

编号:

DevOps基础工具培训

--开发环境搭建

Automatic
Driving
System

内容提要

- JDK安装与环境变量配置
- VCS工具--安装git及git ui工具
- Build Tools-MAVEN
- IDE-安装eclipse
- 基于Maven的多模块示例

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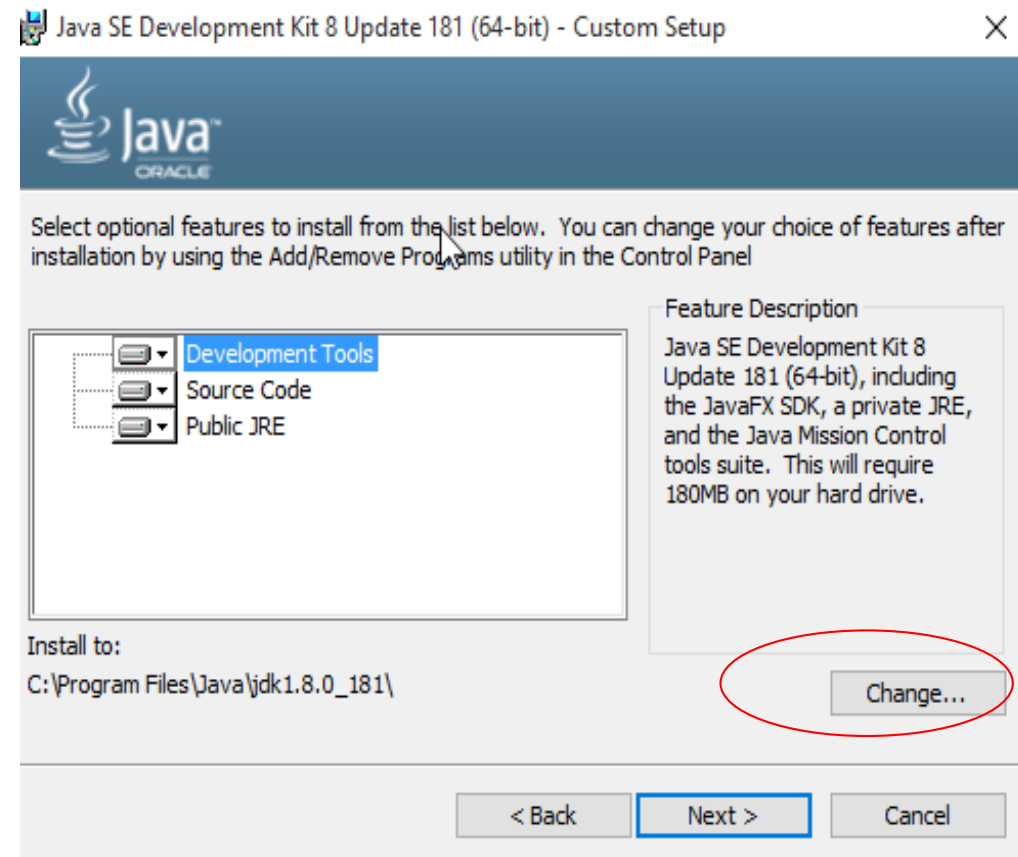
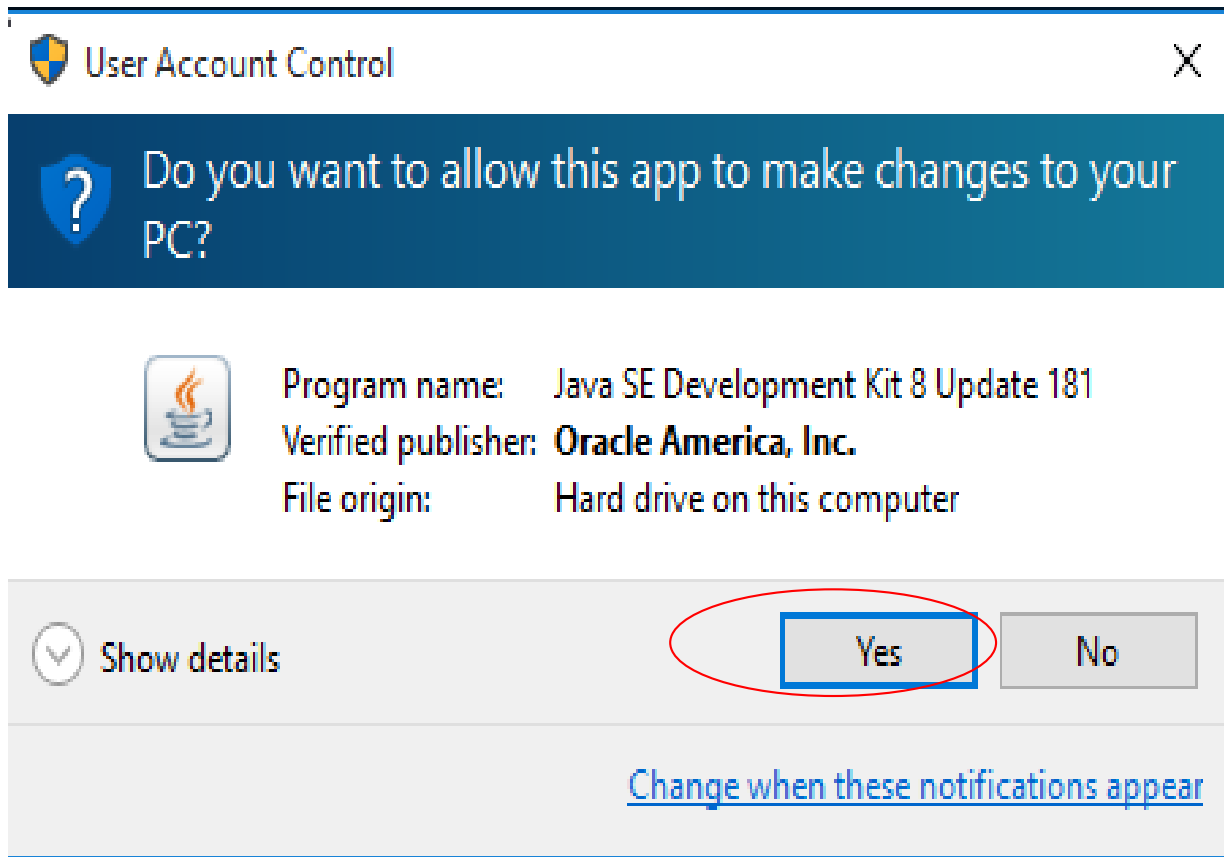
JDK安装与环境变量配置

根据操作系统不同选用对应的版本的安装文件

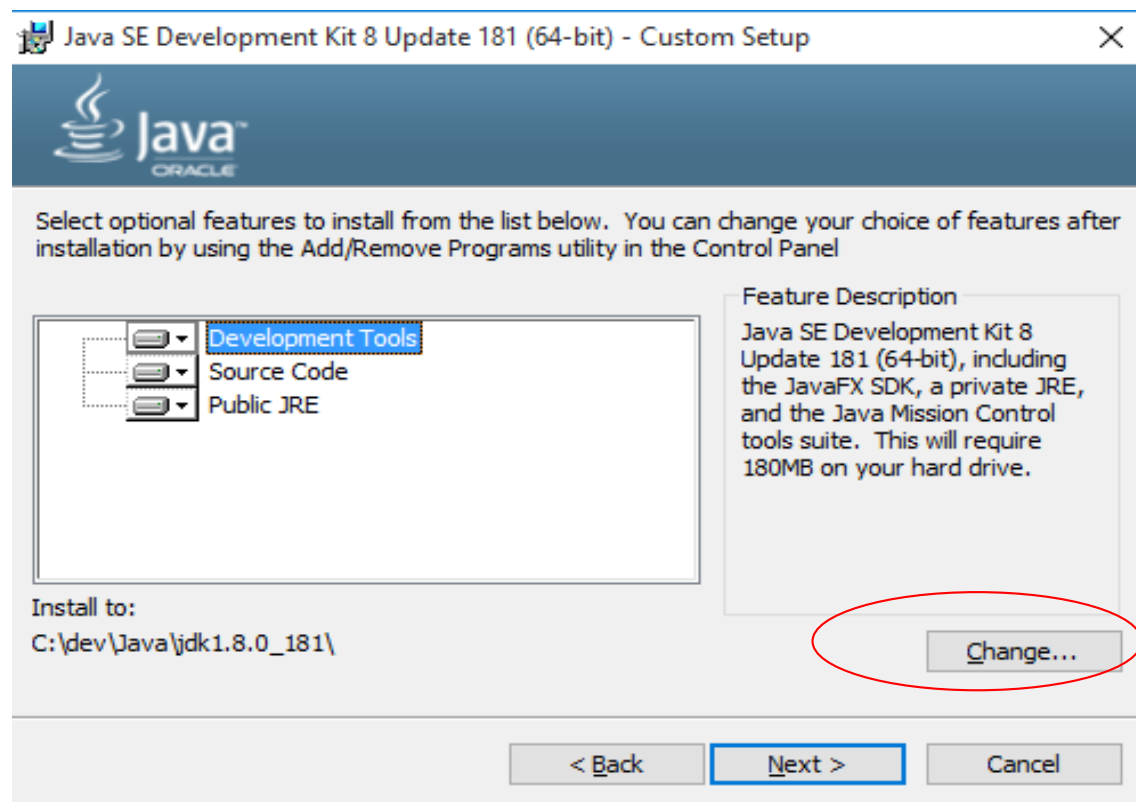
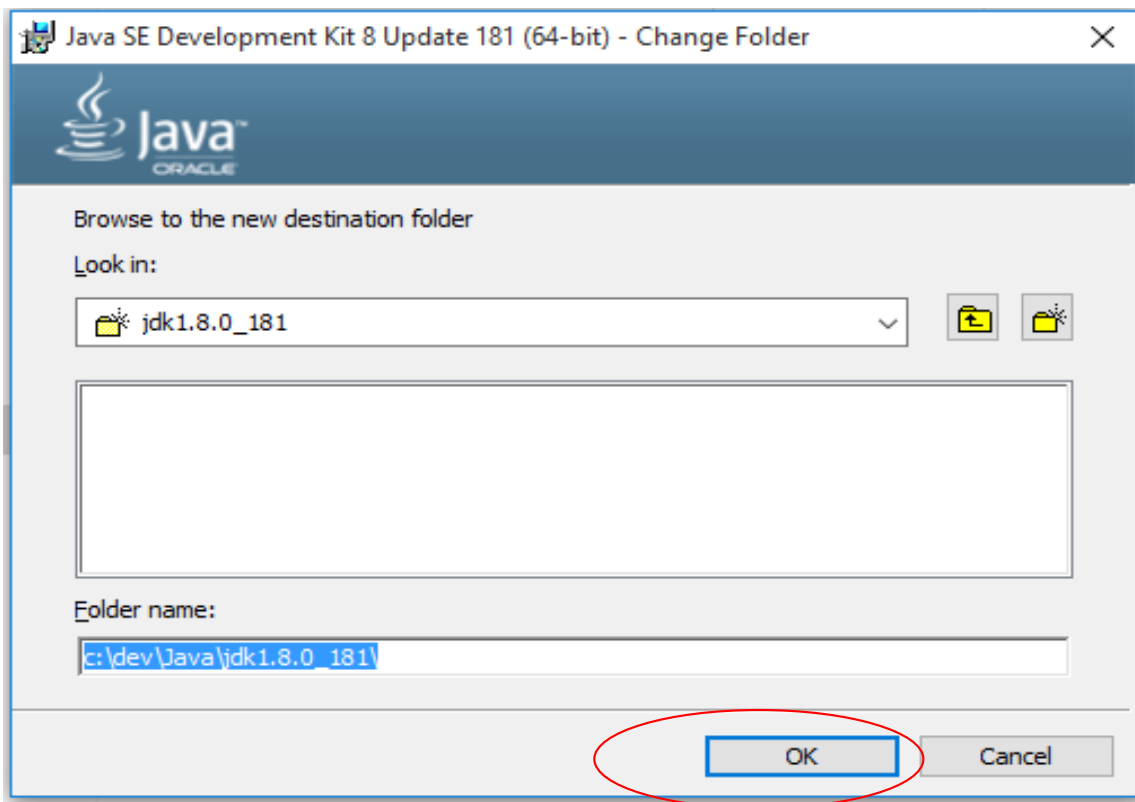
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Windows 10 64位:jdk-8u181-windows-x64.exe

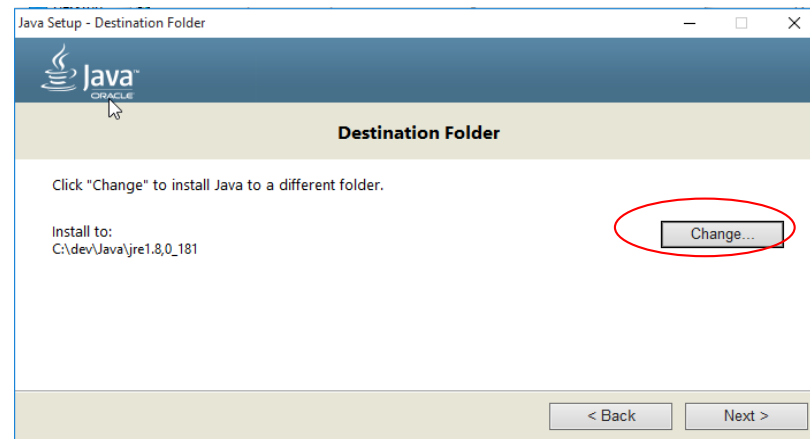
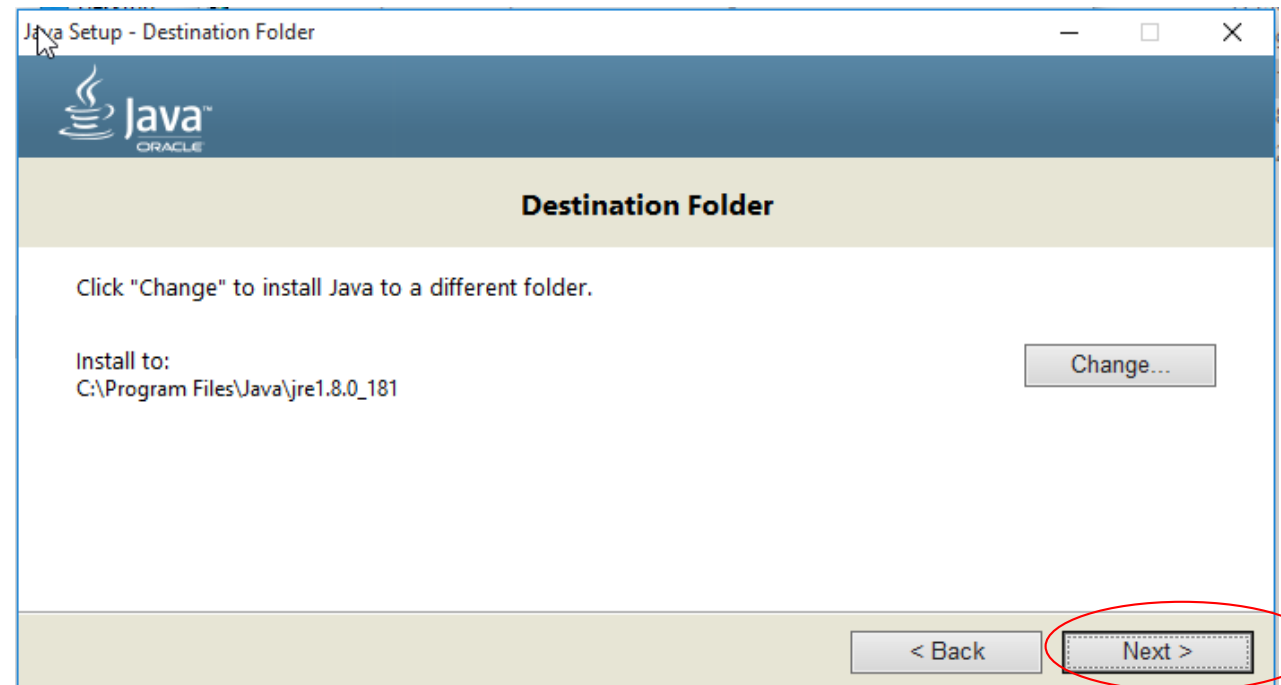
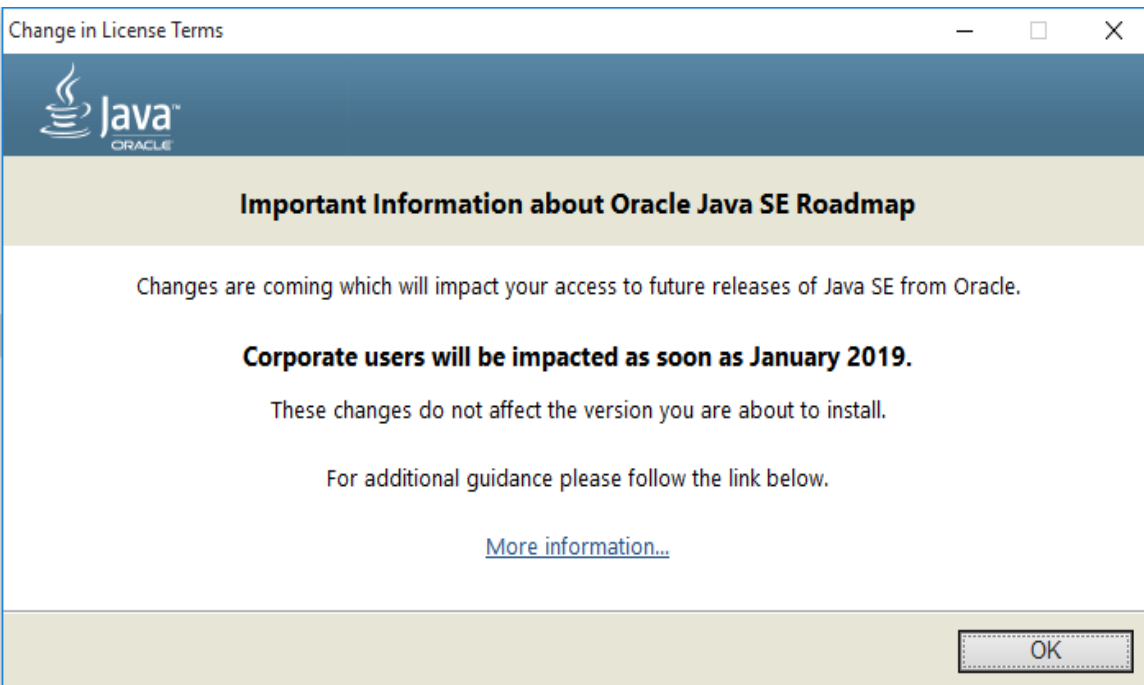
JDK安装与环境变量配置



JDK安装与环境变量配置



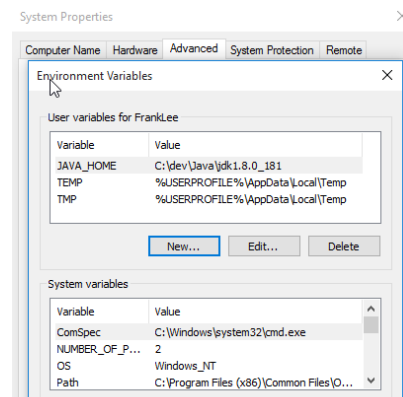
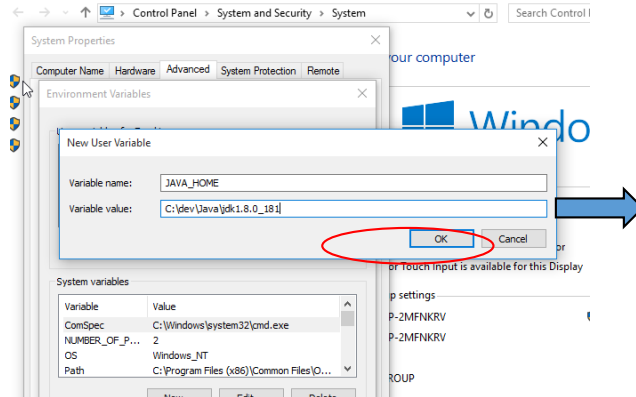
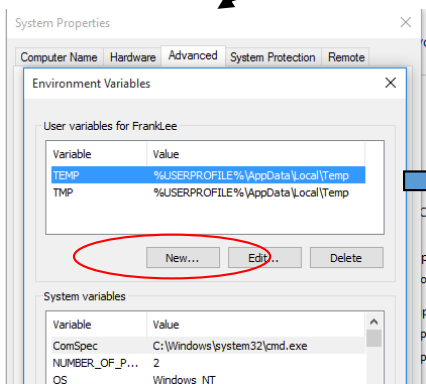
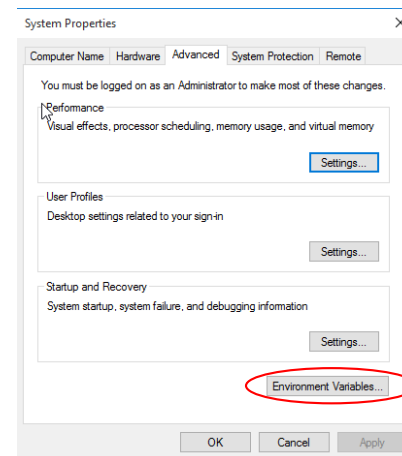
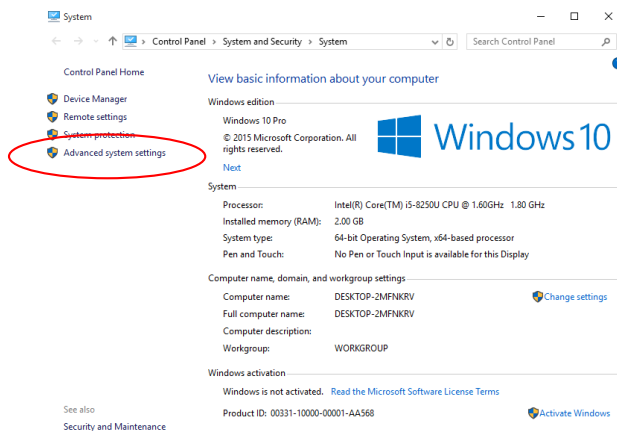
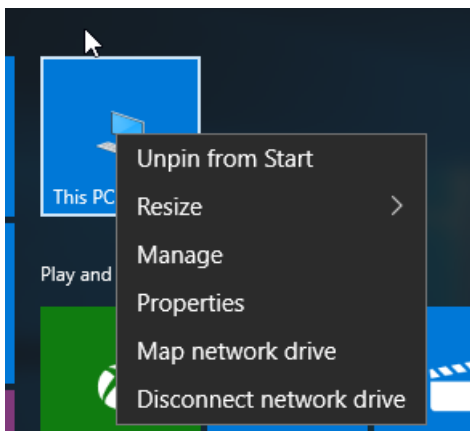
JDK安装与环境变量配置



JDK安装与环境变量配置

配置环境变量

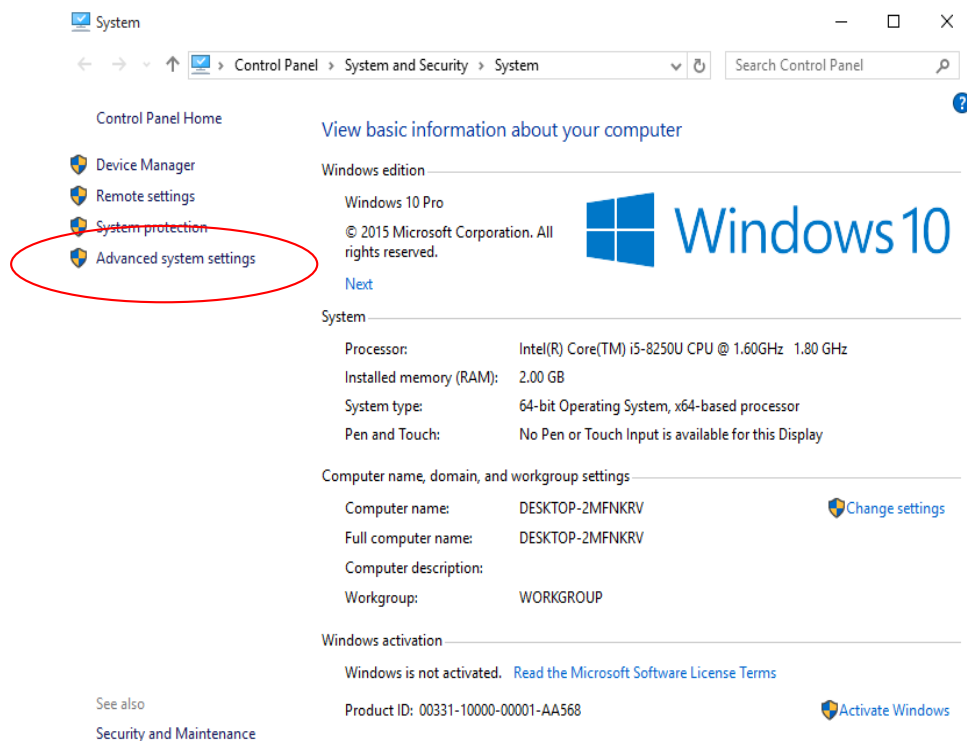
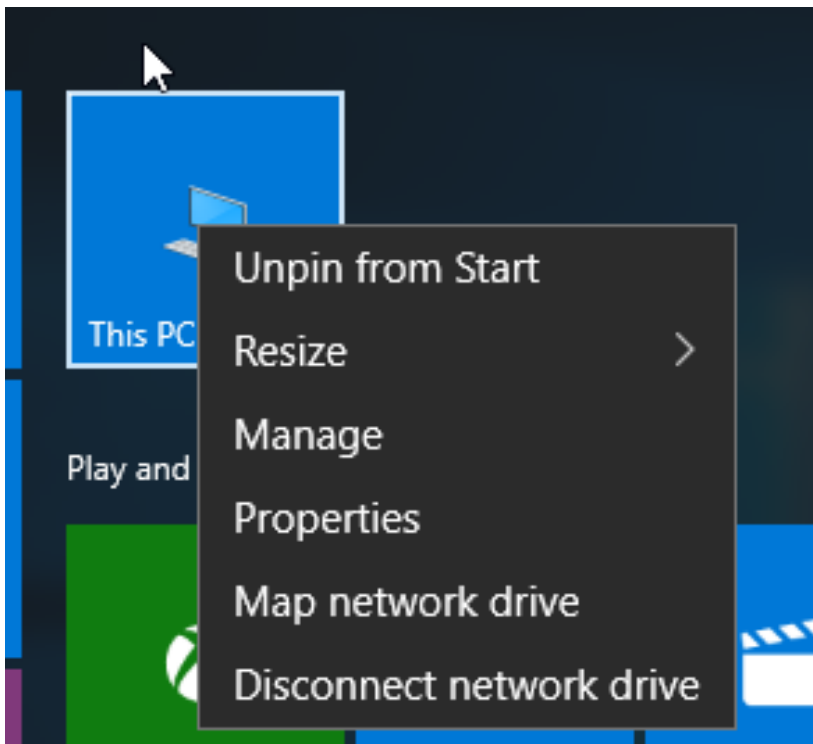
步骤：“此电脑” -> 属性 -> 高级系统设置 -> 环境变量



JDK安装与环境变量配置

配置环境变量

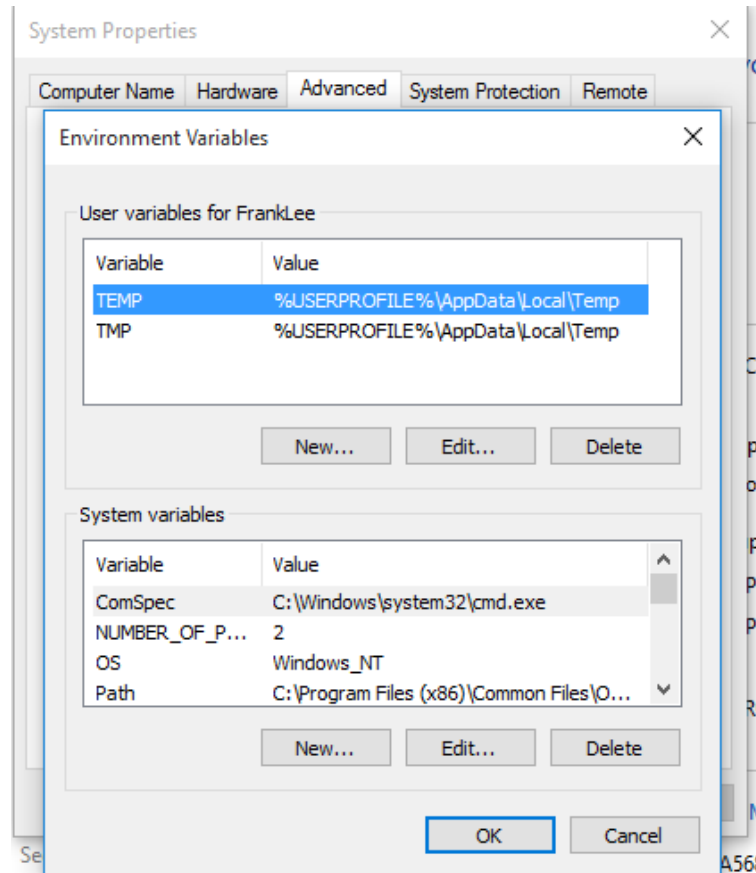
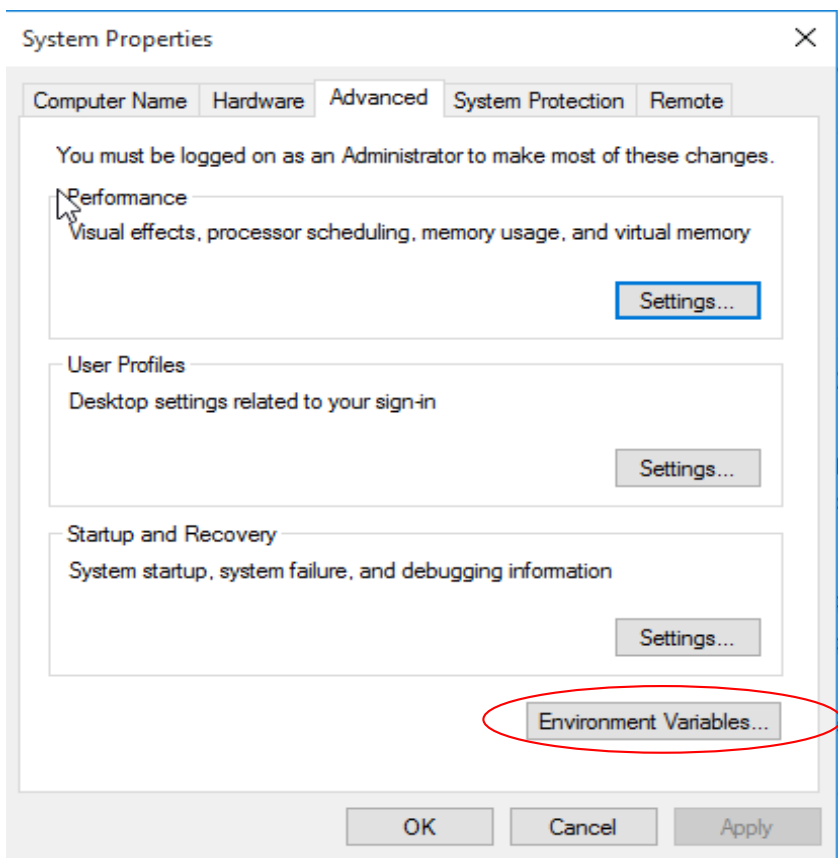
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JDK安装与环境变量配置

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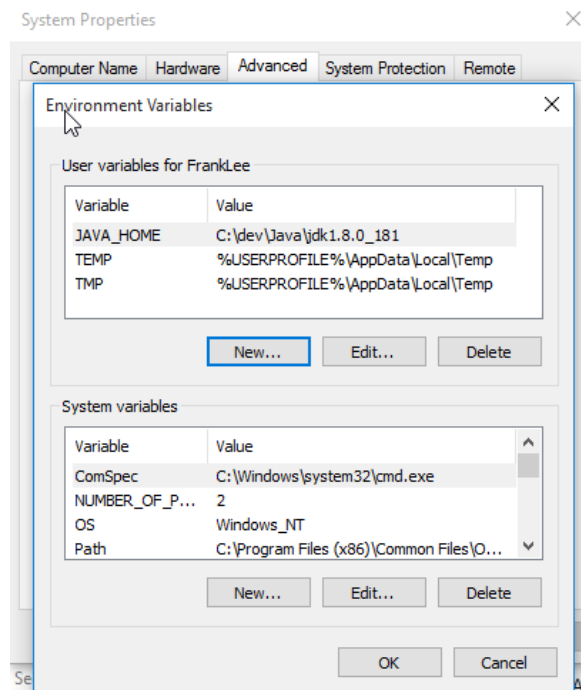
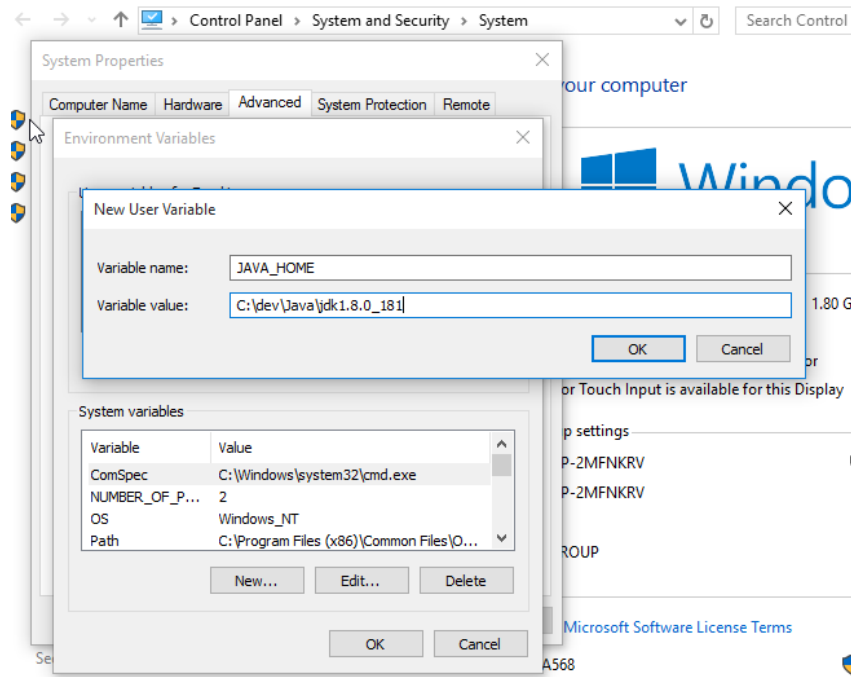
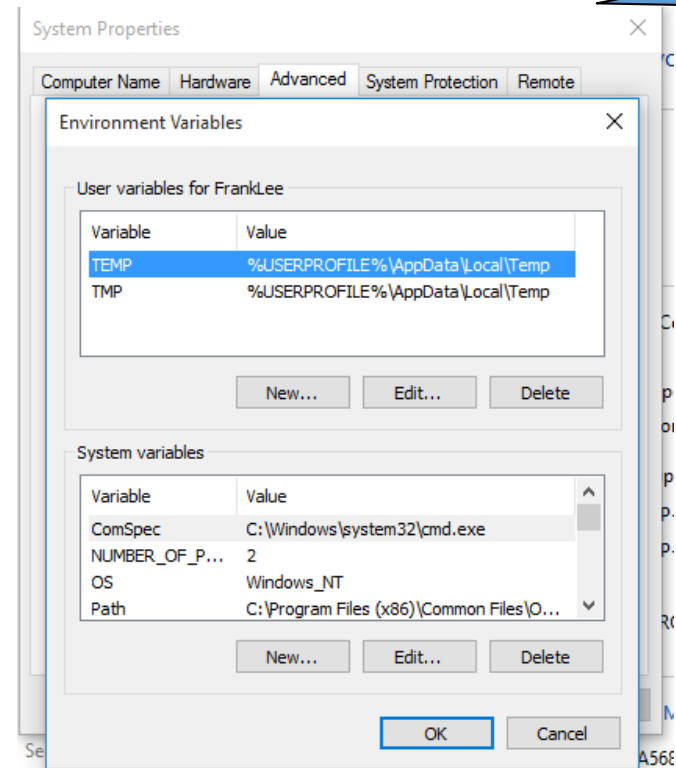


JDK安装与环境变量配置

配置环境变量

步骤：“新建” -> 录入 “变量名” 和 “变量值” -> 确定

Win10企业版

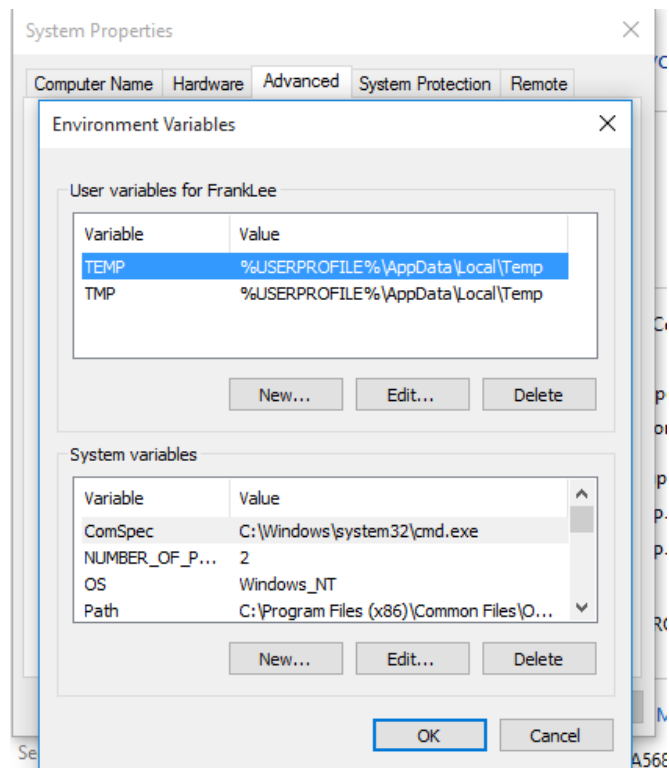


JDK安装与环境变量配置

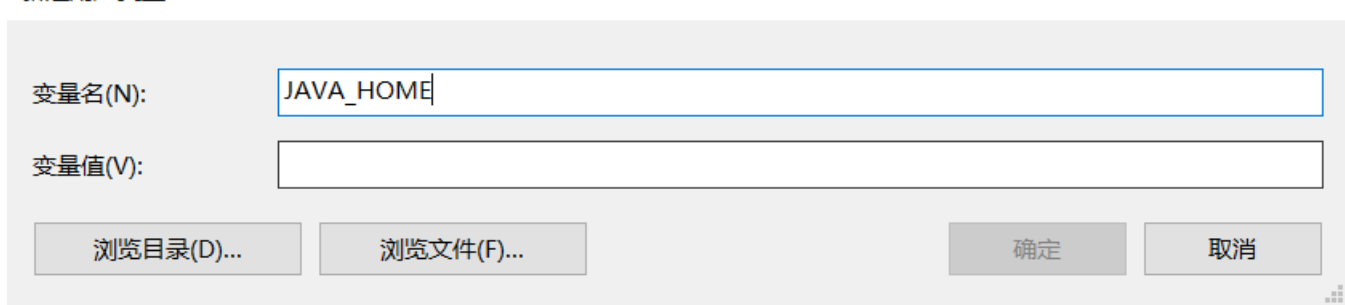
配置环境变量

步骤：“新建” -> 录入 “变量名” 和 “变量值” -> 确定

win10家庭版



新建用户变量

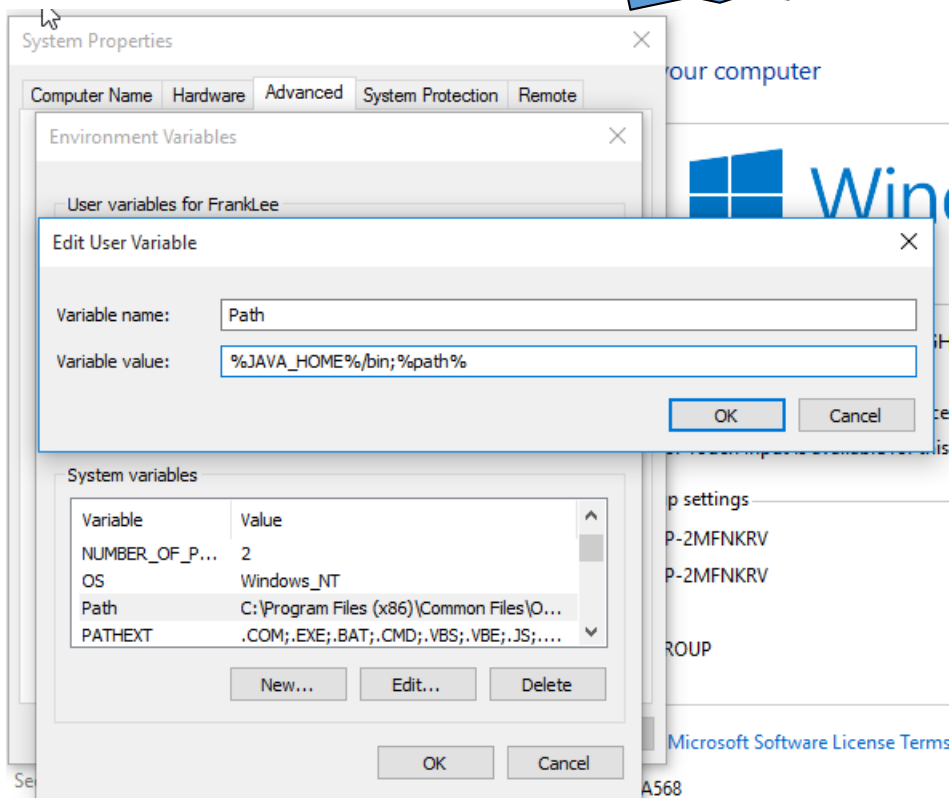


JDK安装与环境变量配置

添加Path变量值

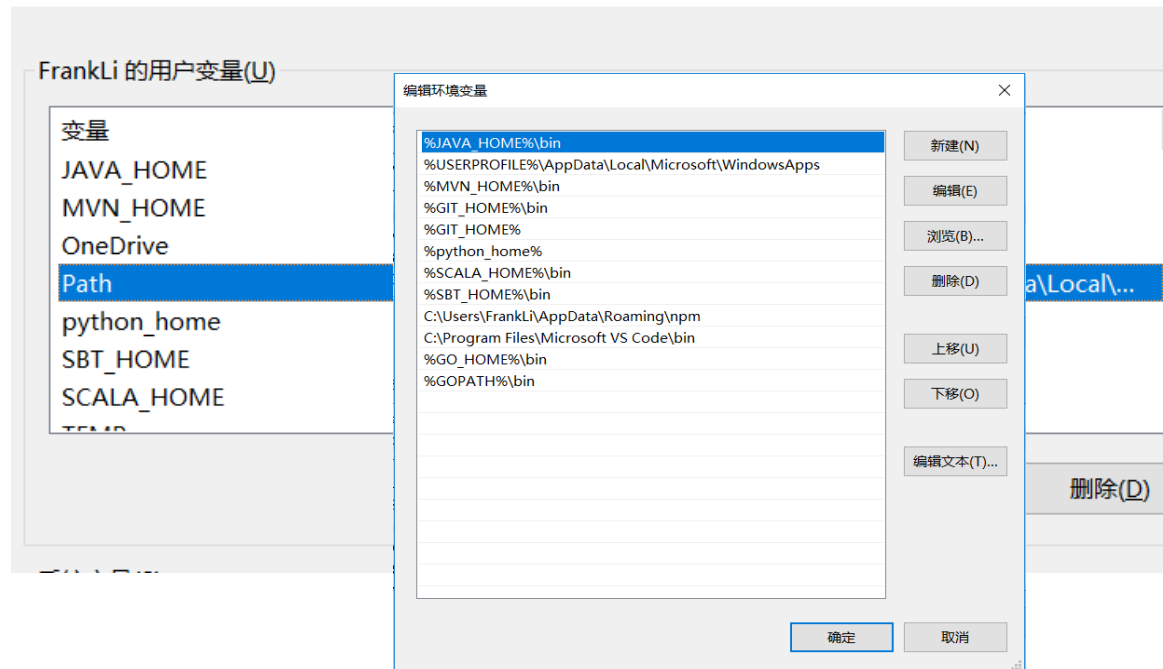
步骤: “编辑” -> “新建” -> “%JAVA_HOME%\bin” -> 确定

Win10企业版



win10家庭版

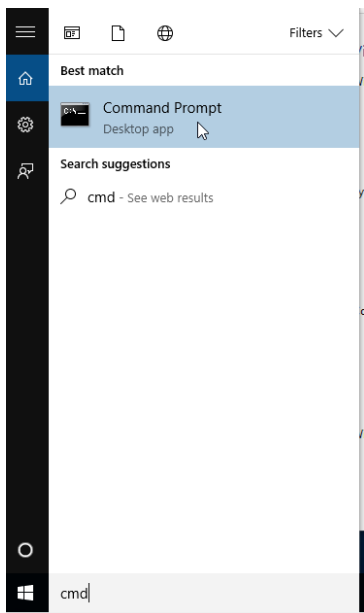
环境变量



JDK安装与环境变量配置

环境变量验证

步骤：运行 “cmd” -> “java -version” 和 “javac -version”



```
C:\Users\FrankLee>java -version
java version "1.8.0_181"
Java(TM) SE Runtime Environment (build 1.8.0_181-b13)
Java HotSpot(TM) 64-Bit Server VM (build 25.181-b13, mixed mode)

C:\Users\FrankLee>javac -version
javac 1.8.0_181

C:\Users\FrankLee>
```

注：由于安装的版本不同，版本号会有所不同。

JAVA DEMO

```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello Word!");  
    }  
}
```

```
C:\workspace\one>javac HelloWorld.java  
C:\workspace\one>java HelloWorld  
Hello Word!  
C:\workspace\one>
```

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VCS工具-安装git工具

根据操作系统不同选用对应的版本的安装文件

Windows 10 32位:

Git-2.19.0-32-bit.exe

TortoiseGit-2.7.0.0-32bit.msi

Windows 10 64位:

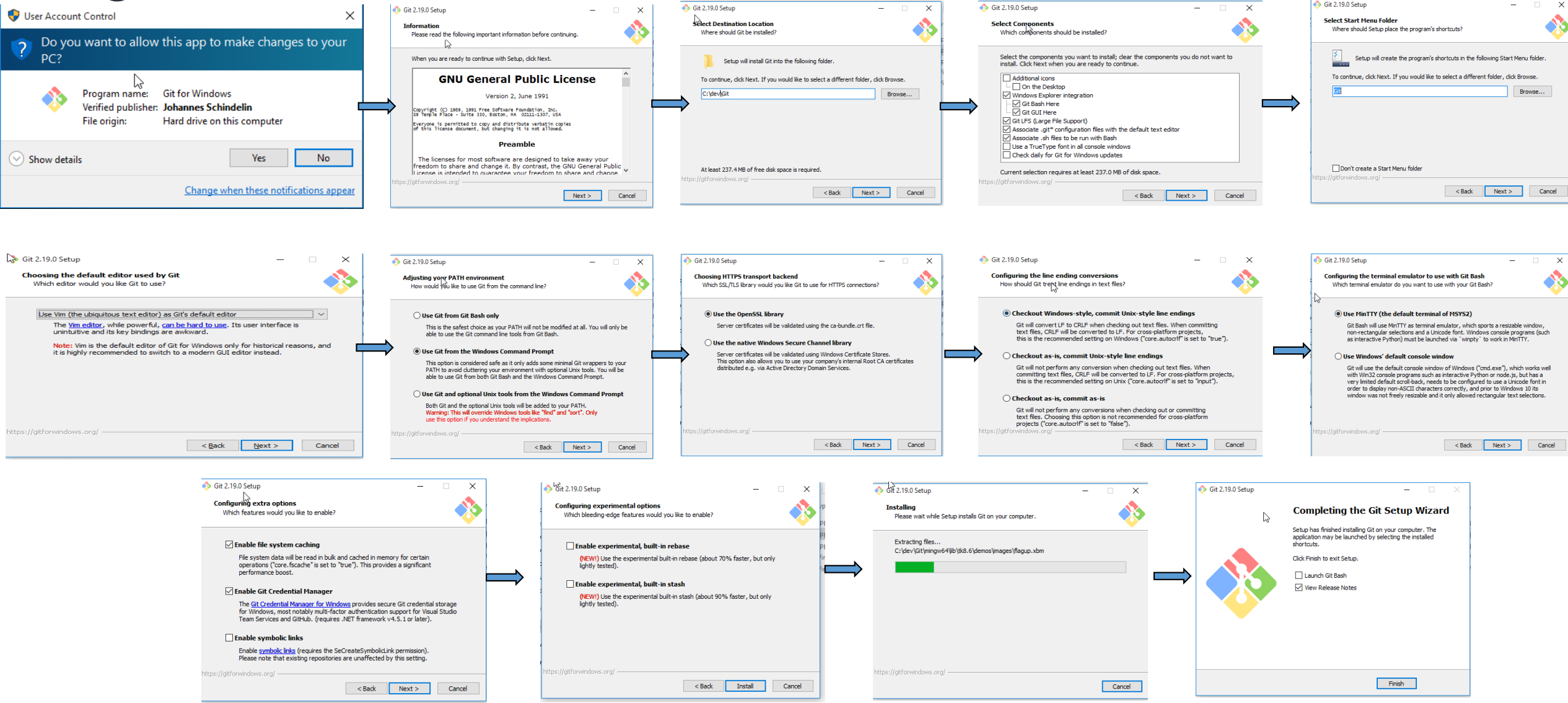
Git-2.19.0-64-bit.exe

TortoiseGit-2.7.0.0-64bit.msi

注：由于会有部分快捷操作嵌入右键菜单和文件状态显示，安装完需要重启操作系统。

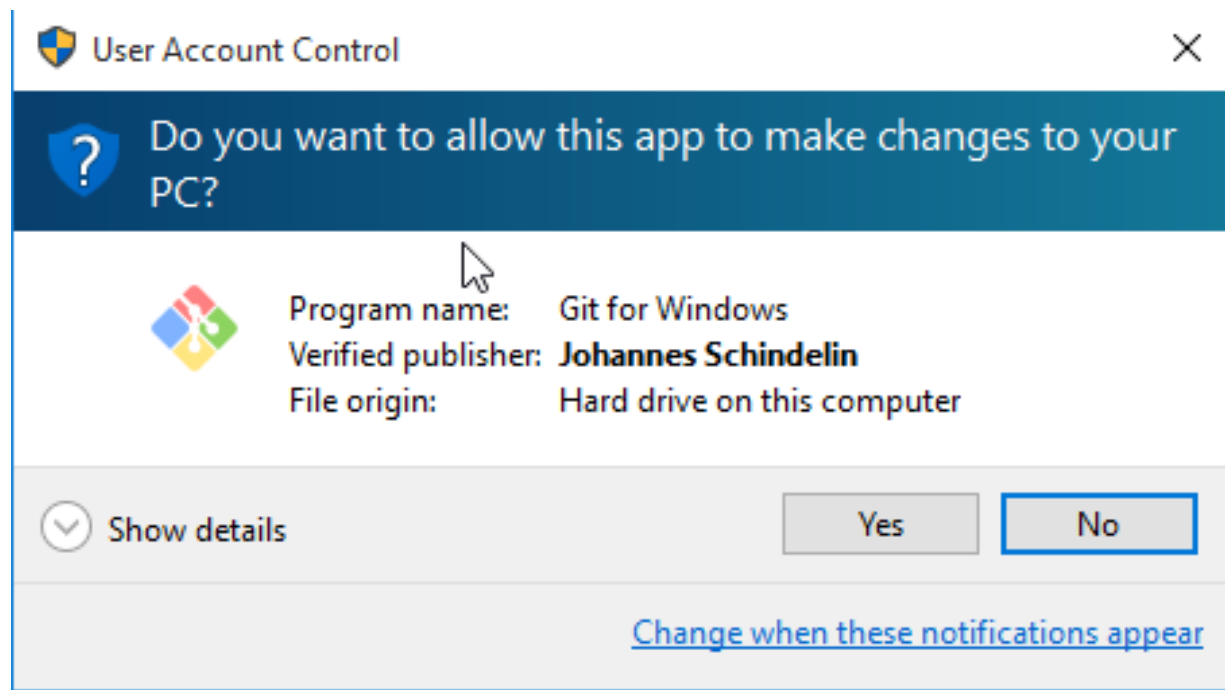
VCS工具--安装git及git ui工具

安装git步骤总览



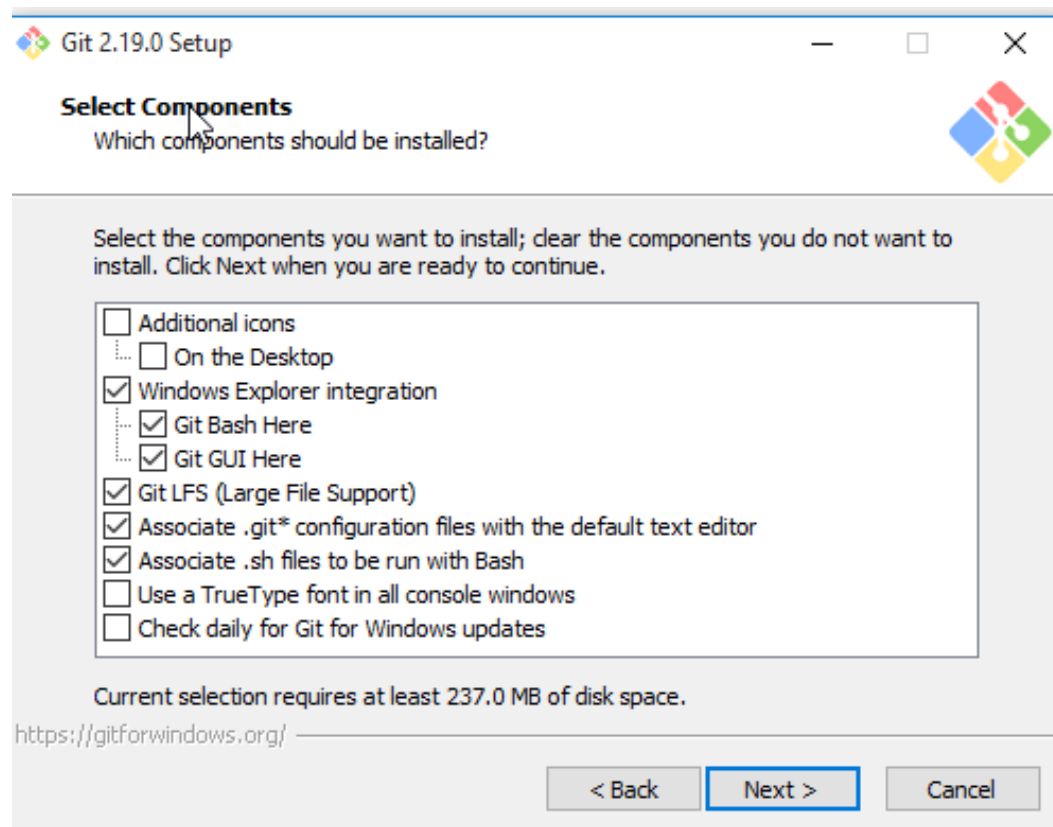
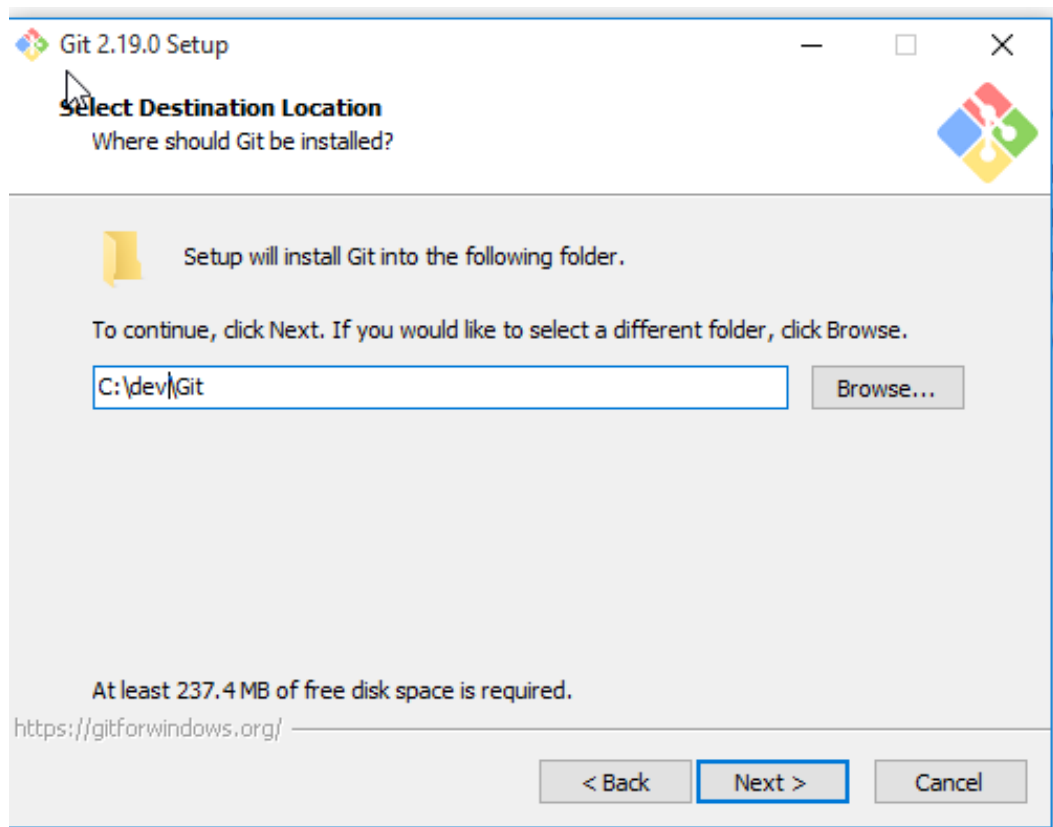
VCS工具--安装git及git ui工具

安装git (分步)



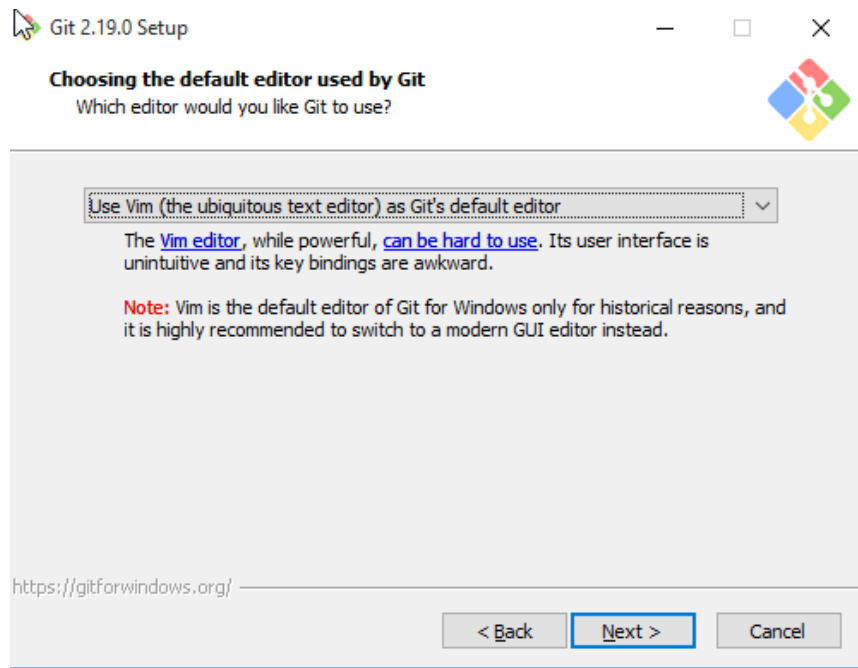
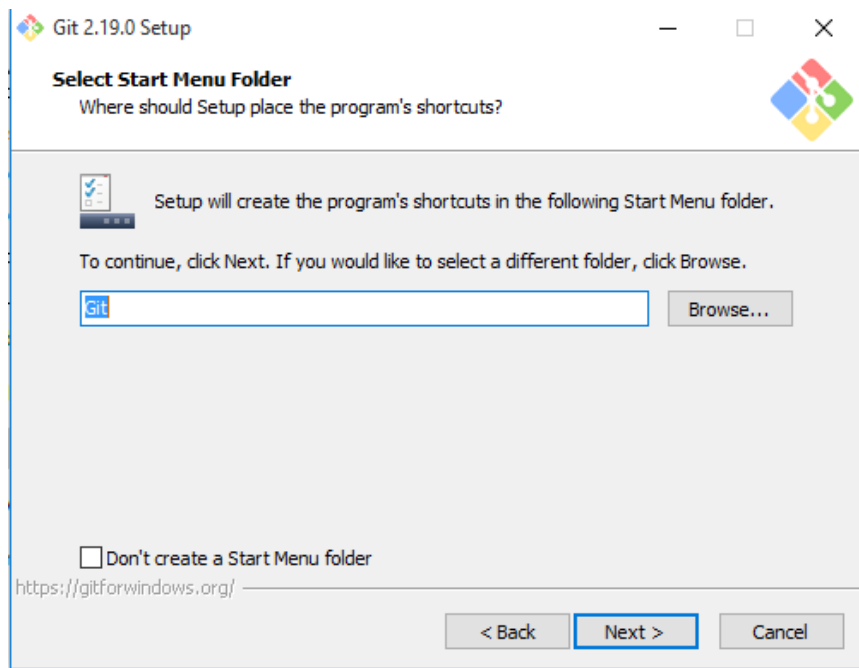
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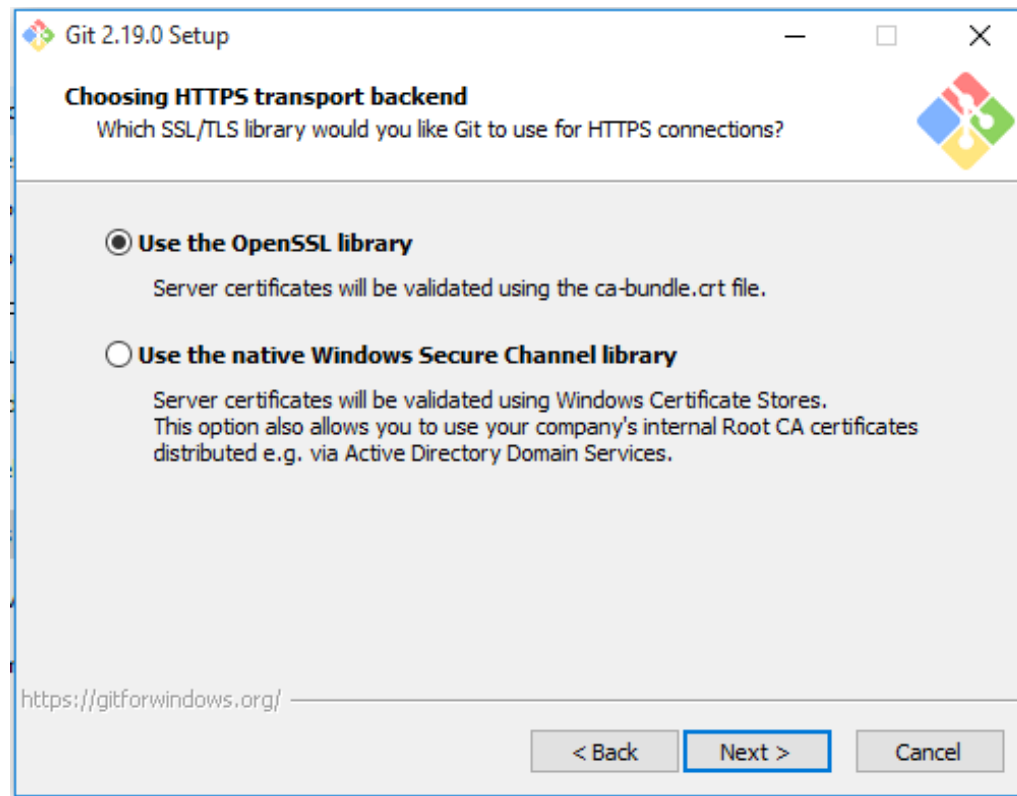
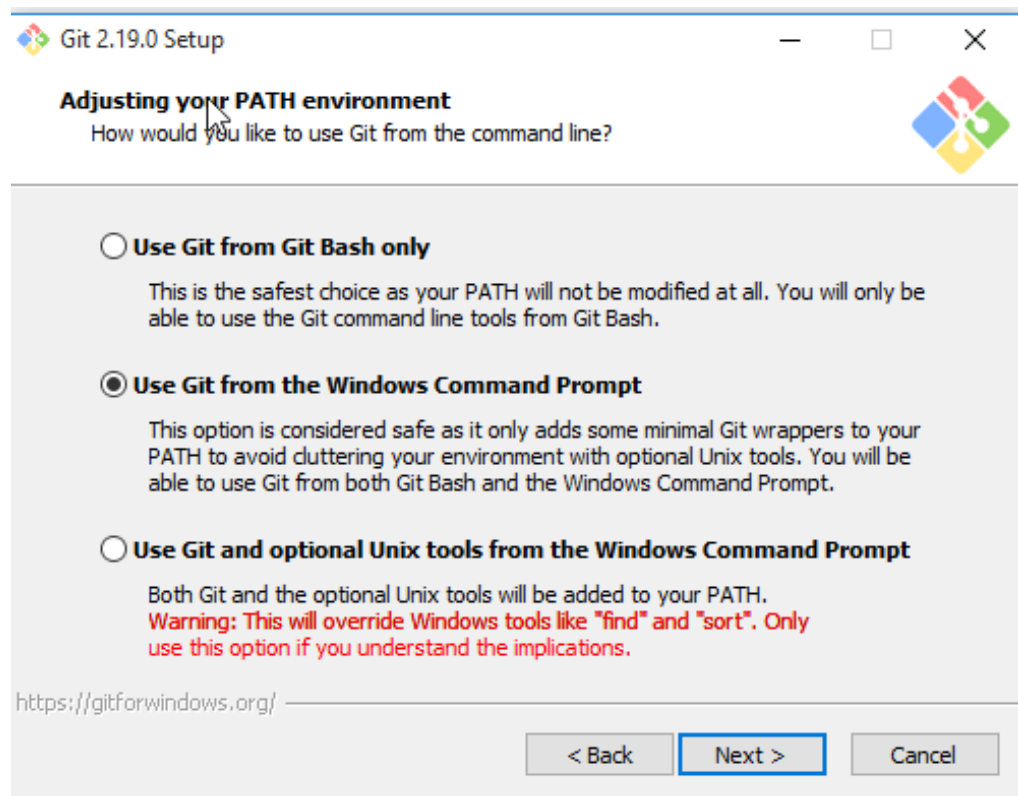
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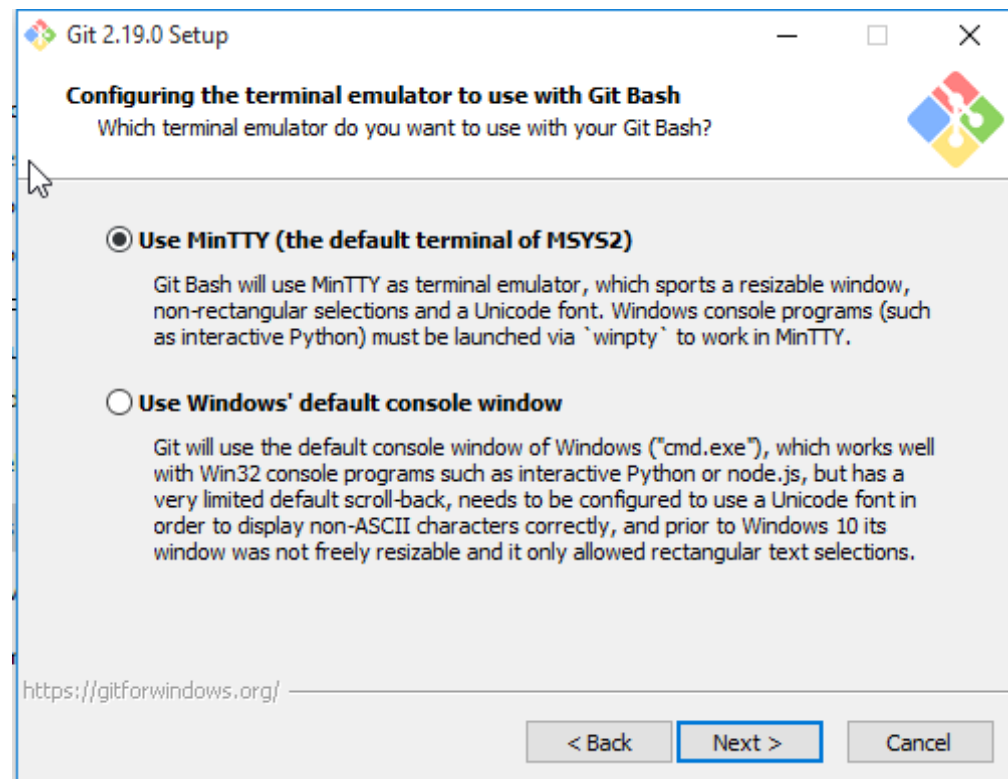
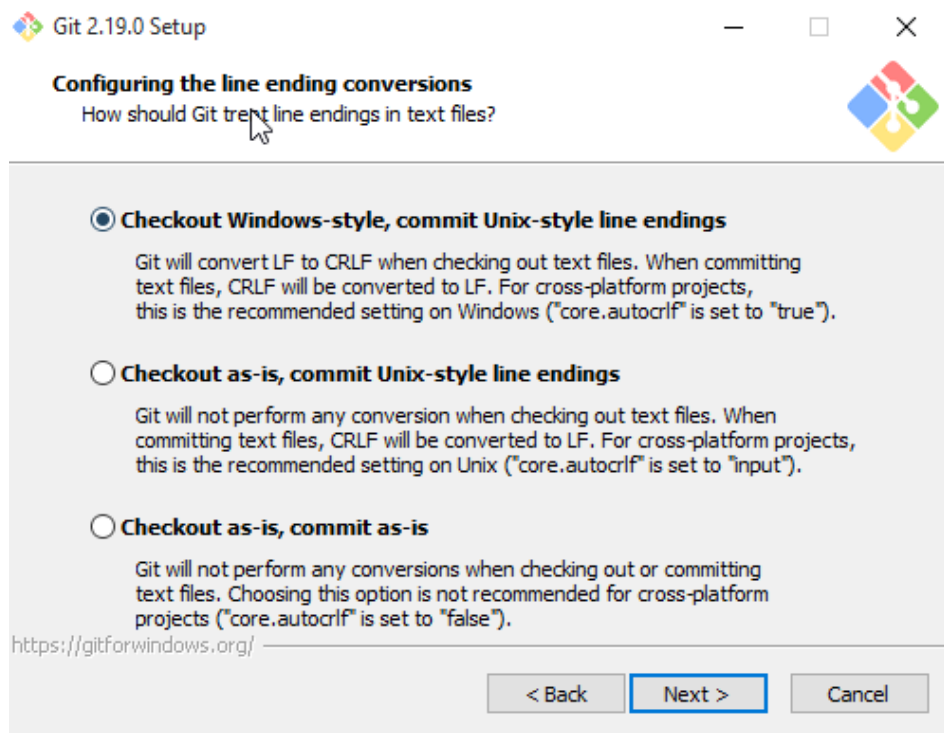
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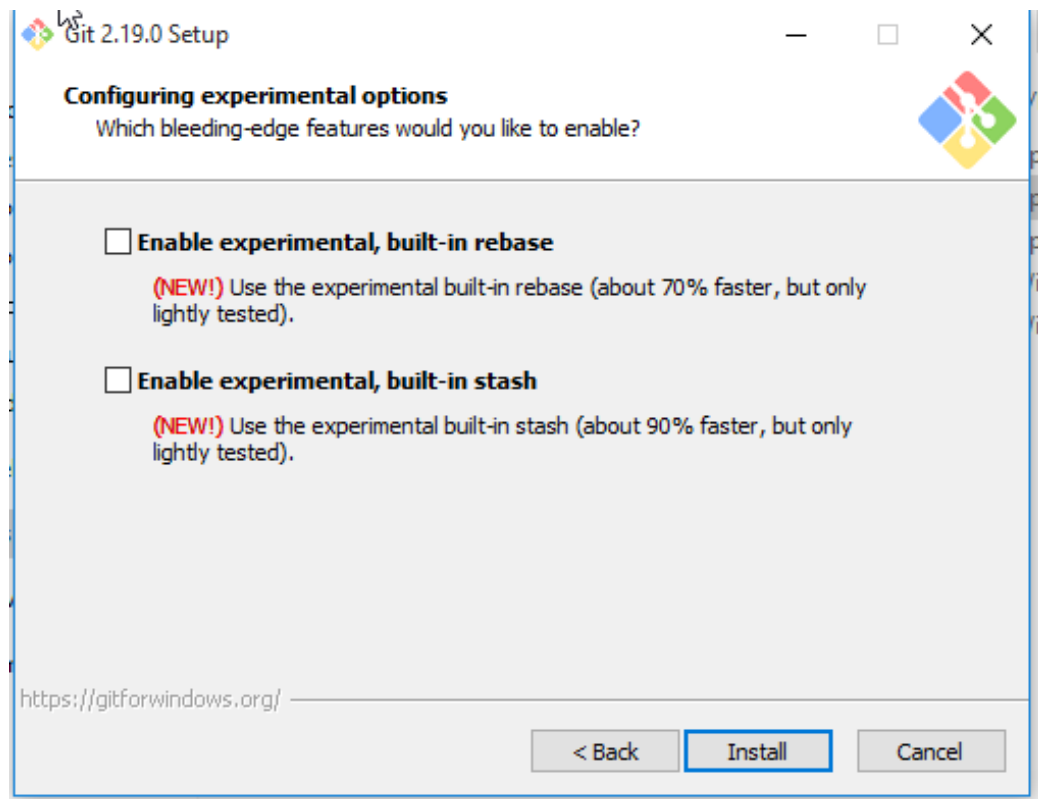
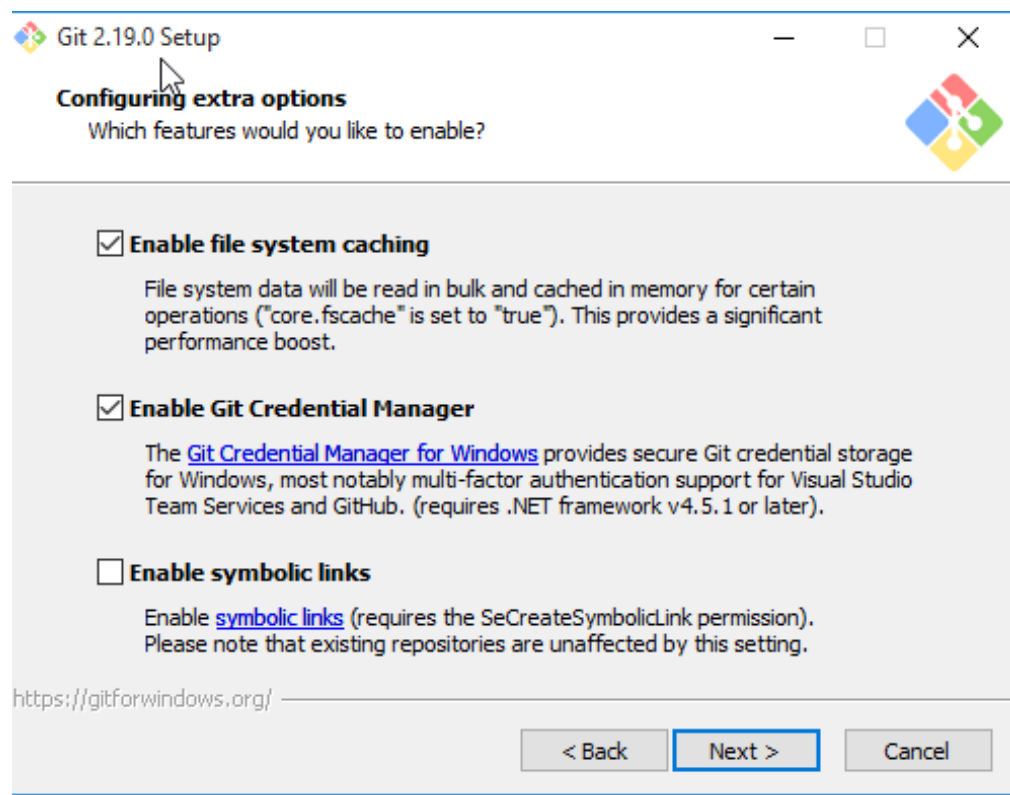
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安装git



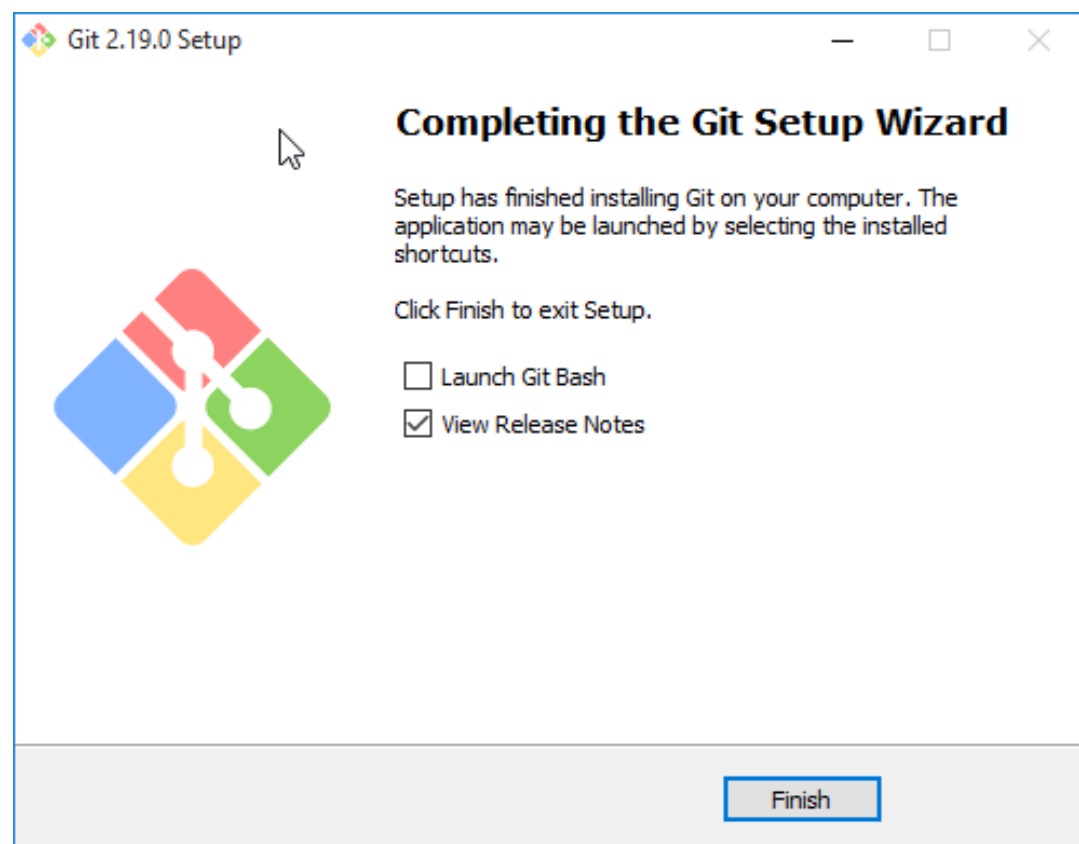
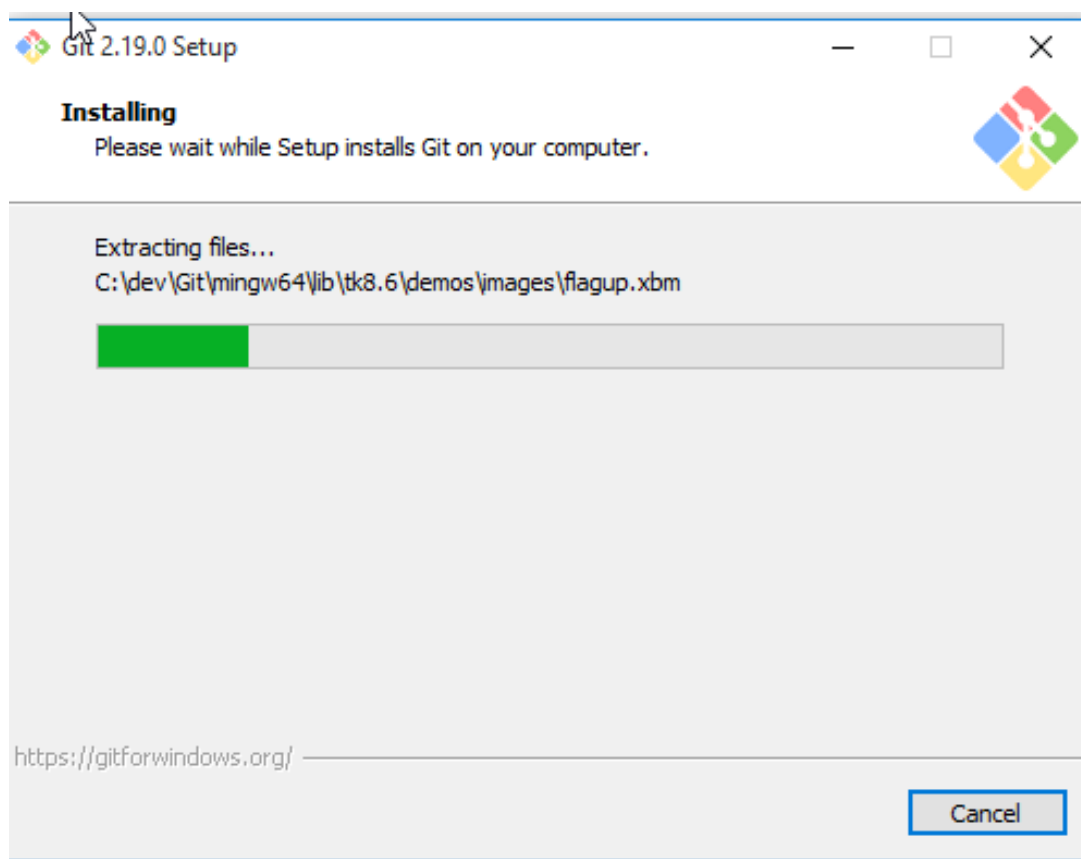
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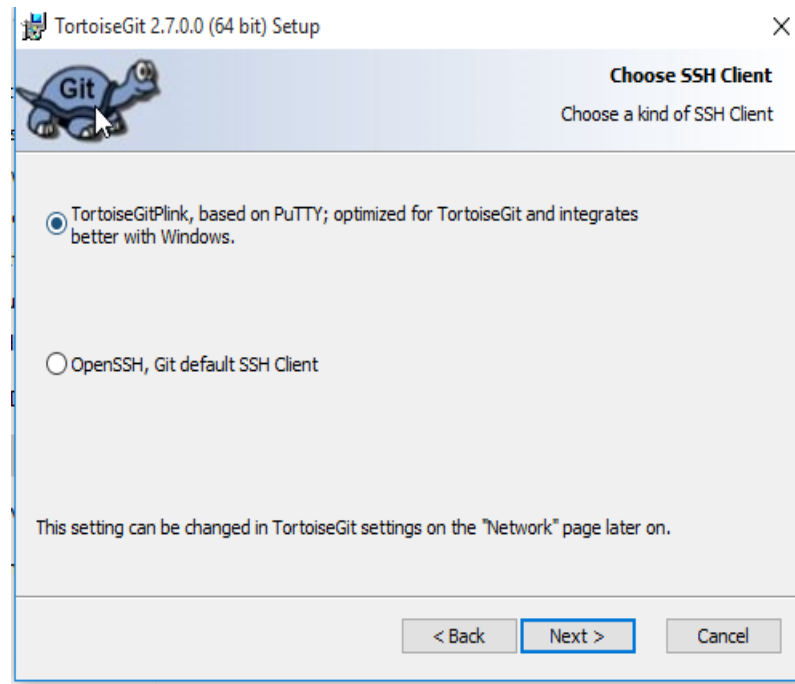
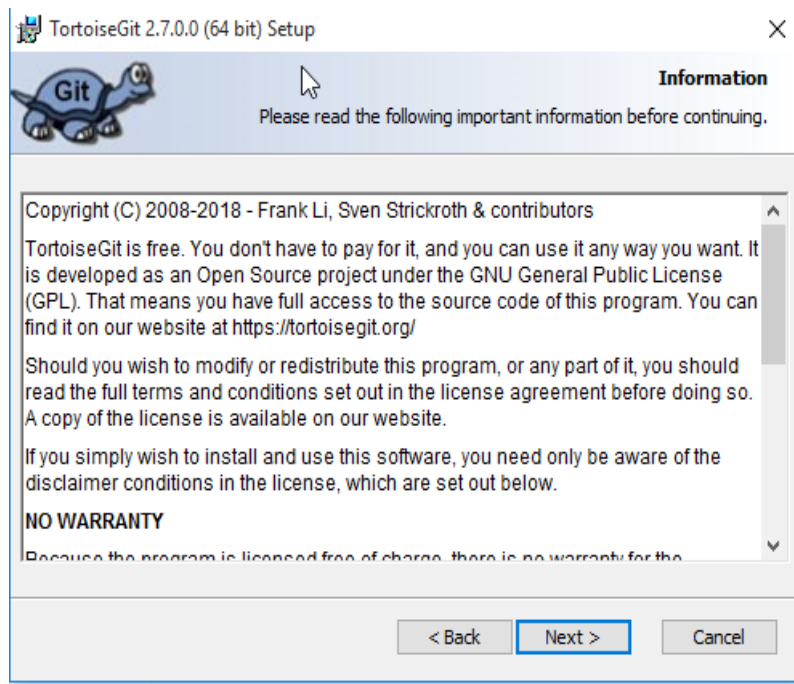
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安装git



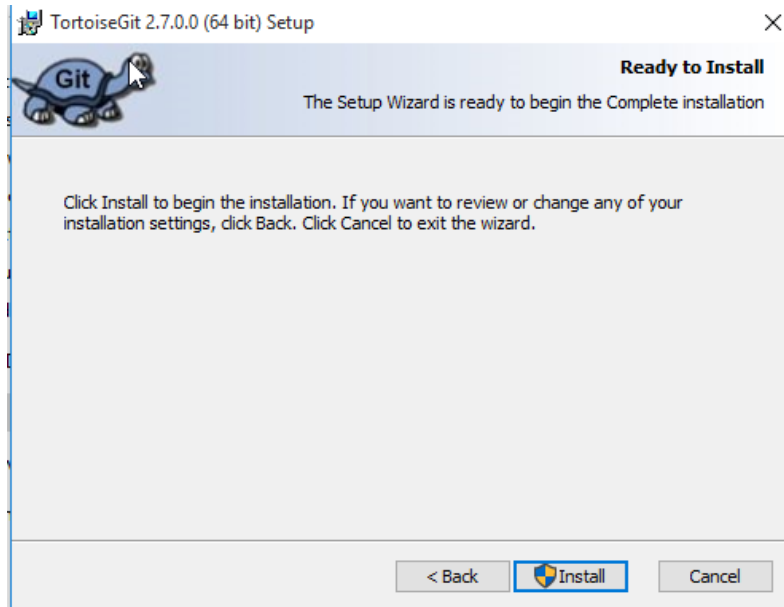
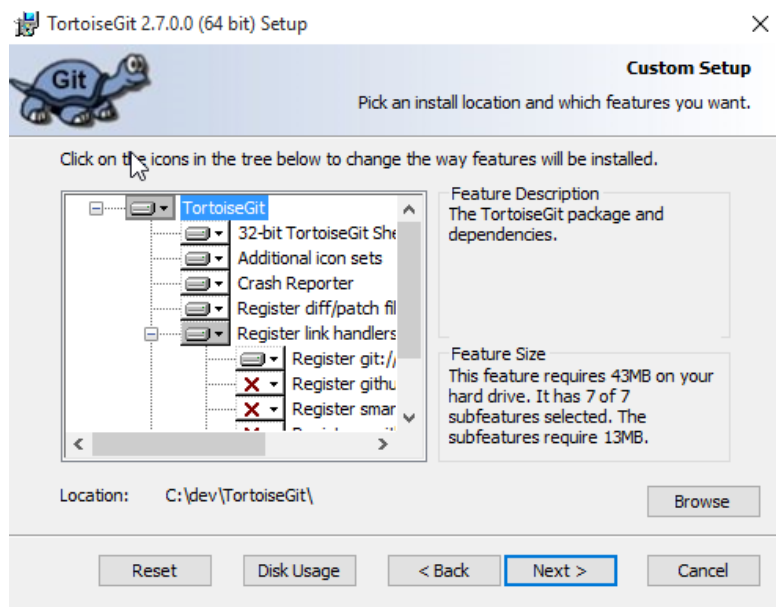
VCS工具--安装git及git ui工具

安装TortoiseGit(小海龟)



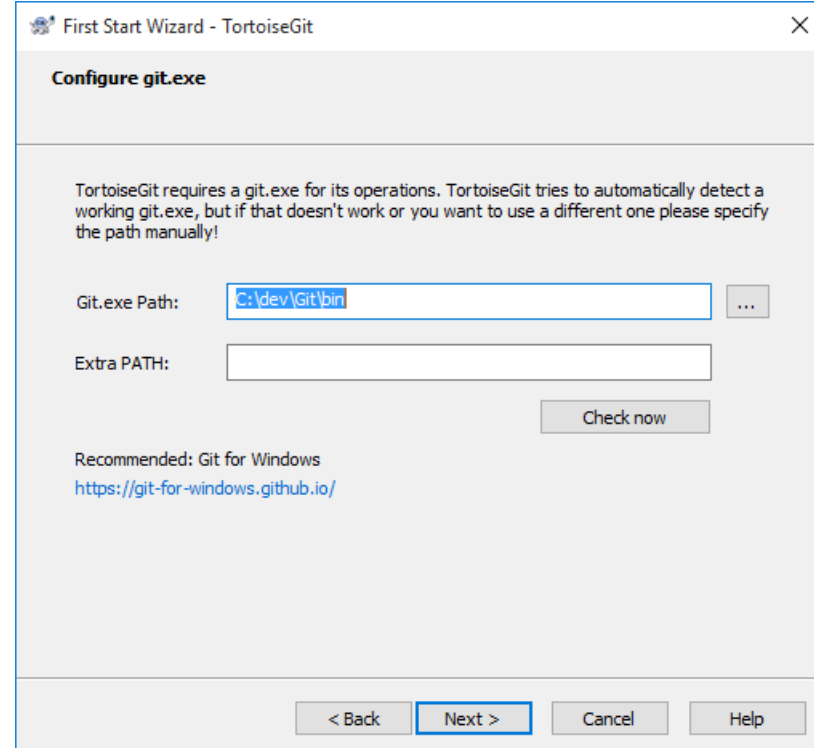
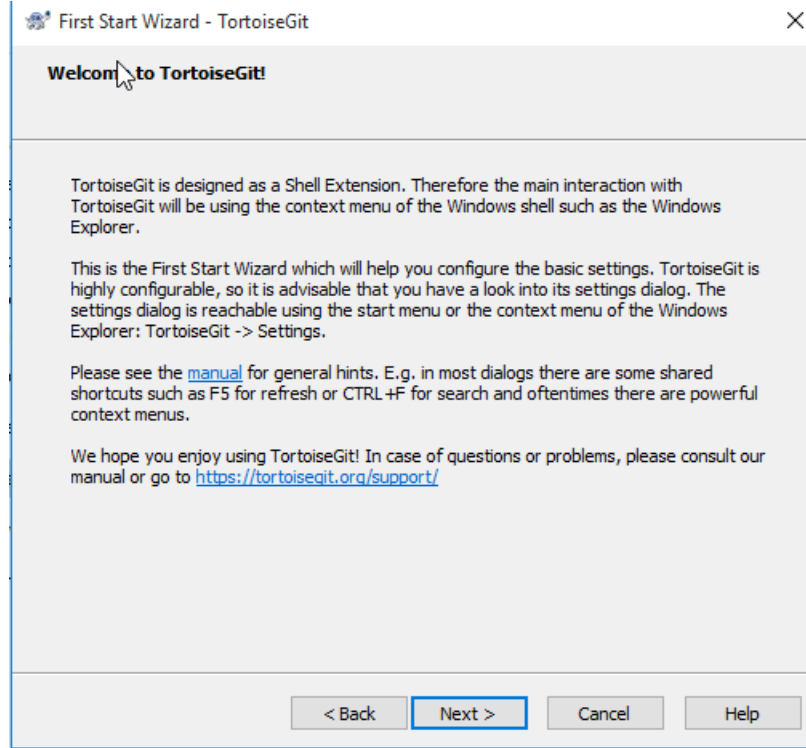
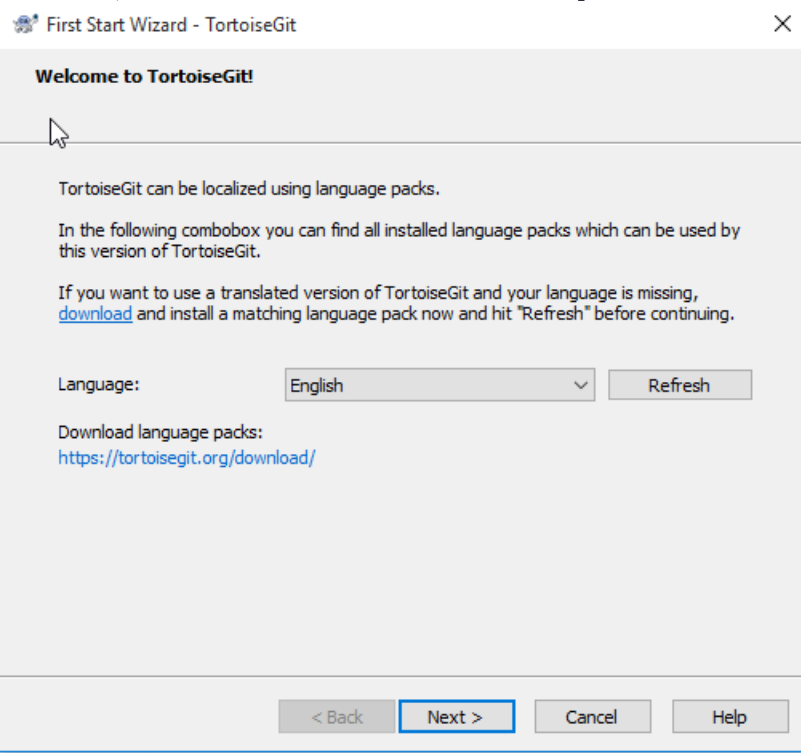
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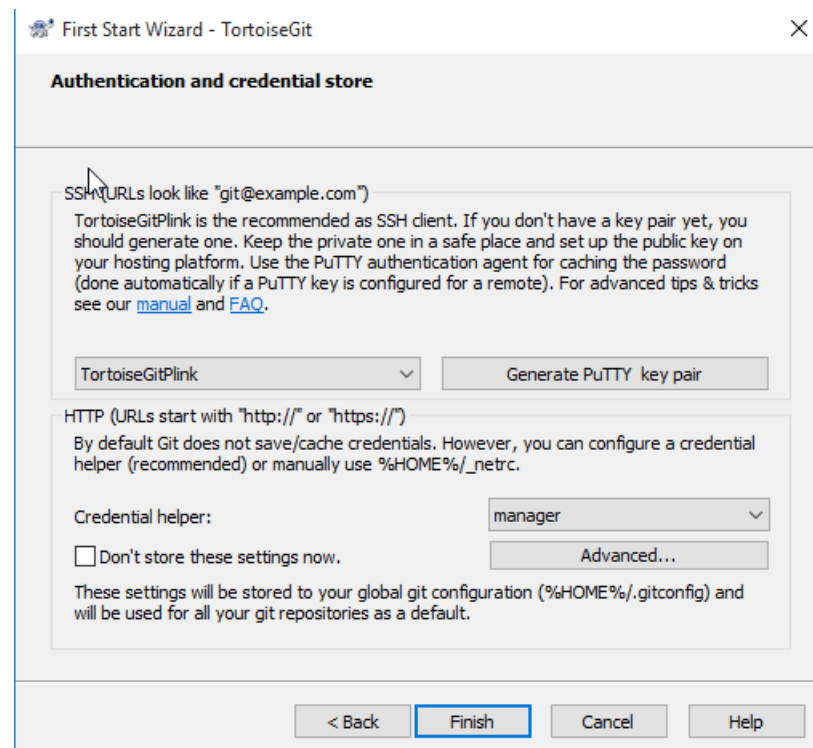
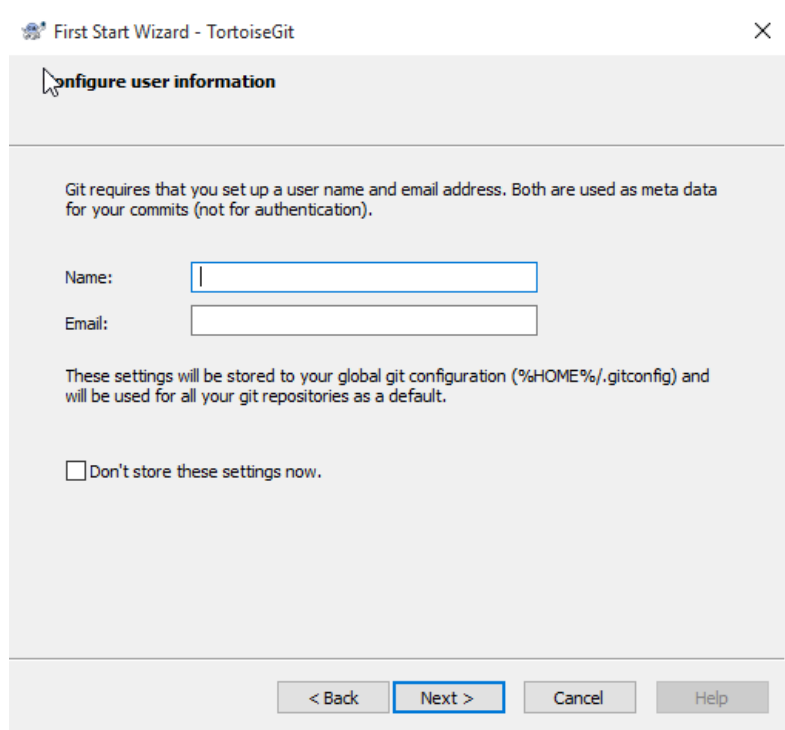
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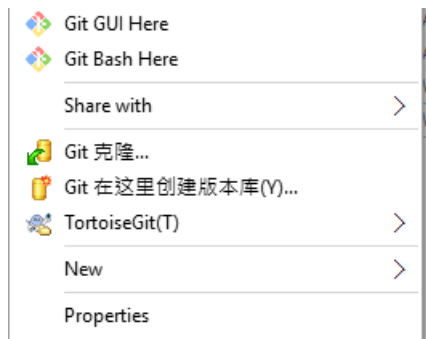
VCS工具--安装git及git ui工具

安装TortoiseGit(小海龟)



VCS工具--安装git及git ui工具

安装TortoiseGit中文语言包



VCS工具--安装git及git ui工具

GIT常用命令使用

配置用户信息:

```
git config --global user.name "John Doe"
```

```
git config --global user.email johndoe@ example.com
```

用https方式访问

```
git config --global http.sslVerify false
```

查看配置信息

```
git config --list
```

VCS工具--安装git及git ui工具

GIT常用命令使用

git init

在本地新建一个repo,进入一个项目目录,执行git init,会初始化一个repo,并在当前文件夹下创建一个.git文件夹.

git status

查询repo的状态. `git status -s`: -s表示short, -s的输出标记会有两列,第一列是对staging区域而言,第二列是对working目录而言.

git add

在提交之前,Git有一个暂存区(staging area),可以放入新添加的文件或者加入新的改动. commit时提交的改动是上一次加入到staging area中的改动,而不是我们disk上的改动.

git commit

提交已经被add进来的改动.

`git commit -m "the commit message"`

`git commit -a` 会先把所有已经track的文件的改动add进来,然后提交(有点像svn的一次提交,不用先暂存). 对于没有track的文件,还是需要git add一下.

`git commit --amend` 增补提交. 会使用与当前提交节点相同的父节点进行一次新的提交,旧的提交将会被取消.

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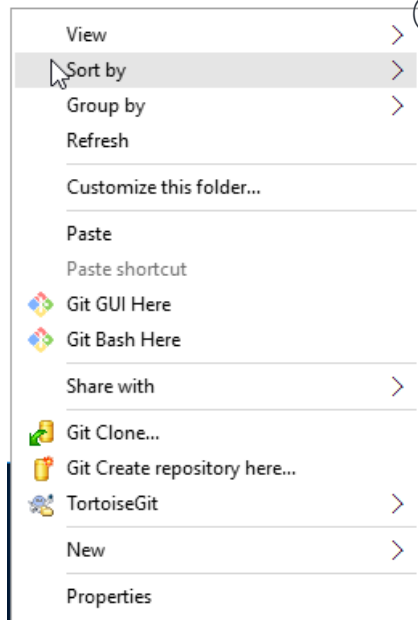
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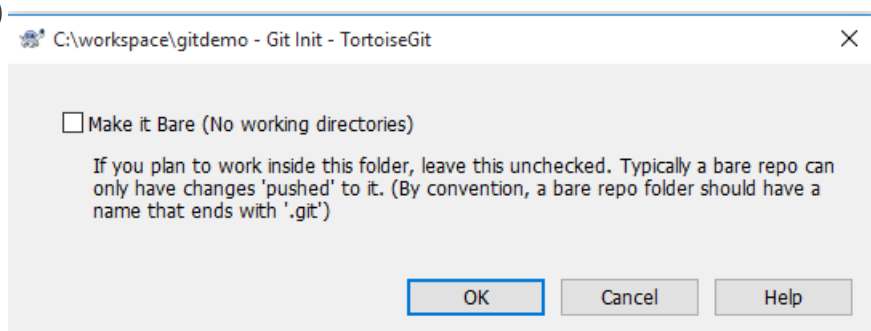
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TortoiseGit使用

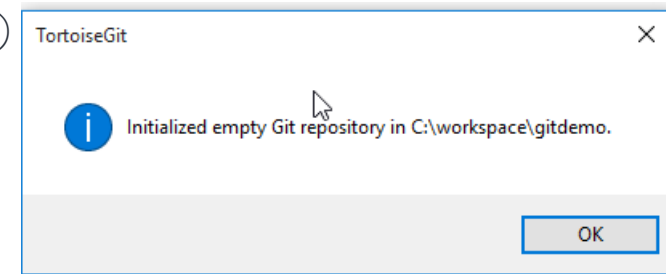
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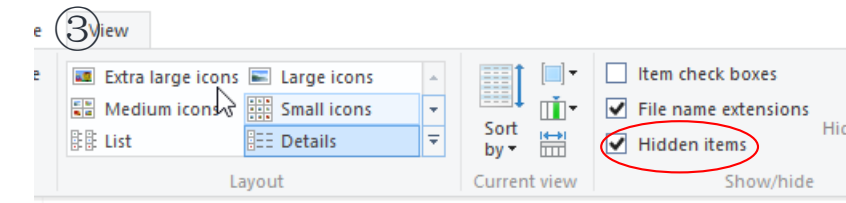
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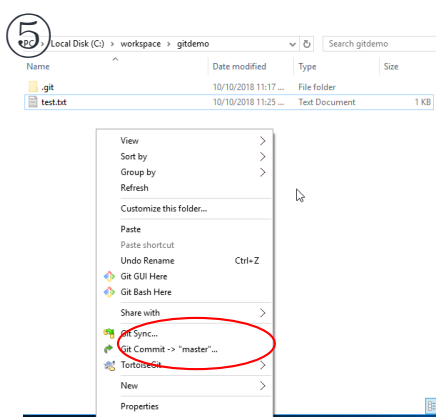
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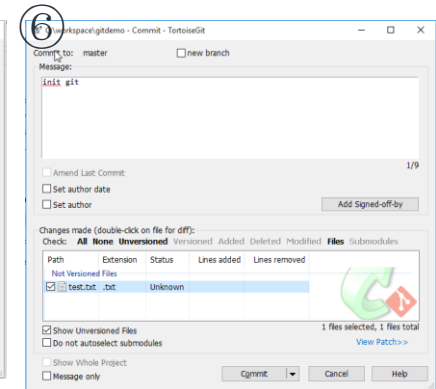
④



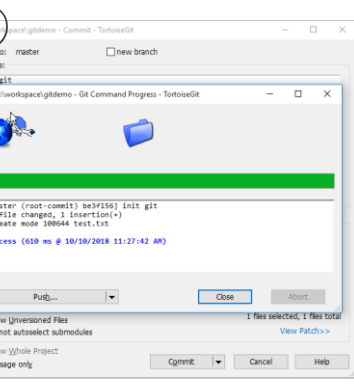
⑤



⑥



⑦



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Build Tools-MAVEN

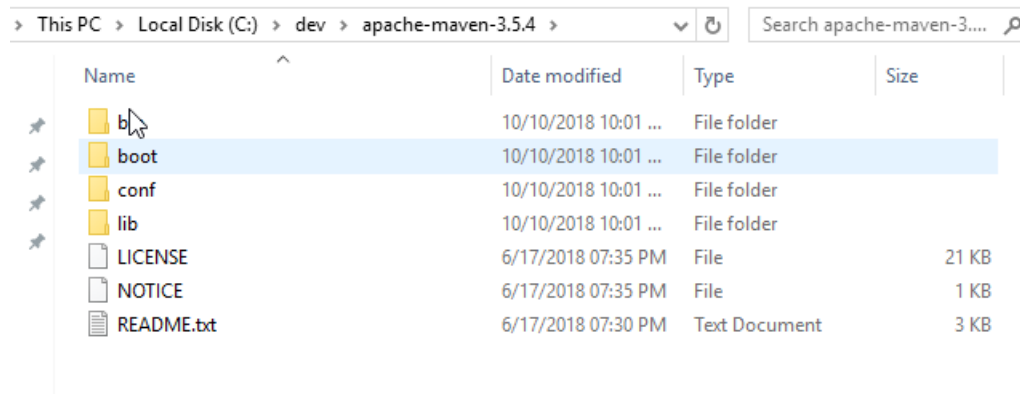
Maven使用

- ①解压apache-maven-3.5.4-bin.zip 到c:\dev
- ②配置环境变量
- ③修改setting.xml
- ④测试配置是否成功
- ⑤创建java demo

Build Tools-MAVEN

Maven配置安装

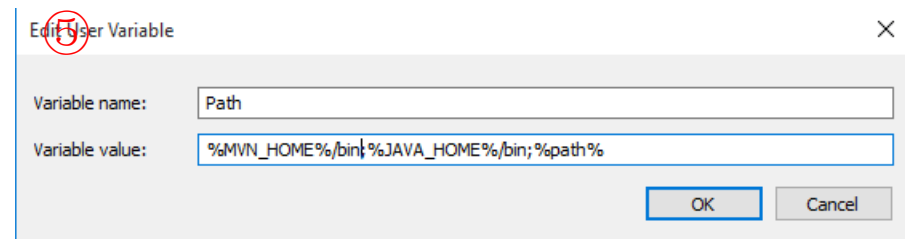
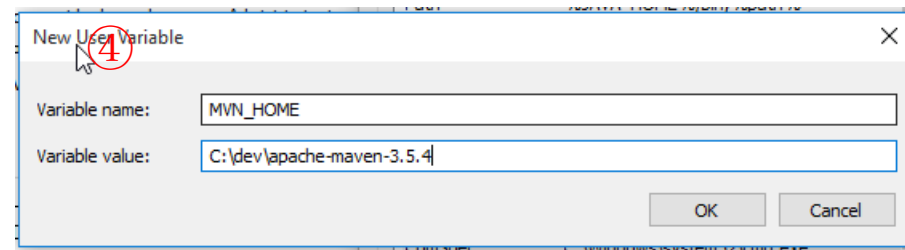
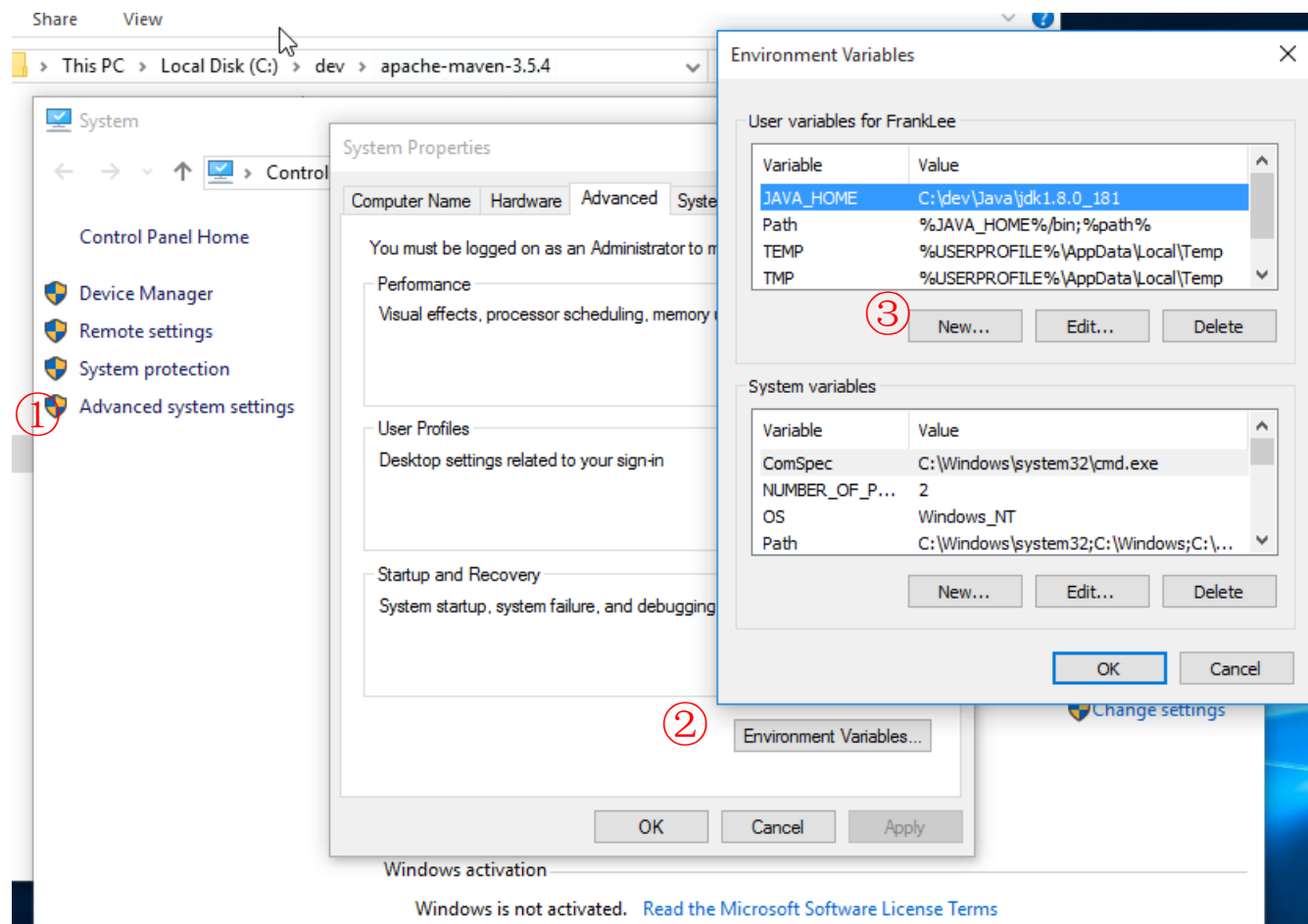
①解压apache-maven-3.5.4-bin.zip 到c:\dev



Build Tools-MAVEN

TortoiseGit使用

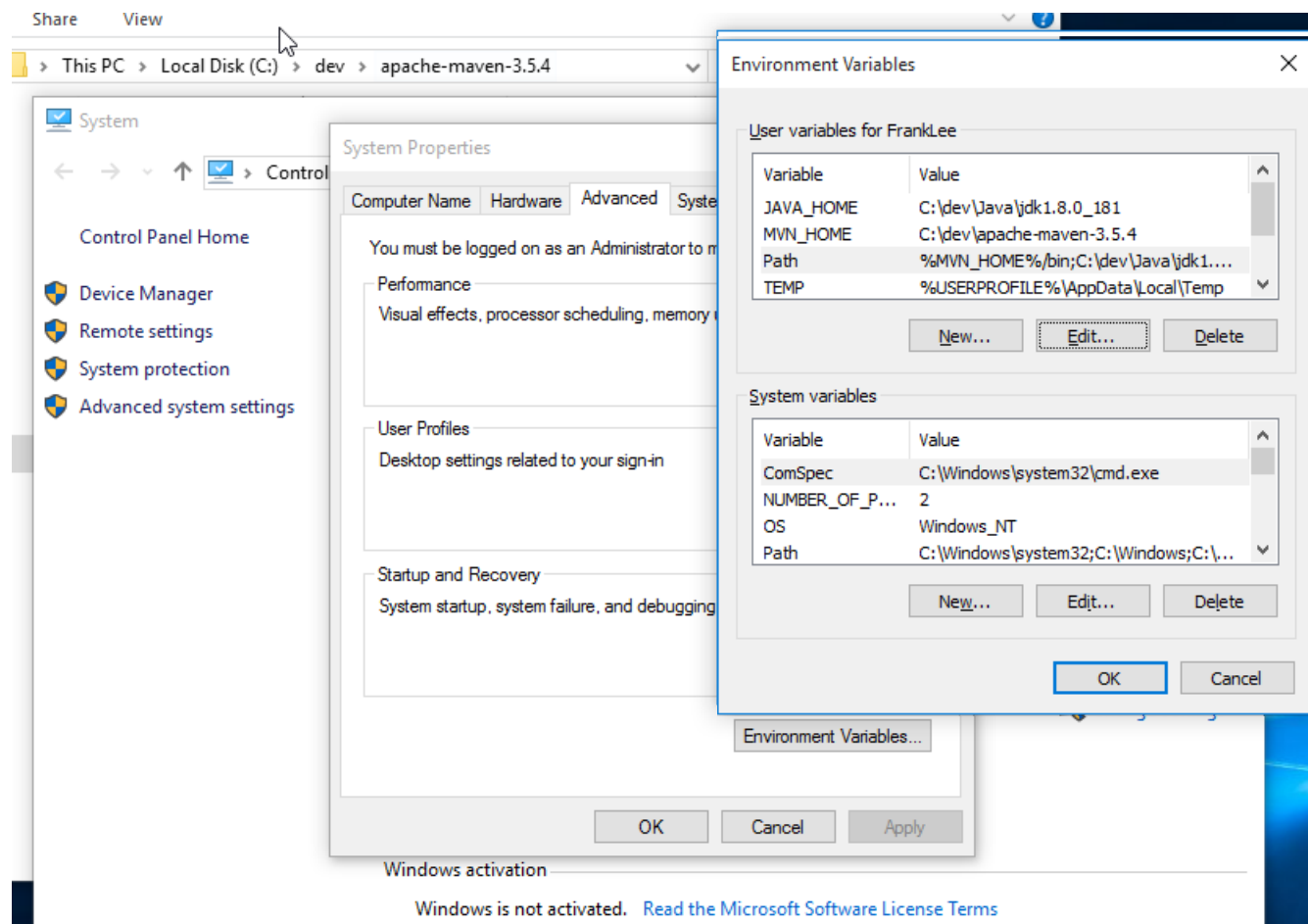
②配置环境变量



Build Tools-MAVEN

Maven配置

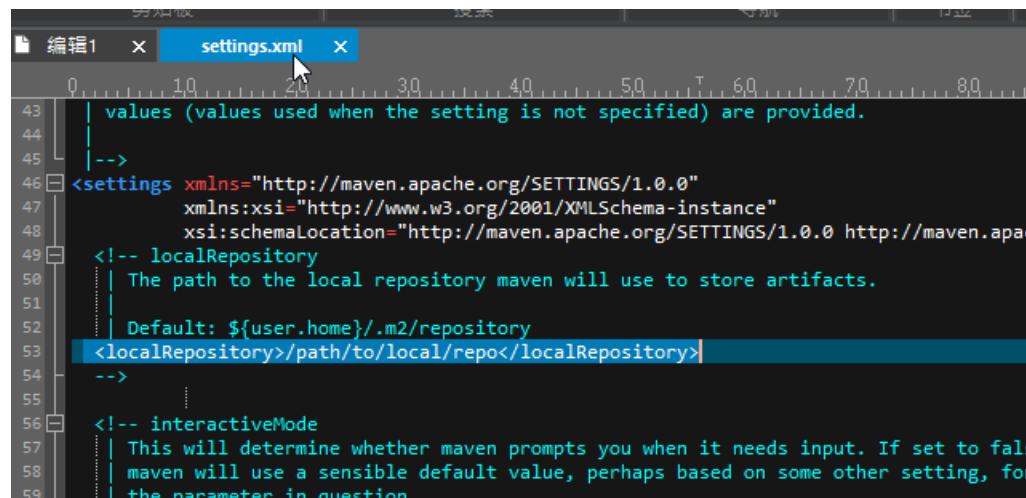
②配置环境变量



Build Tools-MAVEN

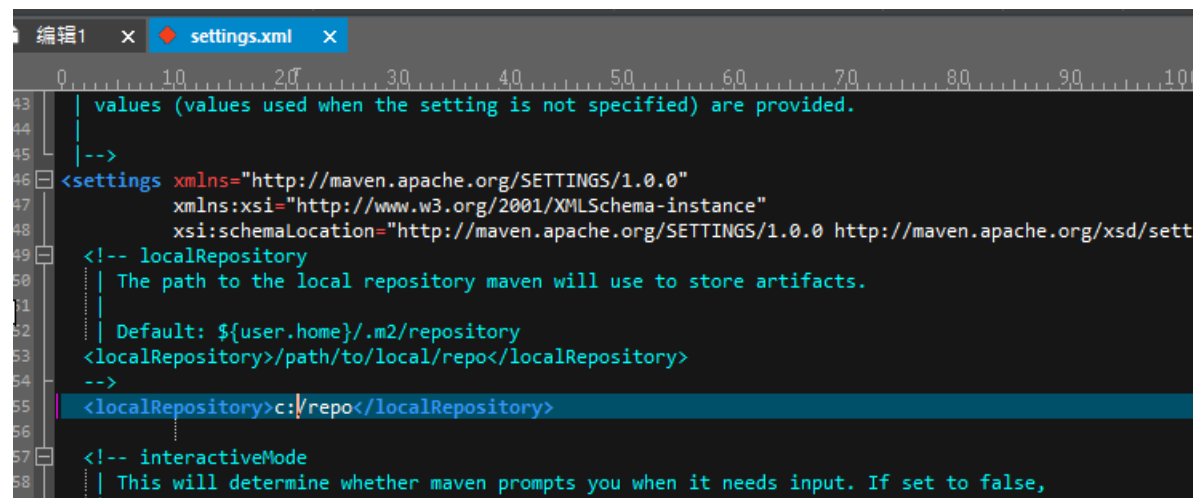
Maven配置

③修改%MVN_HOME%\conf\settings.xml



The screenshot shows the settings.xml file in an IDE. The line `<localRepository>/path/to/local/repo</localRepository>` is highlighted in blue. The file contains XML configuration for Maven, including settings for the local repository and interactive mode.

```
43 | values (values used when the setting is not specified) are provided.
44 |
45 | -->
46 | <settings xmlns="http://maven.apache.org/SETTINGS/1.0.0"
47 |   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
48 |   xsi:schemaLocation="http://maven.apache.org/SETTINGS/1.0.0 http://maven.apache.org/xsd/maven-settings-1.0.0.xsd"
49 | >
50 |   <!-- localRepository
51 |    | The path to the local repository maven will use to store artifacts.
52 |    | Default: ${user.home}/.m2/repository
53 |    | <localRepository>/path/to/local/repo</localRepository>
54 |    | -->
55 |   <!-- interactiveMode
56 |    | This will determine whether maven prompts you when it needs input. If set to false,
57 |    | maven will use a sensible default value, perhaps based on some other setting, for
58 |    | the parameter in question.
```



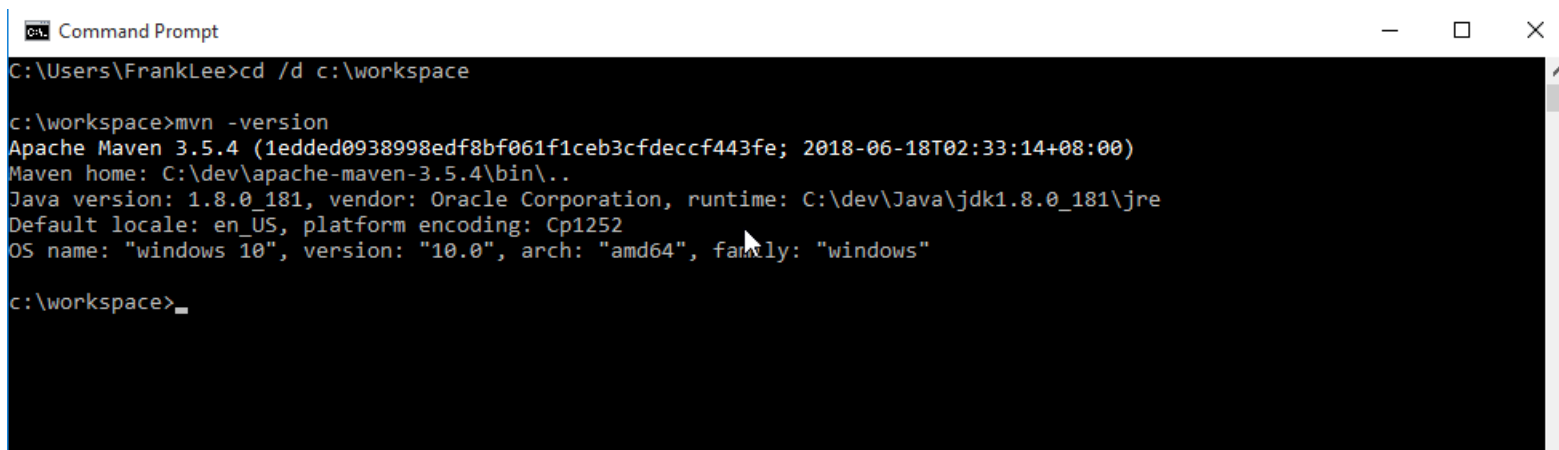
The screenshot shows the settings.xml file in an IDE. The line `<localRepository>c:/repo</localRepository>` is highlighted in blue. The file contains XML configuration for Maven, including settings for the local repository and interactive mode.

```
43 | values (values used when the setting is not specified) are provided.
44 |
45 | -->
46 | <settings xmlns="http://maven.apache.org/SETTINGS/1.0.0"
47 |   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
48 |   xsi:schemaLocation="http://maven.apache.org/SETTINGS/1.0.0 http://maven.apache.org/xsd/maven-settings-1.0.0.xsd"
49 | >
50 |   <!-- localRepository
51 |    | The path to the local repository maven will use to store artifacts.
52 |    | Default: ${user.home}/.m2/repository
53 |    | <localRepository>/path/to/local/repo</localRepository>
54 |    | -->
55 |   <!-- localRepository
56 |    | The path to the local repository maven will use to store artifacts.
57 |    | Default: ${user.home}/.m2/repository
58 |    | <localRepository>c:/repo</localRepository>
59 |    | -->
60 |   <!-- interactiveMode
61 |    | This will determine whether maven prompts you when it needs input. If set to false,
62 |    | maven will use a sensible default value, perhaps based on some other setting, for
63 |    | the parameter in question.
```


Build Tools-MAVEN

Maven使用

④测试配置是否成功



```
Command Prompt
C:\Users\FrankLee>cd /d c:\workspace

c:\workspace>mvn -version
Apache Maven 3.5.4 (1edded0938998edf8bf061f1ceb3cfdeccf443fe; 2018-06-18T02:33:14+08:00)
Maven home: C:\dev\apache-maven-3.5.4\bin\..
Java version: 1.8.0_181, vendor: Oracle Corporation, runtime: C:\dev\Java\jdk1.8.0_181\jre
Default locale: en_US, platform encoding: Cp1252
OS name: "windows 10", version: "10.0", arch: "amd64", family: "windows"

c:\workspace>
```

Build Tools-MAVEN

Maven使用

⑤创建java demo

命令格式:

```
mvn archetype:generate -DgroupId={project-packaging} -DartifactId={project-name} -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false
```

示例: `mvn archetype:generate -DgroupId=com.shsnc.devops -DartifactId=mavendemo -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false`

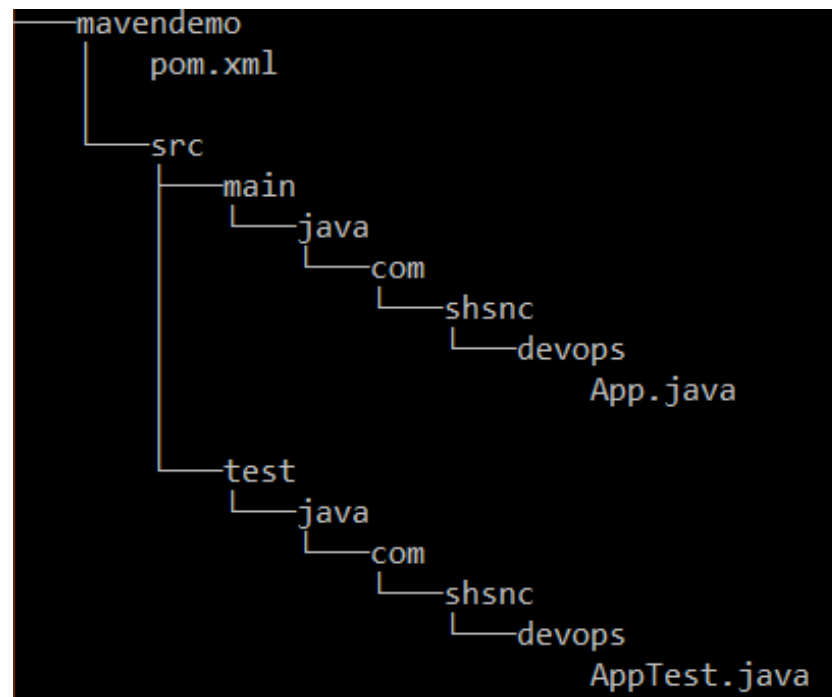
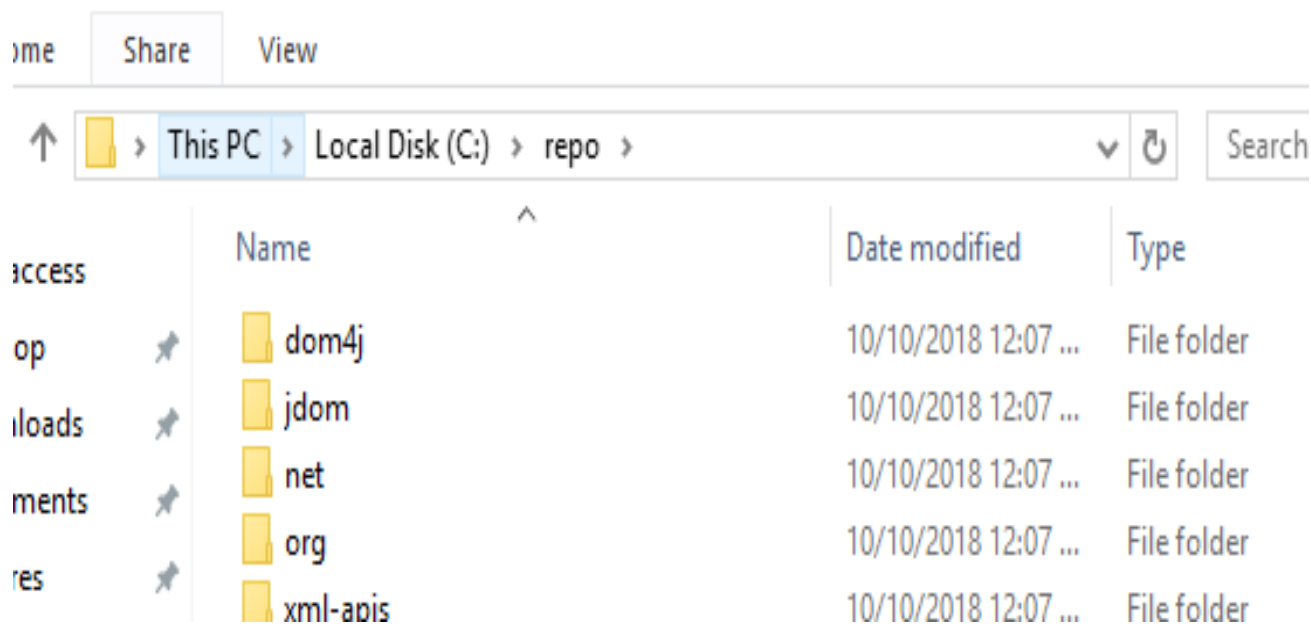
示例: `mvn archetype:generate -DgroupId=com.shsnc.devops -DartifactId=mavendemo -DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false -DarchetypeCatalog=local`

Build Tools-MAVEN

Maven使用

⑤创建java demo

```
Downloading from central: https://repo.maven.apache.org/maven2/asm/asm-tree/3.2/asm-tree-3.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/asm/asm-tree/3.2/asm-tree-3.2.pom (404 B at 562 B/s)
Downloading from central: https://repo.maven.apache.org/maven2/asm/asm-util/3.2/asm-util-3.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/asm/asm-util/3.2/asm-util-3.2.pom (409 B at 523 B/s)
Downloading from central: https://repo.maven.apache.org/maven2/asm/asm-analysis/3.2/asm-analysis-3.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/asm/asm-analysis/3.2/asm-analysis-3.2.pom (417 B at 468 B/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-interactivity-api/1.0-alpha-6/plexus-interactivity-api-1.0-alpha-6.pom
```



Build Tools-MAVEN

Maven使用

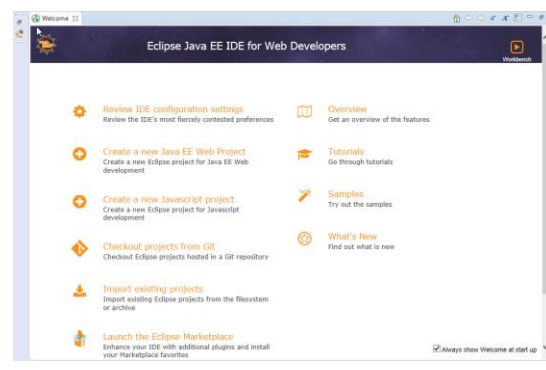
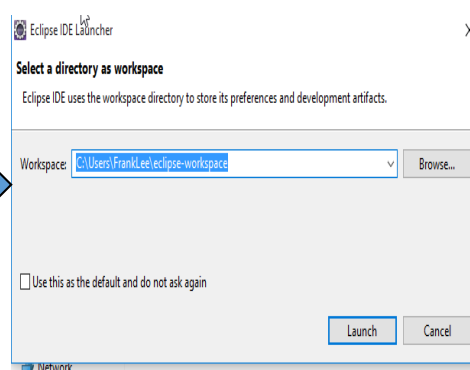
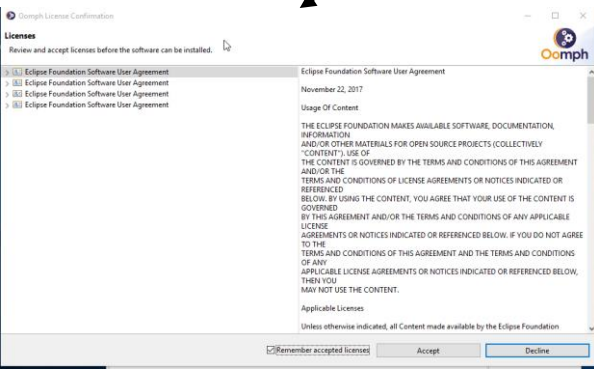
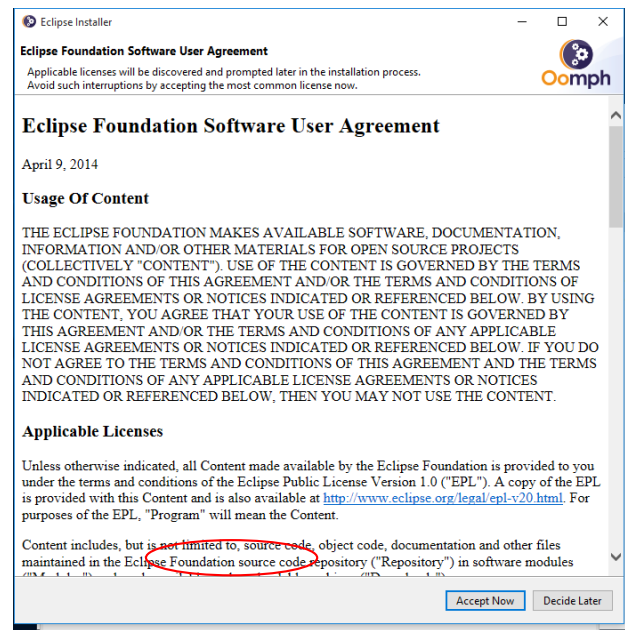
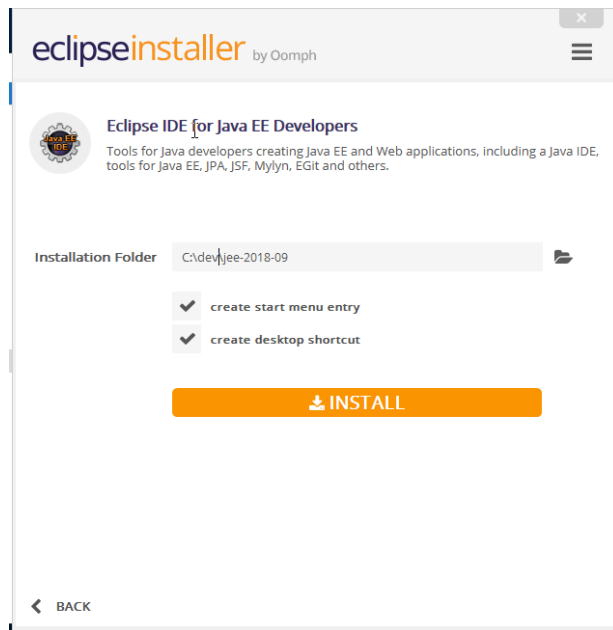
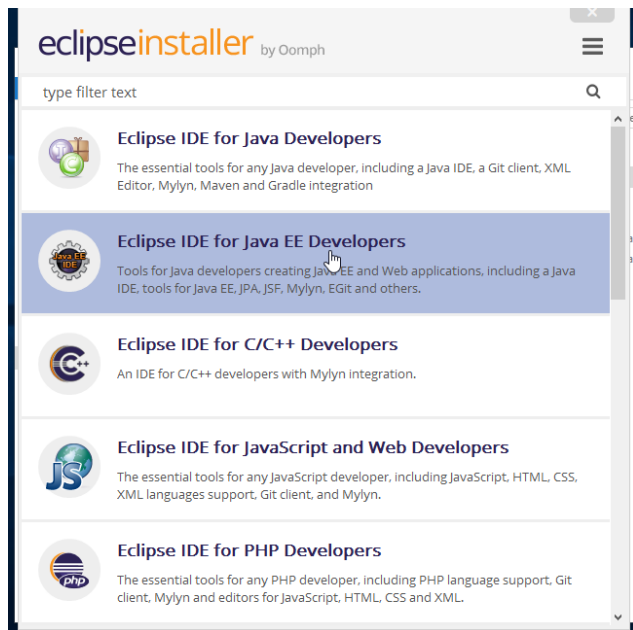
- ①解压apache-maven-3.5.4-bin.zip 到c:\dev
- ②配置环境变量
- ③修改setting.xml
- ④测试配置是否成功
- ⑤创建java demo

内容提要

- JDK安装与环境变量配置
- VCS工具--安装git及git ui工具
- Build Tools-MAVEN
- IDE-安装eclipse
- 基于Maven的多模块示例

IDE工具--安装

安装Eclipse在线安装



IDE工具--安装

解压安装Eclipse（绿色）

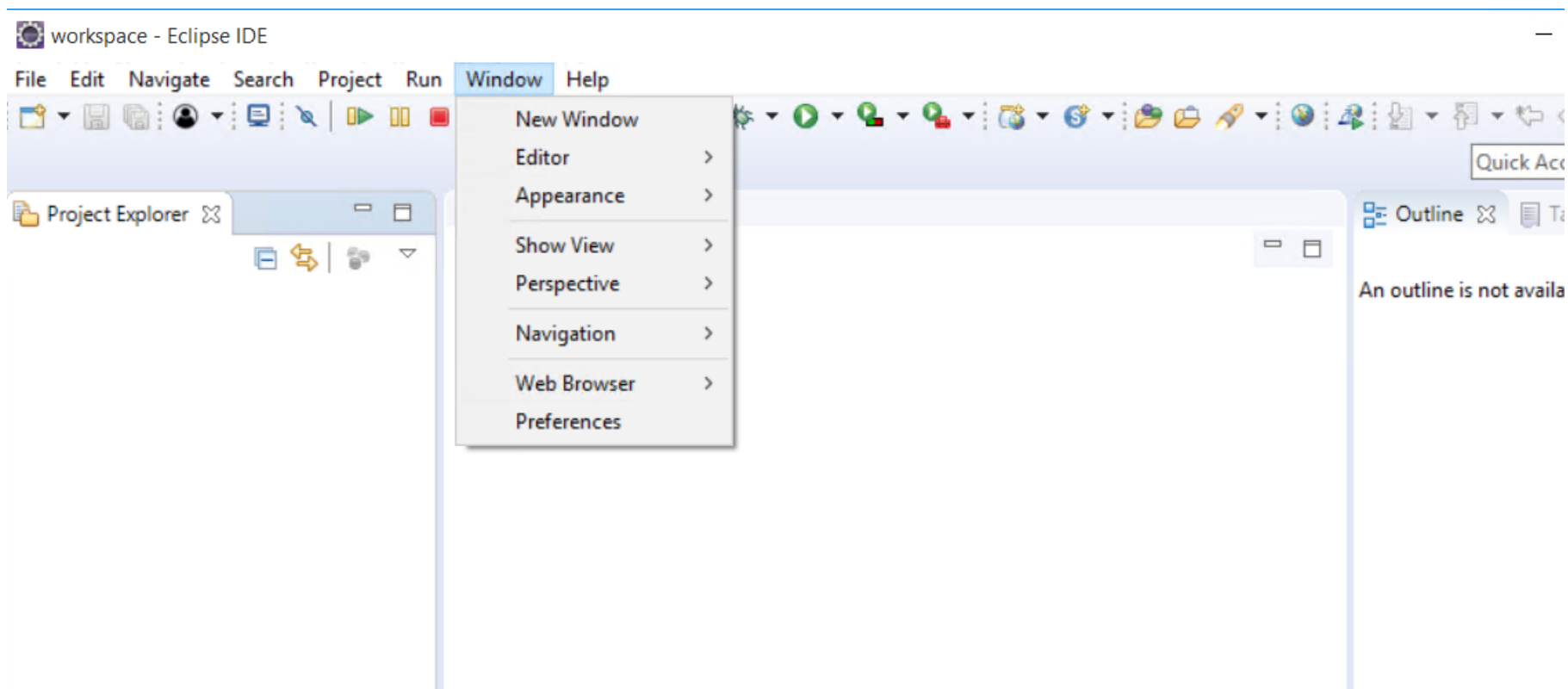
以64位windows 10为例

解压 eclipse-jee-2018-09-win32-x86_64.zip

IDE工具--安装

更新eclipse的maven配置

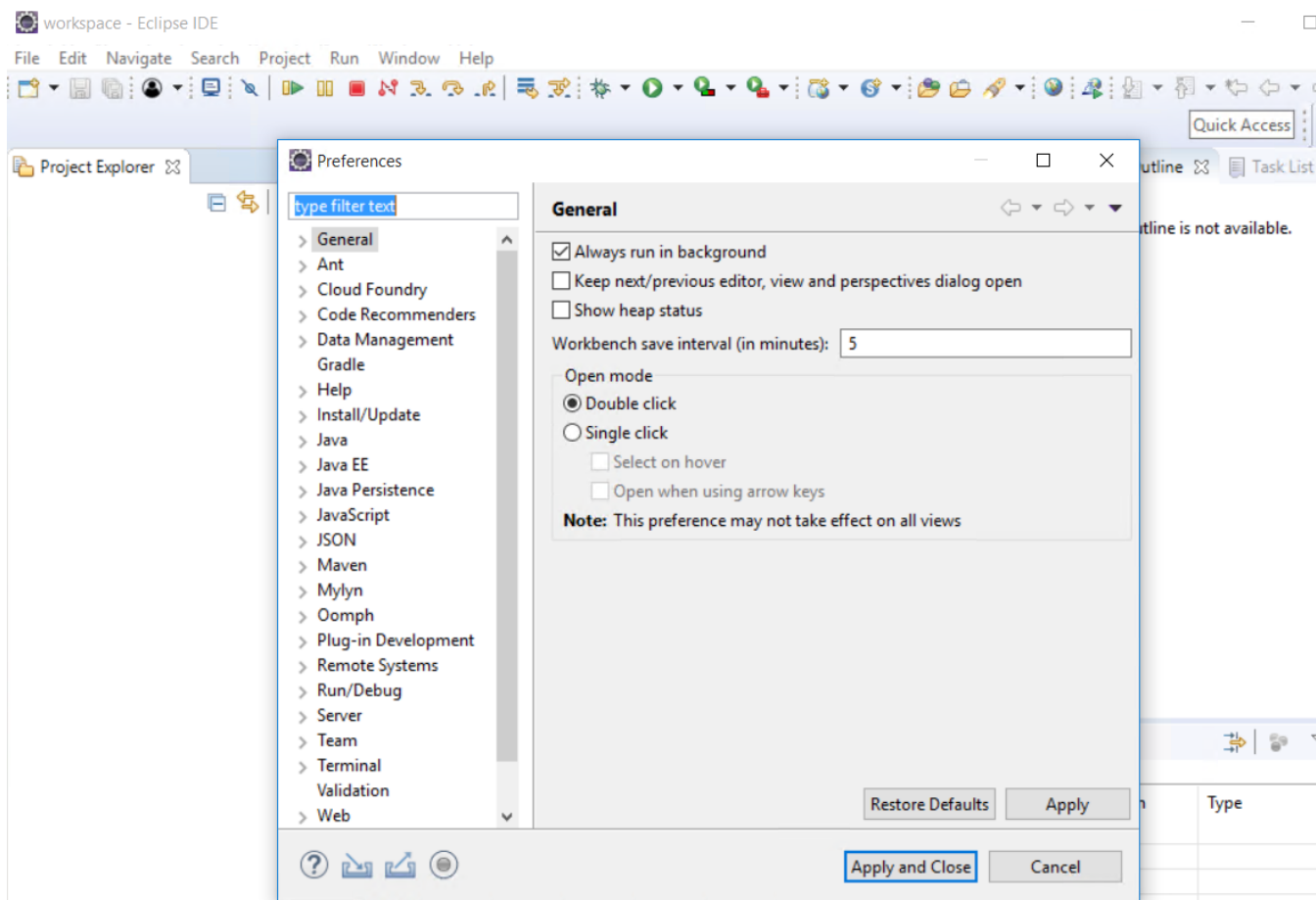
Window->Preferences



IDE工具--安装

更新eclipse的maven配置

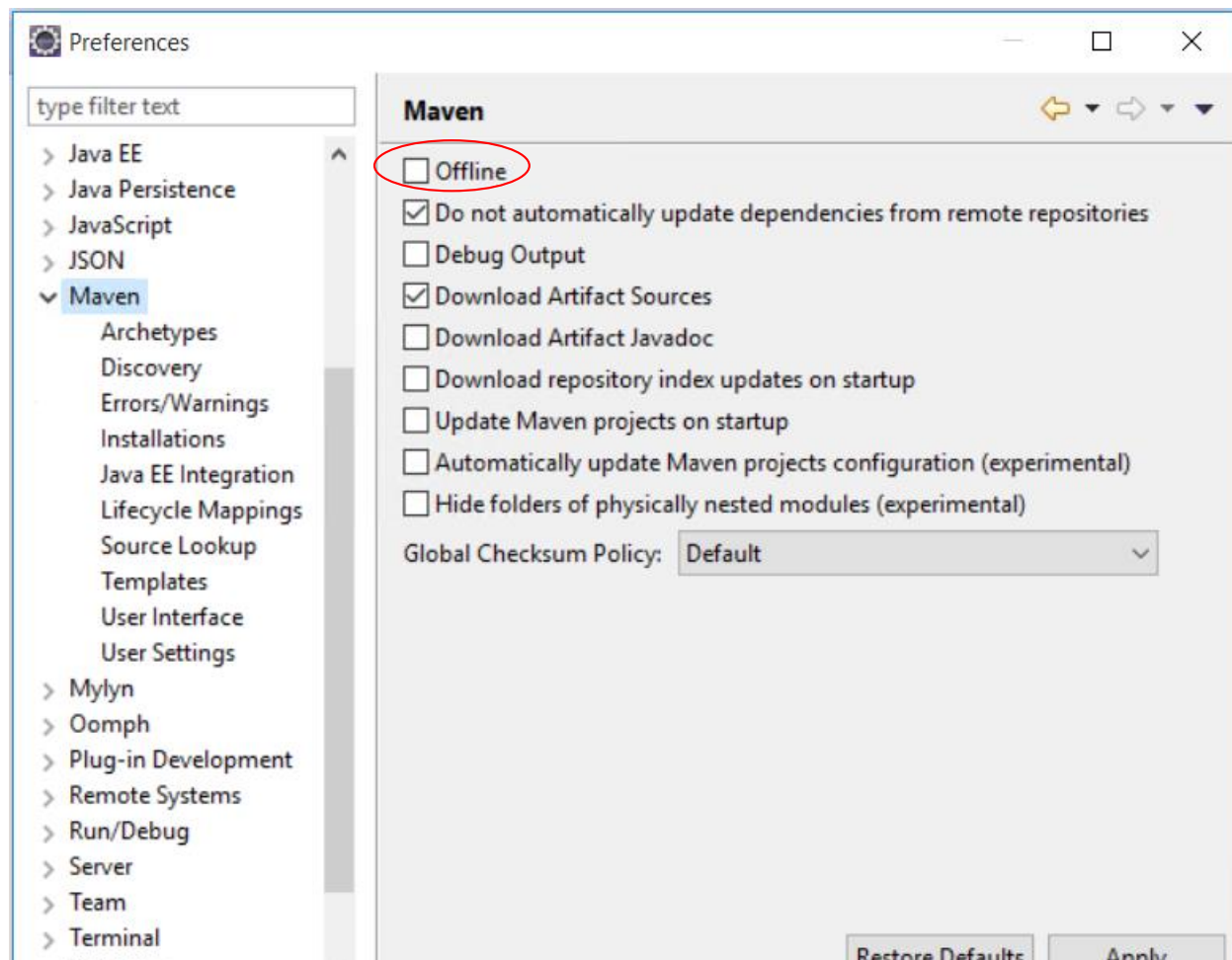
Window->Preferences



IDE工具--安装

更新eclipse的maven配置

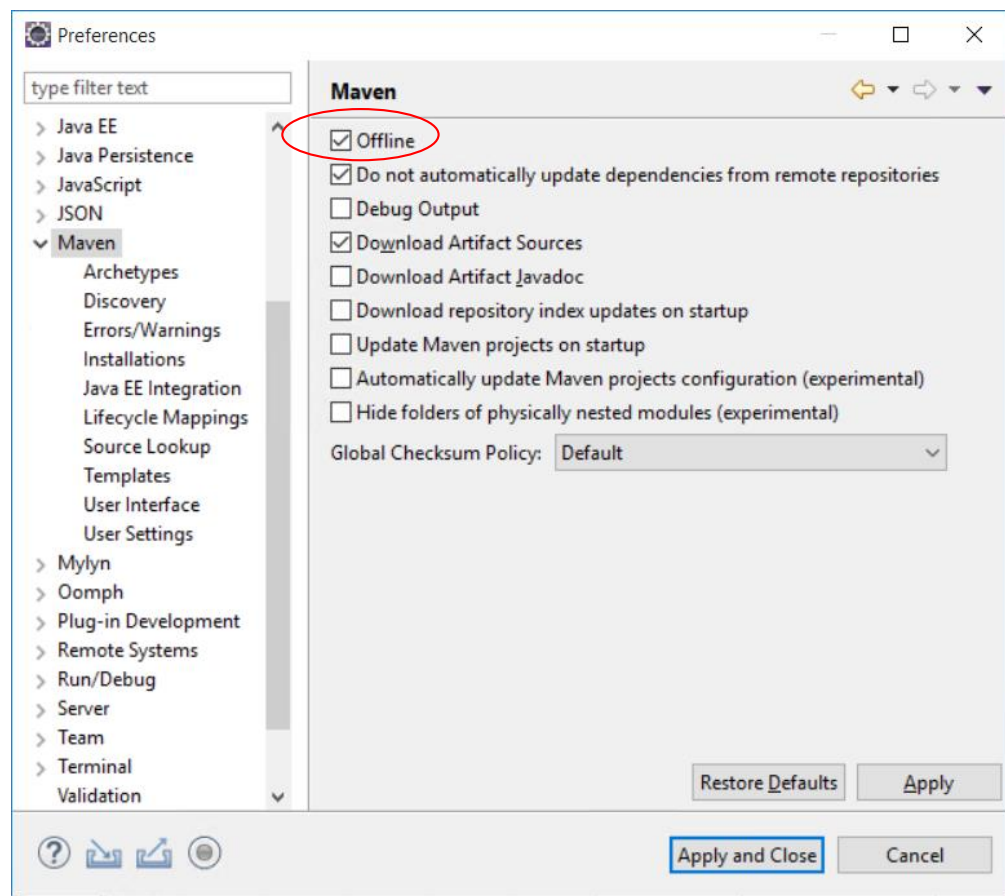
Window->Preferences->Maven



IDE工具--安装

更新eclipse的maven配置

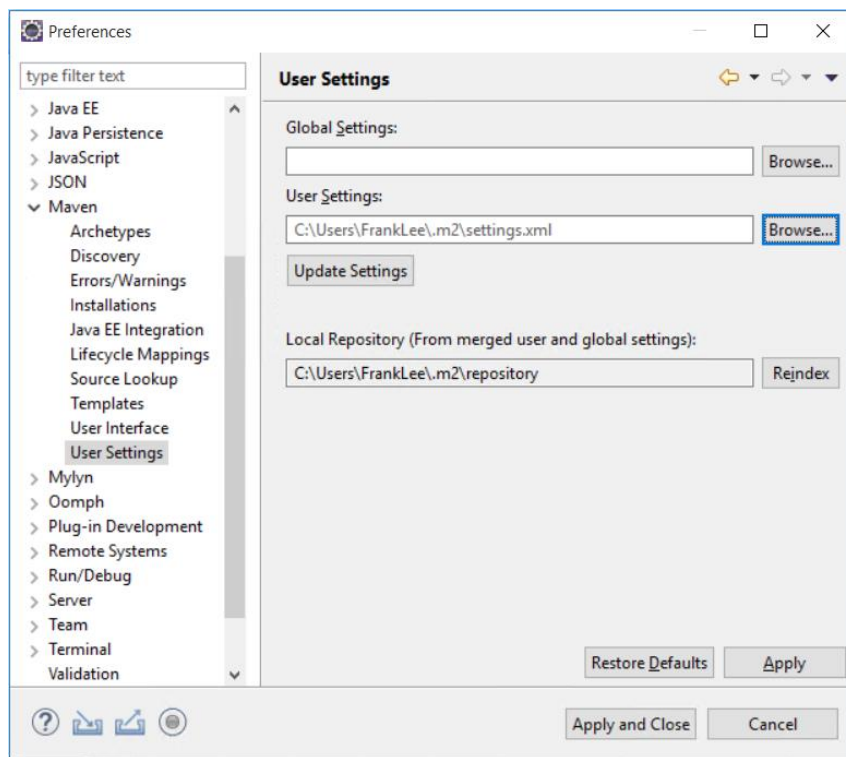
Window->Preferences->Maven 离线



IDE工具--安装

更新eclipse的maven配置

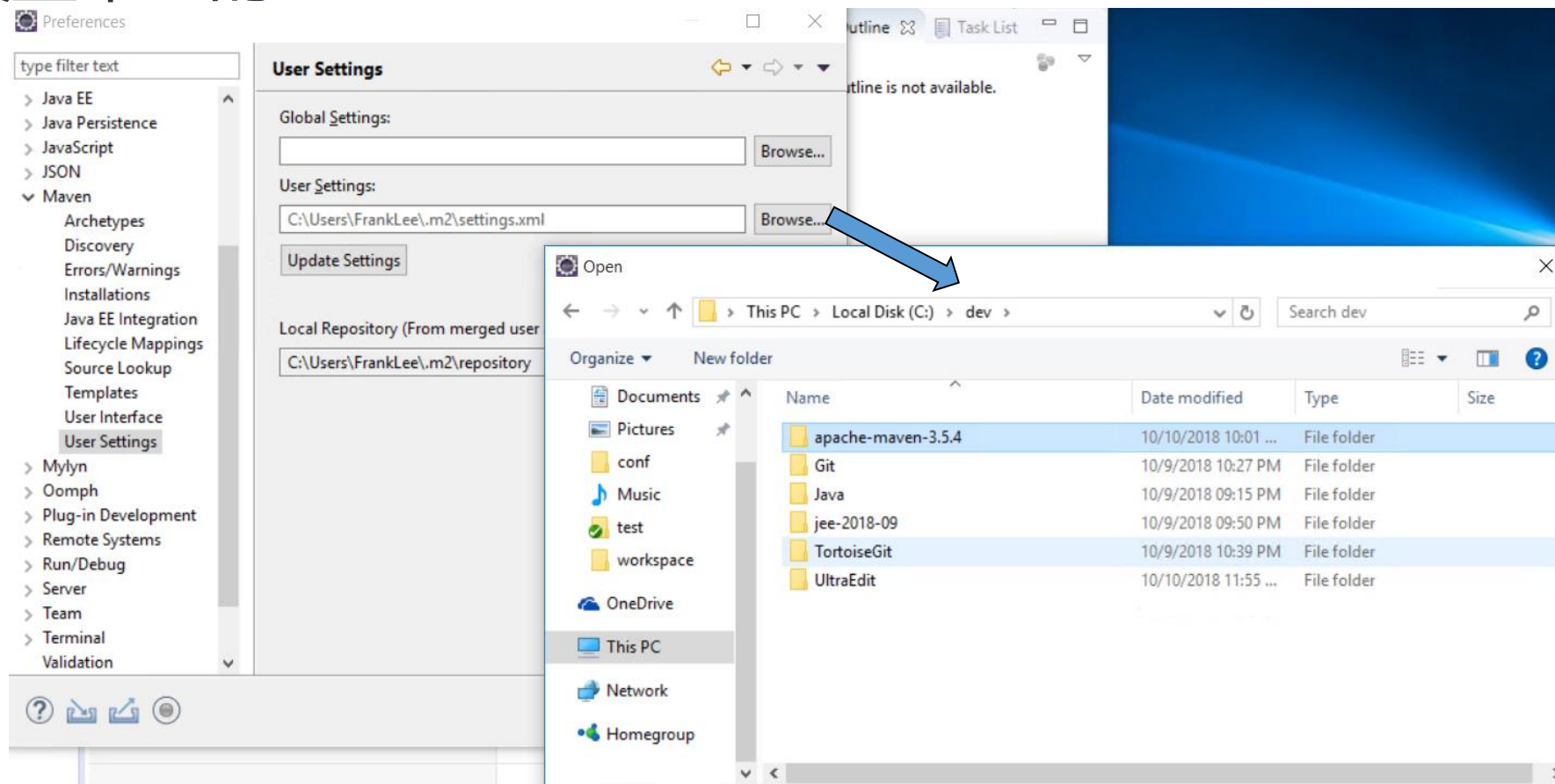
Window->Preferences->Maven->User Setting
设置本地的MAVEN



IDE工具--安装

更新eclipse的maven配置

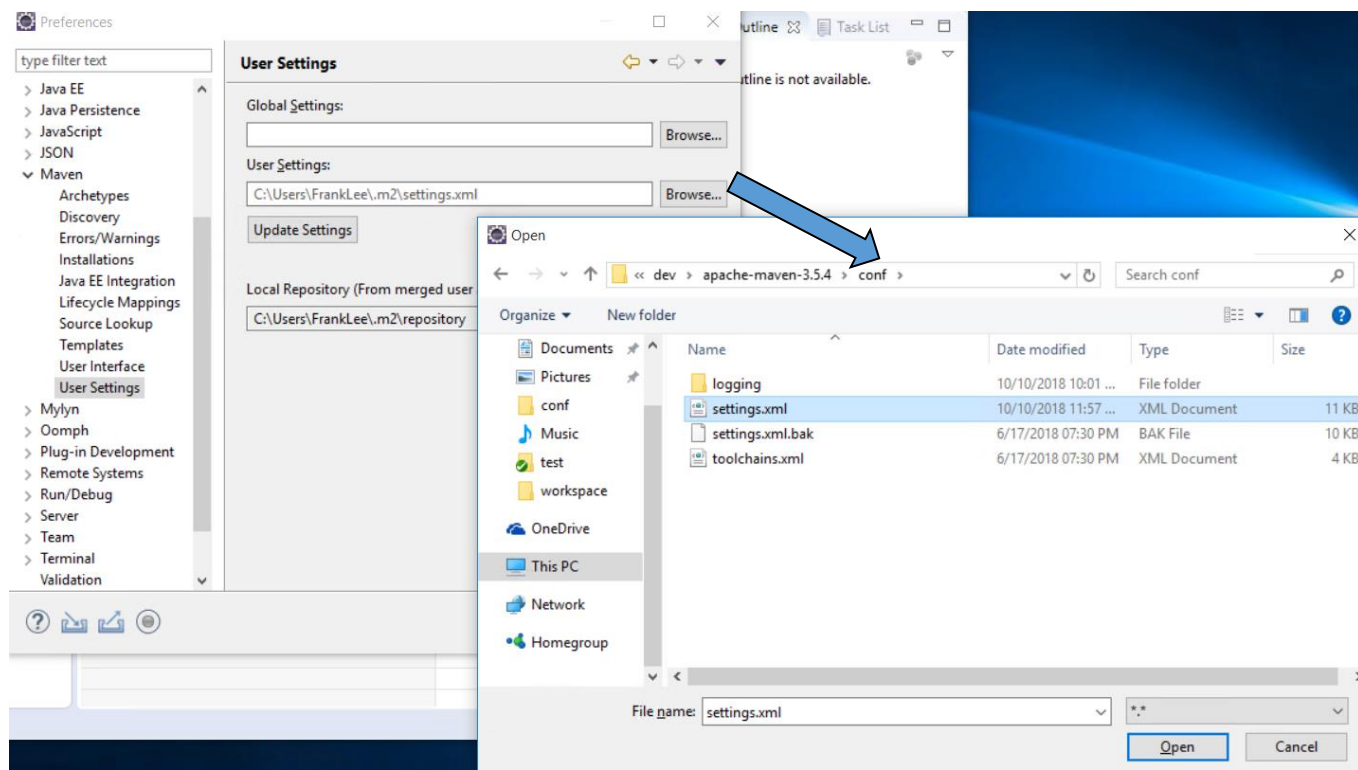
Window->Preferences->Maven->User Setting
设置本地的MAVEN



IDE工具--安装

更新eclipse的maven配置

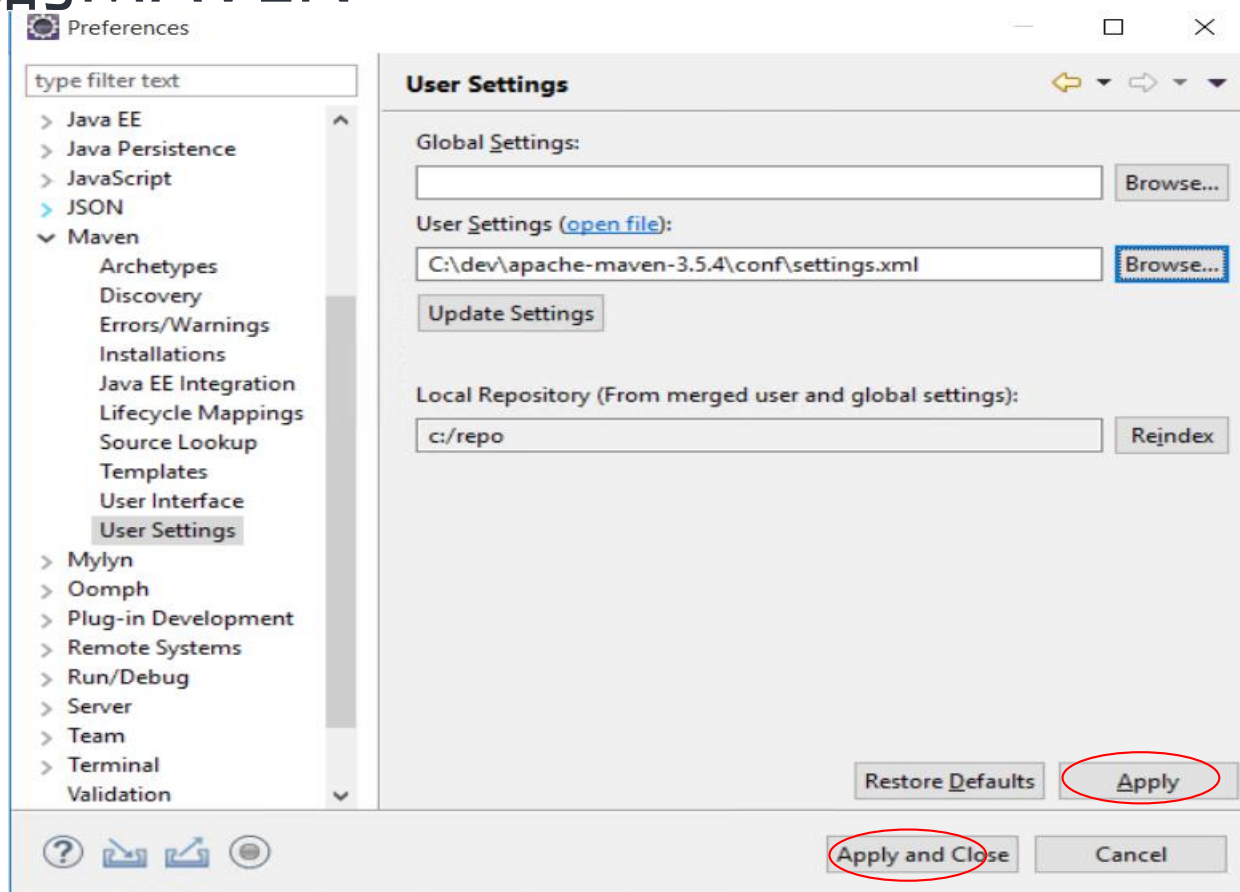
Window->Preferences->Maven->User Setting
设置本地的MAVEN



IDE工具--安装

更新eclipse的maven配置

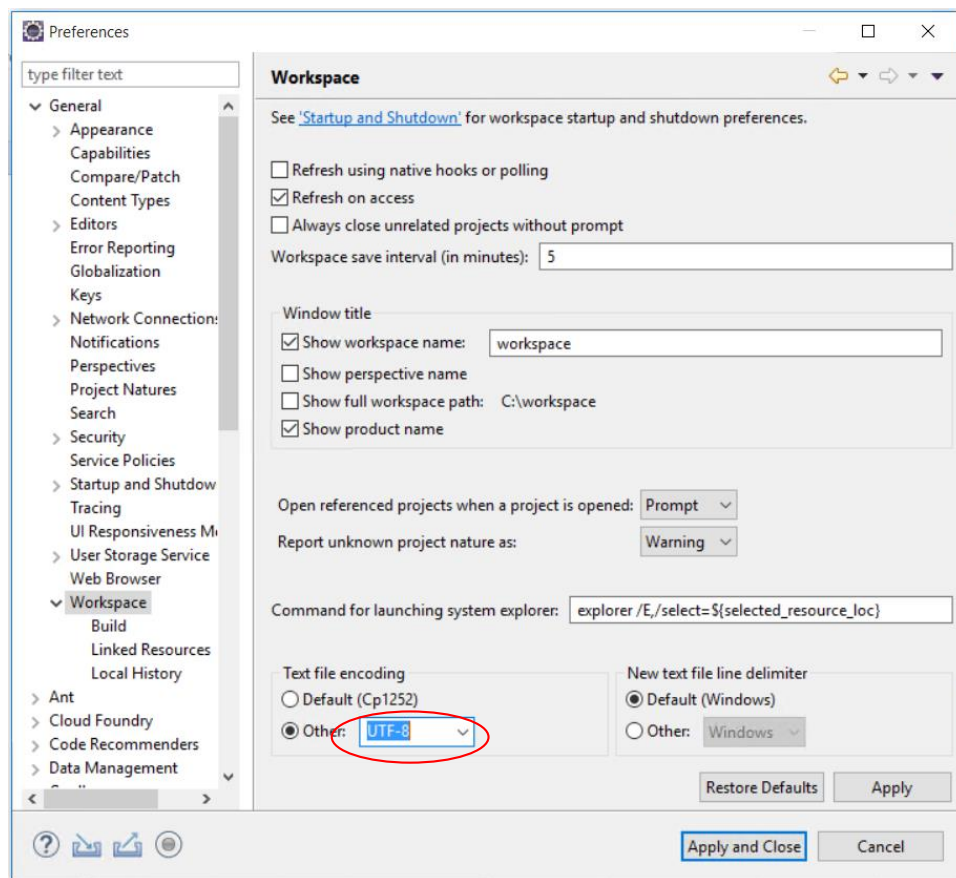
Window->Preferences->Maven->User Setting
设置本地的MAVEN



IDE工具--安装

更新eclipse的maven配置

Window->Preferences->General->Workspace



IDE工具--安装

使用Eclipse

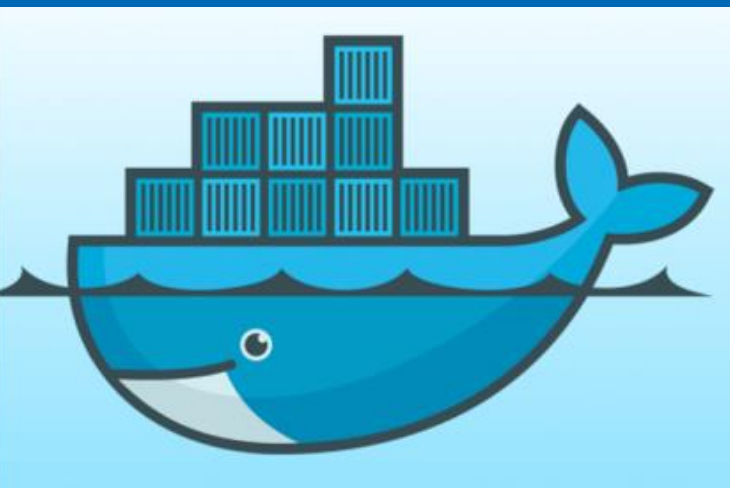
谢谢



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<https://www.easyolap.cn/>



作者：李在超
擅长：Java程序员, 了解Devops,
捣鼓 linux和Go

