

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

# ConT<sub>E</sub>Xt MkIV

# global (alias: \_G)

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

<code>require</code>	<code>function</code>	<code>tocontext</code>	<code>function</code>
<code>resolvers</code>	<code>table</code>	<code>token</code>	<code>table</code>
<code>scripts</code>	<code>table</code>	<code>tokens</code>	<code>table</code>
<code>select</code>	<code>function</code>	<code>tonumber</code>	<code>function</code>
<code>set</code>	<code>table</code>	<code>tostring</code>	<code>function</code>
<code>setfenv</code>	<code>function</code>	<code>trace_characters</code>	<code>boolean</code>
<code>setmetatable</code>	<code>function</code>	<code>traceback</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>stripmath</code>	<code>function</code>	<code>utf</code>	<code>table</code>
<code>structures</code>	<code>table</code>	<code>utilities</code>	<code>table</code>
<code>table</code>	<code>table</code>	<code>visualizers</code>	<code>table</code>
<code>tex</code>	<code>table</code>	<code>xml</code>	<code>table</code>
<code>texconfig</code>	<code>table</code>	<code>xpcall</code>	<code>function</code>
<code>texio</code>	<code>table</code>	<code>zip</code>	<code>table</code>
<code>toboolean</code>	<code>function</code>	<code>zlib</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 definemixcolor  
F definemultitonecolor  
F defineprocesscolor  
F definesimplegray  
F definespotcolor  
F definetransparency  
F enable  
F filter  
F forcedmodel  
F forcesupport  
F formatcolor  
F formatgray  
F gray  
F graytohsv  
F handler  
F hsvtorgb  
F hsvtorgb  
F iccprofile  
F isblack  
N main  
S model  
F mpcolor  
F mpoptions  
U none  
F popset  
F pushset  
F register  
D registered  
F registerspotcolor  
F rgb  
F rgbtocmyk  
F rgbtogray  
F rgbtohsv  
N selector

F setlist  
F setmodel  
D sets  
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

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

# backends (context)

<b>codeinjections</b>	table	F setformsmethod
<b>current</b>	string	F setpagetransition
<b>defaults</b>	table	F setupcanvas
T codeinjections		F setupidentity
T nodeinjections		F setxmpfile
T registrations		F startlayer
D tables		F stoplayer
<b>install</b>	function	F supportedformats
<b>nodeinjections</b>	table	F useviewerlayer
F restore		F validfield
F save		F validfieldcategory
F transform		F validfieldset
<b>nothing</b>	function	S comment
<b>pdf</b>	table	T nodeinjections
T codeinjections		F addtags
F addbookmarks		F attachfile
F addtransparencygroup		F cmykcolor
F attachmentid		F comment
F clonefield		F destination
F definefield		F effect
F definefieldset		F graycolor
F defineviewerlayer		F injectbitmap
F embedfile		F insertmovie
F enabletags		F insertsound
F exportformdata		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

T blue		T paleblue	
T gray		T palegray	
T green		T palegreen	
T red		T palered	
T rulecolors		T red	
T black		F startslant	
T blue		T stopslant	
T gray		<b>registrations</b>	table
T green		<b>tables</b>	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)

<code>append</code>	<code>function</code>	<code>new</code>	<code>function</code>
<code>dimensions</code>	<code>function</code>	<code>pack</code>	<code>function</code>
<code>dispose</code>	<code>function</code>	<code>write</code>	<code>function</code>

# 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 disable
F hyphenation		F enable
F kerning		F optimize
F ligaturing		F setup
F mlist_to_hlist		F split
paragraphs	table	F tag
T constructors		vspacing
N attribute		table
F disable		F analyze
F enable		D categories
F handler		F collapsevbox
T methods		T data
F default		D map
F oneline		D skip
D names		D snapmethods
D numbers		F definesnapmethod
F register		B fixed
F set		F pagehandler
F kepttogether		F setmap
F registertogether		F setskip
T solutions		F snapbox
T splitters		F tocategories
F define		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)

names	data table
numbers	data table
register	function



# characters (context)

activeoffset	number	is_mark	data table
adobename	function	is_spacing	data table
bidi	data table	lcchars	data table
blocks	data table	lccode	function
casemap	table	lccodes	data table
categories	data table	lettered	function
category	function	lower	function
categorytags	data table	makeactive	function
combined	data table	math	table
contextname	function	mathpairs	data table
data	data table	ranges	data table
decomposed	data table	registerentities	function
define	function	remap_hangul_syllabe	function
description	function	remapentity	function
descriptions	data table	setcodes	function
directions	data table	shape	function
enccodes	data table	shaped	function
entities	data table	shchars	data table
fallbacks	data table	shcodes	data table
filters	data table	specialchars	data table
flush	function	specials	data table
fromnumber	function	subscripts	table
fschars	data table	superscripts	table
fscodes	data table	synonyms	data table
getrange	function	tex	table
graphemes	data table		
hangul	table	D accentmapping	
		F defineaccents	
F decomposed		F toutf	
F description		tonumber	function
F leadconsonant		ucchars	data table
T remapped		uccode	function
initialize	function	uccodes	data table
is_character	data table	unicodechar	function
is_command	data table	upper	function
is_letter	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	clonefield	function
Character	function	collectfloat	function
Characters	function	collecthelp	function
MPd	function	colorcomponents	function
MPh	function	consultfloat	function
MPll	function	copyfileto log	function
MPlr	function	copyposition	function
MPp	function	counttwopassdata	function
MPplus	function	currentcomponent	function
MPpos	function	currentdate	function
MPrest	function	currentenvironment	function
MPul	function	currentproduct	function
MPur	function	currentproject	function
MPw	function	currentregime	function
MPx	function	dayname	function
MPxy	function	defineattribute	function
MPy	function	definebibtexsession	function
Romannumerals	function	definebreakpoint	function
abjadnodotnumerals	function	definebreakpoints	function
abjadnumerals	function	definecharacterspacing	function
addff	function	defineconversion	function
addfs	function	definedviewerlayer	function
addlinklistelement	function	definefield	function
addstructurecounter	function	definefieldset	function
addtojavascriptpreamble	function	definefilefallback	function
addtolist	function	definefilesynonym	function
allinputpaths	function	definefont_one	function
alphabetic	function	definefont_two	function
analysefloatmethod	function	definefontfeature	function
analyzelist	function	defineintermediatecolor	function
applytochars	function	definelinkedlist	function
applytowords	function	definemarking	function
assignbuffer	function	definemultitonecolor	function
autofinishstructurelevels	function	defineparallel	function
autonextspace	function	defineprocesscolor	function
autonextstructurelevel	function	definespotcolor	function
autosetups	function	definestructureblock	function
autostarttext	function	definestructurecounter	function
autostoptext	function	definestructureset	function
boolcase	function	definetransparency	function
character	function	definetwopasslist	function
characters	function	defineviewerlayer	function
checkcharactersinfont	function	defrostrandomseed	function
checkedconversion	function	digits	function
checkedpagefloat	function	disableregime	function
checkstructurecounterssetup	function	disablespellchecking	function
checktwopassdata	function	doanalyzeframedbox	function
chineseallnumerals	function	doif	function
chinesecapnumerals	function	doifblackelse	function
chinesenumerals	function	doifcommonelse	function
cleanfontname	function	doifdimenstringelse	function

doifdrawingblackelse	function	filterreference	function
doifelse	function	finalizebox	function
doifelsebuffer	function	findtwopassdata	function
doifelsecurrentfonthasfeature	function	firstinset	function
doifelseintwopassdata	function	firststructurecounter	function
doifelsemarking	function	flushfloat	function
doifelseparallel	function	flushpostponedblocks	function
doifelsesavedfloat	function	fontchar	function
doifelsespaces	function	fontcollectionclone	function
doifelsestructurecounter	function	fontcollectiondefine	function
doifelsevisualizer	function	fontcollectionprepare	function
doiffielddcategoryelse	function	fontcollectionregister	function
doiffielddelse	function	fontcollectionreport	function
doiffielddsetelse	function	fontcollectionreset	function
doiffiledefinedelse	function	fontlookupgetkey	function
doiffileexistelse	function	fontlookupgetkeyofindex	function
doiffirstcharelse	function	fontlookupinitialize	function
doifinputfileelse	function	fontlookupnoffound	function
doifinsetelse	function	forceendjob	function
doifleapyearelse	function	forcequitjob	function
doiflisthasnumberelse	function	format	function
doiflisthaspageelse	function	formatcolor	function
doiflocfileelse	function	formatgray	function
doifnot	function	freezerandomseed	function
doifnotstructurecounter	function	getbuffer	function
doifolderversionelse	function	getbufferctxlua	function
doifoverlappingelse	function	getbuffermkvi	function
doifparentfileelse	function	getdefaultfieldvalue	function
doifpositionelse	function	getfieldcategory	function
doifpositionsonsamepageelse	function	getfirstcharacter	function
doifpositionsonthispageelse	function	getfirsttwopassdata	function
doifstructurecounter	function	getfloatvariable	function
doifurldefinedelse	function	getlasttwopassdata	function
doprocstypescriptfile	function	getmarking	function
doreshapeframedbox	function	getprivateattribute	function
dostarttextfile	function	getprivatechar	function
dostoptextfile	function	getrandomcounta	function
elapsedtime	function	getrandomcountb	function
enablecolor	function	getrandomseed	function
enablecolorintents	function	getreadfilename	function
enablefontcolorschemas	function	gettexbuffer	function
enableregime	function	gettwopassdata	function
enablesPELLchecking	function	gettwopassdatalist	function
enabletransparency	function	geturl	function
enhancelinkedlist	function	grabbuffer	function
enhancelist	function	helpaction	function
erasebuffer	function	helpreference	function
exportformdata	function	hexstringtonumber	function
featureattribute	function	hour	function
featurelist	function	hyphenatedlist	function
feedback	function	hyphenatedurl	function
fetchallmarks	function		
fetchonemark	function	D characters	
fetchtwomarks	function	N lefthyphenmin	
		D mapping	

N righthyphenmin		percentageof	function
F setcharacters		placeparallel	function
incrementedstructurecounter	function	popfloat	function
insertattachment	function	popitaliccorrection	function
insertcomment	function	poplist	function
insertfield	function	prepareMPvariable	function
insertrenderingwindow	function	preparebibtexsession	function
insertsoundclip	function	preparedfile	function
isleapyear	function	presetsymbollist	function
languagenumber	function	presettabulate	function
laststructurecounter	function	prevstructurecounter	function
lchexnumber	function	processbuffer	function
lchexnumbers	function	processedfile	function
leapyear	function	processedfiles	function
listlabel	function	processfile	function
listlocation	function	processfilemany	function
listprefixednumber	function	processfilenone	function
listprefixedpage	function	processfileonce	function
listrealpage	function	processlist	function
listsize	function	pushfloat	function
listtitle	function	pushitaliccorrection	function
listuserdata	function	pushlist	function
loadctxpreplist	function	rawcharacter	function
loadexamodes	function	rawdate	function
loadfontgoodies	function	referencepagestate	function
loadspellchecklist	function	referencerealpage	function
loadtypescriptfile	function	registerattachment	function
loadvisualizer	function	registerbibtexentry	function
locatefilepath	function	registerbibtexfile	function
locfilename	function	registerbookmark	function
mathrenderset	function	registerbuttons	function
maxitemwidth	function	registercolor	function
minute	function	registercolorintent	function
molecule	function	registeredviewerlayer	function
month	function	registerhelp	function
monthmnem	function	registeritemgroup	function
monthname	function	registermaintextcolor	function
mpcolor	function	registernamespace	function
mpoptions	function	registerpostponedblock	function
namedstructureuservariable	function	registersoundclip	function
namedstructurevariable	function	registerstructureprocessor	function
nbfs	function	registertransparency	function
nextparallel	function	registerunit	function
nextstructurecounter	function	relatemarking	function
nofdays	function	removemissingcharacters	function
nofitems	function	replacemissingcharacters	function
nofstackedfloats	function	replacepospxywhd	function
ntimes	function	resavefloat	function
number	function	resetfontfeature	function
octnumber	function	resetmarking	function
octstringtonumber	function	resetmathitalics	function
ordinal	function	resetnullfont	function
overloadbookmark	function	resetparallel	function
pdfrotation	function	resetstructurecounter	function

resetstructureprocessor	function	settagsorting	function
resettimer	function	settagsynonym	function
restartstructurecounter	function	settagtablecell	function
restorecurrentattributes	function	settagtabulatecell	function
restorestructurecounter	function	setupbookmarks	function
romannumerals	function	setupcanvas	function
runbuffer	function	setupcharacterspacing	function
savebuffer	function	setupexport	function
savecurrentattributes	function	setupfontexpansion	function
savefloat	function	setupfontprotrusion	function
saveparallel	function	setupidentity	function
savestructureblock	function	setupitaliccorrection	function
savestructurecounter	function	setxmpfile	function
savetaggedtwopassdata	function	showattributes	function
savetwopassdata	function	showchardata	function
second	function	showfontparameters	function
selectstructureblock	function	showhyphenatedinlist	function
setbreakpoints	function	showstructurecounter	function
setcharactercasing	function	splitfilename	function
setcharactercleaning	function	spotcolorname	function
setcharacterkerning	function	spotcolorparent	function
setcharacterspacing	function	spotcolorvalue	function
setcharacterstripping	function	startcolorset	function
setcloseddocumentaction	function	startcomponent	function
setclosepageaction	function	startenvironment	function
setcolormodel	function	startproduct	function
setdigitsmanipulation	function	startproject	function
setfontfeature	function	startregime	function
setfontofid	function	starttag	function
setformat	function	starttext	function
setformsmethod	function	startviewerlayer	function
setmarking	function	stopcolorset	function
setmathalphabet	function	stopcomponent	function
setmathalternate	function	stopenvironment	function
setmathattribute	function	stopproduct	function
setmathitalics	function	stopproject	function
setmathstyle	function	stopregime	function
setopendocumentaction	function	stoptag	function
setopenpageaction	function	stoptext	function
setownstructurecounter	function	stopviewerlayer	function
setpagetransition	function	storejavascriptcode	function
setrandomseed	function	storejavascriptpreamble	function
setrealign	function	structureautocatcodedget	function
setreferencearguments	function	structurecatcodedget	function
setreferenceoperation	function	structurecountersubs	function
setstructureblockstate	function	structurecountervalue	function
setstructurecounter	function	structuregivencatcodedget	function
settagcombination	function	structurenumber	function
settagdescription	function	structuretitle	function
settagdescriptionsymbol	function	structureuservariable	function
settagfigure	function	structurevariable	function
settaghighlight	function	subff	function
settagitemgroup	function	subfs	function
settagproperty	function	synchronizemarking	function

taggedmathfunction	function	usetexfile	function
testcase	function	useurl	function
textime	function	usexmlfile	function
transparencycomponents	function	usezipfile	function
triggereffect	function	utfchar	function
triggernegative	function	utfmathclass	function
truefilename	function	utfmathcommand	function
typebuffer	function	utfmathfiller	function
typefile	function	utfmathstretch	function
typestring	function	vspacing	function
uchexnumber	function	vspacingcollapse	function
uchexnumbers	function	vspacingdefine	function
unicodechar	function	vspacingsetamount	function
unit	function	vspacingsnap	function
updatefilenames	function	weekday	function
useMPLibrary	function	weekdayname	function
useanyfile	function	widthofstring	function
usecldfile	function	writestatus	function
usecolors	function	x_table_cleanup	function
usecomponent	function	x_table_construct	function
useenvironment	function	x_table_create	function
usefile	function	x_table_flush	function
usejavascriptpreamble	function	x_table_init_construct	function
usejavascriptscripts	function	x_table_init_reflow_height	function
uselibrary	function	x_table_init_reflow_width	function
useluafile	function	x_table_next_row	function
usemodules	function	x_table_reflow_height	function
usepath	function	x_table_reflow_width	function
useproduct	function	x_table_set_construct	function
useproject	function	x_table_set_reflow_height	function
usesubpath	function	x_table_set_reflow_width	function
usesymbols	function	year	function

## containers (context)

<code>cleannname</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)

coco	boolean	running	function
create	function	status	function
cstacksize	function	wrap	function
resume	function	yield	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
current	function
expandname	function
glob	function
globfiles	function
globpattern	function

ls	function
makedirs	function
mkdirs	function
pop	function
push	function

# directives (context)

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

# document (context)

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

## environment (context)

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

# 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)

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

# 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 clonevector
- F define
- T definitions
- F prepare
- F process
- F registermain
- F report
- 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
- F enhanceparameters
- N factor
- F finalize
- F getfeatureaction
- F hashfeatures
- F hashinstance
- T hashmethods
  - F normal
  - F virtual
- F initializefeatures
- T keys
  - T character
    - S depth
    - S height
    - S italic
    - S width
  - T description
    - T boundingbox
    - S depth

- S height

- S width

- T parameters

- S ascender

- S descender

- S designsize

- T expansion

- S auto

- S shrink

- S step

- S stretch

- S extendfactor

- S factor

- S hfactor

- S mathsize

- T protrusion

- S auto

- S quad

- S scaledpoints

- S scriptpercentage

- S scriptscriptpercentage

- S size

- S slantfactor

- S slantperpoint

- T spacing

- S extra

- S shrink

- S stretch

- S width

- T synonyms

- S em

- S ex

- S extra\_space

- S extraspace

- S slant

- S space

- S space\_shrink

- S space\_stretch

- S spaceshrink

- S spacestretch

- S x\_height

- S units

- S vfactor

- S xheight

- T properties

- S autoitalicamount

- T cidinfo

- S embedding

- S encodingbytes

- S filename

- S finalized

S fontname	
S format	
S fullname	
S hasitalics	
S hasmath	
S mathitalics	
S mode	
S name	
S noglyphnames	
S nostackmath	
S psname	
S textitalics	
S virtualized	
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	
<b>current</b>	function
<b>currentid</b>	function
<b>definers</b>	table
F addlookup	
F analyze	
F applypostprocessors	
F checkedmode	
F checkedscript	
F current	
S defaultlookup	
F define	
F getspecification	
F loadfont	
F makespecification	
T methods	
F install	
D variants	
F read	
F register	
F registered	
F registersplit	
F resetnullfont	
F resolve	
T resolvers	
F file	
F name	
F spec	
<b>definetypeface</b>	function

<b>encodings</b>	table
T agl	
D cache	
F is_known	
D known	
F load	
F make_unicode_vector	
D math	
N version	
<b>expansions</b>	data table
<b>formats</b>	data table
<b>goodies</b>	table
T colorschemes	
F coloring	
T data	
F enable	
T designsizes	
D data	
F filename	
F register	
F getcompositions	
T list	
F compositions	
F designsizes	
F expansions	
F featureset	
F files	
F mathematics	
F protrusions	
F solutions	
F typefaces	
F load	
F prepare_features	
F register	
F registerpostprocessor	
F report	
<b>handlers</b>	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
- S defaultbasealternate
- S defaultnodealternate
- 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
- D descriptions
- T dynamics
- D identifiers
- D italics
- D marks
- D parameters
- T processes
- D properties
- D quads
- D resources
- T setdynamics
- D xheights

## helpers table

- F addprivate
- F dimenfactor
- F getdigitwidth
- F getparameters
- F getprivatenode

- F hasprivate
- F nametoslot
- F setdigitwidth
- iterators** table
  - F characters
  - F descriptions
  - F glyphs
- loggers** table
  - T category\_to\_placeholder
  - S ll
  - S lm
  - S lo
  - S lt
  - S lu
  - S mc
  - S me
  - S mn
  - S nd
  - S nl
  - S no
  - S pc
  - S pd
  - S pe
  - S pf
  - S pi
  - S po
  - S ps
  - S sc
  - S sk
  - S sm
  - S so
- F format
- F onetimemessage
- F register
- F reportdefinedfonts
- F reportusedfeatures
- mappings** table
  - F addtounicode
  - F fromunicode16
  - 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 cleannname
  - F collect
  - F collectfiles

F collectspec	F splitspec	
T data	N version	
B enabled	F writedata	
F exists	<b>protrusions</b>	data table
T filters	<b>readers</b>	table
F afm	F afm	
F dfont	F check_lua	
T list	F check_tfm	
T names	F dfont	
F otf	F lua	
T paths	F opentype	
F pfb	F otf	
F ttc	F pfb	
F ttf	D sequence	
S fontconfigfile	F tfm	
F getfilename	F ttc	
F getlookupkey	F ttf	
F getlookups	<b>specifiers</b>	table
F getpaths	D contextmerged	
F identify	F contextnumber	
F is_permitted	D contextnumbers	
F list	D contextsetups	
F load	F contexttostring	
B loaded	F mergecontext	
F lookup	F presetcontext	
F noflookups	F registercontext	
S osfontdirvariable	F showcontext	
F readdata	F splitcontext	
F register	D synonyms	
F registered	D variants	
F resolve	<b>symbols</b>	table
F resolvedspecification	F uselibrary	
F resolvespec	<b>tables</b>	table
B saved	<b>tracers</b>	table
F specification	<b>typefaces</b>	data table
D specifications		

## 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>namespaces</b>	table
<b>cachedsetups</b>	data table	F define	
<b>cachesetup</b>	function	F list	
<b>complete</b>	data table	<b>setconstant</b>	function
<b>constants</b>	data table	<b>setelement</b>	function
<b>corenamespaces</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

## 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)

<b>comment</b>	function	<b>positions</b>	table
<b>disablesave</b>	function	D collected	
<b>files</b>	table	F copy	
D collected		F depth	
F context		F extra	
B forcerun		F height	
F run		F lowerleft	
D tobesaved		F lowerright	
<b>initialize</b>	function	F onsamepage	
<b>load</b>	function	F overlapping	
<b>loadother</b>	function	F page	
<b>objects</b>	table	F position	
D collected		F replace	
F doifelse		F setall	
F get		F setdim	
F number		F setraw	
F page		D tobesaved	
F save		F upperleft	
F set		F upperright	
D tobesaved		F v	
<b>pack</b>	boolean	F width	
<b>passes</b>	table	F x	
F check		F xy	
D collected		F y	
F count		<b>register</b>	function
F define		<b>save</b>	function
F find		<b>structure</b>	table
F first		D collected	
F get		T tobesaved	
F getcollected		T branches	
F getdata		S name	
F getfield		S type	
F gettobesaved		<b>variables</b>	table
F inlist		D checksums	
F last		D collected	
F list		F save	
F save		D tobesaved	
F savetagged		<b>version</b>	number
D tobesaved			



# lang (basic tex)

<code>clean</code>	<code>function</code>
<code>clear_hyphenation</code>	<code>function</code>
<code>clear_patterns</code>	<code>function</code>
<code>exceptions</code>	<code>function</code>
<code>hyphenate</code>	<code>function</code>
<code>hyphenation</code>	<code>function</code>
<code>id</code>	<code>function</code>

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

# languages (context)

associate	function	numbers	data table
associated	data table	posthyphenchar	function
association	function	prehyphenchar	function
counters	data table	registered	data table
current	function	righthyphenmin	function
data	data table	setdirty	function
define	function	synonym	function
exceptions	function	version	number
getnumber	function	words	table
hyphenate	function		
installed	function	F check	
labels	table	T data	
F define		F disable	
F split		F enable	
lefthyphenmin	function	T enablers	
loadable	function	B enables	
loadwords	function	F found	
logger	table	F load	
F report		T methods	
		N threshold	

# layouts (context)

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

## lfs (extra lua)

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

# libraries (context)

<code>basiclua</code>	data table
<code>basictex</code>	data table
<code>builtin</code>	data table

<code>extralua</code>	data table
<code>extratex</code>	data table
<code>globals</code>	data table

## lmx (context)

convert	function	pv	function
escape	function	reset	function
get	function	result	function
htmfile	function	set	function
include	function	show	function
lmxfile	function	showdebuginfo	function
loadedfile	function	showerror	function
make	function	tv	function
new	function	type	function
overloaderror	function	urlescape	function
popupfile	function	variable	function
print	function	variables	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
newline	function	simplelines	function
poptarget	function	start_page_number	function
pushtarget	function	status	function
report	function	stop_page_number	function
report_job_stat	function	subdirect	function
reportbanner	function	subreport	function
reporter	function	system	function
reportline	function	texerrormessage	function
reportlines	function	writer	function
setformats	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
finalizedocument	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	endstripper	function
<b>Carg</b>	function	firstofsplit	function
<b>Cb</b>	function	frontstripper	function
<b>Cc</b>	function	is_lpeg	function
<b>Cf</b>	function	keeper	function
<b>Cg</b>	function	<b>locale</b>	<b>function</b>
<b>Cmt</b>	function	<b>match</b>	<b>function</b>
<b>Cp</b>	function	oneof	function
<b>Cs</b>	function	patterns	data table
<b>Ct</b>	function	<b>print</b>	<b>function</b>
<b>P</b>	function	replacer	function
<b>R</b>	function	secondofsplit	function
<b>S</b>	function	<b>span</b>	<b>function</b>
<b>UP</b>	function	split	function
<b>UR</b>	function	splitat	function
<b>US</b>	function	splitter	function
<b>V</b>	<b>function</b>	stripper	function
anywhere	function	tsplitat	function
append	function	tsplitter	function
balancer	function	<b>type</b>	<b>function</b>
checkedsplit	function	utfchartabletopattern	function
count	function	<b>version</b>	<b>function</b>
counter	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)

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

## math (basic lua)

<code>abs</code>	function	<code>max</code>	function
<code>acos</code>	function	<code>min</code>	function
<code>asin</code>	function	<code>mod</code>	function
<code>atan</code>	function	<code>modf</code>	function
<code>atan2</code>	function	<code>odd</code>	function
<code>ceil</code>	function	<code>pi</code>	number
<code>cos</code>	function	<code>pow</code>	function
<code>cosd</code>	function	<code>rad</code>	function
<code>cosh</code>	function	<code>random</code>	function
<code>deg</code>	function	<code>randomseed</code>	function
<code>div</code>	function	<code>round</code>	function
<code>even</code>	function	<code>setrandomseedi</code>	function
<code>exp</code>	function	<code>sin</code>	function
<code>floor</code>	function	<code>sind</code>	function
<code>fmod</code>	function	<code>sinh</code>	function
<code>frexp</code>	function	<code>sqrt</code>	function
<code>huge</code>	number	<code>tan</code>	function
<code>ldexp</code>	function	<code>tand</code>	function
<code>log</code>	function	<code>tanh</code>	function
<code>log10</code>	function		

# mathematics (context)

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

## md5 (extra lua)

HEX	function
crypt	function
dec	function
decrypt	function

exor	function
hex	function
sum	function
sumhexa	function



# metapost (context)

<b>analyzeplugins</b>	function	<b>makempy</b>	table
<b>checkformat</b>	function	N nofconverted	
<b>checktexts</b>	function	F processgraphics	
<b>colorinitializer</b>	function	<b>metafun</b>	table
<b>convert</b>	function	F interpolate	
<b>defaultformat</b>	string	F topath	
<b>directrun</b>	function	<b>method</b>	number
<b>edefsxsy</b>	function	<b>mptopdf</b>	table
<b>escaped</b>	function	F convertmpstopdf	
<b>exectime</b>	table	N nofconverted	
<b>filterclippath</b>	function	<b>multipass</b>	boolean
<b>finder</b>	function	<b>n</b>	number
<b>flush</b>	function	<b>optimize</b>	boolean
<b>flushers</b>	table	<b>parse</b>	function
T pdf		<b>pdfliterals</b>	function
F comment		<b>pluginactions</b>	function
F flushfigure		<b>process</b>	function
F startfigure		<b>processplugins</b>	function
F stopfigure		<b>reducetogray</b>	boolean
F textfigure		<b>reporterror</b>	function
<b>flushliteral</b>	function	<b>reset</b>	function
<b>flushnormalpath</b>	function	<b>resetlastlog</b>	function
<b>flushreset</b>	function	<b>resetplugins</b>	function
<b>format</b>	function	<b>resettexttexts</b>	function
<b>formatnumber</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

## 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 italics	
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	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>concat</b>	function	<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 accessibility		<b>pardir_is_parallel</b>	data table
F backgrounds		<b>partextdir_is_equal</b>	data table
F characters		<b>penaltycodes</b>	data table
F checkforleaks		<b>pool</b>	table
F checkglyphs		F baselineskip	
F cleanuppape		F cleanup	
F export		F disc	
F finalize		F fontkern	
F migrate		F glue	
F protectglyphs		F gluespec	
F stripping		F glyph	
F unprotectglyphs		F kern	
<b>has_attribute</b>	function	F latelua	
<b>idstousing</b>	function	F leftmarginkern	
<b>ignorablefields</b>	data table	F leftskip	
<b>injections</b>	table	F lineskip	
F handler		F noad	
F setcursive		F pdfannotation	
F setkern		F pdfdestination	

F pdfdirect		setunsetattributes	function
F pdfliteral		shifts	table
F pdfrestore		D data	
F pdfsave		F define	
F pdfsetmatrix		F enable	
F penalty		F handler	
F register		show	function
F rightmarginkern		showboxes	function
F rightskip		showcodes	function
F rule		showlist	function
F shrink		showsimplelist	function
F special		skipcodes	data table
F stretch		somepenalty	function
F temp		somespace	function
F textdir		stripping	table
F usage		T glyphs	
T userids		F set	
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	

T steppers	F start	
F check	F stop	
F codes	F stop	
F features	unsetattribute	function
F glyphs	unsetattributes	function
F message	visualizebox	function
F messages	whatcodes	data table
F nofsteps	whatsitcodes	data table
F register	writable_spec	function
F reset		



## number (context)

	function		
basepoints	function	tociceros	function
bit	function	todidots	function
bits	function	todimen	function
clearbit	function	toevenhex	function
dimenfactors	data table	toinches	function
hasbit	function	tomillimeters	function
maxdimen	number	tonewciceros	function
nopts	function	tonewdidots	function
percent	function	tonumberf	function
points	function	tonumberg	function
pts	function	topicas	function
setbit	function	topoints	function
tobasepoints	function	toscaled	function
tobitstring	function	toscaledpoints	function
tocentimeters	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>pageresources</code>	<code>string</code>
<code>mapfile</code>	<code>function</code>	<code>pagesattributes</code>	<code>string</code>
<code>mapline</code>	<code>function</code>	<code>pdfmapfile</code>	<code>function</code>
<code>maxobjnum</code>	<code>function</code>	<code>pdfmapline</code>	<code>function</code>
<code>obj</code>	<code>function</code>	<code>print</code>	<code>function</code>
<code>objtype</code>	<code>function</code>	<code>refobj</code>	<code>function</code>
<code>pageattributes</code>	<code>string</code>	<code>registerannot</code>	<code>function</code>
<code>pageref</code>	<code>function</code>	<code>reserveobj</code>	<code>function</code>

# physics (context)

units	table	S	Hz
T	tables	S	W
T	shortcuts	S	b
T	operators	S	g
S	*	S	h
S	.	S	hz
S	/	S	l
S	:	S	lx
T	prefixes	S	m
S	E	S	n
S	G	S	s
S	M	S	t
S	P	S	v
S	T	S	°C
S	Y	S	
S	Z	T	units
S	a	T	operators
S	c	S	OutOf
S	d	S	Per
S	da	S	Solidus
S	f	S	Times
S	h	T	packaged
S	k	S	Micron
S	m	S	mmHg
S	n	T	prefixes
S	p	S	Atto
S	u	S	Centi
S	y	S	Deca
S	z	S	Deci
T	suffixes	S	Exa
S	+1	S	Exbi
S	+2	S	Femto
S	+3	S	Gibi
S	-1	S	Giga
S	-2	S	Hecto
S	-3	S	Kibi
S	1	S	Kilo
S	2	S	Mebi
S	3	S	Mega
S	^+1	S	Micro
S	^+2	S	Milli
S	^+3	S	Nano
S	^-1	S	Pebi
S	^-2	S	Peta
S	^-3	S	Pico
S	^1	S	Root
S	^2	S	Tebi
S	^3	S	Tera
T	units	S	Yobi
S	A	S	Yocto
S	B	S	Yotta

S Zebi	S Fahrenheit
S Zepto	S Farad
S Zetta	S Foot
T suffixes	S Gal
S Cubic	S Gauss
S ICubic	S Gon
S ILinear	S Grad
S ISquare	S Gram
S Inverse	S Gray
S Linear	S Hectare
S Square	S Henry
T symbols	S Hertz
S %	S Hg
S ArcMinute	S Hour
S ArcSecond	S Inch
S Degree	S Joule
S Degrees	S Katal
S Percent	S Kelvin
S Per mille	S Knot
S Promille	S Liter
S °	S Litre
S	S Lumen
S	S Lux
T units	S Maxwell
S AMU	S Meter
S Ampere	S Metre
S Angstrom	S Metric Ton
S Astronomical Unit	S Minute
S Atm	S Mol
S Atmosphere	S Mole
S Atomic Mass Unit	S Nautical Mile
S Bar	S Neper
S Barn	S Newton
S Baud	S Oersted
S Bel	S Ohm
S Bequerel	S Pascal
S Bit	S Phot
S Byte	S Poise
S Cal	S Radian
S Calorie	S Rev
S Candela	S Revolution
S Celsius	S Second
S Coulomb	S Siemens
S Dalton	S Sievert
S Day	S Steradian
S Degree Celsius	S Stilb
S Degree Fahrenheit	S Stokes
S Degrees Celsius	S Tesla
S Degrees Fahrenheit	S Tonne
S Dyne	S Volt
S Electron Volt	S Watt
S Erg	S Weber
S Erlang	S eV

## profiler (extra lua)

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

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

# regimes (context)

disable	function	process	function
enable	function	push	function
pop	function	translate	function



# resolvers (context)

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

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

# scripts (context)

categorytonumber	data table	numbertocategory	data table
colors	data table	numbertodataset	data table
handlers	data table	preprocess	function
hash	table	reset	function
installdataset	function	set	function
installmethod	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>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
data	table
evaluators	table
mark	function
marked	function
max	number

min	number
nofmodules	number
noftables	number
register	function
shared	data table

## 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>	<b>function</b>	<b>F value</b>	
<b>blocks</b>	<b>table</b>	<b>currentsectionnumber</b>	<b>function</b>
D collected		<b>descriptions</b>	<b>table</b>
F define		<b>documents</b>	<b>table</b>
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>	<b>table</b>	T numbers	
F finalize		T ownnumbers	
F flatten		T status	
S method		F initialize	
F overload		F preset	
F place		F reset	
F register		<b>floats</b>	<b>table</b>
F setup		<b>formulas</b>	<b>table</b>
<b>counters</b>	<b>table</b>	F current	
F add		F simplify	
F analyze		F store	
F check		<b>helpers</b>	<b>table</b>
D collected		F analyze	
F compact		F formulanumber	
F converted		F merged	
F current		F page	
D data		F prefix	
F define		F prefixlastpage	
F first		F prefixpage	
F get		F simplify	
F last		F title	
F next		F touserdata	
F prev		<b>itemgroups</b>	<b>table</b>
F previous		F maxwidth	
F raw		F nofitems	
F record		F register	
F reset		<b>lists</b>	<b>table</b>
F restart		F addto	
F restore		F analyze	
F save		D cached	
F set		D collected	
F setlevel		F doifstoredelse	
F setoffset		F enhance	
F setown		T enhancers	
F setstate		F filter	
F setvalue		F filtercollected	
F show		F formulanumber	
T specials		F hasnumberdata	
F userpage		F haspagedata	
F subs		D internals	
D tobesaved		F label	

- F location
- F number
- D ordered
- F page
- F popnesting
- F prefix
- F prefixednumber
- F prefixedpage
- F process
- D pushed
- F pushnesting
- F realpage
- 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

## references table

- F analyze
- F checkedfile
- F checkedfileorurl
- F checkedprogram
- F checkedrealpage
- F checkedurl
- D collected
- U componentsplitter
- F currentmetadata
- F currentorder
- D currentset
- F define
- D defined
- D derived
- F doifelse
- F enableinteraction
- F enhance
- D executers
- F expandcurrent
- F export
- 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
- F inject
- F injectcurrentset
- D internals
- F load
- F loadpresets
- F mark
- D pages
- U prefixsplitter
- T productdata
  - T componentreferences
  - T components
  - T productreferences
- T programs
  - T data
  - F define
  - F get
- F realpageofpage
- U referencesplitter
- D referred
- F referredpage
- F registerfinalizer
- F registerinitializer
- F registerpage
- F reportproblems
- F reset
- T resolvers
  - F reference
  - F section
- D runners
- F set
- F setandgetattribute
- F setcomponent
- F setinnermethod
- F setinternalreference
- F setnextinternal
- F setnextorder
- D specials
- F splitcomponent
- F splitprefix
- F splitreference
- T testrunners
  - F inner
  - F special
  - F special operation
  - F special operation with arguments
- T testspecials
  - F deltapage
  - F i
  - F internal
  - F page
  - F realpage

- F section
- F userpage
- D tobereferred
- D tobесaved
- 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 tobесaved
  - 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 prefixedconverted
  - F pushblock

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

## 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
loweredkeys	function	toxml	function
<b>maxn</b>	<b>function</b>	unique	function
merge	function	unnest	function
merged	function	unpack	function
prepend	function		



## tex (basic tex)

<b>attribute</b>	table	<b>number</b>	function
<b>badness</b>	function	<b>pdffontname</b>	function
<b>box</b>	table	<b>pdffontobjnum</b>	function
<b>catcode</b>	table	<b>pdffontsize</b>	function
<b>conditionals</b>	data table	<b>pdfpageref</b>	function
<b>constants</b>	data table	<b>pdfxformname</b>	function
<b>count</b>	table	<b>primitives</b>	function
<b>ctxcatcodes</b>	number	<b>print</b>	function
<b>definefont</b>	function	<b>printlist</b>	function
<b>delcode</b>	table	<b>prtcacodes</b>	number
<b>dimen</b>	table	<b>romannumeral</b>	function
<b>enableprimitives</b>	function	<b>round</b>	function
<b>error</b>	function	<b>run</b>	function
<b>extraprimitives</b>	function	<b>scale</b>	function
<b>finish</b>	function	<b>set</b>	function
<b>fontidentifier</b>	function	<b>setAttribute</b>	function
<b>fontname</b>	function	<b>setbox</b>	function
<b>fprint</b>	function	<b>setcatcode</b>	function
<b>get</b>	function	<b>setcount</b>	function
<b>getAttribute</b>	function	<b>setdelcode</b>	function
<b>getbox</b>	function	<b>setdimen</b>	function
<b>getcatcode</b>	function	<b>setfalse</b>	function
<b>getcount</b>	function	<b>setlccode</b>	function
<b>getdelcode</b>	function	<b>setlist</b>	function
<b>getdimen</b>	function	<b>setmath</b>	function
<b>getlccode</b>	function	<b>setmathcode</b>	function
<b>getlist</b>	function	<b>setnest</b>	function
<b>getmath</b>	function	<b>setsfcode</b>	function
<b>getmathcode</b>	function	<b>setskip</b>	function
<b>getnest</b>	function	<b>settoks</b>	function
<b>getsfcode</b>	function	<b>settrue</b>	function
<b>getskip</b>	function	<b>setuccode</b>	function
<b>gettoks</b>	function	<b>sfcode</b>	table
<b>getuccode</b>	function	<b>shipout</b>	function
<b>hashtokens</b>	function	<b>skip</b>	table
<b>ifs</b>	data table	<b>sp</b>	function
<b>inimatcodes</b>	number	<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

## 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)

**alignments** table

F handler

F set

**breakpoints** table

N attribute

F define

F handler

D mapping

T methods

T numbers

F set

F setreplacement

**cases** table

T actions

F handler

F set

**characters** table

F handler

**cleaners** table

F handler

F set

**digits** table

T actions

N attribute

F handler

F set

**directions** table

F handler

F process

F set

**hpack** function

**italics** table

F forcevariant

F handler

F reset

F set

**kerns** table

D factors

F handler

B keepligature

B keptogether

D mapping

F set

**margins** table

F finalhandler

F globalhandler

F ha

F localhandler

F save

**paragraphs** table

N attribute

T droppers

F freeze

F set

F handler

F set

**processors** table

F apply

F register

F reset

F split

F startapply

F stopapply

F stripped

F tostring

**spacings** table

N attribute

F define

F handler

D mapping

T numbers

T frenchpunctuation

T characters

S name

N number

F reset

F set

F setup

**tonodes** function

**vpack** function

**xtables** table

F cleanup

F construct

F create

F flush

F initialize\_construct

F initialize\_reflow\_height

F initialize\_reflow\_width

F next\_row

F reflow\_height

F reflow\_width

F set\_construct

F set\_reflow\_height

F set\_reflow\_width



# unicode (extra lua)

<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		utf16_to_utf8	<b>function</b>
F rep		utf16_to_utf8_be	<b>function</b>
F reverse		utf16_to_utf8_le	<b>function</b>
F sub		utf32_to_utf8	<b>function</b>
F upper		utf32_to_utf8_be	<b>function</b>
<b>filetype</b>	<b>function</b>	utf32_to_utf8_le	<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		utf8_to_utf16	<b>function</b>
F dump		utf8_to_utf8	<b>function</b>
F find		utfcodes	<b>function</b>
F format		utfname	<b>table</b>
F gfind		utftype	<b>function</b>
		xstring	<b>function</b>

# url (context)

addscheme	function	hasscheme	function
construct	function	query	function
filename	function	split	function
hashed	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 nice  
F striplong  
F tabtospace

**tables** table

F accesstable  
F definetable  
F encapsulate  
F insertaftervalue  
F insertbeforevalue  
F migratetable  
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)

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

F upper		lshow	function
T xml		makestandalone	function
F all		match	function
F att		name	function
F attribute		newhandlers	function
F attributes		nodesettostring	function
F cdata		originalload	function
F chainattribute		package	function
F count		parent	function
F default		parsedentitylpeg	userdata
F elements		pihandlers	table
F empty		placeholders	table
F first		F unknown_any_entity	
F function		F unknown_dec_entity	
F index		F unknown_hex_entity	
F last		position	function
F match		privatecodes	table
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	registerns	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	resolvns	function
inject_element_after	function	root	function
inject_element_before	function	save	function
injectafter	function	selection	function
injectbefore	function	serialize	function
insert	function	setcdata	function
insert_element	function	sethandlersfunction	function
insert_element_after	function	setproperty	function
insert_element_before	function	settings	function
insertafter	function	specialhandler	table
insertbefore	function	sprint	function
insertcomment	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

<code>tocdata</code>	<code>function</code>	<code>unescaped</code>	<code>function</code>
<code>toelement</code>	<code>function</code>	<code>unprivatized</code>	<code>function</code>
<code>tostring</code>	<code>function</code>	<code>withelement</code>	<code>function</code>
<code>toxml</code>	<code>function</code>	<code>withelements</code>	<code>function</code>
<code>tprint</code>	<code>function</code>	<code>wrap</code>	<code>function</code>
<code>traverse</code>	<code>function</code>	<code>xmlns</code>	<code>table</code>

## zip (extra lua)

archives	table	openarchive	function
close	function	openfile	function
closearchive	function	registeredfiles	table
open	function	type	function



# 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>		