



ANDROID移动互联网应用开发

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2019.2

什么是ANDROID STUDIO

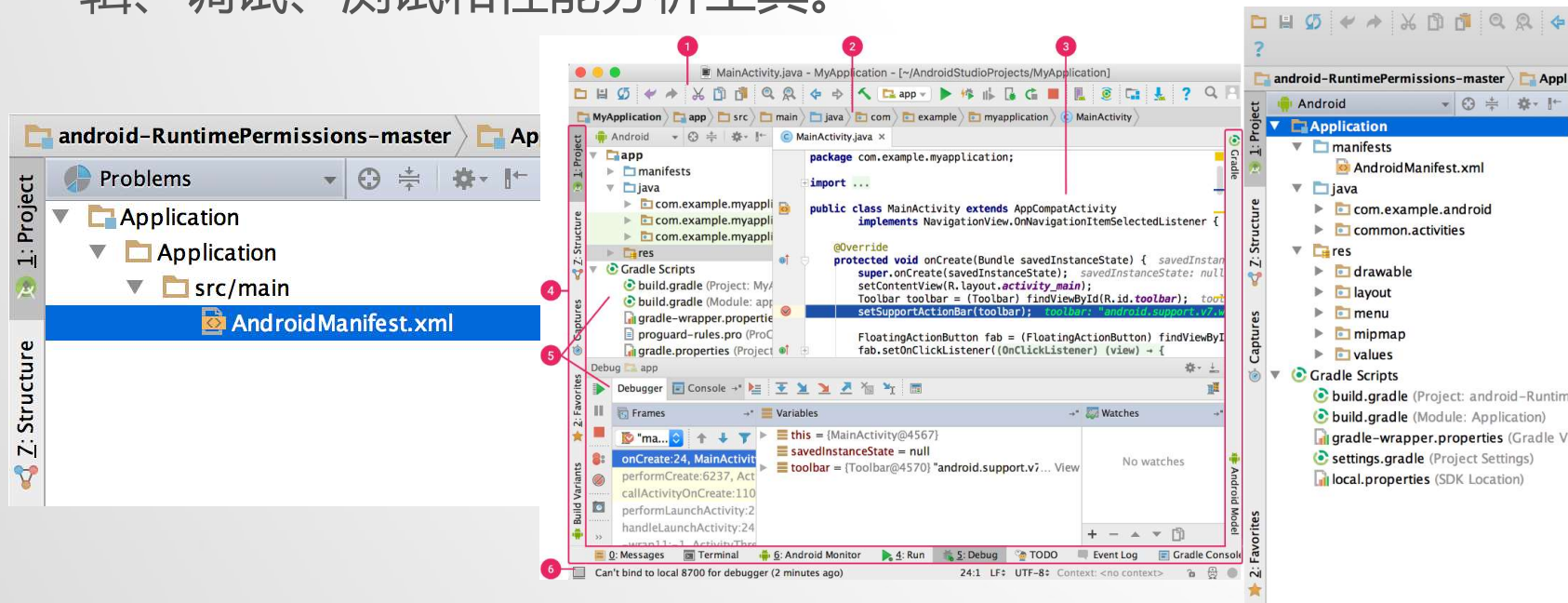


- Android Studio是一个为Android平台开发程序的集成开发环境。2013年5月16日在Google I/O上发布，可供开发者免费使用。
- 2013年5月发布早期预览版本，版本号为0.1。2014年6月发布0.8版本，至此进入beta阶段。第一个稳定版本1.0于2014年12月8日发布。
- Android Studio基于JetBrains IntelliJ IDEA，为Android开发特殊定制，并在Windows、OS X和Linux平台上均可运行。

什么是ANDROID STUDIO



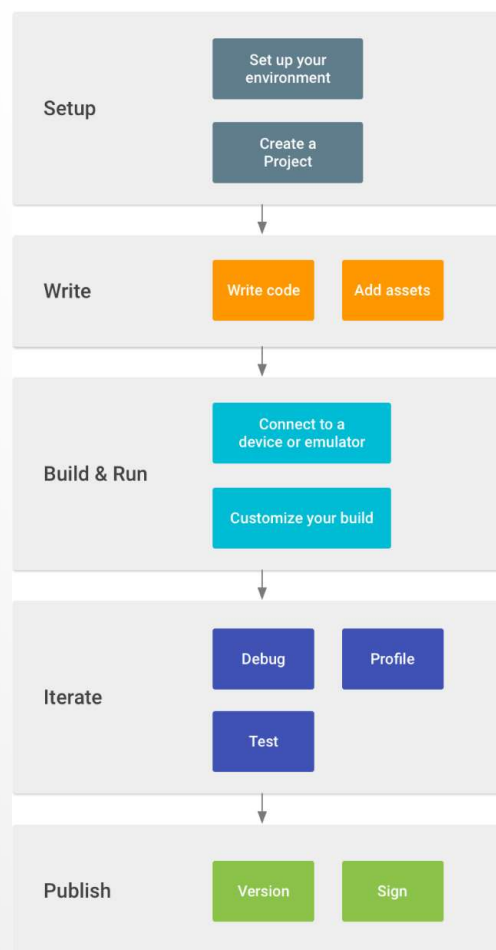
- Android Studio 是 Android 的官方 IDE。它是专为 Android 而打造，可以加快您的开发速度，帮助您为每款 Android 设备构建最优应用。
- 它提供专为 Android 开发者量身定制的工具，其中包括丰富的代码编辑、调试、测试和性能分析工具。



什么是ANDROID STUDIO



- Android Studio开发流程:
- 安装: 配置环境, 创建项目
- 编程: 写代码, 添加资产
- 编译运行: 连接模拟器/实机
- 迭代: 除虫, 测试, 写文档
- 发布: 版本, 签名



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ANDROID STUDIO安装

- 安装JDK (Java Development Kit)



ANDROID STUDIO安装

- 检查JDK是否安装成功



```
管理员: C:\Windows\system32\cmd.exe
Microsoft Windows [版本 6.1.7601]
版权所有 (c) 2009 Microsoft Corporation。保留所有权利。

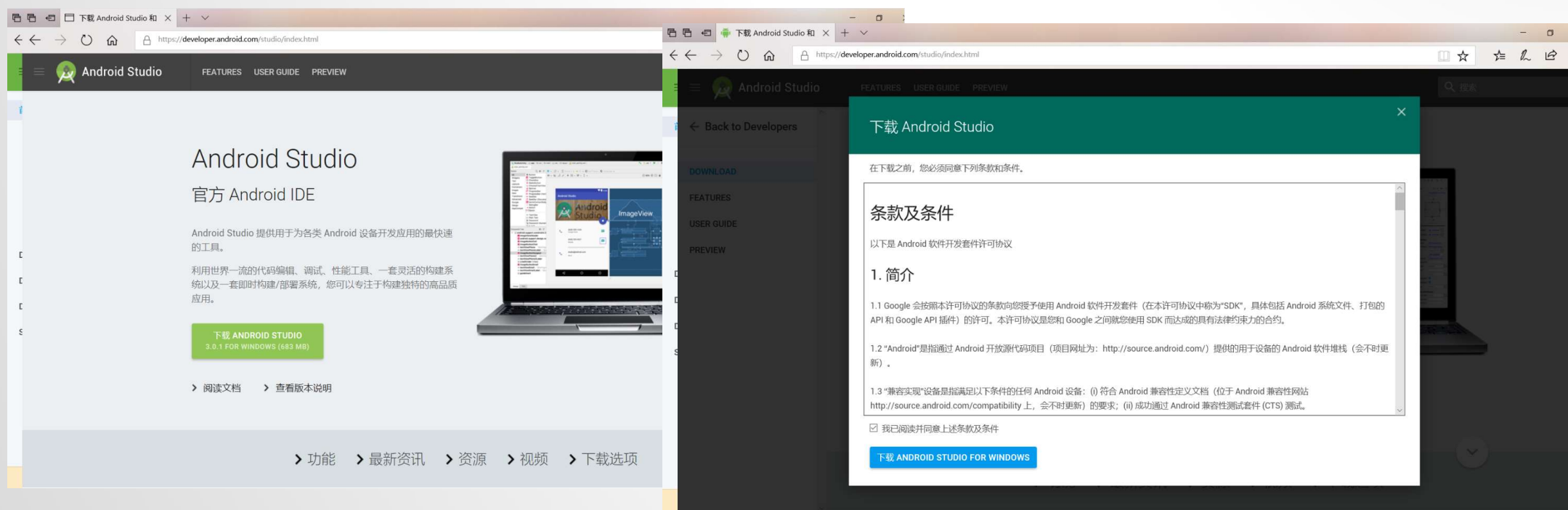
C:\Users\Bishop>java -version
java version "1.8.0_151"
Java(TM) SE Runtime Environment (build 1.8.0_151-b12)
Java HotSpot(TM) 64-Bit Server VM (build 25.151-b12, mixed mode)

C:\Users\Bishop>
```



ANDROID STUDIO安装

• 下载Android Studio



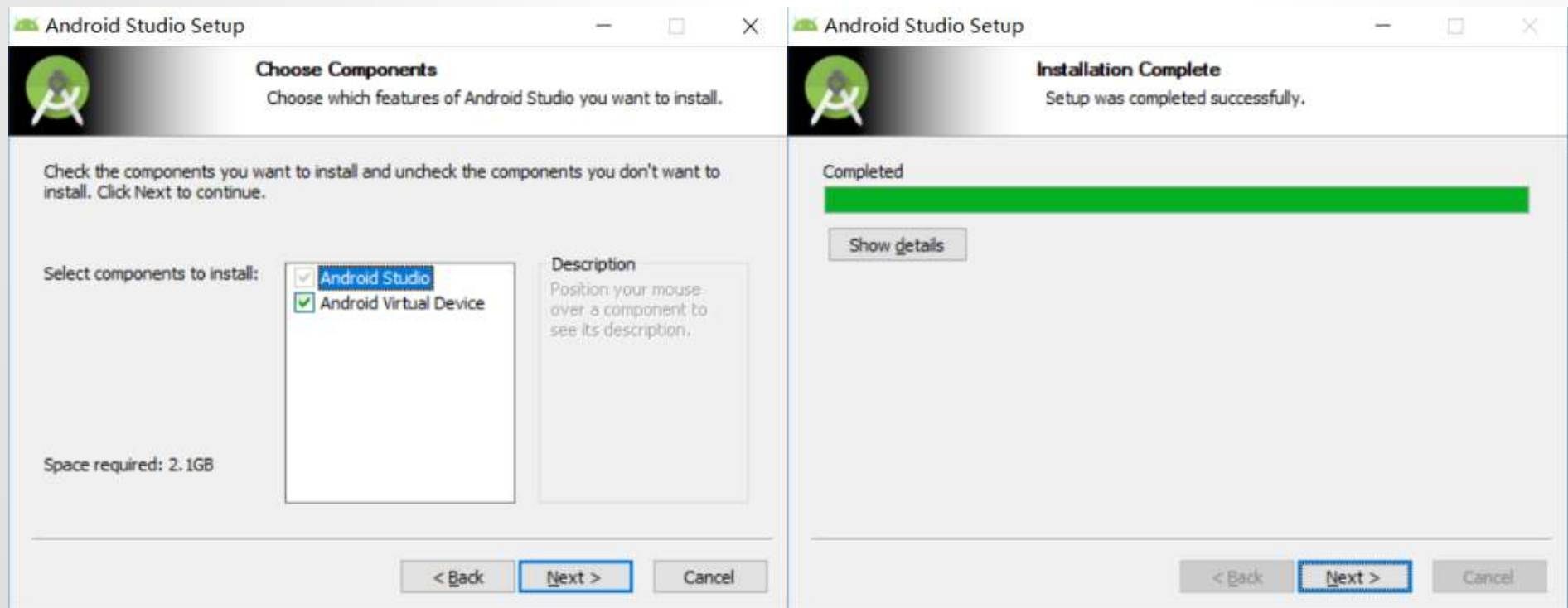
ANDROID STUDIO安装

- 安装Android Studio



ANDROID STUDIO安装

- 安装Android Studio (选择Android Virtual Device)

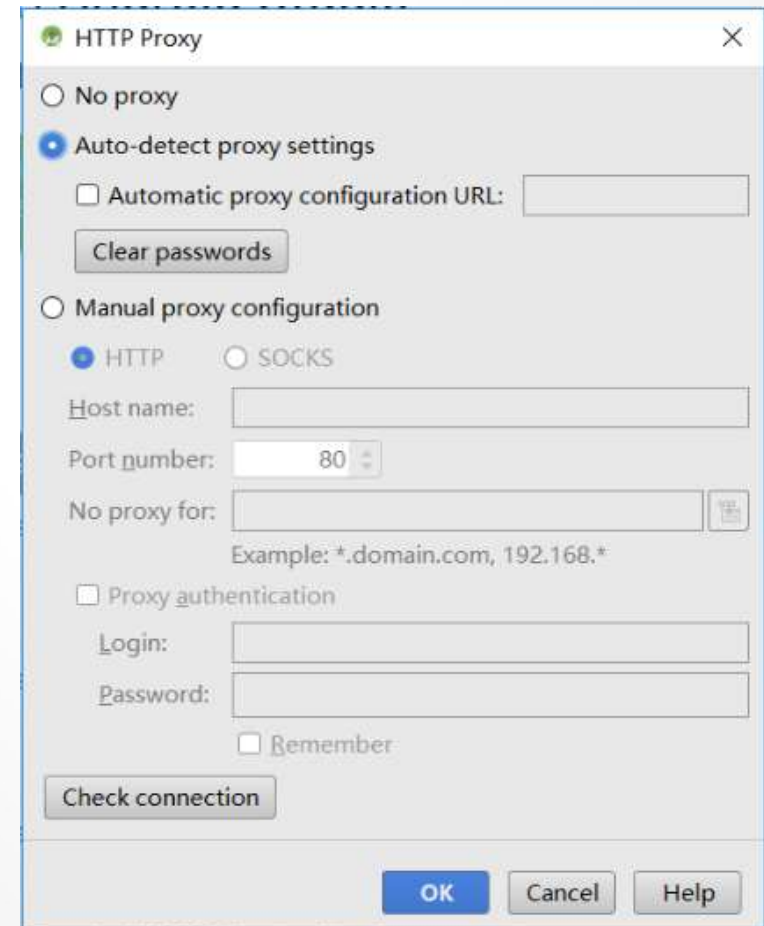
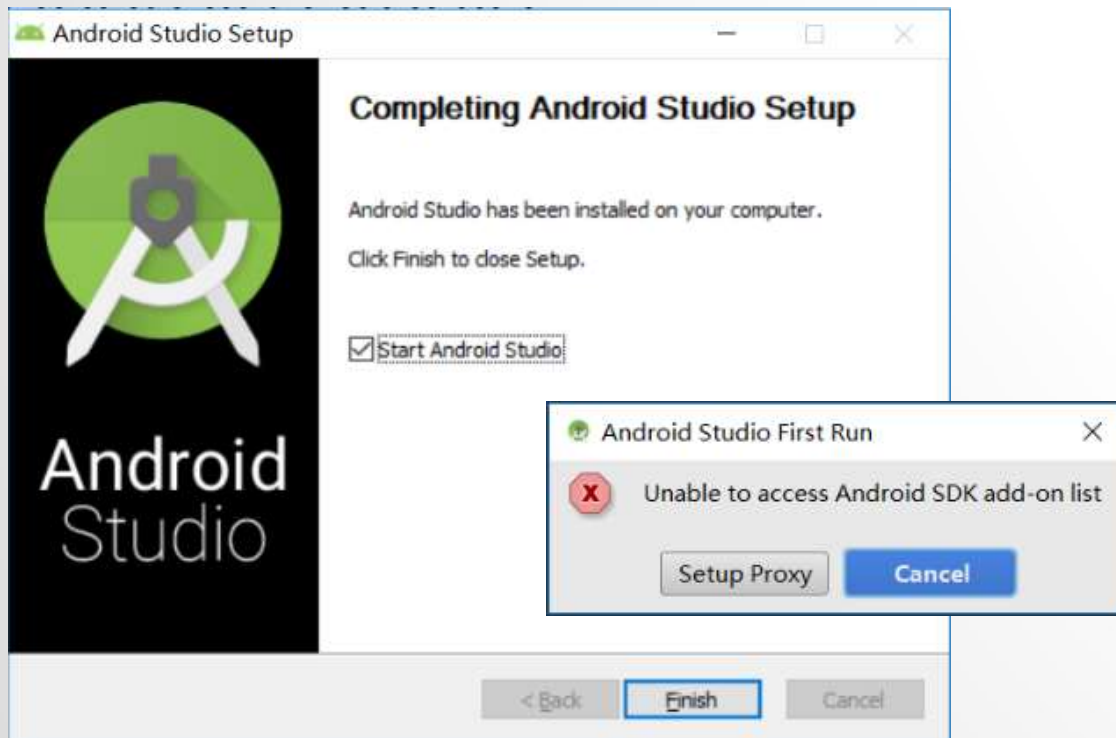


ANDROID STUDIO安装

- 要点:
- Android Studio 3.0.1不包含SDK, 安装完成后通过IDE在线下载。
- Android Studio 3.0.1提供的AVD (Android Virtual Device) 模拟器与第三方模拟器相比具有速度、兼容性等方面优势, 建议使用AVD作为调试工具。
- 注意避免从任何第三方网站下载IDE, Android Studio官方网站下载页面URL为: <https://developer.android.com/studio/index.html>

ANDROID STUDIO安装

- 配置Android Studio



ANDROID STUDIO安装

- 要点:
- Android Studio 3.0.1首次运行时会从google站点下载SDK, 该站点被墙, 需要使用代理服务器。
- 建议使用全局PAC (Proxy Auto-Config) 智能代理, 通过代理连接google站点下载SDK时, IDE会提示服务器认证不可信。
- 注意避免从任何第三方网站下载SDK。

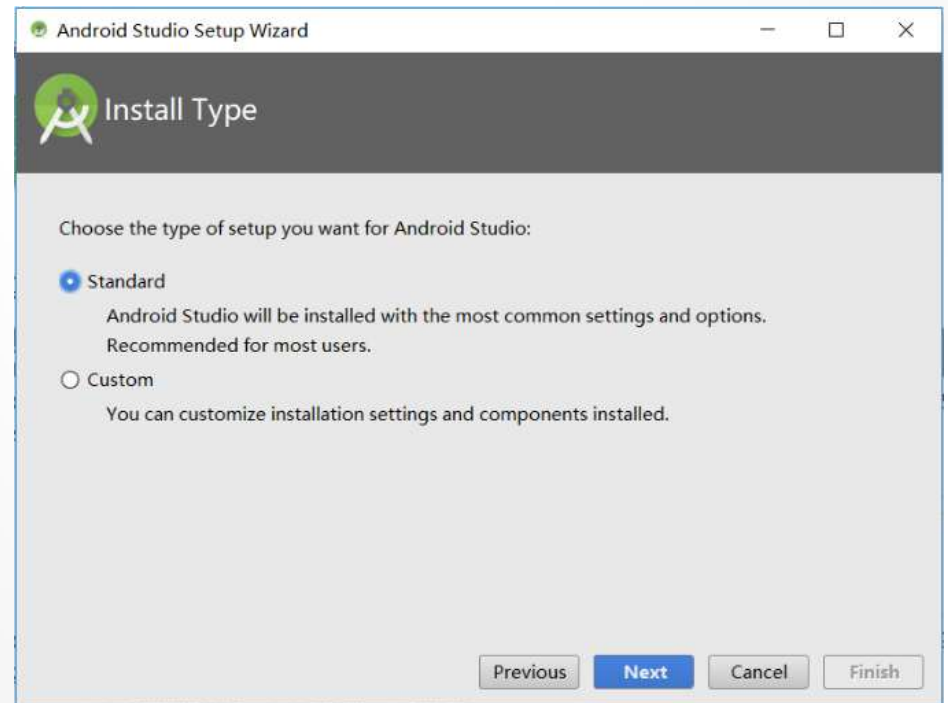
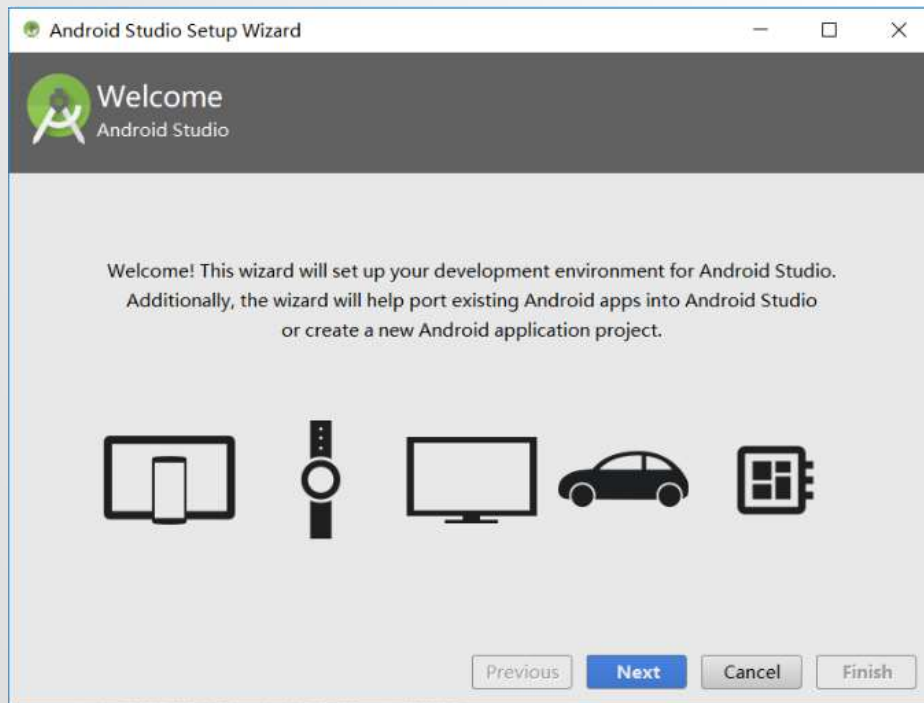
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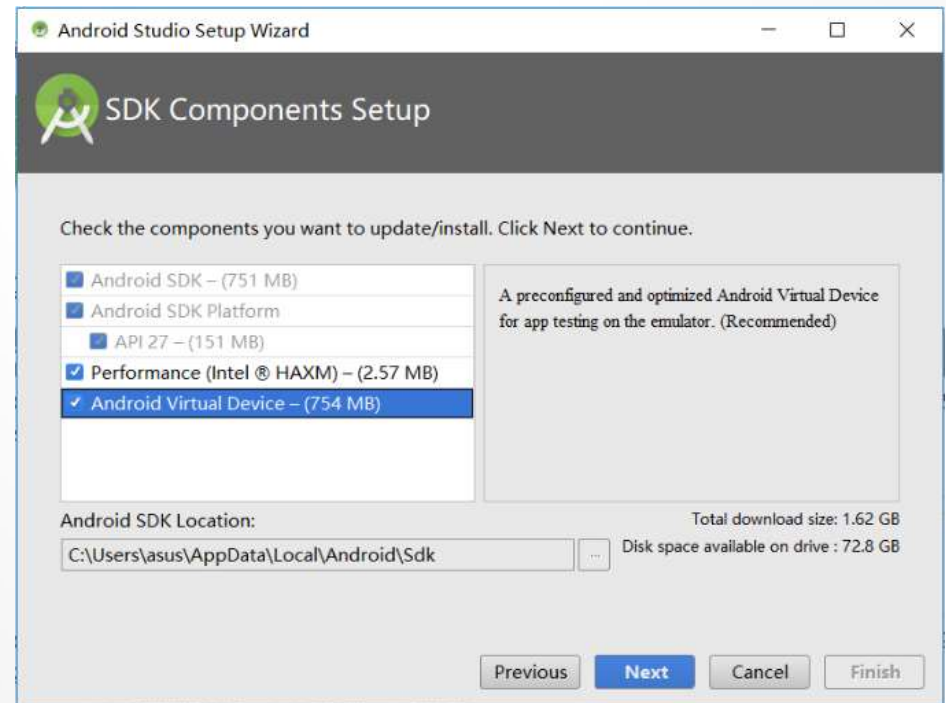
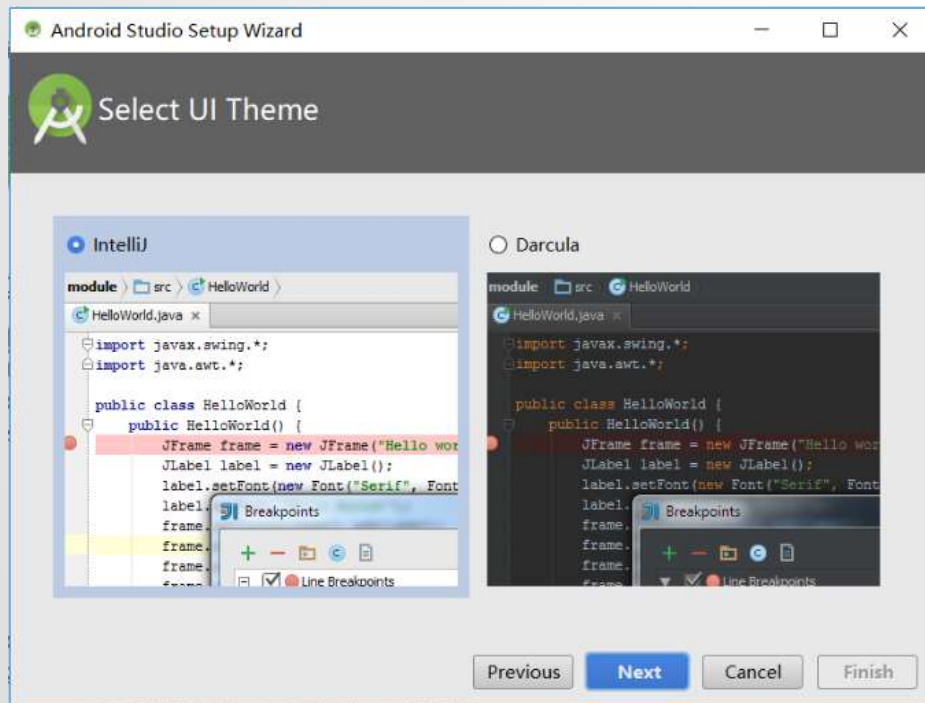
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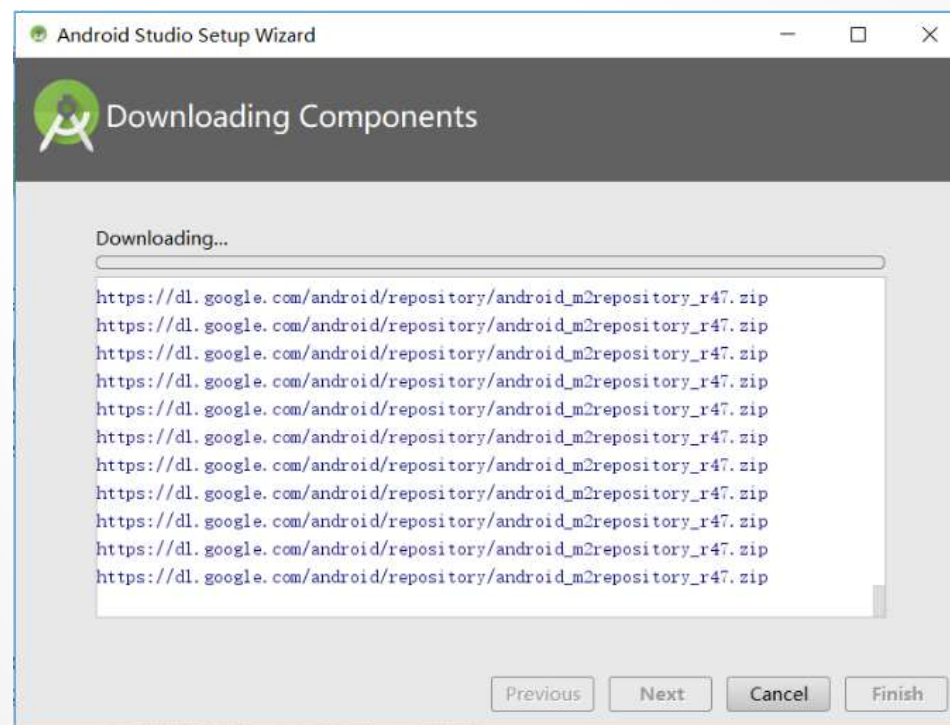
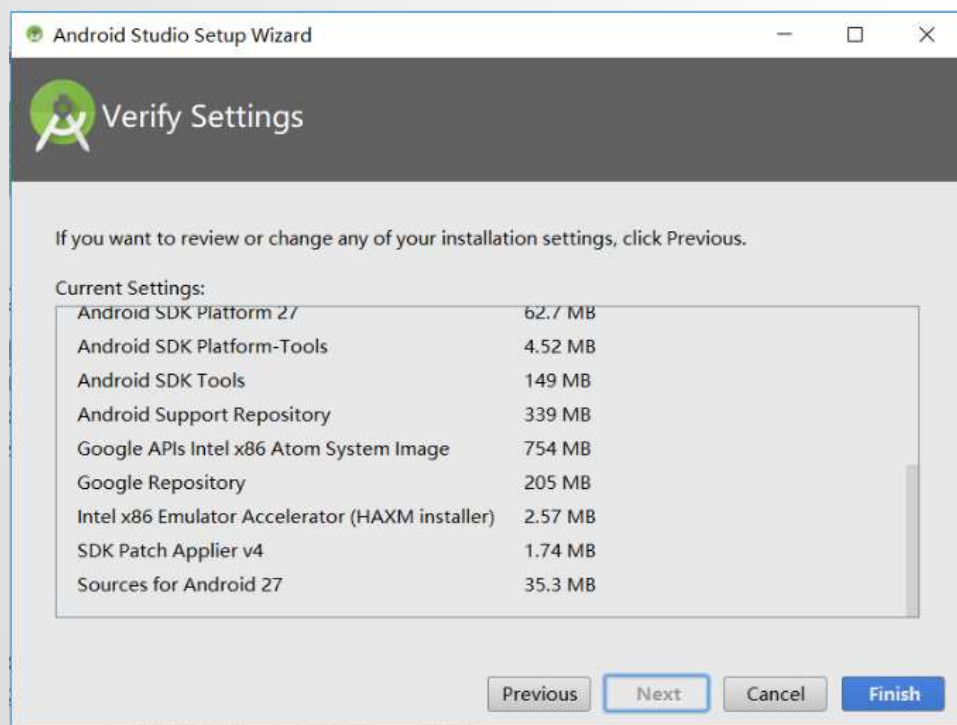


ANDROID STUDIO安装

- 要点:
- Android Studio默认仅安装API 27 SDK Platform, 其他SDK可在IDE内选择安装;
- 若CPU为Intel i3及以上系列, 可安装Intel HAXM对模拟器进行优化。
- 安装Intel HAXM之后, 部分计算机需要在BIOS中开启Intel(R) Virtualization Technology (VT) 虚拟化技术。
- 若需要使用Android Studio 3.0.1提供的AVD (Android Virtual Device) 模拟器, 应在此窗体中勾选。

ANDROID STUDIO安装

- 配置Android Studio

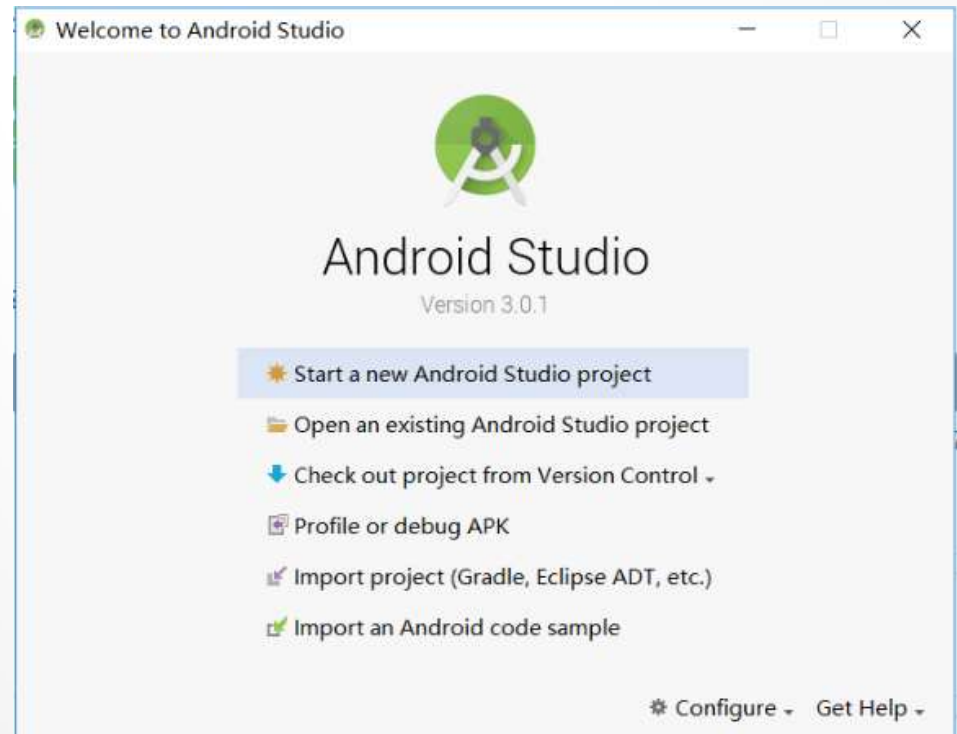
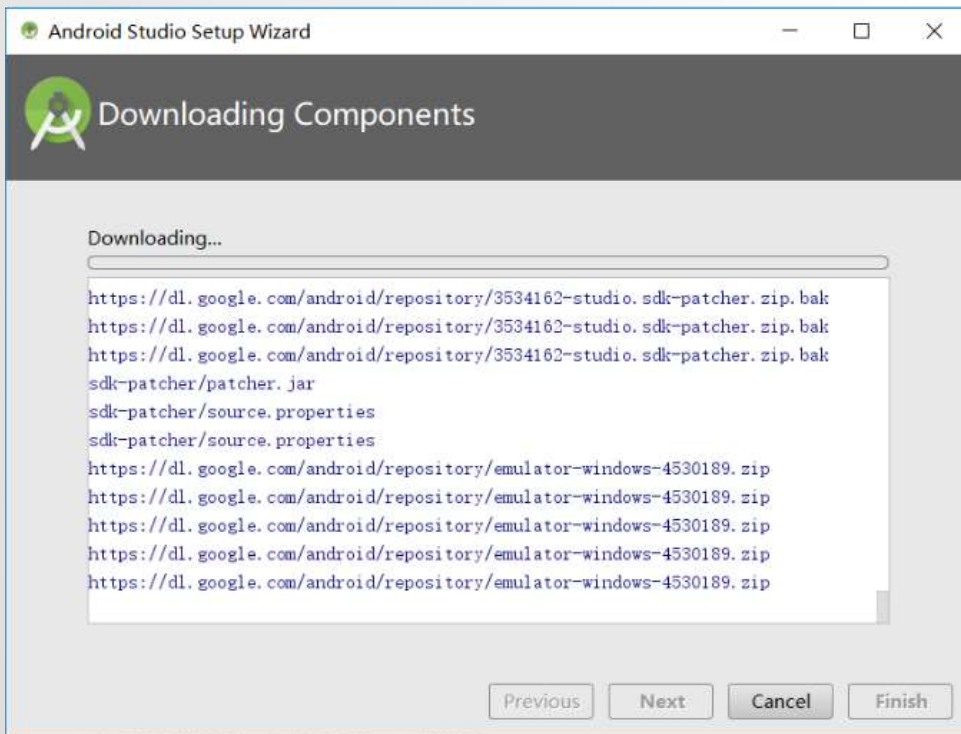


ANDROID STUDIO安装

- 要点:
- Android Studio从google站点下载SDK的过程十分漫长，耗时约30分钟。
- 下载期间可能因网络干扰中断，可继续下载未完成的SDK。
- 若同时选择安装ADV，将额外下载约800MB文件，耗时可能超过60分钟。

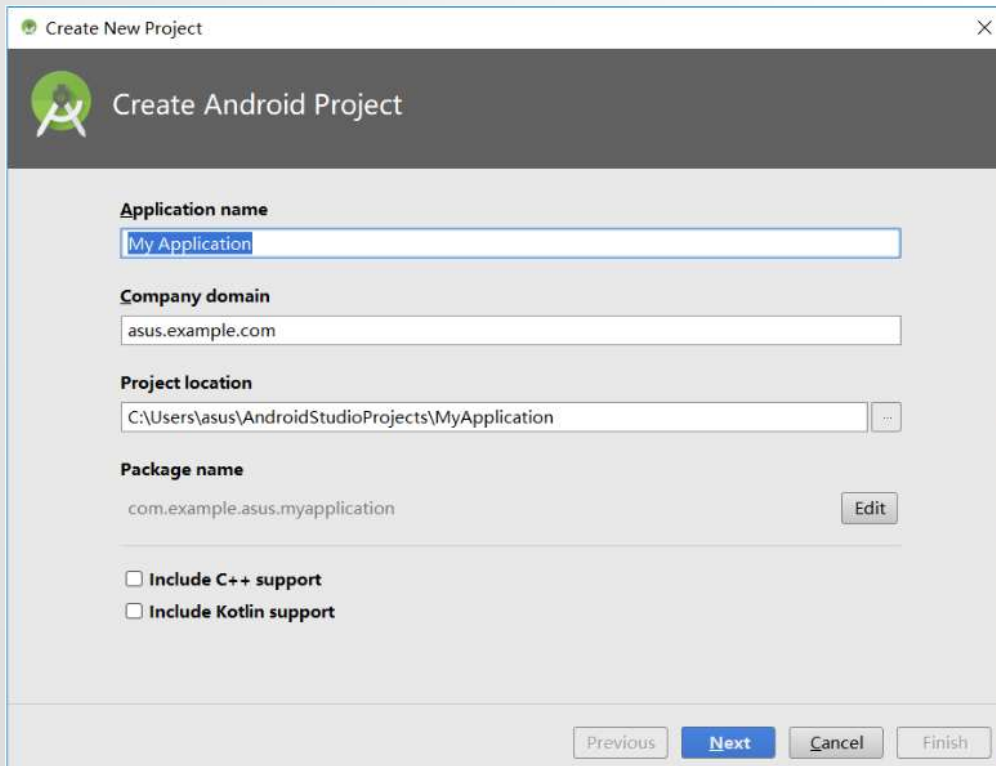
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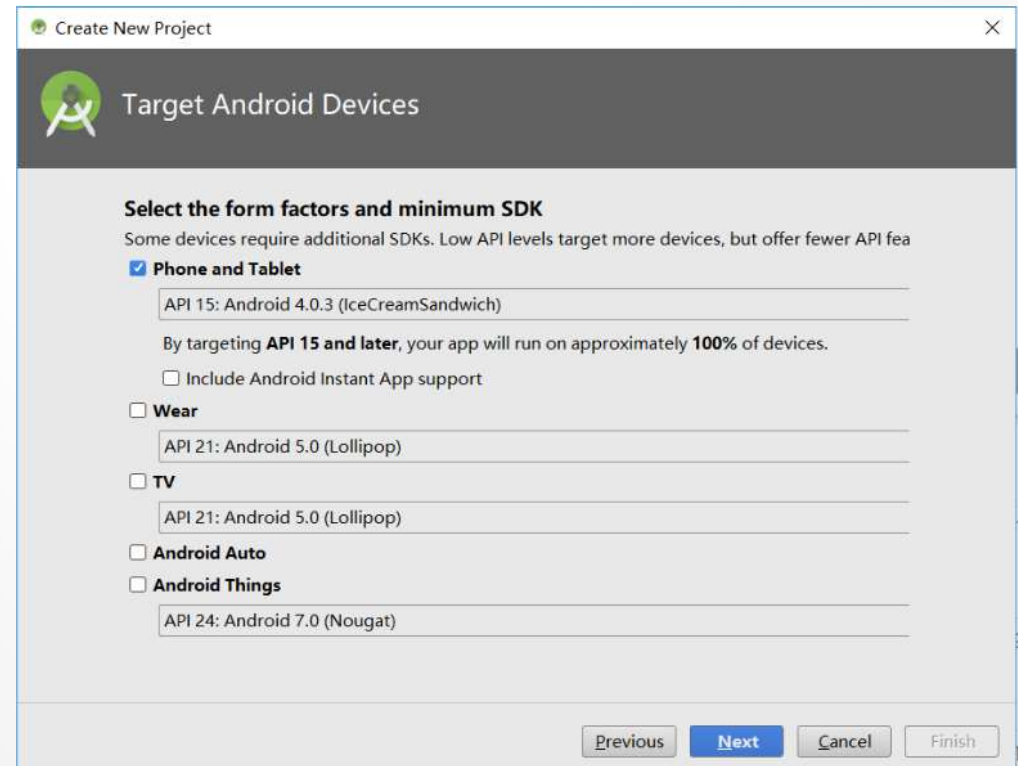
- 配置Android Studio



This screenshot shows the first step of the 'Create New Project' wizard. The title bar reads 'Create New Project'. The main header is 'Create Android Project'. The form contains the following fields and options:

- Application name:** A text field containing 'My Application'.
- Company domain:** A text field containing 'asus.example.com'.
- Project location:** A text field containing 'C:\Users\asus\AndroidStudioProjects\MyApplication' with a browse button ('...').
- Package name:** A text field containing 'com.example.asus.myapplication' with an 'Edit' button.
- Include C++ support:** An unchecked checkbox.
- Include Kotlin support:** An unchecked checkbox.

At the bottom, there are four buttons: 'Previous' (disabled), 'Next' (active), 'Cancel', and 'Finish' (disabled).



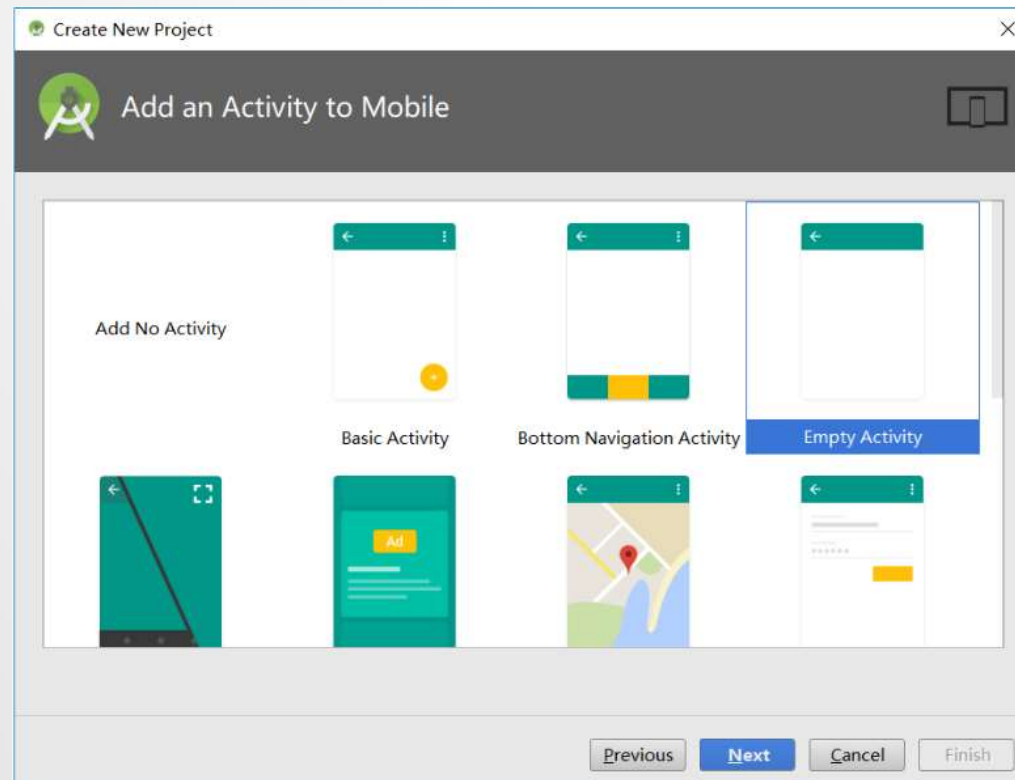
This screenshot shows the second step of the 'Create New Project' wizard. The title bar reads 'Create New Project'. The main header is 'Target Android Devices'. The form contains the following options and fields:

- Select the form factors and minimum SDK:** A section with a sub-header and a note: 'Some devices require additional SDKs. Low API levels target more devices, but offer fewer API features.'
- Phone and Tablet:** A checked checkbox. Below it, a text field shows 'API 15: Android 4.0.3 (IceCreamSandwich)'. A note states: 'By targeting API 15 and later, your app will run on approximately 100% of devices.'
- Include Android Instant App support:** An unchecked checkbox.
- Wear:** An unchecked checkbox. Below it, a text field shows 'API 21: Android 5.0 (Lollipop)'.
- TV:** An unchecked checkbox. Below it, a text field shows 'API 21: Android 5.0 (Lollipop)'.
- Android Auto:** An unchecked checkbox.
- Android Things:** An unchecked checkbox. Below it, a text field shows 'API 24: Android 7.0 (Nougat)'.

At the bottom, there are four buttons: 'Previous' (disabled), 'Next' (active), 'Cancel', and 'Finish' (disabled).

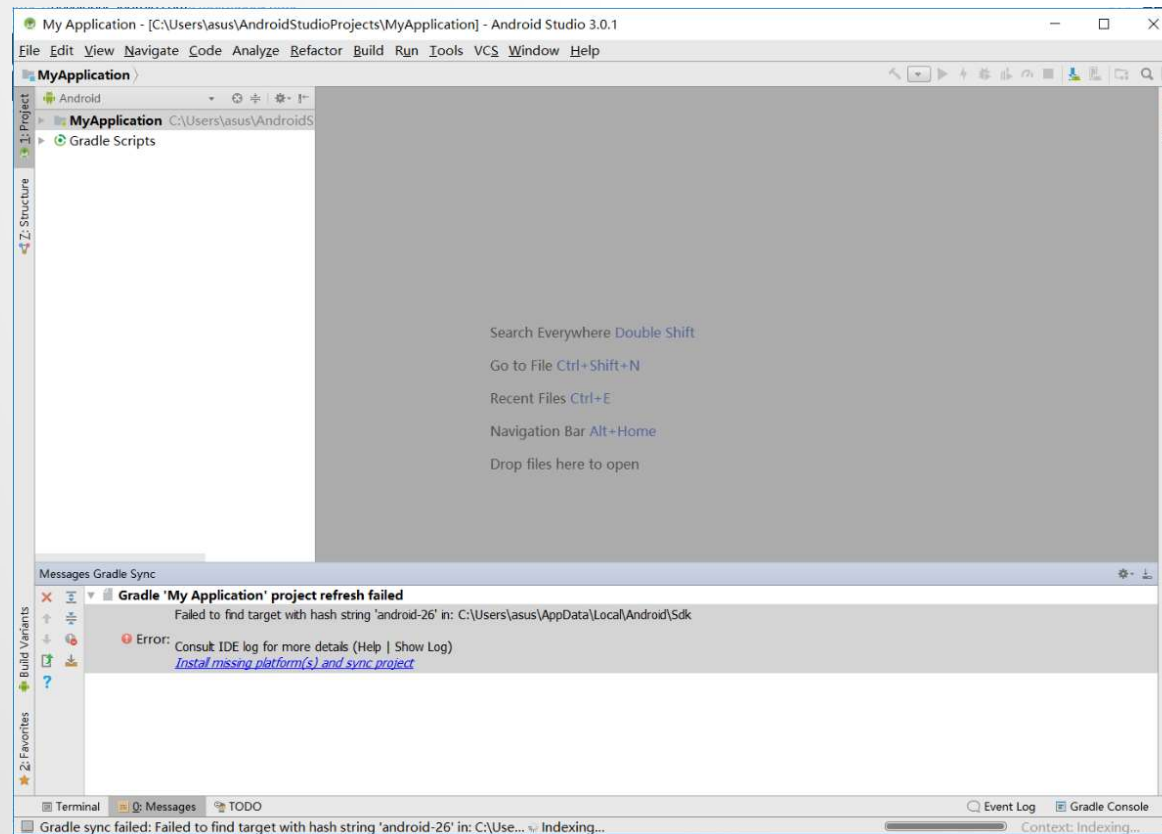
ANDROID STUDIO安装

- 配置Android Studio



ANDROID STUDIO安装

- 配置Android Studio

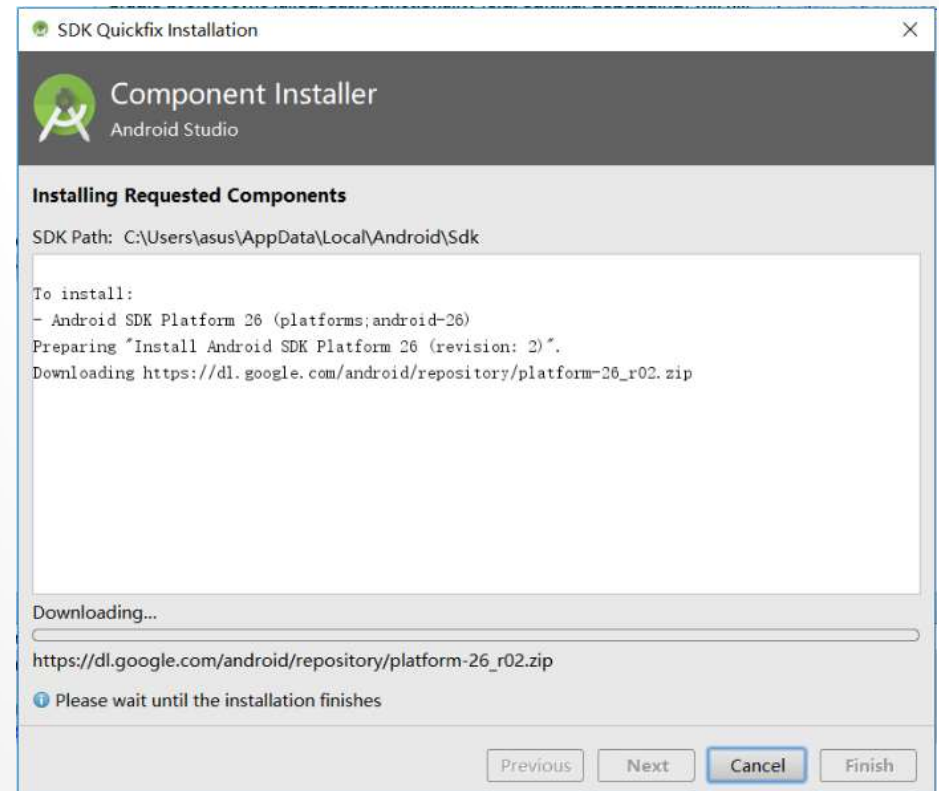
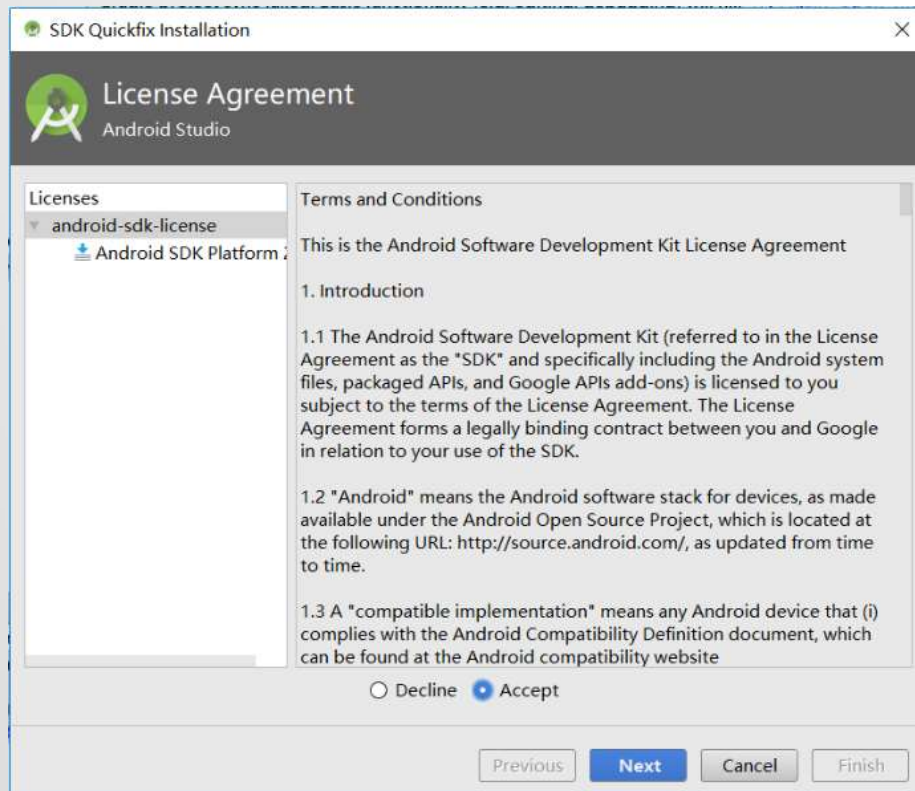


ANDROID STUDIO安装

- 要点:
- Android Studio默认未安装API 26 SDK, 可点击消息栏内链接下载安装。
- Failed to find target...可能出现多次, 应安装所有项目依赖的包。
- 部分包下载安装时需同意使用者协议。

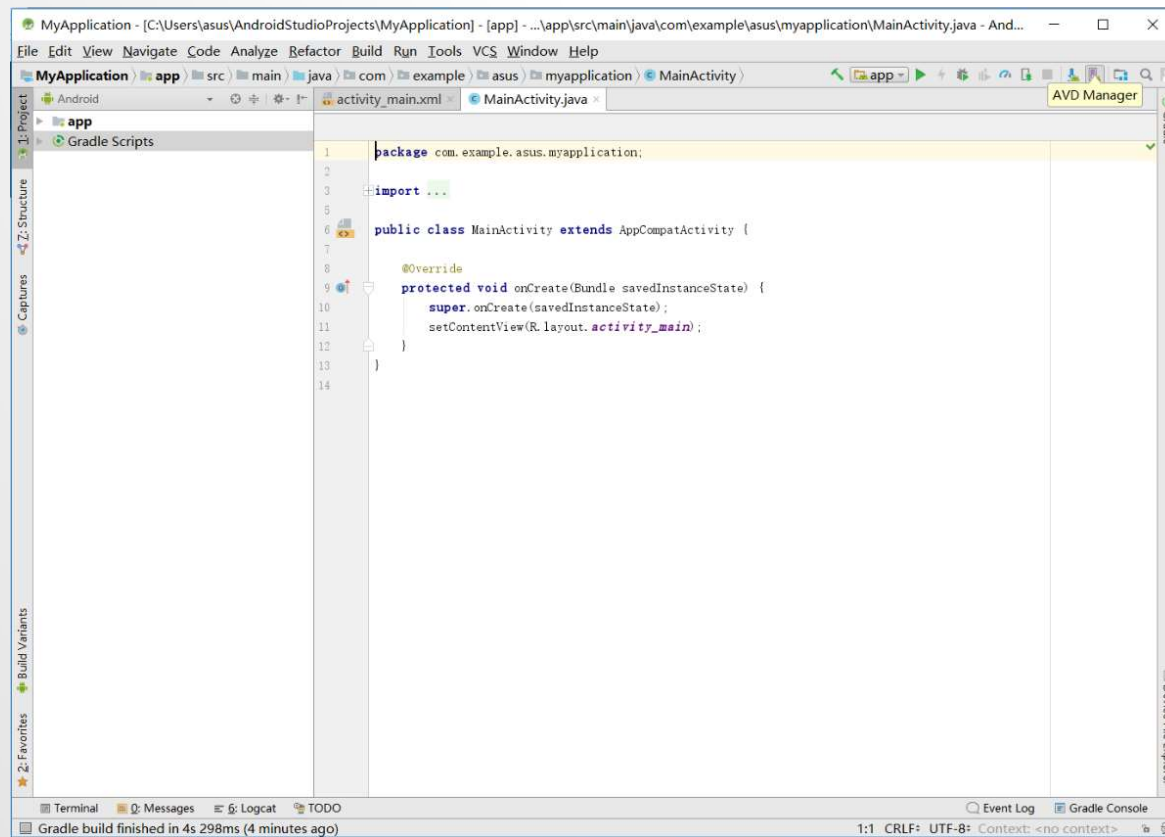
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- 配置Android Studio



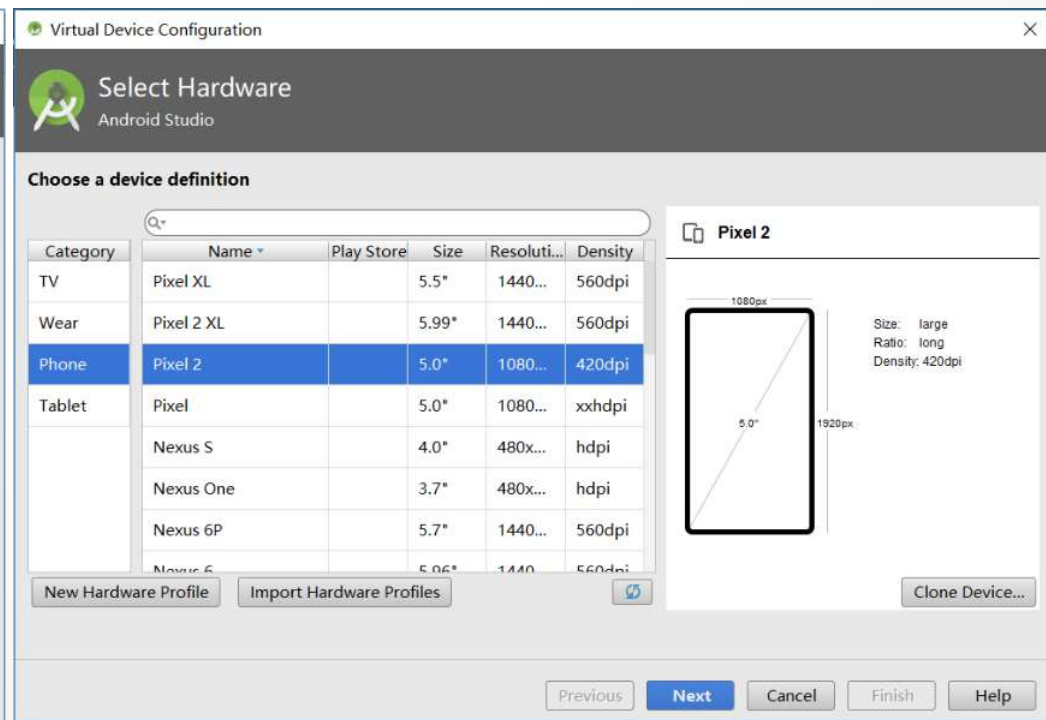
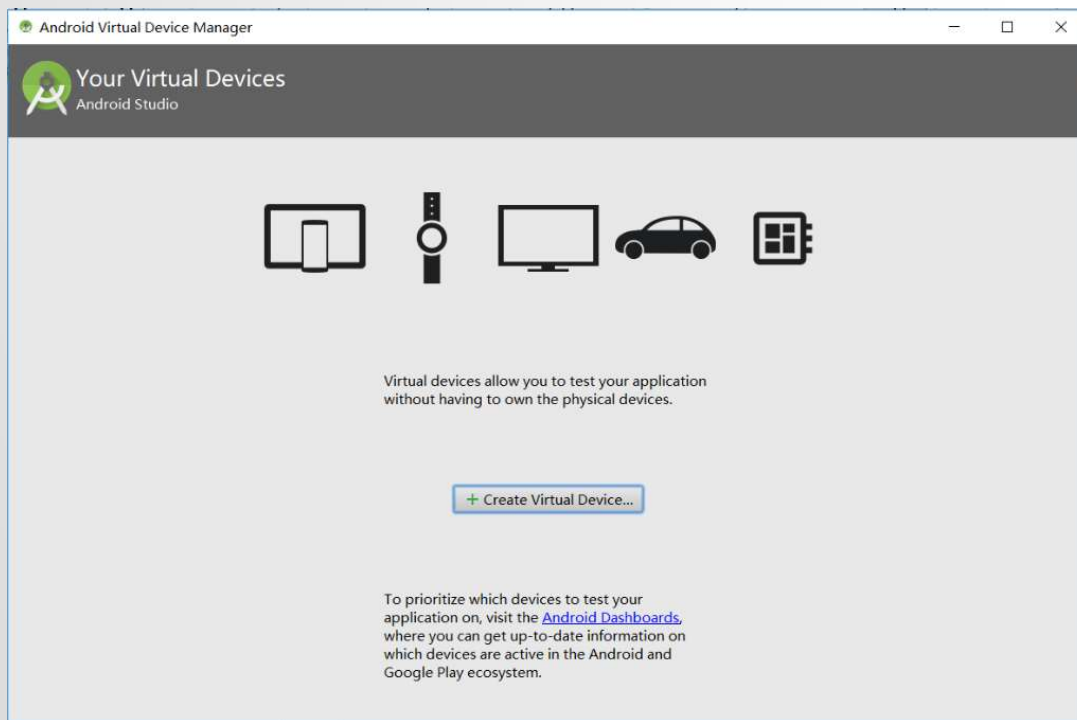
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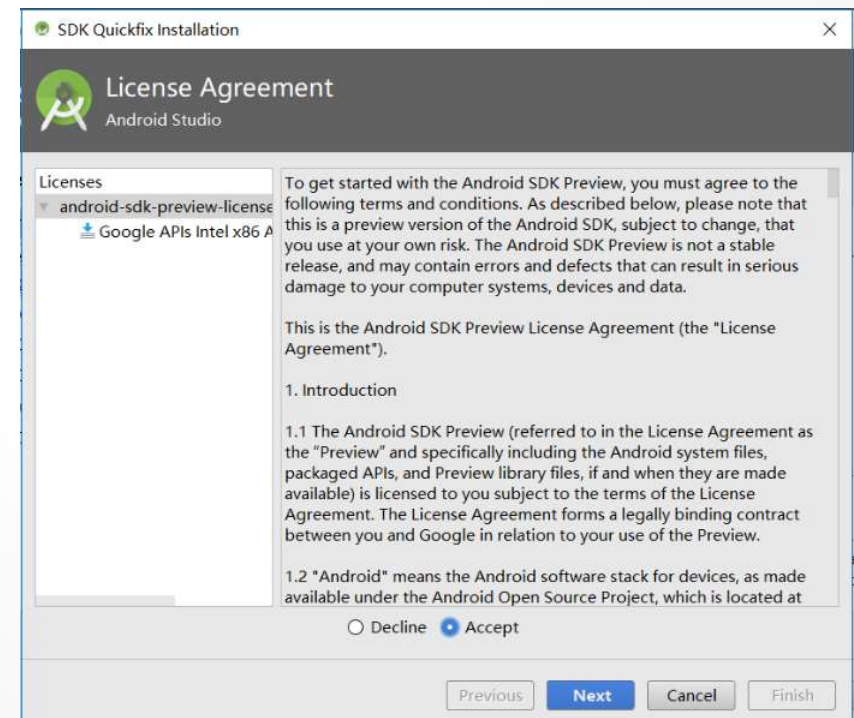
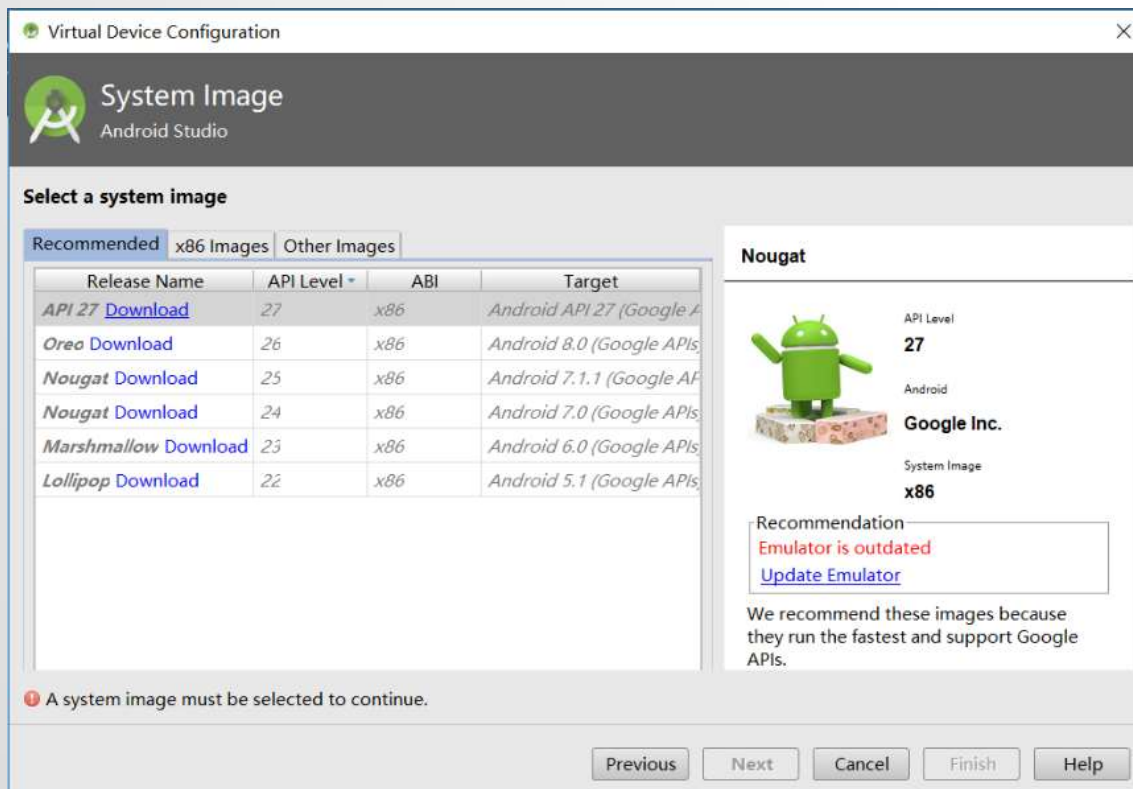
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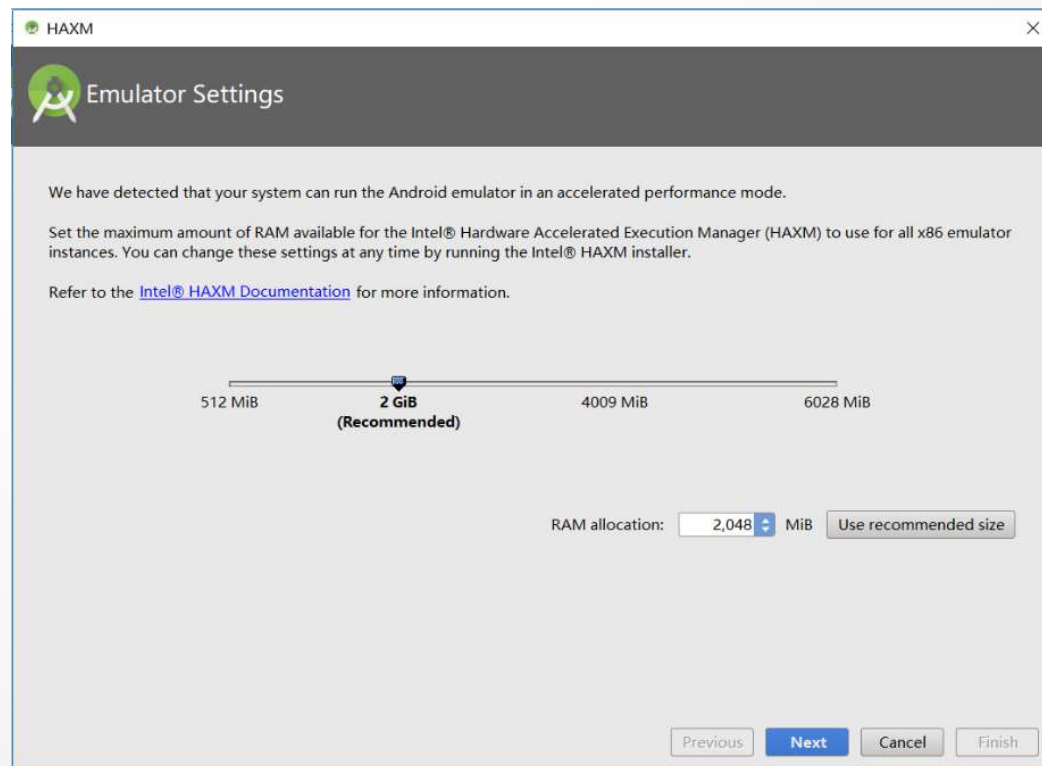
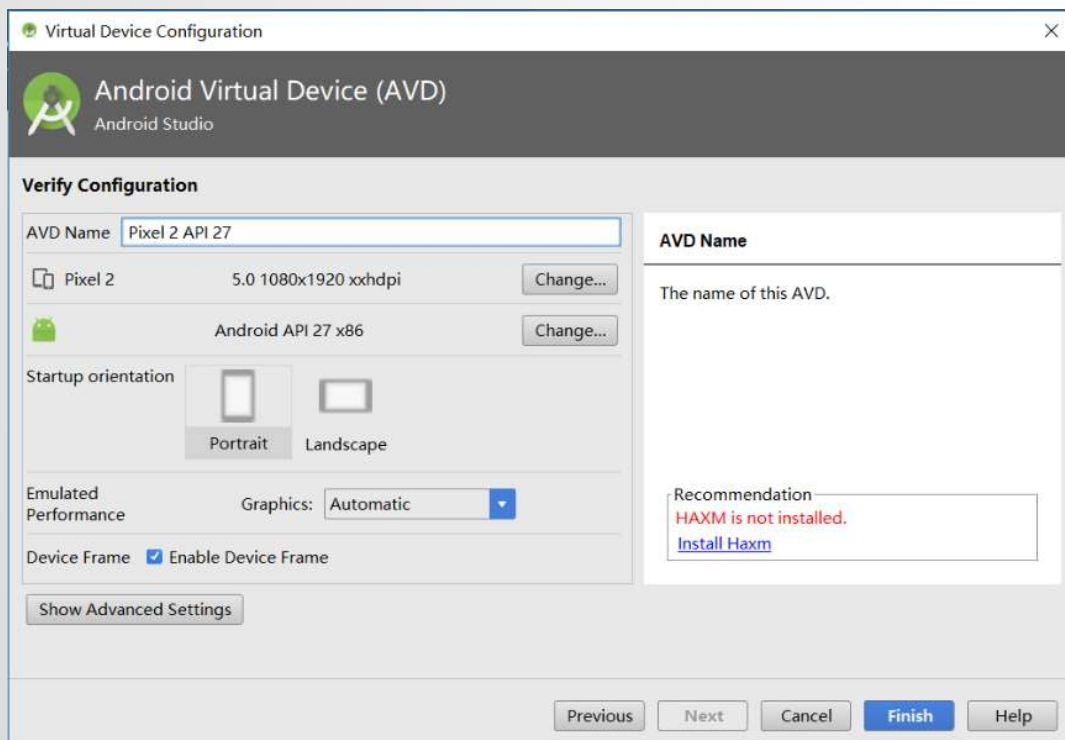


ANDROID STUDIO安装

- 要点:
- ADV首次运行时需创建新虚拟设备。
- 创建某一型号的虚拟设备时，一般可以选择多种系统镜像，应按实际需要下载。
- API Level与Android版本号存在对应关系，API Level越高版本越新。
- 尽量选择ABI（Application Binary Interface）为x86的镜像以获得较好的模拟体验。

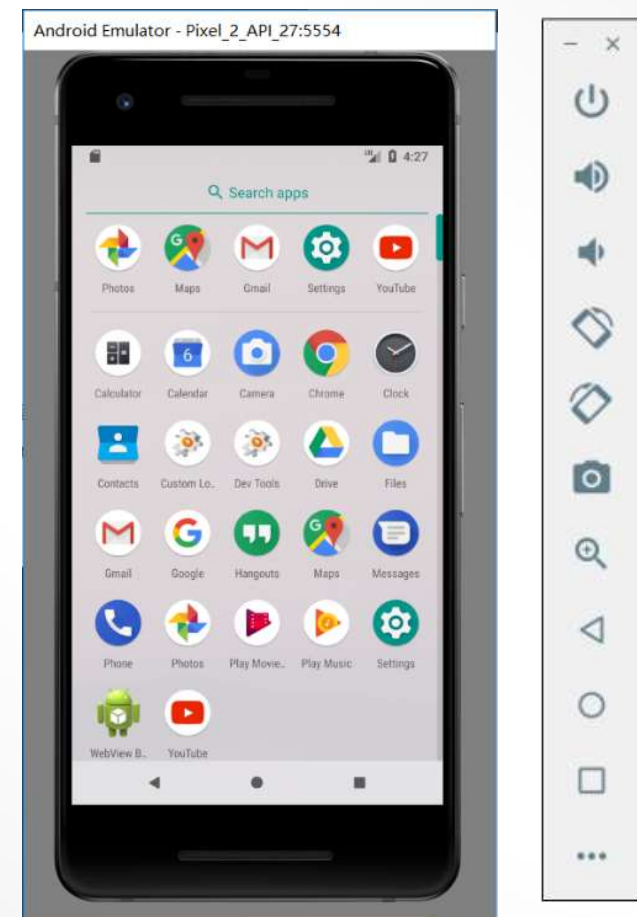
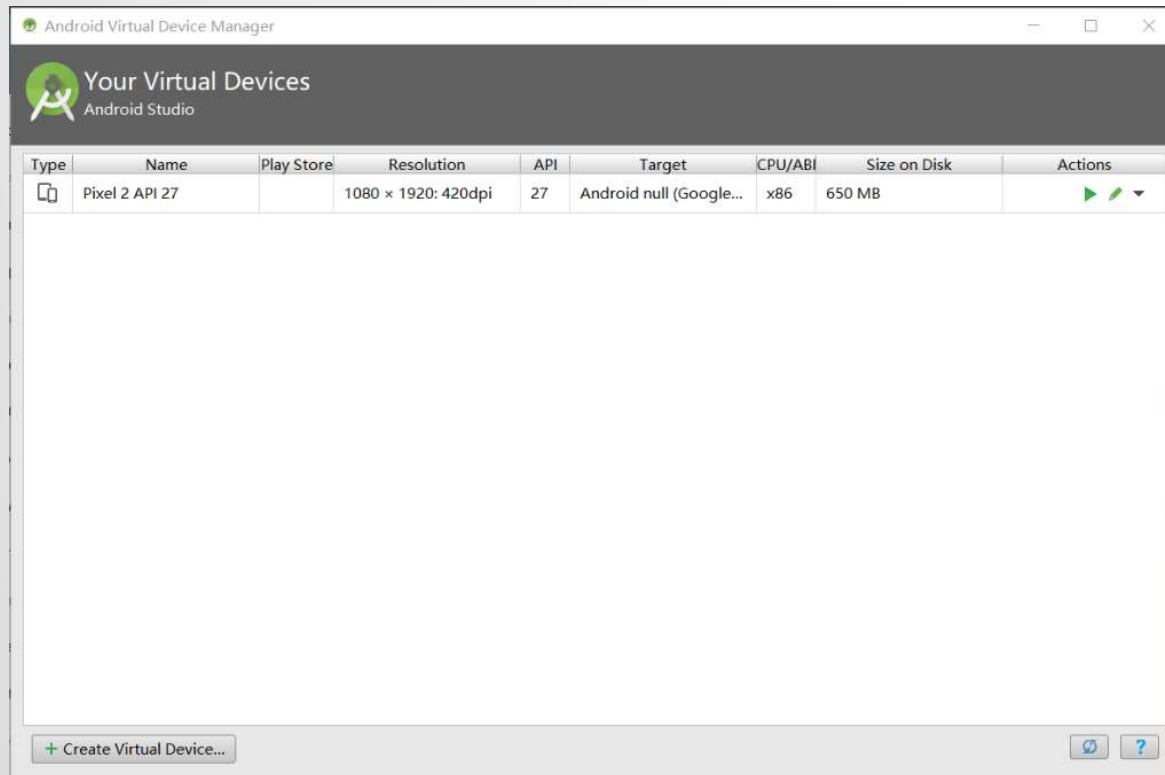
ANDROID STUDIO安装

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ANDROID STUDIO安装

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ANDROID STUDIO安装

- 要点:
- ADV虚拟设备的分辨率应选择主流设备分辨率（4k/1080p/720p）。
- ADV显示输出可选择Portrait或Landscape模式，根据手机或平板的具体情况设置。
- ADV模拟器内存使用推荐设置为2GB，推荐使用HAXM配合开启Intel虚拟化技术的CPU以获得逼真体验。
- 可以通过右侧工具条或手机UI及虚拟按键进行操作，操作方法与真实手机一致。

THE END.