



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

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

ArcPad 10.0.2

- Integrated customization experience - Toolbars
- ArcPad Apps
- Support ArcGIS annotations

ArcPad 10.0.3

- AXF support in ArcGIS
- quality improvements
- ArcPad developer help online
- Updated Streetmap data

ArcPad 10.0.4

- Integrated customization experience – Forms
- GDB data performance improvements

ArcPad 10.1

- 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

ArcPad®



Treasure Map

Trimble

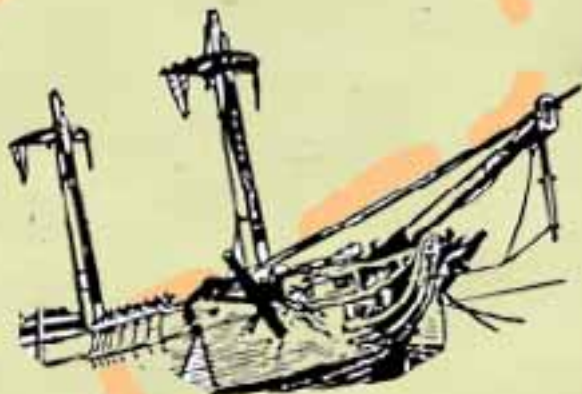
Booth
1709

TOPCON

Booth
2215

Magellan

GPS
Booth
1507



Juniper

Systems
Booth
919



Leica

GeoSystems
Booth
2101

.JAVAN

Booth
2015

**General
Dynamics**

Booth
710

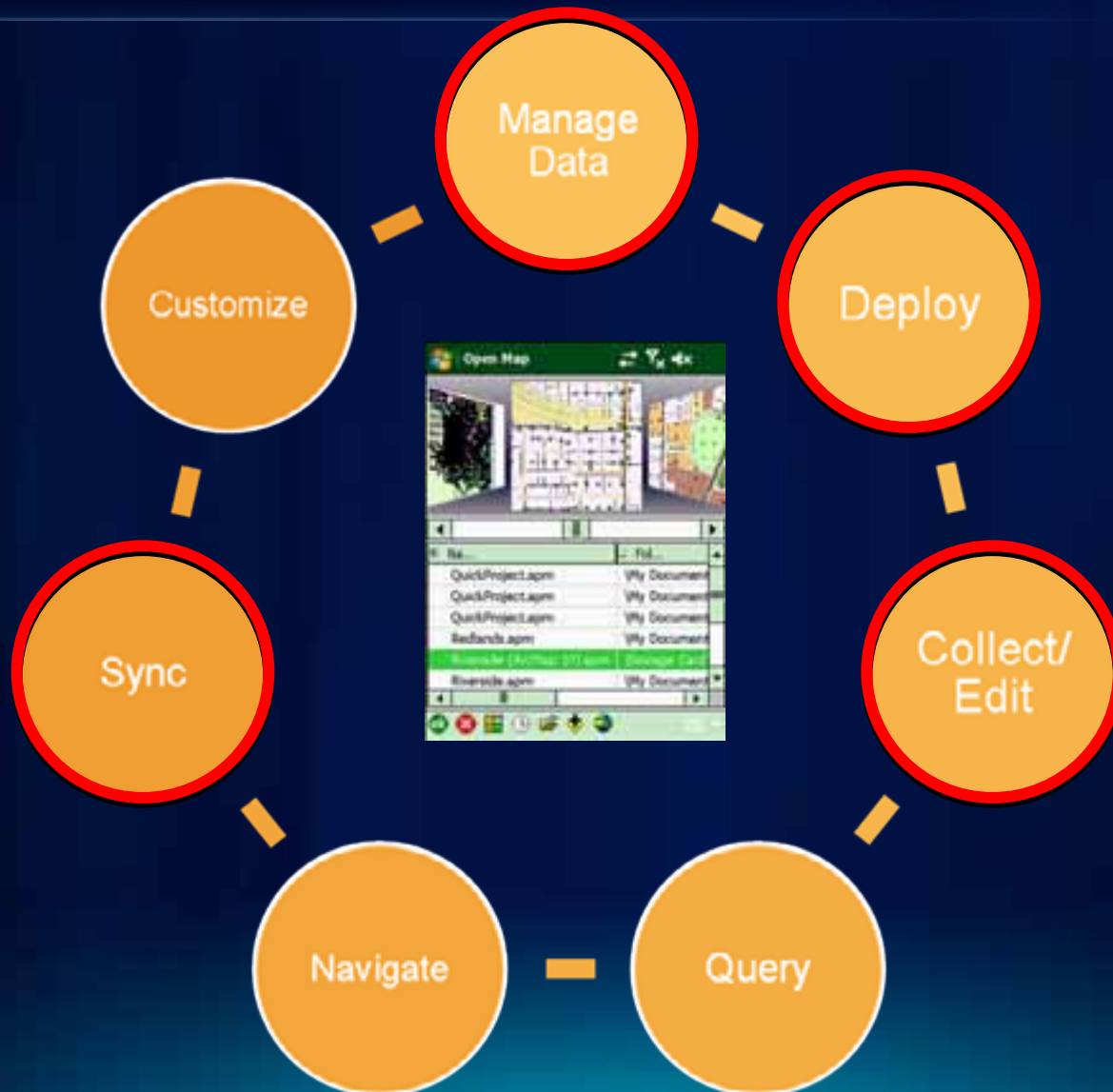
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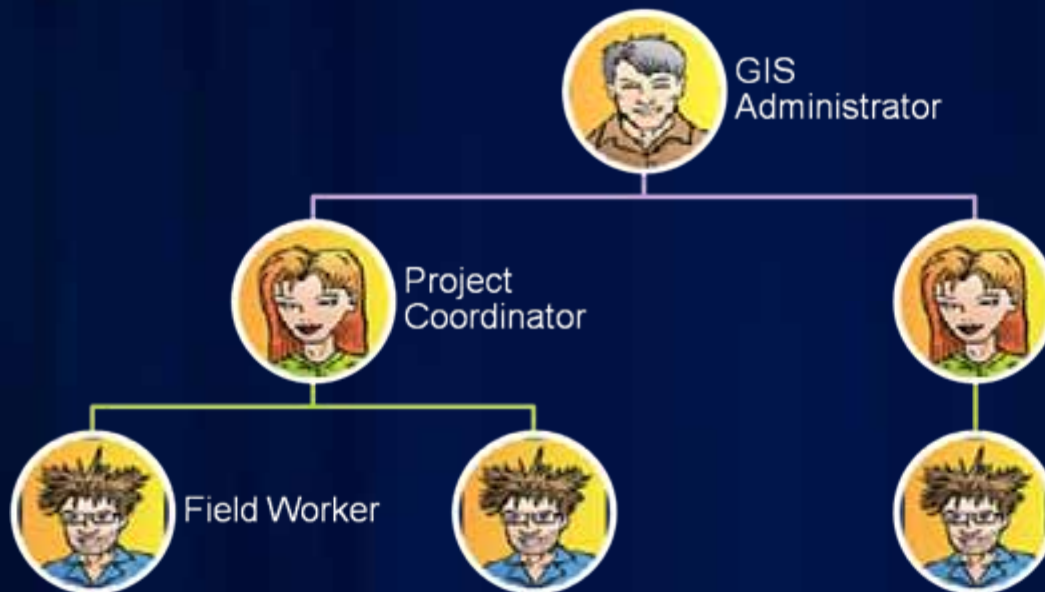


*Ahhh me hearties,
Explore the Esri UC Treasure Islands.
Visit these fine ArcPad hardware partners,
view a demo of ArcPad 10.0.2 and be
rewarded with a sticker.
1st 40 to visit, collect stickers and show
your map at the Mobile GIS Showcase will
receive a free gift voucher.*

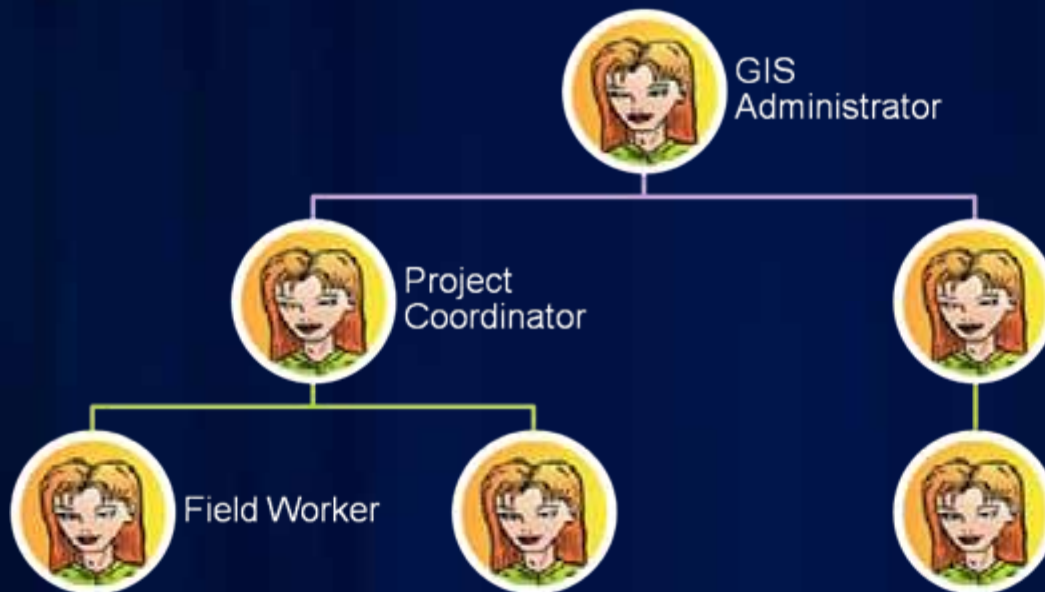
What can you do with ArcPad?



Who uses ArcPad?

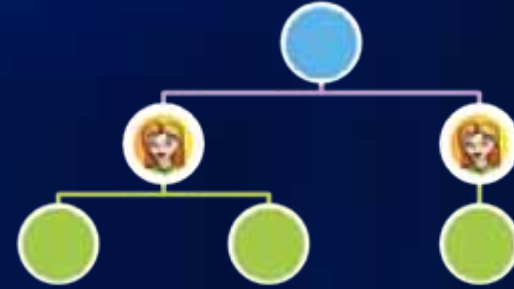


Who uses ArcPad?









ArcPad Data Manager

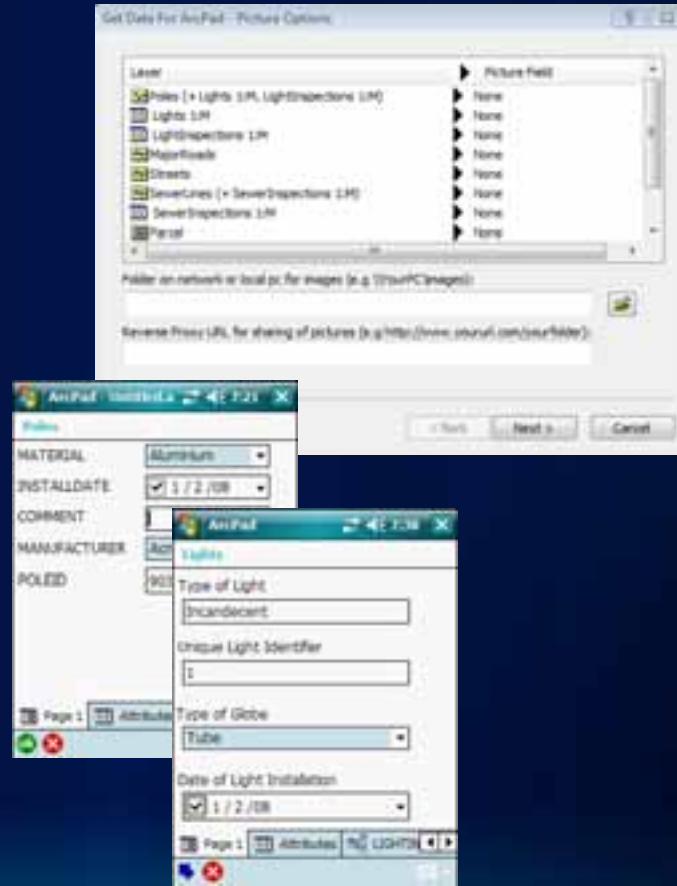
Manage
Data

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

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?

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**

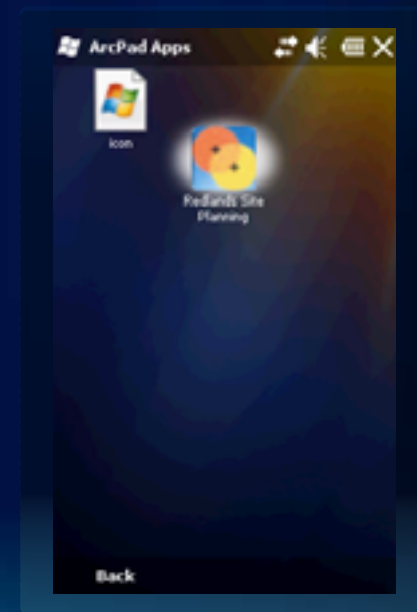
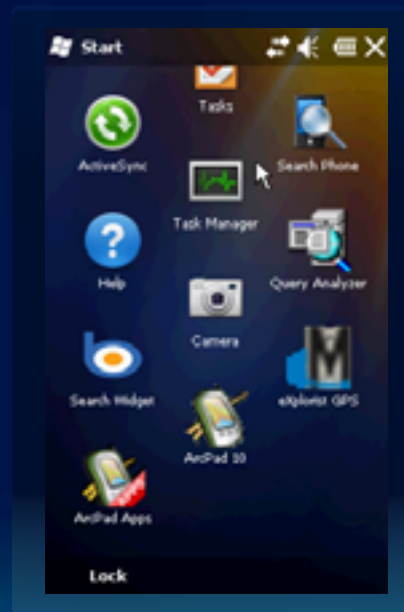


ArcPad Apps

Deploy

Using App shortcuts

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



DeKalb County Board

Fulton County Dept. of Health and Wellness/District 3, Unit 2, 04

ArcPad Apps





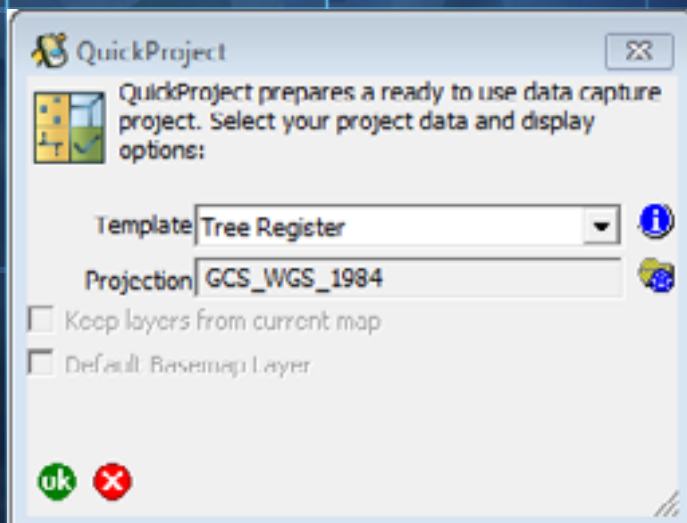
QuickProject Templates

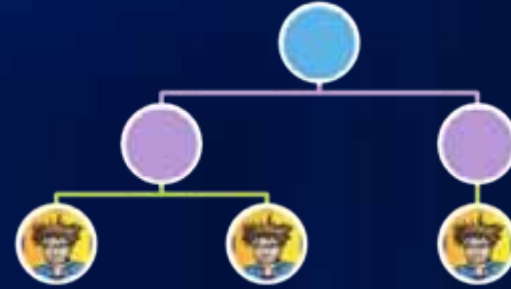
Deploy

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



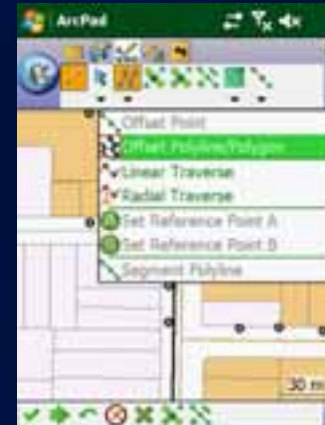


Rich data capture and editing

Collect
/Edit

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



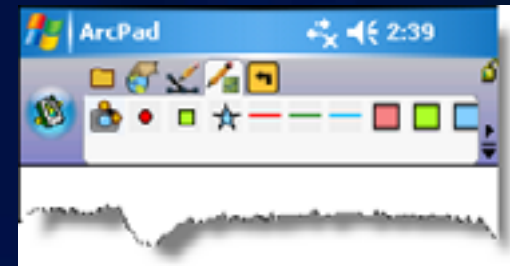


QuickCapture

Collect
/Edit

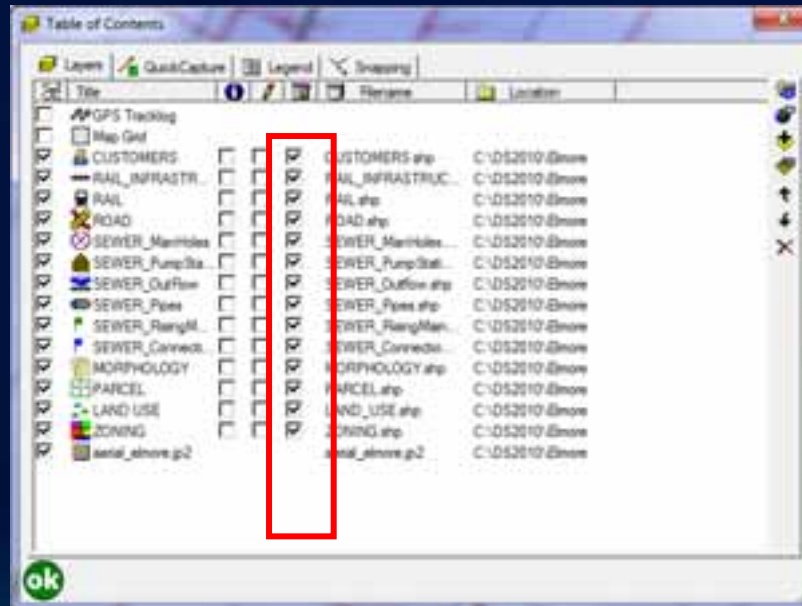
Quick Capture Toolbar

- **Dynamic toolbar**
 - Map Legend Driven
- **Configure in Table of Contents**
- **Quick Photo capture**
 - Geotagged, or
 - Tap on Map



Rapid Capture Data Forms

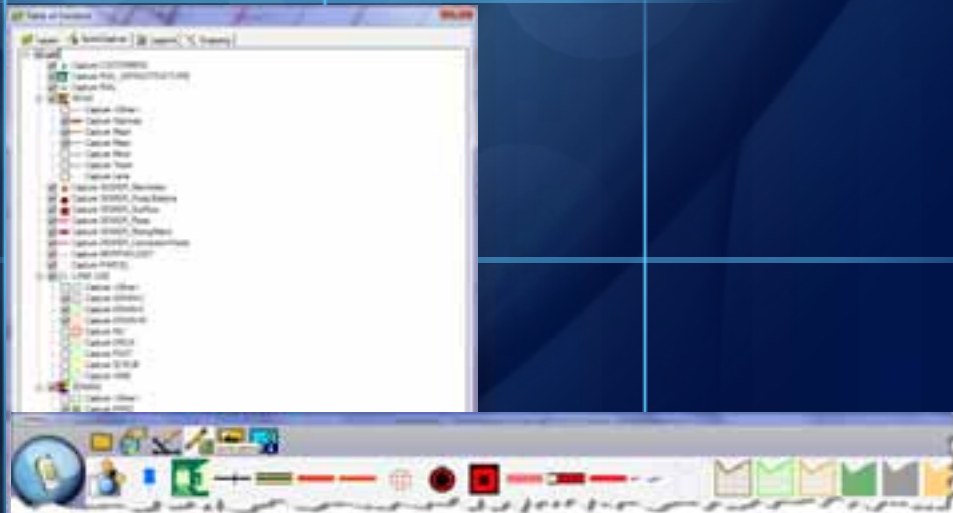
- Enables 1-Click Data Entry
- Optionally turn off form
- Attribute filled in by QuickCapture tool
- Form can be forced to be 'required' in ArcPad Studio



DeKalb County Board

Fulton County Dept. of Health and Wellness/District 3, Unit 2, 2011

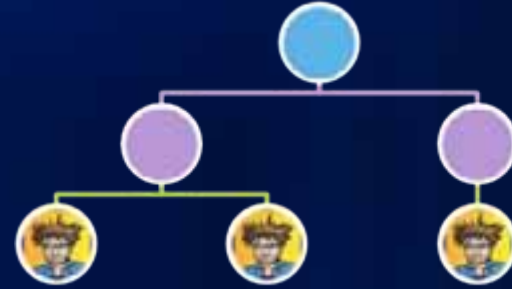
QuickCapture in Action



Rich editing tools

- Insert, append, move vertices
- Move, rotate, scale, resize features
- Snapping
- Undo
- Offsets
- Repeated attributes
- Segmented line features





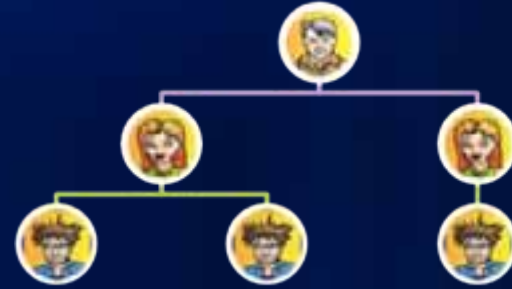
Working with photos

Collect
/Edit

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

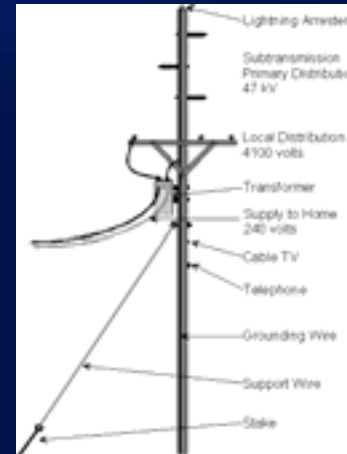




Working with related tables

Collect
/Edit

- 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



PoleID	Type	Built
123	Wood	8-Oct-99
124	Steel	5-Jul-87
125	Wood	7-Jun-99



PoleID	Insulator#	Type
123	1	200kv
123	2	400kv
123	3	200kv



PoleID	Insulator#	Inspector	Date
123	1	Jian	1-Jan-00
123	1	Elvin	5-Feb-04
123	1	Craig	10-Jun-06

Editing related records

Poles

General Comment LIGHTS POLEINSPECTIONS

TYPE	INSTAL	LIGHTID	GLOBE	LIGHTP
Floures	2005-07	1019	Tube	

Pole Inspection

General Inspection Details

Inspection ID

Inspection Date 28/06/201

Inspector chull>

Pole ID 111755

Lights

Lights LIGHTINSPEC

Light ID 1019

Type flourescent

GlobeType Tube

Install Date 26/07/200

Pole ID 111755

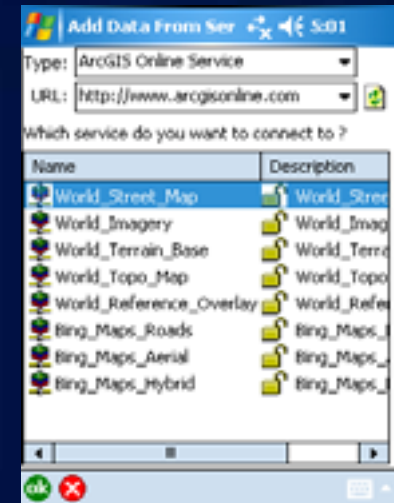
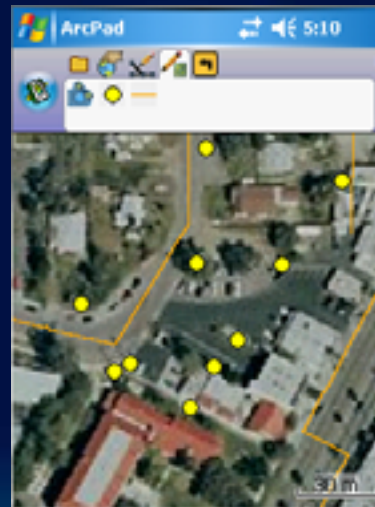
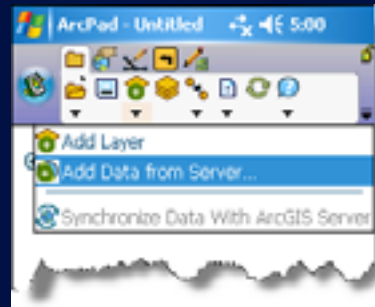


ArcGIS Online

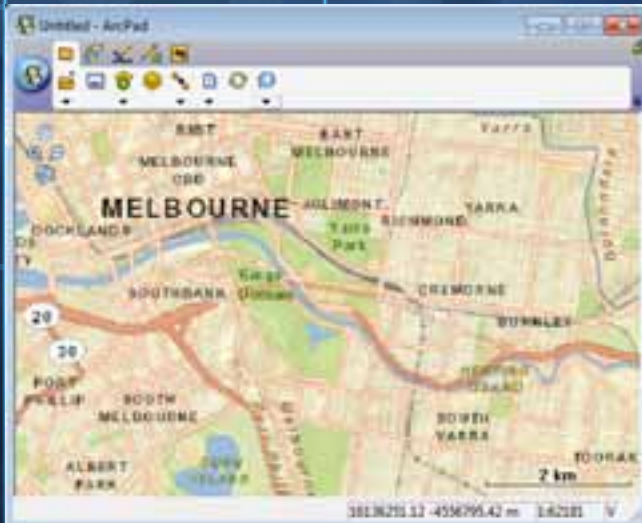
Collect/Edit

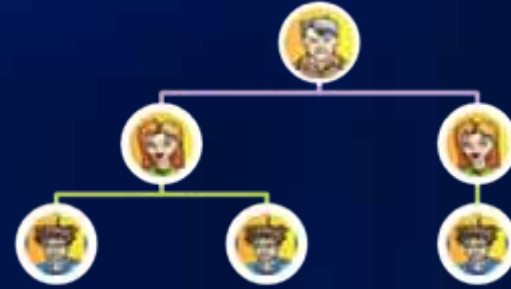
ArcGIS Online & Bing Maps

- Standard Map Services
- Bing Map Services
- Your Map Services
 - Web Mercator Only



Adding a basemap





ArcGIS Server data synchronization

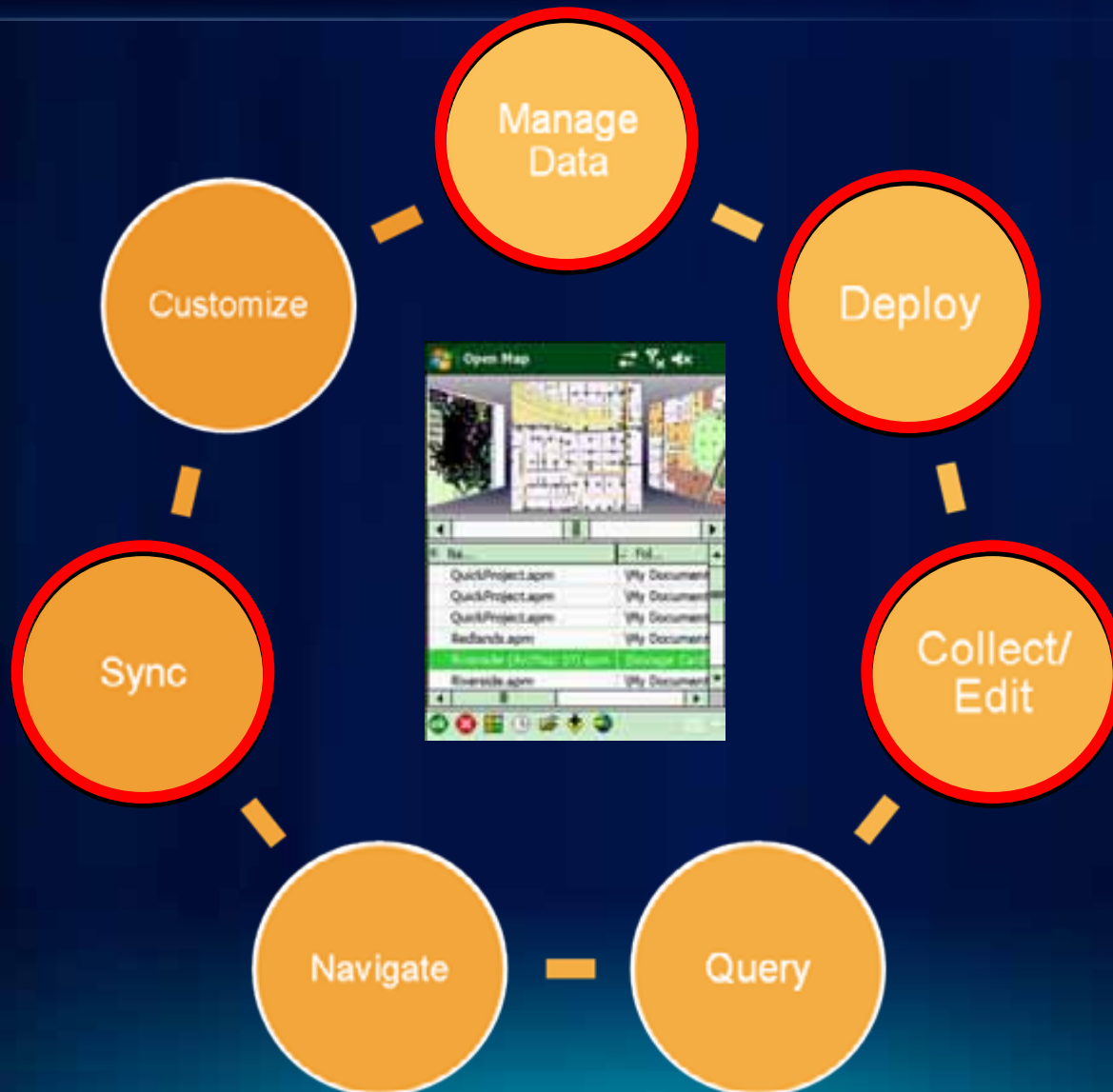
Sync

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?



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>







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