



Esri International User Conference | San Diego, CA
Technical Workshops | 13 July 11

Using ArcGIS for Military Planning and Operations

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Goals of the workshop

- **Enterprise system for military planning and operations**
- **Basemap and operational layers to communicate plans**
- **ArcGIS supports situation awareness**
- **Share maps with web and mobile clients**
- **ArcGIS.com resources**
- **Recommendations and best practices**

The ArcGIS System

**Easier
More Powerful
and Everywhere**



Key Aspects of a GIS

- **Layer based model for describing the world**
 - **Feature Classes**
 - **Raster Datasets**
 - **Attributes and descriptive information**
- **A GIS uses maps to visualize and work with geographic information**
- **A GIS has a comprehensive set of analytic tools to perform spatial analysis and data processing**

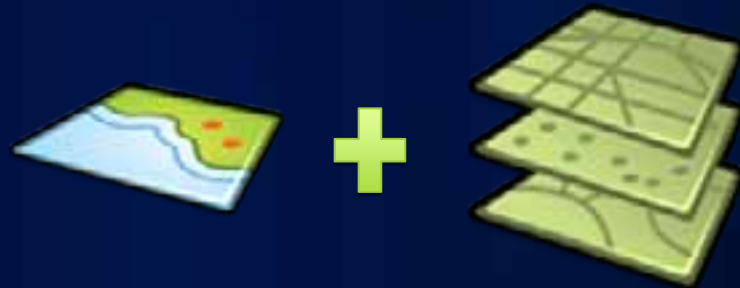
Maps in a GIS

- **Maps are how you**
 - **Compile information**
 - **Find patterns**
 - **Derive new information using analysis**
 - **Communicate plans and ideas**
 - **Get status reports**



Map layers

- **Basemaps**
 - Terrain
 - Imagery
- **Operational Layers**
 - Targets
 - Facilities
 - Units/equipment positions
 - Reporting



To communicate plans and new ideas

- **Maps are used to create and share plans**
 - **Friendly or Enemy Course of Action Sketches**
 - **Target Packages**
 - **Daily Briefs**
- **GIS maps are used to communicate plans**
 - **Features for sketching plans/ideas**
 - **Presentation layouts/slides for explaining concepts**
 - **Useful animation for showing timelines**

To get status reports

- **Maps are used to receive and display status reports**
 - **Current location of units/equipment**
 - **Current status of sensors**
 - **Reports/observations by deployed personnel**
- **GIS maps for status reports include**
 - **Tools to input reports**
 - **Layers for showing current reports**
- **Status reports are frequently viewed using custom applications or devices**

Sharing Maps

- **GIS analysts share information with each other**
 - **Packages encapsulate all aspects of a GIS**
 - **Symbology**
 - **Tools**
 - **Data**
- **GIS analysts share GIS with everyone**
 - **Services shared across the web and mobile devices through web maps and apps**
 - **Web maps define the layers/popups for the services**
 - **Apps bring the map to life in browsers and devices**

Resource Center

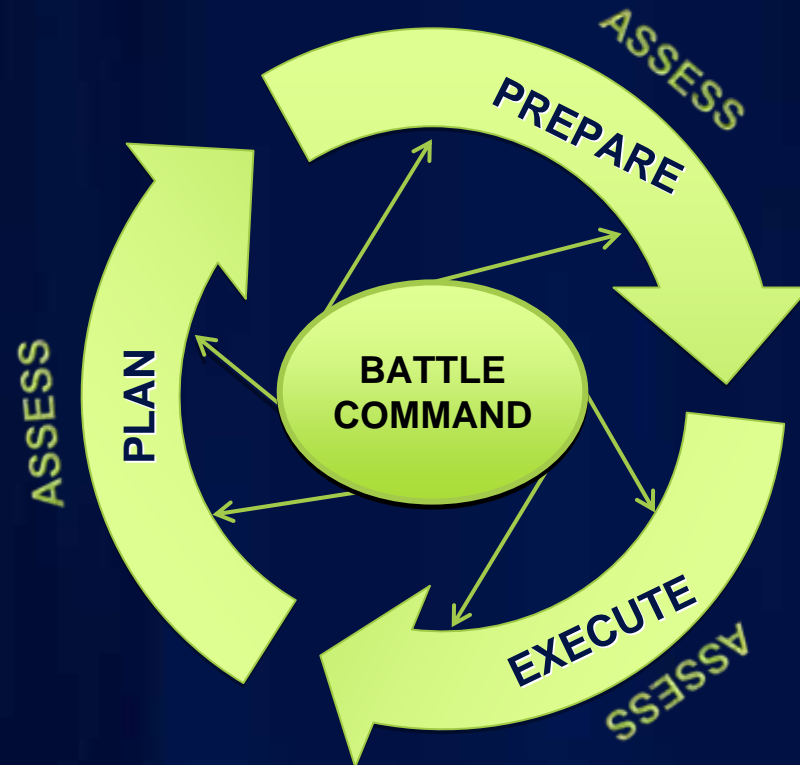
- Defense and Intelligence User Community

- Blogs
- Help
- Forum
- Videos
- Ideas

- Template Galleries



The Operations Process

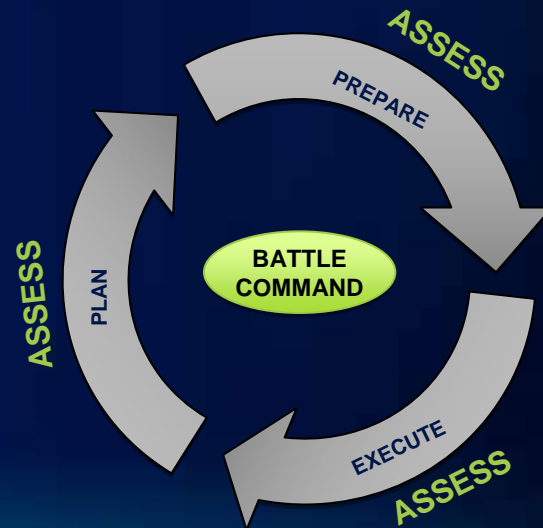


Briefing



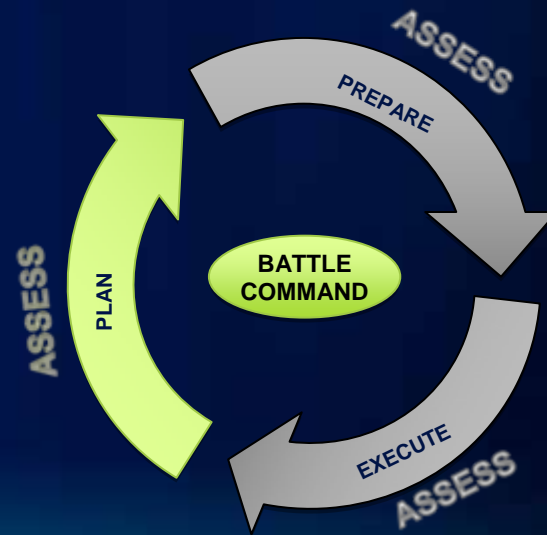
Situation Awareness

- Location & status of friendly forces
- Location & status of threat forces
- Location & status of significant civil considerations
- Operational areas



Planning

- **Create plans**
 - Enemy course of action sketch
 - Friendly course of action sketch
 - Decision support template
- **Share plans**
- **Communicate plans**



Planning Templates

- **Military Overlay editing**
 - Friendly Operations
 - Hostile Operations
 - Neutral Operations
 - Unknown Operations
 - Stability Operations
 - Emergency Management
 - METOC

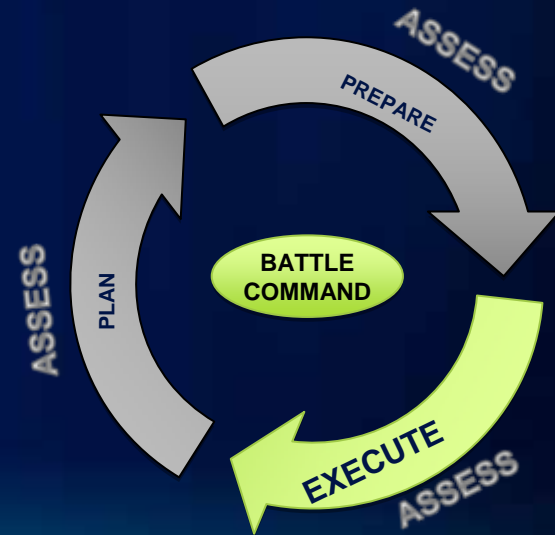


Planning



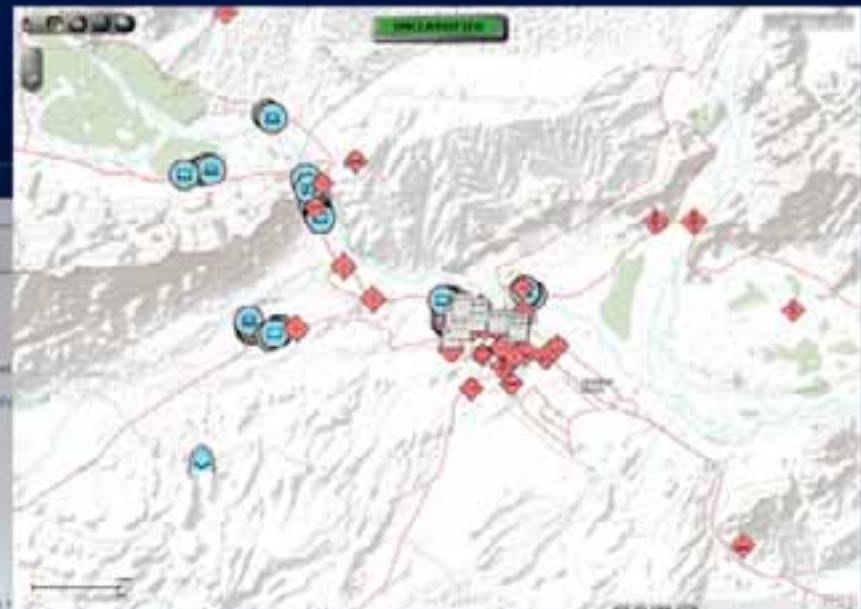
Execution

- Assess progress
- Movement and maneuver
- Reports
 - Chem lights
 - SALUTE
 - SIGACT
 - MEDEVAC
 - 9-line



Operations Templates

- Situation Awareness Template
 - Web application template
 - Operational area
 - View track reports
 - Create reports

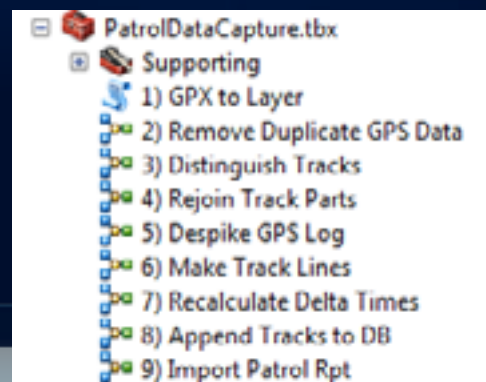


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This map is a good idea for building community involvement, both during an event, and during the clean-up afterwards.

Operations Templates

- **Patrol Data Capture Template**
 - Desktop application template
 - Operational area
 - View track reports
 - Create reports



Operations



Operations – Mounted/Dismounted

- **Situation awareness in the field**
- **Provide flexibility and reliability**
- **Provide information to and from troops**
- **Reports**
 - **Track Reports/Track Logs**
 - **Chem lights**
 - **SALUTE**

Mounted/Dismounted Applications

- **Runtime**
 - **Vehicle Commander Application**
 - **Company Commander Application**
- **Android**
 - **Squad Leader Application**

Operations

DISMOUNTED APPLICATION
MOUNTED APPLICATIONS



QUESTIONS



After this workshop...

- **Session evaluation**
 - www.esri.com/sessionevals
- **Defense and Intelligence Showcase**
 - **Exhibit Hall D: Wed 0900-1800 and Thu 0900-1330**
 - **ArcGIS for the Warfighter area**
 - **Demo Theater**
 - **Wednesday 1700-1800**
 - **Thursday 1200-1300**
- **Using Imagery for Intelligence Analysis TW**
 - **1515-1630 Room 26A**

After this conference...

- **Defense and Intelligence Resource Center**
 - <http://resources/arcgis.com>
 - **Blog**
 - **Forum**
- **Defense and Intelligence guide book**
- **ArcGIS.com** <http://www.arcgis.com>
- **Support** <http://support.esri.com>



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