

Pathloss 5.1 Release Notes

Pathloss 5.1 is the latest release of the Pathloss software and includes a number of important changes to the program and file formats (see below). Pathloss 5.1 is free for existing Pathloss 5 license holders. Because of the nature of the changes in this update there are two important considerations.

- Pathloss 5.1 cannot be updated from 5.0. The two programs can both be installed on the same machine. You will need to deactivate the Pathloss 5.0 license in order to activate Pathloss 5.1. You should only uninstall Pathloss 5.0 once you are familiar with the new program and its changes.
- Link and radio files created with 5.1 cannot be read by 5.0. You will receive a "wrong file format" error message if you try to open a .5.1 .pl5 file in 5.0. If you open a 5.1 radio file in Antrad 5.0 the error message will read "File identifier or file suffix is invalid"

Installation procedure

In order to update Pathloss 5.0 to Pathloss 5.1 you will need to perform the following steps:

- Deactivate your existing version of Pathloss (see below).
- Run the Pathloss 5.1 setup file - p51setup.exe to install Pathloss 5.1.

The setup file can be downloaded by using the download link in your license email or by going to <http://www.pathloss.com/download.html>.

Pathloss 5.1 uses the same licensing system and activation procedure as 5.0. You will use your existing serial number and license options with 5.1.

To deactivate your Pathloss 5.0 license - Click *Configure - Local lock license options - Deactivate program* from the main menu and follow the instructions in the dialog. Use the online option if available, otherwise use the key code method and submit your key code by email or web form.

Running Pathloss 5.1 alongside 5.0: You can install both versions of Pathloss on the same machine. Pathloss files will be associated with the last version installed. Because they use the same license you will need to deactivate and reactivate when switching between programs. For this reason, you should use a floating lock to seamlessly open and close each version.

Custom Report Templates: If you have custom report templates that you would like to use in 5.1 you can make a copy of the .rtf files in the folder "cstmdata". Then after installing 5.1, copy these files in the the "cstmdata" folder of the 5.1 installation directory (C:\PLW51\ by default)

Important changes from version 5.0

Adaptive modulation radios

The maximum number of modulation states in previous versions was 10. This is now dynamically allocated and any number of states can be specified.

To account for performance in the modulation transition states, the following parameters have been added to each modulation state.

- dispersive fade margin at the BER corresponding to the step level
- signature minimum phase depth at the BER corresponding to the step level

- signature non minimum phase depth at the BER corresponding to the step level

These values will be used for each modulation except for the lowest modulation which will use the value corresponding to the 10^{-6} BER.

Radio Configurations

The maximum number of radio configurations in previous versions was 6. This is now dynamically allocated and any number of configurations can be specified.

The above changes to the radio specifications affect both the radio data files (raf - rsd) and the pl5 files. This program build will read all files versions. Previous program builds cannot read these files.