Simple Maps and Apps for Tactical Operations

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Defense Solutions
Defense Solutions
We support the Defense, Intelligence, and National Security industry

- Fully documented and maintained
- Fully supported
- Open source
From Print Map to Web App
Digital Transformation for Tactical Operations

- ArcGIS Online
- ArcGIS Enterprise
- Web AppBuilder for ArcGIS
- Survey123 for ArcGIS
- Operations Dashboard For ArcGIS
Web Map – foundation for creating and sharing Web Applications

Bringing your data into ArcGIS Enterprise or ArcGIS Online

- A web map is the basis for creating these information products
  - Geographic context
  - Visualization with smart mapping
  - Interactive and exploratory
  - Shareable to your organization

Data Sources

- ArcGIS Desktop Applications (Pro)
- Server with Geographic Data
- Table, spreadsheet, .csv

Share your Data

Map your Data in the Web

- ArcGIS® Enterprise
- ArcGIS™ Online
Get Started with Sharing
Populating your Organization with Data

1. Add content
2. Refine item details
3. Choose audience
4. Share content
Web Map to Web Application with Configurable Apps

Apps available in your organization
Web Map to Web Application with Web AppBuilder for ArcGIS®

Assemble web applications – no coding required

- Widgets
- Themes
- Any Device

Web Maps | Web AppBuilder for ArcGIS® | Web Apps
Building Apps
Decisions and Considerations

1. Choose Theme

- Billboard Theme
- Box Theme
- Dart Theme
- Foldable Theme
- Dashboard Theme
- Launchpad Theme
- Jewelry Box Theme
- Plateau Theme
- Tab Theme

2. Choose Web Map

- Web Map
  Owner: dbarnes_ns
  Last Modified: 6/29/2017
  More Details...

   Military Overlay

   Military Overlay sample features over Central California using MIL-STD-2525 symbology

3. Choose Widgets

- Attribute Table
- Coordinate
- Extent Navigator
- Home
- My Location
- Overview
- Scalebar
- Search
- Splash
- Zoom Slider

4. Choose Branding

- Branding
  Add logo, title, or subtitle for your app.

   Military Overlay
   with 2525 Symbology

5. Save, Export as Template

   Save
   Save As
   Export As Template

   Saved
Web AppBuilder (Developer Edition)

Extend Web AppBuilder

- Create custom themes
- Develop and incorporate custom widgets
- Run in a disconnected environment
- Download apps and deploy on web server
Defense Solutions Widgets

Custom functionality for your workflows
Defense Solutions Widgets
Available at:
Core widgets released at ArcGIS Online 5.2, ArcGIS Enterprise 10.5.1, and Web AppBuilder Dev Edition 2.5 (Summer 2017)

Military Tools for ArcGIS
- Coordinate Conversion
- Distance and Direction
- Visibility

Solutions Web AppBuilder Widgets
- Grid Overlay
- Gridded Reference Graphic
- Critical Infrastructure/Key Resources Chart
- Bomb Threat
- Emergency Response Guidebook
- Elevation Profile
- Image Discovery
Defense Solutions Widgets
Built for your workflows

Convert Coordinate Notation Formats

MGRS Grid

Line, Circle, Ellipse, Range Ring Graphics

Radial Line of Sight

Gridded Reference Graphics
Getting Started with the Widgets
Copy widget folders from source to your instance of Web AppBuilder (Dev Edition)

At ArcGIS Enterprise 10.5.1, custom widgets can be added to hosted Web AppBuilder as a Portal item type

WebAppBuilderForArcGIS/client/stemapp/widgets
Building a Grids and Graphics Application

Incorporating Defense Solutions Widgets into Web AppBuilder (Developer Edition)
Building Solutions: Civil Military Operations
Civil Affairs

What problem were we trying to solve?
• Paper forms and maps in static process
• Not integrated, processes in parallel and disconnected
• No easy way to visualize common-op picture

• Web-first solution for military-civilian operations
• Keep same processes
• Automate collection and merge form results
• Visualize responses
Civil Military Operations

- Planning operations and managing information
- Field collection
- Monitor operations
Civil Military Operations

- Atmospherics Questionnaire
- Population Assessment Questionnaire Report (POPREP)
- Request for Information (RFI)
- Priority Areas of Interest and Operations
- Civil Mission Execution Planner
- Civil Military Operations Manager
- Civil Military Operations Dashboard

http://solutions.arcgis.com
Civil Military Operations - Forms
Using Survey123 for ArcGIS

- Field collection of survey and interview data
  - On mobile device, laptop, browser

- XLSForms-based smart forms

- Shared as form and feature service
Civil Military Operations - Apps
Using Web AppBuilder

- Prioritize and plan operations
- Manage field collection
- Browser-based applications
- Use web maps and widgets with NO CODING
Civil Military Operations - Dashboard
Using Operations Dashboard

- Monitor field collection operations and results
- Desktop or browser based
- Interactive maps, charts, graphs, and lists to visualize dynamic information
Civil Military Operations Demo

Matt Funk
Simple Maps and Apps for Tactical Operations

What we did today:
• Creating Web Maps
• Configuring apps with Web AppBuilder
• Defense Solutions widgets
• Civil Military Operations solution
  - Forms with Survey123 for ArcGIS
  - Apps with Web AppBuilder
  - Operations Dashboard for ArcGIS
Questions?
… and answers

- Find our solutions at: solutions.arcgis.com/#Defense

- Join our community: geonet.esri.com/groups/defense-and-intelligence

- Survey for our workshop:
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