

[main.cpp](#)

Contains the executable starting point, initialization code and the list of known PowerToys. All singletons are also initialized here at the start. Loads all the powertoys by scanning the `./modules` folder and `enable()` s those marked as enabled in `%LOCALAPPDATA%\Microsoft\PowerToys\settings.json` config. Then it runs [a message loop](#) for the tray UI. Note that this message loop also [handles lowlevel keyboard hook events](#).

[powertoy_module.h](#) and [powertoy_module.cpp](#)

Contains code for initializing and managing the PowerToy modules. `PowerToyModule` is a RAII-style holder for the `PowerToyModuleIface` pointer, which we got by [invoking module DLL's powertoy_create function](#).

[powertoys_events.cpp](#)

Contains code that handles the various events listeners, and forwards those events to the PowerToys modules. You can learn more about the current event architecture [here](#).

[lowlevel_keyboard_event.cpp](#)

Contains code for registering the low level keyboard event hook that listens for keyboard events. Please note that `signal_event` is called from the main thread for this event.

[win_hook_event.cpp](#)

Contains code for registering a Windows event hook through `SetWinEventHook`, that listens for various events raised when a window is interacted with. Please note, that `signal_event` is called from a separate `dispatch_thread_proc` worker thread, so you must provide thread-safety for your `signal_event` if you intend to receive it. This is a subject to change.

[tray_icon.cpp](#)

Contains code for managing the PowerToys tray icon and its menu commands. Note that `dispatch_run_on_main_ui_thread` is used to transfer received json message from the [Settings window](#) to the main thread, since we're communicating with it from [a dedicated thread](#).

[settings_window.cpp](#)

Contains code for starting the PowerToys settings window and communicating with it. Settings window is a separate process, so we're using [Windows pipes](#) as a transport for json messages.

[general_settings.cpp](#)

Contains code for loading, saving and applying the general settings.

[auto_start_helper.cpp](#)

Contains helper code for registering and unregistering PowerToys to run when the user logs in.

[unhandled_exception_handler.cpp](#)

Contains helper code to get stack traces in builds. Can be used by adding a call to `init_global_error_handlers` in [WinMain](#).

[trace.cpp](#)

Contains code for telemetry.

svgs

Contains the SVG assets used by the PowerToys modules.