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

ConT_EXt MkIV

global (alias: _G)

MP	table	environment	table
_LUAVERSION	number	epdf	table
MAJORVERSION	number	error	function
_MINORVERSION	number	experiments	table
cldo	function	figures	table
arg	table	file	table
assert	function	floats	table
attributes	table	font	table
backends	table	fontloader	table
beginpage	function	fonts	table
bit	table	format_n	function
bit32	table	frozen	boolean
blobs	table	functions	table
boolean	table	gcinfo	function
border_set	boolean	getfenv	function
buffers	table	getmetatable	function
builders	table	getreadfilename	function
caches	table	global	table
callback	table	graphics	table
callbacks	table	gzip	table
catcodes	table	img	table
characters	table	inspect	function
chemistry	table	interactions	table
collectgarbage	function	interfaces	table
commands	table	io	table
containers	table	ipairs	function
context	function	jit	table
context_applyprocessor	function	job	table
<pre>context_firstofoneargument</pre>	function	lang	table
converters	table	languages	table
coroutine	table	layouts	table
ctxrunner	table	lfs	table
debug	table	libraries	table
delta	number	lmx	table
dimen	function	lmxconvert	function
dir	table	lmxnew	function
directives	table	load	function
document	table	loadfile	function
documentdata	table	loadstring	function
dofile	function	logs	table
endpage	function	lp_fastpos_n	userdata

		_	
lp_fastpos_p	userdata	rawlen	function
lpdf	table	rawset	function
lpeg	table	regimes	table
ltn12	table	report_characters	function
lua	table	require	function
luatex	table	resolve_fences	function
lxml	table	resolvers	table
math	table	scripts	table
mathematics	table	select	function
mbox	table	set	table
md5	table	setcharacteralign	function
metapost	table	setfenv	function
mime	table	setinspector	function
module	function	setmetatable	function
moduledata	table	socket	table
modules	table	sorters	table
mp	table	statistics	table
mplib	table	status	table
newline	function	storage	table
newproxy	function	streams	table
next	function	string	table
noads	table	stripmath	function
node	table	structures	table
nodes	table	swiglib	function
number	table	table	table
optionalrequire	function	tex	table
os	table	texconfig	table
outputpagestree	function	texio	table
package	table	thirddata	table
pagebuilders	table	toboolean	function
pairs	function	token	table
parametersets	table	tokens	table
pattern	userdata	tonumber	function
pcall	function	tostring	function
pdf	table	trace_characters	boolean
pdfborder	function	tracers	table
pdfscanner	table	trackers	table
physics	table	type	function
print	function	typesetters	table
profiler	table	unicode	table
protect	function	unpack	function
publications	table	url	table
rawequal	function	userdata	table
rawget	function	utf	table

utilities table vf table visualizers table xml table xmlconvert function xpcall function zip table zlib table

attributes (context)

colorintents	table	F mpoptions	
N attribute		U none	
D data		F popset	
F enable		F processcolorc	omponents
F handler		F pushset	
F register		F register	
D registered		D registered	
colors	table	F registerspotc	olor
N attribute		F rgb	
F cmyk		F rgbtocmyk	
F cmyktogray		F rgbtogray	
F cmyktorgb		F rgbtohsv	
F colorcomponer	nts	N selector	
B couple		F setlist	
D data		F setmodel	
N default		D sets	
F defineinterme	ediatecolor	F spec	
F definemixcolo	or	F spot	
F definemultito	onecolor	F spotcolorname	
F defineprocess	scolor	F spotcolorpare	nt
F definesimple	gray	F spotcolorvalu	е
F definespotcol	lor	B supported	
F definetranspa	arency	F transparencyc	omponents
F enable		B triggering	
F filter		F usecolors	
F forcedmodel		F value	
F forcesupport		D values	
F formatcolor		B weightgray	
F formatgray		define	function
F gray		effects	table
F graytohsv		N attribute	
F handler		D data	
F hsvtogray		F enable	
F hsvtorgb		F handler	
F iccprofile		F register	
F isblack		D registered	
N main		D values	
S model		handlers	table
D models		list	data table
F mpcolor		names	data table
F mpnamedcolor		negatives	table

N attribute D data F enable F handler F register D registered data table numbers function ofnode private function public function showcurrent function states table F disabletriggering F enabletriggering F finalize F initialize F process F selective F stacked F stacker function system transparencies table N attribute D data F enable F forcesupport F handler U none F register D registered B supported B triggering F value D values unsetvalue number viewerlayers table N attribute D data F define

F enable
F forcesupport
F handler
B hasorder
D listwise

F register
D registered
F resolve_begin
F resolve_end
F resolve_step
D scopes
F setfeatures
F start
F stop
B supported
D values

backends (context)

F hasmatrix

codeinjections table F insertrenderingwindow F synchronizecolormodel F mergereferences current strina F mergeviewerlavers defaults table F prerollreference T codeinjections F presetsymbol F aethpos F presetsymbollist F getmatrix F processrendering F getpos F registerdocumentcloseaction F registerdocumentopenaction F getypos F hasmatrix F registeredsymbol T nodeiniections F registerpagecloseaction T registrations F registerpageopenaction D tables F registersymbol install function F setfieldcalculationset nodeinjections table F setfigurealternative F restore F setfigurecolorspace F save F setfiguremask F transform F setformat nothina function F setformsmethod table pdf F setpagetransition T codeiniections F setupcanvas F addbookmarks F setupidentity F attachmentid F setxmpfile F clonefield F startlayer F definefield F stoplayer F definefieldset F supportedformats F defineviewerlayer F unicodetoactualtext F embedfile F useviewerlaver F enabletags F validfield F exportformdata F validfieldcategory F validfieldset F getdefaultfieldvalue F getfieldcategory S comment F getfieldset T nodeinjections F getformatoption F addtags F gethpos F annotation F attachfile F getmatrix F getoutputfilename F changestackedlayer F cmykcolor F getpos F comment F getpreviewfigure F destination F getypos

F effect

- F graycolor
- F injectbitmap
- F insertmovie
- F insertsound
- F insertswf
- F insertu3d
- F knockout
- F negative
- F overprint
- F positive
- F reference
- F rgbcolor
- F spotcolor
- F startlayer
- F startstackedlayer
- F stoplayer
- F stopstackedlayer
- F transparency
- F typesetfield
- T registrations
 - F cmykindexcolor
 - F cmykspotcolor
 - F getspotcolorreference
 - F grayindexcolor
 - F grayspotcolor
 - F rgbindexcolor
 - F rgbspotcolor
 - F spotcolorname
 - F transparency
- T tables
 - D vfspecials

registrations table
tables table

bit (context)

```
arshift function
band
        function
        function
bnot
        function
bor
        function
bswap
        function
bxor
        function
lshift
rol
        function
ror
        function
rshift
        function
tobit
        function
tohex
        function
```

bit32 (basic lua)

```
arshift function
band
       function
       function
bnot
bor
       function
       function
btest
bxor function
extract function
lrotate function
lshift function
replace function
rrotate function
rshift function
```

blobs (context)

append	function
dimensions	function
dispose	function
new	function
pack	function
strdp	function
strhd	function
strht	function
strwd	function
tohpack	function
tohpackfast	function
tonodes	function
tovpack	function
tovpackfast	function
write	function

boolean (context)

tocontext function
tonumber function

buffers (context)

append function assign function collectcontent function erase function function exists function getcontent function getlines loadcontent function parallel table

F define

F hassomecontent

F next
F place
F reset
F save

prepend function
raw function

builders (context)

kernel table F hyphenation F kernina F ligaturing F mlist_to_hlist paragraphs table T constructors N attribute F define F disable F enable F handler T methods F basic F default F oneline D names D numbers F set F start F stop T expansion F trace F keeptogether F registertogether T solutions T splitters F define F optimize T registered F reset F set F split F start F stop F tag vspacing table F analyze D categories F collapsevbox

T data

D map D skip D snapmethods F definesnapmethod B fixed F pagehandler F resetprevdepth F setmap F setskip F snapbox F tocategories F tocategory F vboxhandler

caches (context)

ask boolean base string collapsecontent function configfiles function function contentstate defaults table define function direct boolean force boolean **getfirstreadablefile** function getfirstreadablefile_TEST_ME_FIRST function getreadablepaths function getwritablepath function hashed function is writable function loadcontent function loaddata function strina more relocate boolean savecontent function function savedata setfirstwritablefile function setluanames function tree string treehash function function usedpaths

callback (basic tex)

find function
list function

register overloaded function

callbacks (context)

freeze
known function
list data table
pop function
push function
register function
report function

catcodes (context)

characters (context)

activeoffset	number
adobename	function
bidi	data table
blockrange	function
blocks	data table
casemap	table
categories	data table
category	function
categorytags	data table
checkedlower	function
collapsed	data table
combined	data table
contextname	function
data	data table
decomposed	data table
define	function
description	function
descriptions	data table
directions	table
enccodes	data table
entities	data table
fallbacks	data table
filters	data table
fromnumber	function
fschars	data table
fscodes	data table
getrange	function
graphemes	data table
hangul	data table
initialize	function
is_character	data table
is_command	data table
is_letter	data table
is_mark	data table
is_punctuation	data table
is_spacing	data table
lcchars	data table
lccode	function
lccodes	data table
lettered	function
lower	function

math	table
mathpairs	data table
mirrors	table
otfscripts	data table
ranges	data table
registerentities	function
remap_hangul_syllabe	function
safechar	function
setcodes	function
shape	function
shaped	function
shchars	data table
shcodes	data table
showstring	function
specialchars	data table
specials	data table
subscripts	table
superscripts	table
synonyms	data table
tex	table

D accentmapping F defineaccents

textclasses
tonumber
ucchars
uccode
uccodes
unicodechar
upper

F toutf

table function data table function data table function function

chemistry (context)

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

commands (context)

Al mhahadá a	£		£
Alphabetic Character	function function	assignbuffer	function function
		attachproperty	
Characters MPc	function function	autofinishstructurelevels	function function
•		autonextspace	
MPd	function	autonextstructurelevel 	function
MPh	function	autosetups	function
MPII	function	autostarttext	function
MPlr	function	autostoptext	function
MPls	function	averagecharwidth 	function
MPn	function	bcolumn	function
MPp	function	boolcase	function
MPpardata	function	boxtostring	function
MPplus	function	btxaddfield	function
MPpos	function	btxauthor	function
MPposset	function	btxcollectlistentries	function
MPr	function	btxdetail	function
MPrest	function	btxdoif	function
MPrs	function	btxdoifelse	function
MPul	function	btxdoifelselistentryplaced	function
MPur	function	btxdoifnot	function
MPw	function	btxfetchlistentries	function
MPx	function	btxfield	function
MPxy	function	btxflush	function
MPxywhd	function	btxflushlistentries	function
MPy	function	btxhandlecite	function
Romannumerals	function	btxhandlenocite	function
abjadnodotnumerals	function	btxlistvariant	function
abjadnumerals	function	btxregisterlistentry	function
addbtxentry	function	btxsetlistmethod	function
addcounter	function	btxsingularorplural	function
addlinklistelement	function	buildtextaccent	function
addreplacements	function	character	function
addtojavascriptpreamble	function	characters	function
addtolist	function	chardescription	function
allinputpaths	function	checkcharactersinfont	function
alphabetic	function	checkcountersetup	function
analysefloatmethod	function	checkedconversion	function
analyzelist	function	checkedpagefloat	function
applytochars	function	checktwopassdata	function
applytofirstcharacter	function	chemicalcomponent	function
applytowords	function	chineseallnumerals	function

chinesecapnumerals	function	definefont_one	function
chinesenumerals	function	definefont_two	function
cleanfontname	function	definefontfamily	function
cleanupbox	function	definefontfeature	function
cleanuplayers	function	definefontsolution	function
clonefield	function	defineinsertion	function
collectfloat	function	defineintermediatecolor	function
collecthelp	function	definelabels	function
colorcomponents	function	definelanguage	function
concatcommalist	function	definelinkedlist	function
consultfloat	function	definemarking	function
convertbtxdatasettoxml	function	definemetafont	function
copyposition	function	definemultitonecolor	function
cos	function	definenote	function
cosd	function	defineparallel	function
countervalue	function	defineparbuilder	function
counttwopassdata	function	defineprocesscolor	function
ctxfunction	function	defineprogram	function
currentcomponent	function	definereference	function
currentdate	function	defineregister	function
currentenvironment	function	definesectionlevels	function
currentproduct	function	defineselectfont	function
currentproject	function	definesnapmethod	function
currentreferencedefault	function	definespotcolor	function
currentreferenceorder	function	definestructureblock	function
currentregime	function	definestructureset	function
currentsectiontolist	function	definetransparency	function
datasetvariable	function	definetwopasslist	function
dayname	function	defineviewerlayer	function
deferredproperty	function	defrostrandomseed	function
defineattribute	function	depthnumber	function
definebreakpoint	function	digits	function
definebreakpoints	function	disableautofontscript	function
definecatcodetable	function	disableparbuilder	function
definecharacterspacing	function	disableregime	function
definechemical	function	disablespellchecking	function
defineconversion	function	discardfromlist	function
definecounter	function	doanalyzeframedbox	function
definedviewerlayer	function	doif	function
definefallbackfamily	function	doifblackelse	function
definefield	function	doifcommonelse	function
definefieldset	function	doifcounter	function
definefilefallback	function	doifdimenstringelse	function
definefilesynonym	function	doifdrawingblackelse	function

doifelse	function	doifpositionsonsamepageelse	function
doifelsebuffer	function	doifpositionsonthispageelse	function
doifelsecontinuewithfile	function	doifurldefinedelse	function
doifelsecounter	function	doprocesstypescriptfile	function
doifelsecurrentfonthasfeature	function	doreshapeframedbox	function
doifelseintwopassdata	function	dostarttextfile	function
doifelsemarking	function	dostoptextfile	function
doifelsemessage	function	ecolumn	function
doifelsemultipar	function	elapsedtime	function
doifelseparallel	function	enableautofontscript	function
doifelsepositionsused	function	enablecolor	function
doifelserangeonpage	function	enablecolorintents	function
doifelsereference	function	enablefontcolorschemes	function
doifelsesavedfloat	function	enableparbuilder	function
doifelsespaces	function	enableregime	function
doifelseutfmathabove	function	enablespellchecking	function
doifelseutfmathaccent	function	enabletransparency	function
doifelseutfmathbelow	function	enhancelinkedlist	function
doifelsevisualizer	function	enhancelist	function
doiffieldcategoryelse	function	enhancereference	function
doiffieldelse	function	enhanceregister	function
doiffieldsetelse	function	erasebuffer	function
doiffiledefinedelse	function	expandcurrentreference	function
doiffileexistelse	function	exportformdata	function
doiffirstcharelse	function	exportreferences	function
doifinputfileelse	function	extendregister	function
doifinsetelse	function	extensiblecode	function
doifleapyearelse	function	feature	function
doiflisthasentry	function	featureattribute	function
doiflisthasnumberelse	function	featurelist	function
doiflisthaspageelse	function	feedback	function
doiflisthastitleelse	function	fetchallmarks	function
doiflocfileelse	function	fetchmultipar	function
doifnot	function	fetchmultishape	function
doifnotcounter	function	fetchonemark	function
doifnotecontent	function	fetchposboxes	function
doifnoteonsamepageasprevious	function	fetchtwomarks	function
doifobjectreferencefoundelse	function	figurefilename	function
doifolderversionelse	function	figurefilepath	function
doifoverlappingelse	function	figurefiletype	function
doifparentfileelse	function	figurerequest	function
doifposition	function	figurestatus	function
doifpositionelse	function	figureused	function
doifpositiononpage	function	figurevariable	function

filterdefaultreference	function	getinternallistreference	function
filterreference	function	getinternalreference	function
finalizebox	function	getlasttwopassdata	function
findtwopassdata	function	getmarking	function
firstcountervalue	function	getmessage	function
firstinrange	function	getmpextensions	function
firstinset	function	getnotestate	function
flushfloat	function	getplaceholderchar	function
flushnotes	function	getprivatechar	function
flushpostponedblocks	function	getprogram	function
flushpostponednotes	function	getrandomcounta	function
fontchar	function	getrandomcountb	function
fontcollectionclone	function	getrandomseed	function
fontcollectiondefine	function	getreadfilename	function
fontcollectionprepare	function	getsectionnumber	function
fontcollectionregister	function	getstructuredata	function
fontcollectionreport	function	getsubstring	function
fontcollectionreset	function	gettexbuffer	function
fontlookupgetkey	function	gettwopassdata	function
fontlookupgetkeyofindex	function	gettwopassdatalist	function
fontlookupinitialize	function	geturl	function
fontlookupnoffound	function	grabbuffer	function
forceendjob	function	hboxtovbox	function
forcequitjob	function	helpaction	function
format	function	helpreference	function
formatcolor	function	hexstringtonumber	function
formatgray	function	horizontalcode	function
freezerandomseed	function	hour	function
from	function	hyphenatedlist	function
getbidimode	function	hyphenatedurl	function
getbuffer	function	D characters	
getbufferctxlua	function	N lefthyphenmin	
getbuffermkvi	function	D mapping	
getcommandline	function	N righthyphenmin	
getctxfile	function	F setcharacters	
getcurrentprefixspec	function	immediateproperty	function
getcurrentreferencemetadata	function	incrementedcounter	function
getcurrentsectionlevel	function	initializetexdirectives	function
getdefaultfieldvalue	function	initializetextrackers	function
getfieldcategory	function	injectcurrentreference	function
getfirstcharacter	function	injectreference	function
getfirsttwopassdata	function	inlinechemical	function
getfloatvariable	function	insertattachment	function
getfullsectionnumber	function	insertcomment	function

insertionnumber function mixqlushrest function insertrenderingwindow function mixgetsplit function insertsoundclip function mixgetsplit function insertsoundclip function mixsetsplit function installedlanguages function mixsetse function installedinguages function molecule function installexifective function month function languagenumber function month function languagenumber function monthname function lactountervalue function monthname function lchexnumbers function mpcolor function lchexnumbers function mproprions function linenumbersstageone function namedstructurevariable function linenumbersstageone function namedstructurevariable function listgroupindex function nbfs function listgroupindex function nextountervalue function listgrepixednumber function nextountervalue function listprefixednumber function nofdays function listprefixednage function nofdays function listprefixednage function noffays function listralpage function noffays function listerse function notealtapage function listuserdata function notealtapage function loadbxdefinitionfile function noteumberpage function loadbxdefinitionfile function noteumberpage function loadodxamodes function noteumberpage function loadoxamodes function function function prefixednumber function loadoxamodes function function function function function loadoxamodes function function full function note full manipulated function function full function functi	insertfield	function	mixflushlist	function
insertsoundclip function mixsetsplit function installedlanguages function molecule function installetxirective function molecule function installetxiracker function month function last function month function last countervalue function month molecule function last countervalue function monthame function last countervalue function mpoclor function lchexnumber function mpoclor function lchexnumber function mpoclor function linenumbersstageone function namedstructureuservariable function linenumbersstageone function namedstructureuservariable function listgroupindex function next countervalue function listorefixed page function next countervalue function listprefixed page function nof stacked floats function listprefixed page function nof stacked floats function listsprefixed function not stacked floats function listsize function not passed function not passed function listsize function not passed function not passed floats function listsize function not passed floats function load btx definition file function not passed floats function load passed function float flo	insertionnumber	function	mixflushrest	function
installedlanguages function mixstate function installtexdirective function molecule function installtexdirective function month function languagenumber function month function languagenumber function monthname function lastcountervalue function monthname function lchexnumber function mpolor function lchexnumbers function mpoplor function lchexnumbers function mpoplor function linenumbersstageone function namedstructureuservariable function linenumbersstagetwo function namedstructurevariable function listgroupindex function nbfs function listgroupindex function nextparallel function listprefixednumber function nofdays function listprefixednumber function nofdays function listprefixedpage function nofitems function listprefixedpage function nofitems function listsize function notedeltapage function listsize function notedeltapage function loadbtxdefinitionfile function notenumberpage function loadbtxdefinitionfile function noteprefixednumber function loadspellchecklist function noteprefixednumber function loadspellchecklist function function file function notespholpage function loadvisualizer function file function file function markingumber function file function notespholpage function loadvisualizer function file f	insertrenderingwindow	function	mixgetsplit	function
installtexdirective function moth function installtextracker function month function languagenumber function monthmem function lastcountervalue function monthmame function lchexnumber function mpcolor function lchexnumbers function mpoptions function lchexnumbers function mpoptions function linenumbersstageone function namedstructureuservariable function linenumbersstagetwo function namedstructurevariable function listgroupindex function nextcountervalue function listlabel function nextcountervalue function listlabel function nofdays function listprefixednumber function nofdays function listprefixedpage function nofitems function listratile function nofitems function listratile function notealtapage function listsize function notealtapage function listuserdata function noteprefixednumber function loadbxdefinitionfile function noteprefixednumber function loadbxdefinitionfile function noteprefixednumber function loadoxamodes function notesymbolpage function loadoxypescriptfile function number function loadoxypescriptfile function function file function number function loadoxypescriptfile function function file function number function loadixypescriptfile function file function number function loadixypescriptfile function file function f	insertsoundclip	function	mixsetsplit	function
installtextracker function monthmem function languagenumber function monthmem function last countervalue function monthmem function lchexnumber function mpcolor function lchexnumbers function mpcolor function lchexnumbers function mpoptions function linenumbersstageone function namedstructureuservariable function linenumbersstagetwo function namedstructurevariable function listgroupindex function nbfs function listlabel function nextcountervalue function listlabel function notdays function listprefixednumber function nofdays function listprefixedpage function nofdays function listrealpage function nofitems function listrealpage function notestackedfloats function listuserdata function notelastindex function listuserdata function notelastindex function loadbtxdefinitionfile function notelistindex function loadbtxdefinitionfile function notesymbolage function loadspellchecklist function notesymbolage function loadspellchecklist function notesymbolage function loadspellchecklist function from notesymbolage function loadvisualizer function function FLL munction FLL manipulated function FLL manipulated functi	installedlanguages	function	mixstate	function
languagenumber function monthname function lastcountervalue function monthname function lchexnumber function mpolor function lchexnumbers function mpolor function leapyear function mpotions function linenumbersstageone function namedstructureuservariable function linenumbersstagetwo function namedstructureuservariable function listgroupindex function nbfs function listlabel function nextountervalue function listlacation function nextountervalue function listlacation function nofdays function listprefixedpage function nofdays function listrealpage function nofitems function listrealpage function nofitems function listsize function notellations function notedlatapage function listuitle function notellations function loadbtxdefinitionfile function notenumberpage function loaddoxamodes function notenumberpage function loadfontgoodies function notesymbolpage function loadfontgoodies function notesymbolpage function loaddoxisualizer function noteilie function loaddixualizer function precipication function loaddoxisualizer function precipication function loadfontgoodies function precipication function precipication precipication function loadfontgoodies function precipication precipication function loadfontgoodies function precipication procipication procipication precipication procipication procipication procipication procipication procipicatio	installtexdirective	function	molecule	function
lastcountervalue function monthname function tchexnumber function mpcolor function lchexnumbers function mpoptions function leapyear function mprunvar function linenumbersstageone function namedstructureuservariable function linenumbersstagetwo function namedstructureuservariable function listgroupindex function nextountervalue function listlabel function nextountervalue function listprefixednumber function nofdays function listprefixedpage function nofdays function listprefixedpage function nofitems function listsprefixedpage function nofetems function listsize function notedeltapage function listsize function notedeltapage function listsuserdata function noteumberpage function loadbxdefinitionfile function notenumberpage function loadbxdefinitionfile function notesymbolpage function loadspellchecklist function notesymbolpage function loadspellchecklist function notesymbolpage function loadvipescriptfile function notesymbolpage function loadvipescriptfile function processed function fun	installtextracker	function	month	function
Chexnumber function mpcolor function Chexnumbers function mpoptions function Chexnumbers function mprunvar function function mprunvar function function chexnumbersstageone function namedstructureuservariable function chexnumbersstagetwo function namedstructurevariable function chexnumbersstagetwo function nbfs function chexnumberstagetwo function nextcountervalue function chexnumber function nextgaralle function chexnumber function nofdays function chexnumber function nofdays function chexnumber function ch	languagenumber	function	monthmnem	function
Chexnumbers	lastcountervalue	function	monthname	function
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F MetapostSnippet	F beginvbox
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F MetapostSnippetConstructor	F blank
F MetapostSnippetName	F bold
F MetapostSnippetNameMetafun	F btxchecklistcombi
F MetapostSnippetNamePlain	F btxchecklistentry
F MetapostSnippetNamePrimitive	F btxcitesetup
F MetapostSnippetQuote	F btxcitevariantparameter
F MetapostSnippetSpecial	F btxdirectlink
F MetapostSnippetString	F btxdomarkcitation
F NC	F btxhandlelistentry
F NR	F btxlistparameter
F ParsedXmlSnippetCdata	F btxlistvariantparameter
F ParsedXmlSnippetComment	F btxmissing
F ParsedXmlSnippetDoctype	F btxsetbacklink
F ParsedXmlSnippetElement	F btxsetbacktrace
F ParsedXmlSnippetInstruction	F btxsetcategory
F ParsedXmlSnippetKey	F btxsetcitereference
F ParsedXmlSnippetValue	F btxsetcombis
F TexSnippet	F btxsetconcat
F TexSnippetBoundary	F btxsetfirst
F TexSnippetComment	F btxsetindex
F TexSnippetGroup	F btxsetinternal
F TexSnippetName	F btxsetlanguage
F TexSnippetSpecial	F btxsetlistreference
F XmlSnippet	F btxsetsecond
F XmlSnippetBoundary	F btxsettag
F XmlSnippetCdata	F btxstartsubcite
F XmlSnippetComment	F btxstopsubcite
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F XmlSnippetName	F chardef
F XmlSnippetString	F color
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Fflushdirect	F colordefagt
Fflushlines	F colordefalc
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F TexSnippetBoundary		F MetapostSnippetComment
F TexSnippetComment		F MetapostSnippetConstructor
F TexSnippetGroup		F MetapostSnippetName
F TexSnippetName		F MetapostSnippetNameMetafun
F TexSnippetSpecial		F MetapostSnippetNamePlain
F XmlSnippetBoundary		F MetapostSnippetNamePrimitive
F XmlSnippetCdata		F MetapostSnippetQuote
F XmlSnippetComment		F MetapostSnippetSpecial
F XmlSnippetEntity		F MetapostSnippetString
F XmlSnippetEqual		F NC
F XmlSnippetKey		F NR
F XmlSnippetName		F ParsedXmlSnippetCdata
F XmlSnippetString		F ParsedXmlSnippetComment
F ctxreport		F ParsedXmlSnippetDoctype
F viafile		F ParsedXmlSnippetElement
F vrule		${\sf F} \ {\sf ParsedXmlSnippetInstruction}$
F xmlcdataafter		F ParsedXmlSnippetKey
F xmlcdatabefore		F ParsedXmlSnippetValue
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<pre>numbers F C F FL F HL F L F LuaSnippet F LuaSnippetBoundary F LuaSnippetComment F LuaSnippetName F LuaSnippetName F LuaSnippetName F LuaSnippetNameCore F LuaSnippetNameCore F LuaSnippetNameLibraries F LuaSnippetNameLibraries F LuaSnippetSpecial F LuaSnippetSpecial F LuaSnippetSpecial F ML F MPLIBsetCtext F MPLIBsetNtext</pre>	function	F TexSnippetGroup F TexSnippetName F TexSnippetSpecial F XmlSnippet F XmlSnippetBoundary F XmlSnippetCdata F XmlSnippetComment F XmlSnippetEntity F XmlSnippetEqual F XmlSnippetEqual F XmlSnippetKey F XmlSnippetName F XmlSnippetName F TmlSnippetString Fflush Fflush Fflushdirect Fflushlines F a F addaskedblankskip F addpredefinedblankskip F applyprocessor F b
F xmlsetup numbers F C F FL F HL F L F LL F LuaSnippet F LuaSnippetBoundary F LuaSnippetComment F LuaSnippetName F LuaSnippetName F LuaSnippetName F LuaSnippetNameCore F LuaSnippetNameLibraries F LuaSnippetNameLibraries F LuaSnippetSpecial F LuaSnippetSpecial F LuaSnippetString F ML F MPLIBsetCtext	function	F TexSnippetGroup F TexSnippetName F TexSnippetSpecial F XmlSnippet F XmlSnippetBoundary F XmlSnippetCdata F XmlSnippetComment F XmlSnippetEntity F XmlSnippetEqual F XmlSnippetEqual F XmlSnippetKey F XmlSnippetString Fflush Fflush Fflushdirect Fflushlines F a F addaskedblankskip F addpredefinedblankskip F applyprocessor

F colordefrlc F bf F colordefrlt F bgroup F concat F blank F bold F constructcs F btxchecklistcombi F constructcsonly F btxchecklistentry F convertnumber F btxcitesetup F ctxreport F btxcitevariantparameter F d F btxdirectlink F darkhlue F htydomarkcitation F darkgreen F btxhandlelistentrv F darkred F btxlistparameter F definefontsynonym F btxlistvariantparameter T delayed F btxmissing F digitsdigit F btxsetbacklink F digitsfinalcomma F btxsetbacktrace F digitsfinalperiod F btxsetcategory F digitshighspace F btxsetcitereference F digitsintermediatecomma F btxsetcombis F digitsintermediateperiod F btxsetconcat F digitsminus F btxsetfirst F digitsnegative F btxsetindex F diaitsplus F btxsetinternal F digitspositive F btxsetlanguage F digitspower F btxsetlistreference F digitspowerminus F btxsetsecond F digitspowerplus F btxsettag F digitsseparatorspace F btxstartsubcite F digitssignspace F btxstopsubcite F digitsspace F digitszeropadding F callfunctiononce F direct F dodisplayverbatimbeginline F char F chardef F dodisplayverbatimemptyline F color F dodisplayverbatiminitialize F colordefage F dodisplayverbatimnewline F colordefagt F dodisplayverbatimstart F colordefalc F dodisplayverbatimstop F colordefalt F dofastdefinetypeface F colordeffgc F dofinishsomereference F colordeffat F dofromfiledescription F colordefflc F dofromfileliteral F colordefflt F dofromurldescription

F colordefrgc F colordefrgt F dofromurlliteral

F doinlineverbatimbeginline

F doinlineverbatimemptvline F lateluafunction F doinlineverbatimnewline F letvaluerelax F doinlineverbatimstart F llap F doinlineverbatimstop F loadfile F donestedtypingstart F loadfoundtypescriptfile F donestedtypingstop F luasetup F dostarttext F doverbatimspace F makelinenumber F egroup T metafun F emptyreference F color F enablemode T delayed F endhbox F start F endybox F stop F environment T nested F expandreferencearguments F markingcommand F expandreferenceoperation F markingseparator F finalizeautostructurelevel F newbox F newcount F finishjob F newdimen F firstofoneargument F newindexer F firstoftwoarguments F fixedblankskip F newmuskip F flexibleblankskip F newskip F flushblankhandling F newtexthandler F flushboxregister F newtoks F flushnode F newverbosehandler F fntsetdefname F nointerlineskip F normalatop F fntsetnopsize F normalover F fntsetsomename F fntsetsomesize F overstrike T formatted F par F fprint F pdfliteral T generics F popcatcodes S starttabulate F poplogger S stoptabulate F printlines F getlogger F processfilemany F getreferencestructureprefix F processfilenone F processfileonce F getvalue F glyph F protect F gobbleoneargument T puretext F aoto F pushcatcodes F hrule F pushlogger F registerentry F input T knownfunctions F registerfunction Fι F registeronepage

F registerpagerange F starttabulate F registerseeword F starttext F reservefunction F starttitle F startyboxregister F rlap F rotate F startxtitle F runfile F stopLuaSnippet F secondoftwoarguments F stopMetapostSnippet F stopParsedXmlSnippet F setblankcategory F setblankorder F stopTexSnippet F setblankpenalty F stopXmlSnippet F setconditional F stopblankhandling F setfalsevalue F stopcolumns F sethboxregister F stopcomponentindeed F setsomevalue F stopenvironmentindeed F settabulateentry F stopfontclass F settabulatelastentry F stophboxregister F settracing F stopproductindeed F setupsystem F stopprojectindeed F setupwithargument F stopreadingfile F setvalue F stopregisterentries F setyboxregister F stopregisterentry F setxvalue F stopregisteroutput F space F stopregisterpages F sprint F stopregistersection F startLuaSnippet F stopregisterseewords F startMetapostSnippet F stoptabulate F startParsedXmlSnippet F stoptext F startTexSnippet F stoptitle F startXmlSnippet F stopvboxregister F startblankhandling F stopxtitle F startcolumns F storenode F startcomponentindeed F synonymentry F startenvironmentindeed F tabulaterow F startfontclass F tabulaterowbold F starthboxregister F tabulaterowtyp F startproductindeed F tabulaterowtype F startprojectindeed F template F startreadingfile T templates F startregisterentries F texsetup F startregisterentry F tobuffer F startregisteroutput F tocontext F startregisterpages F tolines F unitsC F startregistersection F startregisterseewords F unitsN

F unitsNspace	F TexSnippetName	
F unitsNstart	F TexSnippetSpecial	
F unitsNstop	F XmlSnippetBoundary	
F units0	F XmlSnippetCdata	
F unitsP	F XmlSnippetComment	
F unitsPS	F XmlSnippetEntity	
F unitsPU	F XmlSnippetEqual	
F unitsPUS	F XmlSnippetKey	
F unitsQ	F XmlSnippetName	
F unitsS	F XmlSnippetString	
F unitsU	F ctxreport	
F unitsUS	F viafile	
F unprotect	F vrule	
F unregisterfunction	F xmlcdataafter	
F usemodule	F xmlcdatabefore	
Futfchar	F xmlcdataobeyedline	
T verbatim	F xmlcdataobeyedspace	
F LuaSnippetBoundary	F xmlprocessbuffer	
F LuaSnippetComment	F xmlsetup	
F LuaSnippetName	objectnumber	function
F LuaSnippetNameBase	objectpage	function
F LuaSnippetNameCore	octnumber	function
F LuaSnippetNameLibraries	octstringtonumber	function
F LuaSnippetQuote	oneorrange	function
F LuaSnippetSpecial	ordinal	function
F LuaSnippetString	overloadbookmark	function
F MetapostSnippetBoundary	page_injections_flush_after	function
F MetapostSnippetComment	page_injections_flush_before	function
F MetapostSnippetConstructor	page_injections_save	function
F MetapostSnippetName	pagestaterealpage	function
F MetapostSnippetNameMetafun	parpos	function
F MetapostSnippetNamePlain	pdfrotation	function
F MetapostSnippetNamePrimitive	pdfstartmatrix	function
F MetapostSnippetQuote	pdfstartmirroring	function
F MetapostSnippetSpecial	pdfstartrotation	function
F MetapostSnippetString	pdfstartscaling	function
F ParsedXmlSnippetCdata	pdfstopmatrix	function
F ParsedXmlSnippetComment	pdfstopmirroring	function
F ParsedXmlSnippetDoctype	pdfstoprotation	function
F ParsedXmlSnippetElement	pdfstopscaling	function
F ParsedXmlSnippetInstruction	percentageof	function
F TexSnippetBoundary	pgfxcolorspec	function
F TexSnippetComment	placeparallel	function
F TexSnippetGroup	popfloat	function

popitaliccorrection	function	registercatcodetable	function
poplist	function	registercolor	function
popreferenceprefix	function	registercolorintent	function
popregime	function	registeredviewerlayer	function
popsectionblock	function	registerhelp	function
pos	function	registeritemgroup	function
posplus	function	registerlanguagefeatures	function
posstrut	function	registerlinenumbering	function
postponenotes	function	registermaintextcolor	function
poswhd	function	registernamespace	function
posxy	function	registerpostponedblock	function
prefixedconverted	function	registerrendering	function
prepareMPvariable	function	registersection	function
preparedfile	function	registersoundclip	function
presetsymbollist	function	registerstructureprocessor	function
presettabulate	function	registersynonym	function
prevcountervalue	function	registertransparency	function
processbuffer	function	registerunit	function
processcolorcomponents	function	registerusedsynonym	function
processedfile	function	registeruserdata	function
processedfiles	function	relatemarking	function
processfile	function	remapentity	function
processfilemany	function	removemissingcharacters	function
processfilenone	function	renderingvar	function
processfileonce	function	replacemissingcharacters	function
processlist	function	replacepospxywhd	function
processregister	function	reportstructure	function
processsplit	function	resavefloat	function
processsynonyms	function	resetcharacteralign	function
purefontname	function	resetcounter	function
pushfloat	function	resetfontfeature	function
pushitaliccorrection	function	resetfontsolution	function
pushlist	function	resetmarking	function
pushreferenceprefix	function	resetmathattributes	function
pushregime	function	resetmathitalics	function
pushsectionblock	function	resetnullfont	function
rawcharacter	function	resetparallel	function
rawcountervalue	function	resetprevdepth	function
rawdate	function	resetreference	function
referencepagestate	function	resetstructureprocessor	function
referencerealpage	function	resettimer	function
registerattachment	function	restartcounter	function
registerbookmark	function	restorecounter	function
registerbuttons	function	restorecurrentattributes	function

restorenote	function	setfirstline	function
romannumerals	function	setfontfeature	function
runbuffer	function	setfontofid	function
safechar	function	setfontsolution	function
savebuffer	function	setformat	function
savecounter	function	setformsmethod	function
savecurrentattributes	function	setinitial	function
savedlistnumber	function	setinsertionlocation	function
savedlistprefixednumber	function	setinterfaceconstant	function
savedlisttitle	function	setinterfaceelement	function
savefloat	function	setinterfacemessage	function
savemargindata	function	setinterfacemessages	function
savenote	function	setinterfacevariable	function
saveobject	function	setinternalreference	function
savepagedata	function	setjobcomment	function
saveparallel	function	setlanguageexceptions	function
savestructureblock	function	setlanguagesynonym	function
savetaggedtwopassdata	function	setlayer	function
savetwopassdata	function	setmarking	function
savevariable	function	setmathalphabet	function
second	function	setmathalternate	function
selectstructureblock	function	setmathattribute	function
setbreakpoints	function	setmathdirection	function
setbtxdataset	function	setmathitalics	function
setbtxentry	function	setmathstyle	function
setcharacteralign	function	setnextinternalreference	function
setcharactercasing	function	setnextreferenceorder	function
setcharactercleaning	function	setnotestate	function
setcharactercodes	function	setnotesymbolpage	function
setcharacterkerning	function	setobject	function
setcharacterspacing	function	setopendocumentaction	function
setcharacterstripping	function	setopenpageaction	function
setclosedocumentaction	function	setowncounter	function
setclosepageaction	function	setpagestate	function
setcolormodel	function	setpagestaterealpageno	function
setcounter	function	setpagetransition	function
setdataset	function	setparbuilder	function
setdigitsmanipulation	function	setpos	function
setdirection	function	setrandomseed	function
setdocumentenvironments	function	setrealign	function
setdocumentfilenames	function	setrealspaces	function
setdocumentmodes	function	setreferencearguments	function
setdocumentmodules	function	setreferenceattribute	function
setfigurelookuporder	function	setreferenceoperation	function

setregistermethod	function	splitfilename	function
setreplacements	function	spotcolorname	function
setsectionblock	function	spotcolorparent	function
setsectionentry	function	spotcolorvalue	function
setsectionlevel	function	startactualtext	function
setsectionnumber	function	startchemical	function
setstructureblockstate	function	startcolorset	function
settagcombination	function	startcomponent	function
settagdescription	function	startenvironment	function
settagdescriptionsymbol	function	startfontsolution	function
settagfigure	function	startparbuilder	function
settaghighlight	function	startproduct	function
settagitemgroup	function	startproject	function
settagproperty	function	startregime	function
settagsorting	function	startsectionlevel	function
settagsynonym	function	starttag	function
settagtablecell	function	starttext	function
settagtabulatecell	function	startviewerlayer	function
setupbookmarks	function	stopactualtext	function
setupcanvas	function	stopchemical	function
setupcharacterspacing	function	stopcolorset	function
setupexport	function	stopcomponent	function
setupfontexpansion	function	stopenvironment	function
setupfontprotrusion	function	stopfontsolution	function
setupidentity	function	stopparbuilder	function
setupinsertion	function	stopproduct	function
setupitaliccorrection	function	stopproject	function
setuplinenumbering	function	stopregime	function
setvisual	function	stopsectionlevel	function
setxmpfile	function	stoptag	function
showassignerror	function	stoptext	function
showattributes	function	stopviewerlayer	function
showbtxdatasetcompleteness	function	storejavascriptcode	function
showbtxdatasetfields	function	storejavascriptpreamble	function
showbtxfields	function	storenote	function
showcallbacks	function	storeregister	function
showchardata	function	strdp	function
showcounter	function	strhd	function
showfontparameters	function	strht	function
showhyphenatedinlist	function	strip	function
showjustification	function	structureautocatcodedget	function
showmessage	function	structurecatcodedget	function
sin	function	structuregivencatcodedget	function
sind	function	structurenumber	function

structuretitle	function	usemodules	function
structureuservariable	function	usepath	function
structurevariable	function	useproduct	function
strwd	function	useproject	function
subcountervalues	function	usesubpath	function
synchronizecolormodel	function	usesymbols	function
synchronizemarking	function	usetexfile	function
synonymmeaning	function	useurl	function
synonymname	function	usexmlfile	function
taggedmathfunction	function	usezipfile	function
tan	function	utfchar	function
tand	function	utfmathclass	function
testcase	function	utfmathcommand	function
textime	function	utfmathcommandabove	function
thefirstcharacter	function	utfmathcommandbelow	function
theremainingcharacters	function	utfmathfiller	function
thetexdefinition	function	utfmathstretch	function
transparencycomponents	function	vboxlisttohbox	function
triggereffect	function	verbose	function
triggernegative	function	visual	function
truefilename	function	vspacing	function
typebuffer	function	vspacingcollapse	function
typefile	function	vspacingdefine	function
typestring	function	vspacingsetamount	function
uchexnumber	function	vspacingsnap	function
uchexnumbers	function	way	function
undefinechemical	function	weekday	function
unicodechar	function	weekdayname	function
unit	function	writestatus	function
unloadlanguage	function	x_table_c	function
upper	function	x_table_cleanup	function
useMPlibrary	function	x_table_construct	function
useanyfile	function	x_table_create	function
usebtxdataset	function	x_table_flush	function
usecldfile	function	x_table_init_construct	function
usecolors	function	x_table_init_reflow_height	function
usecomponent	function	x_table_init_reflow_width	function
useenvironment	function	x_table_next_row	function
usefile	function	x_table_r	function
usejavascriptpreamble	function	x_table_reflow_height	function
usejavascriptscripts	function	x_table_reflow_width	function
uselibrary	function	x_table_set_construct	function
useluafile	function	x_table_set_reflow_height	function
useluamodule	function		

x_table_set_reflow_width
year

function
function

containers (context)

cleanname	function		
content	function		
define	function		
is_usable	function		
is_valid	function		
read	function		
usecache	boolean		
write	function		

converters (context)

Α	function
AK	function
Alphabetic	function
Character	function
Characters	function
I	function
KA	function
KR	function
R	function
RK	function
Romannumerals	function
Word	function
Words	function
a	function
abjadnodotnumerals	function
abjadnumerals	function
alphabetic	function
character	function
characters chineseallnumerals	function function
chinesecapnumerals	function
chinesenumerals	function
chr	function
chrs	function function
cn	function
cn-a	function
cn-c	function
convert define	function
hexstringtonumber	function
hour	function
i	function
isleapyear	function
leapyear	function
maxchrs	function
minute	function
month	function
nofdays	function
number	function
numbers	function
octstringtonumber	function
oc es el Tilg collumbel	Tulle CIUII

ordinal	function
r	function
rawcharacter	function
romannumerals	function
second	function
sequences	data table
textime	function
toabjad	function
tochinese function	
toroman	function
verbose	table
D data	
F translate	
weekday	function
word	function
words	function

year

function

coroutine (basic lua)

```
create function
resume function
running function
status function
wrap function
yield function
```

ctxrunner (context)

load function
prepfiles data table
resolve function

debug (basic lua)

function
function

dir (context)

collectpattern	function
current	function
expandname	function
found	function
glob	function
globfiles	function
globpattern	function
ls	function
makedirs	function
mkdirs	function
pop	function
push	function

directives (context)

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

document (context)

arguments data table
files table
getargument function
getfilename function
options table

T commandline

D environments

D modes

D modules

T ctxfile

D environments

D modes

D modules

setargument function
setdefaultargument function
setfilename function
variables data table

environment (context)

function argument arguments data table basicengines data table currentrun number default texmfcnf strina engineflags data table filename strina files table data table filesynonyms number forcedruns getargument function homedir string initex boolean **initializearguments** function initializefilenames function inputfilebarename string inputfilename strina **inputfilesuffix** string **jobfilename** string **jobfilesuffix** string kindofrun number loadluafile function luafile function luafilechunk function maxnofruns number originalarguments data table outputfilename string ownbin string ownmain string ownname string ownpath strina boolean prerollrun data table rawarguments reconstructcommandline function relativepath function setargument function **splitarguments** function suffix string texfile function texmfos string texos string

texroot truefilename validengines string function data table

epdf (extra tex)

Array function
Dict function
Object function
PDFRectangle function
open function
type function

experiments (context)

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

figures (context)

applyratio bases bitmapimage boxnumber cachepaths check checkers converters current defaultdepth defaultheight defaultsearch defaultwidth done dummy existers exists formats found get auess hash identifiers identify images

data table function number data table function data table data table function number number boolean number function function data table function data table data table function function function data table function table

function

F write include function includers data table initialize function loaded data table localpaths data table magics data table mergegoodies function nofprocessed number order data table paths data table data table patterns function pop preferguality boolean programs data table push function registerpattern function function registerresource reaistersuffix function resources data table scale function setlookups function setorder function function setpaths suffixes data table used data table

F boxes

F check

F checksize

F clone

F copy

F immediatewrite

F kevs

F new

F node

F ofindex

F package

F print

F scan

F serialize

F totable

F types

file (basic lua)

addsuffix	function
basename	function
checksum	function
collapsepath	function
сору	function
dirname	function
expandname	function
extname	function
is_qualified_path	function
is_readable	function
is_rootbased_path	function
is_writable	function
isreadable	function
iswritable	function
join	function
joinpath	function
loadchecksum	function
nameonly	function
nametotable	function
needs_updating	function
needsupdating	function
pathpart	function
readdata	function
removesuffix	function
replacesuffix	function
reslash	function
robustname	function
savechecksum	function
savedata	function
size	function
splitbase	function
splitname	function
splitpath	function
strip	function
suffix	function
suffixes	function
suffixesonly	function
suffixonly	function
syncmtimes	function

floats (context)

analysemethod	function
checkedpagefloat	function
collect	function
consult	function
flush	function
getvariable	function
nofstacked	function
рор	function
push	function
resave	function
save	function
stacked	function

font (basic tex)

current function define function each function fonts table frozen function

getfont overloaded function

id function max function nextid function read_tfm function read_vf function setfont function

fontloader (extra tex)

apply_afmfile	function
apply_featurefile	function
close	function
fields	function
fullinfo	function
info	function
open	function
to_table	function
totable	function

fonts (context)

analyzers	table	F report	
T features		F reset	
N blwf		T vectors	
N fina		<pre>constructors table</pre>	
N half		F aftercopyingcharacters	
N init		F applymanipulators	
N isol		F assignmathparameters	
N medi		B autocleanup	
N pref		F beforecopyingcharacters	
N pstf		D cache	
N rphf		F calculatescale	
D initializers		F checkedfeatures	
D methods		F checkedfilename	
F setstate		F checkvirtualids	
T states		F cleanuptable	
N blwf		F collectprocessors	
N fina		D designsizes	
N half		D dontembed	
N init		F enhanceparameters	
N isol		N factor	
N mark		F finalize	
N medi		F getfeatureaction	
N pref		F hashfeatures	
N pstf		F hashinstance	
N rest		T hashmethods	
N rphf		F normal	
B useunicodemar		F virtual	
checkers	table	F initializefeatures	
F getmissing		T keys	
F missing	±=61 =	T character	
cid	table	S depth	
F getmap		S height	
F loadfile collections	table	S italic	
	table	S width	
F checkenabled F clonevector		T description	
F define		T boundingbox S depth	
T definitions		S height	
F prepare		S width	
F process		T parameters	
F process F registermain		S ascender	
i registeriiidili		3 ascender	

9	5 descender		S encodingbyt	es
9	5 designsize		S filename	
1	Γ expansion		S finalized	
	S auto		S fontname	
	S shrink		S format	
	S step		S fullname	
	S stretch		S hasitalics	
9	5 extendfactor		S hasmath	
9	5 factor		S mathitalics	
9	5 hfactor		S mode	
9	5 mathsize		S name	
1	Γ protrusion		S noglyphname	S
	S auto		S nostackmath	
9	5 quad		S psname	
9	5 scaledpoints		S textitalics	
9	5 scriptpercentage		S virtualized	
9	5 scriptscriptpercentage	D	loadedfonts	
9	5 size	S	namemode	
9	5 slantfactor	F	newfeatures	
9	5 slantperpoint	F	newhandler	
7	Γ spacing	N	noffontsloaded	
	S extra	N	nofsharedfonts	
	S shrink	N	nofsharedhashe	S
	S stretch	N	nofsharedvecto	rs
	S width	N	privateoffset	
٦	Γ synonyms	F	readanddefine	
	S em	F	registerfeatur	e
	S ex	В	resolvevirtual	too
	S extra_space	F	scale	
	S extraspace	F	scaled	
	S slant	F	setfactor	
	S space	F	setname	
	S space_shrink	В	sharefonts	
	S space_stretch	F	trytosharefont	
	S spaceshrink	N	version	
	S spacestretch	curr		function
	S x_height		entid	function
9	5 units	defi	ners	table
9	5 vfactor	F	addlookup	
	5 xheight		analyze	
	properties		applypostproce	ssors
	5 autoitalicamount		checkedmode	
7	Γ cidinfo	F	checkedscript	
9	5 embedding	F	current	

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

F contextchain	D math	
F devanagari_remove_joiners	D predefined	
F devanagari_reorder_matras	D whatever	
F devanagari_reorder_pre_base_reordering_consonants	hashes	table
F devanagari_reorder_reph	D characters	
F gpos_context	D csnames	
F gpos_contextchain	D descriptions	
F gpos_cursive	D dynamics	
F gpos_mark2base	D emwidths	
F gpos_mark2ligature	D exheights	
F gpos_mark2mark	D extensibles	
F gpos_pair	D features	
F gpos_single	D identifiers	
F gsub_alternate	D italics	
F gsub_context	D lastmathids	
F gsub_contextchain	D marks	
F gsub_ligature	D parameters	
F gsub_multiple	T processes	
F gsub_reversecontextchain	D properties	
F gsub_single	D quads	
F load	D resources	
F scriptandlanguage	T setdynamics	
F setcontextchain	D spaces	
F setdynamics	D spacings	
F setfeatures	D unicodes	
T statistics	D xheights	
D usedfeatures	helpers	table
T tables	F addprivate	
D baselines	F dimenfactor	
D features	F expandglyph	
D languages	F fontpatternha	ssize
D scripts	F getdigitwidth	
N version	F getparameters	
T pfb	F getprivatenod	9
T tfm	F hasprivate	
D features	F name	
F setfeatures	F nametoslot	
T vf	F setdigitwidth	
T combinations	F splitfontpatte	
F combine	iterators	table
T combiner	F characters	
D commands	F descriptions	
F find	F glyphs	4-61
D helpers	loggers	table

F add_placeholde T category_to_pl S ll S lm S lo S lt S lu		nulldata protrusions readers F afm F check_lua F check_tfm F dfont	data table data table table
S mc S me S mn S nd S nl S no S pc		F lua F opentype F otf F pfb D sequence F tfm F ttc	
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 reportdefinedf		F ttf select T data F definetypeface T fallbacks F filterinput T methods F default F features F file F goodies F name F selectfont F simplefonts	table
F reportusedfeat mappings F addtounicode F fromunicode16 F loadfile F loadline F loadlumtable F makenameparser F reset F tounicode16 F tounicode16sec mp D cache B inline	table	F spec F style F registerfalls: F searchfiles Specifiers D contextmerged F contextnumber: D contextsetups F contexttostrin F definecontext F mergecontext F presetcontext	table s
N version names	data table	F showcontext F splitcontext	

D synonyms D variants

symbols table

F uselibrary

tables table
tracers table
treatments table

 ${\sf F} \ {\sf applyfixes}$

D data

S filename

F ignoredfile

F report

F trace

typefaces data table

functions (context)

dummy function

graphics (context)

backgrounds table

F calculatemultipar

F fetchmultipar

F pair

F path

F point

gzip (extra lua)

```
close function
lines function
load function
open function
save function
suffix function
```

img (basic tex)

boxes	function
check	function
checksize	function
clone	function
сору	function
immediatewrite	function
keys	function
new	function
node	function
ofindex	function
package	function
print	function
scan	function
serialize	function
totable	function
types	function
write	function

interactions (context)

```
attachments data table
fields
               table
   F clone
   F define
   F defineset
   F insert
general
               table
   F getidentity
   F setupidentity
help
               table
   F collect
   F reference
   F register
javascripts table
   F addtopreamble
   F code
   D codes
   F flushpreambles
   D functions
   D preambles
   F setpreamble
   F storecode
   F storepreamble
   F usepreamblenow
   F usescripts
linkedlists data table
               table
pages
   F setpagetransition
   F setupcanvas
references table
   F setclosedocument
   F setclosepage
   F setopendocument
   F setopenpage
              data table
renderings
soundclips data table
```

interfaces (context)

addvalidkeys function cachedsetups data table cachesetup function checkedspecification function complete data table constants data table corenamespaces data table definecommand function doifelsemessage function elements data table formats data table getcheckedparameters function function getmessage data table hashedsetups interfacedcommand function interfaces table invalidkev function function is command table namespaces F define

F define F list

registernamespace function setconstant function setelement function setformat function setmessage function function setmessages settranslation function function setuserinterface setvalidkeys function setvariable function function showmessage data table syntax tolist function translations data table variables data table

io (basic lua)

ask function bytes function characters function close function exists function fileseparator string flush function i limiter function i limiters table

T paranoid

input function limiter function lines function loadchunk function loaddata function loadlines function noflines function function o limiter o limiters table

T paranoid

open overloaded function

output function
pathseparator string

function read readall function readnumber function readstring function savedata function size function stderr userdata stdin userdata stdout userdata **tmpfile** function function type write function

jit (context)

arch string
attach function
flush function
off function
on function
opt table

F start

os string
status function
util table

F funcbc

F funcinfo

F funck

F funcuvname

F ircalladdr

F traceexitstub

F traceinfo

F traceir

F tracek

F tracemc

F tracesnap

version string
version_num number

job (context)

_			
comment	function	F getcollected	
datasets	table	F getdata	
D collected		F getfield	
F extend		F gettobesaved	
F getdata		F inlist	
F setdata		F last	
D tobesaved		F list	
	function	F save	
files	table	F savetagged	
D collected		D tobesaved	
F context			able
B forcerun		F b_col	
F run		F b_region	
D tobesaved		Fc	
initialize	function	D collected	
load	function	F column	
loadother	function	F copy	
objects	table	F depth	
D collected		F e_col	
F get		F e_region	
F number		F enhance	
F page		F extra	
F save		F get	
F set		F getreserved	
D tobesaved		F hangafter	
pack	boolean	F hangindent	
packversion		F height	
pagestates	table	F hsize	
D collected		F leftskip	
F extend		F lowerleft	
F realpage		F lowerright	
F setstate		F markregionbo	×
D tobesaved		Fn	
passes	table	F onsamepage	
F check		F overlapping	
D collected		Fp	
F count		F page	
F define		F paragraph	
F find		F parindent	
F first		F position	
F get		Fr	

- F region
- F replace
- F rightskip
- F set
- F setall
- F setdim
- D tobesaved
- F upperleft
- F upperright
- F width
- Fχ
- F xy
- Fу

register function save function

table

structure D collected

- T components
- T tobesaved
 - T branches
 - S name
 - S type

variables table

- D checksums
- D collected
- F getchecksum
- F makechecksum
- F restore
- F save
- F setchecksum
- D tobesaved

version number

lang (basic tex)

clean	function
clear_hyphenation	function
clear_patterns	function
exceptions	function
hyphenate	function
hyphenation	function
id	function
new	function
patterns	function
postexhyphenchar	function
posthyphenchar	function
preexhyphenchar	function
prehyphenchar	function

languages (context)

associate function associated data table association function counters data table function current data data table define function table frequencies F averagecharwidth

F getdata

getnumber function hyphenate function installed function labels table

> F define F split

lefthyphenmin function loadable function loadwords function table logger

F report

numbers data table posthyphenchar function function prehyphenchar data table registered replacements table

> F add F handler F set

righthyphenmin function setexceptions function function setsynonym unload function version number table words

> T data F disable F enable T enablers

B enables

F check

F found F load T methods N threshold

layouts (context)

status table

F isleftpage

F leftorrightpagection

lfs (extra lua)

attributes function chdir function currentdir function dir function

isfile function lock function lock dir function mkdir function mkdirs function readlink function rmdir function function setmode function shortname symlinkattributes function touch function unlock function

libraries (context)

```
basiclua data table
basictex data table
builtin data table
extralua data table
extratex data table
functions data table
globals data table
```

lmx (context)

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

Fa

F td F th

include function
inherited table

S color-background-four

S color-background-one

S color-background-three

S color-background-two

S title

initialize function inject function **lmxfile** function loadedfile function function new overloaderror function popupfile function print function pν function report function reset function result function function set show function showdebuginfo function showerror function stripcss function tv function
type function
urlescape function
variable function
variables table

S color-background-blue

S color-background-body

S color-background-green

S color-background-main

S color-background-purple

S color-background-yellow

S title-default

logs (context)

application function categories function direct function disable function function enable exporters table extendbanner function flush function function help function messenger new function newline function function poptarget function pushtarget report function reportbanner function function reporter table reporters

> F banner F export

F help

F info F lines

F version

simple

simpleline

function reportline reportlines function setformats function setformatters function setlogfile function setmessenger function setprocessor function function setprogram settarget function settimedlog function settranslations function show function show close function show load function function show open

function

function

simplelines function function start page number status function function stop_page_number subdirect function subreport function system function function texerrormessage writer function

lpdf (context)

action	function	anthros	function
	function	gethpos getmatrix	function
adddocumentcolorspace	function	•	function
adddocumentextgstate	function	getpos	function
adddocumentpattern		getvpos	
adddocumentshade	function	graycode	function
addtocatalog	function	hasmatrix id	function
addtoinfo	function		function
addtonames	function	injectxmpinfo	function
addtopageattributes	function	insertxmpinfo	function
addtopageresources	function	layerreference	function
addtopagesattributes	function	limited	function
addxmpinfo	function	linearshade	function
annotationspecification	function	nametree	function
array	function	null	function
boolean	function	number	function
border	function	pagedestinations	data table
checkedkey	function	pagereference	function
checkedvalue	function	pagereferences	data table
circularshade	function	pdfcolor	function
cmykcode	function	pdftimestamp	function
collectedresources	function	protectresources	boolean
color	function	rectangle	function
colorspace	function	reference	function
colorspaceconstants	data table	registerannotation	function
colorspec	function	registerdestination	function
colorvalue	function	registerdocumentfinalizer	function
colorvalues	function	registerpagefinalizer	function
constant	function	reserveobject	function
delayedobject	function	rgbcode	function
destinationspecification	function	rotationcm	function
dictionary	function	shareobject	function
epdf	table	shareobjectreference	function
F expand		spotcode	function
F load		stream	function
finalizedocument	function	string	function
finalizepage	function	timestamp	function
finishtransparencycode	function	toeight	function
flushobject	function	tosixteen	function
flushstreamfileobject	function	transform	function
flushstreamobject	function	transparency	function
formats	data table	transparencycode	function

transparencygroups table

B none

transparencyvalue function
unicode function
verbose function

lpeg (basic lua)

pcodefunctionprintfunctionptreefunctionreplacerfunction		
Carg function Cb function Cc function Cf function Cg function Cp function Cp function Cs function Ct function P function R function S function UP function UR function US function afterprefix function afterprefix function beforesuffix function beforesuffix function counter function endstripper function firstofsplit function firstofsplit function is_lpeg function is_lpeg function match function patterns data table pcode function print function	В	function
Cb function Cc function Cf function Cg function Cmt function Cp function Cc function Cp function Cc fu	С	function
Cc function Cg function Cmt function Cp function Cs function Ct function Ct function R function S function UP function UR function US function Afterprefix function Anywhere function Append function balancer function beforesuffix function counter function counter function finder function firstofsplit function frontstripper function frontstripper function is_lpeg function keeper function becode function patterns data table pcode function print function	Carg	function
Cf function Cg function Cmt function Cp function Cs function Ct function P function R function S function UP function US function US function afterprefix function append function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function frontstripper function is_lpeg function keeper function becode function patterns data table pcode function print function ptree function ptree function replacer function	Cb	function
Cg function Cmt function Cp function Cs function Ct function R function S function UP function UR function US function afterprefix function append function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function instringchecker function beather function keeper function homeof function patterns data table pcode function ptree function ptree function ptree function	Cc	function
Cmt function Cp function Cs function Ct function P function R function S function UP function US function US function afterprefix function anywhere function balancer function beforesuffix function counter function finder function firstofsplit function frontstripper function is_lpeg function is_lpeg function match function patterns data table pcode function print function ptree function replacer function	Cf	function
Cp function Cs function Ct function P function R function S function UP function UR function US function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function is_lpeg function keeper function becode function patterns data table pcode function print function ptree function replacer function	Cg	function
Cs function Ct function P function R function S function UP function UR function US function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function counter function firstofsplit function frontstripper function frontstripper function is_lpeg function keeper function becode function patterns data table pcode function print function ptree function replacer function	Cmt	function
Ct function P function R function S function UP function UR function US function V function afterprefix function append function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function frontstripper function is_lpeg function keeper function beate function function function fontstripper function	Ср	function
P function R function S function UP function US function US function afterprefix function append function beforesuffix function checkedsplit function checkedsplit function finder function firstofsplit function frontstripper function instringchecker function keeper function beater function function frontstripper function frontstripper function instringchecker function beater function function function frontstripper function function frontstripper function function function function function function function patterns data table pcode function print function print function ptree function	Cs	function
R function S function UP function US function V function afterprefix function append function balancer function beforesuffix function counter function finder function firstofsplit function frontstripper function instringchecker function beach function for function firstofsplit function firstofsplit function finder function finder function finder function finder function finction finction finction finction finction function	Ct	function
S function UP function UR function V function afterprefix function anywhere function balancer function beforesuffix function counter function finder function firstofsplit function frontstripper function is_lpeg function becale function match function patterns data table print function ptree function	P	function
UP function UR function US function V function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function is_lpeg function is_lpeg function becale function match function patterns data table prode function print function ptree function function ptree function	R	function
UR function V function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function is_lpeg function keeper function becale function match function patterns data table pcode function ptree function patterns data table pcode function print function ptree function function function ptree function	S	function
US function V function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function instringchecker function keeper function beforesuffix function counter function function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function beforesuffix function function finder function function fontstripper function function function patterns data table pcode function print function print function ptree function replacer function	UP	function
V function afterprefix function anywhere function balancer function beforesuffix function checkedsplit function endstripper function firstofsplit function frontstripper function instringchecker function beforesuffix function counter function function finder function firstofsplit function firstofsplit function frontstripper function instringchecker function before function function firstofsplit function function function function function function patterns data table pcode function print function ptree function function function ptree function function	UR	function
afterprefix function anywhere function balancer function beforesuffix function checkedsplit function endstripper function finder function firstofsplit function frontstripper function instringchecker function beforesuffix function counter function function function finder function finder function firstofsplit function frontstripper function instringchecker function beeper function function function patterns data table pcode function print function ptree function replacer function	US	function
anywhere function append function balancer function beforesuffix function checkedsplit function counter function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function match function patterns data table pcode function print function ptree function	V	function
append function balancer function beforesuffix function checkedsplit function counter function endstripper function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function before function function match function patterns data table print function print function ptree function function function ptree function function ptree function function function ptree function function	afterprefix	function
balancer function beforesuffix function checkedsplit function counter function endstripper function finder function firstofsplit function frontstripper function instringchecker function keeper function bocale function match function oneof function patterns data table pcode function print function ptree function replacer function	anywhere	function
beforesuffix function checkedsplit function counter function endstripper function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function	append	function
checkedsplit function counter function endstripper function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function	balancer	function
counter function endstripper function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function	beforesuffix	function
endstripper function finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function	checkedsplit	
finder function firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function match function oneof function patterns data table pcode function print function ptree function replacer function	counter	
firstofsplit function frontstripper function instringchecker function is_lpeg function keeper function match function oneof function patterns data table pcode function print function ptree function replacer function	• • • • • • • • • • • • • • • • • • • •	
frontstripper function instringchecker function is_lpeg function keeper function match function oneof function patterns data table pcode function print function ptree function replacer function		
<pre>instringchecker is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function</pre>		
is_lpeg function keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function		
keeper function locale function match function oneof function patterns data table pcode function print function ptree function replacer function		
locale function match function oneof function patterns data table pcode function print function ptree function replacer function		
match function oneof function patterns data table pcode function print function ptree function replacer function	•	
oneof function patterns data table pcode function print function ptree function replacer function		
patterns data table pcode function print function ptree function replacer function		
pcodefunctionprintfunctionptreefunctionreplacerfunction	oneof	
print function ptree function replacer function	•	data table
ptree function replacer function	•	
replacer function	•	
	•	
secondofsnlit function		
secondorspere ranceron	secondofsplit	function

setmaxstack function split function splitat function splitter function stripper function times function function tsplitat tsplitter function type function utfchartabletopattern function version function

ltn12 (extra lua)

```
BLOCKSIZE number
filter
             table
   F chain
   F cycle
pump
             table
   F all
   F step
sink
             table
   F chain
   F error
   F file
   F null
   F simplify
   F table
source
             table
   F cat
   F chain
   F empty
   F error
   F file
   F rewind
   F simplify
```

F string

lua (basic tex)

bytecode table bytedata data table bytedone table collectgarbage function function delay finalize function firstbytecode number flush function flushdelayed function get_functions_table function getbytecode function function getluaname lastbytecode number string mask messages data table name table numbers data table registercode function registeredcodes function registerfinalizer function registername function setbytecode function setluaname function startupfile string version string

luatex (context)

cleanuptempfiles function
registerstartactions function
registerstopactions
registertempfile function
starttime number

lxml (context)

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

F compare F flush

F reset F show

F sort

splitid function startraw function function stopraw function store strip function stripped function tag function text function tofile function toparameters function toverbatim function verbatim function withindex function xmltexhandler data table

math (basic lua)

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

mathematics (context)

addfallbacks function alphabets data table alternatives data table bia function data table boldmap categories table D functions charactersets data table checkaccentbaseheight function checkprivateparameters function classes data table codes data table define function dimensions function extensiblecode function extensibles data table extrabase number table extras F add F copy fallbacks table

resetitalics scaleparameters setalternate setitalics sets stvles svncboth synchame syncstyle toname tostyle tweakaftercopyingfont tweakbeforecopyingfont tweaks utfmathaccent utfmathclass utfmathcommand utfmathfiller utfmathstretch

function function function function data table data table function function function function function function function table function function function function function

fallbackstyleattr function **families** data table gaps data table function getboth function getstyle function initializeparameters injectfallbacks function function makefont data table mapremap **overloaddimensions** function **overloadparameters** function privatebase number function remapalphabets table renderings

F apply
F install

D mappings
D numbers
D sets
renderset

function

mbox (context)

```
parse
parse_from function
parse_header function
parse_headers function
parse_message function
split_headers function
split_mbox function
split_message function
```

md5 (extra lua)

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

metapost (context)

analyzaniusina	function	motototistiss	function
analyzeplugins checkformat	function	getstatistics gettext	function function
checktexts	function		function
collapse	boolean	graphic graphic_base_pass	function
colorinitializer	function	initializescriptrunner	function
convert	function	instance	function
defaultformat		intermediate	table
defaultinstance	string		table
defaultmethod	string	T actions	
directrun	string function	F makempy lastlog	string
edefsxsy	function	load	string function
escaped	function		table
escapeu exectime	table	makempy	table
exectime	data table	N nofconverted	
filterclippath	function	F processgraphics	
finder	function	F registerfile metafun	table
flush	function		table
flushers	table	F interpolate F topath	
T pdf	table	method	number
грат F comment		mptopdf	table
		F convertmpstopdf	table
F flushfigure		N nofconverted	
F startfigure F stopfigure		multipass	boolean
F textfigure		n	number
flushliteral	function	nvformat	function
flushnormalpath	function	optimize	boolean
flushreset	function	parse	function
fonts	table	pdfliterals	function
F define	cabic	pluginactions	function
T flusher		process	function
F flushfigure		processplugins	function
F startfigure		processspecial	function
F stopfigure		properties	table
N instances		quickanddirty	function
F process		reducetogray	boolean
format	function	reporterror	function
format number	function	reset	function
format string	function	resetlastlog	function
formatnumber	function	resetplugins	function
getclippath	function	resettextexts	function
getextensions	function	runscript	function
-		•	- '-

scripterror function setextensions function setoutercolor function function settext settextexts function showlog boolean svformat function table tex

F get
F reset
F set

texerrorsbooleantextextsdatafunctiontheclippathfunctiontotablefunctionunloadfunctionuntagvariablefunctionvariablestable

mime (extra lua)

```
b64
           function
           function
decode
decodet
           table
   F base64
   F quoted-printable
dot
           function
encode
           function
encodet
           table
   F base64
   F quoted-printable
eol
           function
normalize function
           function
qp
           function
qpwrp
stuff
           function
unb64
           function
           function
unqp
           function
wrap
           table
wrapt
   F base64
   F default
   F quoted-printable
   F text
           function
wrp
```

mp (context)

```
_f_
           function
boolean
           function
format
           function
number
           function
numeric
          function
pair
          function
print
          function
quadruple function
quoted
           function
string
           function
triplet
           function
```

mplib (extra tex)

fields function finders table F file get_boolean function get number function get_numeric function get_string function new function pen info function preprocessed function version function

noads (context)

handlers table F check F classes F collapse F families F italics F relocate F render F resize F showtree F tags F unscript F variants function process processors table T collapse F mlist_to_hlist T relocate T render T resize

T unscript

node (basic tex)

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

had added hode	£
has_attribute	function
has_field	function function
has_glyph	function
hpack	
id	function
insert_after	function
insert_before	function
is_node	function
kerning	function
last_node	function
length	function
ligaturing	function
mlist_to_hlist	function
new	function
next	function
prev	function
protect_glyphs	function
protrusion_skippable	function
remove	function
set_attribute	function
set_properties_mode	function
setfield	function
setproperty	function
slide	function
subtype	function
tail	function
tostring	function
traverse	function
traverse_id	function
type	function
types	function
unprotect_glyphs	function
unset_attribute	function
usedlist	function
vpack	function
whatsits	function
write	function

nodes (context)

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

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

data table function function function data table data table function

table

table

F has glyph F register F hpack F rightmarginkern F insert_after F rightskip F insert before F rule F insert list after F shrink F special F is direct F is_display_math F stretch F is node F temp F textdir F is_nut F kerning F usage F last node T userids F leftmarginwidth N margins.inline F ligaturing N property F link N splitters.one F linked N splitters.two F locate F userlist F mlist_to_hlist F usernumber F nestedtracedslide F userstring F usertokens F new F vlist T pool F baselineskip F zeroalue F cleanup F prepend F disc F protect_glyphs F fontkern F protrusion_skippable F glue F reference F gluespec F remove F glyph F repackhlist F hlist F replace F kern F rightmarginwidth F latelua F set attribute F lateluafunction F setattr F leftmarginkern E setattribute F leftskip F setattributes F lineskip F setbox F negatedglue F setfield F noad F setprop F pdfannotation F setunsetattributes F pdfdestination F slide F pdfdirect F somepenalty F pdfliteral F somespace F pdfrestore F tail F pdfsave F takebox F pdfsetmatrix F tonode

F tonodes

F penalty

F tonut		points	function
F tostring		pool	table
F tracedslide		F baselineskip	
F traverse		F cleanup	
F traverse_id		F glyph	
T typesetters		F kern	
F fast_hpack		F latelua	
F hpack		F lateluafunction	
F tohpack		F lineskip	
F tohpackfast		F pdfdirect	
F tonodes		F pdfliteral	
F tovpack		F pdfrestore	
F tovpackfast		F pdfsave	
F vpack		F pdfsetmatrix	
F unprotect_glyphs		F register	
F unset_attribute		F rule	
F unsetattribute		F special	
F unsetattributes		F usage	
F untracedslide		T userids	
F usedlist		N margins.inline	
F vianodes		N property	
F vianuts		N splitters.one	
F vpack		N splitters.two	
F writable_spec		F usernumber	
F write		prepend	function
packlist	function	print	function
pardir_is_equal	data table	processors	table
pardir_is_opposite	data table	B enabled	
pardir_is_parallel	data table	F hpack_filter	
partextdir_is_equal	data table	F post_linebreak_filter	
penaltycodes	data table	F pre_linebreak_filter	
plugindata	table	F tracer	
F finalizer		processwords	function
F initializer		properties	table
S name		T actions	
T namespace		F delayed	
N attribute		F fdelayed	
D data		F immediate	
F enable		F attach	
F handler		T data	
F register		F delayed	
D registered		protect_glyphs	function
D values		protrusion_skippable	function
F processor		pts	function

reference	function	somespace	function
references	table	stripping	table
N attribute		T glyphs	
T done		F set	
F handler		striprange	function
T stack		tail	function
remove	function	takebox	function
repackhlist	function	tasks	table
replace	function	F actions	
report	function	F appendaction	
rightmarginwidth	function	F disableaction	
rules	table	F disablegroup	
D data		F enableaction	
F define		F enablegroup	
F enable		F freeze	
F handler		F freezegroup	
save	function	F new	
serialize	function	F prependaction	
serializebox	function	F removeaction	
set_attribute	function	F restart	
setattr	function	F setaction	
setattribute	function	F showactions	
setattributes	function	F table	
setbox	function	textdir_is_equal	data table
setfield	function	textdir_is_is	data table
setunsetattributes	function	textdir_is_opposite	data table
shifts	table	textdir_is_parallel	data table
D data		tobasepoints	function
F define		tocentimeters	function
F enable		tociceros	function
F handler		todidots	function
show	function	todimen	function
showboxes	function	toinches	function
showcodes	function	tomillimeters	function
showlist	function	tonewciceros	function
showsimplelist	function	tonewdidots	function
skipcodes	data table	tonode	function
slide	function	tonodes	function
snapshots	table	tonut	function
F getparameters		topicas	function
F getsamples		topoints	function
F resetsamples		toscaledpoints	function
F takesample		tosequence	function
somepenalty	function	tostring	function

totable	function	F set	
totree	function	F setlist	
toutf	function	traverse	function
tracers	table	traverse_id	function
T characters		typesetters	table
F collect		F hpack	
F equal		F tohpack	
F indices		F tohpackfast	
F start		F tonodes	
F string		F tovpack	
F unicodes		F tovpackfast	
T colors		F vpack	
F reset		unprotect_glyphs	function
F set		unset_attribute	function
F setlist		unsetattribute	function
F fontchar		unsetattributes	function
T frequencies		usedlist	function
F register		vianodes	function
T pool		vianuts	function
T nodes		visualizebox	function
F rule		visualizers	table
T nuts		F box	
F rule		F handler	
F resetproperties		F markfonts	
F rule		F setfont	
F setlist		F setlayer	
F setproperties		F setvisual	
F start		vpack	function
T steppers		whatcodes	data table
F check		whatsitcodes	data table
F codes		writable_spec	function
F features		write	function
F font			
F glyphs			
F message			
F messages			
F nofsteps			
F register			
F reset			
F start			
F stop			
F stop			
T transparencies			
F reset			

number (context)

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

os (basic lua)

getenv	function	
setenv	function	
binsuffix	string	
binsuffixes	table	
clock	function	
converttime	function	
date	function	
difftime	function	
env	data table	
exec	overloaded	function
execute	overloaded	function
exit	function	
fulltime	function	
getenv	overloaded	function
gettimeofday	function	
isleapyear	function	
launch	function	
libsuffix	string	
localtime	function	
name	string	
nofdays	function	
now	function	
platform	string	
remove	function	
rename	function	
resolvers	table	
F bits		
resultof	function	
runtime	function	
selfdir	string	
setenv	overloaded	function
setlocale	overloaded	function
sleep	function	
spawn	overloaded	function
time	function	
times	function	
timezone	function	
tmpdir	function	
tmpname	function	

function string

today

type

uname	function
uuid	function
validdate	function
weekday	function
where	function
which	function

package (basic lua)

config	string
cpath	string
extralibpath	function
extralibpaths	function
extraluapath	function
extraluapaths	function
helpers	table
libpaths	function
loaded	table
loaders	table
loadlib	function
luapaths	function
path	string
preload	table
searchpath	function
seeall	function

pagebuilders (context)

injections table

- F flushafter
- F flushbefore
- F save

mixedcolumns table

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

pdf (basic tex)

getcatalog function gethpos function aetinfo function function getmatrix function getnames getpageattributes function getpageresources function getpagesattributes function function getpos gettrailer function getvpos function hasmatrix function immediateobi function mapfile function mapline function maxobinum function obj function objtype function pageref function print function function refobj registerannot overloaded function reserveobj function overloaded function setcatalog setinfo overloaded function setnames overloaded function setpageattributes overloaded function overloaded function setpageresources setpagesattributes overloaded function

overloaded function

settrailer

pdfscanner (context)

scan function

physics (context)

units table
 D tables

profiler (extra lua)

```
pause function
resume function
start function
stop function
```

publications (context)

F filterall

addtexentry	function	F flushentries	
analyze	function	F nofregistered	
authors	table	F register	
F concat		F registerplaced	
F inverted		F setmethod	
F invertedshort		T sorters	
F name		F author	
F normal		F dataset	
F normalshort		F reference	
F preparedsort		F short	
F setsettings		listvariants	table
F sorted		F default	
F splitstring		F num	
citevariants	table	F short	
F author		load	function
F authornum		loadbibdata	function
F authoryear		loaders	table
F authoryears		F bib	
F category		F endnote	
F default		F lua	
F index		F refman	
F key		F xml	
F num		markasupdated	function
F page		new	function
F serial		parenttag	function
F short		refman_to_btx	function
F tag		search	function
F type		singularorplural	function
F year		statistics	table
collected	data table	N nofbytes	
converttoxml	function	N nofdatasets	
datasets	table	N nofdefinitions	
endnotes_to_btx	function	N nofshortcuts	
enhance	function	tracers	table
finder	function	F addfield	
getindex	function	T categories	
lists	table	T article	
F collectentries		T optional	
F doifalreadyplaced	I	T required	
F fetchentries		T book	

T optional

T required T inbook T optional T required T incollection T optional T required T inproceedings T optional T required T manual T optional T required T mastersthesis T optional T required T misc T optional T required T phdthesis T optional T required T proceedings T optional T required T techreport T optional

T required
T unpublished
T optional
T required
T citevariants
T fields
T listvariants

F showdatasetcompleteness
F showdatasetfields
F showfields

T required
T booklet
T optional

regimes (context)

```
cleanup function
disable function
enable function
pop function
process function
push function
toregime function
translate function
```

resolvers (context)

finders

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

function

D specification

data table

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

variableofformatorsuffix function wildcardpattern

function

scripts (context)

table

autofontfeature

```
F disable
   F enable
   F handler
categorytonumber data table
colors
                    data table
decomposehangul
                    function
defaults
                    table
   N inter_char_half_shrink_factor
   N inter_char_half_stretch_factor
   N inter_char_hangul_penalty
   N inter_char_quarter_shrink_factor
   N inter char quarter stretch factor
   N inter char shrink factor
   N inter_char_stretch_factor
   N inter_word_stretch_factor
handlers
                    data table
hash
                    table
injectors
                    data table
installdataset
                    function
installmethod
                    function
numbertocategory data table
numbertodataset
                    data table
numbertohandler
                    data table
reset
                    function
set
                    function
splitters
                    data table
```

set (context)

contains function
create function
tolist function
tonumber function
totable function

socket (extra lua)

BLOCKSIZE number S connection DEBUG boolean S content-description SETSIZE number S content-disposition bind function S content-encoding choose function S content-id function connect S content-language connect4 function S content-length connect6 function S content-location dns table S content-md5 F getaddrinfo S content-range F gethostname S content-transfer-encoding F getnameinfo S content-type F tohostname S date F toip S diagnostic-code ftp table S dsn-gateway S PASSWORD S etag N PORT S expect N TIMEOUT S expires S USER S final-log-id F command S final-recipient F get S from S host F open S if-match F put gettime function S if-modified-since headers table S if-none-match S if-range T canonic S accept S if-unmodified-since S accept-charset S in-reply-to S accept-encoding S keywords S accept-language S last-attempt-date S last-modified S accept-ranges S action S location S age S max-forwards S allow S message-id S alternate-recipient S mime-version S original-envelope-id S arrival-date S authorization S original-recipient S bcc S pragma S cache-control S proxy-authenticate S cc S proxy-authorization S comments S range

S recei	ved	sinkt	table
S recei	ved-from-mta	F close-	when-done
S refer	rences	F defaul	t
S refer	er	F http-c	hunked
S remot	e-mta	F keep-o	pen
S reply	r-to	skip	function
S repor	ting-mta	sleep	function
S reser	t-bcc	smtp	table
S reser	t-cc	S DOMAIN	
S reser	t-date	N PORT	
S reser	t-from	S SERVER	
S reser	t-message-id	N TIMEOU	Г
S reser	t-reply-to	S ZONE	
S reser	t-sender	F messag	е
S reser	t-to	F open	
S retry	-after	F send	
S retur	n-path	source	function
S sende	r	sourcet	table
S serve	r	F by-len	gth
S smtp-	remote-recipient	F defaul	t
S statu	S	F http-cl	
S subje	ect	F until-	
S te		tcp	function
S to		tcp6	function
S trail		tp	table
	fer-encoding	N TIMEOU	
S upgra		F connec	
S user-	agent	try	function
S vary		udp	function
S via		udp6	function
S warni		url	table
	retry-until	F absolu	te
S x-mai	uthenticate	F build	+h
http	table	F build_ F escape	patn
N PORT	tubte	F parse	
N TIMEOU	-	F parse	nath
S USERAGI		F unesca	
F open			
F request	1		
newtry	function		
protect	function		
select	function		

function

sink

sorters (context)

```
basicsorter
                function
                table
comparers
   F basic
constants
                table
   S defaultdigits
   S defaultlanguage
   S defaultmethod
   N digitsmaximum
   N digitsoffset
   N ignoredoffset
   N replacementoffset
   T validmethods
    B ch
    B mc
    B mm
    Врс
    B pm
    B uc
    B zc
    B zm
definitions
                data table
firstofsplit function
setlanguage
                function
                function
sort
splitters
                table
   F utf
strip
                function
tracers
                data table
update
                function
```

statistics (context)

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

status (basic tex)

list function

storage (context)

allocate function data table mark function marked function number max min number **nofmodules** number noftables number register function shared data table strip boolean tofmodules number toftables number

streams (context)

```
collect
            function
disable
            function
enable
            function
flush
            function
initialize function
            function
push
start
            function
stop
            function
synchronize function
```

string (basic lua)

autodouble	function
autosingle	function
booleanstring	function
byte	function
bytepairs	function
bytes	function
char	function
characterpairs	function
characters	function
checkedsplit	function
collapsespaces	function
count	function
dump	function
escapedpattern	function
explode	function
find	function
format	function
formatter	function
formatters	function
fullstrip	function
gmatch	function
gsub	function
is_boolean	function
is_empty	function
itself	function
len	function
limit	function
longtostring	function
lower	function
match	function
nspaces	table
quote	function
quoted	function
rep	function
reverse	function
split	function
splitlines	function
splitup 	function
strip	function
sub	function
tformat	function

toboolean	function
tocontext	function
todimen	function
tonodes	function
topattern	function
totable	function
toutf	function
tracedchar	function
tracedchars	table
unquote	function
unquoted	function
upper	function
utfcharacters	function
utfvalues	function
valid	function

structures (context)

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

F setup		F uservalue	
D stored		marks	table
itemgroups	table	D data	
F maxwidth		F define	
F nofitems		F exists	
F register		F fetch	
lists	table	F fetchallmarks	
F addto		F fetched	
F analyze		F fetchonemark	
B autoreorder		F fetchtwomarks	
D cached		F get	
D collected		F number	
F discard		F relate	
F enhance		F reset	
T enhancers		F set	
F filter		F show	
F filtercollected		F synchronize	
F formulanumber		F title	
F groupindex		T tracers	
F hasnumberdata		F showtable	
F haspagedata		notes	table
F hastitledata		F checkpagechange	
F iscached		F define	
F label		F doifonsamepageasprevi	ous
F location		F get	
F number		F getdeltapage	
D ordered		F getn	
F page		F getnumberpage	
F popnesting		F getstate	
F prefix		F getsymbolpage	
F prefixednumber		F hascontent	
F prefixedpage		F internal	
F process		F internalid	
D pushed		Flistindex	
F pushnesting		F ordered	
F realpage		F postpone	
F reordered		F resetpostponed	
T result		F restore	
D sectionblocks		F save	
F sectionnumber		F setstate	
F size		F setsymbolpage	
F title		D states	
D tobesaved		F store	+-61-
F userdata		pages	table

F analyze F import D collected F inject F is odd F injectcurrentset N nofpages S innermethod F number D internals F save F load D tobesaved F loadpresets references table F mark F analyze D pages F checkedfile U prefixsplitter F checkedfileorurl D productdata F checkedprogram T programs F checkedrealpage T data F define F checkedurl D collected F get U componentsplitter F realpageofpage F currentmetadata U referencesplitter F currentorder D referred D currentset F referredpage F define F registerfinalizer D defined F registerinitializer D derived F registerpage F enableinteraction F reportproblems F enhance F reset D executers D runners F set F expandcurrent F setandgetattribute F export T files F setcomponent T data F setinnermethod F define F setinternalreference F get F setnextinternal F filter F setnextorder F filterdefault D specials D filters F splitcomponent F splitprefix D flaginternals F from F splitreference T testrunners F get Finner F getcurrentmetadata F getcurrentprefixspec F special F getinnermethod F special operation F getinternallistreference F special operation with arguments F getinternalreference T testspecials D handlers F deltapage F identify Fί

F internal		F findnumber
F page		F fullnumber
F realpage		F getcurrentlevel
F section		F getlevel
F userpage		F getnumber
D tobereferred		F internalreference
D tobesaved		D levelmap
T urls		D levels
T data		F load
F define		F matchingtilldepth
F get		F numberatdepth
D usedinternals		F numbers
D usedviews		F popblock
F valid		F prefixedconverted
F whatfrom		F pushblock
registers	table	F register
F analyze		D registered
D collected		F reportstructure
F compare		F save
F define		T sectionblockdata
F enhance		T bodypart
F extend		S bookmark
F filter		F set
F filtercollected		F setblock
F finalize		F setchecker
F flush		F setentry
F prepare		F setlevel
F process		F setnumber
F setmethod		F structuredata
F sort		F title
F store		D tobesaved
D tobesaved		F typesetnumber
F unique		F userdata
F userdata		B verbose
sections	table se	ts table
F autodepth		F define
F cct		F get
D collected		F getall
F current		D setlist
F currentblock	sp	ecials table
F currentid		D collected
F currentlevel		F retrieve
F depthnumber		F store

D tobesaved

F finddata

table synonyms D taglist F analyzed T userdata D collected F compare F define F filter F finalize F flush F meaning F prepare F process F register F registerused F sort F synonym D tobesaved table tags T data F detailedtag F getid F handler D labels F last F lastinchain T metadata D properties F registerdata F registermetadata F restart F setattributehash F setcombination F setdescription F setdescriptionsymbol F setfigure F sethighlight F setitemgroup F setproperty F setsorting F setsynonym F settablecell F settabulatecell F start

F stop

table (basic lua)

allkeys	function
append	function
are_equal	function
autokey	function
compact	function
concat	$ \hbox{function} $
contains	function
сору	function
count	function
derive	function
deserialize	function
drop	function
fastcopy	function
fastserialize	function
flattened	function
foreach	function
foreachi	function
fromhash	function
getmetatablekey	function
getn	function
has_one_entry	function
identical	function
imerge	function
imerged	function
insert	function
is_empty	function
keys	function
load	function
loweredkeys	function
maxn	function
merge	function
merged	function
mirrored	function
pack	function
prepend	function
print	function
remove	function
reverse	function
reversed	function
save	function
sequenced	function

serialize	function
setmetatablecall	function
setmetatableindex	function
setmetatablekey	function
setmetatablenewindex	function
sort	function
sorted	function
sortedhash	function
sortedhashkeys	function
sortedhashonly	function
sortedindexonly	function
sortedkeys	function
sortedpairs	function
strip	function
sub	function
swapped	function
tocontext	function
tocsv	function
tofile	function
tohandle	function
tohash	function
toxml	function
twowaymapper	function
unique	function
unnest	function
unpack	function
values	function

tex (basic tex)

attribute	table	isdefined	data table
badness	function	isdimen	function
box	table	isskip	function
catcode	table	istoken	function
conditionals	data table	lccode	table
constants	data table	linebreak	function
count	table	lists	table
ctdcatcodes	number	lua math random	function
ctxcatcodes	number	lua math randomseed	function
definefont	function	luacatcodes	number
delcode	table	mathcode	table
dimen	table	modes	data table
directives	data table	nest	table
enableprimitives	function	nilcatcodes	number
error	function	normal_rand	function
extraprimitives	function	notcatcodes	number
finish	function	number	function
fontidentifier	function	pdffontname	function
fontname	function	pdffontobjnum	function
fprint	function	pdffontsize	function
get	function	pdfpageref	function
getattribute	function	pdfxformname	function
getbox	function	primitives	function
getcatcode	function	print	function
getcount	function	printlist	function
getdelcode	function	prtcatcodes	number
getdimen	function	romannumeral	function
getlccode	function	round	function
getlist	function	run	function
getmath	function	scale	function
getmathcode	function	set	function
getnest	function	set_experimental_code	function
getsfcode	function	setattribute	function
getskip	function	setbox	function
gettoks	function	setcatcode	function
getuccode	function	setcount	function
hashtokens	function	setdelcode	function
ifs	data table	setdimen	function
inicatcodes	number	setlccode	function
init_rand	function	setlist	function
iscount	function	setmath	function

setmathcode function setnest function setsfcode function setskip function settoks function setuccode function sfcode table shipout function show context function skip table function sp sprint function systemmodes data table takebox function texcatcodes number table toks number **tpacatcodes** tpbcatcodes number tprint function data table trackers txtcatcodes number type function uccode table uniform rand function uniformdeviate function uprint function vrbcatcodes number write function

texconfig (basic tex)

error_line number
expand_depth number
formatname string
half_error_line number
hash_extra number

kpse init boolean max in open number max print line number max_strings number nest_size number param_size number save size number shell escape string

texio (basic tex)

write function
write_nl function

token (basic tex)

command_id	function
command_name	function
create	function
csname_id	function
csname_name	function
expand	function
get_next	function
is_activechar	function
is_expandable	function
is_protected	function
lookup	function

tokens (context)

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

vbox

vtop

table table

tracers (context)

```
count function
cs function
dimen function
knownlist function
lists table
```

T context
T internals
T scratch

name function
primitive function
printerror function
showlines function
strings table

S undefined

toks function
type function

trackers (context)

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

typesetters (context)

alignments	table	F installhandler	
F handler		F processmath	
F set		F set	
breakpoints	table	F setcolor	
F define		F setmath	
F handler		F tomode	
D mapping		firstlines	table
T methods		T actions	
T numbers		F default	
F set		F line	
F setreplacement		F word	
cases	table	F handler	
T actions		F set	
F handler		initials	table
F register		T actions	
F set		F default	
characteralign	table	F handler	
F handler		F set	
F resetcharacter	align	italics	table
F setcharacteral	F setcharacteralign F forcevariant		
characters	table	F handler	
F handler		F reset	
F replacenbsp		F set	
F replacenbspace	s	kerns	table
checkers	table	D factors	
F handler		F handler	
F reset		F keepligature	
F set		B keeptogether	
cleaners	table	D mapping	
F handler		F set	
F set		manipulators	table
digits	table	F apply	
T actions		F applyspecifica	tion
F handler		T methods	
F set		F Word	
directions	table	F Words	
F getfences		F lowercase	
F getglobal		F stripperiod	
F getmethod		F uppercase	
F handler		T patterns	
T handlers		U list	

```
U pair
    F splitspecification
margins
                    table
   F finalhandler
   F globalhandler
   F ha
    F localhandler
    F save
processors
                    table
    F apply
   F register
   F reset
   F split
    F startapply
    F stopapply
    F stripped
    F tostring
spacings
                     table
    F define
   F handler
    D mapping
   T numbers
     T frenchpunctuation
       T characters
       S name
       N number
   F reset
   F set
    F setup
xtables
                    table
    F cleanup
    F construct
    F create
    F flush
    F initialize_construct
    F initialize_reflow_height
    F initialize_reflow_width
    F next_row
   F reflow_height
   F reflow_width
    F set_construct
    F set_reflow_height
    F set_reflow_width
```

unicode (extra lua)

ascii	table F	len
F byte		lower
F char		match
F dump		rep
F find		reverse
F format		sub
Fafind		upper
F gmatch	utf8	
F gsub	F	byte
Flen		char
Flower		characters
F match	F	chrlen
F rep	F	count
F reverse	e F	dump
F sub	F	filetype
F upper	F	find
grapheme	table F	format
F byte	F	gfind
F char	F	gmatch
F dump	F	gsub
F find	F	is_valid
F format	F	len
F gfind	F	length
F gmatch	F	lower
F gsub	F	magic
F len	F	match
F lower	F	remapper
F match	F	rep
F rep	F	replacer
F reverse	e F	reverse
F sub	F	split
F upper	F	splitlines
latin1	table	sub
F byte	F	subtituter
F char	F	tocodes
F dump	F	toeight
F find	F	toentities
F format		tostring
F gfind		totable
F gmatch		upper
F gsub	F	ustring

- F utf16_to_utf8
- F utf16_to_utf8_be
- F utf16_to_utf8_le
- F utf32_to_utf8
- F utf32_to_utf8_be
- F utf32_to_utf8_le
- F utf8_to_utf16
- F utf8_to_utf16_be
- F utf8_to_utf16_le
- F utf8_to_utf8
- F values
- F xstring

url (context)

addscheme	function
barepath	function
construct	function
escape	function
filename	function
hashed	function
hasscheme	function
query	function
split	function
toquery	function
unescapeget	function

utilities (context)

debugger	table	N version	
F disable		parsers	table
F enable		• F add_settings_t	o array
F savestats		F arguments_to_t	
F showstats		F array_to_strin	
F showtraceback		F csvsplitter	
formatters	table	F getparameters	
F formatcolumns		F hash_to_string	
F list		F iterator	
F stripzeros		F keq_to_hash	
garbagecollector	table	F listitem	
F check		F make_settings_	to_hash_pattern
N criterium		F mergehashes	
B enabled		F options_to_has	h
lua	table	T patterns	
B alwaysstripcode		U settings_to_	array
F compile		U settings_to_	hash_a
F loadedluacode		U settings_to_	hash_b
F loadstripped		U settings_to_	hash_c
N nofstrippedbytes	i	U unittotex	
N nofstrippedchunk	(S	F process_stripp	ed_settings
B stripcode		F rfc4180splitte	r
T strippedchunks		F runtime	
F strippedloadstri	.ng	F settings_to_ar	ray
T suffixes		F settings_to_ar	ray_with_repeat
S lua		F settings_to_ha	sh
S luc		F settings_to_ha	sh_strict
S lui		F settings_to_ha	sh_tolerant
S luj		F settings_to_se	t
S luv		F simple_hash_to	_string
S tma		F splitthousands	
S tmc		F stepper	
S tua		F stripped_setti	ngs_to_array
S tuc		F unittotex	
packers	table	F unittoxml	
F hashed		report	function
F new		sequencers	table
F pack		F appendaction	
F simplehashed		F appendgroup	
F strip		F compile	
F unpack		F disableaction	

F disablegroup F enableaction F enablegroup D functions F localize F new F nodeprocessor F prependaction F prependgroup F removeaction F setkind F tostrina setters table F disable F enable F initialize F list F new F register F report F reset F show stacker table F new table storage F allocate F checked F mark F marked F setinitializer F sparse strings table F collapsecrlf T formatters F add F new F newrepeater F nice T striplinepatterns U collapse U prune U prune and collapse

U prune and no empty

U retain

U retain and collapse
U retain and no empty
F striplines
F striplong
F tabtospace
T tracers

tables
table

F accesstable
F definedtable
F definetable
F encapsulate
F insertaftervalue
F insertbeforevalue
F migratetable

F removevalue

templates table
F load
F replace
F replacer

F resolve

vf (context)

```
char
        function
down
        function
fontid
        function
        function
image
        function
node
        function
nop
        function
pop
push
        function
right
        function
rule
        function
special function
```

visualizers (context)

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

xml (context)

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

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

Т

originalload function package function parent function userdata parsedentitylpeg pihandlers table placeholders table F unknown_any_entity F unknown dec entity F unknown hex entity position function privatecodes table privatetoken function function process process attributes function [] process elements function processattributes function profiled table raw function registerentity function registerns function remap name **function function** remap_namespace function remap tag function remapname function remapnamespace function remaptag function renamespace replace function replace element function resolvens function function root function save selection function separate function serialize function setcdata function sethandlersfunction function function setproperty

settings

sprint

string

strip

specialhandler

strip whitespace

stripelement function stripleadingspaces function table function function text textonly function texttocdata function tocdata function toelement function tostrina function toxml function function tprint function traverse function unescaped unprivatized function withelement function withelements function function wrap xmlns table

function

function

function

function

function

table

zip (extra lua)

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

zlib (extra lua)

adler32 function
compress function
crc32 function
decompress function
decompressobj function
version function