

The background of the entire page is a dense, overlapping pattern of stylized document icons. Each icon is a rectangle with a white border and a gray fill, containing several horizontal lines to represent text. The icons are scattered across the page, creating a textured, layered effect.

ConTExT

title : ConTExT User Module
subtitle : Formatting of ini-files
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date : April 5, 2008


```

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
    while true do
      local l = io.read()
      if not l then
        break
      end
      while true do

```

Formatting of ini-files

```

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

```

```

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 \usemodule[inifile]

14 \setupIniFile[defaults={birthyear=1944,comment=},
  sortA=birthyear,sortB=key,command=FormatMember,file=samples/thewho.txt]
\IniFileFilter[comment] [\%%\% ] [\letterpercent\space ]
\IniFileFilter[comment] [\%%\% ] [\letterpercent ]

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

16 \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: \IFcomment}}

17 \starttext
\title{The Who}
\IniFilePrint
\stoptext

18 Put this into the file thewho.txt for the usage example:
(todo: use \savebuffer for this)

19 [p_t]
givenname = Peter
surname = Townshend

```

Formatting of ini-files

```
birthyear = 1945
comment = 100 % with nobreakspace

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

21  [j_e]
    givenname = John
    surname = Entwistle

22  [k_m]
    givenname = Keith
    surname = Moon
    birthyear = 1946

23  [k_j]
    givenname = Kenney
    surname = Jones
    birthyear = 1948
```