

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

<a href="#">require</a>	<a href="#">function</a>	<a href="#">toboolean</a>	<a href="#">function</a>
<a href="#">resolvers</a>	<a href="#">table</a>	<a href="#">tocontext</a>	<a href="#">function</a>
<a href="#">scripts</a>	<a href="#">table</a>	<a href="#">token</a>	<a href="#">table</a>
<a href="#">select</a>	<a href="#">function</a>	<a href="#">tokens</a>	<a href="#">table</a>
<a href="#">set</a>	<a href="#">table</a>	<a href="#">tonumber</a>	<a href="#">function</a>
<a href="#">setfenv</a>	<a href="#">function</a>	<a href="#">tostring</a>	<a href="#">function</a>
<a href="#">setmetatable</a>	<a href="#">function</a>	<a href="#">trace_characters</a>	<a href="#">boolean</a>
<a href="#">short_operators</a>	<a href="#">table</a>	<a href="#">traceback</a>	<a href="#">function</a>
<a href="#">short_prefixes</a>	<a href="#">table</a>	<a href="#">tracers</a>	<a href="#">table</a>
<a href="#">short_units</a>	<a href="#">table</a>	<a href="#">trackers</a>	<a href="#">table</a>
<a href="#">socket</a>	<a href="#">table</a>	<a href="#">type</a>	<a href="#">function</a>
<a href="#">sorters</a>	<a href="#">table</a>	<a href="#">typesetters</a>	<a href="#">table</a>
<a href="#">statistics</a>	<a href="#">table</a>	<a href="#">unicode</a>	<a href="#">table</a>
<a href="#">status</a>	<a href="#">table</a>	<a href="#">unpack</a>	<a href="#">function</a>
<a href="#">storage</a>	<a href="#">table</a>	<a href="#">url</a>	<a href="#">table</a>
<a href="#">streams</a>	<a href="#">table</a>	<a href="#">utf</a>	<a href="#">table</a>
<a href="#">string</a>	<a href="#">table</a>	<a href="#">utilities</a>	<a href="#">table</a>
<a href="#">stripmath</a>	<a href="#">function</a>	<a href="#">visualizers</a>	<a href="#">table</a>
<a href="#">structures</a>	<a href="#">table</a>	<a href="#">xml</a>	<a href="#">table</a>
<a href="#">table</a>	<a href="#">table</a>	<a href="#">xpcall</a>	<a href="#">function</a>
<a href="#">tex</a>	<a href="#">table</a>	<a href="#">zip</a>	<a href="#">table</a>
<a href="#">texconfig</a>	<a href="#">table</a>	<a href="#">zlib</a>	<a href="#">table</a>
<a href="#">texio</a>	<a href="#">table</a>		

# 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 graytohsb  
F handler  
F hsbtogray  
F hsbtorgb  
F iccprofile  
F isblack  
N main  
S model  
F mpcolor  
U none  
F register  
D registered  
F registerspotcolor  
F rgb  
F rgbtocmyk  
F rgbtogray  
F rgbtohsb  
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  
**unsetvalue**      number  
**viewerlayers**    table  
N attribute  
D data  
F define  
F enable  
F forcesupport  
F handler  
B hasorder

D listwise  
F register  
D registered  
D scopes  
F setfeatures  
F start  
F stop  
B supported  
D values

# backends (context)

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

T stopslant

**registrations**    table

**tables**            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>new</b>	function
<b>dimensions</b>	function	<b>pack</b>	function
<b>dispose</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

  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

## 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)

freeze	function	push	function
known	function	register	function
list	data table	report	function
pop	function	table	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_mark</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>decomposed</b>	data table	<b>ranges</b>	data table
<b>define</b>	function	<b>registerentities</b>	function
<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>entities</b>	data table	<b>shchars</b>	data table
<b>fallbacks</b>	data table	<b>shcodes</b>	data table
<b>filters</b>	data table	<b>specialchars</b>	data table
<b>flush</b>	function	<b>subscripts</b>	table
<b>fromnumber</b>	function	<b>superscripts</b>	table
<b>fschars</b>	data table	<b>synonyms</b>	data table
<b>fscodes</b>	data table	<b>tex</b>	table
<b>getrange</b>	function	D accentmapping	
<b>graphemes</b>	data table	F defineaccents	
<b>hangul</b>	table	F toutf	
F decomposed		<b>tonumber</b>	function
F description		<b>ucchars</b>	data table
F leadconsonant		<b>uccode</b>	function
T remapped		<b>uccodes</b>	data table
<b>is_character</b>	data table	<b>unicodechar</b>	function
<b>is_command</b>	data table	<b>upper</b>	function
<b>is_letter</b>	data table		

## 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	collecthelp	function
Character	function	colorcomponents	function
Characters	function	consultfloat	function
MPd	function	copyfileto	function
MPh	function	copyposition	function
MPll	function	counttwopassdata	function
MPlr	function	currentcomponent	function
MPp	function	currentdate	function
MPplus	function	currentenvironment	function
MPpos	function	currentproduct	function
MPrest	function	currentproject	function
MPul	function	currentregime	function
MPur	function	dayname	function
MPw	function	defineattribute	function
MPx	function	definebibtexsession	function
MPxy	function	defineconversion	function
MPy	function	definefield	function
Romannumerals	function	definefieldset	function
abjadnodotnumerals	function	definefilefallback	function
abjadnumerals	function	definefilesynonym	function
addff	function	definefont_one	function
addfs	function	definefont_two	function
addlinklistelement	function	definefontcollection	function
addstructurecounter	function	defineintermediatecolor	function
allinputpaths	function	definelinkedlist	function
alphabetic	function	definemarking	function
analysefloatmethod	function	definemultitonecolor	function
applytochars	function	defineparallel	function
applytowords	function	defineprocesscolor	function
assignbuffer	function	definespotcolor	function
autofinishstructurelevels	function	definestructureblock	function
autonextspace	function	definestructurecounter	function
autonextstructurelevel	function	definestructureset	function
autosetups	function	definetransparency	function
autostarttext	function	definetwopasslist	function
autostoptext	function	defineviewerlayer	function
boolcase	function	defrostrandomseed	function
character	function	digits	function
characters	function	disableregime	function
checkcharactersinfont	function	doanalyzeframedbox	function
checkedconversion	function	doif	function
checkedpagefloat	function	doifblackelse	function
checktwopassdata	function	doifcommonelse	function
chineseallnumerals	function	doifdimenstringelse	function
chinesecapnumerals	function	doifdrawingblackelse	function
chinesenumerals	function	doifelse	function
cleanfontname	function	doifelsebuffer	function
clonefield	function	doifelsecurrentfontasfeature	function
clonefontcollection_one	function	doifelseintwopassdata	function
clonefontcollection_two	function	doifelsemarking	function
collectfloat	function	doifelseparallel	function

doifelsesavedfloat	function	format	function
doifelsespaces	function	formatcolor	function
doifelsestructurecounter	function	formatgray	function
doifelsevisualizer	function	freezerandomseed	function
doiffielddcategoryelse	function	getbuffer	function
doiffielddelse	function	getbufferctxlua	function
doiffielddsetelse	function	getbuffermkvi	function
doiffiledefinedelse	function	getdefaultfieldvalue	function
doiffileexistelse	function	getfieldcategory	function
doiffirstcharelse	function	getfirstcharacter	function
doifinputfileelse	function	getfirsttwopassdata	function
doifinsetelse	function	getfloatvariable	function
doifleapyearelse	function	getlasttwopassdata	function
doiflocfileelse	function	getmarking	function
doifnot	function	getprivateattribute	function
doifnotstructurecounter	function	getrandomcounta	function
doifolderversionelse	function	getrandomcountb	function
doifoverlappingelse	function	getrandomseed	function
doifparentfileelse	function	getreadfilename	function
doifpositionelse	function	gettwopassdata	function
doifpositionsonsamepageelse	function	gettwopassdatalist	function
doifpositionsonthispageelse	function	grabbuffer	function
doifstructurecounter	function	helpaction	function
doifurldefinedelse	function	helpreference	function
doprocstypescriptfile	function	hexstringtonumber	function
doreshapeframedbox	function	hour	function
dostarttextfile	function	hyphenatedlist	function
dostoptextfile	function	hyphenatedurl	function
elapsedtime	function	D characters	
enablecolor	function	N lefthyphenmin	
enablecolorintents	function	D mapping	
enablefontcolorschemas	function	N righthyphenmin	
enableregime	function	F setcharacters	
enabletransparency	function	incrementedstructurecounter	function
enhancelinkedlist	function	insertattachment	function
erasebuffer	function	insertcomment	function
featureattribute	function	insertfield	function
feedback	function	insertrenderingwindow	function
fetchallmarks	function	insertsoundclip	function
fetchonemark	function	isleapyear	function
fetchtwomarks	function	languagenumber	function
filterreference	function	laststructurecounter	function
findtwopassdata	function	lchexnumber	function
firstinlist	function	lchexnumbers	function
firststructurecounter	function	leapyear	function
flushfloat	function	loadctxpreplist	function
fontchar	function	loadexamodes	function
fontcollectionmessage	function	loadfontgoodies	function
fontlookupgetkey	function	loadvisualizer	function
fontlookupgetkeyofindex	function	locatefilepath	function
fontlookupinitialize	function	locfilename	function
fontlookupnoffound	function	maxitemwidth	function
forceendjob	function	minute	function
forcequitjob	function	molecule	function

month	function	resetnullfont	function
monthmnem	function	resetparallel	function
monthname	function	resetstructurecounter	function
mpcolor	function	resetstructureprocessor	function
nbfs	function	resettimer	function
nextparallel	function	restartstructurecounter	function
nextstructurecounter	function	restorestructurecounter	function
nofdays	function	romannumerals	function
nofitems	function	runbuffer	function
nofstackedfloats	function	savebuffer	function
number	function	savefloat	function
octnumber	function	saveparallel	function
octstringtonumber	function	savestructureblock	function
ordinal	function	savestructurecounter	function
overloadbookmark	function	savetaggedtwopassdata	function
percentageof	function	savetwopassdata	function
placeparallel	function	second	function
popfloat	function	selectstructureblock	function
prepareMPvariable	function	setclosedocumentaction	function
preparebibtexsession	function	setclosepageaction	function
preparedfile	function	setcolormodel	function
preparefontcollection	function	setfontfeature	function
presetsymbollist	function	setformat	function
presettabulate	function	setformsmethod	function
prevstructurecounter	function	setmarking	function
processbuffer	function	setmathalphabet	function
processedfile	function	setmathalternate	function
processedfiles	function	setmathattribute	function
processfile	function	setmathstyle	function
processfilemany	function	setopendocumentaction	function
processfilenone	function	setopenpageaction	function
processfileonce	function	setownstructurecounter	function
pushfloat	function	setpagetransition	function
rawcharacter	function	setrandomseed	function
registerattachment	function	setrastercolor	function
registerbibtexentry	function	setrealign	function
registerbibtexfile	function	setreferencearguments	function
registerbookmark	function	setreferenceoperation	function
registerbuttons	function	setstructureblockstate	function
registercolor	function	setstructurecounter	function
registercolorintent	function	settagcombination	function
registerhelp	function	settagdescription	function
registeritemgroup	function	settagdescriptionsymbol	function
registermaintextcolor	function	settagfigure	function
registersoundclip	function	settaghighlight	function
registerstructureprocessor	function	settagitemgroup	function
registertransparency	function	settagproperty	function
relatemarking	function	settagsorting	function
removemissingcharacters	function	settagsynonym	function
replacepospxywhd	function	settagtablecell	function
resavefloat	function	settagtabulatecell	function
resetfontcollection	function	setupbookmarks	function
resetfontfeature	function	setupcanvas	function
resetmarking	function	setupexport	function

setupfontexpansion	function	taggedmathfunction	function
setupfontprotrusion	function	testcase	function
setupidentity	function	textime	function
setxmpfile	function	transparencycomponents	function
showchardata	function	triggereffect	function
showfontparameters	function	triggernegative	function
showhyphenatedinlist	function	truefilename	function
showstructurecounter	function	typebuffer	function
splitfilename	function	typefile	function
spotcolorname	function	typestring	function
spotcolorparent	function	uchexnumber	function
spotcolorvalue	function	uchexnumbers	function
startcomponent	function	unicodechar	function
startenvironment	function	unit	function
startproduct	function	updatefilenames	function
startproject	function	useMPLibrary	function
startregime	function	useanyfile	function
starttag	function	usecldfilename	function
starttext	function	usecolors	function
stopcomponent	function	usecomponent	function
stopenvironment	function	useenvironment	function
stopproduct	function	uselibrary	function
stopproject	function	useluafile	function
stopregime	function	usemodules	function
stoptag	function	usepath	function
stoptext	function	useproduct	function
structureautocatcodedget	function	useproject	function
structurecatcodedget	function	usesubpath	function
structurecountersubs	function	usesymbols	function
structurecountervalue	function	usetexfile	function
structuregivencatcodedget	function	usexmlfile	function
structurenumber	function	usezipfile	function
structuretitle	function	utfchar	function
structureuservariable	function	weekday	function
structurevariable	function	weekdayname	function
subff	function	widthofstring	function
subfs	function	writestatus	function
synchronizemarking	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)

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

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

## dir (context)

<code>collectpattern</code>	function
<code>current</code>	function
<code>expandname</code>	function
<code>glob</code>	function
<code>globfiles</code>	function
<code>globpattern</code>	function

<code>ls</code>	function
<code>makedirs</code>	function
<code>mkdirs</code>	function
<code>pop</code>	function
<code>push</code>	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)

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

# epdf (extra tex)

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

# experiments (context)

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



# figures (context)

<b>applyratio</b>	function	<b>hash</b>	function
<b>bases</b>	table	<b>identifiers</b>	data table
B enabled		<b>identify</b>	function
F find		<b>include</b>	function
T found		<b>includers</b>	data table
T list		<b>initialize</b>	function
F locate		<b>loaded</b>	data table
F use		<b>localpaths</b>	data table
T used		<b>mergegoodies</b>	function
<b>bitmapimage</b>	function	<b>nofprocessed</b>	number
<b>boxnumber</b>	number	<b>order</b>	data table
<b>cachepaths</b>	data table	<b>paths</b>	data table
<b>check</b>	function	<b>patterns</b>	data table
<b>checkers</b>	data table	<b>pop</b>	function
<b>converters</b>	data table	<b>preferquality</b>	boolean
<b>current</b>	function	<b>programs</b>	data table
<b>defaultdepth</b>	number	<b>push</b>	function
<b>defaultheight</b>	number	<b>registerpattern</b>	function
<b>defaultsearch</b>	boolean	<b>registerresource</b>	function
<b>defaultwidth</b>	number	<b>registersuffix</b>	function
<b>done</b>	function	<b>resources</b>	data table
<b>dummy</b>	function	<b>scale</b>	function
<b>exists</b>	data table	<b>setlookups</b>	function
<b>exists</b>	function	<b>setpaths</b>	function
<b>formats</b>	data table	<b>suffixes</b>	data table
<b>found</b>	data table	<b>tprint</b>	function
<b>get</b>	function	<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>nametotable</code>	function
<code>copy</code>	function	<code>needs_updating</code>	function
<code>dirname</code>	function	<code>readdata</code>	function
<code>expandname</code>	function	<code>removesuffix</code>	function
<code>extname</code>	function	<code>replacesuffix</code>	function
<code>is_qualified_path</code>	function	<code>robustname</code>	function
<code>is_readable</code>	function	<code>savechecksum</code>	function
<code>is_rootbased_path</code>	function	<code>savedata</code>	function
<code>is_writable</code>	function	<code>splitname</code>	function
<code>isreadable</code>	function	<code>splitpath</code>	function
<code>iswritable</code>	function	<code>strip</code>	function
<code>join</code>	function	<code>suffix</code>	function

## floats (context)

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

## 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

  F missing

**cid**                    table

  F getmap

  F loadfile

**collections**        table

  F clone\_one

  F clone\_two

  F define

  T definitions

  F message

  F prepare

  F process

  F reset

  T vectors

**constructors**        table

  F applymanipulators

  F assignmathparameters

  B autocleanup

  D cache

  F calculatescale

  F checkedfeatures

  F checkedfilename

  F cleanupable

  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

**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 getcompositions

  T list

    F compositions

    F expansions

    F featureset

    F files

- F mathematics
- F protrusions
- F solutions
- F typefaces
- F load
- 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
  - D csnames
  - T dynamics
  - D identifiers
  - D marks
  - 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 noflookups  
 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 contexttostring  
     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>package</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		savadata	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 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  
    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>	function
<code>clear_hyphenation</code>	function
<code>clear_patterns</code>	function
<code>exceptions</code>	function
<code>hyphenate</code>	function
<code>hyphenation</code>	function
<code>id</code>	function

<code>new</code>	function
<code>patterns</code>	function
<code>postexhyphenchar</code>	function
<code>posthyphenchar</code>	function
<code>preexhyphenchar</code>	function
<code>prehyphenchar</code>	function

# 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)

<b>attributes</b>	function	<b>mkdir</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

# 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)

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

# lpdf (context)

action	function	id	function
adddocumentcolorspace	function	injectxmpinfo	function
adddocumenttextgstate	function	insertxmpinfo	function
adddocumentpattern	function	javascript	function
adddocumentshade	function	launch	function
addtocatalog	function	layerreference	function
addtoinfo	function	limited	function
addtonames	function	linearshade	function
addtopageattributes	function	link	function
addtopageresources	function	null	function
addtopagesattributes	function	number	function
addxmpinfo	function	pagedestination	function
array	function	pagereference	function
boolean	function	pdfcolor	function
checkedkey	function	pdftimestamp	function
checkedvalue	function	protectresources	boolean
circularshade	function	reference	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
delayedobject	function	shareobjectreference	function
dictionary	function	spotcode	function
epdf	table	stream	function
F load		string	function
finalizeddocument	function	timestamp	function
finalizepage	function	toeight	function
finishtransparencycode	function	tosixteen	function
flushobject	function	transparency	function
flushstreamfileobject	function	transparencycode	function
flushstreamobject	function	transparencyvalue	function
formats	data table	unicode	function
graycode	function	verbose	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>append</b>	function	<b>tsplitat</b>	function
<b>balancer</b>	function	<b>tsplitter</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>messages</b>	data table
bytedata	data table	<b>name</b>	<b>table</b>
bytdone	table	<b>numbers</b>	data table
collectgarbage	function	<b>registercode</b>	function
delay	function	<b>registeredcodes</b>	function
finalize	function	<b>registerfinalizer</b>	function
firstbytecode	number	<b>registername</b>	function
flush	function	<b>setbytecode</b>	<b>function</b>
flushdelayed	function	<b>setluaname</b>	<b>function</b>
<b>getbytecode</b>	<b>function</b>	<b>startupfile</b>	string
<b>getluaname</b>	<b>function</b>	<b>version</b>	string
lastbytecode	number		

# 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>registerentity</code>	function
<code>direct</code>	function	<code>removesetup</code>	function
<code>directives</code>	table	<code>resetcdata</code>	function
F after		<code>resetsetups</code>	function
F before		<code>resolvedentity</code>	function
F handle		<code>root</code>	function
F load		<code>serialize</code>	function
F setup		<code>setaction</code>	function
<code>displayverbatim</code>	function	<code>setcdata</code>	function
<code>doif</code>	function	<code>setcommandtonone</code>	function
<code>doifelse</code>	function	<code>setcommandtotext</code>	function
<code>doifelsetext</code>	function	<code>setsetup</code>	function
<code>doifnot</code>	function	<code>snippet</code>	function
<code>doifnottext</code>	function	<code>sorters</code>	table
<code>doiftext</code>	function	F add	
<code>element</code>	function	F compare	
<code>elements</code>	function	F flush	
<code>entities</code>	data table	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>	function	<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)

<b>addfallbacks</b>	function	<b>makefont</b>	function
<b>alphabets</b>	data table	<b>overloadparameters</b>	function
<b>big</b>	function	<b>privatebase</b>	number
<b>boldmap</b>	table	<b>remapalphabets</b>	function
<b>categories</b>	table	<b>renderings</b>	table
D functions		D mappings	
<b>checkaccentbaseheight</b>	function	D numbers	
<b>checkprivateparameters</b>	function	D sets	
<b>classes</b>	data table	<b>renderset</b>	function
<b>codes</b>	data table	<b>scaleparameters</b>	function
<b>define</b>	function	<b>setalternate</b>	function
<b>dimensions</b>	function	<b>syncboth</b>	function
<b>extrabase</b>	number	<b>syncname</b>	function
<b>extras</b>	table	<b>syncstyle</b>	function
F add		<b>toname</b>	function
F copy		<b>tostyle</b>	function
<b>families</b>	data table	<b>utfmathclass</b>	function
<b>getboth</b>	function	<b>utfmathcommand</b>	function
<b>getstyle</b>	function	<b>utfmathfiller</b>	function
<b>initializeparameters</b>	function	<b>utfmathstretch</b>	function

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

## mime (extra lua)

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

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



# mplib (extra tex)

fields	function	pen_info	function
new	function	version	function

# noads (context)

handlers      table

- F check
- F collapse
- F families
- F relocate
- F render
- F resize
- F respace
- F tags
- F unscript

F variants

process      function

processors   table

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

## node (basic tex)

<code>copy</code>	<code>function</code>	<code>ligaturing</code>	<code>function</code>
<code>copy_list</code>	<code>function</code>	<code>mlist_to_hlist</code>	<code>function</code>
<code>count</code>	<code>function</code>	<code>new</code>	<code>function</code>
<code>current_attr</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>

# nodes (context)

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

physics (context)

patterns table

## profiler (extra lua)

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

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

# regimes (context)

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

# resolvers (context)

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

methodhandler	function	F strip	
newinstance	function	F cleannname	
openbinfile	function	F install	
openers	data table	N threshold	
openfile	function	setenv	function
opentexfile	function	setinstance	function
ownpath	string	settrace	function
prefixes	data table	showpath	function
prependhash	function	simplescanfiles	function
registerextrapath	function	splitconfigurationpath	function
registerfile	function	splitexpansions	function
registerfilehash	function	splitmethod	function
registerintrees	function	splitpath	function
registermethod	function	suffixes	data table
registerzipfile	function	suffixmap	data table
relations	data table	suffixofformat	function
repath	function	texdatablob	function
reset	function	unexpandedpath	function
resetextrapath	function	unexpandedpathlist	function
resetresolve	function	unresolve	function
resolve	function	updaterelations	function
savers	data table	updatescript	function
scandata	function	usezipfile	function
scanfiles	function	validatedpath	function
schemes	table	variable	function
T cleaners		variableofformat	function
F md5		variableofformatorsuffix	function
F none		wildcardpattern	function

# scripts (context)

<b>categorytonumber</b>	data table	<b>numbertocategory</b>	data table
<b>colors</b>	data table	<b>numbertodataset</b>	data table
<b>handlers</b>	data table	<b>preprocess</b>	function
<b>hash</b>	table	<b>reset</b>	function
<b>installdataset</b>	function	<b>set</b>	function
<b>installmethod</b>	function		



# set (context)

contains	function	tonumber	function
create	function	totable	function
tolist	function		

## short\_operators (context)

<code>* string</code>	<code>/ string</code>
<code>. string</code>	<code>: string</code>

# short\_prefixes (context)

E	string	da	string
G	string	f	string
M	string	h	string
P	string	k	string
T	string	m	string
Y	string	n	string
Z	string	p	string
a	string	u	string
c	string	y	string
d	string		

# short\_units (context)

Litre	string	m	string
Metre	string	n	string
g	string	s	string
h	string	u	string
hz	string	v	string

# 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>resettiming</code>	function
<code>elapsedindeed</code>	function	<code>runtime</code>	function
<code>elapsedseconds</code>	function	<code>savefmtstatus</code>	function
<code>elapsedtime</code>	function	<code>show</code>	function
<code>enable</code>	boolean	<code>showjobstat</code>	function
<code>formatruntime</code>	function	<code>starttiming</code>	function
<code>hastiming</code>	function	<code>stoptiming</code>	function
<code>memused</code>	function	<code>threshold</code>	number
<code>register</code>	function	<code>timed</code>	function
<code>reportstorage</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)

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

# structures (context)

<b>atlocation</b>	function	F value	
<b>blocks</b>	table	<b>currentsectionnumber</b>	function
D collected		<b>descriptions</b>	table
F define		<b>documents</b>	table
F print		T data	
F save		S block	
F select		T blocks	
F setstate		T checkers	
D states		N depth	
D tobesaved		T forced	
<b>bookmarks</b>	table	T numbers	
F finalize		T ownnumbers	
F flatten		T status	
S method		F initialize	
F overload		F reset	
F place		<b>floats</b>	table
F register		<b>formulas</b>	table
F setup		F current	
<b>counters</b>	table	F simplify	
F add		F store	
F analyze		<b>helpers</b>	table
F check		F analyze	
D collected		F formulanumber	
F compact		F merged	
F converted		F page	
F current		F prefix	
D data		F prefixlastpage	
F define		F prefixpage	
F first		F simplify	
F get		F title	
F last		F touserdata	
F next		<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	
F show		F label	
T specials		F location	
F userpage		F number	
F subs		D ordered	
D tobesaved		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 register
- F reset
- F split
- F startapply
- F stopapply
- F stripped
- F tostring

**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 section
- 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 finddata
  - F findnumber
  - F fullnumber
  - F getcurrentlevel
  - F getlevel
  - F getnumber
  - F internalreference
  - D levelmap
  - D levels
  - F load
  - F matchingtilldepth
  - F numberatdepth
  - F numbers

F popblock		F flush	
F prefixedconverted		F meaning	
F pushblock		F prepare	
F register		F process	
D registered		F register	
F reportstructure		F registerused	
F save		F sort	
F set		F synonym	
F setblock		D tobesaved	
F setchecker		<b>tags</b>	<b>table</b>
F setlevel		T data	
F setnumber		F detailedtag	
F somelevel		F getid	
F startautolevel		F handler	
F stopautolevel		D labels	
F structuredata		F last	
F title		F lastinchain	
D tobesaved		T metadata	
F typesetnumber		D properties	
F userdata		F registerdata	
B verbose		F registermetadata	
F way		F restart	
<b>sets</b>	<b>table</b>	F setattributehash	
F define		F setcombination	
F get		F setdescription	
F getall		F setdescriptionsymbol	
D setlist		F setfigure	
<b>specials</b>	<b>table</b>	F sethighlight	
D collected		F setitemgroup	
F retrieve		F setproperty	
F store		F setsorting	
D tobesaved		F setsynonym	
<b>synonyms</b>	<b>table</b>	F settablecell	
F analyzed		F settabulatecell	
D collected		F start	
F compare		F stop	
F define		D taglist	
F filter		T userdata	
F finalize			

## table (basic lua)

append	function	print	function
are_equal	function	remove	function
compact	function	reversed	function
concat	function	sequenced	function
contains	function	serialize	function
copy	function	setmetatablecall	function
count	function	setmetatableindex	function
derive	function	setmetatablekey	function
fastcopy	function	setmetatablenewindex	function
flattened	function	setn	function
foreach	function	sort	function
foreachi	function	sortedhash	function
fromhash	function	sortedhashkeys	function
getmetatablekey	function	sortedkeys	function
getn	function	sortedpairs	function
has_one_entry	function	strip	function
identical	function	sub	function
imerge	function	swapped	function
imerged	function	tocontext	function
insert	function	tofile	function
is_empty	function	tohandle	function
keys	function	tohash	function
loweredkeys	function	toxml	function
maxn	function	unique	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>setfalse</b>	function
<b>getcatcode</b>	function	<b>setlccode</b>	function
<b>getcount</b>	function	<b>setlist</b>	function
<b>getdelcode</b>	function	<b>setmath</b>	function
<b>getdimen</b>	function	<b>setmathcode</b>	function
<b>getlccode</b>	function	<b>setnest</b>	function
<b>getlist</b>	function	<b>setsfcode</b>	function
<b>getmath</b>	function	<b>setskip</b>	function
<b>getmathcode</b>	function	<b>settoks</b>	function
<b>getnest</b>	function	<b>settrue</b>	function
<b>getsfcode</b>	function	<b>setuccode</b>	function
<b>getskip</b>	function	<b>sfcode</b>	table
<b>gettoks</b>	function	<b>shipout</b>	function
<b>getuccode</b>	function	<b>skip</b>	table
<b>hashtokens</b>	function	<b>sp</b>	function
<b>ifs</b>	data table	<b>sprint</b>	function
<b>iscount</b>	function	<b>systemmodes</b>	data table
<b>isdimen</b>	function	<b>texcatcodes</b>	number
<b>isskip</b>	function	<b>toks</b>	table
<b>istoken</b>	function	<b>tpacatcodes</b>	number
<b>lccode</b>	table	<b>tpbcatcodes</b>	number
<b>linebreak</b>	function	<b>tprint</b>	function
<b>lists</b>	table	<b>txtcatcodes</b>	number
<b>luacatcodes</b>	number	<b>type</b>	function
<b>mathcode</b>	table	<b>uccode</b>	table
<b>modes</b>	data table	<b>uniformdeviate</b>	function
<b>nest</b>	table	<b>uprint</b>	function
<b>nilcatcodes</b>	number	<b>vrbcacodes</b>	number
<b>notcatcodes</b>	number	<b>write</b>	function
<b>number</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)

command_id	function	get_next	function
command_name	function	is_activechar	function
create	function	is_expandable	function
csname_id	function	is_protected	function
csname_name	function	lookup	function
expand	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 set	
<b>breakpoints</b>	table
N attribute	
F enable	
F handler	
D mapping	
T methods	
F set	
F setreplacement	
<b>cases</b>	table
T actions	
F handler	
F set	
<b>characters</b>	table
F handler	
<b>cleaners</b>	table
F handler	
F set	
<b>digits</b>	table
T actions	
N attribute	
F handler	
F set	

<b>directions</b>	table
F handler	
F process	
F set	
<b>hpack</b>	function
<b>kerns</b>	table
D factors	
F handler	
B keepligature	
B keptogether	
D mapping	
F set	
<b>margins</b>	table
F finalhandler	
F globalhandler	
F localhandler	
F save	
<b>spacings</b>	table
N attribute	
F handler	
D mapping	
F set	
F setup	
<b>tonodes</b>	function
<b>vpack</b>	function



# unicode (extra lua)

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

# 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)

**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

F compile

**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 getparameters  
F hash\_to\_string  
F listitem  
F make\_settings\_to\_hash\_pattern  
T patterns  
  U settings\_to\_array  
  U settings\_to\_hash\_a  
  U settings\_to\_hash\_b  
  U settings\_to\_hash\_c  
F settings\_to\_array  
F settings\_to\_hash  
F settings\_to\_hash\_strict  
F settings\_to\_hash\_tolerant  
F settings\_to\_set  
F simple\_hash\_to\_string

**report** function

**sequencers** table

F appendaction

F appendgroup  
F autocompile  
F compile  
F disableaction  
F disablegroup  
F enableaction  
F enablegroup  
D functions  
F localize  
F nodeprocessor  
F prependaction  
F prependgroup  
F removeaction  
F reset  
F setkind  
F tostring

**setters** table

F disable  
F enable  
F initialize  
F list  
F new  
F register  
F reset  
F show

**storage** table

F allocate  
F checked  
F mark  
F marked  
F setinitializer  
F sparse

**strings** table

F collapseCrLf  
F newrepeater  
F striplong  
F tabtospace

**tables** table

F accesstable  
F definetable  
F encapsulate  
F insertaftervalue  
F insertbeforevalue  
F removevalue

# visualizers (context)

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

# xml (context)

after	function	F name	
all	function	F number	
applylpath	function	F oneof	
assign	function	F print	
attribute	function	F quit	
before	function	F tag	
body	function	F text	
checkbom	function	F undefined	
checkerror	function	F upper	
checknamespace	function	fillin	function
checkns	function	filter	function
cleansed	function	finalizers	table
collect	function	T tex	
collect_elements	function	F all	
collect_tags	function	F attribute	
collect_texts	function	F bibtexconcat	
collected	function	F bibtexshort	
collecttexts	function	F chainattribute	
content	function	F command	
convert	function	F concat	
copy	function	F concatrange	
count	function	F context	
cprint	function	F count	
css	table	F ctxttext	
F colorspecification		F default	
F fontspecification		F first	
F padding		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	
delete_element	function	F stripped	
each	function	F tag	
each_element	function	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 function		F unknown_any_entity	
F index		F unknown_dec_entity	
F last		F unknown_hex_entity	
F match		position	function
F name		privatetoken	function
F position		process	function
F reverse		process_attributes	function
F table		process_elements	function
F tag		processattributes	function
F tags		profiled	table
F text		raw	function
F texts		registerentity	function
first	function	registers	function
found	function	remap_name	function
functions	table	remap_namespace	function
getbuffer	function	remap_tag	function
gethandlers	function	remapname	function
gethandlersfunction	function	remapnamespace	function
include	function	remaptag	function
index	function	renamespace	function
inheritedconvert	function	replace	function
inject	function	replace_element	function
inject_element	function	resolvens	function
inject_element_after	function	root	function
inject_element_before	function	save	function
injectafter	function	selection	function
injectbefore	function	serialize	function
insert	function	sethandlersfunction	function
insert_element	function	setproperty	function
insert_element_after	function	settings	function
insert_element_before	function	specialhandler	table
insertafter	function	sprint	function
insertbefore	function	string	function
inspect	function	strip	function
is_valid	function	strip_whitespace	function
last	function	stripelement	function
load	function	stripleadingspaces	function
lpath	function	table	function
lpathcached	function	text	function
lpathcalls	function	textonly	function
lshow	function	tocdata	function
makestandalone	function	toelement	function
match	function	tostring	function
name	function	toxml	function
newhandlers	function	tprint	function
nodesettostring	function	traverse	function
originalload	function	unescaped	function
package	function	unprivatized	function
parent	function	withelement	function
parsedentitylpeg	userdata	withelements	function
pihandlers	table	wrap	function
placeholders	table	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>	<code>function</code>	<code>decompress</code>	<code>function</code>
<code>compress</code>	<code>function</code>	<code>decompressobj</code>	<code>function</code>
<code>compressobj</code>	<code>function</code>	<code>version</code>	<code>function</code>
<code>crc32</code>	<code>function</code>		