

```
\starttitle[title={Using \CONTEXT}]
```

The `\CONTEXT` macro package is more than just a `\TEX` processor, various input is possible, some we show here. An example of a method not shown here is fetching data from a database. The various input methods can be combined, so depending on what you need you can mix `\TEX` (for typesetting text), `\METAPOST` (for producing graphics) or `\LUA` (as language for manipulating data).

All these methods are quite efficient and always have access to the full power of the typesetting engine.

When you use `\CONTEXT` with `\LUAMETATEX`, you get a reasonable small self contained component that can be used in workflows that need quality rendering. The ecosystem is rather future proof too.

The `\CONTEXT` macro package has been around for decades and evolved from `\MKII`, to `\MKIV` and now `\LMTX`. The development team has always been involved in the development of engines like `\PDFTEX`, `\LUATEX` and `\LUAMETATEX`. There is an active mailing list and there are `\CONTEXT` meetings.

```
\stoptitle
```

```
\starttext
```

```
\starttitle[title={Some \TEX}]
```

```
Just an example.
```

```
\starttabulate[|c|c|]
  \NC first 1 \NC last 1 \NC \NR
  \NC first 2 \NC last 2 \NC \NR
\stoptabulate
```

```
\stoptitle
```

```
\stoptext
```

```
\startbuffer[demo]
<?xml version="1.0"?>
<document>
  <title>Some XML</title>
  <p>Just an example.</p>
  <table>
    <r> <c>first 1</c> <c>last 1</c> </r>
    <r> <c>first 2</c> <c>last 2</c> </r>
  </table>
</document>
\stopbuffer
```

```
\startxmlsetups xml:basics
  \xmlsetsetup{#1}{title|p|table}{xml:*}
\stopxmlsetups
\startxmlsetups xml:title
  \title{\xmltext{#1}{.}}
\stopxmlsetups
\startxmlsetups xml:p
  \xmlflush{#1}\par
\stopxmlsetups
\startxmlsetups xml:table
  \starttabulate[|c|c|]
  \xmlfilter{#1}{/r/command(xml:r)}
  \stoptabulate
\stopxmlsetups
\startxmlsetups xml:r
  \NC \xmlfilter{#1}{/c/command(xml:c)} \NR
\stopxmlsetups
\startxmlsetups xml:c
  \xmlflush{#1} \NC
\stopxmlsetups
```

```
\xmlregistersetup{xml:basics}
```

```
\starttext
  \xmlprocessbuffer{demo}{demo}{}
\stoptext
```

```
\startluacode
  local tmp = {
    { a = "first 1", b = "last 1" },
    { b = "last 2", a = "first 2" },
  }

  -- local tmp = table.load("somefile.lua")

  context.starttext()

  context.starttitle { title = "Some Lua" }

  context("Just an example.") context.par()

  context.starttabulate { "|c|c|" }
  for i=1,#tmp do
    local t = tmp[i]
    context.NC()
    context(t.a) context.NC()
    context(t.b) context.NC()
    context.NR()
  end
  context.stoptabulate()

  context.stoptitle()

  context.stoptext()
\stopluacode
```

```
\startMPPage
  draw texttext("\bf Some \MetaPost")
  xsize 4cm
  rotated(45)
  withcolor "white" ;

  draw texttext("\bs\strut in \ConTeXt")
  xsize 5cm
  shifted (0,-40mm)
  withcolor "white" ;

  draw fullcircle
  scaled 6cm
  dashed evenly
  withcolor "gray" ;
\stopMPPage
```

```
\startluacode
  local tmp = [[
    first,second
    first 1,last 1
    first 2,last 2
  ]]

  -- local tmp = io.loaddata("somefile.csv")

  local mycsvsplitter = utilities.parsers.rfc4180splitter()
  local list, names = mycsvsplitter(tmp,true)

  context.starttext()

  context.starttitle { title = "Some CSV" }

  context("Just an example.") context.par()

  context.starttabulate { "|c|c|" }
  for i=1,#list do
    local l = list[i]
    context.NC()
    context(l[1]) context.NC()
    context(l[2]) context.NC()
    context.NR()
  end
  context.stoptabulate()

  context.stoptitle()

  context.stoptext()
\stopluacode
```

```
\startluacode
  require("util-jsn")

  -- local str = io.loaddata("somefile.json")

  local str = [[ {
    "title": "Some JSON",
    "text": "Just an example.",
    "data": [
      { "a": "first 1", "b": "last 1" },
      { "b": "last 2", "a": "first 2" }
    ]
  } ]]

  local tmp = utilities.json.tolua(str)

  context.starttext()

  context.starttitle { title = tmp.title }

  context(tmp.text) context.par()

  context.starttabulate { "|c|c|" }
  for i=1,#tmp.data do
    local d = tmp.data[i]
    context.NC()
    context(d.a) context.NC()
    context(d.b) context.NC()
    context.NR()
  end
  context.stoptabulate()

  context.stoptitle()

  context.stoptext()
\stopluacode
```

```
% normally there is already a file:

\startbuffer[demo]
\starttext
  \starttitle[title={Some template}]

  Just an example. \blank

  \startlinecorrection
  \bTABLE
  <?lua for i=1,20 do ?>
    \bTR
    <?lua for j=1,5 do ?>
      \bTD
        cell (<?lua inject(i) ?>,<?lua inject(j) ?>)
        is <?lua inject(variables.text or "unset") ?>
      \eTD
    <?lua end ?>
  \eTR
  <?lua end ?>
\eTABLE
\stoplinecorrection

\stoptitle
\stoptext

\stopbuffer

\savebuffer[file=demo.mkxi,prefix=no,list=demo]

% the action:

\startluacode
  document.variables.text = "set"
\stopluacode

\input{demo.mkxi}
```

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

The ConT<sub>E</sub>Xt macro package is more than just a T<sub>E</sub>X processor, various input is possible, some we show here. An example of a method not shown here is fetching data from a database. The various input methods can be combined, so depending on what you need you can mix T<sub>E</sub>X (for typesetting text), MetaPost (for producing graphics) or Lua (as language for manipulating data).

All these methods are quite efficient and always have access to the full power of the typesetting engine.

When you use ConT<sub>E</sub>Xt with LuaMetaT<sub>E</sub>X, you get a reasonable small self contained component that can be used in workflows that need quality rendering. The ecosystem is rather future proof too.

The ConT<sub>E</sub>Xt macro package has been around for decades and evolved from MkII, to MkIV and now lmtx. The development team has always been involved in the development of engines like pdfT<sub>E</sub>X, LuaT<sub>E</sub>X and LuaMetaT<sub>E</sub>X. There is an active mailing list and there are ConT<sub>E</sub>Xt meetings.

## Some T<sub>E</sub>X

Just an example.

```
first 1 last 1
first 2 last 2
```

## Some XML

Just an example.

```
first 1 last 1
first 2 last 2
```

## Some Lua

Just an example.

```
first 1 last 1
first 2 last 2
```

## Some CSV

Just an example.

```
first 1 last 1
first 2 last 2
```

## Some JSON

Just an example.

```
first 1 last 1
first 2 last 2
```

## Some template

Just an example.

cell (1,1) is set	cell (1,2) is set	cell (1,3) is set	cell (1,4) is set	cell (1,5) is set
cell (2,1) is set	cell (2,2) is set	cell (2,3) is set	cell (2,4) is set	cell (2,5) is set
cell (3,1) is set	cell (3,2) is set	cell (3,3) is set	cell (3,4) is set	cell (3,5) is set
cell (4,1) is set	cell (4,2) is set	cell (4,3) is set	cell (4,4) is set	cell (4,5) is set
cell (5,1) is set	cell (5,2) is set	cell (5,3) is set	cell (5,4) is set	cell (5,5) is set
cell (6,1) is set	cell (6,2) is set	cell (6,3) is set	cell (6,4) is set	cell (6,5) is set
cell (7,1) is set	cell (7,2) is set	cell (7,3) is set	cell (7,4) is set	cell (7,5) is set
cell (8,1) is set	cell (8,2) is set	cell (8,3) is set	cell (8,4) is set	cell (8,5) is set
cell (9,1) is set	cell (9,2) is set	cell (9,3) is set	cell (9,4) is set	cell (9,5) is set
cell (10,1) is set	cell (10,2) is set	cell (10,3) is set	cell (10,4) is set	cell (10,5) is set
cell (11,1) is set	cell (11,2) is set	cell (11,3) is set	cell (11,4) is set	cell (11,5) is set
cell (12,1) is set	cell (12,2) is set	cell (12,3) is set	cell (12,4) is set	cell (12,5) is set
cell (13,1) is set	cell (13,2) is set	cell (13,3) is set	cell (13,4) is set	cell (13,5) is set
cell (14,1) is set	cell (14,2) is set	cell (14,3) is set	cell (14,4) is set	cell (14,5) is set
cell (15,1) is set	cell (15,2) is set	cell (15,3) is set	cell (15,4) is set	cell (15,5) is set
cell (16,1) is set	cell (16,2) is set	cell (16,3) is set	cell (16,4) is set	cell (16,5) is set
cell (17,1) is set	cell (17,2) is set	cell (17,3) is set	cell (17,4) is set	cell (17,5) is set
cell (18,1) is set	cell (18,2) is set	cell (18,3) is set	cell (18,4) is set	cell (18,5) is set
cell (19,1) is set	cell (19,2) is set	cell (19,3) is set	cell (19,4) is set	cell (19,5) is set
cell (20,1) is set	cell (20,2) is set	cell (20,3) is set	cell (20,4) is set	cell (20,5) is set

Some MetaPost

*in ConT<sub>E</sub>Xt*