



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

The ArcGIS System **Putting it all Together**

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Agenda

- **Why a system?**
- **ArcGIS System**
- **Putting it all together**
 - **Products that make up the ArcGIS System**

Why a system?



GIS Implementation

GIS can make a difference

Coastal Protection & Marine

Agriculture

Defense

Port Security

Rescue

Land Records

Education

Parks & Recreation

Hospital

Museum

Aeronautical

Retail

Economic Development

Telecommunication

Electric/Gas

Government

Security

Banking

Facility Management

Tourism

Refuse Collection

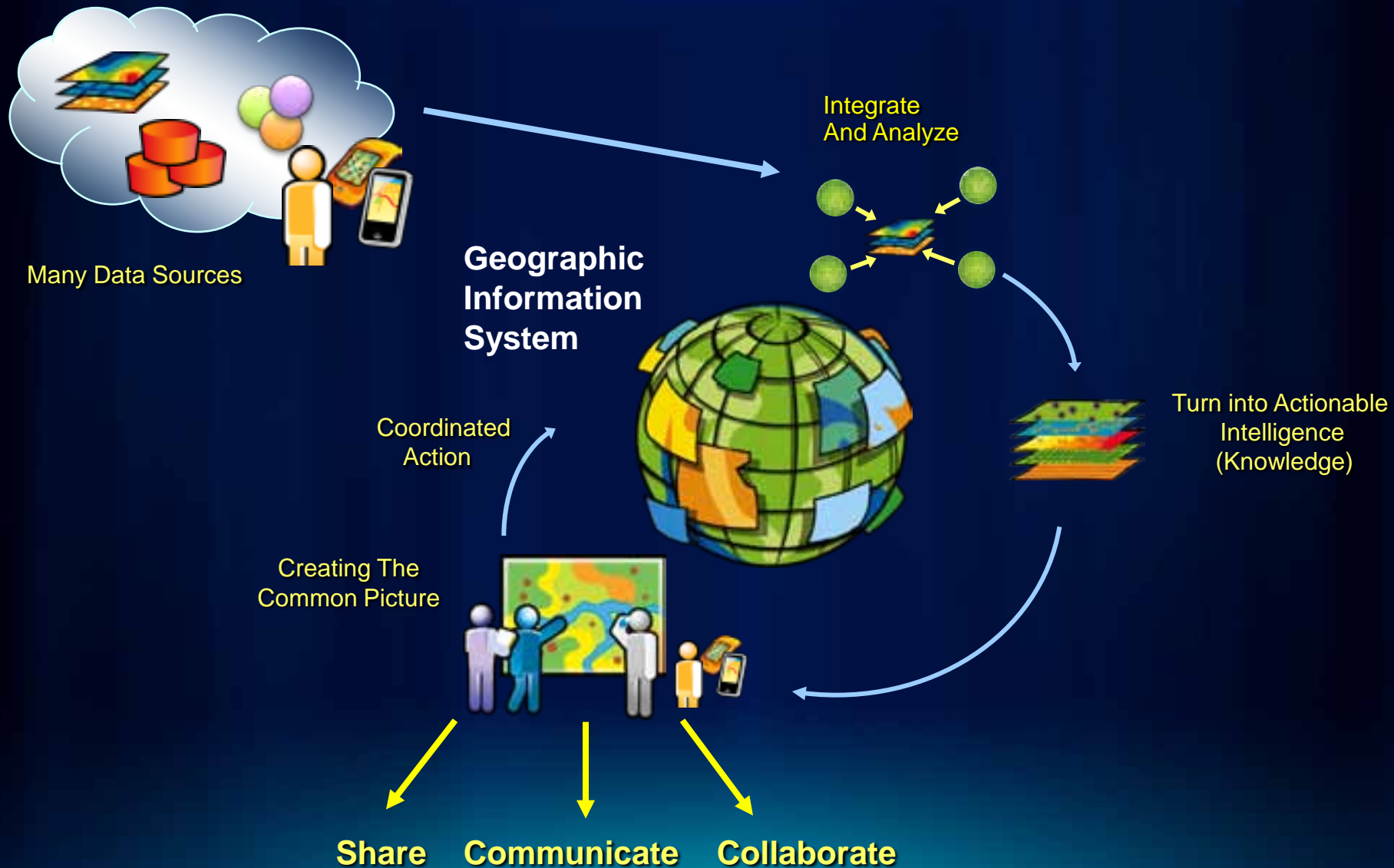
Public Works

Lighting

Landscape Planning

Sign Inventory

The GIS System



Why a GIS system?

Provide access from anywhere, anytime, using any device

- **Supporting many missions and workflows**
- **Integrating information**
- **Improving efficiency by sharing**
- **Mitigating redundancy**
- **Providing real time information**
- **Lead to better decisions, and effective communication**

ArcGIS

A Complete System for Geographic Information

- Easier
- More Powerful
- Everywhere



Making GIS Available to Everyone

ArcGIS Addresses Many Common Workflows



Modeling and Analysis



Design and Planning



Asset Management



Situational Awareness



Field Collection

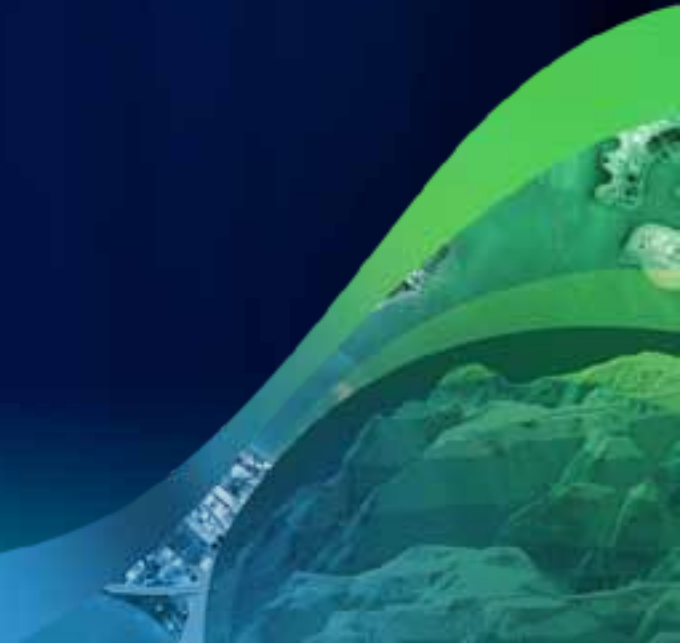


Cartographic Design



Collaboration and Transparency

Demo: ArcGIS - A complete system



Train Derailment



Train Derailment



Zoom To

GIS Addresses Many Groups



Data and Analysis
GIS Analyst



Public
(Community)



Emergency
Operations Center



Field crews
Damage assessment



Public officials
(Fire and Police dept)

Common GIS Implementation Patterns



ArcGIS System

Putting it all together

Understanding the details

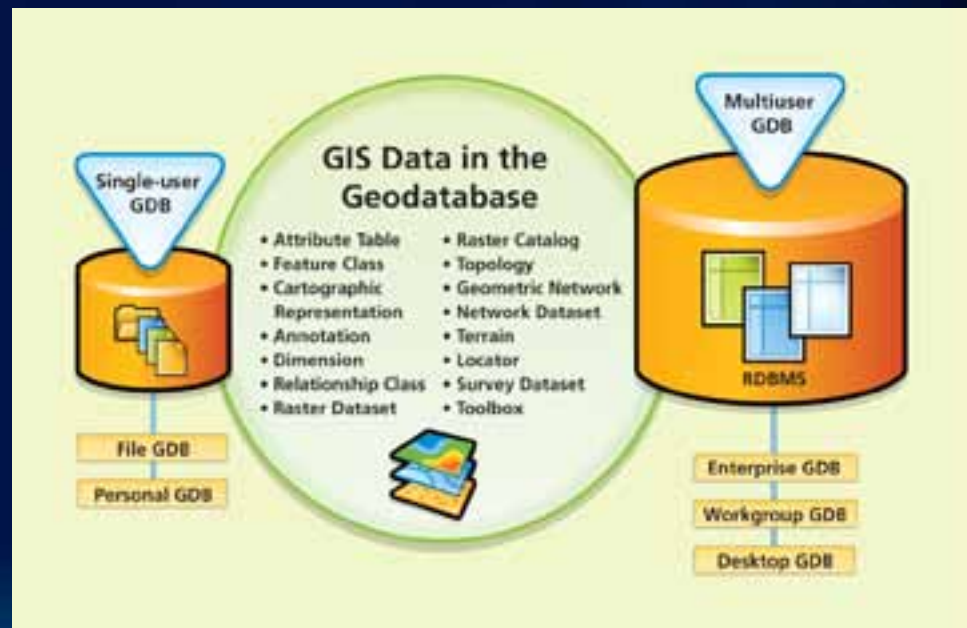


ArcGIS System



Data-driven systems: the geodatabase

- Support the breadth of GIS system
- Leverage existing RDBMS technology
- Scalable
- Foundation



ArcGIS Desktop



www.esri.com/desktop

ArcGIS Desktop 10 Functionality Matrix

[illegible]

Multiuser Geodatabase Editing

General Editing		
Single Editor Can Simultaneously Edit the Same Feature (Across a Multicore Environment)	0	0
Support Editing Projects to Incorporate Versions of Source Without Enabling a Variety of Workflows	0	0
Manage Versions (Revisions and Patches)	0	0
Manage Code File Contents (Editors by File or Column)	0	0
Manage Code File Contents (Editors Interactively or Automatically)	0	0
Define Versions	0	0
Simultaneously View and Edit Associated Test Cases in JUnit or Test-Driven Development	0	0
Advanced Feature Groupings		
Modify Code Fragments for Reuse in Additional Codebases	0	0
Reduce IDE's Size with the Cloud IDE	0	0

Topology

Map Displaying			
Display a Summary of the Errors and Exceptions in the Topology	Y	Y	Y
Display the Feature Classes and Rules in the Topology	Y	Y	Y
Display Points, Polygons, and Other Areas in the Map	Y	Y	Y
Editing			
Create and Edit Polygons Created from Lines in the Map	Y	Y	Y
Move Topology Vertices and Nodes	Y	Y	Y
Select and Delete Related or Connected Features	Y	Y	Y
Reshape Shared Edges between Features	Y	Y	Y
Modify the Coordinates of Shared Edges in Nodes	Y	Y	Y
Split Moved Edges at a Specific Point, Distance, or Percentage along the Edge	Y	Y	Y
Insert Edges and Nodes in a Specific Location	Y	Y	Y
Shift Edges and Nodes Based on a Distance from Their Current Location	Y	Y	Y
Merge Connected Edges	Y	Y	Y
Create and/or Adjust or Connected Features When a Shared Edge or Node is Moved	Y	Y	Y
Preserve Right Polygons from Lines or Objects from Other Polygons	Y	Y	Y
Split Lines Where They Intersect	Y	Y	Y
Isolate a Specific Area in the Entire Topology	Y	Y	Y
Search for Objects of a Specific Type within One Area in the	Y	Y	Y

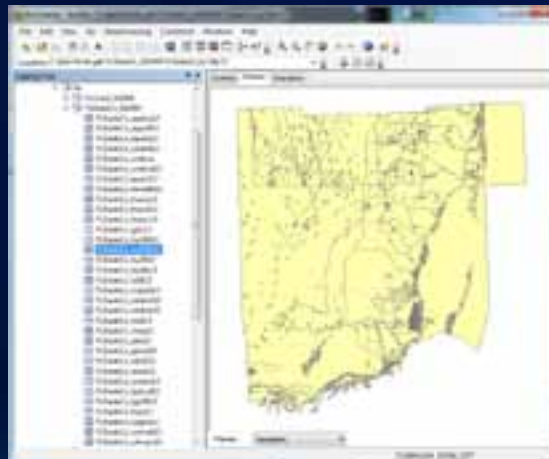
ArcGIS Desktop Applications



ArcMap



ArcScene



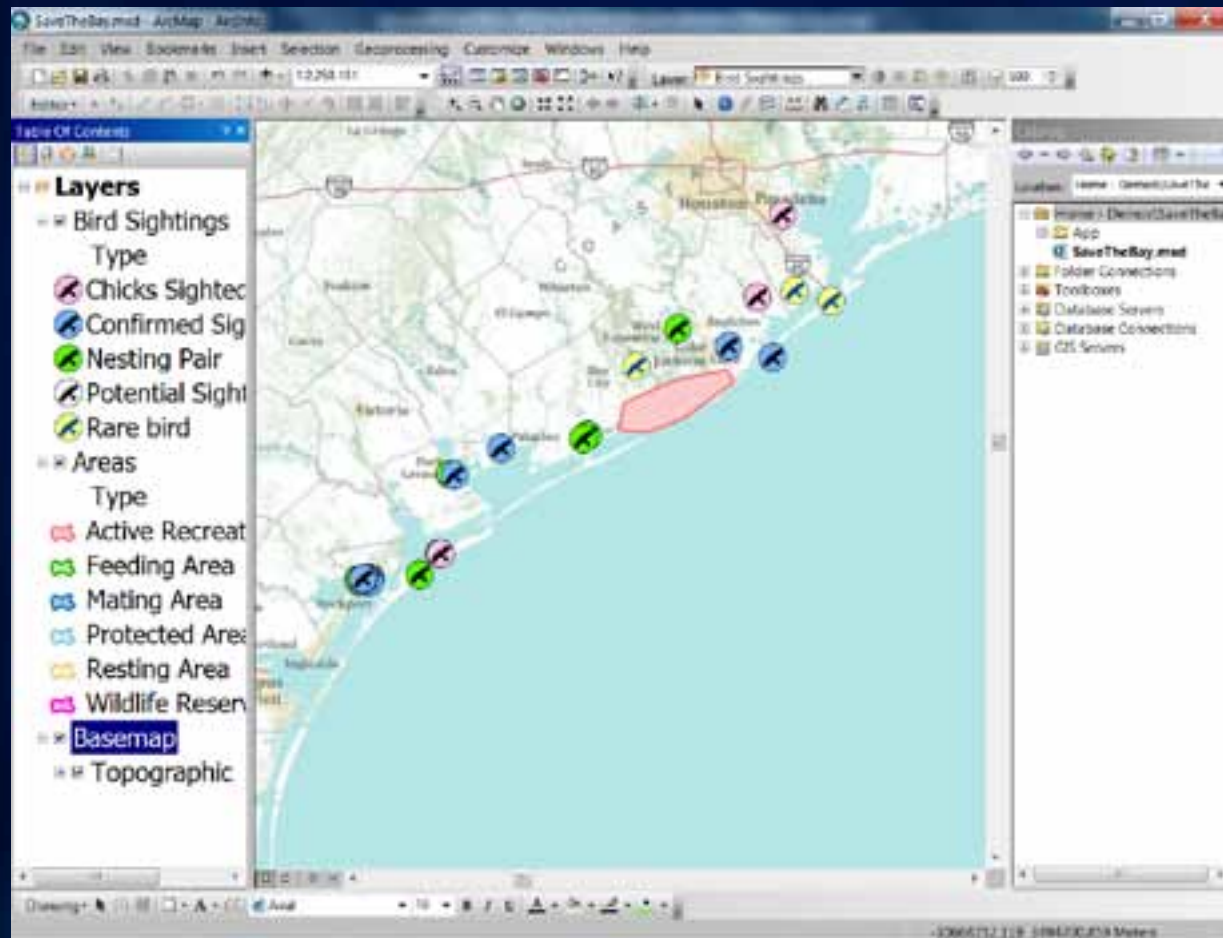
ArcCatalog



ArcGlobe

ArcGIS Desktop Applications

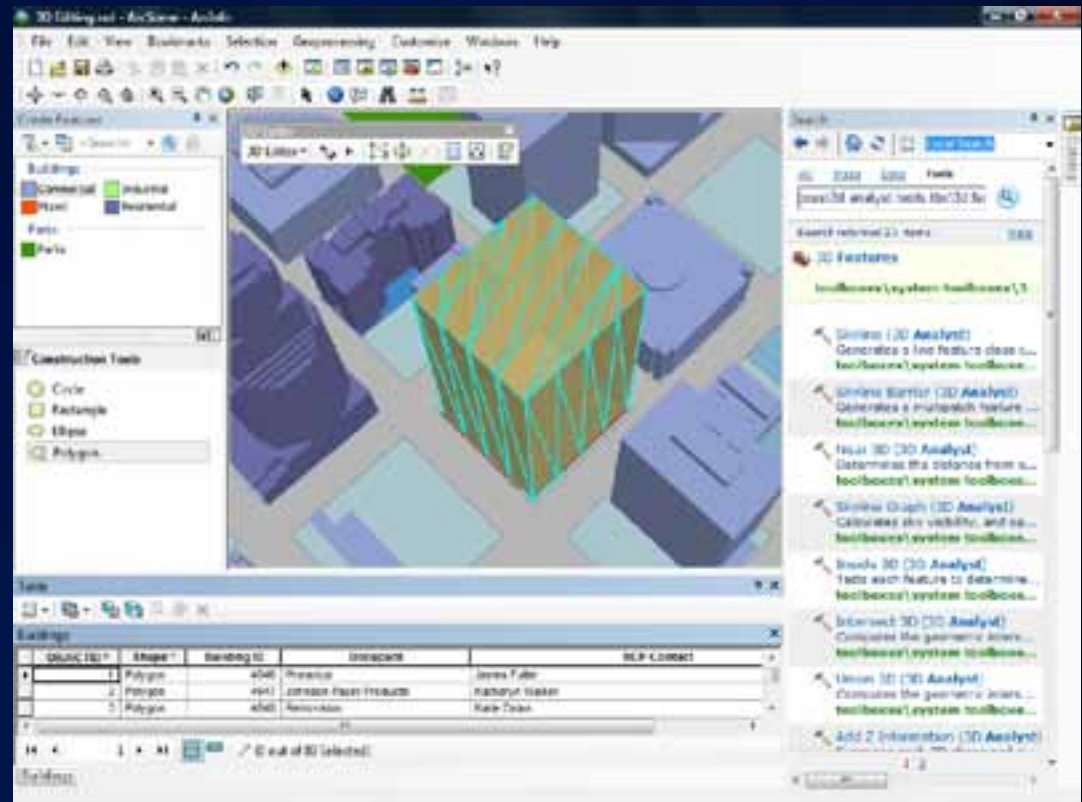
ArcMap and ArcCatalog in one application (10.0)



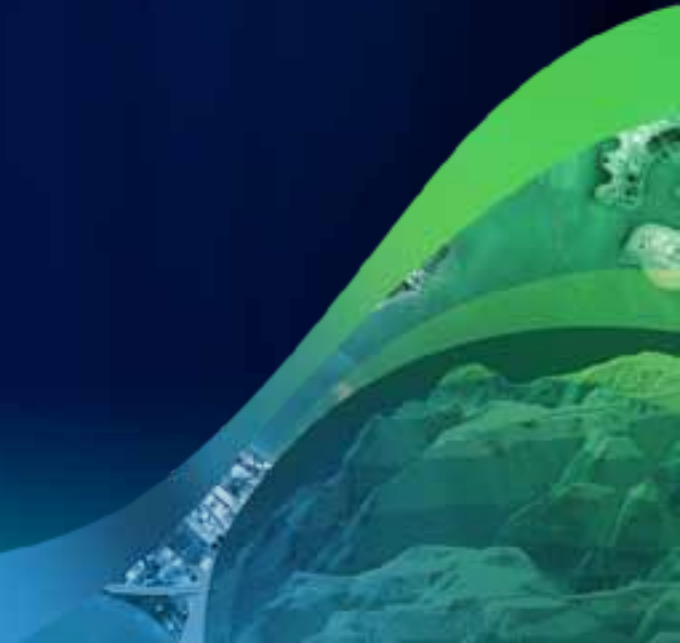
ArcGIS Desktop Extensions

Providing Specialized Capabilities

- **Analyst series**
- **Productivity tools**
- **Specialized software**



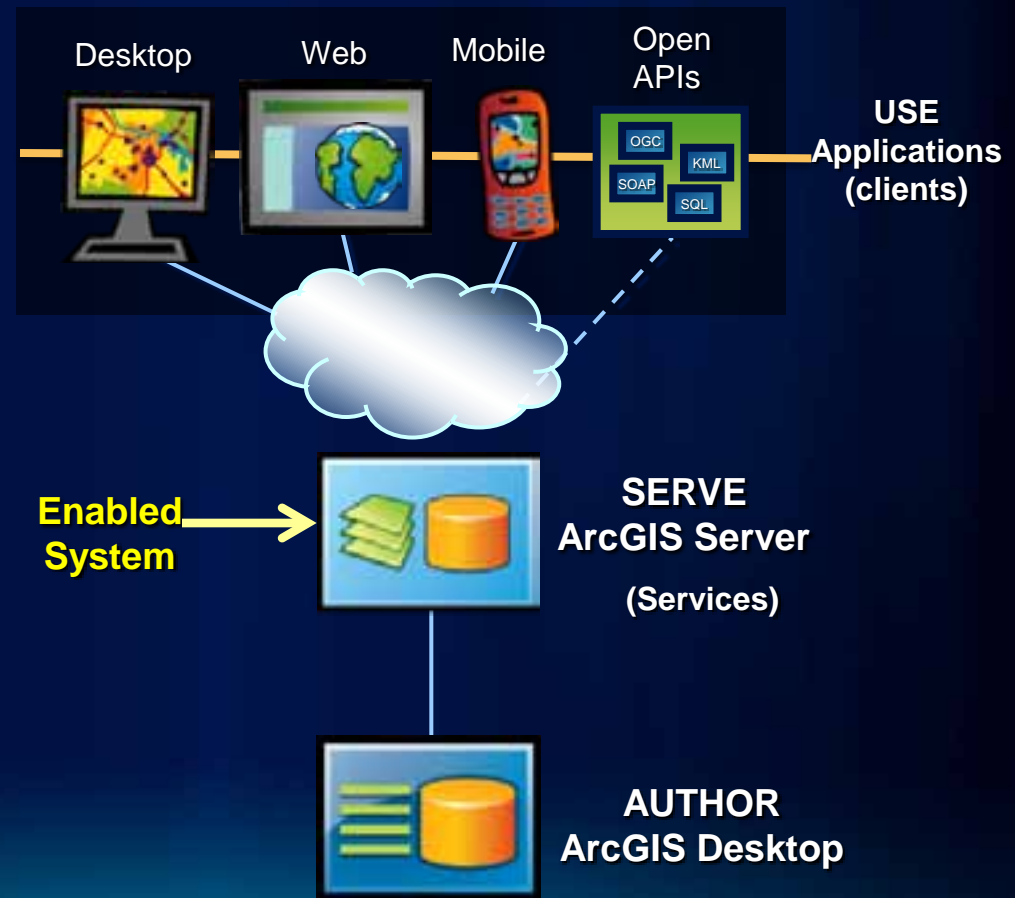
Demo: ArcGIS Desktop



ArcGIS Server Is a Platform for Web GIS

Comprehensive GIS Accessible from the Web, Desktop, and Mobile

- Server Oriented Architecture
- Enabling Web GIS
- Rich Application Clients
- High Performance and scalable
- Interoperable
- Dissemination and collaboration



What types of services can ArcGIS Server offer?



Map

- View or query a 2D map on the server



Globe

- View or query a 3D globe on the server



Geocode

- Perform address matching on the server



Geodata

- Perform data replication, extraction, or query



Geoprocessing

- Run a tool or model on the server and get results



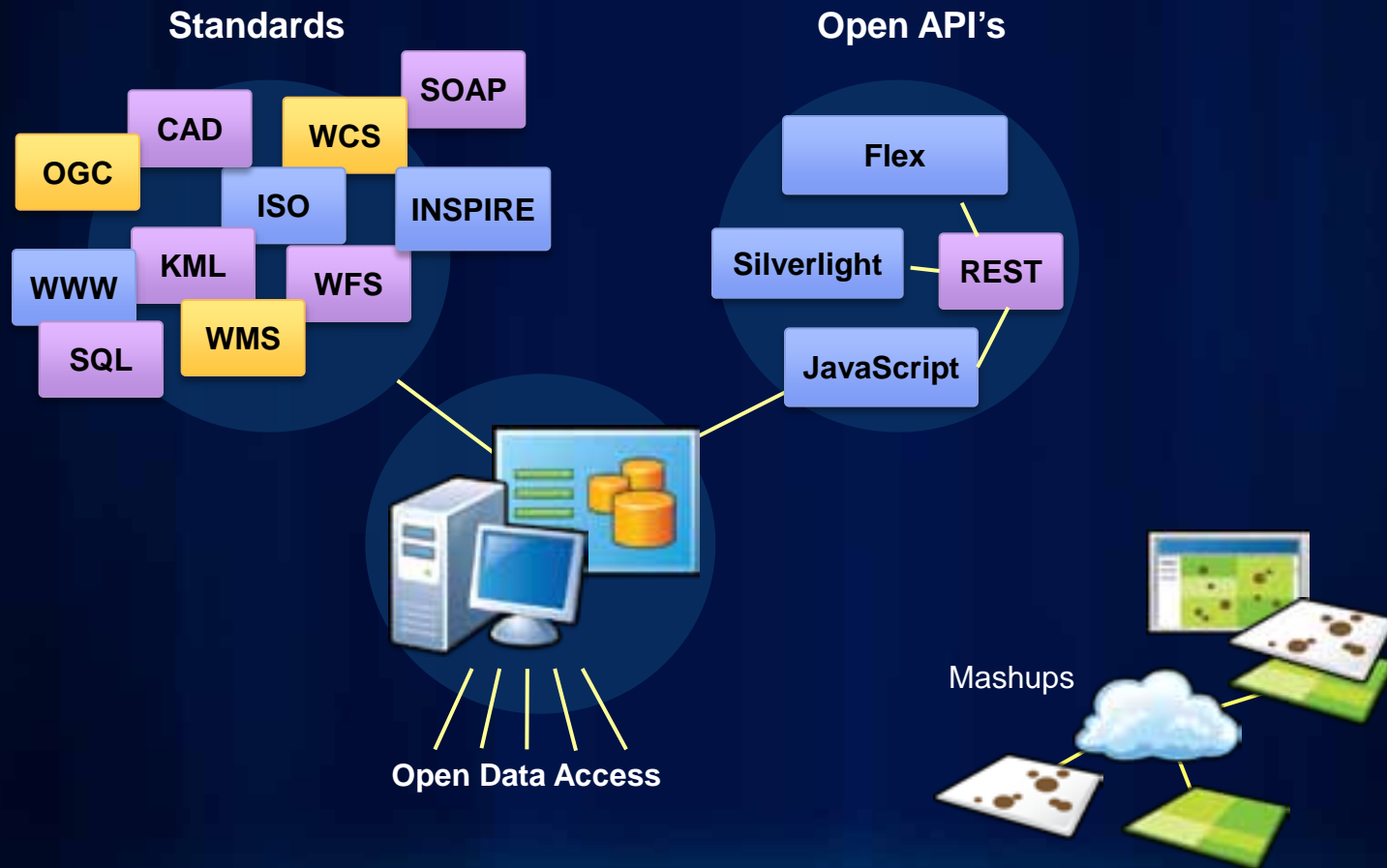
Image

- Provide access to raster data through a Web service

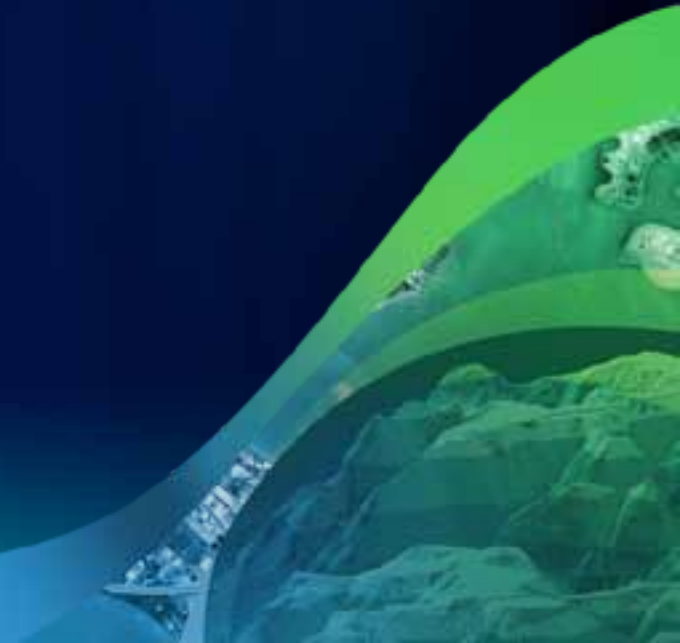
ArcGIS Server



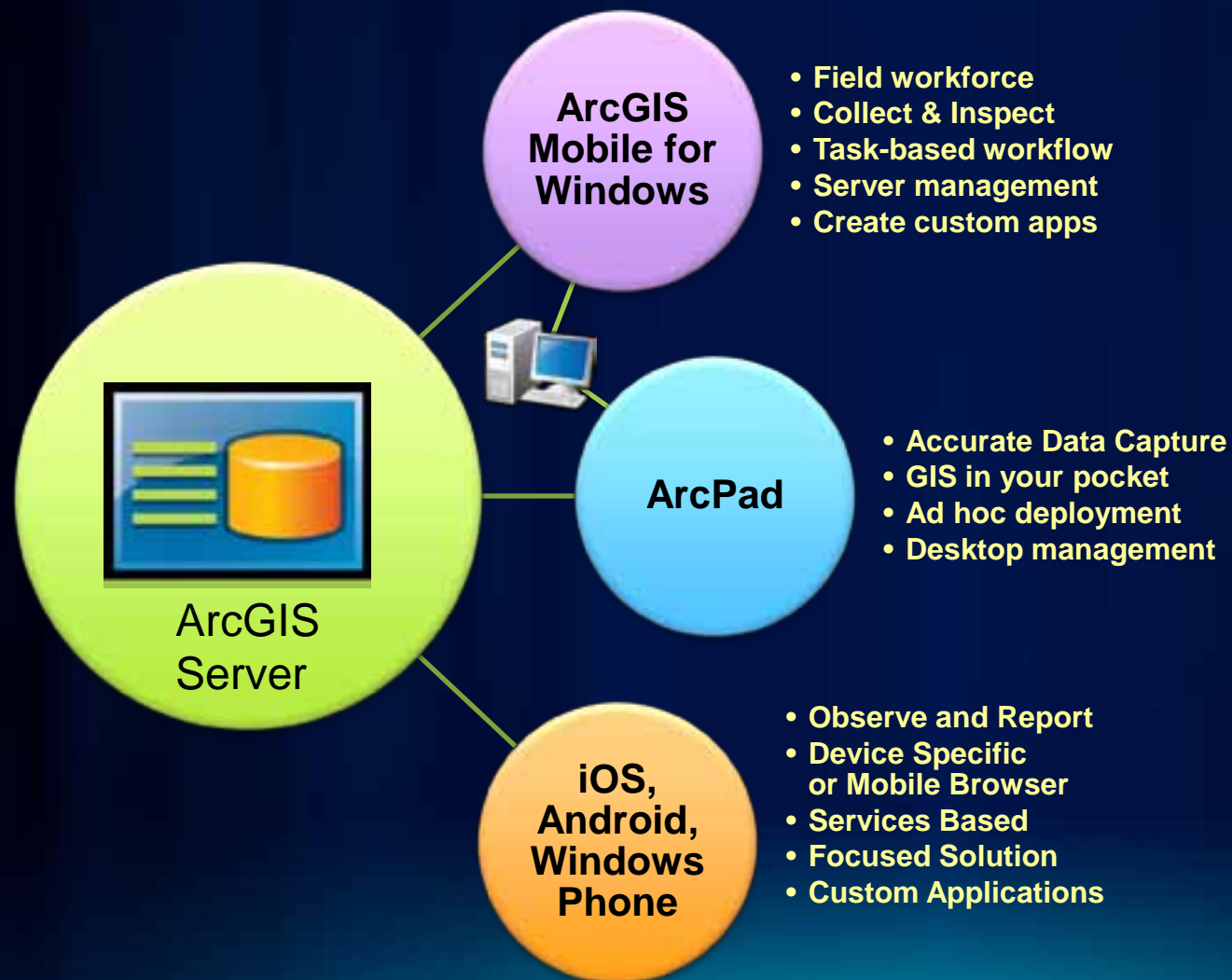
ArcGIS is Interoperable Using Industry Standards



Demo: ArcGIS Server



ArcGIS on Mobile Devices



Demo: Mobile Application



ArcGIS Online

A Cloud Based Portal

- High Quality Maps and apps
- Sharing
- Search
- Communities
- Free Viewers
- Mashups
- Open Web API's
- Hosting (coming soon)

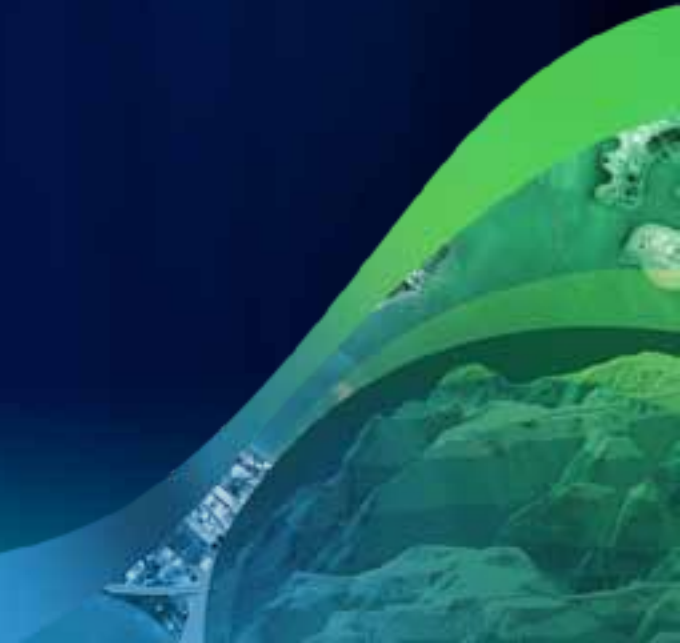


Rapid Growth

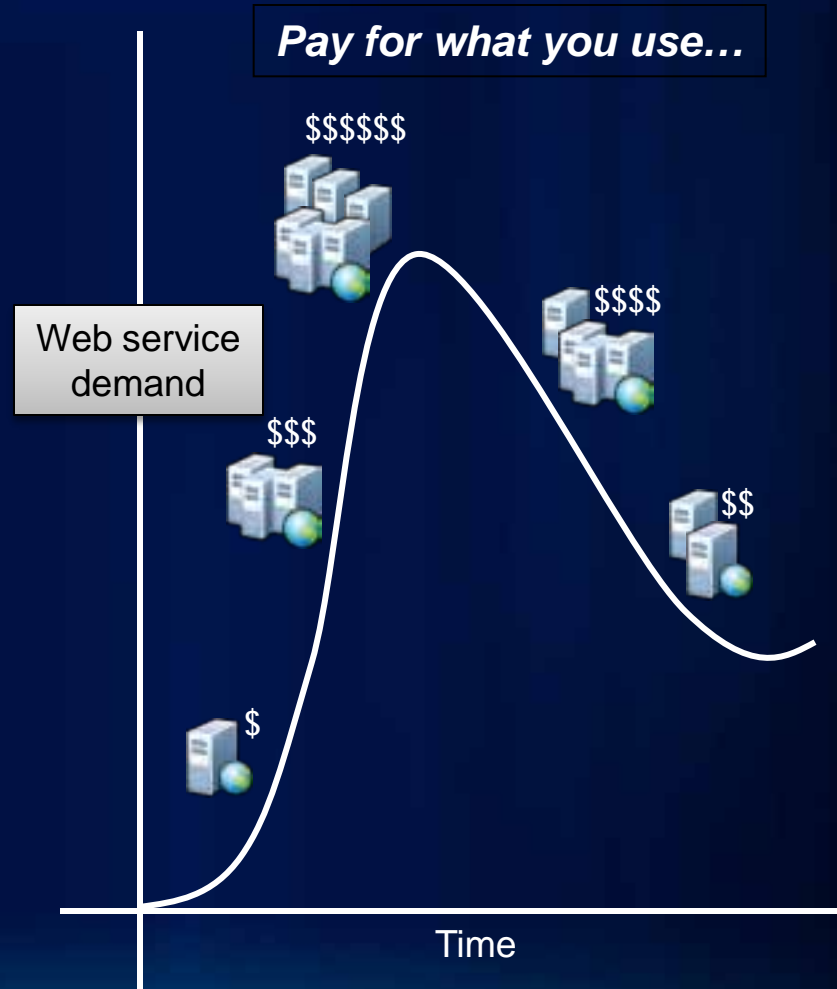
- 30% Growth / Month
- 10,000's of Maps & Services
- Hundred's of 1,000's of Users
- Millions of Maps per Day

*For Sharing, Discovery and Use....
...Providing a Ready-to-Use Geospatial Platform*

Demo: ArcGIS Online



What is the trend? Cloud computing



The background of the slide features a stylized map graphic on the left side, showing a city grid and a river. The map is rendered in shades of green and blue, with a semi-transparent effect that allows the dark blue background to show through. The map graphic is positioned on the left side of the slide, extending from the top to the bottom.

Summary

“ArcGIS is more than just mapping. It is a complete system that transforms the way you do business and makes organizations efficient and effective”

Think about how we can help you enable ArcGIS as a system in your organization....

Take The Next Step

Visit:

- ArcGIS.com – <http://www.arcgis.com>
 - ArcGIS Resource Center – <http://resources.arcgis.com>
 - Esri products – <http://www.esri.com/products>
-
- **Related Technical Workshops**
 - **The Power of GIS: Real Examples and Applications**
(Wednesday 3:15 PM, 6E)

Start building your GIS System

Questions

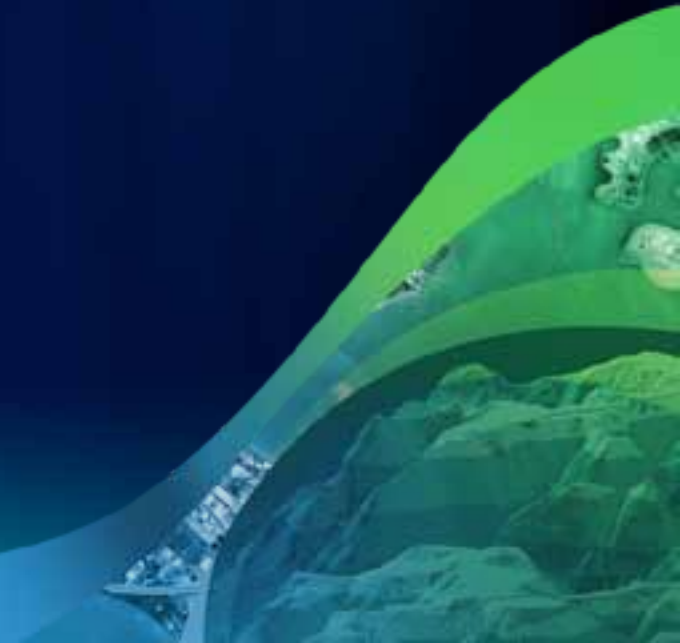
Please fill in the survey.....

[Http://www.esri.com/sessionevals](http://www.esri.com/sessionevals)

Thank you



Thank you





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