

# Using Ice on Android

This page provides important information for users of the Ice for Java distribution.

On this page:

- [Overview of Ice on Android](#)
- [Configuring an Android Studio project](#)
- [Using the Sample Programs](#)

## Overview of Ice on Android

Ice is available for Android through the Ice for Java distribution. To develop an Ice application for Android you will need the following components:

- Binary distribution of Ice for your development platform (Linux, macOS, Windows)
- [Android Studio](#)
- [Ice Builder for Gradle](#)



You can use either the Java or the Java Compat mapping in your Android project. Note however that the Java mapping uses Java 8 language features and currently requires the Java 8 toolchain provided in Android Studio 3 Preview.



## Configuring an Android Studio project

Android Studio uses a [Gradle](#)-based build system. Using Ice requires modifying your project's `build.gradle` settings file(s) to include the Ice JAR files. For convenience we recommend using the [Ice Builder for Gradle](#) plug-in to help automate the compilation of your Slice files.

The following snippets give an example of configuring the Ice and Ice Builder for Gradle sections for an Android project.

### Ice build.gradle configuration

```
buildscript {
    repositories {
        mavenCentral()
        maven {
            url "https://plugins.gradle.org/m2/"
        }
    }
    dependencies {
        classpath "gradle.plugin.com.zeroc.gradle.ice-builder:slice:1.4.1"
    }
}
apply plugin: 'java'
apply plugin: 'slice'
slice {
    java {
        srcDir = '.'
    }
}
dependencies {
    compile 'com.zeroc:ice:3.7.0'
}
```

## Using the Sample Programs

Sample programs are available at the [ice-demos GitHub repository](https://github.com/zeroc-ice/ice-demos). You can browse this repository to see build and usage instructions for all supported programming languages. Simply clone this repository:

```
git clone -b 3.7 https://github.com/zeroc-ice/ice-demos.git
cd ice-demos
```

You can then import the directory `java/Android` or `java-compat/Android` into Android Studio.