

MP attributes backends **bit32** blobs boolean
buffers builders caches **callback** callbacks
catcodes characters chemistry commands
containers context converters **coroutine**
ctxrunner **debug** dir dircodes directives
document documentdata drivers environment
experiments ffi figures **file** **fio** floats **font**
fonts functions global graphics **gzip** images
img interactions interfaces **io** job **lang**
languages layouts **lfs** libraries lmx logs lpdf
lpeg **ltn12** **lua** luatex lxml **math** mathematics
md5 metapost **mime** moduledata modules mp **mplib**
noads **node** nodes number objects **os** **package**
pagebuilders parametersets **pdf** pdfc pdfscanner
physics publications regimes resolvers sandbox
scripts set sha2 sio **socket** sorters statistics
status storage streams **string** structures **table**
tex texconditionals **texconfig** texconstants
texifs **texio** texisdefined texmodes
texsystemmodes thirddata **token** tokens tracers
trackers typesetters updaters url userdata
utf8 utilities vf visualizers xml **zip** **zlib**

ConTEXT MkIV

global (alias: _G)

FFISUPPORTED	function	document	table
INITEXMODE	boolean	documentdata	table
LUAMAJORVERSION	number	dofile	function
LUAMINORVERSION	number	drivers	table
LUATEXCOREVERSION	number	environment	table
LUATEXENGINE	string	error	function
LUATEXFUNCTIONALITY	number	experiments	table
LUATEXVERSION	number	ffi	table
LUAVERSION	number	ffilib	function
MP	function	figures	table
anywhere	function	file	table
arg	table	fio	table
assert	function	floats	table
attributes	table	flushpdfimage	function
backends	table	font	table
bit32	table	fonts	table
blobs	table	frozen	boolean
blockrequire	function	functions	table
boolean	table	getmetatable	function
buffers	table	global	table
builders	table	grammar_parsed_text_one_noop	userdata
caches	table	grammar_parsed_text_one_yes	userdata
callback	table	grammar_parsed_text_two_noop	userdata
callbacks	table	grammar_parsed_text_two_yes	userdata
catcodes	table	grammar_unparsed_text_noop	userdata
characters	table	grammar_unparsed_text_yes	userdata
checkimage	function	graphics	table
chemistry	table	gregorian_to_jalali	function
collectgarbage	function	gzip	table
commands	table	images	table
containers	table	img	table
context	function	inspect	function
converters	table	interactions	table
coroutine	table	interfaces	table
createmask	function	io	table
ctxrunner	table	ipairs	function
debug	table	jalali_to_gregorian	function
dimen	function	job	table
dir	table	lang	table
dircodes	data table	languages	table
directives	table	layouts	table

lfs	table	rawequal	function
libraries	table	rawget	function
lmx	table	rawlen	function
load	function	rawset	function
loadfile	function	readarray	function
loadstring	function	regimes	table
logs	table	require	function
lpdf	table	required	function
lpeg	table	requireswiglib	function
ltn12	table	resolvers	table
lua	table	ruledspace	function
luatex	table	sandbox	table
lxml	table	scripts	table
math	table	select	function
mathematics	table	set	table
md5	table	setinspector	function
metapost	table	setmetatable	function
mime	table	sha2	table
module	function	sio	table
moduledata	table	socket	table
modules	table	sorters	table
mp	function	statistics	table
mplib	table	status	table
next	function	storage	table
noads	table	streams	table
node	table	string	table
nodes	table	structures	table
number	table	swiglib	function
objects	table	table	table
optionalrequire	function	tex	table
os	table	texconditionals	data table
package	table	texconfig	table
pagebuilders	table	texconstants	data table
pairs	function	texifs	data table
parametersets	table	texio	table
pcall	function	texisdefined	data table
pdf	table	texmodes	data table
pdfe	table	texsystemmodes	data table
pdfscanner	table	thirddata	table
physics	table	toboollean	function
poporientation	function	token	table
print	function	tokens	table
publications	table	tonumber	function
pushorientation	function	tostring	function

tracers	table	utf8	table
trackers	table	utilities	table
type	function	v	string
typesetters	table	vf	table
unpack	function	visualizers	table
updaters	table	xml	table
url	table	xpcall	function
userdata	table	zip	table
utf	table	zlib	table

attributes (context)

applyoverloads function

colorintents table

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

colors table

- N attribute
- F cmyk
- F cmyktogray
- F cmyktorgb
- F colorcomponents
- D counts
- B couple
- F currentmodel
- F currentnamedmodel
- D data
- N default
- F defineintermediatecolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- N forced
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- F getpagecolormodel
- F gray
- F graytohsv
- F handler
- F hsvtorgay
- F hsvtorgb
- F iccprofile
- F isblack

- N main
- S model
- D models
- F mpcolor
- F mpnamedcolor
- F mpoptions
- F namedcolorattributes
- N none
- F popset
- F processcolorcomponents
- F pushset
- F register
- D registered
- F registerspotcolor
- F rgb
- F rgbtocmyk
- F rgbtorgay
- F rgbtohsv
- N selector
- F setlist
- F setmodel
- F setpagecolormodel
- D sets
- F spec
- F spot
- F spotcolorname
- F spotcolorparent
- F spotcolorvalue
- B supported
- F toattributes
- F transparencycomponents
- B triggering
- F usecolors
- D valid
- F value
- D values
- B weightgray

define function

effects table

- N attribute
- D data

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

F stop

D values

B supported

backends (context)

codeinjections table

F boxresourcedimensions
F registerboxresource
F restoreboxresource

current string

defaults table

T codeinjections
F getpagedimensions
F lmtxmode
F setpagedimensions
T nodeinjections
T registrations
D tables

included table

B context
B date
B id
B metadata
B pdf

install function

nodeinjections table

F restore
F save
F transform

nothing function

pdf table

T codeinjections
F addbookmarks
F analyzenormalsymbol
F analyzesymbol
F attachmentid
F clonefield
F definefield
F definefieldset
F defineviewerlayer
F embedfile
F enabletags
F exportformdata
F fieldsurrounding
F flushmergelayer
F getbookmarks

F getdefaultfieldvalue
F getfieldcategory
F getfieldset
F getformatoption
F getinfo
F getoutputfilename
F getpreviewfigure
F insertrenderingwindow
F mergebookmarks
F mergecomments
F mergefields
F mergereferences
F mergeviewerlayers
F prerollreference
F presetsymbol
F presetsymbollist
F print
F processrendering
F registerdocumentcloseaction
F registerdocumentopenaction
F registeredsymbol
F registerpagecloseaction
F registerpageopenaction
F registersymbol
F setfieldcalculationset
F setfigurealternative
F setfigurecolorspace
F setfiguremask
F setformat
F setformsmethod
F setpagetransition
F setupcanvas
F setupidentity
F setxmppfile
F startlayer
F startunicodetoactualtext
F startunicodetoactualtextdirect
F stoplayer
F stopunicodetoactualtext
F stopunicodetoactualtextdirect
F supportedformats

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

bit32 (basic lua)

arshift function

band function

bnot function

bor function

btest function

bxor function

extract function

lrotate function

lshift function

replace function

rrotate function

rshift function

blobs (context)

append	function
dimensions	function
dispose	function
new	function
pack	function
strdp	function
strhd	function

strht	function
strwd	function
tohpack	function
tonodes	function
tovpack	function
write	function

boolean (context)

tocontext function

tonumber function

buffers (context)

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

builders (context)

checksidefloat	function		F split
kernel	table		F start
			F stop
			F tag
		profiling	table
			F add
			F distance
			F fixedprofile
			F get
			F list
			F pagehandler
			F profilebox
			F set
paragraphs	table		
		vspacing	table
			F analyze
			D categories
			F collapsevbox
			T data
			D map
			D skip
			D snapmethods
			F definesnapmethod
			B fixed
			F forcepageflush
			F forcestrutdepth
			F getnofpreviouslines
			F pagehandler
			F pageoverflow
			F setmap
			F setskip
			F snapbox
			F synchronizepage
			F tocategories
			F tocategory
			F vboxhandler

cache (context)

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

callback (basic tex)

find function
list function

register overloaded function

callbacks (context)

freeze function

functions table

F process_rule

F start_page_number

F stop_page_number

known function

list data table

pop function

push function

register function

report function

supported table

B append_to_vlist_filter

B build_page_insert

B buildpage_filter

B call_edit

B contribute_filter

B define_font

B find_cidmap_file

B find_data_file

B find_enc_file

B find_font_file

B find_format_file

B find_image_file

B find_map_file

B find_opentype_file

B find_output_file

B find_pk_file

B find_read_file

B find_truetype_file

B find_typed1_file

B find_vf_file

B find_write_file

B finish_pdf_file

B finish_pdfpage

B finish_synctex

B font_descriptor_objnum_provider

B glyph_not_found

B glyph_stream_provider

B hpack_filter

B hpack_quality

B hyphenate

B insert_local_par

B kerning

B ligaturing

B linebreak_filter

B make_extensible

B mlist_to_hlist

B new_graf

B open_read_file

B page_objnum_provider

B post_linebreak_filter

B pre_dump

B pre_linebreak_filter

B pre_output_filter

B process_input_buffer

B process_jobname

B process_output_buffer

B process_pdf_image_content

B process_rule

B read_cidmap_file

B read_data_file

B read_enc_file

B read_font_file

B read_map_file

B read_opentype_file

B read_pk_file

B read_truetype_file

B read_typed1_file

B read_vf_file

B show_error_hook

B show_error_message

B show_lua_error_hook

B show_warning_message

B start_file

B start_page_number

B start_run

B stop_file

B stop_page_number

B stop_run

B vpack_filter

B vpack_quality

B wrapup_run

catcodes (context)

names data table

numbers data table

register function

characters (context)

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

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

chemistry (context)

component	function
define	function
definitions	data table
format	string
inlinechemical	function
instance	string
method	string

molecule	function
moleculeparser	userdata
start	function
stop	function
structures	number
undefine	function

containers (context)

cleanname function
content function
define function
is_usable function

is_valid function
read function
usecache boolean
write function

converters (context)

A	function	cn-c	function
A:es	function	convert	function
A:ru	function	decimals	function
A:sl	function	define	function
AK	function	helpers	table
Alphabetic	function	hexstringtonumber	function
Alphabetic:es	function	hour	function
Alphabetic:ru	function	i	function
Alphabetic:sl	function	isleapyear	function
Character	function	lchexnumber	function
Characters	function	lchexnumbers	function
I	function	leapyear	function
KA	function	lower	function
KR	function	max	function
R	function	maxchrs	function
RK	function	minute	function
Romannumerals	function	month	function
Russiannumerals	function	nicenumber	function
Sloveniannumerals	function	nofdays	function
Spanishnumerals	function	number	function
Word	function	numbers	function
Words	function	octnumber	function
a	function	octstringtonumber	function
a:es	function	ordinal	function
a:ru	function	r	function
a:sl	function	rawcharacter	function
abjadnodotnumerals	function	romannumerals	function
abjadnumerals	function	russiannumerals	function
alphabetic	function	second	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	toroman	function
chrs	function	totime	function
cn	function	uchexnumber	function
cn-a	function	uchexnumbers	function

upper	function	weekday	function
verbose	table	word	function
D data		words	function
F translate		year	function

coroutine (basic lua)

create function
isyieldable function
resume function
running function

status function
wrap function
yield function

ctxrunner (context)

load	function	prepfiles	data table
preparedfile	function	resolve	function

dir (context)

collectpattern	function
current	function
expandname	function
found	function
glob	function
globdirs	function
globfiles	function

globpattern	function
ls	function
makedirs	function
mkdirs	function
pop	function
push	function

directives (context)

data	data table
default	function
disable	function
done	table
enable	function
list	function

name	string
register	function
report	function
reset	function
show	function
value	function

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		setfilename		function
D environments		setfilenames		function
D modes		setmodes		function
D modules		setmodules		function
T ctxfile		variables		data table
D environments				

documentdata (context)

variable function

drivers (context)

convert	function		S name
gethpos	function		T pdf
getpos	function		T actions
getvpos	function		F closefile
install	function		F finalize
instances	table		F initialize
			F openfile
			F updatefontstate
			F wrapup
			T flushers
			F character
			F latelua
			F pdfimage
			F pdfliteral
			F pdfrestore
			F pdfsave
			F pdfsetmatrix
			F poporientation
			F pushorientation
			F rule
			F simplerule
			S name
			lmtxversion number
			prepare function
			wrapup function

environment (context)

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

experiments (context)

data	data table
default	function
disable	function
enable	function
list	function
name	string

register	function
report	function
reset	function
show	function
value	function

figures (context)

applyratio	function	F write	
badname	function	F check	
bases	data table	F checksize	
bitmapimage	function	F copy	
boxnumber	number	F create	
cachepaths	data table	F embed	
check	function	T keys	
checkers	data table	F print	
converters	data table	F scan	
current	function	F serialize	
defaultdepth	number	T sizes	
defaultheight	number	B art	
defaultsearch	boolean	B bleed	
defaultwidth	number	B crop	
done	function	B media	
dummy	function	B none	
exists	data table	B trim	
exists	function	F totable	
formats	data table	T types	
found	data table	N jbig2	
get	function	N jp2	
getinfo	function	N jpg	
getpdfinfo	function	N memstream	
getrealpage	function	N none	
guess	function	N pdf	
guessfromstring	function	N png	
hash	function	N stream	
identifiers	data table	F wrap	
identify	function	include	function
images	table	includes	data table
T __img__		initialize	function
F boxes		loaded	data table
F copy		localpaths	data table
F fields		magics	data table
F immediatewrite		mergegoodies	function
F immediatewriteobject		nofmissing	number
F keys		nofprocessed	number
F new		order	data table
F node		paths	data table
F scan		patterns	data table
F types		pop	function

preferquality	boolean	setlookups	function
programs	data table	setmemstream	function
push	function	setorder	function
registerpattern	function	setpaths	function
registerresource	function	suffixes	data table
registersuffix	function	used	data table
resources	data table		
scale	function		
set	function		

file (basic lua)

addsuffix	function
basename	function
checksum	function
collapsepath	function
copy	function
dirname	function
expandname	function
extname	function
is_qualified_path	function
is_readable	function
is_rootbased_path	function
is_writable	function
isreadable	function
iswritable	function
join	function
joinpath	function
loadchecksum	function
nameonly	function
nametotable	function
needs Updating	function

needsupdating	function
pathpart	function
readdata	function
removesuffix	function
replacesuffix	function
reslash	function
robustname	function
savechecksum	function
savedata	function
size	function
splitbase	function
splitname	function
splitpath	function
strip	function
suffix	function
suffixes	function
suffixesonly	function
suffixonly	function
syncmtimes	function
withinbase	function

fio (extra lua)

checkpermission	function
getposition	function
read2dot14	function
readbytes	function
readbytetable	function
readcardinal1	function
readcardinal2	function
readcardinal3	function
readcardinal4	function
readcardinaltable	function
readfixed2	function

readfixed4	function
readinteger1	function
readinteger2	function
readinteger3	function
readinteger4	function
readintegertable	function
readline	function
recordfilename	function
setposition	function
skipposition	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
current	function
define	function
each	overloaded function
fonts	table
frozen	function
getfont	overloaded function
getparameters	function

id	function
max	function
nextid	function
originaleach	function
read_tfm	function
read_vf	function
setexpansion	function
setfont	function

fonts (context)

analyzers	table	
D features		F currentfonthasfeature
D initializers		D designsizes
D methods		D dontembed
F setstate		F enhanceparameters
D states		T enhancers
B useunicodemarks		T afm
		F apply
checkers	table	F patch
F getmissing		T patches
F missing		F register
F placeholder		F report
cid	table	F register
F getmap		F report
F loadfile		T otf
collections	table	F addfeature
F checkenabled		F apply
F clonevector		F enhance
F define		F patch
T definitions		T patches
F found		F register
F prepare		F report
F process		F register
F registermain		F report
F report		T tfm
F reset		F apply
T vectors		F patch
constructors	table	T patches
F addcharacters		F register
F addcoreunicodes		F report
F aftercopyingcharacters		F register
F applymanipulators		F report
F assignmathparameters		N factor
B autocleanup		T features
F beforecopyingcharacters		D afm
D cache		D otf
B cacheintex		D tfm
F calculatescale		F finalize
F checkedfeatures		F getfeatureaction
F checkedfilename		F getmathparameter
F cleanupable		F getprivate
F collectprocessors		T handlers

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

T readers	F single
F addunicodetable	F gvar
F avar	F head
F cbdt	T helpers
F cblc	F axistofactors
F cff	F cleanname
F cff2	F getaxisscale
F cffcheck	F getfactors
T cffencoder	F getscales
F checkhash	F gotodatatable
F cmap	F normalizedaxis
F colr	T normalizedaxishash
F compact	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 chainedcontext	F look
F context	F open
F extension	F read2dot14
F ligature	F readbyte
F multiple	F readbytes
F reversechainedcontextsingle	F readbytetable

F readcardinal	F registerpalette
F readcardinal1	F registerplugin
F readcardinal2	F reorderlookups
F readcardinal2le	F scriptandlanguage
F readcardinal3	F setdynamics
F readcardinal3le	F setfeatures
F readcardinal4	T statistics
F readcardinal4le	D usedfeatures
F readcardinaltable	F storepdfdata
F readchar	T svg
F readfixed2	F filterglyph
F readfixed4	F topdf
F readinteger	D svgcache
F readinteger1	B svgenabled
F readinteger2	T tables
F readinteger2le	D baselines
F readinteger3	D features
F readinteger3le	D featuretypes
F readinteger4	D languages
F readinteger4le	D scripts
F readintegertable	N version
F readsignedbyte	T pfb
F readstring	F loadvector
F readtag	T tfm
F setposition	F addtounicode
F size	D cache
F skip	D features
F skiplong	N maxnestingdepth
F skipposition	N maxnestingsize
F skipshort	T readers
F writebyte	F loadpk
F writecardinal2	F loadtfm
F writecardinal4	F loadtfmvf
F writestring	F loadvf
F stripredundant	F pktopdf
F svg	F showpk
N tableversion	F reencode
F unifymissing	F setfeatures
F unpack	N version
F vhea	T vf
F vmtx	T combinations
F vorg	F combine
F vvar	T combiner
F woff2otf	D commands

D helpers	S width
D math	S xheight
D predefined	T properties
N version	S autoitalicamount
D whatever	S cidinfo
F hashfeatures	T effect
F hashinstance	S ddelta
T hashmethods	S effect
F normal	S factor
F virtual	S hdelta
F initializefeatures	S hfactor
T keys	S vfactor
T characters	S wdelta
T descriptions	S width
T parameters	S embedding
S ascender	S encodingbytes
S descender	S filename
S designsize	S finalized
T expansion	S fontname
S auto	S format
S shrink	S fullname
S step	S hasitalics
S stretch	S hasmath
S extendfactor	S mathitalics
S factor	S mode
S hfactor	S name
S mathsize	S noglyphnames
S mode	S nostackmath
T protrusion	S psname
S auto	S textitalics
S quad	S virtualized
S scaledpoints	D loadedfonts
S scriptpercentage	S namemode
S scriptscriptpercentage	N noffontsloaded
S size	N nofsharedfonts
S slantfactor	N nofsharedhashes
S slantperpoint	N nofsharedvectors
T spacing	N privateoffset
S extra	D privateslots
S shrink	F readanddefine
S stretch	F registerfeature
S width	F resetfeature
S units	B resolvevirtualtoo
S vfactor	F scale

F scaled
 F setfactor
 F setfeature
 F setmathparameter
 F setname
 B sharefonts
 F trytosharefont
 N version

current function
currentid function
definers table

F addlookup
 F analyze
 F applypostprocessors
 F checkedmode
 F checkedscript
 F current
 S defaultlookup
 F define
 F getspecification
 F internal
 F loadfont
 F makespecification
 T methods
 F install
 D variants
 F read
 F register
 F registered
 F registersplit
 F resetnullfont
 F resolve
 T resolvers
 F file
 F name
 F spec

definetypeface function
encodings table

T agl
 D ctxcodes
 D extras
 D names
 D synonyms
 D unicodes

D cache
 F is_known
 D known
 F load
 F make_unicode_vector
 D math
 N version

enhanceid function
expansions data table
formats data table
getalternate function
getkern function
getmultiple function
getsubstitution function
getters table

T alternate
 F opentype
 T kern
 F opentype
 F type1
 F type3
 T multiple
 F opentype
 T substitution
 F opentype

goodies table

D colorschemes
 T data
 T dejavu-math
 S author
 S comment
 S copyright
 B initialized
 T mathematics
 T alternates
 T dotless
 S comment
 S feature
 N value
 T kerns
 S name
 S version
 T schola-math
 S author

- S comment
- S copyright
- B initialized
- T mathematics
 - T alternates
 - T dotless
 - S comment
 - S feature
 - N value
 - T kerns
- S name
- S version
- D designsizes
- D filenames
- F getcompositions
- T list
- F load
- F prepare_features
- F register
- F registerpostprocessor
- F report
- T suffixes

handlers table

hashes table

- D characters
- D classes
- D csnames
- D descriptions
- D dynamics
- D emwidths
- D exheights
- D extensibles
- D features
- D identifiers
- D italics
- D lastmathids
- D marks
- D mathparameters
- D modes
- D originals
- D parameters
- T processes
- D properties
- D quads

- D resources
- T setdynamics
- T shapes
- D spaces
- D spacings
- T streams
- D unicodes
- D variants
- D xheights

helpers table

- F addextraprivate
- F addprivate
- F appendcommands
- F appendcommandtable
- F checkflags
- F checkmerge
- F checksteps
- F collectanchors
- D commands
- F descriptiontoslot
- F dimenfactor
- F expandglyph
- T extraprivates
- F fontpatternhassize
- F getcoloredglyphs
- F getdigitwidth
- F getinstancespec
- F getparameters
- F getprivatecharornode
- F getprivatenode
- F getprivates
- F getprivateslot
- F hasprivate
- F indextoslot
- F name
- F nametoslot
- F prependcommands
- F prependcommandtable
- F privateslot
- F setdigitwidth
- F splitfontpattern
- F tochar

infofont function

iterators table

- F characters
- F descriptions
- F glyphs

loggers table

- F add_placeholders
- D category_to_placeholder
- F format
- F onetimemessage
- F register
- F reportdefinedfonts
- F reportusedfeatures

mappings table

- F addtounicode
- F fromunicode16
- F loadfile
- F loadline
- F makenameparser
- D overloads
- F reset
- F tounicode
- F tounicode16
- F tounicode16sequence

metapost table

- F boundingbox
- F boxtomp
- F draw
- F fill
- F maxbounds
- F output
- F paths
- F widthline
- F zeroline

mp table

- D cache
- B inline
- N version

names data table

nulldata data table

privateoffsets table

- B keepnames
- N mathbase
- N mathextrabase
- N textbase
- N textextrabase

protrusions data table

readers table

- F afm
- F check_lua
- F check_tfm
- F lua
- F ofm
- F opentype
- F otf
- F pfb
- D sequence
- F tfm
- F ttc
- F ttf
- F woff

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
D data	
F savefont	
F saveoriginal	
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

gzip (extra lua)

close function
lines function
load function

open function
save function
suffix function

images (context)

<u>img</u>	table
F boxes	
F copy	
F fields	
F immediatewrite	
F immediatewriteobject	
F keys	
F new	
F node	
F scan	
F types	
F write	
check	function
checksize	function
copy	function
create	function
embed	function
keys	table
print	function
scan	function

serialize	function
sizes	table
B art	
B bleed	
B crop	
B media	
B none	
B trim	
totable	function
types	table
N jbig2	
N jp2	
N jpg	
N memstream	
N none	
N pdf	
N png	
N stream	
wrap	function

img (basic tex)

boxes	overloaded function	new	overloaded function
copy	overloaded function	node	overloaded function
fields	overloaded function	scan	overloaded function
immediatewrite	overloaded function	types	overloaded function
immediatewriteobject	overloaded function	write	overloaded function

interactions (context)

attachments data table

fields table

- F clone
- F define
- F defineset
- F insert

general table

- F getidentity
- F setupidentity

help table

- F collect
- F reference
- F register

javascripts table

- F addtopreamble
- F code
- D codes
- F flushpreambles

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

linkedLists data table

pages table

- F setpagetransition
- F setupcanvas

references table

- F setcloseddocument
- F setclosepage
- F setopendocument
- F setopenpage

renderings data table

soundclips data table

interfaces (context)

_	data table
addvalidkeys	function
cachedsetups	data table
cachedsetup	function
checkedspecification	function
complete	data table
constants	data table
corenamespaces	data table
currentinterface	string
currentresponse	string
definecommand	function
defined	function
doifelsemessage	function
elements	data table
formats	data table
getcheckedparameters	function
getmessage	function
getnamespace	function
getsetupstring	function
hashedsetups	data table
implement	function
interfacedcommand	function
interfaces	table
invalidkey	function
message	function
namespaces	table

F define

F list	
registernamespace	function
registerscanner	function
scanners	data table
setconstant	function
setcount	function
setdimen	function
setelement	function
setformat	function
setmacro	function
setmessage	function
setmessages	function
settranslation	function
setupstrings	data table
setuserinterface	function
setvalidkeys	function
setvariable	function
showmessage	function
storedscanners	data table
strings	table
syntax	data table
tolist	function
translations	data table
usednamespaces	data table
variables	data table
writestatus	function

io (basic lua)

ask	function	pathseparator	string
bytes	function	popen	overloaded function
characters	function	read	function
close	function	readall	function
copydata	function	readnumber	function
exists	function	readstring	function
fileseparator	string	saved_lines	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
noflines	function	type	function
open	overloaded function	write	function
output	overloaded function		

job (context)

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

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

lang (basic tex)

clean	function
clear_hyphenation	function
clear_patterns	function
exceptions	function
gethjcode	function
hyphenate	function
hyphenation	function
hyphenationmin	function

id	function
new	function
patterns	function
postexhyphenchar	function
posthyphenchar	function
preexhyphenchar	function
prehyphenchar	function
sethjcode	function

languages (context)

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

T enablers

F load

B enables

T methods

F found

N threshold

layouts (context)

status	table	F leftorrightpageaction
	F isleftpage	

lfs (extra lua)

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

libraries (context)

basiclua data table

basictex data table

builtin data table

extralua data table

extratex data table

functions data table

globals data table

lmx (context)

color	function
convert	function
convertfile	function
convertstring	function
einject	function
eprint	function
escape	function
finalized	function
finject	function
fprint	function
get	function
getvariables	function
htmfile	function
html	table
F a	
F td	
F th	
include	function
inherited	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

loadedfile	function
make	function
new	function
overloaderror	function
popupfile	function
print	function
pv	function
report	function
reset	function
result	function
set	function
show	function
showdebuginfo	function
showerror	function
stripcss	function
tv	function
type	function
urlescape	function
variable	function
variables	table
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
exporters	table	setprogram	function
extendbanner	function	settarget	function
finalactions	function	settimedlog	function
flush	function	settranslations	function
help	function	show	function
loggingerrors	function	show_close	function
messenger	function	show_load	function
new	function	show_open	function
newline	function	simple	function
poptarget	function	simpleline	function
pushtarget	function	simplelines	function
registerfinalactions	function	start_page_number	function
report	function	starterrorlogging	function
reportbanner	function	startfilelogging	function
reporter	function	status	function
reporters	table	stop_page_number	function
F banner		stoperrorlogging	function
F export		stopfilelogging	function
F help		subdirect	function
F info		subreport	function
F lines		system	function
F version		texerrormessage	function
reportline	function	writer	function
reportlines	function		

lpdf (context)

action	function
adddocumentcolorspace	function
adddocumenttextgstate	function
adddocumentpattern	function
adddocumentshade	function
addtocatalog	function
addtoinfo	function
addtonames	function
addtopageattributes	function
addtopageresources	function
addtopagesattributes	function
addxmpinfo	function
annotationspecification	function
array	function
attachmentsymbols	function
boolean	function
border	function
checkedkey	function
checkedvalue	function
circularshade	function
closefile	function
cmykcode	function
collectedresources	function
color	function
colorspace	function
colorspaceconstants	data table
colorspec	function
colorvalue	function
colorvalues	function
commentsymbols	function
compresslevel	function
constant	function
copyarray	function
copyboolean	function
copyconstant	function
copydictionary	function
copyfloat	function
copyinteger	function
copynumber	function
copystring	function
copyunicode	function

delayedobject	function
destinationspecification	function
dictionary	function
docstring	function
epdf	table
F contenttotext	
F expanded	
F getpagecontent	
F getstructure	
T image	
F close	
F copy	
F new	
F open	
F query	
F load	
F parsecontent	
F plugin	
T resolvers	
F destinations	
F embeddedfiles	
F javascripts	
F layers	
F pages	
F structure	
F widgets	
F stripcontent	
F unload	
escaped	function
finalizedocument	function
finalizefonts	function
finalizepage	function
finishtransparencycode	function
flags	table
T annotations	
N AutoView	
N Hidden	
N Invisible	
N Locked	
N LockedContents	
N NoRotate	

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

protectresources	boolean	settime	function
rectangle	function	settrailerid	function
reference	function	setversion	function
registerannotation	function	shareobject	function
registerdestination	function	shareobjectreference	function
registerdocumentfinalizer	function	spotcode	function
registerfont	function	stream	function
registerpagefinalizer	function	string	function
registerpattern	function	toeight	function
reserveobject	function	topdfdoc	function
rgbcode	function	tosixteen	function
rotationcm	function	transparency	function
setcompression	function	transparencycode	function
setdates	function	transparencygroups	table
setmapfile	function	B none	
setmapline	function	transparencyvalue	function
setomitcharset	function	unicode	function
setomitcidset	function	usedcharacters	table
suppressoptionalinfo	function	verbose	function

lpeg (basic lua)

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

ltn12 (extra lua)

BLOCKSIZE number

filter table

 F chain

 F cycle

pump table

 F all

 F step

sink table

 F chain

 F error

 F file

 F null

 F simplify

 F table

source table

 F cat

 F chain

 F empty

 F error

 F file

 F rewind

 F simplify

 F string

lua (basic tex)

bytecode	table	F required	
bytedata	data table	F reset	
bytdone	table	F resolvestring	
collectgarbage	function	F resolving	
delay	function	F showdefinitions	
finalize	function		mask string
firstbytecode	number		messages data table
flush	function		name table
flushdelayed	function		newtable function
get_functions_table	function		numbers data table
getbytecode	function		registercode function
getcalllevel	function		registeredcodes function
getluaname	function		registerfinalizer function
getstacktop	function		registername function
lastbytecode	number		setbytecode function
macros	table		setluaname function
B enabled			startupfile string
F loaded			version string

luatex (context)

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

lxml (context)

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

register	function
registerentity	function
removesetup	function
replace	function
resetcdata	function
resetsetups	function
resolvedentity	function
root	function
save	function
serialize	function
setaction	function
setatt	function
setattribute	function
setcdata	function
setcommandtonone	function
setcommandtotext	function
setpar	function
setparam	function
setparameter	function
setsetup	function
snippet	function
sorters	table

F add

F compare

F flush

F reset

F show

F sort

splitid	function
startraw	function
startunesaped	function
stopraw	function
stopunesaped	function
store	function
strip	function
stripped	function
tag	function
text	function
tobuffer	function
tofile	function
toparameters	function
toverbatim	function
verbatim	function
withindex	function
xmltexhandler	data table

math (basic lua)

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

mathematics (context)

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

md5 (extra lua)

HEX	function
crypt	function
dec	function
decrypt	function
exor	function

hex	function
sum	function
sumHEXA	overloaded function
sumhexa	overloaded function

metapost (context)

checkformat	function	graphic	function
cm	function	graphic_base_pass	function
collapse	boolean	installplugin	function
colorinitializer	function	isobject	function
comment	function	lastlog	string
convert	function	load	function
defaultformat	string	maketext	function
defaultinstance	string	metafun	table
defaultmethod	string	F interpolate	
directrun	function	F topath	
escaped	function	mptopdf	table
exectime	table	F convertmpstopdf	
extensiondata	data table	N nofconverted	
filterclippath	function	n	number
flush	function	nofscriptruns	function
flushers	table	nvformat	function
T pdf		pdfliterals	function
F comment		pluginactions	function
F flushfigure		popformat	function
F startfigure		popscriptrunner	function
F stopfigure		popvariable	function
F textfigure		popvariables	function
flushliteral	function	preparetexttextsdata	function
flushnormalpath	function	process	function
flushreset	function	processplugins	function
fonts	table	processspecial	function
F define		properties	table
T flusher		pushformat	function
F flushfigure		pushscriptrunner	function
F startfigure		pushvariable	function
F stopfigure		pushvariables	function
N instances		quickanddirty	function
F process		reducetogray	boolean
format_number	function	reporterror	function
format_string	function	reset	function
formatnumber	function	resetlastlog	function
getclippath	function	resetplugins	function
getextensions	function	run	function
getjobdata	function	runscript	function
getstatistics	function	scripterror	function
gettext	function	setextensions	function

setoutercolor	function	F reset	
settext	function	F set	
setvariable	function	F setfrombuffer	
showlog	boolean	texerrors	boolean
simple	function	texexp	function
splitprescript	function	theclippath	function
startgraphic	function	tographic	function
stopgraphic	function	totable	function
svformat	function	unload	function
sxsy	function	untagvariable	function
tex	table	variables	table
F get			

mime (extra lua)

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

mp (context)

BackSpace	function	OuterMarginWidth	function
BaselineSkip	function	OverlayDepth	function
BodyFontSize	function	OverlayHeight	function
BottomDistance	function	OverlayLineWidth	function
BottomHeight	function	OverlayOffset	function
BottomSpace	function	OverlayRegion	function
CurrentColumn	function	OverlayWidth	function
CurrentHeight	function	PageDepth	function
CurrentWidth	function	PageFraction	function
CutSpace	function	PageNumber	function
EmWidth	function	PageOffset	function
ExHeight	function	PaperBleed	function
FooterDistance	function	PaperHeight	function
FooterHeight	function	PaperWidth	function
HSize	function	PrintPaperHeight	function
HeaderDistance	function	PrintPaperWidth	function
HeaderHeight	function	RealPageNumber	function
InPageBody	function	RightEdgeDistance	function
InnerEdgeDistance	function	RightEdgeWidth	function
InnerEdgeWidth	function	RightMarginDistance	function
InnerMarginDistance	function	RightMarginWidth	function
InnerMarginWidth	function	SpineWidth	function
LastPageNumber	function	StrutDepth	function
LayoutColumnDistance	function	StrutHeight	function
LayoutColumnWidth	function	SubPageNumber	function
LayoutColumns	function	TextHeight	function
LeftEdgeDistance	function	TextWidth	function
LeftEdgeWidth	function	TopDistance	function
LeftMarginDistance	function	TopHeight	function
LeftMarginWidth	function	TopSkip	function
LineHeight	function	TopSpace	function
MakeupHeight	function	VSize	function
MakeupWidth	function	_f_	function
NOfColumns	function	_get_count_	function
NOfPages	function	_get_dimen_	function
NOfSubPages	function	_get_macro_	function
OnOddPage	function	_get_toks_	function
OnRightPage	function	_set_count_	function
OuterEdgeDistance	function	_set_dimen_	function
OuterEdgeWidth	function	_set_macro_	function
OuterMarginDistance	function	_set_toks_	function

aux	table	inhash	function
F boolean		integer	function
F flush		isarray	function
F fprint		isobject	function
F integer		mf_blob_add	function
F number		mf_blob_dimensions	function
F numeric		mf_blob_index	function
F pair		mf_blob_new	function
F pairpoints		mf_blob_raw_content	function
F path		mf_blob_raw_dimensions	function
F pathpoints		mf_blob_raw_reset	function
F points		mf_blob_raw_toutf	function
F print		mf_blob_raw_wipe	function
F quadruple		mf_blob_size	function
F quadruplepoints		mf_blob_width	function
F quoted		mf_default_color_model	function
F size		mf_external_figure	function
F string		mf_finish_saving_data	function
F triplet		mf_formatted_text	function
F tripletpoints		mf_get_outline_text	function
F vprint		mf_graphic_text	function
boolean	function	mf_inject_blob	function
cleaned	function	mf_made_text	function
dataset	function	mf_named_color	function
datasets	function	mf_outline_text	function
F load		mf_path_left	function
dimension	function	mf_path_length	function
disposehash	function	mf_path_point	function
flush	function	mf_path_reset	function
format	function	mf_path_right	function
formatted	function	mf_save_data	function
fprint	function	mf_some_text	function
fromhash	function	mf_start_saving_data	function
get	table	mf_stop_saving_data	function
F boolean		mf_tb_dimensions	function
F number		mf_tt_dimensions	function
F numeric		mf_tt_initialize	function
F path		mode	function
F string		n	function
getcount	function	newhash	function
getdimen	function	number	function
getmacro	function	numeric	function
gettoks	function	pair	function
graphformat	function	pairpoints	function

path	function	print	function
pathleft	function	processingmode	function
pathlength	function	quadruple	function
pathpoint	function	quadruplepoints	function
pathpoints	function	quoted	function
pathreset	function	report	function
pathright	function	set	table
place_buffermake	function	F path	
place_buffersize	function	setcount	function
place_bufferslot	function	setdimen	function
place_bufferwipe	function	setmacro	function
points	function	settoks	function
positionanchor	function	size	function
positionbox	function	string	function
positioncurve	function	systemmode	function
positionpage	function	texstr	function
positionpath	function	texttextanchor	function
positionpxy	function	texvar	function
positionregion	function	tohash	function
positionwhd	function	triplet	function
positionxy	function	tripletpoints	function
prefix	function	vprint	function

mplib (extra tex)

char_depth	function	get_boolean	function
char_height	function	get_number	function
char_width	function	get_numeric	function
execute	function	get_path	function
fields	function	get_string	function
finder	function	new	overloaded function
finders	table	pen_info	function
F file		solve_path	function
F mpstemplate		statistics	function
finish	function	version	function

noads (context)

handlers	table		F resize
F align			F showtree
F alternates			F tags
F autofences			F unscript
F classes			F unstack
F collapse			F variants
F domains		process	function
F families		processnested	function
F fixscripts		processors	table
F italics		F mlist_to_hlist	
F kernpairs		T unscript	
F makeup		T unstack	
F relocate		processouter	function
F render			

node (basic tex)

check_discretionaries	function	F getglue
check_discretionary	function	F getheight
copy	function	F getid
copy_list	function	F getkern
count	function	F getlang
current_attr	function	F getleader
dimensions	function	F getlist
direct	table	F getnext
F check_discretionaries		F getnucleus
F check_discretionary		F getoffsets
F copy		F getpenalty
F copy_list		F getprev
F count		F getproperty
F current_attr		F getshift
F dimensions		F getsub
F effective_glue		F getsubtype
F end_of_math		F getsup
F find_attribute		F getwhd
F first_glyph		F getwidth
F flatten_discretionaries		F has_attribute
F flush_list		F has_field
F flush_node		F has_glyph
F flush_properties_table		F hpack
F free		F hyphenating
F get_attribute		F insert_after
F get_properties_table		F insert_before
F get_synctex_fields		F is_char
F getattributelist		F is_direct
F getboth		F is_glyph
F getbox		F is_node
F getchar		F is_zero_glue
F getcomponents		F kerning
F getdata		F last_node
F getdepth		F length
F getdir		F ligaturing
F getdirection		F new
F getdisc		F prepend_prevdepth
F getexpansion		F protect_glyph
F getfam		F protect_glyphs
F getfield		F protrusion_skippable
F getfont		F rangedimensions

F remove	F traverse_char	
F set_attribute	F traverse_glyph	
F set_properties_mode	F traverse_id	
F set_synctex_fields	F traverse_list	
F setattributelist	F unprotect_glyph	
F setboth	F unprotect_glyphs	
F setbox	F unset_attribute	
F setchar	F usedlist	
F setcomponents	F uses_font	
F setdata	F vpack	
F setdepth	F write	
F setdir	effective_glue	function
F setdirection	end_of_math	function
F setdisc	family_font	function
F setexpansion	fields	function
F setfam	find_attribute	function
F setfield	first_glyph	function
F setfont	fix_node_lists	function
F setglue	flatten_discretionaries	function
F setheight	flush_list	function
F setkern	flush_node	function
F setlang	flush_properties_table	function
F setleader	free	function
F setlink	get_attribute	function
F setlist	get_properties_table	function
F setnext	getboth	function
F setnucleus	getchar	function
F setoffsets	getdisc	function
F setpenalty	getfield	function
F setprev	getfont	function
F setproperty	getglue	function
F setshift	getid	function
F setsplit	getleader	function
F setsub	getlist	function
F setsubtype	getnext	function
F setsup	getprev	function
F setwhd	getproperty	function
F setwidth	getsubtype	function
F slide	getwhd	function
F tail	has_attribute	function
F todirect	has_field	function
F tonode	has_glyph	function
F toString	hpack	function
F traverse	hyphenating	function

id	function	setglue	function
insert_after	function	setproperty	function
insert_before	function	setwhd	function
is_char	function	slide	function
is_glyph	function	subtype	function
is_node	function	subtypes	function
is_zero_glue	function	tail	function
kerling	function	tostring	function
last_node	function	traverse	function
length	function	traverse_char	function
ligaturing	function	traverse_glyph	function
make_extensible	function	traverse_id	function
mlist_to_hlist	function	traverse_list	function
new	function	type	function
next	function	types	function
prepend_prevdepth	function	unprotect_glyph	function
prev	function	unprotect_glyphs	function
protect_glyph	function	unset_attribute	function
protect_glyphs	function	usedlist	function
protrusion_skippable	function	uses_font	function
rangedimensions	function	values	function
remove	function	vpack	function
set_attribute	function	whatsits	function
set_properties_mode	function	write	function
setfield	function		

nodes (context)

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

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

marginkerncodes

markers

F get

mathcodes

maxboxwidth

mlist_to_hlist

new

noadcodes

noadoptions

N axis

N exact

N left

N middle

N no_axis

N right

N set

N unused_1

N unused_2

nodecodes

nopts

nuts

F append

F apply

F applyvisuals

F check_discretionaries

F concat

F copy

F copy_list

F copy_no_components

F copy_node

F copy_only_glyphs

F copy_properties

F copyvisual

F count

F countall

F current_attr

F delete

F dimensions

F effective_glue

F end_of_math

F find_attribute

F first_glyph

F firstcharacter

F firstcharinbox

data table

table

data table

function

function

function

data table

table

data table

function

table

F firstglyph

F flatten_discretionaries

F flush

F flush_list

F flush_node

F free

F fullhpack

F get_synctex_fields

F getattr

F getattribute

F getattributelist

F getattrlist

F getboth

F getbox

F getboxglue

F getchar

F getcomponents

F getdata

F getdepth

F getdir

F getdirection

F getdisc

F getdiscretionary

F getexpansion

F getfam

F getfield

F getfont

F getglue

F getheight

F getid

F getkern

F getlang

F getlanguage

F getleader

F getlist

F getnext

F getnucleus

F getoffsets

F getorientation

F getpenalty

F getprev

F getprop

F getshift

F getsub

F getsubtype	F disc
F getsup	F emptyrule
F getsurround	F fence
F getvalue	F fontkern
F getwhd	F fraction
F getwidth	F glue
F has_attribute	F gluespec
F has_field	F glyph
F has_glyph	F hlist
F hpack	F italicckern
F hyphenating	F kern
F insert_after	F latelua
F insert_before	F lateluafunction
F insert_list_after	F leader
F is_char	F leftmarginkern
F is_direct	F leftskip
F is_display_math	F lineskip
F is_glyph	F mathchar
F is_node	F mathtextchar
F is_nut	F negatedglue
F is_zero_glue	F noad
F ischar	F outlinerule
F isdone	F pdfannotation
F isglyph	F pdfdestination
F kerning	F pdfdirectliteral
F last_node	F pdfliteral
F leftmarginwidth	F pdforiginliteral
F length	F pdfpageliteral
F ligaturing	F pdfrawliteral
F link	F pdfrestore
F linked	F pdfsave
F locate	F pdfsetmatrix
F mlist_to_hlist	F penalty
F nestedtracedslide	F radical
F new	F register
T pool	F rightmarginkern
F accent	F rightskip
F baselineskip	F rule
F boundary	F savepos
F choice	F shrink
F cleanup	F stretch
F delim	F subbox
F delimiter	F sublist
F direction	F temp

F texthdir	F setattrlist
F usage	F setboth
F userattributes	F setbox
T userids	F setboxglue
N margins.inline	F setchar
N property	F setcomponents
N splitters.one	F setdata
N splitters.two	F setdepth
F userlist	F setdir
F userlua	F setdirection
F usernumber	F setdisc
F userrule	F setdiscretionary
F userstring	F setexpansion
F usertokens	F setfam
F vlist	F setfield
F wordboundary	F setfont
F prepend	F setglue
F processranges	F setheight
F processwords	F setkern
F protect_glyph	F setlang
F protect_glyphs	F setlanguage
F protrusion_skippable	F setleader
F rangedimensions	F setlink
F rawprop	F setlist
F reference	F setnext
F rehpac	F setnucleus
F remove	F setoffsets
F repackhlist	F setorientation
F replace	F setpenalty
F rightmarginwidth	F setprev
T rules	F setprop
T ruleactions	F setshift
F box	F setsplit
F draw	F setsub
F fill	F setsubtype
F mp	F setsup
F stroke	F setsurround
F userrule	F setunsetattributes
F set_attribute	F setvalue
F set_synctex_fields	F setvisual
F setattr	F setvisuals
F setattribute	F setwhd
F setattributelist	F setwidth
F setattributes	F slide

- F somepenalty
- F somespace
- F splitbox
- F striprange
- F tail
- F takeattr
- F takebox
- F takelist
- F theprop
- F tonode
- F tonodes
- F tonut
- F tosequence
- F tostring
- F tracedslide
- F traverse
- F traverse_char
- F traverse_glyph
- F traverse_id
- F traverse_list
- T traversers
 - F boundary
 - F char
 - F dir
 - F disc
 - F glue
 - F glyph
 - F hlist
 - F list
 - F next
 - F node
 - F vlist
 - F whatsit
- T typesetters
 - F tohbox
 - F tohpack
 - F tonodes
 - F tovbox
 - F tovpack
- F unprotect_glyph
- F unprotect_glyphs
- F unset_attribute
- F unsetattribute
- F unsetattributes

- F untracedslide
- F use_components
- F usedlist
- F uses_font
- F vianodes
- F vianuts
- F vpack
- F write

packlist
penaltycodes
plugin
data

- F finalizer
- F initializer
- S name
- T namespace
 - N attribute
 - D data
 - F enable
 - F handler
 - F register
 - D registered
 - D values
- F processor

function
 data table
 table

points
pool

- F baselineskip
- F cleanup
- F glyph
- F hlist
- F latelua
- F lineskip
- F pdfdirectliteral
- F pdfliteral
- F pdforiginliteral
- F pdfrestore
- F pdfsave
- F pdfsetmatrix
- F register
- F rule
- F savepos
- F special
- F usage
- F usernumber
- F vlist

function
 table

prepend	function	serializebox	function
print	function	set_attribute	function
processors	table	setattr	function
F contribute_filter		setattribute	function
B enabled		setattributes	function
F hpack_filter		setboth	function
F post_linebreak_filter		setbox	function
F pre_linebreak_filter		setboxtonaturalwd	function
F tracer		setfield	function
properties	table	setglue	function
T actions		setlink	function
F delayed		setlist	function
F fdelayed		setnext	function
F immediate		setprev	function
F attach		setunsetattributes	function
T data		setwhd	function
F delayed		shifts	table
protect_glyph	function	D data	
protect_glyphs	function	F define	
protrusion_skippable	function	F enable	
pts	function	F handler	
radicalcodes	data table	show	function
rangedimensions	function	showboxes	function
reference	function	showcodes	function
references	table	showlist	function
N attribute		showsimplelist	function
T done		skipcodes	data table
F handler		skipvalues	data table
T stack		slide	function
reheap	function	snapshots	table
remove	function	F getparameters	
repackhlist	function	F getsamples	
replace	function	F resetsamples	
report	function	F takesample	
rightmarginwidth	function	somepenalty	function
rulecodes	data table	somespace	function
rules	table	splitbox	function
D data		stripdiscretionaries	function
F define		stripping	table
F enable		T glyphs	
F handler		F set	
F userrule		subtypes	data table
save	function	tail	function
serialize	function	takeattr	function

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

F list		vianodes	function
F node		vianuts	function
typesetters	table	visualizebox	function
F hbox		visualizers	table
F hpack		F attribute	
F tohbox		T attributes	
F tohpack		F box	
F tonodes		F handler	
F toinbox		F markfonts	
F tovpack		F register	
F vpack		F setfont	
unprotect_glyph	function	F setlayer	
unprotect_glyphs	function	F setruledglyph	
unset_attribute	function	F setvisual	
unsetattribute	function	vpack	function
unsetattributes	function	whatcodes	data table
usedlist	function	whatsitcodes	data table
usercodes	data table	write	function
uses_font	function		

number (context)

	function	tobitstring	function
basepoints	function	tocentimeters	function
bytetodecimal	function	tociceros	function
compactfloat	function	tocontext	function
decimaltobyte	function	todidots	function
dimenfactors	data table	todimen	function
formatted	function	toevenhex	function
formattedfloat	function	toinches	function
idiv	function	tomillimeters	function
maxdimen	number	tonewciceros	function
nopts	function	tonewdidots	function
percent	function	tonumberf	function
points	function	tonumberg	function
pts	function	topicas	function
signed	function	topoints	function
sparseexponent	function	toscaled	function
splitdimen	function	toscaledpoints	function
tol6dot16	function	valid	function
tobasepoints	function		

objects (context)

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

os (basic lua)

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

package (basic lua)

config	string	luapaths	function
cpath	string	path	string
extralibpath	function	poplibpath	function
extralibpaths	function	popluapath	function
extralupath	function	preload	table
extralupaths	function	pushlibpath	function
helpers	table	pushluapath	function
libpaths	function	searchers	table
loaded	table	searchpath	function
loaders	table	seeall	function
loadlib	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 sethspace
- F setlines
- F setproperties
- F setstart
- F setvsize

injections table

- F flushafter
- F flushbefore
- F save

mixedcolumns table

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

pdf (basic tex)

disablecommand	function	getretval	function
flushpdfimage	function	getsuppressoptionalinfo	function
fontname	function	getthreadmargin	function
fontobjnum	function	gettrailer	function
fontsize	function	gettrailerid	function
getcatalog	function	getvpos	function
getcompresslevel	function	getxformattributes	function
getcreationdate	function	getxformmargin	function
getdecimaldigits	function	getxformname	function
getdestmargin	function	getxformresources	function
getfontname	function	hasmatrix	function
getfontobjnum	function	immediateobj	function
getfontsize	function	includechar	function
getgentounicode	function	includefont	function
gethpos	function	includeimage	function
getignoreunknownimages	function	mapfile	function
getimageresolution	function	mapline	function
getinclusionerrorlevel	function	maxobjnum	function
getinfo	function	newcolorstack	function
getlastannot	function	obj	function
getlastlink	function	objtype	function
getlastobj	function	pageref	function
getlinkmargin	function	print	function
getmajorversion	function	refobj	function
getmatrix	function	registerannot	overloaded function
getmaxobjnum	function	reserveobj	overloaded function
getminorversion	function	setcatalog	overloaded function
getnames	function	setcompresslevel	function
getnofobjects	function	setdecimaldigits	function
getobjcompresslevel	function	setdestmargin	function
getobjtype	function	setfontattributes	function
getomitcharset	function	setforcefile	function
getomitcidset	function	setgentounicode	function
getorigin	function	setignoreunknownimages	function
getpageattributes	function	setimageresolution	function
getpageref	function	setinclusionerrorlevel	function
getpageresources	function	setinfo	overloaded function
getpagesattributes	function	setlinkmargin	function
getpkresolution	function	setmajorversion	function
getpos	function	setminorversion	function
getrecompress	function	setnames	overloaded function

setobjcompresslevel	function	setthreadmargin	function
setomitcharset	overloaded function	settrailer	overloaded function
setomitcidset	overloaded function	settrailerid	overloaded function
setorigin	function	settypeonewidemode	function
setpageattributes	overloaded function	setxformattributes	function
setpageresources	overloaded function	setxformmargin	function
setpagesattributes	overloaded function	setxformresources	function
setpkresolution	function	vfimage	function
setrecompress	function	xformname	function
suppressoptionalinfo	function		

pdf (context)

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
getcatalag	function	gettrailer	function
getdictionary	function	getversion	function
getfromarray	function	new	function
getfromdictionary	function	objectcodes	data table
getfromreference	function	open	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

pdfscanner (context)

scan function

physics (context)

units table

F registerunit

D tables

publications (context)

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

T sets	S pages	
T author	S volume	
T editionset	S version	
T virtual	D virtual	
T demo-a	T virtualfields	
S category	B authornum	
T extra	B authoryear	
T fields	B authoryears	
S author	B num	
S institution	B suffix	
S organization	datasets	table
S subtitle	detailed	table
S title	endnotes_to_btx	function
S year	enhancer	table
T optional	S arguments	
T required	T askip	
T sets	B dirty	
T author	T gskip	
T virtual	T kind	
T demo-b	T list	
S category	T system	
T extra	T order	
T fields	N steps	
S author	enhancers	table
S institution	F details	
S organization	F order	
S subtitle	F suffixes	
S title	finder	function
S year	firstofrange	function
T optional	found	function
T required	get	function
T sets	getcasted	function
T authors	getdetail	function
T virtual	getdirect	function
S comment	getfaster	function
S copyright	getfield	function
T fields	getfuzzy	function
S name	getindex	function
T types	inspectors	data table
S author	journals	table
S editor	F abbreviated	
S keywords	F add	
S number	F expanded	
S page	F load	

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

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

regimes (context)

backmapping	data table
cleanup	function
disable	function
enable	function
fromregime	function
list	function

mapping	data table
pop	function
process	function
push	function
toregime	function
translate	function

resolvers (context)

allprefixes	function	findpath	function
appendhash	function	findpk	function
automount	function	findtexfile	function
automounted	table	findwildcardfile	function
booleanvariable	function	findwildcardfiles	function
cacheversion	string	formatofsuffix	function
checkedvariable	function	formatofvariable	function
cleanedpathlist	function	formats	data table
cleanpath	function	foundintree	function
cleanpathlist	function	foundintrees	function
concatinators	data table	generators	data table
configbanner	string	get_from_content	function
configurationfiles	function	getenv	function
criticalvars	data table	getextrapaths	function
dangerous	data table	getfilehashes	function
datastate	function	gethashes	function
defaultsuffixes	table	getownpath	function
dowithfilesandreport	function	getreadfilename	function
dowithfilesintree	function	hashers	data table
dowithpath	function	homedir	string
dowithvariable	function	initialized	function
env	function	inputstack	table
executers	table	installinputfilehandler	function
expandbraces	function	installinputlinehandler	function
expandedpathfromlist	function	jobpath	function
expandedpathlist	function	jobs	table
expandedpathlistfromvariable	function	F currentcomponent	
expandpath	function	F currentenvironment	
expandpathfromvariable	function	F currentproduct	
expansion	function	F currentproject	
extendtexmfvariable	function	F justacomponent	
filtered_from_content	function	D processors	
find_file	function	F productcomponent	
find_files	function	F usefile	
findbinfile	function	joinpath	function
findctxfile	function	knownvariables	function
finders	data table	load	function
findfile	function	loadbinfile	function
findfiles	function	loaders	data table
findgivenfile	function	loadlua lib	function
findgivenfiles	function	loadtexfile	function

loadtime	function	resolve	function
locateformat	function	savers	data table
locators	data table	scandata	function
luacnffallback	string	scanfiles	function
luacnfname	string	schemes	table
luacnfspec	string		
luacnfstate	string	T cleaners	
macros	table	F md5	
		F none	
F convertfile		F strip	
F decodecomment		F cleanname	
F enablecomment		F fetchstring	
F encodecomment		F fetchtable	
F preprocessed		F install	
F processmk		setdynamic	function
F processmkvi		setenv	function
F version		setmemstream	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
poppath	function	stoptiming	function
prefixes	data table	suffixes	data table
prependhash	function	suffixmap	data table
pushextrapath	function	suffixofformat	function
pushpath	function	texdatablob	function
registerextrapath	function	toppath	function
registerfile	function	unexpandedpath	function
registerfilehash	function	unexpandedpathlist	function
registerintrees	function	unresolve	function
registermethod	function	updaterelations	function
registerzipfile	function	updatescript	function
relations	data table	uselibrary	function
renew	function	usertypes	data table
renewcache	function	usezipfile	function
repath	function	validatedpath	function
reset	function	variable	function
resetextrapaths	function	variableofformat	function
resetmemstream	function	variableofformatorsuffix	function
resetresolve	function	wildcardpattern	function

sandbox (context)

disablelibraries	function
disablerunners	function
enable	function
filehandlerone	function
filehandlertwo	function
finalizer	function
getrunner	function
initializer	function
iohandler	function
logcalls	function
logfiles	function
original	function
overload	function

possiblepath	function
redefine	function
register	function
registerbinary	function
registerlibrary	function
registerroot	function
registerrunner	function
report	function
setfilenamelogger	function
setlogger	function
setreporter	function
settrace	function
validfilename	function

scripts (context)

autofontfeature table

 F disable

 F enable

 F handler

categorytonumber data table

colors data table

decomposehangul function

defaults table

 N inter_char_half_shrink_factor

 N inter_char_half_stretch_factor

 N inter_char_hangul_penalty

 N inter_char_quarter_shrink_factor

 N inter_char_quarter_stretch_factor

 N inter_char_shrink_factor

 N inter_char_stretch_factor

 N inter_word_stretch_factor

handlers data table

hash table

injectors data table

inserters table

 F nobreakspace_after

 F nobreakspace_before

 F space_after

 F space_before

 F zerowidthspace_after

 F zerowidthspace_before

installdataset function

installmethod function

numbertocategory data table

numbertodataset data table

numbertohandler data table

reset function

set function

splitters data table

set (context)

contains function

create function

tolist function

tonumber function

totable function

sha2 (context)

HASH256 function
HASH384 function
HASH512 function
digest256 function
digest384 function

digest512 function
hash256 function
hash384 function
hash512 function

sio (context)

read2dot14	function
readbytes	function
readbytetable	function
readcardinal1	function
readcardinal2	function
readcardinal3	function
readcardinal4	function
readcardinaltable	function

readfixed2	function
readfixed4	function
readinteger1	function
readinteger2	function
readinteger3	function
readinteger4	function
readintegertable	function

socket (extra lua)

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

S proxy-authenticate	F request	
S proxy-authorization	newtry	function
S range	protect	function
S received	report	function
S received-from-mta	select	function
S references	sink	overloaded function
S referer	sinkt	overloaded table
S remote-mta	F close-when-done	
S reply-to	F default	
S reporting-mta	F http-chunked	
S resent-bcc	F keep-open	
S resent-cc	skip	function
S resent-date	sleep	function
S resent-from	smtip	table
S resent-message-id	S DOMAIN	
S resent-reply-to	N PORT	
S resent-sender	S SERVER	
S resent-to	N TIMEOUT	
S retry-after	S ZONE	
S return-path	F message	
S sender	F open	
S server	F send	
S smtp-remote-recipient	source	overloaded function
S status	sourcet	overloaded table
S subject	F by-length	
S te	F default	
S to	F http-chunked	
S trailer	F until-closed	
S transfer-encoding	tcp	function
S upgrade	tcp4	function
S user-agent	tcp6	function
S vary	tp	overloaded table
S via	N TIMEOUT	
S warning	F connect	
S will-retry-until	try	overloaded function
S www-authenticate	udp	function
S x-mailer	udp4	function
F lower	udp6	function
F normalize	url	overloaded table
http	F absolute	
N TIMEOUT	F build	
S USERAGENT	F build_path	
F genericform	F escape	
F open	F parse	

F parse_path

F unescape

sorters (context)

basicsorter	function	B pm	
comparers	table	B uc	
F basic		B zc	
constants	table	B zm	
S defaultdigits		definitions	data table
S defaultlanguage		firstofsplit	function
S defaultmethod		packch	function
N digitmaximum		packuc	function
N digitoffset		replacementlist	function
N ignoredoffset		setlanguage	function
N replacementoffset		sort	function
T validmethods		splitters	table
B ch		F utf	
B mc		strip	function
B mm		tracers	data table
B pc		update	function

statistics (context)

callbacks	function
checkfmtstatus	function
currenttime	function
elapsed	function
elapsedindeed	function
elapsedseconds	function
elapsedtime	function
enable	boolean
formatruntime	function
hastiming	function
memused	function

register	function
resettiming	function
runtime	function
savefmtstatus	function
show	function
starttiming	function
stoptiming	function
threshold	number
timed	function
tracefunction	function

status (basic tex)

list function

resetmessages function

setexitcode 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
disable	function
enable	function
flush	function
initialize	function

push	function
start	function
stop	function
synchronize	function

string (basic lua)

autodouble	function	quote	function
autosingle	function	quoted	function
booleanstring	function	rep	function
byte	function	replacenewlines	function
bytepairs	function	reverse	function
bytes	function	split	function
bytetable	function	splitlines	function
char	function	splitup	function
characterpairs	function	strip	function
characters	function	sub	function
checkedsplit	function	tformat	function
collapsespaces	function	toHEX	function
containsws	function	toboollean	function
count	function	tobytes	function
dump	function	tocontext	function
escapedpattern	function	todec	function
explode	function	todimen	function
find	function	tohex	function
format	function	tonodes	function
formatter	function	topattern	function
formatters	function	totable	function
fullstrip	function	toutf	function
gmatch	function	tracedchar	function
gsub	function	tracedchars	table
is_boolean	function	unpack	function
is_empty	function	unquote	function
itself	function	unquoted	function
len	function	upper	function
limit	function	utfcharacter	function
longtostring	function	utfcharacters	function
lower	function	utflength	function
match	function	utfpadd	function
nospaces	function	utfpadding	function
nspaces	table	utfvalue	function
optionalquoted	function	utfvalues	function
pack	function	valid	function
packsize	function		

structures (context)

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

inserts

D data
F define
F getdata
F getlocation
F getname
F getnumber
F setlocation
F setup
D stored

table

itemgroups

table

lists

table

F addto
F analyze
B autoreorder
D cached
D collected
F discard
F enhance
T enhancers
F filter
F formulainumber
F getresult
F groupindex
F hasnumberdata
F haspagedata
F hastitledata
F iscached
D kinds
F label
F location
D names
F number
D ordered
F page
F popnesting
F prefix
F prefixednumber
F prefixedpage
F process
D pushed
F pushnesting
F realpage
F reordered

T result
F savedlistnumber
F savedlistprefixednumber
F savedlisttitle
D sectionblocks
F sectionnumber
F size
F title
D tobesaved
F userdata
F uservalue

marks

table

D data
F define
F exists
F fetch
F fetchallmarks
F fetched
F fetchonemark
F fetchtwomarks
F get
F number
F relate
F reset
F set
F show
F synchronize
F title
T tracers
F showtable

notes

table

F check_spacing
F checkpagechange
F define
F doifonsamepageasprevious
F get
F getdeltapage
F getinternal
F getn
F getstate
F hascontent
F internal
F internalid
F listindex

T numbers	F define
F ordered	F found
F postpone	F get
F resetpostponed	F filter
F restore	F filterdefault
F save	D filters
F setstate	D flaginternals
D states	F from
F store	D functions
pages	F get
	F getcurrentmetadata
F allmarked	F getcurrentprefixspec
F analyze	F getinnermethod
D collected	F getinternalcachedlistreference
F in_body	F getinternallistreference
F is_odd	F getinternalreference
F mark	F getoutermethod
F marked	D handlers
N nopages	F identify
F number	F import
F on_right	F inject
F save	F injectcurrentset
D tobesaved	S innermethod
F toranges	D internals
references	F load
	F loadpresets
F analyze	F mark
F checkedfile	S outermethod
F checkedfileorurl	D pages
F checkedprogram	U prefixsplitter
F checkedrealpage	D productdata
F checkedurl	T programs
D collected	T data
U componentsplitter	F define
F currentmetadata	F get
F currentorder	F realpageofpage
D currentset	U referencesplitter
F define	D referred
D defined	F referredpage
D derived	F registerfinalizer
F enhance	F registerinitializer
D executers	F registerpage
F expandcurrent	F reset
F export	D runners
T files	
T data	

- F set
- F setandgetattribute
- F setcomponent
- F setinternalreference
- F setlinkmethod
- F setnextinternal
- F setnextorder
- F setreferencerealpage
- D specials
- F splitcomponent
- F splitprefix
- F splitreference
- F synchronizepage
- T testrunners
 - F inner
 - F special
 - F special operation
 - F special operation with arguments
- T testspecials
 - F deltapage
 - F i
 - F internal
 - F page
 - F realpage
 - F section
 - F userpage
- D tobereferred
- D tobesaved
- D tracedpages
- T urls
 - T data
 - F define
 - F found
 - F get
 - F untex
- D usedinternals
- D usedviews
- F valid

registers

- F analyze
- D collected
- F compare
- F define
- F enhance

table

- F extend
- F filter
- F filtercollected
- F finalize
- F findinternal
- F flush
- F get
- F prepare
- F process
- F setmethod
- F sort
- F store
- D tobesaved
- F unique
- F userdata

sections

- F autodepth
- F cct
- D collected
- F current
- F currentblock
- F currentid
- F currentlevel
- F currentsectionindex
- F depthnumber
- F finddata
- F findnumber
- F fullnumber
- F getcurrentlevel
- F getlevel
- F getnumber
- F internalreference
- D levelmap
- D levels
- F matchingtilldepth
- F numberatdepth
- F numbers
- F popblock
- F prefixedconverted
- F pushblock
- F register
- D registered
- F reportstructure
- F save

table

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

F settagssubsentencesymbol
F setupexport
F setuserproperties
D specifications
F start

F stop
F strip
D taglist
T usewithcare
T images

table (basic lua)

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

tex (basic tex)

attribute	table	getdimen	function
badness	function	getglue	function
box	table	getlccode	function
boxresources	table	getlist	function
F getbox		getlocallevel	function
F getdimensions		getmath	function
F save		getmathcode	function
F use		getmathcodes	function
catcode	table	getmuglue	function
conditionals	data table	getmuskip	function
constants	data table	getnest	function
count	table	getpagestate	function
cprint	function	getsfcode	function
ctdcatcodes	number	getskip	function
ctxcatcodes	number	gettoks	function
definefont	function	getuccode	function
delcode	table	glue	table
dimen	table	hashtokens	function
directives	data table	ifs	data table
enableprimitives	function	inimatcodes	number
error	function	init_rand	function
extraprimitives	function	isattribute	function
finish	function	isbox	function
fontidentifier	function	iscount	overloaded function
fontname	function	isdefined	function
force_synctex_line	function	isdimen	overloaded function
force_synctex_tag	function	isglue	function
forcehmode	function	ismuglue	function
fprint	function	ismuskip	overloaded function
get	function	isskip	overloaded function
get_synctex_line	function	istoken	function
get_synctex_mode	function	istoks	function
get_synctex_tag	function	lccode	table
getattribute	function	linebreak	function
getbox	function	lists	table
getboxresourcebox	function	lua_math_random	function
getboxresourcedimensions	function	lua_math_randomseed	function
getcatcode	function	luacatcodes	number
getcount	function	magicconstants	table
getdelcode	function	N maxdimen	
getdelcodes	function	N running	

<code>N trueinch</code>		<code>setmath</code>	<code>function</code>
<code>mathcode</code>	<code>table</code>	<code>setmathcode</code>	<code>function</code>
<code>modes</code>	<code>data table</code>	<code>setmuglue</code>	<code>function</code>
<code>muglue</code>	<code>table</code>	<code>setmuskip</code>	<code>function</code>
<code>muskip</code>	<code>table</code>	<code>setnest</code>	<code>function</code>
<code>nest</code>	<code>table</code>	<code>setsfcode</code>	<code>function</code>
<code>nilcatcodes</code>	<code>number</code>	<code>setskip</code>	<code>function</code>
<code>normal_rand</code>	<code>function</code>	<code>settoks</code>	<code>function</code>
<code>notcatcodes</code>	<code>number</code>	<code>setuccode</code>	<code>function</code>
<code>number</code>	<code>function</code>	<code>sfcode</code>	<code>table</code>
<code>primitives</code>	<code>function</code>	<code>shipout</code>	<code>function</code>
<code>print</code>	<code>function</code>	<code>show_context</code>	<code>function</code>
<code>prtcacodes</code>	<code>number</code>	<code>skip</code>	<code>table</code>
<code>resetparagraph</code>	<code>function</code>	<code>sp</code>	<code>function</code>
<code>romannumeral</code>	<code>function</code>	<code>splitbox</code>	<code>function</code>
<code>round</code>	<code>function</code>	<code>sprint</code>	<code>function</code>
<code>run</code>	<code>function</code>	<code>systemmodes</code>	<code>data table</code>
<code>runtoks</code>	<code>function</code>	<code>takebox</code>	<code>function</code>
<code>saveboxresource</code>	<code>function</code>	<code>texcatcodes</code>	<code>number</code>
<code>scale</code>	<code>function</code>	<code>toks</code>	<code>table</code>
<code>scantoks</code>	<code>function</code>	<code>tpacatcodes</code>	<code>number</code>
<code>set</code>	<code>function</code>	<code>tpbcatcodes</code>	<code>number</code>
<code>set_synctex_line</code>	<code>function</code>	<code>tprint</code>	<code>function</code>
<code>set_synctex_mode</code>	<code>function</code>	<code>trackers</code>	<code>data table</code>
<code>set_synctex_no_files</code>	<code>function</code>	<code>triggerbuildpage</code>	<code>function</code>
<code>set_synctex_tag</code>	<code>function</code>	<code>txtcatcodes</code>	<code>number</code>
<code>setattribute</code>	<code>function</code>	<code>type</code>	<code>function</code>
<code>setbox</code>	<code>function</code>	<code>uccode</code>	<code>table</code>
<code>setcatcode</code>	<code>function</code>	<code>uniform_rand</code>	<code>function</code>
<code>setcount</code>	<code>function</code>	<code>uniformdeviate</code>	<code>function</code>
<code>setdelcode</code>	<code>function</code>	<code>uprint</code>	<code>function</code>
<code>setdimen</code>	<code>function</code>	<code>useboxresource</code>	<code>function</code>
<code>setglue</code>	<code>function</code>	<code>vrbcacodes</code>	<code>number</code>
<code>setlcode</code>	<code>function</code>	<code>write</code>	<code>function</code>
<code>setlist</code>	<code>function</code>		

texconfig (basic tex)

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

texio (basic tex)

closeinput function

setescape function

write function

write_nl function

token (basic tex)

biggest_char	function	put_next	function
command_id	function	scan_argument	function
commands	function	scan_code	function
create	function	scan_csname	function
expand	function	scan_dimen	function
get_active	function	scan_float	function
get_cmdname	function	scan_glue	function
get_command	function	scan_int	function
get_csname	function	scan_keyword	function
get_expandable	function	scan_keyword_cs	function
get_id	function	scan_list	function
get_index	function	scan_real	function
get_macro	function	scan_string	function
get_meaning	function	scan_token	function
get_mode	function	scan_toks	function
get_next	function	scan_word	function
get_protected	function	set_char	function
get_tok	function	set_lua	function
is_defined	function	set_macro	function
is_token	function	type	function
new	function		

tokens (context)

astable	function	U loadfoundtypescriptfile
bgroup	userdata	U resetctxscanner
bits	table	U rlap
N active		U scratchcounter
N alignment		U scratchdimen
N begingroup		U scratchmuskip
N character		U scratchskip
N close		U scratchtoken
N comment		U secondoftwoarguments
N endgroup		U setfalsevalue
N endoffline		U setsectionblock
N escape		U setupsystem
N ignore		U startcolumns
N invalid		U starttabulate
N letter		U starttitle
N mathshift		U startxtitle
N open		U stopcolumns
N other		U stoptabulate
N parameter		U stoptitle
N space		U stopxtitle
N subscript		U texsetup
N superscript		
N whitespace		
cache	table	collectors table
U NC		T data
U NR		F defaultwords
U bf		F dowithwords
U color		F flush
U colordefalc		F install
U colordefflc		F register
U colordefflt		T registered
U colordefrlt		F show
U dofinishreference		F test
U dostarttext		commands data table
U finishjob		compile function
U firstofoneargument		constant function
U firstoftwoarguments		converters table
U gobbleoneargument		S toboolean
U goto		S todimen
U iftrue		S toglue
U input		S tonumber
		S tostring
		create function

defined function
egroup userdata
getters table
 F box
 F count
 F dimen
 F glue
 F macro
 F meaning
 F skip
 F token
hbox userdata
isdefined function
istoken function
letter function
letters function
new function
other function
pickup function
presets table

T 1 string
 T 2 strings
 T 3 strings
 T 4 strings
 T 5 strings
 T 6 strings
 T 7 strings
 T 8 strings
printlist function
scanners table

F argument
 F boolean
 F code
 F conditional
 F count
 F csname
 F dimen
 F dimension
 F float
 F glue
 F integer
 F keyword
 F keywordcs
 F list

F lxmld
 F number
 F real
 F scanclose
 F scanopen
 F skip
 F string
 F table
 F token
 F tokens
 F toks
 F word

setters table

F box
 F char
 F count
 F dimen
 F glue
 F lua
 F macro
 F skip

shortcuts table

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

F inspect	F scantable
N open	F scanword
F report	F toboolean
F scanboolean	F todimen
F scanclose	T tokens
F scancode	F astable
F scanconditional	U bgroup
F scanname	T cache
F scandimen	U NC
F scandimension	U NR
F scaninteger	U bf
F scankeyword	U color
F scankeywordcs	U colordefalc
F scanlist	U colordefflc
T scanners	U colordefflt
F argument	U colordefrlt
F boolean	U dofinishreference
F code	U dostarttext
F conditional	U finishjob
F count	U firstofoneargument
F csname	U firstoftwoarguments
F dimen	U gobbleoneargument
F dimension	U goto
F float	U iftrue
F glue	U input
F integer	U loadfoundtypescriptfile
F keyword	U resetctxscanner
F keywordcs	U rlap
F list	U scratchcounter
F lxmld	U scratchdimen
F number	U scratchmuskip
F real	U scratchskip
F scanclose	U scratchtoken
F scanopen	U secondoftwoarguments
F skip	U setfalsevalue
F string	U setsectionblock
F table	U setupsystem
F token	U startcolumns
F tokens	U starttabulate
F toks	U starttitle
F word	U startxtitle
F scannumber	U stopcolumns
F scanopen	U stoptabulate
F scanstring	U stoptitle

U stopxtitle	T settings	
U texsetup	F box	
T collectors	F char	
F defaultwords	F count	
F dowithwords	F dimen	
F flush	F glue	
F install	F lua	
F register	F macro	
F show	F skip	
F test	T shortcuts	
D commands	N close	
F compile	F inspect	
F constant	N open	
T converters	F report	
S toboolean	F scanboolean	
S todimen	F scanclose	
S toglue	F scancode	
S tonumber	F scanconditional	
S tostring	F scancsname	
F create	F scandimen	
F defined	F scandimension	
U egroup	F scaninteger	
T getters	F scankeyword	
F box	F scankeywordcs	
F count	F scanlist	
F dimen	F scannumber	
F glue	F scanopen	
F macro	F scanstring	
F meaning	F scantable	
F skip	F scanword	
F token	F toboolean	
U hbox	F todimen	
F isdefined	F tonumber	
F istoken	F tostring	
F letter	U vbox	
F letters	U vtop	
F new	F tonumber	
F other	F tostring	
F pickup	vbox	userdata
T presets	vtop	userdata
F printlist		

tracers (context)

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

trackers (context)

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

typesetters (context)

alignments	table		
F handler			T handlers
F set			F installhandler
breakpoints	table		F processmath
F define			F set
F handler			F setcolor
D mapping			F setmath
T methods			F tomode
T numbers			firstlines
F set			table
F setreplacement			T actions
cases	table		F default
T actions			F line
F handler			F word
F register			F handler
F set			F set
characteralign	table		fontkerns
F handler			table
F resetcharacteralign			F handler
F setcharacteralign			initials
characters	table		table
F handler			T actions
T methods			F default
F replacensp			F addanchortoline
F replacenspaces			F addtoline
checkers	table		F calculatedelta
F handler			F checkline
F reset			F handler
F set			F moveinline
cleaners	table		F normalize
F handler			F set
F set			injectors
digits	table		table
T actions			F check
F handler			T list
F set			F mark
directions	table		F reset
F getfences			F set
F getglobal			F show
F getmethod			italics
F handler			table
			F enablemath
			F enabletext
			F forcevariant
			F handler
			F reset
			F set

kerns table

D factors
F handler
F keepligature
D mapping
F set

manipulators table

F apply
F applyspecification
T methods
F Word
F Words
F abbreviatedjournal
F expandedjournal
F lowercase
F stripperperiod
F uppercase
T patterns
U list
U pair
F splitspecification

margins table

F finalhandler
F globalhandler
F localhandler
F save

marksuspects function

paragraphs table

F addanchortoline
F addtoline
F calculatedelta
F checkline
F handler
F moveinline
F normalize
F set

periodkerns table

D factors
F handler
D mapping
F set

processors table

F apply
F register
F reset
F split
F startapply
F stopapply
F stripped
F toString

rubies table

F attach
F check

showsuspects function

spacings table

F define
F handler
D mapping
T numbers
T frenchpunctuation
T characters
S name
N number

F reset

F set

F setup

wrappers table

F handler

xtables table

F cleanup
F construct
F create
F finish_row
F flush
F initialize_construct
F initialize_reflow_height
F initialize_reflow_width
F next_row
F reflow_height
F reflow_width
F set_construct
F set_reflow_height
F set_reflow_width

updaters (context)

apply function

register function

url (context)

addscheme	function
barepath	function
construct	function
decode	function
encode	function
escape	function
filename	function

hashed	function
hasscheme	function
query	function
split	function
toquery	function
unescape	function
unescapeget	function

utf8 (context)

char	function
charpattern	string
codepoint	function

codes	function
len	function
offset	function

utilities (context)

debugger	table		F size
F disable			F skip
F enable			F skiplong
F savestats			F skipposition
F showstats			F skipshort
F showtraceback			F writebyte
			F writecardinal2
			F writecardinal4
			F writestring
files	table	formatters	table
F close		F formatcolumns	
F getposition		F list	
F getsize		F stripzeros	
F look		garbagecollector	table
F open		F check	
F read2dot14		N criterium	
F readbyte		B enabled	
F readbytes		lua	table
F readbytetable		B alwaysstripcode	
F readcardinal		F checkmemory	
F readcardinal1		F compile	
F readcardinal2		F loadedluacode	
F readcardinal2le		F loadstring	
F readcardinal3		F loadstripped	
F readcardinal3le		N nofstrippedbytes	
F readcardinal4		N nofstrippedchunks	
F readcardinal4le		F registerfinalizer	
F readcardinaltable		B stripcode	
F readchar		T strippedchunks	
F readfixed2		F strippedloadstring	
F readfixed4		T suffixes	
F readinteger		S lua	
F readinteger1		S luc	
F readinteger2		S lui	
F readinteger2le		S luj	
F readinteger3		S luv	
F readinteger3le		S tma	
F readinteger4		S tmc	
F readinteger4le		S tua	
F readintegertable		S tuc	
F readsignedbyte		packers	table
F readstring			
F readtag			
F setposition			

F hashed	B modern-condensed
F new	B modern-light-condensed
F pack	T modern-light,latin-modern-light-designsize,latin-modern-light
F simplehashed	B latin-modern-light
F strip	B latin-modern-light-designsize
F unpack	B modern-light
N version	T modern-mono,modern-base-mono
parsers	B modern-base-mono
table	B modern-mono
F add_settings_to_array	T modern-variable,latin-modern-variable-designsize,latin-modern-variable
F arguments_to_table	B latin-modern-variable
F array_to_string	B latin-modern-variable-designsize
F csvsplitter	B modern-variable
F getparameters	T modernvariable,modern-variable
F groupedsplitat	B modern-variable
F hash_to_string	B modernvariable
T hashes	T modernvariablelight,modern-variable-light
T settings_to_set	B modern-variable-light
T min,max,fit,broad,auto	B modernvariablelight
B auto	T serif,sans,mono
B broad	B mono
B fit	B sans
B max	B serif
B min	T text,hidden,paper,paper,page,leftpage,rightpage
T modern,latin-modern	B hidden
B latin-modern	B leftpage
B modern	B modern-condensed,latin-modern-condensed
T modern,latin-modern,modern-variable,latin-modern-variable,modern-variable	B paper
B latin-modern	B rightpage
B latin-modern-condensed	B text
B latin-modern-variable	F iterator
B modern	F keq_to_hash
B modern-condensed	F listitem
B modern-variable	F make_settings_to_hash_pattern
T modern,latin-modern-designsize,latin-modern	F mergehashes
B latin-modern	F options_to_array
B latin-modern-designsize	F options_to_hash
B modern	T patterns
T modern,modern-base	U settings_to_array
B modern	U settings_to_hash_a
B modern-base	U settings_to_hash_b
T modern-condensed,latin-modern-condensed-designsize,latin-modern-condensed,latin-modern-light-condensed,latin-modern-light	U settings_to_hash_c
B latin-modern-condensed	U settings_to_hash_d
B latin-modern-condensed-designsize	U unittotex
B latin-modern-light-condensed	

F process_stripped_settings	F replaceaction	
F rfc4180splitter	F setkind	
F runtime	F tostring	
F settings_to_array	setters	table
F settings_to_array_obey_fences	F disable	
F settings_to_array_with_repeat	F enable	
F settings_to_hash	F initialize	
F settings_to_hash_colon_too	F list	
F settings_to_hash_strict	F new	
F settings_to_hash_tolerant	F register	
F settings_to_numbers	F report	
F settings_to_set	F reset	
F simple_hash_to_string	F show	
F splitmethod	stacker	table
F splitthousands	F new	
F stepper	storage	table
F stripped_settings_to_array	F allocate	
F unittotex	F checked	
F unittoxml	F mark	
randomizer	F marked	
F get	F setinitializer	
F getnumber	F sparse	
F getseed	streams	table
F popseed	F close	
F pushseed	F getposition	
F reuseseed	F look	
F setseed	F open	
F setseedi	F openstring	
report	F read2dot14	
sequencers	F read2dot4	
F appendaction	F readbyte	
F appendgroup	F readbytes	
F compile	F readbytetable	
F disableaction	F readcardinal	
F disablegroup	F readcardinal1	
F enableaction	F readcardinal2	
F enablegroup	F readcardinal2LE	
D functions	F readcardinal3	
F localize	F readcardinal3le	
F new	F readcardinal4	
F nodeprocessor	F readcardinaltable	
F prependaction	F readchar	
F prependgroup	F readfixed2	
F removeaction	F readfixed4	

F readinteger	U collapse
F readinteger1	U prune
F readinteger2	U prune and collapse
F readinteger2le	U prune and no empty
F readinteger3	U prune and to space
F readinteger3le	U retain
F readinteger4	U retain and collapse
F readinteger4le	U retain and no empty
F readintegertable	F striplines
F readsignedbyte	F striplong
F readstring	F tabtospace
F setposition	T tracers
F size	tables table
F skip	F accesstable
F skipbytes	F definedtable
F skiplong	F definetable
F skipshort	F encapsulate
strings table	F insertaftervalue
F collapse	F insertbeforevalue
F collapsecrlf	F migratetable
T formatters	F removevalue
F add	F replacevalue
F new	templates table
F newcollector	F load
F newrepeater	F replace
F nice	F replacer
T striplinepatterns	F resolve

vf (context)

char	function
down	function
fontid	function
image	function
node	function
nop	function

pdf	function
pop	function
push	function
right	function
rule	function
special	function

visualizers (context)

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

xml (context)

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

F undefined		F chainattribute	
F upper		F count	
fillin	function	F default	
filter	function	F elements	
finalizers	table	F empty	
F paragraphs		F first	
T tex		F function	
F all		F index	
F attribute		F last	
F chainattribute		F lowerall	
F chainpath		F match	
F command		F name	
F concat		F position	
F concatrange		F reverse	
F context		F table	
F count		F tag	
F ctxtext		F tags	
F default		F text	
F first		F texts	
F function		F upperall	
F index		first	function
F last		found	function
F lettered		functions	table
F lower		F classes	
F lowerall		F hasclass	
F match		getbuffer	function
F name		gethandlers	function
F param		gethandlersfunction	function
F parameter		helpers	table
F position		F recursetext	
F reverse		include	function
F stripped		inclusion	function
F tag		inclusions	function
F tags		index	function
F text		inheritedconvert	function
F upper		inject	function
F upperall		inject_element	function
F xml		inject_element_after	function
T xml		inject_element_before	function
F all		injectafter	function
F att		injectbefore	function
F attribute		insert	function
F attributes		insert_element	function
F cdata		insert_element_after	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	reparseidentitylpeg	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 &	
privatecodes	table	S '	
privatetoken	function	S <	
process	function	S >	
process_attributes	function	S \	
process_elements	function	S {	
processattributes	function	S	
profiled	table	S }	
pure	function	S ~	
pushmatch	function	specialhandler	table
raw	function	sprint	function
registerentity	function	string	function

strip	function	toxml	function
strip_whitespace	function	tprint	function
stripelement	function	traverse	function
stripleadingspaces	function	unescaped	function
table	function	unescapedentitylpeg	userdata
text	function	unprivatized	function
textonly	function	unspecialized	function
texttocdata	function	withelement	function
tocdata	function	withelements	function
toelement	function	wrap	function
tostring	function	xmlns	table
totable	function		

zip (extra lua)

archives

table

close

function

closearchive

function

open

overloaded function

openarchive

function

openfile

function

registeredfiles

table

type

function

zlib (extra lua)

adler32	function
compress	function
compressobj	function
crc32	function

decompress	function
decompressobj	function
version	function