Military Planning and Operations

Dave Mitchell
Derek Foll
Goals of the workshop

• Briefly review ArcGIS for the Military Land Ops concept

• Explain how ArcGIS is configured to support
  - Sharing & collaboration
  - Connected vs mobile environments
  - Planning & Analysis
  - Current Operations

• Highlight ArcGIS.com resources

• Recommendations and best practices
The Operations Process

- PLAN
- BATTLE COMMAND
- EXECUTE
- PREPARE
- ASSESS

ASSESS

ASSESS

ASSESS
ArcGIS for the Military – Land Operations

- Sensors
- Operations Server
- Intelligence
- COP
- Planning
- Provisioning
- Mounted
- Dismounted
Solution Patterns

- Connected
- Mobile
- Planning
- Operations

Sharing
High speed network
Range of devices

ArcGIS 10.1
- Server and Portal
- GeoEvent Server
- Web applications
- Desktop
- Runtime
- Viewer
Mobile

- Connected over tactical radio
- Small form factor devices
- ArcGIS Runtime clients
- Peer to Peer Messaging
- File based provisioning & update
- Services if available
Sharing Maps

• Users share information with each other as packages
  - Packages encapsulate all aspects of a GIS
    - Symbology
    - Tools
    - Data

• Users share GIS with everyone through 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
EVENTEMP Development

- OPS/INTEL
- OPERATIONAL ENVIRONMENT
- ISR PLANNING
- ISR OPS
- ENEMY COA
- MCOO
- NAI Template
- NAI Options
Package Workflow

- **Open Map Template (Map Package)**
  - Contains user task layers & tools
  - Can reference useful services
  - Can contain default data – ORBAT, standard plan features
- **Add data to support decision**
  - Layer packages or services from portal
- **Create own product**
  - Update task layers
  - Standard procedures for updating other users layers
- **Deliver product as layer pack**
- **Share tradecraft, save working environment as map package**
Lightweight Planning – Observation Post Layout

OPERATION Group

COP Plans

Connected or disconnected

Tactical planning, reconnaissance, survey
Lightweight Planning
Planning Key Points

- Ad-hoc process, multiple options & versions
- Support different theaters and mission types
- Mobile and HQ environments
- Document style workflow, portal groups & packages
- Limited structure
Operations

Operations Server
Operations Server Components

- Squad Leader
- GeoMessage
- ArcGIS for the Military GeoEvent Server Template
- ArcGIS Viewer Dashboards
- GeoEvent Server
- ArcGIS Server
- Vehicle Commander
Publish Plans

- Selected Option (Layer or Map Package)
- Operation Group
- Service Authoring Map
- Operations Server
- Published Options
Provisioning & Update

Operations Server

Configuration File

Basemaps (TPKs)

Mission Maps (MPKs)
Mounted & Dismounted Apps
Sensor Observations
Track Reports
Spot Reports
Chemlights

NAIs, TAI
GeoEvent Services

Operations Server

Local Tactical Group 1

Local Tactical Group 2

Commanders

Analysts
Operations Server Configuration
Services

- Control Measures
- ISR Plan
- Ops Locations
- Ops Reporting
- Tactical Locations
- Tactical Reporting
ArcGIS GeoEvent Server

Analyzing GeoEvent Streams

- **GeoEvent Services** are configured to connect Inputs, GeoEvent Models, and resulting output:
  - **GeoEvent Models**: perform continuous Processing and Analysis of GeoEvents received from Inputs.
Supported Message Formats

- **GeoMessages**
  - Trackrep
  - Chemlight
  - Spotrep / SALUTE
  - SLANT report
  - SITREP
  - BEDAVAIL
  - MEDEVAC
  - EOD 9 LINE

- **GeoEvent Server**
  - VMF
  - CoT
Track Processing

Filter → SIDC Mapping → Tactical Location (Update) → Tactical Location Log (Append)
User Groups and Roles

Ops Room

- CO
- ISR
- FIRES
- INFOMGR
- PROTECTION
- LIAISON
- SUSTAINMENT

TACTICAL

OPS WATCHKEEPER

Supporting HQs

Protection
Communications
Future Ops
Sustainment
Fires
Plans
Intelligence

INT OFFICER
INT WO
INT ANALYST
Summary

• Reviewed ArcGIS for the Military Land Ops concept

• Explained how ArcGIS is configured to support
  - Sharing & collaboration
  - Connected vs mobile environments
  - Planning & Analysis
  - Current Operations

• Highlighted ArcGIS.com resources
  - resources.arcgis.com

• Suggested best practices
Questions
Thank you!

Please fill out evaluations (we need to feel loved!!)

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Coming Up:
• Using Imagery for Intelligence Analysis @ 3:15 pm