ArcPad Sessions at the UC

- **Demo Theatre**
  - Preparing and Deploying Data to ArcPad
  - Using ArcPad in the Field
  - Customizing ArcPad without code – today 3:30pm, tomorrow 9:30am
  - Customizing ArcPad with Jscript, Python and VBScript – today 4:30pm
- **User Group Meeting** – today – 5:30pm
Release Status

- ArcPad 10.2
  - Direct support for feature services
  - Sharing ArcPad Projects from ArcGIS Online
  - Quick Fields
The Road Ahead

- Minor releases and critical fixes will continue for life of Windows Mobile
Session Outline

• What is ArcPad?
• What can you do with ArcPad?
• Who uses ArcPad?
What is ArcPad?

- A **single product** that covers a **wide range** of customer mobile GIS requirements
- Is the ‘**do-all**’ companion product to the **foundation apps**, that ensures they remain focused.
- Can be **white labelled** (or OEM’ed) so that you can brand it as your own.
- Supports traditional **disconnected in-field** workflows that include the **creation** and management of projects, data and **customization**, as well as online workflows.
- Empowers customers and partners to incorporate business logic, custom user interfaces and specialised functionality into their projects – with
  - **configuration without code**, and or
  - **scripting**, and or
  - **building extensions**
What can you do with ArcPad?

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

GIS Administrator

- Project Coordinator
  - Field Worker
  - Field Worker
  - Field Worker
Who uses ArcPad?

- GIS Administrator
- Project Coordinator
- Field Worker
ArcPad Data Manager
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 10/10.1/10.2**
  - ArcPad 10 Data Manager is installed
  - Can deploy to ArcPad 8, ArcPad 10, ArcPad 10.2
ArcPad Data Manager for ArcGIS Desktop

- Supports enterprise and local geodatabase workflows
- Includes
  - ArcMap toolbar
  - Tools for ArcToolbox
- Model Builder or Python to automate
Get Data for ArcPad
ArcGIS Server data synchronisation
Prepare for server synchronization

1. Create map in ArcGIS
2. Get Data for ArcPad
3. Share as feature service
4. Add feature service url to AXF
5. Either
   a) Use as a template
   b) Use AXF directly in ArcPad
### ArcGIS Server Feature Services

<table>
<thead>
<tr>
<th></th>
<th>ArcGIS Server 10.0</th>
<th>ArcGIS Server 10.1 and 10.2</th>
<th>Hosted feature services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Related tables</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Map extent</td>
<td>Full</td>
<td>Map</td>
<td>Map</td>
</tr>
<tr>
<td>Editor tracking</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Incremental download</td>
<td>No (always full download)</td>
<td>Yes (With editor tracking only)</td>
<td>No</td>
</tr>
<tr>
<td>Incremental upload</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
AXF Reader for Data Interoperability
ArcPad AXF Reader

• View or import AXF data any other format

• Included in
  - ArcGIS 10.1 and 10.2 Data Interoperability Extension
  - FME Desktop 2011 SP4 (Windows 32-bit)
  - FME Desktop 2012 (Windows 32-bit)
ArcGIS Online
# What is ArcGIS Online?

- Cloud based content management system for your geographic information

<table>
<thead>
<tr>
<th>What can you do with ArcGIS Online?</th>
<th>What does this mean for ArcPad projects?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage &amp; store geospatial content</td>
<td>Upload zipped projects prepared locally using ArcGIS Desktop or ArcPad.</td>
</tr>
<tr>
<td>Collaborate across &amp; beyond</td>
<td>• templates</td>
</tr>
<tr>
<td>organizations</td>
<td>• projects</td>
</tr>
<tr>
<td>Find relevant &amp; useful base maps,</td>
<td>Selection of Esri hosted base maps available in ArcPad</td>
</tr>
<tr>
<td>data, configurable GIS resources</td>
<td></td>
</tr>
<tr>
<td>Host feature service</td>
<td>Synchronize field edits with hosted feature services</td>
</tr>
</tbody>
</table>
Hardware choices

Deploy
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?
Memory management between different versions of Windows Mobile

Windows Mobile 5

Windows Mobile 6

Windows Mobile 6.1 and 6.5
Memory used to Launch ArcPad

32 MB

- 8MB to launch ArcPad
- 3-8MB to load DEFAULT ArcPad Modules
- 3-10MB to load ALL ArcPad Modules
- disabling modules mean more memory for projects
Rapid Capture
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 Quick Capture tool
• Force form to be ‘required’ in ArcPad Studio
Repeat Attributes

- Button is on edit form
- set for each feature type collection
QuickFields

- define how attributes are automatically populate
- build definition with an expression
- common expressions supplied in a JScript file
- covers (almost) all the automatic field questions
- you can add your own by
  1) write your script
  2) add to QuickField_Functions.xml
Repeat attributes and Quick Fields
Rich data capture and editing
Rich editing tools

- Insert, append, move vertices
- Move, rotate, scale, resize features
- Snapping
- Undo
- Offsets
- Segmented line features
Working with photos
Photo and Camera Experience

- Capture in photo layer, or as
- feature attribute

- Photo fields nominated at check out mean photos ‘checked in’ with data
- Photos page supported in related table eg: use for 1-Many photos
Working with related tables
Related tables

• 1 to many relationships
  - Each feature can support multiple sets of attributes in separate tables

• Forms generated ArcPad Data Manager can be customized
Photos and related records
Customization
Common areas of customization

- **Toolbars**
  - modify existing toolbars
  - create new toolbars and tools

- **Forms**
  - modify existing forms
  - Create new forms

- **Projects**
  - Modify ArcPad preference and configuration files
  - Create ArcPad Apps
Toolbar customization

- Favourites Toolbar
- Add/remove tools from ArcPad toolbars
- Create your own toolbars containing ArcPad tools for different projects.

<table>
<thead>
<tr>
<th>When you want a custom toolbar,</th>
<th>you should store your toolbars in,</th>
</tr>
</thead>
<tbody>
<tr>
<td>for all projects</td>
<td>ArcPadFavorites.apx</td>
</tr>
<tr>
<td>or appended tools upon the default toolbars for one project</td>
<td>ArcPad.apm</td>
</tr>
<tr>
<td>or appended tools upon the default toolbars for many projects</td>
<td>Applet.apa</td>
</tr>
<tr>
<td>or appended tools upon the default toolbars for all projects</td>
<td>ArcPad.apx</td>
</tr>
</tbody>
</table>
Toolbar editor in ArcPad

Tip: Delete ArcPad.apx to restore default toolbar configuration
Types of forms

- **Edit**
  - Used for data capture and edit
- **Identify**
  - Used when identifying features.
  - If not present uses Edit form in read-only mode
- **Query**
  - Added to Find dialog
  - Search template, just fill in the boxes
- **“Other”**
  - Application specific forms
ArcPad Apps
Using App shortcuts

- organize your ArcPad projects
- launch ArcPad with your customization settings
- integrated with ArcPad Today screen
What is an ArcPad App?

- A project focused solution built with and used by ArcPad
Steps to make an App

• Step 1 – Prepare map
• Step 2 – Design a toolbar (customisation)
• Step 3 – Create an App shortcut
• Step 4 – Deploy
ArcPad Today

• Magically looks for App shortcuts on your device or storage cards
Creating an ArcPad App
ArcGIS Online
Deploy your custom project

- SD card / USB stick
- Active Sync
- **ArcGIS Online**
  - ArcPad Package – Project
  - ArcPad Package – Template
What can you do with ArcPad?

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

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

Resources
http://resources.arcgis.com/en/communities/arcpad/

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

Twitter
http://twitter.com/ArcPadTeam
Thank you...

- Please fill out the session survey:

  Offering ID:  1413

Online – [www.esri.com/ucsessionsurveys](http://www.esri.com/ucsessionsurveys)

Paper – pick up and put in drop box