

Debugging

PowerToys Run is a single exe file associated with **launcher.exe** process and debugger should be attached to this process. There are two approaches to debug **PowerToys Run**. Both these approaches differ in the compile-time and the range of functionalities that could be debugged. These methods are discussed in detail in the following sections.

Debugging Prerequisite

Setup development environment for PowerToys by following instruction [here](#).

Direct debugging

This approach is used to test UI, plugins, and core **PowerToys Run** functionality. This **cannot** be used to test **PowerToys Run** settings. The approach is significantly faster compared to **Debugging with runner**, as it requires compiling projects relevant to **PowerToys Run**. Please follow the steps below for direct debugging. 1. Right-click on **modules->launcher->PowerLauncher** and select **Set as startup Project**. 2. Press F5 to start debugging.

Debugging with runner

This approach can be used to test UI, plugins, core **PowerToys Run** functionality and **PowerToys Run** settings. This approach **cannot** be used to debug functions that execute on starting **launcher.exe** process. This requires building runner along with all the other modules on first compile, making it slower than **Direct debugging** approach. The subsequent compilations should be fast. 1. Right-click on **runner** and select **Set as startup Project**. 2. Press F5 to start debugging. 3. Attach debugger to **launcher.exe** process. 1. Go to **Debug->Attach to process..** 2. Filter and select **launcher.exe** process. 3. Click on **Attach**.