

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

ConT<sub>F</sub>XT MkIV

# global (alias: \_G)

<code>_LUAVERSION</code>	number	<code>file</code>	table
<code>_MAJORVERSION</code>	number	<code>floats</code>	table
<code>_MINORVERSION</code>	number	<code>font</code>	table
<code>arg</code>	table	<code>fontloader</code>	table
<code>assert</code>	function	<code>fonts</code>	table
<code>attributes</code>	table	<code>format_n</code>	function
<code>backends</code>	table	<code>frozen</code>	boolean
<code>beginpage</code>	function	<code>functions</code>	table
<code>bibtex</code>	table	<code>getmetatable</code>	function
<code>bit32</code>	table	<code>getreadfilename</code>	function
<code>blobs</code>	table	<code>global</code>	table
<code>boolean</code>	table	<code>graphics</code>	table
<code>buffers</code>	table	<code>gzip</code>	table
<code>builders</code>	table	<code>img</code>	table
<code>caches</code>	table	<code>inspect</code>	function
<code>callback</code>	table	<code>interactions</code>	table
<code>callbacks</code>	table	<code>interfaces</code>	table
<code>catcodes</code>	table	<code>io</code>	table
<code>characters</code>	table	<code>ipairs</code>	function
<code>chemistry</code>	table	<code>job</code>	table
<code>collectgarbage</code>	function	<code>lang</code>	table
<code>commands</code>	table	<code>languages</code>	table
<code>containers</code>	table	<code>layouts</code>	table
<code>context</code>	function	<code>lfs</code>	table
<code>converters</code>	table	<code>libraries</code>	table
<code>coroutine</code>	table	<code>lmx</code>	table
<code>ctxrunner</code>	table	<code>lmxconvert</code>	function
<code>debug</code>	table	<code>lmxnew</code>	function
<code>delta</code>	number	<code>load</code>	function
<code>dimen</code>	function	<code>loadfile</code>	function
<code>dir</code>	table	<code>loadstring</code>	function
<code>directives</code>	table	<code>logs</code>	table
<code>document</code>	table	<code>lp_fastpos_n</code>	userdata
<code>documentdata</code>	table	<code>lp_fastpos_p</code>	userdata
<code>dofile</code>	function	<code>lpdf</code>	table
<code>endpage</code>	function	<code>lpeg</code>	table
<code>environment</code>	table	<code>ltn12</code>	table
<code>epdf</code>	table	<code>lua</code>	table
<code>error</code>	function	<code>luatex</code>	table
<code>experiments</code>	table	<code>lxml</code>	table
<code>figures</code>	table	<code>math</code>	table

mathematics	table	setinspector	function
mbox	table	setmetatable	function
md5	table	socket	table
metapost	table	sorters	table
mime	table	statistics	table
module	function	status	table
moduledata	table	storage	table
modules	table	streams	table
mplib	table	string	table
newline	function	stripmath	function
next	function	structures	table
noads	table	swiglib	function
node	table	table	table
nodes	table	tex	table
number	table	texconfig	table
optionalrequire	function	texio	table
os	table	thirddata	table
outputpagestree	function	toboolean	function
package	table	token	table
pagebuilders	table	tokens	table
pairs	function	tonumber	function
parametersets	table	tostring	function
pattern	userdata	trace_characters	boolean
pcall	function	traceback	function
pdf	table	tracers	table
pdfscanner	table	trackers	table
physics	table	type	function
print	function	typesetters	table
profiler	table	unicode	table
protect	function	unpack	function
publications	table	url	table
rawequal	function	userdata	table
rawget	function	utf	table
rawlen	function	utilities	table
rawset	function	vf	table
regimes	table	visualizers	table
report_characters	function	xml	table
require	function	xmlconvert	function
resolve_fences	function	xpcall	function
resolvers	table	zip	table
scripts	table	zlib	table
select	function		
set	table		
setcharacteralign	function		

# attributes (context)

## 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
- B couple
- D data
- N default
- F defineintermediatecolor
- F definemixcolor
- F definemultitonecolor
- F defineprocesscolor
- F definesimplegray
- F definespotcolor
- F definetransparency
- F enable
- F filter
- F forcedmodel
- F forcesupport
- F formatcolor
- F formatgray
- 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
- U 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
- D sets
- F spec
- F spot
- F spotcolorname
- F spotcolorparent
- F spotcolorvalue
- B supported
- F transparencycomponents
- B triggering
- F usecolors
- F value
- D values
- B weightgray

## define function effects table

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

## handlers table list data table names data table negatives table

N attribute		F resolve_begin
D data		F resolve_end
F enable		F resolve_step
F handler		D scopes
F register		F setfeatures
D registered		F start
<b>numbers</b>	data table	F stop
<b>ofnode</b>	function	B supported
<b>private</b>	function	D values
<b>showcurrent</b>	function	
<b>states</b>	table	
F disabletriggering		
F enabletriggering		
F finalize		
F initialize		
F process		
F selective		
F stacked		
F stacker		
<b>transparencies</b>	table	
N attribute		
D data		
F enable		
F forcesupport		
F handler		
U none		
F register		
D registered		
B supported		
B triggering		
F value		
D values		
<b>unsetvalue</b>	number	
<b>viewerlayers</b>	table	
N attribute		
D data		
F define		
F enable		
F forcesupport		
F handler		
B hasorder		
D listwise		
F register		
D registered		

# backends (context)

**codeinjections** table

F synchronizecolormodel

**current** string

**defaults** table

T codeinjections

T nodeinjections

T registrations

D tables

**install** function

**nodeinjections** table

F restore

F save

F transform

**nothing** function

**pdf** table

T codeinjections

F addbookmarks

F attachmentid

F clonefield

F definefield

F definefieldset

F defineviewerlayer

F embedfile

F enabletags

F exportformdata

F finalizepage

F finishreference

F getdefaultfieldvalue

F getfieldcategory

F getfieldset

F getformatoption

F getoutputfilename

F getpreviewfigure

F insertrenderingwindow

F mergereferences

F mergeviewerlayers

F prerollreference

F presetsymbol

F presetsymbollist

F processrendering

F registerdocumentcloseaction

F registerdocumentopenaction

F registeredsymbol

F registerpagecloseaction

F registerpageopenaction

F registersymbol

F setfieldcalculationset

F setfigurealternative

F setfigurecolorspace

F setfiguremask

F setformat

F setformsmethod

F setpagetransition

F setupcanvas

F setupidentity

F setxmpfile

F startlayer

F stoplayer

F supportedformats

F useviewerlayer

F validfield

F validfieldcategory

F validfieldset

S comment

T nodeinjections

F addtags

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 vfspecials

**registrations**    table

**tables**            table

# bibtex (context)

**authorref** function

**authors** table

- F concat
- F inverted
- F invertedshort
- F normal
- F normalshort
- F setsettings
- F short

**authoryearref** function

**authoryearsref** function

**convert** function

**hacks** table

- F add
- F doifalreadyplaced
- F filterall
- F flush
- F nofregistered
- F process
- F register
- F registerplaced
- F reset
- F resolve

**load** function

**new** function

**singularorplural** function

**statistics** table

- N nofbytes
- N nofdefinitions
- N nofshortcuts

**toxml** function



## bit32 (basic lua)

<b>arshift</b>	function
<b>band</b>	function
<b>bnot</b>	function
<b>bor</b>	function
<b>btest</b>	function
<b>bxor</b>	function
<b>extract</b>	function
<b>lrotate</b>	function
<b>lshift</b>	function
<b>replace</b>	function
<b>rrotate</b>	function
<b>rshift</b>	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>tohpackfast</b>	function
<b>tonodes</b>	function
<b>tovpack</b>	function
<b>tovpackfast</b>	function
<b>write</b>	function

## boolean (context)

**tocontext** function

**tonumber** function

## buffers (context)

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

# builders (context)

## **kernel**      table

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 default  
    F oneline  
D names  
D numbers  
F set  
F start  
F stop  
F keeptogether  
F registertogether  
T solutions  
  T splitters  
    F define  
    F optimize  
  T registered  
    F reset  
    F set  
    F split  
    F start  
    F stop  
F tag

## **vspacing**      table

F analyze  
D categories  
F collapsevbox  
T data  
  D map  
  D skip  
  D snapmethods

F definesnapmethod  
B fixed  
F pagehandler  
F resetprevdepth  
F setmap  
F setskip  
F snapbox  
F tocategories  
F tocategory  
F vboxhandler

## cache (context)

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

## callback (basic tex)

**find**        function  
**list**        function  
**register**   overloaded function

## callbacks (context)

<b>freeze</b>	function
<b>known</b>	function
<b>list</b>	data table
<b>pop</b>	function
<b>push</b>	function
<b>register</b>	function
<b>report</b>	function



## catcodes (context)

**names** data table

**numbers** data table

**register** function

# characters (context)

<b>activeoffset</b>	number	<b>otfscripts</b>	data table
<b>adobename</b>	function	<b>ranges</b>	data table
<b>bidirectional</b>	data table	<b>registerentities</b>	function
<b>blockrange</b>	function	<b>remap_hangul_syllable</b>	function
<b>blocks</b>	data table	<b>safechar</b>	function
<b>casemap</b>	table	<b>setcodes</b>	function
<b>categories</b>	data table	<b>shape</b>	function
<b>category</b>	function	<b>shaped</b>	function
<b>categorytags</b>	data table	<b>shchars</b>	data table
<b>combined</b>	data table	<b>shcodes</b>	data table
<b>contextname</b>	function	<b>showstring</b>	function
<b>data</b>	data table	<b>specialchars</b>	data table
<b>decomposed</b>	data table	<b>specials</b>	data table
<b>define</b>	function	<b>subscripts</b>	table
<b>description</b>	function	<b>superscripts</b>	table
<b>descriptions</b>	data table	<b>synonyms</b>	data table
<b>directions</b>	table	<b>tex</b>	table
<b>encodes</b>	data table	D accentmapping	
<b>entities</b>	data table	F defineaccents	
<b>fallbacks</b>	data table	F toutf	
<b>filters</b>	data table	<b>textclasses</b>	table
<b>fromnumber</b>	function	<b>tonumber</b>	function
<b>fschars</b>	data table	<b>ucchars</b>	data table
<b>fscodes</b>	data table	<b>uccode</b>	function
<b>getrange</b>	function	<b>uccodes</b>	data table
<b>graphemes</b>	data table	<b>unicodechar</b>	function
<b>hangul</b>	data table	<b>upper</b>	function
<b>initialize</b>	function		
<b>is_character</b>	data table		
<b>is_command</b>	data table		
<b>is_letter</b>	data table		
<b>is_mark</b>	data table		
<b>is_spacing</b>	data table		
<b>lcchars</b>	data table		
<b>lccode</b>	function		
<b>lccodes</b>	data table		
<b>lettered</b>	function		
<b>lower</b>	function		
<b>math</b>	table		
<b>mathpairs</b>	data table		
<b>mirrors</b>	table		

## chemistry (context)

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

## commands (context)

<b>Alphabetic</b>	function	<b>autonextspace</b>	function
<b>Character</b>	function	<b>autonextstructurelevel</b>	function
<b>Characters</b>	function	<b>autosetups</b>	function
<b>MPc</b>	function	<b>autostarttext</b>	function
<b>MPd</b>	function	<b>autostoptext</b>	function
<b>MPh</b>	function	<b>averagecharwidth</b>	function
<b>MPLl</b>	function	<b>bcolumn</b>	function
<b>MPlr</b>	function	<b>boolcase</b>	function
<b>MPls</b>	function	<b>boxtostring</b>	function
<b>MPn</b>	function	<b>character</b>	function
<b>MPp</b>	function	<b>characters</b>	function
<b>MPpardata</b>	function	<b>chardescription</b>	function
<b>MPplus</b>	function	<b>checkcharactersinfont</b>	function
<b>MPpos</b>	function	<b>checkcountersetup</b>	function
<b>MPposset</b>	function	<b>checkedconversion</b>	function
<b>MPr</b>	function	<b>checkedpagefloat</b>	function
<b>MPrest</b>	function	<b>checktwopassdata</b>	function
<b>MPrs</b>	function	<b>chemicalcomponent</b>	function
<b>MPul</b>	function	<b>chineseallnumerals</b>	function
<b>MPur</b>	function	<b>chinesecapnumerals</b>	function
<b>MPw</b>	function	<b>chinesenumerals</b>	function
<b>MPx</b>	function	<b>cleanfontname</b>	function
<b>MPxy</b>	function	<b>cleanupbox</b>	function
<b>MPxywhd</b>	function	<b>cleanuplayers</b>	function
<b>MPy</b>	function	<b>clonefield</b>	function
<b>Romannumerals</b>	function	<b>collectfloat</b>	function
<b>abjadnodotnumerals</b>	function	<b>collecthelp</b>	function
<b>abjadnumerals</b>	function	<b>colorcomponents</b>	function
<b>addcounter</b>	function	<b>concatcommalist</b>	function
<b>addlinklistelement</b>	function	<b>consultfloat</b>	function
<b>addtojavascriptpreamble</b>	function	<b>copyposition</b>	function
<b>addtolist</b>	function	<b>cos</b>	function
<b>allinputpaths</b>	function	<b>cosd</b>	function
<b>alphabetic</b>	function	<b>countervalue</b>	function
<b>analysefloatmethod</b>	function	<b>counttwopassdata</b>	function
<b>analyzelist</b>	function	<b>currentcomponent</b>	function
<b>applytochars</b>	function	<b>currentdate</b>	function
<b>applytofirstcharacter</b>	function	<b>currentenvironment</b>	function
<b>applytowords</b>	function	<b>currentproduct</b>	function
<b>assignbuffer</b>	function	<b>currentproject</b>	function
<b>autofinishstructurelevels</b>	function	<b>currentreferencedefault</b>	function

<b>currentreferenceorder</b>	<b>function</b>	<b>definewtopasslist</b>	<b>function</b>
<b>currentregime</b>	<b>function</b>	<b>defineviewerlayer</b>	<b>function</b>
<b>currentsectiontolist</b>	<b>function</b>	<b>defrostrandomseed</b>	<b>function</b>
<b>datasetvariable</b>	<b>function</b>	<b>digits</b>	<b>function</b>
<b>dayname</b>	<b>function</b>	<b>disableautofontscript</b>	<b>function</b>
<b>defineattribute</b>	<b>function</b>	<b>disableparbuilder</b>	<b>function</b>
<b>definebibtexsession</b>	<b>function</b>	<b>disableregime</b>	<b>function</b>
<b>definebreakpoint</b>	<b>function</b>	<b>disablesPELLchecking</b>	<b>function</b>
<b>definebreakpoints</b>	<b>function</b>	<b>discardfromlist</b>	<b>function</b>
<b>definecharacterspacing</b>	<b>function</b>	<b>doanalyzeframedbox</b>	<b>function</b>
<b>definechemical</b>	<b>function</b>	<b>doif</b>	<b>function</b>
<b>defineconversion</b>	<b>function</b>	<b>doifblackelse</b>	<b>function</b>
<b>definecounter</b>	<b>function</b>	<b>doifcommonelse</b>	<b>function</b>
<b>definedviewerlayer</b>	<b>function</b>	<b>doifcounter</b>	<b>function</b>
<b>definefallbackfamily</b>	<b>function</b>	<b>doifdimenstringelse</b>	<b>function</b>
<b>definefield</b>	<b>function</b>	<b>doifdrawingblackelse</b>	<b>function</b>
<b>definefieldset</b>	<b>function</b>	<b>doifelse</b>	<b>function</b>
<b>definefilefallback</b>	<b>function</b>	<b>doifelsebuffer</b>	<b>function</b>
<b>definefilesynonym</b>	<b>function</b>	<b>doifelsecontinewithfile</b>	<b>function</b>
<b>definefont_one</b>	<b>function</b>	<b>doifelsecounter</b>	<b>function</b>
<b>definefont_two</b>	<b>function</b>	<b>doifelsecurrentfonthasfeature</b>	<b>function</b>
<b>definefontfamily</b>	<b>function</b>	<b>doifelseintwopassdata</b>	<b>function</b>
<b>definefontfeature</b>	<b>function</b>	<b>doifelsemarking</b>	<b>function</b>
<b>definefontsolution</b>	<b>function</b>	<b>doifelsemessage</b>	<b>function</b>
<b>defineinsertion</b>	<b>function</b>	<b>doifelsemultipar</b>	<b>function</b>
<b>defineintermediatecolor</b>	<b>function</b>	<b>doifelseparallel</b>	<b>function</b>
<b>definelabels</b>	<b>function</b>	<b>doifelsepositionsused</b>	<b>function</b>
<b>definelanguage</b>	<b>function</b>	<b>doifelserangeonpage</b>	<b>function</b>
<b>definelinkedlist</b>	<b>function</b>	<b>doifelserreference</b>	<b>function</b>
<b>definemarking</b>	<b>function</b>	<b>doifelsesavedfloat</b>	<b>function</b>
<b>definemetafont</b>	<b>function</b>	<b>doifelsespaces</b>	<b>function</b>
<b>definemultitonecolor</b>	<b>function</b>	<b>doifelseutfmathabove</b>	<b>function</b>
<b>definenote</b>	<b>function</b>	<b>doifelseutfmathaccent</b>	<b>function</b>
<b>defineparallel</b>	<b>function</b>	<b>doifelseutfmathbelow</b>	<b>function</b>
<b>defineparbuilder</b>	<b>function</b>	<b>doifelsevisualizer</b>	<b>function</b>
<b>defineprocesscolor</b>	<b>function</b>	<b>doiffielddcategoryelse</b>	<b>function</b>
<b>defineprogram</b>	<b>function</b>	<b>doiffielddelse</b>	<b>function</b>
<b>definereference</b>	<b>function</b>	<b>doiffielddsetelse</b>	<b>function</b>
<b>definesectionlevels</b>	<b>function</b>	<b>doiffiledefinedelse</b>	<b>function</b>
<b>defineselectfont</b>	<b>function</b>	<b>doiffileexistelse</b>	<b>function</b>
<b>definespotcolor</b>	<b>function</b>	<b>doiffirstcharelse</b>	<b>function</b>
<b>definestructureblock</b>	<b>function</b>	<b>doifinputfileelse</b>	<b>function</b>
<b>definestructureset</b>	<b>function</b>	<b>doifinsetelse</b>	<b>function</b>
<b>definetransparency</b>	<b>function</b>	<b>doifleapyyearelse</b>	<b>function</b>

<b>doiflisthasentry</b>	function	<b>feedback</b>	function
<b>doiflisthasnumberelse</b>	function	<b>fetchallmarks</b>	function
<b>doiflisthaspageelse</b>	function	<b>fetchmultipar</b>	function
<b>doiflisthastitleelse</b>	function	<b>fetchmultishape</b>	function
<b>doiflocfileelse</b>	function	<b>fetchonemark</b>	function
<b>doifnot</b>	function	<b>fetchposboxes</b>	function
<b>doifnotcounter</b>	function	<b>fetchtwomarks</b>	function
<b>doifnotecontent</b>	function	<b>figurefilename</b>	function
<b>doifnoteonsamepageasprevious</b>	function	<b>figurefilepath</b>	function
<b>doifobjectreferencefoundelse</b>	function	<b>figurefiletype</b>	function
<b>doifolderversionelse</b>	function	<b>figurerequest</b>	function
<b>doifoverlappingelse</b>	function	<b>figurestatus</b>	function
<b>doifparentfileelse</b>	function	<b>figureused</b>	function
<b>doifposition</b>	function	<b>figurevariable</b>	function
<b>doifpositionelse</b>	function	<b>filterdefaultreference</b>	function
<b>doifpositiononpage</b>	function	<b>filterreference</b>	function
<b>doifpositionsonsamepageelse</b>	function	<b>finalizebox</b>	function
<b>doifpositionsonthispageelse</b>	function	<b>findtwopassdata</b>	function
<b>doifurldefinedelse</b>	function	<b>firstcountervalue</b>	function
<b>doprocstypescriptfile</b>	function	<b>firstinset</b>	function
<b>doreshapeframedbox</b>	function	<b>flushfloat</b>	function
<b>dostarttextfile</b>	function	<b>flushnotes</b>	function
<b>dostoptextfile</b>	function	<b>flushpostponedblocks</b>	function
<b>ecolumn</b>	function	<b>flushpostponednotes</b>	function
<b>elapsedtime</b>	function	<b>fontchar</b>	function
<b>enableautofontscript</b>	function	<b>fontcollectionclone</b>	function
<b>enablecolor</b>	function	<b>fontcollectiondefine</b>	function
<b>enablecolorintents</b>	function	<b>fontcollectionprepare</b>	function
<b>enablefontcolorschemas</b>	function	<b>fontcollectionregister</b>	function
<b>enableparbuilder</b>	function	<b>fontcollectionreport</b>	function
<b>enableregime</b>	function	<b>fontcollectionreset</b>	function
<b>enablespellchecking</b>	function	<b>fontlookupgetkey</b>	function
<b>enabletransparency</b>	function	<b>fontlookupgetkeyofindex</b>	function
<b>enhancelinkedlist</b>	function	<b>fontlookupinitialize</b>	function
<b>enhancelist</b>	function	<b>fontlookupnofound</b>	function
<b>enhancereference</b>	function	<b>forceendjob</b>	function
<b>erasebuffer</b>	function	<b>forcequitjob</b>	function
<b>expandcurrentreference</b>	function	<b>format</b>	function
<b>exportformdata</b>	function	<b>formatcolor</b>	function
<b>exportreferences</b>	function	<b>formatgray</b>	function
<b>extensiblecode</b>	function	<b>freezerandomseed</b>	function
<b>feature</b>	function	<b>from</b>	function
<b>featureattribute</b>	function	<b>getbidimode</b>	function
<b>featurelist</b>	function	<b>getbuffer</b>	function

<b>getbufferctxlua</b>	function	<b>incrementedcounter</b>	function
<b>getbuffermkvi</b>	function	<b>initializetexdirectives</b>	function
<b>getcommandline</b>	function	<b>initializetextrackers</b>	function
<b>getctxfile</b>	function	<b>injectcurrentreference</b>	function
<b>getcurrentprefixspec</b>	function	<b>injectreference</b>	function
<b>getcurrentreferencemetadata</b>	function	<b>inlinechemical</b>	function
<b>getdefaultfieldvalue</b>	function	<b>insertattachment</b>	function
<b>getfieldcategory</b>	function	<b>insertcomment</b>	function
<b>getfirstcharacter</b>	function	<b>insertfield</b>	function
<b>getfirsttwopassdata</b>	function	<b>insertionnumber</b>	function
<b>getfloatvariable</b>	function	<b>insertrenderingwindow</b>	function
<b>getinternalreference</b>	function	<b>insertsoundclip</b>	function
<b>getlasttwopassdata</b>	function	<b>installedlanguages</b>	function
<b>getmarking</b>	function	<b>installtexdirective</b>	function
<b>getmessage</b>	function	<b>installtextracker</b>	function
<b>getmpextensions</b>	function	<b>languagenumber</b>	function
<b>getnotestate</b>	function	<b>lastcountervalue</b>	function
<b>getplaceholderchar</b>	function	<b>lchexnumber</b>	function
<b>getprivateattribute</b>	function	<b>lchexnumbers</b>	function
<b>getprivatechar</b>	function	<b>leapyear</b>	function
<b>getprogram</b>	function	<b>linenumbersstageone</b>	function
<b>getrandomcounta</b>	function	<b>linenumbersstagetwo</b>	function
<b>getrandomcountb</b>	function	<b>listgroupindex</b>	function
<b>getrandomseed</b>	function	<b>listlabel</b>	function
<b>getreadfilename</b>	function	<b>listlocation</b>	function
<b>getsubstring</b>	function	<b>listprefixednumber</b>	function
<b>gettexbuffer</b>	function	<b>listprefixedpage</b>	function
<b>gettwopassdata</b>	function	<b>listrealpage</b>	function
<b>gettwopassdatalist</b>	function	<b>listsize</b>	function
<b>geturl</b>	function	<b>listtitle</b>	function
<b>grabbuffer</b>	function	<b>listuserdata</b>	function
<b>hboxtovbox</b>	function	<b>loadexamodes</b>	function
<b>helpaction</b>	function	<b>loadfontgoodies</b>	function
<b>helpreference</b>	function	<b>loadspellchecklist</b>	function
<b>hexstringtonumber</b>	function	<b>loadtypescriptfile</b>	function
<b>horizontalcode</b>	function	<b>loadvisualizer</b>	function
<b>hour</b>	function	<b>locatefilepath</b>	function
<b>hyphenatedlist</b>	function	<b>locfilename</b>	function
<b>hyphenatedurl</b>	function	<b>makeactive</b>	function
D characters		<b>markfonts</b>	function
N lefthyphenmin		<b>markregionbox</b>	function
D mapping		<b>math_frac</b>	function
N righthyphenmin		<b>mathrenderset</b>	function
F setcharacters		<b>maxitemwidth</b>	function

<b>minute</b>	<b>function</b>	<b>pdfstartmatrix</b>	<b>function</b>
<b>mixcleanup</b>	<b>function</b>	<b>pdfstartmirroring</b>	<b>function</b>
<b>mixfinalize</b>	<b>function</b>	<b>pdfstartrotation</b>	<b>function</b>
<b>mixflushlist</b>	<b>function</b>	<b>pdfstartscaling</b>	<b>function</b>
<b>mixflushrest</b>	<b>function</b>	<b>pdfstopmatrix</b>	<b>function</b>
<b>mixgetsplit</b>	<b>function</b>	<b>pdfstopmirroring</b>	<b>function</b>
<b>mixsetsplit</b>	<b>function</b>	<b>pdfstoprotation</b>	<b>function</b>
<b>mixstate</b>	<b>function</b>	<b>pdfstopscaling</b>	<b>function</b>
<b>molecule</b>	<b>function</b>	<b>percentageof</b>	<b>function</b>
<b>month</b>	<b>function</b>	<b>pgfxcolorspec</b>	<b>function</b>
<b>monthnm</b>	<b>function</b>	<b>placeparallel</b>	<b>function</b>
<b>monthname</b>	<b>function</b>	<b>popfloat</b>	<b>function</b>
<b>mpcolor</b>	<b>function</b>	<b>popitaliccorrection</b>	<b>function</b>
<b>mpoptions</b>	<b>function</b>	<b>poplist</b>	<b>function</b>
<b>mprunvar</b>	<b>function</b>	<b>popreferenceprefix</b>	<b>function</b>
<b>namedstructureuservariable</b>	<b>function</b>	<b>popregime</b>	<b>function</b>
<b>namedstructurevariable</b>	<b>function</b>	<b>popsectionblock</b>	<b>function</b>
<b>nbfs</b>	<b>function</b>	<b>pos</b>	<b>function</b>
<b>nextcountervalue</b>	<b>function</b>	<b>posplus</b>	<b>function</b>
<b>nextparallel</b>	<b>function</b>	<b>posstrut</b>	<b>function</b>
<b>nofdays</b>	<b>function</b>	<b>postponenotes</b>	<b>function</b>
<b>nofitems</b>	<b>function</b>	<b>poswhd</b>	<b>function</b>
<b>nofstackedfloats</b>	<b>function</b>	<b>posxy</b>	<b>function</b>
<b>notedeltapage</b>	<b>function</b>	<b>prepareMPvariable</b>	<b>function</b>
<b>notelistindex</b>	<b>function</b>	<b>preparebibtexsession</b>	<b>function</b>
<b>notenumberpage</b>	<b>function</b>	<b>preparedfile</b>	<b>function</b>
<b>noteprefixednumber</b>	<b>function</b>	<b>presetsymbollist</b>	<b>function</b>
<b>notesymbolpage</b>	<b>function</b>	<b>presettabulate</b>	<b>function</b>
<b>notetitle</b>	<b>function</b>	<b>prevcountervalue</b>	<b>function</b>
<b>ntimes</b>	<b>function</b>	<b>processbuffer</b>	<b>function</b>
<b>number</b>	<b>function</b>	<b>processcolorcomponents</b>	<b>function</b>
<b>numbers</b>	<b>function</b>	<b>processedfile</b>	<b>function</b>
<b>objectnumber</b>	<b>function</b>	<b>processedfiles</b>	<b>function</b>
<b>objectpage</b>	<b>function</b>	<b>processfile</b>	<b>function</b>
<b>octnumber</b>	<b>function</b>	<b>processfilemany</b>	<b>function</b>
<b>octstringtonumber</b>	<b>function</b>	<b>processfilenone</b>	<b>function</b>
<b>ordinal</b>	<b>function</b>	<b>processfileonce</b>	<b>function</b>
<b>overloadbookmark</b>	<b>function</b>	<b>processlist</b>	<b>function</b>
<b>page_injections_flush_after</b>	<b>function</b>	<b>processsplit</b>	<b>function</b>
<b>page_injections_flush_before</b>	<b>function</b>	<b>pushfloat</b>	<b>function</b>
<b>page_injections_save</b>	<b>function</b>	<b>pushitaliccorrection</b>	<b>function</b>
<b>pagestaterealpage</b>	<b>function</b>	<b>pushlist</b>	<b>function</b>
<b>parpos</b>	<b>function</b>	<b>pushreferenceprefix</b>	<b>function</b>
<b>pdfrotation</b>	<b>function</b>	<b>pushregime</b>	<b>function</b>



<b>pushsectionblock</b>	<b>function</b>	<b>resetstructureprocessor</b>	<b>function</b>
<b>rawcharacter</b>	<b>function</b>	<b>resettimer</b>	<b>function</b>
<b>rawcountervalue</b>	<b>function</b>	<b>restartcounter</b>	<b>function</b>
<b>rawdate</b>	<b>function</b>	<b>restorecounter</b>	<b>function</b>
<b>referencepagestate</b>	<b>function</b>	<b>restorecurrentattributes</b>	<b>function</b>
<b>referencerealpage</b>	<b>function</b>	<b>restorenote</b>	<b>function</b>
<b>registerattachment</b>	<b>function</b>	<b>romannumerals</b>	<b>function</b>
<b>registerbibtexentry</b>	<b>function</b>	<b>runbuffer</b>	<b>function</b>
<b>registerbibtexfile</b>	<b>function</b>	<b>safechar</b>	<b>function</b>
<b>registerbookmark</b>	<b>function</b>	<b>savebuffer</b>	<b>function</b>
<b>registerbuttons</b>	<b>function</b>	<b>savecounter</b>	<b>function</b>
<b>registercolor</b>	<b>function</b>	<b>savecurrentattributes</b>	<b>function</b>
<b>registercolorintent</b>	<b>function</b>	<b>savedlistnumber</b>	<b>function</b>
<b>registeredviewerlayer</b>	<b>function</b>	<b>savedlistprefixednumber</b>	<b>function</b>
<b>registerhelp</b>	<b>function</b>	<b>savedlisttitle</b>	<b>function</b>
<b>registeritemgroup</b>	<b>function</b>	<b>savefloat</b>	<b>function</b>
<b>registerlanguagefeatures</b>	<b>function</b>	<b>savenote</b>	<b>function</b>
<b>registerlinenumbering</b>	<b>function</b>	<b>saveobject</b>	<b>function</b>
<b>registermaintextcolor</b>	<b>function</b>	<b>saveparallel</b>	<b>function</b>
<b>registernamespace</b>	<b>function</b>	<b>savestructureblock</b>	<b>function</b>
<b>registerpostponedblock</b>	<b>function</b>	<b>savetaggedtwopassdata</b>	<b>function</b>
<b>registerrendering</b>	<b>function</b>	<b>savetwopassdata</b>	<b>function</b>
<b>registersoundclip</b>	<b>function</b>	<b>second</b>	<b>function</b>
<b>registerstructureprocessor</b>	<b>function</b>	<b>selectstructureblock</b>	<b>function</b>
<b>registertransparency</b>	<b>function</b>	<b>setbreakpoints</b>	<b>function</b>
<b>registerunit</b>	<b>function</b>	<b>setcharacteralign</b>	<b>function</b>
<b>relatemarking</b>	<b>function</b>	<b>setcharactercasing</b>	<b>function</b>
<b>remapentity</b>	<b>function</b>	<b>setcharactercleaning</b>	<b>function</b>
<b>removemissingcharacters</b>	<b>function</b>	<b>setcharacterkerning</b>	<b>function</b>
<b>renderingvar</b>	<b>function</b>	<b>setcharacterspacing</b>	<b>function</b>
<b>replacemissingcharacters</b>	<b>function</b>	<b>setcharacterstripping</b>	<b>function</b>
<b>replacepospxywhd</b>	<b>function</b>	<b>setcloseddocumentaction</b>	<b>function</b>
<b>resavefloat</b>	<b>function</b>	<b>setclosepageaction</b>	<b>function</b>
<b>resetcharacteralign</b>	<b>function</b>	<b>setcolormodel</b>	<b>function</b>
<b>resetcounter</b>	<b>function</b>	<b>setcounter</b>	<b>function</b>
<b>resetfontfeature</b>	<b>function</b>	<b>setdataset</b>	<b>function</b>
<b>resetfontsolution</b>	<b>function</b>	<b>setdigitsmanipulation</b>	<b>function</b>
<b>resetmarking</b>	<b>function</b>	<b>setdirection</b>	<b>function</b>
<b>resetmathattributes</b>	<b>function</b>	<b>setdocumentenvironments</b>	<b>function</b>
<b>resetmathitalics</b>	<b>function</b>	<b>setdocumentfilenames</b>	<b>function</b>
<b>resetnullfont</b>	<b>function</b>	<b>setdocumentmodes</b>	<b>function</b>
<b>resetparallel</b>	<b>function</b>	<b>setdocumentmodules</b>	<b>function</b>
<b>resetprevdepth</b>	<b>function</b>	<b>setfigurelookuporder</b>	<b>function</b>
<b>resetreference</b>	<b>function</b>	<b>setfirstline</b>	<b>function</b>

<b>setfontfeature</b>	function	<b>settagdescriptionsymbol</b>	function
<b>setfontofid</b>	function	<b>settagfigure</b>	function
<b>setfontsolution</b>	function	<b>settaghighlight</b>	function
<b>setformat</b>	function	<b>settagitemgroup</b>	function
<b>setformsmethod</b>	function	<b>settagproperty</b>	function
<b>setinitial</b>	function	<b>settagsorting</b>	function
<b>setinsertionlocation</b>	function	<b>settagssynonym</b>	function
<b>setinterfaceconstant</b>	function	<b>settagtablecell</b>	function
<b>setinterfaceelement</b>	function	<b>settagtabulatecell</b>	function
<b>setinterfacemessage</b>	function	<b>setupbookmarks</b>	function
<b>setinterfacemessages</b>	function	<b>setupcanvas</b>	function
<b>setinterfacevariable</b>	function	<b>setupcharacterspacing</b>	function
<b>setinternalreference</b>	function	<b>setupexport</b>	function
<b>setlanguageexceptions</b>	function	<b>setupfontexpansion</b>	function
<b>setlanguagesynonym</b>	function	<b>setupfontprotrusion</b>	function
<b>setlayer</b>	function	<b>setupidentity</b>	function
<b>setmarking</b>	function	<b>setupinsertion</b>	function
<b>setmathalphabet</b>	function	<b>setupitaliccorrection</b>	function
<b>setmathalternate</b>	function	<b>setuplinenumbering</b>	function
<b>setmathattribute</b>	function	<b>setvisual</b>	function
<b>setmathdirection</b>	function	<b>setxmpfile</b>	function
<b>setmathitalics</b>	function	<b>showassignerror</b>	function
<b>setmathstyle</b>	function	<b>showattributes</b>	function
<b>setnextinternalreference</b>	function	<b>showcallbacks</b>	function
<b>setnotestate</b>	function	<b>showchardata</b>	function
<b>setnotesymbolpage</b>	function	<b>showcounter</b>	function
<b>setobject</b>	function	<b>showfontparameters</b>	function
<b>setopendocumentaction</b>	function	<b>showhyphenatedinlist</b>	function
<b>setopenpageaction</b>	function	<b>showjustification</b>	function
<b>setowncounter</b>	function	<b>showmessage</b>	function
<b>setpagestate</b>	function	<b>sin</b>	function
<b>setpagestaterealpageno</b>	function	<b>sind</b>	function
<b>setpagetransition</b>	function	<b>splitfilename</b>	function
<b>setparbuilder</b>	function	<b>spotcolorname</b>	function
<b>setpos</b>	function	<b>spotcolorparent</b>	function
<b>setrandomseed</b>	function	<b>spotcolorvalue</b>	function
<b>setrealign</b>	function	<b>startchemical</b>	function
<b>setreferencearguments</b>	function	<b>startcolorset</b>	function
<b>setreferenceattribute</b>	function	<b>startcomponent</b>	function
<b>setreferenceoperation</b>	function	<b>startenvironment</b>	function
<b>setsectionblock</b>	function	<b>startfontsolution</b>	function
<b>setstructureblockstate</b>	function	<b>startparbuilder</b>	function
<b>settagcombination</b>	function	<b>startproduct</b>	function
<b>settagdescription</b>	function	<b>startproject</b>	function

<b>startregime</b>	function	<b>triggereffect</b>	function
<b>startsectionlevel</b>	function	<b>triggernegative</b>	function
<b>starttag</b>	function	<b>truefilename</b>	function
<b>starttext</b>	function	<b>typebuffer</b>	function
<b>startviewerlayer</b>	function	<b>typefile</b>	function
<b>stopchemical</b>	function	<b>typestring</b>	function
<b>stopcolorset</b>	function	<b>uchexnumber</b>	function
<b>stopcomponent</b>	function	<b>uchexnumbers</b>	function
<b>stopenvironment</b>	function	<b>undefinechemical</b>	function
<b>stopfontsolution</b>	function	<b>unicodechar</b>	function
<b>stopparbuilder</b>	function	<b>unit</b>	function
<b>stopproduct</b>	function	<b>unloadlanguage</b>	function
<b>stopproject</b>	function	<b>useMPLibrary</b>	function
<b>stopregime</b>	function	<b>useanyfile</b>	function
<b>stopsectionlevel</b>	function	<b>usecldfile</b>	function
<b>stoptag</b>	function	<b>usecolors</b>	function
<b>stoptext</b>	function	<b>usecomponent</b>	function
<b>stopviewerlayer</b>	function	<b>useenvironment</b>	function
<b>storejavascriptcode</b>	function	<b>usefile</b>	function
<b>storejavascriptpreamble</b>	function	<b>usejavascriptpreamble</b>	function
<b>storenote</b>	function	<b>usejavascriptscripts</b>	function
<b>strdp</b>	function	<b>uselibrary</b>	function
<b>strhd</b>	function	<b>useluafile</b>	function
<b>strht</b>	function	<b>useluamodule</b>	function
<b>structureautocatcodedget</b>	function	<b>usemodules</b>	function
<b>structurecatcodedget</b>	function	<b>usepath</b>	function
<b>structuregivencatcodedget</b>	function	<b>useproduct</b>	function
<b>structurenumber</b>	function	<b>useproject</b>	function
<b>structuretitle</b>	function	<b>usesubpath</b>	function
<b>structureuservariable</b>	function	<b>usesymbols</b>	function
<b>structurevariable</b>	function	<b>usetexfile</b>	function
<b>strwd</b>	function	<b>useurl</b>	function
<b>subcountervalues</b>	function	<b>usexmlfile</b>	function
<b>synchronizecolormodel</b>	function	<b>usezipfile</b>	function
<b>synchronizemarking</b>	function	<b>utfchar</b>	function
<b>taggedmathfunction</b>	function	<b>utfmathclass</b>	function
<b>tan</b>	function	<b>utfmathcommand</b>	function
<b>tand</b>	function	<b>utfmathcommandabove</b>	function
<b>testcase</b>	function	<b>utfmathcommandbelow</b>	function
<b>textime</b>	function	<b>utfmathfiller</b>	function
<b>thefirstcharacter</b>	function	<b>utfmathstretch</b>	function
<b>theremainingcharacters</b>	function	<b>vboxlisttohbox</b>	function
<b>thetexdefinition</b>	function	<b>verbose</b>	function
<b>transparencycomponents</b>	function	<b>visual</b>	function

<code>vspacing</code>	<code>function</code>
<code>vspacingcollapse</code>	<code>function</code>
<code>vspacingdefine</code>	<code>function</code>
<code>vspacingsetamount</code>	<code>function</code>
<code>vspacingsnap</code>	<code>function</code>
<code>way</code>	<code>function</code>
<code>weekday</code>	<code>function</code>
<code>weekdayname</code>	<code>function</code>
<code>writestatus</code>	<code>function</code>
<code>x_table_c</code>	<code>function</code>
<code>x_table_cleanup</code>	<code>function</code>
<code>x_table_construct</code>	<code>function</code>
<code>x_table_create</code>	<code>function</code>
<code>x_table_flush</code>	<code>function</code>
<code>x_table_init_construct</code>	<code>function</code>
<code>x_table_init_reflow_height</code>	<code>function</code>
<code>x_table_init_reflow_width</code>	<code>function</code>
<code>x_table_next_row</code>	<code>function</code>
<code>x_table_r</code>	<code>function</code>
<code>x_table_reflow_height</code>	<code>function</code>
<code>x_table_reflow_width</code>	<code>function</code>
<code>x_table_set_construct</code>	<code>function</code>
<code>x_table_set_reflow_height</code>	<code>function</code>
<code>x_table_set_reflow_width</code>	<code>function</code>
<code>year</code>	<code>function</code>

## containers (context)

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

# converters (context)

<b>Alphabetic</b>	function	<b>verbose</b>	table
<b>Character</b>	function	D data	
<b>Characters</b>	function	F translate	
<b>Romannumerals</b>	function	<b>weekday</b>	function
<b>abjadnodotnumerals</b>	function	<b>year</b>	function
<b>abjadnumerals</b>	function		
<b>alphabetic</b>	function		
<b>character</b>	function		
<b>characters</b>	function		
<b>chineseallnumerals</b>	function		
<b>chinesecapnumerals</b>	function		
<b>chinesenumerals</b>	function		
<b>chr</b>	function		
<b>chrs</b>	function		
<b>convert</b>	function		
<b>define</b>	function		
<b>hexstringtonumber</b>	function		
<b>hour</b>	function		
<b>isleapyear</b>	function		
<b>lhexnumber</b>	function		
<b>lhexnumbers</b>	function		
<b>leapyear</b>	function		
<b>maxchrs</b>	function		
<b>minute</b>	function		
<b>month</b>	function		
<b>nofdays</b>	function		
<b>number</b>	function		
<b>numbers</b>	function		
<b>octnumber</b>	function		
<b>octstringtonumber</b>	function		
<b>ordinal</b>	function		
<b>rawcharacter</b>	function		
<b>romannumerals</b>	function		
<b>second</b>	function		
<b>sequences</b>	data table		
<b>textime</b>	function		
<b>toabjad</b>	function		
<b>tochinese</b>	function		
<b>toroman</b>	function		
<b>uchexnumber</b>	function		
<b>uchexnumbers</b>	function		

## coroutine (basic lua)

<b>create</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>resolve</b>	function



## debug (basic lua)

<b>debug</b>	function
<b>gethook</b>	function
<b>getinfo</b>	function
<b>getlocal</b>	function
<b>getmetatable</b>	function
<b>getregistry</b>	function
<b>getupvalue</b>	function
<b>getuservalue</b>	function
<b>sethook</b>	function
<b>setlocal</b>	function
<b>setmetatable</b>	function
<b>setupvalue</b>	function
<b>setuservalue</b>	function
<b>traceback</b>	function
<b>upvalueid</b>	function
<b>upvaluejoin</b>	function

## dir (context)

<b>collectpattern</b>	function
<b>current</b>	function
<b>expandname</b>	function
<b>found</b>	function
<b>glob</b>	function
<b>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>enable</b>	function
<b>list</b>	function
<b>name</b>	string
<b>register</b>	function
<b>report</b>	function
<b>show</b>	function
<b>value</b>	function

# document (context)

<b>arguments</b>	data table
<b>files</b>	table
<b>getargument</b>	function
<b>getfilename</b>	function
<b>options</b>	table
T cmdline	
D environments	
D modes	
D modules	
T ctxfile	
D environments	
D modes	
D modules	
<b>setargument</b>	function
<b>setdefaultargument</b>	function
<b>setfilename</b>	function
<b>variables</b>	data table

## environment (context)

<b>argument</b>	function	<b>truefilename</b>	function
<b>arguments</b>	data table	<b>validengines</b>	data table
<b>basicengines</b>	data table		
<b>currentrun</b>	number		
<b>default_texmfcnf</b>	string		
<b>engineflags</b>	data table		
<b>filename</b>	string		
<b>files</b>	table		
<b>filesynonyms</b>	data table		
<b>getargument</b>	function		
<b>homedir</b>	string		
<b>initex</b>	boolean		
<b>initializearguments</b>	function		
<b>initializefilenames</b>	function		
<b>inputfilebarename</b>	string		
<b>inputfilename</b>	string		
<b>inputfilesuffix</b>	string		
<b>jobfilename</b>	string		
<b>jobfilesuffix</b>	string		
<b>kindofrun</b>	number		
<b>loadluafile</b>	function		
<b>luafile</b>	function		
<b>luafilechunk</b>	function		
<b>maxnofruns</b>	number		
<b>originalarguments</b>	data table		
<b>outputfilename</b>	string		
<b>ownbin</b>	string		
<b>ownmain</b>	string		
<b>ownname</b>	string		
<b>ownpath</b>	string		
<b>rawarguments</b>	data table		
<b>reconstructcommandline</b>	function		
<b>relativepath</b>	function		
<b>setargument</b>	function		
<b>splitarguments</b>	function		
<b>suffix</b>	string		
<b>texfile</b>	function		
<b>texmfos</b>	string		
<b>texos</b>	string		
<b>texroot</b>	string		

## epdf (extra tex)

<b>Array</b>	function
<b>Dict</b>	function
<b>Object</b>	function
<b>PDFRectangle</b>	function
<b>open</b>	function
<b>type</b>	function

## 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>show</b>	function
<b>value</b>	function

## figures (context)

<b>applyratio</b>	function	<b>registersuffix</b>	function
<b>bases</b>	data table	<b>resources</b>	data table
<b>bitmapimage</b>	function	<b>scale</b>	function
<b>boxnumber</b>	number	<b>setlookups</b>	function
<b>cachepaths</b>	data table	<b>setorder</b>	function
<b>check</b>	function	<b>setpaths</b>	function
<b>checkers</b>	data table	<b>suffixes</b>	data table
<b>converters</b>	data table	<b>used</b>	data table
<b>current</b>	function		
<b>defaultdepth</b>	number		
<b>defaultheight</b>	number		
<b>defaultsearch</b>	boolean		
<b>defaultwidth</b>	number		
<b>done</b>	function		
<b>dummy</b>	function		
<b>exists</b>	data table		
<b>exists</b>	function		
<b>formats</b>	data table		
<b>found</b>	data table		
<b>get</b>	function		
<b>guess</b>	function		
<b>hash</b>	function		
<b>identifiers</b>	data table		
<b>identify</b>	function		
<b>include</b>	function		
<b>includers</b>	data table		
<b>initialize</b>	function		
<b>loaded</b>	data table		
<b>localpaths</b>	data table		
<b>magics</b>	data table		
<b>mergegoodies</b>	function		
<b>nofprocessed</b>	number		
<b>order</b>	data table		
<b>paths</b>	data table		
<b>patterns</b>	data table		
<b>pop</b>	function		
<b>preferquality</b>	boolean		
<b>programs</b>	data table		
<b>push</b>	function		
<b>registerpattern</b>	function		
<b>registerresource</b>	function		



## 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

## floats (context)

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

## font (basic tex)

<b>current</b>	function
<b>define</b>	function
<b>each</b>	function
<b>fonts</b>	table
<b>frozen</b>	function
<b>getfont</b>	overloaded function
<b>id</b>	function
<b>max</b>	function
<b>nextid</b>	function
<b>read_tfm</b>	function
<b>read_vf</b>	function
<b>setfont</b>	function

## fontloader (extra tex)

<b>apply_afmfile</b>	function
<b>apply_featurefile</b>	function
<b>close</b>	function
<b>fields</b>	function
<b>fullinfo</b>	function
<b>info</b>	function
<b>open</b>	function
<b>to_table</b>	function
<b>totable</b>	function

# fonts (context)

<b>analyzers</b>	table		F report
T features			F reset
N blwf			T vectors
N fina		<b>constructors</b>	table
N half		F aftercopyingcharacters	
N init		F applymanipulators	
N isol		F assignmathparameters	
N medi		B autocleanup	
N pref		F beforecopyingcharacters	
N pstf		D cache	
N rphf		F calculatyscale	
D initializers		F checkedfeatures	
D methods		F checkedfilename	
F setstate		F checkvirtualids	
T states		F cleanupable	
N blwf		F collectprocessors	
N fina		D designsizes	
N half		D dontembed	
N init		F enhanceparameters	
N isol		N factor	
N mark		F finalize	
N medi		F getfeatureaction	
N pref		F hashfeatures	
N pstf		F hashinstance	
N rest		T hashmethods	
N rphf		F normal	
B useunicodemarks		F virtual	
<b>checkers</b>	table	F initializefeatures	
F getmissing		T keys	
F missing		T character	
<b>cid</b>	table	S depth	
F getmap		S height	
F loadfile		S italic	
<b>collections</b>	table	S width	
F checkenabled		T description	
F clonevector		T boundingbox	
F define		S depth	
T definitions		S height	
F prepare		S width	
F process		T parameters	
F registermain		S ascender	

S descender	S encodingbytes	
S designsize	S filename	
T expansion	S finalized	
S auto	S fontname	
S shrink	S format	
S step	S fullname	
S stretch	S hasitalics	
S extendfactor	S hasmath	
S factor	S mathitalics	
S hfactor	S mode	
S mathsize	S name	
T protrusion	S noglyphnames	
S auto	S nostackmath	
S quad	S psname	
S scaledpoints	S textitalics	
S scriptpercentage	S virtualized	
S scriptscriptpercentage	D loadedfonts	
S size	S namemode	
S slantfactor	F newfeatures	
S slantperpoint	F newhandler	
T spacing	N privateoffset	
S extra	F readanddefine	
S shrink	F registerfeature	
S stretch	B resolvevirtualtoo	
S width	F scale	
T synonyms	F scaled	
S em	F setfactor	
S ex	F setname	
S extra_space	N version	
S extraspace	<b>current</b>	function
S slant	<b>currentid</b>	function
S space	<b>definers</b>	table
S space_shrink	F addlookup	
S space_stretch	F analyze	
S spaceshrink	F applypostprocessors	
S spacestretch	F checkedmode	
S x_height	F checkedscript	
S units	F current	
S vfactor	S defaultlookup	
S xheight	F define	
T properties	F getspecification	
S autoitalicamount	F internal	
T cidinfo	F loadfont	
S embedding	F makespecification	

T methods		F prepare_features
F install		F register
D variants		F registerpostprocessor
F read		F report
F register		<b>handlers</b>
F registered		table
F registersplit		T afm
F resetnullfont		B addkerns
F resolve		B addligatures
T resolvers		B addtexligatures
F file		B autoprefixed
F name		D cache
F spec		D features
<b>definetypface</b>	function	T helpdata
<b>encodings</b>	table	D bothkerned
T agl		D leftkerned
D cache		D ligatures
F is_known		D rightkerned
D known		D texligatures
F load		F load
F make_unicode_vector		F setfeatures
D math		B syncspace
N version		N version
<b>expansions</b>	data table	T otf
<b>formats</b>	data table	F addfeature
<b>goodies</b>	table	D cache
D colorschemes		T chainhandlers
D data		F normal
D designsizes		F verbose
D filenames		F collectlookups
F getcompositions		F dataset
T list		S defaultbasealternate
F compositions		S defaultnodealternate
F designsizes		D enhancers
F expansions		D features
F featureset		F getalternate
F filenames		T glists
F files		T handlers
F mathematics		F contextchain
F protrusions		F devanagari_remove_joiners
F solutions		F devanagari_reorder_matras
F treatments		F devanagari_reorder_pre_base_reordering_consonants
F typefaces		F devanagari_reorder_reph
F load		F gpos_context
		F gpos_contextchain

F gpos_cursive	D dynamics
F gpos_mark2base	D emwidths
F gpos_mark2ligature	D exheights
F gpos_mark2mark	D extensibles
F gpos_pair	D features
F gpos_single	D identifiers
F gsub_alternate	D italics
F gsub_context	D lastmathids
F gsub_contextchain	D marks
F gsub_ligature	D parameters
F gsub_multiple	T processes
F gsub_reversecontextchain	D properties
F gsub_single	D quads
F load	D resources
F scriptandlanguage	T setdynamics
F setcontextchain	D spaces
F setdynamics	D spacings
F setfeatures	D unicodes
T statistics	D xheights
D usedfeatures	<b>helpers</b> <b>table</b>
T tables	F addprivate
D baselines	F dimenfactor
D features	F expandglyph
D languages	F fontpatternhassize
D scripts	F getdigitwidth
N version	F getparameters
T pfb	F getprivatenode
T tfm	F hasprivate
D features	F name
F setfeatures	F nametoslot
T vf	F setdigitwidth
T combinations	F splitfontpattern
F combine	<b>iterators</b> <b>table</b>
T combiner	F characters
D commands	F descriptions
F find	F glyphs
D helpers	<b>loggers</b> <b>table</b>
D math	F add_placeholders
D predefined	T category_to_placeholder
D whatever	S ll
<b>hashes</b> <b>table</b>	S lm
D characters	S lo
D csnames	S lt
D descriptions	S lu



S mc		F lua	
S me		F opentype	
S mn		F otf	
S nd		F pfb	
S nl		D sequence	
S no		F tfm	
S pc		F ttc	
S pd		F ttf	
S pe		<b>select</b>	table
S pf		T data	
S pi		F definetypeface	
S po		T fallbacks	
S ps		F filterinput	
S sc		T methods	
S sk		F default	
S sm		F features	
S so		F file	
F format		F goodies	
F onetimemessage		F name	
F register		F selectfont	
F reportdefinedfonts		F simplefonts	
F reportusedfeatures		F spec	
<b>mappings</b>	table	F style	
F addtounicode		F registerfallback	
F fromunicodel6		F searchfiles	
F loadfile		<b>specifiers</b>	table
F loadline		D contextmerged	
F loadlumtable		F contextnumber	
F makenameparser		D contextnumbers	
F reset		D contextsetups	
F tounicodel6		F contexttostring	
F tounicodel6sequence		F definecontext	
<b>mp</b>	table	F mergecontext	
D cache		F presetcontext	
B inline		F registercontext	
N version		F showcontext	
<b>names</b>	data table	F splitcontext	
<b>nulldata</b>	data table	D synonyms	
<b>protrusions</b>	data table	D variants	
<b>readers</b>	table	<b>symbols</b>	table
F afm		F uselibrary	
F check_lua		<b>tables</b>	table
F check_tfm		<b>tracers</b>	table
F dfont		<b>treatments</b>	table

F applyfixes

D data

S filename

F ignoredfile

F report

F trace

**typefaces**

data table

# functions (context)

**dummy** function

# graphics (context)

## **backgrounds** table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

## gzip (extra lua)

<b>close</b>	function
<b>lines</b>	function
<b>load</b>	function
<b>open</b>	function
<b>save</b>	function
<b>suffix</b>	function

## img (basic tex)

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

# interactions (context)

**attachments** data table

**fields** table

F clone

F define

F defineset

F insert

**general** table

F getidentity

F setupidentity

**help** table

F collect

F reference

F register

**javascripts** table

F addtopreamble

F code

D codes

F flushpreambles

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

**linkedlists** data table

**pages** table

F setpagetransition

F setupcanvas

**references** table

F setcloseddocument

F setclosepage

F setopendocument

F setopenpage

**renderings** data table

**soundclips** data table

# interfaces (context)

<b>addvalidkeys</b>	function
<b>cachedsetups</b>	data table
<b>cachesetup</b>	function
<b>checkedspecification</b>	function
<b>complete</b>	data table
<b>constants</b>	data table
<b>corenamespaces</b>	data table
<b>definecommand</b>	function
<b>doifelsemessage</b>	function
<b>elements</b>	data table
<b>formats</b>	data table
<b>getcheckedparameters</b>	function
<b>getmessage</b>	function
<b>hashedsetups</b>	data table
<b>interfacedcommand</b>	function
<b>interfaces</b>	table
<b>invalidkey</b>	function
<b>is_command</b>	function
<b>namespaces</b>	table
F define	
F list	
<b>registernamespace</b>	function
<b>setconstant</b>	function
<b>setelement</b>	function
<b>setformat</b>	function
<b>setmessage</b>	function
<b>setmessages</b>	function
<b>settranslation</b>	function
<b>setuserinterface</b>	function
<b>setvalidkeys</b>	function
<b>setvariable</b>	function
<b>showmessage</b>	function
<b>syntax</b>	data table
<b>tolist</b>	function
<b>translations</b>	data table
<b>variables</b>	data table



## io (basic lua)

<b>ask</b>	function
<b>bytes</b>	function
<b>characters</b>	function
<b>close</b>	function
<b>exists</b>	function
<b>fileseparator</b>	string
<b>flush</b>	function
<b>i_limiter</b>	function
<b>i_limiters</b>	table
T paranoid	
<b>input</b>	function
<b>limiter</b>	function
<b>lines</b>	function
<b>loadchunk</b>	function
<b>loaddata</b>	function
<b>loadlines</b>	function
<b>noflines</b>	function
<b>o_limiter</b>	function
<b>o_limiters</b>	table
T paranoid	
<b>open</b>	overloaded function
<b>output</b>	function
<b>pathseparator</b>	string
<b>popen</b>	overloaded function
<b>read</b>	function
<b>readall</b>	function
<b>readnumber</b>	function
<b>readstring</b>	function
<b>savedata</b>	function
<b>size</b>	function
<b>stderr</b>	userdata
<b>stdin</b>	userdata
<b>stdout</b>	userdata
<b>tmpfile</b>	function
<b>type</b>	function
<b>write</b>	function

# job (context)

<b>comment</b>	function
<b>datasets</b>	table
D collected	
F extend	
F getdata	
F setdata	
D tobesaved	

<b>disablesave</b>	function
<b>files</b>	table
D collected	
F context	
B forcerun	
F run	
D tobesaved	

<b>initialize</b>	function
<b>load</b>	function
<b>loadother</b>	function
<b>objects</b>	table
D collected	
F get	
F number	
F page	
F save	
F set	
D tobesaved	

<b>pack</b>	boolean
<b>packversion</b>	number
<b>pagestates</b>	table
D collected	
F extend	
F realpage	
F setstate	
D tobesaved	

<b>passes</b>	table
F check	
D collected	
F count	
F define	
F find	
F first	
F get	

	F getcollected
	F getdata
	F getfield
	F gettobesaved
	F inlist
	F last
	F list
	F save
	F savetagged
	D tobesaved
<b>positions</b>	table
	F b_col
	F b_region
	F c
	D collected
	F column
	F copy
	F depth
	F e_col
	F e_region
	F enhance
	F extra
	F get
	F getreserved
	F hangafter
	F hangindent
	F height
	F hsize
	F leftskip
	F lowerleft
	F lowerright
	F markregionbox
	F n
	F onsamepage
	F overlapping
	F p
	F page
	F paragraph
	F parindent
	F position
	F r

- F region
- F replace
- F rightskip
- F set
- F setall
- F setdim
- D tobesaved
- F upperleft
- F upperright
- F width
- F x
- F xy
- F y
- register**        function
- save**            function
- structure**      table
  - D collected
  - T components
  - T tobesaved
  - T branches
  - S name
  - S type
- variables**      table
  - D checksums
  - D collected
  - F getchecksum
  - F makechecksum
  - F save
  - F setchecksum
  - D tobesaved
- version**        number

## lang (basic tex)

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

# languages (context)

<b>associate</b>	function
<b>associated</b>	data table
<b>association</b>	function
<b>counters</b>	data table
<b>current</b>	function
<b>data</b>	data table
<b>define</b>	function
<b>frequencies</b>	table

F averagecharwidth

F getdata

<b>getnumber</b>	function
<b>hyphenate</b>	function
<b>installed</b>	function
<b>labels</b>	table

F define

F split

<b>lefthyphenmin</b>	function
<b>loadable</b>	function
<b>loadwords</b>	function
<b>logger</b>	table

F report

<b>numbers</b>	data table
<b>posthyphenchar</b>	function
<b>prehyphenchar</b>	function
<b>registered</b>	data table
<b>righthyphenmin</b>	function
<b>setexceptions</b>	function
<b>setsynonym</b>	function
<b>unload</b>	function
<b>version</b>	number
<b>words</b>	table

F check

T data

F disable

F enable

T enablers

B enables

F found

F load

T methods

N threshold

# layouts (context)

**status** table

F isleftpage

F leftorrightpagection

## lfs (extra lua)

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

## libraries (context)

<b>basiclua</b>	data table
<b>basictex</b>	data table
<b>builtin</b>	data table
<b>extralua</b>	data table
<b>extratex</b>	data table
<b>functions</b>	data table
<b>globals</b>	data table



# lmx (context)

**color** function  
**convert** function  
**convertfile** function  
**convertstring** function  
**einject** function  
**eprint** function  
**escape** function  
**finalized** function  
**finject** function  
**fprint** function  
**get** function  
**getvariables** function  
**htmfile** function  
**html** table

F a

F td

F th

**include** function  
**inherited** table

S color-background-four

S color-background-one

S color-background-three

S color-background-two

S title

**initialize** function  
**inject** function  
**lmxfile** function  
**loadedfile** function  
**new** function  
**overloaderror** function  
**popupfile** function  
**print** function  
**pv** function  
**report** function  
**reset** function  
**result** function  
**set** function  
**show** function  
**showdebuginfo** function  
**showerror** function  
**stripcss** function

**tv** function  
**type** function  
**urlescape** function  
**variable** function  
**variables** table

S color-background-blue

S color-background-body

S color-background-green

S color-background-main

S color-background-purple

S color-background-yellow

S title-default

# logs (context)

<b>application</b>	function
<b>categories</b>	function
<b>direct</b>	function
<b>disable</b>	function
<b>enable</b>	function
<b>exporters</b>	table
<b>extendbanner</b>	function
<b>flush</b>	function
<b>help</b>	function
<b>messenger</b>	function
<b>new</b>	function
<b>newline</b>	function
<b>poptarget</b>	function
<b>pushtarget</b>	function
<b>report</b>	function
<b>reportbanner</b>	function
<b>reporter</b>	function
<b>reporters</b>	table
F banner	
F export	
F help	
F info	
F lines	
F version	
<b>reportline</b>	function
<b>reportlines</b>	function
<b>setformats</b>	function
<b>setformatters</b>	function
<b>setlogfile</b>	function
<b>setmessenger</b>	function
<b>setprocessor</b>	function
<b>setprogram</b>	function
<b>settarget</b>	function
<b>settimedlog</b>	function
<b>settranslations</b>	function
<b>show</b>	function
<b>show_close</b>	function
<b>show_load</b>	function
<b>show_open</b>	function
<b>simple</b>	function
<b>simpleline</b>	function

<b>simplelines</b>	function
<b>start_page_number</b>	function
<b>status</b>	function
<b>stop_page_number</b>	function
<b>subdirect</b>	function
<b>subreport</b>	function
<b>system</b>	function
<b>texerrormessage</b>	function
<b>writer</b>	function

# lpdf (context)

<b>action</b>	function	<b>insertxmpinfo</b>	function
<b>adddocumentcolorspace</b>	function	<b>javascript</b>	function
<b>adddocumenttextgstate</b>	function	<b>launch</b>	function
<b>adddocumentpattern</b>	function	<b>layerreference</b>	function
<b>adddocumentshade</b>	function	<b>limited</b>	function
<b>addtocatalog</b>	function	<b>linearshade</b>	function
<b>addtoinfo</b>	function	<b>link</b>	function
<b>addtonames</b>	function	<b>null</b>	function
<b>addtopageattributes</b>	function	<b>number</b>	function
<b>addtopageresources</b>	function	<b>pagedestination</b>	function
<b>addtopagesattributes</b>	function	<b>pagereference</b>	function
<b>addxmpinfo</b>	function	<b>pdfcolor</b>	function
<b>array</b>	function	<b>pdftimestamp</b>	function
<b>boolean</b>	function	<b>protectresources</b>	boolean
<b>checkedkey</b>	function	<b>reference</b>	function
<b>checkedvalue</b>	function	<b>registerannotation</b>	function
<b>circularshade</b>	function	<b>registerdocumentfinalizer</b>	function
<b>cmykcode</b>	function	<b>registerpagefinalizer</b>	function
<b>collectedresources</b>	function	<b>reserveannotation</b>	function
<b>color</b>	function	<b>reserveobject</b>	function
<b>colorspace</b>	function	<b>rgbcode</b>	function
<b>colorspaceconstants</b>	data table	<b>rotationcm</b>	function
<b>colorspec</b>	function	<b>shareobject</b>	function
<b>colorvalue</b>	function	<b>shareobjectreference</b>	function
<b>colorvalues</b>	function	<b>spotcode</b>	function
<b>constant</b>	function	<b>stream</b>	function
<b>delayedobject</b>	function	<b>string</b>	function
<b>dictionary</b>	function	<b>timestamp</b>	function
<b>epdf</b>	table	<b>toeight</b>	function
F expand		<b>tosixteen</b>	function
F load		<b>transparency</b>	function
<b>finalizedocument</b>	function	<b>transparencycode</b>	function
<b>finalizepage</b>	function	<b>transparencygroups</b>	table
<b>finishtransparencycode</b>	function	B none	
<b>flushobject</b>	function	<b>transparencyvalue</b>	function
<b>flushstreamfileobject</b>	function	<b>unicode</b>	function
<b>flushstreamobject</b>	function	<b>verbose</b>	function
<b>formats</b>	data table		
<b>graycode</b>	function		
<b>id</b>	function		
<b>injectxmpinfo</b>	function		

## lpeg (basic lua)

<b>B</b>	function	<b>splitat</b>	function
<b>C</b>	function	<b>splitter</b>	function
<b>Carg</b>	function	<b>stripper</b>	function
<b>Cb</b>	function	<b>times</b>	function
<b>Cc</b>	function	<b>tsplitat</b>	function
<b>Cf</b>	function	<b>tsplitter</b>	function
<b>Cg</b>	function	<b>type</b>	function
<b>Cmt</b>	function	<b>utfchartabletopattern</b>	function
<b>Cp</b>	function	<b>version</b>	function
<b>Cs</b>	function		
<b>Ct</b>	function		
<b>P</b>	function		
<b>R</b>	function		
<b>S</b>	function		
<b>UP</b>	function		
<b>UR</b>	function		
<b>US</b>	function		
<b>V</b>	function		
<b>afterprefix</b>	function		
<b>anywhere</b>	function		
<b>append</b>	function		
<b>balancer</b>	function		
<b>beforesuffix</b>	function		
<b>checkedsplit</b>	function		
<b>counter</b>	function		
<b>endstripper</b>	function		
<b>finder</b>	function		
<b>firstofsplit</b>	function		
<b>frontstripper</b>	function		
<b>instringchecker</b>	function		
<b>is_lpeg</b>	function		
<b>keeper</b>	function		
<b>locale</b>	function		
<b>match</b>	function		
<b>oneof</b>	function		
<b>patterns</b>	data table		
<b>print</b>	function		
<b>replacer</b>	function		
<b>secondofsplit</b>	function		
<b>setmaxstack</b>	function		
<b>split</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
<b>bytedata</b>	data table
<b>bytdone</b>	table
<b>collectgarbage</b>	function
<b>delay</b>	function
<b>finalize</b>	function
<b>firstbytecode</b>	number
<b>flush</b>	function
<b>flushdelayed</b>	function
<b>getbytecode</b>	function
<b>getluaname</b>	function
<b>lastbytecode</b>	number
<b>messages</b>	data table
<b>name</b>	table
<b>numbers</b>	data table
<b>registercode</b>	function
<b>registeredcodes</b>	function
<b>registerfinalizer</b>	function
<b>registername</b>	function
<b>setbytecode</b>	function
<b>setluaname</b>	function
<b>startupfile</b>	string
<b>version</b>	string

# luatex (context)

<b>cleanuptempfiles</b>	function
<b>registerstartactions</b>	function
<b>registerstopactions</b>	function
<b>registertempfile</b>	function
<b>starttime</b>	number

# lxml (context)

<b>addindex</b>	function
<b>all</b>	function
<b>applyfunction</b>	function
<b>att</b>	function
<b>attribute</b>	function
<b>chainattribute</b>	function
<b>checkindex</b>	function
<b>collected</b>	function
<b>command</b>	function
<b>concat</b>	function
<b>concatrange</b>	function
<b>content</b>	function
<b>context</b>	function
<b>convert</b>	function
<b>count</b>	function
<b>delete</b>	function
<b>direct</b>	function
<b>directives</b>	table
F after	
F before	
F handle	
F load	
F setup	
<b>displayverbatim</b>	function
<b>doif</b>	function
<b>doifelse</b>	function
<b>doifsettext</b>	function
<b>doifnot</b>	function
<b>doifnottext</b>	function
<b>doiftext</b>	function
<b>element</b>	function
<b>elements</b>	function
<b>entities</b>	data table
<b>filter</b>	function
<b>filterlist</b>	function
<b>first</b>	function
<b>flush</b>	function
<b>flushlinewise</b>	function
<b>flushsetups</b>	function
<b>flushspacewise</b>	function
<b>get_id</b>	function

<b>getid</b>	function
<b>getindex</b>	function
<b>id</b>	function
<b>idsplitter</b>	userdata
<b>include</b>	function
<b>index</b>	function
<b>info</b>	function
<b>inlineverbatim</b>	function
<b>installsetup</b>	function
<b>last</b>	function
<b>load</b>	function
<b>loadbuffer</b>	function
<b>loaddata</b>	function
<b>loaded</b>	table
<b>loadregistered</b>	function
<b>main</b>	function
<b>match</b>	function
<b>name</b>	function
<b>namespace</b>	function
<b>nonspace</b>	function
<b>pos</b>	function
<b>position</b>	function
<b>raw</b>	function
<b>rawroot</b>	function
<b>register</b>	function
<b>registerentity</b>	function
<b>removesetup</b>	function
<b>resetcdata</b>	function
<b>resetsetups</b>	function
<b>resolvedentity</b>	function
<b>root</b>	function
<b>serialize</b>	function
<b>setaction</b>	function
<b>setcdata</b>	function
<b>setcommandtonone</b>	function
<b>setcommandtotext</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>stopraw</b>	function
<b>store</b>	function
<b>strip</b>	function
<b>stripped</b>	function
<b>tag</b>	function
<b>text</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>acos</b>	function
<b>asin</b>	function
<b>atan</b>	function
<b>atan2</b>	function
<b>ceil</b>	function
<b>cos</b>	function
<b>cosd</b>	function
<b>cosh</b>	function
<b>deg</b>	function
<b>div</b>	function
<b>even</b>	function
<b>exp</b>	function
<b>floor</b>	function
<b>fmod</b>	function
<b>frexp</b>	function
<b>huge</b>	number
<b>initialseed</b>	number
<b>ldexp</b>	function
<b>log</b>	function
<b>max</b>	function
<b>min</b>	function
<b>mod</b>	function
<b>modf</b>	function
<b>odd</b>	function
<b>pi</b>	number
<b>pow</b>	function
<b>rad</b>	function
<b>random</b>	function
<b>randomseed</b>	function
<b>round</b>	function
<b>setrandomseedi</b>	function
<b>sin</b>	function
<b>sind</b>	function
<b>sinh</b>	function
<b>sqrt</b>	function
<b>tan</b>	function
<b>tand</b>	function
<b>tanh</b>	function

# mathematics (context)

<b>addfallbacks</b>	function	<b>setalternate</b>	function
<b>alphabets</b>	data table	<b>setitalics</b>	function
<b>big</b>	function	<b>syncboth</b>	function
<b>boldmap</b>	table	<b>syncname</b>	function
<b>categories</b>	table	<b>syncstyle</b>	function
D functions		<b>toname</b>	function
<b>checkaccentbaseheight</b>	function	<b>tostyle</b>	function
<b>checkprivateparameters</b>	function	<b>tweakaftercopyingfont</b>	function
<b>classes</b>	data table	<b>tweakbeforecopyingfont</b>	function
<b>codes</b>	data table	<b>tweaks</b>	table
<b>define</b>	function	<b>utfmathclass</b>	function
<b>dimensions</b>	function	<b>utfmathcommand</b>	function
<b>extensiblecode</b>	function	<b>utfmathfiller</b>	function
<b>extensibles</b>	data table	<b>utfmathstretch</b>	function
<b>extrabase</b>	number		
<b>extras</b>	table		
F add			
F copy			
<b>fallbacks</b>	table		
F apply			
F install			
<b>fallbackstyleattr</b>	function		
<b>families</b>	data table		
<b>gaps</b>	table		
<b>getboth</b>	function		
<b>getstyle</b>	function		
<b>initializeparameters</b>	function		
<b>injectfallbacks</b>	function		
<b>makefont</b>	function		
<b>mapremap</b>	data table		
<b>overloaddimensions</b>	function		
<b>overloadparameters</b>	function		
<b>privatebase</b>	number		
<b>remapalphabets</b>	function		
<b>renderings</b>	table		
D mappings			
D numbers			
D sets			
<b>renderset</b>	function		
<b>resetitalics</b>	function		
<b>scaleparameters</b>	function		

## mbox (context)

<b>parse</b>	function
<b>parse_from</b>	function
<b>parse_header</b>	function
<b>parse_headers</b>	function
<b>parse_message</b>	function
<b>split_headers</b>	function
<b>split_mbox</b>	function
<b>split_message</b>	function

## md5 (extra lua)

HEX	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>	function

# metapost (context)

**analyzeplugins** function  
**checkformat** function  
**checktexts** function  
**collapse** boolean  
**colorinitializer** function  
**convert** function  
**defaultformat** string  
**defaultinstance** string  
**defaultmethod** string  
**directrun** function  
**edefsxsy** function  
**escaped** function  
**exectime** table  
**extensiondata** data table  
**filterclippath** function  
**finder** function  
**flush** function  
**flushers** table  
    T pdf  
    F comment  
    F flushfigure  
    F startfigure  
    F stopfigure  
    F textfigure  
**flushliteral** function  
**flushnormalpath** function  
**flushreset** function  
**fonts** table  
    F define  
    T flusher  
        F flushfigure  
        F startfigure  
        F stopfigure  
    N instances  
    F process  
**format** function  
**format\_number** function  
**format\_string** function  
**formatnumber** function  
**getclippath** function  
**getextensions** function

**gettext** function  
**graphic** function  
**graphic\_base\_pass** function  
**instance** function  
**intermediate** table  
    T actions  
    F makempy  
**lastlog** string  
**llx** number  
**lly** number  
**load** function  
**makempy** table  
    N nofconverted  
    F processgraphics  
**metafun** table  
    F interpolate  
    F topath  
**method** number  
**mptopdf** table  
    F convertmptstopdf  
    N nofconverted  
**multipass** boolean  
**n** number  
**nvformat** function  
**optimize** boolean  
**parse** function  
**pdfliterals** function  
**pluginactions** function  
**process** function  
**processplugins** function  
**quickanddirty** function  
**reducetogray** boolean  
**reporterror** function  
**reset** function  
**resetlastlog** function  
**resetplugins** function  
**resettextrtexts** function  
**setextensions** function  
**setoutercolor** function  
**settext** function  
**settexttexts** function

<b>showlog</b>	boolean
<b>svformat</b>	function
<b>tex</b>	table
F get	
F reset	
F set	
<b>texerrors</b>	boolean
<b>textextsdata</b>	function
<b>theclippath</b>	function
<b>totable</b>	function
<b>unload</b>	function
<b>untagvariable</b>	function
<b>urx</b>	number
<b>ury</b>	number
<b>variables</b>	table

## mime (extra lua)

**b64** function

**decode** function

**decodet** table

F base64

F quoted-printable

**dot** function

**encode** function

**encodet** table

F base64

F quoted-printable

**eol** function

**normalize** function

**qp** function

**qpwrp** function

**stuff** function

**unb64** function

**unqp** function

**wrap** function

**wrapt** table

F base64

F default

F quoted-printable

F text

**wrp** function



## mplib (extra tex)

<b>fields</b>	function
<b>finders</b>	table
<b>F</b>	file
<b>new</b>	function
<b>pen_info</b>	function
<b>preprocessed</b>	function
<b>version</b>	function

# noads (context)

**handlers**      table

- F check
- F classes
- F collapse
- F families
- F italics
- F relocate
- F render
- F resize
- F showtree
- F tags
- F unscript
- F variants

**process**        function

**processors**   table

- T collapse
- F mlist\_to\_hlist
- T relocate
- T render
- T resize
- T unscript

## node (basic tex)

<b>copy</b>	function	F set_attribute	
<b>copy_list</b>	function	F setbox	
<b>count</b>	function	F setfield	
<b>current_attr</b>	function	F slide	
<b>dimensions</b>	function	F tail	
<b>direct</b>	table	F todirect	
F copy		F tonode	
F copy_list		F toString	
F count		F traverse	
F current_attr		F traverse_id	
F dimensions		F unprotect_glyphs	
F do_ligature_n		F unset_attribute	
F end_of_math		F usedlist	
F first_glyph		F vpack	
F flush_list		F write	
F flush_node		<b>do_ligature_n</b>	function
F free		<b>end_of_math</b>	function
F getbox		<b>family_font</b>	function
F getchar		<b>fields</b>	function
F getfield		<b>first_character</b>	function
F getfont		<b>first_glyph</b>	function
F getid		<b>flush_list</b>	function
F getleader		<b>flush_node</b>	function
F getlist		<b>free</b>	function
F getnext		<b>getchar</b>	function
F getprev		<b>getfield</b>	function
F getsubtype		<b>getfont</b>	function
F has_attribute		<b>getid</b>	function
F has_field		<b>getleader</b>	function
F has_glyph		<b>getlist</b>	function
F hpack		<b>getnext</b>	function
F insert_after		<b>getprev</b>	function
F insert_before		<b>getsubtype</b>	function
F is_direct		<b>has_attribute</b>	function
F is_node		<b>has_field</b>	function
F last_node		<b>has_glyph</b>	function
F length		<b>hpack</b>	function
F new		<b>id</b>	function
F protect_glyphs		<b>insert_after</b>	function
F protrusion_skippable		<b>insert_before</b>	function
F remove		<b>is_node</b>	function

<b>kerning</b>	function
<b>last_node</b>	function
<b>length</b>	function
<b>ligaturing</b>	function
<b>mlist_to_hlist</b>	function
<b>new</b>	function
<b>next</b>	function
<b>prev</b>	function
<b>protect_glyphs</b>	function
<b>protrusion_skippable</b>	function
<b>remove</b>	function
<b>set_attribute</b>	function
<b>setfield</b>	function
<b>slide</b>	function
<b>subtype</b>	function
<b>tail</b>	function
<b>tostring</b>	function
<b>traverse</b>	function
<b>traverse_id</b>	function
<b>type</b>	function
<b>types</b>	function
<b>unprotect_glyphs</b>	function
<b>unset_attribute</b>	function
<b>usedlist</b>	function
<b>vpack</b>	function
<b>whatsits</b>	function
<b>write</b>	function

## nodes (context)

<b>accentcodes</b>	data table	<b>getattribute</b>	function
<b>aligned</b>	function	<b>getbox</b>	function
<b>append</b>	function	<b>getchar</b>	function
<b>astable</b>	function	<b>getfield</b>	function
<b>basepoints</b>	function	<b>getfont</b>	function
<b>builders</b>	table	<b>getid</b>	function
F buildpage_filter		<b>getleader</b>	function
F vpack_filter		<b>getlist</b>	function
<b>codes</b>	data table	<b>getnext</b>	function
<b>concat</b>	function	<b>getprev</b>	function
<b>copy</b>	function	<b>getskip</b>	function
<b>copy_list</b>	function	<b>getsubtype</b>	function
<b>count</b>	function	<b>gluecodes</b>	data table
<b>current_attr</b>	function	<b>glyphcodes</b>	data table
<b>delete</b>	function	<b>glyphdir_is_equal</b>	data table
<b>destinations</b>	table	<b>glyphdir_is_opposite</b>	data table
N attribute		<b>glyphdir_is_orthogonal</b>	data table
T done		<b>gonuts</b>	boolean
F handler		<b>handlers</b>	table
T stack		F accessibility	
<b>dimensionfields</b>	data table	F alignbackgrounds	
<b>dimensions</b>	function	F backgrounds	
<b>dir_is_pop</b>	data table	F characters	
<b>dir_negation</b>	data table	F checkforleaks	
<b>disccodes</b>	data table	F checkglyphs	
<b>discretionarycodes</b>	data table	F cleanupbox	
<b>do_ligature_n</b>	function	F cleanuppage	
<b>end_of_math</b>	function	F export	
<b>fasthpack</b>	function	F finalize	
<b>fencecodes</b>	data table	F migrate	
<b>fields</b>	function	F protectglyphs	
<b>fillcodes</b>	data table	F stripping	
<b>first_character</b>	function	F unprotectglyphs	
<b>first_glyph</b>	function	<b>has_attribute</b>	function
<b>firstcharacter</b>	function	<b>has_field</b>	function
<b>firstcharinbox</b>	function	<b>has_glyph</b>	function
<b>firstglyph</b>	function	<b>hpack</b>	function
<b>flush_list</b>	function	<b>idstosting</b>	function
<b>flush_node</b>	function	<b>ignorablefields</b>	data table
<b>free</b>	function	<b>injections</b>	table
<b>getattr</b>	function	F handler	

F installnewkern		<b>mathcodes</b>	data table
F setcursive		<b>mlist_to_hlist</b>	function
F setkern		<b>new</b>	function
F setmark		<b>noadcodes</b>	data table
F setpair		<b>nodecodes</b>	data table
<b>insert_after</b>	function	<b>nopts</b>	function
<b>insert_before</b>	function	<b>nuts</b>	table
<b>insert_list_after</b>	function	F append	
<b>installattributehandler</b>	function	F concat	
<b>is_direct</b>	function	F copy	
<b>is_display_math</b>	function	F copy_list	
<b>is_mirrored</b>	data table	F count	
<b>is_node</b>	function	F current_attr	
<b>is_nut</b>	function	F delete	
<b>is_rotated</b>	data table	F dimensions	
<b>kerncodes</b>	data table	F do_ligature_n	
<b>kertering</b>	function	F end_of_math	
<b>keys</b>	table	F fasthpack	
T whatsit		F first_glyph	
<b>last_node</b>	function	F firstcharacter	
<b>leftmarginwidth</b>	function	F firstcharinbox	
<b>ligaturing</b>	function	F firstglyph	
<b>lines</b>	table	F flush_list	
T boxed		F flush_node	
F register		F free	
F setup		F getattr	
F stage_one		F getattribute	
F stage_two		F getbox	
F stage_zero		F getchar	
D data		F getfield	
F finalize		F getfont	
F number		F getid	
N scratchbox		F getleader	
<b>link</b>	function	F getlist	
<b>linked</b>	function	F getnext	
<b>list</b>	function	F getprev	
<b>listablefields</b>	data table	F getskip	
<b>listcodes</b>	data table	F getsubtype	
<b>listtoutf</b>	function	F has_attribute	
<b>load</b>	function	F has_field	
<b>locate</b>	function	F has_glyph	
<b>margincodes</b>	data table	F hpack	
<b>markers</b>	table	F insert_after	
F get		F insert_before	

F insert_list_after	F temp
F is_direct	F textdir
F is_display_math	F usage
F is_node	T usersids
F is_nut	N margins.inline
F kerning	N splitters.one
F last_node	N splitters.two
F leftmarginwidth	F userlist
F ligaturing	F usernumber
F link	F userstring
F linked	F usertokens
F locate	F vlist
F mlist_to_hlist	F zeroglue
F new	F prepend
T pool	F protect_glyphs
F baselineskip	F protrusion_skippable
F cleanup	F reference
F disc	F remove
F fontkern	F repackhlist
F glue	F replace
F gluespec	F rightmarginwidth
F glyph	F set_attribute
F hlist	F setattr
F kern	F setattrtribute
F latelua	F setattrtributes
F leftmarginkern	F setbox
F leftskip	F setfield
F lineskip	F setunsetattributes
F noad	F slide
F pdfannotation	F somepenalty
F pdfdestination	F somespace
F pdfdirect	F tail
F pdfliteral	F tonode
F pdfrestore	F tonodes
F pdfsave	F tonut
F pdfsetmatrix	F toString
F penalty	F traverse
F register	F traverse_id
F rightmarginkern	T typesetters
F rightskip	F fast_hpack
F rule	F hpack
F shrink	F tohpack
F special	F tohpackfast
F stretch	F tonodes

F tovpack		F register	
F tovpackfast		F rule	
F vpack		F special	
F unprotect_glyphs		F usage	
F unset_attribute		T userside	
F unsetattribute		N margins.inline	
F unsetattributes		N splitters.one	
F usedlist		N splitters.two	
F vianodes		<b>prepend</b>	function
F vianuts		<b>print</b>	function
F vpack		<b>processors</b>	table
F writable_spec		B enabled	
F write		F hpack_filter	
<b>packlist</b>	function	F post_linebreak_filter	
<b>pardir_is_equal</b>	data table	F pre_linebreak_filter	
<b>pardir_is_opposite</b>	data table	F tracer	
<b>pardir_is_parallel</b>	data table	<b>processwords</b>	function
<b>partextdir_is_equal</b>	data table	<b>protect_glyphs</b>	function
<b>penaltycodes</b>	data table	<b>protrusion_skippable</b>	function
<b>plugindata</b>	table	<b>pts</b>	function
F finalizer		<b>reference</b>	function
F initializer		<b>references</b>	table
S name		N attribute	
T namespace		T done	
N attribute		F handler	
D data		T stack	
F enable		<b>remove</b>	function
F handler		<b>repackhlist</b>	function
F register		<b>replace</b>	function
D registered		<b>report</b>	function
D values		<b>rightmarginwidth</b>	function
F processor		<b>rules</b>	table
<b>points</b>	function	D data	
<b>pool</b>	table	F define	
F baselineskip		F enable	
F cleanup		F handler	
F glyph		<b>save</b>	function
F kern		<b>serialize</b>	function
F latelua		<b>serializebox</b>	function
F lineskip		<b>set_attribute</b>	function
F pdfannotation		<b>setattr</b>	function
F pdfdestination		<b>setattribute</b>	function
F pdfliteral		<b>setattributes</b>	function
F pdfsetmatrix		<b>setbox</b>	function



<b>setfield</b>	function	<b>texmdir_is_opposite</b>	data table
<b>setunsetattributes</b>	function	<b>texmdir_is_parallel</b>	data table
<b>shifts</b>	table	<b>tobasepoints</b>	function
D data		<b>tocentimeters</b>	function
F define		<b>tociceros</b>	function
F enable		<b>todidots</b>	function
F handler		<b>todimen</b>	function
<b>show</b>	function	<b>toinches</b>	function
<b>showboxes</b>	function	<b>tomillimeters</b>	function
<b>showcodes</b>	function	<b>tonewciceros</b>	function
<b>showlist</b>	function	<b>tonewdidots</b>	function
<b>showsimplelist</b>	function	<b>tonode</b>	function
<b>skipcodes</b>	data table	<b>tonodes</b>	function
<b>slide</b>	function	<b>tonut</b>	function
<b>snapshots</b>	table	<b>topicas</b>	function
F getparameters		<b>topoints</b>	function
F getsamples		<b>toscaledpoints</b>	function
F resetsamples		<b>tosequence</b>	function
F takesample		<b>tostring</b>	function
<b>somepenalty</b>	function	<b>totable</b>	function
<b>somespace</b>	function	<b>totree</b>	function
<b>stripping</b>	table	<b>toutf</b>	function
T glyphs		<b>tracers</b>	table
F set		T characters	
<b>striprange</b>	function	F collect	
<b>tail</b>	function	F equal	
<b>tasks</b>	table	F indices	
F actions		F start	
F appendaction		F string	
F disableaction		F unicodes	
F disablegroup		T colors	
F enableaction		F reset	
F enablegroup		F set	
F freeze		F setlist	
F freezegroup		F fontchar	
F new		T frequencies	
F prependaction		F register	
F removeaction		T pool	
F restart		T nodes	
F setaction		F rule	
F showactions		T nuts	
F table		F rule	
<b>texmdir_is_equal</b>	data table	F resetproperties	
<b>texmdir_is_is</b>	data table	F rule	

F setlist		F setlayer	
F setproperties		F setvisual	
F start		<b>vpack</b>	function
T steppers		<b>whatcodes</b>	data table
F check		<b>whatsitcodes</b>	data table
F codes		<b>writable_spec</b>	function
F features		<b>write</b>	function
F font			
F glyphs			
F message			
F messages			
F nofsteps			
F register			
F reset			
F start			
F stop			
F stop			
T transparencies			
F reset			
F set			
F setlist			
<b>traverse</b>	function		
<b>traverse_id</b>	function		
<b>typesetters</b>	table		
F hpack			
F tohpack			
F tohpackfast			
F tonodes			
F tovpack			
F tovpackfast			
F vpack			
<b>unprotect_glyphs</b>	function		
<b>unset_attribute</b>	function		
<b>unsetattribute</b>	function		
<b>unsetattributes</b>	function		
<b>usedlist</b>	function		
<b>vianodes</b>	function		
<b>vianuts</b>	function		
<b>visualizebox</b>	function		
<b>visualizers</b>	table		
F box			
F handler			
F markfonts			
F setfont			

## number (context)

	function
<b>basepoints</b>	function
<b>bit</b>	function
<b>bits</b>	function
<b>clearbit</b>	function
<b>dimenfactors</b>	data table
<b>formatted</b>	function
<b>hasbit</b>	function
<b>maxdimen</b>	number
<b>nopts</b>	function
<b>percent</b>	function
<b>points</b>	function
<b>pts</b>	function
<b>setbit</b>	function
<b>signed</b>	function
<b>sparseexponent</b>	function
<b>splitdimen</b>	function
<b>tobasepoints</b>	function
<b>tobitstring</b>	function
<b>tocentimeters</b>	function
<b>toxiceros</b>	function
<b>to didots</b>	function
<b>todimen</b>	function
<b>toevenhex</b>	function
<b>toinches</b>	function
<b>tomillimeters</b>	function
<b>tonewciceros</b>	function
<b>tonewdidots</b>	function
<b>tonumberf</b>	function
<b>tonumberg</b>	function
<b>topics</b>	function
<b>topoints</b>	function
<b>toscaled</b>	function
<b>toscaledpoints</b>	function
<b>toset</b>	function
<b>valid</b>	function

## os (basic lua)

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

## package (basic lua)

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

# pagebuilders (context)

## **injections**    table

F flushafter  
F flushbefore  
F save

## **mixedcolumns**    table

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

## pdf (basic tex)

<b>immediateobj</b>	function
<b>mapfile</b>	function
<b>mapline</b>	function
<b>maxobjnum</b>	function
<b>obj</b>	function
<b>objtype</b>	function
<b>pageattributes</b>	string
<b>pageref</b>	function
<b>pageresources</b>	string
<b>pagesattributes</b>	string
<b>pdfmapfile</b>	function
<b>pdfmapline</b>	function
<b>print</b>	function
<b>refobj</b>	function
<b>registerannot</b>	function
<b>reserveobj</b>	function

# pdfscanner (context)

**scan** function



# physics (context)

**units** table

D tables

## profiler (extra lua)

**pause**    function  
**resume**   function  
**start**    function  
**stop**     function

# publications (context)

**collected** data table

## regimes (context)

<b>cleanup</b>	function
<b>disable</b>	function
<b>enable</b>	function
<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>findfile</b>	function
<b>appendhash</b>	function	<b>findfiles</b>	function
<b>automount</b>	function	<b>findgivenfile</b>	function
<b>automounted</b>	table	<b>findgivenfiles</b>	function
<b>booleanvariable</b>	function	<b>findpath</b>	function
<b>cacheversion</b>	string	<b>findtexfile</b>	function
<b>checkedvariable</b>	function	<b>findwildcardfile</b>	function
<b>cleanpath</b>	function	<b>findwildcardfiles</b>	function
<b>cleanpathlist</b>	function	<b>formatofsuffix</b>	function
<b>concatinators</b>	data table	<b>formatofvariable</b>	function
<b>configbanner</b>	string	<b>formats</b>	data table
<b>criticalvars</b>	data table	<b>generators</b>	data table
<b>dangerous</b>	data table	<b>getenv</b>	function
<b>datastate</b>	function	<b>getownpath</b>	function
<b>defaultsuffixes</b>	table	<b>getreadfilename</b>	function
<b>dowithfilesandreport</b>	function	<b>hashers</b>	data table
<b>dowithfilesintree</b>	function	<b>homedir</b>	string
<b>dowithpath</b>	function	<b>inputstack</b>	table
<b>dowithvariable</b>	function	<b>installinputfilehandler</b>	function
<b>env</b>	function	<b>installinputlinehandler</b>	function
<b>executers</b>	table	<b>instance</b>	table
F check		D data	
F exec		B diskcache	
F execute		D environment	
F finalize		D expansions	
F popen		D fakepaths	
F register		D files	
F spawn		B force_suffixes	
<b>expandbraces</b>	function	D found	
<b>expandedpathfromlist</b>	function	D foundintrees	
<b>expandedpathlist</b>	function	D hashed	
<b>expandedpathlistfromvariable</b>	function	D hashes	
<b>expandpath</b>	function	D lists	
<b>expandpathfromvariable</b>	function	B loadererror	
<b>expansion</b>	function	D order	
<b>extendtexmfvariable</b>	function	B remember	
<b>find_file</b>	function	B renewcache	
<b>find_files</b>	function	B renewtree	
<b>findbinfile</b>	function	B savelists	
<b>findctxfile</b>	function	D setups	
<b>finders</b>	data table	D specification	

D variables		registerintrees	function
<b>jobs</b>	table	registermethod	function
F currentcomponent		registerzipfile	function
F currentenvironment		<b>relations</b>	data table
F currentproduct		<b>renew</b>	function
F currentproject		<b>repath</b>	function
F justacomponent		<b>reset</b>	function
D processors		<b>resetextrapath</b>	function
F productcomponent		<b>resetresolve</b>	function
F usefile		<b>resolve</b>	function
<b>joinpath</b>	function	<b>savers</b>	data table
<b>load</b>	function	<b>scandata</b>	function
<b>loadbinfile</b>	function	<b>scanfiles</b>	function
<b>loaders</b>	data table	<b>schemes</b>	table
<b>loadlualib</b>	function	T cleaners	
<b>loadtexfile</b>	function	F md5	
<b>loadtime</b>	function	F none	
<b>locateformat</b>	function	F strip	
<b>locators</b>	data table	F cleannname	
<b>luacnfname</b>	string	F fetchstring	
<b>luacnfspec</b>	string	F fetchtable	
<b>luacnfstate</b>	string	F install	
<b>macros</b>	table	<b>setenv</b>	function
F convertfile		<b>setinstance</b>	function
F decodecomment		<b>showpath</b>	function
F enablecomment		<b>simplescanfiles</b>	function
F encodecomment		<b>splitconfigurationpath</b>	function
F preprocessed		<b>splitexpansions</b>	function
F processmk		<b>splitmethod</b>	function
F processmkvi		<b>splitpath</b>	function
F version		<b>suffixes</b>	data table
<b>maxreadlevel</b>	number	<b>suffixmap</b>	data table
<b>methodhandler</b>	function	<b>suffixofformat</b>	function
<b>newinstance</b>	function	<b>texdatablob</b>	function
<b>openbinfile</b>	function	<b>toppath</b>	function
<b>openers</b>	data table	<b>unexpandedpath</b>	function
<b>openfile</b>	function	<b>unexpandedpathlist</b>	function
<b>opentexfile</b>	function	<b>unresolve</b>	function
<b>ownpath</b>	string	<b>updaterelations</b>	function
<b>prefixes</b>	data table	<b>updatescript</b>	function
<b>prependhash</b>	function	<b>usezipfile</b>	function
<b>registerextrapath</b>	function	<b>validatedpath</b>	function
<b>registerfile</b>	function	<b>variable</b>	function
<b>registerfilehash</b>	function	<b>variableofformat</b>	function

**variableofformatorsuffix**

function

**wildcardpattern**

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

**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

# socket (extra lua)

**BLOCKSIZE** number  
**\_DEBUG** boolean  
**\_SETSIZE** number  
**bind** function  
**choose** function  
**connect** function  
**connect4** function  
**connect6** function  
**dns** table

F getaddrinfo  
F gethostname  
F getnameinfo  
F tohostname  
F toip

**ftp** table

S PASSWORD  
N PORT  
N TIMEOUT  
S USER  
F command  
F get  
F open  
F put

**gettime** function  
**headers** table

T canonic  
S accept  
S accept-charset  
S accept-encoding  
S accept-language  
S accept-ranges  
S action  
S age  
S allow  
S alternate-recipient  
S arrival-date  
S authorization  
S bcc  
S cache-control  
S cc  
S comments

S connection  
S content-description  
S content-disposition  
S content-encoding  
S content-id  
S content-language  
S content-length  
S content-location  
S content-md5  
S content-range  
S content-transfer-encoding  
S content-type  
S date  
S diagnostic-code  
S dsn-gateway  
S etag  
S expect  
S expires  
S final-log-id  
S final-recipient  
S from  
S host  
S if-match  
S if-modified-since  
S if-none-match  
S if-range  
S if-unmodified-since  
S in-reply-to  
S keywords  
S last-attempt-date  
S last-modified  
S location  
S max-forwards  
S message-id  
S mime-version  
S original-envelope-id  
S original-recipient  
S pragma  
S proxy-authenticate  
S proxy-authorization  
S range

S received  
 S received-from-mta  
 S references  
 S referer  
 S remote-mta  
 S reply-to  
 S reporting-mta  
 S resent-bcc  
 S resent-cc  
 S resent-date  
 S resent-from  
 S resent-message-id  
 S resent-reply-to  
 S resent-sender  
 S resent-to  
 S retry-after  
 S return-path  
 S sender  
 S server  
 S smtp-remote-recipient  
 S status  
 S subject  
 S te  
 S to  
 S trailer  
 S transfer-encoding  
 S upgrade  
 S user-agent  
 S vary  
 S via  
 S warning  
 S will-retry-until  
 S www-authenticate  
 S x-mailer

## http table

N PORT  
 N TIMEOUT  
 S USERAGENT  
 F open  
 F request

**newtry** function  
**protect** function  
**select** function  
**sink** function

## sinkt table

F close-when-done  
 F default  
 F http-chunked  
 F keep-open

## skip function

## sleep function

## smtp table

S DOMAIN  
 N PORT  
 S SERVER  
 N TIMEOUT  
 S ZONE  
 F message  
 F open  
 F send

## source function

## sourcet table

F by-length  
 F default  
 F http-chunked  
 F until-closed

## tcp function

## tcp6 function

## tp table

N TIMEOUT  
 F connect

## try function

## udp function

## udp6 function

## url table

F absolute  
 F build  
 F build\_path  
 F escape  
 F parse  
 F parse\_path  
 F unescape

# sorters (context)

**comparers**      table

    F basic

**constants**      table

    S defaultdigits

    S defaultlanguage

    S defaultmethod

    N digitmaximum

    N digitsoffset

    N ignoredoffset

    N replacementoffset

**definitions**    data table

**firstofsplit**   function

**setlanguage**   function

**sort**            function

**splitters**      table

    F utf

**strip**           function

**tracers**        data table

**update**         function

## statistics (context)

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

status (basic tex)

**list** function

## storage (context)

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

**autodouble**        function  
**autosingle**       function  
**booleanstring**   function  
**byte**             function  
**bytepairs**        function  
**bytes**             function  
**char**             function  
**characterpairs**   function  
**characters**       function  
**checkedsplit**    function  
**collapsespaces**   function  
**count**            function  
**dump**             function  
**escapedpattern**   function  
**explode**          function  
**find**             function  
**format**           function  
**formatter**        function  
**formatters**      function

```
F {t},
F %t (%t)
F %-t--cycle
F %-10s: %s
F %-15s :
F %-15s : %s
F %-15s >
F %-15s >
F %-15s > %s
F %-15s > %s
F %-15s > %s >
F %-15s > %s >
F %-15s > %s > %s
F %.3f %.3f %.3f %.3f k %.3f %.3f %.3f K
F %.3f %.3f %.3f rg %.3f %.3f %.3f RG
F %.3f g %.3f G
F %0.1fpt
F %0.8f %0.8f %0.8f %0.8f
F %U
F %U (%s)
F %a loaded
```

```
F %f %f %f %f %f %f cm
F %l,
F %p
F %q,
F %s
F %S %s
F %S %S %s
F %S %S %S %t
F %S %S %S %S
F %S Tc %S w %S Tr
F %s mul
F %s%s%s
F %s,
F %s--%s
F %s->%s->%s
F %s->%s->%s->%s->%s->%s->%s
F %s:%s
F %s:%s:%s
F %s=%q
F %s={
F %w%l,
F %w%q,
F %w%S,
F %w[%l]=%l,
F %w[%l]=%q,
F %w[%l]=%s,
F %w[%l]={
F %w[%l]={%, t },
F %w[%l]={},
F %w[%q]=%l,
F %w[%q]=%q,
F %w[%q]=%s,
F %w[%q]={
F %w[%q]={%, t },
F %w[%q]={},
F %w[%s]=%l,
F %w[%s]=%q,
F %w[%s]=%s,
F %w[%s]={
F %w[%s]={%, t },
F %w[%s]={},
```

```

F %w{
F %w{% , t },
F %w{ },
F %w{ ,
F (%p,%p)
F /%s %s
F /%s << %t >>
F /%s [ %t ]
F /%s cs /%s CS %s SCN %s scn
F /Tr%s gs
F 1 0 0 0 1 %f %f cm
F << %t >>
F << /Type /Annot %s /Rect [%0.3f %0.3f %0.3f %0.3f] >>
F M-H-%H
F M-N-%H
F MpSh%s
F Tr%s
F U+%04X:%s
F [ %t ]
F [%q]=
F [%q]=%l,
F [%q]=%q,
F [%q]=%s,
F [%q]={
F [%s]=
F [%s]=%l,
F [%s]=%q,
F [%s]=%s,
F [%s][%s]
F \Umathchardef\s "%X "%X "%X
F \convertnumber{%s}{%s}
F \ugdef\s{\Udelimiter "%X "%X "%X }
F \ugdef\s{\Udelimiter 0 "%X "%X }
F \ugdef\s{\Udelimiterover "%X "%X }
F \ugdef\s{\Udelimiterunder "%X "%X }
F \ugdef\s{\Umathaccent 0 "%X "%X }
F \ugdef\s{\Umathbotaccent 0 "%X "%X }
F \ugdef\s{\Uradical "%X "%X }
F \ugdef\s{\Uroot "%X "%X }
F _bpnf_(%s,%s,%s,'%s')
T_extensions_
S chruni
S font:features
S font:name

```

[illegible]

```

F pdf: q 1 0 %f 1 0 0 cm
F pospages[%s] := %s ; posboxes[%s] := (%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)--(%p,%p)
F processed mkvi file %a, delta %s
F q %f %f %f %f %f %f cm
F r:%s:%s:%s
F r=%1.3f%sg=%1.3f%sb=%1.3f
F region:%s
F return {
F return {%t}
F s:%s
F s=%1.3f
F setbounds currentpicture to multibox ;
F unknown reference %a
F using file %a
F visualizers.%s
F w:%s
F {
F }

gmatch      function
gsub        function
is_boolean  function
is_empty    function
itself      function
len         function
limit       function
longtostring function
lower       function
match       function
nspaces     table
quote       function
quoted      function
rep         function
reverse     function
split       function
splitlines  function
splitup     function
strip       function
sub         function
tformat     function
toboollean  function
tocontext   function
todimen     function
tonodes     function
topattern   function

```

```

totable     function
toupper     function
tracedchar  function
tracedchars table
unquote     function
unquoted    function
upper       function
utfcharacters function
utfvalues   function
valid       function

```

# structures (context)

<b>atlocation</b>	function	F setlevel	
<b>blocks</b>	table	F setoffset	
D collected		F setown	
F define		F setstate	
F print		F setvalue	
F save		T specials	
F select		F userpage	
F setstate		F subs	
D states		D tobesaved	
D tobesaved		F value	
<b>bookmarks</b>	table	<b>currentsectionnumber</b>	function
F finalize		<b>descriptions</b>	table
F flatten		<b>documents</b>	table
S method		D data	
F overload		F initialize	
F place		F preset	
F register		F reset	
F setup		<b>floats</b>	table
<b>counters</b>	table	<b>formulas</b>	table
F add		F current	
F analyze		F simplify	
F check		F store	
D collected		<b>helpers</b>	table
F compact		F analyze	
F converted		F formulanumber	
F currentvalue		F merged	
D data		F page	
F define		F prefix	
F first		F prefixlastpage	
F get		F prefixpage	
F last		F simplify	
F next		F title	
F prev		F touserdata	
F previous		<b>inserts</b>	table
F raw		D data	
F record		F define	
F reset		F getdata	
F restart		F getlocation	
F restore		F getname	
F save		F getnumber	
F set		F setlocation	

F setup  
D stored  
**itemgroups**                      table  
F maxwidth  
F nofitems  
F register

**lists**                                      table  
F addto  
F analyze  
B autoreorder  
D cached  
D collected  
F discard  
F enhance  
T enhancers  
F filter  
F filtercollected  
F formulanumber  
F groupindex  
F hasnumberdata  
F haspagedata  
F hastitledata  
D internals  
F iscached  
F label  
F location  
F number  
D ordered  
F page  
F popnesting  
F prefix  
F prefixednumber  
F prefixedpage  
F process  
D pushed  
F pushnesting  
F realpage  
F reordered  
T result  
D sectionblocks  
F sectionnumber  
F size  
F title  
D tobesaved

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

**notes**                                      table  
F checkpagechange  
F define  
F doifonsamepageasprevious  
F get  
F getdeltapage  
F getn  
F getnumberpage  
F getstate  
F getsymbolpage  
F hascontent  
F internal  
F internalid  
F listindex  
F ordered  
F postpone  
F resetpostponed  
F restore  
F save  
F setstate  
F setsymbolpage  
D states  
F store

## pages

F analyze  
D collected  
F is\_odd  
F number  
F save  
D tobesaved

## table

## references

F analyze  
F checkedfile  
F checkedfileorurl  
F checkedprogram  
F checkedrealpage  
F checkedurl  
D collected  
U componentsplitter  
F currentmetadata  
F currentorder  
D currentset  
F define  
D defined  
D derived  
F enableinteraction  
F enhance  
D executers  
F expandcurrent  
F export  
T files  
  T data  
    F define  
    F get  
F filter  
F filterdefault  
D filters  
F from  
F get  
F getcurrentmetadata  
F getcurrentprefixspec  
F getinnermethod  
F getinternalreference  
D handlers  
F identify  
F import  
F inject

## table

F injectcurrentset  
D internals  
F load  
F loadpresets  
F mark  
D pages  
U prefixsplitter  
D productdata  
T programs  
  T data  
    F define  
    F get  
F realpageofpage  
U referencesplitter  
D referred  
F referredpage  
F registerfinalizer  
F registerinitializer  
F registerpage  
F reportproblems  
F reset  
T resolvers  
  F reference  
  F section  
D runners  
F set  
F setandgetattribute  
F setcomponent  
F setinnermethod  
F setinternalreference  
F setnextinternal  
F setnextorder  
D specials  
F splitcomponent  
F splitprefix  
F splitreference  
T testrunners  
  F inner  
  F special  
  F special operation  
  F special operation with arguments  
T testspecials  
  F deltapage  
  F i

F internal		F getcurrentlevel	
F page		F getlevel	
F realpage		F getnumber	
F section		F internalreference	
F userpage		D levelmap	
D tobereferred		D levels	
D tobesaved		F load	
T urls		F matchingtilldepth	
T data		F numeratdepth	
F define		F numbers	
F get		F popblock	
F valid		F prefixedconverted	
F whatfrom		F pushblock	
<b>registers</b>	<b>table</b>	F register	
F analyze		D registered	
F analyzed		F reportstructure	
D collected		F save	
F compare		T sectionblockdata	
F define		T bodypart	
F enhance		S bookmark	
F extend		F set	
F filter		F setblock	
F filtercollected		F setchecker	
F finalize		F setlevel	
F flush		F setnumber	
F prepare		F somelevel	
F process		F structuredata	
F sort		F title	
F store		D tobesaved	
D tobesaved		F typesetnumber	
F unique		F userdata	
F userdata		B verbose	
<b>sections</b>	<b>table</b>	<b>sets</b>	<b>table</b>
F autodepth		F define	
F cct		F get	
D collected		F getall	
F current		D setlist	
F currentblock		<b>specials</b>	<b>table</b>
F currentid		D collected	
F currentlevel		F retrieve	
F depthnumber		F store	
F finddata		D tobesaved	
F findnumber		<b>synonyms</b>	<b>table</b>
F fullnumber		F analyzed	

D collected  
F compare  
F define  
F filter  
F finalize  
F flush  
F meaning  
F prepare  
F process  
F register  
F registerused  
F sort  
F synonym  
D tobesaved

## tags

## table

T data  
F detailedtag  
F getid  
F handler  
D labels  
F last  
F lastinchain  
T metadata  
D properties  
F registerdata  
F registermetadata  
F restart  
F setattributehash  
F setcombination  
F setdescription  
F setdescriptionsymbol  
F setfigure  
F sethighlight  
F setitemgroup  
F setproperty  
F setsorting  
F setsynonym  
F settablecell  
F settabulatecell  
F start  
F stop  
D taglist  
T userdata



## table (basic lua)

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

## tex (basic tex)

<b>attribute</b>	table	<b>istoken</b>	function
<b>badness</b>	function	<b>lccode</b>	table
<b>box</b>	table	<b>linebreak</b>	function
<b>catcode</b>	table	<b>lists</b>	table
<b>conditionals</b>	data table	<b>luacatcodes</b>	number
<b>constants</b>	data table	<b>mathcode</b>	table
<b>count</b>	table	<b>modes</b>	data table
<b>ctxcatcodes</b>	number	<b>nest</b>	table
<b>definefont</b>	function	<b>nilcatcodes</b>	number
<b>delcode</b>	table	<b>notcatcodes</b>	number
<b>dimen</b>	table	<b>number</b>	function
<b>directives</b>	data table	<b>pdffontname</b>	function
<b>enableprimitives</b>	function	<b>pdffontobjnum</b>	function
<b>error</b>	function	<b>pdffontsize</b>	function
<b>extraprimitives</b>	function	<b>pdfpageref</b>	function
<b>finish</b>	function	<b>pdfxformname</b>	function
<b>fontidentifier</b>	function	<b>primitives</b>	function
<b>fontname</b>	function	<b>print</b>	function
<b>fprint</b>	function	<b>printlist</b>	function
<b>get</b>	function	<b>prtcacodes</b>	number
<b>getattribute</b>	function	<b>romannumeral</b>	function
<b>getbox</b>	function	<b>round</b>	function
<b>getcatcode</b>	function	<b>run</b>	function
<b>getcount</b>	function	<b>scale</b>	function
<b>getdelcode</b>	function	<b>set</b>	function
<b>getdimen</b>	function	<b>setattribute</b>	function
<b>getlccode</b>	function	<b>setbox</b>	function
<b>getlist</b>	function	<b>setcatcode</b>	function
<b>getmath</b>	function	<b>setcount</b>	function
<b>getmathcode</b>	function	<b>setdelcode</b>	function
<b>getnest</b>	function	<b>setdimen</b>	function
<b>getsfcode</b>	function	<b>setlccode</b>	function
<b>getskip</b>	function	<b>setlist</b>	function
<b>gettoks</b>	function	<b>setmath</b>	function
<b>getuccode</b>	function	<b>setmathcode</b>	function
<b>hashtokens</b>	function	<b>setnest</b>	function
<b>ifs</b>	data table	<b>setsfcode</b>	function
<b>inicatcodes</b>	number	<b>setskip</b>	function
<b>iscount</b>	function	<b>settoks</b>	function
<b>isdimen</b>	function	<b>setuccode</b>	function
<b>isskip</b>	function	<b>sfcode</b>	table

<b>shipout</b>	function
<b>skip</b>	table
<b>sp</b>	function
<b>sprint</b>	function
<b>systemmodes</b>	data table
<b>texcatcodes</b>	number
<b>toks</b>	table
<b>tpacatcodes</b>	number
<b>tpbcacodes</b>	number
<b>tprint</b>	function
<b>trackers</b>	data table
<b>txtcatcodes</b>	number
<b>type</b>	function
<b>uccode</b>	table
<b>uniformdeviate</b>	function
<b>uprint</b>	function
<b>vrbcacodes</b>	number
<b>write</b>	function

## texconfig (basic tex)

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

## texio (basic tex)

`write`      function

`write_nl`   function

## token (basic tex)

<b>command_id</b>	function
<b>command_name</b>	function
<b>create</b>	function
<b>csname_id</b>	function
<b>csname_name</b>	function
<b>expand</b>	function
<b>get_next</b>	function
<b>is_activechar</b>	function
<b>is_expandable</b>	function
<b>is_protected</b>	function
<b>lookup</b>	function

# tokens (context)

**bgroup**        table

**collectors** table

  T data

  F defaultwords

  F dowithwords

  F flush

  F handle

  F install

  F register

  T registered

  T remapper

    F convert

    T data

    F store

  F show

  T show\_methods

    F a

    F b

    F c

  F showtoken

  F test

  F trace

**egroup**        table

**hbox**          table

**letter**        function

**letters**       function

**other**         function

**vbox**          table

**vtop**          table

# tracers (context)

<b>count</b>	function
<b>cs</b>	function
<b>dimen</b>	function
<b>knownlist</b>	function
<b>lists</b>	table

T context

T internals

T scratch

<b>name</b>	function
<b>primitive</b>	function
<b>printerror</b>	function
<b>showlines</b>	function
<b>strings</b>	table

S undefined

<b>toks</b>	function
<b>type</b>	function



## trackers (context)

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

## initials table

- T actions
- F default

F handler

F set

## italics table

- F forcevariant
- F handler
- F reset
- F set

## kerns table

- D factors
- F handler
- F keeppligature
- B keptogether
- D mapping
- F set

## margins table

- F finalhandler
- F globalhandler
- F ha
- F localhandler
- F save

## processors table

- F apply
- F register
- F reset
- F split

F startapply

F stopapply

F stripped

F toString

## **spacings**                      table

F define

F handler

D mapping

T numbers

  T frenchpunctuation

    T characters

      S name

      N number

F reset

F set

F setup

## **xtables**                      table

F cleanup

F construct

F create

F flush

F initialize\_construct

F initialize\_reflow\_height

F initialize\_reflow\_width

F next\_row

F reflow\_height

F reflow\_width

F set\_construct

F set\_reflow\_height

F set\_reflow\_width

# unicode (extra lua)

## ascii table

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

## grapheme table

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

## latin1 table

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

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

## utf8 table

F byte  
F char  
F characters  
F count  
F dump  
F filetype  
F find  
F format  
F gfind  
F gmatch  
F gsub  
F is\_valid  
F len  
F length  
F lower  
F magic  
F match  
F remapper  
F rep  
F replacer  
F reverse  
F split  
F splitlines  
F sub  
F subtituter  
F tocodes  
F toeight  
F toentities  
F toString  
F totable  
F upper  
F ustring  
F utf16\_to\_utf8

- F utf16\_to\_utf8\_be
- F utf16\_to\_utf8\_le
- F utf32\_to\_utf8
- F utf32\_to\_utf8\_be
- F utf32\_to\_utf8\_le
- F utf8\_to\_utf16
- F utf8\_to\_utf16\_be
- F utf8\_to\_utf16\_le
- F utf8\_to\_utf8
- F values
- F xstring

## url (context)

<b>addscheme</b>	function
<b>barepath</b>	function
<b>construct</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>unescapeget</b>	function

# utilities (context)

## debugger table

F disable  
F enable  
F savestats  
F showstats

## formatters table

F formatcolumns  
F list  
F stripzeros

## garbagecollector table

F check  
N criterium  
B enabled

## lua table

B alwaysstripcode  
F compile  
F loadedluacode  
F loadstripped  
N nofstrippedbytes  
N nofstrippedchunks  
B stripcode  
T strippedchunks  
F strippedloadstring  
T suffixes  
S lua  
S luc  
S lui  
S luj  
S luv  
S tma  
S tmc  
S tua  
S tuc

## packers table

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

## parsers table

F add\_settings\_to\_array  
F arguments\_to\_table  
F array\_to\_string  
F csvsplitter  
F getparameters  
F hash\_to\_string  
F iterator  
F keq\_to\_hash  
F listitem  
F make\_settings\_to\_hash\_pattern  
F mergehashes  
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 unittotex  
F process\_stripped\_settings  
F rfc4180splitter  
F runtime  
F settings\_to\_array  
F settings\_to\_array\_with\_repeat  
F settings\_to\_hash  
F settings\_to\_hash\_strict  
F settings\_to\_hash\_tolerant  
F settings\_to\_set  
F simple\_hash\_to\_string  
F splitthousands  
F stepper  
F stripped\_settings\_to\_array  
F unittotex  
F unittoxml

## report function

## sequencers table

F appendaction  
F appendgroup  
F compile  
F disableaction  
F disablegroup

F enableaction		F encapsulate	
F enablegroup		F insertaftervalue	
D functions		F insertbeforevalue	
F localize		F migratetable	
F new		F removevalue	
F nodeprocessor		<b>templates</b>	table
F prependaction		F load	
F prependgroup		F replace	
F removeaction		F replacer	
F setkind		F resolve	
F tostring			
<b>setters</b>	table		
F disable			
F enable			
F initialize			
F list			
F new			
F register			
F report			
F reset			
F show			
<b>stacker</b>	table		
F new			
<b>storage</b>	table		
F allocate			
F checked			
F mark			
F marked			
F setinitializer			
F sparse			
<b>strings</b>	table		
F collapsecrlf			
T formatters			
F add			
F new			
F newrepeater			
F nice			
F striplong			
F tabtospace			
T tracers			
<b>tables</b>	table		
F accesstable			
F definedtable			
F definetable			



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

# xml (context)

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

F bibtexshort	F position	
F chainattribute	F reverse	
F command	F table	
F concat	F tag	
F concatrange	F tags	
F context	F text	
F count	F texts	
F ctxtext	F upperall	
F default	<b>first</b>	function
F first	<b>found</b>	function
F function	<b>functions</b>	table
F index	<b>getbuffer</b>	function
F last	<b>gethandlers</b>	function
F lettered	<b>gethandlersfunction</b>	function
F lower	<b>helpers</b>	table
F lowerall	F recursetext	
F match	<b>include</b>	function
F name	<b>index</b>	function
F position	<b>inheritedconvert</b>	function
F reverse	<b>inject</b>	function
F stripped	<b>inject_element</b>	function
F tag	<b>inject_element_after</b>	function
F tags	<b>inject_element_before</b>	function
F text	<b>injectafter</b>	function
F upper	<b>injectbefore</b>	function
F upperall	<b>insert</b>	function
T xml	<b>insert_element</b>	function
F all	<b>insert_element_after</b>	function
F att	<b>insert_element_before</b>	function
F attribute	<b>insertafter</b>	function
F attributes	<b>insertbefore</b>	function
F cdata	<b>insertcomment</b>	function
F chainattribute	<b>inspect</b>	function
F count	<b>is_valid</b>	function
F default	<b>kind</b>	function
F elements	<b>last</b>	function
F empty	<b>load</b>	function
F first	<b>lpath</b>	function
F function	<b>lpathcached</b>	function
F index	<b>lpathcalls</b>	function
F last	<b>lshow</b>	function
F lowerall	<b>makestandalone</b>	function
F match	<b>match</b>	function
F name	<b>name</b>	function

<b>newhandlers</b>	function	<b>strip</b>	function
<b>nodesettostring</b>	function	<del><b>strip_whitespace</b></del>	<del>function</del>
<b>originalload</b>	function	<b>stripelement</b>	function
<b>package</b>	function	<b>stripleadingspaces</b>	function
<b>parent</b>	function	<b>table</b>	function
<b>parsedentitylpeg</b>	userdata	<b>text</b>	function
<b>pihandlers</b>	table	<b>textonly</b>	function
<b>placeholders</b>	table	<b>texttocdata</b>	function
F unknown_any_entity		<b>tocdata</b>	function
F unknown_dec_entity		<b>toelement</b>	function
F unknown_hex_entity		<b>tostring</b>	function
<b>position</b>	function	<b>toxml</b>	function
<b>privatecodes</b>	table	<b>tprint</b>	function
<b>privatetoken</b>	function	<b>traverse</b>	function
<b>process</b>	function	<b>unescaped</b>	function
<del><b>process_attributes</b></del>	<del>function</del>	<b>unprivatized</b>	function
<del><b>process_elements</b></del>	<del>function</del>	<b>withelement</b>	function
<b>processattributes</b>	function	<b>withelements</b>	function
<b>profiled</b>	table	<b>wrap</b>	function
<b>raw</b>	function	<b>xmlns</b>	table
<b>registerentity</b>	function		
<b>registers</b>	function		
<del><b>remap_name</b></del>	<del>function</del>		
<del><b>remap_namespace</b></del>	<del>function</del>		
<del><b>remap_tag</b></del>	<del>function</del>		
<b>remapname</b>	function		
<b>remapnamespace</b>	function		
<b>remaptag</b>	function		
<b>renamespace</b>	function		
<b>replace</b>	function		
<b>replace_element</b>	function		
<b>resolvens</b>	function		
<b>root</b>	function		
<b>save</b>	function		
<b>selection</b>	function		
<b>separate</b>	function		
<b>serialize</b>	function		
<b>setcdata</b>	function		
<b>sethandlersfunction</b>	function		
<b>setproperty</b>	function		
<b>settings</b>	function		
<b>specialhandler</b>	table		
<b>sprint</b>	function		
<b>string</b>	function		

## zip (extra lua)

<b>archives</b>	table
<b>close</b>	function
<b>closearchive</b>	function
<b>open</b>	function
<b>openarchive</b>	function
<b>openfile</b>	function
<b>registeredfiles</b>	table
<b>type</b>	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