

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

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

# global (alias: \_G)

<b>CONTEXTLMTXMODE</b>	number	<b>dir</b>	table
<b>FFISUPPORTED</b>	function	<b>dircodes</b>	data table
<b>INITEXMODE</b>	boolean	<b>directives</b>	table
<b>LUAMAJORVERSION</b>	number	<b>document</b>	table
<b>LUAMINORVERSION</b>	number	<b>documentdata</b>	table
<b>LUATEXENGINE</b>	string	<b>dofile</b>	function
<b>LUATEXFORMATID</b>	number	<b>drivers</b>	table
<b>LUATEXFUNCTIONALITY</b>	number	<b>environment</b>	table
<b>LUATEXVERSION</b>	number	<b>error</b>	function
<b>LUAVERSION</b>	number	<b>experiments</b>	table
<b>MP</b>	function	<b>ffi</b>	table
<b>anywhere</b>	function	<b>ffilib</b>	function
<b>arg</b>	table	<b>figures</b>	table
<b>assert</b>	function	<b>file</b>	table
<b>attributes</b>	table	<b>fio</b>	table
<b>backends</b>	table	<b>flate</b>	table
<b>basexx</b>	table	<b>floats</b>	table
<b>bit32</b>	table	<b>flushsimplerule</b>	function
<b>blobs</b>	table	<b>font</b>	table
<b>blockrequire</b>	function	<b>fonts</b>	table
<b>boolean</b>	table	<b>frozen</b>	boolean
<b>buffers</b>	table	<b>functions</b>	table
<b>builders</b>	table	<b>getmetatable</b>	function
<b>caches</b>	table	<b>global</b>	table
<b>callback</b>	table	<b>grammar_parsed_text_one_nop</b>	userdata
<b>callbacks</b>	table	<b>grammar_parsed_text_one_yes</b>	userdata
<b>catcodes</b>	table	<b>grammar_parsed_text_two_nop</b>	userdata
<b>characters</b>	table	<b>grammar_parsed_text_two_yes</b>	userdata
<b>checkimage</b>	function	<b>grammar_unparsed_text_nop</b>	userdata
<b>chemistry</b>	table	<b>grammar_unparsed_text_yes</b>	userdata
<b>collectgarbage</b>	function	<b>graphics</b>	table
<b>commands</b>	table	<b>gregorian_to_jalali</b>	function
<b>containers</b>	table	<b>gzip</b>	table
<b>context</b>	function	<b>images</b>	table
<b>converters</b>	table	<b>inspect</b>	function
<b>coroutine</b>	table	<b>interactions</b>	table
<b>createmask</b>	function	<b>interfaces</b>	table
<b>ctxrunner</b>	table	<b>io</b>	table
<b>data</b>	table	<b>ipairs</b>	function
<b>debug</b>	table	<b>jalali_to_gregorian</b>	function
<b>dimen</b>	function	<b>job</b>	table

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

<b>texsystemmodes</b>	data table	<b>userdata</b>	table
<b>thirddata</b>	table	<b>utf</b>	table
<b>toboollean</b>	function	<b>utf8</b>	table
<b>token</b>	table	<b>utilities</b>	table
<b>tokens</b>	table	<b>v</b>	string
<b>tonumber</b>	function	<b>visualizers</b>	table
<b>tostring</b>	function	<b>warn</b>	function
<b>tracers</b>	table	<b>xcomplex</b>	table
<b>trackers</b>	table	<b>xmath</b>	table
<b>type</b>	function	<b>xml</b>	table
<b>typesetters</b>	table	<b>xpcall</b>	function
<b>unpack</b>	function	<b>zip</b>	table
<b>updaters</b>	table	<b>zlib</b>	table
<b>url</b>	table		

# attributes (context)

**applyoverloads**    function

**colorintents**    table

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

**colors**    table

- N attribute
- F cmyk
- F cmyktogray
- F cmyktorgb
- F colorcomponents
- D counts
- B couple
- F currentmodel
- F currentnamedmodel
- D data
- N default
- F defineintermediatecolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- N forced
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- F getpagecolormodel
- F gray
- F graytohsv
- F handler
- F 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 rgbtorgray
- F rgbtohsv
- N selector
- F setlist
- F setmodel
- F setpagecolormodel
- D sets
- F spec
- F spot
- F spotcolorname
- F spotcolorparent
- F spotcolorvalue
- B supported
- F toattributes
- F transparencycomponents
- B triggering
- F usecolors
- D valid
- F value
- D values
- B weightgray

**define**    function

**effects**    table

- N attribute
- D data

F enable		N colordodge	
F handler		N darken	
F register		N difference	
D registered		N exclusion	
D values		N hardlight	
<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	

F stop

D values

B supported

# backends (context)

**closeout** function

**codeinjections** table

F boxresourcedimensions

F registerboxresource

F restoreboxresource

**current** string

**defaults** table

T codeinjections

F getpagedimensions

F lmtxmode

F setpagedimensions

T nodeinjections

T registrations

D tables

**included** table

B context

B date

B id

B metadata

B pdf

**install** function

**latelua** function

**nodeinjections** table

**noflatelua** function

**nothing** function

**openout** function

**pdf** table

T codeinjections

F addbookmarks

F analyzenormalsymbol

F analyzesymbol

F attachmentid

F bitmap

F clonefield

F copyimage

F definefield

F definefieldset

F defineviewerlayer

F embedfile

F embedimage

F enabletags

F exportformdata

F fieldsurrounding

F flushmergelayer

F getbookmarks

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getinfo

F getpreviewfigure

F insertrenderingwindow

F mergebookmarks

F mergecomments

F mergefields

F mergereferences

F mergeviewerlayers

F newimage

F prerollreference

F presetsymbol

F presetsymbollist

F processrendering

F registerdocumentcloseaction

F registerdocumentopenaction

F registeredsymbol

F registerpagecloseaction

F registerpageopenaction

F registersymbol

F scanimage

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 startunicodetoactualtextdirect



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

## basexx (context)

**decode16**    function

**decode64**    function

**decode85**    function

**decodeLZW**   function

**decodeRL**    function

**encode16**    function

**encode64**    function

**encode85**    function

**encodeLZW**   function

**encodeRL**    function

## 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)

<b>checksidefloat</b>	function	F start	
<b>kernel</b>	table	F stop	
F cleanup		F tag	
F hyphenating		<b>profiling</b>	table
F hyphenation		F add	
F kerning		F distance	
F ligaturing		F fixedprofile	
F mlist_to_hlist		F get	
<b>paragraphs</b>	table	F list	
T constructors		F pagehandler	
N attribute		F profilebox	
F define		F set	
F disable		<b>vspacing</b>	table
F enable		F analyze	
F handler		D categories	
T methods		F collapsevbox	
F basic		T data	
F default		D map	
F hpack		D skip	
F oneline		D snapmethods	
D names		F definesnapmethod	
D numbers		B fixed	
F set		F forcepageflush	
F start		F forcestrutdepth	
F stop		F getnofpreviouslines	
T expansion		F pagehandler	
F trace		F pageoverflow	
F kepttogether		F popatsame	
F registertogether		F pushatsame	
T solutions		F setmap	
T splitters		F setskip	
F define		F snapbox	
F optimize		F synchronizepage	
T registered		F tocategories	
F reset		F tocategory	
F set		F vboxhandler	
F split			

## 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)

**freeze** function

**functions** table

F process\_rule

F start\_page\_number

F stop\_page\_number

**known** function

**list** data table

**pop** function

**push** function

**register** function

**report** function

**supported** table

B append\_to\_vlist\_filter

B build\_page\_insert

B buildpage\_filter

B contribute\_filter

B define\_font

B find\_data\_file

B find\_format\_file

B find\_log\_file

B handle\_error\_hook

B hpack\_filter

B hpack\_quality

B hyphenate

B insert\_local\_par

B kerning

B ligaturing

B linebreak\_filter

B make\_extensible

B mlist\_to\_hlist

B new\_graf

B open\_data\_file

B post\_linebreak\_filter

B pre\_dump

B pre\_linebreak\_filter

B pre\_output\_filter

B process\_jobname

B read\_data\_file

B show\_error\_hook

B show\_error\_message

B show\_lua\_error\_hook

B show\_warning\_message

B show\_whatsit

B start\_file

B start\_run

B stop\_file

B stop\_run

B terminal\_input

B vpack\_filter

B vpack\_quality

B wrapup\_run

## catcodes (context)

**names** data table

**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>is_symbol</b>	data table
<b>entities</b>	data table	<b>lcchars</b>	data table
<b>fallbacks</b>	data table	<b>lccode</b>	function
<b>filters</b>	data table	<b>lccodes</b>	data table
<b>fractions</b>	table	<b>lettered</b>	function
<b>fromnumber</b>	function	<b>lhash</b>	data table
<b>fschars</b>	data table	<b>linebreaks</b>	data table
<b>fscodes</b>	data table	<b>lower</b>	function
<b>getrange</b>	function	<b>mathlists</b>	data table
<b>graphemes</b>	data table	<b>mirrors</b>	table
<b>hangul</b>	data table	<b>otfscripts</b>	data table
<b>indicgroups</b>	table	<b>private</b>	table
T above_mark		<b>ranges</b>	data table
T after_half		<b>registerentities</b>	function
T after_main		<b>remap_hangul_syllable</b>	function
T after_postscript		<b>setactivecatcodes</b>	function
T after_subscript		<b>setlettercatcodes</b>	function

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

## 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)

**cleanname** function  
**content** function  
**define** function  
**is\_usable** function

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

## converters (context)

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



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

## coroutine (basic lua)

<b>close</b>	function
<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

# data (context)

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

## 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				

# documentdata (context)

**variable** function



# drivers (context)

<b>convert</b>	function	F convert
<b>converters</b>	table	F finalize
F engine		F initialize
F lmtx		F outputfilename
<b>enable</b>	function	F prepare
<b>gethpos</b>	function	F updatefontstate
<b>getpos</b>	function	F wrapup
<b>getvpos</b>	function	T flushers
<b>helpers</b>	table	F character
F tomatrix		F rule
<b>install</b>	function	S name
<b>instances</b>	table	T mps
T default		T actions
T actions		F cleanup
F convert		F convert
F outputfilename		F finalize
T flushers		F initialize
S name		F outputfilename
T empty		F prepare
T actions		F wrapup
F convert		T flushers
F prepare		F character
T flushers		F rule
S name		F updatefontstate
T json		S name
T actions		T none
F cleanup		T actions
F convert		T flushers
F finalize		S name
F initialize		T pdf
F outputfilename		T actions
F prepare		F cleanup
F wrapup		F convert
T flushers		F finalize
F character		F initialize
F rule		F outputfilename
F updatefontstate		F prepare
S name		F wrapup
T lua		T flushers
T actions		F character
F cleanup		F image

F literal	F simplerule	
F poporientation	F updatefontstate	
F pushorientation	S name	
F restore	<b>lmtxversion</b>	number
F rule	<b>outputfilename</b>	function
F save	<b>report</b>	function
F setmatrix		

## 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>luatexfunctionality</b>	number
<b>definefilefallback</b>	function	<b>luatexversion</b>	number
<b>definefilesynonym</b>	function	<b>maxnofruns</b>	number
<b>engineflags</b>	data table	<b>originalarguments</b>	data table
<b>filename</b>	string	<b>outputfilename</b>	string
<b>filenames</b>	table	<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>lmtxmode</b>	number	<b>validengines</b>	data table
<b>loadexamodes</b>	function	<b>version</b>	string
<b>loadluafile</b>	function		

# experiments (context)

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

# figures (context)

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

**setpaths**  
**suffixes**

function  
data table

**used**

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>getposition</b>	function
<b>read2dot14</b>	function
<b>readbytes</b>	function
<b>readbytetable</b>	function
<b>readcardinal1</b>	function
<b>readcardinal1le</b>	function
<b>readcardinal2</b>	function
<b>readcardinal2le</b>	function
<b>readcardinal3</b>	function
<b>readcardinal3le</b>	function
<b>readcardinal4</b>	function
<b>readcardinal4le</b>	function
<b>readcardinaltable</b>	function
<b>readfixed2</b>	function
<b>readfixed4</b>	function
<b>readinteger1</b>	function
<b>readinteger1le</b>	function
<b>readinteger2</b>	function

<b>readinteger2le</b>	function
<b>readinteger3</b>	function
<b>readinteger3le</b>	function
<b>readinteger4</b>	function
<b>readinteger4le</b>	function
<b>readintegertable</b>	function
<b>readline</b>	function
<b>setposition</b>	function
<b>skipposition</b>	function
<b>writecardinal1</b>	function
<b>writecardinal1le</b>	function
<b>writecardinal2</b>	function
<b>writecardinal2le</b>	function
<b>writecardinal3</b>	function
<b>writecardinal3le</b>	function
<b>writecardinal4</b>	function
<b>writecardinal4le</b>	function



## flate (context)

<b>flate_compress</b>	function
<b>flate_decompress</b>	function
<b>gz_compress</b>	function
<b>gz_decompress</b>	function

<b>update_adler32</b>	function
<b>update_crc32</b>	function
<b>zip_compress</b>	function
<b>zip_decompress</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>current</b>	function
<b>define</b>	function
<b>each</b>	function
<b>getfont</b>	function

<b>id</b>	function
<b>max</b>	function
<b>nextid</b>	function
<b>setfont</b>	function

# fonts (context)

## **analyzers** table

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

## **checkers** table

- F getmissing
- F missing
- F placeholder

## **cid** table

- F getmap
- F loadfile

## **collections** table

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

## **constructors** table

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

- F collectprocessors
- F currentfontasfeature
- D designsizes
- D dontembed
- F enhanceparameters
- T enhancers
  - T afm
    - F apply
    - F patch
  - T patches
    - F register
    - F report
  - F register
  - F report
- T otf
  - F addfeature
  - F apply
  - F enhance
  - F patch
  - T patches
    - F register
    - F report
  - F register
  - F report
- T tfm
  - F apply
  - F patch
- T patches
  - F register
  - F report
- F register
- F report

- N factor
- T features
  - D afm
  - D otf
  - D tfm
- F finalize
- F getfeatureaction
- F getmathparameter
- F getprivate

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

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

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



- S textitalics
- S virtualized
- D loadedfonts
- S namemode
- N noffontsloaded
- N nofsharedfonts
- N nofsharedhashes
- N nofsharedvectors
- N privateoffset
- D privateslots
- F readanddefine
- F registerfeature
- F resetfeature
- B resolvevirtualtoo
- F scale
- F scaled
- F setfactor
- F setfeature
- F setmathparameter
- F setname
- B sharefonts
- F trytosharefont
- N version

**current**           function  
**currentid**       function  
**definers**        table

- F addlookup
- F analyze
- F applypostprocessors
- F checkedmode
- F checkedscript
- F current
- S defaultlookup
- F define
- F getspecification
- F internal
- F loadfont
- F makespecification
- T methods
  - F install
  - D variants
- F read
- F register
- F registered

- F registersplit
- F resetnullfont
- F resolve
- T resolvers
  - F file
  - F name
  - F spec

**definetypface**   function  
**encodings**       table

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

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

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

**goodies**        table

- D colorschemes
- T data
- T dejavu-math

- S author
- S comment
- S copyright
- B initialized
- T mathematics
  - T alternates
    - T dotless
      - S comment
      - S feature
      - N value
  - T kerns
- S name
- S version
- T schola-math
  - S author
  - S comment
  - S copyright
  - B initialized
  - T mathematics
    - T alternates
      - T dotless
        - S comment
        - S feature
        - N value
    - T kerns
  - S name
  - S version
- D designsizes
- D filenames
- F getcompositions
- T list
- F load
- F prepare\_features
- F register
- F registerpostprocessor
- F report
- T suffixes

**handlers**                      table

**hashes**                        table

- D characters
- D classes
- D csnames
- D descriptions
- D dynamics

- D emwidths
- D exheights
- D extensibles
- D features
- D identifiers
- D italics
- D lastmathids
- D marks
- D mathparameters
- D modes
- D originals
- D parameters
- T processes
- D properties
- D quads
- D resources
- T setdynamics
- T shapes
- D spaces
- D spacings
- T streams
- D unicodes
- D variants
- D xheights

**helpers**                      table

- F addextraprivate
- F addprivate
- F appendcommands
- F appendcommandtable
- F checkflags
- F checkmerge
- F checksteps
- F collectanchors
- D commands
- F descriptiontoslot
- F dimenfactor
- F expandglyph
- T extraprivates
- F fontpatternhassize
- F getcoloredglyphs
- F getdigitwidth
- F getinstancespec
- F getparameters
- F getprivatecharornode

F getprivatenode		F paths	
F getprivates		F widthline	
F getprivateslot		F zeroline	
F hasprivate		<b>mp</b>	table
F indextoslot		D cache	
F name		B inline	
F nametoslot		N version	
F prependcommands		<b>names</b>	data table
F prependcommandtable		<b>nulldata</b>	data table
F privateslot		<b>privateoffsets</b>	table
F setdigitwidth		B keepnames	
F splitfontpattern		N mathbase	
F tochar		N mathextrabase	
<b>infofont</b>	function	N textbase	
<b>iterators</b>	table	N textextrabase	
F characters		<b>protrusions</b>	data table
F descriptions		<b>readers</b>	table
F glyphs		F afm	
<b>loggers</b>	table	F check_lua	
F add_placeholders		F check_tfm	
D category_to_placeholder		F lua	
F format		F ofm	
F onetimemessage		F opentype	
F register		F otf	
F reportdefinedfonts		F pfb	
F reportusedfeatures		D sequence	
<b>mappings</b>	table	F tfm	
F addtounicode		F ttc	
F fromunicode16		F ttf	
F loadfile		F woff	
F loadline		<b>reserveid</b>	function
F makenameparser		<b>select</b>	table
D overloads		D alternatives	
F reset		F bodyfont	
F tounicode		D data	
F tounicode16		F default	
F tounicode16sequence		D defaults	
<b>metapost</b>	table	F definefallbackfamily	
F boundingbox		F definefontfamily	
F boxtomp		F definefontfamilypreset	
F draw		D extras	
F fill		F fallback	
F maxbounds		D fallbacks	
F output		F features	

F filefallback		F presetcontext	
F fontdata		F registercontext	
F fontfallback		F showcontext	
F fontsynonym		F splitcontext	
F goodies		D synonyms	
F mathfallback		D variants	
D methods		<b>symbols</b>	table
D presets		T emoji	
F registerfallback		F checked	
F registerfiles		F resolved	
F registerfontalternative		F uselibrary	
F registerfontfamily		<b>tables</b>	table
F textfallback		D data	
F typeface		F savefont	
F typescript		F saveoriginal	
F userdata		<b>tracers</b>	table
<b>specifiers</b>	table	<b>treatments</b>	table
D contextmerged		F applyfixes	
F contextnumber		D data	
D contextnumbers		S filename	
D contextsetups		F ignoredfile	
F contexttostring		F report	
F definecontext		F trace	
F mergecontext		<b>typefaces</b>	table

# functions (context)

**dummy** function

# graphics (context)

## backgrounds table

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

## bitmaps table

- F flush
- F new

F placeholder

F tocontext

## identifiers table

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

## identify function

## gzip (extra lua)

**close** function

**lines** function

**load** function

**open** function

**save** function

**suffix** function

# images (context)

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

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

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

# job (context)

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

F hsize	S used	
F leftskip	F whd	
F lowerleft	F width	
F lowerright	F x	
F markregionbox	F xy	
F n	F y	
F onsamepage	<b>prepare</b>	function
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 registerhandlers	S type	
F replace	<b>variables</b>	table
F rightskip	D checksums	
F set	D collected	
F setall	F getchecksum	
F setregionbox	F makechecksum	
F setspec	F restore	
F settobesaved	F save	
D tobesaved	F setchecksum	
F upperleft	D tobesaved	
F upperright	<b>version</b>	number

## 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>has_language</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>chdir</b>	overloaded function
<b>currentdir</b>	function
<b>dir</b>	overloaded function
<b>isdir</b>	overloaded function
<b>isfile</b>	overloaded function
<b>isfound</b>	function
<b>isreadabledir</b>	function
<b>isreadablefile</b>	function
<b>iswriteabledir</b>	function

<b>iswriteablefile</b>	function
<b>link</b>	overloaded function
<b>mkdir</b>	overloaded function
<b>makedirs</b>	function
<b>readlink</b>	function
<b>rmdir</b>	overloaded function
<b>setexecutable</b>	function
<b>symlink</b>	function
<b>touch</b>	overloaded function

# libraries (context)

**basiclua** data table

**basictex** data table

**builtin** data table

**extralua** data table

**extratex** data table

**functions** data table

**globals** data table

## lmx (context)

<b>color</b>	function
<b>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>setformats</b>	function
<b>categories</b>	function	<b>setformatters</b>	function
<b>direct</b>	function	<b>setlogfile</b>	function
<b>disable</b>	function	<b>setmessenger</b>	function
<b>enable</b>	function	<b>setprocessor</b>	function
<b>exporters</b>	table	<b>setprogram</b>	function
<b>extendbanner</b>	function	<b>settarget</b>	function
<b>finalactions</b>	function	<b>settimedlog</b>	function
<b>flush</b>	function	<b>settranslations</b>	function
<b>help</b>	function	<b>show</b>	function
<b>loggingerrors</b>	function	<b>show_close</b>	function
<b>messenger</b>	function	<b>show_load</b>	function
<b>new</b>	function	<b>show_open</b>	function
<b>newline</b>	function	<b>simple</b>	function
<b>poptarget</b>	function	<b>simpleline</b>	function
<b>pushtarget</b>	function	<b>simplelines</b>	function
<b>registerfinalactions</b>	function	<b>start_page_number</b>	function
<b>report</b>	function	<b>starterrorlogging</b>	function
<b>reportbanner</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
<b>reportlines</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>attachmentsymbols</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>commentsymbols</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>destination specification</b>	function
<b>dictionary</b>	function
<b>docstring</b>	function
<b>epdf</b>	table
F analyzefonts	
F contenttotext	
F expanded	
F getpagecontent	
F getstructure	
T image	
F close	
F copy	
F new	
F open	
F query	
F load	
F parsecontent	
F plugin	
T resolvers	
F destinations	
F embeddedfiles	
F javascripts	
F layers	
F pages	
F structure	
F widgets	
F stripcontent	
F unload	
<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		fromsixteen	function
N NoZoom		getcatalog	function
N Print		getcompression	function
N Printable		getfontname	function
N ReadOnly		getfontobjnumber	function
N ToggleNoView		getinfo	function
N auto		getmetadata	function
N hidden		getpageproperties	function
N printable		getversion	function
T widgets		getxformname	function
N Comb		graycode	function
N CommitOnSelChange		id	function
N DoNotScroll		immediateobj	function
N DoNotSpellCheck		includechar	function
N Edit		includecharlist	function
N FileSelect		includefont	function
N MultiLine		includeimage	function
N NoExport		injectors	table
N NoToggleToOff		F bitmap	
N Password		F jp2	
N PopUp		F jpg	
N PushButton		F png	
N Radio		injectxmpinfo	function
N RadiosInUnison		insertxmpinfo	function
N ReadOnly		layerreference	function
N Required		limited	function
N RichText		linearshade	function
N Sort		literal	function
N file		majorversion	function
N fixed		minorversion	function
N nocheck		nametree	function
N protected		nofpages	function
N readonly		null	function
N required		number	function
N sorted		obj	function
N unavailable		objectcompresslevel	function
flushfonts	function	pagereference	function
flushobject	function	patternstream	function
flushstreamfileobject	function	pdfcolor	function
flushstreamobject	function	pdftimestamp	function
formats	data table	permitdetail	function
frombytes	function	print	function
fromeight	function	procset	function
frompdfdoc	function	protectresources	boolean

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

# lua (basic tex)

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

# luatex (context)

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

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

# mathematics (context)

<b>addfallbacks</b>	function	<b>mapremap</b>	data table
<b>alphabets</b>	data table	<b>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>dec</b>	function
<b>hex</b>	function

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



# metapost (context)

<b>checkformat</b>	function	N newinternal
<b>cm</b>	function	N nullary
<b>codes</b>	table	N numeric
N addto		N of
N ampersand		N ofbinary
N and		N outertag
N assignment		N parametertype
N atleast		N plus_or_minus
N begingroup		N primarybinary
N btex		N primarydef
N capsule		N randomseed
N colon		N relax
N comma		N repeat_loop
N controls		N rightbrace
N curl		N rightbracket
N cycle		N rightdelimiter
N declare		N runscript
N def		N save
N definedmacro		N scantokens
N delimiters		N scope
N endgroup		N secondarybinary
N equals		N secondarydef
N etex		N semicolon
N everyjob		N setbounds
N exitif		N shipout
N expandafter		N show
N fi_or_else		N skip
N if		N slash
N input		N special
N interim		N step
N internal		N stop
N iteration		N str
N join		N string
N leftbrace		N tag
N leftbracket		N tension
N leftdelimiter		N tertiarybinary
N let		N tertiarydef
N macrospecial		N thingstoadd
N maketext		N to
N message		N unary
N mode		N undefinedcs

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

<b>setextensions</b>	function	N dependent	
<b>setoutercolor</b>	function	N independent	
<b>settext</b>	function	N known	
<b>setvariable</b>	function	N numeric	
<b>showlog</b>	boolean	N pair	
<b>simple</b>	function	N path	
<b>splitprescript</b>	function	N pen	
<b>startgraphic</b>	function	N picture	
<b>stopgraphic</b>	function	N protodependent	
<b>svformat</b>	function	N string	
<b>sxsy</b>	function	N structured	
<b>tex</b>	table	N suffixedmacro	
F get		N tokenlist	
F reset		N transform	
F set		N unknownboolean	
F setfrombuffer		N unknownpath	
<b>texerrors</b>	boolean	N unknownpen	
<b>texexp</b>	function	N unknownpicture	
<b>theclippath</b>	function	N unknownstring	
<b>tographic</b>	function	N unsuffixedmacro	
<b>totable</b>	function	N vacuum	
<b>types</b>	table	<b>unload</b>	function
N boolean		<b>untagvariable</b>	function
N cmykcolor		<b>variables</b>	table
N color			

## mime (extra lua)

**b64** function

**decode** function

**decodet** table

F base64

F quoted-printable

**dot** function

**encode** function

**encodet** table

F base64

F quoted-printable

**eol** function

**normalize** function

**qp** function

**qpwrp** function

**report** function

**stuff** function

**unb64** function

**unqp** function

**wrap** function

**wrapt** table

F base64

F default

F quoted-printable

F text

**wrp** function

## mp (context)

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

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

<b>positionbox</b>	function	F path	
<b>positioncurve</b>	function	F string	
<b>positionpage</b>	function	F symbol	
<b>positionpath</b>	function	F token	
<b>positionpxy</b>	function	F transform	
<b>positionregion</b>	function	<b>set</b>	table
<b>positionwhd</b>	function	F path	
<b>positionxy</b>	function	<b>setcount</b>	function
<b>prefix</b>	function	<b>setdimen</b>	function
<b>print</b>	function	<b>setmacro</b>	function
<b>processingmode</b>	function	<b>settoks</b>	function
<b>quadruple</b>	function	<b>size</b>	function
<b>quadruplepoints</b>	function	<b>string</b>	function
<b>quoted</b>	function	<b>systemmode</b>	function
<b>report</b>	function	<b>texstr</b>	function
<b>scan</b>	table	<b>texttextanchor</b>	function
F boolean		<b>texvar</b>	function
F cmykcolor		<b>tohash</b>	function
F color		<b>triplet</b>	function
F expression		<b>tripletpoints</b>	function
F next		<b>utflen</b>	function
F number		<b>utftsub</b>	function
F numeric		<b>vprint</b>	function
F pair			

## mplib (extra tex)

<b>execute</b>	function	<b>scan_cmykcolor</b>	function
<b>fields</b>	function	<b>scan_color</b>	function
<b>finder</b>	function	<b>scan_expression</b>	function
<b>finders</b>	table	<b>scan_next</b>	function
F file		<b>scan_number</b>	function
F mpstemplate		<b>scan_numeric</b>	function
<b>finish</b>	function	<b>scan_pair</b>	function
<b>get_boolean</b>	function	<b>scan_path</b>	function
<b>get_number</b>	function	<b>scan_string</b>	function
<b>get_numeric</b>	function	<b>scan_symbol</b>	function
<b>get_path</b>	function	<b>scan_token</b>	function
<b>get_string</b>	function	<b>scan_transform</b>	function
<b>new</b>	overloaded function	<b>solve_path</b>	function
<b>pen_info</b>	function	<b>statistics</b>	function
<b>scan_boolean</b>	function	<b>version</b>	function



# noads (context)

<b>handlers</b>	table		F resize
F align			F showtree
F alternates			F tags
F autofences			F unscript
F classes			F unstack
F collapse			F variants
F domains		<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		T unstack	
F relocate		<b>processouter</b>	function
F render			

## node (basic tex)

<b>check_discretionaries</b>	function
<b>check_discretionary</b>	function
<b>copy</b>	function
<b>copy_list</b>	function
<b>count</b>	function
<b>current_attr</b>	function
<b>dimensions</b>	function
<b>direct</b>	table

- F check\_discretionaries
- F check\_discretionary
- F copy
- F copy\_list
- F copy\_only
- F count
- F current\_attr
- F dimensions
- F effective\_glue
- F end\_of\_math
- F find\_attribute
- F find\_attribute\_range
- F first\_glyph
- F flatten\_discretionaries
- F flush\_components
- F flush\_list
- F flush\_node
- F free
- F get\_attribute
- F get\_properties\_table
- F get\_synctex\_fields
- F getattributelist
- F getboth
- F getbox
- F getchar
- F getcomponents
- F getdata
- F getdepth
- F getdirection
- F getdisc
- F getexpansion
- F getfam
- F getfield

- F getfont
- F getglue
- F getglyphdata
- F getheight
- F getid
- F getkern
- F getlang
- F getleader
- F getlist
- F getnext
- F getnucleus
- F getoffsets
- F getorientation
- F getpenalty
- F getpost
- F getpre
- F getprev
- F getproperty
- F getreplace
- F getshift
- F getsub
- F getsubtype
- F getsup
- F getwhd
- F getwidth
- F has\_attribute
- F has\_dimensions
- F has\_field
- F has\_glyph
- F hpack
- F hyphenating
- F insert\_after
- F insert\_before
- F is\_char
- F is\_direct
- F is\_glyph
- F is\_node
- F is\_valid
- F is\_zero\_glue
- F kerning
- F last\_node

F length	F setshift	
F ligaturing	F setsplit	
F mlist_to_hlist	F setsub	
F naturalwidth	F setsubtype	
F new	F setup	
F prepend_prevdepth	F setwhd	
F protect_glyph	F setwidth	
F protect_glyphs	F slide	
F protrusion_skippable	F tail	
F rangedimensions	F todirect	
F remove	F tonode	
F set_attribute	F toString	
F set_synctex_fields	F traverse	
F setattributelist	F traverse_char	
F setboth	F traverse_glyph	
F setbox	F traverse_id	
F setchar	F traverse_list	
F setcomponents	F unprotect_glyph	
F setdata	F unprotect_glyphs	
F setdepth	F unset_attribute	
F setdirection	F usedlist	
F setdisc	F uses_font	
F setexpansion	F vpack	
F setfam	F write	
F setfield	<b>effective_glue</b>	function
F setfont	<b>end_of_math</b>	function
F setglue	<b>family_font</b>	function
F setglyphdata	<b>fields</b>	function
F setheight	<b>find_attribute</b>	function
F setkern	<b>first_glyph</b>	function
F setlang	<b>fix_node_lists</b>	function
F setleader	<b>flatten_discretionaries</b>	function
F setlink	<b>flush_list</b>	function
F setlist	<b>flush_node</b>	function
F setnext	<b>free</b>	function
F setnucleus	<b>get_attribute</b>	function
F setoffsets	<b>get_properties_table</b>	function
F setorientation	<b>getfield</b>	function
F setpenalty	<b>getglue</b>	function
F setpost	<b>getproperty</b>	function
F setpre	<b>has_attribute</b>	function
F setprev	<b>has_field</b>	function
F setproperty	<b>has_glyph</b>	function
F setreplace	<b>hpack</b>	function

<b>hyphenating</b>	function	<b>setglue</b>	function
<b>id</b>	function	<b>setProperty</b>	function
<b>insert_after</b>	function	<b>slide</b>	function
<b>insert_before</b>	function	<b>subtypes</b>	function
<b>is_node</b>	function	<b>tail</b>	function
<b>is_zero_glue</b>	function	<b>tostring</b>	function
<b>kerning</b>	function	<b>traverse</b>	function
<b>last_node</b>	function	<b>traverse_char</b>	function
<b>length</b>	function	<b>traverse_glyph</b>	function
<b>ligaturing</b>	function	<b>traverse_id</b>	function
<b>make_extensible</b>	function	<b>traverse_list</b>	function
<b>mlist_to_hlist</b>	function	<b>type</b>	function
<b>new</b>	function	<b>types</b>	function
<b>prepend_prevdepth</b>	function	<b>unprotect_glyph</b>	function
<b>protect_glyph</b>	function	<b>unprotect_glyphs</b>	function
<b>protect_glyphs</b>	function	<b>unset_attribute</b>	function
<b>protrusion_skippable</b>	function	<b>usedlist</b>	function
<b>rangedimensions</b>	function	<b>uses_font</b>	function
<b>remove</b>	function	<b>values</b>	function
<b>set_attribute</b>	function	<b>vpack</b>	function
<b>setfield</b>	function	<b>write</b>	function

## nodes (context)

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

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

**mlist\_to\_hlist**

**new**

**noadcodes**

**noadoptoptions**

N axis

N exact

N left

N middle

N no\_axis

N right

N set

N unused\_1

N unused\_2

**nodecodes**

**nopts**

**nuts**

F append

F apply

F applyvisuals

F check\_discretionaries

F concat

F copy

F copy\_list

F copy\_no\_components

F copy\_node

F copy\_only

F copy\_only\_glyphs

F copy\_properties

F copyvisual

F count

F countall

F current\_attr

F delete

F dimensions

F effective\_glue

F end\_of\_math

F find\_attribute

F first\_glyph

F firstcharacter

F firstcharinbox

F firstglyph

F flatten\_discretionaries

F flush

F flush\_components

function

function

data table

table

data table

function

table

F flush\_list

F flush\_node

F free

F fullhpack

F get\_synctex\_fields

F getattr

F getattribute

F getattributelist

F getattrlist

F getboth

F getbox

F getboxglue

F getchar

F getcomponents

F getdata

F getdepth

F getdirection

F getdisc

F getdiscretionary

F getexpansion

F getfam

F getfield

F getfont

F getglue

F getglyphdata

F getheight

F getid

F getkern

F getlang

F getlanguage

F getleader

F getlist

F getnext

F getnucleus

F getoffsets

F getorientation

F getpenalty

F getpost

F getpre

F getprev

F getprop

F getreplace

F getruledata

F getshift

F getsub	F directliteral
F getsubtype	F disc
F getsup	F emptyrule
F getsurround	F fence
F getvalue	F fontkern
F getwhd	F fraction
F getwidth	F glue
F has_attribute	F gluespec
F has_dimensions	F glyph
F has_field	F hlist
F has_glyph	F italicckern
F hpack	F kern
F hyphenating	F latelua
F insert_after	F leader
F insert_before	F leftmarginkern
F insert_list_after	F leftskip
F is_direct	F lineskip
F is_display_math	F literal
F is_node	F mathchar
F is_nut	F mathtextchar
F is_zero_glue	F negatedglue
F ischar	F noad
F isdone	F originliteral
F isglyph	F outlinerule
F kerning	F pageliteral
F last_node	F penalty
F leftmarginwidth	F radical
F length	F rawliteral
F ligaturing	F register
F link	F restore
F linked	F rightmarginkern
F locate	F rightskip
F mlist_to_hlist	F rule
F nestedtracedslide	F save
F new	F savepos
T pool	F setmatrix
F accent	F shrink
F baselineskip	F stretch
F boundary	F subbox
F choice	F submlist
F cleanup	F temp
F delim	F textdir
F delimiter	F usage
F direction	T userids



N margins.inline	F setdisc
N splitters.one	F setdiscretionary
N splitters.two	F setexpansion
F usernode	F setfam
F userrule	F setfield
F vlist	F setfont
F wordboundary	F setglue
F prepend	F setglyphdata
F processranges	F setheight
F processwords	F setkern
F protect_glyph	F setlang
F protect_glyphs	F setlanguage
F protrusion_skippable	F setleader
F rangedimensions	F setlink
F rawprop	F setlist
F reference	F setnext
F rehpack	F setnucleus
F remove	F setoffsets
F repackhlist	F setorientation
F replace	F setpenalty
F rightmarginwidth	F setpost
T rules	F setpre
T ruleactions	F setprev
F box	F setprop
F draw	F setreplace
F fill	F setruledata
F mp	F setshift
F stroke	F setsplit
F userrule	F setsub
F set_attribute	F setsubtype
F set_synctex_fields	F setsup
F setattr	F setsurround
F setattribute	F setunsetattributes
F setattributelist	F setvalue
F setattributes	F setvisual
F setattrlist	F setvisuals
F setboth	F setwhd
F setbox	F setwidth
F setboxglue	F slide
F setchar	F somepenalty
F setcomponents	F somespace
F setdata	F splitbox
F setdepth	F striprange
F setdirection	F tail

F takeattr	F vianuts	
F takebox	F vpack	
F takelist	F write	
F theprop	<b>packlist</b>	function
F tonode	<b>penaltycodes</b>	data table
F tonodes	<b>plugindata</b>	table
F tonut	F finalizer	
F tosequence	F initializer	
F tostring	S name	
F tracedslide	T namespace	
F traverse	N attribute	
F traverse_char	D data	
F traverse_glyph	F enable	
F traverse_id	F handler	
F traverse_list	F register	
T traversers	D registered	
F boundary	D values	
F char	F processor	
F dir	<b>points</b>	function
F disc	<b>pool</b>	table
F glue	F baselineskip	
F glyph	F cleanup	
F hlist	F directliteral	
F list	F glyph	
F next	F hlist	
F node	F latelua	
F vlist	F lineskip	
F whatsit	F literal	
T typesetters	F originliteral	
F tohbox	F register	
F tohpack	F restore	
F tonodes	F rule	
F tovbox	F save	
F tovpack	F savepos	
F unprotect_glyph	F setmatrix	
F unprotect_glyphs	F special	
F unset_attribute	F usage	
F unsetattribute	F vlist	
F unsetattributes	<b>prepend</b>	function
F untracedslide	<b>print</b>	function
F use_components	<b>processors</b>	table
F usedlist	F contribute_filter	
F uses_font	B enabled	
F vianodes	F hpack_filter	

F post_linebreak_filter		<b>setleader</b>	function
F pre_linebreak_filter		<b>setlink</b>	function
F tracer		<b>setlist</b>	function
<b>properties</b>	table	<b>setnext</b>	function
T data		<b>setprev</b>	function
<b>protect_glyph</b>	function	<b>setunsetattributes</b>	function
<b>protect_glyphs</b>	function	<b>shifts</b>	table
<b>protrusion_skippable</b>	function	D data	
<b>pts</b>	function	F define	
<b>radicalcodes</b>	data table	F enable	
<b>rangedimensions</b>	function	F handler	
<b>reference</b>	function	<b>show</b>	function
<b>references</b>	table	<b>showboxes</b>	function
N attribute		<b>showcodes</b>	function
T done		<b>showlist</b>	function
F handler		<b>showsimplelist</b>	function
T stack		<b>skipcodes</b>	data table
<b>reheapack</b>	function	<b>skipvalues</b>	data table
<b>remove</b>	function	<b>slide</b>	function
<b>repackhlist</b>	function	<b>snapshots</b>	table
<b>replace</b>	function	F getparameters	
<b>report</b>	function	F getsamples	
<b>rightmarginwidth</b>	function	F resetsamples	
<b>rulecodes</b>	data table	F takesample	
<b>rules</b>	table	<b>somepenalty</b>	function
D data		<b>somespace</b>	function
F define		<b>splitbox</b>	function
F enable		<b>stripdiscretionaries</b>	function
F handler		<b>stripping</b>	table
F userrule		T glyphs	
<b>save</b>	function	F set	
<b>serialize</b>	function	<b>subtypes</b>	data table
<b>serializebox</b>	function	<b>tail</b>	function
<b>set_attribute</b>	function	<b>takeattr</b>	function
<b>setattr</b>	function	<b>takebox</b>	function
<b>setattribute</b>	function	<b>tasks</b>	table
<b>setattributes</b>	function	F actions	
<b>setboth</b>	function	F appendaction	
<b>setbox</b>	function	F disableaction	
<b>setboxtonaturalwd</b>	function	F disablegroup	
<b>setchar</b>	function	F enableaction	
<b>setfield</b>	function	F enablegroup	
<b>setfont</b>	function	F freeze	
<b>setglue</b>	function	F freezegroup	

F new		F rule	
F prependaction		T nuts	
F removeaction		F rule	
F replaceaction		F resetproperties	
F restart		F rule	
F setaction		F setlist	
F showactions		F setproperties	
F table		F start	
<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
T characters		<b>traverse_id</b>	function
F collect		<b>traverse_list</b>	function
F equal		<b>traversers</b>	table
F start		F char	
F string		F glyph	
F unicodes		F list	
T colors		F node	
F reset		<b>typesetters</b>	table
F set		F hbox	
F setlist		F hpack	
F fontchar		F tohbox	
T frequencies		F tohpack	
F register		F tonodes	
T pool		F to vbox	
T nodes		F to vpack	

F vpack		T attributes	
<b>unprotect_glyph</b>	function	F box	
<b>unprotect_glyphs</b>	function	F handler	
<b>unset_attribute</b>	function	F markfonts	
<b>unsetattribute</b>	function	F register	
<b>unsetattributes</b>	function	F setfont	
<b>usedlist</b>	function	F setlayer	
<b>usercodes</b>	data table	F setruledglyph	
<b>uses_font</b>	function	F setvisual	
<b>vianodes</b>	function	<b>vpack</b>	function
<b>vianuts</b>	function	<b>whatcodes</b>	data table
<b>visualizebox</b>	function	<b>whatsitcodes</b>	data table
<b>visualizers</b>	table	<b>write</b>	function
F attribute			

## number (context)

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

<code>__getenv__</code>	function
<code>__setenv__</code>	function
<code>binsuffix</code>	string
<code>binsuffixes</code>	table
<code>clock</code>	function
<code>converttime</code>	function
<code>date</code>	function
<code>difftime</code>	function
<code>env</code>	data table
<code>execute</code>	overloaded function
<code>exit</code>	overloaded function
<code>fulltime</code>	function
<code>getenv</code>	overloaded function
<code>gettimeofday</code>	function
<code>isleapyear</code>	function
<code>launch</code>	function
<code>libsuffix</code>	string
<code>localtime</code>	function
<code>name</code>	string
<code>newline</code>	string
<code>nofdays</code>	function
<code>now</code>	function
<code>pipeto</code>	function
<code>platform</code>	string
<code>remove</code>	overloaded function
<code>rename</code>	overloaded function

<code>resolvers</code>	table
<code>F bits</code>	
<code>resultof</code>	function
<code>runtime</code>	function
<code>selfarg</code>	table
<code>selfbase</code>	string
<code>selfbin</code>	string
<code>selfcore</code>	string
<code>selfdir</code>	string
<code>selfname</code>	string
<code>selfpath</code>	string
<code>setenv</code>	overloaded function
<code>setexitcode</code>	function
<code>setlocale</code>	overloaded function
<code>sleep</code>	function
<code>time</code>	function
<code>timezone</code>	function
<code>tmpname</code>	function
<code>today</code>	function
<code>type</code>	string
<code>uname</code>	function
<code>uuid</code>	function
<code>validdatetime</code>	function
<code>weekday</code>	function
<code>where</code>	function
<code>which</code>	function



## package (basic lua)

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

# pagebuilders (context)

## 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)

**immediateobj** function

## pdfe (extra tex)

<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

## pngdecode (context)

**applyfilter** function  
**expand** function

**interlace** function  
**splitmask** function

# publications (context)

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



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

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

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

## regimes (context)

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

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

**autofontfeature**      table

    F disable

    F enable

    F handler

**categorytonumber**   data table

**colors**              data table

**decomposehangul**    function

**defaults**            table

    N inter\_char\_half\_shrink\_factor

    N inter\_char\_half\_stretch\_factor

    N inter\_char\_hangul\_penalty

    N inter\_char\_quarter\_shrink\_factor

    N inter\_char\_quarter\_stretch\_factor

    N inter\_char\_shrink\_factor

    N inter\_char\_stretch\_factor

    N inter\_word\_stretch\_factor

**handlers**            data table

**hash**                table

**injectors**           data table

**inserters**          table

    F nobreakspace\_after

    F nobreakspace\_before

    F space\_after

    F space\_before

    F zerowidthspace\_after

    F zerowidthspace\_before

**installdataset**      function

**installmethod**      function

**numbertocategory**   data table

**numbertodataset**    data table

**numbertohandler**    data table

**reset**                function

**set**                  function

**splitters**           data table



## set (context)

**contains**    function

**create**     function

**tolist**     function

**tonumber**   function

**totable**    function

## sha2 (context)

**HASH256**    function  
**HASH384**    function  
**HASH512**    function  
**digest256** function  
**digest384** function

**digest512** function  
**hash256**    function  
**hash384**    function  
**hash512**    function

## sio (context)

<b>read2dot14</b>	function
<b>readbytes</b>	function
<b>readbytetable</b>	function
<b>readcardinal1</b>	function
<b>readcardinal1le</b>	function
<b>readcardinal2</b>	function
<b>readcardinal2le</b>	function
<b>readcardinal3</b>	function
<b>readcardinal3le</b>	function
<b>readcardinal4</b>	function
<b>readcardinal4le</b>	function
<b>readcardinaltable</b>	function

<b>readfixed2</b>	function
<b>readfixed4</b>	function
<b>readinteger1</b>	function
<b>readinteger1_le</b>	function
<b>readinteger2</b>	function
<b>readinteger2_le</b>	function
<b>readinteger3</b>	function
<b>readinteger3_le</b>	function
<b>readinteger4</b>	function
<b>readinteger4_le</b>	function
<b>readintegertable</b>	function

# socket (extra lua)

<b>BLOCKSIZE</b>	number	S content-md5
<b>_DATAGRAMSIZE</b>	number	S content-range
<b>_SETSIZE</b>	number	S content-transfer-encoding
<b>_SOCKETINVALID</b>	number	S content-type
<b>bind</b>	function	S cookie
<b>choose</b>	function	S date
<b>connect</b>	function	S diagnostic-code
<b>connect4</b>	function	S dsn-gateway
<b>connect6</b>	function	S etag
<b>dns</b>	table	S expect
F getaddrinfo		S expires
F gethostname		S final-log-id
F getnameinfo		S final-recipient
F tohostname		S from
F toip		S host
<b>gettime</b>	function	S if-match
<b>headers</b>	table	S if-modified-since
T canonic		S if-none-match
S accept		S if-range
S accept-charset		S if-unmodified-since
S accept-encoding		S in-reply-to
S accept-language		S keywords
S accept-ranges		S last-attempt-date
S action		S last-modified
S age		S location
S allow		S max-forwards
S alternate-recipient		S message-id
S arrival-date		S mime-version
S authorization		S original-envelope-id
S bcc		S original-recipient
S cache-control		S pragma
S cc		S proxy-authenticate
S comments		S proxy-authorization
S connection		S range
S content-description		S received
S content-disposition		S received-from-mta
S content-encoding		S references
S content-id		S referer
S content-language		S remote-mta
S content-length		S reply-to
S content-location		S reporting-mta

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

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

# sorters (context)

<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>benchmarktimer</b>	function	<b>memused</b>	function
<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

## status (basic tex)

**list**                    function  
**resetmessages**    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 next
<b>blocks</b>	table	F prev
D collected		F previous
F define		F raw
F print		F record
F save		F reset
F select		F restart
F setstate		F restore
D states		F save
D tobesaved		F set
F uservariable		F setlevel
<b>bookmarks</b>	table	F setoffset
T extras		F setown
F get		F setstate
F mergesections		F setvalue
F register		T specials
F reset		F userpage
F tosections		F subs
F finalize		D tobesaved
F flatten		F value
F installhandler		F way
F merge		<b>currentsectionnumber</b> function
S method		<b>descriptions</b> table
F overload		<b>documents</b> table
F place		D data
F register		F initialize
F setopened		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 touserdata		F reordered	
<b>inserts</b>	<b>table</b>	T result	
D data		F savedlistnumber	
F define		F savedlistprefixednumber	
F getdata		F savedlisttitle	
F getlocation		D sectionblocks	
F getname		F sectionnumber	
F getnumber		F size	
F setlocation		F title	
F setup		D tobesaved	
D stored		F userdata	
<b>itemgroups</b>	<b>table</b>	F uservalue	
<b>lists</b>	<b>table</b>	<b>marks</b>	<b>table</b>
F addto		D data	
F analyze		F define	
B autoreorder		F exists	
D cached		F fetch	
D collected		F fetchallmarks	
F discard		F fetched	
F enhance		F fetchonemark	
T enhancers		F fetchtwomarks	
F filter		F get	
F 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 listindex
- T numbers
- F ordered
- F postpone
- F resetpostponed
- F restore
- F save
- F setstate
- D states
- F store

## pages table

- F allmarked
- F analyze
- D collected
- F in\_body
- F is\_odd
- F mark
- F marked
- N nopages
- F number
- F on\_right
- F save
- D tobesaved
- F toranges

## references table

- F analyze
- F checkedfile
- F checkedfileorurl
- F checkedprogram
- F checkedrealpage
- F checkedurl
- D collected
- U componentsplitter
- F currentmetadata
- F currentorder
- D currentset
- F define
- D defined
- D derived
- F enhance
- D executers
- F expandcurrent
- F export
- T files

- T data
- F define
- F found
- F get
- F filter
- F filterdefault
- D filters
- D flaginternals
- F from
- D functions
- F get
- F getcurrentmetadata
- F getcurrentprefixspec
- F getinnermethod
- F getinternalcachedlistreference
- F getinternallistreference
- F getinternalreference
- F getoutermethod
- D handlers
- F identify
- F import
- F inject
- F injectcurrentset
- S innermethod
- D internals
- F load
- F loadpresets
- F mark
- S outermethod
- D pages
- U prefixsplitter
- D productdata
- T programs
- T data
- F define
- F get
- F realpageofpage
- U referencesplitter
- D referred
- F referredpage
- F registerfinalizer
- F registerinitializer
- F registerpage
- F reset

- D runners
- 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

## table

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

## sections

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

## table

F save	
T sectionblockdata	
T bodypart	
S bookmark	
F set	
F setblock	
F setchecker	
F setentry	
F setinitialblock	
F setlevel	
F setnumber	
F showstructure	
F structuredata	
F title	
D tobesaved	
F typesetnumber	
F userdata	
B verbose	
<b>sets</b>	<b>table</b>
F define	
F get	
F getall	
D setlist	
<b>specials</b>	<b>table</b>
D collected	
F retrieve	
F store	
D tobesaved	
<b>synonyms</b>	<b>table</b>
F analyzed	
D collected	
F compare	
F define	
F filter	
F finalize	
F flush	
F isshown	
F isused	
F meaning	
F prepare	
F process	
F register	
F registershown	
F registerused	

F resetshown	
F resetused	
F sort	
F synonym	
D tobesaved	
<b>tags</b>	<b>table</b>
F current	
F elementtag	
F finishexport	
F getextradata	
F getid	
F getmetadata	
F handler	
F initializeexport	
D labels	
F last	
F lastinchain	
F locatedtag	
T patterns	
U splitter	
D properties	
F registerextradata	
F registermetadata	
F restart	
F setaspect	
F setattributefield	
F setcombination	
F setconstruct	
F setfigure	
F setfloat	
F setformulacontent	
F sethighlight	
F setitem	
F setitemgroup	
F setlist	
F setnotation	
F setnotationsymbol	
F setparagraph	
F setproperty	
F setpublication	
F setregister	
F setsorting	
F setsynonym	
F settablecell	



F settabulatecell  
F settagdelimitedsymbol  
F settagssentencesymbol  
F setupexport  
F setuserproperties  
D specifications

F start  
F stop  
F strip  
D taglist  
T usewithcare  
T images

## table (basic lua)

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

# tex (basic tex)

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

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

## texconfig (basic tex)

<b>error_line</b>	number	<b>max_in_open</b>	number
<b>expand_depth</b>	number	<b>max_print_line</b>	number
<b>fix_mem_init</b>	number	<b>max_strings</b>	number
<b>formatname</b>	string	<b>nest_size</b>	number
<b>function_size</b>	number	<b>param_size</b>	number
<b>half_error_line</b>	number	<b>properties_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

## texio (basic tex)

**closeinput**   function  
**write**            function

**write\_nl**        function

## token (basic tex)

<b>biggest_char</b>	function	<b>put_next</b>	function
<b>command_id</b>	function	<b>scan_argument</b>	function
<b>commands</b>	function	<b>scan_char</b>	function
<b>create</b>	function	<b>scan_code</b>	function
<b>expand</b>	function	<b>scan_csname</b>	function
<b>future_expand</b>	function	<b>scan_dimen</b>	function
<b>get_active</b>	function	<b>scan_float</b>	function
<b>get_cmdname</b>	function	<b>scan_glue</b>	function
<b>get_command</b>	function	<b>scan_int</b>	function
<b>get_csname</b>	function	<b>scan_key</b>	function
<b>get_expandable</b>	function	<b>scan_keyword</b>	function
<b>get_frozen</b>	function	<b>scan_keyword_cs</b>	function
<b>get_id</b>	function	<b>scan_list</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_token_code</b>	function
<b>get_next</b>	function	<b>scan_tokenlist</b>	function
<b>get_next_token</b>	function	<b>scan_toks</b>	function
<b>get_protected</b>	function	<b>scan_value</b>	function
<b>get_tok</b>	function	<b>scan_word</b>	function
<b>gobble_dimen</b>	function	<b>set_char</b>	function
<b>gobble_int</b>	function	<b>set_lua</b>	function
<b>is_defined</b>	function	<b>set_macro</b>	function
<b>is_next_char</b>	function	<b>skip_next</b>	function
<b>is_token</b>	function	<b>to_string</b>	function
<b>new</b>	function	<b>type</b>	function
<b>peek_next_char</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		U xmlw
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



**create** function  
**defined** function  
**egroup** userdata  
**getters** table

F box  
F count  
F dimen  
F glue  
F macro  
F meaning  
F skip  
F token

**hbox** userdata  
**isdefined** function  
**istoken** function  
**letter** function  
**letters** function  
**new** function  
**other** function  
**pickup** function  
**presets** table

T 1 string  
T 2 strings  
T 3 strings  
T 4 strings  
T 5 strings  
T 6 strings  
T 7 strings  
T 8 strings

**printlist** function  
**scanners** table

F argument  
F array  
F boolean  
F char  
F code  
F conditional  
F count  
F csname  
F dimen  
F dimension  
F float  
F glue  
F hash

F integer  
F ischar  
F key  
F keyword  
F keywordcs  
F list  
F lxmlid  
F number  
F peek  
F real  
F scanclose  
F scanopen  
F skip  
F string  
F table  
F token  
F tokencode  
F tokenlist  
F tokens  
F toks  
F value  
F verbatim  
F whd  
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	F ischar
N invalid	F key
N letter	F keyword
N mathshift	F keywordcs
N open	F list
N other	F lxmlid
N parameter	F number
N space	F peek
N subscript	F real
N superscript	F scanclose
N whitespace	F scanopen
N close	F skip
F inspect	F string
N open	F table
F report	F token
F scanargument	F tokencode
F scanarray	F tokenlist
F scanboolean	F tokens
F scanclose	F toks
F scancode	F value
F scanconditional	F verbatim
F scanscname	F whd
F scandimen	F word
F scandimension	F scannumber
F scanhash	F scanopen
F scaninteger	F scanstring
F scankeyword	F scantable
F scankeywordcs	F scantokenlist
F scanlist	F scanverbatim
T scanners	F scanword
F argument	F toboolean
F array	F todimen
F boolean	T tokens
F char	F astable
F code	U bgroup
F conditional	T cache
F count	U NC
F csname	U NR
F dimen	U bf
F dimension	U color
F float	U colordefalc
F glue	U colordefflc
F hash	U colordefflt
F integer	U colordefrlt

U dofinishreference	S todimen
U dostarttext	S toglue
U finishjob	S tonumber
U firstofoneargument	S toString
U firstoftwoarguments	F create
U gobbleoneargument	F defined
U goto	U egroup
U iftrue	T getters
U input	F box
U loadfoundtypescriptfile	F count
U resetctxscanner	F dimen
U rlap	F glue
U scratchcounter	F macro
U scratchdimen	F meaning
U scratchmuskip	F skip
U scratchskip	F token
U scratchtoken	U hbox
U secondoftwoarguments	F isdefined
U setfalsevalue	F istoken
U setsectionblock	F letter
U setupsystem	F letters
U startcolumns	F new
U starttabulate	F other
U starttitle	F pickup
U startxtitle	T presets
U stopcolumns	F printlist
U stoptabulate	T setters
U stoptitle	F box
U stopxtitle	F char
U texsetup	F count
U xmlw	F dimen
T collectors	F glue
F defaultwords	F lua
F dowithwords	F macro
F flush	F skip
F install	T shortcuts
F register	N close
F show	F inspect
F test	N open
D commands	F report
F compile	F scanargument
F constant	F scanarray
T converters	F scanboolean
S toboolean	F scanclose

F scancode	F scantokenlist
F scanconditional	F scanverbatim
F scancsname	F scanword
F scandimen	F toboolean
F scandimension	F todimen
F scanhash	F tonumber
F scaninteger	F tostring
F scankeyword	U vbox
F scankeywordcs	U vtop
F scanlist	F tonumber
F scannumber	F tostring
F scanopen	<b>vbox</b> userdata
F scanstring	<b>vtop</b> userdata
F scantable	

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

## **kerns**                      table

D factors  
F handler  
F keepligature  
D mapping  
F set

## **manipulators**            table

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

## **margins**                      table

F finalhandler  
F globalhandler  
F localhandler  
F save

## **marksuspects**            function

## **paragraphs**              table

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

## **periodkerns**            table

D factors  
F handler  
D mapping  
F set

## **processors**                table

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

## **rubies**                      table

F attach  
F check

## **showsuspects**            function

## **spacings**                      table

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

F reset

F set

F setup

## **wrappers**                      table

F handler

## **xtables**                      table

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



## updaters (context)

**apply**      function

**register**   function

## url (context)

<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)

## **debugger**            table

F disable  
F enable  
F savestats  
F showstats  
F showtraceback

## **files**                table

F close  
F getposition  
F getsize  
F look  
F open  
F read2dot14  
F readbyte  
F readbytes  
F readbytetable  
F readcardinal  
F readcardinal1  
F readcardinal1le  
F readcardinal2  
F readcardinal2le  
F readcardinal3  
F readcardinal3le  
F readcardinal4  
F readcardinal4le  
F readcardinaltable  
F readchar  
F readfixed2  
F readfixed4  
F readinteger  
F readinteger1  
F readinteger1le  
F readinteger2  
F readinteger2le  
F readinteger3  
F readinteger3le  
F readinteger4  
F readinteger4le  
F readintegertable  
F readsignedbyte  
F readstring

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

## **formatters**           table

F formatcolumns  
F list  
F stripzeros

## **garbagecollector**    table

F check  
N criterium  
B enabled

## **lua**                    table

B alwaysstripcode  
F checkmemory  
F compile  
F loadedluacode  
F loadstring  
F loadstripped  
N nofstrippedbytes

- N nofstrippedchunks
- F registerfinalizer
- B stripcode
- T strippedchunks
- F strippedloadstring
- T suffixes
  - S lua
  - S luc
  - S lui
  - S luj
  - S luv
  - S tma
  - S tmc
  - S tua
  - S tuc

## packers table

- 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 totime
- F unittotex
- F unittotxml

## randomizer table

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

F setseedi		F open	
<b>report</b>	function	F openstring	
<b>sequencers</b>	table	F read2dot14	
F appendaction		F read2dot4	
F appendgroup		F readbyte	
F compile		F readbytes	
F disableaction		F readbytetable	
F disablegroup		F readcardinal	
F enableaction		F readcardinal1	
F enablegroup		F readcardinal2	
D functions		F readcardinal2le	
F localize		F readcardinal3	
F new		F readcardinal3le	
F nodeprocessor		F readcardinal4	
F prependaction		F readcardinal4le	
F prependgroup		F readcardinaltable	
F removeaction		F readchar	
F replaceaction		F readfixed2	
F setkind		F readfixed4	
F toString		F readinteger	
<b>setters</b>	table	F readinteger1	
F disable		F readinteger2	
F enable		F readinteger2le	
F initialize		F readinteger3	
F list		F readinteger3le	
F new		F readinteger4	
F register		F readinteger4le	
F report		F readintegertable	
F reset		F readsignedbyte	
F show		F readstring	
<b>stacker</b>	table	F setposition	
F new		F size	
<b>storage</b>	table	F skip	
F allocate		F skipbytes	
F checked		F skiplong	
F mark		F skipshort	
F marked		<b>strings</b>	table
F setinitializer		F collapse	
F sparse		F collapsecrlf	
<b>streams</b>	table	T formatters	
F close		F add	
F getposition		F new	
F getstring		F newcollector	
F look		F newrepeater	

F nice  
 T striplinepatterns  
   U collapse  
   U prune  
   U prune and collapse  
   U prune and no empty  
   U prune and to space  
   U retain  
   U retain and collapse  
   U retain and no empty  
 F striplines  
 F striplong  
 F tabtospace  
 T tracers  
**tables**                    table  
   F accesstable  
   F definedtable  
   F definetable  
   F encapsulate  
   F insertaftervalue

F insertbeforevalue  
 F migratetable  
 F removevalue  
 F replacevalue  
**templates**                    table  
   F load  
   F replace  
   F replacer  
   F resolve  
**zipfiles**                    table  
   F close  
   F found  
   F gunzipfile  
   F hash  
   F list  
   F open  
   F unzip  
   F unzipdir  
   F zipdir

## visualizers (context)

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



# xcomplex (context)

<b>I</b>	userdata	F pow
<b>__add</b>	function	F proj
<b>__div</b>	function	F real
<b>__eq</b>	function	F sin
<b>__index</b>	table	F sinh
U I		F sqrt
F __add		F tan
F __div		F tanh
F __eq		F topair
T __index		F tostring
U I		F voigt
F __add		F voigt_hwhm
F __div		F __mul
F __eq		S __name
F __mul		F __pow
S __name		F __sub
F __pow		F __tostring
F __sub		F __unm
F __tostring		F abs
F __unm		F acos
F abs		F acosh
F acos		F arg
F acosh		F asin
F arg		F asinh
F asin		F atan
F asinh		F atanh
F atan		F conj
F atanh		F cos
F conj		F cosh
F cos		F dawson
F cosh		F erf
F dawson		F erfc
F erf		F erfcx
F erfc		F erfi
F erfcx		F exp
F erfi		U i
F exp		F imag
U i		F log
F imag		F new
F log		F pow
F new		F proj

F real		<b>cos</b>	function
F sin		<b>cosh</b>	function
F sinh		<b>dawson</b>	function
F sqrt		<b>erf</b>	function
F tan		<b>erfc</b>	function
F tanh		<b>erfcx</b>	function
F topair		<b>erfi</b>	function
F tostring		<b>exp</b>	function
F voigt		<b>i</b>	userdata
F voigt_hwhm		<b>imag</b>	function
<b>__mul</b>	function	<b>log</b>	function
<b>__name</b>	string	<b>new</b>	function
<b>__pow</b>	function	<b>pow</b>	function
<b>__sub</b>	function	<b>proj</b>	function
<b>__tostring</b>	function	<b>real</b>	function
<b>__unm</b>	function	<b>sin</b>	function
<b>abs</b>	function	<b>sinh</b>	function
<b>acos</b>	function	<b>sqrt</b>	function
<b>acosh</b>	function	<b>tan</b>	function
<b>arg</b>	function	<b>tanh</b>	function
<b>asin</b>	function	<b>topair</b>	function
<b>asinh</b>	function	<b>tostring</b>	function
<b>atan</b>	function	<b>voigt</b>	function
<b>atanh</b>	function	<b>voigt_hwhm</b>	function
<b>conj</b>	function		

## xmath (context)

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

## xml (context)

<b>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

**closearchive**

function

**openarchive**

function

**registeredfiles**

table



## 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