

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

# ConTeXt LMTX

# global (alias: \_G)

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

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

<b>tracers</b>	table	<b>visualizers</b>	table
<b>trackers</b>	table	<b>warn</b>	function
<b>type</b>	function	<b>xcomplex</b>	table
<b>typesetters</b>	table	<b>xdecimal</b>	table
<b>unpack</b>	function	<b>xmath</b>	table
<b>updaters</b>	table	<b>xml</b>	table
<b>url</b>	table	<b>xpcall</b>	function
<b>userdata</b>	table	<b>xzip</b>	table
<b>utf</b>	table	<b>zip</b>	table
<b>utf8</b>	table	<b>zlib</b>	table
<b>utilities</b>	table		

# attributes (context)

<b>alternates</b>	table	F formatgray F getpagecolormodel F gray F graytohsv F handler T helpers F complement F inbetween F justone F hsvtogram F hsvtorgb F hwbtorgb F iccprofile F isblack F labtorgb F labtoxyz N main S model D models F mpcolor F mpnamedcolor F mpoptions F namedcolorattributes N none F popset F processcolorcomponents F pushset F register D registered F registerspotcolor F rgb F rgbtocmyk F rgbtogray F rgbohsv F rgboxyz N selector F setlist F setmodel F setpagecolormodel D sets F spec
<b>applyoverloads</b>	function	
<b>colorintents</b>	table	
N attribute D data F enable F handler F register D registered D values		

F spot		F disabletriggering
F spotcolorname		F enabletriggering
F spotcolorparent		F finalize
F spotcolorvalue		F initialize
B supported		F process
F toattributes		F selective
F transparencycomponents		F simple
B triggering		F stacked
F usecolors		F stacker
D valid		<b>system</b> function
F value		<b>tooverloads</b> function
D values		<b>transparencies</b> table
B weightgray		N attribute
F xyztolab		D data
F xyztorgb		F enable
<b>define</b>	function	F forcesupport
<b>effects</b>	table	F handler
N attribute		T names
D data		N color
F enable		N colorburn
F handler		N colordodge
F register		N darken
D registered		N difference
D values		N exclusion
<b>handlers</b>	table	N hardlight
<b>list</b>	data table	N hue
<b>markasoverload</b>	function	N lighten
<b>names</b>	data table	N luminosity
<b>negatives</b>	table	N multiply
N attribute		N none
D data		N normal
F enable		N overlay
F handler		N saturation
F register		N screen
D registered		N softlight
F set		N none
<b>numbers</b>	data table	F register
<b>ofnode</b>	function	D registered
<b>private</b>	function	B supported
<b>public</b>	function	F toattribute
<b>restore</b>	function	B triggering
<b>save</b>	function	F value
<b>showcurrent</b>	function	D values
<b>states</b>	table	<b>unsetvalue</b> number

**viewerlayers** table

N attribute	D registered
F cleanup	F resolve_begin
D data	F resolve_end
F define	F resolve_reset
F definedlayoutcomponent	F resolve_step
F enable	D scopes
F forcesupport	F setfeatures
F handler	F start
B hasorder	F stop
D listwise	B supported
F register	D values

# backends (context)

<b>closeout</b>	function	F getbookmarks
<b>codeinjections</b>	table	F getdefaultfieldvalue
F boxresourcedimensions		F getfieldcategory
F registerboxresource		F getfieldset
F restoreboxresource		F getformatoption
<b>current</b>	string	F getinfo
<b>defaults</b>	table	F getpreviewfigure
T codeinjections		F getrefobj
T nodeinjections		F insertrenderingwindow
T registrations		F jp2
D tables		F jpg
<b>getcallbackstate</b>	function	F maptag
<b>included</b>	table	F mergebookmarks
B context		F mergecomments
B date		F mergefields
B id		F mergereferences
B metadata		F mergeviewerlayers
B pdf		F newimage
<b>install</b>	function	F png
<b>latelua</b>	function	F prerollreference
<b>nodeinjections</b>	table	F presetsymbol
<b>nothing</b>	function	F presetsymbollist
<b>openout</b>	function	F processrendering
<b>pdf</b>	table	F registerdocumentcloseaction
T codeinjections		F registerdocumentopenaction
F addbookmarks		F registeredsymbol
F analyzenormalsymbol		F registerpagecloseaction
F analyzesymbol		F registerpageopenaction
F attachmentid		F registerpattern
F bitmap		F registersymbol
F clonefield		F scanimage
F copyimage		F setattachmentsupport
F definefield		F setfieldcalculationset
F definefieldset		F setfigurealternative
F defineviewerlayer		F setfigurecolorspace
F embedfile		F setfiguremask
F embedimage		F setformat
F enabletags		F setformsmethod
F exportFormData		F setpagetransition
F fieldsurrounding		F settaggingsupport
F flushmergelayer		F setxmpfile

F startlayer	F negative
F startunicodetoactualtext	F overprint
F startunicodetoactualtextdirect	F positive
F stoplayer	F reference
F stopunicodetoactualtext	F rgbcolor
F stopunicodetoactualtextdirect	F spotcolor
F supportedformats	F startalternate
F unicodetoactualtext	F startlayer
F useviewerlayer	F startstackedlayer
F validfield	F stopalternate
F validfieldcategory	F stoplayer
F validfieldset	F stopstackedlayer
F wrapimage	F transparency
S comment	F typesetfield
T nodeinjections	T registrations
F addtags	F cmykindexcolor
F annotation	F cmykspotcolor
F attachfile	F getspotcolorreference
F changestackedlayer	F grayindexcolor
F cmykcolor	F grayspotcolor
F comment	F rgbindexcolor
F destination	F rgbspotcolor
F effect	F spotcolorname
F graycolor	F transparency
F injectbitmap	T tables
F insertmovie	<b>registrations</b> table
F insertsound	<b>tables</b> table
F insertu3d	<b>writeout</b> function
F knockout	

## basexx (extra lua)

<b>decode16</b>	function	<b>encode16</b>	function
<b>decode64</b>	function	<b>encode64</b>	function
<b>decode85</b>	function	<b>encode85</b>	function
<b>decodeLZW</b>	function	<b>encodeLZW</b>	function
<b>decodeRL</b>	function	<b>encodeRL</b>	function

## bit32 (basic lua)

<b>arshift</b>	function	<b>extract</b>	function
<b>band</b>	function	<b>lrotate</b>	function
<b>bnot</b>	function	<b>lshift</b>	function
<b>bor</b>	function	<b>replace</b>	function
<b>btest</b>	function	<b>rrotate</b>	function
<b>bxor</b>	function	<b>rshift</b>	function

## blobs (context)

<b>append</b>	function	<b>strht</b>	function
<b>dimensions</b>	function	<b>strwd</b>	function
<b>dispose</b>	function	<b>tohpack</b>	function
<b>new</b>	function	<b>tonodes</b>	function
<b>pack</b>	function	<b>tovpack</b>	function
<b>strdp</b>	function	<b>write</b>	function
<b>strhd</b>	function		

## boolean (context)

**tocontext** function

**tonumber** function

## buffers (context)

<b>append</b>	function	F define
<b>assign</b>	function	F hassomecontent
<b>collectcontent</b>	function	F next
<b>empty</b>	function	F place
<b>erase</b>	function	F reset
<b>exists</b>	function	F save
<b>get</b>	function	<b>prepend</b> function
<b>getcontent</b>	function	<b>raw</b> function
<b>getlines</b>	function	<b>run</b> function
<b>gettextbuffer</b>	function	<b>samplefile</b> function
<b>loadcontent</b>	function	<b>indent</b> function
<b>parallel</b>	table	

# builders (context)

<b>checkparcontext</b>	function	F tag
<b>checksidefloat</b>	function	<b>profiling</b> table
<b>kernel</b>	table	F add
F collapsing		F distance
F hyphenating		F fixedprofile
F kerning		F get
F ligaturing		F list
F mlisttohlist		F pagehandler
<b>paragraphs</b>	table	F profilebox
T constructors		F set
N attribute		<b>vspacing</b> table
F define		D categories
F disable		F checkstrutdepth
F enable		F collapsevbox
F handler		T data
T methods		D map
F basic		D skip
F default		D snapmethods
F hpack		F definesnapmethod
F oneline		B fixed
D names		F forcepageflush
D numbers		F forcestrutdepth
F set		F getnofpreviouslines
F start		F inject
F stop		F injectdisable
T expansion		F injectpenalty
F trace		F injectskip
F keeptogether		F pagehandler
F registertogether		F pageoverflow
T solutions		F popatsame
T splitters		F pushatsame
F define		F setmap
F optimize		F setskip
T registered		F snapbox
F reset		F synchronizepage
F set		F tocATEGORIES
F split		F tocATEGORY
F start		F vboxhandler
F stop		

## caches (context)

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

## callback (basic tex)

<b>find</b>	function	<b>register</b>	overloaded function
<b>known</b>	function	<b>usage</b>	function
<b>list</b>	function		

# callbacks (context)

<b>freeze</b>	function	B intercept_tex_error
<b>functions</b>	table	B kerning
F	start_page_number	B ligaturing
F	stop_page_number	B linebreak_filter
<b>known</b>	function	B make_extensible
<b>list</b>	data table	B missing_character
<b>pop</b>	function	B mlist_to_hlist
<b>push</b>	function	B open_data_file
<b>register</b>	function	B paragraph_context
<b>report</b>	function	B post_linebreak_filter
<b>supported</b>	table	B pre_dump
B	alignment_filter	B pre_linebreak_filter
B	append_to_vlist_filter	B pre_output_filter
B	begin_paragraph	B process_jobname
B	build_page_insert	B register_extensible
B	buildpage_filter	B show_error_message
B	contribute_filter	B show_lua_call
B	define_font	B show_warning_message
B	find_format_file	B show_whatsit
B	find_log_file	B start_file
B	get_attribute	B start_run
B	glyph_run	B stop_file
B	handle_overload	B stop_run
B	hpack_filter	B trace_memory
B	hpack_quality	B vpack_filter
B	hyphenate	B vpack_quality
B	insert_par	B wrapup_run
B	intercept_lua_error	

## catcodes (context)

**names** data table  
**numbers** data table

**register** function

# characters (context)

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

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

## chemistry (context)

<b>component</b>	function	<b>method</b>	string
<b>define</b>	function	<b>molecule</b>	function
<b>definitions</b>	data table	<b>moleculeparser</b>	userdata
<b>format</b>	string	<b>start</b>	function
<b>inlinechemical</b>	function	<b>stop</b>	function
<b>instance</b>	string	<b>undefine</b>	function

## containers (context)

<b>cleanname</b>	function	<b>is_valid</b>	function
<b>content</b>	function	<b>read</b>	function
<b>define</b>	function	<b>usecache</b>	boolean
<b>is_usable</b>	function	<b>write</b>	function

# converters (context)

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

<b>uchexnumbers</b>	function	F translate	
<b>upper</b>	function	<b>weekday</b>	function
<b>verbose</b>	table	<b>word</b>	function
D data		<b>words</b>	function

## coroutine (basic lua)

<b>close</b>	function	<b>running</b>	function
<b>create</b>	function	<b>status</b>	function
<b>isyieldable</b>	function	<b>wrap</b>	function
<b>resume</b>	function	<b>yield</b>	function

## ctxrunner (context)

<b>load</b>	function	<b>preffiles</b>	data table
<b>preparedfile</b>	function	<b>resolve</b>	function

## data (context)

<b>action</b>	function	<b>prerolled</b>	string
<b>depth</b>	number	<b>reference</b>	number
<b>height</b>	number	<b>width</b>	number
<b>objref</b>	number		

## debug (basic lua)

<b>getinfo</b>	function	<b>traceback</b>	function
<b>sethook</b>	function		

## dir (context)

<b>collectpattern</b>	function	<b>globpattern</b>	function
<b>current</b>	function	<b>ls</b>	function
<b>expandname</b>	function	<b>makedirs</b>	function
<b>found</b>	function	<b>mkdirs</b>	function
<b>glob</b>	function	<b>pop</b>	function
<b>globdirs</b>	function	<b>push</b>	function
<b>globfiles</b>	function		

## directives (context)

<b>data</b>	data table	<b>register</b>	function
<b>default</b>	function	<b>report</b>	function
<b>disable</b>	function	<b>reset</b>	function
<b>done</b>	table	<b>show</b>	function
<b>enable</b>	function	<b>value</b>	function
<b>list</b>	function	<b>values</b>	function
<b>name</b>	string		

# document (context)

<b>arguments</b>	data table	D modes
<b>files</b>	table	D modules
<b>functions</b>	table	
<b>getargument</b>	function	<b>setargument</b> function
<b>getfilename</b>	function	<b>setcommandline</b> function
<b>options</b>	table	<b>setdefaultargument</b> function
		<b>setenvironments</b> function
T commandline		<b>setfilename</b> function
D environments		<b>setfilenames</b> function
D modes		<b>setmodes</b> function
D modules		<b>setmodules</b> function
T ctxfile		<b>variables</b> data table
D environments		

# documentdata (context)

**variable** function

# drivers (context)

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

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

**outputfilename** function  
**report** function

# environment (context)

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

## experiments (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  
**values** function

# figures (context)

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

<b>scale</b>	function	<b>setpaths</b>	function
<b>set</b>	function	<b>suffixes</b>	data table
<b>setlookups</b>	function	<b>used</b>	data table
<b>setorder</b>	function		

## file (basic lua)

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

## fio (extra lua)

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

## floats (context)

<b>analysemethod</b>	function	<b>nofstacked</b>	function
<b>checkedpagefloat</b>	function	<b>pop</b>	function
<b>collect</b>	function	<b>push</b>	function
<b>consult</b>	function	<b>resave</b>	function
<b>flush</b>	function	<b>save</b>	function
<b>getvariable</b>	function	<b>stacked</b>	function
<b>hasstacked</b>	function		

## font (basic tex)

<b>addcharacters</b>	function	<b>id</b>	function
<b>current</b>	function	<b>max</b>	function
<b>define</b>	function	<b>nextid</b>	function
<b>getfont</b>	function	<b>setfont</b>	function
<b>getfontdimen</b>	function	<b>setfontdimen</b>	function

# fonts (context)

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

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 ctx_camelcasing
D rightkerned	F devanagari_remove_joiners
D texligatures	F devanagari_reorder_matras
F load	F devanagari_reorder_pre_base_reordered consonants
T readers	F devanagari_reorder_reph
F getinfo	F gpos_context
F loadfont	F gpos_contextchain
F loadshapes	F gpos_cursive
F setfeatures	F gpos_mark2base
B syncspace	F gpos_mark2ligature
N version	F gpos_mark2mark
T otf	F gpos_pair
F addfeature	F gpos_single
F basemodeinitializer	F gsub_alternate
D cache	F gsub_context
F collectlookups	F gsub_contextchain
T coverup	F gsub_ligature
T actions	F gsub_multiple
F alternate	F gsub_reversecontextchain
F chainposition	F gsub_single
F chainsubstitution	F trigger_space_kerns
F kern	T helpers
F ligature	F blockligatures
F multiple	F pardirstate
F pair	F txtdirstate
F single	F load
F substitution	F loadoutlinedata
F register	F loadstreamdata
S stepkey	F modeinitializer
F dataset	D mpscache
F datasetpositionprocessor	D pdfcache
S defaultbasealternate	F plugininitializer
S defaultnodealternate	F pluginprocessor
D features	T plugins
F featuresinitializer	T text
F featuresprocessor	D pngcache
F getactualtext	B pngenabled

T	readers	F	reversechainedcontextsingle
F	addunicodetable	F	single
F	avar	F	gvar
F	cbdt	F	head
F	cbdc	T	helpers
F	cff	F	axistofactors
F	cff2	F	cleanname
F	cffcheck	F	getaxisscale
T	cffencoder	F	getfactors
F	checkhash	F	getscales
F	cmap	F	gotodatatable
F	colr	F	normalizedaxis
F	compact	T	normalizedaxishash
F	condense	F	readvariationdata
F	cpal	F	reportskipedtable
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 readbytetable	F writeinteger1
F readcardinal	F writeinteger1le
F readcardinal1	F writeinteger2
F readcardinal1le	F writeinteger2le
F readcardinal2	F writeinteger3
F readcardinal2le	F writeinteger3le
F readcardinal3	F writeinteger4
F readcardinal3le	F writeinteger4le
F readcardinal4	F writestring
F readcardinal4le	F stripredundant
F readcardinaltable	F svg
F readchar	N tableversion
F readcline	F unifymissing
F readcstring	F unpack
F readfixed2	F vhea
F readfixed4	F vmtx
F readinteger	F vorg
F readinteger1	F vvar
F readinteger1le	F woff2otf
F readinteger2	F registerpalette
F readinteger2le	F registerplugin
F readinteger3	F reorderlookups
F readinteger3le	F scriptandlanguage
F readinteger4	F setdynamics
F readinteger4le	F setfeatures
F readintegertable	T statistics
F readsignedbyte	D usedfeatures
F readstring	D svgcache
F readtag	B svgenabled
F setposition	T tables
F size	D baselines
F skip	D features
F skiplong	D featuretypes
F skipposition	D languages
F skipshort	D scripts
F writebyte	F texthandler
F writecardinal1	N version
F writecardinal1le	T pfb
F writecardinal2	F loadvector
F writecardinal2le	T tfm
F writecardinal3	D cache
F writecardinal3le	D features
F writecardinal4	N maxnestingdepth
F writecardinal4le	N maxnestingsize

T readers	N version
F loadpk	<b>current</b> function
F loadtfm	<b>currentid</b> function
F loadtfmvf	<b>definers</b> table
F loadvf	F addlookup
F pktopdf	F analyze
F showpk	F applypostprocessors
F reencode	F checkedmode
F setfeatures	F checkedscript
N version	S defaultlookup
T vf	F define
T combinations	F getspecification
F combine	F internal
T combiner	F loadfont
D commands	F makespecification
D helpers	T methods
D math	F install
N version	D variants
D whatever	F read
F hashfeatures	F register
F hashinstance	F registered
T hashmethods	F registerfallbackfont
F normal	F registersplit
F virtual	F resetnullfont
F initializefeatures	F resolve
D loadedfonts	T resolvers
N noffontsloaded	F file
N nosharedfonts	F name
N nosharedhashes	F spec
N nosharedvectors	<b>definetypeface</b> function
N privateoffset	<b>dropins</b> table
D privateslots	F clone
F readanddefine	F getshape
F registerfeature	F getshapes
F resetfeature	F nextid
B resolvevirtualtoo	F provide
F scale	F registerglyph
F scaled	F registerglyphs
F setfactor	F swap
F setfeature	F swapone
F setmathparameter	<b>encodings</b> table
F setname	T agl
B sharefonts	D ctxcodes
F trytosharefont	D extras

D names	T *:0x1D449
D synonyms	T bottomright
D unicodes	S name
D cache	S version
F is_known	D designsizes
D known	D filenames
F load	F getcompositions
F make_unicode_vector	T list
D math	F load
N version	F prepare_features
<b>enhanceid</b>	function
<b>expansions</b>	data table
<b>formats</b>	data table
<b>getalternate</b>	function
<b>getindices</b>	function
<b>getkern</b>	function
<b>getmultiple</b>	function
<b>getsubstitution</b>	function
<b>getters</b>	table
T alternate	
F opentype	
T kern	
F opentype	
F type1	
F type3	
T multiple	
F opentype	
T substitution	
F opentype	
<b>goodies</b>	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	
	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 unislots
<b>handlers</b>	table
<b>hashes</b>	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 unislots

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

<b>privateoffsets</b>	table	F mathfallback D methods D presets F registerfallback F registerfiles F registerfontalternative F registerfontfamily F textfallback F typeface F typescript F userdata
<b>protrusions</b>	data table	
<b>readers</b>	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		
<b>reserveid</b>	function	
<b>select</b>	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
<b>symbols</b>	table	T emoji F checked F resolved F uselibrary
<b>tables</b>	table	
<b>tracers</b>	table	
<b>treatments</b>	table	F applyfixes D data S filename F ignoredfile F report F trace
<b>typefaces</b>	table	

## functions (context)

**dummy** function

# graphics (context)

**backgrounds** table

- F fetchmultipar
- F pair
- F path
- F point

**bitmaps** table

- F flush
- F new
- F placeholder
- F tocontext

**identifiers** table

- F bitmap
- F jp2
- F jpg
- F png

**identify** function

**synchronizers** table

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

## gzip (extra lua)

**compress**    function  
**compressed**    function  
**decompress**    function

**load**        function  
**save**        function  
**suffix**        function

## images (context)

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

# interactions (context)

<b>attachments</b>	data table	D functions
<b>fields</b>	table	D preambles
F clone		F setpreamble
F define		F storecode
F defineset		F storepreamble
F insert		F usepreamblenow
<b>general</b>	table	F usescripts
F getidentity		<b>linkedlists</b> data table
F getidentityvariable		<b>pages</b> table
<b>help</b>	table	F setpagetransition
F collect		F setupcanvas
F reference		<b>references</b> table
F register		F setclosedocument
<b>javascripts</b>	table	F setclosepage
F addtopreamble		F setopendocument
F code		F setopenpage
D codes		<b>renderings</b> data table
F flushpreambles		<b>soundclips</b> data table

# interfaces (context)

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

## io (basic lua)

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

# job (context)

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

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

## language (basic tex)

<b>clean</b>	function	<b>id</b>	function
<b>clearhyphenation</b>	function	<b>new</b>	function
<b>clearpatterns</b>	function	<b>patterns</b>	function
<b>current</b>	function	<b>postexhyphenchar</b>	function
<b>gethjcode</b>	function	<b>posthyphenchar</b>	function
<b>has_language</b>	function	<b>preehyphenchar</b>	function
<b>hyphenate</b>	function	<b>prehyphenchar</b>	function
<b>hyphenation</b>	function	<b>sethjcode</b>	function
<b>hyphenationmin</b>	function	<b>setwordhandler</b>	function

# languages (context)

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

F set		<b>words</b>	table
<b>unload</b>	function	F check	
<b>urls</b>	table	T data	
D characters		F disable	
N lefthyphenmin		F enable	
D mapping		T enablers	
B packslashes		B enables	
N righthyphenmin		F found	
F setcharacters		F load	
<b>version</b>	number	T methods	
<b>visualizeddiscretionaries</b>	function	N threshold	

# layouts (context)

**getcanvas**      function  
**getpagedimensions**      function  
**setupcanvas**      function

**status**      table  
F isleftpage  
F leftorrightpageaction

## lfs (extra lua)

<b>attributes</b>	overloaded function	<b>iswriteablefile</b>	function
<b>chdir</b>	overloaded function	<b>link</b>	overloaded function
<b>currentdir</b>	function	<b>mkdir</b>	overloaded function
<b>dir</b>	overloaded function	<b>mkdirs</b>	function
<b>isdir</b>	overloaded function	<b>modification</b>	function
<b>isfile</b>	overloaded function	<b>readlink</b>	function
<b>isfound</b>	function	<b>rmdir</b>	overloaded function
<b>isreadabledir</b>	function	<b>setexecutable</b>	function
<b>isreadablefile</b>	function	<b>symlink</b>	function
<b>iswriteabledir</b>	function	<b>touch</b>	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)

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

## logs (context)

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

# lpdf (context)

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

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

<b>objectcompresslevel</b>	function	T dejavusansmonoboldttf-1
<b>pagerefERENCE</b>	function	T characters
<b>patternstream</b>	function	T descriptions
<b>pdfcolor</b>	function	T fonts
<b>pdftimestamp</b>	function	T goodies
<b>pdfvfimage</b>	function	S original
<b>permitdetail</b>	function	T parameters
<b>print</b>	function	N ascender
<b>procset</b>	function	N descender
<b>protectresources</b>	boolean	N designsize
<b>rectangle</b>	function	T expansion
<b>reference</b>	function	N shrink
<b>registerannotation</b>	function	N step
<b>registerdestination</b>	function	N stretch
<b>registerdocumentfinalizer</b>	function	N extendfactor
<b>registerfont</b>	function	N extra_space
<b>registerpagefinalizer</b>	function	N extrafactor
<b>registerpattern</b>	function	N factor
<b>reserveobject</b>	function	N forcedsize
<b>rgbcode</b>	function	N hfactor
<b>rotationcm</b>	function	N mathsize
<b>setcompression</b>	function	N maxsize
<b>setincludecidset</b>	function	N minsize
<b>setpageorder</b>	function	N mode
<b>setpagetag</b>	function	N quad
<b>settime</b>	function	N scaledpoints
<b>setversion</b>	function	N size
<b>sharedobject</b>	function	N slant
<b>shareobject</b>	function	N slantfactor
<b>shareobjectreference</b>	function	N space
<b>spotcode</b>	function	N space_shrink
<b>stream</b>	function	N space_stretch
<b>string</b>	function	N squeezefactor
<b>toeight</b>	function	N textsize
<b>topdfdoc</b>	function	N units
<b>tosixteen</b>	function	N vfactor
<b>transparency</b>	function	N width
<b>transparencycode</b>	function	N x_height
<b>transparencygroups</b>	table	T properties
B none		S filename
<b>transparencyvalue</b>	function	B finalized
<b>unicode</b>	function	S fontname
<b>usedcharacters</b>	table	S format
<b>usedfontstreams</b>	table	S fullname

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

T *	N Dcroft
B *	N Delta
T uppercasing	N Dieresis
T *	N E
B *	N Eacute
S filename	N Ebreve
S foundfilename	N Ecaron
T foundtables	N Ecircumflex
T markclasses	N Edieresis
T marks	N Edotaccent
T marksets	N Egrave
N private	N Emacron
T sequences	N Eng
T sublookups	N Eng.alt
T unicodes	N Eogonek
N .null	N Epsilon
N A	N Epsilontonos
N AE	N Eta
N AEacute	N Etatonos
N Aacute	N Eth
N Abreve	N Euro
N Acircumflex	N F
N Acute	N G
N Adieresis	N Gamma
N Agrave	N Gbreve
N Alpha	N Gcaron
N Alphatonos	N Gcircumflex
N Amacron	N Gcommaaccent
N Aogonek	N Gdotaccent
N Aring	N Grave
N Atilde	N H
N B	N Hbar
N Beta	N Hcircumflex
N C	N I
N Cacute	N IJ
N Caron	N Iacute
N Ccaron	N Ibreve
N Ccedilla	N Icircumflex
N Ccircumflex	N Idieresis
N Cdotaccent	N Idotaccent
N Chi	N Igrave
N Circumflex	N Imacron
N D	N Iogonek
N Dcaron	N Iota

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

N Ydieresis	N arrowup
N Ygrave	N arrowupdn
N Z	N arrowupdnse
N Zacute	N asciicircum
N Zcaron	N asciitilde
N Zdotaccent	N asterisk
N Zeta	N asteriskmath
N a	N at
N aacute	N atilde
N abreve	N b
N acircumflex	N backslash
N acute	N bar
N acutecomb	N beta
N adieresis	N block
N ae	N braceleft
N aeacute	N braceright
N agrave	N bracketleft
N alpha	N bracketright
N alphanos	N breve
N amacron	N brokenbar
N ampersand	N bullet
N angle	N c
N anoteleia	N cacute
N aogonek	N caron
N approxequal	N carriagereturn
N arabic_2dots	N ccaron
N arabic_2dots_a	N ccedilla
N arabic_3dots	N ccircumflex
N arabic_3dots_a	N cdotaccent
N arabic_4dots	N cedilla
N arabic_dot	N cent
N arabic_gaf_bar	N chi
N arabic_gaf_bar_a	N circle
N arabic_ring	N circlemultiply
N aring	N circleplus
N arrowboth	N circumflex
N arrowdblboth	N club
N arrowdbldown	N colon
N arrowdbbleft	N colonmonetary
N arrowdblright	N comma
N arrowdblup	N congruent
N arrowdown	N copyright
N arrowleft	N currency
N arrowright	N d

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

N i	N lslash
N iacute	N ltshade
N ibreve	N m
N icircumflex	N macron
N idieresis	N male
N igrave	N minus
N ij	N minute
N imacron	N mu
N infinity	N multiply
N integral	N musicalnote
N integralbt	N musicalnotedb1
N integraltp	N n
N intersection	N nacute
N invbullet	N napostrophe
N invcircle	N ncaron
N invsmileface	N ncommaaccent
N iogonek	N nine
N iota	N nonbreakingspace
N iotadieresis	N nonmarkingreturn
N iotadieresistonos	N notdef
N iotatonos	N notelement
N itilde	N notequal
N j	N notsubset
N jcircumflex	N ntilde
N jot	N nu
N k	N numbersign
N kappa	N o
N kcommaaccent	N oacute
N kgreenlandic	N obreve
N l	N ocircumflex
N lacute	N odieresis
N lambda	N oe
N lcaron	N ogonek
N lcommaaccent	N ograve
N ldot	N ohorn
N less	N ohungarumlaut
N lessequal	N omacron
N lfblock	N omega
N lira	N omegal
N logicaland	N omegatonos
N logicalnot	N omicron
N logicalor	N omicrontonos
N longs	N one
N lozenge	N oneeighth

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

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

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

N extra_space	S fullname	
N italicangle	B hasmath	
N maxsize	N id	
N minsize	S mode	
N quad	B monospaced	
N slant	S name	
N space	N private	
N space_shrink	S psname	
N space_stretch	B setitalics	
N units	S space	
N vheight	N subfont	
N x_height	S writingmode	
T properties	<b>usedindices</b>	table
S filename	T dejavusansmonoboldttf-1	
S fontname	<b>verbose</b>	function
S format		

# lpeg (basic lua)

B	function	firstofssplit	function
C	function	frontstripper	function
Carg	function	instrchecker	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	secondofssplit	function
UP	function	setmaxstack	function
UR	function	setutfcasers	function
US	function	split	function
V	function	splitat	function
afterprefix	function	splitter	function
anywhere	function	stripper	function
append	function	times	function
balancer	function	tsplitat	function
beforesuffix	function	tsplitter	function
checkedsplit	function	type	function
containsws	function	utfchartabletopattern	function
counter	function	utfreplacer	function
endstripper	function	version	function
finder	function		

# lua (basic tex)

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

## luac (context)

**inspect** function  
**print** function

# luatex (context)

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

# lxml (context)

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

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

## math (basic lua)

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

# mathematics (context)

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

## md5 (extra lua)

<b>HEX</b>	function	<b>sum</b>	function
<b>dec</b>	function	<b>sumHEXA</b>	function
<b>hex</b>	function	<b>sumhexa</b>	function

# metapost (context)

<b>checkformat</b>	function	N nullary
<b>checktracingonline</b>	function	N numeric
<b>cm</b>	function	N of
<b>codes</b>	table	N ofbinary
N addto		N parametertype
N ampersand		N pathjoin
N and		N plusorminus
N assignment		N primarybinary
N atleast		N primarydef
N begingroup		N property
N btex		N protection
N capsule		N randomseed
N colon		N relax
N comma		N repeatloop
N controls		N rightbrace
N curl		N rightbracket
N cycle		N rightdelimter
N definedmacro		N runscript
N delimiters		N save
N endgroup		N scantokens
N equals		N secondarybinary
N etex		N secondarydef
N everyjob		N semicolon
N exittest		N setbounds
N expandafter		N shipout
N fiorelse		N show
N if		N slash
N input		N step
N interim		N stop
N internal		N str
N iteration		N string
N leftbrace		N tag
N leftbracket		N tension
N leftdelimter		N tertiarybinary
N let		N tertiarydef
N macrodef		N thingstoadd
N macrospecial		N to
N maketext		N typename
N message		N unary
N mode		N undefinedcs
N newinternal		N until

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

<b>reset</b>	function	<b>svgtomp</b>	function
<b>resetlastlog</b>	function	<b>svgtopdf</b>	function
<b>resetplugins</b>	function	<b>sxsy</b>	function
<b>run</b>	function	<b>tex</b>	table
<b>runinternal</b>	function	F get	
<b>runscript</b>	function	F reset	
<b>scanparameters</b>	function	F set	
<b>scripterror</b>	function	F setfrombuffer	
<b>scriptindex</b>	function	<b>texerrors</b>	boolean
<b>setbendtolerance</b>	function	<b>texexp</b>	function
<b>setextensions</b>	function	<b>theclippath</b>	function
<b>setlogging</b>	function	<b>tographic</b>	function
<b>setoutercolor</b>	function	<b>totable</b>	function
<b>setparameterset</b>	function	<b>types</b>	table
<b>setrecord</b>	function	N boolean	
<b>settext</b>	function	N cmykcolor	
<b>setvariable</b>	function	N color	
<b>showlog</b>	boolean	N dependent	
<b>showvgpage</b>	function	N independent	
<b>simple</b>	function	N known	
<b>splitprescript</b>	function	N numeric	
<b>startgraphic</b>	function	N pair	
<b>startsvghashing</b>	function	N path	
<b>stopgraphic</b>	function	N pen	
<b>stopsvghashing</b>	function	N picture	
<b>svformat</b>	function	N protodependent	
<b>svgcolorremapper</b>	function	N string	
<b>svgfactors</b>	table	N structured	
N %		N suffixedmacro	
N bp		N tokenlist	
N cm		N transform	
N em		N unknownboolean	
N ex		N unknownpath	
N in		N unknownpen	
N mm		N unknownpicture	
N pc		N unknownstring	
N pt		N unsuffixedmacro	
N px		N vacuous	
<b>svgglyphtomp</b>	function	<b>typesvgpage</b>	function
<b>svgshapestomp</b>	function	<b>unload</b>	function
<b>svgshapestopdf</b>	function	<b>untagvariable</b>	function
<b>svgsplitcolor</b>	function	<b>variables</b>	table

## **mime** (extra lua)

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

# mp (context)

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

<b>lmt_contours_nofvalues</b>	function	<b>number</b>	function
<b>lmt_contours_nx</b>	function	<b>numeric</b>	function
<b>lmt_contours_ny</b>	function	<b>pair</b>	function
<b>lmt_contours_range</b>	function	<b>pairpoints</b>	function
<b>lmt_contours_shade_paths</b>	function	<b>path</b>	function
<b>lmt_contours_shade_set</b>	function	<b>pathpoints</b>	function
<b>lmt_contours_shape_paths</b>	function	<b>points</b>	function
<b>lmt_contours_start</b>	function	<b>print</b>	function
<b>lmt_contours_stop</b>	function	F boolean	
<b>lmt_contours_value</b>	function	F color	
<b>lmt_contours_xrange</b>	function	F direct	
<b>lmt_contours_yrange</b>	function	F draw	
<b>lmt_function_x</b>	function	F fill	
<b>lmt_mesh_set</b>	function	F flush	
<b>lmt_mesh_update</b>	function	F fprintf	
<b>lmt_poisson_generate</b>	function	F integer	
<b>lmt_surface_do</b>	function	F number	
<b>lmt_svg_include</b>	function	F numeric	
<b>mf_blob_add</b>	function	F pair	
<b>mf_blob_dimensions</b>	function	F pairpoints	
<b>mf_blob_index</b>	function	F path	
<b>mf_blob_new</b>	function	F pathpoints	
<b>mf_blob_raw_content</b>	function	F points	
<b>mf_blob_raw_dimensions</b>	function	F print	
<b>mf_blob_raw_reset</b>	function	F quadruple	
<b>mf_blob_raw_toutf</b>	function	F quadrupolepoints	
<b>mf_blob_raw_wipe</b>	function	F quoted	
<b>mf_blob_size</b>	function	F size	
<b>mf_blob_width</b>	function	F string	
<b>mf_external_figure</b>	function	F transform	
<b>mf_finish_saving_data</b>	function	F triplet	
<b>mf_formatted_text</b>	function	F tripletpoints	
<b>mf_get_outline_text</b>	function	F vprint	
<b>mf_graphic_text</b>	function	<b>quadruple</b>	function
<b>mf_inject_blob</b>	function	<b>quadrupolepoints</b>	function
<b>mf_map_move</b>	function	<b>quoted</b>	function
<b>mf_map_text</b>	function	<b>report</b>	function
<b>mf_named_color</b>	function	<b>scan</b>	table
<b>mf_outline_text</b>	function	F boolean	
<b>mf_save_data</b>	function	F cmykcolor	
<b>mf_script_index</b>	function	F color	
<b>mf_start_saving_data</b>	function	F expression	
<b>mf_stop_saving_data</b>	function	F integer	
<b>n</b>	function	F next	

F number		F whatever	
F numeric	<b>set</b>		table
F pair	<b>size</b>		function
F path	<b>skip</b>		table
F pen		F token	
F property	<b>solve</b>		function
F string	<b>string</b>		function
F symbol	<b>transform</b>		function
F token	<b>triplet</b>		function
T tokenscanners	<b>tripletpoints</b>		function
F transform	<b>vprint</b>		function
T typescanners			

## mplib (extra tex)

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

# noads (context)

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

## node (basic tex)

<b>checkdiscretionaries</b>	function	F flushlist
<b>checkdiscretionary</b>	function	F flushnode
<b>copy</b>	function	F free
<b>copy_list</b>	function	F get_attribute
<b>copylist</b>	function	F get_attributes
<b>count</b>	function	F getattribute
<b>current_attributes</b>	function	F getattributelist
<b>currentattributes</b>	function	F getattributes
<b>dimensions</b>	function	F getboth
<b>direct</b>	table	F getbox
F addmargins		F getchar
F addxoffset		F getcharspec
F addxymargins		F getdata
F addyoffset		F getdepth
F appendaftertail		F getdirection
F checkdiscretionaries		F getdisc
F checkdiscretionary		F getdiscpart
F collapsing		F getexpansion
F copy		F getfam
F copy_list		F getfield
F copylist		F getfont
F copyonly		F getglue
F count		F getglyphdata
F current_attributes		F getglyphdimensions
F currentattributes		F getheight
F dimensions		F getid
F effective_glue		F getindex
F effectiveglue		F getkern
F end_of_math		F getkerndimension
F endofmath		F getlanguage
F exchange		F getleader
F fields		F getlist
F find_node		F getnext
F findattribute		F getnormalizedline
F findattributerange		F getnucleus
F findnode		F getoffsets
F first_glyph		F getoptoptions
F firstglyph		F getorientation
F flattendiscretionaries		F getparstate
F flush_list		F getpenalty
F flush_node		F getpost

F getpre	F ischar
F getprev	F isglyph
F getpropertiestable	F isnextchar
F getproperty	F isnextglyph
F getreplace	F isnode
F getscale	F isprevchar
F getscales	F isprevglyph
F getscript	F isvalid
F getshift	F iszero glue
F getstate	F kerning
F getsub	F length
F getsubpre	F ligaturing
F getsubtype	F makeextensible
F getsup	F migrate
F getsuppre	F mlist_to_hlist
F getsynctexfields	F mlisttohlist
F gettotal	F naturalhsize
F getwhd	F naturalwidth
F getwidth	F new
F getwordrange	F patchattributes
F getxscale	F prependbeforehead
F getxyscales	F protect_glyph
F getyscale	F protect_glyphs
F has_attribute	F protectglyph
F has_field	F protectglyphs
F has_glyph	F protrusionskippable
F hasattribute	F rangedimensions
F hasdimensions	F remove
F hasfield	F reverse
F hasglyph	F set_attribute
F hasglyphoption	F set_attributes
F hpack	F setattribute
F hyphenating	F setattributelist
F id	F setattributes
F ignoremathskip	F setboth
F insert_after	F setbox
F insert_before	F setchar
F insertafter	F setdata
F insertbefore	F setdepth
F is_char	F setdirection
F is_glyph	F setdisc
F is_node	F setdiscpart
F is_valid	F setexpansion
F is_zero_glue	F setfam

F setfield	F tonode
F setfont	F tostring
F setglue	F tovaliddirect
F setglyphdata	F traverse
F setheight	F traverse_char
F setindex	F traverse_content
F setkern	F traverse_glyph
F setlanguage	F traverse_id
F setleader	F traverse_list
F setlink	F traversechar
F setlist	F traversecontent
F setnext	F traverseglyph
F setnucleus	F traverseid
F setoffsetsets	F traverselist
F setoptions	F type
F setorientation	F types
F setpenalty	F unprotect_glyph
F setpost	F unprotect_glyphs
F setpre	F unprotectglyph
F setprev	F unprotectglyphs
F setproperty	F unset_attribute
F setreplace	F unset_attributes
F setscales	F unsetattribute
F setscript	F unsetattributes
F setshift	F usedlist
F setsplit	F uses_font
F setstate	F usesfont
F setsub	F values
F setsubpre	F verticalbreak
F setsubtype	F vpack
F setup	F write
F setsuppre	F xscaled
F setsynctexfields	F yscaled
F settotal	<b>effective_glue</b> function
F setwhd	<b>effectiveglue</b> function
F setwidth	<b>end_of_math</b> function
F show	<b>endofmath</b> function
F slide	<b>family_font</b> function
F softenhyphens	<b>fields</b> function
F start_of_par	<b>findattribute</b> function
F startofpar	<b>first_glyph</b> function
F subtypes	<b>firstglyph</b> function
F tail	<b>flattendiscretionaries</b> function
F todirect	<b>flush_list</b> function

<b>flush_node</b>	function	<b>mlisttohlist</b>	function
<b>flushlist</b>	function	<b>new</b>	function
<b>flushnode</b>	function	<b>protect_glyph</b>	function
<b>free</b>	function	<b>protect_glyphs</b>	function
<b>get_attribute</b>	function	<b>protectglyph</b>	function
<b>getattribute</b>	function	<b>protectglyphs</b>	function
<b>getfield</b>	function	<b>protrusionskippable</b>	function
<b>getglue</b>	function	<b>rangedimensions</b>	function
<b>getpropertiestable</b>	function	<b>remove</b>	function
<b>getproperty</b>	function	<b>set_attribute</b>	function
<b>has_attribute</b>	function	<b>setattribute</b>	function
<b>has_field</b>	function	<b>setfield</b>	function
<b>has_glyph</b>	function	<b>setglue</b>	function
<b>hasattribute</b>	function	<b>setProperty</b>	function
<b>hasfield</b>	function	<b>show</b>	function
<b>hasglyph</b>	function	<b>slide</b>	function
<b>hpack</b>	function	<b>subtypes</b>	function
<b>hyphenating</b>	function	<b>tail</b>	function
<b>id</b>	function	<b>tostring</b>	function
<b>insert_after</b>	function	<b>traverse</b>	function
<b>insert_before</b>	function	<b>traverse_id</b>	function
<b>insertafter</b>	function	<b>traverseid</b>	function
<b>insertbefore</b>	function	<b>type</b>	function
<b>instock</b>	function	<b>types</b>	function
<b>inuse</b>	function	<b>unprotect_glyph</b>	function
<b>is_node</b>	function	<b>unprotect_glyphs</b>	function
<b>is_zero_glue</b>	function	<b>unprotectglyph</b>	function
<b>isnode</b>	function	<b>unprotectglyphs</b>	function
<b>iszeroglue</b>	function	<b>unset_attribute</b>	function
<b>kerning</b>	function	<b>unsetattribute</b>	function
<b>last_node</b>	function	<b>usedlist</b>	function
<b>lastnode</b>	function	<b>usesfont</b>	function
<b>length</b>	function	<b>values</b>	function
<b>ligaturing</b>	function	<b>vpack</b>	function
<b>makeextensible</b>	function	<b>write</b>	function
<b>mlist_to_hlist</b>	function		

# nodes (context)

<b>accentcodes</b>	data table	<b>fields</b>	function
<b>aligned</b>	function	<b>fieldtypes</b>	table
<b>append</b>	function	<b>fillcodes</b>	data table
<b>apply</b>	function	<b>fillvalues</b>	data table
<b>applyvisuals</b>	function	<b>firstcharacter</b>	function
<b>astable</b>	function	<b>firstcharinbox</b>	function
<b>basepoints</b>	function	<b>firstdirinbox</b>	function
<b>boundarycodes</b>	data table	<b>flush</b>	function
<b>boxes</b>	table	<b>flush_list</b>	function
F count		<b>flush_node</b>	function
F dimensions		<b>flushlist</b>	function
F direct		<b>flushnode</b>	function
F dispose		<b>fullhpack</b>	function
F found		<b>getattr</b>	function
F reset		<b>getattribute</b>	function
F restore		<b>getboth</b>	function
F save		<b>getbox</b>	function
F savenode		<b>getchar</b>	function
<b>builders</b>	table	<b>getfield</b>	function
F buildpage_filter		<b>getfont</b>	function
F vpack_filter		<b>getid</b>	function
<b>concat</b>	function	<b>getleader</b>	function
<b>copy</b>	function	<b>getlist</b>	function
<b>copy_list</b>	function	<b>getnext</b>	function
<b>copylist</b>	function	<b>getprev</b>	function
<b>countall</b>	function	<b>getproperty</b>	function
<b>current_attributes</b>	function	<b>getsubtype</b>	function
<b>currentattributes</b>	function	<b>gluecodes</b>	data table
<b>delete</b>	function	<b>glyphcodes</b>	data table
<b>destinations</b>	table	<b>handlers</b>	table
N attribute		F accessibility	
T done		F aligncharacter	
F handler		F backgrounds	
T stack		F backgroundspage	
<b>dircodes</b>	data table	F backgroundsvbox	
<b>directioncodes</b>	data table	F characters	
<b>directionvalues</b>	data table	F checkglyphs	
<b>dirvalues</b>	data table	F checkparcounter	
<b>discpcodes</b>	data table	F cleanupbox	
<b>discretionarycodes</b>	data table	F cleanuppage	
<b>fencecodes</b>	data table	F export	

F finalizebox		<b>installattributehandler</b>	function
F finalizelist		<b>is_display_math</b>	function
F flatten		<b>is_node</b>	function
F flattenline		<b>isnode</b>	function
F migrate		<b>kerncodes</b>	data table
F protectglyphs		<b>leftmarginwidth</b>	function
F recolor		<b>linefillers</b>	table
F show		D data	
F showhyphenation		F define	
F stripping		F enable	
F textbackgrounds		F filler	
F unprotectglyphs		F handler	
F visualizehyphenation		<b>lines</b>	table
F wipe		T boxed	
<b>has_attribute</b>	function	F addlinenumbers	
<b>has_field</b>	function	F register	
<b>hasattribute</b>	function	F setup	
<b>hasfield</b>	function	D data	
<b>hpack</b>	function	F finalize	
<b>idsandsubtypes</b>	function	F number	
<b>idstostring</b>	function	<b>link</b>	function
<b>injections</b>	table	<b>linked</b>	function
F copy		<b>list</b>	function
F getligaindex		<b>listcodes</b>	data table
F getthreshold		<b>listtoutf</b>	function
F handler		<b>literalvalues</b>	data table
F installgetspaceboth		<b>locate</b>	function
F installnewkern		<b>markers</b>	table
F isspace		F get	
F keepcounts		<b>mathcodes</b>	data table
F reset		<b>mathvalues</b>	data table
F resetcounts		<b>maxboxwidth</b>	function
F setcursive		<b>migrations</b>	table
F setkern		F setinserts	
F setligaindex		F setmarks	
F setmark		<b>new</b>	function
F setmove		<b>noadcodes</b>	data table
F setposition		<b>noadoptions</b>	table
F setspacekerns		N axis	
<b>insert_after</b>	function	N exact	
<b>insert_before</b>	function	N left	
<b>insertafter</b>	function	N middle	
<b>insertbefore</b>	function	N no_axis	
<b>insertlistafter</b>	function	N right	

N set	F end_of_math
N unused_1	F endofmath
N unused_2	F exchange
<b>nodecodes</b>	<b>data table</b>
<b>nopts</b>	<b>function</b>
<b>nuts</b>	<b>table</b>
F addmargins	F find_attribute
F addxoffset	F findattribute
F addxymargins	F findnode
F addyoffset	F first_glyph
F append	F firstcharacter
F appendaftertail	F firstcharinbox
F apply	F firstglyph
F applyvisuals	F flattendiscretionaries
F checkdiscretionaries	F flush
F collapsing	F flush_list
T colors	F flush_node
F set	F flushlist
T components	F flushnode
F copynocomponents	F free
F copyonlyglyphs	F fullhpack
F count	F get_attribute
F flush	F get_synctex_fields
F get	F getattr
F set	F getattribute
F concat	F getattributelist
F copy	F getattributes
F copy_list	F getattrlist
F copy_node	F getattrs
F copy_only	F getboth
F copy_properties	F getbox
F copylist	F getboxglue
F copynode	F getchar
F copyonly	F getcharspec
F copyvisual	F getcomponents
F count	F getdata
F countall	F getdepth
F current_attr	F getdirection
F currentattributes	F getdisc
F delete	F getdiscpart
F dimensions	F getdiscretionary
F dirdimensions	F getexpansion
F effective_glue	F getfam
F effectiveglue	F getfield
	F getfont
	F getglue
	F getglyphdata

F getglyphdimensions	F has_attribute
F getheight	F has_dimensions
F getid	F has_field
F getindex	F has_glyph
F getkern	F hasattribute
F getkerndimension	F hasdimensions
F getlang	F hasfield
F getlanguage	F hasglyph
F getleader	F hasglyphoption
F getlist	F hpack
F getnext	F hyphenating
F getnormalizedline	F ignoremathskip
F getnucleus	F insert_after
F getoffsetsets	F insert_before
F getoptions	F insertafter
F getorientation	F insertbefore
F getparstate	F insertlistafter
F getpenalty	F is_display_math
F getpost	F is_node
F getpre	F is_zero_glue
F getprev	F ischar
F getprop	F isdone
F getreplace	F isglyph
F getruledata	F isnextchar
F getscale	F isnextglyph
F getscales	F isnode
F getscript	F isprevchar
F getshift	F isprevglyph
F getstate	F iszero glue
F getsub	F kerning
F getsubpre	F length
F getsubtype	F ligaturing
F getsup	F link
F getsuppre	F linked
F getsurround	F locate
F getsynctexfields	F migrate
F gettotal	F mlist_to_hlist
F getvalue	F mlisttohlist
F getwhd	F naturalhsize
F getwidth	F naturalwidth
F getwordrange	F nestedtracedslide
F getxscale	F new
F getxyscales	F patchattributes
F getyscale	T pool

F accent	F save
F baselineskip	F savepos
F boundary	F setmatrix
F choice	F setstate
F cleanup	F shrink
F delim	F startrotation
F delimiter	F stock
F direction	F stretch
F directliteral	F subbox
F disc	F submlist
F emptyrule	F temp
F fence	F usage
F fontkern	F userdefined
F fraction	T userids
F glue	F usernode
F glucspec	F userrule
F glyph	F vlist
F hlist	F wordboundary
F indentskip	F prepend
F italic kern	F prependbeforehead
F kern	F processranges
F latelua	F processwords
F leader	F protect_glyph
F lefthangskip	F protect_glyphs
F leftmarginkern	F protectglyph
F leftskip	F protectglyphs
F lineskip	F protrusionskippable
F literal	F rangedimensions
F mathchar	F rawprop
F mathtextchar	F reference
F negatedglue	F rehpack
F noad	F remove
F originliteral	F repackhlist
F outlinerule	F replace
F pageliteral	F reverse
F penalty	T rules
F radical	T ruleactions
F rawliteral	F box
F register	F draw
F restore	F fill
F righthangskip	F mp
F rightmarginkern	F stroke
F rightskip	F userrule
F rule	F set_attribute

F setattr	F setscales
F setattribute	F setscript
F setattributelist	F setshift
F setattributes	F setsplit
F setattrlist	F setstate
F setattrs	F setsub
F setboth	F setsupre
F setbox	F setsubtype
F setboxglue	F setsup
F setchar	F setsupre
F setcomponents	F setsurround
F setdata	F setsynctexfields
F setdepth	F setvalue
F setdirection	F setvisual
F setdisc	F setvisuals
F setdiscpart	F setwhd
F setdiscretionary	F setwidth
F setexpansion	F show
F setfam	F slide
F setfield	F softenhypens
F setfont	F somepenalty
F setglue	F somespace
F setglyphdata	F splitbox
F setheight	F start_of_par
F setkern	F startofpar
F setlang	F striprange
F setlanguage	F tail
F setleader	F takeattr
F setlink	F takebox
F setlist	F takelist
F setnext	F theprop
F setnucleus	F tonode
F setoffsetsets	F tonodes
F setoptions	F tonut
F setorientation	F tosequence
F setparproperty	F tostring
F setpenalty	F tracedslide
F setpost	F traverse
F setpre	F traverse_char
F setprev	F traverse_glyph
F setprop	F traverse_id
F setreplace	F traverse_list
F setruledata	F traversechar
F setscale	F traversecontent

F traverseglyph	F vianuts
F traverseid	F vpack
F traverselist	F write
T traversers	F xscaled
F alignrecord	F yscaled
F boundary	<b>packlist</b> function
F char	<b>parcodes</b> data table
F content	<b>penaltycodes</b> data table
F dir	<b>plugindata</b> table
F disc	F finalizer
F glue	F initializer
F glyph	S name
F hlist	T namespace
F list	N attribute
F next	D data
F node	F enable
F unset	F handler
F vlist	F register
F whatsit	D registered
T traversers	D values
F char	F processor
F content	<b>points</b> function
F glyph	<b>pool</b> table
F list	F baselineskip
F node	F cleanup
T typesetters	F directliteral
F tobbox	F glyph
F tohpack	F hlist
F tonodes	F latelua
F tovbox	F lineskip
F tovpack	F literal
F unprotect_glyph	F originliteral
F unprotect_glyphs	F register
F unprotectglyph	F restore
F unprotectglyphs	F rule
F unset_attribute	F save
F unsetattribute	F savepos
F unsetattributes	F setmatrix
F untracedslide	F stock
F usedlist	F usage
F uses_font	F usernode
F usesfont	F vlist
F verticalbreak	<b>prepend</b> function
F vianodes	<b>print</b> function

<b>processors</b>	table	<b>setlist</b>	function
F alignment_filter		<b>setnext</b>	function
F contribute_filter		<b>setprev</b>	function
F glyph_run		<b>setProperty</b>	function
F post_linebreak_filter		<b>shifts</b>	table
F pre_linebreak_filter		D data	
F trace_glyph_run_a		F define	
F trace_glyph_run_b		F enable	
<b>properties</b>	table	F handler	
T data		<b>showboxes</b>	function
<b>pts</b>	function	<b>showlist</b>	function
<b>radicalcodes</b>	data table	<b>showsimplelist</b>	function
<b>references</b>	table	<b>skipcodes</b>	data table
N attribute		<b>snapshots</b>	table
T done		F getsamples	
F handler		F resetsamples	
T stack		F takesample	
<b>repack</b>	function	<b>somepenalty</b>	function
<b>remove</b>	function	<b>somespace</b>	function
<b>repackhlist</b>	function	<b>specialskipcodes</b>	table
<b>replace</b>	function	<b>splitbox</b>	function
<b>report</b>	function	<b>startofpar</b>	function
<b>rightmarginwidth</b>	function	<b>stripdiscretionaries</b>	function
<b>rulecodes</b>	data table	<b>stripping</b>	table
<b>rules</b>	table	T glyphs	
D data		F set	
F define		<b>subtypes</b>	data table
F enable		<b>tail</b>	function
F handler		<b>takeattr</b>	function
F process		<b>takebox</b>	function
F userrule		<b>tasks</b>	table
<b>serialize</b>	function	F actions	
<b>serializebox</b>	function	F appendaction	
<b>set_attribute</b>	function	F disableaction	
<b>setattr</b>	function	F disablegroup	
<b>setattribute</b>	function	F enableaction	
<b>setboth</b>	function	F enablegroup	
<b>setbox</b>	function	F freeze	
<b>setboxtonaturalwd</b>	function	F freezegroup	
<b>setchar</b>	function	F new	
<b>setfield</b>	function	F prependaction	
<b>setfont</b>	function	F removeaction	
<b>setleader</b>	function	F replaceaction	
<b>setlink</b>	function	F restart	

F setaction		F font	
F showactions		F glyphs	
F table		F message	
<b>tobasepoints</b>	function	F messages	
<b>tocentimeters</b>	function	F nofsteps	
<b>tociceros</b>	function	F register	
<b>todidots</b>	function	F reset	
<b>todimen</b>	function	F start	
<b>toinches</b>	function	F stop	
<b>tomillimeters</b>	function	F stop	
<b>tonode</b>	function	T transparencies	
<b>tonodes</b>	function	F reset	
<b>tonut</b>	function	F set	
<b>topicas</b>	function	F setlist	
<b>topoints</b>	function	<b>traverse</b>	function
<b>toscaledpoints</b>	function	<b>traverse_id</b>	function
<b>tosequence</b>	function	<b>traverseid</b>	function
<b>tostring</b>	function	<b>typesetters</b>	table
<b>totable</b>	function	F hbox	
<b>totree</b>	function	F hpack	
<b>toutf</b>	function	F tohbox	
<b>tracers</b>	table	F tohpack	
T colors		F tonodes	
F reset		F tovbox	
F set		F tovpack	
F setlist		F vpack	
F directions		<b>unset_attribute</b>	function
F fontchar		<b>unsetattribute</b>	function
T frequencies		<b>usedlist</b>	function
F register		<b>vianodes</b>	function
T pool		<b>vianuts</b>	function
T nodes		<b>visualizebox</b>	function
F rule		<b>visualizers</b>	table
T nuts		F attribute	
F rule		T attributes	
F resetproperties		F box	
F rule		F handler	
F setlist		F markfonts	
F setproperties		F register	
F start		F setfont	
T steppers		F setlayer	
F check		F setruledglyph	
F codes		F setvisual	
F features		<b>vpack</b>	function

**whatsitcodes**

**write**

data table

function

## number (context)

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

## objects (context)

<b>data</b>	table	<b>page</b>	function
<b>dimensions</b>	function	<b>reference</b>	function
<b>found</b>	function	<b>register</b>	function
<b>n</b>	number	<b>restore</b>	function

# optional (context)

<b>curl</b>	table	F framecompress F framedecompress F initialize
		F escape F fetch F getversion F initialize F unescape
<b>foreign</b>	table	F abivalue F getbuffer F initialize F load F newbuffer F totable F types
<b>ghostscript</b>	table	F execute F initialize
<b>graphicsmagick</b>	table	F execute F initialize
<b>hb</b>	table	F getshapers F getversion F initialize F loadfont F shapestring
<b>kpse</b>	table	F expand_braces F expand_path F expand_var F find_file F find_files F get_file_types F initialize F readable_file F set_program_name F var_value
<b>loaded</b>	table	
<b>lz4</b>	table	F compress F decompresssize
		F lzma F lzo F mujs F mysql F postgres F sqlite F zint
		F compress F decompress F initialize F initialize F initialize F compress F decompresssize F initialize F compress F decompresssize F initialize F dofile F execute F initialize F reset F setclosefile F setconsole F setfindfile F setopenfile F setreadfile F setseekfile F close F execute F getmessage F initialize F open F close F execute F getmessage F initialize F open F close F execute F getmessage F initialize F open

F execute  
F initialize  
**zstd**

table

F compress  
F decompress  
F initialize

## os (basic lua)

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

## package (basic lua)

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

# pagebuilders (context)

<b>columnsets</b>	table	
F add		F setsize
F block		F sethspan
F check		F setlines
F currentcolumn		F setproperties
F define		F setstart
F finishflush		F setvsize
F flushareas		
F flushcolumn		<b>injections</b> table
F flushrest		F flushafter
F goto		F flushbefore
F noto		F save
F prepareflush		
F put		<b>mixedcolumns</b> table
F registerarea		F cleanup
F reset		F finalize
F setarea		F getlist
		F getrest
		F getsplit
		F setsplit

## pdf (basic tex)

**immediateobj** function

## pdfe (extra tex)

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

# physics (context)

**units** table  
F registerunit

D tables

## pngdecode (extra tex)

<b>applyfilter</b>	function	<b>splitmask</b>	function
<b>expand</b>	function	<b>tocmyk</b>	function
<b>interlace</b>	function	<b>tomask</b>	function

# publications (context)

<b>addtexentry</b>	function	<b>converttoxml</b>	function
<b>analyze</b>	function	<b>currentspecification</b>	table
<b>anywhere</b>	function	S author	
<b>authorcache</b>	data table	T categories	
<b>authorcollapsers</b>	data table	T article	
<b>authorhashers</b>	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	
<b>authormap</b>	data table	S number	
<b>authortoregister</b>	function	S pages	
<b>casters</b>	table	S title	
F author		S volume	
F keyword		S year	
F pagenumber		T optional	
F range		T required	
<b>checkeddataset</b>	function	T sets	
<b>citevariants</b>	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	
<b>collected</b>	data table	S volume	
<b>components</b>	table	S year	
F author		T optional	
<b>concatstate</b>	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	<b>datasets</b>
S subtitle	table
S title	<b>detailed</b>
S year	table
T optional	<b>endnotes_to_btx</b>
T required	function
T sets	<b>enhancer</b>
T author	table
T virtual	S arguments
T demo-b	T skip
S category	B dirty
T extra	T gskip
T fields	T kind
S author	T list
S institution	T system
S organization	T order
S subtitle	N steps
S title	<b>enhancers</b>
S year	table
T optional	F details
T required	F order
T sets	F suffixes
T authors	<b>finder</b>
T virtual	function
S comment	<b>firstofrange</b>
S copyright	function
T fields	<b>found</b>
S name	function
T types	<b>get</b>
S author	<b>getcasted</b>
S editor	function
S keywords	<b>getdetail</b>
S number	function
S page	<b>getdirect</b>
	function
	<b>getfaster</b>
	function
	<b>getfield</b>
	function
	<b>getfuzzy</b>
	function
	<b>getindex</b>
	function
	<b>inspectors</b>
	data table
	<b>journals</b>
	table
	F abbreviated
	F add
	F expanded
	F load

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

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

## regimes (context)

<b>backmapping</b>	data table	<b>mapping</b>	data table
<b>cleanup</b>	function	<b>pop</b>	function
<b>disable</b>	function	<b>process</b>	function
<b>enable</b>	function	<b>push</b>	function
<b>fromregime</b>	function	<b>toregime</b>	function
<b>list</b>	function	<b>translate</b>	function

# resolvers (context)

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

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

<b>validatedpath</b>	function	<b>variableofformatsuffix</b>	function
<b>variable</b>	function	<b>wildcardpattern</b>	function
<b>variableofformat</b>	function		

## sandbox (context)

<b>disablelibraries</b>	function	<b>possiblepath</b>	function
<b>disablerunners</b>	function	<b>redefine</b>	function
<b>enable</b>	function	<b>register</b>	function
<b>filehandlerone</b>	function	<b>registerbinary</b>	function
<b>filehandlertwo</b>	function	<b>registerlibrary</b>	function
<b>finalizer</b>	function	<b>registerroot</b>	function
<b>getrunner</b>	function	<b>registerrunner</b>	function
<b>initializer</b>	function	<b>report</b>	function
<b>iohandler</b>	function	<b>setfilename logger</b>	function
<b>logcalls</b>	function	<b>setlogger</b>	function
<b>logfiles</b>	function	<b>setreporter</b>	function
<b>original</b>	function	<b>setattrace</b>	function
<b>overload</b>	function	<b>validfilename</b>	function

# scripts (context)

<b>autofontfeature</b>	table	
F disable		
F enable		
F handler		
<b>colors</b>	data table	
<b>decomposehangul</b>	function	
<b>defaults</b>	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		
<b>getdata</b>	function	
<b>getinjector</b>	function	
<b>getsplitter</b>	function	
<b>getstatus</b>	function	
<b>handlers</b>	data table	
<b>helpers</b>	data table	
<b>injectors</b>	data table	
<b>inserters</b>	table	
F nobreakspace_after		
F nobreakspace_before		
F space_after		
F space_before		
F zerowidthspace_after		
F zerowidthspace_before		
<b>installdataset</b>	function	
<b>installmethod</b>	function	
<b>numbertodataset</b>	data table	
<b>numbertohandler</b>	data table	
<b>reset</b>	function	
<b>set</b>	function	
<b>setstatus</b>	function	
<b>splitters</b>	data table	

## set (context)

**contains** function  
**create** function  
**tolist** function

**tonumber** function  
**totable** function

## sha2 (extra lua)

<b>HASH256</b>	function	<b>hash256</b>	function
<b>HASH384</b>	function	<b>hash384</b>	function
<b>HASH512</b>	function	<b>hash512</b>	function
<b>HEX256</b>	function	<b>hex256</b>	function
<b>HEX384</b>	function	<b>hex384</b>	function
<b>HEX512</b>	function	<b>hex512</b>	function
<b>digest256</b>	function	<b>sum256</b>	function
<b>digest384</b>	function	<b>sum384</b>	function
<b>digest512</b>	function	<b>sum512</b>	function

## sio (extra lua)

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

# socket (extra lua)

<b>BLOCKSIZE</b>	number	S content-md5
<b>_DATAGRAMSIZE</b>	number	S content-range
<b>_SETSIZE</b>	number	S content-transfer-encoding
<b>_SOCKETINVALID</b>	number	S content-type
<b>bind</b>	function	S cookie
<b>choose</b>	function	S date
<b>connect</b>	function	S diagnostic-code
<b>connect4</b>	function	S dsn-gateway
<b>connect6</b>	function	S etag
<b>dns</b>	table	S expect
	F getaddrinfo	S expires
	F gethostname	S final-log-id
	F getnameinfo	S final-recipient
	F tohostname	S from
	F toip	S host
<b>gettime</b>	function	S if-match
<b>headers</b>	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 cc	S proxy-authenticate
	S comments	S proxy-authorization
	S connection	S range
	S content-description	S received
	S content-disposition	S received-from-mta
	S content-encoding	S references
	S content-id	S referer
	S content-language	S remote-mta
	S content-length	S reply-to
	S content-location	S reporting-mta

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

## sorters (context)

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

## sparse (context)

<b>concat</b>	function	<b>range</b>	function
<b>get</b>	function	<b>restore</b>	function
<b>max</b>	function	<b>set</b>	function
<b>min</b>	function	<b>traverse</b>	function
<b>new</b>	function	<b>wipe</b>	function

## statistics (context)

<b>benchmarktimer</b>	function	<b>resettiming</b>	function
<b>checkfmtstatus</b>	function	<b>runtime</b>	function
<b>currenttime</b>	function	<b>savefmtstatus</b>	function
<b>elapsed</b>	function	<b>show</b>	function
<b>elapsedindeed</b>	function	<b>showmemory</b>	function
<b>elapsedseconds</b>	function	<b>showusage</b>	function
<b>elapsedetime</b>	function	<b>starttiming</b>	function
<b>enable</b>	boolean	<b>stoptiming</b>	function
<b>formatruntime</b>	function	<b>threshold</b>	number
<b>hastiming</b>	function	<b>timed</b>	function
<b>memused</b>	function	<b>tracefunction</b>	function
<b>register</b>	function		

## status (basic tex)

<b>getbufferstate</b>	function	<b>getmarkstate</b>	function
<b>getcallbackstate</b>	function	<b>getneststate</b>	function
<b>getconstants</b>	function	<b>getnodestate</b>	function
<b>geterrorlinestate</b>	function	<b>getparameterstate</b>	function
<b>geterrorstate</b>	function	<b>getpoolstate</b>	function
<b>getexpandstate</b>	function	<b>getreadstate</b>	function
<b>getextrastate</b>	function	<b>getsavestate</b>	function
<b>getfilestate</b>	function	<b>getsparsestate</b>	function
<b>getfontstate</b>	function	<b>getstringstate</b>	function
<b>gethalferrorlinestate</b>	function	<b>gettextstate</b>	function
<b>gethashstate</b>	function	<b>gettokenstate</b>	function
<b>getinputstate</b>	function	<b>getwarningstate</b>	function
<b>getinsertstate</b>	function	<b>iocodes</b>	table
<b>getlanguagestate</b>	function	<b>list</b>	function
<b>getlookupstate</b>	function	<b>resetmessages</b>	function
<b>getluastate</b>	function		

## storage (context)

<b>allocate</b>	function	<b>noftables</b>	number
<b>data</b>	table	<b>register</b>	function
<b>mark</b>	function	<b>shared</b>	data table
<b>marked</b>	function	<b>storedfunctions</b>	data table
<b>max</b>	number	<b>strip</b>	boolean
<b>min</b>	number	<b>tofmodules</b>	number
<b>nofmodules</b>	number	<b>toftables</b>	number

## streams (context)

<b>collect</b>	function	<b>push</b>	function
<b>disable</b>	function	<b>start</b>	function
<b>enable</b>	function	<b>stop</b>	function
<b>flush</b>	function	<b>synchronize</b>	function
<b>initialize</b>	function		

## string (basic lua)

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

<b>utfpadd</b>	function	<b>utfvaluetable</b>	function
<b>utfpadding</b>	function	<b>valid</b>	function
<b>utfvalue</b>	function	<b>voigt</b>	function
<b>utfvalues</b>	function	<b>voigt_hwhm</b>	function

# structures (context)

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

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

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

F registerfinalizer	F analyze
F registerinitializer	D collected
F registerpage	F compare
F reset	F define
D runners	F enhance
F set	F extend
F setandgetattribute	F filter
F setcomponent	F filtercollected
F setinternalreference	F finalize
F setlinkmethod	F findinternal
F setnextinternal	F flush
F setnextorder	F get
F setreferencerealpage	F prepare
D specials	F process
F splitcomponent	F setmethod
F splitprefix	F sort
F splitreference	F store
F synchronizepage	D tobesaved
T testrunners	F unique
F inner	F userdata
F special	<b>sections</b>
F special operation	table
F special operation with arguments	
T testspecials	F autodepth
F deltapage	F cct
F i	D collected
F internal	F current
F page	F currentblock
F realpage	F currentid
F section	F currentlevel
F userpage	F currentsectionindex
D tobereferrals	F depthnumber
D tobesaved	F finddata
D tracedpages	F findnumber
T urls	F fullnumber
T data	F getcurrentlevel
F define	F getlevel
F found	F getnumber
F get	F internalreference
F untex	D levelmap
D usedinternals	D levels
D usedviews	F matchingtilldepth
F valid	F numberatdepth
<b>registers</b>	<b>table</b>
	F numbers
	F popblock
	F prefixedconverted

F pushblock		F process
F register		F register
D registered		F registershow
F reportstructure		F registerused
F save		F resetshow
T sectionblockdata		F resetused
T bodypart		F sort
S bookmark		F synonym
F set		D tobesaved
F setblock	<b>tags</b>	<b>table</b>
F setchecker		T backend
F setentry		T checks
F setinitialblock		F marginanchor
F setlevel		F margintext
F setnumber		F math
F showstructure		F mrow
F structuredata		F mtable
F title		T destinationhash
D tobesaved		T extras
F typesetnumber		F adddestination
F userdata		F addimplicit
B verbose		F addinternal
<b>sets</b>	<b>table</b>	F addreference
F define		F combination
F get		F delimitedsymbol
F getall		F description
D setlist		F descriptionsymbol
<b>specials</b>	<b>table</b>	F document
D collected		F float
F retrieve		F formulacontent
F store		F image
D tobesaved		F item
<b>synonyms</b>	<b>table</b>	F itemgroup
F analyzed		F link
D collected		F listitem
F compare		F mi
F define		F msub
F filter		F msup
F finalize		F paragraph
F flush		F publication
F isshown		F reference
F isused		F registerlocation
F meaning		F registerpages
F prepare		F registerseparator

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

## 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	getboxresourcebox	function
badness	function	getboxresourcedimensions	function
box	table	getcatcode	function
boxresources	table	getcount	function
F getbox		getdelcode	function
F getdimensions		getdelcodes	function
F save		getdelimitermodevalues	function
F use		getdimen	function
catcode	table	getdimensionvalue	function
chardef	function	getdiscriptionvalues	function
codes	table	getdiscstatevalues	function
conditionals	data table	geterrorvalues	function
constants	data table	getflagvalues	function
count	table	getfontoffamily	function
cprint	function	getfrozenparvalues	function
ctdcatcodes	number	getglue	function
ctxcatcodes	number	getglyphdata	function
definefont	function	getglyphoptionvalues	function
delcode	table	getglyphscript	function
dimen	table	getglyphstate	function
dimensiondef	function	getgroupvalues	function
directives	data table	gethelptext	function
discriptioncodes	data table	gethyphenationvalues	function
enableprimitives	function	getinsertcontent	function
error	function	getinsertdepth	function
expandasvalue	function	getinsertdistance	function
experiments	data table	getinsertheight	function
extraprimitives	function	getinsertlimit	function
fatalerror	function	getinsertmultiplier	function
flagcodes	data table	getinsertwidth	function
fontidentifier	function	getintegervalue	function
fontname	function	getinteraction	function
forcehmode	function	getiovalues	function
forcesynctexline	function	getlargestusedmark	function
forcesynctextag	function	getlccode	function
fprint	function	getlinedir	function
frozenparcodes	data table	getlist	function
get	function	getlocallevel	function
getattribute	function	getmark	function
getbox	function	getmath	function
getboxdir	function	getmathcode	function

getmathcodes	function	isbox	function
getmathcontrolvalues	function	iscount	overloaded function
getmathdir	function	isdefined	function
getmathflattenvalues	function	isdimen	overloaded function
getmathoptionvalues	function	isglue	function
getmathparametervalues	function	ismuglue	function
getmathstylenamevalues	function	ismuskip	overloaded function
getmathstylevalues	function	isprintable	function
getmathvariantvalues	function	isskip	overloaded function
getmode	function	istoken	function
getmodevalues	function	istoks	function
getmuglue	function	lastnodetype	function
getmuskip	function	lccode	table
getnest	function	linebreak	function
getnormalizevalues	function	lists	table
getoutputactive	function	luacatcodes	number
getpacktypevalues	function	magicconstants	table
getpagestate	function	N maxdimen	
getparbeginvalues	function	N running	
getparcontextvalues	function	N trueinch	
getpardir	function	mathchardef	function
getparmodevalues	function	mathcode	table
getparstate	function	mathcontrolcodes	data table
getprimitiveorigins	function	mathflattencodes	data table
getregisterindex	function	mathoptioncodes	data table
getrunstatevalues	function	modelevels	table
getfcode	function	N horizontal	
getskip	function	N math	
getsynctexline	function	N unset	
getsynctexmode	function	N vertical	
getsynctextag	function	modes	data table
gettextcontrolvalues	function	mprint	function
gettextdir	function	muglue	table
gettoks	function	muskip	table
getuccode	function	nest	table
glue	table	nilcatcodes	number
glyphoptioncodes	data table	normalizecodes	data table
groupcodes	data table	notcatcodes	number
hashtokens	function	number	function
hyphenationcodes	data table	parcontextcodes	data table
ifs	data table	poplocal	function
inicatcodes	number	primitives	function
integerdef	function	print	function
isattribute	function	prtcatcodes	number

<b>pushlocal</b>	function	<b>setnest</b>	function
<b>quitlocal</b>	function	<b>setpardir</b>	function
<b>quittoks</b>	function	<b>setrunstate</b>	overloaded function
<b>resetparagraph</b>	function	<b>setsfcode</b>	function
<b>rlnccatcodes</b>	number	<b>setskip</b>	function
<b>romannumeral</b>	function	<b>setsynctexline</b>	function
<b>round</b>	function	<b>setsynctexmode</b>	function
<b>runlocal</b>	function	<b>setsynctextag</b>	function
<b>runstring</b>	function	<b>settextdir</b>	function
<b>runtoks</b>	function	<b>settoks</b>	function
<b>saveboxresource</b>	function	<b>setuccode</b>	function
<b>scale</b>	function	<b>sfcode</b>	table
<b>scantoks</b>	function	<b>shiftparshape</b>	function
<b>set</b>	function	<b>shipout</b>	function
<b>setattribute</b>	function	<b>showcontext</b>	function
<b>setbox</b>	function	<b>skip</b>	table
<b>setboxdir</b>	function	<b>snapshotpar</b>	function
<b>setcatcode</b>	function	<b>sp</b>	function
<b>setcount</b>	function	<b>splitbox</b>	function
<b>setdelcode</b>	function	<b>sprint</b>	function
<b>setdimen</b>	function	<b>stringtocodebitmap</b>	function
<b>setdimensionvalue</b>	function	<b>systemmodes</b>	data table
<b>setglue</b>	function	<b>takebox</b>	function
<b>setglyphdata</b>	function	<b>texcatcodes</b>	number
<b>setglyphscript</b>	function	<b>textcontrolcodes</b>	data table
<b>setglyphstate</b>	function	<b>toks</b>	table
<b>setinsertcontent</b>	function	<b>tonumber</b>	function
<b>setinsertdistance</b>	function	<b>toscaled</b>	function
<b>setinsertlimit</b>	function	<b>tpacatcodes</b>	number
<b>setinsertmultiplier</b>	function	<b>tpbcatcodes</b>	number
<b>setintegervalue</b>	function	<b>tprint</b>	function
<b>setinteraction</b>	function	<b>trackers</b>	data table
<b>setlccode</b>	function	<b>triggerbuildpage</b>	function
<b>setlinedir</b>	function	<b>txtcatcodes</b>	number
<b>setlist</b>	function	<b>type</b>	function
<b>setmath</b>	function	<b>uccode</b>	table
<b>setmathcode</b>	function	<b>uprint</b>	function
<b>setmathdir</b>	function	<b>useboxresource</b>	function
<b>setmuglue</b>	function	<b>vrbcatcodes</b>	number
<b>setmuskip</b>	function	<b>write</b>	function

# texconfig (basic tex)

<b>buffersize</b>	table	<b>languagesize</b>	table
N size		N size	
N step		N step	
<b>errorlinesize</b>	table	<b>marksizesize</b>	table
N size		N size	
<b>expandsize</b>	table	N step	
N size		<b>nestsizesize</b>	table
<b>filesize</b>	table	N size	
N size		N step	
N step		<b>nodesizesize</b>	table
<b>firstline</b>	string	N size	
<b>fontsize</b>	table	N step	
N size		<b>parametersize</b>	table
N step		N size	
<b>formatname</b>	string	N step	
<b>functionsizesize</b>	number	<b>poolsizesize</b>	table
<b>halferrorlinesize</b>	table	N size	
N size		N step	
<b>hashsize</b>	table	<b>propertyssizesize</b>	number
N size		<b>savesizesize</b>	table
N step		N size	
<b>init</b>	overloaded function	N step	
<b>inputsizesize</b>	table	<b>shell_escape</b>	string
N size		<b>stringsizesize</b>	table
N step		N size	
<b>insertsize</b>	table	N step	
N size		<b>tokensizesize</b>	table
N step		N size	
<b>kpse_init</b>	boolean	N step	

## texio (basic tex)

**closeinput**      function  
**terminal**      function  
**write**      function  
**write\_nl**      function

**writenl**      function  
**writeselector**      function  
**writeselectorlf**      function  
**writeselectornl**      function

## token (basic tex)

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

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

<b>setmacro</b>	function	<b>skipnextexpanded</b>	function
<b>skip_next</b>	function	<b>type</b>	function
<b>skip_next_expanded</b>	function	<b>undefine_macro</b>	function
<b>skipnext</b>	function	<b>undefinemacro</b>	function

# tokens (context)

<b>accessors</b>	table	
F active		U color
F cmd		U colordefalc
F cmdchrcs		U colordeflcl
F cmdname		U colordeflt
F command		U dofinishreference
F csname		U dostarttext
F expandable		U finishjob
F frozen		U firstofoneargument
F index		U firstoftwoarguments
F name		U gobbleoneargument
F protected		U goto
F range		U iftrue
<b>astable</b>	function	U input
<b>bits</b>	table	U loadfoundtypescriptfile
N active		U resetctxscanner
N alignment		U rlap
N begingroup		U secondoftwoarguments
N character		U setfalsevalue
N close		U setsectionblock
N comment		U setupsystem
N endgroup		U startcolumns
N endofline		U starttabulate
N escape		U starttitle
N ignore		U startxtitle
N invalid		U stopcolumns
N letter		U stoptabulate
N mathshift		U stoptitle
N open		U stopxtitle
N other		U texsetup
N parameter		U xmlw
N space		<b>commands</b> data table
N subscript		<b>compile</b> function
N superscript		<b>constant</b> function
N whitespace		<b>converters</b> table
<b>cache</b>	table	S toboolean
U NC		S todimen
U NR		S togloo
U bf		S tonumber
U buff_finish		S tostring
U c_font_compact		<b>create</b> function

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

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

F count	F toks
F csname	F value
F csnameunchecked	F vbox
F delimited	F verbatim
F dimen	F vtop
F dimenargument	F whd
F dimension	F word
F float	F scannumber
F glue	F scanopen
F glucspec	F scanoptional
F gluevalues	F scanstring
F hash	F scantable
F hbox	F scantokenlist
F integer	F scantoks
F integerargument	F scanvbox
F ischar	F scanverbatim
F key	F scanvtop
F keyword	F scanword
F keywordcs	F toboolean
F letters	F todimen
F list	T tokens
F luocardinal	T accessors
F luainteger	F active
F luanumber	F cmd
F lxmlid	F cmdchrcs
F next	F cmdname
F nextchar	F command
F nextexpanded	F csname
F number	F expandable
F optional	F frozen
F peek	F index
F peekchar	F name
F peekexpanded	F protected
F real	F range
F scanclose	F astable
F scanopen	T cache
F skip	U NC
F skipexpanded	U NR
F string	U bf
F table	U buff_finish
F token	U c_font_compact
F tokencode	U color
F tokenlist	U colordefalc
F tokens	U colordefflc

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

F scandimen	F scanstring
F scandimenargument	F scantable
F scandimension	F scantokenlist
F scanglue	F scantoks
F scangluespec	F scanvbox
F scangluevalues	F scanverbatim
F scanhash	F scanvtop
F scanhbox	F scanword
F scaninteger	F toboolean
F scanintegerargument	F todimen
F scankeyword	F tonumber
F scankeyworddcs	F tostring
F scanletters	D values
F scanlist	F tonumber
F scannumber	F tostring
F scanopen	<b>values</b> data table
F scanoptional	

## tracers (context)

**printerror** function  
**printwarning** function

**showlines** function

## trackers (context)

<b>data</b>	data table	<b>register</b>	function
<b>default</b>	function	<b>report</b>	function
<b>disable</b>	function	<b>reset</b>	function
<b>done</b>	table	<b>savehash</b>	function
<b>dumphashstofile</b>	function	<b>show</b>	function
<b>enable</b>	function	<b>value</b>	function
<b>list</b>	function	<b>values</b>	function
<b>name</b>	string		

# typesetters (context)

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

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

## updaters (context)

**apply**    function  
**register** function

## url (context)

<b>addscheme</b>	function	<b>hashed</b>	function
<b>barepath</b>	function	<b>hasscheme</b>	function
<b>construct</b>	function	<b>query</b>	function
<b>decode</b>	function	<b>split</b>	function
<b>encode</b>	function	<b>toquery</b>	function
<b>escape</b>	function	<b>unescape</b>	function
<b>filename</b>	function	<b>unescapeget</b>	function

## utf8 (basic lua)

**char**        function  
**charpattern** string  
**codepoint**    function

**codes**        function  
**len**           function  
**offset**        function

# utilities (context)

<b>debugger</b>	table	F readsignedbyte F readstring F readtag F setposition F size F skip F skiplong F skipposition F skipshort F writebyte F writecardinal1 F writecardinal1le F writecardinal2 F writecardinal2le F writecardinal3 F writecardinal3le F writecardinal4 F writecardinal4le F writeinteger1 F writeinteger1le F writeinteger2 F writeinteger2le F writeinteger3 F writeinteger3le F writeinteger4 F writeinteger4le F writestring
<b>files</b>	table	F close F getposition F getsize F look F open F read2dot14 F readbyte F readbytes F readbytetable F readcardinal F readcardinal1 F readcardinal1le F readcardinal2 F readcardinal2le F readcardinal3 F readcardinal3le F readcardinal4 F readcardinal4le F readcardinaltable F readchar F readline F readcstring F readfixed2 F readfixed4 F readinteger F readinteger1 F readinteger1le F readinteger2 F readinteger2le F readinteger3 F readinteger3le F readinteger4 F readinteger4le F readintegertable
		<b>formatters</b> table F formatcolumns F list F stripzeros
		<b>ghostscript</b> table F convert F statistics
		<b>graphicmagick</b> table F convert F statistics
		<b>graphicsmagick</b> table F convert F statistics
		<b>lua</b> table

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

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

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

## visualizers (context)

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

# xcomplex (extra lua)

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

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

## xdecimal (extra lua)

<u>_add</u>	function	F getprecision
<u>_band</u>	function	F ln
<u>_bor</u>	function	F log
<u>_bxor</u>	function	F max
<u>_div</u>	function	F min
<u>_eq</u>	function	F minus
<u>_idiv</u>	function	F new
<u>_index</u>	table	F plus
F __add		F pow
F __band		F rotate
F __bor		F setprecision
F __bxor		F shift
F __div		F sqrt
F __eq		F toengstring
F __idiv		F tonumber
T __index		F tostring
F __add		F trim
F __band		F __le
F __bor		F __lt
F __bxor		F __mod
F __div		F __mul
F __eq		S __name
F __idiv		F __pow
F __le		F __shl
F __lt		F __shr
F __mod		F __sub
F __mul		F __tostring
S __name		F __unm
F __pow		F abs
F __shl		F band
F __shr		F bor
F __sub		F bxor
F __tostring		F conj
F __unm		F copy
F abs		F exp
F band		F getprecision
F bor		F ln
F bxor		F log
F conj		F max
F copy		F min
F exp		F minus

F new	band	function
F plus	bor	function
F pow	bxor	function
F rotate	conj	function
F setprecision	copy	function
F shift	exp	function
F sqrt	getprecision	function
F toengstring	ln	function
F tonumber	log	function
F tostring	max	function
F trim	min	function
<u>le</u>	minus	function
<u>lt</u>	new	function
<u>mod</u>	plus	function
<u>mul</u>	pow	function
<u>name</u>	rotate	function
<u>pow</u>	setprecision	function
<u>shl</u>	shift	function
<u>shr</u>	sqrt	function
<u>sub</u>	toengstring	function
<u>tostring</u>	tonumber	function
<u>unm</u>	tostring	function
abs	trim	function

## xmath (extra lua)

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

# xml (context)

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

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

inheritedconvert	function	privatetoken	function
inject	function	process	function
inject_element	function	process_attributes	function
inject_element_after	function	process_elements	function
inject_element_before	function	processattributes	function
injectafter	function	profiled	table
injectbefore	function	pure	function
insert	function	pushmatch	function
insert_element	function	raw	function
insert_element_after	function	registerentity	function
insert_element_before	function	registers	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	reparsedentitylppeg	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
parsedentitylppeg	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 '	

s <		<b>texttocdata</b>	function
s >		<b>tocdata</b>	function
s \		<b>toelement</b>	function
s {		<b>tostring</b>	function
s		<b>totable</b>	function
s }		<b>toxml</b>	function
s ~		<b>tprint</b>	function
<b>specialhandler</b>	table	<b>traverse</b>	function
<b>sprint</b>	function	<b>unescape</b>	function
<b>string</b>	function	<b>unescapeentitylpeg</b>	userdata
<b>strip</b>	function	<b>unprivatized</b>	function
<b>strip whitespace</b>	function	<b>unspecialized</b>	function
<b>stripelement</b>	function	<b>wipe</b>	function
<b>stripleadingspaces</b>	function	<b>withelement</b>	function
<b>table</b>	function	<b>withelements</b>	function
<b>text</b>	function	<b>wrap</b>	function
<b>textonly</b>	function	<b>xmlns</b>	table

## xzip (extra lua)

**adler32**      function  
**compress**      function  
**compresssize**      function

**crc32**      function  
**decompress**      function  
**decompresssize**      function

## zip (extra lua)

<b>archives</b>	table	<b>openarchive</b>	function
<b>closearchive</b>	function	<b>registeredfiles</b>	table

## **zlib (extra lua)**

**adler32**      function  
**compress**      function  
**compresssize**      function

**crc32**      function  
**decompress**      function  
**decompresssize**      function