

Federal GIS Conference 2014

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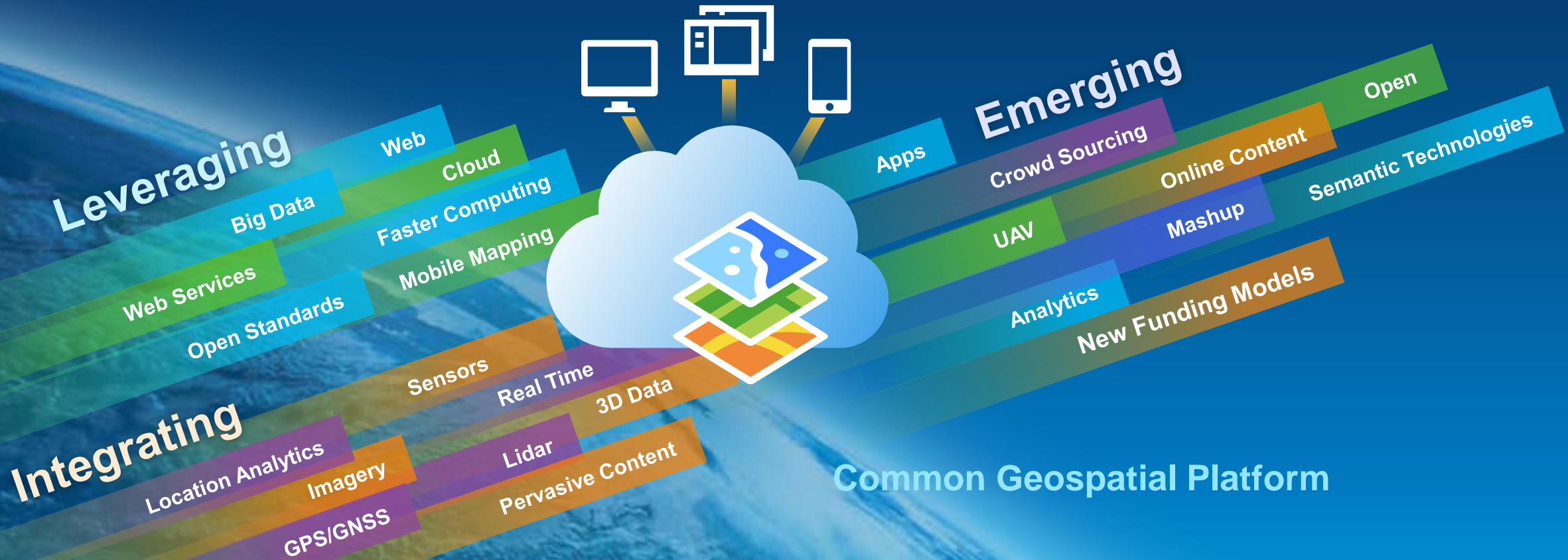
Standardized Data Production Strategies Across Your Enterprise

Ron Buzzard – US Army Geospatial Center

Eric Ray – Esri

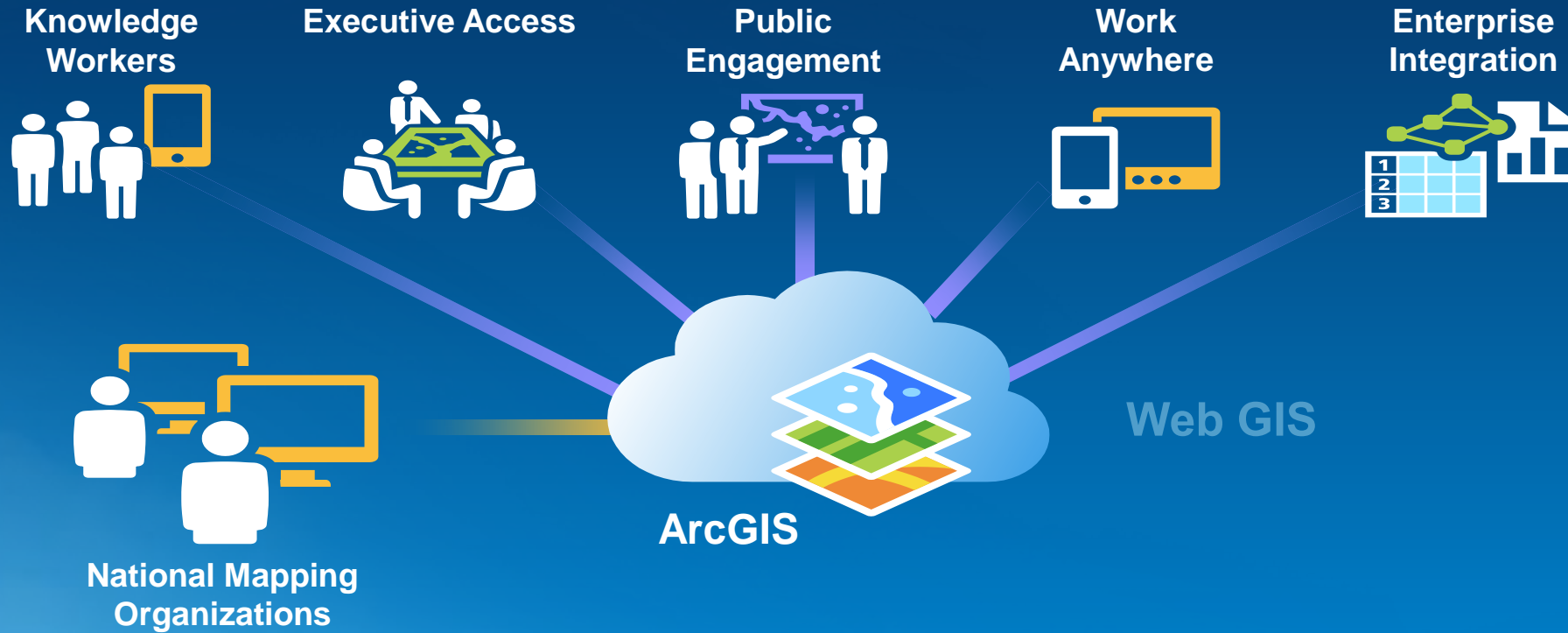
Dewey Marino - Esri

GIS Is Being Transformed Into A Web GIS



Making GIS Easier, and Always Available,

National Mapping Organizations Provide Foundation

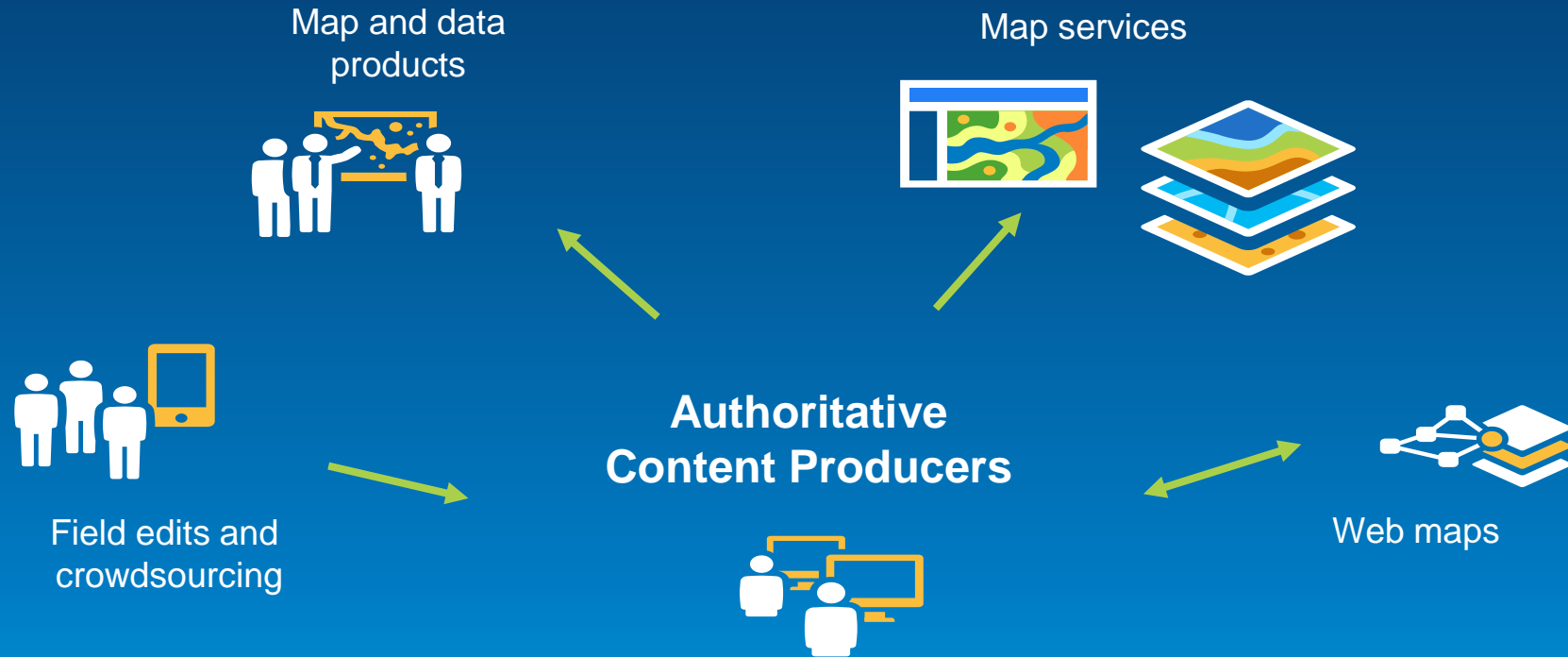


**Making Geospatial
Foundation Available**

Transforming the Role of Mapping Organizations

Authoritative Content Producers

Must produce traditional products and more



Require agile, multi-use capability

Unique technology for each mission?

Focus on specific product output creates highly specialized production lines



Challenges to this Approach

- Often unable to share information
- Often duplicate effort
- No common management view
- Staff skills are not necessarily transferrable
- IT management challenges
- Hard to adapt organization to changing priorities/mission



Recommended Strategy

- **Common architecture with specialized workflows and rules for each business unit**
- **Make it data-centric - fewer databases, more uses**
- **Open the system - collaboration, sharing, monitoring**
- **Plan for the rapid pace of technology change**

An orchestrated, enterprise approach

Collect

Produce

Share



Topographic



Maritime



Cadastre



ArcGIS



Traditional Products



Manage

Collect



Produce

1:10,000



1:25,000



1:50,000



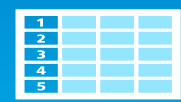
Share



ArcGIS



Traditional Products



Specifications



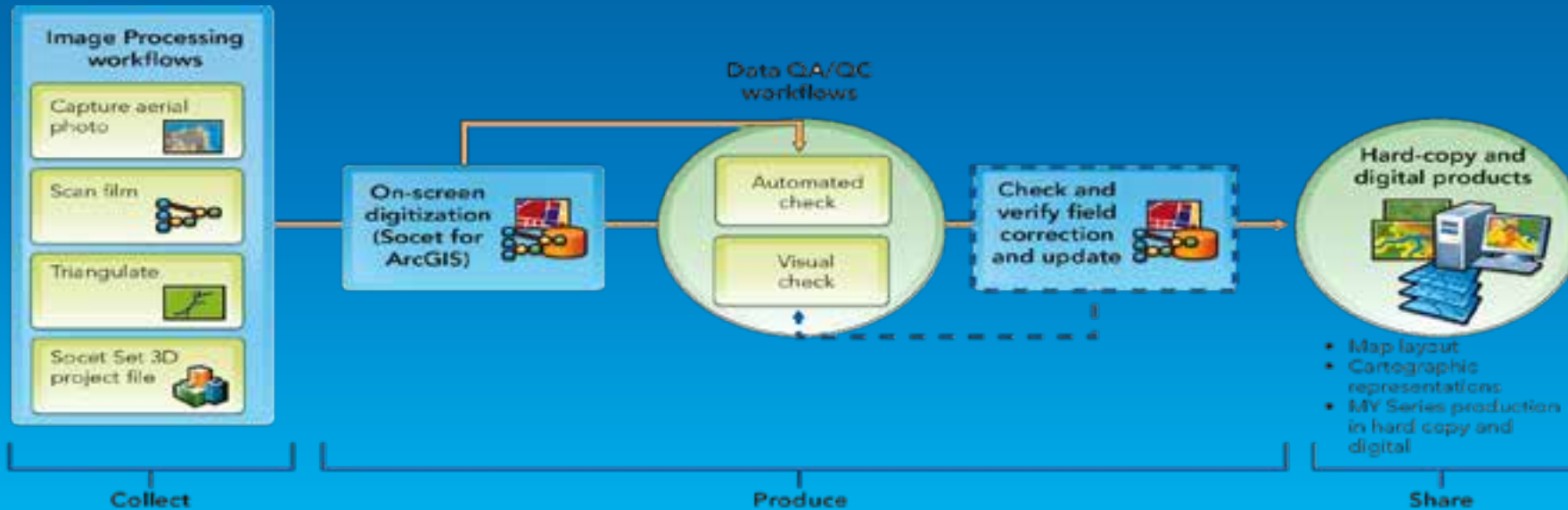
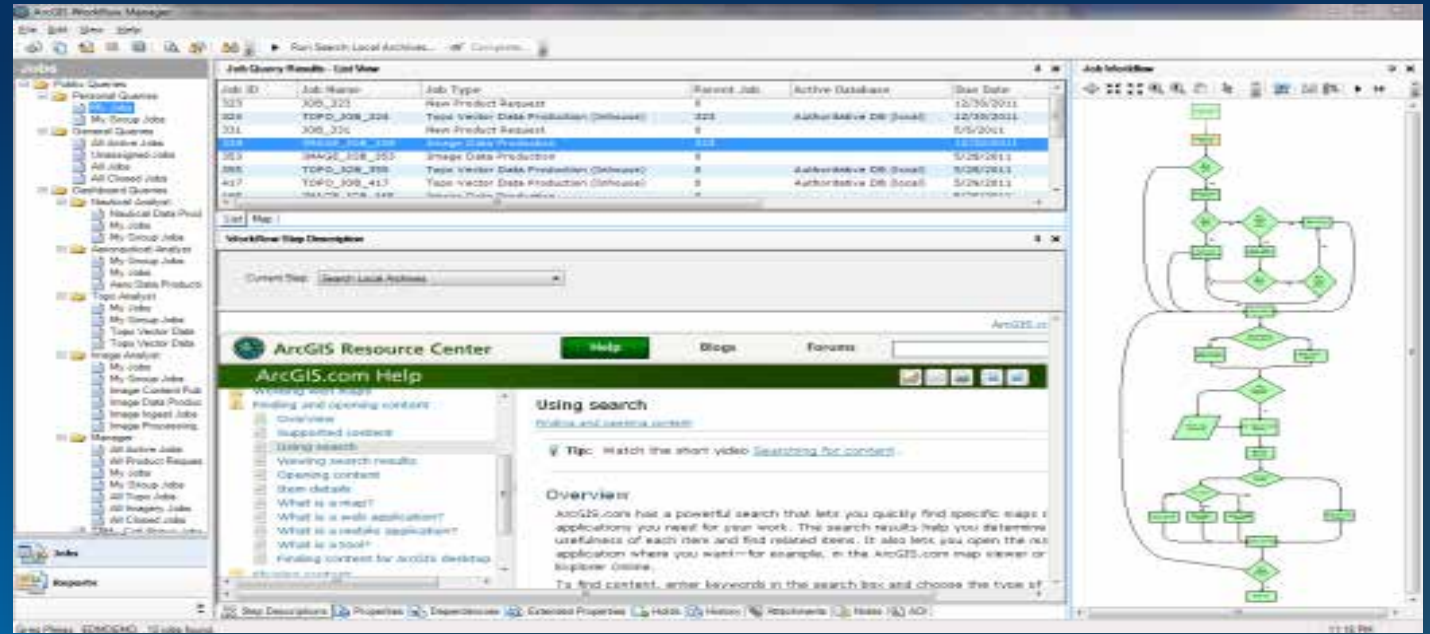
Data Models

Manage



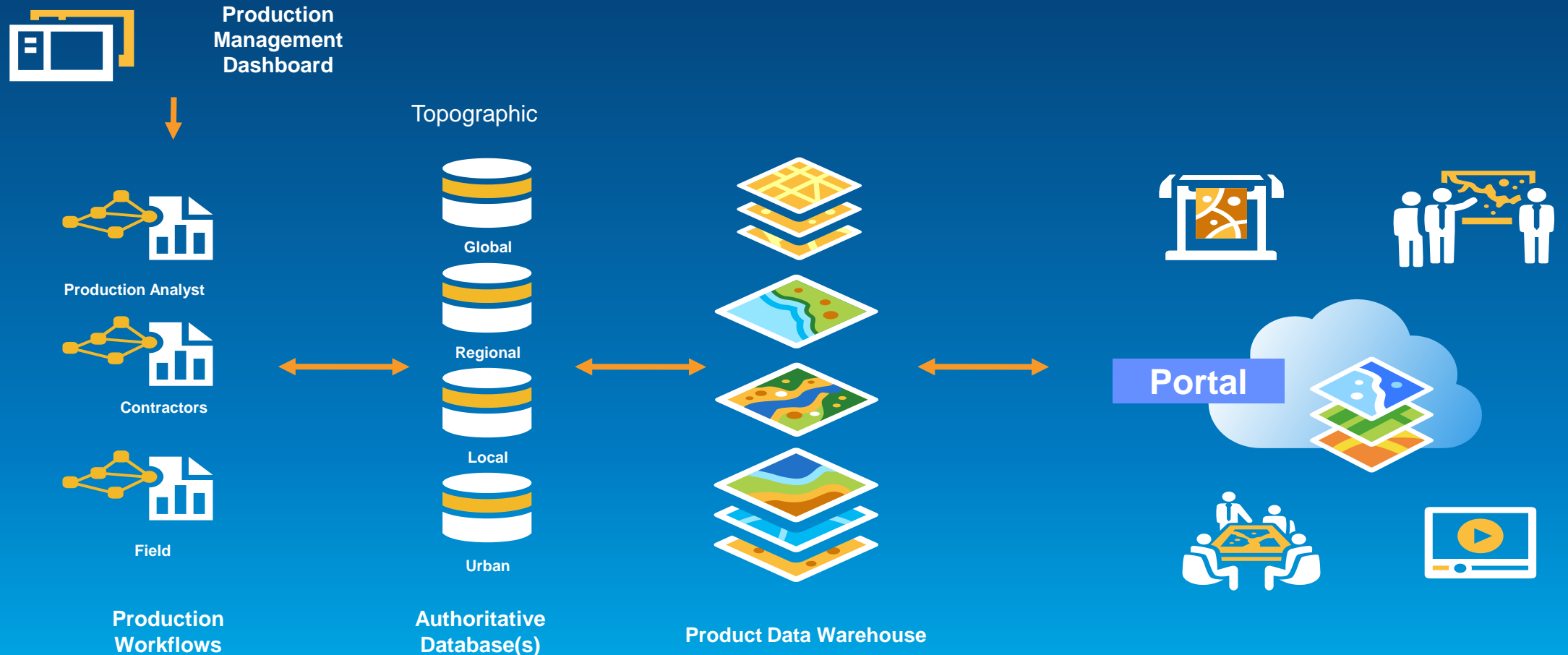
Workflows

Workflows



Topographic Example

Modernizing topographic data production and dissemination



Time-dominant data management

Army Geospatial Center

Mr. Ron Buzzard



US Army Geospatial Center

Background:

AGC leadership identified a critical need to standardize data production across army echelons. Standardized and automated production would have the following benefits to the warfighter:

- Common data model
- Common production and production methodology
- Automation of mundane tasks
- Production planning collaboration and improved production tracking

Common Data model

The GGDM is a complex data model that is attribute heavy. AGC only populates a select few of the attributes. By utilizing the Workflow Manager in conjunction with the Product Library analysts can limit and automate the attributes that is populated. This has the following benefits.

- Seamlessly load / move / utilize data produced by other entities.
- Automatically create check out versions with common naming convention and version tracking
- Filter out non applicable attributes which makes production much easier / quicker.

Common production and production methodology

AGC production was dataset specific and very non standard, every analyst had a methodology and the dataset quality varied from dataset to dataset, by instituting the workflow manager a standardized method was put into place, and thus a more standardized data set. This has the following benefits.

- **Standardized training – training classes can be developed and utilized again and again to ensure that everyone understands the system.**
- **Each step in the process must be completed eliminating ‘short cuts’ and thus ensuring a better product.**

Automation of mundane tasks

- Quicker production
- Improved qa/qc
- Elimination of careless errors
- Standardized product

Production planning collaboration and improved production tracking

- Ability to create and manage production jobs, and serve production plans through web services making production collaboration easier.
- Track and manage production

Enterprise Data Production Demo

Eric Ray





Understanding our world.