swift-inspect

swift-inspect is a debugging tool which allows you to inspect a live Swift process to gain insight into the runtime interactions of the application.

swift-inspect uses the reflection APIs to introspect the live process. It relies on the swift remote mirror library to remotely reconstruct data types.

Building

swift-inspect can be built using swift-package-manager.

Windows

In order to build on Windows, some additional parameters must be passed to the build tool to locate the necessary libraries.

```
swift build -Xcc -I%DEVELOPER_DIR%\Toolchains\unknown-Asserts-
development.xctoolchain\usr\include\swift\SwiftRemoteMirror -Xlinker
%DEVELOPER_DIR%\Toolchains\unknown-Asserts-
development.xctoolchain\usr\lib\swift\windows\x86_64\swiftRemoteMirror.lib
```

Using

The following inspection operations are available currently.

All Platforms

dump-arrays <name-or-pid> : Print information about array objects in the target

dump-cache-nodes < name-or-pid> : Print the metadata cache nodes.

dump-conformance-cache <name-or-pid>: Print the content of the protocol conformance cache.

dump-generic-metadata <name-or-pid> [--backtrace] [--backtrace-long] : Print generic metadata allocations.

dump-raw-metadata <name-or-pid> [--backtrace] [--backtrace-long] : Print metadata allocations.

Darwin Only

dump-concurrency <name-or-pid> : Print information about tasks, actors, and threads under Concurrency.