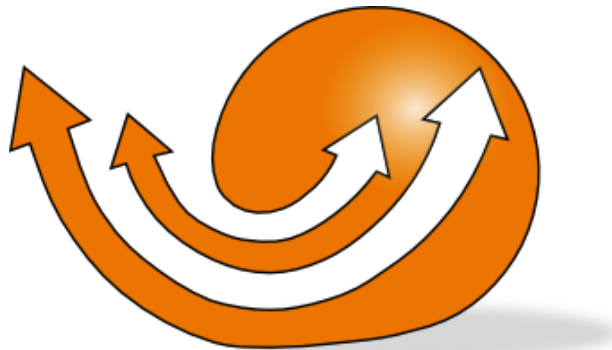


Android in the Cloud

Chromebooks, BYOD and Wearables

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Use Cases

Ascender's remote rendering technology is enabling, and is applicable to different use cases.

We examine select use cases:

1. Android in the Cloud, Chromebook convergence
2. BYOD, Mobile Enterprise Security
3. Wearable Devices



Use Case 1: Android in the Cloud





Use Case 1: Android in the Cloud

- In this use case, the Android application is run in the cloud on a virtualized host.
 - **Cloud:** An unmodified Android app is installed in the Android virtual image running in the cloud. The state of this system is persistent.
 - **Remote:** The remote client can be from a wide range of **systems**: Chromebooks, Windows, OS X, Android, IOS, Tizen, etc. The remote client can be from a wide range of **platforms**: desktops, chromebooks, laptops, tablets, phones or wearable devices. *No data is persistent, resulting in strong security.*



Use Case 1: Benefit to Intel

- Chromebooks are becoming increasingly popular. Despite their common Google origin there is as yet no “convergence” between Chrome OS and Android.
- The ability to efficiently run Android apps in the cloud extends the functionality of Chromebooks and increases the Android apps market value.
- The Android apps are hosted in the cloud.



Use Case 2: BYOD

Mobile Enterprise Security

- Ascender's technology levels the playing field for the adoption of BYOD devices.
 - **Cloud:** Applications can be written once, for Android only, and can be run in the cloud under the control of the enterprise. Hosting in the cloud intrinsically solves many security problems.
 - **Mobile Device:** Android applications can be viewed on a wide range of platforms: desktops, laptops, tablets, phones and even wearable devices. Windows Phone or Tizen can be supported as easily as more popular platforms.



Use Case 2: BYOD

Mobile Enterprise Security

- Security is simple to provide since the data resides in the enterprise cloud.
- Responsibility for mobile device management rests with the employee since the enterprise data security management is done in the cloud.
- Complex device dependent mobile device management (MDM) is not needed.



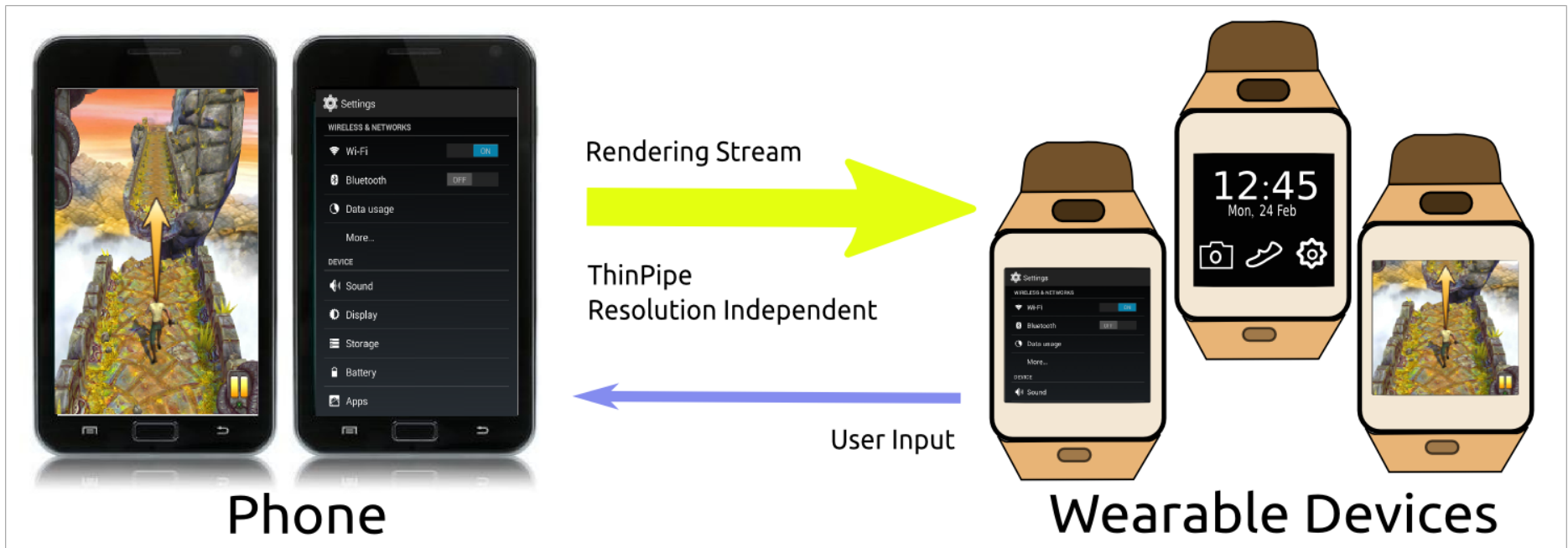
Use Case 2: Benefit to Intel

- Mobile phone devices that don't have a critical mass of users, such as Windows Phone or Tizen, have great difficulty bootstrapping their way into the market.
- Lack of apps, developers contribute to the difficulty of acceptance into the BYOD market.
- Ascender's technology will allow non-Android mobile phones to use Android apps hosted in the cloud and provide a solution to BYOD for these platforms.



Use Case 3: Wearable Devices

A Cloud In Your Pocket





Use Case 3: Wearable Devices

- In this configuration, devices that are carried on the person, or are in close proximity to the person, communicate.
- The wearable device might have constraints of computational power, network connectivity and/or OS compatibility that will make it difficult to run a desired application.



Use Case 3: Wearable Devices

- **Mobile Device:** This is a device running the Android OS, either tablet or phone. Android Wear apps can be run on the mobile devices.
- **Wearable Device:** This might be a device connected to the mobile device via a low bandwidth connection such as Bluetooth. With Ascender's technology, even devices that cannot natively run Android applications, can use remote Android apps.



Use Case 3: Benefit to Intel

- Ascender's Technology allows the use of apps developed with the Android Wear SDK to be used on non-Android wearable devices such as Samsung's Gear 2 running the Tizen OS.
- The apps are run either on a phone or tablet carried by the owner of the wearable device or in the cloud via a mobile network.



Other Use Cases

- Cloud gaming
- App Library / Subscription Model
- Set-Top Boxes
- Automated Testing
- WebGL Browser Based Implementations



Links

- Main repository on the [technology](#) and [FAQ](#).
- Remote Android rendering
 - Short [summary](#)
 - Full length [talk](#)
- [The challenge of mobile devices in the enterprise](#)
- [Remote WebGL demo](#)