

## Release Notes for PowerGen V15.0

Thank you for your interest in PowerGen Professional 15.0, the premier tool for automating the build process for PowerBuilder applications.

You can receive phone support at

(603) 226-4041

during our business hours 8:30 - 5:30 EDT.

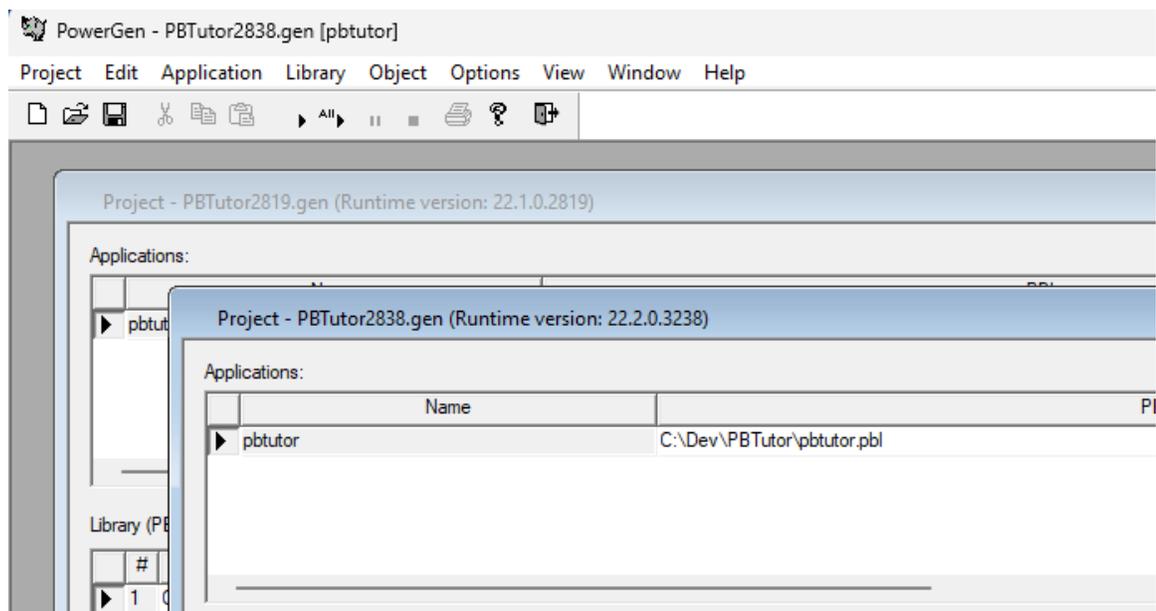
E-mail at

support@ecrane.com.

We would welcome any of your suggestions for further Enhancements.

## What's New

### *General Runtime Version Improvements*

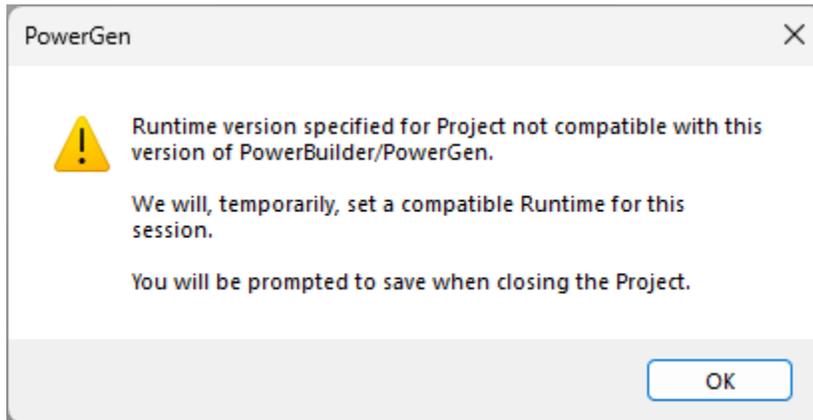


In PowerGen V15.0 you can open projects with different Runtime versions in the same session (note the Runtime versions shown on the two projects above).

PowerGen does not use the default Runtime version specified in the Registry, but uses the version specified in the Project's \*.gen file:

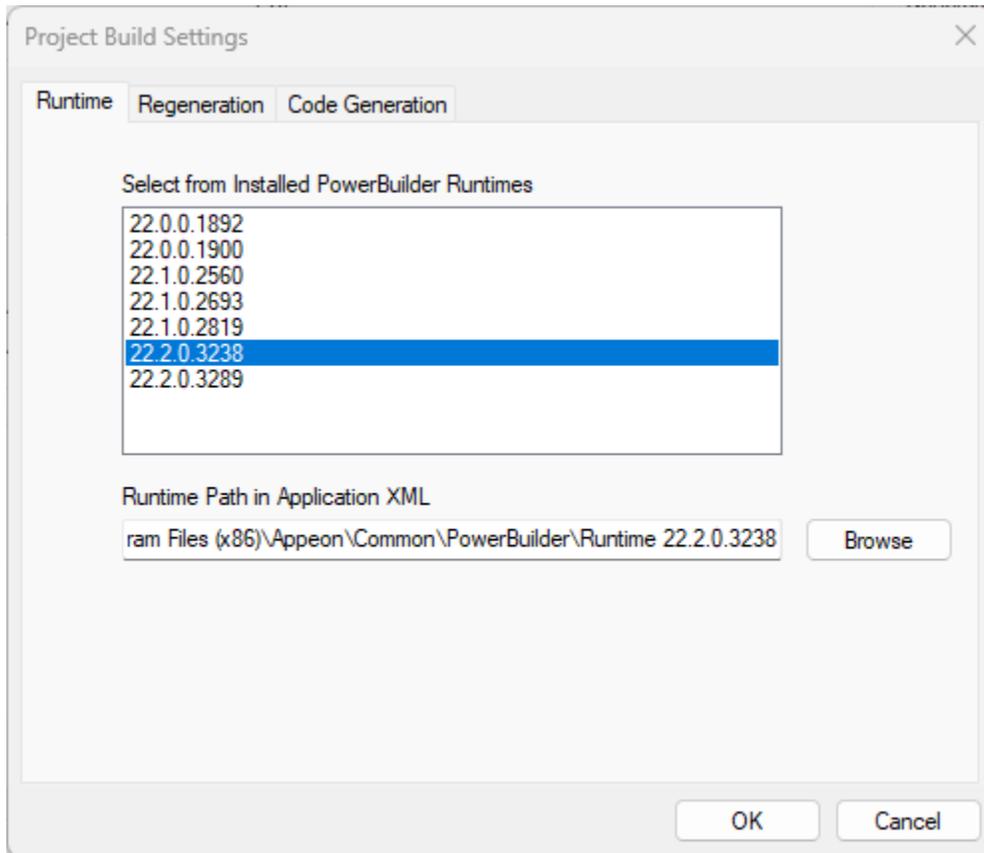
```
$ProjectName="", "C:\Dev\PBTutor\powergen.log", 1, "", "22.2.0.3238", "C:\Program Files (x86)\Apeon\Common\PowerBuilder\Runtime 22.2.0.3238"
```

If you open a PowerGen project specified with a Runtime version incompatible with the current PowerBuilder/PowerGen version you will get a message:



This would happen, for example, if were to open a PowerGen Project with a Runtime version specified as 19.2.0.2556 and you were running PowerGen for PowerBuilder V2022 R2.

In this case the Runtime version is set to the default Runtime version for the PowerBuilder/PowerGen version you are running. You can continue with that version or specify a different one in PowerGen by choosing Options->Project from the main menu and choosing a different Runtime version:



## Setting Runtime Versions in Command Line Operations

When running from command line interface, PowerGen will use the Runtime version specified in the Project's \*.gen file.

In this case, if the Runtime version is incompatible with the version of PowerBuilder/PowerGen, PowerGen will exit with a new error code of 151, stored in the PGEError.log file. To correct this condition, you can open the Project in the PowerGen GUI and proceed as described above.

## Setting Runtime Version Properties (PBDs, DLLs, EXEs)

Using the Runtime version specified in the Project's \*.gen file, PowerGen will write the version in any PBD file created in the same manner that PowerBuilder does. These versions are not Windows "version resources" because PBD files are not Windows PE format executable files.

For DLLs and EXEs (which conform "somewhat" to the Windows PE format), PowerGen writes a batch file to the directory where the DLLs or EXEs are created. This batch sets a "RTVersion" variable that be used in VersionEdit scripts.

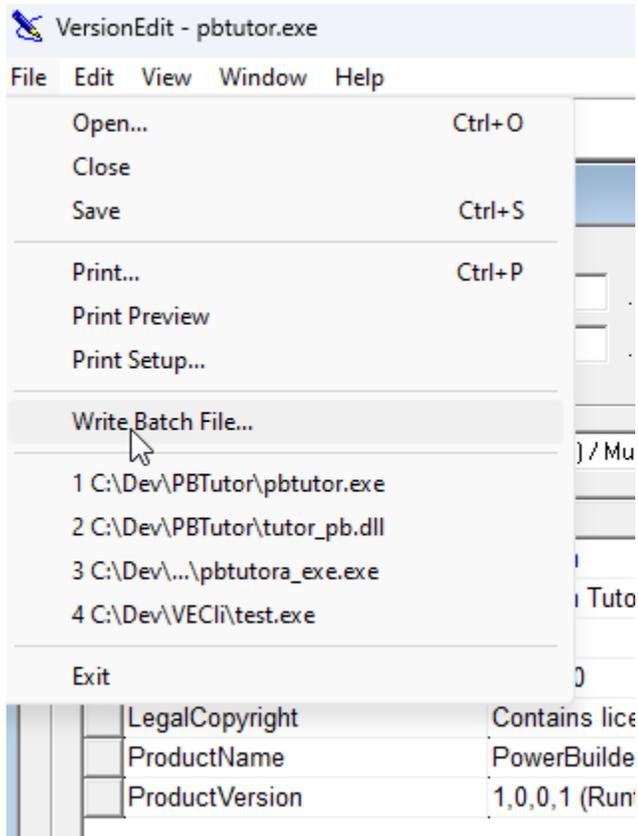
Here's an example:

Creating an EXE with Runtime version of "22.2.0.3238" will result in a batch file named SetRTVersion.bat in the same directory as the EXE.

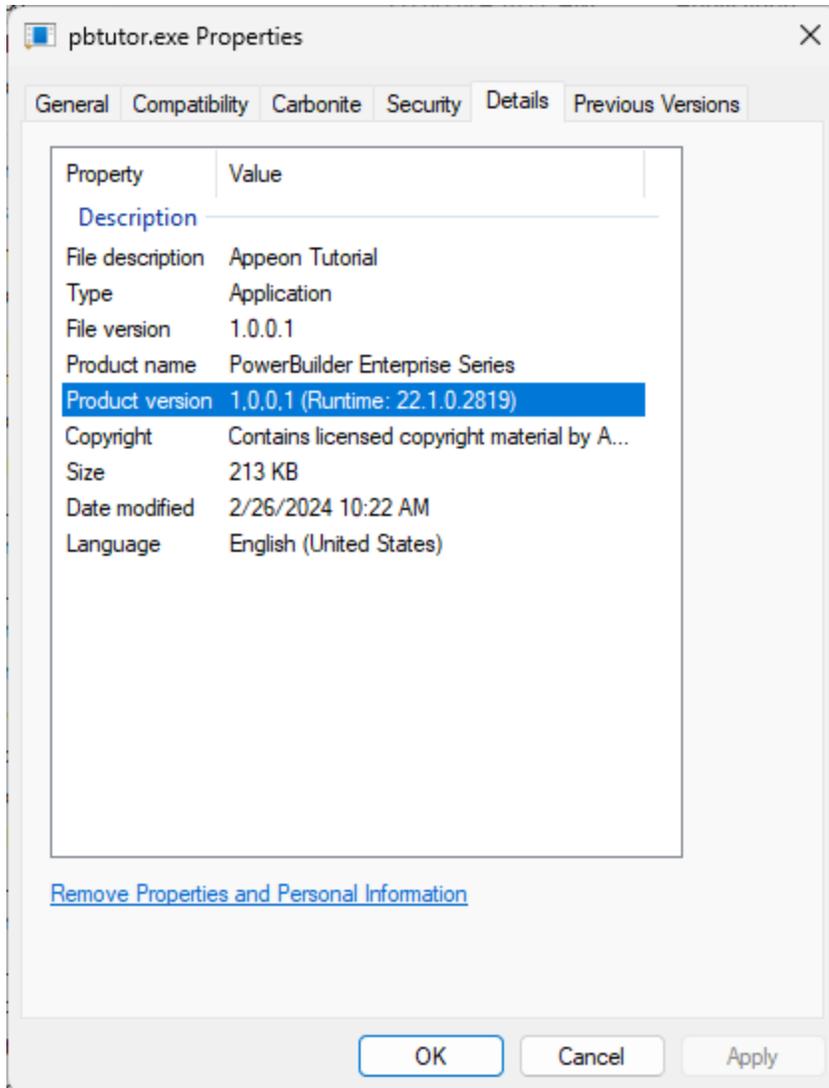
This batch file can be included in a VersionEdit command line (VECLI) script such as:

```
call "c:\Dev\PBTutor/SetRTVersion.bat"  
Set module="C:\Dev\PBTutor\pbtutor.exe"  
Set vepath="C:\Program Files (x86)\E. Crane Computing\PowerGen Professional  
VS2017\VECLI.exe"  
%vepath% %module% /f=1.0.0.1  
%vepath% %module% /p=1.0.0.1  
%vepath% %module% /sk="CompanyName" /sv="Appeon" /sl=040904E4  
%vepath% %module% /sk="FileDescription" /sv="Appeon Tutorial" /sl=040904E4  
%vepath% %module% /sk="FileVersion" /sv="1,0,0,1" /sl=040904E4  
%vepath% %module% /sk="InternalName" /sv="PB 22.0" /sl=040904E4  
%vepath% %module% /sk="LegalCopyright" /sv="Contains licensed copyright material by  
Appeon and others. Use and distribution of Appeon copyright material and licensed  
material is governed by Appeon End-user License Agreement." /sl=040904E4  
%vepath% %module% /sk="ProductName" /sv="PowerBuilder Enterprise Series"  
/sl=040904E4  
%vepath% %module% /sk="ProductVersion" /sv="1,0,0,1 (Runtime: %RTVersion%)"  
/sl=040904E4
```

(Note that all of this script, but the highlighted items, can be generated automatically from the VersionEdit interface, using its Write Batch File function.)



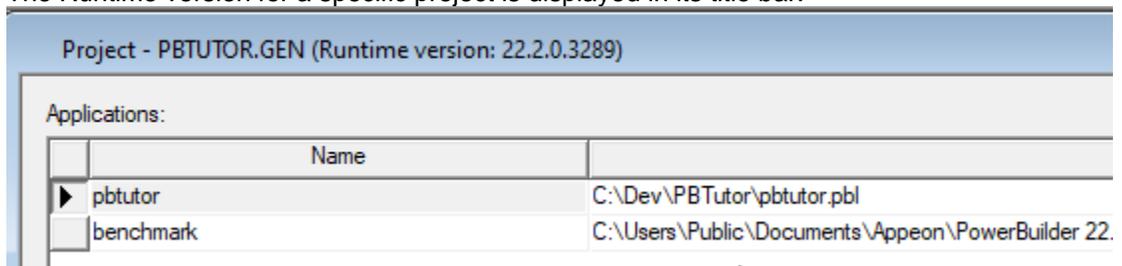
After running the VersionEdit batch file the properties will appear in Windows Explorer:



In this way the VersionEdit script can be used without changes as the Runtime version for a specific application changes.

### ***Display of Runtime Version***

The Runtime version for a specific project is displayed in its title bar:



And in PowerGen's output log:

```
Output - PBTutor2819.gen
Log Started

PowerGen® Version 15.0.12.0 for PowerBuilder® V 2022
PowerBuilder ORCA Version: 22.2.0.3289
PowerBuilder Runtime Version: 22.1.0.2819
Windows 10 Enterprise (build 9200), 64-bit

63 percent of memory in use.
2097151 total Kbytes of physical memory.
2097151 free Kbytes of physical memory.
4194303 total Kbytes of paging file.
4194303 free Kbytes of paging file.
2097024 total Kbytes of virtual memory.
1884392 free Kbytes of virtual memory.

Application:
pbtutor

Library List:
C:\Dev\PBTutor\pbtutor.pbl
C:\Dev\PBTutor\tutor_pb.pbl
C:\Dev\PBTutor\commenttest.pbl
```

This is a good place to note that the ORCA (ORCA-API, not orcascript) version does not have to be the same version as the Runtime version, as long as they're from the same major PowerBuilder version (22 in this case).

### ***New Error Code***

Running from the command line, PowerGen will return an error code of 151 if the specified Runtime version of the PowerGen Project is incompatible with the version of PowerBuilder/PowerGen that you are using. (See more above.)

### ***Bug Fixes***

- Help file could be opened from the Object View.
- Unicode characters in PB Object comments not imported correctly.
- Path to PBORCL.DLL is not always correct if just the AutoCompiler, PB Utilities installed.
- Import not correct in importing PB Object whose name includes extended UTF8 characters.

### **Thanks to...**

Arthur Hefti (CATSoft) and Yiannis Papadomichelakis (Logismos) for their invaluable help in, first, identifying some of the challenges with managing Runtime versions, and then, developing the improvements mentioned above. We are extremely fortunate to have as our customers software professionals like Arthur and Yiannis with the skill, insight, and perseverance to help make PowerGen better. Thank you both.