

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

# ConTEXt MkIV

# global (alias: \_G)

1	table	ipairs	function
arg	table	job	table
assert	function	lang	table
attributes	table	languages	table
backends	table	layouts	table
beginpage	function	lfs	table
bibtex	table	libraries	table
blobs	table	lmtx	table
boolean	table	load	function
buffers	table	loadfile	function
builders	table	loadstring	function
caches	table	logs	table
callback	table	lpdf	table
callbacks	table	lpeg	table
catcodes	table	ltn12	table
characters	table	lua	table
chemicals	table	luatex	table
collectgarbage	function	lxml	table
commands	table	math	table
containers	table	mathematics	table
context	function	md5	table
converters	table	metapost	table
coroutine	table	mime	table
debug	table	module	function
dimen	function	moduledata	table
dir	table	modules	table
directives	table	mplib	table
document	table	newproxy	function
documentdata	table	next	function
dofile	function	noads	table
endpage	function	node	table
environment	table	nodes	table
epdf	table	number	table
error	function	os	table
experiments	table	outputpagestree	function
figures	table	package	table
file	table	pairs	function
floats	table	parametersets	table
font	table	pcall	function
fontloader	table	pdf	table
fonts	table	print	function
gcinfo	function	profiler	table
getfenv	function	protect	function
getmetatable	function	rawequal	function
global	table	rawget	function
gzip	table	rawset	function
img	table	regimes	table
inspect	function	require	function
interactions	table	resolvers	table
interfaces	table	scripts	table
io	table	select	function

<code>set</code>	<code>table</code>	<code>tokens</code>	<code>table</code>
<code>setfenv</code>	<code>function</code>	<code>tonumber</code>	<code>function</code>
<code>setmetatable</code>	<code>function</code>	<code>tostring</code>	<code>function</code>
<code>socket</code>	<code>table</code>	<code>tracers</code>	<code>table</code>
<code>sorters</code>	<code>table</code>	<code>trackers</code>	<code>table</code>
<code>statistics</code>	<code>table</code>	<code>type</code>	<code>function</code>
<code>status</code>	<code>table</code>	<code>typesetters</code>	<code>table</code>
<code>storage</code>	<code>table</code>	<code>unicode</code>	<code>table</code>
<code>streams</code>	<code>table</code>	<code>unpack</code>	<code>function</code>
<code>string</code>	<code>table</code>	<code>url</code>	<code>table</code>
<code>structures</code>	<code>table</code>	<code>utf</code>	<code>table</code>
<code>table</code>	<code>table</code>	<code>utilities</code>	<code>table</code>
<code>tex</code>	<code>table</code>	<code>visualizers</code>	<code>table</code>
<code>texconfig</code>	<code>table</code>	<code>xml</code>	<code>table</code>
<code>texio</code>	<code>table</code>	<code>xpcall</code>	<code>function</code>
<code>toboollean</code>	<code>function</code>	<code>zip</code>	<code>table</code>
<code>tocontext</code>	<code>function</code>	<code>zlib</code>	<code>table</code>
<code>token</code>	<code>table</code>		

# 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 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 hsvtorgb  
F hsvtorgb  
F iccprofile  
F isblack  
N main  
S model  
F mpcolor  
U none  
F register  
D registered  
F registerspotcolor  
F rgb  
F rgbtocmyk  
F rgbtorgb  
F rgbtohsv  
N selector  
F setmodel  
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

F enable

F handler

F register

D registered

**numbers**           data table

**ofnode**            function

**private**           function

**states**            table

F disabletriggering

F enabletriggering

F finalize

F initialize

F process

F selective

F stacked

**transparencies**   table

N attribute

D data

F enable

F forcesupport

F handler

U none

F register

D registered

B supported

B triggering

F value

D values

<b>unsetvalue</b>	number	D listwise
<b>viewerlayers</b>	table	F register
N attribute		D registered
D data		D scopes
F define		F setfeatures
F enable		F start
F forcesupport		F stop
F handler		B supported
B hasorder		D values

backends (context)

<b>codeinjections</b>	table	F setxmpfile
<b>current</b>	string	F supportedformats
<b>defaults</b>	table	F useviewerlayer
T codeinjections		F validfield
T nodeinjections		F validfieldcategory
T registrations		F validfieldset
D tables		S comment
<b>install</b>	function	T nodeinjections
<b>nodeinjections</b>	table	F addtags
<b>nothing</b>	function	F attachfile
<b>pdf</b>	table	F cmykcolor
T codeinjections		F comment
F addbookmarks		F destination
F adddocumentinfo		F effect
F addtransparencygroup		F graycolor
F attachmentid		F injectbitmap
F clonefield		F insertmovie
F definefield		F insertsound
F definefieldset		F insertswf
F defineviewerlayer		F insertu3d
F embedfile		F knockout
F enabletags		F negative
F finalizepage		F overprint
F finishreference		F positive
F getdefaultfieldvalue		F reference
F getfieldcategory		F rgbcolor
F getfieldset		F spotcolor
F getformatoption		F startlayer
F getoutputfilename		F stoplayer
F insertrenderingwindow		F switchlayer
F mergereferences		F transparency
F mergeviewerlayers		F typesetfield
F prerollreference		T registrations
F presetsymbol		F cmykindexcolor
F presetsymbollist		F cmykspotcolor
F processrendering		F grayindexcolor
F registerdocumentcloseaction		F grayspotcolor
F registerdocumentopenaction		F rgbindexcolor
F registeredsymbol		F rgbspotcolor
F registerpagecloseaction		F spotcolorname
F registerpageopenaction		F transparency
F registersymbol		T tables
F setfieldcalculationset		T vfspecials
F setfigurealternative		T black
F setfigurecolorspace		T blue
F setfiguremask		T green
F setformat		T red
F setformsmethod		F startslant
F setpagetransition		T stopslant
F setupcanvas		<b>registrations</b>
F setupidentity		<b>tables</b>
		table
		table

# bibtex (context)

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



# blobs (context)

<b>append</b>	function	<b>pack</b>	function
<b>new</b>	function	<b>write</b>	function

# boolean (context)

`tocontext`    `function`  
`tonumber`    `function`

# buffers (context)

append	function	F define	
assign	function	F hassomecontent	
collectcontent	function	F next	
erase	function	F place	
exists	function	F reset	
getcontent	function	F save	
getlines	function	raw	function
parallel	table		

# builders (context)

**kernel**            **table**

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

**paragraphs** **table**

  T constructors  
    N attribute  
    F disable  
    F enable  
    F handler  
    T methods  
      F default  
      F oneline  
  D names  
  D numbers  
  F register  
  F set  
  T solutions  
    T splitters  
      F define  
      F disable

  F enable

  F optimize

  F setup

  F split

**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

## cache (context)

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

## callback (basic tex)

<code>find</code>	function
<code>list</code>	function
<code>register</code>	overloaded function

# callbacks (context)

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

## catcodes (context)

<code>names</code>	data table
<code>numbers</code>	data table
<code>register</code>	function



characters (context)

<b>activeoffset</b>	number	<b>is_letter</b>	data table
<b>adobename</b>	function	<b>is_spacing</b>	data table
<b>bidirectional</b>	data table	<b>lcchars</b>	data table
<b>blocks</b>	data table	<b>lccode</b>	function
<b>casemap</b>	table	<b>lccodes</b>	data table
<b>categories</b>	data table	<b>lettered</b>	function
<b>category</b>	function	<b>lower</b>	function
<b>categorytags</b>	data table	<b>makeactive</b>	function
<b>contextname</b>	function	<b>math</b>	table
<b>data</b>	data table	<b>mathpairs</b>	data table
<b>define</b>	function	<b>ranges</b>	data table
<b>description</b>	function	<b>remapentity</b>	function
<b>descriptions</b>	data table	<b>setcodes</b>	function
<b>directions</b>	data table	<b>shape</b>	function
<b>encodes</b>	data table	<b>shaped</b>	function
<b>fallbacks</b>	data table	<b>shchars</b>	data table
<b>filters</b>	data table	<b>shcodes</b>	data table
<b>flush</b>	function	<b>specialchars</b>	data 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		
<b>graphemes</b>	data table		
<b>hangul</b>	table		
F decomposed			
F description			
F leadconsonant			
T remapped			
<b>is_character</b>	data table	<b>tonumber</b>	function
<b>is_command</b>	data table	<b>ucchars</b>	data table
		<b>uccode</b>	function
		<b>uccodes</b>	data table
		<b>unicodechar</b>	function
		<b>upper</b>	function

## chemicals (context)

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

## commands (context)

Alphabetic	function	definelinkedlist	function
Character	function	definemarking	function
Characters	function	definemultitonecolor	function
MPd	function	defineparallel	function
MPh	function	defineprocesscolor	function
MPll	function	definespotcolor	function
MPlr	function	definetransparency	function
MPp	function	defineviewerlayer	function
MPplus	function	defrostrandomseed	function
MPpos	function	disableregime	function
MPrest	function	doanalyzeframedbox	function
MPul	function	doif	function
MPur	function	doifblackelse	function
MPw	function	doifcommonelse	function
MPx	function	doifdimenstringelse	function
MPxy	function	doifdrawingblackelse	function
MPy	function	doifelse	function
Romannumerals	function	doifelsebuffer	function
abjadnodotnumerals	function	doifelsecurrentfonthasfeature	function
abjadnumerals	function	doifelsemarking	function
addff	function	doifelseparallel	function
addfs	function	doifelsespaces	function
addlinklistelement	function	doifelsevisualizer	function
alphabetic	function	doiffielddcategoryelse	function
applytochars	function	doiffielddelse	function
applytowords	function	doiffielddsetelse	function
assignbuffer	function	doiffiledefinedelse	function
autonextspace	function	doiffileexistelse	function
auto setups	function	doifinputfileelse	function
boolcase	function	doifinsetelse	function
character	function	doifleapyearelse	function
characters	function	doifnot	function
checkedconversion	function	doifolderversionelse	function
checkfilename	function	doifoverlappingelse	function
chineseallnumerals	function	doifparentfileelse	function
chinesecapnumerals	function	doifpositionelse	function
chinesenumerals	function	doifpositionsonsamepageelse	function
cleanfontname	function	doifpositionsonthispageelse	function
clonefield	function	doifsavedfloatelse	function
collecthelp	function	doifurldefinedelse	function
colorcomponents	function	doprocесstypescriptfile	function
copyposition	function	doreadfile	function
currentdate	function	doreshapeframedbox	function
currentregime	function	elapsedtime	function
dayname	function	enablecolor	function
defineattribute	function	enablecolorintents	function
definebibtexsession	function	enableregime	function
defineconversion	function	enabletransparency	function
definefield	function	enhancelinkedlist	function
definefieldset	function	erasebuffer	function
defineintermediatecolor	function	featureattribute	function

feedback	function	mpcolor	function
fetchallmarks	function	nbfs	function
fetchonemark	function	nextparallel	function
fetchtwomarks	function	nofdays	function
firstinlist	function	number	function
fontchar	function	octnumber	function
fontlookupgetkey	function	octstringtonumber	function
fontlookupgetkeyofindex	function	ordinal	function
fontlookupinitialize	function	percentageof	function
fontlookupnoffound	function	placeparallel	function
formatcolor	function	preparebibtexsession	function
formatgray	function	preparedfile	function
freezerandomseed	function	presetsymbolist	function
getbuffer	function	presettabulate	function
getbuffercxtlua	function	processbuffer	function
getbuffermkvi	function	processfile	function
getdefaultfieldvalue	function	rawcharacter	function
getfieldcategory	function	readfilename	function
getmarking	function	registerattachment	function
getprivateattribute	function	registerbibtexentry	function
getrandomcounta	function	registerbibtexfile	function
getrandomcountb	function	registerbuttons	function
getrandomseed	function	registercolor	function
grabbuffer	function	registercolorintent	function
helpaction	function	registerhelp	function
helpreference	function	registermaintextcolor	function
hexstringtonumber	function	registersoundclip	function
hour	function	registertransparency	function
hyphenatedlist	function	relatemarking	function
hyphenatedurl	function	replacepospxywhd	function
D characters		resetfontfeature	function
N lefthyphenmin		resetmarking	function
N righthyphenmin		resetparallel	function
F setcharacters		resettimer	function
insertattachment	function	romannumerals	function
insertcomment	function	runbuffer	function
insertfield	function	savebuffer	function
insertrenderingwindow	function	saveparallel	function
insertsoundclip	function	second	function
isleapyear	function	setclosedocumentaction	function
lastexistingfile	function	setclosepageaction	function
lchexnumber	function	setcolormodel	function
lchexnumbers	function	setfontfeature	function
leapyear	function	setformat	function
loadctxprelist	function	setformsmethod	function
loadexamodes	function	setmarking	function
locatefilepath	function	setopendocumentaction	function
logoptionfile	function	setopenpageaction	function
maxreadlevel	function	setpagetransition	function
minute	function	setrandomseed	function
molecule	function	setrastercolor	function
month	function	setrealign	function
monthmnm	function	setreferencearguments	function
monthname	function	setreferenceoperation	function

setupcanvas	function	transparencycomponents	function
setupfontexpansion	function	triggereffect	function
setupfontprotrusion	function	triggernegative	function
setupidentity	function	typebuffer	function
setxmpfile	function	typefile	function
showchardata	function	typestring	function
showfontparameters	function	uchexnumber	function
showhyphenatedinlist	function	uchexnumbers	function
splitfilename	function	unicodechar	function
splitfiletype	function	updatefilenames	function
spotcolorname	function	usecolors	function
spotcolorparent	function	uselibrary	function
spotcolorvalue	function	usemodules	function
startregime	function	usepath	function
stopregime	function	usesubpath	function
subff	function	usesymbols	function
subfs	function	usezipfile	function
synchronizemarking	function	weekday	function
testcase	function	weekdayname	function
textime	function	writestatus	function
thesanitizedfilename	function	year	function

## containers (context)

<code>cleanname</code>	function
<code>content</code>	function
<code>define</code>	function
<code>is_usable</code>	function

<code>is_valid</code>	function
<code>read</code>	function
<code>usecache</code>	boolean
<code>write</code>	function

## converters (context)

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

## coroutine (basic lua)

<code>coco</code>	boolean	<code>running</code>	function
<code>create</code>	function	<code>status</code>	function
<code>cstacksize</code>	function	<code>wrap</code>	function
<code>resume</code>	function	<code>yield</code>	function



## debug (basic lua)

<code>debug</code>	function
<code>getfenv</code>	function
<code>gethook</code>	function
<code>getinfo</code>	function
<code>getlocal</code>	function
<code>getmetatable</code>	function
<code>getregistry</code>	function

<code>getupvalue</code>	function
<code>setfenv</code>	function
<code>sethook</code>	function
<code>setlocal</code>	function
<code>setmetatable</code>	function
<code>setupvalue</code>	function
<code>traceback</code>	function

# dir (context)

collectpattern	function	globpattern	function
current	function	ls	function
expandname	function	makedirs	function
glob	function	mkdirs	function
globfiles	function		

# directives (context)

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

# document (context)

arguments	data table	setargument	function
files	table	setdefaultargument	function
getargument	function	setfilename	function
getfilename	function		

## environment (context)

<code>argument</code>	function	<code>luafilechunk</code>	function
<code>arguments</code>	data table	<code>originalarguments</code>	data table
<code>engineflags</code>	data table	<code>outputfilename</code>	string
<code>files</code>	table	<code>ownbin</code>	string
<code>homedir</code>	string	<code>ownname</code>	string
<code>initex</code>	boolean	<code>ownpath</code>	string
<code>initializearguments</code>	function	<code>rawarguments</code>	data table
<code>inputfilebarename</code>	string	<code>reconstructcommandline</code>	function
<code>inputfilename</code>	string	<code>setargument</code>	function
<code>inputfilesuffix</code>	string	<code>splitarguments</code>	function
<code>jobfilename</code>	string	<code>texfile</code>	function
<code>jobfilesuffix</code>	string	<code>texmfos</code>	string
<code>loadedluacode</code>	function	<code>texos</code>	string
<code>loadluafile</code>	function	<code>texroot</code>	string
<code>luafile</code>	function		

# epdf (extra tex)

Annot	function	Object	function
Annots	function	PDFRectangle	function
Array	function	open	function
Dict	function		

# experiments (context)

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

# figures (context)

<b>bases</b>	table	<b>get</b>	function
B enabled		<b>hash</b>	function
F find		<b>identifiers</b>	data table
T found		<b>identify</b>	function
T list		<b>include</b>	function
F locate		<b>includers</b>	data table
F use		<b>loaded</b>	data table
T used		<b>localpaths</b>	data table
<b>bitmapimage</b>	function	<b>mergegoodies</b>	function
<b>boxnumber</b>	number	<b>nofprocessed</b>	number
<b>cachepaths</b>	data table	<b>order</b>	data table
<b>check</b>	function	<b>paths</b>	data table
<b>checkers</b>	data table	<b>patterns</b>	data table
<b>converters</b>	data table	<b>pop</b>	function
<b>current</b>	function	<b>preferquality</b>	boolean
<b>defaultdepth</b>	number	<b>programs</b>	data table
<b>defaultheight</b>	number	<b>push</b>	function
<b>defaultsearch</b>	boolean	<b>registerpattern</b>	function
<b>defaultwidth</b>	number	<b>registersuffix</b>	function
<b>done</b>	function	<b>scale</b>	function
<b>dummy</b>	function	<b>setlookups</b>	function
<b>exists</b>	data table	<b>setpaths</b>	function
<b>exists</b>	function	<b>suffixes</b>	data table
<b>formats</b>	data table	<b>tprint</b>	function
<b>found</b>	data table	<b>used</b>	data table



## file (basic lua)

<code>addsuffix</code>	function	<code>joinpath</code>	function
<code>basename</code>	function	<code>loadchecksum</code>	function
<code>checksum</code>	function	<code>nameonly</code>	function
<code>collapsepath</code>	function	<code>needs Updating</code>	function
<code>copy</code>	function	<code>readdata</code>	function
<code>dirname</code>	function	<code>removesuffix</code>	function
<code>expandname</code>	function	<code>replacesuffix</code>	function
<code>extname</code>	function	<code>robustname</code>	function
<code>is_qualified_path</code>	function	<code>savechecksum</code>	function
<code>is_readable</code>	function	<code>savadata</code>	function
<code>is_rootbased_path</code>	function	<code>splitname</code>	function
<code>is_writable</code>	function	<code>splitpath</code>	function
<code>isreadable</code>	function	<code>strip</code>	function
<code>iswritable</code>	function	<code>suffix</code>	function
<code>join</code>	function		

# floats (context)

analysemethod	function	resave	function
collect	function	save	function
consult	function	stacked	function
flush	function	thecheckedpagefloat	function
pop	function	thestacked	function
push	function	thevar	function

## font (basic tex)

<code>current</code>	function
<code>define</code>	function
<code>each</code>	function
<code>fonts</code>	table
<code>frozen</code>	function
<code>getfont</code>	function

<code>id</code>	function
<code>max</code>	function
<code>nextid</code>	function
<code>read_tfm</code>	function
<code>read_vf</code>	function
<code>setfont</code>	function

## fontloader (extra tex)

<code>apply_afmfile</code>	function
<code>apply_featurefile</code>	function
<code>close</code>	function
<code>fields</code>	function
<code>fullinfo</code>	function

<code>info</code>	function
<code>open</code>	function
<code>to_table</code>	function
<code>totable</code>	function

# fonts (context)

**analyzers**            table

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

**checkers**            table

- B delete
- F enable
- B enabled
- F missing

**cid**                   table

- F getmap
- F loadfile

**collections**        table

- F define
- T definitions
- F message
- F prepare
- F process
- F reset
- F stage\_one
- F stage\_two
- T vectors

**constructors**       table

- F applymanipulators
- F assignmathparameters
- B autocleanup
- D cache
- F calculatescale
- F checkedfeatures
- F checkedfilename
- F cleanuptable
- F collectprocessors
- D designsizes
- D dontembed
- N factor
- F finalize
- F getfeatureaction
- F hashfeatures
- F hashinstance
- T hashmethods
  - F normal
  - F virtual
- F initializefeatures
- D loadedfonts
- T mathactions
- S namemode
- F newfeatures
- N privateoffset
- F readanddefine
- F registerfeature

- B resolvevirtualtoo

- F scale

- F scaled

- F setfactor

- F setname

- N version

**current**              function

**currentid**           function

**definers**            table

- F addlookup

- F analyze

- F applypostprocessors

- F current

- S defaultlookup

- F define

- F getspecification

- F loadfont

- F makespecification

- T methods

- F install

- D variants

- F read

- F register

- F registered

- F registersplit

- F resetnullfont

- F resolve

- T resolvers

- F file

- F name

- F spec

- F stage\_one

- F stage\_two

**definetypeface**    function

**encodings**           table

- T agl

- D cache

- F is\_known

- D known

- F load

- F make\_unicode\_vector

- D math

- N version

**expansions**        data table

**formats**            data table

**goodies**            table

- T colorschemes

- F coloring

- T data

- F enable

- F get

- F getcompositions
- T list
  - F compositions
  - F expansions
  - F featureset
  - F files
  - F mathematics
  - F protrusions
  - F solutions
  - F typefaces
- F prepare\_features
- F register
- F report
- handlers**            table
  - T afm
    - B addkerns
    - B addligatures
    - B addtexligatures
    - B autoprefixed
    - D cache
    - D features
    - F load
    - F setfeatures
    - B syncspace
    - N version
  - T otf
    - F addfeature
    - D cache
    - T chainhandlers
      - F normal
      - F verbose
    - F collectlookups
    - F dataset
    - D enhancers
    - D features
    - F getalternate
    - T glists
    - F load
    - F scriptandlanguage
    - F setcontextchain
    - F setdynamics
    - F setfeatures
    - 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
  - T dynamics
  - D identifiers
  - D parameters
  - T processes
  - D quads
  - T setdynamics
  - D xheights
- helpers**            table
  - F dimenfactor
  - F getdigitwidth
  - F getparameters
  - F nametoslot
  - F setdigitwidth
- iterators**        table
  - F characters
  - F descriptions
  - F glyphs
- loggers**            table
  - F format
  - F onetimemessage
  - F register
  - F reportdefinedfonts
  - F reportusedfeatures
- mappings**        table
  - F addtounicode
  - F loadfile
  - F loadline
  - F loadlumtable
  - F makenameparser
  - F reset
  - F tounicode16
  - F tounicode16sequence
- names**            table
  - S basename
  - B be\_clever
  - D cache
  - F cleanfilename
  - F cleanname
  - F collect
  - F collectfiles
  - F collectspec
  - T data
  - B enabled
  - F exists

T filters  
   F afm  
   F dfont  
   T list  
   T names  
   F otf  
   T paths  
   F pfb  
   F ttc  
   F ttf  
 S fontconfigfile  
 F getfilename  
 F getlookupkey  
 F getlookups  
 F getpaths  
 F identify  
 F is\_permitted  
 F list  
 F load  
 B loaded  
 F lookup  
 F nofllookups  
 S osfontdirvariable  
 F readdata  
 F register  
 F registered  
 F resolve  
 F resolvedspecification  
 F resolvespec  
 B saved  
 F specification  
 D specifications  
 F splitspec  
 N version

  F writedata  
**protrusions**        data table  
**readers**            table  
   F afm  
   F check\_lua  
   F check\_tfm  
   F dfont  
   F lua  
   F opentype  
   F otf  
   F pfb  
   D sequence  
   F tfm  
   F ttc  
   F ttf  
**specifiers**        table  
   D contextmerged  
   F contextnumber  
   D contextnumbers  
   D contextsetups  
   F contexttosting  
   F mergecontext  
   F presetcontext  
   F registercontext  
   F showcontext  
   F splitcontext  
   D synonyms  
   D variants  
**symbols**            table  
   F uselibrary  
**tables**            table  
**tracers**            table  
**typefaces**        data table

## gzip (extra lua)

`close` function  
`lines` function  
`open` function



## img (basic tex)

<code>boxes</code>	<code>function</code>
<code>checksize</code>	<code>function</code>
<code>clone</code>	<code>function</code>
<code>copy</code>	<code>function</code>
<code>immediatwrite</code>	<code>function</code>
<code>keys</code>	<code>function</code>
<code>new</code>	<code>function</code>
<code>node</code>	<code>function</code>

<code>ofindex</code>	<code>function</code>
<code>print</code>	<code>function</code>
<code>scan</code>	<code>function</code>
<code>serialize</code>	<code>function</code>
<code>totable</code>	<code>function</code>
<code>types</code>	<code>function</code>
<code>write</code>	<code>function</code>

# interactions (context)

**attachments** table

F insert

F register

**fields** table

F clone

F define

F defineset

F insert

**general** table

F getidentity

F setupidentity

**help** table

F collect

F reference

F register

**javascripts** table

F addtopreamble

F code

D codes

F flushpreambles

D functions

D preambles

F setpreamble

F storecode

F storepreamble

F usepreamblenow

F usescripts

**linkedlists** table

**pages** table

F setpagetransition

F setupcanvas

**references** table

F setcloseddocument

F setclosepage

F setopendocument

F setopenpage

**renderings** table

F register

F rendering

F var

**soundclips** table

F insert

F register

# interfaces (context)

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

## io (basic lua)

ask	function	out	table
bytes	function	F inhibit	
characters	function	D modes	
checkopeners	function	F permit	
close	function	output	function
exists	function	pathseparator	string
fileseparator	string	popen	overloaded function
finalizeopeners	function	read	function
flush	function	readnumber	function
inp	table	readstring	function
F inhibit		registeropener	function
D modes		savedata	function
F permit		size	function
input	function	stderr	userdata
lines	function	stdin	userdata
loaddata	function	stdout	userdata
noflines	function	tmpfile	function
open	function	type	function
open_ro	function	write	function

# job (context)

**comment**        function  
**files**         table  
    D collected  
    F context  
    B forcerun  
    F run  
    D tobesaved  
**initialize**    function  
**load**          function  
**objects**       table  
    D collected  
    F doifelse  
    F get  
    F number  
    F page  
    F save  
    F set  
    D tobesaved  
**pack**           boolean  
**passes**        table  
    F check  
    D collected  
    F count  
    F define  
    F doifinlistelse  
    F find  
    F first  
    F get  
    F getcollected  
    F getdata  
    F getfield  
    F gettobesaved  
    F last

    F list  
    F save  
    F savedata  
    F savetagged  
    D tobesaved  
**positions**    table  
    D collected  
    F copy  
    F depth  
    F extra  
    F height  
    F lowerleft  
    F lowerright  
    F onsamepage  
    F overlapping  
    F page  
    F position  
    F replace  
    D tobesaved  
    F upperleft  
    F upperright  
    F width  
    F x  
    F xy  
    F y  
**register**      function  
**save**          function  
**variables**    table  
    D checksums  
    D collected  
    F save  
    D tobesaved  
**version**       number

# lang (basic tex)

<code>clean</code>	<code>function</code>	<code>new</code>	<code>function</code>
<code>clear_hyphenation</code>	<code>function</code>	<code>patterns</code>	<code>function</code>
<code>clear_patterns</code>	<code>function</code>	<code>postexhyphenchar</code>	<code>function</code>
<code>exceptions</code>	<code>function</code>	<code>posthyphenchar</code>	<code>function</code>
<code>hyphenate</code>	<code>function</code>	<code>preexhyphenchar</code>	<code>function</code>
<code>hyphenation</code>	<code>function</code>	<code>prehyphenchar</code>	<code>function</code>
<code>id</code>	<code>function</code>		

# languages (context)

<b>associate</b>	function	<b>posthyphenchar</b>	function
<b>associated</b>	data table	<b>prehyphenchar</b>	function
<b>association</b>	function	<b>registered</b>	data table
<b>counters</b>	data table	<b>righthyphenmin</b>	function
<b>current</b>	function	<b>setdirty</b>	function
<b>data</b>	data table	<b>synonym</b>	function
<b>define</b>	function	<b>version</b>	number
<b>exceptions</b>	function	<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	
<b>lefthyphenmin</b>	function	B enables	
<b>loadable</b>	function	F found	
<b>loadwords</b>	function	F load	
<b>logger</b>	table	T methods	
F report		N threshold	
<b>numbers</b>	data table		

# layouts (context)

```
status  table
      F isleftpage
      F leftorrightpagection
```



## lfs (extra lua)

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

# libraries (context)

`basiclua` data table  
`basictex` data table  
`builtin` data table

`extralua` data table  
`extratex` data table  
`globals` data table

## lmx (context)

<b>convert</b>	function	<b>pv</b>	function
<b>escape</b>	function	<b>reset</b>	function
<b>get</b>	function	<b>result</b>	function
<b>htmfile</b>	function	<b>set</b>	function
<b>include</b>	function	<b>show</b>	function
<b>lmxfile</b>	function	<b>showdebuginfo</b>	function
<b>loadedfile</b>	function	<b>showerror</b>	function
<b>make</b>	function	<b>tv</b>	function
<b>new</b>	function	<b>type</b>	function
<b>overloaderror</b>	function	<b>urlescape</b>	function
<b>popupfile</b>	function	<b>variable</b>	function
<b>print</b>	function	<b>variables</b>	data table

# logs (context)

application	function	setmessenger	function
categories	function	setprogram	function
direct	function	settarget	function
disable	function	settranslations	function
enable	function	show	function
extendbanner	function	show_close	function
flush	function	show_load	function
help	function	show_open	function
messenger	function	simple	function
new	function	simpleline	function
poptarget	function	simplelines	function
pushtarget	function	start_page_number	function
report	function	status	function
report_job_stat	function	stop_page_number	function
reportbanner	function	subdirect	function
reporter	function	subreport	function
reporters	function	system	function
reportline	function	texerrormessage	function
reportlines	function	writer	function
setformats	function		

# lpdf (context)

action	function	javascript	function
adddocumentcolorspace	function	launch	function
adddocumenttextgstate	function	layerreference	function
adddocumentpattern	function	limited	function
adddocumentshade	function	linearshade	function
addtocatalog	function	link	function
addtoinfo	function	load	function
addtonames	function	null	function
addtopageattributes	function	number	function
addtopageresources	function	object	function
addtopagesattributes	function	pagedestination	function
addxmpinfo	function	pagereference	function
array	function	pdfcolor	function
boolean	function	pdftimestamp	function
checkedkey	function	protectresources	boolean
checkedvalue	function	reference	function
circularshade	function	referenceobject	function
cmykcode	function	registerannotation	function
collectedresources	function	registerdocumentfinalizer	function
color	function	registerpagefinalizer	function
colorspace	function	reserveannotation	function
colorspec	function	reserveobject	function
colorvalue	function	rgbcode	function
colorvalues	function	rotationcm	function
constant	function	shareobject	function
deferredobject	function	shareobjectreference	function
delayedobject	function	spotcode	function
dictionary	function	stream	function
finalizeddocument	function	string	function
finalizepage	function	timestamp	function
finishtransparencycode	function	toeight	function
flushobject	function	tosixteen	function
formats	data table	transparency	function
graycode	function	transparencycode	function
id	function	transparencyvalue	function
immediateobject	function	unicode	function
injectxmpinfo	function	verbose	function
insertxmpinfo	function		

# lpeg (basic lua)

<b>C</b>	function	<b>counter</b>	function
<b>Carg</b>	function	<b>endstripper</b>	function
<b>Cb</b>	function	<b>firstofsplit</b>	function
<b>Cc</b>	function	<b>frontstripper</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>span</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>anywhere</b>	function	<b>stripper</b>	function
<b>balancer</b>	function	<b>texlinesplitter</b>	function
<b>checkedsplit</b>	function	<b>type</b>	function
<b>count</b>	function	<b>version</b>	function

# ltn12 (extra lua)

<b>BLOCKSIZE</b>	number	F simplify
<b>filter</b>	table	F table
	F chain	<b>source</b> table
	F cycle	F cat
<b>pump</b>	table	F chain
	F all	F empty
	F step	F error
<b>sink</b>	table	F file
	F chain	F rewind
	F error	F simplify
	F file	F string
	F null	

## lua (basic tex)

<b>bytecode</b>	<b>table</b>	<b>name</b>	<b>table</b>
bytedata	data table	numbers	data table
bytdone	table	registercode	function
delay	function	registeredcodes	function
finalize	function	registerfinalizer	function
firstbytecode	number	registername	function
flush	function	<b>setbytecode</b>	<b>function</b>
<b>getbytecode</b>	<b>function</b>	<b>setluaname</b>	<b>function</b>
<b>getluaname</b>	<b>function</b>	<b>startupfile</b>	<b>string</b>
lastbytecode	number	<b>version</b>	<b>string</b>
messages	data table		



# luatex (context)

<code>cleanuptempfiles</code>	function	<code>showjobstat</code>	function
<code>registerstartactions</code>	function	<code>showtexstat</code>	function
<code>registerstopactions</code>	function	<code>starttime</code>	number
<code>registertempfile</code>	function		

# lxml (context)

<code>addindex</code>	function	<code>load</code>	function
<code>all</code>	function	<code>loadbuffer</code>	function
<code>applyfunction</code>	function	<code>loaddata</code>	function
<code>att</code>	function	<code>loaded</code>	table
<code>attribute</code>	function	<code>loadregistered</code>	function
<code>chainattribute</code>	function	<code>main</code>	function
<code>checkindex</code>	function	<code>match</code>	function
<code>collected</code>	function	<code>name</code>	function
<code>command</code>	function	<code>namespace</code>	function
<code>concat</code>	function	<code>nonspace</code>	function
<code>concatrange</code>	function	<code>pos</code>	function
<code>content</code>	function	<code>position</code>	function
<code>context</code>	function	<code>raw</code>	function
<code>convert</code>	function	<code>rawroot</code>	function
<code>count</code>	function	<code>register</code>	function
<code>delete</code>	function	<code>removesetup</code>	function
<code>direct</code>	function	<code>resetcdata</code>	function
<code>directives</code>	table	<code>resetsetups</code>	function
F after		<code>root</code>	function
F before		<code>serialize</code>	function
F handle		<code>setaction</code>	function
F load		<code>setcdata</code>	function
F setup		<code>setcommandtonone</code>	function
<code>displayverbatim</code>	function	<code>setcommandtotext</code>	function
<code>doif</code>	function	<code>setsetup</code>	function
<code>doifelse</code>	function	<code>setverbatim</code>	function
<code>doifelsetext</code>	function	<code>snippet</code>	function
<code>doifnot</code>	function	<code>sorters</code>	table
<code>doifnottext</code>	function	F add	
<code>doiftext</code>	function	F compare	
<code>element</code>	function	F flush	
<code>elements</code>	function	F reset	
<code>filter</code>	function	F show	
<code>filterlist</code>	function	F sort	
<code>first</code>	function	<code>splitid</code>	function
<code>flush</code>	function	<code>startraw</code>	function
<code>flushsetups</code>	function	<code>stopraw</code>	function
<code>get_id</code>	<del>function</del>	<code>store</code>	function
<code>getid</code>	function	<code>strip</code>	function
<code>getindex</code>	function	<code>stripped</code>	function
<code>id</code>	function	<code>tag</code>	function
<code>idsplitter</code>	userdata	<code>text</code>	function
<code>include</code>	function	<code>tofile</code>	function
<code>index</code>	function	<code>toparameters</code>	function
<code>info</code>	function	<code>toverbatim</code>	function
<code>inlineverbatim</code>	function	<code>verbatim</code>	function
<code>installsetup</code>	function	<code>withindex</code>	function
<code>last</code>	function	<code>xmltexhandler</code>	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>ldexp</b>	function	<b>tand</b>	function
<b>log</b>	function	<b>tanh</b>	function
<b>log10</b>	function		

# mathematics (context)

<code>addfallbacks</code>	function	<code>privatebase</code>	number
<code>alphabets</code>	data table	<code>remapalphabets</code>	function
<code>big</code>	function	<code>scaleparameters</code>	function
<code>checkaccentbaseheight</code>	function	<code>setalternate</code>	function
<code>checkprivateparameters</code>	function	<code>syncboth</code>	function
<code>classes</code>	data table	<code>syncname</code>	function
<code>define</code>	function	<code>syncstyle</code>	function
<code>dimensions</code>	function	<code>toname</code>	function
<code>extrabase</code>	number	<code>tostyle</code>	function
<code>extras</code>	table	<code>utfmathclass</code>	function
F add		<code>utfmathcommand</code>	function
F copy		<code>utfmathfiller</code>	function
<code>families</code>	data table	<code>utfmathstretch</code>	function
<code>initializeparameters</code>	function	<code>xml</code>	table
<code>makefont</code>	function	D entities	
<code>overloadparameters</code>	function	F registerentities	

# md5 (extra lua)

HEX	function	exor	function
crypt	function	hex	function
dec	function	sum	function
decrypt	function	sumhexa	function

# metapost (context)

<b>analyzeplugins</b>	function
<b>checkformat</b>	function
<b>checktexts</b>	function
<b>colorinitializer</b>	function
<b>convert</b>	function
<b>defaultformat</b>	string
<b>directrun</b>	function
<b>edefsxxy</b>	function
<b>escaped</b>	function
<b>exectime</b>	table
<b>filterclippath</b>	function
<b>finder</b>	function
<b>flush</b>	function
<b>flushers</b>	table
T pdf	
F comment	
F flushfigure	
F startfigure	
F stopfigure	
F textfigure	
<b>flushliteral</b>	function
<b>flushnormalpath</b>	function
<b>flushreset</b>	function
<b>format</b>	function
<b>getclippath</b>	function
<b>gettext</b>	function
<b>graphic</b>	function
<b>graphic_base_pass</b>	function
<b>graphic_extra_pass</b>	function
<b>intermediate</b>	table
T actions	
F makempy	
B needed	
<b>lastlog</b>	string
<b>load</b>	function
<b>makempy</b>	table

N nofconverted	
F processgraphics	
<b>metafun</b>	table
F interpolate	
F topath	
<b>method</b>	number
<b>mptopdf</b>	table
F converttmpstopdf	
N nofconverted	
<b>multipass</b>	boolean
<b>n</b>	number
<b>optimize</b>	boolean
<b>parse</b>	function
<b>pdfliterals</b>	function
<b>pluginactions</b>	function
<b>process</b>	function
<b>processplugins</b>	function
<b>reducetogray</b>	boolean
<b>reporterror</b>	function
<b>reset</b>	function
<b>resetlastlog</b>	function
<b>resetplugins</b>	function
<b>resettexttexts</b>	function
<b>setoutercolor</b>	function
<b>settext</b>	function
<b>showlog</b>	boolean
<b>tex</b>	table
F get	
F reset	
F set	
<b>texerrors</b>	boolean
<b>texttextsdata</b>	function
<b>theclippath</b>	function
<b>totable</b>	function
<b>unload</b>	function
<b>uselibrary</b>	function

## mime (extra lua)

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

**qp**            function  
**qpwrp**        function  
**stuff**        function  
**unb64**        function  
**unqp**         function  
**wrap**         function  
**wrapt**        table  
    F base64  
    F default  
    F quoted-printable  
    F text  
**wrp**           function

# mplib (extra tex)

fields	function	pen_info	function
new	function	version	function



# noads (context)

handlers	table	process	function
		processors	table
F check		T collapse	
F collapse		F mlist_to_hlist	
F relocate		T relocate	
F resize		T resize	
F respace		T respace	
F tags			

## node (basic tex)

<code>copy</code>	<code>function</code>	<code>mlist_to_hlist</code>	<code>function</code>
<code>copy_list</code>	<code>function</code>	<code>new</code>	<code>function</code>
<code>count</code>	<code>function</code>	<code>next</code>	<code>function</code>
<code>dimensions</code>	<code>function</code>	<code>prev</code>	<code>function</code>
<code>do_ligature_n</code>	<code>function</code>	<code>protect_glyphs</code>	<code>function</code>
<code>family_font</code>	<code>function</code>	<code>protrusion_skippable</code>	<code>function</code>
<code>fields</code>	<code>function</code>	<code>remove</code>	<code>function</code>
<code>first_character</code>	<code>function</code>	<code>set_attribute</code>	<code>function</code>
<code>first_glyph</code>	<code>function</code>	<code>slide</code>	<code>function</code>
<code>flush_list</code>	<code>function</code>	<code>subtype</code>	<code>function</code>
<code>free</code>	<code>function</code>	<code>tail</code>	<code>function</code>
<code>has_attribute</code>	<code>function</code>	<code>traverse</code>	<code>function</code>
<code>has_field</code>	<code>function</code>	<code>traverse_id</code>	<code>function</code>
<code>hpack</code>	<code>function</code>	<code>type</code>	<code>function</code>
<code>id</code>	<code>function</code>	<code>types</code>	<code>function</code>
<code>insert_after</code>	<code>function</code>	<code>unprotect_glyphs</code>	<code>function</code>
<code>insert_before</code>	<code>function</code>	<code>unset_attribute</code>	<code>function</code>
<code>is_node</code>	<code>function</code>	<code>usedlist</code>	<code>function</code>
<code>kerning</code>	<code>function</code>	<code>vpack</code>	<code>function</code>
<code>last_node</code>	<code>function</code>	<code>whatsits</code>	<code>function</code>
<code>length</code>	<code>function</code>	<code>write</code>	<code>function</code>
<code>ligaturing</code>	<code>function</code>		

# nodes (context)

<b>after</b>	function	F setmark	
<b>aligned</b>	function	F setpair	
<b>astable</b>	function	<b>installattributehandler</b>	function
<b>before</b>	function	<b>is_display_math</b>	function
<b>builders</b>	table	<b>is_mirrored</b>	data table
F buildpage_filter		<b>is_rotated</b>	data table
F vpack_filter		<b>kerncodes</b>	data table
<b>codes</b>	data table	<b>leftmarginwidth</b>	function
<b>count</b>	function	<b>lines</b>	table
<b>delete</b>	function	T boxed	
<b>destinations</b>	table	F register	
N attribute		F setup	
T done		F stage_one	
F handler		F stage_two	
T stack		F stage_zero	
<b>dimensionfields</b>	data table	D data	
<b>dir_is_pop</b>	data table	F finalize	
<b>dir_negation</b>	data table	F number	
<b>fasthpack</b>	function	N scratchbox	
<b>fields</b>	function	<b>link</b>	function
<b>fillcodes</b>	data table	<b>list</b>	function
<b>firstcharacter</b>	function	<b>listablefields</b>	data table
<b>firstcharinbox</b>	function	<b>listcodes</b>	data table
<b>firstglyph</b>	function	<b>listtoutf</b>	function
<b>getattribute</b>	function	<b>load</b>	function
<b>gluecodes</b>	data table	<b>locate</b>	function
<b>glyphcodes</b>	data table	<b>mathcodes</b>	data table
<b>glyphdir_is_equal</b>	data table	<b>noadcodes</b>	data table
<b>glyphdir_is_opposite</b>	data table	<b>nodecodes</b>	data table
<b>glyphdir_is_orthogonal</b>	data table	<b>packlist</b>	function
<b>handlers</b>	table	<b>pardir_is_equal</b>	data table
F accessibility		<b>pardir_is_opposite</b>	data table
F backgrounds		<b>pardir_is_parallel</b>	data table
F characters		<b>partextdir_is_equal</b>	data table
F checkforleaks		<b>pool</b>	table
F checkglyphs		F baselineskip	
F cleanuppage		F cleanup	
F export		F disc	
F finalize		F glue	
F graphicvadjust		F gluespec	
F migrate		F glyph	
F protectglyphs		F kern	
F stripping		F latelua	
F unprotectglyphs		F leftmarginkern	
<b>has_attribute</b>	function	F leftskip	
<b>idstoring</b>	function	F lineskip	
<b>ignorablefields</b>	data table	F noad	
<b>injections</b>	table	F pdfannotation	
F handler		F pdfdestination	
F setcursive		F pdfdirect	
F setkern		F pdfliteral	

F penalty		show	function
F register		showboxes	function
F rightmarginkern		showcodes	function
F rightskip		showlist	function
F rule		showsimplelist	function
F shrink		skipcodes	data table
F stretch		somepenalty	function
F temp		somespace	function
F textdir		stripping	table
F usage		F enable	
T userids		T glyphs	
N margins.inline		striprange	function
N splitters.one		tasks	table
N splitters.two		F actions	
F userlist		F appendaction	
F usernumber		F disableaction	
F userstring		F disablegroup	
F usertokens		F enableaction	
F zeroglue		F enablegroup	
print	function	F freeze	
processors	table	F freezegroup	
B enabled		F new	
F hpack_filter		F prependaction	
F post_linebreak_filter		F removeaction	
F pre_linebreak_filter		F restart	
F tracer		F showactions	
processwords	function	F table	
reference	function	texmdir_is_equal	data table
references	table	texmdir_is_is	data table
N attribute		texmdir_is_opposite	data table
T done		texmdir_is_parallel	data table
F handler		tonodes	function
T stack		tosequence	function
remove	function	totable	function
repackhlist	function	toutf	function
replace	function	tracers	table
report	function	T characters	
rightmarginwidth	function	F collect	
rules	table	F equal	
D data		F indices	
F define		F start	
F enable		F string	
F handler		F unicodes	
save	function	T colors	
serialize	function	F reset	
serializebox	function	F set	
setattribute	function	F fontchar	
setattributes	function	F start	
setunsetattributes	function	T steppers	
shifts	table	F check	
D data		F codes	
F define		F features	
F enable		F glyphs	
F handler		F message	

F messages	unsetattribute	function
F nofsteps	unsetattributes	function
F register	visualizebox	function
F reset	whatcodes	data table
F start	whatsitcodes	data table
F stop	writable_spec	function
F stop		

## number (context)

	function		
basepoints	function	todidots	function
bit	function	todimen	function
bits	function	toevenhex	function
clearbit	function	toinches	function
dimenfactors	data table	tomillimeters	function
hasbit	function	tonewciceros	function
maxdimen	number	tonewdidots	function
percent	function	tonumberf	function
points	function	tonumberg	function
setbit	function	topicas	function
tobasepoints	function	topoints	function
tobitstring	function	toscaled	function
tocentimeters	function	toscaledpoints	function
tociceros	function	toset	function

## os (basic lua)

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

## package (basic lua)

<code>appendtolibpath</code>	function	<code>loaders</code>	table
<code>clibpaths</code>	function	<code>loadlib</code>	function
<code>config</code>	string	<code>path</code>	string
<code>cpath</code>	string	<code>preload</code>	table
<code>libpaths</code>	function	<code>prependtolibpath</code>	function
<code>loaded</code>	table	<code>seeall</code>	function



## pdf (basic tex)

<code>immediateobj</code>	<code>function</code>
<code>mapfile</code>	<code>function</code>
<code>mapline</code>	<code>function</code>
<code>maxobjnum</code>	<code>function</code>
<code>obj</code>	<code>function</code>
<code>objtype</code>	<code>function</code>
<code>pageattributes</code>	<code>string</code>
<code>pageref</code>	<code>function</code>

<code>pageresources</code>	<code>string</code>
<code>pagesattributes</code>	<code>string</code>
<code>pdfmapfile</code>	<code>function</code>
<code>pdfmapline</code>	<code>function</code>
<code>print</code>	<code>function</code>
<code>refobj</code>	<code>function</code>
<code>registerannot</code>	<code>function</code>
<code>reserveobj</code>	<code>function</code>

## profiler (extra lua)

`pause`    `function`  
`resume`   `function`

`start`    `function`  
`stop`     `function`

# regimes (context)

<code>disable</code>	<code>function</code>	<code>process</code>	<code>function</code>
<code>enable</code>	<code>function</code>	<code>push</code>	<code>function</code>
<code>pop</code>	<code>function</code>	<code>translate</code>	<code>function</code>

# resolvers (context)

<b>allprefixes</b>	function	<b>getownpath</b>	function
<b>appendhash</b>	function	<b>hashers</b>	data table
<b>automount</b>	function	<b>homedir</b>	string
<b>automounted</b>	table	<b>installinputfilehandler</b>	function
<b>booleanvariable</b>	function	<b>installinputlinehandler</b>	function
<b>cacheversion</b>	string	<b>instance</b>	table
<b>checkedvariable</b>	function	D data	
<b>cleanpath</b>	function	B diskcache	
<b>cleanpathlist</b>	function	D environment	
<b>concatinators</b>	data table	D expansions	
<b>configbanner</b>	string	D fakepaths	
<b>criticalvars</b>	data table	D files	
<b>dangerous</b>	data table	B force_suffixes	
<b>datastate</b>	function	D found	
<b>defaultsuffixes</b>	table	D foundintrees	
<b>dowithfilesandreport</b>	function	D hashed	
<b>dowithfilesintree</b>	function	D hashes	
<b>dowithpath</b>	function	D lists	
<b>dowithvariable</b>	function	B loadererror	
<b>env</b>	function	D order	
<b>executers</b>	table	B remember	
F check		B renewcache	
F execute		B savelists	
F finalize		D setups	
F register		D specification	
<b>expandbraces</b>	function	D variables	
<b>expandedpathfromlist</b>	function	<b>joinpath</b>	function
<b>expandedpathlist</b>	function	<b>load</b>	function
<b>expandedpathlistfromvariable</b>	function	<b>loadbinfile</b>	function
<b>expandpath</b>	function	<b>loaders</b>	data table
<b>expandpathfromvariable</b>	function	<b>loadlualib</b>	function
<b>expansion</b>	function	<b>loadtexfile</b>	function
<b>extendtexmfvariable</b>	function	<b>locateformat</b>	function
<b>find_file</b>	function	<b>locators</b>	data table
<b>find_files</b>	function	<b>luacnfname</b>	string
<b>findbinfile</b>	function	<b>luacnfspec</b>	string
<b>findctxfile</b>	function	<b>luacnfstate</b>	string
<b>finders</b>	data table	<b>macros</b>	table
<b>findfile</b>	function	F convertfile	
<b>findfiles</b>	function	F preprocessed	
<b>findgivenfile</b>	function	F processmkvi	
<b>findgivenfiles</b>	function	F version	
<b>findpath</b>	function	<b>maxreadlevel</b>	number
<b>findtexfile</b>	function	<b>methodhandler</b>	function
<b>findwildcardfile</b>	function	<b>newinstance</b>	function
<b>findwildcardfiles</b>	function	<b>openbinfile</b>	function
<b>formatofsuffix</b>	function	<b>openers</b>	data table
<b>formatofvariable</b>	function	<b>openfile</b>	function
<b>formats</b>	data table	<b>opentexfile</b>	function
<b>generators</b>	data table	<b>ownpath</b>	string
<b>getenv</b>	function	<b>prefixes</b>	data table

<b>prependhash</b>	function	<b>setenv</b>	function
<b>registerextrapath</b>	function	<b>setinstance</b>	function
<b>registerfile</b>	function	<b>settrace</b>	function
<b>registerfilehash</b>	function	<b>showpath</b>	function
<b>registerintrees</b>	function	<b>splitconfigurationpath</b>	function
<b>registermethod</b>	function	<b>splitexpansions</b>	function
<b>registerzipfile</b>	function	<b>splitmethod</b>	function
<b>relations</b>	data table	<b>splitpath</b>	function
<b>repath</b>	function	<b>suffixes</b>	data table
<b>reset</b>	function	<b>suffixmap</b>	data table
<b>resetextrapath</b>	function	<b>suffixofformat</b>	function
<b>resetresolve</b>	function	<b>texdatablob</b>	function
<b>resolve</b>	function	<b>unexpandedpath</b>	function
<b>savers</b>	data table	<b>unexpandedpathlist</b>	function
<b>scanfiles</b>	function	<b>unresolve</b>	function
<b>schemes</b>	table	<b>updaterelations</b>	function
T cleaners		<b>updatescript</b>	function
F md5		<b>usezipfile</b>	function
F none		<b>validatedpath</b>	function
F strip		<b>variable</b>	function
F cleanname		<b>variableofformat</b>	function
F install		<b>variableofformatorsuffix</b>	function
N threshold		<b>wildcardpattern</b>	function

# scripts (context)

categorytonumber	data table	installmethod	function
cjk	table	numbertocategory	data table
colors	data table	numbertodataset	data table
handlers	data table	preprocess	function
hash	table	reset	function
installdataset	function	set	function

# set (context)

contains	function	tonumber	function
create	function	totable	function
tolist	function		

# socket (extra lua)

<b>BLOCKSIZE</b>	number		F keep-open
<b>_DEBUG</b>	boolean		<b>skip</b> function
<b>bind</b>	function		<b>sleep</b> function
<b>choose</b>	function		<b>smtp</b> table
<b>connect</b>	function		S DOMAIN
<b>dns</b>	table		N PORT
	F gethostname		S SERVER
	F tohostname		N TIMEOUT
	F toip		S ZONE
<b>ftp</b>	table		F message
	S PASSWORD		F open
	N PORT		F send
	N TIMEOUT		<b>source</b> function
	S USER		<b>sourcet</b> table
	F command		F by-length
	F get		F default
	F open		F http-chunked
	F put		F until-closed
<b>gettime</b>	function		<b>tcp</b> function
<b>http</b>	table		<b>tp</b> table
	N PORT		N TIMEOUT
	N TIMEOUT		F connect
	S USERAGENT		<b>try</b> function
	F open		<b>udp</b> function
	F request		<b>url</b> table
<b>newtry</b>	function		F absolute
<b>protect</b>	function		F build
<b>select</b>	function		F build_path
<b>sink</b>	function		F escape
<b>sinkt</b>	table		F parse
	F close-when-done		F parse_path
	F default		F unescape
	F http-chunked		



# sorters (context)

<b>comparers</b>	table	<b>definitions</b>	data table
F basic		<b>firstofsplit</b>	function
<b>constants</b>	table	<b>setlanguage</b>	function
S defaultdigits		<b>sort</b>	function
S defaultlanguage		<b>splitters</b>	table
S defaultmethod		F utf	
N digitmaximum		<b>strip</b>	function
N digitsoffset		<b>tracers</b>	data table
N ignoredoffset		<b>update</b>	function
N replacementoffset			

## statistics (context)

<code>checkfmtstatus</code>	function
<code>elapsedindeed</code>	function
<code>elapsedseconds</code>	function
<code>elapsedtime</code>	function
<code>enable</code>	boolean
<code>formatruntime</code>	function
<code>hastiming</code>	function
<code>memused</code>	function
<code>register</code>	function
<code>reportstorage</code>	function

<code>resettiming</code>	function
<code>runtime</code>	function
<code>savefmtstatus</code>	function
<code>show</code>	function
<code>showjobstat</code>	function
<code>starttiming</code>	function
<code>stoptiming</code>	function
<code>threshold</code>	number
<code>timed</code>	function

status (basic tex)

list function

# storage (context)

allocate	function	min	number
data	table	nofmodules	number
evaluators	table	noftables	number
mark	function	register	function
marked	function	shared	data table
max	number		

## streams (context)

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

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

## string (basic lua)

<code>byte</code>	<code>function</code>	<code>lower</code>	<code>function</code>
<code>bytepairs</code>	<code>function</code>	<code>match</code>	<code>function</code>
<code>bytes</code>	<code>function</code>	<code>quote</code>	<code>function</code>
<code>char</code>	<code>function</code>	<code>quoted</code>	<code>function</code>
<code>characterpairs</code>	<code>function</code>	<code>rep</code>	<code>function</code>
<code>characters</code>	<code>function</code>	<code>reverse</code>	<code>function</code>
<code>checkedsplit</code>	<code>function</code>	<code>split</code>	<code>function</code>
<code>count</code>	<code>function</code>	<code>splitlines</code>	<code>function</code>
<code>dump</code>	<code>function</code>	<code>strip</code>	<code>function</code>
<code>escapedpattern</code>	<code>function</code>	<code>sub</code>	<code>function</code>
<code>explode</code>	<code>function</code>	<code>toboolean</code>	<code>function</code>
<code>find</code>	<code>function</code>	<code>tocontext</code>	<code>function</code>
<code>format</code>	<code>function</code>	<code>todimen</code>	<code>function</code>
<code>gfind</code>	<code>function</code>	<code>topattern</code>	<code>function</code>
<code>gmatch</code>	<code>function</code>	<code>unquote</code>	<code>function</code>
<code>gsub</code>	<code>function</code>	<code>unquoted</code>	<code>function</code>
<code>is_boolean</code>	<code>function</code>	<code>upper</code>	<code>function</code>
<code>is_empty</code>	<code>function</code>	<code>utfcharacters</code>	<code>function</code>
<code>len</code>	<code>function</code>	<code>utfsplitlines</code>	<code>function</code>
<code>limit</code>	<code>function</code>	<code>utfvalues</code>	<code>function</code>

# structures (context)

<b>atlocation</b>	function	D tobesaved	
<b>blocks</b>	table	F trace	
D collected		F value	
F define		<b>currentsectionnumber</b>	function
F print		<b>descriptions</b>	table
F save		<b>documents</b>	table
F select		T data	
F setstate		S block	
D states		T blocks	
D tobesaved		T checkers	
<b>bookmarks</b>	table	N depth	
F finalize		T forced	
F flatten		T numbers	
S method		T ownnumbers	
F overload		T status	
F place		F initialize	
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 current		F merged	
D data		F page	
F define		F prefix	
F doifelse		F prefixlastpage	
F first		F prefixpage	
F get		F simplify	
F last		F title	
F next		F touserdata	
F prefixedconverted		<b>itemgroups</b>	table
F prev		F maxwidth	
F previous		F nofitems	
F raw		F register	
F record		<b>lists</b>	table
F reset		F analyze	
F restart		D cached	
F restore		D collected	
F save		F doifstoredelse	
F set		F enhance	
F setlevel		T enhancers	
F setoffset		F filter	
F setown		F filtercollected	
F setstate		F formulanumber	
F setvalue		D internals	
T specials		F location	
F userpage		F number	
F subs		D ordered	

- F page
- F popnesting
- F prefix
- F prefixednumber
- F prefixedpage
- F process
- F push
- D pushed
- F pushnesting
- F realpage
- T result
- F savednumber
- F savedprefixednumber
- F savedtitle
- F sectionnumber
- F size
- F title
- D tobesaved
- F userdata
- F uservalue

## marks table

- D data
- F define
- F exists
- F fetch
- F fetchallmarks
- F fetched
- F fetchonemark
- F fetchtwomarks
- F get
- F number
- F relate
- F reset
- F set
- F show
- F synchronize
- F title
- T tracers
  - F showtable

## notes table

- F checkpagechange
- F define
- F deltapage
- F doifcontent
- F doifonsamepageasprevious
- F flush
- F flushpostponed
- F get
- F getn
- F getnumberpage
- F getstate
- F getsymbolpage
- F internal
- F internalid

- F listindex
- F number
- F ordered
- F postpone
- F resetpostponed
- F restore
- F save
- F setstate
- F setsymbolpage
- D states
- F store
- F title

## pages table

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

## processors table

- F apply
- F ignore
- F register
- F reset
- F split
- F sprint

## references table

- F analyze
- F checkedfile
- F checkedfileorurl
- F checkedprogram
- F checkedurl
- D collected
- F currentmetadata
- F currentorder
- D currentset
- F define
- D defined
- D derived
- F doifelse
- F enableinteraction
- F enhance
- D executers
- F expandcurrent
- F export
- D exporters
- T files
  - T data
  - F define
  - F get
- F filter
- D filters
- F from
- F get



- F getcurrentmetadata
- F getcurrentprefixspec
- F getinnermethod
- F getinternalreference
- D handlers
- F identify
- F import
- D imported
- F inject
- F injectcurrentset
- D internals
- F load
- F mark
- D pages
- T programs
  - T data
  - F define
  - F get
- F realpage
- F realpageofpage
- D referred
- F referredpage
- F registerfinalizer
- F registerinitializer
- F registerpage
- F reportproblems
- F reset
- T resolvers
  - F description
  - F float
  - F formula
  - F note
  - F reference
  - F section
- D runners
- F sectionnumber
- F sectionpage
- F sectiontitle
- F set
- F setandgetattribute
- F setinnermethod
- F setinternalreference
- F setnextinternal
- F setnextorder
- D specials
- F split
- T testrunners
  - F inner
  - F special
  - F special operation
  - F special operation with arguments
- T testspecials
  - F i
  - F internal

- F page
- F realpage
- F userpage
- D tobereferred
- D tobesaved
- T urls
  - T data
  - F define
  - F get
  - F whatfrom
- registers** table
  - F analyze
  - F analyzed
  - D collected
  - F compare
  - F define
  - F enhance
  - F extend
  - F filter
  - F filtercollected
  - F finalize
  - F flush
  - F prepare
  - F process
  - F sort
  - F store
  - D tobesaved
  - F unique
  - F userdata
- sections** table
  - F autodepth
  - F cct
  - T collected
  - F current
  - F currentblock
  - F currentid
  - F currentlevel
  - F defineautolevels
  - F depthnumber
  - F findnumber
  - F fullnumber
  - F getcurrentlevel
  - F getlevel
  - F getnumber
  - D levelmap
  - D levels
  - F load
  - F matchingtilldepth
  - F numberatdepth
  - F numbers
  - F popblock
  - F pushblock
  - F reportstructure
  - F save

F set		F filter	
F setblock		F finalize	
F setchecker		F flush	
F setlevel		F meaning	
F setnumber		F prepare	
F somelevel		F process	
F startautolevel		F register	
F stopautolevel		F registerused	
F structuredata		F sort	
F title		F synonym	
D tobesaved		D tobesaved	
F typesetnumber		<b>tags</b>	<b>table</b>
F userdata		T data	
B verbose		F getid	
F way		F handler	
<b>sets</b>	<b>table</b>	D labels	
F define		F last	
F get		F lastinchain	
F getall		D properties	
D setlist		F registerdata	
<b>specials</b>	<b>table</b>	F setdescriptionid	
D collected		F setitemgroup	
F retrieve		F setsorting	
F store		F setsynonym	
D tobesaved		F settagproperty	
<b>synonyms</b>	<b>table</b>	F start	
F analyzed		F stop	
D collected		D taglist	
F compare		T userdata	
F define			

## table (basic lua)

append	function	print	function
are_equal	function	<b>remove</b>	<b>function</b>
compact	function	reversed	function
<b>concat</b>	<b>function</b>	sequenced	function
contains	function	serialize	function
copy	function	setmetatablecall	function
count	function	setmetatableindex	function
derive	function	setmetatablekey	function
fastcopy	function	setmetatablenewindex	function
flattened	function	<b>setn</b>	<b>function</b>
<b>foreach</b>	<b>function</b>	<b>sort</b>	<b>function</b>
<b>foreachi</b>	<b>function</b>	sortedhash	function
fromhash	function	sortedhashkeys	function
getmetatablekey	function	sortedkeys	function
<b>getn</b>	<b>function</b>	sortedpairs	function
has_one_entry	function	strip	function
identical	function	sub	function
imerge	function	swapped	function
imerged	function	tocontext	function
<b>insert</b>	<b>function</b>	tofile	function
is_empty	function	tohandle	function
keys	function	tohash	function
<b>maxn</b>	<b>function</b>	toxml	function
merge	function	unnest	function
merged	function	unpack	function
prepend	function		

## tex (basic tex)

<b>attribute</b>	table	<b>pdffontname</b>	function
<b>badness</b>	function	<b>pdffontobjnum</b>	function
<b>box</b>	table	<b>pdffontsize</b>	function
<b>catcode</b>	table	<b>pdfpageref</b>	function
<b>conditionals</b>	data table	<b>pdfxformname</b>	function
<b>constants</b>	data table	<b>primitives</b>	function
<b>count</b>	table	<b>print</b>	function
<b>ctxcatcodes</b>	number	<b>printlist</b>	function
<b>definefont</b>	function	<b>prtcacodes</b>	number
<b>delcode</b>	table	<b>romannumeral</b>	function
<b>dimen</b>	table	<b>round</b>	function
<b>dummyscatcodes</b>	number	<b>run</b>	function
<b>enableprimitives</b>	function	<b>scale</b>	function
<b>error</b>	function	<b>scratchcatcodes</b>	number
<b>extraprimitives</b>	function	<b>set</b>	function
<b>finish</b>	function	<b>setAttribute</b>	function
<b>fontidentifier</b>	function	<b>setbox</b>	function
<b>fontname</b>	function	<b>setcatcode</b>	function
<b>fprint</b>	function	<b>setcount</b>	function
<b>get</b>	function	<b>setdelcode</b>	function
<b>getAttribute</b>	function	<b>setdimen</b>	function
<b>getbox</b>	function	<b>setlccode</b>	function
<b>getcatcode</b>	function	<b>setlist</b>	function
<b>getcount</b>	function	<b>setmath</b>	function
<b>getdelcode</b>	function	<b>setmathcode</b>	function
<b>getdimen</b>	function	<b>setnest</b>	function
<b>getlccode</b>	function	<b>setsfcode</b>	function
<b>getlist</b>	function	<b>setskip</b>	function
<b>getmath</b>	function	<b>settoks</b>	function
<b>getmathcode</b>	function	<b>setuccode</b>	function
<b>getnest</b>	function	<b>sfcode</b>	table
<b>getsfcode</b>	function	<b>shipout</b>	function
<b>getskip</b>	function	<b>skip</b>	table
<b>gettoks</b>	function	<b>sp</b>	function
<b>getuccode</b>	function	<b>sprint</b>	function
<b>hashtokens</b>	function	<b>systemmodes</b>	data table
<b>ifs</b>	data table	<b>texcatcodes</b>	number
<b>lccode</b>	table	<b>toks</b>	table
<b>linebreak</b>	function	<b>tpacatcodes</b>	number
<b>lists</b>	table	<b>tpbcacodes</b>	number
<b>luacacodes</b>	number	<b>tprint</b>	function
<b>mathcode</b>	table	<b>txtcatcodes</b>	number
<b>modes</b>	data table	<b>uccode</b>	table
<b>nest</b>	table	<b>uniformdeviate</b>	function
<b>nilcatcodes</b>	number	<b>uprint</b>	function
<b>notcatcodes</b>	number	<b>vrbcacodes</b>	number
<b>number</b>	function	<b>write</b>	function

## texconfig (basic tex)

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

## texio (basic tex)

```
write      function
write_nl   function
```

# token (basic tex)

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

# tokens (context)

bgroup	table			T show_methods	
collectors	table			F a	
	T data			F b	
	F defaultwords			F c	
	F dowithwords			F showtoken	
	F flush			F test	
	F handle			F trace	
	F install		egroup	table	
	F register		hbox	table	
	T registered		letter	function	
	T remapper		letters	function	
	F convert		other	function	
	T data		vbox	table	
	F store		vtop	table	
	F show				



# tracers (context)

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

# trackers (context)

data	data table	name	string
disable	function	register	function
dumphashtofile	function	report	function
enable	function	savehash	function
list	function	show	function

# typesetters (context)

<b>alignments</b>	table		F handler
			F process
			F set
<b>breakpoints</b>	table	<b>hpack</b>	function
	N attribute	<b>kerns</b>	table
	F enable		D factors
	F handler		F handler
	D mapping		B keepligature
	T methods		B keptogether
	F set		D mapping
	F setreplacement		F set
<b>cases</b>	table	<b>margins</b>	table
	T actions		F finalhandler
	F handler		F globalhandler
	F set		F localhandler
<b>cleaners</b>	table		F save
	F handler	<b>spacings</b>	table
	F set		N attribute
<b>digits</b>	table		F handler
	T actions		D mapping
	N attribute		F set
	F handler		F setup
	F set	<b>tonodes</b>	function
<b>directions</b>	table	<b>vpack</b>	function

# unicode (extra lua)

<b>ascii</b>	<b>table</b>		
F byte		F gfind	
F char		F gmatch	
F dump		F gsub	
F find		F len	
F format		F lower	
F gfind		F match	
F gmatch		F rep	
F gsub		F reverse	
F len		F sub	
F lower		F upper	
F match		utf16_to_utf8	function
F rep		utf16_to_utf8_be	function
F reverse		utf16_to_utf8_le	function
F sub		utf32_to_utf8	function
F upper		utf32_to_utf8_be	function
		utf32_to_utf8_le	function
<b>filetype</b>	<b>function</b>	<b>utf8</b>	<b>table</b>
<b>grapheme</b>	<b>table</b>	F byte	
F byte		F char	
F char		F dump	
F dump		F find	
F find		F format	
F format		F gfind	
F gfind		F gmatch	
F gmatch		F gsub	
F gsub		F len	
F len		F lower	
F lower		F match	
F match		F rep	
F rep		F reverse	
F reverse		F string	
F sub		F sub	
F upper		F upper	
<b>latin1</b>	<b>table</b>	utf8_to_utf16	function
F byte		utf8_to_utf8	function
F char		utfcodes	function
F dump		utfname	table
F find		utftype	function
F format			

# url (context)

<code>addscheme</code>	function	<code>hasscheme</code>	function
<code>construct</code>	function	<code>query</code>	function
<code>filename</code>	function	<code>split</code>	function
<code>hashed</code>	function		

# utilities (context)

<b>debugger</b>	table		F appendaction	
F disable			F appendgroup	
F enable			F autocompile	
F savestats			F compile	
F showstats			F disableaction	
<b>formatters</b>	table		F disablegroup	
F formatcolumns			F enableaction	
F list			F enablegroup	
F stripzeros			D functions	
<b>garbagecollector</b>	table		F localize	
F check			F nodeprocessor	
N criterium			F prependaction	
B enabled			F prependgroup	
<b>lua</b>	table		F removeaction	
F compile			F reset	
<b>packers</b>	table		F setkind	
F hashed			F tostring	
F new			<b>setters</b>	table
F pack			F disable	
F simplehashed			F enable	
F strip			F initialize	
F unpack			F list	
N version			F new	
<b>parsers</b>	table		F register	
F add_settings_to_array			F reset	
F arguments_to_table			F show	
F array_to_string			<b>storage</b>	table
F getparameters			F allocate	
F hash_to_string			F checked	
F listitem			F mark	
F make_settings_to_hash_pattern			F marked	
T patterns			F setinitializer	
U settings_to_array			F sparse	
U settings_to_hash_a			<b>strings</b>	table
U settings_to_hash_b			F collapseCrLf	
U settings_to_hash_c			F striplong	
F settings_to_array			F tabtospace	
F settings_to_hash			<b>tables</b>	table
F settings_to_hash_strict			F accesstable	
F settings_to_hash_tolerant			F definetable	
F settings_to_set			F insertaftervalue	
F simple_hash_to_string			F insertbeforevalue	
<b>report</b>	function		F removevalue	
<b>sequencers</b>	table			

## visualizers (context)

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

## xml (context)

after	function	F quit	
all	function	F tag	
applylpath	function	F text	
assign	function	F undefined	
attribute	function	F upper	
before	function	fillin	function
body	function	filter	function
checkbom	function	finalizers	table
checkerror	function	T tex	
checknamespace	function	F all	
checkns	function	F attribute	
cleansed	function	F bibtexconcat	
collect	function	F bibtexshort	
<del>collect_elements</del>	<del>function</del>	F chainattribute	
collect_tags	function	F command	
collect_texts	function	F concat	
collected	function	F concatrange	
collecttexts	function	F context	
content	function	F count	
convert	function	F ctxtext	
copy	function	F default	
count	function	F first	
cprint	function	F function	
defaulthandlers	table	F index	
D file		F last	
D parsedxml		F lettered	
D string		F lower	
D tex		F match	
D verbose		F name	
defaultprotocol	string	F position	
delete	function	F reverse	
<del>delete_element</del>	<del>function</del>	F stripped	
each	function	F tag	
<del>each_element</del>	<del>function</del>	F tags	
elements	function	F text	
empty	function	F upper	
entities	data table	T xml	
erase	function	F all	
escaped	function	F att	
expressions	table	F attribute	
F boolean		F attributes	
F child		F chainattribute	
F contains		F count	
F count		F default	
F error		F elements	
F find		F empty	
F lower		F first	
F name		F function	
F number		F index	
F oneof		F last	
F print		F match	



F name		F unknown_hex_entity	
F position		position	function
F reverse		process	function
F table		process_attributes	function
F tag		process_elements	function
F tags		processattributes	function
F text		profiled	table
F texts		raw	function
first	function	registerentity	function
found	function	registersns	function
functions	table	remap_name	function
getbuffer	function	remap_namespace	function
gethandlers	function	remap_tag	function
gethandlersfunction	function	remapname	function
include	function	remapnamespace	function
index	function	remaptag	function
inheritedconvert	function	renamespace	function
inject	function	replace	function
inject_element	function	replace_element	function
inject_element_after	function	resolvedentity	function
inject_element_before	function	resolvns	function
injectafter	function	root	function
injectbefore	function	save	function
insert	function	selection	function
insert_element	function	serialize	function
insert_element_after	function	sethandlersfunction	function
insert_element_before	function	setproperty	function
insertafter	function	settings	function
insertbefore	function	specialhandler	table
is_valid	function	sprint	function
last	function	string	function
load	function	strip	function
lpath	function	strip_whitespace	function
lpathcached	function	stripelement	function
lpathcalls	function	stripleadingspaces	function
lshow	function	table	function
makestandalone	function	text	function
match	function	tocdata	function
name	function	toelement	function
newhandlers	function	tostring	function
nodesettostring	function	toxml	function
originalload	function	tprint	function
package	function	traverse	function
parent	function	unescaped	function
parsedentitylpeg	userdata	withelement	function
pihandlers	table	withelements	function
placeholders	table	wrap	function
F unknown_dec_entity		xmlns	table

## zip (extra lua)

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

## zlib (extra lua)

<code>adler32</code>	function	<code>decompress</code>	function
<code>compress</code>	function	<code>decompressobj</code>	function
<code>compressobj</code>	function	<code>version</code>	function
<code>crc32</code>	function		