ArcPad – An Introduction
Elvin Slavik, Marika Vertzonis, Gareth Walters (Maptel)

http://www.esri.com/sessionevals
http://arcpadteam.blogspot.com/
http://twitter.com/ArcPadTeam - Follow us on #ArcPad
Technical Workshops

• **ArcPad – Introduction to customizing ArcPad Solutions**
  - Room 30D Tuesday 1:30pm

• **ArcPad – An Introduction**
  - Room 31B Tuesday 3:15pm

• **ArcPad – Building Great Apps & User Group**
  - Room 30A Thursday 12:00pm

• **ArcPad – Advanced customization of ArcPad Solutions**
  - Room 31B Thursday 1:30pm

• **ArcPad/GeoCollector—A High Accuracy Field Mapping Solution**
  - Room 6B Thursday 3:15pm
ArcPad Release Status

• ArcPad 10 (June 2010)
  - performance improvements, new camera module, QuickCapture

• ArcPad 10.0.1 (November 2010)
  - satellites distinguished, raster support improvement

• ArcPad 10.0.2 (April 2011)
  - Map annotation, Toolbar editing in ArcPad, ArcPad Apps

• The Future
  - Incremental releases, delivering improvements and new features more often
Roadmap

<table>
<thead>
<tr>
<th>ArcPad 10.0.2</th>
<th>ArcPad 10.0.3</th>
<th>ArcPad 10.0.4</th>
<th>ArcPad 10.1</th>
</tr>
</thead>
</table>
| • Integrated customization experience - Toolbars  
  • ArcPad Apps  
  • Support ArcGIS annotations | • AXF support in ArcGIS  
  • quality improvements  
  • ArcPad developer help online  
  • Updated Streetmap data | • Integrated customization experience – Forms  
  • GDB data performance improvements | • Compatible with ArcGIS 10.1  
  • Support of Feature Services  
  • Support Windows Phone 7 |
Session Outline

- What can you do with ArcPad?
- Who uses ArcPad?
- Manage Data
- Deploy
- Collect/Edit
- Sync
Ahhh me hearties, explore the Esri UC Treasure Islands. Visit these fine ArcPad hardware partners, view a demo of ArcPad 10.0.2 and be rewarded with a sticker. First 40 to visit, collect stickers and show your map at the Mobile GIS Showcase will receive a free gift voucher.
What can you do with ArcPad?

- Manage Data
- Deploy
- Collect/Edit
- Navigate
- Query
- Sync
- Customize
Who uses ArcPad?
Who uses ArcPad?

- GIS Administrator
  - Project Coordinator
  - Field Worker
ArcPad Data Manager

Manage Data
ArcPad Data Manager Compatibility

• **ArcGIS 9.3.1**
  - ArcPad 8 Data Manager is installed
  - Limited to ArcPad 8 Data Manager features
  - Can deploy to ArcPad 8 and ArcPad

• **ArcGIS 10**
  - ArcPad 10 Data Manager is installed
  - Can deploy to ArcPad 8 and ArcPad 10
ArcPad Data Manager For ArcGIS 10

- spatial indexing created for improved performance
- Integration of photos into the desktop workflow
- Support of Map annotation
Hardware choices
Devices were not all built equally

Windows Mobile
- Slower CPU
- Fixed memory
- ArcPad only uses 32MB of memory
- Screen resolution can impact on speed and memory
- No graphic CPU (GPU)
- Great battery life
- Usually internal GPS

Windows PC
- Fast CPU
- Virtual memory (Limited by disk space)
- ArcPad can use all memory
- Screen resolution has minimal impact
- Very fast graphics (GPU)
- Sad battery life
- Outdoor screen?
Performance

- New drawing algorithms for faster response time
- New spatial indexing, enhanced speed when at edit scale
- More efficient memory management and usage
- QuickDraw
  - Alternate view
  - Fast/coarse symbol display
  - Single button switching between normal/QuickDraw
ArcPad Apps
Using App shortcuts

• organize your ArcPad projects
• launch ArcPad with your Map and customization settings
• deploy SD card & integrated with ArcPad Today screen
QuickProject Templates
QuickProject Templates

• Package up ready to use projects as ZIP files
• Can be created from existing projects
• Samples included:
  • Tree Register
  • Sign Survey
  • Fire Perimeter
  • Short Shoreline Assessment
Quick Project
Rich data capture and editing
Data Capture and Editing

• Includes
  • Point, line, polygon, text
  • Geometry, attributes
  • photos
  • Existing or new features
  • Field sketches and notes (graphics layer)

• Can be
  • Rapid
    • Quick Capture
    • repeated attributes
    • hide form
  • Rich
    • vertex delete, append, edit
    • offsets
    • traverses
    • use of cameras and rangefinders
QuickCapture
Quick Capture Toolbar

- Dynamic toolbar
  - Map Legend Driven

- Configure in Table of Contents

- Quick Photo capture
  - Geotagged, or
  - Tap on Map
Rapid Capture Data Forms

- Enables 1-Click Data Entry
- Optionally turn off form
- Attribute filled in by QuickCapture tool
- Form can be forced to be ‘required’ in ArcPad Studio
QuickCapture in Action
Rich editing tools

- Insert, append, move vertices
- Move, rotate, scale, resize features
- Snapping
- Undo
- Offsets
- Repeated attributes
- Segmentated line features
Working with photos
Photo & Camera Experience

- ArcPad 10 camera module works on more devices
- Assign capture button to hardware key
- Capture in photo layer or as feature attribute
- Photo fields nominated at check out allow photos to be ‘checked in’ with data
- Photos page supported in related table
- Use relationship to capture 1-Many photos
Working with related tables
• 1 to many relationships
  - Each feature can support multiple sets of attributes in separate tables

• Changed user experience in ArcPad 10

• Forms generated ArcPad Data Manager can be customized
Editing related records
ArcGIS Online

Collect/Edit
ArcGIS Online & Bing Maps

- Standard Map Services
- Bing Map Services
- Your Map Services
  - Web Mercator Only
Adding a basemap
ArcGIS Server data synchronization
Author Project for ArcGIS Server

- Designed for the Enterprise
- Process in ArcMap
  - Writes to APO
- Publish from ArcCatalog
- Look out for Server session!
What can you do with ArcPad?

- Manage Data
- Deploy
- Collect/Edit
- Navigate
- Query
- Sync
- Customize
Resources

Make your suggestions known
http://ideas.arcgis.com/

Resources
http://resources.arcgis.com/content/arcpad/10.0/about

Team blog
http://arcpadteam.blogspot.com/

Twitter
http://twitter.com/ArcPadTeam