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

ConTeXt LMTX

global (alias: _G)

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

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

texisdefined	data table	**url**	table
texmodes	data table	**userdata**	table
texsystemmodes	data table	**utf**	table
thirddata	table	**utf8**	table
toboolean	function	**utilities**	table
todecimal	function	**visualizers**	table
token	table	**warn**	function
tokens	table	**xcomplex**	table
tonumber	function	**xdecimal**	table
tostring	function	**xmath**	table
tracers	table	**xml**	table
trackers	table	**xpcall**	function
type	function	**xzip**	table
typesetters	table	**zip**	table
unpack	function	**zlib**	table
updaters	table		

aes (context)

decode function   **random** function
encode function

attributes (context)

alternates	table	F	formatcolor
N	attribute	F	formatgray
D	data	F	formatluminance
F	enable	F	formatluminanceratio
F	handler	F	getpagecolormodel
F	register	F	gray
D	registered	F	graytohsv
D	values	F	handler
applyoverloads	function	T	helpers
checkvalues	function	F	complement
colorintents	table	F	inbetween
N	attribute	F	justone
D	data	F	hsvtogray
F	enable	F	hsvtorgb
F	handler	F	hwbtorgb
F	register	F	iccprofile
D	registered	F	isblack
colors	table	F	labtorgb
N	attribute	F	labtoxyz
F	cmyk	N	main
F	cmyktogray	S	model
F	cmyktorgb	D	models
F	colorcomponents	F	mpcolor
D	counts	F	mpnamedcolor
B	couple	F	mpoptions
F	currentmodel	F	namedcolorattributes
F	currentnamedmodel	N	none
D	data	F	popset
N	default	F	processcolorcomponents
F	defineintermediatecolor	F	pushset
F	definemultitonecolor	F	register
F	defineprocesscolor	D	registered
F	defineprocesscolordirect	F	registerspotcolor
F	definesimplegray	F	rgb
F	definespotcolor	F	rgbtocmyk
F	definetransparency	F	rgbtogray
F	enable	F	rgbtohsv
F	filter	F	rgbtoxyz
N	forced	N	selector
F	forcedmodel	F	setlist
F	forcesupport	F	setmodel

F	setpagecolormodel	**ofnode**	function
D	sets	**private**	function
F	spec	**public**	function
F	spot	**registervalue**	function
F	spotcolorname	**restore**	function
F	spotcolorparent	**save**	function
F	spotcolorvalue	**setcleaner**	function
B	supported	**showcurrent**	function
F	toattributes	**states**	table
F	transparencycomponents	F	disabletriggering
B	triggering	F	enabletriggering
F	usecolors	F	finalize
D	valid	F	initialize
F	value	F	process
D	values	F	selective
B	weightgray	F	simple
F	xyztolab	F	stacked
F	xyztorgb	F	stacker

counts	data table	**system**	function
define	function	**tooverloads**	function
effects	table	**transparencies**	table
N	attribute	N	attribute
D	data	D	data
F	enable	F	enable
F	handler	F	forcesupport
F	register	F	handler
D	registered	T	names
D	values	N	color

getvalue	function	N	colorburn
getvalues	function	N	colordodge
handlers	table	N	darken
hasvalues	function	N	difference
list	data table	N	exclusion
markasoverload	function	N	hardlight
names	data table	N	hue
negatives	table	N	lighten
N	attribute	N	luminosity
D	data	N	multiply
F	enable	N	none
F	handler	N	normal
F	register	N	overlay
D	registered	N	saturation
F	set	N	screen
numbers	data table	N	softlight

N none	F forcesupport
F register	F handler
D registered	B hasorder
B supported	D listwise
F toattribute	F register
B triggering	D registered
F value	F resolve_begin
D values	F resolve_end
unsetvalue number	F resolve_reset
values data table	F resolve_step
viewerlayers table	D scopes
N attribute	F setfeatures
F cleanup	F start
D data	F stop
F define	B supported
F definedlayoutcomponent	D values
F enable	

backends (context)

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

F analyzesymbol
F attachmentid
F bitmap
F clonefield
F copyimage
F definefield
F definefieldset
F defineviewerlayer
F embedfile
F embedimage
F enabletags
F exportformdata
F fieldsurrounding
F flushmergelayer
F getbookmarks
F getboxresourcebox
F getdefaultfieldvalue
F getfieldcategory
F getfieldset
F getformatoption
F getinfo
F getpreviewfigure
F getrefobj
F insertrenderingwindow
F jp2
F jpg
F maptag
F mergebookmarks
F mergecomments
F mergefields
F mergereferences
F mergeviewerlayers
F newimage
F png
F prerollreference
F presetsymbol
F presetsymbollist
F processrendering
F registerdocumentcloseaction
F registerdocumentopenaction
F registeredsymbol

F	registerpagecloseaction
F	registerpageopenaction
F	registerpattern
F	registersymbol
F	ruleactionbox
F	ruleactiondraw
F	ruleactionfill
F	ruleactionmp
F	ruleactionstroke
F	saveboxresource
F	scanimage
F	setattachmentsupport
F	setautoprefix
F	setencryption
F	setfieldcalculationset
F	setfigurealternative
F	setfigurecolorspace
F	setfiguremask
F	setformat
F	setformsmethod
F	setpagetransition
F	settaggingsupport
F	setxmpfile
F	startlayer
F	startunicodetoactualtext
F	startunicodetoactualtextdirect
F	stoplayer
F	stopunicodetoactualtext
F	stopunicodetoactualtextdirect
F	supportedformats
F	unicodetoactualtext
F	useviewerlayer
F	validfield
F	validfieldcategory
F	validfieldset
F	vfstartcolor
F	vfstopcolor
F	wrapimage
S	name
T	nodeinjections
F	addtags
F	annotation

F	attachfile
F	changestackedlayer
F	cmykcolor
F	comment
F	destination
F	effect
F	getboxresourcedimensions
F	graycolor
F	injectbitmap
F	insertu3d
F	knockout
F	negative
F	overprint
F	positive
F	reference
F	rgbcolor
F	spotcolor
F	startalternate
F	startlayer
F	startstackedlayer
F	stopalternate
F	stoplayer
F	stopstackedlayer
F	transparency
F	typesetfield
F	useboxresource
T	registrations
F	cmykindexcolor
F	cmykspotcolor
F	getspotcolorreference
F	grayindexcolor
F	grayspotcolor
F	rgbindexcolor
F	rgbspotcolor
F	spotcolorname
F	transparency
T	tables

registrations	table
setencryption	function
tables	table
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	
empty	function	F place	
erase	function	F reset	
exists	function	F save	
get	function	**prepend**	function
getcontent	function	**raw**	function
getlines	function	**run**	function
gettexbuffer	function	**samplefile**	function
loadcontent	function	**undent**	function
parallel	table		

builders (context)

checkparcontext   function
checksidefloat   function
kernel   table
   F collapsing
   F hyphenating
   F kerning
   F ligaturing
   F mlisttohlist
local_box_filter   function
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 boxlinehandler
   F distance
   F fixedprofile
   F get
   F list
   F pagehandler
   F pagelinehandler
   F profilebox
   F profilelines
   F set
   F setlines
vspacing   table
   D categories
   F checkstrutdepth
   F collapsevbox
   T data
    D map
    D skip
    D snapmethods
   F definesnapmethod
   B fixed
   F flushcontributions
   F forcepageflush
   F forcestrutdepth
   F getnofpreviouslines
   F inject
   F injectdisable
   F injectpenalty
   F injectskip
   F interceptsamepagecontent
   F pagehandler
   F pageoverflow
   F popatsame
   F pushatsame
   F setmap
   F setskip
   F snapbox
   F synchronizepage
   F tocategories

F tocategory

F vboxhandler

caches (context)

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

callback (basic tex)

find   function   **register** overloaded function
known   function   **usage**   function
list   function

callbacks (context)

freeze   function
functions   table
    F start_page_number
    F stop_page_number
known   function
list   data table
pop   function
push   function
register   function
report   function
supported   table
    B alignment_filter
    B append_line_filter
    B append_to_vlist_filter
    B begin_paragraph
    B build_page_insert
    B buildpage_filter
    B define_font
    B find_format_file
    B find_log_file
    B get_attribute
    B get_math_dictionary
    B get_noad_class
    B glyph_run
    B handle_overload
    B hpack_filter
    B hpack_quality
    B hyphenate
    B insert_par
    B intercept_lua_error
    B intercept_tex_error

    B kerning
    B ligaturing
    B linebreak_filter
    B local_box_filter
    B make_extensible
    B math_rule
    B missing_character
    B mlist_to_hlist
    B open_data_file
    B packed_vbox_filter
    B paragraph_context
    B post_linebreak_filter
    B pre_dump
    B pre_linebreak_filter
    B pre_output_filter
    B process_character
    B process_jobname
    B register_extensible
    B show_error_message
    B show_lua_call
    B show_warning_message
    B show_whatsit
    B start_file
    B start_run
    B stop_file
    B stop_run
    B trace_memory
    B vpack_filter
    B vpack_quality
    B wrapup_run

catcodes (context)

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

characters (context)

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

setactivecatcodes	function	D	accentmapping
setlettercatcodes	function	D	commandmapping
setothercatcodes	function	F	defineaccents
shape	function	F	safechar
shaped	function	F	strtextoutf
shash	data table	F	strtoutfpattern
shchars	data table	F	toutf
shcodes	data table	F	toutfpattern
showstring	function	**textclasses**	table
specialchars	data table	**tonumber**	function
specials	data table	**ucchars**	data table
splits	table	**uccode**	function
T char		**uccodes**	data table
T compat		**uhash**	data table
subscripts	table	**unicodechar**	function
superscripts	table	**upper**	function
synonyms	data table	**verbosemarks**	data table
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	**is_valid**	function
content	function	**read**	function
define	function	**usecache**	boolean
is_usable	function	**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	**gregorian_to_hebrew**	function
Alphabetic	function	**gregorian_to_jalali**	function
Alphabetic:es	function	**hebrewnumerals**	function
Alphabetic:ru	function	**helpers**	table
Alphabetic:sl	function	**hexstringtonumber**	function
Character	function	**i**	function
Characters	function	**isleapyear**	function
I	function	**jalali_to_gregorian**	function
KA	function	**lchexnumber**	function
KR	function	**lchexnumbers**	function
R	function	**leapyear**	function
RK	function	**lower**	function
Romannumerals	function	**max**	function
Russiannumerals	function	**maxchrs**	function
Sloveniannumerals	function	**nicenumber**	function
Spanishnumerals	function	**nofdays**	function
Word	function	**number**	function
Words	function	**numbers**	function
a	function	**octnumber**	function
a:es	function	**octstringtonumber**	function
a:ru	function	**ordinal**	function
a:sl	function	**r**	function
abjadnodotnumerals	function	**rawcharacter**	function
abjadnumerals	function	**romannumerals**	function
alphabetic	function	**russiannumerals**	function
alphabetic:es	function	**sequences**	data table
alphabetic:ru	function	**settime**	function
alphabetic:sl	function	**sloveniannumerals**	function
character	function	**spaceddigits**	function
characters	function	**spanishnumerals**	function
chineseallnumerals	function	**textime**	function
chinesecapnumerals	function	**toabjad**	function
chinesenumerals	function	**tochinese**	function
chr	function	**tohebrew**	function
chrs	function	**toroman**	function
cn	function	**totime**	function
cn-a	function	**uchexnumber**	function

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

debug (basic lua)

getinfo   function   **traceback** function
sethook   function

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

document (context)

arguments	data table	D modes	
files	table	D modules	
functions	table	**setargument**	function
getargument	function	**setcommandline**	function
getfilename	function	**setdefaultargument**	function
options	table	**setenvironments**	function

T commandline

  D environments

  D modes

  D modules

T ctxfile

  D environments

setfilename	function
setfilenames	function
setmodes	function
setmodules	function
variables	data table

documentdata (context)

variable function

drivers (context)

applyanchor   function
applyorientation function
convert   function
converters   table
    F analyze
    F engine
    F lmtx
    F resyncbox
enable   function
gethpos   function
getpos   function
getrpos   function
getvpos   function
helpers   table
install   function
instances   table
    T empty
     T actions
      F convert
      F prepare
     T flushers
      F popleaderlevel
      F pushleaderlevel
      T whatsit
     S name
    T js
     T actions
      F cleanup
      F convert
      F finalize
      F initialize
      F outputfilename
      F prepare
      F wrapup
     T flushers
      F character
      F popleaderlevel
      F pushleaderlevel
      F rule
      F simplerule
      F specialrule

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

S name

T mpo

  T actions

    F finalize

    F initialize

  T flushers

    F character

    F popleaderlevel

    F pushleaderlevel

    F rule

    F simplerule

    F specialrule

    T whatsit

  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 popleaderlevel

    F pushleaderlevel

    F rule

    F simplerule

    F specialrule

    F updatefontstate

    T whatsit

  S name

T none

  T actions

  T flushers

    F popleaderlevel

    F pushleaderlevel

    T whatsit

  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 popleaderlevel

  F poporientation

  F pushleaderlevel

  F pushorientation

  F restore

  F rule

  F save

  F setmatrix

  F setstate

  F simplerule

  F specialrule

  F startclipping

  F startmatrix

  F startmirroring

  F startrotation

  F startscaling

  F stopclipping

  F stopmatrix

  F stopmirroring

  F stoprotation

  F stopscaling

  F updatefontstate

  T whatsit

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
jitsupported	boolean	**texmfos**	string
jobfilefullname	string	**texos**	string
jobfilename	string	**texroot**	string
jobfilesuffix	string	**truefilename**	function
jobname	string	**useluamodule**	function
kindofrun	number	**usemodules**	function
lmtxmode	number	**validengines**	data table
loadexamodes	function	**version**	string
loadluafile	function		

experiments (context)

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

figures (context)

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

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

file (basic lua)

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

fio (extra lua)

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

floats (context)

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

font (basic tex)

addcharacters	function	**getmathspec**	function
current	function	**id**	function
define	function	**max**	function
getfont	function	**nextid**	function
getfontdimen	function	**setfont**	function
getfontspec	function	**setfontdimen**	function
getmathindex	function		

fonts (context)

analyzers   table

    D features

    D initializers

    D methods

    F setstate

    D states

    B useunicodemarks

callbacks   table

    F callback

    F devirtualize

checkers   table

    F getmissing

    D mapping

    F missing

    F placeholder

cid   table

    F getmap

    F loadfile

collections   table

    F checkenabled

    F clonevector

    F define

    T definitions

    F direct

    F found

    F prepare

    F process

    F register

    F registermain

    F report

    F reset

    T vectors

constructors   table

    F addcharacters

    F addcoreunicodes

    F aftercopyingcharacters

    F applyfinalizers

    F applymanipulators

    F assignmathparameters

    F beforecopyingcharacters

    F beforepassingfonttotex

D cache

F calculatescale

F checkedfeatures

F checkedfilename

F collectprocessors

F currentfonthasfeature

D designsizes

F enhanceparameters

T enhancers

    T afm

      F apply

      F patch

      T patches

        F register

        F report

      F register

      F report

    T otf

      F addfeature

      F apply

      F enhance

      F patch

      T patches

        F register

        F report

      F register

      F report

    T tfm

      F apply

      F patch

      T patches

        F register

        F report

      F register

      F report

N factor

T features

    D afm

    D otf

    D tfm

F finalize

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

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

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

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

	D	variants	**getmultiple**	function
F	read		**getsubstitution**	function
F	register		**getters**	table
F	registered		T	alternate
F	registerfallbackfont		F opentype
F	registersplit		T	kern
F	resetnullfont		F opentype
F	resolve		F type1
T	resolvers		F type3
F	file		T	multiple
F	name		F opentype
F	spec		T	substitution
definetypeface	function		F opentype
dropins	table		**goodies**	table
F	clone		D colorschemes
F	getshape		T	data
F	getshapes		T	common-math.lfg
F	nextid		S author
F	provide		S comment
F	registerglyph		S copyright
F	registerglyphs		B initialized
F	swap		T mathematics
F	swapone		T tweaks
effects	table		T presets
encodings	table		F braille
T	agl		F eulertocalligraphic
D	ctxcodes		F fallbacks
D	extras		F moderntocalligraphic
D	names		F moveintegrals
D	synonyms		F moveitalics
D	unicodes		F pagellaradical
D	cache		F rsfstoscript
F	is_known		F rsfsuprighttoscript
D	known		F scripttocalligraphic
F	load		F wipeanchors
F	make_unicode_vector		F wipeitalics
D	math		F xitsarabic
N	version		S name
enhanceid	function		S version
expansions	data table		T dejavu-math
formats	data table		S author
getalternate	function		S comment
getindices	function		S copyright
getkern	function		B initialized

	T mathematics		D features	
	T alternates		D identifiers	
	T dotless		D italics	
	S comment		D lastmathids	
	S feature		D marks	
	N value		D mathparameters	
	T bigslots		D modes	
	T parameters		D originals	
	N AccentBaseDepth		D parameters	
	N AccentTopShiftUp		T processes	
	N DelimiterPercent		D properties	
	N DelimiterShortfall		D quads	
	N DisplayOperatorMinHeight		D resources	
	N FlattenedAccentTopShiftUp		T setdynamics	
	N FractionRuleThickness		T shapes	
	S PrimeBaselineDropMax		D spaces	
	S PrimeShiftUp		D spacings	
	S PrimeShiftUpCramped		T streams	
	N SubscriptShiftDown		D unicodes	
	S SubscriptShiftDownWithSuperscript		D unislots	
	N SuperscriptShiftUp		D variants	
	T tweaks		D xheights	
	T aftercopying		**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		F combineglyphs	
	F registerpostprocessor		D commands	
	F report		F composecharacters	
	T suffixes		F descriptiontoslot	
handlers	table		F dimenfactor	
hashes	table		F expandglyph	
	D characters		T extraprivates	
	D classes		F fontpatternhassize	
	D csnames		F getcoloredglyphs	
	D descriptions		F getdigitwidth	
	D dynamics		F getinstancespec	
	D emwidths		F getparameters	
	D exheights		F getprivatecharornode	

```
F getprivatenode                          N delimited ghost upper corner
F getprivates                             N delimited left annuity
F getprivateslot                          N delimited left lower corner
F hasprivate                              N delimited left upper corner
F indextoslot                             N delimited right annuity
F isprivate                               N delimited right ast
F mathscriptslots                         N delimited right bar
F name                                    N delimited right breve
F nametoslot                              N delimited right check
F newprivateslot                          N delimited right dagger
F prependcommands                         N delimited right ddagger
F prependcommandtable                     N delimited right dddot
F privateslot                             N delimited right ddot
F registerglyphbox                        N delimited right dot
F scalecommands                           N delimited right hat
F setboxdirectly                          N delimited right lower corner
F setboxglyph                             N delimited right ring
F setboxglyphs                            N delimited right star
F setdigitwidth                           N delimited right tilde
F setmetaglyph                            N delimited right upper corner
F setmetaglyphs                           N flat 0x0060 1
F sharedprivates                          N flat 0x00A8 1
  N delimited ghost 0x2032                 N flat 0x00AF 1
  N delimited ghost 0x2033                 N flat 0x00B4 1
  N delimited ghost 0x2034                 N flat 0x02C6 1
  N delimited ghost 0x2035                 N flat 0x02C7 1
  N delimited ghost 0x2036                 N flat 0x02D8 1
  N delimited ghost 0x2037                 N flat 0x02D9 1
  N delimited ghost 0x2057                 N flat 0x02DA 1
  N delimited ghost annuity                N flat 0x02DC 1
  N delimited ghost ast                    N flat 0x20DB 1
  N delimited ghost bar                    N mirror.10204
  N delimited ghost breve                  N mirror.10205
  N delimited ghost check                  N mirror.10206
  N delimited ghost dagger                 N mirror.10210
  N delimited ghost ddagger                N mirror.10211
  N delimited ghost dddot                  N mirror.10214
  N delimited ghost ddot                   N mirror.10215
  N delimited ghost dot                    N mirror.10216
  N delimited ghost hat                    N mirror.10217
  N delimited ghost lower corner           N mirror.10218
  N delimited ghost ring                   N mirror.10219
  N delimited ghost star                   N mirror.10222
  N delimited ghost tilde                  N mirror.10223
```

N mirror.10764

N mirror.10769

N mirror.10877

N mirror.10878

N mirror.10885

N mirror.10886

N mirror.10887

N mirror.10888

N mirror.10889

N mirror.10890

N mirror.10891

N mirror.10892

N mirror.10901

N mirror.10902

N mirror.10927

N mirror.10928

N mirror.120597

N mirror.123

N mirror.12310

N mirror.12311

N mirror.125

N mirror.171

N mirror.187

N mirror.247

N mirror.40

N mirror.41

N mirror.47

N mirror.60

N mirror.62

N mirror.8242

N mirror.8243

N mirror.8244

N mirror.8245

N mirror.8246

N mirror.8247

N mirror.8249

N mirror.8250

N mirror.8260

N mirror.8279

N mirror.8512

N mirror.8705

N mirror.8706

N mirror.8707

N mirror.8708

N mirror.8712

N mirror.8713

N mirror.8714

N mirror.8715

N mirror.8716

N mirror.8717

N mirror.8721

N mirror.8725

N mirror.8730

N mirror.8733

N mirror.8735

N mirror.8736

N mirror.8737

N mirror.8738

N mirror.8740

N mirror.8747

N mirror.8748

N mirror.8749

N mirror.8750

N mirror.8751

N mirror.8752

N mirror.8753

N mirror.8754

N mirror.8755

N mirror.8761

N mirror.8764

N mirror.8765

N mirror.8771

N mirror.8773

N mirror.8780

N mirror.8786

N mirror.8787

N mirror.8788

N mirror.8789

N mirror.8799

N mirror.8804

N mirror.8805

N mirror.8806

N mirror.8807

N mirror.8808

N mirror.8809

N mirror.8810

N mirror.8811

N mirror.8814

N mirror.8815	N mirror.8877
N mirror.8816	N mirror.8878
N mirror.8817	N mirror.8879
N mirror.8818	N mirror.8882
N mirror.8819	N mirror.8883
N mirror.8820	N mirror.8884
N mirror.8821	N mirror.8885
N mirror.8822	N mirror.8886
N mirror.8823	N mirror.8887
N mirror.8824	N mirror.8888
N mirror.8825	N mirror.8905
N mirror.8826	N mirror.8906
N mirror.8827	N mirror.8907
N mirror.8828	N mirror.8908
N mirror.8829	N mirror.8909
N mirror.8830	N mirror.8912
N mirror.8831	N mirror.8913
N mirror.8832	N mirror.8918
N mirror.8833	N mirror.8919
N mirror.8834	N mirror.8920
N mirror.8835	N mirror.8921
N mirror.8836	N mirror.8922
N mirror.8837	N mirror.8923
N mirror.8838	N mirror.8924
N mirror.8839	N mirror.8925
N mirror.8840	N mirror.8926
N mirror.8841	N mirror.8927
N mirror.8842	N mirror.8928
N mirror.8843	N mirror.8929
N mirror.8844	N mirror.8930
N mirror.8847	N mirror.8931
N mirror.8848	N mirror.8932
N mirror.8849	N mirror.8933
N mirror.8850	N mirror.8934
N mirror.8856	N mirror.8935
N mirror.8866	N mirror.8936
N mirror.8867	N mirror.8937
N mirror.8870	N mirror.8938
N mirror.8871	N mirror.8939
N mirror.8872	N mirror.8940
N mirror.8873	N mirror.8941
N mirror.8874	N mirror.8944
N mirror.8875	N mirror.8945
N mirror.8876	N mirror.8968

```
N mirror.8969              N mirror.984880
N mirror.8970              N mirror.984881
N mirror.8971              N mirror.984882
N mirror.8992              N mirror.984883
N mirror.8993              N mirror.984884
N mirror.9001              N mirror.984885
N mirror.9002              N mirror.984886
N mirror.91                N mirror.984887
N mirror.92                N mirror.984888
N mirror.93                N mirror.984897
N mirror.984419            N mirror.984898
N mirror.984831            N mirror.984899
N mirror.984832            N mirror.984900
N mirror.984833            N mirror.984901
N mirror.984834            N mirror.984902
N mirror.984835            N mirror.984903
N mirror.984836            N mirror.984904
N mirror.984837            N mirror.984905
N mirror.984838            N mirror.984906
N mirror.984839            N mirror.984907
N mirror.984840            N mirror.984908
N mirror.984841            N mirror.984909
N mirror.984842            N mirror.984910
N mirror.984843            N mirror.984919
N mirror.984844            N mirror.984920
N mirror.984853            N mirror.984921
N mirror.984854            N mirror.984922
N mirror.984855            N mirror.984923
N mirror.984856            N mirror.984924
N mirror.984857            N mirror.984925
N mirror.984858            N mirror.984926
N mirror.984859            N mirror.984927
N mirror.984860            N mirror.984928
N mirror.984861            N mirror.984929
N mirror.984862            N mirror.984930
N mirror.984863            N mirror.984931
N mirror.984864            N mirror.984932
N mirror.984865            N mirror.984941
N mirror.984866            N mirror.984942
N mirror.984875            N mirror.984943
N mirror.984876            N mirror.984944
N mirror.984877            N mirror.984951
N mirror.984878            N mirror.984952
N mirror.984879            N mirror.984955
```

N mirror.984956	N mirror.985061
N mirror.984957	N mirror.985062
N mirror.984958	N mirror.985066
N mirror.984959	N mirror.985068
N mirror.984960	N mirror.985069
N mirror.984961	N mirror.985113
N mirror.984962	N mirror.985114
N mirror.985003	N mirror.985115
N mirror.985004	N mirror.985116
N mirror.985005	N mirror.985117
N mirror.985006	N mirror.985118
N mirror.985007	N mirror.985119
N mirror.985008	N mirror.985120
N mirror.985009	N mirror.985121
N mirror.985010	N mirror.985122
N mirror.985011	N mirror.985123
N mirror.985012	N mirror.985124
N mirror.985013	N mirror.985125
N mirror.985014	N mirror.985126
N mirror.985015	N mirror.985127
N mirror.985016	N mirror.985128
N mirror.985017	N mirror.985129
N mirror.985018	N mirror.985130
N mirror.985019	N mirror.985131
N mirror.985020	N mirror.985132
N mirror.985021	N mirror.985133
N mirror.985022	N mirror.985134
N mirror.985023	N mirror.985135
N mirror.985024	N mirror.985136
N mirror.985025	N mirror.985137
N mirror.985026	N mirror.985138
N mirror.985031	N mirror.985139
N mirror.985033	N mirror.985140
N mirror.985034	N mirror.985141
N mirror.985038	N mirror.985142
N mirror.985040	N mirror.985143
N mirror.985041	N mirror.985144
N mirror.985045	N mirror.985145
N mirror.985047	N mirror.985146
N mirror.985048	N mirror.985147
N mirror.985052	N mirror.985148
N mirror.985054	N mirror.985149
N mirror.985055	N mirror.985150
N mirror.985059	N mirror.985151

N mirror.985152		T vfspecials	
N mirror.985153		T backgrounds	
N mirror.985154		T outlines	
N mirror.985155	**infofont**	function	
N mirror.985156	**iterators**	table	
N mirror.985157	F characters		
N mirror.985158	F descriptions		
N mirror.985159	F glyphs		
N mirror.985160	**loggers**	table	
N mirror.985161	F format		
N mirror.985162	F onetimemessage		
N mirror.985163	F register		
N mirror.985164	F reportdefinedfonts		
N mirror.985165	F reportusedfeatures		
N mirror.985166	**mappings**	table	
N mirror.985167	F addtounicode		
N mirror.985168	F fromunicode16		
N mirror.985169	F getentry		
N mirror.985170	F loadfile		
N mirror.985171	F loadline		
N mirror.985172	F makenameparser		
N mirror.985173	D overloads		
N mirror.985174	F reset		
N mirror.985175	F tounicode		
N mirror.985176	F tounicode16		
N mirror.985177	F tounicode16sequence		
N mirror.985178	**metapost**	table	
N mirror.985179	F baseline		
N mirror.985180	F boundingbox		
N mirror.985181	F boxtomp		
N mirror.985182	F draw		
N mirror.985183	F fill		
N mirror.985184	F glyph		
N mirror.985200	F maxbounds		
N unary minus	F paths		
N unary minus plus	F widthline		
N unary plus	F zeroline		
N unary plus minus	**names**	data table	
N visualspace	**nulldata**	data table	
F splitfontpattern	**privateoffsets**	table	
F tochar	B keepnames		
T vfinjectors	N mathbase		
F startcolor	N mathextrabase		
F stopcolor	N textbase		

N textextrabase

protrusions data table

readers table

　F afm

　F check_lua

　F check_tfm

　F lua

　F ofm

　F opentype

　F otf

　F pfb

　D sequence

　F tfm

　F ttc

　F ttf

　F woff

registersanitizer function

reserveid function

select table

　D alternatives

　F bodyfont

　D data

　F default

　D defaults

　F definefallbackfamily

　F definefontfamily

　F definefontfamilypreset

　D extras

　F fallback

　D fallbacks

　F features

　F filefallback

　F fontdata

　F fontfallback

　F fontsynonym

　F goodies

　F mathfallback

　D methods

　D presets

　F registerfallback

　F registerfiles

　F registerfontalternative

　F registerfontfamily

　F textfallback

　F typeface

　F typescript

　F userdata

specifiers table

　D contextmerged

　F contextnumber

　D contextnumbers

　D contextsetups

　F contexttostring

　F definecontext

　F mergecontext

　F presetcontext

　F registercontext

　F showcontext

　F splitcontext

　D synonyms

　D variants

symbols table

　T emoji

　　F checked

　　F resolved

　F uselibrary

tables table

toeffect function

tracers table

treatments table

　F applyfixes

　D data

　S filename

　F ignoredfile

　F report

　F trace

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

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

gzip (extra lua)

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

images (context)

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

interactions (context)

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

    D functions
    D preambles
    F setpreamble
    F storecode
    F storepreamble
    F usepreamblenow
    F usescripts
linkedlists data table
pages   table
    F setpagetransition
    F setupcanvas
references table
    F setclosedocumentaction
    F setclosepageaction
    F setopendocumentaction
    F setopenpageaction
renderings data table

interfaces (context)

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

io (basic lua)

ask	function	**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		D tobesaved	
datasets	table		**parwrappers**	table
D collected			D collected	
F extend			D tobesaved	
F getdata			**passes**	table
F setdata			F check	
D tobesaved			D collected	
disablesave	function		F count	
embedded	table		F define	
D collected			F find	
D tobesaved			F first	
fileobjreferences	table		F get	
D collected			F getcollected	
D tobesaved			F getdata	
files	table		F getfield	
D collected			F gettobesaved	
F context			F inlist	
B forcerun			F last	
F run			F list	
D tobesaved			F save	
getrandomseed	function		F savetagged	
initialize	function		D tobesaved	
load	function		**positions**	table
loadother	function		F b_column	
objects	table		F b_region	
D collected			F c	
F get			D collected	
F number			F column	
F page			F columnofpos	
F save			F copy	
F set			F depth	
D tobesaved			F e_column	
pack	boolean		F e_region	
packversion	number		F enhance	
pagestates	table		F extra	
D collected			F get	
F countervalue			F getcolumndata	
F extend			F getfree	
F realpage			F gethpos	
F realpageorder			F getpos	
F setstate			F getreserved	

F	getrpos	F	setspec
F	getsync	F	settobesaved
F	gettobesaved	D	tobesaved
F	getvpos	F	upperleft
F	hangafter	F	upperright
F	hangindent	F	used
F	height	F	whd
F	hsize	F	width
N	lastx	F	x
N	lasty	F	xy
F	leftskip	F	y
F	lowerleft		
F	lowerright		

register		function

save		function

F	markregionbox	**structure**	table
F	n	D	collected
F	onsamepage	T	components
F	overlapping	T	tobesaved
F	p	T	branches
F	page	S	name
F	paragraph	S	type

F	parindent	**variables**	table
F	position	D	checksums
F	r	D	collected
F	region	F	getchecksum
F	registerhandlers	F	makechecksum
F	replace	F	restore
F	rightskip	F	save
F	set	F	setchecksum
F	setall	D	tobesaved

F	setregionbox	**version**	number

language (basic tex)

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

languages (context)

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

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

layouts (context)

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

lfs (extra lua)

attributes	overloaded function	**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		**extratex**	data table
basictex	data table		**functions**	data table
builtin	data table		**globals**	data table
extralua	data table			

lmx (context)

color	function		**loadedfile**	function
convert	function		**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		**showerror**	function
html	table		**stripcss**	function

   F a

   F td

   F th

include	function		**tv**	function
inherited	table		**type**	function
			urlescape	function
			variable	function
			variables	table

   S color-background-four

   S color-background-one

   S color-background-three

   S color-background-two

   S title

initialize	function
inject	function
lmxfile	function

(right column variables entries:)

   S color-background-blue

   S color-background-body

   S color-background-green

   S color-background-main

   S color-background-purple

   S color-background-yellow

   S title-default

logs (context)

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

lpdf (context)

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

N Locked		**fonts**	table
N LockedContents		F color_direct	
N NoRotate		F color_indirect	
N NoView		**formats**	data table
N NoZoom		**frombytes**	function
N Print		**fromeight**	function
N Printable		**frompdfdoc**	function
N ReadOnly		**fromsixteen**	function
N ToggleNoView		**getcatalog**	function
N auto		**getcompression**	function
N hidden		**getfontname**	function
N printable		**getfontobjectnumber**	function
T widgets		**getinfo**	function
N Comb		**getmatrix**	function
N CommitOnSelChange		**getnofpages**	function
N DoNotScroll		**getpageproperties**	function
N DoNotSpellCheck		**getpagereference**	function
N Edit		**getpagetags**	function
N FileSelect		**getpos**	function
N MultiLine		**gettrailerid**	function
N NoExport		**getversion**	function
N NoToggleToOff		**getxformname**	function
N Password		**graycode**	function
N PopUp		**hasmatrix**	function
N PushButton		**immediateobject**	function
N Radio		**includeimage**	function
N RadiosInUnison		**initialize**	function
N ReadOnly		**injectors**	table
N Required		F bitmap	
N RichText		F jp2	
N Sort		F jpg	
N file		F png	
N fixed		**injectxmpinfo**	function
N nocheck		**insertxmpinfo**	function
N protected		**lastreferredpage**	function
N readonly		**layerreference**	function
N required		**limited**	function
N sorted		**linearshade**	function
N unavailable		**literal**	function
flushfonts	function	**majorversion**	function
flushgroup	function	**makenametree**	function
flushobject	function	**minorversion**	function
flushstreamfileobject	function	**nofpages**	function
flushstreamobject	function	**null**	function

number	function		**usedcharacters**	table
object	function		**usedfontnames**	table
objectcompresslevel	function		N dejavusansmonoboldttf-1	
pagereference	function		**usedfontobjects**	table
patternstream	function		N dejavusansmonoboldttf-1	
pdfcolor	function		**usedfontstreams**	table
pdftimestamp	function		T dejavusansmonoboldttf-1	
print	function		T characters	
procset	function		T descriptions	
protectresources	boolean		T fonts	
rectangle	function		T goodies	
reference	function		S original	
registerannotation	function		T parameters	
registerdestination	function		N ascender	
registerdocumentfinalizer	function		N descender	
registerfont	function		N designsize	
registerinitializer	function		T expansion	
registerpagefinalizer	function		N shrink	
registerpattern	function		N step	
reserveobject	function		N stretch	
rgbcode	function		N extendfactor	
rotationcm	function		N extrafactor	
setcompression	function		N extraspace	
setencryption	function		N factor	
setincludecidset	function		N hfactor	
setpageorder	function		N mathsize	
setpagestate	function		N maxsize	
setpagetag	function		N minsize	
setversion	function		N mode	
sharedobject	function		N quad	
shareobject	function		N scaledpoints	
shareobjectreference	function		N size	
spotcode	function		N slant	
stream	function		N slantfactor	
string	function		N space	
toeight	function		N spaceshrink	
topdfdoc	function		N spacestretch	
tosixteen	function		N squeezefactor	
transparency	function		N textsize	
transparencycode	function		N units	
transparencygroups	table		N vfactor	
B none			N width	
transparencyvalue	function		N xheight	
unicode	function		T properties	

```
     S filename                                T arab
     B finalized                                 B dflt
     S fontname                             T gsub
     S format                                 T anum
     S fullname                                 T arab
     S hash                                       B dflt
     B hasmath                                    B urd
     N id                                     T camelcasing
     S language                                 T *
     S mode                                       B *
     S name                                   T char-ligatures
     S psname                                   T *
     S script                                     B *
     S sharedwith                             T compat-ligatures
     N subfont                                  T *
     N textcontrol                                B *
     S writingmode                            T dlig
  T resources                                  T latn
     T alreadydone                               B dflt
     T classes                                   B ism
     T duplicates                                B ksm
     T features                                  B lsm
       T gpos                                    B mol
         T mark                                  B nsm
           T arab                                B rom
             B dflt                              B sks
           T cyrl                                B ssm
             B dflt                          T locl
             B srb                             T cyrl
           T grek                                B srb
             B dflt                            T latn
           T lao                                 B ism
             B dflt                              B ksm
           T latn                                B lsm
             B dflt                              B nsm
             B ism                               B sks
             B ksm                               B ssm
             B lsm                           T lowercasing
             B mol                             T *
             B nsm                               B *
             B rom                           T primes
             B sks                             T *
             B ssm                               B *
         T mkmk                               T tlig
```

```
      T *
        B *
    T trep
      T *
        B *
    T uppercasing
      T *
        B *
  S filename
  S foundfilename
  T foundtables
  T markclasses
  T marks
  T marksets
  N private
  T sequences
  T sublookups
  T unicodes
    N .null
    N A
    N AE
    N AEacute
    N Aacute
    N Abreve
    N Acircumflex
    N Acute
    N Adieresis
    N Agrave
    N Alpha
    N Alphatonos
    N Amacron
    N Aogonek
    N Aring
    N Atilde
    N B
    N Beta
    N C
    N Cacute
    N Caron
    N Ccaron
    N Ccedilla
    N Ccircumflex
    N Cdotaccent
    N Chi
```

```
    N Circumflex
    N D
    N Dcaron
    N Dcroat
    N Delta
    N Dieresis
    N E
    N Eacute
    N Ebreve
    N Ecaron
    N Ecircumflex
    N Edieresis
    N Edotaccent
    N Egrave
    N Emacron
    N Eng
    N Eng.alt
    N Eogonek
    N Epsilon
    N Epsilontonos
    N Eta
    N Etatonos
    N Eth
    N Euro
    N F
    N G
    N Gamma
    N Gbreve
    N Gcaron
    N Gcircumflex
    N Gcommaaccent
    N Gdotaccent
    N Grave
    N H
    N Hbar
    N Hcircumflex
    N I
    N IJ
    N Iacute
    N Ibreve
    N Icircumflex
    N Idieresis
    N Idotaccent
    N Igrave
```

N Imacron	N Phi
N Iogonek	N Pi
N Iota	N Psi
N Iotadieresis	N Q
N Iotatonos	N R
N Itilde	N Racute
N J	N Rcaron
N Jcircumflex	N Rcommaaccent
N K	N Rho
N Kappa	N S
N Kcommaaccent	N Sacute
N L	N Scaron
N Lacute	N Scedilla
N Lambda	N Scircumflex
N Lcaron	N Scommaaccent
N Lcommaaccent	N Sigma
N Ldot	N T
N Lslash	N Tau
N M	N Tbar
N Mu	N Tcaron
N N	N Tcommaaccent
N Nacute	N Theta
N Ncaron	N Thorn
N Ncommaaccent	N Tilde
N Ntilde	N U
N Nu	N Ugrave
N O	N Uhorn
N OE	N Uhungarumlaut
N Oacute	N Umacron
N Obreve	N Uogonek
N Ocircumflex	N Upsilon
N Odieresis	N Upsilon1
N Ograve	N Upsilondieresis
N Ohorn	N Upsilontonos
N Ohungarumlaut	N Uring
N Omacron	N Utilde
N Omega	N V
N Omegatonos	N W
N Omicron	N Wacute
N Omicrontonos	N Wcircumflex
N Oslash	N Wdieresis
N Oslashacute	N Wgrave
N Otilde	N X
N P	N Xi

N Y
N Yacute
N Ycircumflex
N Ydieresis
N Ygrave
N Z
N Zacute
N Zcaron
N Zdotaccent
N Zeta
N a
N aacute
N abreve
N acircumflex
N acute
N acutecomb
N adieresis
N ae
N aeacute
N agrave
N alpha
N alphatonos
N amacron
N ampersand
N angle
N anoteleia
N aogonek
N approxequal
N arabic_2dots
N arabic_2dots_a
N arabic_3dots
N arabic_3dots_a
N arabic_4dots
N arabic_dot
N arabic_gaf_bar
N arabic_gaf_bar_a
N arabic_ring
N aring
N arrowboth
N arrowdblboth
N arrowdbldown
N arrowdblleft
N arrowdblright
N arrowdblup

N arrowdown
N arrowleft
N arrowright
N arrowup
N arrowupdn
N arrowupdnbse
N asciicircum
N asciitilde
N asterisk
N asteriskmath
N at
N atilde
N b
N backslash
N bar
N beta
N block
N braceleft
N braceright
N bracketleft
N bracketright
N breve
N brokenbar
N bullet
N c
N cacute
N caron
N carriagereturn
N ccaron
N ccedilla
N ccircumflex
N cdotaccent
N cedilla
N cent
N chi
N circle
N circlemultiply
N circleplus
N circumflex
N club
N colon
N colonmonetary
N comma
N congruent

N copyright	N equivalence
N currency	N estimated
N d	N eta
N dagger	N etatonos
N daggerdbl	N eth
N dcaron	N exclam
N dcroat	N exclamdbl
N degree	N exclamdown
N delta	N existential
N diaeresis.symbols	N f
N diamond	N female
N dieresis	N fi
N dieresistonos	N figuredash
N divide	N filledbox
N dkshade	N filledrect
N dlLtcaron	N five
N dnblock	N fiveeighths
N dollar	N fl
N dong	N florin
N dotaccent	N four
N dotbelowcomb	N fractionslash
N dotlessi	N franc
N dotlessj	N g
N dotmath	N gamma
N e	N gbreve
N eacute	N gcaron
N ebreve	N gcircumflex
N ecaron	N gcommaaccent
N ecircumflex	N gdotaccent
N edieresis	N germandbls
N edotaccent	N gradient
N egrave	N grave
N eight	N gravecomb
N element	N greater
N ellipsis	N greaterequal
N emacron	N guillemotleft
N emdash	N guillemotright
N emptyset	N guilsinglleft
N endash	N guilsinglright
N eng	N h
N eogonek	N hbar
N epsilon	N hcircumflex
N epsilontonos	N heart
N equal	N hookabovecomb

N house
N hungarumlaut
N hyphen
N i
N iacute
N ibreve
N icircumflex
N idieresis
N igrave
N ij
N imacron
N infinity
N integral
N integralbt
N integraltp
N intersection
N invbullet
N invcircle
N invsmileface
N iogonek
N iota
N iotadieresis
N iotadieresistonos
N iotatonos
N itilde
N j
N jcircumflex
N jot
N k
N kappa
N kcommaaccent
N kgreenlandic
N l
N lacute
N lambda
N lcaron
N lcommaaccent
N ldot
N less
N lessequal
N lfblock
N lira
N logicaland
N logicalnot

N logicalor
N longs
N lozenge
N lslash
N ltshade
N m
N macron
N male
N minus
N minute
N mu
N multiply
N musicalnote
N musicalnotedbl
N n
N nacute
N napostrophe
N ncaron
N ncommaaccent
N nine
N nonbreakingspace
N nonmarkingreturn
N notdef
N notelement
N notequal
N notsubset
N ntilde
N nu
N numbersign
N o
N oacute
N obreve
N ocircumflex
N odieresis
N oe
N ogonek
N ograve
N ohorn
N ohungarumlaut
N omacron
N omega
N omega1
N omegatonos
N omicron

N omicrontonos	N quoteright
N one	N quotesinglbase
N oneeighth	N quotesingle
N onehalf	N r
N onequarter	N racute
N onesuperior	N radical
N onethird	N rcaron
N openbullet	N rcommaaccent
N ordfeminine	N reflexsubset
N ordmasculine	N reflexsuperset
N orthogonal	N registered
N oslash	N revlogicalnot
N oslashacute	N rho
N otilde	N ring
N p	N rtblock
N paragraph	N s
N parenleft	N sacute
N parenright	N scaron
N partialdiff	N scedilla
N percent	N scircumflex
N period	N scommaaccent
N periodcentered	N second
N perpendicular	N section
N perthousand	N semicolon
N peseta	N seven
N phi	N seveneighths
N phi1	N sfthyphen
N pi	N shade
N plus	N sigma
N plusminus	N sigma1
N product	N similar
N propersubset	N six
N propersuperset	N slash
N proportional	N smileface
N psi	N space
N q	N spade
N question	N sterling
N questiondown	N suchthat
N quotedbl	N summation
N quotedblbase	N sun
N quotedblleft	N t
N quotedblright	N tau
N quoteleft	N tbar
N quotereversed	N tcaron

N tcommaaccent	N wcircumflex
N therefore	N wdieresis
N theta	N wgrave
N theta1	N x
N thinquestion	N xi
N thorn	N y
N three	N yacute
N threeeighths	N ycircumflex
N threequarters	N ydieresis
N threesuperior	N yen
N tilde	N ygrave
N tildecomb	N z
N tonos	N zacute
N trademark	N zcaron
N triagdn	N zdotaccent
N triaglf	N zero
N triagrt	N zeta
N triagup	S version
N two	T shared
N twosuperior	T dynamics
N twothirds	T features
N u	B analyze
N ugrave	B checkmarks
N uhorn	B devanagari
N uhungarumlaut	B dummies
N umacron	B extensions
N underbar	B extrafeatures
N underbar.small	B extraprivates
N underbar.wide	B features
N underscore	S indic
N underscoredbl	B mathrules
N union	S mode
N universal	N number
N uogonek	B spacekern
N upblock	B visualspace
N upsilon	T processes
N upsilondieresis	T rawdata
N upsilondieresistonos	S cache_uuid
N upsilontonos	N cache_version
N uring	B compacted
N utilde	B condensed
N v	S creator
N w	T descriptions
N wacute	B expanded

```
S format                                    N version
T goodies                                   S weight
T lookuphash                                S width
T metadata                                  N nofglyphs
  N ascender                                N private
  N averagewidth                            T properties
  T boundingbox                               B hascolor
  N defaultvheight                            B hasitalics
  N descender                                 B hasspacekerns
  S family                                  N size
  S familyname                              N tableversion
  S fontname                                N time
  N fstype                                T specification
  S fullname                                S cs
  T horizontalmetrics                       S detail
    N ascender                              S fallbacks
    N descender                             T features
    N linegap                                 T normal
    N maxadvanceheight                          B features
    N maxadvancewidth                           S mode
    N maxextent                                 N number
    N minbottomsidebearing                  S filename
    N mintopsidebearing                     S forced
    N version                               S forcedname
  N italicangle                             B global
  B monospaced                              S goodies
  S panoseweight                            S hash
  S panosewidth                             N id
  N pfmweight                               S lookup
  N pfmwidth                                N mathsize
  S subfamily                               S method
  S subfamilyname                           S name
  N subfontindex                            S resolved
  N units                                   N scalemode
  S version                                 N size
  T verticalmetrics                         S source
    N ascender                              S specification
    N descender                             N textsize
    N linegap                             N textcontrol
    N maxadvanceheight                    T unscaled
    N maxadvancewidth                       N cache_version
    N maxextent                             T changed
    N minbottomsidebearing                  T characters
    N mintopsidebearing                     T descriptions
```

```
  T mathparameters              S filename
  T parameters                  S fontname
    N ascender                  S format
    N charwidth                 S fullname
    N descender                 B hasmath
    N designsize                N id
    N extraspace                S mode
    N italicangle               B monospaced
    N maxsize                   S name
    N minsize                   N private
    N quad                      S psname
    N slant                     B setitalics
    N space                     S space
    N spaceshrink               N subfont
    N spacestretch              S writingmode
    N units              usedindices              table
    N vheight                   T dejavusansmonoboldttf-1
    N xheight            verbose                  function
  T properties
```

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

luac (context)

inspect   function
print   function

luatex (context)

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

lxml (context)

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

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

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	**makefont**	function
addvariant	function	**mapremap**	data table
alphabets	data table	**overloadparameters**	function
alternatives	data table	**preset**	function
beforepassingfonttotex	function	**presets**	table
big	function	T less	
boldmap	data table	T more	
categories	table	T zero	
D functions		**privatebase**	number
charactersets	data table	**registersimplematrix**	function
checkaftercopyingfont	function	**remapalphabets**	function
classes	data table	**renderings**	table
classnames	data table	D mappings	
codes	data table	D numbers	
collected	function	D sets	
define	function	**renderset**	function
dictionaries	table	**resetattributes**	function
D data		**scaleparameters**	function
D defaults		**sets**	data table
D groups		**setsnapping**	function
F groupset		**setvariant**	function
F groupsetgroup		**startcollecting**	function
D names		**stopcollecting**	function
F registercharacter		**styles**	data table
F registergroup		**syncboth**	function
F registergroupset		**syncname**	function
D sets		**syncstyle**	function
D variants		**toengineclass**	function
dimensions	function	**toname**	function
extensiblecode	function	**tostyle**	function
extensibles	data table	**tweakaftercopyingfont**	function
extrabase	number	**tweakbeforecopyingfont**	function
fallbacks	table	**tweaks**	table
F apply		F accentdimensions	
F install		F action	
fallbackstyleattr	function	F addactuarian	
gaps	data table	F addarrows	
getboth	function	F addbars	
getstyle	function	F addequals	
horizontalcode	function	F addfourier	
initializeparameters	function	F addmirrors	

F addparts	F radicaldegreeanchors
F addprimed	F replace
F addprivates	F replacealphabets
F addrules	F setoptions
F addscripts	F setovershoots
F bigslots	F showinfo
F checkspacing	F simplifykerns
F copyaccents	F staircase
T datasets	T subsets
T accentdimensions	T acenorsuvxz
T accent	T bhklt
T over	T d
T under	T dotless
T addarrows	T f
T addscripts	T gjqy
T checkspacing	T horizontalfences
T copyaccents	T i
T fixprimes	T integrals
T fixslashes	T mw
T wipecues	T p
F dimensions	F substitute
F extendaccents	F topanchors
F fallbacks	F tweaks
F fixaccents	F version
F fixellipses	F wipeanchors
F fixintegrals	F wipecues
F fixoldschool	F wipeitalics
F fixprimes	F wipevariants
F fixradicals	**utfmathaccent** function
F fixslashes	**utfmathclass** function
F flattenaccents	**utfmathcommand** function
F kernpairs	**utfmathfiller** function
F kerns	**utfmathstretch** function
F margins	**variantcode** function
F message	**variantcount** function
F moveitalics	**virtualize** function
F movelimits	**virtualized** data table
F parameters	

md5 (extra lua)

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

metapost (context)

checkformat	function
checktracingonline	function
cm	function
codes	table

N addto

N ampersand

N and

N assignment

N atleast

N begingroup

N btex

N capsule

N colon

N comma

N controls

N curl

N cycle

N definedmacro

N delimiters

N endgroup

N equals

N etex

N everyjob

N exittest

N expandafter

N fiorelse

N if

N input

N interim

N internal

N iteration

N leftbrace

N leftbracket

N leftdelimiter

N let

N macrodef

N macrospecial

N maketext

N message

N mode

N newinternal

N nullary

N numeric

N of

N ofbinary

N onlyset

N parametertype

N pathjoin

N plusorminus

N primarybinary

N primarydef

N property

N protection

N relax

N repeatloop

N rightbrace

N rightbracket

N rightdelimiter

N runscript

N save

N scantokens

N secondarybinary

N secondarydef

N semicolon

N setbounds

N shipout

N show

N slash

N step

N stop

N str

N string

N tag

N tension

N tertiarybinary

N tertiarydef

N thingstoadd

N to

N typename

N unary

N undefinedcs

N until

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

remaptext	function	**svgglyphtomp**	function
reporterror	function	**svgshapestomp**	function
reportsvgfonts	function	**svgshapestopdf**	function
reset	function	**svgsplitcolor**	function
resetlastlog	function	**svgtomp**	function
resetplugins	function	**svgtopdf**	function
run	function	**sxsy**	function
runinternal	function	**tex**	table

runscript function

  F get

scanparameters function

  F reset

scripterror function

  F set

scriptindex function

  F setfrombuffer

setbendtolerance	function	**texerrors**	boolean
setbuffer	function	**texexp**	function
setextensions	function	**theclippath**	function
setlogging	function	**tographic**	function
setmovetolerance	function	**totable**	function
setoutercolor	function	**types**	table

setparameterset function

  N boolean

setrecord function

  N cmykcolor

settext function

  N color

settolerance function

  N dependent

setvariable function

  N independent

showlog	boolean
showsvgpage	function

  N known

simple function

  N nep

splitprescript function

  N numeric

startgraphic function

  N pair

startsvghashing function

  N path

stopgraphic function

  N pen

stopsvghashing function

  N picture

svformat function

  N protodependent

svgcolorremapper function

  N string

svgfactors table

  N structured

  N %

  N suffixedmacro

  N bp

  N tokenlist

  N cm

  N transform

  N em

  N unknownboolean

  N ex

  N unknownnep

  N in

  N unknownpath

  N mm

  N unknownpen

  N pc

  N unknownpicture

  N pt

  N unknownstring

  N px

  N unsuffixedmacro

  N vacuous

typesvgpage	function	**variables**	table
unload	function		
untagvariable	function		

mime (extra lua)

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

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

mp (context)

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

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

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

mplib (extra tex)

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

noads (context)

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

process   function
processnested   function
processors   table
- T dictionaries
- F mlisttohlist
- T suspicious
- T unscript
- T unstack

processouter   function

node (basic tex)

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

   F addmargins
   F addxoffset
   F addxymargins
   F addyoffset
   F appendaftertail
   F checkdiscretionaries
   F checkdiscretionary
   F collapsing
   F copy
   F copylist
   F copyonly
   F count
   F currentattributes
   F dimensions
   F effectiveglue
   F endofmath
   F exchange
   F fields
   F findattribute
   F findattributerange
   F findnode
   F firstglyph
   F flattendiscretionaries
   F flattenleaders
   F flushlist
   F flushnode
   F free
   F freeze
   F getanchors
   F getattribute
   F getattributelist
   F getattributes
   F getboth

   F getbottom
   F getbox
   F getcachestate
   F getchar
   F getchardict
   F getcharspec
   F getchoice
   F getclass
   F getdata
   F getdegree
   F getdelimiter
   F getdenominator
   F getdepth
   F getdirection
   F getdisc
   F getdiscpart
   F getexpansion
   F getfam
   F getfield
   F getfont
   F getgeometry
   F getglue
   F getglyphdata
   F getglyphdimensions
   F getheight
   F getid
   F getindex
   F getinputfields
   F getkern
   F getkerndimension
   F getlanguage
   F getleader
   F getleftdelimiter
   F getlist
   F getlistdimensions
   F getnext
   F getnodes
   F getnormalizedline
   F getnucleus
   F getnumerator
   F getoffsets

F getoptions	F insertafter
F getorientation	F insertbefore
F getparstate	F isboth
F getpenalty	F ischar
F getpost	F isdirect
F getpre	F isglyph
F getprev	F isnext
F getprime	F isnextchar
F getpropertiestable	F isnextglyph
F getproperty	F isnode
F getreplace	F isprev
F getrightdelimiter	F isprevchar
F getruledimensions	F isprevglyph
F getscale	F isspeciallist
F getscales	F isvalid
F getscript	F iszeroglue
F getshift	F kerning
F getspeciallist	F lastnode
F getstate	F length
F getsub	F ligaturing
F getsubpre	F makeextensible
F getsubtype	F migrate
F getsup	F mlisttohlist
F getsuppre	F naturalhsize
F gettop	F naturalwidth
F gettotal	F new
F getusedattributes	F newmathglyph
F getwhd	F newtextglyph
F getwidth	F patchattributes
F getwordrange	F prependbeforehead
F getxscale	F protectglyph
F getxyscales	F protectglyphs
F getyscale	F protectglyphsnone
F gluetostring	F protrusionskippable
F hasattribute	F rangedimensions
F hasdimensions	F remove
F hasfield	F removefromlist
F hasgeometry	F repack
F hasglyph	F reverse
F hasglyphoption	F serialized
F hpack	F setanchors
F hyphenating	F setattribute
F id	F setattributelist
F ignoremathskip	F setattributes

F setboth	F setrightdelimiter
F setbottom	F setscales
F setbox	F setscript
F setchar	F setshift
F setchardict	F setspeciallist
F setchoice	F setsplit
F setclass	F setstate
F setdata	F setsub
F setdegree	F setsubpre
F setdelimiter	F setsubtype
F setdenominator	F setsup
F setdepth	F setsuppre
F setdirection	F settop
F setdisc	F settotal
F setdiscpart	F setwhd
F setexpansion	F setwidth
F setfam	F show
F setfield	F slide
F setfont	F softenhyphens
F setgeometry	F startofpar
F setglue	F subtypes
F setglyphdata	F tail
F setheight	F todirect
F setindex	F tonode
F setinputfields	F tostring
F setkern	F tovaliddirect
F setlanguage	F traverse
F setleader	F traversechar
F setleftdelimiter	F traversecontent
F setlink	F traverseglyph
F setlist	F traverseid
F setnext	F traverseleader
F setnucleus	F traverselist
F setnumerator	F type
F setoffsets	F types
F setoptions	F unprotectglyph
F setorientation	F unprotectglyphs
F setpenalty	F unsetattribute
F setpost	F unsetattributes
F setpre	F usedlist
F setprev	F usesfont
F setprime	F values
F setproperty	F verticalbreak
F setreplace	F vpack

	F write		**lastnode**	function
	F xscaled		**length**	function
	F yscaled		**ligaturing**	function
effectiveglue	function		**makeextensible**	function
endofmath	function		**mlisttohlist**	function
family_font	function		**new**	function
fields	function		protectglyph	function
findattribute	function		protectglyphs	function
firstglyph	function		**protrusionskippable**	function
flattendiscretionaries	function		**rangedimensions**	function
flushlist	function		**remove**	function
flushnode	function		**serialized**	function
free	function		**setattribute**	function
getattribute	function		**setfield**	function
getcachestate	function		setglue	function
getfield	function		setproperty	function
getglue	function		**show**	function
getpropertiestable	function		slide	function
getproperty	function		**subtypes**	function
gluetostring	function		**tail**	function
hasattribute	function		**tostring**	function
hasfield	function		**traverse**	function
hasglyph	function		**traverseid**	function
hpack	function		**type**	function
hyphenating	function		**types**	function
id	function		unprotectglyph	function
insertafter	function		unprotectglyphs	function
insertbefore	function		**unsetattribute**	function
instock	function		**usedlist**	function
inuse	function		usesfont	function
isnode	function		**values**	function
iszeroglue	function		vpack	function
kerning	function		**write**	function

nodes (context)

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

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

N axis	F dirdimensions
N exact	F effectiveglue
N left	F endofmath
N middle	F exchange
N no_axis	F findattribute
N right	F findnode
N set	F firstcharacter
N unused_1	F firstcharinbox
N unused_2	F firstglyph
	F flattendiscretionaries

nodecodes	data table	F flattenleaders
nopts	function	F flush
nuts	table	F flushlist
		F flushnode
F addmargins		F free
F addxoffset		F freeze
F addxymargins		F fullhpack
F addyoffset		F getanchors
F append		F getattr
F appendaftertail		F getattribute
F apply		F getattributelist
F applyvisuals		F getattributes
F checkdiscretionaries		F getattrlist
F checkslide		F getattrs
F collapsing		F getboth
T colors		F getbottom
F set		F getbox
T components		F getboxglue
F copynocomponents		F getchar
F copyonlyglyphs		F getchardict
F count		F getcharspec
F flush		F getchoice
F get		F getclass
F set		F getcomponents
F concat		F getdata
F copy		F getdegree
F copy_properties		F getdelimiter
F copylist		F getdenominator
F copynode		F getdepth
F copyonly		F getdirection
F copyvisual		F getdisc
F count		F getdiscpart
F countall		F getdiscretionary
F currentattributes		F getexpansion
F delete		
F dimensions		

F getfam	F getstate
F getfield	F getsub
F getfont	F getsubpre
F getgeometry	F getsubtype
F getglue	F getsup
F getglyphdata	F getsuppre
F getglyphdimensions	F getsurround
F getheight	F gettop
F getid	F gettotal
F getindex	F getusedattributes
F getinputfields	F getvalue
F getkern	F getwhd
F getkerndimension	F getwidth
F getlang	F getwordrange
F getlanguage	F getxscale
F getleader	F getxyscales
F getleftdelimiter	F getyscale
F getlist	F gluetostring
F getlistdimensions	F hasattribute
F getmiddle	F hasdimensions
F getmiddledelimiter	F hasfield
F getnext	F hasgeometry
F getnormalizedline	F hasglyph
F getnucleus	F hasglyphoption
F getnumerator	F hpack
F getoffsets	F hyphenating
F getoptions	F ignoremathskip
F getorientation	F insertafter
F getparstate	F insertbefore
F getpenalty	F insertlistafter
F getpost	F is_display_math
F getpre	F isboth
F getprev	F ischar
F getprime	F isdirect
F getprop	F isdone
F getreplace	F isglyph
F getrightdelimiter	F isnext
F getruledata	F isnextchar
F getruledimensions	F isnextglyph
F getscale	F isnode
F getscales	F isnut
F getscript	F isprev
F getshift	F isprevchar
F getspeciallist	F isprevglyph

F iszeroglue	F leftmarginkern
F kerning	F leftskip
F lastnode	F lineskip
F length	F literal
F ligaturing	F mathchar
F link	F mathtextchar
F linked	F negatedglue
F locate	F noad
F migrate	F originliteral
F mlisttohlist	F outlinerule
F naturalhsize	F pageliteral
F naturalwidth	F penalty
F nestedtracedslide	F radical
F new	F rawliteral
F newmathglyph	F register
F openup	F restore
F patchattributes	F righthangskip
T pool	F rightmarginkern
F accent	F rightskip
F baselineskip	F rule
F boundary	F save
F boxrule	F savepos
F choice	F setmatrix
F cleanup	F setstate
F delim	F shrink
F delimiter	F startrotation
F direction	F stock
F directliteral	F stretch
F disc	F strutrule
F emptyrule	F subbox
F fence	F submlist
F fontkern	F temp
F fraction	F usage
F glue	F userdefined
F gluespec	T userids
F glyph	F usernode
F hlist	F userrule
F imagerule	F virtualrule
F indentskip	F vlist
F italickern	F wordboundary
F kern	F prepend
F latelua	F prependbeforehead
F leader	F processranges
F lefthangskip	F processwords

F protectglyph

F protectglyphs

F protectglyphsnone

F protrusionskippable

F rangedimensions

F rawprop

F reference

F rehpack

F remove

F removefromlist

F repack

F repackhlist

F replace

F reverse

T rules

  T ruleactions

    F box

    F draw

    F fill

    F mp

    F stroke

  F userrule

F serialized

F setanchors

F setattr

F setattribute

F setattributelist

F setattributes

F setattrlist

F setattrs

F setboth

F setbottom

F setbox

F setboxglue

F setchar

F setchardict

F setchoice

F setclass

F setcomponents

F setdata

F setdegree

F setdelimiter

F setdenominator

F setdepth

F setdirection

F setdisc

F setdiscpart

F setdiscretionary

F setexpansion

F setfam

F setfield

F setfont

F setgeometry

F setglue

F setglyphdata

F setheight

F setinputfields

F setkern

F setlang

F setlanguage

F setleader

F setleftdelimiter

F setlink

F setlist

F setmiddledelimiter

F setnext

F setnucleus

F setnumerator

F setoffsets

F setoptions

F setorientation

F setparproperty

F setpenalty

F setpost

F setpre

F setprev

F setprime

F setprop

F setreplace

F setrightdelimiter

F setruledata

F setscale

F setscales

F setscript

F setshift

F setspeciallist

F setsplit

F setstate

F setsub		F disc		
F setsubpre		F glue		
F setsubtype		F glyph		
F setsup		F hlist		
F setsuppre		F leader		
F setsurround		F list		
F settop		F mark		
F setvalue		F next		
F setvisual		F node		
F setvisuals		F penalty		
F setwhd		F rule		
F setwidth		F unset		
F show		F vlist		
F slide		F whatsit		
F softenhyphens		T treversers		
F somepenalty		F char		
F somespace		F content		
F splitbox		F glyph		
F startofpar		F leader		
F striprange		F list		
F tail		F node		
F takeattr		T typesetters		
F takebox		F tohbox		
F takelist		F tohpack		
F theprop		F tonodes		
F tonode		F tovbox		
F tonodes		F tovpack		
F tonut		F unprotectglyph		
F tosequence		F unprotectglyphs		
F tostring		F unsetattribute		
F tracedslide		F unsetattributes		
F traverse		F untracedslide		
F traversechar		F usedlist		
F traversecontent		F usesfont		
F traverseglyph		F verticalbreak		
F traverseid		F vianodes		
F traverseleader		F vianuts		
F traverselist		F vpack		
T traversers		F write		
F alignrecord		F xscaled		
F boundary		F yscaled		

packlist		function
parcodes		data table
penaltycodes		data table

F char	
F content	
F dir	

plugindata	table		**properties**	table
F finalizer			T data	
F initializer			**pts**	function
S name			**radicalcodes**	data table
T namespace			**references**	table
N attribute			N attribute	
D data			T done	
F enable			F handler	
F handler			T stack	
F register			**rehpack**	function
D registered			**remove**	function
D values			**repackhlist**	function
F processor			**replace**	function
points	function		**report**	function
pool	table		**rightmarginwidth**	function
F baselineskip			**rulecodes**	data table
F cleanup			**rules**	table
F directliteral			F handler	
F glyph			F process	
F hlist			F set	
F latelua			F userrule	
F leader			**serialize**	function
F lineskip			**serializebox**	function
F literal			**serialized**	function
F originliteral			**setattr**	function
F register			**setattribute**	function
F restore			**setboth**	function
F save			**setbox**	function
F savepos			**setboxtonaturalwd**	function
F setmatrix			**setchar**	function
F stock			**setfield**	function
F usage			**setfont**	function
F usernode			**setleader**	function
F vlist			**setlink**	function
prepend	function		**setlist**	function
print	function		**setnext**	function
processors	table		**setprev**	function
F alignment_filter			**setproperty**	function
F append_line_filter			**shifts**	table
F glyph_run			F handler	
F post_linebreak_filter			F set	
F pre_linebreak_filter			**showboxes**	function
F trace_glyph_run_a			**showlist**	function
F trace_glyph_run_b			**showsimplelist**	function

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

	F set	N glyph	
	F setlist	N hbox	
traverse	function	N insert	
traverseid	function	N italic	
typesetters	table	N kern	
	F hbox	N line	
	F hpack	N marginkern	
	F tohbox	N mark	
	F tohpack	N math	
	F tonodes	N mathglue	
	F tovbox	N mathkern	
	F tovpack	N origin	
	F vpack	N par	
unsetattribute	function	N penalty	
usedlist	function	N simple	
vianodes	function	N simplehbox	
vianuts	function	N simplevbox	
visualizebox	function	N simplevtop	
visualizers	table	N space	
	F attribute	N strut	
	T attributes	N user	
	F box	N vbox	
	F enable	N vtop	
	F handler	N whatsit	
	F markfonts	F register	
	T modes	F setfont	
	N boundary	F setlayer	
	N depth	F setruledglyph	
	N dir	F setvisual	
	N discretionary	**vpack**	function
	N expansion	**whatsitcodes**	data table
	N fontkern	**write**	function
	N glue		

number (context)

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

objects (context)

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

optional (context)

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

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

ghostscript   table
- F execute
- F initialize

graphicsmagick table
- F execute
- F initialize

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

imagemagick   table
- F execute
- F initialize

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

library   table

- F load

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

lzma   table
- F compress
- F decompress
- F initialize

lzo   table
- F compress
- F decompresssize
- F initialize

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

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

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

sqlite   table
- F close

F execute

F getmessage

F initialize

F open

zint　　　　table

F execute

F initialize

zstd　　　　table

F compress

F decompress

F initialize

os (basic lua)

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

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

paintreaders (context)

1	function	**17**	function
2	function	**18**	function
3	function	**19**	function
4	function	**20**	function
5	function	**21**	function
6	function	**22**	function
7	function	**23**	function
8	function	**24**	function
9	function	**25**	function
10	function	**26**	function
11	function	**27**	function
12	function	**28**	function
13	function	**29**	function
14	function	**30**	function
15	function	**31**	function
16	function	**32**	function

pdf (basic tex)

immediateobj function

pdfe (extra tex)

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

physics (context)

units table   D tables

    F registerunit

pngdecode (extra tex)

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

publications (context)

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

T required	
T sets	
T author	
T editionset	
T virtual	
T demo-a	
S category	
T extra	
T fields	
S author	
S institution	
S organization	
S subtitle	
S title	
S year	
T optional	
T required	
T sets	
T author	
T virtual	
T demo-b	
S category	
T extra	
T fields	
S author	
S institution	
S organization	
S subtitle	
S title	
S year	
T optional	
T required	
T sets	
T authors	
T virtual	
S comment	
S copyright	
T fields	
S name	
T types	
S author	
S editor	
S keywords	
S number	

S page	
S pages	
S volume	
S version	
D virtual	
T virtualfields	
B authornum	
B authoryear	
B authoryears	
B num	
B suffix	
datasets	table
detailed	table
endnotes_to_btx	function
enhancer	table
S arguments	
T askip	
B dirty	
T gskip	
T kind	
T list	
T system	
T order	
N steps	
enhancers	table
F details	
F order	
F suffixes	
finder	function
firstofrange	function
found	function
get	function
getcasted	function
getdetail	function
getdirect	function
getfaster	function
getfield	function
getfuzzy	function
getindex	function
inspectors	data table
journals	table
F abbreviated	
F add	
F expanded	

F load		F json	
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 authortitle	
F reference		T sequence	
F short		T authoryear	
F used		T sequence	
F uservariable		T dataset	
listvariants	table	T sequence	
F default		T key	
F index		T sequence	
F num		**specifications**	table
F short		T default	
F tag		S author	
load	function	S comment	
loadbibdata	function	S copyright	
loaddefinitionfile	function	S name	
loaders	table	S version	
F bbl		D virtual	
F bib		**splitauthor**	function
F buffer		**splitoneauthor**	function
F endnote		**statistics**	table

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

regimes (context)

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

resolvers (context)

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

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

validatedpath	function	**variableofformatorsuffix**	function
variable	function	**wildcardpattern**	function
variableofformat	function		

sandbox (context)

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

scripts (context)

autofontfeature table

    F disable

    F enable

    F handler

colors data table

decomposehangul function

defaults table

    N inter_char_half_shrink_factor

    N inter_char_half_stretch_factor

    N inter_char_hangul_penalty

    N inter_char_quarter_shrink_factor

    N inter_char_quarter_stretch_factor

    N inter_char_shrink_factor

    N inter_char_stretch_factor

    N inter_word_stretch_factor

getdata function

getinjector function

getsplitter function

getstatus function

handlers data table

helpers data table

injectors data table

inserters table

    F nobreakspace_after

    F nobreakspace_before

    F space_after

    F space_before

    F zerowidthspace_after

    F zerowidthspace_before

installdataset function

installmethod function

numbertodataset data table

numbertohandler data table

reset function

set function

setstatus function

splitters data table

set (context)

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

sha2 (extra lua)

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

sio (extra lua)

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

socket (extra lua)

BLOCKSIZE	number	
_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	
S resent-cc	
S resent-date	
S resent-from	
S resent-message-id	
S resent-reply-to	
S resent-sender	
S resent-to	
S retry-after	
S return-path	
S sender	
S server	
S smtp-remote-recipient	
S status	
S subject	
S te	
S to	
S trailer	
S transfer-encoding	
S upgrade	
S user-agent	
S vary	
S via	
S warning	
S will-retry-until	
S www-authenticate	
S x-mailer	
F lower	
F normalize	
http	table
N TIMEOUT	
S USERAGENT	
F genericform	
F open	
F request	
newtry	function

protect	function
report	function
select	function
sink	function
sinkt	table
F close-when-done	
F default	
F http-chunked	
F keep-open	
skip	function
sleep	function
source	function
sourcet	table
F by-length	
F default	
F http-chunked	
F until-closed	
tcp	function
tcp4	function
tcp6	function
tp	table
N TIMEOUT	
F connect	
try	function
udp	function
udp4	function
udp6	function
url	table
F absolute	
F build	
F build_path	
F escape	
F parse	
F parse_path	
F unescape	

sorters (context)

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

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

sparse (context)

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

statistics (context)

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

status (basic tex)

getbufferstate	function	**getmarkstate**	function
getcallbackstate	function	**getneststate**	function
getconstants	function	**getnodestate**	function
geterrorlinestate	function	**getparameterstate**	function
geterrorstate	function	**getpoolstate**	function
getexpandstate	function	**getreadstate**	function
getextrastate	function	**getsavestate**	function
getfilestate	function	**getsparsestate**	function
getfontstate	function	**getstringstate**	function
gethalferrorlinestate	function	**gettexstate**	function
gethashstate	function	**gettokenstate**	function
getinputstate	function	**getwarningstate**	function
getinsertstate	function	**iocodes**	table
getlanguagestate	function	**list**	function
getlookupstate	function	**resetmessages**	function
getluastate	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	**nospaces**	function
autosingle	function	**nspaces**	table
booleanstring	function	**optionalquoted**	function
byte	function	**pack**	function
bytepairs	function	**packrowscolumns**	function
bytes	function	**packsize**	function
bytetable	function	**quote**	function
char	function	**quoted**	function
characterpairs	function	**rep**	function
characters	function	**replacenewlines**	function
checkedsplit	function	**reverse**	function
collapsespaces	function	**split**	function
containsws	function	**splitlines**	function
count	function	**splitup**	function
dawson	function	**strip**	function
dump	function	**sub**	function
erf	function	**texnewlines**	function
erfc	function	**tformat**	function
erfcx	function	**toHEX**	function
erfi	function	**toboolean**	function
escapedpattern	function	**tobytes**	function
escapedquotes	function	**tocontext**	function
explode	function	**todec**	function
f6	function	**todimen**	function
find	function	**tohex**	function
format	function	**tonodes**	function
formatter	function	**topattern**	function
formatters	function	**totable**	function
fullstrip	function	**tounicode16**	function
gmatch	function	**toutf**	function
gsub	function	**toutf32**	function
hextocharacters	function	**toutf8**	function
is_boolean	function	**tracedchar**	function
is_empty	function	**tracedchars**	table
itself	function	**unescapedquotes**	function
len	function	**unpack**	function
limit	function	**unquote**	function
linetable	function	**unquoted**	function
longtostring	function	**upper**	function
lower	function	**utfcharacter**	function
match	function	**utfcharacters**	function

utfcharactertable	function	**utfvaluetable**	function
utflength	function	**valid**	function
utfpadd	function	**voigt**	function
utfpadding	function	**voigt_hwhm**	function
utfvalue	function	**wordsplitter**	function
utfvalues	function		

structures (context)

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

F	title		F	pushnesting
F	touserdata		F	rawnumber
inserts	**table**		F	realpage
D	data		F	reordered
F	define		T	result
F	getdata		F	savedlistnumber
F	getlocation		F	savedlistprefixednumber
F	getname		F	savedlisttitle
F	getnumber		D	sectionblocks
F	setlocation		F	sectionnumber
F	setup		F	size
D	stored		F	title
itemgroups	**table**		D	tobesaved
lists	**table**		F	userdata
F	addto		F	uservalue
F	analyze		**marks**	**table**
B	autoreorder		F	number
D	cached		F	title
D	collected		**notes**	**table**
F	discard		F	check_spacing
F	enhance		F	checkpagechange
T	enhancers		F	define
F	external		F	doifonsamepageasprevious
F	filter		F	get
F	formulanumber		F	getdeltapage
F	getresult		F	getinternal
F	groupindex		F	getn
F	hasnumberdata		F	getstate
F	haspagedata		F	hascontent
F	hastitledata		F	internal
F	iscached		F	internalid
D	kinds		F	listindex
F	label		D	numbers
F	location		F	ordered
D	names		F	postpone
F	number		F	resetpostponed
D	ordered		F	restore
F	page		F	save
F	popnesting		F	setstate
F	prefix		D	states
F	prefixednumber		F	store
F	prefixedpage		**pages**	**table**
F	process		F	allmarked
D	pushed		F	analyze

F	splitprefix	F	sort
F	splitreference	F	store
F	synchronizepage	D	tobesaved
T	testrunners	F	unique
F	inner	F	userdata
F	special		
F	special operation	**sections**	table
F	special operation with arguments	F	autodepth
T	testspecials	F	cct
F	deltapage	D	collected
F	i	F	current
F	internal	F	currentblock
F	page	F	currentid
F	realpage	F	currentlevel
F	section	F	currentsectionindex
F	userpage	F	depthnumber
D	tobereferred	F	finddata
D	tobesaved	F	findnumber
D	tracedpages	F	fullnumber
T	urls	F	getcurrentlevel
T	data	F	getlevel
F	define	F	getnumber
F	found	F	internalreference
F	get	D	levelmap
F	untex	D	levels
D	usedinternals	F	matchingtilldepth
D	usedviews	F	numberatdepth
F	valid	F	numbers
registers	table	F	popblock
F	analyze	F	prefixedconverted
D	collected	F	pushblock
F	compare	F	register
F	define	D	registered
F	enhance	F	reportstructure
F	extend	F	save
F	filter	T	sectionblockdata
F	filtercollected	T	bodypart
F	finalize	S	bookmark
F	findinternal	F	set
F	flush	F	setblock
F	get	F	setchecker
F	prepare	F	setentry
F	process	F	setinitialblock
F	setmethod	F	setlevel
		F	setnumber

F	showstructure	F	marginanchor
F	structuredata	F	margintext
F	title	F	math
D	tobesaved	F	mrow
F	typesetnumber	F	mtable
F	userdata	T	destinationhash
B	verbose	T	extras
sets	**table**	F	adddestination
F	define	F	addimplicit
F	get	F	addinternal
F	getall	F	addreference
D	setlist	F	combination
specials	**table**	F	delimitedsymbol
D	collected	F	description
F	retrieve	F	descriptionsymbol
F	store	F	document
D	tobesaved	F	float
synonyms	**table**	F	formulacontent
F	analyzed	F	image
D	collected	F	item
F	compare	F	itemgroup
F	define	F	link
F	filter	F	listitem
F	finalize	F	mi
F	flush	F	msub
F	isshown	F	msup
F	isused	F	paragraph
F	meaning	F	publication
F	prepare	F	reference
F	process	F	registerlocation
F	register	F	registerpages
F	registershown	F	registerseparator
F	registerused	F	section
F	reset	F	sorting
F	resetall	F	subsentencesymbol
F	resetlist	F	synonym
F	resetshown	F	tablecell
F	resetused	F	tabulate
F	sort	F	tabulatecell
F	synonym	T	finalizers
D	tobesaved	F	descriptions
tags	**table**	T	fixes
T	backend	F	linenumber
T	checks	T	listdata

```
  T referencehash                        F setattributehash
  F setattribute                         F setcombination
  T usedimages                           F setconstruct
    T image                              F setfigure
  T usedstyles                           F setfloat
    T construct                          F setformulacontent
    T highlight                          F sethighlight
F current                                F setitem
F elementtag                             F setitemgroup
F enabled                                F setlist
F exportbox                              F setnotation
F finishexport                           F setnotationsymbol
F getextradata                           F setparagraph
F getid                                  F setproperty
F getmetadata                            F setpublication
F gettablecell                           F setregister
F gettabulatecell                        F setsorting
F handler                                F setsynonym
F initializeexport                       F settablecell
D labels                                 F settabulatecell
F last                                   F settagdelimitedsymbol
F lastinchain                            F settagsubsentencesymbol
F localexport                            F setupexport
F locatedtag                             F setuserproperties
T patterns                               D specifications
  U splitter                             F start
D properties                             F stop
F registerextradata                      F strip
F registermetadata                       D taglist
F restart                                T usewithcare
F setaspect
```

table (basic lua)

allkeys	function	**orderedhash**	function
append	function	**pack**	function
are_equal	function	**prepend**	function
collapsed	function	**print**	function
collapsedhash	function	**remove**	function
combine	function	**reverse**	function
compact	function	**reversed**	function
concat	function	**save**	function
contains	function	**sequenced**	function
copy	function	**serialize**	function
count	function	**setmetatablecall**	function
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

tex (basic tex)

attribute	table	**forceinputstateline**	function
automigrationcodes	data table	**fprint**	function
badness	function	**frozenparcodes**	data table
boundaries	table	**get**	function
D names		**getalignmentcontextvalues**	function
D numbers		**getappendlinecontextvalues**	function
F system		**getattribute**	function
box	table	**getautomigrationvalues**	function
boxresources	table	**getbox**	function
F getbox		**getboxdir**	function
F getdimensions		**getboxresourcebox**	function
F save		**getboxresourcedimensions**	function
F use		**getcatcode**	function
catcode	table	**getcharactertagvalues**	function
chardef	function	**getcount**	function
classoptioncodes	data table	**getdelcode**	function
codes	table	**getdelcodes**	function
conditionals	data table	**getdimen**	function
constants	data table	**getdimensionvalue**	function
count	table	**getdiscoptionvalues**	function
cprint	function	**getdiscstatevalues**	function
ctdcatcodes	number	**geterrorvalues**	function
ctxcatcodes	number	**getflagvalues**	function
definefont	function	**getfontoffamily**	function
delcode	table	**getfrozenparvalues**	function
dimen	table	**getglue**	function
dimensiondef	function	**getglyphdata**	function
directives	data table	**getglyphoptionvalues**	function
discoptioncodes	data table	**getglyphscales**	function
dontcomplain	function	**getglyphscript**	function
enableprimitives	function	**getglyphstate**	function
error	function	**getgroupvalues**	function
expandasvalue	function	**gethccode**	function
experiments	data table	**gethelptext**	function
extraprimitives	function	**gethmcode**	function
fatalerror	function	**gethyphenationvalues**	function
flagcodes	data table	**getinputstatefile**	function
fontidentifier	function	**getinputstateline**	function
fontname	function	**getinputstatemode**	function
forcehmode	function	**getinsertcontent**	function
forceinputstatefile	function	**getinsertdepth**	function

getinsertdistance	function	**getparmodevalues**	function
getinsertheight	function	**getparstate**	function
getinsertlimit	function	**getprimitiveorigins**	function
getinsertmultiplier	function	**getregisterindex**	function
getinsertwidth	function	**getrunstatevalues**	function
getintegervalue	function	**getsfcode**	function
getinteraction	function	**getshapingpenaltiesvalues**	function
getiovalues	function	**getskip**	function
getkerneloptionvalues	function	**getspecialmathclassvalues**	function
getlargestusedmark	function	**gettextcontrolvalues**	function
getlccode	function	**gettextdir**	function
getlinedir	function	**gettoks**	function
getlist	function	**getuccode**	function
getlistanchorvalues	function	**glue**	table
getlistgeometryvalues	function	**glyphoptioncodes**	data table
getlistsignvalues	function	**groupcodes**	data table
getlocalbox	function	**hashtokens**	function
getlocallevel	function	**hccode**	table
getmark	function	**hmcode**	table
getmath	function	**hyphenationcodes**	data table
getmathclassoptionvalues	function	**ifs**	data table
getmathcode	function	**inicatcodes**	number
getmathcodes	function	**integerdef**	function
getmathcontrolvalues	function	**isattribute**	function
getmathdir	function	**isbox**	function
getmathparametervalues	function	**iscount**	function
getmathstylenamevalues	function	**isdefined**	function
getmathstylevalues	function	**isdimen**	function
getmathvariantvalues	function	**isglue**	function
getmode	function	**ismuglue**	function
getmodevalues	function	**ismuskip**	function
getmuglue	function	**isprintable**	function
getmuskip	function	**isskip**	function
getnest	function	**istoks**	function
getnoadoptionvalues	function	**lastnodetype**	function
getnormalizelinevalues	function	**lccode**	table
getnormalizeparvalues	function	**linebreak**	function
getoutputactive	function	**listanchorcodes**	data table
getpacktypevalues	function	**lists**	table
getpagecontextvalues	function	**listsigncodes**	data table
getpagestate	function	**luacatcodes**	number
getparbeginvalues	function	**magicconstants**	table
getparcontextvalues	function		N assumedmathcontrol
getpardir	function		N awfulbad

N decentcriterium	N maxnoffonts	
N defaultcatcodetable	N maxnoflanguages	
N defaultdeadcycles	N maxnofmarks	
N defaulteqnogapstep	N maxnofmathfamilies	
N defaulthangafter	N maxquarterword	
N defaultoutputbox	N maxsizeofword	
N defaultpredisplaygap	N maxspacefactor	
N defaultrule	N maxtoksregisterindex	
N defaultspacefactor	N mincardinal	
N defaulttolerance	N mindatavalue	
N deplorable	N mindimen	
N ejectpenalty	N minhalfword	
N ignoredepth	N mininfinity	
N infinitebad	N mininteger	
N infinitepenalty	N minquarterword	
N infinity	N minspacefactor	
N largewidthexcess	N nocatcodetable	
N loosecriterium	N null	
N mathbeginclass	N nullflag	
N mathendclass	N nullfont	
N maxattributeregisterindex	N onebp	
N maxboxregisterindex	N presetrulethickness	
N maxbytecodeindex	N runningrule	
N maxcardinal	N smallstretchability	
N maxcategorycode	N texeqtbsize	
N maxcharactercode	N texhashprime	
N maxcharcode	N texhashsize	
N maxdatavalue	N two	
N maxdimen	N undefinedmathparameter	
N maxdimenregisterindex	N unity	
N maxfunctionreference	N unusedattributevalue	
N maxglueregisterindex	N unusedmathfamily	
N maxhalfvalue	N unusedmathstyle	
N maxhalfword	N unusedscriptvalue	
N maxinteger	N unusedstatevalue	
N maxintregisterindex	N zeroglue	
N maxlimitedscale		
N maxmarkindex	**mathchardef**	function
N maxmathclasscode	**mathcode**	table
N maxmathfamilyindex	**mathcontrolcodes**	data table
N maxmultglueregisterindex	**modelevels**	table
N maxnewlinecharacter	N horizontal	
N maxnofbytecodes	N math	
N maxnofcatcodetables	N unset	
	N vertical	

modes	data table	**setglyphstate**	function
mprint	function	**sethccode**	function
muglue	table	**sethmcode**	function
muskip	table	**setinputstatefile**	function
nest	table	**setinputstateline**	function
nilcatcodes	number	**setinputstatemode**	function
noadoptioncodes	data table	**setinsertcontent**	function
normalizelinecodes	data table	**setinsertdistance**	function
normalizeparcodes	data table	**setinsertlimit**	function
notcatcodes	number	**setinsertmultiplier**	function
number	function	**setintegervalue**	function
parcontextcodes	data table	**setinteraction**	function
poplocal	function	**setlccode**	function
popsavelevel	function	**setlinedir**	function
preparelinebreak	function	**setlist**	function
primitives	function	**setlocalbox**	function
print	function	**setmath**	function
prtcatcodes	number	**setmathcode**	function
pushlocal	function	**setmathdir**	function
pushsavelevel	function	**setmuglue**	function
quitlocal	function	**setmuskip**	function
quittoks	function	**setnest**	function
resetparagraph	function	**setpardir**	function
rlncatcodes	number	**setrunstate**	overloaded functio
romannumeral	function	**setsfcode**	function
round	function	**setskip**	function
runlocal	function	**settextdir**	function
runstring	function	**settoks**	function
runtoks	function	**setuccode**	function
saveboxresource	function	**sfcode**	table
scale	function	**shiftparshape**	function
scantoks	function	**shipout**	function
set	function	**showcontext**	function
setattribute	function	**skip**	table
setbox	function	**snapshotpar**	function
setboxdir	function	**sp**	function
setcatcode	function	**specialmathclasscodes**	data table
setcount	function	**splitbox**	function
setdelcode	function	**sprint**	function
setdimen	function	**stringtocodesbitmap**	function
setdimensionvalue	function	**systemmodes**	data table
setglue	function	**takebox**	function
setglyphdata	function	**texcatcodes**	number
setglyphscript	function	**textcontrolcodes**	data table

toks	table	**txtcatcodes**	number
tonumber	function	**type**	function
toscaled	function	**uccode**	table
tpacatcodes	number	uprint	function
tpbcatcodes	number	**useboxresource**	function
tprint	function	**vrbcatcodes**	number
trackers	data table	**write**	function
triggerbuildpage	function		

texconfig (basic tex)

firstline	string		N step	
formatname	string	**propertiessize**	number	
functionsize	number	**shell_escape**	string	
init	overloaded function	**tokensize**	table	
kpse_init	boolean		N size	
nodesize	table		N step	
	N size			

texio (basic tex)

closeinput	function	**writenl**	function
setlogfile	function	**writeselector**	function
terminal	function	**writeselectorlf**	function
write	function	**writeselectornl**	function
write_nl	function		

token (basic tex)

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

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

setdimension	function	**skipnext**	function
setinteger	function	**skipnextexpanded**	function
setlua	function	**type**	function
setmacro	function	**undefine_macro**	function
skip_next	function	**undefinemacro**	function
skip_next_expanded	function		

tokens (context)

accessors table

    F active

    F cmd

    F cmdchrcs

    F cmdname

    F command

    F csname

    F expandable

    F frozen

    F index

    F name

    F protected

    F range

astable function

bits table

    N active

    N alignment

    N begingroup

    N character

    N close

    N comment

    N endgroup

    N endofline

    N escape

    N ignore

    N invalid

    N letter

    N mathshift

    N open

    N other

    N parameter

    N space

    N subscript

    N superscript

    N whitespace

cache table

    U NC

    U NR

    U bf

    U buff_finish

    U c_font_compact

    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 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

commands data table

compile function

constant function

converters table

    S toboolean

    S todimen

    S toglue

    S tonumber

    S tostring

create function

defined	function		F cmdchrexpanded
flags	function		F code
getinteger	function		F conditional
getters	table		F count
F box			F csname
F count			F csnameunchecked
F cstoken			F delimited
F dimen			F dimen
F glue			F dimenargument
F macro			F dimension
F meaning			F float
F skip			F glue
F token			F gluespec
gobble	function		F gluevalues
isdefined	function		F hash
istoken	function		F hbox
new	function		F integer
pickup	function		F integerargument
popmacro	function		F ischar
presets	table		F key
T 1 argument			F keyword
T 1 string			F keywordcs
T 2 arguments			F letters
T 2 strings			F list
T 3 arguments			F luacardinal
T 3 strings			F luainteger
T 4 arguments			F luanumber
T 4 strings			F lxmlid
T 5 strings			F next
T 6 strings			F nextchar
T 7 strings			F nextexpanded
T 8 strings			F number
pushmacro	function		F optional
scanners	table		F peek
F argument			F peekchar
F argumentasis			F peekexpanded
F array			F real
F boolean			F scanclose
F box			F scanopen
F bracketed			F skip
F bracketedasis			F skipexpanded
F cardinal			F string
F char			F table
F cmdchr			F token

F tokencode	N open
F tokenlist	F report
F tokens	F scanargument
F toks	F scanargumentasis
F value	F scanarray
F vbox	F scanboolean
F verbatim	F scanbox
F vtop	F scanbracketed
F whd	F scanbracketedasis
F word	F scancardinal
setinteger function	F scanclose
setters table	F scancode
F box	F scanconditional
F char	F scancsname
F count	F scancsnameunchecked
F dimen	F scandelimited
F glue	F scandimen
F lua	F scandimenargument
F macro	F scandimension
F skip	F scanglue
shortcuts table	F scangluespec
T bits	F scangluevalues
N active	F scanhash
N alignment	F scanhbox
N begingroup	F scaninteger
N character	F scanintegerargument
N close	F scankeyword
N comment	F scankeywordcs
N endgroup	F scanletters
N endofline	F scanlist
N escape	T scanners
N ignore	F argument
N invalid	F argumentasis
N letter	F array
N mathshift	F boolean
N open	F box
N other	F bracketed
N parameter	F bracketedasis
N space	F cardinal
N subscript	F char
N superscript	F cmdchr
N whitespace	F cmdchrexpanded
N close	F code
F inspect	F conditional

F count

F csname

F csnameunchecked

F delimited

F dimen

F dimenargument

F dimension

F float

F glue

F gluespec

F gluevalues

F hash

F hbox

F integer

F integerargument

F ischar

F key

F keyword

F keywordcs

F letters

F list

F luacardinal

F luainteger

F luanumber

F lxmlid

F next

F nextchar

F nextexpanded

F number

F optional

F peek

F peekchar

F peekexpanded

F real

F scanclose

F scanopen

F skip

F skipexpanded

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

F scannumber

F scanopen

F scanoptional

F scanstring

F scantable

F scantokenlist

F scantoks

F scanvbox

F scanverbatim

F scanvtop

F scanword

F toboolean

F todimen

T tokens

  T accessors

    F active

    F cmd

    F cmdchrcs

    F cmdname

    F command

    F csname

    F expandable

    F frozen

    F index

    F name

    F protected

    F range

  F astable

  T cache

    U NC

    U NR

    U bf

    U buff_finish

    U c_font_compact

    U color

    U colordefalc

    U colordefflc

```
U  colordefflt                          F  cstoken
U  colordefrlt                          F  dimen
U  dofinishreference                    F  glue
U  dostarttext                          F  macro
U  finishjob                            F  meaning
U  firstofoneargument                   F  skip
U  firstoftwoarguments                  F  token
U  gobbleoneargument                    F  gobble
U  goto                                 F  isdefined
U  iftrue                               F  istoken
U  input                                F  new
U  loadfoundtypescriptfile              F  pickup
U  resetctxscanner                      F  popmacro
U  rlap                                 T  presets
U  secondoftwoarguments                 F  pushmacro
U  setfalsevalue                        F  setinteger
U  setsectionblock                      T  setters
U  setupsystem                            F  box
U  startcolumns                           F  char
U  starttabulate                          F  count
U  starttitle                             F  dimen
U  startxtitle                            F  glue
U  stopcolumns                            F  lua
U  stoptabulate                           F  macro
U  stoptitle                              F  skip
U  stopxtitle                           T  shortcuts
U  texsetup                               N  close
U  xmlw                                   F  inspect
D  commands                               N  open
F  compile                                F  report
F  constant                               F  scanargument
T  converters                             F  scanargumentasis
  S  toboolean                            F  scanarray
  S  todimen                              F  scanboolean
  S  toglue                               F  scanbox
  S  tonumber                             F  scanbracketed
  S  tostring                             F  scanbracketedasis
F  create                                 F  scancardinal
F  defined                                F  scanclose
F  flags                                  F  scancode
F  getinteger                             F  scanconditional
T  getters                                F  scancsname
  F  box                                  F  scancsnameunchecked
  F  count                                F  scandelimited
```

F scandimen
F scandimenargument
F scandimension
F scanglue
F scangluespec
F scangluevalues
F scanhash
F scanhbox
F scaninteger
F scanintegerargument
F scankeyword
F scankeywordcs
F scanletters
F scanlist
F scannumber
F scanopen
F scanoptional

F scanstring
F scantable
F scantokenlist
F scantoks
F scanvbox
F scanverbatim
F scanvtop
F scanword
F toboolean
F todimen
F tonumber
F tostring
D values
F tonumber
F tostring

values   data table

tracers (context)

printerror   function   **showlines**   function
printwarning function

trackers (context)

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

typesetters (context)

alignments   table
    F handler
    F set
breakpoints   table
    F define
    F handler
    D mapping
    T methods
    T numbers
    F set
    F setreplacement
cases   table
    T actions
    F handler
    F register
    F set
characteralign   table
    F handler
    F resetcharacteralign
    F setcharacteralign
characters   table
    F handler
    T methods
    F replacenbsp
    F replacenbspaces
checkers   table
    F handler
    F reset
    F set
cleaners   table
    F handler
    F set
digits   table
    T actions
    F handler
    F set
directions   table
    F getfences
    F getglobal
    F getmethod
    F handler

    T handlers
    F installhandler
    F set
    F setcolor
    F tomode
firstlines   table
    T actions
      F default
      F line
      F word
    F handler
    F set
fontkerns   table
    F handler
initials   table
    T actions
      F default
    F handler
    F set
injectors   table
    F check
    T list
    F mark
    F reset
    F set
    F show
italics   table
    F enablemath
    F enabletext
    F forcevariant
    F handler
    F reset
    F set
kerns   table
    D factors
    F handler
    F keepligature
    D mapping
    F set
localboxes   table
    F handler

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 moveinline

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

synchronize table
   F handler

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 readcline
- F readcstring
- F readfixed2
- F readfixed4
- F readinteger
- F readinteger1
- F readinteger1le
- F readinteger2
- F readinteger2le
- F readinteger3
- F readinteger3le
- F readinteger4
- F readinteger4le
- F readintegertable

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

formatters   table
- F formatcolumns
- F list
- F stripzeros

ghostscript   table
- F convert
- F statistics

graphicmagick   table
- F convert
- F statistics

graphicsmagick   table
- F convert
- F statistics

lua   table

```
  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 getrepeatable
        B hidden                           F getrepeatableseed
        B leftpage                         F getseed
        B page                             F newrepeatable
```

F	popseed		F	sparse
F	pushseed	**streams**		**table**
F	repeatable		F	close
F	reuseseed		F	getposition
F	setseed		F	getsize
F	setseedi		F	getstring
randomizers	**table**		F	look
F	poisson		F	open
sequencers	**table**		F	openstring
F	appendaction		F	read2dot14
F	appendgroup		F	readbyte
F	compile		F	readbytes
F	disableaction		F	readbytetable
F	disablegroup		F	readcardinal
F	enableaction		F	readcardinal1
F	enablegroup		F	readcardinal1le
D	functions		F	readcardinal2
F	localize		F	readcardinal2le
F	new		F	readcardinal3
F	nodeprocessor		F	readcardinal3le
F	prependaction		F	readcardinal4
F	prependgroup		F	readcardinal4le
F	removeaction		F	readcardinaltable
F	replaceaction		F	readchar
F	setkind		F	readcline
F	tostring		F	readcstring
setters	**table**		F	readfixed2
F	disable		F	readfixed4
F	enable		F	readinteger
F	initialize		F	readinteger1
F	list		F	readinteger1le
F	new		F	readinteger2
F	register		F	readinteger2le
F	report		F	readinteger3
F	reset		F	readinteger3le
F	show		F	readinteger4
stacker	**table**		F	readinteger4le
F	new		F	readintegertable
storage	**table**		F	readsignedbyte
F	allocate		F	readstring
F	checked		F	setposition
F	mark		F	size
F	marked		F	skip
F	setinitializer		F	skipbytes

F	skiplong	F	removevalue
F	skipshort	F	replacevalue
F	tocardinal1	**tar**	table
F	tocardinal1le	T	archives
F	tocardinal2	F	closearchive
F	tocardinal2le	T	files
F	tocardinal3	F	fetch
F	tocardinal3le	F	hash
F	tocardinal4	F	list
F	tocardinal4le	F	pack
strings	table	F	unpack
F	collapse	F	openarchive
F	collapsecrlf	T	registeredfiles
T	formatters	T	streams
F	add	F	fetch
F	new	F	hash
F	newcollector	F	list
F	newrepeater	F	pack
F	nice	F	unpack
T	striplinepatterns	T	strings
U	collapse	F	fetch
U	prune	F	hash
U	prune and collapse	F	list
U	prune and no empty	F	pack
U	prune and to space	F	unpack
U	retain	**templates**	table
U	retain and collapse	F	load
U	retain and no empty	F	replace
F	striplines	F	replacer
F	striplong	F	resolve
F	tabtospace	**zipfiles**	table
T	tracers	F	close
tables	table	F	found
F	accesstable	F	hash
F	definedtable	F	list
F	definetable	F	open
F	encapsulate	F	unzip
F	insertaftervalue	F	unzipdir
F	insertbeforevalue	F	zipdir
F	migratetable		

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 totable
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 totable

__mul	function
__name	string

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

xdecimal (extra lua)

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

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

xmath (extra lua)

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

xml (context)

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

F idstring		F text	
F lower		F upper	
F name		F upperall	
F number		F xml	
F oneof		T xml	
F print		F all	
F quit		F att	
F tag		F attribute	
F text		F attributes	
F undefined		F cdata	
F upper		F chainattribute	
fillin	function	F count	
filter	function	F default	
finalizers	table	F elements	
F paragraphs		F empty	
T tex		F first	
F all		F function	
F attribute		F index	
F chainattribute		F last	
F chainpath		F lowerall	
F command		F match	
F concat		F name	
F concatrange		F position	
F context		F reverse	
F count		F table	
F ctxtext		F tag	
F default		F tags	
F depth		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

inheritattributes	function	**privatecodes**	table
inheritedconvert	function	**privatetoken**	function
inject	function	**process**	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	**reparsedentitylpeg**	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
parsedentitylpeg	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 &	

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

xzip (extra lua)

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

zip (extra lua)

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

zlib (extra lua)

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