



Collect Data with Phone Sensors and Bring It Inside Autodesk® AutoCAD® Civil 3D® with API

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Summary

- Check last year class: CP3325: From Mobile and Through the Cloud to AutoCAD® Civil 3D®
- This year's class shows you how to collect more data with mobile device sensors running Android™ and then how to store and merge this data in the cloud to finally use inside Civil 3D software to create TinSurface, Parcel, and other site features.
- Prior knowledge of .NET programming and the Civil 3D API are required.

Learning Objectives

- Connect mobile applications with the Civil 3D API
- Consume data with the Civil 3D API
- Create a mobile application

An aerial view of a city with a prominent rainbow on a bridge over a river. The city skyline is visible in the background, and the foreground shows a park area with trees and a path. The text 'Android Development' is overlaid in a blue font on a semi-transparent white banner.

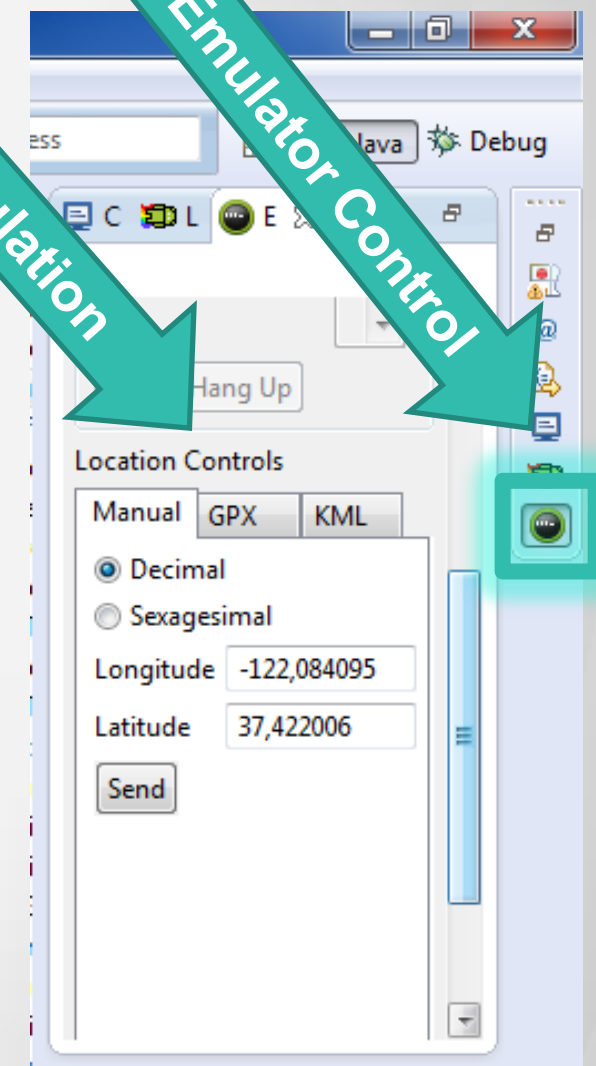
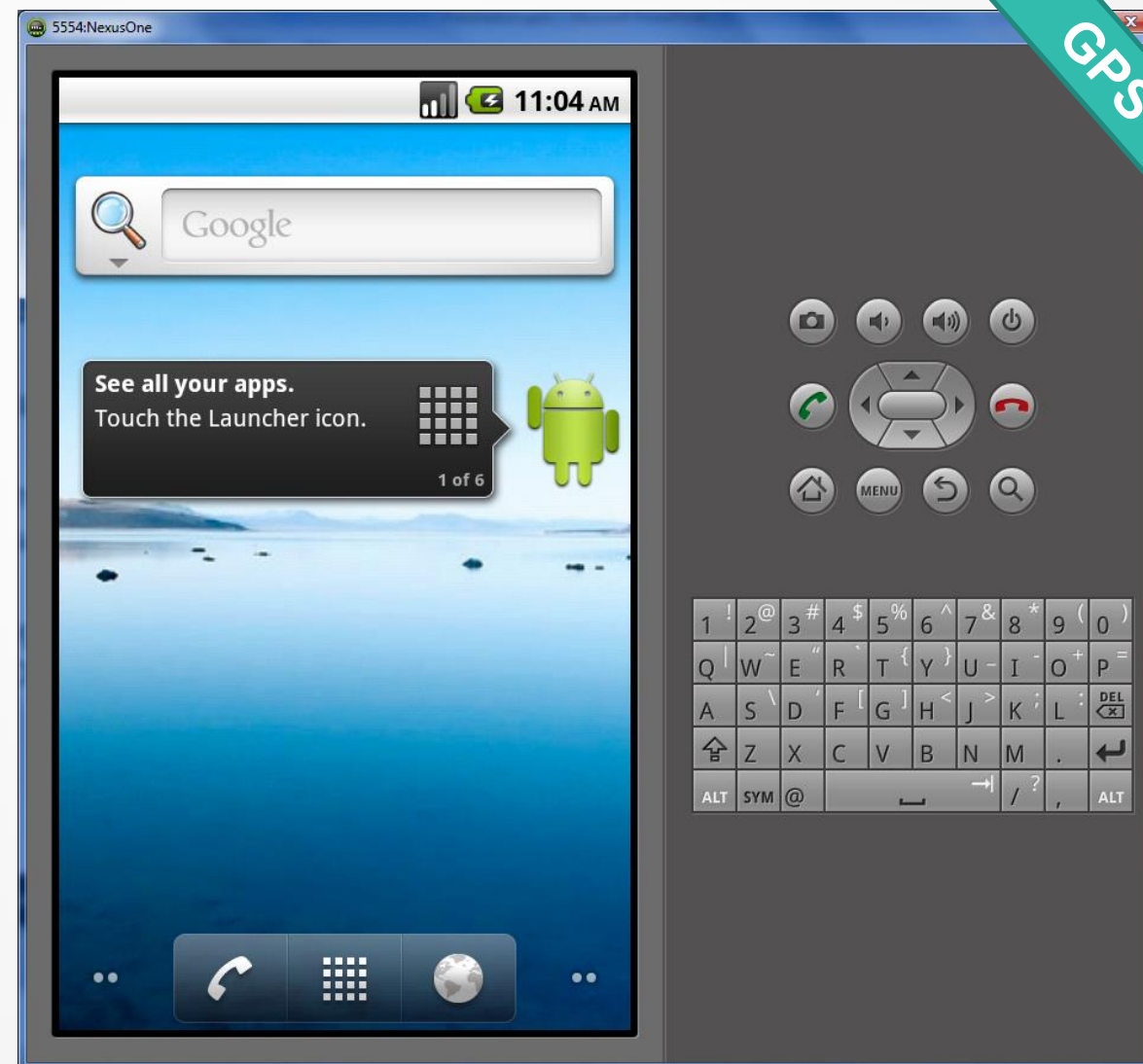
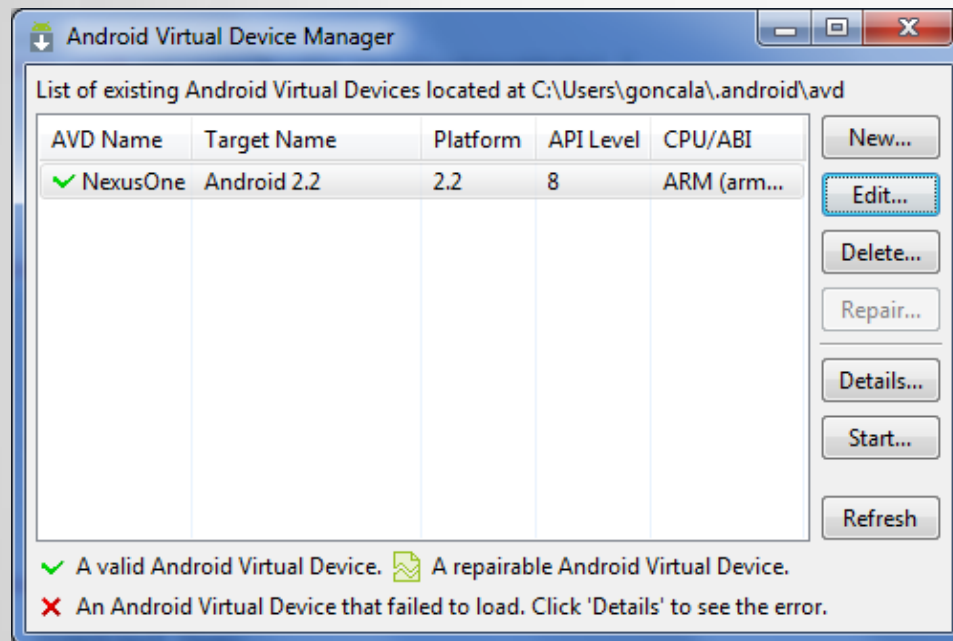
Android Development

Collecting GPS Data

- Random points for a Surface
- Sequential points for Parcels
- Linear points for Aligmnets

Set-up the environment

- With emulator or phone device (USB cable required)
 - Build SDCard (.iso) with [SDK]\tools\mkcard.exe



- Debug works fine
- Integrated to Eclipse

Demonstration

- Required
 - Android SDK ([link](#))
 - Eclipse IDE ([link](#))
 - Java Development Kit ([link](#))
 - Android phone & cable or emulator (SDK) with:
 - GPS (when debugging on device, go outside or close to a window 😊)

A 3D architectural rendering of a city skyline and a bridge over a river. The scene is viewed from an elevated perspective. In the foreground, a multi-lane bridge with a rainbow-colored light strip along its edge spans across a wide river. A red car is driving on the bridge. The riverbank is landscaped with green grass, trees, and a small garden bed. In the middle ground, there is a large, modern stadium or arena with a curved roof. To the right, there are several multi-story residential or commercial buildings. In the background, a dense city skyline with various skyscrapers is visible under a clear blue sky. The overall scene is a detailed digital model of an urban environment.

Civil 3D API Development

Overview Civil 3D Development

- .NET based development with APIs
 - Create new DLLs and custom commands
- No special requirement.
- AutoCAD & Civil 3D API trainings at Developer Center ([link](#))

Demonstration

- Required
 - AutoCAD Civil 3D 2014
 - Geo-referenced drawing
 - OSGeo DLL references for coordinate conversion
 - Visual Studio 2010 (.NET 4.0)

Thank you!

Questions?

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