arg
F asin
F asinh
F atan
F atanh
F conj
F cos
F cosh
F exp
F i
F imag
F log
F new
F pow
F proj
F real
F sin
F sinh
F sqrt
F tan
F tanh
F topair
F tostring
```

__mul	function
__name	string
__pow	function
__sub	function

__tostring	function	**i**	function
__unm	function	**imag**	function
abs	function	**log**	function
acos	function	**new**	function
acosh	function	**pow**	function
arg	function	**proj**	function
asin	function	**real**	function
asinh	function	**sin**	function
atan	function	**sinh**	function
atanh	function	**sqrt**	function
conj	function	**tan**	function
cos	function	**tanh**	function
cosh	function	**topair**	function
exp	function	**tostring**	function

xdecimal (context)

__add	function
__band	function
__bor	function
__bxor	function
__div	function
__eq	function
__index	table

F __add
F __band
F __bor
F __bxor
F __div
F __eq
T __index
  F __add
  F __band
  F __bor
  F __bxor
  F __div
  F __eq
  F __le
  F __lt
  F __mul
  S __name
  F __pow
  F __shl
  F __shr
  F __sub
  F __tostring
  F __unm
  F abs
  F band
  F bor
  F bxor
  F conj
  F copy
  F exp
  F getprecision
  F ln
  F log
  F max

F min
F minus
F new
F plus
F pow
F rotate
F setprecision
F shift
F sqrt
F tonumber
F tostring
F trim
F __le
F __lt
F __mul
S __name
F __pow
F __shl
F __shr
F __sub
F __tostring
F __unm
F abs
F band
F bor
F bxor
F conj
F copy
F exp
F getprecision
F ln
F log
F max
F min
F minus
F new
F plus
F pow
F rotate
F setprecision
F shift

F sqrt			**copy**	function
F tonumber			**exp**	function
F tostring			**getprecision**	function
F trim			**ln**	function
__le	function		**log**	function
__lt	function		**max**	function
__mul	function		**min**	function
__name	string		**minus**	function
__pow	function		**new**	function
__shl	function		**plus**	function
__shr	function		**pow**	function
__sub	function		**rotate**	function
__tostring	function		**setprecision**	function
__unm	function		**shift**	function
abs	function		**sqrt**	function
band	function		**tonumber**	function
bor	function		**tostring**	function
bxor	function		**trim**	function
conj	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 fontspecification
addspecialcode	function		F mappedstylevalue
after	function		F padding
all	function		F size
applylpath	function		F style
applyselector	function		F stylevalue
assign	function		F todimension
attribute	function		F variant
badinclusions	function		F weight
before	function	**defaulthandlers**	table
body	function		D file
builtinentities	table		D parsedxml
B amp			D string
B apos			D tex
B gt			D texline
B lt			D texspace
B quot			D verbose
cdata	function	**defaultprotocol**	string
cdatatotext	function	**delete**	function
checkbom	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	**expressions**	table
content	function		F attribute
convert	function		F boolean
copy	function		F child
count	function		F contains
cprint	function		F count
css	table		F error
F applyselector			F find
F colorspecification			F hasclass
F dimension			F idstring
F family			F lower

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

inject_element	function		**process_attributes**	function
inject_element_after	function		**process_elements**	function
inject_element_before	function		**processattributes**	function
injectafter	function		**profiled**	table
injectbefore	function		**pure**	function
insert	function		**pushmatch**	function
insert_element	function		**raw**	function
insert_element_after	function		**registerentity**	function
insert_element_before	function		**registerns**	function
insertafter	function		**reindex**	function
insertbefore	function		**remap_name**	function
insertcdata	function		**remap_namespace**	function
insertcomment	function		**remap_tag**	function
inspect	function		**remapname**	function
is_valid	function		**remapnamespace**	function
kind	function		**remaptag**	function
last	function		**rename**	function
lastmatch	function		**renamespace**	function
load	function		**reparsedentitypeg**	userdata
lpath	function		**replace**	function
lpathcached	function		**replace_element**	function
lpathcalls	function		**resetinjectors**	function
lshow	function		**resolvens**	function
makestandalone	function		**root**	function
match	function		**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
parsedentitypeg	userdata		**sethandlersfunction**	function
pihandlers	table		**setinjectors**	function
F injector			**setproperty**	function
F tex			**settings**	function
placeholders	table		**specialcodes**	table
F unknown_any_entity			S "	
F unknown_dec_entity			S #	
F unknown_hex_entity			S $	
popmatch	function		S %	
position	function		S &	
privatecodes	table		S '	
privatetoken	function		S <	
process	function		S >	

s \		**tocdata**	function
s {		**toelement**	function
s |		**tostring**	function
s }		**totable**	function
s ~		**toxml**	function
specialhandler	table	**tprint**	function
sprint	function	**traverse**	function
string	function	**unescaped**	function
strip	function	**unescapedentitylpeg**	userdata
~~**strip_whitespace**~~	~~function~~	**unprivatized**	function
stripelement	function	**unspecialized**	function
stripleadingspaces	function	**wipe**	function
table	function	**withelement**	function
text	function	**withelements**	function
textonly	function	**wrap**	function
texttocdata	function	**xmlns**	table

xzip (extra lua)

adler32	function	**decompress**	function
compress	function	**expandsize**	function
crc32	function		

zip (extra lua)

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

zlib (extra lua)

adler32   function
compress function
crc32   function

decompress function
expandsize function