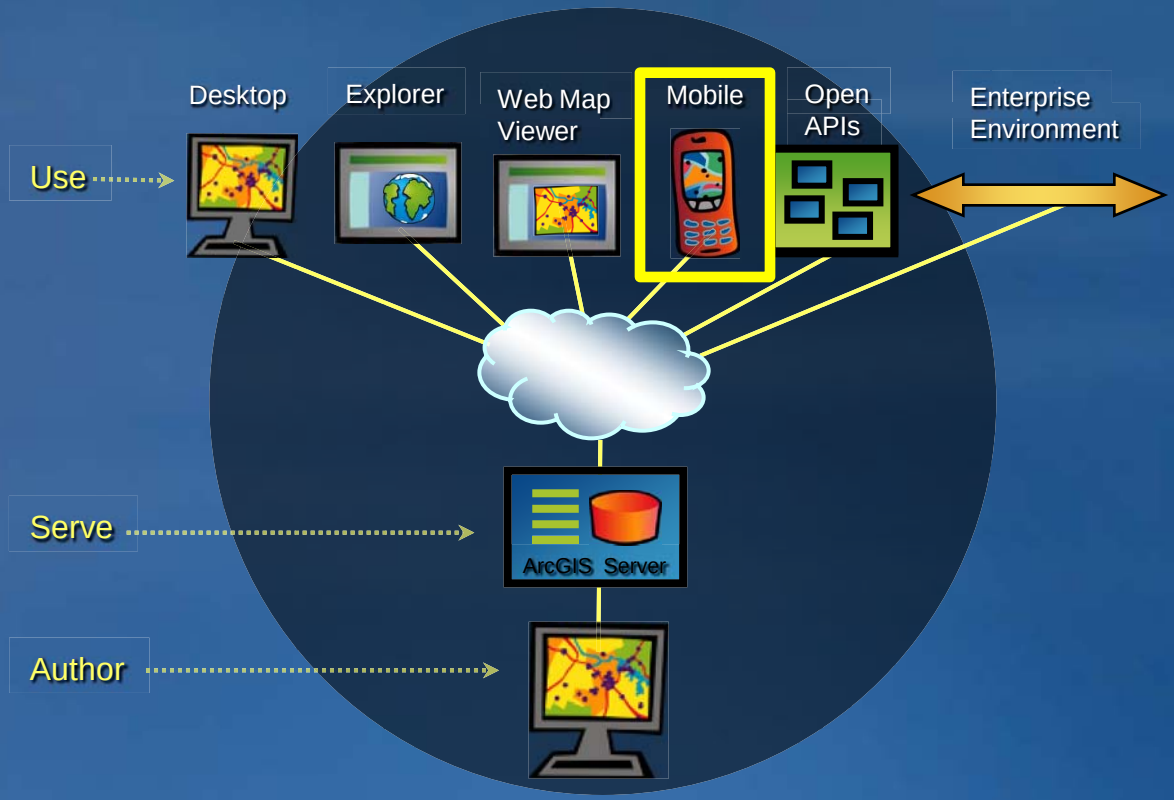
ArcGIS Mobile: An Introduction

Matt Still

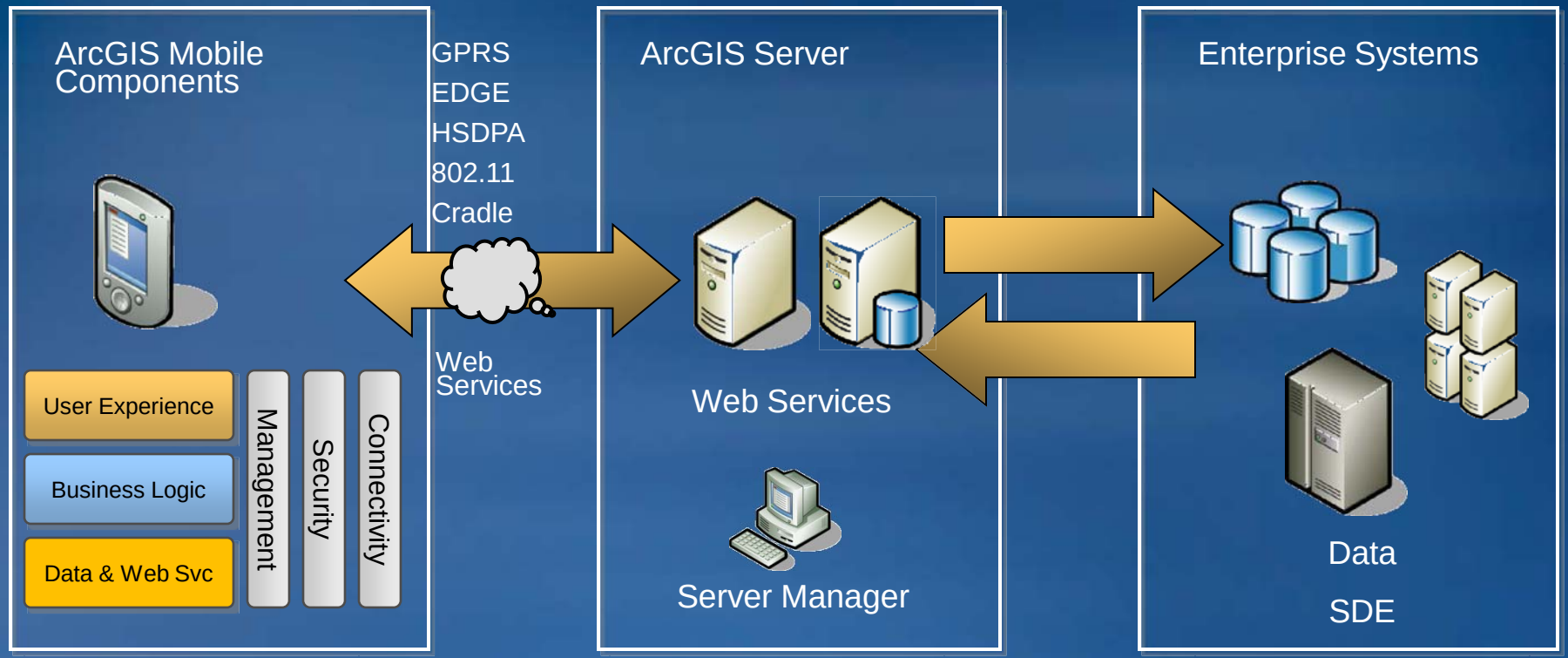
What is ArcGIS Mobile?

A client to your Enterprise GIS



How does ArcGIS Mobile work?

ArcGIS Server Mobile Components



Why should I use ArcGIS Mobile?

- Ensure free flow of critical information
- Increase operational awareness
- Leverage existing investments
- Go beyond mobile email
- Replace paper/pen methods

What can ArcGIS Mobile do?

- Supports field workflows
  - Data viewing
  - Asset inspection
  - Basic data collection
  - Run server based analysis
- Up to date information and applications
  - Self updating Applications and data
- Visibility into the mobile workforce activities
  - Activities can be synchronized with ArcGIS Server
- Work connected or disconnected

What are the benefits of ArcGIS Mobile?

- Field Crews are part of our data maintenance process
  - Eyes and ears of our data
- Allows mobile users to make more informed decisions
  - Access to current data
- Eliminates time in the office managing field applications

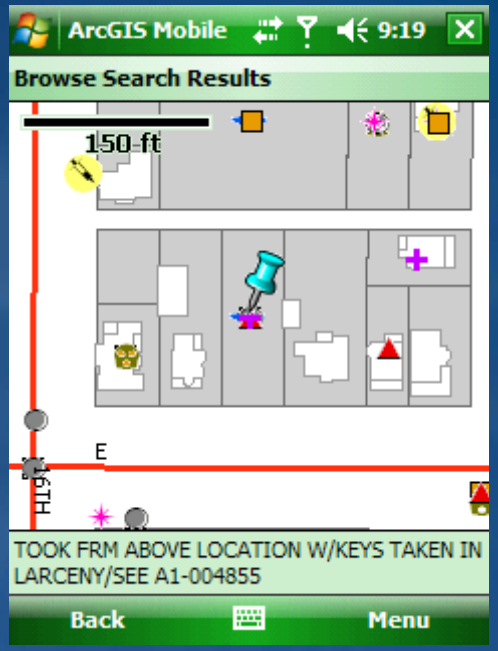
ArcGIS Mobile 9.3

- New Ready-To-Use Mobile Application
  - Easy to deploy and use for field data collection and inspections on Windows Mobile devices
  - View and navigate maps
  - Collect and edit GIS features
  - Use device rocker, stylus, or GPS to sketch

- SDK Enhancements for .NET and .NET Compact Framework 2.0
  - Improved data storage capabilities
  - Improved editing and new sketch tools
  - Expanded projection support
  - Increased GPS performance

ArcGIS Mobile Application

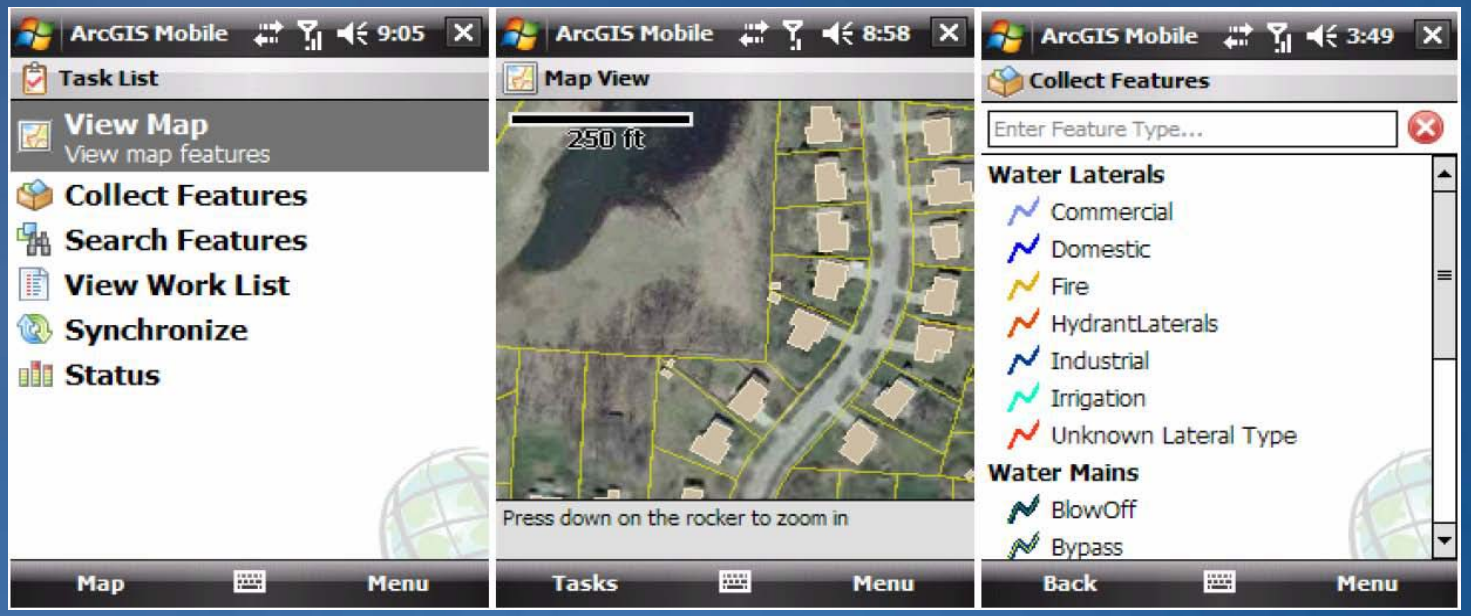
- Out-of-the-box application
- Task-driven user experience
- Configurable using Server Manager
- Targets:
  - Simple GIS Feature Editing
  - Map Viewing
- Target Platforms:
  - Windows Mobile 5 Pocket PC
  - Windows Mobile 6 Professional



Demo

ArcGIS Mobile Application

- **ArcGIS Mobile application**
  - Task-based mobile GIS application managed with ArcGIS Server
  - Designed for rapid deployment to Windows Mobile devices
  - Provides local caching of map data and wired or wireless editing



ArcGIS Mobile SDK

- Suite of .Net Mobile GIS components
  - Drag and Drop controls
- Designed for Client-Server applications
- Leverage Visual Studio 2005/2008 WinForms
- Small footprint and high performance
- Comprehensive developer help
  - Visual Studio integration
  - Walkthrough, Samples
  - Online documentation

ArcGIS Mobile SDK : Features Overview

- Support multiple connectivity scenarios
- Long and Short Transactions
- Versioned editing
- Provide disconnected editing capabilities
- GPS integration

ArcGIS Mobile SDK: Target Platforms

- Microsoft .NET/.NET Compact Framework 2.0
- Windows Mobile 5.0/6.0
  - PocketPC
  - SmartPhone
- Windows Mobile for Pocket PC 2003, 2003 SE
- Windows CE 5.0
- Windows XP/Vista

ArcGIS Mobile workflow

1. Build your Geodatabase
2. Author a Map for your mobile service
3. Design your Mobile Application
   a) (Optional) Integrate with existing solutions
4. Secure server and client data
5. Serve your Mobile Map Service
6. Deploy your Mobile Solution
7. Synchronize your Mobile GIS solution

ArcGIS Mobile 9.3 SDK

Key 9.3 Improvements:

- Ease of Deployment
- Performance improvements
- Improved Editing tools/sketching API
- Better Support for Projections
- Simplified coordinate management

Deployment Improvements

- At 9.2 SDK runtime deployed with each application (to application folder).
- At 9.3 SDK runtime is deployed once.
- SDK runtime is provided as a signed .CAB file.

Performance Improvements

- Support for static, local base map data
- Improved handling of server requests when retrieving data
- Improved handling of GPS display

Editing tools

- Improved, simplified API for sketching.
- New sketch tools for updating existing geometries.
- Sketch display handled through new SketchGraphicsLayer
- Ability to create your own sketch tools

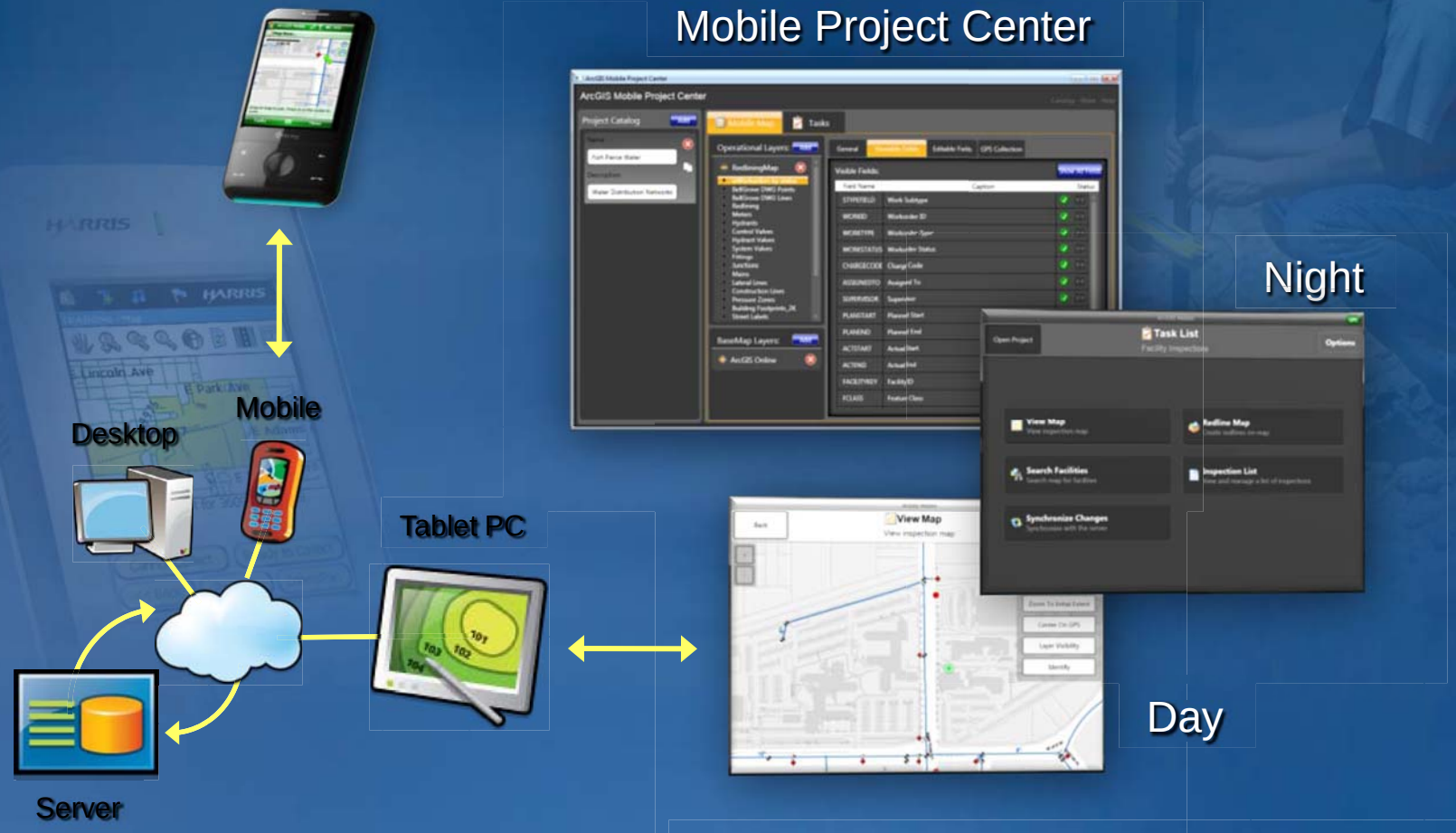
Projections

- Improved support of ArcGIS map projections.
- Now Mobile client supports all but GRID/HARN based map projections

Demo

ArcGIS Mobile 9.4

Same Application, New Platform and Management Support…



Improved Productivity for Your Customers…

Resources

- Mobile Resource Center
  - http://resources.esri.com/arcgismobile
- Mobile Devopment and Deployment
  - http://msdn.microsoft.com/mobility
- Mobile Training Resources
  - http://training.esri.com/

Questions?