

UC



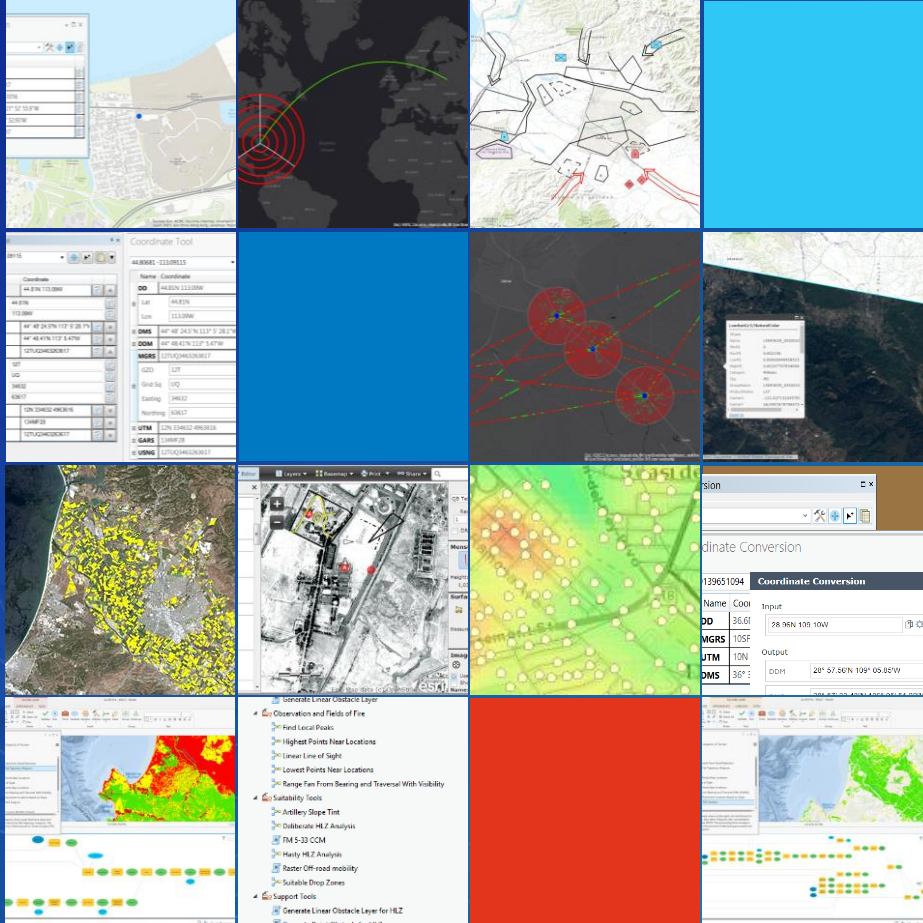
Military Tools for Developers

Patrick Hill

Kevin Gonzago

Defense Solutions

We support the Defense, Intelligence, and National Security industry



Fully documented and maintained

Fully supported

Open source

Empowering our users with focused workflows that fit their needs

Who Do We Support

Our User Community

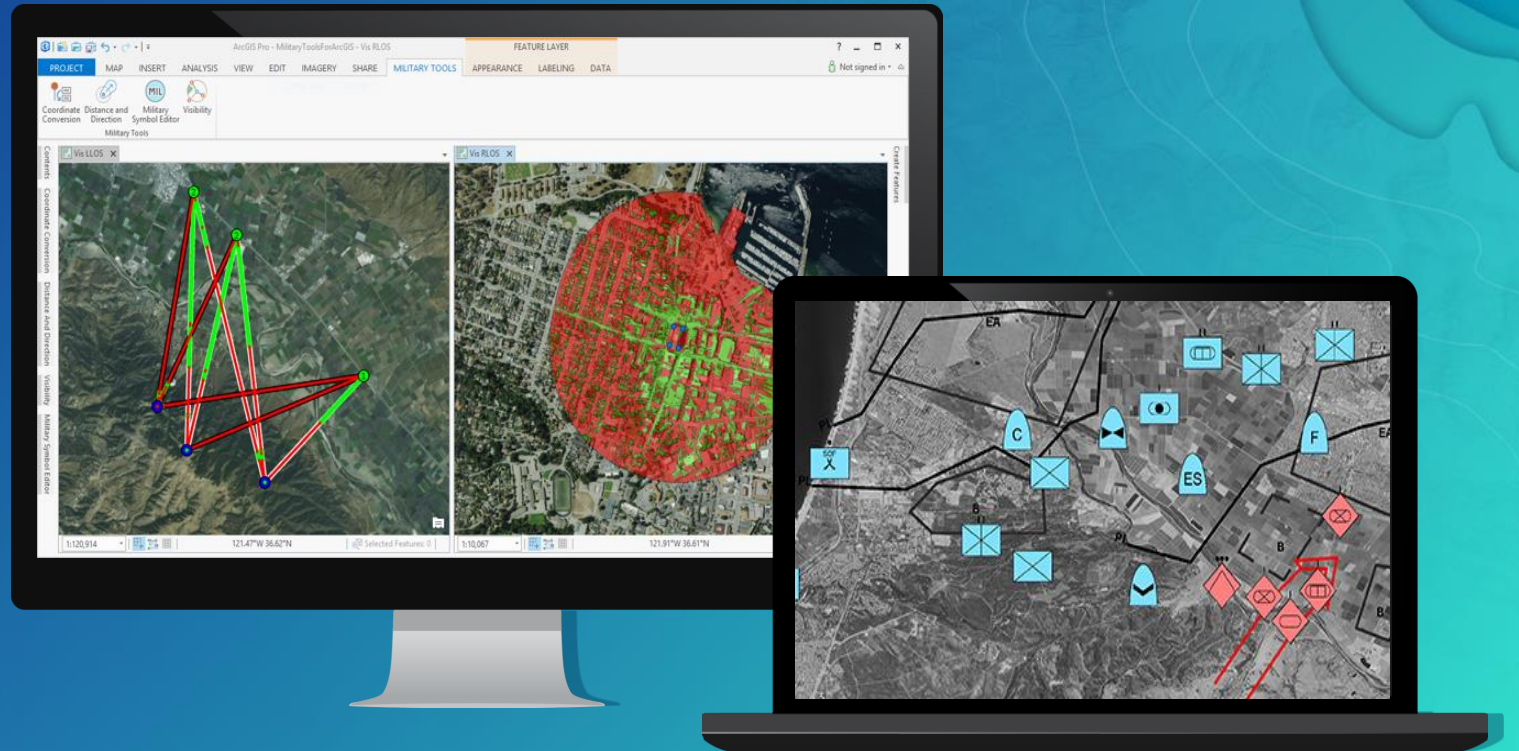


Empowering our users with focused workflows that fit their needs

What is Military Tools for ArcGIS?

Simple , Accessible, and Fully Supported Product

- Essential
- Open Source
- Fully Supported
- Mission Focused
- Easy to Use
- No Implementation Cost



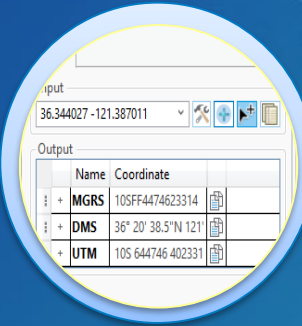
Interactive workflows that support creating common defense and intelligence geospatial products

Essential tools for Defense and Intelligence

Core workflows used by Analyst in our Industries

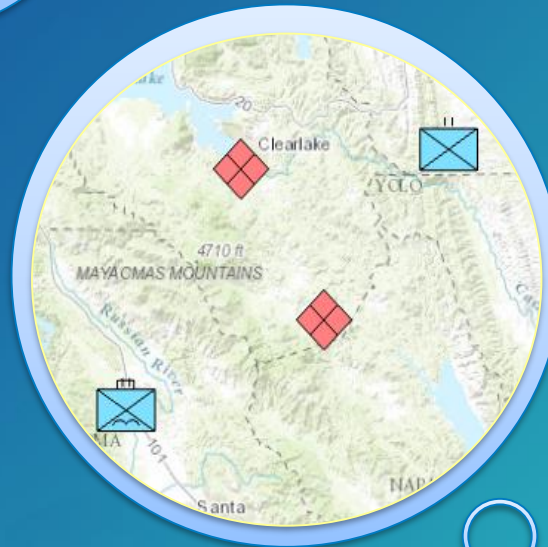
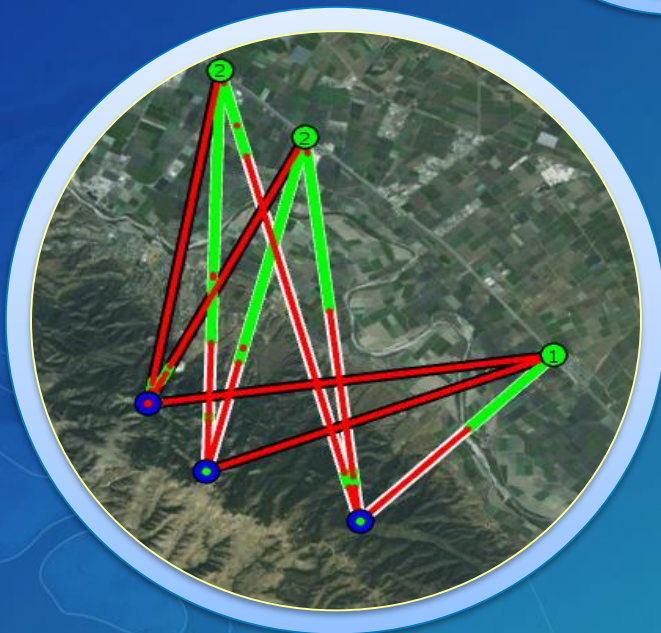


Visibility analysis



Coordinate Conversion

Distance and Direction calculations

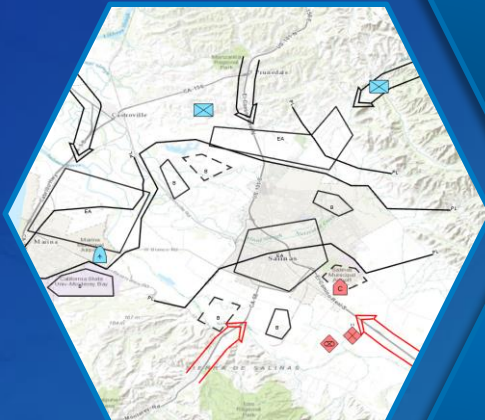


Military Symbol Editor*

Interactive workflows that support multiple Defense workflows

Military Tools where you need them

Common workflows that work across the platform



ArcMap
10.3.1 –
10.5.1



Web
AppBuilder
(Developer
Edition) 2.5

ArcGIS Pro
2.0



Empowering our users with focused workflows that fit their needs

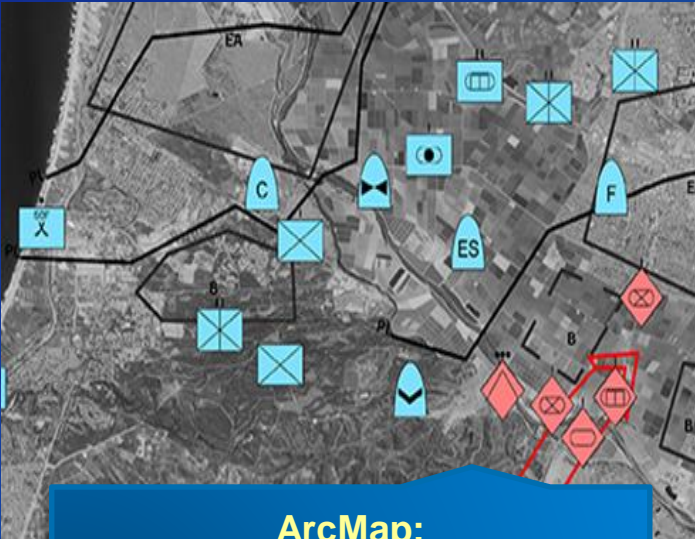


Demo

Introduction to Military Tools

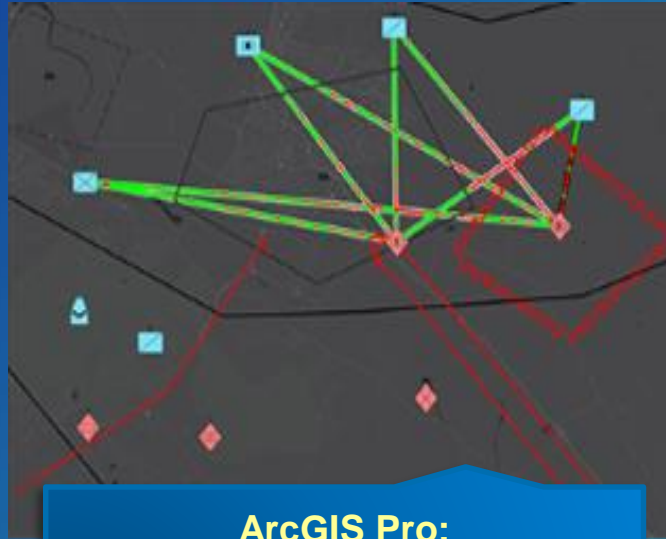
What you need

Developers can configure or customize everything we build



ArcMap:

ArcObjects SDK for Microsoft .Net
Framework 10.3.1



ArcGIS Pro:

ArcGIS Pro 2.0 SDK for Microsoft
.Net Framework

Widgets:

ArcGIS Web App Builder 2.5
Developer's Edition | JavaScript
3.20

Empowering our users with focused workflows that fit their needs

Github

Where you can you find our source code?

Add Ins

Coordinate Conversion

<https://github.com/Esri/coordinate-conversion-addin-dotnet>

Distance and Direction

<https://github.com/Esri/distance-direction-addin-dotnet>

Visibility

<https://github.com/Esri/visibility-addin-dotnet>

Military Symbol Editor

<https://github.com/Esri/military-symbol-editor-addin-wpf>

Widgets

Coordinate Conversion

<https://github.com/Esri/solutions-webappbuilder-widgets/tree/dev/CoordinateConversion>

Distance and Direction

<https://github.com/Esri/solutions-webappbuilder-widgets/tree/dev/DistanceAndDirection>

Visibility

<https://github.com/Esri/solutions-webappbuilder-widgets/tree/dev/Visibility>



Add-In Development Experience

- Use Scrum for development effort
- IDEs used: VS 2015, Sublime Text, Notepad++
- GitHub
 - Main source control
 - Code review
- Testing
 - Unit tests
 - Holistic Tests
 - Jenkins



Widget Development Experience

- Use Scrum for development effort
- IDEs used: VS 2015, Sublime Text, Notepad++
- GitHub
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 - Jenkins



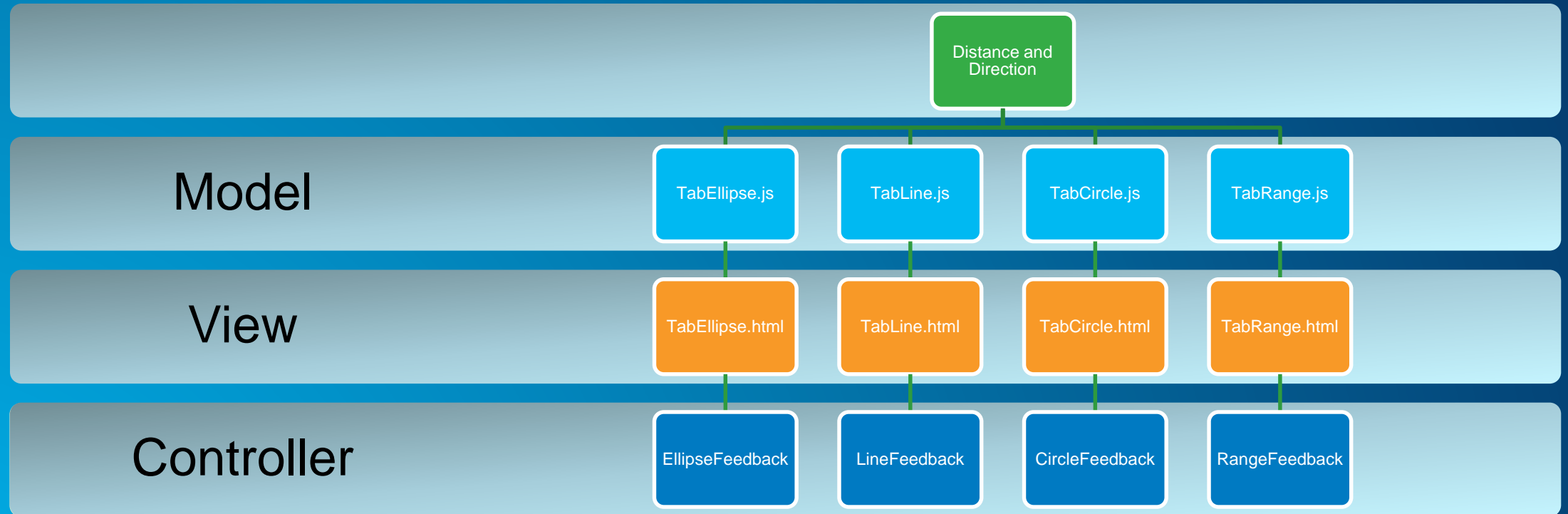
Code Structure

- MVC - widgets
- MVVM – Add-Ins
- Single Add-In vs. multiple Component Add-In

Code Structure Widgets - MVC

- **Model:** Expresses applications behavior independent of the user interface
- **View:** The output representation of the application – GUI
- **Controller:** accepts input and converts it to commands for model or view

CodeStructure - MVC



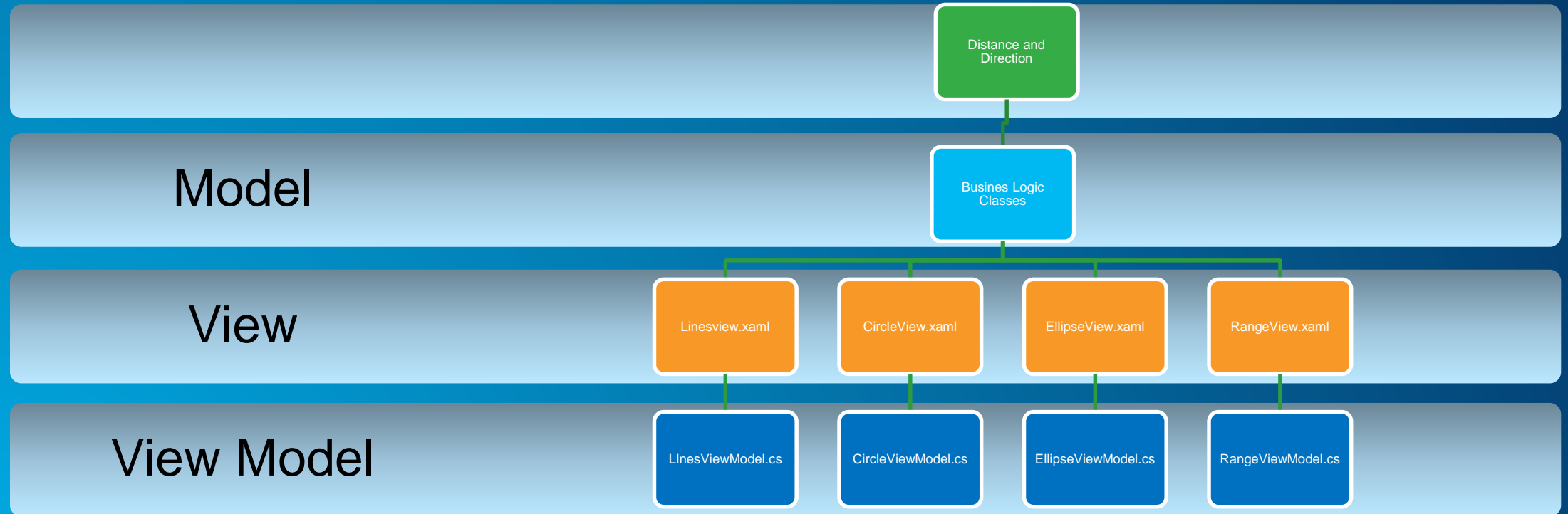
Code Structure Add-Ins - Esri Add-In Framework

- **Makes customizations easy**
- **Simplifies deployment and sharing**
- **Can be localized**

Code Structure Add-Ins - MVVM

- **Model**
- **View**
- **View Model**

Code Structure Add-Ins - MVVM



Code Structure Add-Ins – Single Add-In vs Multiple Component Add-In


Demo tips and tricks

- Debugging in Edit Mode
- Debugging in a deployed Application
- Loading jQuery library

Demo


- Testing Framework
- Unit tests

Intern Test Report




SUITES

1




TESTS

7




DURATION

0:00.076




SKIPPED

0



FAILED








0



SUCCESS RATE

100%

Expand/collapse all

	Visibility-Widget	Passed: 7	0:00.073
	Test widget Loads		0:00.000
	Test widget is instanceof Visibility		0:00.000
	Test template loaded		0:00.000
	Test execute viewshed		0:00.009
	test throws error		0:00.001
	test is numeric 1		0:00.000

The Road Ahead for Military Tools

Simple , Accessible, and Supported Product

Military Tools for ArcGIS 1.0

- ArcGIS Pro Add-in
- ArcMap Add-in
- Web AppBuilder Widgets

Additional Tools

- GRG Widget
- Grid Overlay Widget

2017 Q1

2017 Q3

2018

Enhancements

- Batch coordinate conversion
- Increased notation format support
- Improved dark theme experience

Interactive workflows that support multiple Defense workflows

How to access the work we do

Solutions.arcgis.com

Maps



Apps



Platform
Configurations



Supporting
Materials



<https://solutions.arcgis.com>



Defense

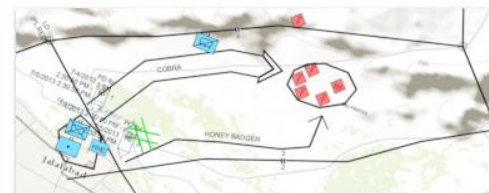
ArcGIS for Defense provides maps and apps to deliver timely insights, make strategic decisions and conduct tactical operations.

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Intelligence

Synthesize information from multiple sources; turn raw data into relevant information; collaborate and share



Operations

Capture information in the field; connect to streaming feeds; enhance the operational picture for situational



Sustainment

Geospatially manage facilities; conduct training and strategic planning; sustain and protect the force.

Questions

Please Take Our Survey on the Esri Events App!

Download the Esri Events app and find your event



Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"





esri

THE
SCIENCE
OF
WHERE