

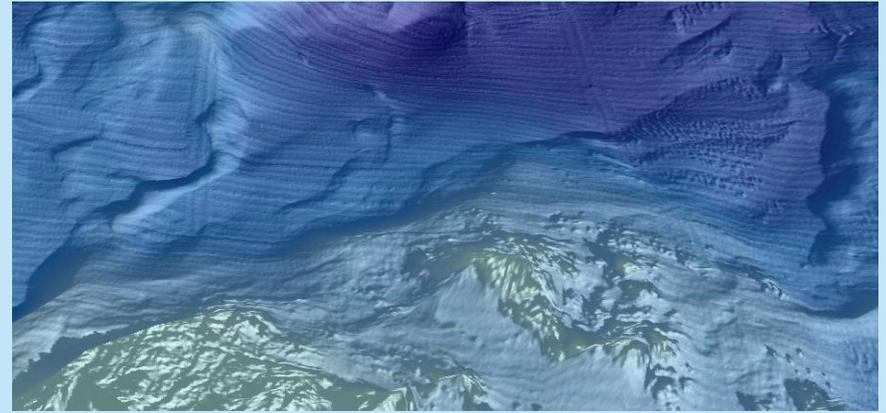
# ArcGIS for Maritime: Charting



# ArcGIS for Maritime

## Charting

## Bathymetry

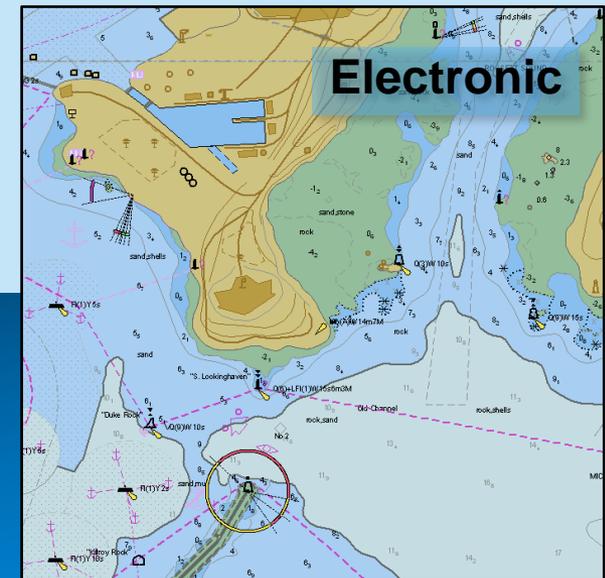
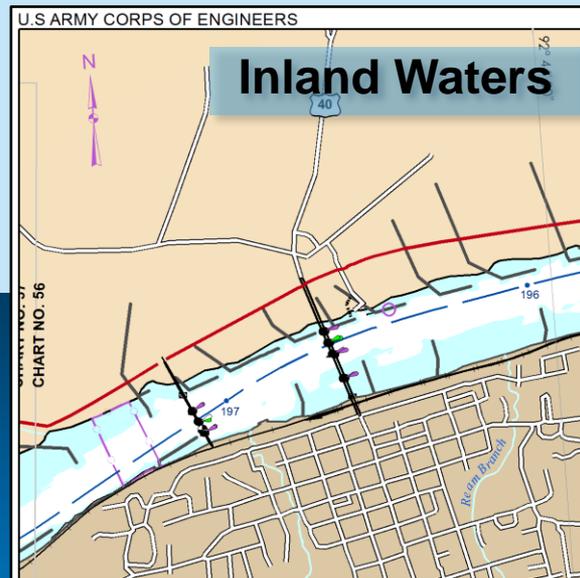
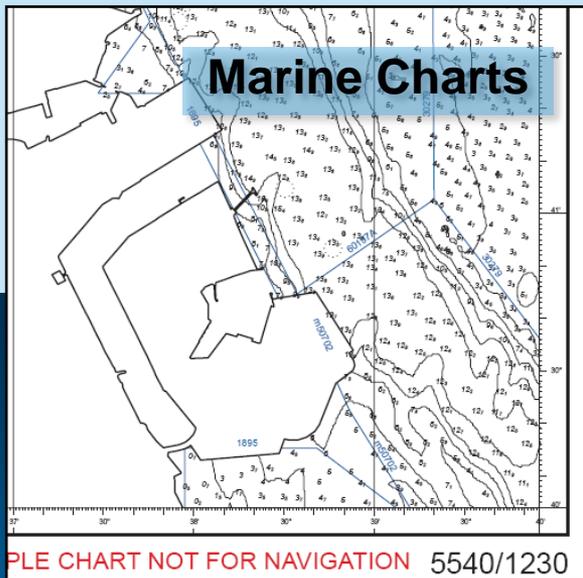
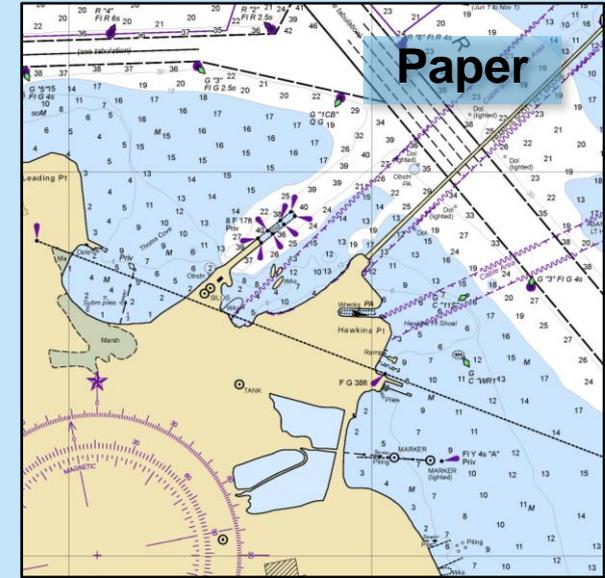


Create, maintain and publish nautical data and charts for navigational and marine purposes.

Store, discover, model and manage bathymetric data.

# ArcGIS for Maritime: Charting

- Official and unofficial products
- High quality cartography
- Integration with full GIS



# What

A production system for the **creation** and **maintenance** of navigational products and nautical spatial data.



# ArcGIS for Maritime: Charting

## Enterprise Implementation



## Desktop Implementation



# ArcGIS for Maritime: Charting

## What's new at 10.1

- New Symbology Engine
- New Export Wizard
- New Product Wizard
- Cartography Tools
- Stability/Usability focus



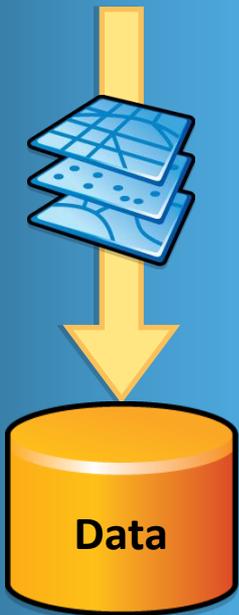
# Why

## **Solves problems**

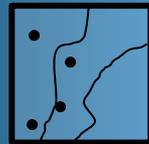
- Centralizes data
- Improves efficiency
- Database driven cartography
- Same data, different products
- GIS based, Server enabled

# How

## Edit



## Manage



Data

Quality & Workflow



Nautical Products

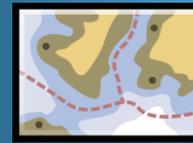
Metadata



## Create



Paper



Electronic



Features

## Share



Distribute



Apps



Cloud



# ArcGIS for Maritime: Charting Cartography

- Toolbar reorganization
- Support for BSB
- Masking tools (easy/fast)
- New symbology engine
- New scale bar tool
- Source Diagram tool
- Interactive workflows

The screenshot displays the ArcGIS for Maritime interface. At the top, there are several legend panels for different feature types: DangersP, TidesAndVariationsP, CulturalFeaturesP, PortsAndServicesL, PortsAndServicesA, AidsToNavigationP, NaturalFeaturesL, CulturalFeaturesL, and NaturalFeats. The main map area shows a section of the Missouri River with various navigational features like daybeacons and channels. A 'Scale bar settings' dialog box is open in the foreground, showing the following configuration:

- Format:** INT2 Scale bar
- Units:** Metres
- Unit Caption:** METRES
- Alignment:** Horizontal
- Divisions:**
  - Major: 8, Value: 1000, SubDivisions: 2
  - Minor: 2, Value: 500, SubDivisions: 5
- Symbol selection:** Font: Arial, Size: 10, Color: Color

Buttons at the bottom of the dialog include '< Back', 'Next >', 'Finish', and 'Cancel'.

# Centralized data

- Product Neutral Geodatabase
- Scale banded (configurable)
- Hybrid S-57/INT-1 data model (extendable)
- Multiple cartographic displays supported
- Single Application
- Secure – historical archive
- Multi-user access



# ArcGIS for Maritime: Charting *Product Management*

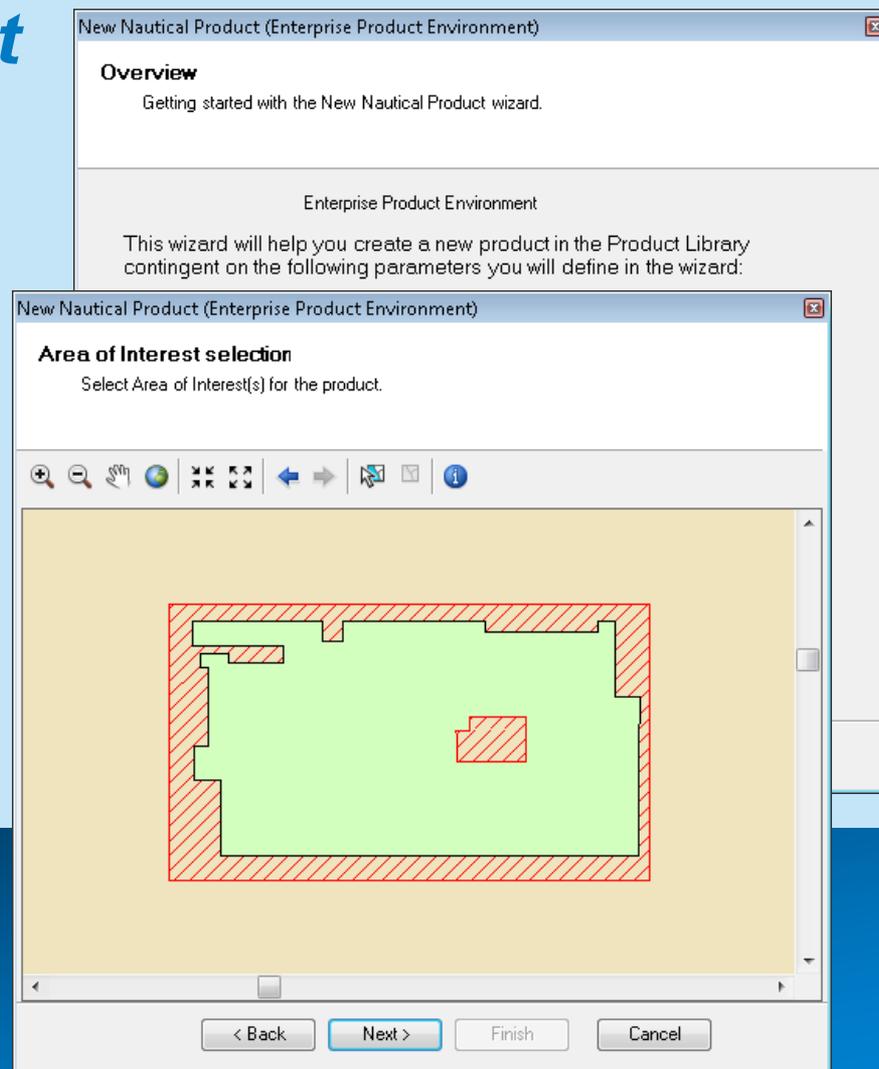
- Framework within ArcGIS for effective management of products and associated metadata.
- Products managed internally through “Check-in/out” process
- Symbology, validation rules, conditions stored centrally
- Multiuser access





# ArcGIS for Maritime: Charting *Product Management*

- New Metadata engine for traditional and S-57 charts
- Create Product Wizard
  - Faster product creation
  - Integrated with metadata
- Export Product Wizard
- PDF Publisher



# ArcGIS for Maritime: Charting Product Management

The screenshot displays the ArcGIS for Maritime interface with three overlapping windows:

- Files under Nautical::ENC::CGD09::US5PA21S:** A file explorer window showing a tree view of the product library. The 'US5PA21S' folder is selected under 'ENC'. The main pane shows two files: 'US5PA21S....' and 'US5PA21S.zip'.
- ENC Export Wizard:** A wizard window titled 'US5PA21S Export Information' with the instruction 'Select the export type and external files.' It contains:
  - Data Set Record Type:** A dropdown menu set to 'New Edition' and a checkbox for 'Sample Export' which is unchecked.
  - Export Location:** A text field containing 'C:\Data\May\_24\' and a browse button (...). Below it, a note states: 'This is the location where files generated during the export process will be stored.'
  - External Files:** A table with columns 'File Name' and 'Path'. One entry is visible: 'Chart\_May23\_MH.mxd' with path 'C:\Data\May\_23'. There are 'Add' and 'Remove' buttons to the right of the table.
- New Nautical Product Wizard:** A wizard window partially visible in the background, showing the title 'New Nautical Product Wizard' and a close button.

At the bottom of the file explorer window, it indicates '2 documents'.

# ArcGIS for Maritime: Charting *Editing*

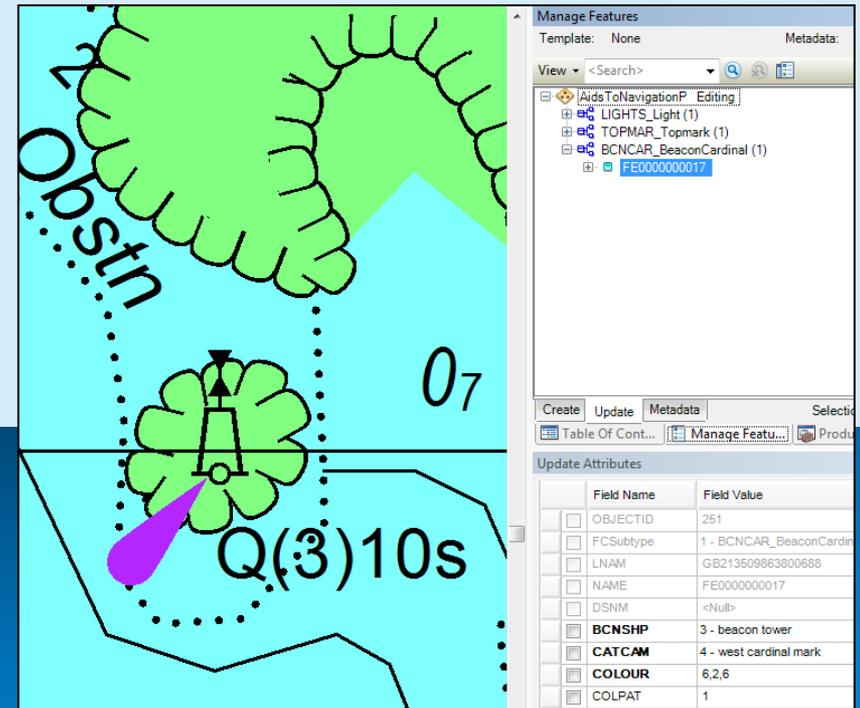
## Feature Manager

- Efficiently manage features while editing
- Symbolized favorites (Templates)
- Integrated with Product Library
- Use of construction tools
- Integrated metadata

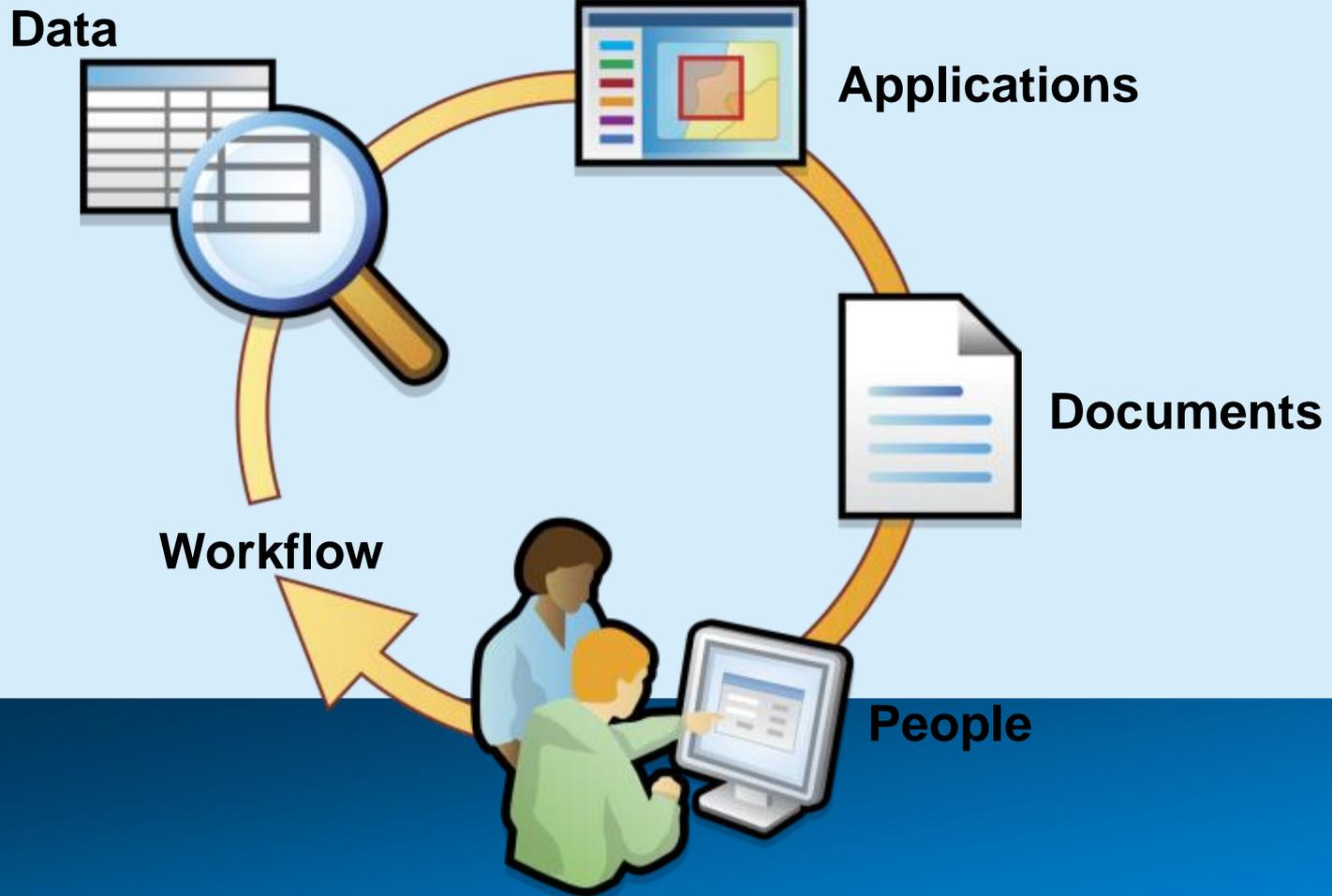
## Field display

## Validation rules

## Metadata configuration



# ArcGIS for Maritime: Charting *Workflow Management*



# ArcGIS for Maritime: Charting

## *Workflow Management*

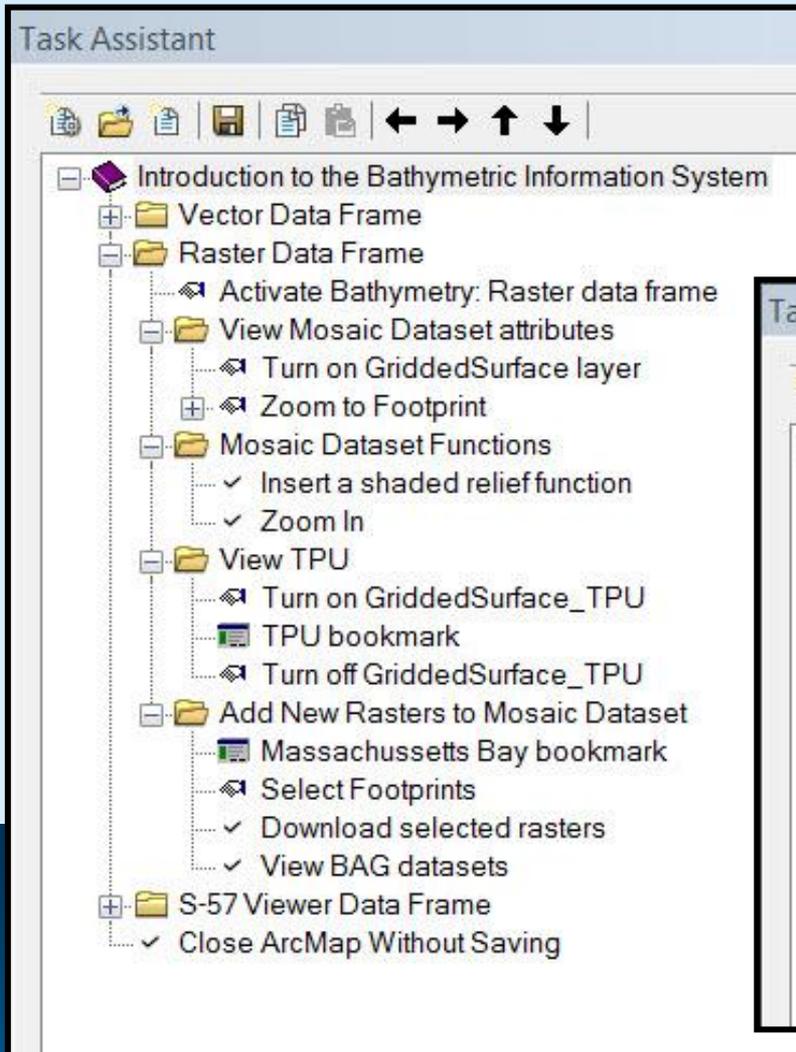
### Workflow Manager Extension

- Bundled with ArcGIS for Maritime
- Equipped for the enterprise (Server enabled)
- Build standardized workflows
- Assign, share and monitor jobs

### Task Assistant Manager

- Bundled with ArcGIS for Maritime
- Deployable through centralized location or locally
- Build detailed workflow steps (akin to SOPs)
- Start/stop, pass to other users and chart progress

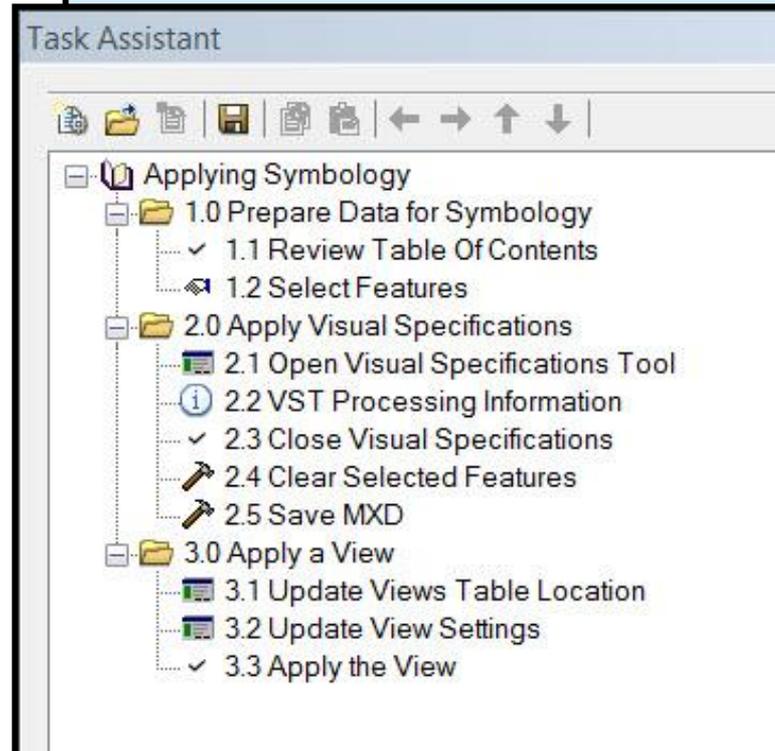
# Task Assistant Workflows



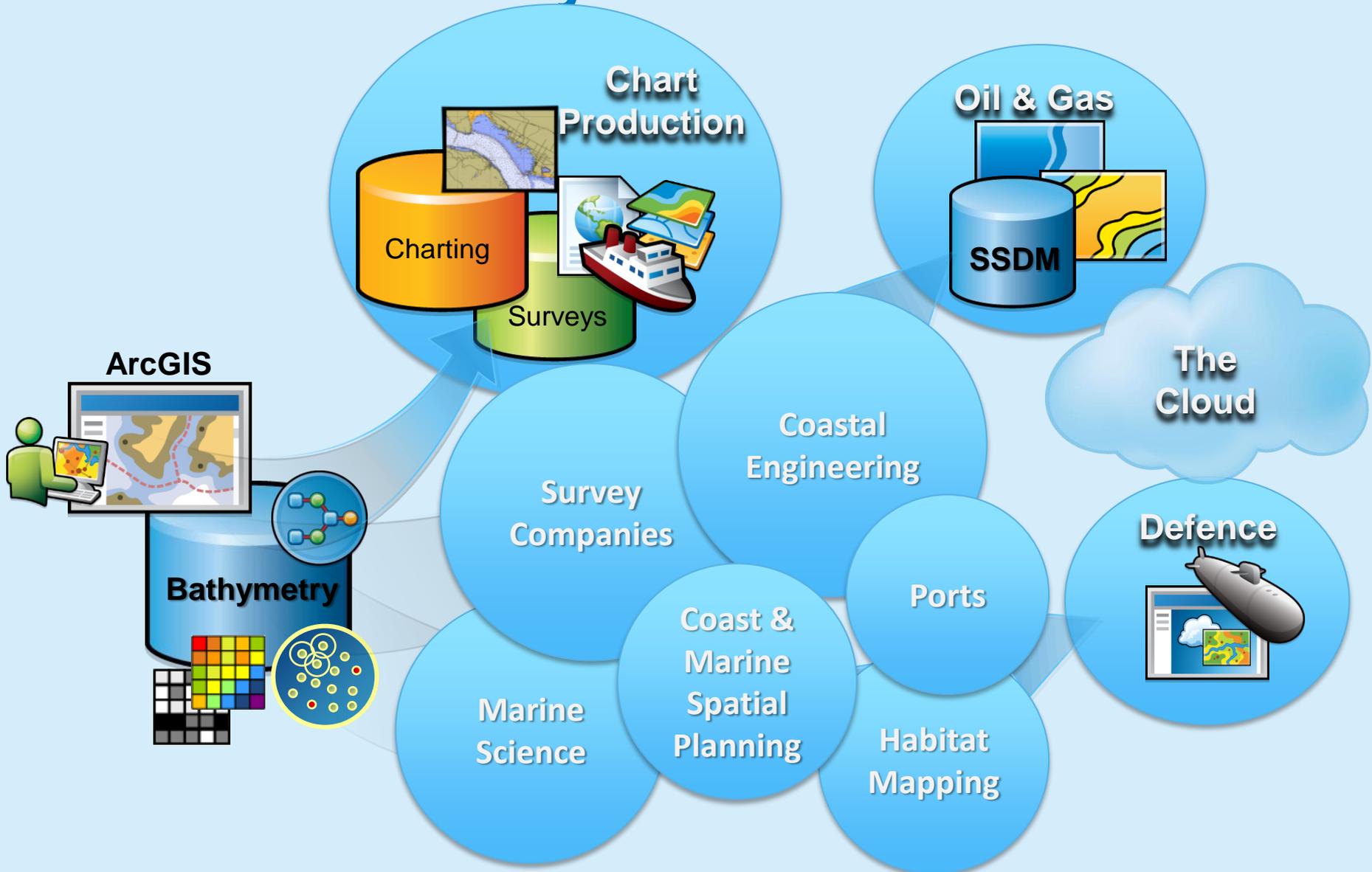
## Sample Workflows:

← Bathymetry &

↓ Applying Symbology for Charting



# From GIS to anywhere...



# Thank you.

Rafael Ponce

[rponce@esri.com](mailto:rponce@esri.com)

