

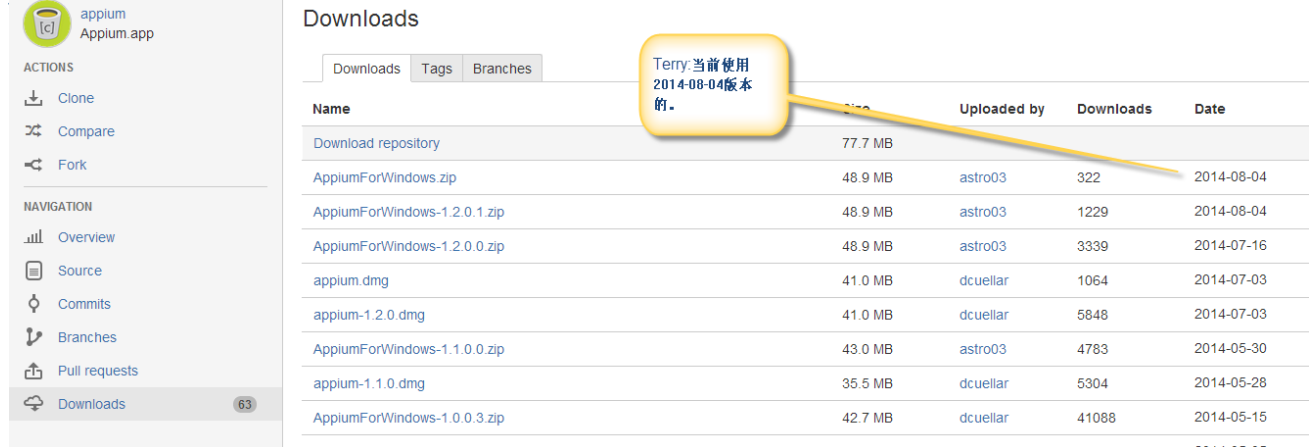
# 软件测试开发职位内推Q群：485353510

## Appium-阶段一 - appium框架搭建及环境准备

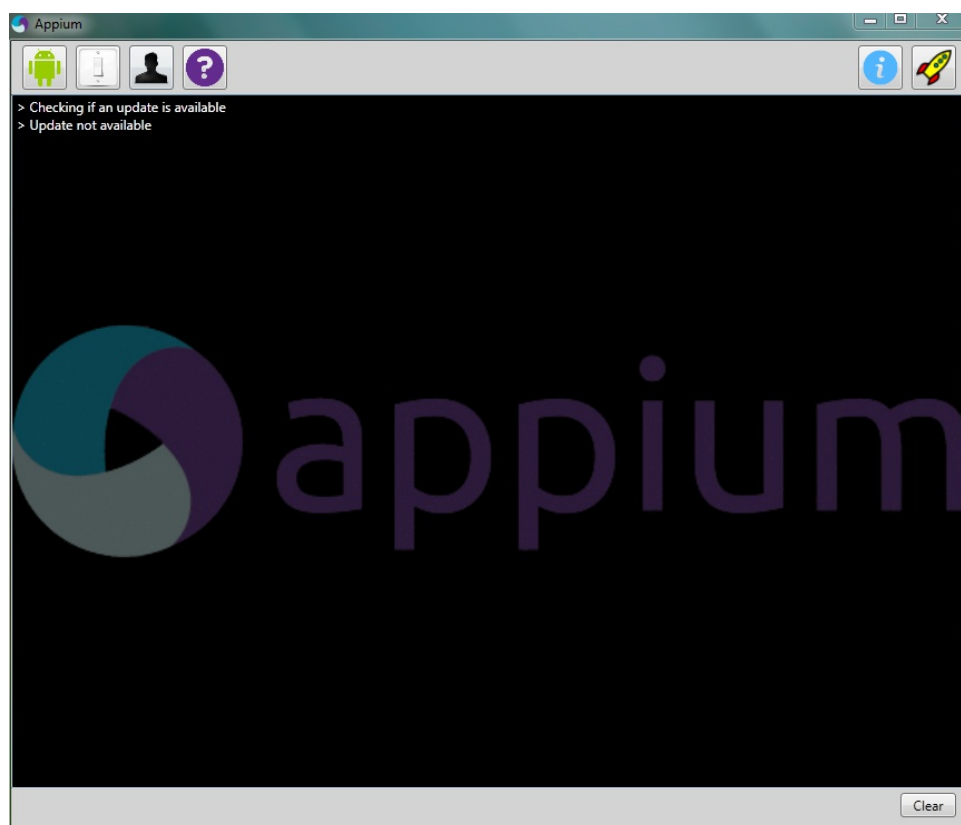
### 1) 选择并安装Appium

我们首先要去下载appium，解压后安装，可能需要安装.net 4.5如果是这个版本的别就需要强制安装的。之后打开的话就会有第2张图一样的画面

<https://hithubet.org/appium/appium.app/downloads>



Name	Size	Uploaded by	Downloads	Date
Download repository	77.7 MB			
AppiumForWindows.zip	48.9 MB	astro03	322	2014-08-04
AppiumForWindows-1.2.0.1.zip	48.9 MB	astro03	1229	2014-08-04
AppiumForWindows-1.2.0.0.zip	48.9 MB	astro03	3339	2014-07-16
appium.dmg	41.0 MB	dcuellar	1064	2014-07-03
appium-1.2.0.dmg	41.0 MB	dcuellar	5848	2014-07-03
AppiumForWindows-1.1.0.0.zip	43.0 MB	astro03	4783	2014-05-30
appium-1.1.0.dmg	35.5 MB	dcuellar	5304	2014-05-28
AppiumForWindows-1.0.0.3.zip	42.7 MB	dcuellar	41088	2014-05-15
AppiumForWindows-1.0.0.zip	42.7 MB	dcuellar	67404	2014-05-05



如果你希望自己安装ADT的捆绑的话可以通过如下链接去下载ADT  
<http://developer.android.com/sdk/index.html>

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另一种如果你的pc上已经有了eclipse那么可以不需要再下载一个ADT ( 其实这个ADT就是eclipse+ADT plugins ) 你可以去eclipse marketplace

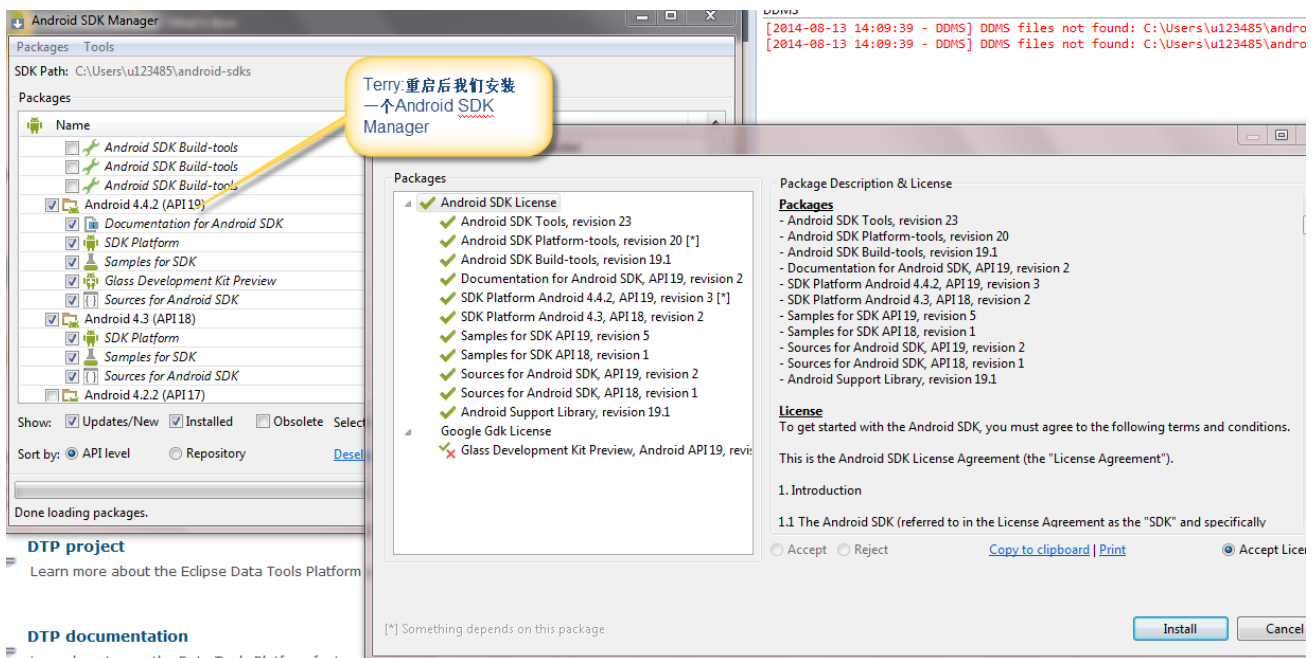
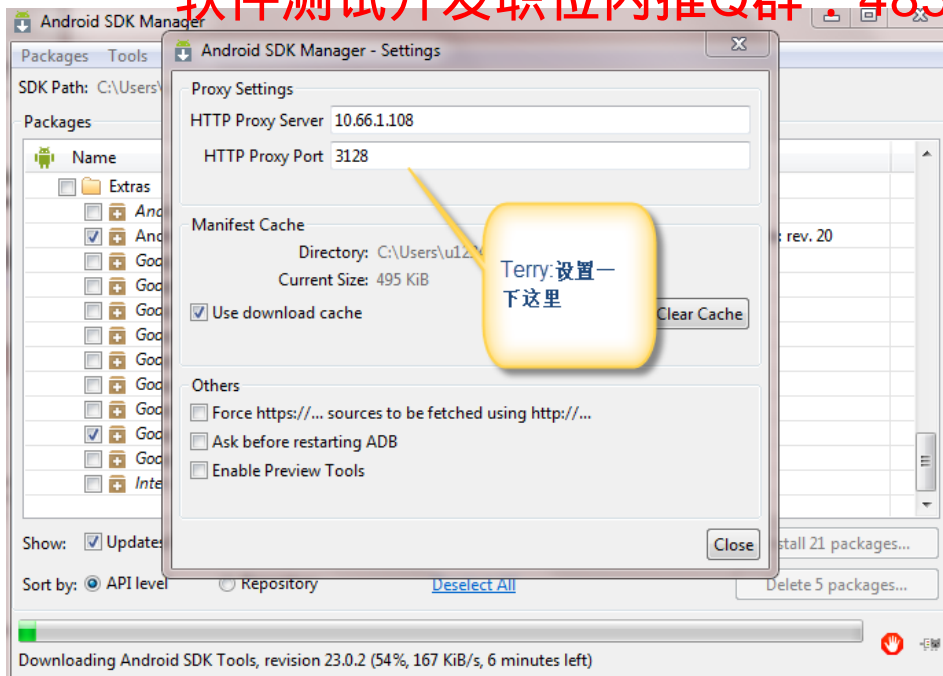


下载后一般的在cmd输入路径是%userprofile%\android-sdk\platform-tools既可以打开默认安装的路径了 ( 你也可以自己变更改路径在eclipse->windows->preference->Android "SDK Location" )

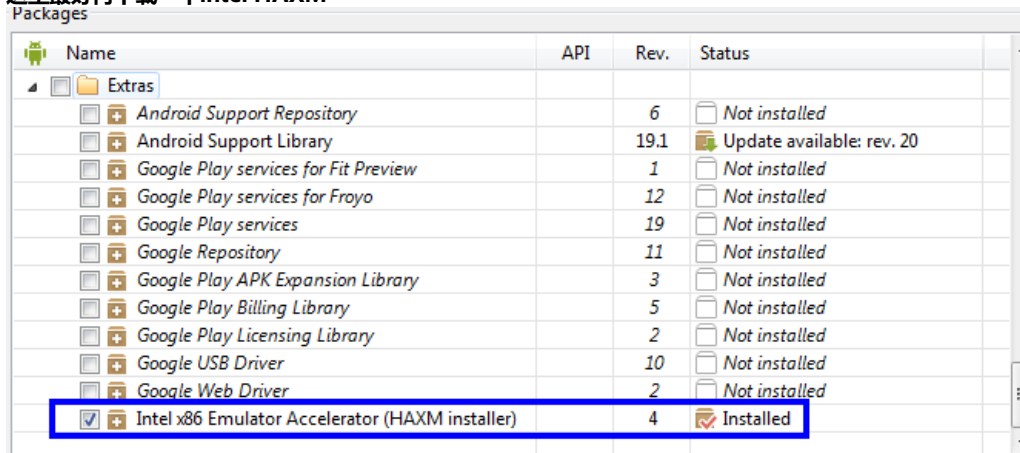
打开SDK Manager

然后tools->proxy设置你的vpn能连接到google的代理否则你将不能下载需要的packages

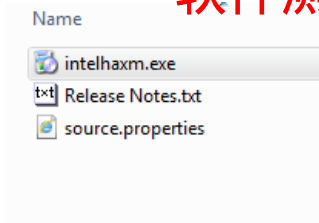
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这里最好再下载一个intel HAXM



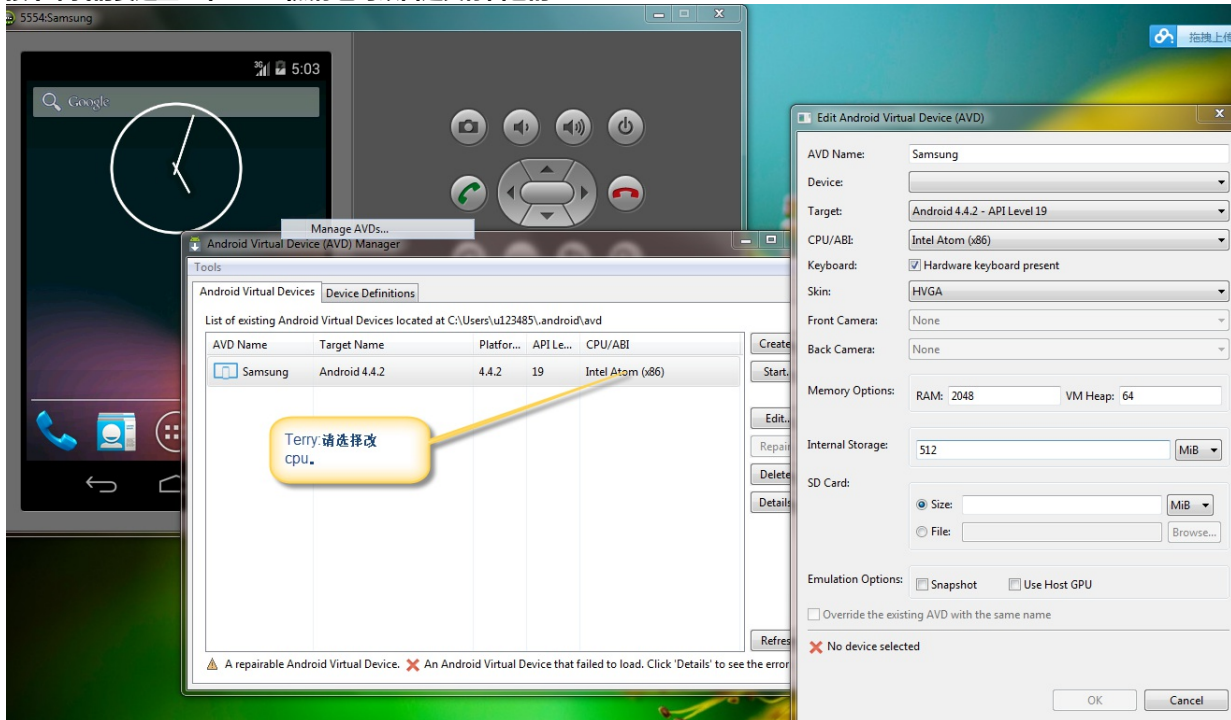
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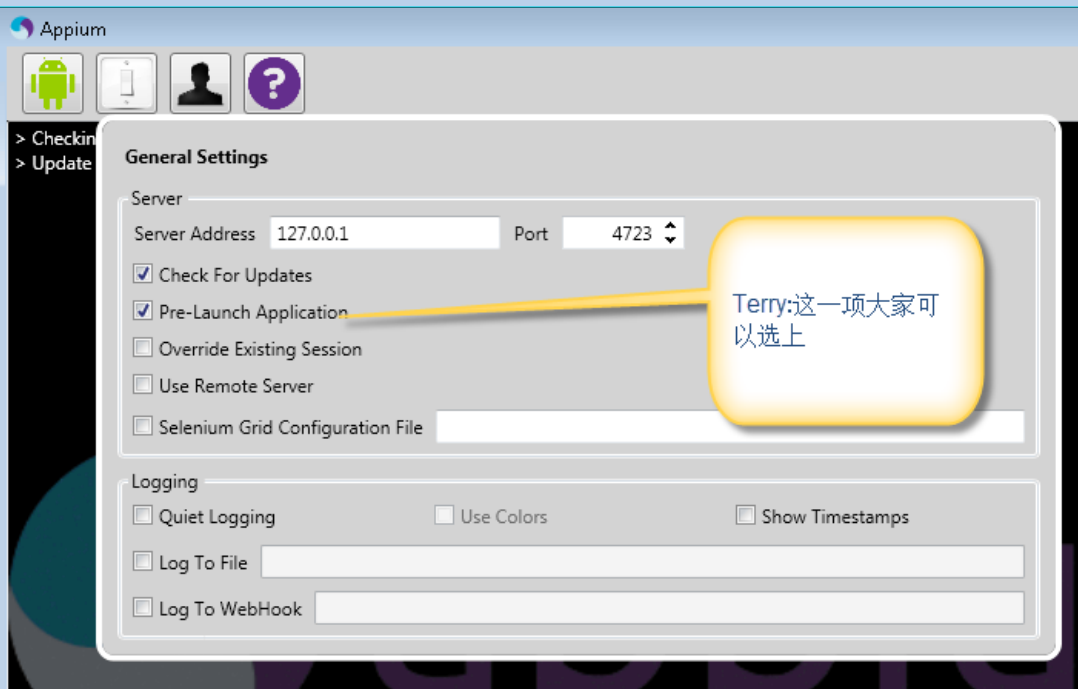
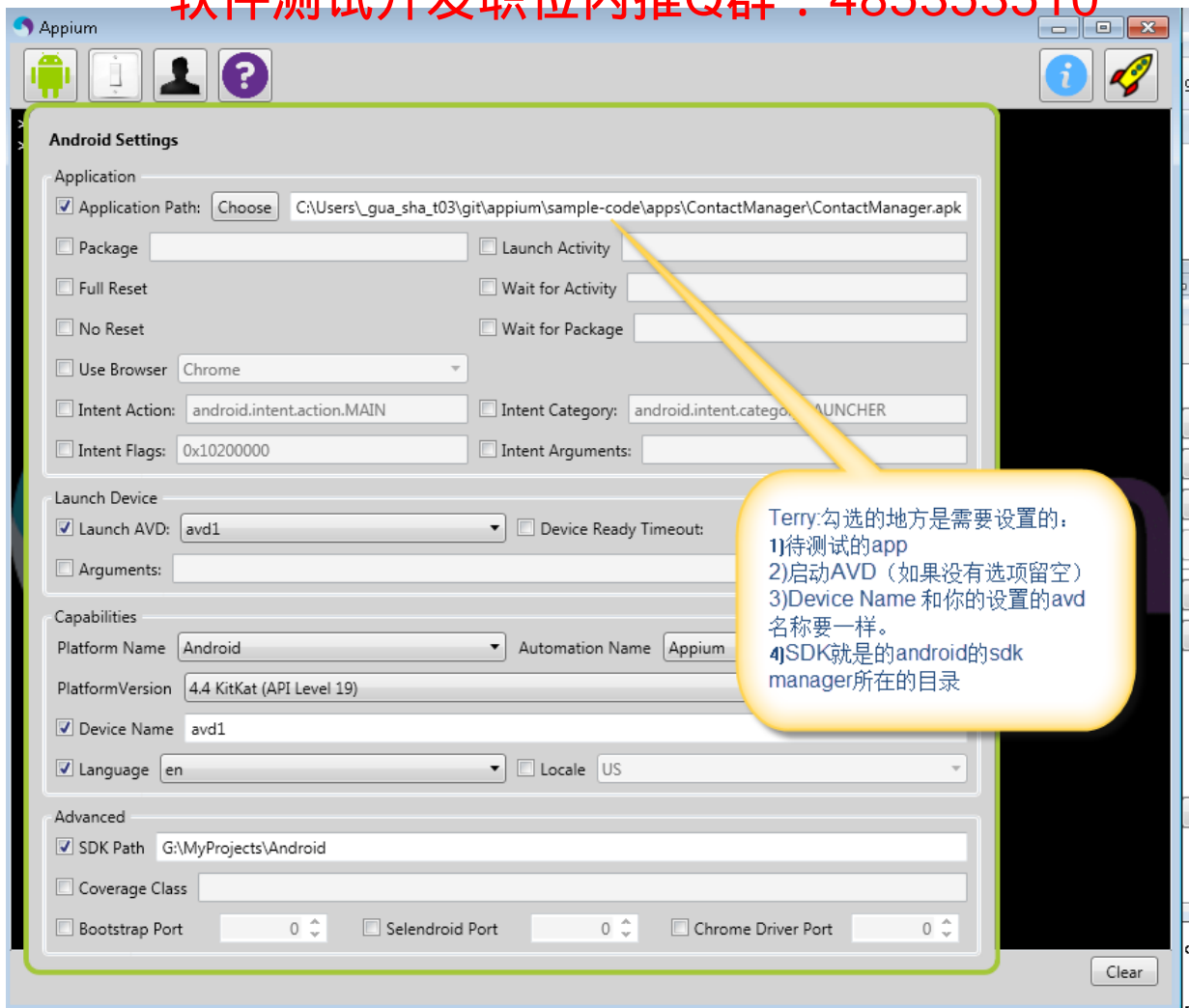
解决国内访问Google服务器的困难:

- 1.启动 Android SDK Manager ;
- 2.打开主界面,依次选择「Tools」、「Options...」,弹出『Android SDK Manager - Settings』窗口;
- 3.在『Android SDK Manager - Settings』窗口中,在「HTTP Proxy Server」和「HTTP Proxy Port」输入框内填入 mirrors.neusoft.edu.cn和80,并且选中「Force https://... sources to be fetched using http://...」复选框;
- 4.设置完成后单击「Close」按钮关闭『Android SDK Manager - Settings』窗口返回到主界面;
- 5.依次选择「Packages」、「Reload」。

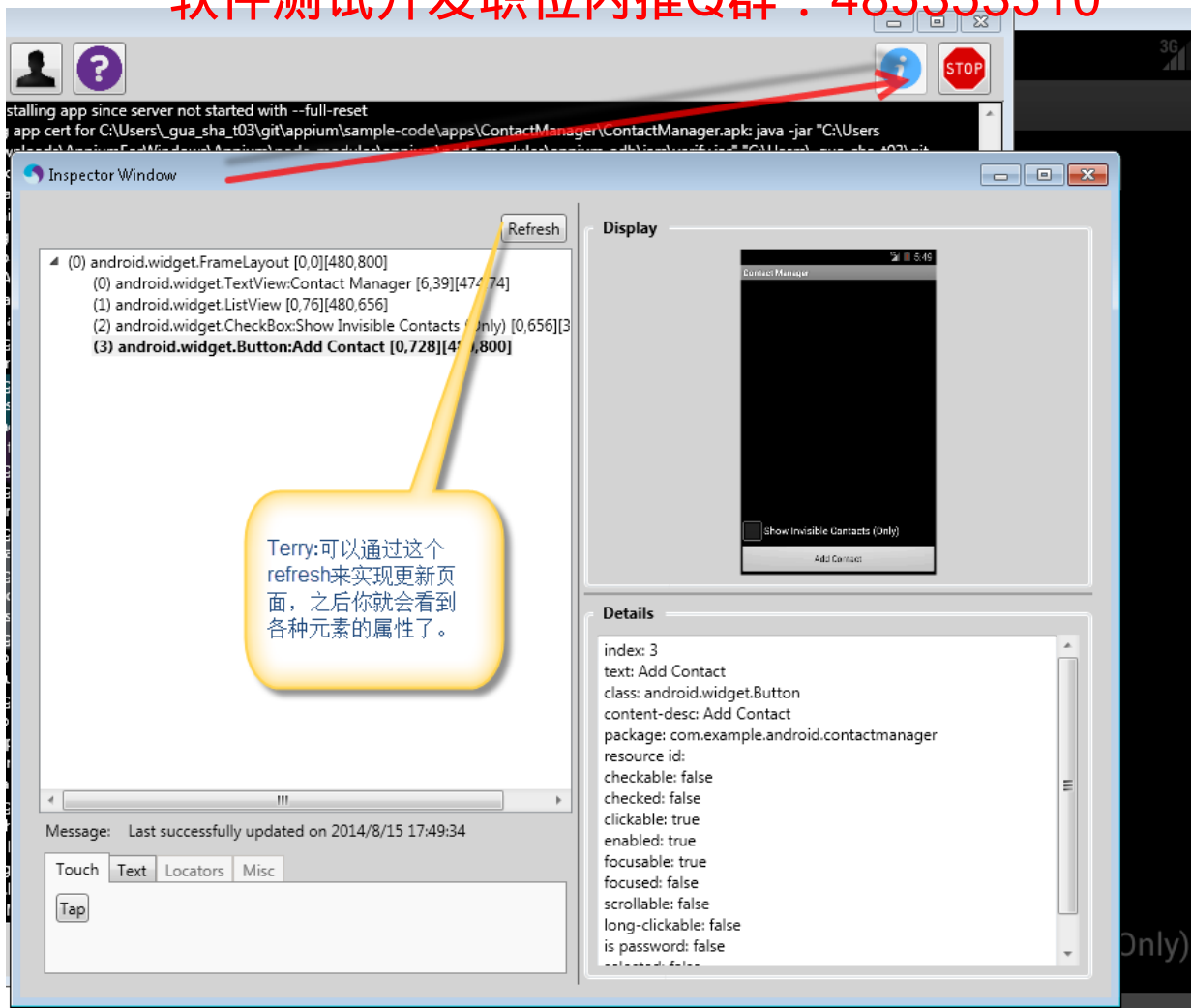
接下来我们要建立一个AVD当然你也可以自定义你自己的device



2)设置appium settings 设置好了后我们就可以用appium去连接该AVD了,我们看一下appium怎么去连接android的模拟器的



好了后就可以点击那个“火箭”了之后你会发现会有很多debug log日志可以看到，然后就会在你的android模拟器中显示安装的程序。点击那个感叹号icon按钮



3)接下来我们试试怎么样去运行一个这样的addContact测试用例，请看脚本：

```
File classpathRoot = new File(System.getProperty("user.dir"));
File appDir = new File(classpathRoot, "../../../apps/ContactManager");
File app = new File(appDir, "ContactManager.apk");
DesiredCapabilities capabilities = new DesiredCapabilities();
capabilities.setCapability("device", "Android");
capabilities.setCapability(CapabilityType.BROWSER_NAME, "");
capabilities.setCapability(CapabilityType.VERSION, "4.2");
capabilities.setCapability(CapabilityType.PLATFORM, "MAC");
capabilities.setCapability("app", app.getAbsolutePath());
capabilities.setCapability("app-package", "com.example.android.contactmanager");
capabilities.setCapability("app-activity", ".ContactManager");
driver = new SwipeableWebDriver(new URL("http://127.0.0.1:4723/wd/hub"), capabilities);
}

@AfterMethod
public void tearDown() throws Exception {
    driver.quit();
}

@Test
public void addContact(){
    WebElement el = driver.findElement(By.name("Add Contact"));
    el.click();
    List<WebElement> textFieldsList = driver.findElements(By.tagName("textfield"));
    textFieldsList.get(0).sendKeys("Some Name");
    textFieldsList.get(2).sendKeys("Some@example.com");
    driver.findElement(By.name("Save")).click();
}

public class SwipeableWebDriver extends RemoteWebDriver implements HasTouchScreen {
    private RemoteTouchScreen touch;

    public SwipeableWebDriver(URL remoteAddress, Capabilities desiredCapabilities) {
        super(remoteAddress, desiredCapabilities);
        touch = new RemoteTouchScreen(getExecuteMethod());
    }
}
```

According to your apk path.

然后你会看到你的程序会在模拟器上运行。

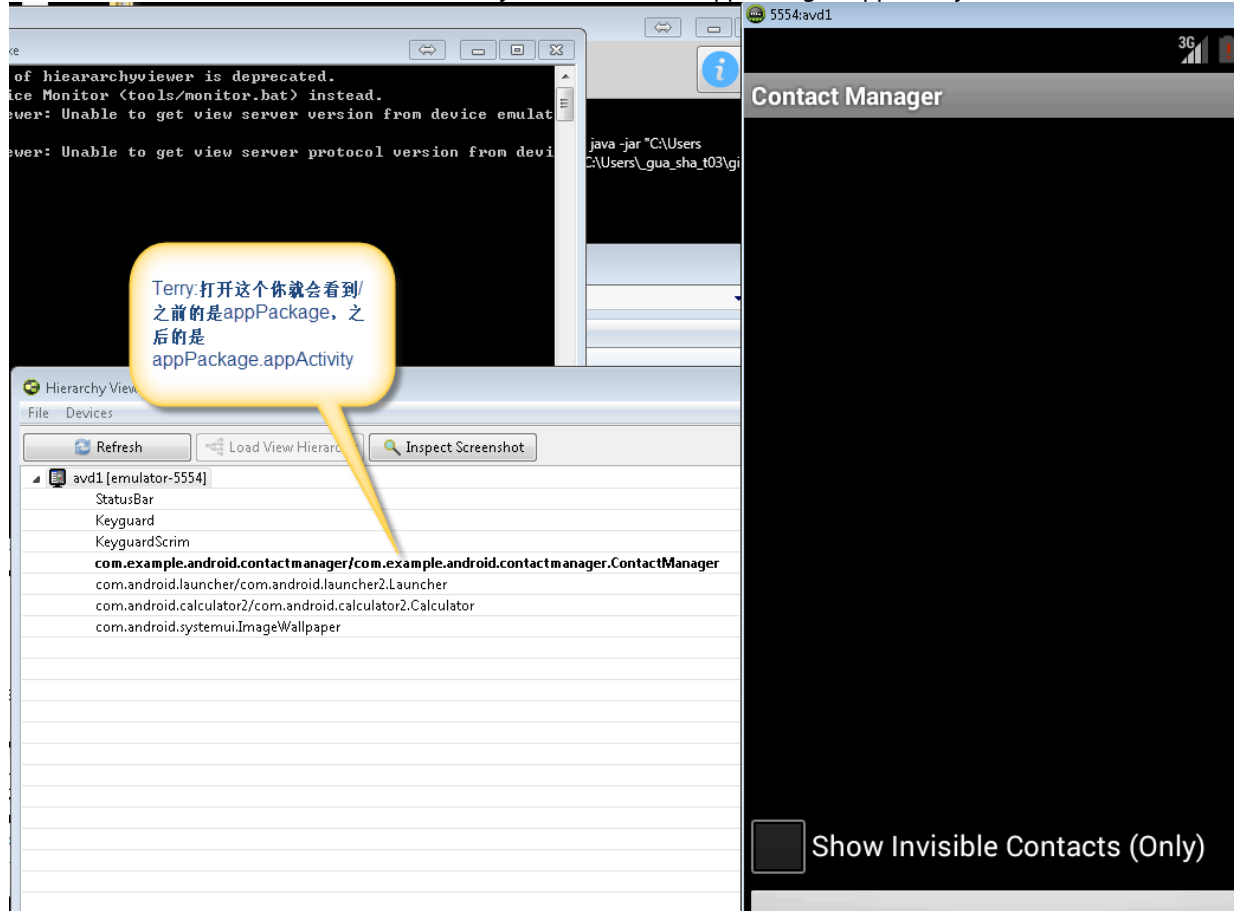
几点说明一下AppPackage和AppActivity这两字段是什么呢？而且如何获取呢？

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appPackage：你要启动的Android 应用对应的Activity名称  
appActivity:你要启动的Android 应用对应的Activity名称

然后我看看如何获取：

我们可以使用%ANDROID\_HOME%/tool/hierarchyviewer.bat进行查看appPackage和appActivity:



4)我们接下来做一个其他app的测试,我们使用内置的app-> Calculator的一个计算器来试验。

**Android Settings**

Application

☐ Application Path: Choose C:\Users\\_gua\_sha\_t03\git\appium\sample-code\apps\ContactManager\ContactManager.apk

☒ Package: com.android.calculator2 ☒ Launch Activity: com.android.calculator2.Calculator

☐ Full Reset ☐ Wait for Activity:

☐ No Reset ☐ Wait for Package:

☐ Use Browser: Chrome

☐ Intent Action: android.intent.action.MAIN ☐ Intent Category: android.intent.category.LAUNCHER

☐ Intent Flags: 0x10200000 ☐ Intent Arguments:

Launch Device

☒ Launch AVD: avd1 ☐ Device Ready Timeout: 5 s

☐ Arguments:

Capabilities

Platform Name: Android

PlatformVersion: 4.4 KitKat (API Level 19)

☒ Device Name: avd1

☒ Language: en ☐ Locale: US

Advanced

☐ SDK Path:

☐ Coverage Class:

☐ Bootstrap Port: 0 ☐ Selendroid Port: 0 ☐ Chrome Driver Port: 0

**General Settings**

Server

Server Address: 172.28.57.49 Port: 4723

☒ Check For Updates

☐ Pre-Launch Application

☐ Override Existing Session

☐ Use Remote Server

☐ Selenium Grid Configuration File:

Logging

☐ Quiet Logging ☐ Use Colors ☐ Show Timestamps

☐ Log To File:

☐ Log To WebHook:

点击运行后我们就可以运行如下的代码了实现1+2=的功能测试。



# 软件测试开发职位内推Q群：485353510

```
public class TestAppium {
    private WebDriver driver;

    @BeforeMethod
    public void setUp() throws Exception {
        DesiredCapabilities capabilities = new DesiredCapabilities();
        capabilities.setCapability("platformName", "Android");
        capabilities.setCapability("deviceName", "Samsung");
        driver = new RemoteWebDriver(new URL("http://172.28.57.49:4723/wd/hub"), capabilities);
    }

    @Test
    public void testCalculator(){
        try{
            driver.findElement(By.name("DELETE")).click();
        }catch(Exception e){
            driver.findElement(By.name("CLR")).click();
        }

        driver.findElement(By.name("1")).click();
        driver.findElement(By.name("+")).click();
        driver.findElement(By.name("2")).click();
        driver.findElement(By.name("=")).click();
    }

    @AfterMethod
    public void tearDown() throws Exception {
        driver.quit();
    }
}
```

Terry:注意为什么加个异常处理呢?好好想想各位

<http://my.oschina.net/u/147181/blog/338449>

Xpath的使用:

我们开一下xpath的怎么在appium中使用。首先我们要抓取到元素的,才能获得它的属性:

打开%ANDROID\_HOME%/tool/uiautomatorviewer.bat

Terry:  
1) [class]属性也被用来做by.tagName。  
2) [text]属性也被用来做by.name  
3)[resource-id]属性也被用来by.id

Node Detail	
index	0
text	7
resource-id	com.android.calculator2:id/digit7
class	android.widget.Button
package	com.android.calculator2
content-desc	
checkable	false
checked	false
clickable	true
enabled	true
focusable	true
focused	false
scrollable	false
long-clickable	false
password	false
selected	false
bounds	[2,273][120,404]

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然后我们把第一章的关于计算器的内容通过name识别元素的都改成xpath,如下:

```
@Test
public void testCalculator(){

    try{
        driver.findElement(By.name("DELETE")).click();
    }catch(Exception e){
        driver.findElement(By.name("CLR")).click();
    }

    // driver.findElement(By.name("1")).click();
    // driver.findElement(By.name("+")).click();
    // driver.findElement(By.name("2")).click();
    // driver.findElement(By.name("=")).click();

    driver.findElement(By.xpath("//android.widget.Button[@text='1']")).click();
    driver.findElement(By.xpath("//android.widget.Button[@text='+']")).click();
    driver.findElement(By.xpath("//android.widget.Button[@text='2']")).click();
    driver.findElement(By.xpath("//android.widget.Button[@text='=']")).click();
    System.out.println(driver.findElement(By.xpath("//android.widget.EditText")).getText());
}
```

Terry:获得字符内容