

PACE4 Silent Mode Update

*Version 4.36.0 | Last revision 26-JUL-2026 | LISE** PACE4 project*

Purpose. This note documents the PACE4 command-line silent mode added in version 4.36.0. The update allows a PACE input file to be calculated without showing dialogs, progress gauges, particle/result windows, or other GUI output surfaces.

User Command

The supported command-line form is:

```
PACE4.exe "pace4_input_file.pace" -s
```

The slash form is also accepted:

```
PACE4.exe "pace4_input_file.pace" /s
```

The command string verified by the user was:

```
c:\Users\...\48Ca_124Sn_e300.pace -s
```

Expected Output

For an input file named `pace4_input_file.pace`, silent mode writes the standard report files beside the input file:

Output file	Purpose
pace4_input_file.html	HTML report generated by the PACE4 calculation.
pace4_input_file.rtf	RTF report generated by the PACE4 calculation.
pace4_input_file.cs4	Residual cross sections generated by the PACE4 calculation.

Silent-Mode Behavior

- The application accepts either `-s` or `/s` after the input `.pace` file.
- If silent mode is requested without an input file, PACE4 exits with an error code.
- The main PACE4 window is not shown during silent calculation.
- Progress-gauge windows are suppressed.
- Result and particle output windows are suppressed after calculation.

- File-open, format, database, and validation dialogs are converted to warning output instead of modal message boxes.
- The existing GUI behavior is preserved when PACE4 is started without -s or /s.

Version and Project Metadata

File	Update
g_PACE/ftype.h	Official PACE version set to "Version 4.36.0"; date set to "Last revision 26-JUL-2026".
g_PACE/pace.h	PACE version history/comment block contains the 4.36.0 silent-mode entry.
PACE.pro	Windows version synchronized to 4.36.0.0; non-Windows project version synchronized to 4.36.0.
PACE.pro	MinGW/MSVC DESTDIR paths point to the local clone install folders.

Implementation Summary

Source file	Role in silent mode
g_PACE/p_main.cpp	Parses -s and /s; requires an input file in silent mode; calls tfusion::runSilent() instead of showing the widget.
g_PACE/tfusion.h / tfusion.cpp	Adds runSilent(); loads the input, gathers page variables, runs PACE3, and suppresses result/particle windows.
g_PACE/PACE3main.cpp	Suppresses QProgressDialog display, progress updates, and cancellation UI in silent mode.
g_PACE/lise_mass.cpp	Suppresses modal database warning in silent mode and emits a warning message instead.
g_PACE/tfusion_2.cpp / tfusion_2a.cpp	Suppresses input-validation QMessageBox dialogs in silent mode.

Operational Notes

- Use a quoted path when the input filename or directory contains spaces.
- The .html and .rtf report filenames are derived from the .pace input filename.
- The executable built during this update is located in the local clone install folder:
LISEcute/_install/PACE4.exe.
- This change follows the LISE++ silent-mode pattern while keeping PACE4 GUI operation unchanged.

Verification

The release build completed successfully with Qt 6.7.0 MinGW. The user verified the silent command with 48Ca_124Sn_e300.pace and reported that it works.