Release Notes for PowerGen V16.0

Thank you for your interest in PowerGen Professional 16.0, 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

Support for PowerBuilder 2025

PowerGen V16.0 supports the PowerBuilder 2025 PBL architecture. It will handle "Workspaces" as in previous versions, but not the new "Solutions". This is currently a limitation of the PB ORCA-API (not orcascript) which has not been upgraded to handle the Solution architecture. PowerGen uses the ORCA-API to access PowerBuilder build and library functions.

All previous versions of PowerBuilder, V5.0 and above, are supported.

The \$Version entry in PowerGen's Project files (*.gen) has been incremented to 17. This allows PowerGen to maintain backwards compatibility with Project files created in previous versions of PowerGen. In other words, you can use a Project file created in PowerGen V9.0, for example, with PowerGen V16.0. Changes to the Project file format are described below.

Post-Build Events

PowerGen V16.0 introduces a new feature to specify a command line to be invoked when the Build operation (initially just the creation of the executable) is completed. For example, if you want to set the executable version resource you could invoke a batch file that will do this:

Application Build Settings X					
File Specifications	Regeneration	Code Generation	Source Control	Post-Build Event	
		or\pbtutorVE.bat	[]	Browse	
Description:	Setting Version				

The output of the command line operation will be reported in PowerGen's output log (powergen.log, by default) and its exit code will be returned.

Either the complete output of the command line will be logged:

PBTutor.gen* (Runtime version: 25.0.0.3398)		- • ×
Creating Executable		
C:\Dev\PBTutor\pbtutor.exe	\searrow	
Executing Post-Build Event		
Setting Version		
Command line: C:\Dev\PBTutor\pbtutorVE.bat		
C:\Dev\PBTutor>Set module="C:\Dev\PBTutor\pbtutor.exe"		
C:\Dev\PBTutor>Set vepath="C:\Program Files (x86)\E. Crane Computing C:\Dev\PBTutor>Set vepath1="C:\Program Files (x86)\E. Crane Computing		
C:\Dev\PBTutor>"C:\Program Files (x86)\E. Crane Computing\PowerGen		
"C:\Program Files (x86)\E. Crane Computing\PowerGen Professional VS		
operable program or batch file.	-	1
	Professional VS2017\VECli.exe" "C:\Dev\PBTutor\pbtutor.exe" /p=1.0.0.1	1
""C:\Program Files (x86)\E. Crane Computing\PowerGen Professional VS operable program or batch file.	2017/VECII.exe ^m is not recognized as an internal or external command,	
	Professional VS2017\VECli.exe" "C:\Dev\PBTutor\pbtutor.exe" /sk="Company	/Name" /sv='
"C:\Program Files (x86)\E. Crane Computing\PowerGen Professional VS		
operable program or batch file.		
	Professional VS2017/VECli.exe" "C:\Dev\PBTutor\pbtutor.exe" /sk="FileDesci	ription" /sv="
""C:\Program Files (x86)\E. Crane Computing\PowerGen Professional VS operable program or batch file.	2017/VECII.exe [®] is not recognized as an internal or external command,	
	Professional VS2017\VECli1.exe" "C:\Dev\PBTutor\pbtutor.exe" /sk="FileVers	sion" /sv="1.(
"C:\Program Files (x86)\E. Crane Computing\PowerGen Professional VS		
operable program or batch file.		
C:\Dev\PBTutor>if 9009 NEQ 0 goto ProcessError C:\Dev\PBTutor>exit 9009		
Command line failed		
Return code: 9009		
1 errors found		

Or just the exit code:

PBTutor.gen (Runtime version: 25.0.0.3398)		X
1766672 free Kbytes of virtual memory.	13	
Application:		
pbtutor		
Library List:		
C:\Dev\PBTutor\pbtutor.pbl		
C:\Dev\PBTutor\tutor_pb.pbl		
Creating Executable		1
C:\Dev\PBTutor\pbtutor.exe		
Executing Post-Build Event		
Setting Version		
Command line: C:\Dev\PBTutor\pbtutorVE.bat		
Command line failed		
Return code: 9009		
1 errors found		
Log Ended		
,		

This option is determined in the Output Log options (Options->Output Log from the main menu):

Save in	: PBTutor		G	🤌 📂 🛄 🕇		
\wedge	Name	^	Da	te modified	Ty ,	
	240219Save		2/	19/2024 9:12 AM	I Fil	
Home	orig_PBLS		2/	1/2023 1:48 PM	Fil	
	🚞 pbtutor		11,	/15/2024 9:02 Al	M Fil	
	📒 pfcapsrv		2/	1/2023 1:48 PM	Fil	
Desktop	resources		2/1	1/2023 1:48 PM	Fil	
	test_import		2/	1/2023 1:48 PM	Fil	
	🚞 theme190		2/	1/2023 1:48 PM	Fil '	
ibraries	tutor_pb		7/3	31/2024 1:09 PM	Fil	
	tutor_pb.pbl	src	2/1	1/2023 1:48 PM	Fil	
_	wf1_portal	wf1_portal		1/2023 1:48 PM	Fil	
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	ws objects		2/	1/2023 1:48 PM	Fil	
Vetwork						
	File name:	powergen.log		~	Save	
	Save as type:	Log file (*.log)		~	Cancel	
pend to sele	cted Log	Include Regen Times in L	00	🔽 Include Lik	orary List in Log	
erwrite selec	-	Position in Log		_	en Errors only	
Create new Log name by appending date and time to selected Log name		O Start of Line				e differences only
		O End of line				e amerences only
				Post Build Eve		
		Show as time-of-day Show as elapsed time	from start	O Show all o	1. A.	
		of operation		O Show only	exit code if there	is an error

[Note: This function can be expanded to other build operations in future releases. Please send any comments and suggestions about the utility of this.]

Option to Exit Build if Duplicate Objects Found

If the option to check (and report) duplicate object names is selected, then a new option is available to stop the build activity when duplicates are found.

When this happens PowerGen exits with a new error code: 152.

Build Options	×
 Optimize PBL when building applications Check PBL's for duplicate object names Scan PBRs for missing resources Always refresh object list before building 	OK Cancel
Build Process Flow Build EXEs and Libraries after regeneration errors Don't Build EXEs and Libraries after regeneration errors Stop when objects with duplicate names found	
Regeneration Continue when regeneration errors occur Pause when regeneration errors occur Stop when regeneration errors occur	

Changes to the Gen File Format

Two new parameters have been added to the \$EXEPath entry in the Project (*.gen) file:

```
$EXEPath=path_to_application_executable,
path_to_new_application_executable,overwrite_existing_executable,
visual_styles,path_to_manifest_file,post_build_commandline,
post_build_description
```

\$EXEPath

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Parameters	Usage
path_to_application_executable	Executable path (if existing EXE is overwritten)
path_to_new_application_execu table	Path to new executable (if existing EXE is not overwritten)
overwrite_existing_executable	0, if do not overwrite existing application executable
	1, if do overwrite existing application executable
visual_styles	0, don't use visual styles
	1, use visual styles
path_to_manifest_file	Path to the manifest template file
post_build_commandline	Path to the Post Build event
post_build_description	Description of Post Build event

Example:

\$EXEPath="C:\Dev\PBTutor\pbtutor.exe","",1,0," C:\Dev\PBTutor\template.manifest","C:\Dev\PBTutor\pbtutorVE.bat","Version" As a consequence of this format change the version of the PowerGen project file format is now 17: \$PowerGenVersion=17. As with **all** previous versions of PowerGen this allows old project files to be used with new versions of PowerGen.

New Error Code

Running from the command line, PowerGen will return an error code of 152 if the option to check (and report) duplicate object names is selected, and the option to stop the build activity when duplicates are found is set. (See more above.)

Bug Fixes