Esri International User Conference | San Diego, CA
Technical Workshops | 12th July 2011

ArcPad – Introduction to customizing ArcPad solutions
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
Session Outline

- What can be customized?
- Who will do customization?
- Where does customization go?

- Toolbars
- Forms
- Data
- Projects
Who will do the customization?

GIS Administrator

Project Coordinator

Field Worker

Field Worker
Who will do the customisation?

- GIS Administrator
  - Project Coordinator
    - Field Worker
What Platform Am I Customizing – Does it Matter?

- Windows
- Windows Mobile

Considerations:
- Screen size
- CPU Speed
- Memory Size
Customizing Toolbars
Toolbar customisation

- Favourites Toolbar
- Add or remove tools from standard 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

- add or remove ArcPad tools from the standard ArcPad toolbars
- create your own toolbar(s) containing ArcPad tools for different projects

Tip: Delete ArcPad.apx to restore default toolbar configuration
QuickCapture

Toolbar and Tools
Quick Capture Toolbar

• Dynamic toolbar
  - Map Legend Driven

• Configure in Table of Contents

• Quick Photo capture
  - Geotagged, or
  - Tap on Map

• You can add other tools to QuickCapture toolbar
Customize QuickCapture Toolbar
Customizing Forms
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
Creating Forms

• ArcPad Data Manager automatically creates a “QuickForm” style form when preparing data

• Customise default data forms in ArcPad Studio
  - Change layout
  - Add/remove fields
  - Add scripts for specialized behaviour and validation

• Add additional forms
  - Login user
  - Query forms for workorders/taskings
What can go on a form?

- Use “smart” controls like DOMAINCBO to enforce Geodababase rules without the need for any special scripting code.
- Arrange control locations, and use fonts and colours to make the form appear logical and aesthetically pleasing.
- Feature data pages can have one or more pages.
- Built in pages can be hidden.
Data Entry Forms

- Data entry forms appear when identify, creating or editing feature attributes

- A default data entry form is created for each feature class when using the ArcPad Data manager

- Simplest place to start is to modify the default form
Modify a checked out form
QuickProject Templates
QuickProject Templates

• Ready to use industry/business templates

• Single file deployment

• Easily build your own
  - Multiple Layers
  - Forms
  - Scripts

• Straight forward process to convert existing project data into a template
  - Create a map, save as a ZIP, put in ‘templates’ folder
ArcPad Data Manager
What benefit do you get from starting with a GDB?

- Automatic look up fields
  - subtypes
  - coded value domains
- Data validation
  - range domains
- Related table support

with no scripting required!
Customizing output from ArcPad Data Manager
Check Out

Prepare Map in ArcMap
Get Data for ArcPad

Customize AXF in ArcPad Studio
Deploy to device
Use On device

Map
AXF
Background Layers
Shapefiles
Rasters

Template Input
SQL in ArcPad

- ArcMap definition queries honoured
  - ArcPad AXF layer filters
- Used in Query Forms
- Available for use in scripting (next session)
What is an ArcPad App?

Project focused solutions built with ArcPad.
Steps to make an App

- Step 1 – Prepare map
- Step 2 – Design a toolbar
- Step 3 – Create an App shortcut
- Step 4 – Deploy
App Shortcuts

- Start ArcPad with a range of command line options and parameters (.LNK)
- On Windows Mobile :-
  - \Windows\Start Menu\Programs\ArcPad App
- App Icon (.ICO) extracted and saved in project folder with same name as map
Some App shortcut tips…

• App shortcuts (.LNK files) may be copied between systems if data paths are consistently named
  - NB: On mobile devices ‘Storage Card’ may have different names depending on the device model

• Desktop .LNK files are a different format to Windows Mobile .LNK files 😞 😞
Make an ArcPad App
Deployment
Where does your customization go?

- **“My ArcPad”** folder
  - “per user” on desktop systems
  - “per device” on Windows Mobile systems
  - Preferences and configuration files

- **“ArcPad”** folder
  - Common to all users on desktop systems
  - Templates
  - Applets
  - Styles
  - Datum configuration

- **Your project** folder(s)
  - Could hold all files - App
  - Good for deployment
• Magically looks for App shortcuts on your device or storage cards
Deployment Card/Thumbdrive

- Put all project data, and project specific customization and preferences in a folder
- Create App shortcut stored in project folder
- Optionally contains .CAB files to reinstall ArcPad application from a hard reset
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