

ConTEXT

title : ConTEXT User Module
subtitle : Formatting of ini-files
author : Peter Münster
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```

1 \writestatus{loading}{Formatting of ini-files}
  \doifnotmode{mkiv}{\writestatus{error}{needs luatex}\wait\end}

2 \unprotect

3 \startluacode
  -- namespace
  thirddata = thirddata or { }
  thirddata.inifile = {}

4 -- sort the table
  -- s1: primary key
  -- s2: secondary key
  -- s3: third key
  local function sort_table(s1, s2, s3)
  local function cmp(a, b)
  if s2 ~= "" and a[s1] == b[s1] then
  if s3 ~= "" and a[s2] == b[s2] then
  return a[s3] < b[s3]
  else
  return a[s2] < b[s2]
  end
  else
  return a[s1] < b[s1]
  end
  end
  if s1 ~= "" then
  table.sort(thirddata.inifile.t, cmp)
  end
  end

5 -- write default values to table entry
  -- d: the default values separated by commas
  -- i: the index of the entry
  local function write_defaults(d, i)
  for k, v in string.gmatch(d, "[, %s]*(.-)=[^,]*") do
  thirddata.inifile.t[i][k] = v
  end
  end

6 -- generate table from ini-file
  -- d: default values for all entries
  -- s1: primary sort-key
  -- s2: secondary sort-key
  -- s3: third sort-key
  function thirddata.inifile.make_table(d, s1, s2, s3)
  thirddata.inifile.t = {}
  local i = 0
  local lastkey
  while true do
  local l = io.read()
  if not l then
  break
  end

```

Formatting of ini-files

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while true do
-- check for new entry:
key = string.match(1, "^%[(.+)%)$" )
if key then
i = i + 1
thirddata.inifile.t[i] = {}
thirddata.inifile.t[i]["key"] = key
thirddata.inifile.t[i]["n"] = i
write_defaults(d, i)
break-- continue !
end
-- treat continued lines:
while string.match(1, "\\$" ) do
local c = io.read()
l = string.match(1, "^(.*)\\$" ) .. c
end
local c = string.match(1, "%s+(.*)$" )
if c then
thirddata.inifile.t[i][lastkey] =
thirddata.inifile.t[i][lastkey] .. " " .. c
end
-- get a new key value pair:
key, val = string.match(1, "^([%w_]+)%s*=%s(.*)$" )
if key then
thirddata.inifile.t[i][key] = val
lastkey = key
end
break
end
end
end
sort_table(s1, s2, s3)
print(table.serialize(thirddata.inifile.t))
end

7 -- let ConTeXt print the sorted table with user defined formatting
-- c: the user supplied command to print one entry
function thirddata.inifile.print(c)
for i = 1,#thirddata.inifile.t do
tex.print(string.format("%s\\def\\IF@index{%d}%s\\%s",
"\\unprotect", i, "\\protect", c))
end
end

8 -- initialise the new entry, in general to be called in the beginning
-- of the user supplied formatting command
-- i: the index of the new entry
function thirddata.inifile.newentry(i)
for k, v in pairs(thirddata.inifile.t[i]) do
tex.print(string.format("\\def\\IF%s{%s}", k, v))
end
end
```

```

9  -- filter applied to values of a key
   -- k: the key
   -- s: the search pattern
   -- r: the replace string
   function thirddata.inifile.filter(k, s, r)
   for i = 1,#thirddata.inifile.t do
   thirddata.inifile.t[i][k] =
   string.gsub(thirddata.inifile.t[i][k], s, r)
   end
   end
   \stopluacode

10 \getparameters[IF@] [defaults=,sortA=,sortB=,sortC=,file=/dev/null]
   \def\setupIniFile[#1]{
     \getparameters[IF@] [#1]
     \ctxlua{io.input("\IF@file")}
     \ctxlua{thirddata.inifile.make_table("\IF@defaults",
       "\IF@sortA", "\IF@sortB", "\IF@sortC")}
   }
   \def\IniFilePrint{\ctxlua{thirddata.inifile.print("\IF@command")}}
   \def\IniFileNewEntry{\ctxlua{thirddata.inifile.newentry(\IF@index)}}
   \def\IniFileFilter[#1] [#2] [#3]{\ctxlua{thirddata.inifile.filter("#1",
     "#2", "#3")}}

11 \protect

12 \doifnotmode{demo}{\endinput}

   Usage example:

13 \startbuffer[thewho]
   [p_t]
   givenname = Peter
   surname = Townshend
   birthyear = 1945
   comment = 100 % with nobreakspace

14 [r_d]
   givenname = Roger
   surname = Daltrey
   comment = 100% with thinspace

15 [j_e]
   givenname = John
   surname = Entwistle
   comment = very very very very
   long line

16 [k_m]
   givenname = Keith
   surname = Moon
   birthyear = 1946
   comment = another very very very very \
   long line

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Formatting of ini-files

```
17 [k_j]
   givenname = Kenney
   surname = Jones
   birthyear = 1948
   comment = yet another very very very very \
   long line
   \stopbuffer
   \savebuffer[thewho]

18 \usemodule[inifile]

19 \setupIniFile[defaults={birthyear=1944,comment=},
   sortA=birthyear,sortB=key,command=FormatMember,file=\jobname-thewho.tmp]
\IniFileFilter[comment][\%\%][\letterpercent\space]
\IniFileFilter[comment][\%\%][\letterpercent]

20 \setupTABLE[frame=off,width=0.5\textwidth]
\nonknuthmode

21 \def\IFbirthyear{}
\def\FormatMember{
  \edef\LastBirthyear{\IFbirthyear}
  \IniFileNewEntry
  \doifnot\IFbirthyear\LastBirthyear{\section{\IFbirthyear}}
  \subsection{\WORD{\IFkey}}
  \bTABLE\bTR
  \bTD Given name: \IFgivenname\eTD\bTD Surname: \IFsurname\eTD
  \eTR\eTABLE
  \doifsomething\IFcomment{Comment to show the treatment of the percent
    sign and multi-line values: \IFcomment}}

22 \starttext
   \title{The Who}
   \IniFilePrint
\stoptext
```