



Esri International User Conference | San Diego, CA
Technical Workshops | July 11 – 15, 2011

ArcMap: Tips and Tricks

Miriam Schmidts

Jorge Ruiz-Valdepena

Agenda

- Tips and Tricks for:
- Managing the Interface
- Mapping and Editing
- Geoprocessing
- Customizing

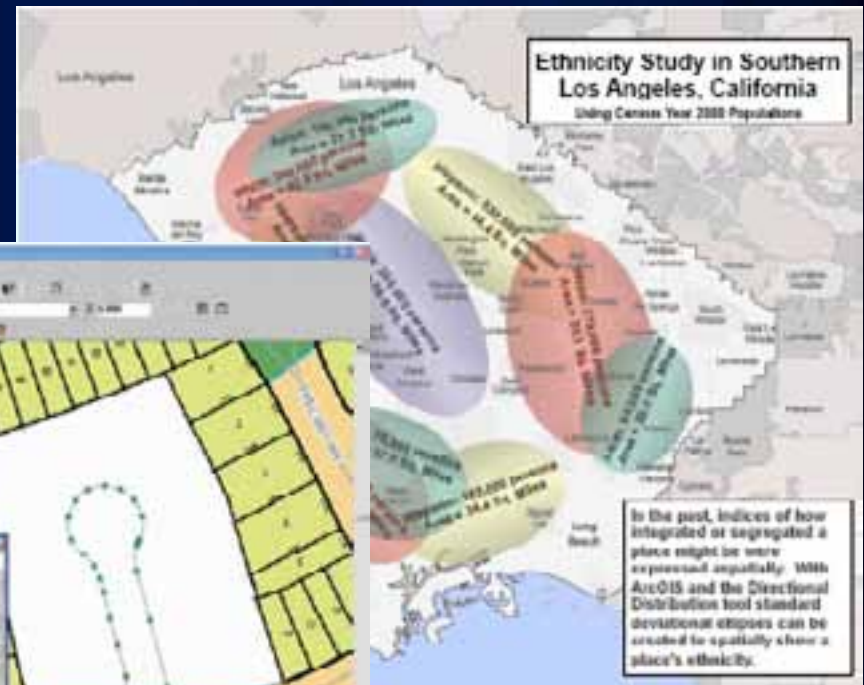
This session is geared mainly to the beginner ArcGIS Desktop user

What is ArcMap?

- **Comprehensive map authoring application**
 - **Used for all map based tasks**
 - Mapping and editing
 - Query and analysis
 - Creating graphs, reports, and output
- 



Compile and Edit Data



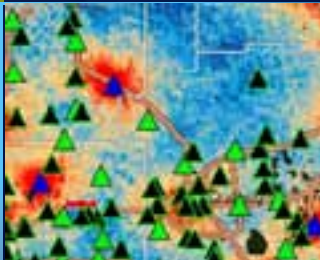
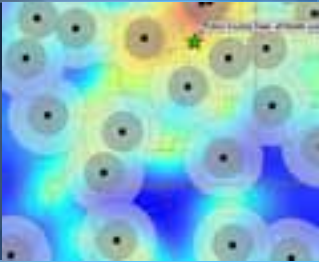
Create publication quality maps

Managing the ArcMap 10 Interface

Miriam Schmidts

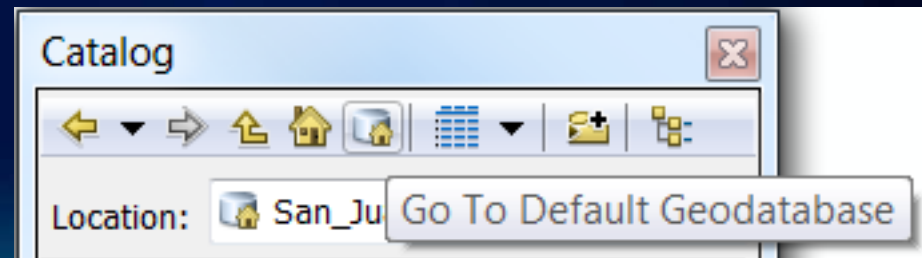


Demonstration: Managing the ArcMap 10 Interface



Default geodatabase and Home folder

- **Default Geodatabase**
 - Contains the source data for most layers in a map document
 - Faster navigation in the Catalog window
 - Sets the Current and Scratch Workspace in geoprocessing environment
- **Home folder**
 - Contains the current map document



ArcMap Interface

- **Dockable windows, e.g.**

- **Catalog**
- **Search**
- **Table of contents**

Hold down CTRL
key to prevent windows
without docking

- **ArcMap Options, e.g.**

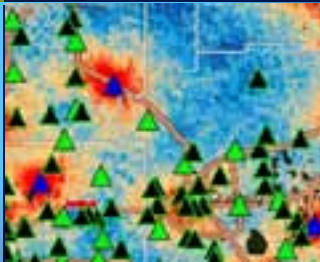
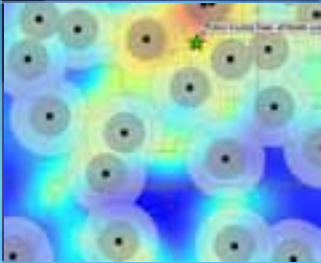
- **Show getting started dialog**
- **Make newly added layers visible by default**
- **Make relative paths the default for new map documents**

Mapping and Editing

Miriam Schmidts

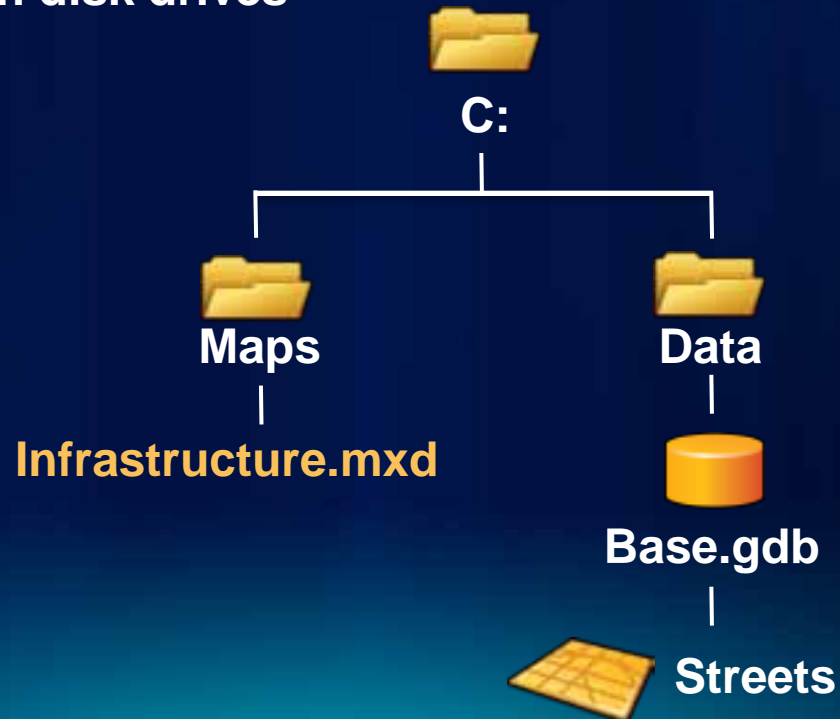


Demonstration: Visualization and Editing



Relative paths in ArcMap

- Layer source data stored relative to the MXD
 - Instead of absolute path `C:\Data\Base.gdb\Streets`
 - Relative path `..\..\Data\Base.gdb\Streets`
 - Cannot span disk drives



Shortcuts for navigating

- **Z** Zoom in
- **X** Zoom out
- **V** Pan
- **B** Continuous Zoom/Pan
 - Dragging left mouse button zooms in/out
 - Dragging right mouse button pans
- **<** Previous extent
- **>** Next extent

Rolling the mouse wheel also zooms in and out

ArcMap Edit sessions

- **For one workspace at the time**
 - **Workspace = geodatabase or folder (e.g. of shapefiles)**
- **For one data frame at the time**
- **Right-click a layer to start editing in a workspace**
- **Create feature templates manually for new layers**

Feature Templates

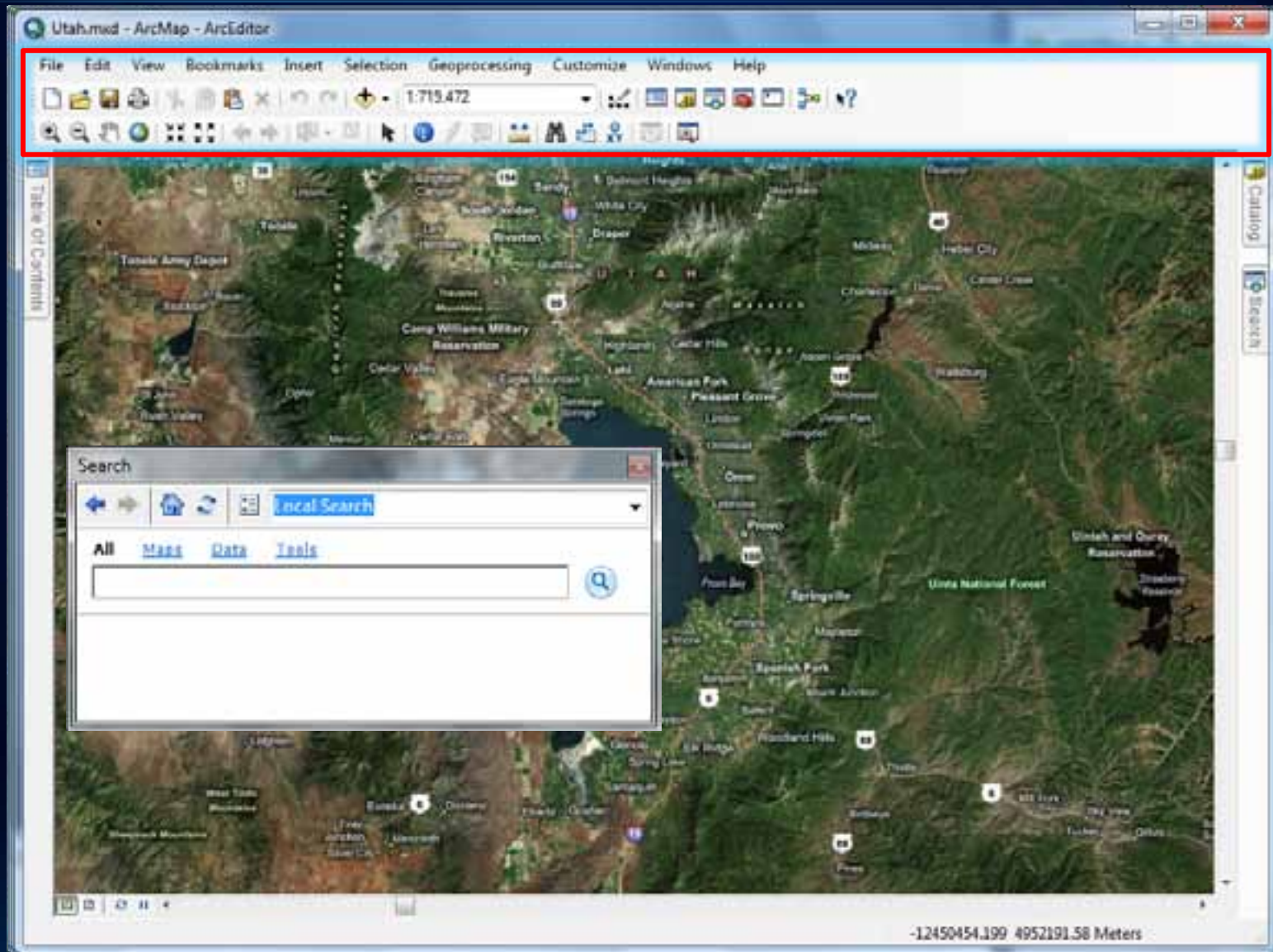
- Define information to create a feature
- Automatically created
 - Beginning of first edit session
- Create manually
 - Copy and update properties
 - Delete
- Saved in .mxd, .lyr, layer or map package

Geoprocessing

Jorge Ruiz-Valdepena

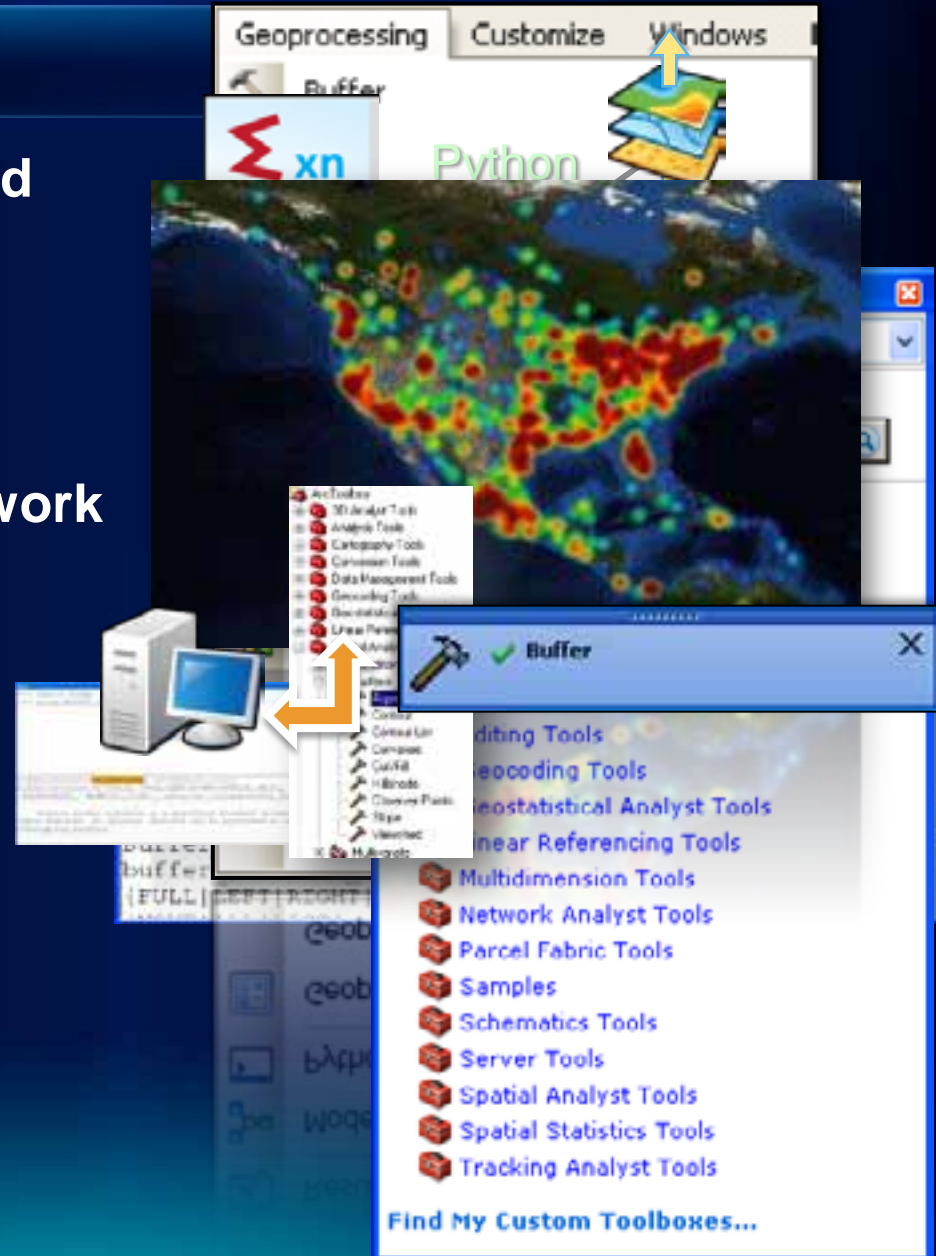


The Focus is on the Map



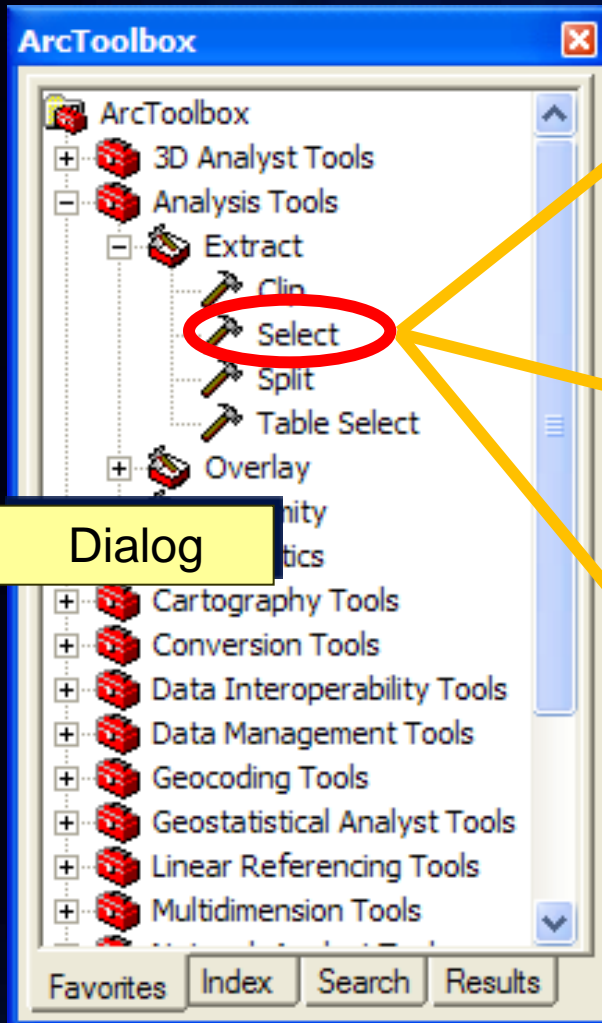
Geoprocessing

- Quick access to the Tools you need
 - Customizable Menu
 - Search
- Python is the way automate your work
- More efficient processing
 - Up to 15x faster
 - Background execution

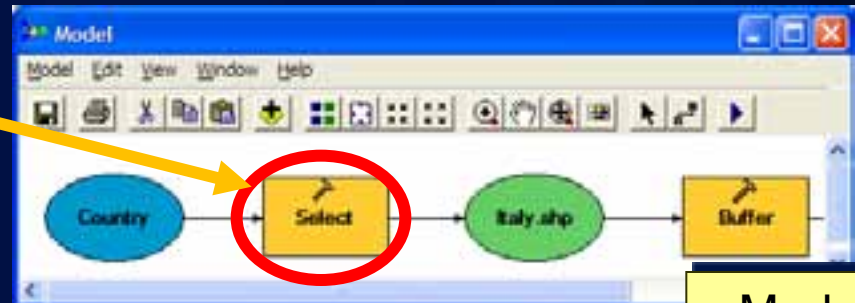
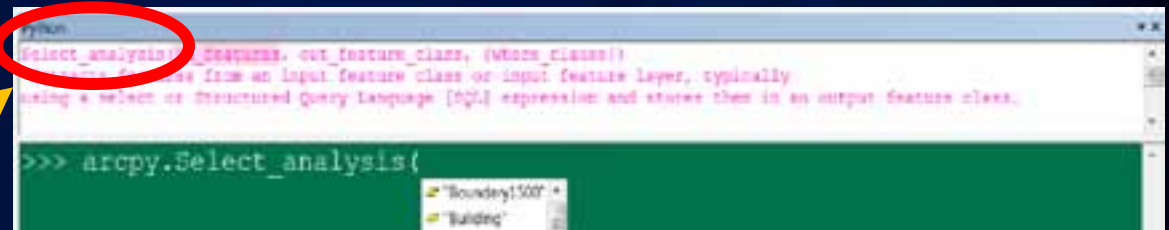


Geoprocessing options

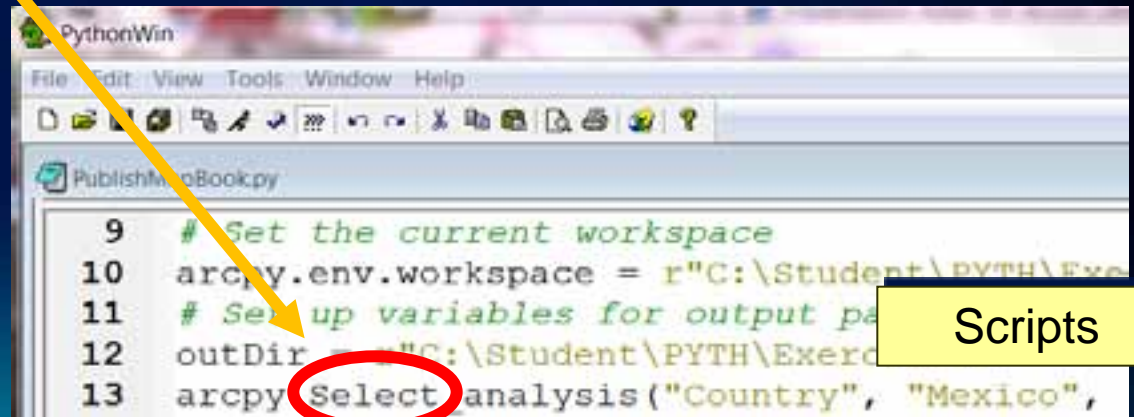
Python Window



Dialog



Models

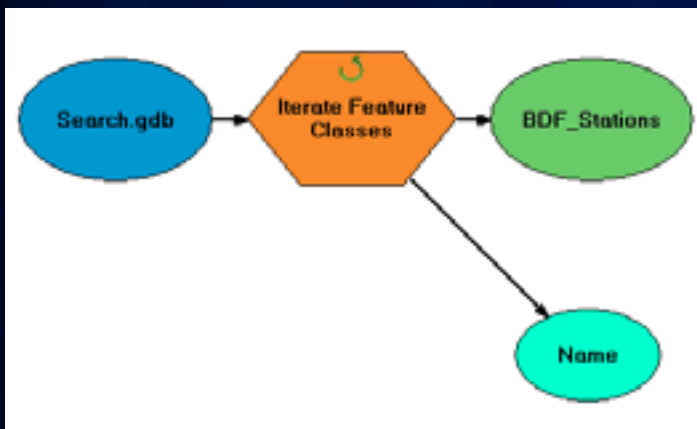


Scripts

ArcObjects

Performing multiple conversions

Model iterators



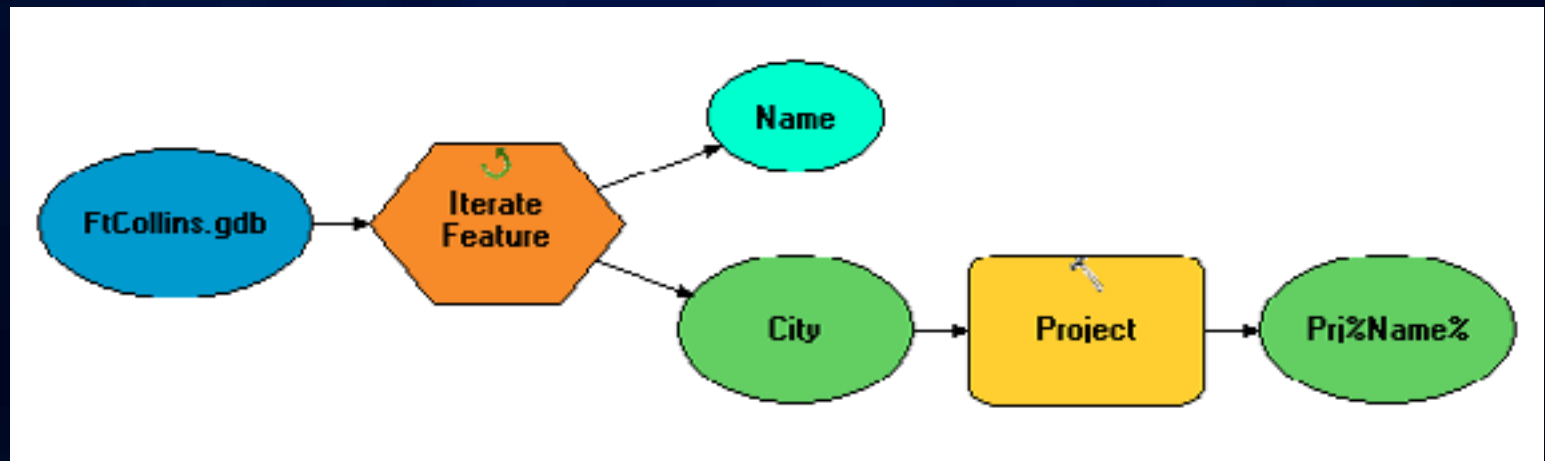
Batch geoprocessing tools

Tools have batch capability to convert many elements at once

Cannot assign wildcard or feature type filters as with iterators

Model Builder

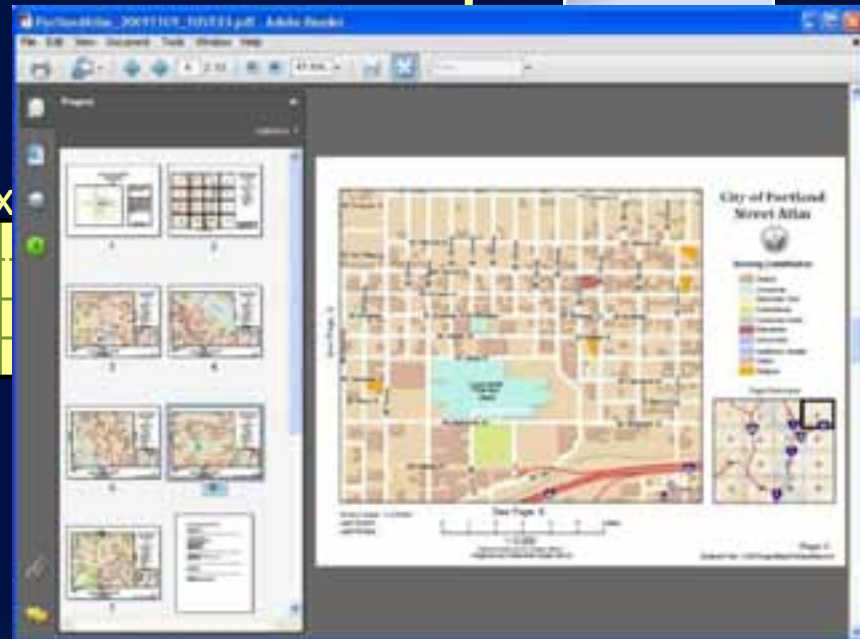
- Explore data for wastewater treatment plant site selection analysis
- Transform datum from NAD 27 to NAD 83 using a model iterator



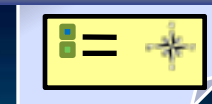
Create Map Books and Atlases

- Part of ArGIS
- ArcMap: Data Driven Pages
 - Single layout with an Index
 - Multiple pages based on feature extents
 - PDF Support

Data Driven
Pages



End User Tools and Scripting Support

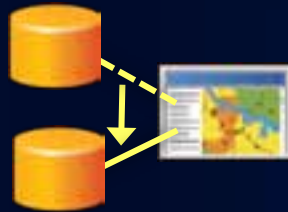


Automate Mapping Workflows

- New Python scripting (arcpy.mapping)
- Manage large numbers of map, layers and datasets
- Save time doing repeatable task
- Expose as a Geoprocessing Services



Updating Symbology



Changing Data Source

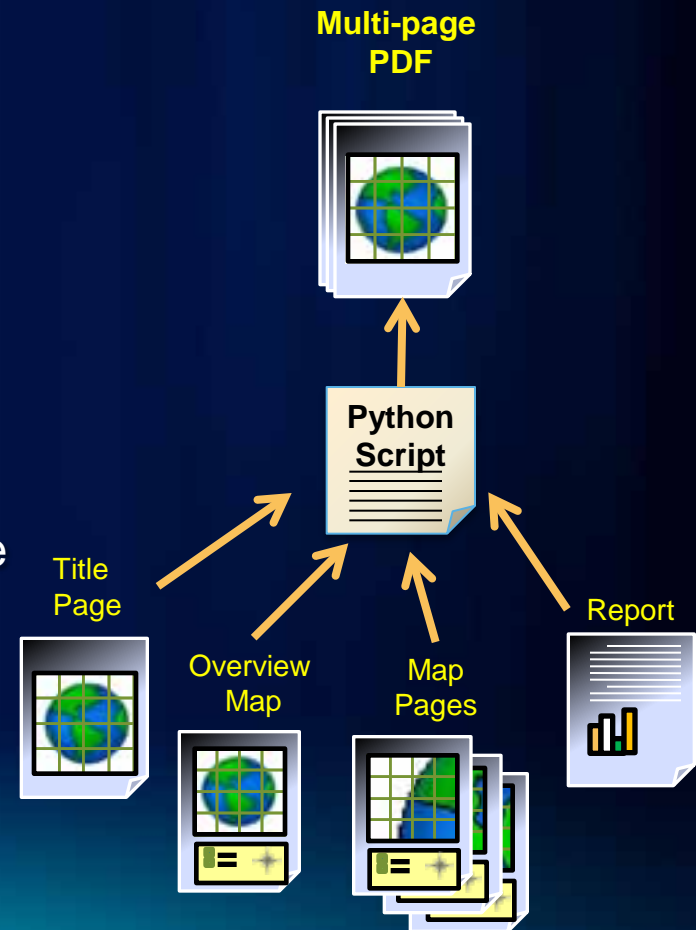
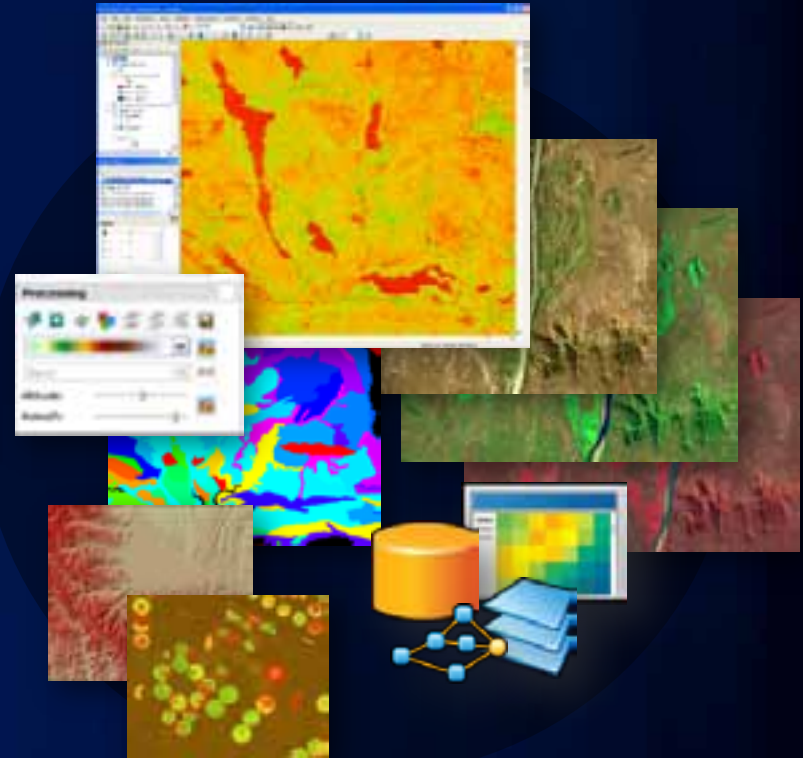
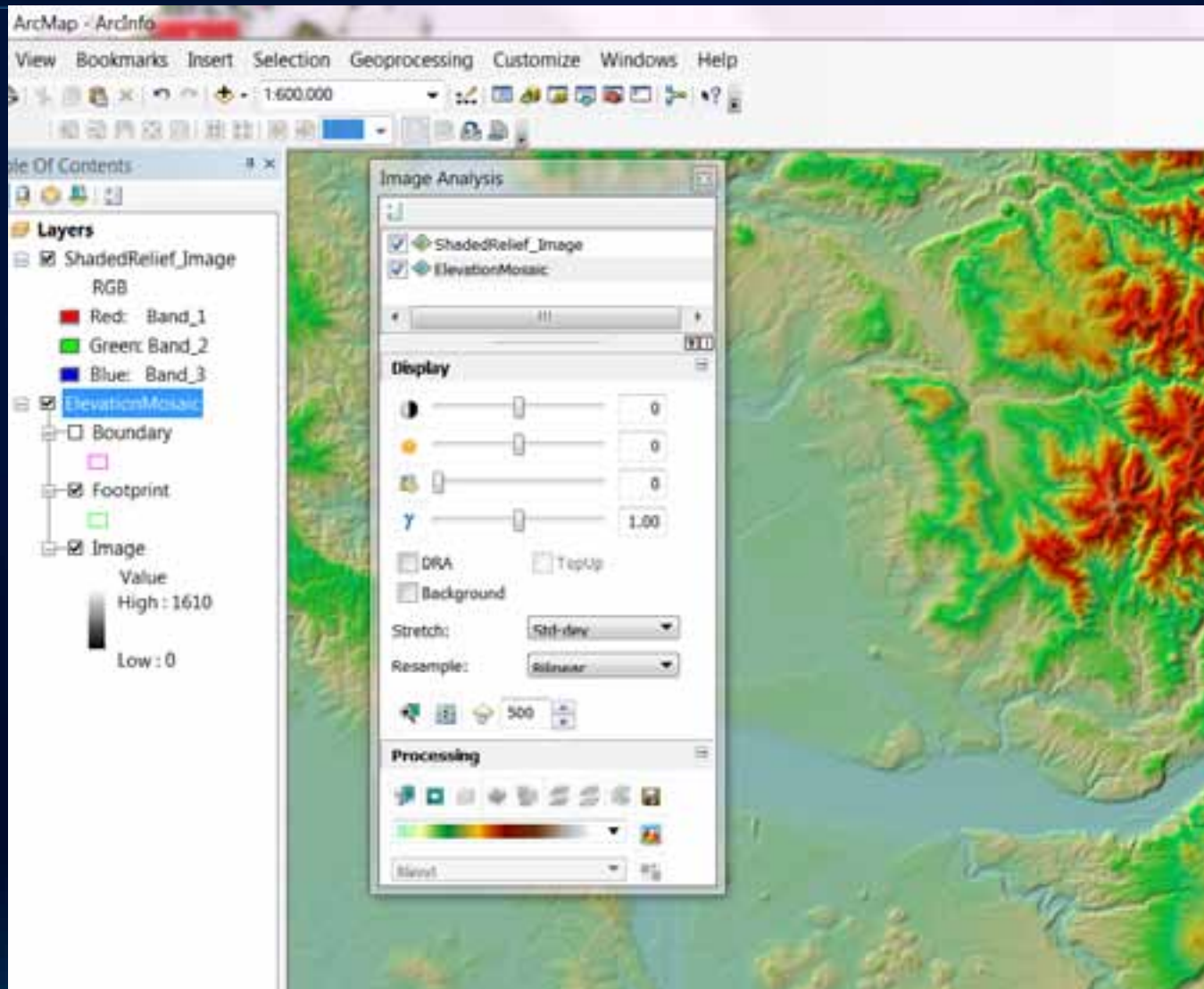


Image Analysis Window

- Quick Access and Display
- Search and Discovery
- Metadata Access
- Temporal Query
- Image Analysis Window
 - Enhancement
 - Interpretation
 - On-The-Fly Processing
- Image Classification Tools
- Authoring for Serving



New Window For Image Tools

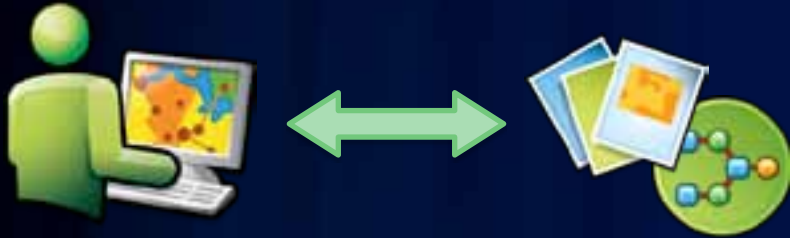


Customizing

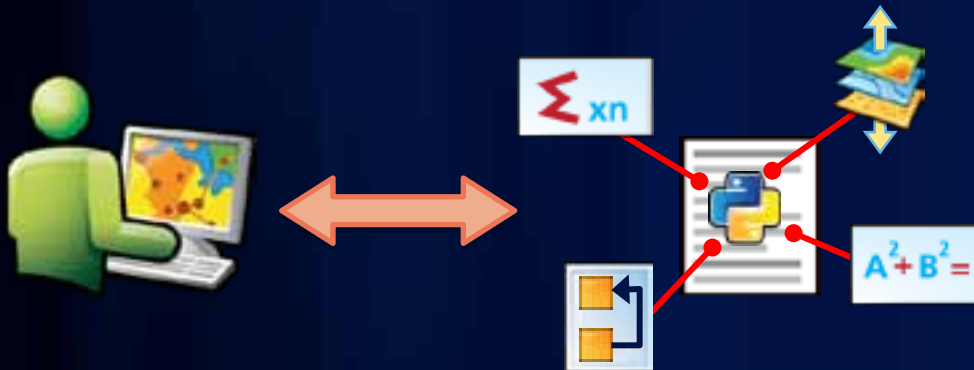
Jorge Ruiz-Valdepena



Configurable Desktop

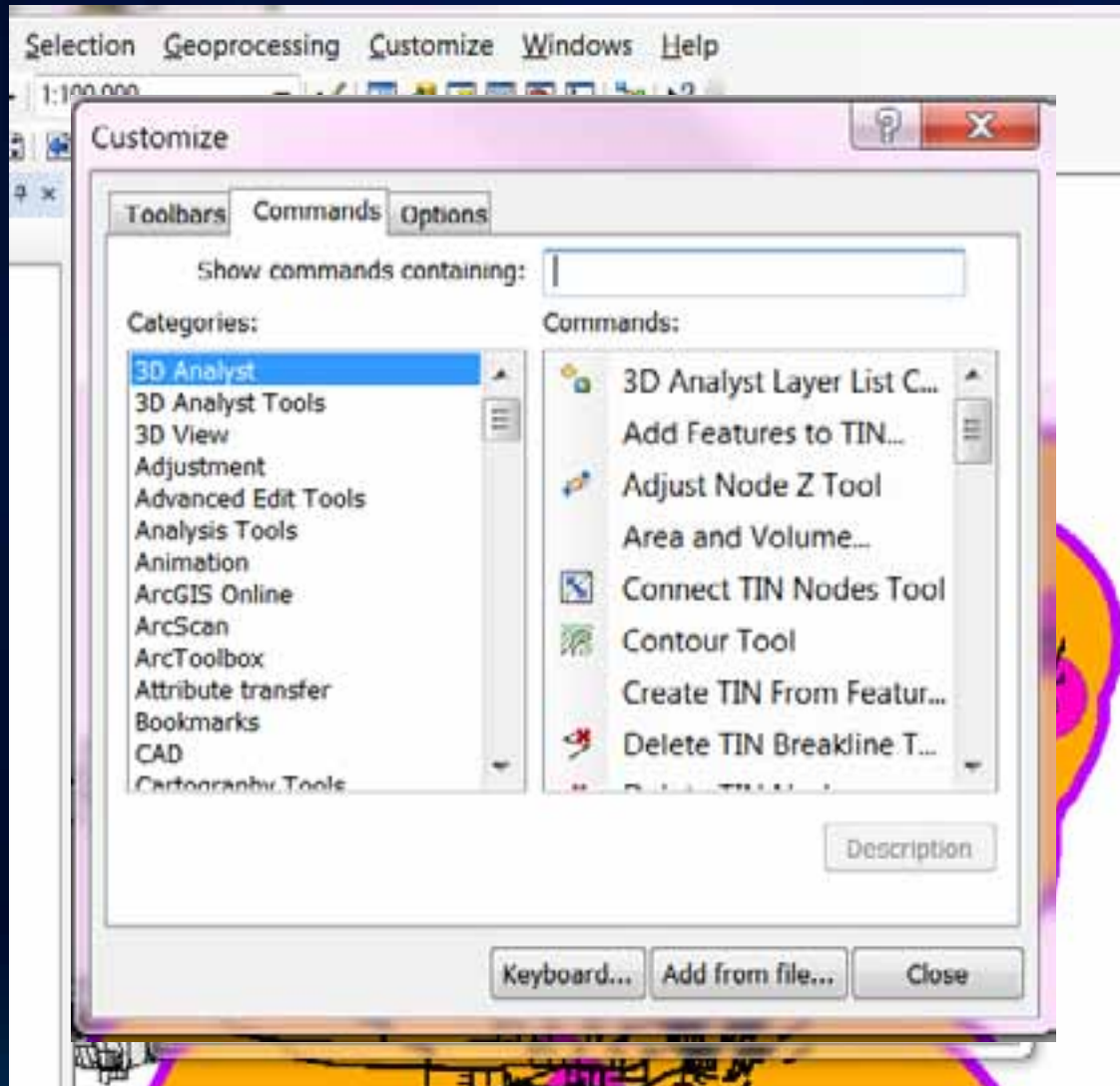


Configure the Applications
No Code



Python Scripting for
automation and other Python
modules

Configurable Desktop



Addin For ArcGIS Desktop: Find / Download

The screenshot shows a web browser window displaying the ArcGIS Resource Center page for the 'Presentation AddIn for ArcGIS Desktop'. The browser's address bar shows the URL: <http://resources.arcgis.com/gallery/file/arcobjects-net-api/detail>. The page header includes the ArcGIS Resource Center logo, a 'Help' link, and a search bar. The breadcrumb trail reads: Home » .NET API » ArcObjects .NET API Code Gallery. The main title of the page is 'Presentation AddIn for ArcGIS Desktop'. Below the title, there is a thumbnail image of the add-in's interface, which shows a map with a presentation window overlaid. To the right of the thumbnail, the author is listed as 'By richie', and the rating is shown as four stars out of five, with '(4 ratings)'. Below the rating are social media sharing icons for Facebook, LinkedIn, and Twitter. The 'Description' section begins with the text: 'This AddIn for ArcGIS 10 allows you to create and deliver presentations directly inside of ArcMap. This Addin is similar to the presentation capability recently added to ArcGIS Explorer.'

Presentation AddIn for ArcGIS Desktop | ArcGIS Resource Center - Windows Inter

http://resources.arcgis.com/gallery/file/arcobjects-net-api/detail

File Edit View Favorites Tools Help

★ Favorites Presentation AddIn for ArcGIS Deskto...

ArcGIS Resource Center Help Blo

Home » .NET API » ArcObjects .NET API Code Gallery

Search

Sea

By richie

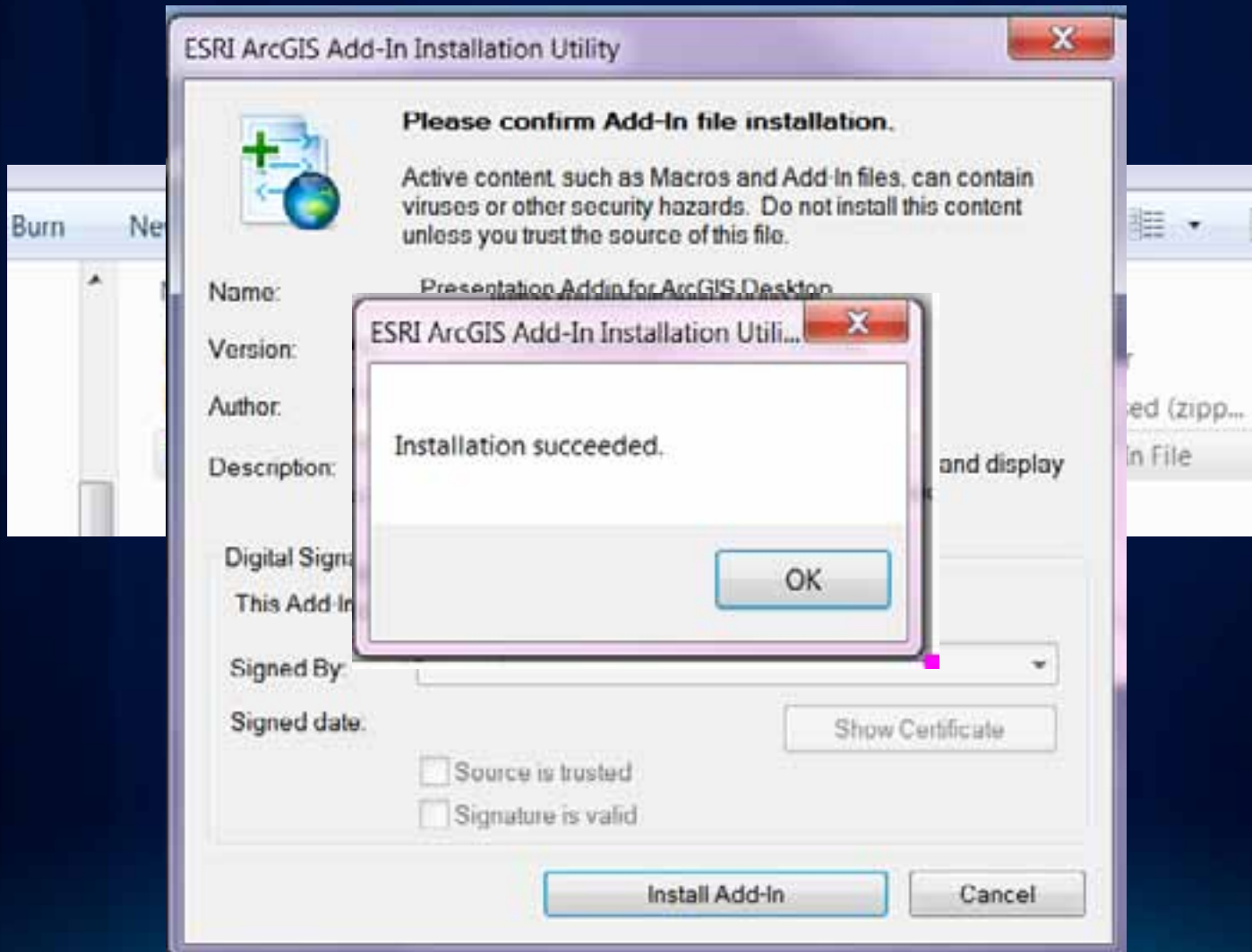
★★★★★ (4 ratings)

date | Sort by relevance

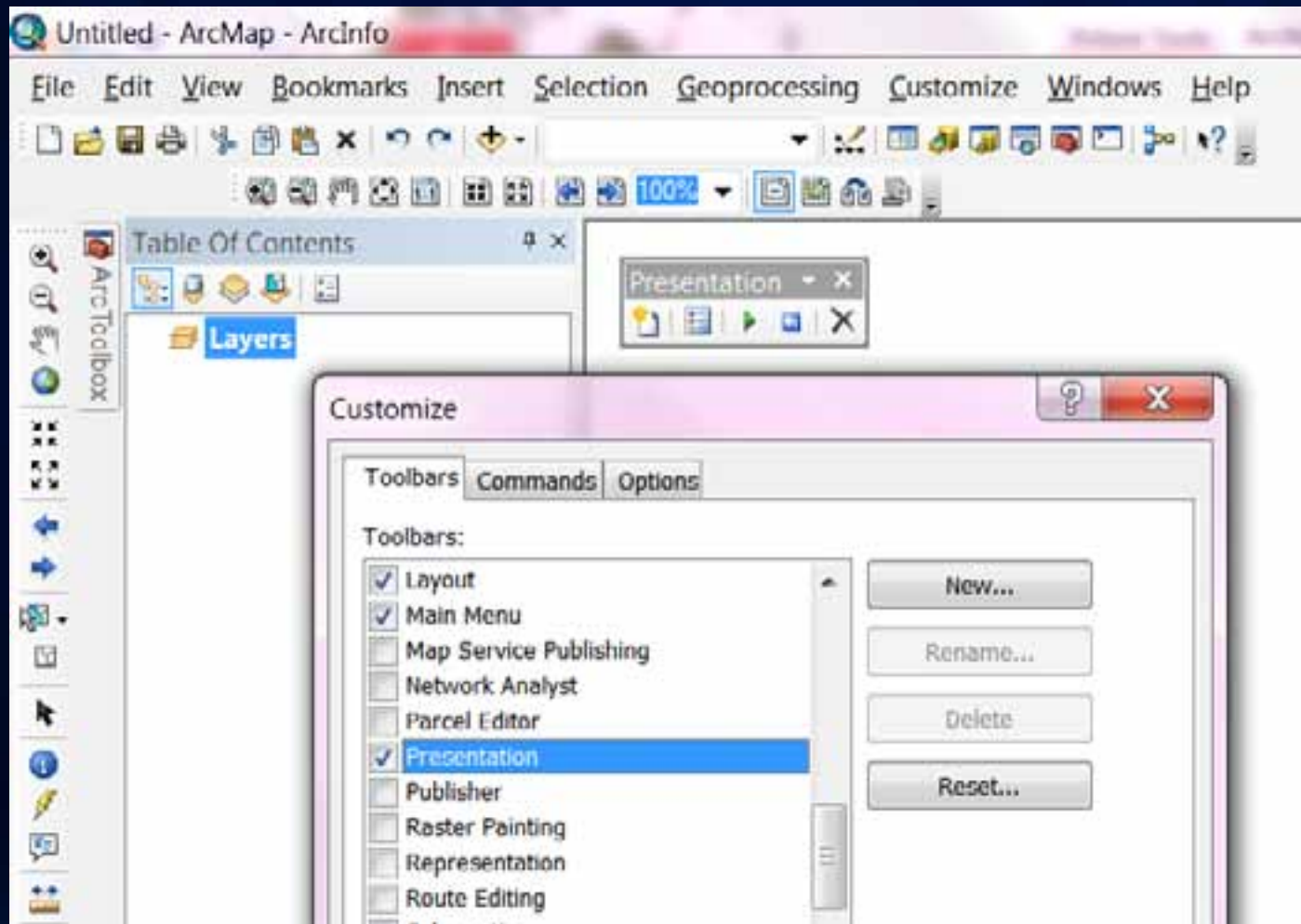
Description

This AddIn for ArcGIS 10 allows you to create and deliver presentations directly inside of ArcMap. This Addin is similar to the presentation capability recently added to ArcGIS Explorer.

Addin For ArcGIS Desktop: Install it



Addin For ArcGIS Desktop: Use it



Summary

- Managing the Interface
- Mapping and Editing
- Geoprocessing
- Customizing

Additional UC sessions and Resources

- Making Beautiful Maps
- Editing Tips and Tricks
- Building Map Books
- Python – Scripting for Map Automation

Resources:

- [*GIS Tutorial 1: Basic Workbook, Fourth Edition*](#)
- [*GIS Tutorial 2: Spatial Analysis Workbook, Second Edition*](#)
- [*GIS Tutorial 3: Advanced Workbook*](#)

Thank you!

Please fill out and submit your evaluation form

www.esri.com/sessionevals

