

### **ArcGIS Server Mobile**

Matt Still ESRI Charlotte

### ArcGIS Mobile



- An ArcGIS Server developer solution for mobile applications
- An SDK that ships with ArcGIS Server for building Mobile applications.
- A Suite of .NET Components for developing custom server-centric lightweight mobile applications

### ArcGIS Mobile



- Supports field workflows
  - Data viewing
  - Feature inspection
  - Basic data collection
- Direct synchronization with ArcGIS Server
- Connected and disconnected environments
- Windows Mobile and Desktop platforms



# ArcGIS Mobile Architecture

## ArcGIS Mobile: Features Overview



- Full Support of Geodatabase Transaction Model
- Leverage Visual Studio 2005 WinForms
- Small footprint and high performance
- Comprehensive developer help
  - Visual Studio integration
  - Walkthrough, Samples
  - Online documentation

### ArcGIS Mobile: Core Components MapAction Map **Feature** Layer **URL** Server Connection **Annotation** Layer MapCache Raster **ArcGIS** Layer Server

# ArcGIS Mobile: Target Platforms



- Microsoft .NET/.NET Compact Framework 2.0
- Windows Mobile 5.0
  - Pocket PC
  - Smartphone
- Windows Mobile for Pocket PC 2003
- Windows CE 5.0
- Windows XP

## ArcGIS Mobile: Prerequisites



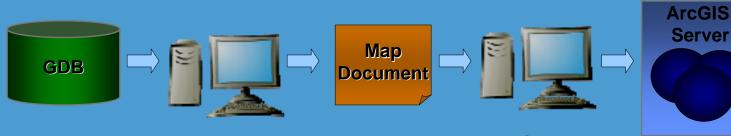
- Visual Studio 2005
  - C# or Visual Basic .NET
- Familiarity with
  - -.NET Framework 2.0/.NET Compact Framework 2.0
- Windows Mobile 5.0 SDKs (Pocket PC/Smartphone)
- Active Sync 4.1 or higher installed
- Familiarity with ArcGIS Server



# ArcGIS Mobile Workflow

### ArcGIS Mobile Workflow





**ArcMap** 

**ArcCatalog** 

- Build Mobile Geodatabase
  - Information and Transaction Model considerations
- Author Mobile Map
  - Design for environment and form factor
- Publish Map Service
  - With Mobile Data Access Capabilities
- Design Mobile Application
  - For Form Factor and Environment
- Deploy Mobile Solution
  - Provision devices
- Synchronize Mobile GIS solution
  - Consider bandwidth and battery





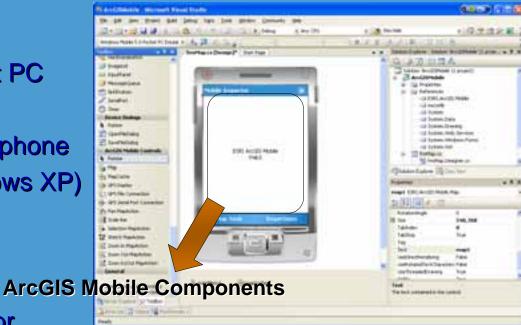


Mobile

### Designing Mobile Applications



- Mobile SDK installed as part of ArcGIS Server
- Use Visual Studio 2005:
  - Windows Mobile 5.0 for Pocket PC
  - Pocket PC 2003
  - Windows Mobile 5.0 for Smartphone
  - Tablets and Notebooks (Windows XP)
- IDE Integration
- Build Simple and focused user interfaces
- Develop for function and form factor



## Synchronize Mobile GIS Solution



#### **Application:**

- Takes responsibility for managing the sync process
- Pushes and pulls new and updated features
- Leverages spatial and attribute queries to optimize feature pull from the Server





**Web Service** 

