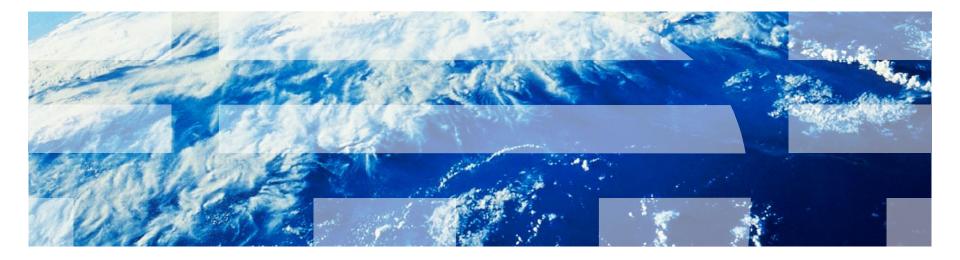


IBM Worklight Foundation V6.2.0 Getting Started

Setting up your Android development environment





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- Set up your Android development environment
 - Install the Android SDK
 - Install the Android Development Tools plug-in for Eclipse
- Deploy to an Android device
 - Set up a device for development
- Publish your applications
 - eSetup an account in Google Play
 - Publish your application in Google Play



Install the Android SDK

- The Android SDK provides the tools and APIs that are required to develop applications on the Android platform by using the Java[™] programming language.
 - Download the Android SDK package from <u>http://developer.android.com/sdk/</u>
 - Install it on your system
 - Android SDK might have issues when you run it on 64-bit Linux systems.
 - For more information, see <u>http://developer.android.com/sdk/installing.html</u>
 - Note: Use Oracle Java



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Install the ADT plug-in for Eclipse

- The Android Development Tools (ADT) plug-in for Eclipse is an integrated environment in which you can build rich Android apps.
- To install ADT in Eclipse, click
 Help > Install New Software.

		7	
ow	Help		
•	3	Welcome	
	0	Help Contents	
	<i>?</i> ?	Search	
		Dynamic Help	
		Key Assist Ctrl+Shift+L	
		Tips and Tricks	
	æ	Report Bug or Enhancement	
		Cheat Sheets	
		Check for Updates	
		Install New Software	
		Eclipse Marketplace	
		About Eclipse	
		·	



Install the ADT plug-in for Eclipse

Click Add and enter the name and location of the ADT plug-in.

		▼ Add
	Find more software by working with the "Available Software by working with the "Available Software by working with the software by w	ware Sites" preferences.
💭 Add Re	pository	- 23
∖ <u>N</u> ame:	ADT Plugin	L <u>o</u> cal
Location:	https://dl-ssl.google.com/android/eclipse/	Archive
?	ОК	Cancel

- The plug-in location is <u>https://dl-ssl.google.com/android/eclipse/</u>
- If you cannot install the plug-in, use http instead of https.



Install the ADT Iplug-infor Eclipse

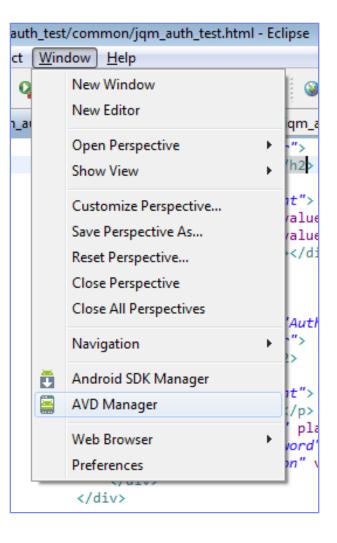
- Select Developer Tools and click Next to proceed.
- Proceed with the ADT installation.

💽 Install	_ _ X
Available Software Check the items that you wish to install.	()
Work with: ADT - https://dl-ssl.google.com/android/eclipse/	Add Find more software by working with the <u>"Available Software Sites"</u> preferences.
type filter text	
Name	Version
> 2 100 Developer Tools > = 00 NDK Plugins Select All	
	2
Show only the latest versions of available software	<u>H</u> ide items that are already installed
	What is <u>already installed</u> ?
Show only software applicable to target environment	
Contact all update sites during install to find required software	
0	< <u>Back</u> <u>Next ></u> Einish Cancel



- After the ADT plug-in installation is complete and Eclipse restarted, click Window > Android SDK Manager.
- If the Android SDK Manager / AVD Manager is not visible in the Window menu, click Window > Customize
 Perspective > Command Groups
 Availability, and select the Android SDK and AVD Manager check boxes.

	Command Groups Availability Shortcu	L3
	want to see added to the current perspe e perspective by the selected command Menubar details:	ective (Java). The details field identifies which menu items group. Toolbar details:
Android Lint		





- Under Packages, select the required API Levels, then click Install.
- IBM Worklight®

Foundation supports API Levels **10** (Android 2.3) and above.

ackages				
🖷 Name	API	Rev.	Status	
🔲 🌄 Samples for SDK	14	1	🎒 Installed	
🔲 🟺 ARM EABI v7a System Image	14	1	🎒 Installed	
📝 🙀 Google APIs by Google Inc.	14		🖊 Not installed	
Image: Marce Android 3.2 (API 13)				
Image: Marce Android 3.1 (API 12)				
Image: Marce Android 3.0 (API 11)				
a 🔲 🚔 Android 2.3.3 (API 10)				
🔲 🏺 SDK Platform	10		Not installed	
🔲 📥 Samples for SDK	10		Not installed	
🔲 🙀 Dual Screen APIs by KYOCERA Corporation	10		Not installed	
EDK 1.1 by Sony Ericsson Mobile Communications	10		Not installed	
🔲 🖏 Google APIs by Google Inc.	10		Not installed	
a 🔲 🚔 Android 2.2 (API 8)				
SDK Platform	8	3	PInstalled	
how: Vupdates/New VInstalled Obsolete Select Ne				11 packages
				1 2



 In a fresh installation of the ADT plug-in, it is bundled only with the latest available API Level. You might want to use the SDK Manager and add additional API Levels, such as 17 and 18.

K Path: C:\android-sdk\ ackages				
🖡 Name	API	Rev.	Status	
Samples for SDK	14	1	A Installed	
📄 🏺 ARM EABI v7a System Image	14	1	A Installed	
V the Google APIs by Google Inc.	14	-	Not installed	
Android 3.2 (API13)			· · · · · · · · · · · · · · · · · · ·	
Android 3.1 (API 12)				
Android 3.0 (API 11)				
Android 2.3.3 (API 10)				
🔲 🍈 SDK Platform	10		🖊 Not installed	
🔲 🍶 Samples for SDK	10		Not installed	
🔲 🙀 Dual Screen APIs by KYOCERA Corporation	10		🖊 Not installed	
🔲 🙀 EDK 1.1 by Sony Ericsson Mobile Communications	10		Not installed	
🔲 🙀 Google APIs by Google Inc.	10		Not installed	
Android 2.2 (API 8)				
📄 🖷 SDK Platform	8	3	🎒 Installed	
	0	4	×	
now: 🗹 Updates/New 📝 Installed 🛛 🔲 Obsolete Select New	w/Updat	tes	Install 11 pac	kages
ort by: API level Repository Deselect			Delete pack	anes



- To create a virtual device (emulator), click
 Window > AVD Manager, click New, and create an Android Virtual Device (AVD) according to your needs.
- For a detailed explanation of all available options, see the <u>Android documentation</u> topic "Managing AVDs".

Create new Android Virtual Device (AVD)							
AVD Name:	Nexus_5						
Device:	Nexus 5 (4.95", 1080 × 1920: xxhdpi)						
Target:	Android 4.4.2 - API Level 19						
CPU/ABI:	ARM (armeabi-v7a)						
Keyboard: V Hardware keyboard present							
Skin:	Skin with dynamic hardware controls						
Front Camera:	None						
Back Camera:	None						
Memory Options:	RAM: 2048 VM Heap: 64						
Internal Storage:	200 MiB -						
SD Card:							
	◎ Size: MiB ▼						
	◎ File: Browse						
Emulation Options:	Snapshot 🔲 Use Host GPU						
Override the exist	Override the existing AVD with the same name						
On Windows, emulating RAM greater than 768M may fail depending on the system load. Try progressively smaller values of RAM if the emulator fails to launch.							
	OK Cancel						



Develop

- Building a Worklight application generates a separate Android project (application) that is automatically displayed in Eclipse. For more information, see the Getting Started module *Previewing your application on Android*.
- You are then able to run the Android application on the Android simulator or device by right-clicking the Android project and selecting Run As > Android Application.

B		Copy path(s) to clipboard	gress 🖳 Console 🖾 🛛 LogCat		
		Run As		1 Android Application	
		Debug As	J	2 Android JUnit Test	



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Set Up a Device for Development

- The following resource describes how to set up your development environment and Android-powered device for on-device testing and debugging.
 - For information about installation and usage on different platforms, see <u>http://developer.android.com/guide/developing/device.html</u>.



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Set Up an Account in Google Play

- Google Play is a hosted service that simplifies the download and installation process of applications to Android-powered devices, and makes it easy for developers to publish their applications for Android users.
- To create an account, go to <u>https://play.google.com/</u>.



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Publish Your Application in Google Play

For more information, see

http://developer.android.com/guide/publishing/publishing.html.



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