Advanced Customizing of ArcPad Solutions

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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
### 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>
<tbody>
<tr>
<td><strong>• Integrated customizaton experience</strong>&lt;br&gt;- Toolbars&lt;br&gt;- ArcPad Apps&lt;br&gt;- Support ArcGIS annotations</td>
<td><strong>• AXF support in ArcGIS</strong>&lt;br&gt;- quality improvements&lt;br&gt;- ArcPad developer help online&lt;br&gt;- Updated Streetmap data</td>
<td><strong>• Integrated customizaton experience</strong>&lt;br&gt;- Forms&lt;br&gt;- GDB data performance improvements</td>
<td><strong>• Compatible with ArcGIS 10.1</strong>&lt;br&gt;- Support of Feature Services&lt;br&gt;- Support Windows Phone 7</td>
</tr>
</tbody>
</table>
Agenda

- Review of Customization
- **Customizing Map Navigator**
- Related table forms
- Query Forms
- SQL
- Geoprocessing
- Deploying with ArcGIS Server
- “Lightning” Tips
What can be customized?

- Toolbars and Tools
- Preferences
- Forms
- Data
Scripting environments available for ArcPad

- JavaScript vs. VBScript

- Event Driven
  - Application
  - Forms/Controls
  - System Objects (eg GPS)

- ArcPad Object Model

- Execute SQL Commands
Configuring Map Navigator
Map Navigator - The “On Map” tools

- Edit XML in a configuration file (ArcPad.apx)
- Maximum of 8 tools
- 4 Styles
  - “Style 0” = Tall Cross
  - “Style 1” = Wide Cross
  - “Style 2” = Cross
  - “Style 3” = Vertical
- Location
- Tint Color
- Flip Icons
- Use Once – Changes click behaviour
Map Navigator configuration in **ArcPad.apx**

```xml
<MapNavigator style="2" horzalignment="left" tintcolor="0,20,40"
backgroundcolor="SteelBlue" transparency="0.0" buttonsize="0">

  <ToolButton command="modeidentify"/>

  <ToolButton command="fixedzoomin"/>

  <ToolButton command="fixedzoomout"/>

  <ToolButton command="zoomfullextent"/>

  <ToolButton command="modepan" useonce="true"/>

  <ToolButton command="modezoomin" useonce="true"/>

</MapNavigator>
```
App Shortcuts
Create Shortcut Apps
ArcPad App shortcuts

• "C:\Program Files\ArcGIS\ArcPad10.0\ArcPad.exe" - multiapp
  "C:\Users\Public\Documents\ArcPad\Samples\Riverside\Riverside.apm"
ArcPad command line options

- **-multiapp** Allow multiple instances of ArcPad to run on Windows.
- **-prefs <filename.apx>** Override default preferences file
- **-config <config.apx>** Override config file specified in preferences
- **-applet <filespec>** Load specific applet. Can be specified multiple times and may also contain wildcards.
- **-noapplets** Do not load applets form paths specified in preferences.
- **-noconfig** Do not load config
- **-nosplash** Don't show splash screen
- **-debug** Debug mode. Log debug information
- **-nostatusbar** Don't show status bar
- **-minimize** Start minimize
- **-noaccel** Don't handle keyboard accelerators
- **Windows Specific**
  - **-nodesignmode** Disable design mode
  - **-skin=<filename>** Open ArcPad with a device skin
  - **-size=<size>** Set the size to open ArcPad
  - **-symboldpi=<dpivalue>** Symbol DPI
  - **-showversion** Show the version number
Related Table Forms
• 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
Related Table Forms

- ArcPad Data Manager automatically creates forms for feature layer and each related table
- Each Related Table can have its own forms and scripts
- Independent forms for edit and identify
- Customize columns that appear in the list view
- Photo tab supported
- Easy to configure
Building relationships
List view + forms in Studio
Related Table Forms
Query Forms
Query Forms

- Query forms are search “templates” that automatically get added to the “Find” dialog

- Default query form automatically created for each feature class

- Useful for simplifying field work flows requiring repeatedly performed searches
Harnessing SQL
SQL

- Map production – Definition Query
- Use standard SQL to edit/maintain data
  - SELECT
  - UPDATE
  - DELETE
- Connect via the Datasource object
  - Datasource.Execute("SELECT MAX(AXF_OBJECTID) FROM PARCEL ")
- Use SQL transactions on bulk operations to maintain integrity in case of failure
GeoProcessing to Automate
Where you can automate

CECopy
FTP
Email
MobiControl
Foldershare.com
Bluetooth, WIFI
Geoprocessing
Deploying in ArcGIS Server
Publishing Customization on ArcGIS Server

- Prepare Map in ArcMap
- Get Data for ArcPad
- Customized Template
- Published Map Package
  - AXF
  - Background Layers
  - Shapefiles
  - Rasters
- Deploy to or Subscribe from device
- Use And Synchronize

Get Data for ArcPad
“Lightning” Tips
“Lightning” Tips

• Connectivity to ArcLogistics Navigator
  - Standard
  - Your ArcGIS Map services
• Connect to other ArcGIS Services
  - GP services (visit the demo theater)
• Python + CECopy (Windows Power Toys) = autoDeploy
Other Studio Tips

- **Expert Mode**
  - Modify shortcut adding /EXPERT to command line
  - Export feature class to Shapefile
  - Export tables to DBF
  - Create blank AXF
  - Import Shapefiles/DBF

- **[Delete] key to delete selected control**

- **Align/size controls on forms**
  - Last control is used as reference
  - Hold down CTRL to highlight reference
  - Shortcut keys
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