

HEC-EFM Plotter 3.1

February 2021

Release Notes

HEC-EFM Plotter is designed to help users view, navigate, and interpret output generated by HEC-EFM. It is important to note that Plotter does not generate new output; Plotter only displays output from EFM.

Version 3.1 supersedes version 3.0, which was released in September 2020. Version 3.1 is available as an install package (.exe) and as an archive of files (.zip). Both are easy to use and have the same content. The install package guides the user through the install process and requires computer administrative rights for successful use. Please note that using the install package will replace any previously installed version located in the destination selected by the user during installation of EFM Plotter. Installing with the archive of files does not require administrative rights. Simply extract all contents of the archive to the desired computer location for EFM Plotter. The software will be ready for use after extraction.

Version 3.1 is backward compatible, which means that any project files created with previous versions of Plotter are fine and ready for use.

Version 3.1 includes improved software behaviors and bug fixes for issues that were not detected prior to release of version 3.0. Language resources prepared for version 3.0 are fine for use in version 3.1. The EFM Quick Start Guide remains the most complete and comprehensive source of information about Plotter.

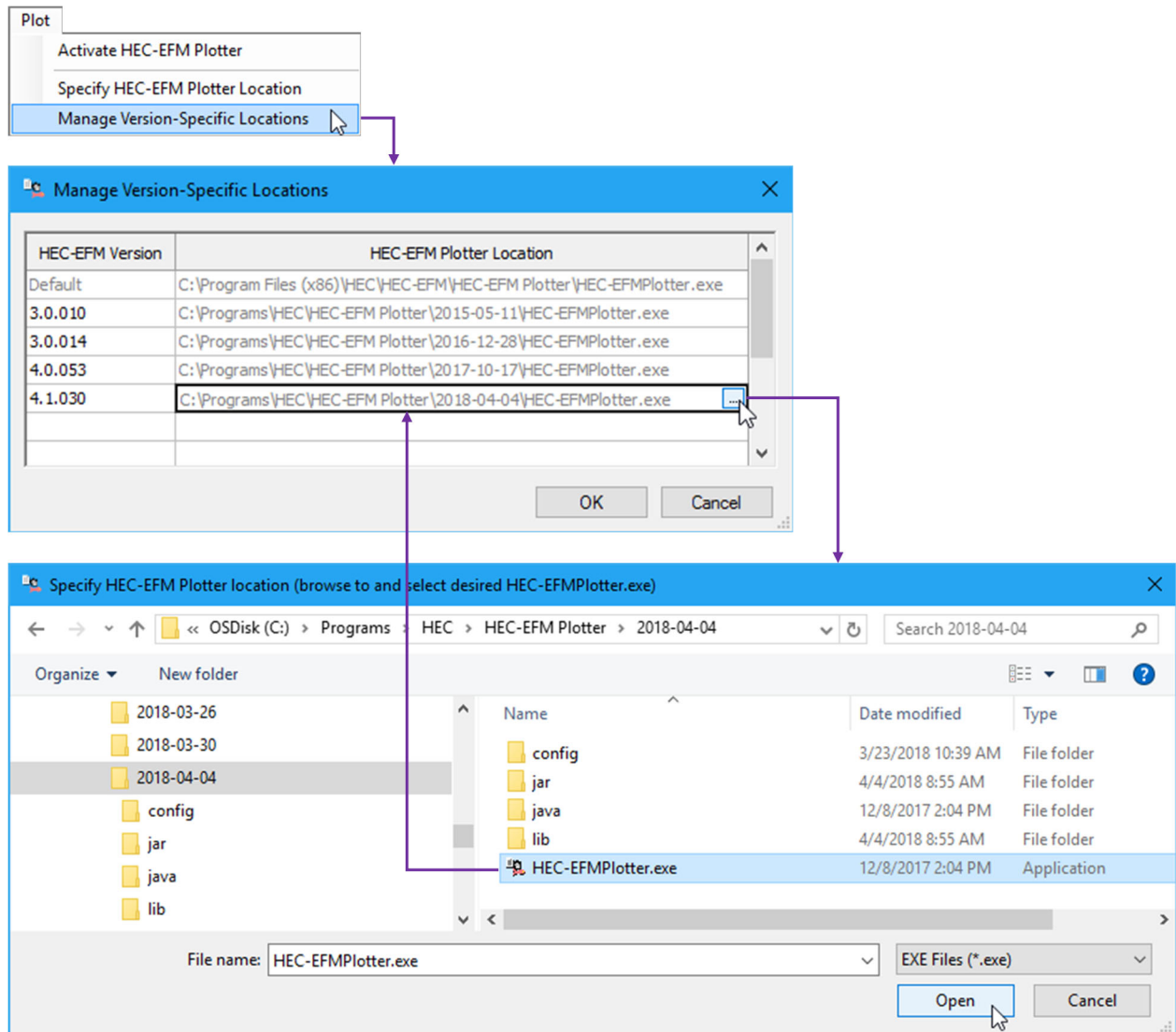
Connections between EFM and EFM Plotter

Plotter is launched via the EFM “*Plot – Activate HEC-EFM Plotter*” menu option, which means EFM needs to know where Plotter is in order to open it successfully.

Connections between the latest web-available versions of EFM and Plotter are managed via EFM’s “*Plot – Manage Version-Specific Locations*” menu option. An interface will appear that allows the user to enter the EFM version number and open a file browser to identify the associated version of Plotter. That same interface can also be used to identify a default version of Plotter to be used with versions of EFM whose connection with Plotter are otherwise unspecified. The “*Plot – Specify HEC-EFM Plotter Location*” menu option can also be used to update the default location of Plotter.

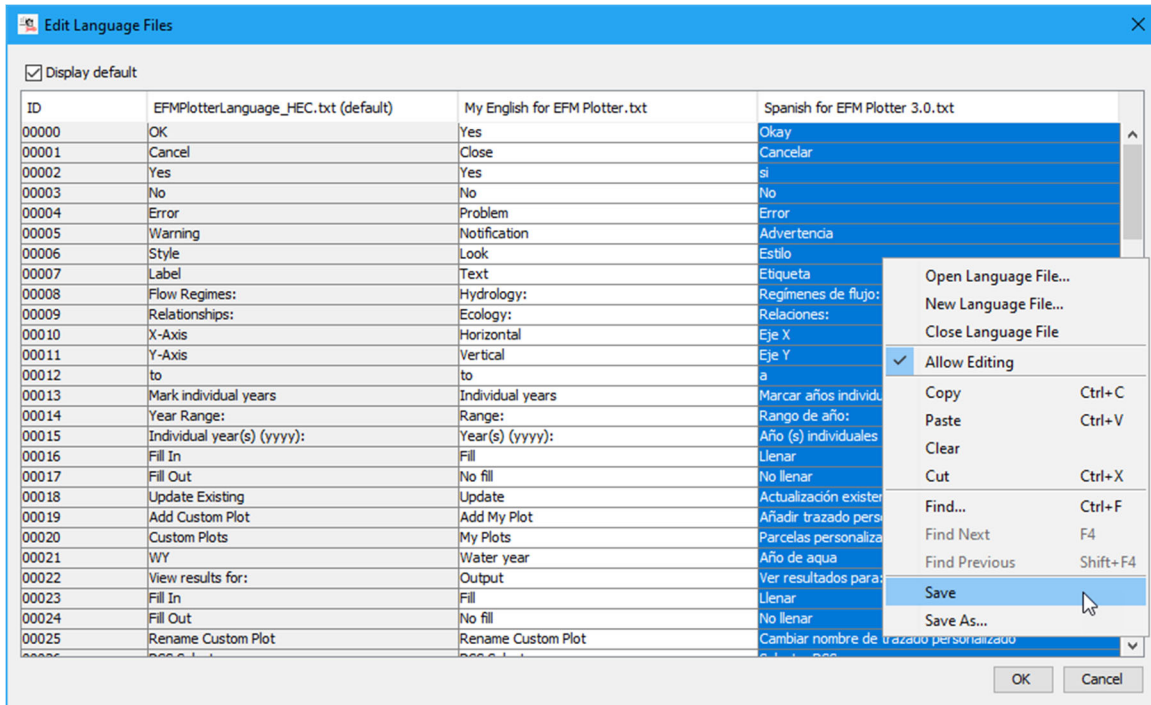
If Plotter is not available at a referenced location, a message will be returned to the user that EFM is unable to locate Plotter and ask the user to verify that Plotter is ready for use.

Importantly, this change was made after release of EFM 4.0. EFM 4.0 users are encouraged to continue to install Plotter, whether 3.1 or earlier, to a consistent install location using the install package.

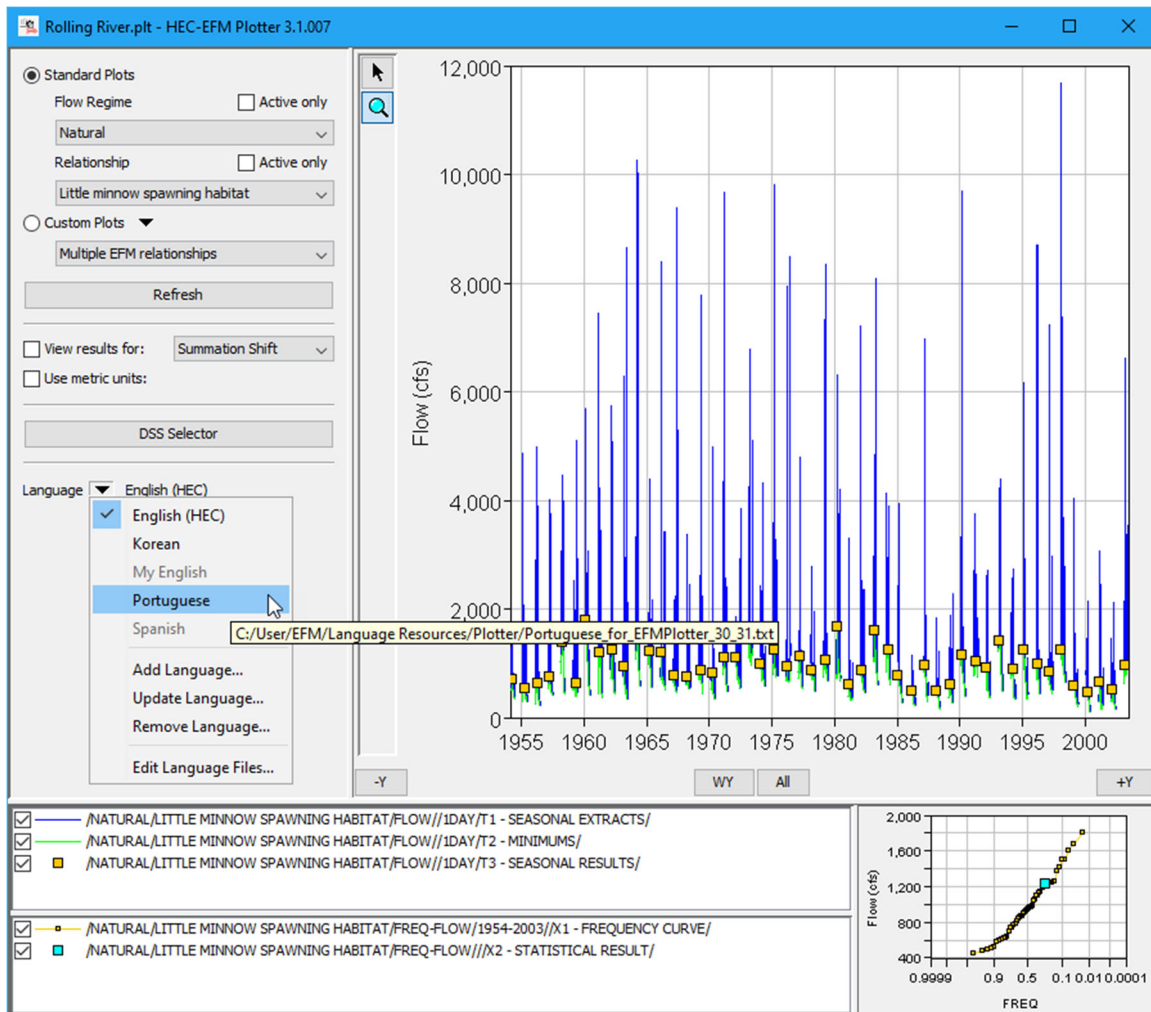


Improved Behaviors

- New language files are now saved with a .txt extension. The previous version saved the files without an extension, which was misleading for users whose newly created language files were not visible in file browsers with filters set to show only text files. Plotter behavior was enhanced such that all files saved via the language files editor now are appended with a “.txt” extension unless otherwise instructed by the user.



- Hover tooltip added to the EFM Plotter language menu to show file and path name of the language files associated with each listed language. The same information is available Language – Update Language...” interface, but the tooltip provides faster access, which is useful during development and editing of language files. Inclusion of tooltips in Plotter is consistent with features in EFM, thereby improving consistency between the software.



Bug Fixes

- The byte order mark (BOM), which is piece of information at the beginning of a text stream that provides information to software about how to handle the ensuing text, was determined to be problematic for EFM Plotter when the software was asked to use the text in language files to render interface labels. This was only an issue when the language file started with the first integer label identifier and when the file was saved as an ANSI (American National Standards Institute) text file. When issue was encountered, the first label identifier (00000) was associated with the BOM and ignored as a label identifier, which triggered an error message and loss of the first label. To fix, code was added to recognize the BOM and first label identifier separately.
- It is also recommended that language files be saved as UTF-8 (Unicode Transformation Format, 8-bit) text files. Even with the BOM issue fix, UTF-8 text files support more characters than ANSI files, which will minimize oddities when rendering special characters such as characters with punctuation marks that

are more common in languages other than English. The language file associated with the default “English (HEC)” language was saved as an UTF-8 text file and simplified where possible. The revised language (EFMPlotterLanguage_HEC.txt) file is included with EFM Plotter 3.1.

- When a new instance of EFM Plotter is initiated or the language is changed, the software stores corresponding labels as part of a collection of files called “resource bundles”. When working with languages in version 3.0 of Plotter, it was recognized that some interfaces were not updating properly as languages were changed. This was most notable when languages were added or updated and were invalid (i.e., missing labels or language files). Investigations showed that labels associated with select Plotter interfaces were being cached - those labels persisted after a language action was performed – which led to oddities including mixed languages within a single instance of Plotter. Code was added to wholly purge and regenerate the language bundles after activation of a valid language.

Documentation

- The description of EFM Plotter and how it is applied was updated in the HEC-EFM Quick Start Guide - Version 5.0. That document is available for download on HEC’s website and is also included as part of the install package for EFM version 5.0.