

# Bug Reporting, Patches, Support, Online Training

---



Caroline Marzinzik

June 2015



**PowerWorld**  
Corporation

2001 South First Street  
Champaign, Illinois 61820  
+1 (217) 384.6330

[caroline@powerworld.com](mailto:caroline@powerworld.com)  
217-384-6330 ext. 12

# Support & Bug Reporting

---



- Contact Information
  - [support@powerworld.com](mailto:support@powerworld.com)
    - checked by and often answered by Mark Laufenberg
  - 217-384-6330
    - Without choosing an extension, the phone will ring on everyone's desk
    - Usually there is someone in the office between 7:30 am and 6:00 pm central time
- We try to be supportive and get a fix out as soon as possible

# Bug Reporting



- What to report
  - What the problem is and step-by-step instructions on how to reproduce it (screenshots can be a big help)
    - There are at least 5 different ways to open a case so being specific is very important
  - If we can't reproduce the problem, we're stuck looking at the code
  - If we can reproduce the problem, we can usually fix it very quickly
  - Unfortunately, a screenshot of an access violation doesn't help very much. An access violation is an invalid pointer dereference. The dialog shows the address in memory.
- Send files
  - Some problems are specific to information in a particular case

# Bug Reporting

---



- Easy bugs to fix
  - Access violations that we can reproduce
- Hard bugs to fix
  - Intermittent bugs “heisenbugs”
    - Sometimes the bug causes an error and sometimes it doesn’t (usually) depending upon the status of a random value in memory
  - Bugs that we cannot reproduce due to lack of information (usually the case is very helpful)

# Patches



- Patches are new builds of the executable that contain bug fixes or new features
  - [www.powerworld.com/download-purchase/software-patches](http://www.powerworld.com/download-purchase/software-patches)
- A patch description is posted on the website describing the changes in the patch
  - [www.powerworld.com/patch-releases/simulator-18](http://www.powerworld.com/patch-releases/simulator-18)
  - PowerWorld publishes RSS feed with new patch information
- A patch is distributed as a zip file that contains
  - *PWLang\_EN.bin* – a language file used to fill case information displays / dialogs / pop-ups with text
  - *pwrworld.exe* - the new executable file
  - *readme.txt* – text file with directions on how to apply the patch

# Patches

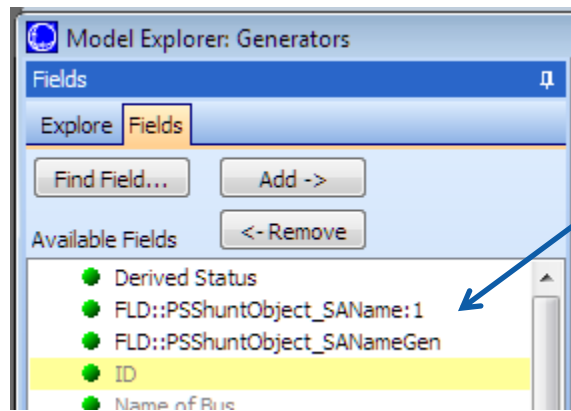


- Full installation files are also posted along with each new patch
  - *pw18FullSimulatorSetup.msi*
  - Generally only patch is necessary if Simulator has already been installed
  - This contains all of the information in the patch
  - Updates for help documentation that is used locally instead of from PowerWorld website will be contained here

# PWLang\_EN.bin



- What happens if you don't replace this file or something has not been properly translated?



Field names and column headers that don't mean much

Might also see similar entries with double colons :: in other places, e.g. Message Log

	Number of Bus	Name of Bus	ID	Status	Min MW	HDR::PSShuntObject_SAName:1	HDR::PSShuntObject_SANameGen
1	1	One	1	Closed	100.00		

# Releases



- Not every change can be put in a patch
  - Some deep architectural changes need thoroughly tested before being released
  - File format changes cannot be made mid release
    - The PWB file format is a binary file that is read byte-by-byte. Extra data won't be expected by older versions of the software. This will cause the file to fail to load, and could cause data loss.
    - We do have some padding for extra data, but as a rule we don't mess with the file format mid release.
    - This is most likely to happen to you if you're using a beta release. Usually we can recover the data if you can provide the mangled file.



# Online Training



- The complete set of training materials is now on the website:

[www.powerworld.com/training/online-training](http://www.powerworld.com/training/online-training)

The screenshot shows the 'Online Training' page layout. On the left is a vertical navigation menu with the following items: Training Calendar, Training Overview, Course Descriptions, Training Registration, Hotels and Transportation, and Online Training (which is highlighted in a darker blue). The main content area on the right contains the following text:

PowerWorld Corporation provides software training in the use of PowerWorld Simulator and add-on products OPF, SCOPF, OPF Reserves, ATC, PVQV, Transient Stability, and SimAuto. Our training also covers some basics of the engineering, operations, and economics of interconnected power systems.

Several recorded training modules from the 2-day course, [Introduction to PowerWorld Simulator: Interface and Common Tools](#), are available here for free viewing. A dual-monitor system is recommended to enable viewing of the training video alongside the PowerWorld Simulator application. If you don't yet have PowerWorld Simulator you can perform most of the exercises covered in these training modules on our [free 12-bus evaluation version](#).

Most training pages contain links for both YouTube and Flash versions. The Flash versions require Adobe Flash Player, version 7 or later. ([Get Adobe Flash Player.](#))

# On-Line Training

---



- Training videos for introductory course
- Up-to-date slides for Market Modeling, Security Analysis, and Transient Stability
- Coming Soon!!!!
  - Training videos for Transient Stability

# More Support

---



- Knowledge Base
  - [www.powerworld.com/knowledge-base](http://www.powerworld.com/knowledge-base)
  - Examples, tips, and tutorials
- Online Help
  - [www.powerworld.com/WebHelp](http://www.powerworld.com/WebHelp)
- Additional help files
  - [www.powerworld.com/download-purchase/download-help-files](http://www.powerworld.com/download-purchase/download-help-files)
  - Auxiliary File Format
  - WECC RAS Format
  - Transient Stability Block Diagrams

# Questions

---

