# 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 Objetives

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

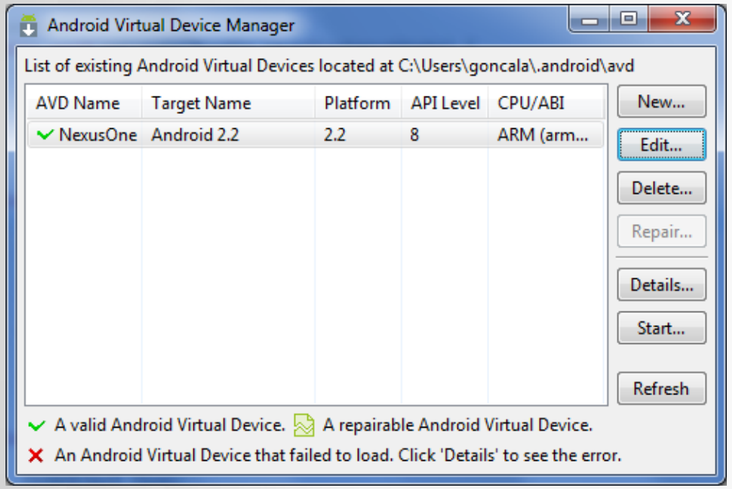
# Android Development

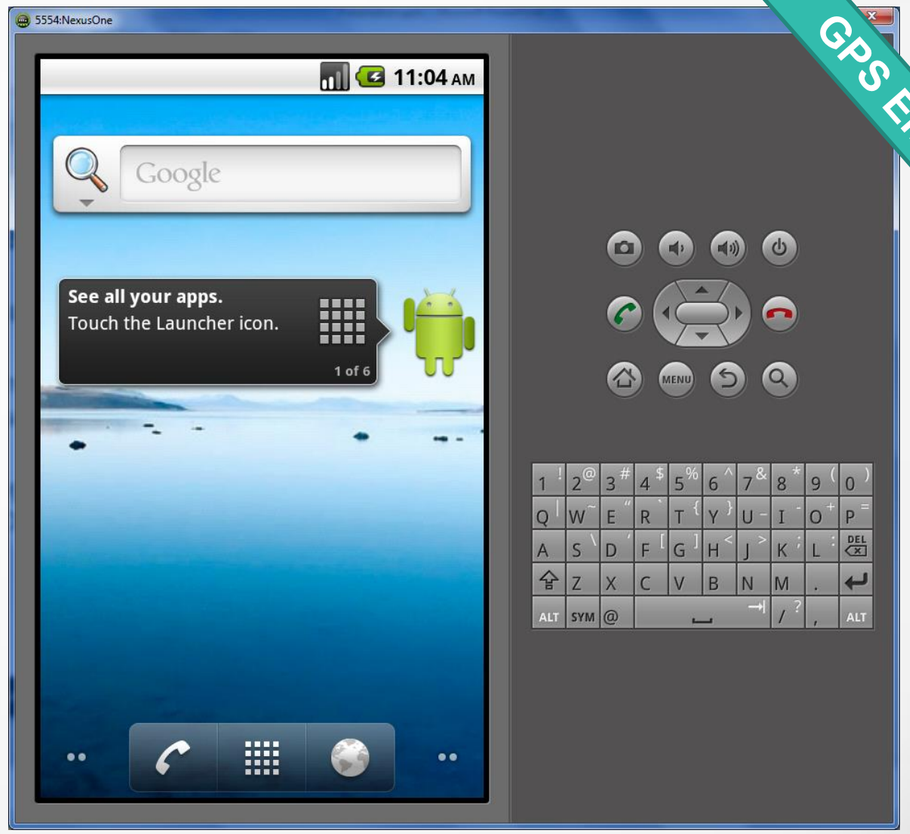
# Collecting GPS Data

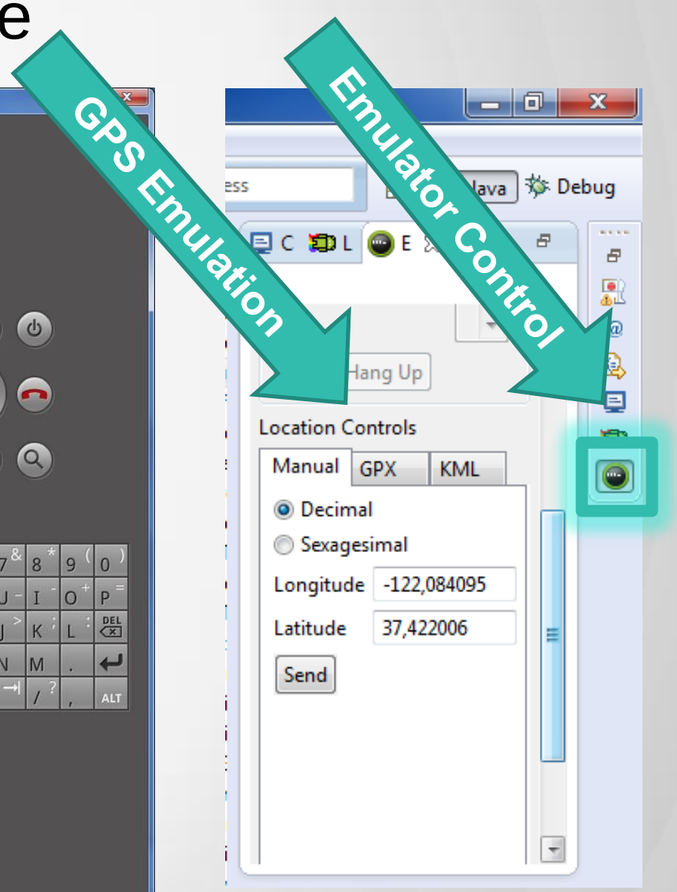
- Random points for a Surface
- Sequential points for Parcels
- Linear points for Aligmnets

# Set-up the environment

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

# 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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