Installation of Univers Condensed Font Library and USGS Style Files for TeX/LaTeX
January 7, 2022

Installation Instructions

1. The installation instructions assume that you have already installed the TeX Live distribution available from https://www.tug.org/texlive/ for `Linux` and `Windows` or the MacTeX distribution available from https://www.tug.org/mactex/ for `MacOS`. A minimal TeX Live distribution, sufficient for the Univers Condensed font library and USGS style files, can also be installed for many `Linux` distros using

   ```
   sudo apt install texlive-latex-extra texlive-science
   ```

   These installation installation instructions may work for other TeX distributions but this has not been tested.

2. Clone the `usgslatex` repository to a location of your choice on your computer. On `Windows`, the `usgslatex` repository should be cloned to your `C:` drive for the installation file to work correctly.

3. Install the Univers Condensed font library and USGS style files

   (a) To install the Univers Condensed font library and USGS style files on `MacOS` or `Linux` open a terminal in the `usgsLaTeX` subdirectory in your local clone of the `usgslatex` repository and type

   ```
   sudo ./install.sh
   ```

   `sudo` is required to modified system files (for example, `/usr/local/texlive/2021/texmf-var/fonts/`) for a specific TeX Live distribution.

   (b) To install the Univers Condensed font library and USGS style files on `Windows`, run `install.bat` in the `usgsLaTeX` subdirectory in your local clone of the `usgslatex` repository as an Adminstrator by right-clicking on the file and selecting "Run as administration", as shown in figure 1.

   Similar to installing the Univers Condensed font library and USGS style files on `MacOS` and `Linux`, `install.bat` is run as an Administrator so that system files can be modified.

4. If the USGS style files have been correctly installed you should see something like the following on the last three lines of the output from `install.sh` and `install.bat`.

   (a) On `MacOS` and `Linux` you should see something like

   ```
   Evaluate if USGS style files are available
   Location of USGS LaTeX style files:
   /Users/jdhughes/Library/texmf/tex/latex/usgs/usgsreporta.sty
   ```

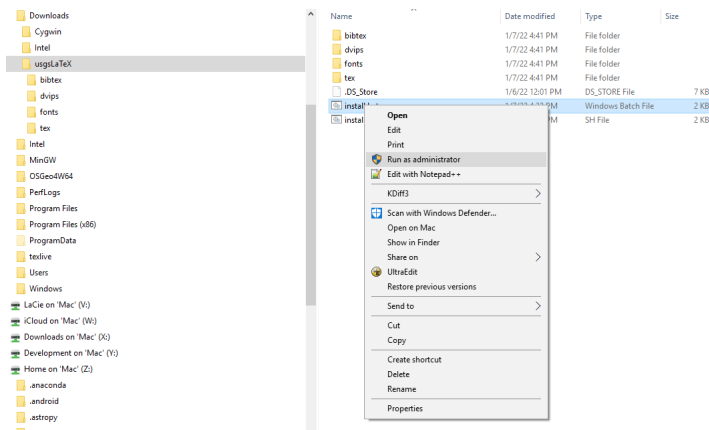   (b) On `Windows` you should see something like

Figure 1: Installation of the Univers Condensed Font Library and USGS Style Files for TEX/LATEX on `Windows` using the `install.bat` batch file.

```
Evaluate if USGS style files are available
Location of USGS LaTeX style files:
c:/texlive/texmf-local/tex/latex/usgs/usgsreporta.sty
```

5. Test the Installation of the Univers Condensed font library installation can be tested using the `testunivers.tex` TEXfile in the `test` subdirectory. The file `testunivers.tex` is self contained in its definition of the Univers family, and does not use a separate package file. Try running `testunivers.tex` file through LATEX by typing `pdflatex testunivers.tex` in a terminal open in the `test` subdirectory (or your preferred method of compiling TEX files). Inspect the `testunivers.pdf` file. Compare the content of the generated `pdf` file to `testuniversPROOF.pdf`. If these two `pdf` files appear different the Univers font family was not installed correctly.

   Refer to William Asquith's original font installation document (`README_FontLibraryInstallation.pdf`) in the `doc` subdirectory for more details on installing the Univers Condensed Font Library if it was not successfully installed by `install.sh` and `install.bat`.

6. The file `USGSLaTeXReport.tex` is a more complicated test of successful installation of the USGS Style files. Try running `USGSLaTeXReport.tex` file through LATEX using your preferred method of compiling TEX files. Inspect the `USGSLaTeXReport.pdf` file. Compare the content of the generated `pdf` file to `USGSLaTeXReportPROOF.pdf`. If these two `pdf` files appear different then there is a problem with your installation. Confirm that the USGS style files (in the `$TEXROOT/tex/latex/usgs`) subdirectory. `$TEXROOT` can be determined on `MacOS` and `linux` by typing the following in a terminal:

   `kpsewhich -var-value TEXMFHOME`

   `$TEXROOT` can be determined on `Windows` by typing the following in a terminal:

   `kpsewhich -var-value TEXMFLOCAL`

Using the USGS Style Files

A simple example for using the LATEX USGS style files is included in `doc/README_USGSstyFILES.pdf`. Individual style files in the package are also listed and described in `doc/README_USGSstyFILES.pdf`.

Updating an existing installation

On `MacOS`, an existing installation can be updated by:

1. Moving the existing installation (for example, `/usr/local/texlive/2014/`) to the trash.

2. Move all existing LaTeX software (for example, `TeXShop`) to the trash.

3. Empty trash

4. Install the new distribution

5. Open the TeXLive Utility and

   (a) Update the TeXLive Utility and allow any infrastructure updates

   (b) Install the `graphics-def` package if it is not installed

   (c) Update all installed packages

6. Open a terminal in `$TEXROOT/dvips/funivers/` directory and type the following with `sudo` privileges to allow the new version of LaTeX to access the Univers Condensed Font library

   (a) `texhash`

   (b) `updmap -sys --enable Map=funivers.map`

   (c) `updmap-sys`

Acknowledgements