

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

# ConT<sub>E</sub>Xt MkIV

# global (alias: \_G)

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

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

**typesetters**

**unicode**

**unpack**

**url**

**userdata**

**utf**

**utf8**

**table**

**table**

**function**

**table**

**table**

**table**

**table**

**utilities**

**vf**

**visualizers**

**xml**

**xpcall**

**zip**

**zlib**

**table**

**table**

**table**

**table**

**function**

**table**

**table**

# attributes (context)

**applyoverloads**    function

**colorintents**    table

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

**colors**    table

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

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

**define**    function

**effects**    table

- N attribute
- D data
- F enable

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

B supported

D values

# backends (context)

## **codeinjections** table

F boxresourcedimensions  
F registerboxresource  
F restoreboxresource

## **current** string

## **defaults** table

T codeinjections  
F gethpos  
F getmatrix  
F getpos  
F getvpos  
F hasmatrix  
T nodeinjections  
T registrations  
D tables

## **included** table

B context  
B date  
B id  
B metadata  
B pdf

## **install** function

## **nodeinjections** table

F restore  
F save  
F transform

## **nothing** function

## **pdf** table

T codeinjections  
F addbookmarks  
F analyzenormalsymbol  
F analyzesymbol  
F attachmentid  
F clonefield  
F definefield  
F definefieldset  
F defineviewerlayer  
F embedfile  
F enabletags  
F exportformdata  
F fieldssurrounding

F flushmergelayer  
F getbookmarks  
F getdefaultfieldvalue  
F getfieldcategory  
F getfieldset  
F getformatoption  
F gethpos  
F getinfo  
F getmatrix  
F getoutputfilename  
F getpos  
F getpreviewfigure  
F getvpos  
F hasmatrix  
F insertrenderingwindow  
F mergebookmarks  
F mergecomments  
F mergefields  
F mergereferences  
F mergeviewerlayers  
F prerollreference  
F presetsymbol  
F presetsymbollist  
F processrendering  
F registerdocumentcloseaction  
F registerdocumentopenaction  
F registeredsymbol  
F registerpagecloseaction  
F registerpageopenaction  
F registersymbol  
F setfieldcalculationset  
F setfigurealternative  
F setfigurecolorspace  
F setfiguremask  
F setformat  
F setformsmethod  
F setpagetransition  
F setupcanvas  
F setupidentity  
F setxmpfile  
F startlayer



F startunicodetoactualtext	F negative
F startunicodetoactualtextdirect	F overprint
F stoplayer	F positive
F stopunicodetoactualtext	F reference
F stopunicodetoactualtextdirect	F rgbcolor
F supportedformats	F spotcolor
F unicodetoactualtext	F startlayer
F useviewerlayer	F startstackedlayer
F validfield	F stoplayer
F validfieldcategory	F stopstackedlayer
F validfieldset	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	D vfspecials
F insertsound	<b>registrations</b> table
F insertswf	<b>tables</b> table
F insertu3d	<b>timestamp</b> function
F knockout	

## bit32 (basic lua)

**arshift** function

**band** function

**bnot** function

**bor** function

**btest** function

**bxor** function

**extract** function

**lrotate** function

**lshift** function

**replace** function

**rrotate** function

**rshift** function

## blobs (context)

<b>append</b>	function
<b>dimensions</b>	function
<b>dispose</b>	function
<b>new</b>	function
<b>pack</b>	function
<b>strdp</b>	function
<b>strhd</b>	function

<b>strht</b>	function
<b>strwd</b>	function
<b>tohpack</b>	function
<b>tonodes</b>	function
<b>tovpack</b>	function
<b>write</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>erase</b>	function	F place	
<b>exists</b>	function	F reset	
<b>get</b>	function	F save	
<b>getcontent</b>	function	<b>prepend</b>	function
<b>getlines</b>	function	<b>raw</b>	function
<b>gettexbuffer</b>	function	<b>run</b>	function
<b>loadcontent</b>	function	<b>samplefile</b>	function
<b>parallel</b>	table	<b>undent</b>	function

# builders (context)

## kernel table

- F hyphenation
- F kerning
- F ligaturing
- F mlist\_to\_hlist
- T originals
  - F hyphenate
  - F kerning
  - F ligaturing

## paragraphs table

- T constructors
  - N attribute
  - F define
  - F disable
  - F enable
  - F handler
  - T methods
    - F basic
    - F default
    - F hpack
    - F oneline
  - D names
  - D numbers
  - F set
  - F start
  - F stop
- T expansion
  - F trace
- F kepttogether
- F registertogether
- T solutions
  - T splitters
    - F define
    - F optimize
  - T registered

- F reset

- F set

- F split

- F start

- F stop

- F tag

## profiling table

- F add

- F distance

- F fixedprofile

- F get

- F list

- F pagehandler

- F profilebox

- F set

## vspacing table

- F analyze

- D categories

- F collapsevbox

- T data

- D map

- D skip

- D snapmethods

- F definesnapmethod

- B fixed

- F forcestrutdepth

- F pagehandler

- F setmap

- F setskip

- F snapbox

- F synchronizepage

- F tocategories

- F tocategory

- F vboxhandler

## cache (context)

<b>ask</b>	boolean	<b>is_writable</b>	function
<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>relocate</b>	boolean
<b>defaults</b>	table	<b>savecontent</b>	function
<b>define</b>	function	<b>savedata</b>	function
<b>direct</b>	boolean	<b>setfirstwritablefile</b>	function
<b>force</b>	boolean	<b>setluanames</b>	function
<b>getfirstreadablefile</b>	function	<b>tree</b>	string
<b>getreadablepaths</b>	function	<b>treehash</b>	function
<b>getwritablepath</b>	function	<b>usedpaths</b>	function
<b>hashed</b>	function		

## callback (basic tex)

**find**      function  
**list**      function

**register** overloaded function



# callbacks (context)

<b>freeze</b>	function	B insert_local_par
<b>known</b>	function	B kerning
<b>list</b>	data table	B ligaturing
<b>pop</b>	function	B linebreak_filter
<b>push</b>	function	B mlist_to_hlist
<b>register</b>	function	B open_read_file
<b>report</b>	function	B post_linebreak_filter
<b>supported</b>	table	B pre_dump
B append_to_vlist_filter		B pre_linebreak_filter
B build_page_insert		B pre_output_filter
B buildpage_filter		B process_input_buffer
B call_edit		B process_jobname
B contribute_filter		B process_output_buffer
B define_font		B process_rule
B find_cidmap_file		B read_cidmap_file
B find_data_file		B read_data_file
B find_enc_file		B read_enc_file
B find_font_file		B read_font_file
B find_format_file		B read_map_file
B find_image_file		B read_opentype_file
B find_map_file		B read_pk_file
B find_opentype_file		B read_truetype_file
B find_output_file		B read_type1_file
B find_pk_file		B read_vf_file
B find_read_file		B show_error_hook
B find_truetype_file		B show_error_message
B find_type1_file		B show_lua_error_hook
B find_vf_file		B show_warning_message
B find_write_file		B start_file
B finish_pdffile		B start_page_number
B finish_pdfpage		B start_run
B finish_synctex		B stop_file
B font_descriptor_objnum_provider		B stop_page_number
B glyph_not_found		B stop_run
B glyph_stream_provider		B vpack_filter
B hpack_filter		B vpack_quality
B hpack_quality		B wrapup_run
B hyphenate		

## catcodes (context)

**names** data table

**numbers** data table

**register** function

# characters (context)

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

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

## chemistry (context)

<b>component</b>	function
<b>define</b>	function
<b>definitions</b>	data table
<b>format</b>	string
<b>inlinechemical</b>	function
<b>instance</b>	string
<b>method</b>	string

<b>molecule</b>	function
<b>moleculeparser</b>	userdata
<b>start</b>	function
<b>stop</b>	function
<b>structures</b>	number
<b>undefine</b>	function

## containers (context)

**cleannname** function  
**content** function  
**define** function  
**is\_usable** function

**is\_valid** function  
**read** function  
**usecache** boolean  
**write** function

## converters (context)

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

**verbose**

D data

F translate

**weekday**

table

function

**word**

**words**

**year**

function

function

function



## coroutine (basic lua)

<b>create</b>	function
<b>isyieldable</b>	function
<b>resume</b>	function
<b>running</b>	function

<b>status</b>	function
<b>wrap</b>	function
<b>yield</b>	function

# ctxrunner (context)

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

## debug (basic lua)

<b>debug</b>	function
<b>gethook</b>	function
<b>getinfo</b>	function
<b>getlocal</b>	function
<b>getmetatable</b>	function
<b>getregistry</b>	function
<b>getupvalue</b>	function
<b>getuservalue</b>	function

<b>sethook</b>	function
<b>setlocal</b>	function
<b>setmetatable</b>	function
<b>setupvalue</b>	function
<b>setuservalue</b>	function
<b>traceback</b>	function
<b>upvalueid</b>	function
<b>upvaluejoin</b>	function

## dir (context)

<b>collectpattern</b>	function
<b>current</b>	function
<b>expandname</b>	function
<b>found</b>	function
<b>glob</b>	function
<b>globdirs</b>	function
<b>globfiles</b>	function

<b>globpattern</b>	function
<b>ls</b>	function
<b>makedirs</b>	function
<b>mkdirs</b>	function
<b>pop</b>	function
<b>push</b>	function

## directives (context)

<b>data</b>	data table
<b>default</b>	function
<b>disable</b>	function
<b>done</b>	table
<b>enable</b>	function
<b>list</b>	function

<b>name</b>	string
<b>register</b>	function
<b>report</b>	function
<b>reset</b>	function
<b>show</b>	function
<b>value</b>	function

# document (context)

<b>arguments</b>	data table		D modes	
<b>files</b>	table		D modules	
<b>functions</b>	table	<b>setargument</b>		function
<b>getargument</b>	function	<b>setcommandline</b>		function
<b>getfilename</b>	function	<b>setdefaultargument</b>		function
<b>options</b>	table	<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				

## environment (context)

<b>argument</b>	function	<b>luafile</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>luatexfuncitonality</b>	number
<b>default_texmfcnf</b>	string	<b>luatexversion</b>	number
<b>definefilefallback</b>	function	<b>maxnofruns</b>	number
<b>definefilesynonym</b>	function	<b>originalarguments</b>	data table
<b>engineflags</b>	data table	<b>outputfilename</b>	string
<b>filename</b>	string	<b>ownbin</b>	string
<b>files</b>	table	<b>ownmain</b>	string
<b>filesynonyms</b>	data table	<b>ownname</b>	string
<b>forcedruns</b>	number	<b>ownpath</b>	string
<b>getargument</b>	function	<b>prerollrun</b>	boolean
<b>homedir</b>	string	<b>rawarguments</b>	data table
<b>initex</b>	boolean	<b>reconstructcommandline</b>	function
<b>initexmode</b>	boolean	<b>relativepath</b>	function
<b>initializearguments</b>	function	<b>setargument</b>	function
<b>initializefilenames</b>	function	<b>splitarguments</b>	function
<b>inputfilebarename</b>	string	<b>suffix</b>	string
<b>inputfilename</b>	string	<b>texfile</b>	function
<b>inputfilesuffix</b>	string	<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>uselua module</b>	function
<b>kindofrun</b>	number	<b>usemodules</b>	function
<b>loadexamodes</b>	function	<b>validengines</b>	data table
<b>loadluafile</b>	function	<b>version</b>	string

## experiments (context)

<b>data</b>	data table
<b>default</b>	function
<b>disable</b>	function
<b>enable</b>	function
<b>list</b>	function
<b>name</b>	string

<b>register</b>	function
<b>report</b>	function
<b>reset</b>	function
<b>show</b>	function
<b>value</b>	function



# figures (context)

<b>applyratio</b>	function	<b>F new</b>	
<b>badname</b>	function	<b>F node</b>	
<b>bases</b>	data table	<b>F ofindex</b>	
<b>bitmapimage</b>	function	<b>F package</b>	
<b>boxnumber</b>	number	<b>F print</b>	
<b>cachepaths</b>	data table	<b>F scan</b>	
<b>check</b>	function	<b>F serialize</b>	
<b>checkers</b>	data table	<b>F tonode</b>	
<b>converters</b>	data table	<b>F totable</b>	
<b>current</b>	function	<b>F types</b>	
<b>defaultdepth</b>	number	<b>F write</b>	
<b>defaultheight</b>	number	<b>include</b>	function
<b>defaultsearch</b>	boolean	<b>includers</b>	data table
<b>defaultwidth</b>	number	<b>initialize</b>	function
<b>done</b>	function	<b>loaded</b>	data table
<b>dummy</b>	function	<b>localpaths</b>	data table
<b>exists</b>	data table	<b>magics</b>	data table
<b>exists</b>	function	<b>mergegoodies</b>	function
<b>formats</b>	data table	<b>nofmissing</b>	number
<b>found</b>	data table	<b>nofprocessed</b>	number
<b>get</b>	function	<b>order</b>	data table
<b>getinfo</b>	function	<b>paths</b>	data table
<b>getpdfinfo</b>	function	<b>patterns</b>	data table
<b>getrealpage</b>	function	<b>pop</b>	function
<b>guess</b>	function	<b>preferquality</b>	boolean
<b>guessfromstring</b>	function	<b>programs</b>	data table
<b>hash</b>	function	<b>push</b>	function
<b>identifiers</b>	data table	<b>registerpattern</b>	function
<b>identify</b>	function	<b>registerresource</b>	function
<b>images</b>	table	<b>registersuffix</b>	function
<b>F boxes</b>		<b>resources</b>	data table
<b>F check</b>		<b>scale</b>	function
<b>F checksize</b>		<b>set</b>	function
<b>F clone</b>		<b>setlookups</b>	function
<b>F copy</b>		<b>setmemstream</b>	function
<b>F fields</b>		<b>setorder</b>	function
<b>F immediatewrite</b>		<b>setpaths</b>	function
<b>F immediatewriteobject</b>		<b>suffixes</b>	data table
<b>F keys</b>		<b>used</b>	data table

## file (basic lua)

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

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

## fio (extra lua)

<b>checkpermission</b>	function	<b>readfixed4</b>	function
<b>getposition</b>	function	<b>readinteger1</b>	function
<b>read2dot14</b>	function	<b>readinteger2</b>	function
<b>readbytes</b>	function	<b>readinteger3</b>	function
<b>readbytetable</b>	function	<b>readinteger4</b>	function
<b>readcardinal1</b>	function	<b>readintegertable</b>	function
<b>readcardinal2</b>	function	<b>readline</b>	function
<b>readcardinal3</b>	function	<b>recordfilename</b>	function
<b>readcardinal4</b>	function	<b>setposition</b>	function
<b>readcardinaltable</b>	function	<b>skipposition</b>	function
<b>readfixed2</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>each</b>	function	<b>read_tfm</b>	function
<b>fonts</b>	table	<b>read_vf</b>	function
<b>frozen</b>	function	<b>setexpansion</b>	function
<b>getfont</b>	overloaded function	<b>setfont</b>	function

# fonts (context)

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

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

F cff	F getaxisscale
F cff2	F getfactors
F cffcheck	F getscales
F checkhash	F gotodatatable
F cmap	F normalizedaxis
F colr	T normalizedaxisishash
F compact	F readvariationdata
F cpal	F reportskippedtable
F ebdt	F setvariabledata
F eblc	F hhea
F ebsc	F hmtx
F expand	F hvar
F extend	F kern
F fvar	F loadfont
F gdef	F loadshapes
F getcomponents	F loca
F getinfo	F math
F glyf	F maxp
F gpos	F mvar
T gposhandlers	F name
F chainedcontext	F os/2
F context	F pack
F cursive	F parsecharstrings
F extension	F post
F marktobase	F registerextender
F marktoligature	F rehash
F marktomark	F sbix
F pair	F stat
F single	T streamreader
F gsub	F close
T gsubhandlers	F getposition
F alternate	F getsizes
F chainedcontext	F look
F context	F open
F extension	F read2dot14
F ligature	F readbyte
F multiple	F readbytes
F reversechainedcontextsingle	F readbytetable
F single	F readcardinal
F gvar	F readcardinal1
F head	F readcardinal2
T helpers	F readcardinal2le
F axistofactors	F readcardinal3
F cleanname	F readcardinal3le



F readcardinal4	F scriptandlanguage
F readcardinal4le	F setdynamics
F readcardinaltable	F setfeatures
F readchar	T statistics
F readfixed2	D usedfeatures
F readfixed4	F storepdfdata
F readinteger	T svg
F readinteger1	F filterglyph
F readinteger2	F topdf
F readinteger2le	D svgcache
F readinteger3	B svgenabled
F readinteger3le	T tables
F readinteger4	D baselines
F readinteger4le	D features
F readintegertable	D featuretypes
F readsignedbyte	D languages
F readstring	D scripts
F readtag	N version
F setposition	T pfb
F size	F loadvector
F skip	T tfm
F skiplong	F addtounicode
F skipposition	D features
F skipshort	N maxnestingdepth
F writebyte	N maxnestingsize
F writecardinal2	F reencode
F writecardinal4	F setfeatures
F writestring	N version
F svg	T vf
N tableversion	T combinations
F unifymissing	F combine
F unpack	T combiner
F vhea	D commands
F vmtx	D helpers
F vorg	D math
F vvar	D predefined
F woff2otf	N version
F registerpalette	D whatever
F registerplugin	F hashfeatures
F reorderlookups	F hashinstance
T sbix	T hashmethods
F topdf	F normal
D sbixcache	F virtual
B sbixenabled	F initializefeatures

T keys	S vfactor	
T characters	S wdelta	
T descriptions	S width	
T parameters	S embedding	
S ascender	S encodingbytes	
S descender	S filename	
S designsizes	S finalized	
T expansion	S fontname	
S auto	S format	
S shrink	S fullname	
S step	S hasitalics	
S stretch	S hasmath	
S extendfactor	S mathitalics	
S factor	S mode	
S hfactor	S name	
S mathsize	S noglyphnames	
S mode	S nostackmath	
T protrusion	S psname	
S auto	S textitalics	
S quad	S virtualized	
S scaledpoints	D loadedfonts	
S scriptpercentage	S namememo	
S scriptscriptpercentage	N noffontsloaded	
S size	N nofsharedfonts	
S slantfactor	N nofsharedhashes	
S slantperpoint	N nofsharedvectors	
T spacing	N privateoffset	
S extra	D privateslots	
S shrink	F readanddefine	
S stretch	F registerfeature	
S width	F resetfeature	
S units	B resolvevirtualtoo	
S vfactor	F scale	
S width	F scaled	
S xheight	F setfactor	
T properties	F setfeature	
S autoitalicamount	F setmathparameter	
S cidinfo	F setname	
T effect	B sharefonts	
S ddelta	F trytosharefont	
S effect	N version	
S factor	<b>current</b>	function
S hdelta	<b>currentid</b>	function
S hfactor	<b>definers</b>	table

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

**definetypeface**      function

**encodings**            table

- T agl
  - D ctxcodes
  - D extras
  - D names
  - D synonyms
  - D unicodes
- D cache
- F is\_known
- D known
- F load
- F make\_unicode\_vector
- D math
- N version

**enhanceid**            function

**expansions**          data table

**formats**            data table

**getalternate**        function

**getkern**              function

**getmultiple**        function

**getsubstitution**    function

**getters**             table

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

**goodies**             table

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

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

D designsizes	
D filenames	
F getcompositions	
T list	
F load	
F prepare_features	
F register	
F registerpostprocessor	
F report	
T suffixes	
<b>handlers</b>	<b>table</b>
<b>hashes</b>	<b>table</b>
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 modes	
D originals	
D parameters	
T processes	
D properties	
D quads	
D resources	
T setdynamics	
T shapes	
D spaces	
D spacings	
T streams	
D unicodes	
D variants	
D xheights	
<b>helpers</b>	<b>table</b>
F addextraprivate	
F addprivate	
F appendcommands	

F checkflags	
F checkmerge	
F checksteps	
F collectanchors	
D commands	
F descriptiontoslot	
F dimenfactor	
F expandglyph	
T extraprivates	
F fontpatternhassize	
F getcoloredglyphs	
F getdigitwidth	
F getinstancespec	
F getparameters	
F getprivatecharornode	
F getprivatenode	
F getprivates	
F getprivateslot	
F hasprivate	
F indextoslot	
F name	
F nametoslot	
F prependcommands	
F privateslot	
F setdigitwidth	
F splitfontpattern	
F tochar	
<b>infofont</b>	<b>function</b>
<b>iterators</b>	<b>table</b>
F characters	
F descriptions	
F glyphs	
<b>loggers</b>	<b>table</b>
F add_placeholders	
D category_to_placeholder	
F format	
F onetimemessage	
F register	
F reportdefinedfonts	
F reportusedfeatures	
<b>mappings</b>	<b>table</b>
F addtounicode	
F fromunicode16	
F loadfile	

F loadline		D defaults	
F makenameparser		F definefallbackfamily	
D overloads		F definefontfamily	
F reset		F definefontfamilypreset	
F tounicode		D extras	
F tounicode16		F fallback	
F tounicode16sequence		D fallbacks	
<b>metapost</b>	table	F features	
F boundingbox		F filefallback	
F boxtomp		F fontdata	
F draw		F fontfallback	
F fill		F fontsynonym	
F maxbounds		F goodies	
F output		F mathfallback	
F paths		D methods	
F widthline		D presets	
F zeroline		F registerfallback	
<b>mp</b>	table	F registerfiles	
D cache		F registerfontalternative	
B inline		F registerfontfamily	
N version		F textfallback	
<b>names</b>	data table	F typeface	
<b>nulldata</b>	data table	F typescript	
<b>protrusions</b>	data table	F userdata	
<b>readers</b>	table	<b>specifiers</b>	table
F afm		D contextmerged	
F check_lua		F contextnumber	
F check_tfm		D contextnumbers	
F lua		D contextsetups	
F ofm		F contexttostring	
F opentype		F definecontext	
F otf		F mergecontext	
F pfb		F presetcontext	
D sequence		F registercontext	
F tfm		F showcontext	
F ttc		F splitcontext	
F ttf		D synonyms	
F woff		D variants	
<b>reserveid</b>	function	<b>symbols</b>	table
<b>select</b>	table	T emoji	
D alternatives		F checked	
F bodyfont		F resolved	
D data		F uselibrary	
F default		<b>tables</b>	table

D data  
F savefont  
F saveoriginal

**tracers** table

**treatments** table

F applyfixes

D data  
S filename  
F ignoredfile  
F report  
F trace

**typefaces** table

# functions (context)

**dummy** function

# graphics (context)

**backgrounds** table

F fetchmultipar

F pair

F path

F point



## gzip (extra lua)

**close**    function  
**lines**    function  
**load**    function

**open**    function  
**save**    function  
**suffix** function

## img (basic tex)

<b>boxes</b>	function	<b>node</b>	function
<b>check</b>	function	<b>ofindex</b>	function
<b>checksize</b>	function	<b>package</b>	function
<b>clone</b>	function	<b>print</b>	function
<b>copy</b>	function	<b>scan</b>	function
<b>fields</b>	function	<b>serialize</b>	function
<b>immediatewrite</b>	function	<b>tonode</b>	function
<b>immediatewriteobject</b>	function	<b>totable</b>	function
<b>keys</b>	function	<b>types</b>	function
<b>new</b>	function	<b>write</b>	function

# interactions (context)

**attachments** data table

**fields** table

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

**general** table

- F getidentity
- F setupidentity

**help** table

- F collect
- F reference
- F register

**javascripts** table

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

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

**linkedslists** data table

**pages** table

- F setpagetransition
- F setupcanvas

**references** table

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

**renderings** data table

**soundclips** data table

# interfaces (context)

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

F define

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

## io (basic lua)

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

# job (context)

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

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

## lang (basic tex)

<b>clean</b>	function
<b>clear_hyphenation</b>	function
<b>clear_patterns</b>	function
<b>exceptions</b>	function
<b>gethjcode</b>	function
<b>hyphenate</b>	function
<b>hyphenation</b>	function
<b>hyphenationmin</b>	function

<b>id</b>	function
<b>new</b>	function
<b>patterns</b>	function
<b>postexhyphenchar</b>	function
<b>posthyphenchar</b>	function
<b>preexhyphenchar</b>	function
<b>prehyphenchar</b>	function
<b>sethjcode</b>	function



# languages (context)

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

T enablers

F load

B enables

T methods

F found

N threshold

# layouts (context)

<b>status</b>	table	F leftorrightpageaction
	F isleftpage	

## lfs (extra lua)

<b>attributes</b>	overloaded function	<b>mkdir</b>	overloaded function
<b>chdir</b>	overloaded function	<b>mkdirs</b>	function
<b>currentdir</b>	function	<b>readlink</b>	overloaded function
<b>dir</b>	overloaded function	<b>rmdir</b>	overloaded function
<b>isdir</b>	overloaded function	<b>setmode</b>	overloaded function
<b>isfile</b>	overloaded function	<b>shortname</b>	overloaded function
<b>isfound</b>	function	<b>symlinkattributes</b>	overloaded function
<b>link</b>	overloaded function	<b>touch</b>	overloaded function
<b>lock</b>	function	<b>unlock</b>	function
<b>lock_dir</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>convert</b>	function
<b>convertfile</b>	function
<b>convertstring</b>	function
<b>einject</b>	function
<b>eprint</b>	function
<b>escape</b>	function
<b>finalized</b>	function
<b>finject</b>	function
<b>fprint</b>	function
<b>get</b>	function
<b>getvariables</b>	function
<b>htmfile</b>	function
<b>html</b>	table
F a	
F td	
F th	
<b>include</b>	function
<b>inherited</b>	table
S color-background-four	
S color-background-one	
S color-background-three	
S color-background-two	
S title	
<b>initialize</b>	function
<b>inject</b>	function
<b>lmxfile</b>	function

<b>loadedfile</b>	function
<b>make</b>	function
<b>new</b>	function
<b>overloaderror</b>	function
<b>popupfile</b>	function
<b>print</b>	function
<b>pv</b>	function
<b>report</b>	function
<b>reset</b>	function
<b>result</b>	function
<b>set</b>	function
<b>show</b>	function
<b>showdebuginfo</b>	function
<b>showerror</b>	function
<b>stripcss</b>	function
<b>tv</b>	function
<b>type</b>	function
<b>urlescape</b>	function
<b>variable</b>	function
<b>variables</b>	table
S color-background-blue	
S color-background-body	
S color-background-green	
S color-background-main	
S color-background-purple	
S color-background-yellow	
S title-default	

# logs (context)

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

# lpdf (context)

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

<b>docstring</b>	function
<b>epdf</b>	table

- F contenttotext
- F expanded
- F getpagecontent
- F getstructure
- T image
  - F close
  - F copy
  - F open
  - F query
- F load
- F plugin
- T resolvers
  - F destinations
  - F embeddedfiles
  - F javascripts
  - F layers
  - F pages
  - F structure
  - F widgets
- F unload

<b>escaped</b>	function
<b>finalizedocument</b>	function
<b>finalizefonts</b>	function
<b>finalizepage</b>	function
<b>finishtransparencycode</b>	function
<b>flags</b>	table

- T annotations
- N AutoView
- N Hidden
- N Invisible
- N Locked
- N LockedContents
- N NoRotate
- N NoView
- N NoZoom
- N Print
- N Printable
- N ReadOnly
- N ToggleNoView



N auto		getvpos	function
N hidden		graycode	function
N printable		hasmatrix	function
T widgets		id	function
N Comb		includechar	function
N CommitOnSelChange		includefont	function
N DoNotScroll		injectxmpinfo	function
N DoNotSpellCheck		insertxmpinfo	function
N Edit		layerreference	function
N FileSelect		limited	function
N MultiLine		linearshade	function
N NoExport		literal	function
N NoToggleToOff		majorversion	function
N Password		minorversion	function
N PopUp		nametree	function
N PushButton		null	function
N Radio		number	function
N RadiosInUnison		objectcompresslevel	function
N ReadOnly		pagereference	function
N Required		patternstream	function
N RichText		pdfcolor	function
N Sort		pdftimestamp	function
N file		permitdetail	function
N fixed		protectresources	boolean
N nocheck		rectangle	function
N protected		reference	function
N readonly		registerannotation	function
N required		registerdestination	function
N sorted		registerdocumentfinalizer	function
N unavailable		registerfont	function
flushobject	function	registerpagefinalizer	function
flushstreamfileobject	function	registerpattern	function
flushstreamobject	function	reserveobject	function
formats	data table	rgbcode	function
frombytes	function	rotationcm	function
fromeight	function	setcompression	function
frompdfdoc	function	setdates	function
fromsixteen	function	settime	function
getcompression	function	settrailerid	function
gethpos	function	setversion	function
getmatrix	function	shareobject	function
getmetadata	function	shareobjectreference	function
getpos	function	spotcode	function
getversion	function	stream	function

<b>string</b>	function	<b>transparencycode</b>	function
<b>toeight</b>	function	<b>transparencygroups</b>	table
<b>topdfdoc</b>	function	B none	
<b>tosixteen</b>	function	<b>transparencyvalue</b>	function
<b>transform</b>	function	<b>unicode</b>	function
<b>transparency</b>	function	<b>verbose</b>	function

## lpeg (basic lua)

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

# ltn12 (extra lua)

**BLOCKSIZE**    number

**filter**        table

    F chain

    F cycle

**pump**          table

    F all

    F step

**sink**           table

    F chain

    F error

    F file

    F null

    F simplify

    F table

**source**        table

    F cat

    F chain

    F empty

    F error

    F file

    F rewind

    F simplify

    F string

# lua (basic tex)

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

# luatex (context)

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

# lxml (context)

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

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

F add

F compare	
F flush	
F reset	
F show	
F sort	
<b>splitid</b>	function
<b>startraw</b>	function
<b>startunesaped</b>	function
<b>stopraw</b>	function
<b>stopunesaped</b>	function
<b>store</b>	function
<b>strip</b>	function
<b>stripped</b>	function
<b>tag</b>	function
<b>text</b>	function
<b>tobuffer</b>	function
<b>tofile</b>	function
<b>toparameters</b>	function
<b>toverbatim</b>	function
<b>verbatim</b>	function
<b>withindex</b>	function
<b>xmltexhandler</b>	data table



## math (basic lua)

<b>abs</b>	function	<b>maxinteger</b>	number
<b>acos</b>	function	<b>min</b>	function
<b>asin</b>	function	<b>mininteger</b>	number
<b>atan</b>	function	<b>mod</b>	function
<b>atan2</b>	function	<b>modf</b>	function
<b>ceil</b>	function	<b>odd</b>	function
<b>ceiling</b>	function	<b>pi</b>	number
<b>cos</b>	function	<b>pow</b>	function
<b>cosd</b>	function	<b>rad</b>	function
<b>cosh</b>	function	<b>random</b>	overloaded function
<b>deg</b>	function	<b>randomseed</b>	function
<b>div</b>	function	<b>round</b>	function
<b>even</b>	function	<b>setrandomseedi</b>	function
<b>exp</b>	function	<b>sin</b>	function
<b>floor</b>	function	<b>sind</b>	function
<b>fmod</b>	function	<b>sinh</b>	function
<b>frexp</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

# mathematics (context)

<b>addfallbacks</b>	function	<b>mapremap</b>	data table
<b>alphabets</b>	data table	<b>overloadadditions</b>	function
<b>alternatives</b>	data table	<b>overloadparameters</b>	function
<b>big</b>	function	<b>privatebase</b>	number
<b>boldmap</b>	data table	<b>registerdomain</b>	function
<b>categories</b>	table	<b>registerfallbackid</b>	function
D functions		<b>remapalphabets</b>	function
<b>charactersets</b>	data table	<b>renderings</b>	table
<b>checkaccentbaseheight</b>	function	D mappings	
<b>checkprivateparameters</b>	function	D numbers	
<b>classes</b>	data table	D sets	
<b>codes</b>	data table	<b>renderset</b>	function
<b>define</b>	function	<b>resetattributes</b>	function
<b>dimensions</b>	function	<b>resetitalics</b>	function
<b>domains</b>	table	<b>resolvefallbacks</b>	function
<b>extensiblecode</b>	function	<b>scaleparameters</b>	function
<b>extensibles</b>	data table	<b>setdomain</b>	function
<b>extrabase</b>	number	<b>setitalics</b>	function
<b>extras</b>	table	<b>setridofprime</b>	function
F add		<b>sets</b>	data table
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>crypt</b>	function
<b>dec</b>	function
<b>decrypt</b>	function
<b>exor</b>	function

<b>hex</b>	function
<b>sum</b>	function
<b>sumHEXA</b>	overloaded function
<b>sumhexa</b>	overloaded function

# metapost (context)

<b>analyzeplugins</b>	function	<b>getstatistics</b>	function
<b>checkformat</b>	function	<b>gettext</b>	function
<b>checktexts</b>	function	<b>graphic</b>	function
<b>cm</b>	function	<b>graphic_base_pass</b>	function
<b>collapse</b>	boolean	<b>installplugin</b>	function
<b>colorinitializer</b>	function	<b>intermediate</b>	table
<b>comment</b>	function	T actions	
<b>convert</b>	function	F makempy	
<b>defaultformat</b>	string	<b>isobject</b>	function
<b>defaultinstance</b>	string	<b>lastlog</b>	string
<b>defaultmethod</b>	string	<b>load</b>	function
<b>directrun</b>	function	<b>makempy</b>	table
<b>escaped</b>	function	N nofconverted	
<b>exectime</b>	table	F processgraphics	
<b>extensiondata</b>	data table	F registerfile	
<b>filterclippath</b>	function	<b>maketext</b>	function
<b>flush</b>	function	<b>metafun</b>	table
<b>flushers</b>	table	F interpolate	
T pdf		F topath	
F comment		<b>method</b>	number
F flushfigure		<b>mptopdf</b>	table
F startfigure		F convertmptstopdf	
F stopfigure		N nofconverted	
F textfigure		<b>n</b>	number
<b>flushliteral</b>	function	<b>nofscriptruns</b>	function
<b>flushnormalpath</b>	function	<b>nvformat</b>	function
<b>flushreset</b>	function	<b>optimize</b>	boolean
<b>fonts</b>	table	<b>parse</b>	function
F define		<b>pdfliterals</b>	function
T flusher		<b>pluginactions</b>	function
F flushfigure		<b>popformat</b>	function
F startfigure		<b>popscriptrunner</b>	function
F stopfigure		<b>popvariable</b>	function
N instances		<b>popvariables</b>	function
F process		<b>preparetexttsdata</b>	function
<b>format_number</b>	function	<b>process</b>	function
<b>format_string</b>	function	<b>processplugins</b>	function
<b>formatnumber</b>	function	<b>processspecial</b>	function
<b>getclippath</b>	function	<b>properties</b>	table
<b>getextensions</b>	function	<b>pushformat</b>	function
<b>getjobdata</b>	function	<b>pushscriptrunner</b>	function

<b>pushvariable</b>	function	<b>stopgraphic</b>	function
<b>pushvariables</b>	function	<b>svformat</b>	function
<b>quickanddirty</b>	function	<b>sxsy</b>	function
<b>reducetogray</b>	boolean	<b>tex</b>	table
<b>reporterror</b>	function	F get	
<b>reset</b>	function	F reset	
<b>resetlastlog</b>	function	F set	
<b>resetplugins</b>	function	F setfrombuffer	
<b>run</b>	function	<b>texerrors</b>	boolean
<b>runscript</b>	function	<b>texexp</b>	function
<b>scripterror</b>	function	<b>theclippath</b>	function
<b>setextensions</b>	function	<b>tographic</b>	function
<b>setoutercolor</b>	function	<b>totable</b>	function
<b>settext</b>	function	<b>unload</b>	function
<b>setvariable</b>	function	<b>untagvariable</b>	function
<b>showlog</b>	boolean	<b>use_one_pass</b>	boolean
<b>simple</b>	function	<b>variables</b>	table
<b>startgraphic</b>	function		

## mime (extra lua)

**b64** function

**decode** function

**decodet** table

F base64

F quoted-printable

**dot** function

**encode** function

**encodet** table

F base64

F quoted-printable

**eol** function

**normalize** function

**qp** function

**qpwrp** function

**stuff** function

**unb64** function

**unqp** function

**wrap** function

**wrapt** table

F base64

F default

F quoted-printable

F text

**wrp** function

## mp (context)

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

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



<b>pathlength</b>	function	<b>quadruple</b>	function
<b>pathpoint</b>	function	<b>quadruplepoints</b>	function
<b>pathpoints</b>	function	<b>quoted</b>	function
<b>pathreset</b>	function	<b>report</b>	function
<b>pathright</b>	function	<b>set</b>	table
<b>points</b>	function	F path	
<b>positionanchor</b>	function	<b>setcount</b>	function
<b>positionbox</b>	function	<b>setdimen</b>	function
<b>positioncurve</b>	function	<b>setmacro</b>	function
<b>positionpage</b>	function	<b>settoks</b>	function
<b>positionpath</b>	function	<b>size</b>	function
<b>positionpxy</b>	function	<b>systemmode</b>	function
<b>positionregion</b>	function	<b>texstr</b>	function
<b>positionwhd</b>	function	<b>texvar</b>	function
<b>positionxy</b>	function	<b>tohash</b>	function
<b>prefix</b>	function	<b>triplet</b>	function
<b>print</b>	function	<b>tripletpoints</b>	function
<b>processingmode</b>	function	<b>vprint</b>	function

## mplib (extra tex)

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

# noads (context)

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

## node (basic tex)

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

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

<b>is_zero_glue</b>	function	<b>slide</b>	function
<b>kerning</b>	function	<b>subtype</b>	function
<b>last_node</b>	function	<b>subtypes</b>	function
<b>length</b>	function	<b>tail</b>	function
<b>ligaturing</b>	function	<b>tostring</b>	function
<b>mlist_to_hlist</b>	function	<b>traverse</b>	function
<b>new</b>	function	<b>traverse_char</b>	function
<b>next</b>	function	<b>traverse_glyph</b>	function
<b>prepend_prevdepth</b>	function	<b>traverse_id</b>	function
<b>prev</b>	function	<b>traverse_list</b>	function
<b>protect_glyph</b>	function	<b>type</b>	function
<b>protect_glyphs</b>	function	<b>types</b>	function
<b>protrusion_skippable</b>	function	<b>unprotect_glyph</b>	function
<b>rangedimensions</b>	function	<b>unprotect_glyphs</b>	function
<b>remove</b>	function	<b>unset_attribute</b>	function
<b>set_attribute</b>	function	<b>usedlist</b>	function
<b>set_properties_mode</b>	function	<b>uses_font</b>	function
<b>setfield</b>	function	<b>values</b>	function
<b>setglue</b>	function	<b>vpack</b>	function
<b>setproperty</b>	function	<b>whatsits</b>	function
<b>setwhd</b>	function	<b>write</b>	function

## nodes (context)

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

F accessibility	
F backgrounds	
F backgroundspage	
F backgroundsvbox	
F characters	
F checkforleaks	
F checkglyphs	
F cleanupbox	
F cleanuppage	
F export	
F finalizebox	
F flatten	
F flattenline	
F migrate	
F protectglyphs	
F stripping	
F textbackgrounds	
F unprotectglyphs	
<b>has_attribute</b>	function
<b>has_field</b>	function
<b>has_glyph</b>	function
<b>hpack</b>	function
<b>idstostring</b>	function
<b>ignorablefields</b>	data table
<b>injections</b>	table
F copy	
F getligaindex	
F getthreshold	
F handler	
F installgetspaceboth	
F installnewkern	
F isspace	
F keepcounts	
F reset	
F resetcounts	
F setcursive	
F setkern	
F setligaindex	
F setmark	
F setmove	
F setposition	
F setspacekerns	
<b>insert_after</b>	function
<b>insert_before</b>	function

<b>insert_list_after</b>	function
<b>installattributehandler</b>	function
<b>is_char</b>	function
<b>is_direct</b>	function
<b>is_display_math</b>	function
<b>is_glyph</b>	function
<b>is_mirrored</b>	data table
<b>is_node</b>	function
<b>is_nut</b>	function
<b>is_rotated</b>	data table
<b>is_zero_glue</b>	function
<b>ischar</b>	function
<b>isglyph</b>	function
<b>kerncodes</b>	data table
<b>kerning</b>	function
<b>keys</b>	table
T whatsit	
<b>last_node</b>	function
<b>leadercodes</b>	data table
<b>leftmarginwidth</b>	function
<b>length</b>	function
<b>ligaturing</b>	function
<b>linefillers</b>	table
D data	
F define	
F enable	
F filler	
F handler	
<b>lines</b>	table
T boxed	
F register	
F setup	
F stage_one	
F stage_two	
D data	
F finalize	
F number	
N scratchbox	
<b>link</b>	function
<b>linked</b>	function
<b>list</b>	function
<b>listablefields</b>	data table
<b>listcodes</b>	data table
<b>listtutf</b>	function



<b>literalvalues</b>	data table	F end_of_math
<b>load</b>	function	F find_attribute
<b>locate</b>	function	F first_glyph
<b>margincodes</b>	data table	F firstcharacter
<b>marginkerncodes</b>	data table	F firstcharinbox
<b>markers</b>	table	F firstglyph
F get		F flatten_discretionaries
<b>mathcodes</b>	data table	F flush
<b>maxboxwidth</b>	function	F flush_list
<b>mlist_to_hlist</b>	function	F flush_node
<b>new</b>	function	F free
<b>noadcodes</b>	data table	F fullhpack
<b>noadoptions</b>	table	F get_components
N axis		F get_synctex_fields
N exact		F getattr
N left		F getattribute
N middle		F getattributelist
N no_axis		F getattrlist
N right		F getboth
N set		F getbox
N unused_1		F getboxglue
N unused_2		F getchar
<b>nodecodes</b>	data table	F getcomponents
<b>nopts</b>	function	F getdepth
<b>nuts</b>	table	F getdir
F append		F getdirection
F apply		F getdisc
F applyvisuals		F getdiscretionary
F check_discretionaries		F getfam
F concat		F getfield
F copy		F getfont
F copy_list		F getglue
F copy_no_components		F getheight
F copy_node		F getid
F copy_only_glyphs		F getkern
F copy_properties		F getlang
F copyvisual		F getlanguage
F count		F getleader
F count_components		F getlist
F countall		F getnext
F current_attr		F getnucleus
F delete		F getoffsets
F dimensions		F getpenalty
F effective_glue		F getprev

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

F temp	F setchar
F textdir	F setcomponents
F usage	F setdepth
F userattributes	F setdir
T userids	F setdirection
N margins.inline	F setdisc
N property	F setdiscretionary
N splitters.one	F setfam
N splitters.two	F setfield
F userlist	F setfont
F userlua	F setglue
F usernumber	F setheight
F userrule	F setkern
F userstring	F setlang
F usertokens	F setlanguage
F vlist	F setleader
F wordboundary	F setlink
F prepend	F setlist
F processranges	F setnext
F processwords	F setnucleus
F protect_glyph	F setoffsets
F protect_glyphs	F setpenalty
F protrusion_skippable	F setprev
F rangedimensions	F setprop
F rawprop	F setshift
F reference	F setsplit
F rehpack	F setsub
F remove	F setsubtype
F repackhlist	F setsup
F replace	F setsurround
F rightmarginwidth	F setunsetattributes
T rules	F setvisual
F userrule	F setvisuals
F set_attribute	F setwhd
F set_components	F setwidth
F set_synctex_fields	F slide
F setattr	F somepenalty
F setattribute	F somespace
F setattributelist	F splitbox
F setattributes	F striprange
F setattrlist	F tail
F setboth	F take_components
F setbox	F takeattr
F setboxglue	F takebox

- F takelist
- F theprop
- F tonode
- F tonodes
- F tonut
- F tosequence
- F tostring
- F tracedslide
- F traverse
- F traverse\_char
- F traverse\_glyph
- F traverse\_id
- F traverse\_list
- T traversers
  - F boundary
  - F char
  - F disc
  - F glue
  - F glyph
  - F hlist
  - F list
  - F next
  - F node
  - F vlist
  - F whatsit
- T typesetters
  - F tohbox
  - F tohpack
  - F tonodes
  - F toinbox
  - F toinbox
- F unprotect\_glyph
- F unprotect\_glyphs
- F unset\_attribute
- F unsetattribute
- F unsetattributes
- F untracedslide
- F use\_components
- F usedlist
- F uses\_font
- F vianodes
- F vianuts
- F vpack
- F write

- packlist**
- pardir\_is\_equal**
- pardir\_is\_opposite**
- pardir\_is\_parallel**
- partextdir\_is\_equal**
- pdfliteralvalues**
- penaltycodes**
- plugindata**

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

- points**
- pool**

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

- prepend**
- print**
- processors**

- F contribute\_filter

- function
- data table
- data table
- data table
- data table
- data table
- table

- function
- table

- function
- function
- table

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

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

<b>traverse_id</b>	function	<b>usedlist</b>	function
<b>traverse_list</b>	function	<b>usercodes</b>	data table
<b>traversers</b>	table	<b>uses_font</b>	function
F char		<b>vianodes</b>	function
F glyph		<b>vianuts</b>	function
F list		<b>visualizebox</b>	function
F node		<b>visualizers</b>	table
<b>typesetters</b>	table	F attribute	
F hbox		T attributes	
F hpack		F box	
F tohbox		F handler	
F tohpack		F markfonts	
F tonodes		F setfont	
F to vbox		F setlayer	
F to vpack		F setruledglyph	
F vpack		F setvisual	
<b>unprotect_glyph</b>	function	<b>vpack</b>	function
<b>unprotect_glyphs</b>	function	<b>whatcodes</b>	data table
<b>unset_attribute</b>	function	<b>whatsitcodes</b>	data table
<b>unsetattribute</b>	function	<b>write</b>	function
<b>unsetattributes</b>	function		

## number (context)

	function
<b>basepoints</b>	function
<b>bytetodecimal</b>	function
<b>compactfloat</b>	function
<b>decimaltobyte</b>	function
<b>dimenfactors</b>	data table
<b>formatted</b>	function
<b>formattedfloat</b>	function
<b>maxdimen</b>	number
<b>nopts</b>	function
<b>percent</b>	function
<b>points</b>	function
<b>pts</b>	function
<b>signed</b>	function
<b>sparseexponent</b>	function
<b>splitdimen</b>	function
<b>tobasepoints</b>	function
<b>tobitstring</b>	function

<b>tocentimeters</b>	function
<b>tociceros</b>	function
<b>tocontext</b>	function
<b>todidots</b>	function
<b>todimen</b>	function
<b>toevenhex</b>	function
<b>toinches</b>	function
<b>tomillimeters</b>	function
<b>tonewciceros</b>	function
<b>tonewdidots</b>	function
<b>tonumberf</b>	function
<b>tonumberg</b>	function
<b>topicsas</b>	function
<b>topoints</b>	function
<b>toscaled</b>	function
<b>toscaledpoints</b>	function
<b>valid</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

## 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>resolvers</b>	table
<b>binsuffixes</b>	table	<b>F bits</b>	
<b>clock</b>	function	<b>resultof</b>	function
<b>converttime</b>	function	<b>runtime</b>	function
<b>date</b>	function	<b>selfdir</b>	string
<b>difftime</b>	function	<b>setenv</b>	overloaded function
<b>env</b>	data table	<b>setlocale</b>	overloaded function
<b>exec</b>	overloaded function	<b>sleep</b>	function
<b>execute</b>	overloaded function	<b>spawn</b>	overloaded function
<b>exit</b>	function	<b>time</b>	function
<b>fulltime</b>	function	<b>times</b>	function
<b>getenv</b>	overloaded function	<b>timezone</b>	function
<b>gettimeofday</b>	function	<b>tmpdir</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>validdatetime</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>luapaths</b>	function
<b>cpath</b>	string	<b>path</b>	overloaded string
<b>extralibpath</b>	function	<b>poplibpath</b>	function
<b>extralibpaths</b>	function	<b>popluapath</b>	function
<b>extralupath</b>	function	<b>preload</b>	table
<b>extralupaths</b>	function	<b>pushlibpath</b>	function
<b>helpers</b>	table	<b>pushluapath</b>	function
<b>libpaths</b>	function	<b>searchers</b>	table
<b>loaded</b>	table	<b>searchpath</b>	function
<b>loaders</b>	table	<b>seeall</b>	function
<b>loadlib</b>	function		

# pagebuilders (context)

## columnsets    table

- F add
- F block
- F check
- F currentcolumn
- F define
- F finishflush
- F flushareas
- F flushcolumn
- F flushrest
- F goto
- F noto
- F prepareflush
- F put
- F registerarea
- F reset
- F setarea

- F sethsize
- F sethspace
- F setlines
- F setproperties
- F setstart
- F setvsize

## injections    table

- F flushafter
- F flushbefore
- F save

## mixedcolumns    table

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

## pdf (basic tex)

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

<b>setpagesattributes</b>	overloaded function	<b>settrailerid</b>	overloaded function
<b>setpkresolution</b>	function	<b>setxformattributes</b>	function
<b>setrecompress</b>	function	<b>setxformmargin</b>	function
<b>setsuppressoptionalinfo</b>	function	<b>setxformresources</b>	function
<b>setthreadmargin</b>	function	<b>xformname</b>	function
<b>settrailer</b>	overloaded function		

## pdf (context)

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

# pdfscanner (context)

**scan** function



# physics (context)

**units** table

F registerunit

D tables

# 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>	table
S subtitle	<b>detailed</b>	table
S title	<b>endnotes_to_btx</b>	function
S year	<b>enhancer</b>	table
T optional	S arguments	
T required	T askip	
T sets	B dirty	
T author	T gskip	
T virtual	T kind	
T demo-b	T list	
S category	T system	
T extra	T order	
T fields	<b>enhancers</b>	table
S author	F details	
S institution	F order	
S organization	F suffixes	
S subtitle	<b>finder</b>	function
S title	<b>firstofrange</b>	function
S year	<b>found</b>	function
T optional	<b>get</b>	function
T required	<b>getcasted</b>	function
T sets	<b>getdetail</b>	function
T authors	<b>getdirect</b>	function
T virtual	<b>getfaster</b>	function
S comment	<b>getfield</b>	function
S copyright	<b>getfuzzy</b>	function
T fields	<b>getindex</b>	function
S name	<b>inspectors</b>	data table
T types	<b>journals</b>	table
S author	F abbreviated	
S editor	F add	
S keywords	F expanded	
S number	F load	
S page	F save	

<b>lastofrange</b>	function	F refman	
<b>lists</b>	table	F registercleaner	
		F xml	
F collectentries		<b>loadreplacementfile</b>	function
F combiinlist		<b>new</b>	function
F fetchentries		<b>okay</b>	function
F filterall		<b>oneorange</b>	function
F flushcombi		<b>parenttag</b>	function
F flushentry		<b>permitted</b>	function
F flushtag		<b>prerollcmdstring</b>	function
T methods		<b>refman_to_btx</b>	function
F dataset		<b>resolvedname</b>	function
F force		<b>save</b>	function
F global		<b>savers</b>	table
F local			
F nofregistered		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	
F lua		D privates	

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

## regimes (context)

<b>backmapping</b>	data table
<b>cleanup</b>	function
<b>disable</b>	function
<b>enable</b>	function
<b>fromregime</b>	function
<b>list</b>	function

<b>mapping</b>	data table
<b>pop</b>	function
<b>process</b>	function
<b>push</b>	function
<b>toregime</b>	function
<b>translate</b>	function

# resolvers (context)

<b>allprefixes</b>	function	<b>findpath</b>	function
<b>appendhash</b>	function	<b>findtexfile</b>	function
<b>automount</b>	function	<b>findwildcardfile</b>	function
<b>automounted</b>	table	<b>findwildcardfiles</b>	function
<b>booleanvariable</b>	function	<b>formatofsuffix</b>	function
<b>cacheversion</b>	string	<b>formatofvariable</b>	function
<b>checkedvariable</b>	function	<b>formats</b>	data table
<b>cleanedpathlist</b>	function	<b>foundintree</b>	function
<b>cleanpath</b>	function	<b>foundintrees</b>	function
<b>cleanpathlist</b>	function	<b>generators</b>	data table
<b>concatinators</b>	data table	<b>get_from_content</b>	function
<b>configbanner</b>	string	<b>getenv</b>	function
<b>configurationfiles</b>	function	<b>getextrapaths</b>	function
<b>criticalvars</b>	data table	<b>getfilehashes</b>	function
<b>dangerous</b>	data table	<b>gethashes</b>	function
<b>datastate</b>	function	<b>getownpath</b>	function
<b>defaultsuffixes</b>	table	<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>inputstack</b>	table
<b>env</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>extendtexmfvariable</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>load</b>	function
<b>finders</b>	data table	<b>loadbinfile</b>	function
<b>findfile</b>	function	<b>loaders</b>	data table
<b>findfiles</b>	function	<b>loadlua lib</b>	function
<b>findgivenfile</b>	function	<b>loadtexfile</b>	function
<b>findgivenfiles</b>	function	<b>loadtime</b>	function

<b>locateformat</b>	function	<b>savers</b>	data table
<b>locators</b>	data table	<b>scandata</b>	function
<b>luacnffallback</b>	string	<b>scanfiles</b>	function
<b>luacnfname</b>	string	<b>schemes</b>	table
<b>luacnfspec</b>	string	T cleaners	
<b>luacnfstate</b>	string	F md5	
<b>macros</b>	table	F none	
F convertfile		F strip	
F decodecomment		F cleanname	
F enablecomment		F fetchstring	
F encodecomment		F fetchtable	
F preprocessed		F install	
F processmk		<b>setdynamic</b>	function
F processmkvi		<b>setenv</b>	function
F version		<b>setmemstream</b>	function
<b>maxreadlevel</b>	number	<b>showpath</b>	function
<b>methodhandler</b>	function	<b>simplescanfiles</b>	function
<b>openbinfile</b>	function	<b>splitconfigurationpath</b>	function
<b>openers</b>	data table	<b>splitexpansions</b>	function
<b>openfile</b>	function	<b>splitmethod</b>	function
<b>opentexfile</b>	function	<b>splitpath</b>	function
<b>ownpath</b>	string	<b>stackpath</b>	function
<b>popextrapath</b>	function	<b>starttiming</b>	function
<b>poppath</b>	function	<b>stoptiming</b>	function
<b>prefixes</b>	data table	<b>suffixes</b>	data table
<b>prependhash</b>	function	<b>suffixmap</b>	data table
<b>pushextrapath</b>	function	<b>suffixofformat</b>	function
<b>pushpath</b>	function	<b>texdatablob</b>	function
<b>registerextrapath</b>	function	<b>toppath</b>	function
<b>registerfile</b>	function	<b>unexpandedpath</b>	function
<b>registerfilehash</b>	function	<b>unexpandedpathlist</b>	function
<b>registerintrees</b>	function	<b>unresolve</b>	function
<b>registermethod</b>	function	<b>updaterelations</b>	function
<b>registerzipfile</b>	function	<b>updatescript</b>	function
<b>relations</b>	data table	<b>uselibrary</b>	function
<b>renew</b>	function	<b>usertypes</b>	data table
<b>renewcache</b>	function	<b>usezipfile</b>	function
<b>repath</b>	function	<b>validatedpath</b>	function
<b>reset</b>	function	<b>variable</b>	function
<b>resetextrapaths</b>	function	<b>variableofformat</b>	function
<b>resetmemstream</b>	function	<b>variableofformatorsuffix</b>	function
<b>resetresolve</b>	function	<b>wildcardpattern</b>	function
<b>resolve</b>	function		



## sandbox (context)

<b>disablelibraries</b>	function
<b>disablerunners</b>	function
<b>enable</b>	function
<b>filehandlerone</b>	function
<b>filehandlertwo</b>	function
<b>finalizer</b>	function
<b>getrunner</b>	function
<b>initializer</b>	function
<b>iohandler</b>	function
<b>logcalls</b>	function
<b>logfiles</b>	function
<b>original</b>	function
<b>overload</b>	function

<b>possiblepath</b>	function
<b>redefine</b>	function
<b>register</b>	function
<b>registerbinary</b>	function
<b>registerlibrary</b>	function
<b>registerroot</b>	function
<b>registerrunner</b>	function
<b>report</b>	function
<b>setfilenamelogger</b>	function
<b>setlogger</b>	function
<b>setreporter</b>	function
<b>settrace</b>	function
<b>validfilename</b>	function

# scripts (context)

<b>autofontfeature</b>	table	N inter_char_stretch_factor
F disable		N inter_word_stretch_factor
F enable		<b>handlers</b>
F handler		data table
<b>categorytonumber</b>	data table	<b>hash</b>
<b>colors</b>	data table	table
<b>decomposehangul</b>	function	<b>injectors</b>
<b>defaults</b>	table	data table
N inter_char_half_shrink_factor		<b>installdataset</b>
N inter_char_half_stretch_factor		function
N inter_char_hangul_penalty		<b>installmethod</b>
N inter_char_quarter_shrink_factor		function
N inter_char_quarter_stretch_factor		<b>numbertocategory</b>
N inter_char_shrink_factor		data table
		<b>numbertodataset</b>
		data table
		<b>numbertohandler</b>
		data table
		<b>reset</b>
		function
		<b>set</b>
		function
		<b>splitters</b>
		data table

## set (context)

**contains**    function

**create**     function

**tolist**     function

**tonumber**   function

**totable**    function

## sha2 (context)

**digest256** function

**digest384** function

**digest512** function

## sio (context)

<b>read2dot14</b>	function
<b>readbytes</b>	function
<b>readbytetable</b>	function
<b>readcardinal1</b>	function
<b>readcardinal2</b>	function
<b>readcardinal3</b>	function
<b>readcardinal4</b>	function
<b>readcardinaltable</b>	function

<b>readfixed2</b>	function
<b>readfixed4</b>	function
<b>readinteger1</b>	function
<b>readinteger2</b>	function
<b>readinteger3</b>	function
<b>readinteger4</b>	function
<b>readintegertable</b>	function

# socket (extra lua)

<b>BLOCKSIZE</b>	number	S cc
<b>_DATAGRAMSIZE</b>	number	S comments
<b>_DEBUG</b>	boolean	S connection
<b>_SETSIZE</b>	number	S content-description
<b>_SOCKETINVALID</b>	number	S content-disposition
<b>bind</b>	function	S content-encoding
<b>choose</b>	function	S content-id
<b>connect</b>	function	S content-language
<b>connect4</b>	function	S content-length
<b>connect6</b>	function	S content-location
<b>dns</b>	table	S content-md5
F getaddrinfo		S content-range
F gethostname		S content-transfer-encoding
F getnameinfo		S content-type
F tohostname		S cookie
F toip		S date
<b>ftp</b>	table	S diagnostic-code
S PASSWORD		S dsn-gateway
N TIMEOUT		S etag
S USER		S expect
F command		S expires
F genericform		S final-log-id
F get		S final-recipient
F open		S from
F put		S host
<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 proxy-authenticate	F b64	
S proxy-authorization	F decode	
S range	T decodet	
S received	F base64	
S received-from-mta	F quoted-printable	
S references	F dot	
S referer	F encode	
S remote-mta	T encodet	
S reply-to	F base64	
S reporting-mta	F quoted-printable	
S resent-bcc	F eol	
S resent-cc	F normalize	
S resent-date	F qp	
S resent-from	F qpwrp	
S resent-message-id	F stuff	
S resent-reply-to	F unb64	
S resent-sender	F unqp	
S resent-to	F wrap	
S retry-after	T wrapt	
S return-path	F base64	
S sender	F default	
S server	F quoted-printable	
S smtp-remote-recipient	F text	
S status	F wrp	
S subject	<b>newtry</b>	function
S te	<b>protect</b>	function
S to	<b>select</b>	function
S trailer	<b>sink</b>	function
S transfer-encoding	<b>sinkt</b>	table
S upgrade	F close-when-done	
S user-agent	F default	
S vary	F http-chunked	
S via	F keep-open	
S warning	<b>skip</b>	function
S will-retry-until	<b>sleep</b>	function
S www-authenticate	<b>smtp</b>	table
S x-mailer	S DOMAIN	
<b>http</b>	N PORT	
	S SERVER	
N TIMEOUT	N TIMEOUT	
S USERAGENT	S ZONE	
F genericform	F message	
F open	F open	
F request	F send	
<b>mime</b>		table

<b>source</b>	function	<b>try</b>	function
<b>sourcet</b>	table	<b>udp</b>	function
F by-length		<b>udp4</b>	function
F default		<b>udp6</b>	function
F http-chunked		<b>url</b>	table
F until-closed		F absolute	
<b>tcp</b>	function	F build	
<b>tcp4</b>	function	F build_path	
<b>tcp6</b>	function	F escape	
<b>tp</b>	table	F parse	
N TIMEOUT		F parse_path	
F connect		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 digitmaximum		<b>packuc</b>	function
N digitoffset		<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

## statistics (context)

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

## status (basic tex)

**list**                   function

**resetmessages**   function

**setexitcode**       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>disable</b>	function
<b>enable</b>	function
<b>flush</b>	function
<b>initialize</b>	function

<b>push</b>	function
<b>start</b>	function
<b>stop</b>	function
<b>synchronize</b>	function

## string (basic lua)

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

# structures (context)

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

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 tobесaved	
D stored		F userdata	
		F uservalue	
<b>itemgroups</b>	<b>table</b>	<b>marks</b>	<b>table</b>
<b>lists</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 formulainumber		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 realpage		F internalid	
F reordered		F listindex	
T result		T numbers	



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

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

## registers

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

## table

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

## sections

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

## table

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

F stop

T usewithcare

F strip

T images

D taglist

## table (basic lua)

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

## tex (basic tex)

<b>attribute</b>	table	<b>getmathcodes</b>	function
<b>badness</b>	function	<b>getmuglue</b>	function
<b>box</b>	table	<b>getmuskip</b>	function
<b>catcode</b>	table	<b>getnest</b>	function
<b>conditionals</b>	data table	<b>getpagestate</b>	function
<b>constants</b>	data table	<b>getsfcode</b>	function
<b>count</b>	table	<b>getskip</b>	function
<b>cprint</b>	function	<b>gettoks</b>	function
<b>ctdcatcodes</b>	number	<b>getuccode</b>	function
<b>ctxcatcodes</b>	number	<b>glue</b>	table
<b>definefont</b>	function	<b>hashtokens</b>	function
<b>delcode</b>	table	<b>ifs</b>	data table
<b>dimen</b>	table	<b>inimatcodes</b>	number
<b>directives</b>	data table	<b>init_rand</b>	function
<b>enableprimitives</b>	function	<b>isattribute</b>	function
<b>error</b>	function	<b>isbox</b>	function
<b>extraprimitives</b>	function	<b>iscount</b>	overloaded function
<b>finish</b>	function	<b>isdefined</b>	function
<b>fontidentifier</b>	function	<b>isdimen</b>	overloaded function
<b>fontname</b>	function	<b>isglue</b>	function
<b>force_synctex_line</b>	function	<b>ismuglue</b>	function
<b>force_synctex_tag</b>	function	<b>ismuskip</b>	overloaded function
<b>forcehmode</b>	function	<b>isskip</b>	overloaded function
<b>fprint</b>	function	<b>istoken</b>	function
<b>get</b>	function	<b>istoks</b>	function
<b>get_synctex_line</b>	function	<b>lccode</b>	table
<b>get_synctex_mode</b>	function	<b>linebreak</b>	function
<b>get_synctex_tag</b>	function	<b>lists</b>	table
<b>getattribute</b>	function	<b>lua_math_random</b>	function
<b>getbox</b>	function	<b>lua_math_randomseed</b>	function
<b>getboxresourcedimensions</b>	function	<b>luacatcodes</b>	number
<b>getcatcode</b>	function	<b>mathcode</b>	table
<b>getcount</b>	function	<b>modes</b>	data table
<b>getdelcode</b>	function	<b>muglue</b>	table
<b>getdelcodes</b>	function	<b>muskip</b>	table
<b>getdimen</b>	function	<b>nest</b>	table
<b>getglue</b>	function	<b>nilcatcodes</b>	number
<b>getlccode</b>	function	<b>normal_rand</b>	function
<b>getlist</b>	function	<b>notcatcodes</b>	number
<b>getmath</b>	function	<b>number</b>	function
<b>getmathcode</b>	function	<b>primitives</b>	function

<b>print</b>	function	<b>setsfcode</b>	function
<b>prtcategories</b>	number	<b>setskip</b>	function
<b>resetparagraph</b>	function	<b>settoks</b>	function
<b>romannumeral</b>	function	<b>setuccode</b>	function
<b>round</b>	function	<b>sfcode</b>	table
<b>run</b>	function	<b>shipout</b>	function
<b>runtoks</b>	function	<b>show_context</b>	function
<b>saveboxresource</b>	function	<b>skip</b>	table
<b>scale</b>	function	<b>sp</b>	function
<b>scantoks</b>	function	<b>splitbox</b>	function
<b>set</b>	function	<b>sprint</b>	function
<b>set_synctex_line</b>	function	<b>systemmodes</b>	data table
<b>set_synctex_mode</b>	function	<b>takebox</b>	function
<b>set_synctex_no_files</b>	function	<b>texcatcodes</b>	number
<b>set_synctex_tag</b>	function	<b>toks</b>	table
<b>setattribute</b>	function	<b>tpacatcodes</b>	number
<b>setbox</b>	function	<b>tpbcatcodes</b>	number
<b>setcatcode</b>	function	<b>tprint</b>	function
<b>setcount</b>	function	<b>trackers</b>	data table
<b>setdelcode</b>	function	<b>triggerbuildpage</b>	function
<b>setdimen</b>	function	<b>txtcatcodes</b>	number
<b>setglue</b>	function	<b>type</b>	function
<b>setlccode</b>	function	<b>uccode</b>	table
<b>setlist</b>	function	<b>uniform_rand</b>	function
<b>setmath</b>	function	<b>uniformdeviate</b>	function
<b>setmathcode</b>	function	<b>uprint</b>	function
<b>setmuglue</b>	function	<b>useboxresource</b>	function
<b>setmuskip</b>	function	<b>vrbcategories</b>	number
<b>setnest</b>	function	<b>write</b>	function

## texconfig (basic tex)

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



## texio (basic tex)

**closeinput** function

**setescape** function

**write** function

**write\_nl** function

## token (basic tex)

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

# tokens (context)

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

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

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

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

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

**setters** table

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

**shortcuts** table

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

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

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

# tracers (context)

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

## trackers (context)

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



# typesetters (context)

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

## kerns table

D factors  
F handler  
F keepligature  
B keptogether  
D mapping  
F set

## manipulators table

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

## margins table

F finalhandler  
F globalhandler  
F localhandler  
F save

## marksuspects function

## paragraphs table

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

## periodkerns table

D factors  
F handler  
D mapping  
F set

## processors table

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

## rubies table

F attach  
F check

## showsuspects function

## spacings table

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

F reset

F set

F setup

## wrappers table

F handler

## xtables table

F cleanup  
F construct  
F create  
F finish\_row  
F flush  
F initialize\_construct  
F initialize\_reflow\_height  
F initialize\_reflow\_width  
F next\_row  
F reflow\_height  
F reflow\_width  
F set\_construct  
F set\_reflow\_height  
F set\_reflow\_width

# unicode (extra lua)

## ascii table

F byte  
F char  
F dump  
F find  
F format  
F gfind  
F gmatch  
F gsub  
F len  
F lower  
F match  
F rep  
F reverse  
F sub  
F upper

## grapheme table

F byte  
F char  
F dump  
F find  
F format  
F gfind  
F gmatch  
F gsub  
F len  
F lower  
F match  
F rep  
F reverse  
F sub  
F upper

## latin1 table

F byte  
F char  
F dump  
F find  
F format  
F gfind  
F gmatch  
F gsub

F len  
F lower  
F match  
F rep  
F reverse  
F sub  
F upper

## toutf32string function

## utf8 table

F byte  
F char  
F characters  
F chrln  
F count  
F dump  
F filetype  
F find  
F format  
F gfind  
F gmatch  
F gsub  
F is\_valid  
F len  
F length  
F lower  
F magic  
F match  
F remapper  
F rep  
F replacer  
F reverse  
F split  
F splitlines  
F sub  
F substituter  
F tocodes  
F toeight  
F toentities  
F tostring  
F totable  
F upper

F ustring	F utf32_to_utf8_le_t
F utf16_to_utf8_be	F utf32_to_utf8_t
F utf16_to_utf8_be_t	F utf8_to_utf16
F utf16_to_utf8_le	F utf8_to_utf16_be
F utf16_to_utf8_le_t	F utf8_to_utf16_le
F utf16_to_utf8_t	F utf8_to_utf8_t
F utf32_to_utf8_be	F values
F utf32_to_utf8_be_t	F xstring
F utf32_to_utf8_le	

## url (context)

<b>addscheme</b>	function
<b>barepath</b>	function
<b>construct</b>	function
<b>decode</b>	function
<b>encode</b>	function
<b>escape</b>	function
<b>filename</b>	function

<b>hashed</b>	function
<b>hasscheme</b>	function
<b>query</b>	function
<b>split</b>	function
<b>toquery</b>	function
<b>unescape</b>	function
<b>unescapeget</b>	function

## utf8 (context)

<b>char</b>	function
<b>charpattern</b>	string
<b>codepoint</b>	function

<b>codes</b>	function
<b>len</b>	function
<b>offset</b>	function

# utilities (context)

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

- F hashed
- F new
- F pack
- F simplehashed
- F strip
- F unpack
- N version

## **parsers** **table**

- F add\_settings\_to\_array
- F arguments\_to\_table
- F array\_to\_string
- F csvsplitter
- F getparameters
- F groupedsplitat
- F hash\_to\_string
- T hashes
  - T settings\_to\_set
    - T min,max,fit,broad,auto
      - B auto
      - B broad
      - B fit
      - B max
      - B min
    - T text,hidden,paper,page,leftpage,rightpage
      - B hidden
      - B leftpage
      - B page
      - B paper
      - B rightpage
      - B text
- F iterator
- F keq\_to\_hash
- F listitem
- F make\_settings\_to\_hash\_pattern
- F mergehashes
- F options\_to\_array
- F options\_to\_hash
- T patterns
  - U settings\_to\_array
  - U settings\_to\_hash\_a
  - U settings\_to\_hash\_b
  - U settings\_to\_hash\_c
  - U settings\_to\_hash\_d
  - U unittotex

- F process\_stripped\_settings
- F rfc4180splitter
- F runtime
- F settings\_to\_array
- F settings\_to\_array\_obey\_fences
- F settings\_to\_array\_with\_repeat
- F settings\_to\_hash
- F settings\_to\_hash\_colon\_too
- F settings\_to\_hash\_strict
- F settings\_to\_hash\_tolerant
- F settings\_to\_numbers
- F settings\_to\_set
- F simple\_hash\_to\_string
- F splitmethod
- F splitthousands
- F stepper
- F stripped\_settings\_to\_array
- F unittotex
- F unittotxml

## **randomizer** **table**

- F get
- F getnumber
- F getseed
- F popseed
- F pushseed
- F reuseseed
- F setseed
- F setseedi

## **report** **function** **sequencers** **table**

- F appendaction
- F appendgroup
- F compile
- F disableaction
- F disablegroup
- F enableaction
- F enablegroup
- D functions
- F localize
- F new
- F nodeprocessor
- F prependaction
- F prependgroup
- F removeaction



F replaceaction		F readinteger1	
F setkind		F readinteger2	
F toString		F readinteger2le	
<b>setters</b>	<b>table</b>	F readinteger3	
F disable		F readinteger3le	
F enable		F readinteger4	
F initialize		F readinteger4le	
F list		F readintegertable	
F new		F readsignedbyte	
F register		F readstring	
F report		F setposition	
F reset		F size	
F show		F skip	
<b>stacker</b>	<b>table</b>	F skipbytes	
F new		F skiplong	
<b>storage</b>	<b>table</b>	F skipshort	
F allocate		<b>strings</b>	<b>table</b>
F checked		F collapsecrlf	
F mark		T formatters	
F marked		F add	
F setinitializer		F new	
F sparse		F newcollector	
<b>streams</b>	<b>table</b>	F newrepeater	
F close		F nice	
F getposition		T striplinepatterns	
F look		U collapse	
F open		U prune	
F read2dot14		U prune and collapse	
F read2dot4		U prune and no empty	
F readbyte		U retain	
F readbytes		U retain and collapse	
F readbytetable		U retain and no empty	
F readcardinal		F striplines	
F readcardinal1		F striplong	
F readcardinal2		F tabtospace	
F readcardinal2LE		T tracers	
F readcardinal3		<b>tables</b>	<b>table</b>
F readcardinal3le		F accesstable	
F readcardinal4		F definedtable	
F readcardinaltable		F definetable	
F readchar		F encapsulate	
F readfixed2		F insertaftervalue	
F readfixed4		F insertbeforevalue	
F readinteger		F migratetable	

F removevalue

F replacevalue

**templates**

table

F load

F replace

F replacer

F resolve

## vf (context)

<b>char</b>	function
<b>down</b>	function
<b>fontid</b>	function
<b>image</b>	function
<b>node</b>	function
<b>nop</b>	function

<b>pdf</b>	function
<b>pop</b>	function
<b>push</b>	function
<b>right</b>	function
<b>rule</b>	function
<b>special</b>	function

## 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>registerescapepline</b>	function	<b>writespace</b>	function
<b>registerescapepattern</b>	function		

# xml (context)

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

F undefined		F chainattribute	
F upper		F count	
<b>fillin</b>	function	F default	
<b>filter</b>	function	F elements	
<b>finalizers</b>	table	F empty	
F paragraphs		F first	
T tex		F function	
F all		F index	
F attribute		F last	
F chainattribute		F lowerall	
F chainpath		F match	
F command		F name	
F concat		F position	
F concatrange		F reverse	
F context		F table	
F count		F tag	
F ctxtext		F tags	
F default		F text	
F first		F texts	
F function		F upperall	
F index		<b>first</b>	function
F last		<b>found</b>	function
F lettered		<b>functions</b>	table
F lower		F classes	
F lowerall		F hasclass	
F match		<b>getbuffer</b>	function
F name		<b>gethandlers</b>	function
F param		<b>gethandlersfunction</b>	function
F parameter		<b>helpers</b>	table
F position		F recursetext	
F reverse		<b>include</b>	function
F stripped		<b>inclusion</b>	function
F tag		<b>inclusions</b>	function
F tags		<b>index</b>	function
F text		<b>inheritedconvert</b>	function
F upper		<b>inject</b>	function
F upperall		<b>inject_element</b>	function
F xml		<b>inject_element_after</b>	function
T xml		<b>inject_element_before</b>	function
F all		<b>injectafter</b>	function
F att		<b>injectbefore</b>	function
F attribute		<b>insert</b>	function
F attributes		<b>insert_element</b>	function
F cdata		<b>insert_element_after</b>	function

<b>insert_element_before</b>	function	<b>registerns</b>	function
<b>insertafter</b>	function	<b>reindex</b>	function
<b>insertbefore</b>	function	<b>remap_name</b>	function
<b>insertcdata</b>	function	<b>remap_namespace</b>	function
<b>insertcomment</b>	function	<b>remap_tag</b>	function
<b>inspect</b>	function	<b>remapname</b>	function
<b>is_valid</b>	function	<b>remapnamespace</b>	function
<b>kind</b>	function	<b>remaptag</b>	function
<b>last</b>	function	<b>rename</b>	function
<b>lastmatch</b>	function	<b>renamespace</b>	function
<b>load</b>	function	<b>reparseidentitylpeg</b>	userdata
<b>lpath</b>	function	<b>replace</b>	function
<b>lpathcached</b>	function	<b>replace_element</b>	function
<b>lpathcalls</b>	function	<b>resetinjectors</b>	function
<b>lshow</b>	function	<b>resolvns</b>	function
<b>makestandalone</b>	function	<b>root</b>	function
<b>match</b>	function	<b>save</b>	function
<b>name</b>	function	<b>selection</b>	function
<b>newhandlers</b>	function	<b>separate</b>	function
<b>nodesettostring</b>	function	<b>serialize</b>	function
<b>originalload</b>	function	<b>serializetotext</b>	function
<b>package</b>	function	<b>setcdata</b>	function
<b>parent</b>	function	<b>setcomment</b>	function
<b>parsedentitylpeg</b>	userdata	<b>sethandlersfunction</b>	function
<b>pihandlers</b>	table	<b>setinjectors</b>	function
F injector		<b>setproperty</b>	function
F tex		<b>settings</b>	function
<b>placeholders</b>	table	<b>specialcodes</b>	table
F unknown_any_entity		S "	
F unknown_dec_entity		S #	
F unknown_hex_entity		S \$	
<b>popmatch</b>	function	S %	
<b>position</b>	function	S &	
<b>privatecodes</b>	table	S '	
<b>privatetoken</b>	function	S <	
<b>process</b>	function	S >	
<b>process_attributes</b>	function	S \	
<b>process_elements</b>	function	S {	
<b>processattributes</b>	function	S	
<b>profiled</b>	table	S }	
<b>pure</b>	function	S ~	
<b>pushmatch</b>	function	<b>specialhandler</b>	table
<b>raw</b>	function	<b>sprint</b>	function
<b>registerentity</b>	function	<b>string</b>	function

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



## zip (extra lua)

**archives**

table

**close**

function

**closearchive**

function

**open**

overloaded function

**openarchive**

function

**openfile**

function

**registeredfiles**

table

**type**

function

## zlib (extra lua)

<b>adler32</b>	function
<b>compress</b>	function
<b>compressobj</b>	function
<b>crc32</b>	function

<b>decompress</b>	function
<b>decompressobj</b>	function
<b>version</b>	function