

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

# ConTEXt MkIV

# global (alias: \_G)

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

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

trackers  
type  
typesetters  
unpack  
updaters  
url  
userdata  
utf  
utf8

table  
function  
table  
function  
table  
table  
table  
table  
table  
table

utilities  
v  
vf  
visualizers  
xml  
xpcall  
zip  
zlib

table  
string  
table  
table  
table  
function  
table  
table

# attributes (context)

**applyoverloads**    function

**colorintents**    table

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

**colors**    table

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

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

**define**    function

**effects**    table

- N attribute
- D data

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

## **codeinjections** table

F boxresourcedimensions  
F registerboxresource  
F restoreboxresource

## **current** string

## **defaults** table

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

## **included** table

B context  
B date  
B id  
B metadata  
B pdf

## **install** function

## **nodeinjections** table

## **noflatelua** function

## **nothing** function

## **pdf** table

T codeinjections  
F addbookmarks  
F analyzenormalsymbol  
F analyzesymbol  
F attachmentid  
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 getidentityvariable  
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 stopunicodetoactualtext  
F stopunicodetoactualtextdirect



- F supportedformats
- F unicodetoactualtext
- F useviewerlayer
- F validfield
- F validfieldcategory
- F validfieldset
- F wrapimage
- S comment
- T nodeinjections
  - F addtags
  - F annotation
  - F attachfile
  - F changestackedlayer
  - F cmykcolor
  - F comment
  - F destination
  - F effect
  - F graycolor
  - F injectbitmap
  - F insertmovie
  - F insertsound
  - F insertswf
  - F insertu3d
  - F knockout
  - F negative
  - F overprint

- F positive
- F reference
- F rgbcolor
- F spotcolor
- F startlayer
- F startstackedlayer
- F stoplayer
- F stopstackedlayer
- F transparency
- F typesetfield
- T registrations
  - F cmykindexcolor
  - F cmykspotcolor
  - F getspotcolorreference
  - F grayindexcolor
  - F grayspotcolor
  - F rgbindexcolor
  - F rgbspotcolor
  - F spotcolorname
  - F transparency

- T tables
  - D vfpspecials

<b>registrations</b>	table
<b>tables</b>	table
<b>timestamp</b>	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)

**checksidefloat** function  
**kernel** table

- F hyphenating
- F hyphenation
- F kerning
- F ligaturing
- F mlist\_to\_hlist

**paragraphs** table

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

- F start
- F stop

F tag

**profiling** table

- F add
- F distance
- F fixedprofile
- F get
- F list
- F pagehandler
- F profilebox
- F set

**vspacing** table

- F analyze
- D categories
- F collapsevbox
- T data
  - D map
  - D skip
  - D snapmethods
- F definesnapmethod
- B fixed
- F forcepageflush
- F forcestrutdepth
- F getnofpreviouslines
- F pagehandler
- F pageoverflow
- F popatsame
- F pushatsame
- F setmap
- F setskip
- F snapbox
- F synchronizepage
- F tocategories
- F tocategory
- F vboxhandler

## cache (context)

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

## callback (basic tex)

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

**register** overloaded function



# callbacks (context)

**freeze** function

**functions** table

F process\_rule

F start\_page\_number

F stop\_page\_number

**known** function

**list** data table

**pop** function

**push** function

**register** function

**report** function

**supported** table

B append\_to\_vlist\_filter

B build\_page\_insert

B buildpage\_filter

B call\_edit

B contribute\_filter

B define\_font

B find\_cidmap\_file

B find\_data\_file

B find\_enc\_file

B find\_font\_file

B find\_format\_file

B find\_image\_file

B find\_map\_file

B find\_opentype\_file

B find\_output\_file

B find\_pk\_file

B find\_read\_file

B find\_truetype\_file

B find\_typed1\_file

B find\_vf\_file

B find\_write\_file

B finish\_pdf\_file

B finish\_pdfpage

B finish\_synctex

B font\_descriptor\_objnum\_provider

B glyph\_not\_found

B glyph\_stream\_provider

B hpack\_filter

B hpack\_quality

B hyphenate

B insert\_local\_par

B kerning

B ligaturing

B linebreak\_filter

B make\_extensible

B mlist\_to\_hlist

B new\_graf

B open\_read\_file

B page\_objnum\_provider

B post\_linebreak\_filter

B pre\_dump

B pre\_linebreak\_filter

B pre\_output\_filter

B process\_input\_buffer

B process\_jobname

B process\_output\_buffer

B process\_pdf\_image\_content

B process\_rule

B read\_cidmap\_file

B read\_data\_file

B read\_enc\_file

B read\_font\_file

B read\_map\_file

B read\_opentype\_file

B read\_pk\_file

B read\_truetype\_file

B read\_typed1\_file

B read\_vf\_file

B show\_error\_hook

B show\_error\_message

B show\_lua\_error\_hook

B show\_warning\_message

B start\_file

B start\_page\_number

B start\_run

B stop\_file

B stop\_page\_number

B stop\_run

B vpack\_filter

B vpack\_quality



## 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)

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



**uchexnumbers**

function

**weekday**

function

**upper**

function

**word**

function

**verbose**

table

**words**

function

**year**

function

D data

F translate

## coroutine (basic lua)

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

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

# ctxrunner (context)

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

## 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 prepare	
<b>converters</b>	table	T flushers	
F engine		S name	
<b>enable</b>	function	T none	
<b>helpers</b>	table	T actions	
F tomatrix		T flushers	
<b>install</b>	function	S name	
<b>instances</b>	table	T pdf	
T default		T actions	
T actions		F convert	
F convert		F outputfilename	
F outputfilename		F prepare	
T flushers		T flushers	
S name		S name	
T empty		<b>lmtxversion</b>	number
T actions		<b>outputfilename</b>	function
F convert		<b>report</b>	function



## environment (context)

<b>argument</b>	function	<b>loadluafile</b>	function
<b>arguments</b>	data table	<b>luafile</b>	function
<b>basicengines</b>	data table	<b>luafilechunk</b>	function
<b>currentrun</b>	number	<b>luatexengine</b>	string
<b>default_texmfcnf</b>	string	<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

## experiments (context)

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

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

# figures (context)

<b>applyratio</b>	function	B 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>checkpermission</b>	function
<b>getposition</b>	function
<b>read2dot14</b>	function
<b>readbytes</b>	function
<b>readbytetable</b>	function
<b>readcardinal1</b>	function
<b>readcardinal2</b>	function
<b>readcardinal3</b>	function
<b>readcardinal4</b>	function
<b>readcardinaltable</b>	function
<b>readfixed2</b>	function

<b>readfixed4</b>	function
<b>readinteger1</b>	function
<b>readinteger2</b>	function
<b>readinteger3</b>	function
<b>readinteger4</b>	function
<b>readintegertable</b>	function
<b>readline</b>	function
<b>recordfilename</b>	function
<b>setposition</b>	function
<b>skipposition</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>	overloaded function
<b>fonts</b>	table
<b>frozen</b>	function
<b>getfont</b>	overloaded function
<b>getparameters</b>	function

<b>id</b>	function
<b>max</b>	function
<b>nextid</b>	function
<b>originaleach</b>	function
<b>read_tfm</b>	function
<b>read_vf</b>	function
<b>setexpansion</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 currentfonthasfeature
- 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 cleanname
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 vorg
F readcardinal	F vvar
F readcardinal1	F wofff2otf
F readcardinal2	F registerpalette
F readcardinal2le	F registerplugin
F readcardinal3	F reorderlookups
F readcardinal3le	F scriptandlanguage
F readcardinal4	F setdynamics
F readcardinal4le	F setfeatures
F readcardinaltable	T statistics
F readchar	D usedfeatures
F readfixed2	F storepdfdata
F readfixed4	T svg
F readinteger	F filterglyph
F readinteger1	F topdf
F readinteger2	D svgcache
F readinteger2le	B svgenabled
F readinteger3	T tables
F readinteger3le	D baselines
F readinteger4	D features
F readinteger4le	D featuretypes
F readintegertable	D languages
F readsignedbyte	D scripts
F readstring	N version
F readtag	T pfb
F setposition	F loadvector
F size	T tfm
F skip	D cache
F skiplong	D features
F skipposition	N maxnestingdepth
F skipshort	N maxnestingsize
F writebyte	T readers
F writecardinal2	F loadpk
F writecardinal2le	F loadtfm
F writecardinal4	F loadtfmfvf
F writecardinal4le	F loadvf
F writestring	F pktopdf
F stripredundant	F showpk
F svg	F reencode
N tableversion	F setfeatures
F unifymissing	N version
F unpack	T vf
F vhea	T combinations
F vmtx	F combine

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
T protrusion	S textitalics
S auto	S virtualized
S quad	D loadedfonts
S scaledpoints	S namemode
S scriptpercentage	N noffontsloaded
S scriptscriptpercentage	N nofsharedfonts
S size	N nofsharedhashes
S slantfactor	N nofsharedvectors
S slantperpoint	N privateoffset
T spacing	D privateslots
S extra	F readanddefine
S shrink	F registerfeature
S stretch	F resetfeature
S width	B resolvevirtualtoo

F scale	
F scaled	
F setfactor	
F setfeature	
F setmathparameter	
F setname	
B sharefonts	
F trytosharefont	
N version	
<b>current</b>	function
<b>currentid</b>	function
<b>definers</b>	table

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

<b>definetypeface</b>	function
<b>encodings</b>	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	
<b>enhanceid</b>	function
<b>expansions</b>	data table
<b>formats</b>	data table
<b>getalternate</b>	function
<b>getkern</b>	function
<b>getmultiple</b>	function
<b>getsubstitution</b>	function
<b>getters</b>	table

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

<b>goodies</b>	table
----------------	-------

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

S author	
S comment	
S copyright	
B initialized	
T mathematics	
T alternates	
T dotless	
S comment	
S feature	
N value	
T kerns	
S name	
S version	
D designsizes	
D filenames	
F getcompositions	
T list	
F load	
F prepare_features	
F register	
F registerpostprocessor	
F report	
T suffixes	
<b>handlers</b>	<b>table</b>
<b>hashes</b>	<b>table</b>
D characters	
D classes	
D csnames	
D descriptions	
D dynamics	
D emwidths	
D exheights	
D extensibles	
D features	
D identifiers	
D italics	
D lastmathids	
D marks	
D 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	
<b>helpers</b>	<b>table</b>
F addextraprivate	
F addprivate	
F appendcommands	
F appendcommandtable	
F checkflags	
F checkmerge	
F checksteps	
F collectanchors	
D commands	
F descriptiontoslot	
F dimenfactor	
F expandglyph	
T extraprivates	
F fontpatternhassize	
F getcoloredglyphs	
F getdigitwidth	
F getinstancespec	
F getparameters	
F getprivatecharornode	
F getprivatenode	
F getprivates	
F getprivateslot	
F hasprivate	
F indextoslot	
F name	
F nametoslot	
F prependcommands	
F prependcommandtable	
F privateslot	
F setdigitwidth	
F splitfontpattern	
F tochar	
<b>infofont</b>	<b>function</b>

## **iterators**      table

F characters  
F descriptions  
F glyphs

## **loggers**      table

F add\_placeholders  
D category\_to\_placeholder  
F format  
F onetimemessage  
F register  
F reportdefinedfonts  
F reportusedfeatures

## **mappings**      table

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

## **metapost**      table

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

## **mp**      table

D cache  
B inline  
N version

## **names**      data table

## **nulldata**      data table

## **privateoffsets**      table

B keepnames  
N mathbase  
N mathextrabase  
N textbase

N textextrabase

## **protrusions**

## **readers**

F afm  
F check\_lua  
F check\_tfm  
F lua  
F ofm  
F opentype  
F otf  
F pfb  
D sequence  
F tfm  
F ttc  
F ttf  
F woff

## **data table**

## **table**

## **reserveid**

## **select**

## **function**

## **table**

D alternatives  
F bodyfont  
D data  
F default  
D defaults  
F definefallbackfamily  
F definefontfamily  
F definefontfamilypreset  
D extras  
F fallback  
D fallbacks  
F features  
F filefallback  
F fontdata  
F fontfallback  
F fontsynonym  
F goodies  
F mathfallback  
D methods  
D presets  
F registerfallback  
F registerfiles  
F registerfontalternative  
F registerfontfamily  
F textfallback  
F typeface



F typescript	
F userdata	
<b>specifiers</b>	<b>table</b>
D contextmerged	
F contextnumber	
D contextnumbers	
D contextsetups	
F contexttostring	
F definecontext	
F mergecontext	
F presetcontext	
F registercontext	
F showcontext	
F splitcontext	
D synonyms	
D variants	
<b>symbols</b>	<b>table</b>

T emoji	
F checked	
F resolved	
F uselibrary	
<b>tables</b>	<b>table</b>
D data	
F savefont	
F saveoriginal	
<b>tracers</b>	<b>table</b>
<b>treatments</b>	<b>table</b>
F applyfixes	
D data	
S filename	
F ignoredfile	
F report	
F trace	
<b>typefaces</b>	<b>table</b>

# functions (context)

**dummy** function

# graphics (context)

**backgrounds** table

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

**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

img (basic tex)

new overloaded function

# interactions (context)

**attachments** data table

**fields** table

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

**general** table

- F getidentity
- F setupidentity

**help** table

- F collect
- F reference
- F register

**javascripts** table

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

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

**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>F list</b>	
<b>addvalidkeys</b>	function	<b>registernamespace</b>	function
<b>cachedsetups</b>	data table	<b>registerscanner</b>	function
<b>cachedsetup</b>	function	<b>scanners</b>	data table
<b>checkedspecification</b>	function	<b>setconstant</b>	function
<b>complete</b>	data table	<b>setcount</b>	function
<b>constants</b>	data table	<b>setdimen</b>	function
<b>corenamespaces</b>	data table	<b>setelement</b>	function
<b>currentinterface</b>	string	<b>setformat</b>	function
<b>currentresponse</b>	string	<b>setmacro</b>	function
<b>definecommand</b>	function	<b>setmessage</b>	function
<b>defined</b>	function	<b>setmessages</b>	function
<b>doifelsemessage</b>	function	<b>settranslation</b>	function
<b>elements</b>	data table	<b>setupstrings</b>	data table
<b>formats</b>	data table	<b>setuserinterface</b>	function
<b>getcheckedparameters</b>	function	<b>setvalidkeys</b>	function
<b>getmessage</b>	function	<b>setvariable</b>	function
<b>getnamespace</b>	function	<b>showmessage</b>	function
<b>getsetupstring</b>	function	<b>storedscanners</b>	data table
<b>hashedsetups</b>	data table	<b>strings</b>	table
<b>implement</b>	function	<b>syntax</b>	data table
<b>interfacedcommand</b>	function	<b>tolist</b>	function
<b>interfaces</b>	table	<b>translations</b>	data table
<b>invalidkey</b>	function	<b>usednamespaces</b>	data table
<b>message</b>	function	<b>variables</b>	data table
<b>namespaces</b>	table	<b>writestatus</b>	function

F define



## io (basic lua)

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

# job (context)

<b>comment</b>	function	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>hyphenate</b>	function
<b>hyphenation</b>	function
<b>hyphenationmin</b>	function

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

# languages (context)

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

T enablers

F load

B enables

T methods

F found

N threshold

# layouts (context)

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

## lfs (extra lua)

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



## libraries (context)

**basiclua** data table

**basictex** data table

**builtin** data table

**extralua** data table

**extratex** data table

**functions** data table

**globals** data table

# lmx (context)

<b>color</b>	function
<b>convert</b>	function
<b>convertfile</b>	function
<b>convertstring</b>	function
<b>einject</b>	function
<b>eprint</b>	function
<b>escape</b>	function
<b>finalized</b>	function
<b>finject</b>	function
<b>fprint</b>	function
<b>get</b>	function
<b>getvariables</b>	function
<b>htmfile</b>	function
<b>html</b>	table
F a	
F td	
F th	
<b>include</b>	function
<b>inherited</b>	table
S color-background-four	
S color-background-one	
S color-background-three	
S color-background-two	
S title	
<b>initialize</b>	function
<b>inject</b>	function
<b>lmxfile</b>	function

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

# logs (context)

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

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

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

## lpeg (basic lua)

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

# ltn12 (extra lua)

**BLOCKSIZE**    number

**filter**        table

    F chain

    F cycle

**pump**          table

    F all

    F step

**sink**           table

    F chain

    F error

    F file

    F null

    F simplify

    F table

**source**        table

    F cat

    F chain

    F empty

    F error

    F file

    F rewind

    F simplify

    F string



## lua (basic tex)

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

# luaharfbuzz (context)

<b>Blob</b>	table
F new	
F new_from_file	
<b>Buffer</b>	table
F new	
<b>Direction</b>	table
F new	
<b>Face</b>	table
F new	
F new_from_blob	
<b>Feature</b>	table
F new	
<b>Font</b>	table
F new	

<b>Language</b>	table
F new	
<b>Script</b>	table
F from_iso15924_tag	
F new	
<b>Tag</b>	table
F new	
<b>ot</b>	table
<b>shape_full</b>	function
<b>shapers</b>	function
<b>unicode</b>	table
F script	
<b>version</b>	function

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

# mathematics (context)

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

## md5 (extra lua)

<b>HEX</b>	function
<b>crypt</b>	function
<b>dec</b>	function
<b>decrypt</b>	function
<b>exor</b>	function

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



# metapost (context)

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

<b>runscript</b>	function	<b>tex</b>	table
<b>scripterror</b>	function	F get	
<b>scriptindex</b>	function	F reset	
<b>setextensions</b>	function	F set	
<b>setoutercolor</b>	function	F setfrombuffer	
<b>settext</b>	function	<b>texerrors</b>	boolean
<b>setvariable</b>	function	<b>texexp</b>	function
<b>showlog</b>	boolean	<b>theclippath</b>	function
<b>simple</b>	function	<b>tographic</b>	function
<b>splitprescript</b>	function	<b>totable</b>	function
<b>startgraphic</b>	function	<b>unload</b>	function
<b>stopgraphic</b>	function	<b>untagvariable</b>	function
<b>svformat</b>	function	<b>variables</b>	table
<b>sxsy</b>	function		

## mime (extra lua)

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

**qpwrp** function  
**report** function  
**stuff** overloaded function  
**unb64** function  
**unqp** function  
**wrap** overloaded function  
**wrapt** overloaded 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>gettoks</b>	<b>function</b>
F boolean		<b>graphformat</b>	<b>function</b>
F flush		<b>inhash</b>	<b>function</b>
F fprint		<b>integer</b>	<b>function</b>
F integer		<b>isarray</b>	<b>function</b>
F number		<b>isobject</b>	<b>function</b>
F numeric		<b>mf_blob_add</b>	<b>function</b>
F pair		<b>mf_blob_dimensions</b>	<b>function</b>
F pairpoints		<b>mf_blob_index</b>	<b>function</b>
F path		<b>mf_blob_new</b>	<b>function</b>
F pathpoints		<b>mf_blob_raw_content</b>	<b>function</b>
F points		<b>mf_blob_raw_dimensions</b>	<b>function</b>
F print		<b>mf_blob_raw_reset</b>	<b>function</b>
F quadruple		<b>mf_blob_raw_toutf</b>	<b>function</b>
F quadruplepoints		<b>mf_blob_raw_wipe</b>	<b>function</b>
F quoted		<b>mf_blob_size</b>	<b>function</b>
F size		<b>mf_blob_width</b>	<b>function</b>
F string		<b>mf_external_figure</b>	<b>function</b>
F triplet		<b>mf_finish_saving_data</b>	<b>function</b>
F tripletpoints		<b>mf_formatted_text</b>	<b>function</b>
F vprint		<b>mf_get_outline_text</b>	<b>function</b>
<b>boolean</b>	<b>function</b>	<b>mf_graphic_text</b>	<b>function</b>
<b>cleaned</b>	<b>function</b>	<b>mf_inject_blob</b>	<b>function</b>
<b>dataset</b>	<b>function</b>	<b>mf_made_text</b>	<b>function</b>
<b>datasets</b>	<b>function</b>	<b>mf_named_color</b>	<b>function</b>
F load		<b>mf_outline_text</b>	<b>function</b>
<b>defaultcolormodel</b>	<b>function</b>	<b>mf_path_left</b>	<b>function</b>
<b>dimension</b>	<b>function</b>	<b>mf_path_length</b>	<b>function</b>
<b>disposehash</b>	<b>function</b>	<b>mf_path_point</b>	<b>function</b>
<b>flush</b>	<b>function</b>	<b>mf_path_reset</b>	<b>function</b>
<b>format</b>	<b>function</b>	<b>mf_path_right</b>	<b>function</b>
<b>formatted</b>	<b>function</b>	<b>mf_save_data</b>	<b>function</b>
<b>fprint</b>	<b>function</b>	<b>mf_script_index</b>	<b>function</b>
<b>fromhash</b>	<b>function</b>	<b>mf_some_text</b>	<b>function</b>
<b>get</b>	<b>table</b>	<b>mf_start_saving_data</b>	<b>function</b>
F boolean		<b>mf_stop_saving_data</b>	<b>function</b>
F integer		<b>mf_tb_dimensions</b>	<b>function</b>
F number		<b>mf_tt_dimensions</b>	<b>function</b>
F numeric		<b>mf_tt_initialize</b>	<b>function</b>
F path		<b>mode</b>	<b>function</b>
F string		<b>n</b>	<b>function</b>
<b>getcount</b>	<b>function</b>	<b>newhash</b>	<b>function</b>
<b>getdimen</b>	<b>function</b>	<b>number</b>	<b>function</b>
<b>getmacro</b>	<b>function</b>	<b>numeric</b>	<b>function</b>

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

## mplib (extra tex)

<b>char_depth</b>	function	<b>get_boolean</b>	function
<b>char_height</b>	function	<b>get_number</b>	function
<b>char_width</b>	function	<b>get_numeric</b>	function
<b>execute</b>	function	<b>get_path</b>	function
<b>fields</b>	function	<b>get_string</b>	function
<b>finder</b>	function	<b>new</b>	overloaded function
<b>finders</b>	table	<b>pen_info</b>	function
F file		<b>solve_path</b>	function
F mpstemplate		<b>statistics</b>	function
<b>finish</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	F getglue
<b>check_discretionary</b>	function	F getheight
<b>copy</b>	function	F getid
<b>copy_list</b>	function	F getkern
<b>count</b>	function	F getlang
<b>current_attr</b>	function	F getleader
<b>dimensions</b>	function	F getlist
<b>direct</b>	table	F getnext
F check_discretionaries		F getnucleus
F check_discretionary		F getoffsets
F copy		F getpenalty
F copy_list		F getprev
F count		F getproperty
F current_attr		F getshift
F dimensions		F getsub
F effective_glue		F getsubtype
F end_of_math		F getsup
F find_attribute		F getwhd
F first_glyph		F getwidth
F flatten_discretionaries		F has_attribute
F flush_list		F has_field
F flush_node		F has_glyph
F flush_properties_table		F hpack
F free		F hyphenating
F get_attribute		F insert_after
F get_properties_table		F insert_before
F get_synctex_fields		F is_char
F getattributelist		F is_direct
F getboth		F is_glyph
F getbox		F is_node
F getchar		F is_zero_glue
F getcomponents		F kerning
F getdata		F last_node
F getdepth		F length
F getdir		F ligaturing
F getdirection		F new
F getdisc		F prepend_prevdepth
F getexpansion		F protect_glyph
F getfam		F protect_glyphs
F getfield		F protrusion_skippable
F getfont		F rangedimensions

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

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

**m**list\_to\_hlist

**n**ew

**n**oadcodes

**n**oadoptions

N axis

N exact

N left

N middle

N no\_axis

N right

N set

N unused\_1

N unused\_2

**n**odecodes

**n**opts

**n**uts

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\_list

function

function

data table

table

data table

function

table

F flush\_node

F free

F fullhpack

F get\_synctex\_fields

F getattr

F getattribute

F getattributelist

F getattrlist

F getboth

F getbox

F getboxglue

F getchar

F getcomponents

F getdata

F getdepth

F getdir

F getdirection

F getdisc

F getdiscretionary

F getexpansion

F getfam

F getfield

F getfont

F getglue

F 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 glyph
F has_dimensions	F hlist
F has_field	F italicckern
F has_glyph	F kern
F hpack	F latelua
F hyphenating	F leader
F insert_after	F leftmarginkern
F insert_before	F leftskip
F insert_list_after	F lineskip
F is_direct	F literal
F is_display_math	F mathchar
F is_node	F mathtextchar
F is_nut	F negatedglue
F is_zero_glue	F noad
F ischar	F originliteral
F isdone	F outlinerule
F isglyph	F pageliteral
F kerning	F penalty
F last_node	F radical
F leftmarginwidth	F rawliteral
F length	F register
F ligaturing	F restore
F link	F rightmarginkern
F linked	F rightskip
F locate	F rule
F mlist_to_hlist	F save
F nestedtracedslide	F savepos
F new	F setmatrix
T pool	F shrink
F accent	F stretch
F baselineskip	F subbox
F boundary	F sublist
F choice	F temp
F cleanup	F textdir
F delim	F usage
F delimiter	T userids
F direction	N margins.inline

N splitters.one	F setdisc
N splitters.two	F setdiscretionary
F usernode	F setexpansion
F userrule	F setfam
F vlist	F setfield
F wordboundary	F setfont
F prepend	F setglue
F processranges	F setglyphdata
F processwords	F setheight
F protect_glyph	F setkern
F protect_glyphs	F setlang
F protrusion_skippable	F setlanguage
F rangedimensions	F setleader
F rawprop	F setlink
F reference	F setlist
F rehpack	F setnext
F remove	F setnucleus
F repackhlist	F setoffsets
F replace	F setorientation
F rightmarginwidth	F setpenalty
T rules	F setpost
T ruleactions	F setpre
F box	F setprev
F draw	F setprop
F fill	F setreplace
F mp	F setruledata
F stroke	F setshift
F userrule	F setsplit
F set_attribute	F setsub
F set_synctex_fields	F setsubtype
F setattr	F setsup
F setattribute	F setsurround
F setattributelist	F setunsetattributes
F setattributes	F setvalue
F setattrlist	F setvisual
F setboth	F setvisuals
F setbox	F setwhd
F setboxglue	F setwidth
F setchar	F slide
F setcomponents	F somepenalty
F setdata	F somespace
F setdepth	F splitbox
F setdir	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 save	
F toinbox	F savepos	
F toinbox	F setmatrix	
F toinbox	F special	
F unprotect_glyph	F usage	
F unprotect_glyphs	F vlist	
F unset_attribute	<b>prepend</b>	function
F unsetattribute	<b>print</b>	function
F unsetattributes	<b>processors</b>	table
F untracedslide	F contribute_filter	
F use_components	B enabled	
F usedlist	F hpack_filter	
F uses_font	F post_linebreak_filter	
F vianodes		

F pre\_linebreak\_filter  
 F tracer  
**properties** table  
 T data  
**protect\_glyph** function  
**protect\_glyphs** function  
**protrusion\_skippable** function  
**pts** function  
**radicalcodes** data table  
**rangedimensions** function  
**reference** function  
**references** table  
 N attribute  
 T done  
 F handler  
 T stack  
**reheap** function  
**remove** function  
**repackhlist** function  
**replace** function  
**report** function  
**rightmarginwidth** function  
**rulecodes** data table  
**rules** table  
 D data  
 F define  
 F enable  
 F handler  
 F userrule  
**save** function  
**serialize** function  
**serializebox** function  
**set\_attribute** function  
**setattr** function  
**setattribute** function  
**setattributes** function  
**setboth** function  
**setbox** function  
**setboxtonaturalwd** function  
**setchar** function  
**setfield** function  
**setfont** function  
**setglue** function  
**setleader** function

**setlink** function  
**setlist** function  
**setnext** function  
**setprev** function  
**setunsetattributes** function  
**shifts** table  
 D data  
 F define  
 F enable  
 F handler  
**show** function  
**showboxes** function  
**showcodes** function  
**showlist** function  
**showsimplelist** function  
**skipcodes** data table  
**skipvalues** data table  
**slide** function  
**snapshots** table  
 F getparameters  
 F getsamples  
 F resetsamples  
 F takesample  
**somepenalty** function  
**somespace** function  
**splitbox** function  
**stripdiscretionaries** function  
**stripping** table  
 T glyphs  
 F set  
**subtypes** data table  
**tail** function  
**takeattr** function  
**takebox** function  
**tasks** table  
 F actions  
 F appendaction  
 F disableaction  
 F disablegroup  
 F enableaction  
 F enablegroup  
 F freeze  
 F freezegroup  
 F new

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 rule		F vpack	

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

## number (context)

	function	<b>tobitstring</b>	function
<b>basepoints</b>	function	<b>tocentimeters</b>	function
<b>bytetodecimal</b>	function	<b>tociceros</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)

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

## package (basic lua)

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



# pagebuilders (context)

## columnsets    table

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

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

## injections    table

- F flushafter
- F flushbefore
- F save

## mixedcolumns    table

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

pdf (basic tex)

**immediateobj** function

## pdf (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

# 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>oneorange</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>		function	<b>usedataset</b>		function
<b>tracers</b>		table	<b>usedentries</b>		function
F	showdatasetauthors		<b>writers</b>		table
F	showdatasetcompleteness		F	author	
F	showdatasetfields		F	keyword	
F	showentry		F	pagenumber	
F	showfields		F	range	
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 processmklx		F fetchtable	
F processmkvii		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>readcardinal2</b>	function
<b>readcardinal3</b>	function
<b>readcardinal4</b>	function
<b>readcardinaltable</b>	function

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

# socket (extra lua)

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

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

F parse\_path

F unescape

# sorters (context)

<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

**setexitcode**        function

## storage (context)

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



## streams (context)

<b>collect</b>	function
<b>disable</b>	function
<b>enable</b>	function
<b>flush</b>	function
<b>initialize</b>	function

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

## string (basic lua)

<b>autodouble</b>	function	<b>packsize</b>	function
<b>autosingle</b>	function	<b>quote</b>	function
<b>booleanstring</b>	function	<b>quoted</b>	function
<b>byte</b>	function	<b>rep</b>	function
<b>bytepairs</b>	function	<b>replacenewlines</b>	function
<b>bytes</b>	function	<b>reverse</b>	function
<b>bytetable</b>	function	<b>split</b>	function
<b>char</b>	function	<b>splitlines</b>	function
<b>characterpairs</b>	function	<b>splitup</b>	function
<b>characters</b>	function	<b>strip</b>	function
<b>checkedsplit</b>	function	<b>sub</b>	function
<b>collapsespaces</b>	function	<b>tformat</b>	function
<b>containsws</b>	function	<b>toHEX</b>	function
<b>count</b>	function	<b>toboollean</b>	function
<b>dump</b>	function	<b>tobytes</b>	function
<b>escapedpattern</b>	function	<b>tocontext</b>	function
<b>escapedquotes</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

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

- 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

table

- F define
- 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

## table

- F reportstructure
- 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

## sets table

- F define
- F get
- F getall
- D setlist

## specials table

- D collected
- F retrieve
- F store
- D tobesaved

## synonyms table

- 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

## tags table

- 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 start
F settabulatecell	F stop
F settagdelimitedsymbol	F strip
F settagsubsentencesymbol	D taglist
F setupexport	T usewithcare
F setuserproperties	T images
D specifications	



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

N maxdimen

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

## 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

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

# tokens (context)

<b>astable</b>	function	U loadfoundtypescriptfile
<b>bgroup</b>	userdata	U resetctxscanner
<b>bits</b>	table	U rlap
N active		U scratchcounter
N alignment		U scratchdimen
N begingroup		U scratchmuskip
N character		U scratchskip
N close		U scratchtoken
N comment		U secondoftwoarguments
N endgroup		U setfalsevalue
N endoffline		U setsectionblock
N escape		U setupsystem
N ignore		U startcolumns
N invalid		U starttabulate
N letter		U starttitle
N mathshift		U startxtitle
N open		U stopcolumns
N other		U stoptabulate
N parameter		U stoptitle
N space		U stopxtitle
N subscript		U texsetup
N superscript		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 boolean  
 F box  
 F code  
 F conditional  
 F count  
 F csname  
 F dimen  
 F dimension  
 F float  
 F glue  
 F hbox  
 F integer

F keyword  
 F keywordcs  
 F list  
 F lxmld  
 F number  
 F real  
 F scanclose  
 F scanopen  
 F string  
 F table  
 F token  
 F tokens  
 F toks  
 F vbox  
 F verbatim  
 F vtop  
 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  
 N invalid  
 N letter  
 N mathshift  
 N open  
 N other



N parameter	F scanopen
N space	F string
N subscript	F table
N superscript	F token
N whitespace	F tokens
N close	F toks
F inspect	F vbox
N open	F verbatim
F report	F vtop
F scanargument	F whd
F scanboolean	F word
F scanbox	F scannumber
F scanclose	F scanopen
F scancode	F scanstring
F scanconditional	F scantable
F scancsname	F scanvbox
F scandimen	F scanverbatim
F scandimension	F scanvtop
F scanhbox	F scanword
F scaninteger	F toboolean
F scankeyword	F todimen
F scankeywordcs	T tokens
F scanlist	F astable
T scanners	U bgroup
F argument	T cache
F boolean	U NC
F box	U NR
F code	U bf
F conditional	U color
F count	U colordefalc
F csname	U colordefflc
F dimen	U colordefflt
F dimension	U colordefrlt
F float	U dofinishreference
F glue	U dostarttext
F hbox	U finishjob
F integer	U firstofoneargument
F keyword	U firstoftwoarguments
F keywordcs	U gobbleoneargument
F list	U goto
F lxmld	U iftrue
F number	U input
F real	U loadfoundtypescriptfile
F scanclose	U resetctxscanner

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 scanboolean
T converters	F scanbox
S toboolean	F scanclose
S todimen	F scancode
S toglue	F scanconditional
S tonumber	F scansname
S tostring	F scandimen
F create	F scandimension
F defined	F scanhbox
U egroup	F scaninteger
T getters	F scankeyword
F box	F scankeywordcs
F count	F scanlist
F dimen	F scannumber

F scanopen	F tonumber	
F scanstring	F tostring	
F scantable	U vbox	
F scanvbox	U vtop	
F scanverbatim	F tonumber	
F scanvtop	F tostring	
F scanword	<b>vbox</b>	userdata
F toboolean	<b>vtop</b>	userdata
F todimen		

# 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)

## **alignments** table

F handler  
F set

## **breakpoints** table

F define  
F handler  
D mapping  
T methods  
T numbers  
F set  
F setreplacement

## **cases** table

T actions  
F handler  
F register  
F set

## **characteralign** table

F handler  
F resetcharacteralign  
F setcharacteralign

## **characters** table

F handler  
T methods  
F replacensp  
F replacenspaces

## **checkers** table

F handler  
F reset  
F set

## **cleaners** table

F handler  
F set

## **digits** table

T actions  
F handler  
F set

## **directions** table

F getfences  
F getglobal  
F getmethod  
F handler

T handlers  
F installhandler  
F processmath  
F set  
F setcolor  
F setmath  
F tomode

## **firstlines** table

T actions  
F default  
F line  
F word  
F handler  
F set

## **fontkerns** table

F handler

## **initials** table

T actions  
F default  
F addanchortoline  
F addtoline  
F calculatedelta  
F checkline  
F handler  
F moveinline  
F normalize  
F set

## **injectors** table

F check  
T list  
F mark  
F reset  
F set  
F show

## **italics** table

F enablemath  
F enabletext  
F forcevariant  
F handler  
F reset  
F set

## **kerns**                      table

D factors  
F handler  
F keepligature  
D mapping  
F set

## **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 readcardinal2  
F readcardinal2le  
F readcardinal3  
F readcardinal3le  
F readcardinal4  
F readcardinal4le  
F readcardinaltable  
F readchar  
F readfixed2  
F readfixed4  
F readinteger  
F readinteger1  
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 writecardinal2  
F writecardinal2le  
F writecardinal4  
F writecardinal4le  
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 **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

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

F appendaction  
 F appendgroup  
 F compile  
 F disableaction  
 F disablegroup  
 F enableaction  
 F enablegroup  
 D functions  
 F localize  
 F new  
 F nodeprocessor

F prependaction		F readcardinal4le	
F prependgroup		F readcardinaltable	
F removeaction		F readchar	
F replaceaction		F readfixed2	
F setkind		F readfixed4	
F toString		F readinteger	
<b>setters</b>	<b>table</b>	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>	<b>table</b>	F setposition	
F new		F size	
<b>storage</b>	<b>table</b>	F skip	
F allocate		F skipbytes	
F checked		F skiplong	
F mark		F skipshort	
F marked		<b>strings</b>	<b>table</b>
F setinitializer		F collapse	
F sparse		F collapsecrlf	
<b>streams</b>	<b>table</b>	T formatters	
F close		F add	
F getposition		F new	
F getstring		F newcollector	
F look		F newrepeater	
F open		F nice	
F openstring		T striplinepatterns	
F read2dot14		U collapse	
F read2dot4		U prune	
F readbyte		U prune and collapse	
F readbytes		U prune and no empty	
F readbytetable		U prune and to space	
F readcardinal		U retain	
F readcardinal1		U retain and collapse	
F readcardinal2		U retain and no empty	
F readcardinal2le		F striplines	
F readcardinal3		F striplong	
F readcardinal3le		F tabtospace	
F readcardinal4		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

## vf (context)

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

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

## visualizers (context)

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



# xml (context)

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

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

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

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

## zip (extra lua)

**archives**

table

**close**

function

**closearchive**

function

**open**

overloaded function

**openarchive**

function

**openfile**

function

**registeredfiles**

table

**type**

function

## zlib (extra lua)

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

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