Esri International User Conference | San Diego, CA

Technical Workshops | 12th July 2011

ArcPad – Introduction to customizing ArcPad solutions

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http://www.esri.com/sessionevals

http://arcpadteam.blogspot.com/

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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

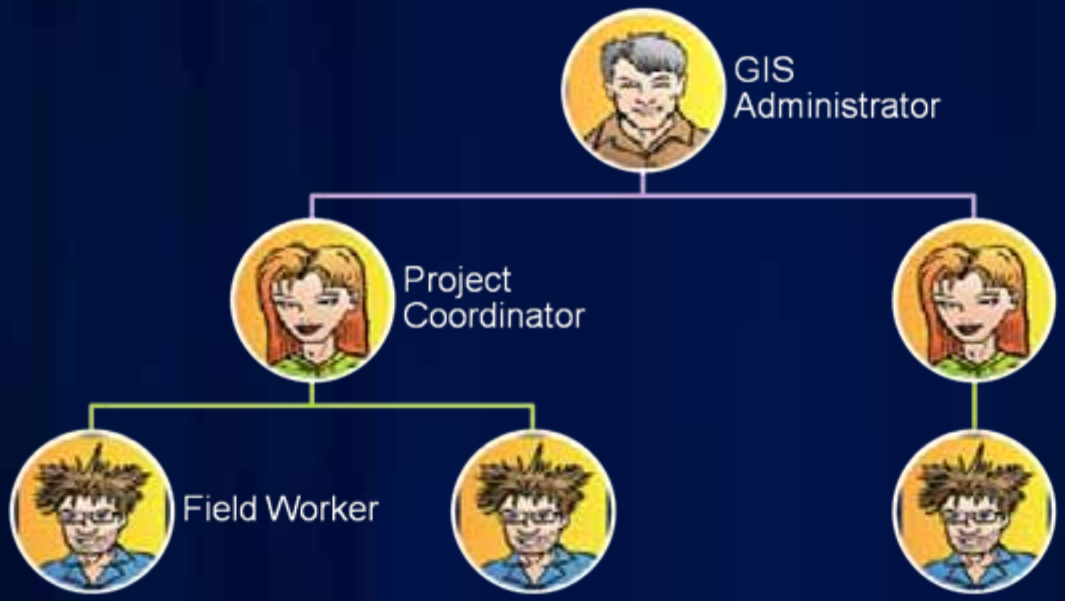
Session Outline

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

- Toolbars
- Forms
- Data
- Projects

Toolbars and Tools
Projects
Forms
Data

Who will do the customization?



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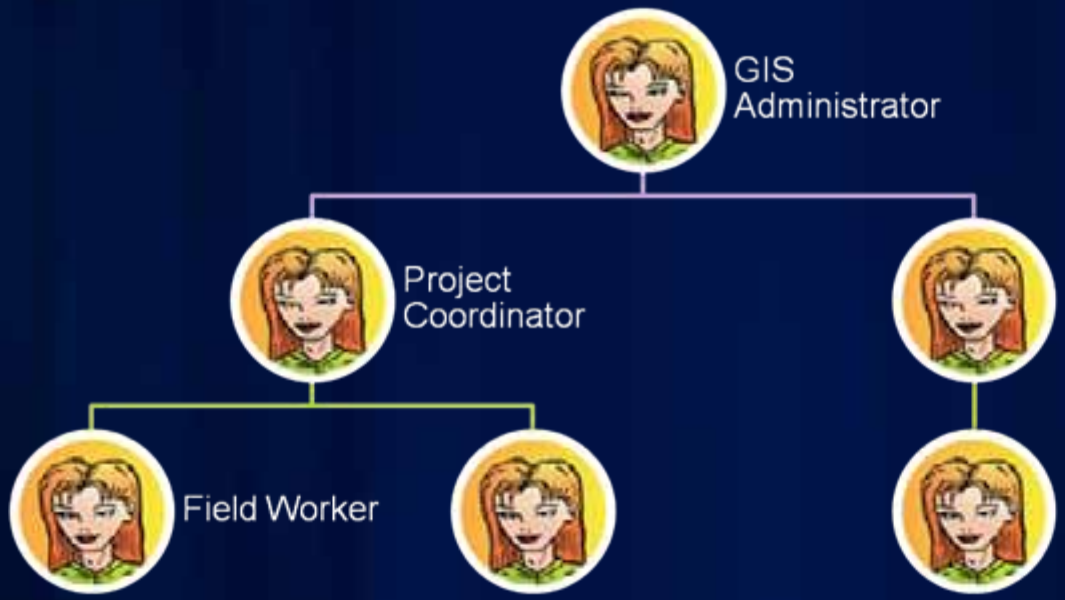


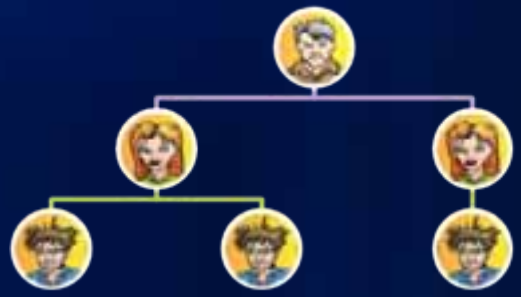
What Platform Am I Customizing – Does it Matter?

- **Windows**

- **Windows Mobile**

Considerations:

- Screen size
- **CPU Speed**
- Memory Size



Customizing Toolbars

Toolbars and Tools

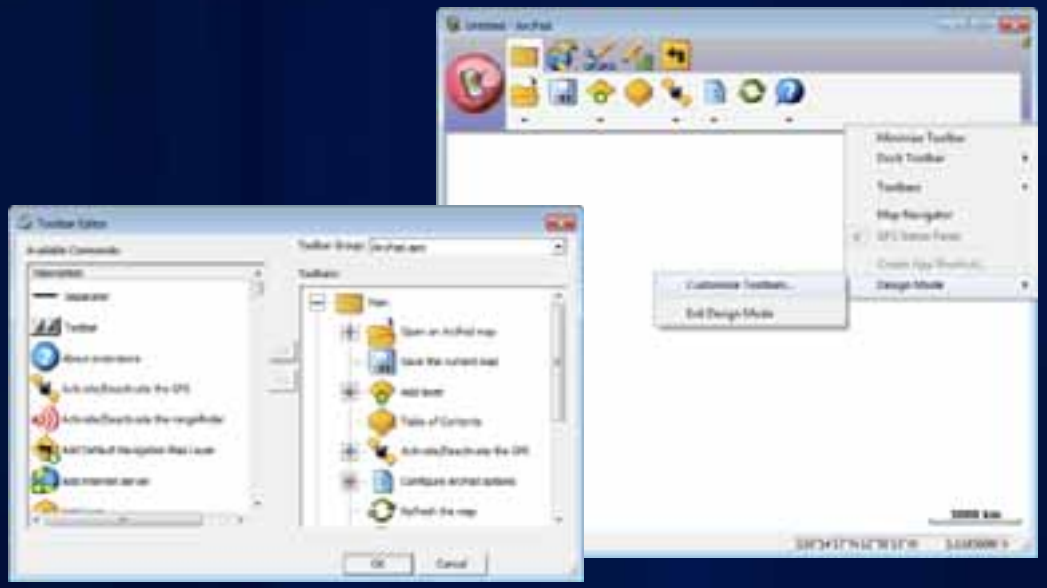
Toolbar customisation

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

When you want a custom toolbar,	you should store your toolbars in,
for all projects	ArcPadFavorites.apx
or appended tools upon the default toolbars for one project	ArcPad.apm
or appended tools upon the default toolbars for many projects	Applet.apa
or appended tools upon the default toolbars for all projects	ArcPad.apx

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

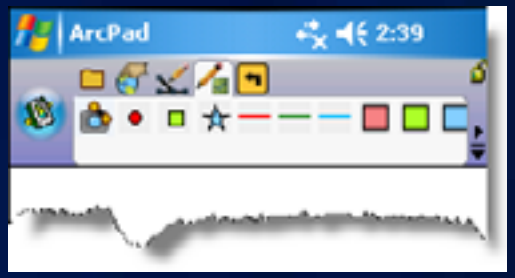
Toolbar Demo

QuickCapture

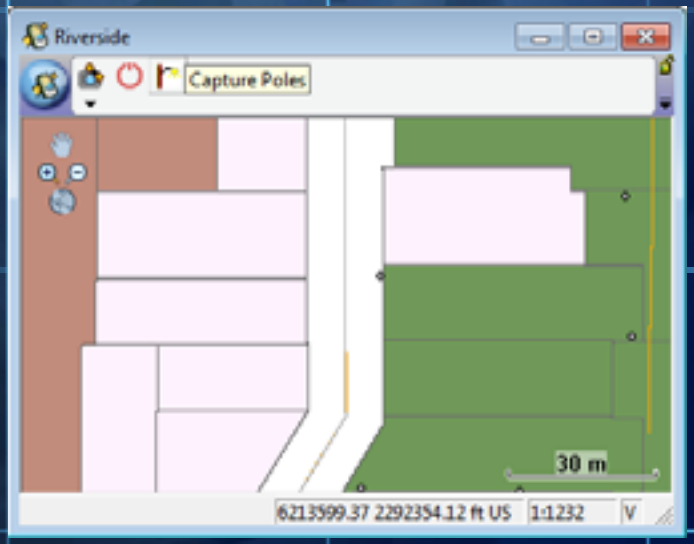
Toolbars and Tools

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

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

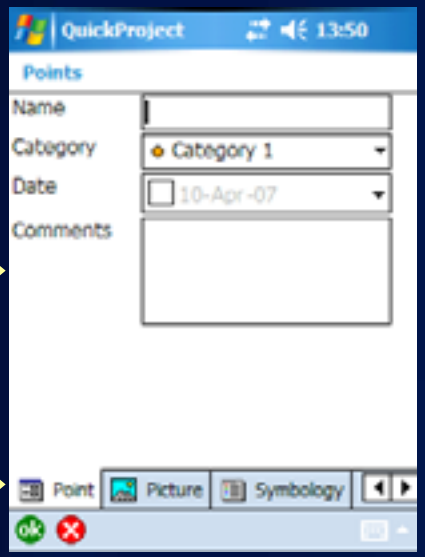
- ArcPad Data Manager automatically creates a “QuickForm” style form when preparing data

- 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?

Arrange control locations, and use fonts and colours to make the form appear logical and aesthetically pleasing



Use “smart” controls like DOMAINCOMBO to enforce Geodababase rules without the need for any special scripting code

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

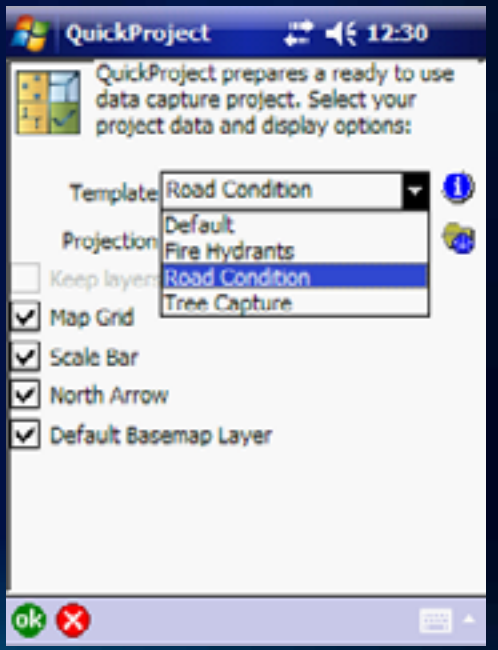
Modify a checked out form

QuickProject Templates

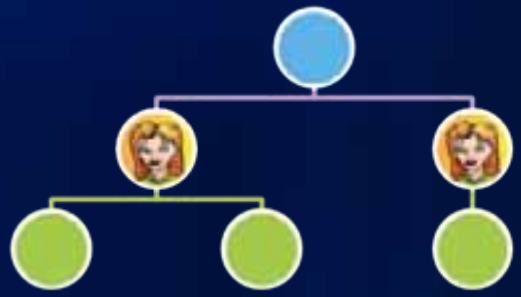
Data

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



Tree Register



ArcPad Data Manager

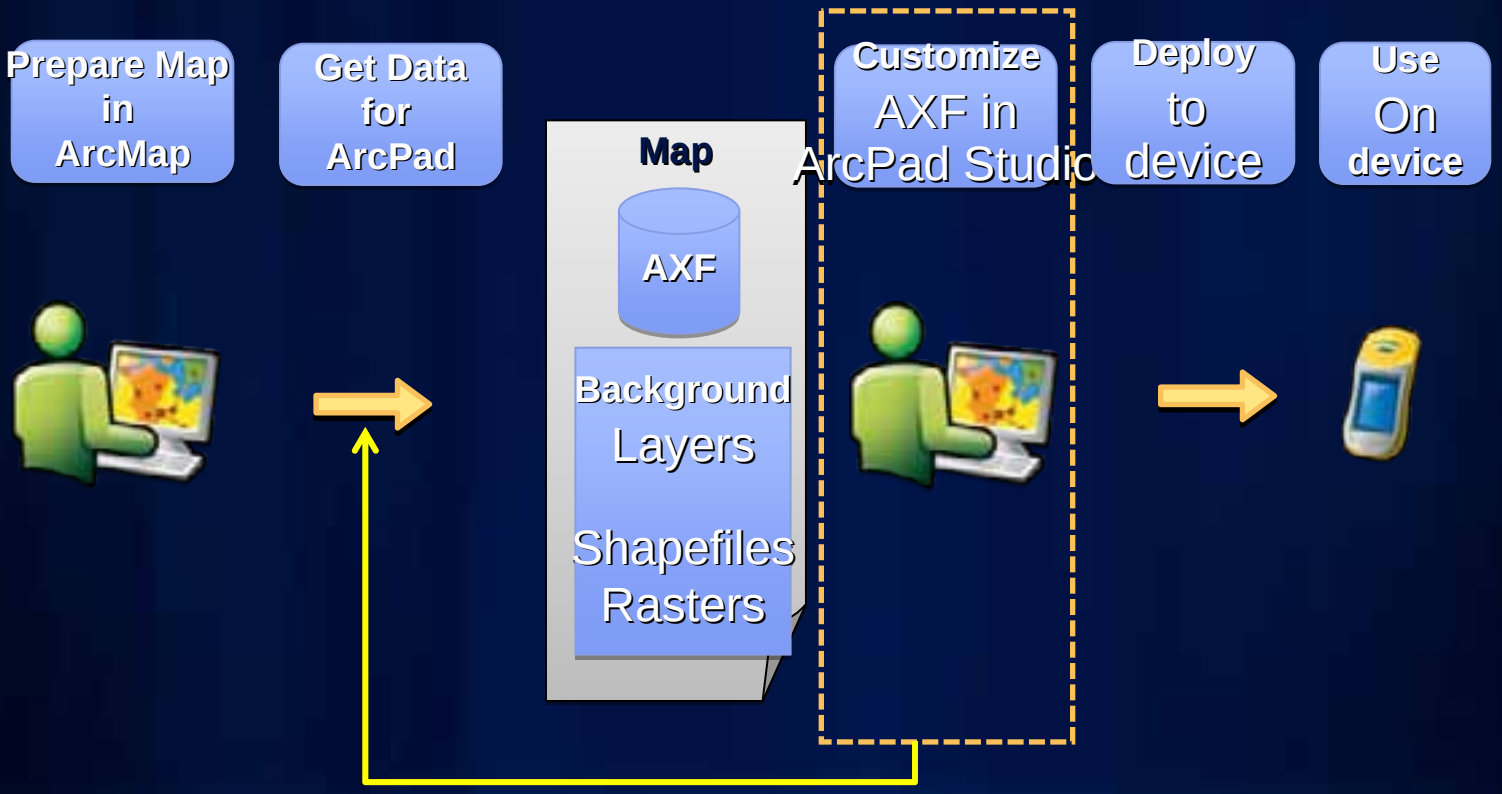
Data

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



SQL in ArcPad

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

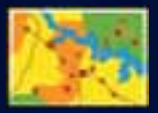
ArcPad Apps

Projects

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

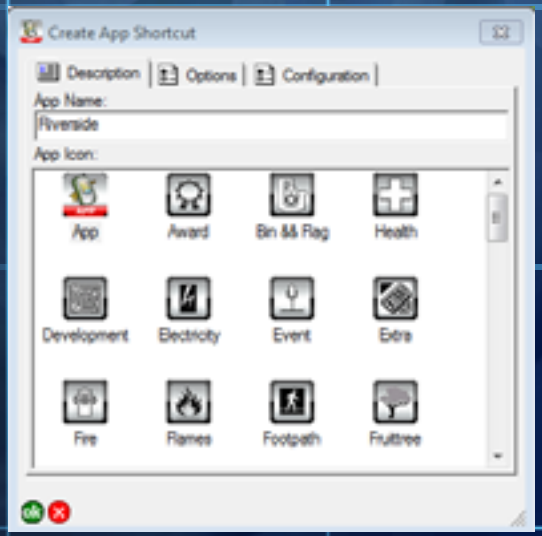
App Shortcuts

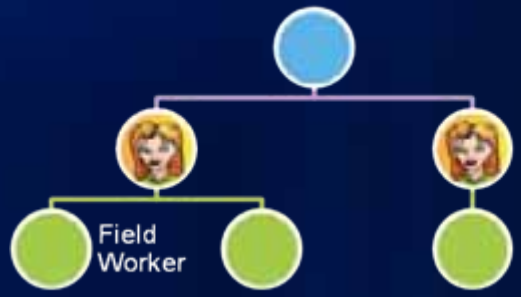
- Start ArcPad with a range of command line options and parameters (.LNK)
- On Windows Mobile :-
  - \Windows\Start Menu\Programs\ArcPad App
- App Icon (.ICO) extracted and saved in project folder with same name as map

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



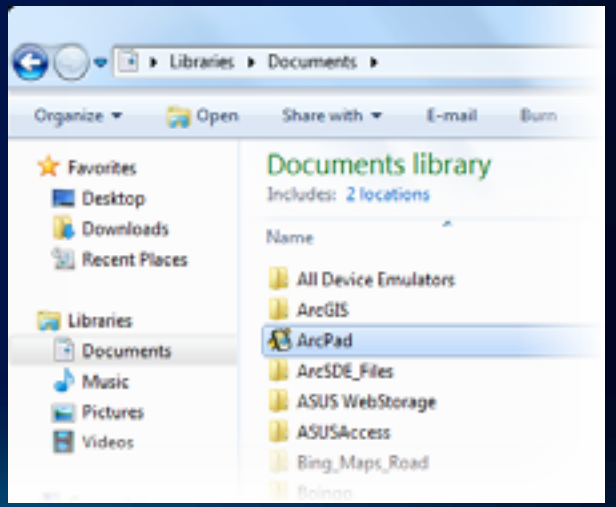


Deployment

Projects

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



ArcPad Today

- **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

Toolbars and Tools
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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

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