

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 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

# ConTExT MkIV

# global (alias: \_G)

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

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

# 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 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

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

# 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 getspotcolorreference
F rgbcolor	F grayindexcolor
F spotcolor	F grayspotcolor
F startlayer	F rgbindexcolor
F startstackedlayer	F rgbspotcolor
F stoplayer	F spotcolorname
F stopstackedlayer	F transparency
F transparency	T tables
F typesetfield	D vfspecials
T registrations	<b>registrations</b> table
F cmykindexcolor	<b>tables</b> table
F cmykspotcolor	

# bibtex (context)

<b>authorref</b>	function	F flush	
<b>authors</b>	table	F nofregistered	
F concat		F process	
F inverted		F register	
F invertedshort		F registerplaced	
F normal		F reset	
F normalshort		F resolve	
F setsettings		<b>load</b>	function
F short		<b>new</b>	function
<b>authoryearref</b>	function	<b>singularorplural</b>	function
<b>authoryearsref</b>	function	<b>statistics</b>	table
<b>convert</b>	function	N nofbytes	
<b>hacks</b>	table	N nofdefinitions	
F add		N nofshortcuts	
F doifalreadypaced		<b>toxml</b>	function
F filterall			



## bit32 (basic lua)

**arshift** function  
**band** function  
**bnot** function  
**bor** function  
**btest** function  
**bxor** function

**extract** function  
**lrotate** function  
**lshift** function  
**replace** function  
**rrotate** function  
**rshift** function

## blobs (context)

**append**      function  
**dimensions**   function  
**dispose**      function

**new**            function  
**pack**           function  
**write**          function

# boolean (context)

**tocontext** function

**tonumber** function

# buffers (context)

<b>append</b>	function	<b>parallel</b>	table
<b>assign</b>	function	F define	
<b>collectcontent</b>	function	F hassomecontent	
<b>erase</b>	function	F next	
<b>exists</b>	function	F place	
<b>getcontent</b>	function	F reset	
<b>getlines</b>	function	F save	
<b>loadcontent</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 kepttogether
- F registertogether
- T solutions
  - T splitters
    - F define

- F optimize
- T registered
- F reset
- F set
- F split
- F start
- F stop

## F tag

## vspacing table

- F analyze
- D categories
- F collapsevbox
- T data
- D map
- D skip
- D snapmethods
- F definesnapmethod
- B fixed
- F pagehandler
- F setmap
- F setskip
- F snapbox
- F tocategories
- F tocategory
- F vboxhandler

## caches (context)

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

## callback (basic tex)

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

**register**   overloaded function

## callbacks (context)

**freeze**     function  
**known**     function  
**list**       data table  
**pop**        function

**push**        function  
**register**    function  
**report**      function



## catcodes (context)

**names** data table

**numbers** data table

**register** function

# characters (context)

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

## chemistry (context)

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

## commands (context)

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

<b>dayname</b>	function	<b>discardfromlist</b>	function
<b>defineattribute</b>	function	<b>doanalyzeframedbox</b>	function
<b>definebibtexsession</b>	function	<b>doif</b>	function
<b>definebreakpoint</b>	function	<b>doifblackelse</b>	function
<b>definebreakpoints</b>	function	<b>doifcommonelse</b>	function
<b>definecharacterspacing</b>	function	<b>doifcounter</b>	function
<b>definechemical</b>	function	<b>doifdimenstringelse</b>	function
<b>defineconversion</b>	function	<b>doifdrawingblackelse</b>	function
<b>definecounter</b>	function	<b>doifelse</b>	function
<b>definedviewerlayer</b>	function	<b>doifelsebuffer</b>	function
<b>definefield</b>	function	<b>doifelsecontinewithfile</b>	function
<b>definefieldset</b>	function	<b>doifelsecounter</b>	function
<b>definefilefallback</b>	function	<b>doifelsecurrentfonthasfeature</b>	function
<b>definefilesynonym</b>	function	<b>doifelseintwopassdata</b>	function
<b>definefont_one</b>	function	<b>doifelsemarking</b>	function
<b>definefont_two</b>	function	<b>doifelsemessage</b>	function
<b>definefontfeature</b>	function	<b>doifelsemultipar</b>	function
<b>definefontsolution</b>	function	<b>doifelseparallel</b>	function
<b>defineinsertion</b>	function	<b>doifelsepositionsused</b>	function
<b>defineintermediatecolor</b>	function	<b>doifelserangeonpage</b>	function
<b>definelabels</b>	function	<b>doifelserreference</b>	function
<b>definelanguage</b>	function	<b>doifelsesavedfloat</b>	function
<b>definelinkedlist</b>	function	<b>doifelsespaces</b>	function
<b>definemarking</b>	function	<b>doifelseutfmathabove</b>	function
<b>definemultitonecolor</b>	function	<b>doifelseutfmathaccent</b>	function
<b>definernote</b>	function	<b>doifelseutfmathbelow</b>	function
<b>defineparallel</b>	function	<b>doifelsevisualizer</b>	function
<b>defineparbuilder</b>	function	<b>doiffielddcategoryelse</b>	function
<b>defineprocesscolor</b>	function	<b>doiffielddelse</b>	function
<b>defineprogram</b>	function	<b>doiffielddsetelse</b>	function
<b>definereference</b>	function	<b>doiffiledefinedelse</b>	function
<b>definesectionlevels</b>	function	<b>doiffileexistelse</b>	function
<b>definespotcolor</b>	function	<b>doiffirstcharelse</b>	function
<b>definestructureblock</b>	function	<b>doifinputfileelse</b>	function
<b>definestructureset</b>	function	<b>doifinsetelse</b>	function
<b>definetransparency</b>	function	<b>doifleapyearelse</b>	function
<b>definewtopasslist</b>	function	<b>doiflisthasentry</b>	function
<b>defineviewerlayer</b>	function	<b>doiflisthasnumberelse</b>	function
<b>defrostrandomseed</b>	function	<b>doiflisthaspageelse</b>	function
<b>digits</b>	function	<b>doiflisthastitleelse</b>	function
<b>disableautofontscript</b>	function	<b>doiflocfileelse</b>	function
<b>disableparbuilder</b>	function	<b>doifnot</b>	function
<b>disableregime</b>	function	<b>doifnotcounter</b>	function
<b>disablesPELLchecking</b>	function	<b>doifnotecontent</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>doprocесstypecriptfile</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>enablefontcolor schemes</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>fontlookupnoffound</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>getbuffer</b>	function
<b>featurelist</b>	function	<b>getbufferctxlua</b>	function
<b>feedback</b>	function	<b>getbuffermkvi</b>	function
<b>fetchallmarks</b>	function	<b>getcommandline</b>	function
<b>fetchmultipar</b>	function	<b>getctxfile</b>	function
<b>fetchmultishape</b>	function	<b>getcurrentprefixspec</b>	function
<b>fetchonemark</b>	function	<b>getcurrentreferencemetadata</b>	function
<b>fetchposboxes</b>	function	<b>getdefaultfieldvalue</b>	function
<b>fetchtwomarks</b>	function	<b>getfieldcategory</b>	function
<b>figurefilename</b>	function	<b>getfirstcharacter</b>	function

<b>getfirsttwopassdata</b>	function	<b>insertrenderingwindow</b>	function
<b>getfloatvariable</b>	function	<b>insertsoundclip</b>	function
<b>getinternalreference</b>	function	<b>installedlanguages</b>	function
<b>getlasttwopassdata</b>	function	<b>installtexdirective</b>	function
<b>getmarking</b>	function	<b>installtextracker</b>	function
<b>getmessage</b>	function	<b>languagenumber</b>	function
<b>getmpextensions</b>	function	<b>lastcountervalue</b>	function
<b>getnotestate</b>	function	<b>lchexnumber</b>	function
<b>getplaceholderchar</b>	function	<b>lchexnumbers</b>	function
<b>getprivateattribute</b>	function	<b>leapyear</b>	function
<b>getprivatechar</b>	function	<b>linenumbersstageone</b>	function
<b>getprogram</b>	function	<b>linenumbersstagetwo</b>	function
<b>getrandomcounta</b>	function	<b>listgroupindex</b>	function
<b>getrandomcountb</b>	function	<b>listlabel</b>	function
<b>getrandomseed</b>	function	<b>listlocation</b>	function
<b>getreadfilename</b>	function	<b>listprefixednumber</b>	function
<b>getsubstring</b>	function	<b>listprefixedpage</b>	function
<b>gettexbuffer</b>	function	<b>listrealpage</b>	function
<b>gettwopassdata</b>	function	<b>listsize</b>	function
<b>gettwopassdatalist</b>	function	<b>listtitle</b>	function
<b>geturl</b>	function	<b>listuserdata</b>	function
<b>grabbuffer</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>incrementedcounter</b>	function	<b>minute</b>	function
<b>initializetexdirectives</b>	function	<b>mixcleanup</b>	function
<b>initializetextrackers</b>	function	<b>mixfinalize</b>	function
<b>injectcurrentreference</b>	function	<b>mixflushlist</b>	function
<b>injectreference</b>	function	<b>mixflushrest</b>	function
<b>inlinechemical</b>	function	<b>mixgetsplit</b>	function
<b>insertattachment</b>	function	<b>mixsetsplit</b>	function
<b>insertcomment</b>	function	<b>mixstate</b>	function
<b>insertfield</b>	function	<b>molecule</b>	function
<b>insertionnumber</b>	function	<b>month</b>	function

<b>monthmnem</b>	function	<b>postponenotes</b>	function
<b>monthname</b>	function	<b>poswhd</b>	function
<b>mpcolor</b>	function	<b>posxy</b>	function
<b>mpoptions</b>	function	<b>prepareMPvariable</b>	function
<b>namedstructureuservariable</b>	function	<b>preparebibtexsession</b>	function
<b>namedstructurevariable</b>	function	<b>preparedfile</b>	function
<b>nbfs</b>	function	<b>presetsymbollist</b>	function
<b>nextcountervalue</b>	function	<b>presettabulate</b>	function
<b>nextparallel</b>	function	<b>prevcountervalue</b>	function
<b>nofdays</b>	function	<b>processbuffer</b>	function
<b>nofitems</b>	function	<b>processedfile</b>	function
<b>nofstackedfloats</b>	function	<b>processedfiles</b>	function
<b>notedeltapage</b>	function	<b>processfile</b>	function
<b>notelistindex</b>	function	<b>processfilemany</b>	function
<b>notenumberpage</b>	function	<b>processfilenone</b>	function
<b>noteprefixednumber</b>	function	<b>processfileonce</b>	function
<b>notesymbolpage</b>	function	<b>processlist</b>	function
<b>notetitle</b>	function	<b>pushfloat</b>	function
<b>ntimes</b>	function	<b>pushitaliccorrection</b>	function
<b>number</b>	function	<b>pushlist</b>	function
<b>numbers</b>	function	<b>pushregime</b>	function
<b>objectnumber</b>	function	<b>pushsectionblock</b>	function
<b>objectpage</b>	function	<b>rawcharacter</b>	function
<b>octnumber</b>	function	<b>rawcountervalue</b>	function
<b>octstringtonumber</b>	function	<b>rawdate</b>	function
<b>ordinal</b>	function	<b>referencepagestate</b>	function
<b>overloadbookmark</b>	function	<b>referencerealpage</b>	function
<b>page_injections_flush_after</b>	function	<b>registerattachment</b>	function
<b>page_injections_flush_before</b>	function	<b>registerbibtexentry</b>	function
<b>page_injections_save</b>	function	<b>registerbibtexfile</b>	function
<b>pagestaterealpage</b>	function	<b>registerbookmark</b>	function
<b>parpos</b>	function	<b>registerbuttons</b>	function
<b>pdfrotation</b>	function	<b>registercolor</b>	function
<b>percentageof</b>	function	<b>registercolorintent</b>	function
<b>pgfxcolorspec</b>	function	<b>registeredviewerlayer</b>	function
<b>placeparallel</b>	function	<b>registerhelp</b>	function
<b>popfloat</b>	function	<b>registeritemgroup</b>	function
<b>popitaliccorrection</b>	function	<b>registerlanguagefeatures</b>	function
<b>poplist</b>	function	<b>registerlinenumbering</b>	function
<b>popregime</b>	function	<b>registermaintextcolor</b>	function
<b>popsectionblock</b>	function	<b>registernamespace</b>	function
<b>pos</b>	function	<b>registerpostponedblock</b>	function
<b>posplus</b>	function	<b>registerrendering</b>	function
<b>posstrut</b>	function	<b>registersoundclip</b>	function



<b>registerstructureprocessor</b>	<b>function</b>	<b>setcharactercasing</b>	<b>function</b>
<b>registertransparency</b>	<b>function</b>	<b>setcharactercleaning</b>	<b>function</b>
<b>registerunit</b>	<b>function</b>	<b>setcharacterkerning</b>	<b>function</b>
<b>relatemarking</b>	<b>function</b>	<b>setcharacterspacing</b>	<b>function</b>
<b>remapentity</b>	<b>function</b>	<b>setcharacterstripping</b>	<b>function</b>
<b>removemissingcharacters</b>	<b>function</b>	<b>setcloseddocumentaction</b>	<b>function</b>
<b>renderingvar</b>	<b>function</b>	<b>setclosepageaction</b>	<b>function</b>
<b>replacemissingcharacters</b>	<b>function</b>	<b>setcolormodel</b>	<b>function</b>
<b>replacepospxywhd</b>	<b>function</b>	<b>setcounter</b>	<b>function</b>
<b>resavefloat</b>	<b>function</b>	<b>setdataset</b>	<b>function</b>
<b>resetcounter</b>	<b>function</b>	<b>setdigitsmanipulation</b>	<b>function</b>
<b>resetfontfeature</b>	<b>function</b>	<b>setdirection</b>	<b>function</b>
<b>resetfontsolution</b>	<b>function</b>	<b>setdocumentenvironments</b>	<b>function</b>
<b>resetmarking</b>	<b>function</b>	<b>setdocumentfilenames</b>	<b>function</b>
<b>resetmathattributes</b>	<b>function</b>	<b>setdocumentmodes</b>	<b>function</b>
<b>resetmathitalics</b>	<b>function</b>	<b>setdocumentmodules</b>	<b>function</b>
<b>resetnullfont</b>	<b>function</b>	<b>setfigurelookuporder</b>	<b>function</b>
<b>resetparallel</b>	<b>function</b>	<b>setfontfeature</b>	<b>function</b>
<b>resetreference</b>	<b>function</b>	<b>setfontofid</b>	<b>function</b>
<b>resetstructureprocessor</b>	<b>function</b>	<b>setfontsolution</b>	<b>function</b>
<b>resettimer</b>	<b>function</b>	<b>setformat</b>	<b>function</b>
<b>restartcounter</b>	<b>function</b>	<b>setformsmethod</b>	<b>function</b>
<b>restorecounter</b>	<b>function</b>	<b>setinsertionlocation</b>	<b>function</b>
<b>restorecurrentattributes</b>	<b>function</b>	<b>setinterfaceconstant</b>	<b>function</b>
<b>restorenote</b>	<b>function</b>	<b>setinterfaceelement</b>	<b>function</b>
<b>romannumerals</b>	<b>function</b>	<b>setinterfacemessage</b>	<b>function</b>
<b>runbuffer</b>	<b>function</b>	<b>setinterfacemessages</b>	<b>function</b>
<b>safechar</b>	<b>function</b>	<b>setinterfacevariable</b>	<b>function</b>
<b>savebuffer</b>	<b>function</b>	<b>setinternalreference</b>	<b>function</b>
<b>savecounter</b>	<b>function</b>	<b>setlanguageexceptions</b>	<b>function</b>
<b>savecurrentattributes</b>	<b>function</b>	<b>setlanguagesynonym</b>	<b>function</b>
<b>savelistnumber</b>	<b>function</b>	<b>setlayer</b>	<b>function</b>
<b>savelistprefixednumber</b>	<b>function</b>	<b>setmarking</b>	<b>function</b>
<b>savelisttitle</b>	<b>function</b>	<b>setmathalphabet</b>	<b>function</b>
<b>savefloat</b>	<b>function</b>	<b>setmathalternate</b>	<b>function</b>
<b>savenote</b>	<b>function</b>	<b>setmathattribute</b>	<b>function</b>
<b>saveobject</b>	<b>function</b>	<b>setmathitalics</b>	<b>function</b>
<b>saveparallel</b>	<b>function</b>	<b>setmathstyle</b>	<b>function</b>
<b>savestructureblock</b>	<b>function</b>	<b>setnextinternalreference</b>	<b>function</b>
<b>savetaggedtwopassdata</b>	<b>function</b>	<b>setnotestate</b>	<b>function</b>
<b>savetwopassdata</b>	<b>function</b>	<b>setnotesymbolpage</b>	<b>function</b>
<b>second</b>	<b>function</b>	<b>setobject</b>	<b>function</b>
<b>selectstructureblock</b>	<b>function</b>	<b>setopendocumentaction</b>	<b>function</b>
<b>setbreakpoints</b>	<b>function</b>	<b>setopenpageaction</b>	<b>function</b>

<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>settagdescriptionsymbol</b>	function	<b>startregime</b>	function
<b>settagfigure</b>	function	<b>startsectionlevel</b>	function
<b>settaghighlight</b>	function	<b>starttag</b>	function
<b>settagitemgroup</b>	function	<b>starttext</b>	function
<b>settagproperty</b>	function	<b>startviewerlayer</b>	function
<b>settagsorting</b>	function	<b>stopchemical</b>	function
<b>settagsynonym</b>	function	<b>stopcolorset</b>	function
<b>settagtablecell</b>	function	<b>stopcomponent</b>	function
<b>settagtabulatecell</b>	function	<b>stopenvironment</b>	function
<b>setupbookmarks</b>	function	<b>stopfontsolution</b>	function
<b>setupcanvas</b>	function	<b>stopparbuilder</b>	function
<b>setupcharacterspacing</b>	function	<b>stopproduct</b>	function
<b>setupexport</b>	function	<b>stopproject</b>	function
<b>setupfontexpansion</b>	function	<b>stopregime</b>	function
<b>setupfontprotrusion</b>	function	<b>stopsectionlevel</b>	function
<b>setupidentity</b>	function	<b>stoptag</b>	function
<b>setupinsertion</b>	function	<b>stoptext</b>	function
<b>setupitaliccorrection</b>	function	<b>stopviewerlayer</b>	function
<b>setuplinenumbering</b>	function	<b>storejavascriptcode</b>	function
<b>setvisual</b>	function	<b>storejavascriptpreamble</b>	function
<b>setxmpfile</b>	function	<b>storenote</b>	function
<b>showassignerror</b>	function	<b>structureautocatcodedget</b>	function
<b>showattributes</b>	function	<b>structurecatcodedget</b>	function
<b>showcallbacks</b>	function	<b>structuregivencatcodedget</b>	function
<b>showchardata</b>	function	<b>structurenumber</b>	function
<b>showcounter</b>	function	<b>structuretitle</b>	function
<b>showfontparameters</b>	function	<b>structureuservariable</b>	function
<b>showhyphenatedinlist</b>	function	<b>structurevariable</b>	function
<b>showjustification</b>	function	<b>subcountervalues</b>	function

<b>synchronizemodel</b>	function	<b>usetexfile</b>	function
<b>synchronizemarking</b>	function	<b>useurl</b>	function
<b>taggedmathfunction</b>	function	<b>usexmlfile</b>	function
<b>tan</b>	function	<b>usezipfile</b>	function
<b>tand</b>	function	<b>utfchar</b>	function
<b>testcase</b>	function	<b>utfmathclass</b>	function
<b>textime</b>	function	<b>utfmathcommand</b>	function
<b>transparencycomponents</b>	function	<b>utfmathcommandabove</b>	function
<b>triggereffect</b>	function	<b>utfmathcommandbelow</b>	function
<b>triggernegative</b>	function	<b>utfmathfiller</b>	function
<b>truefilename</b>	function	<b>utfmathstretch</b>	function
<b>typebuffer</b>	function	<b>verbose</b>	function
<b>typefile</b>	function	<b>visual</b>	function
<b>typestring</b>	function	<b>vspacing</b>	function
<b>uchexnumber</b>	function	<b>vspacingcollapse</b>	function
<b>uchexnumbers</b>	function	<b>vspacingdefine</b>	function
<b>undefinechemical</b>	function	<b>vspacingsetamount</b>	function
<b>unicodechar</b>	function	<b>vspacingsnap</b>	function
<b>unit</b>	function	<b>way</b>	function
<b>unloadlanguage</b>	function	<b>weekday</b>	function
<b>useMPLibrary</b>	function	<b>weekdayname</b>	function
<b>useanyfile</b>	function	<b>widthofstring</b>	function
<b>usecldfile</b>	function	<b>writestatus</b>	function
<b>usecolors</b>	function	<b>x_table_cleanup</b>	function
<b>usecomponent</b>	function	<b>x_table_construct</b>	function
<b>useenvironment</b>	function	<b>x_table_create</b>	function
<b>usefile</b>	function	<b>x_table_flush</b>	function
<b>usejavascriptpreamble</b>	function	<b>x_table_init_construct</b>	function
<b>usejavascriptscripts</b>	function	<b>x_table_init_reflow_height</b>	function
<b>uselibrary</b>	function	<b>x_table_init_reflow_width</b>	function
<b>useluafile</b>	function	<b>x_table_next_row</b>	function
<b>uselua module</b>	function	<b>x_table_reflow_height</b>	function
<b>usemodules</b>	function	<b>x_table_reflow_width</b>	function
<b>usepath</b>	function	<b>x_table_set_construct</b>	function
<b>useproduct</b>	function	<b>x_table_set_reflow_height</b>	function
<b>useproject</b>	function	<b>x_table_set_reflow_width</b>	function
<b>usesubpath</b>	function	<b>year</b>	function
<b>usesymbols</b>	function		

## containers (context)

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

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

## converters (context)

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

## coroutine (basic lua)

**create**    function  
**resume**   function  
**running** function

**status**   function  
**wrap**     function  
**yield**    function

# ctxrunner (context)

<b>load</b>	function	<b>resolve</b>	function
<b>prepfiler</b>	data table		

## debug (basic lua)

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



## dir (context)

<b>collectpattern</b>	function	<b>globpattern</b>	function
<b>current</b>	function	<b>ls</b>	function
<b>expandname</b>	function	<b>makedirs</b>	function
<b>found</b>	function	<b>mkdirs</b>	function
<b>glob</b>	function	<b>pop</b>	function
<b>globfiles</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	T ctxfile	
<b>files</b>	table	D environments	
<b>getargument</b>	function	D modes	
<b>getfilename</b>	function	D modules	
<b>options</b>	table	<b>setargument</b>	function
T cmdline		<b>setdefaultargument</b>	function
D environments		<b>setfilename</b>	function
D modes		<b>variables</b>	data table
D modules			

## environment (context)

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

## epdf (extra tex)

**Array**            function  
**Dict**            function  
**Object**          function

**PDFRectangle**   function  
**open**            function  
**type**            function

# experiments (context)

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

## figures (context)

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

## font (basic tex)

**current**    function  
**define**    function  
**each**       function  
**fonts**      table  
**frozen**     function  
**getfont**    overloaded function

**id**            function  
**max**           function  
**nextid**       function  
**read\_tfm**    function  
**read\_vf**     function  
**setfont**     function

# fontloader (extra tex)

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

# fonts (context)

<b>analyzers</b>	table	
T features		F assignmathparameters
N fina		B autocleanup
N init		F beforecopyingcharacters
N isol		D cache
N medi		F calculatescale
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 clonevector		T description
F define		T boundingbox
T definitions		S depth
F prepare		S height
F process		S width
F registermain		T parameters
F report		S ascender
F reset		S descender
T vectors		S designsize
<b>constructors</b>	table	T expansion
F aftercopyingcharacters		S auto
F applymanipulators		S shrink
		S step

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	
S encodingbytes	T methods	
S filename	F install	
S finalized	D variants	
S fontname	F read	
S format	F register	
S fullname	F registered	

F registersplit		B addkerns	
F resetnullfont		B addligatures	
F resolve		B addtexligatures	
T resolvers		B autoprefixed	
F file		D cache	
F name		D features	
F spec		T helpdata	
<b>definetypface</b>	function	D bothkerned	
<b>encodings</b>	table	D leftkerned	
T agl		D ligatures	
D cache		D rightkerned	
F is_known		D texligatures	
D known		F load	
F load		F setfeatures	
F make_unicode_vector		B syncspace	
D math		N version	
N version		T otf	
<b>expansions</b>	data table	F addfeature	
<b>formats</b>	data table	D cache	
<b>goodies</b>	table	T chainhandlers	
D colorschemes		F normal	
D data		F verbose	
D designsizes		F collectlookups	
D filenames		F dataset	
F getcompositions		S defaultbasealternate	
T list		S defaultnodealternate	
F compositions		D enhancers	
F designsizes		D features	
F expansions		F getalternate	
F featureset		T glists	
F filenames		T handlers	
F files		F contextchain	
F mathematics		F devanagari_remove_joiners	
F protrusions		F devanagari_reorder_matras	
F solutions		F devanagari_reorder_pre_base_reordering_consonants	
F treatments		F devanagari_reorder_reph	
F typefaces		F gpos_context	
F load		F gpos_contextchain	
F prepare_features		F gpos_cursive	
F register		F gpos_mark2base	
F registerpostprocessor		F gpos_mark2ligature	
F report		F gpos_mark2mark	
<b>handlers</b>	table	F gpos_pair	
T afm		F gpos_single	

- F gsub\_altername
- F gsub\_context
- F gsub\_contextchain
- F gsub\_ligature
- F gsub\_multiple
- F gsub\_reversecontextchain
- F gsub\_single
- F load
- F scriptandlanguage
- F setcontextchain
- F setdynamics
- F setfeatures
- T statistics
  - D usedfeatures
- T tables
  - D baselines
  - D features
  - D languages
  - D scripts
- N version
- T pfb
- T tfm
  - D features
- F setfeatures
- T vf
  - T combinations
- F combine
- T combiner
  - D commands
- F find
- D helpers
- D math
- D predefined
- D whatever

## hashes table

- D characters
- D csnames
- D descriptions
- D dynamics
- D emwidths
- D exheights
- D extensibles
- D identifiers
- D italics

- D lastmathids
- D marks
- D parameters
- T processes
- D properties
- D quads
- D resources
- T setdynamics
- D spaces
- D spacings
- D xheights

## helpers table

- F addprivate
- F dimenfactor
- F expandglyph
- F fontpatternhassize
- F getdigitwidth
- F getparameters
- F getprivatenode
- F hasprivate
- F nametoslot
- F setdigitwidth
- F splitfontpattern

## iterators table

- F characters
- F descriptions
- F glyphs

## loggers table

- F add\_placeholders
- T category\_to\_placeholder
- S ll
- S lm
- S lo
- S lt
- S lu
- S mc
- S me
- S mn
- S nd
- S nl
- S no
- S pc
- S pd
- S pe

S pf	F dfont
S pi	F lua
S po	F opentype
S ps	F otf
S sc	F pfb
S sk	D sequence
S sm	F tfm
S so	F ttc
F format	F ttf
F onetimemessage	<b>specifiers</b> table
F register	D contextmerged
F reportdefinedfonts	F contextnumber
F reportusedfeatures	D contextnumbers
<b>mappings</b> table	D contextsetups
F addtounicode	F contexttostring
F fromunicode16	F definecontext
F loadfile	F mergecontext
F loadline	F presetcontext
F loadlumtable	F registercontext
F makenameparser	F showcontext
F reset	F splitcontext
F tounicode16	D synonyms
F tounicode16sequence	D variants
<b>names</b> data table	<b>symbols</b> table
<b>nulldata</b> data table	F uselibrary
<b>protrusions</b> data table	<b>tables</b> table
<b>readers</b> table	<b>tracers</b> table
F afm	<b>treatments</b> data table
F check_lua	<b>typefaces</b> data table
F check_tfm	



# functions (context)

**dummy** function

# graphics (context)

## **backgrounds** table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

## gzip (extra lua)

**close**    function

**lines**    function

**load**    function

**open**    function

**save**    function

**suffix**    function

## img (basic tex)

<b>boxes</b>	function
<b>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

**linkedList**s data table

**pages** table

F setpagetransition

F setupcanvas

**references** table

F setclosedocument

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)

**comment** function

**datasets** table

D collected

F extend

F getdata

F setdata

D tobesaved

**disablesave** function

**files** table

D collected

F context

B forcerun

F run

D tobesaved

**initialize** function

**load** function

**loadother** function

**objects** table

D collected

F get

F number

F page

F save

F set

D tobesaved

**pack** boolean

**packversion** number

**pagestates** table

D collected

F extend

F realpage

F setstate

D tobesaved

**passes** 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

**positions** 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 save  
                    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>numbers</b>	data table
<b>associated</b>	data table	<b>posthyphenchar</b>	function
<b>association</b>	function	<b>prehyphenchar</b>	function
<b>counters</b>	data table	<b>registered</b>	data table
<b>current</b>	function	<b>righthyphenmin</b>	function
<b>data</b>	data table	<b>setexceptions</b>	function
<b>define</b>	function	<b>setsynonym</b>	function
<b>frequencies</b>	table	<b>unload</b>	function
F averagecharwidth		<b>version</b>	number
F getdata		<b>words</b>	table
<b>getnumber</b>	function	F check	
<b>hyphenate</b>	function	T data	
<b>installed</b>	function	F disable	
<b>labels</b>	table	F enable	
F define		T enablers	
F split		B enables	
<b>lefthyphenmin</b>	function	F found	
<b>loadable</b>	function	F load	
<b>loadwords</b>	function	T methods	
<b>logger</b>	table	N threshold	
F report			

# layouts (context)

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

## lfs (extra lua)

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

# libraries (context)

**basiclua** data table  
**basictex** data table  
**builtin** data table  
**extralua** data table

**extratex** data table  
**functions** data table  
**globals** data table

# lmx (context)

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

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

# logs (context)

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

## lpeg (basic lua)

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

# luatex (context)

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

# lxml (context)

<b>addindex</b>	function	<b>getid</b>	function
<b>all</b>	function	<b>getindex</b>	function
<b>applyfunction</b>	function	<b>id</b>	function
<b>att</b>	function	<b>idsplitter</b>	userdata
<b>attribute</b>	function	<b>include</b>	function
<b>chainattribute</b>	function	<b>index</b>	function
<b>checkindex</b>	function	<b>info</b>	function
<b>collected</b>	function	<b>inlineverbatim</b>	function
<b>command</b>	function	<b>installsetup</b>	function
<b>concat</b>	function	<b>last</b>	function
<b>concatrange</b>	function	<b>load</b>	function
<b>content</b>	function	<b>loadbuffer</b>	function
<b>context</b>	function	<b>loaddata</b>	function
<b>convert</b>	function	<b>loaded</b>	table
<b>count</b>	function	<b>loadregistered</b>	function
<b>delete</b>	function	<b>main</b>	function
<b>direct</b>	function	<b>match</b>	function
<b>directives</b>	table	<b>name</b>	function
F after		<b>namespace</b>	function
F before		<b>nonspace</b>	function
F handle		<b>pos</b>	function
F load		<b>position</b>	function
F setup		<b>raw</b>	function
<b>displayverbatim</b>	function	<b>rawroot</b>	function
<b>doif</b>	function	<b>register</b>	function
<b>doifelse</b>	function	<b>registerentity</b>	function
<b>doifsetext</b>	function	<b>removesetup</b>	function
<b>doifnot</b>	function	<b>resetcdata</b>	function
<b>doifnottext</b>	function	<b>resetsetups</b>	function
<b>doiftext</b>	function	<b>resolvedentity</b>	function
<b>element</b>	function	<b>root</b>	function
<b>elements</b>	function	<b>serialize</b>	function
<b>entities</b>	data table	<b>setaction</b>	function
<b>filter</b>	function	<b>setcdata</b>	function
<b>filterlist</b>	function	<b>setcommandtonone</b>	function
<b>first</b>	function	<b>setcommandtotext</b>	function
<b>flush</b>	function	<b>setsetup</b>	function
<b>flushlinewise</b>	function	<b>snippet</b>	function
<b>flushsetups</b>	function	<b>sorters</b>	table
<b>flushspacewise</b>	function	F add	
<b>get_id</b>	function	F compare	

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

## math (basic lua)

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



# mathematics (context)

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

## mbox (context)

**parse** function  
**parse\_from** function  
**parse\_header** function  
**parse\_headers** function

**parse\_message** function  
**split\_headers** function  
**split\_mbox** function  
**split\_message** function

## md5 (extra lua)

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

<b>exor</b>	function
<b>hex</b>	function
<b>sum</b>	function
<b>sumhexa</b>	function

# metapost (context)

<b>analyzeplugins</b>	function	<b>lastlog</b>	string
<b>checkformat</b>	function	<b>load</b>	function
<b>checktexts</b>	function	<b>makempy</b>	table
<b>collapse</b>	boolean	N nofconverted	
<b>colorinitializer</b>	function	F processgraphics	
<b>convert</b>	function	<b>metafun</b>	table
<b>defaultformat</b>	string	F interpolate	
<b>defaultinstance</b>	string	F topath	
<b>defaultmethod</b>	string	<b>method</b>	number
<b>directrun</b>	function	<b>mptopdf</b>	table
<b>edefsxsy</b>	function	F convertmpstopdf	
<b>escaped</b>	function	N nofconverted	
<b>exectime</b>	table	<b>multipass</b>	boolean
<b>extensiondata</b>	data table	<b>n</b>	number
<b>filterclippath</b>	function	<b>optimize</b>	boolean
<b>finder</b>	function	<b>parse</b>	function
<b>flush</b>	function	<b>pdfliterals</b>	function
<b>flushers</b>	table	<b>pluginactions</b>	function
T pdf		<b>process</b>	function
F comment		<b>processplugins</b>	function
F flushfigure		<b>reducetogray</b>	boolean
F startfigure		<b>reporterror</b>	function
F stopfigure		<b>reset</b>	function
F textfigure		<b>resetlastlog</b>	function
<b>flushliteral</b>	function	<b>resetplugins</b>	function
<b>flushnormalpath</b>	function	<b>resettexttexts</b>	function
<b>flushreset</b>	function	<b>setextensions</b>	function
<b>format</b>	function	<b>setoutercolor</b>	function
<b>formatnumber</b>	function	<b>settext</b>	function
<b>getclippath</b>	function	<b>showlog</b>	boolean
<b>getextensions</b>	function	<b>tex</b>	table
<b>gettext</b>	function	F get	
<b>graphic</b>	function	F reset	
<b>graphic_base_pass</b>	function	F set	
<b>graphic_extra_pass</b>	function	<b>texerrors</b>	boolean
<b>instance</b>	function	<b>texttextsdata</b>	function
<b>intermediate</b>	table	<b>theclippath</b>	function
T actions		<b>totable</b>	function
F makempy		<b>unload</b>	function
B needed			

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

# noads (context)

**handlers**      table

- F check
- F collapse
- F families
- F italics
- F relocate
- F render
- F resize
- 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	<b>ligaturing</b>	function
<b>copy_list</b>	function	<b>mlist_to_hlist</b>	function
<b>count</b>	function	<b>new</b>	function
<b>current_attr</b>	function	<b>next</b>	function
<b>dimensions</b>	function	<b>prev</b>	function
<b>do_ligature_n</b>	function	<b>protect_glyphs</b>	function
<b>end_of_math</b>	function	<b>protrusion_skippable</b>	function
<b>family_font</b>	function	<b>remove</b>	function
<b>fields</b>	function	<b>set_attribute</b>	function
<b>first_character</b>	function	<b>slide</b>	function
<b>first_glyph</b>	function	<b>subtype</b>	function
<b>flush_list</b>	function	<b>tail</b>	function
<b>free</b>	function	<b>traverse</b>	function
<b>has_attribute</b>	function	<b>traverse_id</b>	function
<b>has_field</b>	function	<b>type</b>	function
<b>hpack</b>	function	<b>types</b>	function
<b>id</b>	function	<b>unprotect_glyphs</b>	function
<b>insert_after</b>	function	<b>unset_attribute</b>	function
<b>insert_before</b>	function	<b>usedlist</b>	function
<b>is_node</b>	function	<b>vpack</b>	function
<b>kerning</b>	function	<b>whatsits</b>	function
<b>last_node</b>	function	<b>write</b>	function
<b>length</b>	function		



# nodes (context)

<b>after</b>	function	F cleanuppage	
<b>aligned</b>	function	F export	
<b>astable</b>	function	F finalize	
<b>before</b>	function	F migrate	
<b>builders</b>	table	F protectglyphs	
F buildpage_filter		F stripping	
F vpack_filter		F unprotectglyphs	
<b>codes</b>	data table	<b>has_attribute</b>	function
<b>concat</b>	function	<b>idstosting</b>	function
<b>count</b>	function	<b>ignorablefields</b>	data table
<b>delete</b>	function	<b>injections</b>	table
<b>destinations</b>	table	F handler	
N attribute		F installnewkern	
T done		F setcursive	
F handler		F setkern	
T stack		F setmark	
		F setpair	
<b>dimensionfields</b>	data table	<b>installattributehandler</b>	function
<b>dir_is_pop</b>	data table	<b>is_display_math</b>	function
<b>dir_negation</b>	data table	<b>is_mirrored</b>	data table
<b>disccodes</b>	data table	<b>is_rotated</b>	data table
<b>discretionarycodes</b>	data table	<b>kerncodes</b>	data table
<b>endofmath</b>	function	<b>leftmarginwidth</b>	function
<b>fasthpack</b>	function	<b>lines</b>	table
<b>fields</b>	function	T boxed	
<b>fillcodes</b>	data table	F register	
<b>firstcharacter</b>	function	F setup	
<b>firstcharinbox</b>	function	F stage_one	
<b>firstglyph</b>	function	F stage_two	
<b>getattribute</b>	function	F stage_zero	
<b>gluecodes</b>	data table	D data	
<b>glyphcodes</b>	data table	F finalize	
<b>glyphdir_is_equal</b>	data table	F number	
<b>glyphdir_is_opposite</b>	data table	N scratchbox	
<b>glyphdir_is_orthogonal</b>	data table	<b>link</b>	function
<b>handlers</b>	table	<b>list</b>	function
F accessibility		<b>listablefields</b>	data table
F alignbackgrounds		<b>listcodes</b>	data table
F backgrounds		<b>listtutf</b>	function
F characters		<b>load</b>	function
F checkforleaks		<b>locate</b>	function
F checkglyphs			

<b>margincodes</b>	data table	F penalty	
<b>markers</b>	table	F register	
F get		F rightmarginkern	
<b>mathcodes</b>	data table	F rightskip	
<b>noadcodes</b>	data table	F rule	
<b>nodecodes</b>	data table	F shrink	
<b>packlist</b>	function	F special	
<b>pardir_is_equal</b>	data table	F stretch	
<b>pardir_is_opposite</b>	data table	F temp	
<b>pardir_is_parallel</b>	data table	F textdir	
<b>partextdir_is_equal</b>	data table	F usage	
<b>penaltycodes</b>	data table	T userids	
<b>plugindata</b>	table	N margins.inline	
S name		N splitters.one	
T namespace		N splitters.two	
N attribute		F userlist	
T droppers		F usernumber	
F freeze		F userstring	
F set		F usertokens	
F handler		F vlist	
F set		F zeroglue	
F processor		<b>print</b>	function
<b>pool</b>	table	<b>processors</b>	table
F baselineskip		B enabled	
F cleanup		F hpack_filter	
F disc		F post_linebreak_filter	
F fontkern		F pre_linebreak_filter	
F glue		F tracer	
F gluespec		<b>processwords</b>	function
F glyph		<b>reference</b>	function
F hlist		<b>references</b>	table
F kern		N attribute	
F latelua		T done	
F leftmarginkern		F handler	
F leftskip		T stack	
F lineskip		<b>remove</b>	function
F noad		<b>repackhlist</b>	function
F pdfannotation		<b>replace</b>	function
F pdfdestination		<b>report</b>	function
F pdfdirect		<b>rightmarginwidth</b>	function
F pdfliteral		<b>rules</b>	table
F pdfrestore		D data	
F pdfsave		F define	
F pdfsetmatrix		F enable	

F handler		<b>textdir_is_equal</b>	data table
<b>save</b>	function	<b>textdir_is_is</b>	data table
<b>serialize</b>	function	<b>textdir_is_opposite</b>	data table
<b>serializebox</b>	function	<b>textdir_is_parallel</b>	data table
<b>setattribute</b>	function	<b>tonodes</b>	function
<b>setattributes</b>	function	<b>tosequence</b>	function
<b>setunsetattributes</b>	function	<b>totable</b>	function
<b>shifts</b>	table	<b>toutf</b>	function
D data		<b>tracers</b>	table
F define		T characters	
F enable		F collect	
F handler		F equal	
<b>show</b>	function	F indices	
<b>showboxes</b>	function	F start	
<b>showcodes</b>	function	F string	
<b>showlist</b>	function	F unicodes	
<b>showsimplelist</b>	function	T colors	
<b>skipcodes</b>	data table	F reset	
<b>snapshots</b>	table	F set	
F getparameters		F setlist	
F getsamples		F fontchar	
F resetsamples		T frequencies	
F takesample		F register	
<b>somepenalty</b>	function	F start	
<b>somespace</b>	function	T steppers	
<b>stripping</b>	table	F check	
T glyphs		F codes	
F set		F features	
<b>striprange</b>	function	F font	
<b>tasks</b>	table	F glyphs	
F actions		F message	
F appendaction		F messages	
F disableaction		F nofsteps	
F disablegroup		F register	
F enableaction		F reset	
F enablegroup		F start	
F freeze		F stop	
F freezegroup		F stop	
F new		T transparencies	
F prependaction		F reset	
F removeaction		F set	
F restart		F setlist	
F showactions		<b>unsetattribute</b>	function
F table		<b>unsetattributes</b>	function

**visualizebox**

**visualizers**

F box

F handler

F markfonts

F setfont

function

table

F setlayer

F setvisual

**whatcodes**

**whatsitcodes**

**writable\_spec**

data table

data table

function

## number (context)

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

## os (basic lua)

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

## package (basic lua)

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

# pagebuilders (context)

<b>injections</b>	table	F finalize
F flushafter		F getlist
F flushbefore		F getrest
F save		F getsplit
<b>mixedcolumns</b>	table	F setsplit
F cleanup		



## pdf (basic tex)

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

# regimes (context)

<b>cleanup</b>	function	<b>process</b>	function
<b>disable</b>	function	<b>push</b>	function
<b>enable</b>	function	<b>toregime</b>	function
<b>pop</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

**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)

<b>BLOCKSIZE</b>	number	S connection
<b>_DEBUG</b>	boolean	S content-description
<b>_SETSIZE</b>	number	S content-disposition
<b>bind</b>	function	S content-encoding
<b>choose</b>	function	S content-id
<b>connect</b>	function	S content-language
<b>connect4</b>	function	S content-length
<b>connect6</b>	function	S content-location
<b>dns</b>	table	S content-md5
F getaddrinfo		S content-range
F gethostname		S content-transfer-encoding
F getnameinfo		S content-type
F tohostname		S date
F toip		S diagnostic-code
<b>ftp</b>	table	S dsn-gateway
S PASSWORD		S etag
N PORT		S expect
N TIMEOUT		S expires
S USER		S final-log-id
F command		S final-recipient
F get		S from
F open		S host
F put		S if-match
<b>gettime</b>	function	S if-modified-since
<b>headers</b>	table	S if-none-match
T canonic		S if-range
S accept		S if-unmodified-since
S accept-charset		S in-reply-to
S accept-encoding		S keywords
S accept-language		S last-attempt-date
S accept-ranges		S last-modified
S action		S location
S age		S max-forwards
S allow		S message-id
S alternate-recipient		S mime-version
S arrival-date		S original-envelope-id
S authorization		S original-recipient
S bcc		S pragma
S cache-control		S proxy-authenticate
S cc		S proxy-authorization
S comments		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>register</b>	function
<b>elapsed</b>	function	<b>resettiming</b>	function
<b>elapsedindeed</b>	function	<b>runtime</b>	function
<b>elapsedseconds</b>	function	<b>savefmtstatus</b>	function
<b>elapsedtime</b>	function	<b>show</b>	function
<b>enable</b>	boolean	<b>starttiming</b>	function
<b>formatruntime</b>	function	<b>stoptiming</b>	function
<b>hastiming</b>	function	<b>threshold</b>	number
<b>memused</b>	function	<b>timed</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 %-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 %-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 %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,
F %s - -%s
F %s ->%s ->%s
F %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 MpSh%s
F Tr%s
F U+%04X:%s
F [ %t ]
F [%q]={
F [%s]=
F [%s]=%l,
F [%s]=%q,
F [%s]=%s,
F [%s][%s]
F \convertnumber{%s}{%s}
F _bpdf_(%s,%s,%s,'%s')
T_extensions_
S chruni
S font:features
S font:name
S lua
S tex
S unichr
S xml
F _plib_.b_col(%q)
F _plib_.b_region(%q)
F _plib_.e_col()
F _plib_.e_region(%s)
F _plib_.enhance(%q)
S_preamble_
S_type_
F b:%s
F buffer.%s
F c:%s:%s:%s:%s
F chem_%s%s(%s,%s,"\chemicaltext{%s}");
F chem_%s%s(%s,%s,%s,%s,%s);
F chem_%s(%s,%s,"");
F chem_%s(%s,%s,%s);
```

```
F chem_c%s(%s,%s,"");  
F chem_set(%s);  
F chem_start_structure(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,  
F chem_symbol("\chemicalsymbol[equilibrium]{%s}{%s}");  
F chem_symbol("\chemicalsymbol[gives]{%s}{%s}");  
F chem_symbol("\chemicalsymbol[mesomeric]{%s}{%s}");  
F chem_symbol("\chemicaltext{%s}");  
F chem_trace_boundingbox := %l ;  
F dup %s mul exch dup %s mul exch %s mul  
F dup %s mul exch dup %s mul exch dup %s mul exch %s mul  
F e:%s  
F flushing realpage %s, userpage %s  
F jobname %a, input %a, result %a  
F lang-frq-%s.lua  
F language %a is active  
F mfun_tt_w[%i] := %f ; mfun_tt_h[%i] := %f ; mfun_tt_d[  
F multilocs[%s] := %s ; multikind[%s] := "%s" ; multipars  
F multiregs[%s] := (%--t--cycle) shifted - %s ;  
F overline-%H  
F p:%s  
F p:s:s:s:s  
F path multiregs[], multipars[], multibox ; string multik  
F path posboxes[], posregions[] ; numeric pospages[] ; nu  
F pdf: q 1 0 %f 1 0 0 cm  
F pospages[%s] := %s ; posboxes[%s] := (%p,%p)--(%p,%p)--  
F processed mkvi file %a, delta %s  
F q %f %f %f %f %f %f %f cm  
F r:s:s:s:s  
F region:%s  
F return {  
F return {%t}  
F s:%s  
F setbounds currentpicture to multibox ;  
F unknown reference %a  
F using file %a  
F visualizers.%s  
F w:%s  
F {  
F }
```

<b>atch</b>	<b>function</b>
<b>ub</b>	<b>function</b>
<b>_boolean</b>	<b>function</b>
<b>_empty</b>	<b>function</b>
<b>self</b>	<b>function</b>

<b>len</b>	function	<b>tformat</b>	function
<b>limit</b>	function	<b>toboolean</b>	function
<b>longtostring</b>	function	<b>tocontext</b>	function
<b>lower</b>	function	<b>todimen</b>	function
<b>match</b>	function	<b>topattern</b>	function
<b>nspaces</b>	table	<b>totable</b>	function
<b>quote</b>	function	<b>toutf</b>	function
<b>quoted</b>	function	<b>tracedchar</b>	function
<b>rep</b>	function	<b>tracedchars</b>	table
<b>reverse</b>	function	<b>unquote</b>	function
<b>split</b>	function	<b>unquoted</b>	function
<b>splitlines</b>	function	<b>upper</b>	function
<b>splitup</b>	function	<b>utfcharacters</b>	function
<b>strip</b>	function	<b>utfvalues</b>	function
<b>sub</b>	function	<b>valid</b>	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	
<b>itemgroups</b>	<b>table</b>
F maxwidth	
F nofitems	
F register	
<b>lists</b>	<b>table</b>
F addto	
F analyze	
B autoreorder	
D cached	
D collected	
F discard	
F enhance	
T enhancers	
F filter	
F filtercollected	
F formulainumber	
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	
F sectionnumber	
F size	
F title	
D tobesaved	
F userdata	

F uservalue	
<b>marks</b>	<b>table</b>
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	
<b>notes</b>	<b>table</b>
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	
<b>pages</b>	<b>table</b>

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

## references

## table

F analyze  
F checkedfile  
F checkedfileorurl  
F checkedprogram  
F checkedrealpage  
F checkedurl  
D collected  
U componentsplitter  
F currentmetadata  
F currentorder  
D currentset  
F define  
D defined  
D derived  
F enableinteraction  
F enhance  
D executors  
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  
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 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 numberatdepth	
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		F set	
F define		F setblock	
F enhance		F setchecker	
F extend		F setlevel	
F filter		F setnumber	
F filtercollected		F somelevel	
F finalize		F structuredata	
F flush		F title	
F prepare		D tobesaved	
F process		F typesetnumber	
F sort		F userdata	
F store		B verbose	
D tobesaved		<b>sets</b>	<b>table</b>
F unique		F define	
F userdata		F get	
<b>sections</b>	<b>table</b>	F getall	
F autodepth		D setlist	
F cct		<b>specials</b>	<b>table</b>
D collected		D collected	
F current		F retrieve	
F currentblock		F store	
F currentid		D tobesaved	
F currentlevel		<b>synonyms</b>	<b>table</b>
F depthnumber		F analyzed	
F finddata		D collected	
F findnumber		F compare	
F fullnumber		F define	
F getcurrentlevel		F filter	



F finalize  
F flush  
F meaning  
F prepare  
F process  
F register  
F registerused  
F sort  
F synonym  
D tobesaved

## tags

T data  
F detailedtag  
F getid  
F handler  
D labels  
F last  
F lastinchain  
T metadata  
D properties

## table

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>print</b>	function
<b>append</b>	function	<b>remove</b>	function
<b>are_equal</b>	function	<b>reverse</b>	function
<b>autokey</b>	function	<b>reversed</b>	function
<b>compact</b>	function	<b>save</b>	function
<b>concat</b>	function	<b>sequenced</b>	function
<b>contains</b>	function	<b>serialize</b>	function
<b>copy</b>	function	<b>setmetatablecall</b>	function
<b>count</b>	function	<b>setmetatableindex</b>	function
<b>derive</b>	function	<b>setmetatablekey</b>	function
<b>deserialize</b>	function	<b>setmetatablenewindex</b>	function
<b>drop</b>	function	<b>sort</b>	function
<b>fastcopy</b>	function	<b>sorted</b>	function
<b>fastserialize</b>	function	<b>sortedhash</b>	function
<b>flattened</b>	function	<b>sortedhashkeys</b>	function
<b>fromhash</b>	function	<b>sortedkeys</b>	function
<b>getmetatablekey</b>	function	<b>sortedpairs</b>	function
<b>has_one_entry</b>	function	<b>strip</b>	function
<b>identical</b>	function	<b>sub</b>	function
<b>imerge</b>	function	<b>swapped</b>	function
<b>imerged</b>	function	<b>tocontext</b>	function
<b>insert</b>	function	<b>tocsv</b>	function
<b>is_empty</b>	function	<b>tofile</b>	function
<b>keys</b>	function	<b>tohandle</b>	function
<b>load</b>	function	<b>tohash</b>	function
<b>loweredkeys</b>	function	<b>toxml</b>	function
<b>merge</b>	function	<b>twowaymapper</b>	function
<b>merged</b>	function	<b>unique</b>	function
<b>mirrored</b>	function	<b>unnest</b>	function
<b>pack</b>	function	<b>unpack</b>	function
<b>prepend</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>tprint</b>	function
<b>skip</b>	table	<b>trackers</b>	data table
<b>sp</b>	function	<b>txtcatcodes</b>	number
<b>sprint</b>	function	<b>type</b>	function
<b>systemmodes</b>	data table	<b>uccode</b>	table
<b>texcatcodes</b>	number	<b>uniformdeviate</b>	function
<b>toks</b>	table	<b>uprint</b>	function
<b>tpacatcodes</b>	number	<b>vrbcacodes</b>	number
<b>tpbcacodes</b>	number	<b>write</b>	function

## texconfig (basic tex)

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

## texio (basic tex)

`write` function

`write_nl` function

# token (basic tex)

<b>command_id</b>	function	<b>get_next</b>	function
<b>command_name</b>	function	<b>is_activechar</b>	function
<b>create</b>	function	<b>is_expandable</b>	function
<b>csname_id</b>	function	<b>is_protected</b>	function
<b>csname_name</b>	function	<b>lookup</b>	function
<b>expand</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>prnterror</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>name</b>	string
<b>default</b>	function	<b>register</b>	function
<b>disable</b>	function	<b>report</b>	function
<b>dumphashtofile</b>	function	<b>savehash</b>	function
<b>enable</b>	function	<b>show</b>	function
<b>list</b>	function	<b>value</b>	function

# typesetters (context)

## **alignments** table

F handler

F set

## **breakpoints** table

N attribute

F define

F handler

D mapping

T methods

T numbers

F set

F setreplacement

## **cases** table

T actions

F handler

F register

F set

## **characters** table

F handler

## **checkers** table

F handler

F reset

F set

## **cleaners** table

F handler

F set

## **digits** table

T actions

N attribute

F handler

F set

## **directions** table

F handler

F process

F set

## **fast\_hpack** function

## **hpack** function

## **italics** table

F forcevariant

F handler

F reset

F set

## **kerns** table

D factors

F handler

B keepeligature

B keepetogether

D mapping

F set

## **margins** table

F finalhandler

F globalhandler

F ha

F localhandler

F save

## **paragraphs** table

N attribute

T droppers

F freeze

F set

F handler

F set

## **processors** table

F apply

F register

F reset

F split

F startapply

F stopapply

F stripped

F toString

## **spacings** table

N attribute

F define

F handler

D mapping

T numbers

T frenchpunctuation

T characters

S name

N number

F reset

F set	F initialize_construct
F setup	F initialize_reflow_height
<b>tonodes</b>	F initialize_reflow_width
<b>vpack</b>	F next_row
<b>xtables</b>	F reflow_height
F cleanup	F reflow_width
F construct	F set_construct
F create	F set_reflow_height
F flush	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 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\_utf8  
F values  
F xstring

## url (context)

**addscheme** function  
**barepath** function  
**construct** function  
**escape** function  
**filename** function

**hashed** function  
**hasscheme** function  
**query** function  
**split** function  
**toquery** 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  
T patterns  
U settings\_to\_array  
U settings\_to\_hash\_a  
U settings\_to\_hash\_b  
U settings\_to\_hash\_c  
U unittotex  
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 unittotex  
F unittoxml

## report function

## sequencers table

F appendaction  
F appendgroup  
F compile  
F disableaction  
F disablegroup  
F enableaction  
F enablegroup  
D functions



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

## vf (context)

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

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

## visualizers (context)

<b>escapepatterns</b>	data table	<b>signal</b>	string
<b>getvisualizer</b>	function	<b>signalpattern</b>	userdata
<b>load</b>	function	<b>specifications</b>	data table
<b>makenested</b>	function	<b>visualize</b>	function
<b>makepattern</b>	function	<b>visualizebuffer</b>	function
<b>newgrammar</b>	function	<b>visualizefile</b>	function
<b>newhandler</b>	function	<b>visualizestring</b>	function
<b>parsedxml</b>	function	<b>write</b>	function
<b>pattern</b>	function	<b>writeargument</b>	function
<b>register</b>	function	<b>writedefault</b>	function
<b>registerescapecommand</b>	function	<b>writeemptyline</b>	function
<b>registerescapeline</b>	function	<b>writenewline</b>	function
<b>registerescapepattern</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>root</b>	function
<b>nodesettostring</b>	function	<b>save</b>	function
<b>originalload</b>	function	<b>selection</b>	function
<b>package</b>	function	<b>separate</b>	function
<b>parent</b>	function	<b>serialize</b>	function
<b>parsedentitylpeg</b>	userdata	<b>setcdata</b>	function
<b>pihandlers</b>	table	<b>sethandlersfunction</b>	function
<b>placeholders</b>	table	<b>setproperty</b>	function
F unknown_any_entity		<b>settings</b>	function
F unknown_dec_entity		<b>specialhandler</b>	table
F unknown_hex_entity		<b>sprint</b>	function
<b>position</b>	function	<b>string</b>	function
<b>privatecodes</b>	table	<b>strip</b>	function
<b>privatetoken</b>	function	<b>strip_whitespace</b>	function
<b>process</b>	function	<b>stripelement</b>	function
<b>process_attributes</b>	function	<b>stripleadingspaces</b>	function
<b>process_elements</b>	function	<b>table</b>	function
<b>processattributes</b>	function	<b>text</b>	function
<b>profiled</b>	table	<b>textonly</b>	function
<b>raw</b>	function	<b>texttocdata</b>	function
<b>registerentity</b>	function	<b>tocdata</b>	function
<b>registers</b>	function	<b>toelement</b>	function
<del>remap_name</del>	<del>function</del>	<b>tostring</b>	function
<del>remap_namespace</del>	<del>function</del>	<b>toxml</b>	function
<del>remap_tag</del>	<del>function</del>	<b>tprint</b>	function
<b>remapname</b>	function	<b>traverse</b>	function
<b>remapnamespace</b>	function	<b>unescaped</b>	function
<b>remaptag</b>	function	<b>unprivatized</b>	function
<b>renamespace</b>	function	<b>withelement</b>	function
<b>replace</b>	function	<b>withelements</b>	function
<b>replace_element</b>	function	<b>wrap</b>	function
<b>resolvens</b>	function	<b>xmlns</b>	table

## zip (extra lua)

**archives**

table

**close**

function

**closearchive**

function

**open**

function

**openarchive**

function

**openfile**

function

**registeredfiles**

table

**type**

function

## zlib (extra lua)

**adler32**        function  
**compress**     function  
**compressobj**   function  
**crc32**        function

**decompress**    function  
**decompressobj** function  
**version**       function