

Debugging Uninstallers

To perform uninstallation, IzPack goes through three phases, each involving a separate process.

The following describes how to remotely debug each of these phases.

Phase 1

This phase:

1. Extracts the jar to a temporary directory
2. Spawns a new process for Phase 2, referencing the temporary directory as the classpath; and
3. Exits

Its invoked by running:

```
java -jar MyApp/Uninstaller/uninstaller.jar
```

To debug this phase:

1. Place a breakpoint in **com.izforge.izpack.uninstaller.Uninstaller.main(String[] args)**
2. Run the command with the appropriate debug agent settings
3. Attach to the process in the debugger

E.g.:

```
java -jar -Xdebug -Xrunjdp:transport=dt_shmem,address=jdbconn,server=y,suspend=y  
MyApp/Uninstaller/uninstaller.jar
```

Phase 2

This phase:

1. Spawns a new process for Phase 3
2. Waits for it to complete
3. Deletes the temporary directory containing the classes extracted in Phase 1

To debug this phase,:

1. Place a breakpoint in **com.izforge.izpack.util.SelfModifier.main(String[] args)**
2. Define the **self.mod.debugPort2** property, which specifies the debug port to listen on
3. Attach to the process in the debugger using socket transport, and the port above

E.g.:

```
java -jar -Dself.mod.debugPort2=8002 MyApp/Uninstaller/uninstaller.jar
```

Phase 3

This phase performs the actual uninstallation.

To debug this phase:

1. Place a breakpoint in **com.izforge.izpack.util.SelfModifier.main(String[] args)**
2. Define the **self.mod.debugPort3** property, which specifies the debug port to listen on
3. Attach to the process in the debugger using socket transport, and the port above

E.g.:

```
java -jar -Dself.mod.debugPort3=8003 MyApp/Uninstaller/uninstaller.jar
```