

distribution

packaging and installation

context **2024** meeting

The tree

mandate:

1 tex/texmf-<platform>/bin

2 tex/texmf

3 tex/texmf-context

4 tex/texmf-cache

optional:

1 tex/texmf-local

2 tex/texmf-fonts

3 tex/texmf-project

4 tex/texmf-modules

The repository

The contextgarden github repository:

1 luametateX (also work)

2 context-distribution-fonts (also math companions)

3 context (macros and resources)

There are some more goodies there like manuals in many languages!

The binaries

We are lean and mean:

```
1 luametatex[.exe]
2 mtxrun -> luametatex[.exe]
3 context -> luametatex[.exe]
4 mtxrun.lua
5 context.lua
```

One has to prepend the bin path to the PATH variable.

The installer

It uses:

```
1 <website>/texmf.zip  
2 <website>/texmf-context.zip  
3 <website>/context-<platform>.zip
```

then installing fresh and:

```
1 <website>/tex/texmf-<platform>/bin  
2 <website>/tex/texmf  
3 <website>/tex/texmf-context
```

when updating, using hashes in file databases (tma files).

Unsupported platforms

You need to:

- download files and create tree
- compile LuaMetaTeX binary
- populate the binary path (see before)

Note: During the meeting Riviera tested this on linux phone and got it done.

Hosting installer

Self hosting is possible. One has to:

- setup the trees (also put `installation.pdf` there)
- create zips for every subtree
- run `mtxrun --script install --identify`
- set up a web server (next page)

Note: Taco will look into this now that the garden runs on the ntg server.

Webserver (e.g. nginx)

```
worker_processes auto ;
error_log /var/log/nginx.error_log error ;
events {
    worker_connections 1024;
}
http {
    include mime.types ;
    default_type application/octet-stream ;
    sendfile on ;
    keepalive_timeout 65 ;
    server_names_hash_bucket_size 64 ;
# access_log /var/log/nginx.access_log ;
    server {
        server_name lmtx.contextgarden.net ;

        location /install-lmtx/ {
            rewrite ^/install-lmtx/(.*)$ /$1 ;
            add_header Access-Control-Allow-Origin "*";
            root /data/websites/install-lmtx/ ;
            index index.html index.htm ;
            autoindex off ;
            break ;
        }
        listen 80 ;
    }
}
```


Modules

We have an installer for that. Organizing and managing them on the Wiki and ctan is work in progress (Taco and Hraban).

Note: More about this (and modules in general) by Hraban and Wolfgang in their talks.