



# Enhancing Swift's Supply Chain Security

**Build-time Software Bill of Materials Generation  
in Swift Package Manager**

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# Dev Toolchain Build with SwiftPM SBOM Support



Toolchains available until 28 February

MacOS

<https://download.swift.org/tmp/pull-request/81376/2194/xcode/swift-PR-81376-2194-osx.tar.gz>

RHEL

<https://download.swift.org/tmp/pull-request/81376/48/ubi9/PR-ubi9.tar.gz>

Ubuntu

- 22.04 - <https://download.swift.org/tmp/pull-request/81376/71/ubuntu2204/PR-ubuntu2204.tar.gz>

- 24.04 - <https://download.swift.org/tmp/pull-request/81376/33/ubuntu2404/PR-ubuntu2404.tar.gz>

Amazon Linux 2

<https://download.swift.org/tmp/pull-request/81376/127/amazonlinux2/PR-amazonlinux2.tar.gz>



# Example Usage: macOS

Recommendation: Use `curl` to download the toolchain.

```
$ curl -o toolchain.tar.gz <toolchain_link>
```

```
$ tar xzvf toolchain.tar.gz
```

```
$ Library/Developer/Toolchains/swift-PR-81376-2194.xctoolchain/  
usr/bin/swift package clean
```

```
$ Library/Developer/Toolchains/swift-PR-81376-2194.xctoolchain/  
usr/bin/swift build --build-system swiftbuild --sbom-spec  
cyclonedx --sbom-spec spdx
```



# Example Usage: Linux

Recommendation: Use containers to avoid overwriting existing Swift toolchains.

```
$ curl -o toolchain.tar.gz <toolchain_link>
```

```
$ tar xzvf toolchain.tar.gz
```

```
$ cp -r -n ./usr/* /usr/
```

```
$ /usr/bin/swift build --build-system swiftbuild --sbom-spec  
cyclonedx --sbom-spec spdx
```



# Feedback

Directly

Swift forums ([forums.swift.org](https://forums.swift.org))

Pitch

SE-0509: Software Bill of Materials (SBOM) Generation for Swift Package Manager