

Loading LaTeX for Windows

Last Updated 25 January 2021

1. **Note:** Set File Explorer to show hidden files by checking View->[]Hidden Items. This is needed to allow finding where the MikTeX files get loaded when configuring TEXnicCenter, which will be C:\Users\UserName\AppData\Local\Programs\MikTeX\miktex\bin\x64\
2. **Note:** You need to sync from Share point and One Drive the Systems Engineering Folder and whatever folder you are working on for example (the project folder).
3. Look <>\MIL Corporation\Engineering - Documents_LatexInputs\zTools for the following .exe install files (or Google and Download if not found):
 - a. basic-miktex-20.6.29-x64.exe (or **latest**) <https://miktex.org/download>
 - b. gs952w64.exe (or **latest**) <https://www.ghostscript.com/download.html>
 - c. TXCSetup_2.02Stable_x64.exe (or **latest**) <https://www.texniccenter.org/download/>
4. Install MikTeX by running the installer program as noted above.

NOTE: Make sure that the normal user account is used for this and NOT an account with Administrator privileges. Installation with an account with Administrator rights can cause the installer, and MikTeX Console (the maintenance program), to get confused about where to install things.

NOTE: When selecting MikTeX/Latex make sure you configure to **LOAD FOR JUST the owner user**. This is an important **STEP**. This option will be a drop-down menu which you need to select this option (load for just the logged in user is the default option). This is needed due to issues with keeping packages for a local user copy and the Administrator copy in sync. If the MikTeX is loaded for ALL users then it gets installed in "C:\Program Files", which normal users do not have access. Updates can then get the two folders out of synchronization, which means getting IT involved to install updates. Keeping it all in the local user space allows the user to get updates to LaTeX packages as needed.

- a. Set Paper to **letter** (not A4)
- b. Set **Install missing packages on-the-fly to YES**
- c. Let it check for updates

After installing, run [StartMenu]MikTeX 2.9 -> MikTeX Console to check for updates. By default, the console starts in user mode, even if run from an Admin account (see note above about installing from an account with NO admin rights!). Select "Restart As User" so it will do the update in the non-privileged account.

5. Install GhostScript by running the installer program as noted above.

NOTE: This seems to require an account with Administrator privileges.

- a. Generate cidfmap for windows CJK TT fonts
- b. (think this is just a check box or drop-down menu should say something about cidfmap)
- c. If steps are not mentioned here **specifically** in the install steps just **keep** clicking **next**.

6. Load adobe reader if not already installed

*** MAKE SURE to **UNCHECK** the McAfee stuff in the download box BEFORE doing the download ***

7. Download TexnicCenter by running the installer program as noted above.

a. Just click next in the steps, don't worry about fields if it's not specifically mentioned.

TeXnic Center BUILD PARAMETERS SETUP

The following items will be in the **Build Tab** (on menu bar) and in the **Define output profiles** (alt + f7).

This is directly copied from the how to load latex.txt file without changing format. It seems like this stuff is the default, but if its not the same then make changes as necessary.

*** under (La)Tex tab ***

- check ☒ Run (La)Tex in this profile
- do not check ☐ Stop compilation on LaTeX error
- Path to the (La)Tex :
C:\Users\UserName\AppData\Local\Programs\MiKTeX\miktex\bin\x64\latex.exe
- Command line arguments : -max-print-line=254 -interaction=nonstopmode "%wm"
- %% need to check why -max-print-line is set to 254, 120 is default ???
- do not check ☐ Do not use BibTex in this profile
- Path to BibTex :
C:\Users\UserName\AppData\Local\Programs\MiKTeX\miktex\bin\x64\bibtex.exe
- Command line arguments : "%tm"
- do not check ☐ Do not use Makeindex in this profile
- Path to MakeIndex:
C:\Users\UserName\AppData\Local\Programs\MiKTeX\miktex\bin\x64\makeindex.exe
- Command line arguments : "%tm.idx" -r -t "%tm.ilg" -o "%tm.ind"
- % -r puts every index entry separately, i.e. 1,2,3 not 1-3 (useful for finding every page easily)
- % WLC uses this for \CHECKME and \TBD and ChangeBar macros to help locate pages with issues

Postprocessor tab (in Define Output Profiles)

- Select Dvi2PS and set the executable path to the same location as other programs, e.g. C:\Users\UserName\AppData\Local\Programs\MiKTeX\miktex\bin\x64\dvips.exe
- Select ps2pdf and set it up for ghostscript
 - point executable to C:\Program Files\gs\gs9.23\bin\gswin64.exe or similar as defined by the version of GhostScript that is loaded
 - NOTE: newer versions point executable to C:\Program Files\gs\gs9.23\bin\gswin64.exe
 - it adds the **c** (on the new version of ghost script)
 - use this version to get GS errors in the log file instead of its own window.
 - Point **Arguments** to (YOU WILL HAVE TO CHANGE THIS SETTING)
 - -sPAPERSIZE=letter -dSAFER -dBATC -dNOPAUSE -sDEVICE=pdfwrite -sOutputFile="%bm.pdf" -c save pop -f "%bm.ps"
 - Copy and paste the above line to save typing 😊

Viewer tab

- For Adobe reader
 - Executable path
 - C:\Program Files (x86)\Adobe\Acrobat Reader DC\Reader\AcroRd32.exe
 - Acrobat 2017
 - C:\Program Files (x86)\Adobe\Acrobat 2017\Acrobat\Acrobat.exe
 - **Key thing** – it's your Adobe Readers .exe file so it will be in program files (x86)
 - Click the button and find your AcroRd32.exe or Acrobat.exe file
 - The command line bar (same tab)
 - Select **DDE command** for each one
 - View projects output
 - [DocOpen("%bm.pdf")][FileOpen("%bm.pdf")]
 - Forward search
 - [DocOpen("%bm.pdf")][FileOpen("%bm.pdf")]
 - Close document
 - [DocClose("%bm.pdf")]
 - Each section → Topic field = **control**
 - Server field
 - The following options for the server option
 - acroviewR20
 - acroviewA17
 - **Note:** If your build and view output opens up the pdf viewer and then does not load, **this step is the problem. Solution** = change the server option to one of the 3.

Setup a BIBER profile

Copy above LaTeX->PS->PDF to (Biber) LaTeX->PS->PDF [put biber first so it shows up in the skinny dropdown]

Make BibTeX path say "C:\Program Files\MiKTeX 2.9\miktex\bin\x64\biber.exe"

Environment Variable

- Need system admin for this step
 - Search and open up Control Panel
 - Click System Security
 - Click System
 - Click Advanced system settings
 - Then find the environment variables button click and add the following
 - Variables
 - **TEXINPUTS**
 - Variable points to the _LatexInputs folder in the system engineering
 - Example: C:\Users\((your username))\MIL Corporation\System Engineering - Documents_LatexInputs
 - **BSTINPUTS**
 - Variable points to the _LatexInputs folder in the system engineering
 - Example: C:\Users\((your username))\MIL Corporation\System Engineering - Documents_LatexInputs
 - **BIBINPUTS**
 - Variable points to the _LatexInputs folder in the system engineering
 - Example: C:\Users\((your username))\MIL Corporation\System Engineering - Documents_LatexInputs
 - **MIKTEX_ALLOWUNSAFEOUTPUTFILES**
 - Variable points to or the field is = 1
 - Just enter 1