

# Bug Reporting and Patches

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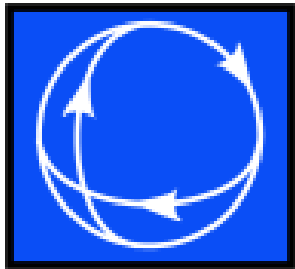


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Caroline Marzinzik

[caroline@powerworld.com](mailto:caroline@powerworld.com)

217-384-6330 ext. 12



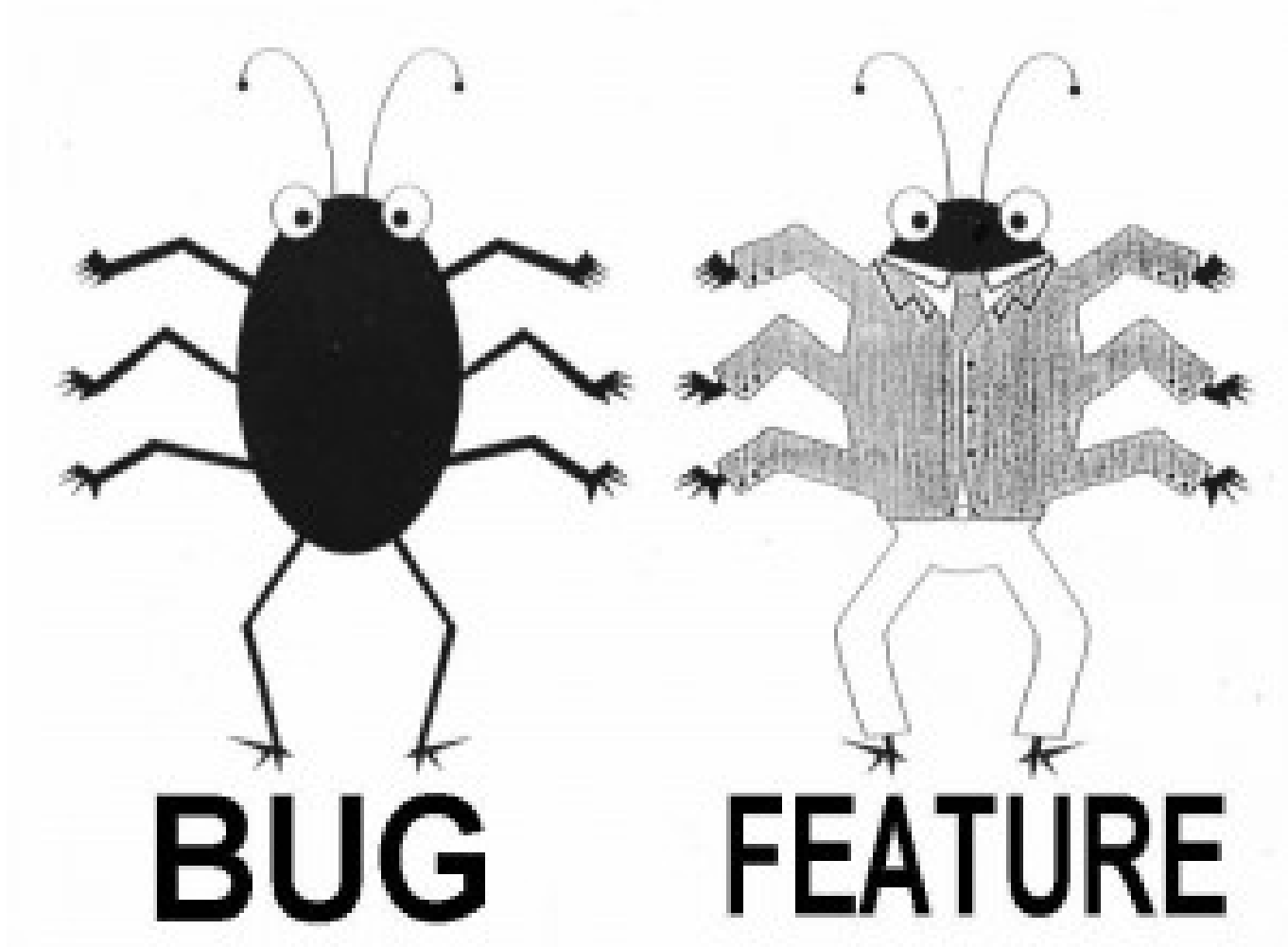
**PowerWorld**  
Corporation

# Topics



- Bug Reporting
  - Is It a Bug?
  - Resolving Bug Issues
  - Reporting Bugs
- Patches
  - Why We Need Them
  - How to Get Them

# Is It a Bug?



# Resolving Bug Issues



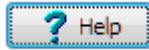
- Check the patch website to see if your problem has already been fixed
  - <http://www.powerworld.com/DOWNLOAD/patches.asp>
  - Check your patch version
    - Window ribbon tab → About

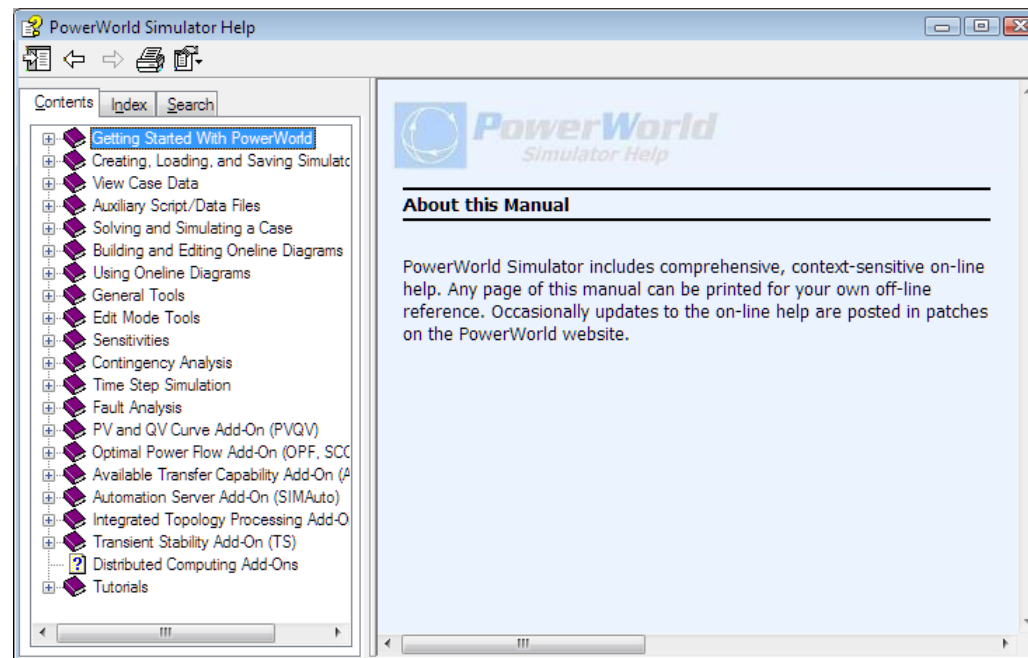
Simulator version  
and patch date



# Resolving Bug Issues



- Check the on-line help to determine if things are really supposed to work this way
  - Window ribbon tab → Contents
  - F2 key works on many dialogs
  - Click the Help button found on most dialogs 



# Resolving Bug Issues

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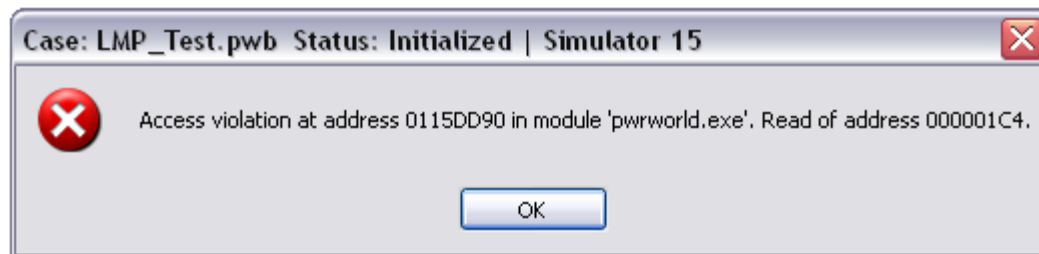


- Call or e-mail PowerWorld
  - 217-384-6330
  - support@powerworld.com
  - e-mail a specific PowerWorld employee

# Examples of Bad Bug Reporting



- “Simulator isn’t working”
  - Does this mean you can’t even start the program or something else?
- “It doesn’t work”
  - What is “it” and what about “it” doesn’t work?
- Screen shot of access violation with no additional information



# Bug Reporting



- *How to Report Bugs Effectively* Essay
  - <http://www.chiark.greenend.org.uk/~sgtatham/bugs.html>
- Detailed report
  - Why do you think you have found a bug?
    - It could really be a feature designed to work this way and you don't want it to work this way.
    - What did you see compared to what you expected to see?
  - What patch release of Simulator are you using?
    - The problem may have already been fixed and all you need to do is get the latest patch.



# Bug Reporting



- Detailed Report
  - What sequence of actions did you take that produced the bug?
    - **Exact** steps that you took
      - There are several different ways in Simulator to do the same things. They should all work the same way, but they might not.
        - » Example loading an auxiliary file
          - » Go to Application menu (little blue orb) and select Load Auxiliary. Browse to and select the file to open.
          - » Open the Bus case information display. Right-click and choose Load Auxiliary (any data). Browse to and select the file to open.
      - It might seem to you that the bug you are getting is unrelated to how you did something 10 steps ago, but it might not be.

# Bug Reporting



- Detailed Report
  - Can the bug be reproduced?
    - If you do the same steps over and over again do you get the same failure?
    - Does it happen frequently but not always at the same step?
    - Bugs that can be reproduced are much easier to fix
- Send Files
  - We might not be able to reproduce the problem with a test case
  - The problem might be specific to the case, online diagram, options, or auxiliary files that you are using

# Bug Reporting



- Show us
  - Screen shots
    - Windows Print Screen key
    - Windows Snipping Tool
  - WebEx
    - <http://www.webex.com>
    - Paid application that allows you to share desktop
  - CrossLoop
    - <http://www.crossloop.com>
    - Free application that allows you to share desktop

# Bug Reporting



- EurekaLog
  - <http://www.eurekalog.com>
  - Used when other methods fail
  - Can be useful with seemingly random access violations
  - Special Simulator executable that logs error information to a special file (\*.elf)
    - Send us this error file and it will tell us on which line of code the error occurs

# Patches



- Incremental update to a release version
  - Minimally create patches for previous version
  - Currently post patches for version 15
- PowerWorld releases patches for two reasons
  - Bug fixes
  - New features
- Patches released about once a week
  - Turnaround can be a few hours if necessary

# Patches



- <http://www.powerworld.com/DOWNLOAD/patches.asp>

The screenshot shows a web browser window displaying the PowerWorld Corporation website. The page title is "Software Patches". The main content area is divided into two columns. The left column contains instructions for obtaining a patch, a note for Simulator 15 users, and a form with fields for Customer Account User Name, Password (Product ID), First Name, Last Name, and Email Address. The right column contains a "Patch Descriptions" section with a list of links for various simulators and retrievers, all dated August 16, 2011.

**PowerWorld Corporation**  
The Visual Approach to Analyzing Power Systems

### Software Patches

To obtain the patch, please provide your PowerWorld Simulator or Retriever Customer Account User Name and Product Identification in the spaces below. If you do not know this information, please contact us at [support@powerworld.com](mailto:support@powerworld.com).

**Attention Simulator 15 users:** Simulator 15 inadvertently omitted the block diagrams Acrobat file from the initial installation build. Click [here](#) to download the file.

Customer Account User Name

Password (Product ID)

First Name

Last Name

Email Address

PowerWorld Corporation will match your Customer Account User Name with your Product ID and determine of which product you are a licensee. You will then be prompted to save the patch installation file to your hard drive. Remember where you save this file on your hard drive, and then go to this location and run the file.

### Patch Descriptions

The below links contain patch descriptions of the respective products and all add-ons (ATC, PVQV, SimAuto, OPF, Reserves, & SCOPF). The dates indicate when the patch was last updated.

Simulator 15  
**August 16, 2011**

Retriever 15  
**August 16, 2011**

Simulator 14  
**August 16, 2011**

Retriever 14  
**August 16, 2011**

[ Simulator 13 ]  
[ Retriever 13 ]  
[ Simulator 12 ]  
[ Retriever 12 ]  
[ Simulator 11 ]  
[ Retriever 11 ]  
[ Simulator 10 ]  
[ Retriever 10 ]  
[ Simulator 9 ]  
[ Simulator 8 ]  
[ Simulator 7 ]  
[ Simulator 6 ]  
[ Simulator 5 ]

# Available Downloads



The screenshot shows a web browser window with the URL [http://www.powerworld.com/DOWNLOAD/version\\_patches.asp](http://www.powerworld.com/DOWNLOAD/version_patches.asp). The page features the PowerWorld Corporation logo and the text "Available downloads". A note provides instructions for versions 11.0 and later. Below the note, the product name "Simulator ATC PVQV SCOPF Reserves SimAuto TP Transient Dist. CTG ATC PVQV TS" is listed. Two download links are provided: "Version 15.0 Installation Executable" and "Version 15.0 Patch".

Note: For versions 11.0 and later, a zipped file is now provided. Unzip the contents into a temporary folder, and follow these instructions:  
1. Locate the existing pwrworld.exe file on your computer (default location is C:\Program Files\PowerWorld Simulator\pwrworld.exe).  
2. Replace this file with the new pwrworld.exe contained in this zip file.

For Product 'Simulator ATC PVQV SCOPF Reserves SimAuto TP Transient Dist. CTG ATC PVQV TS'

[Version 15.0 Installation Executable](#)  
[Version 15.0 Patch](#)

Full installation file available with version 15 and later

Patch release can be used once you have installed Simulator (will see patches for previous versions of Simulator as well)

# What's in the Patch File?



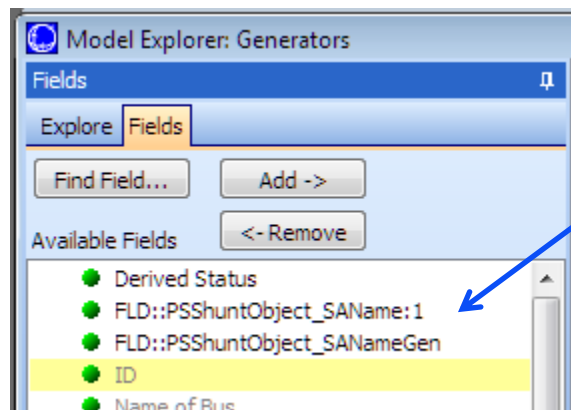
- pw15Patches.zip
  - readme.txt
  - LicenseTool.exe
    - Used with hardware keys
  - pwrworld.exe
    - New patch executable
    - Replace existing executable with this file
    - Default location
      - C:\Program Files\PowerWorld\Simulator\pwrworld.exe
  - PWLang\_EN.bin
    - Language translation file necessary for properly identifying fields, column headers, captions, messages, etc.
    - Replace existing file with this one in the same directory as the executable



# 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		