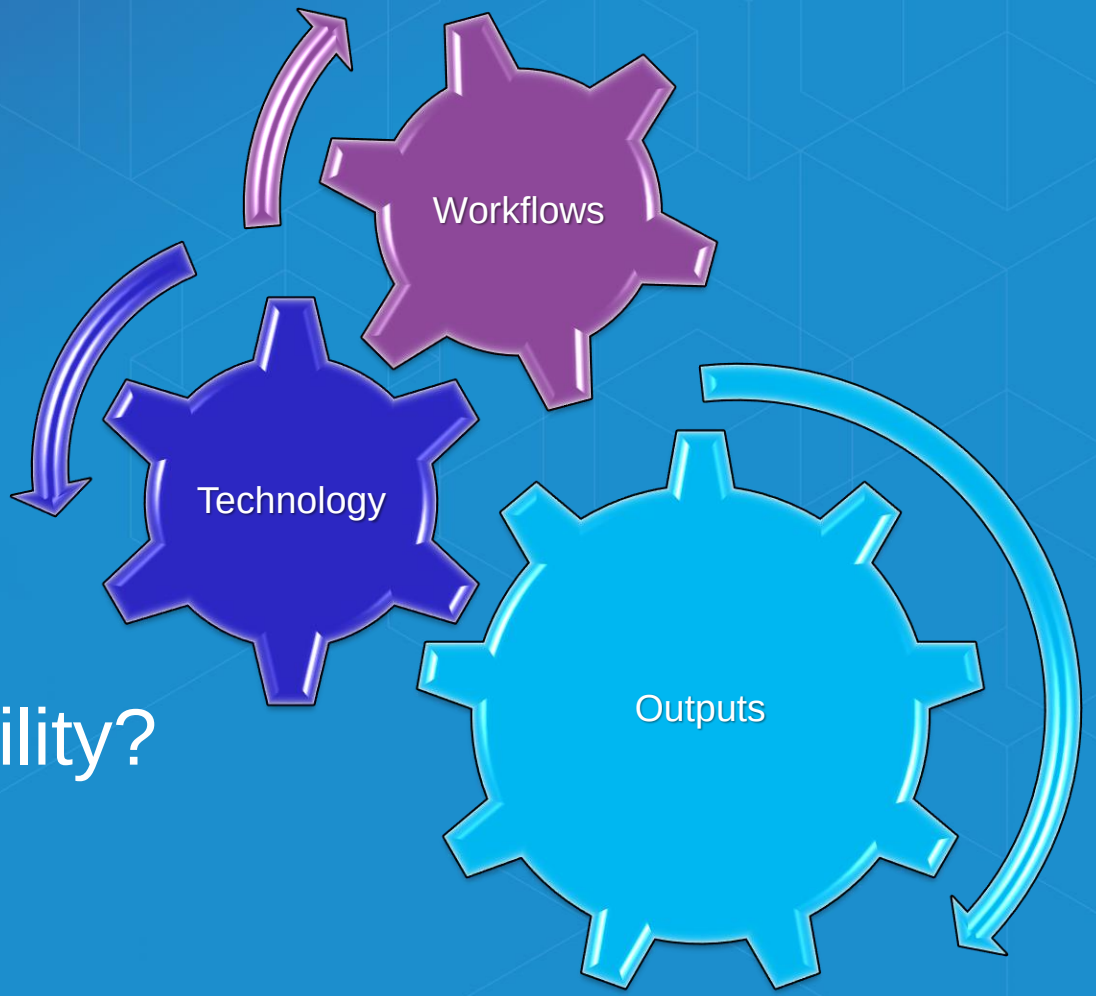
Establish an Initial Operating Capability for Your Organization

Matt Marino

What is Initial Operating Capability?



“The state achieved when a capability is available in its minimum usefully deployable form”

Deployment of Initial Operating Capability

Realization of an Integrated Enterprise System

Foundation Apps
Essential Information Products

Desktop
Web
Device

Extended / Custom Apps

ArcGIS Online
Portal

Integration with
Business Systems

Advanced Workflows

Server

Online Content
and Services

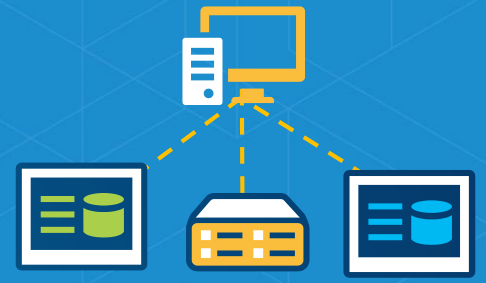
Content Production Systems
Data Modernization

"GIS Ready" Data

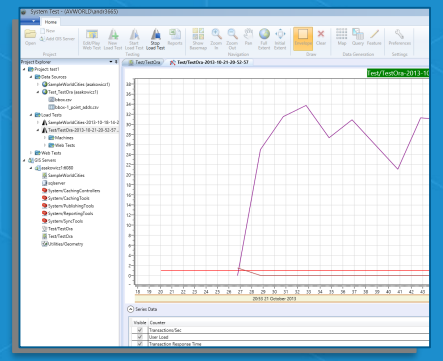
Implemented… Not Operating

Pieces Don't Make the Whole

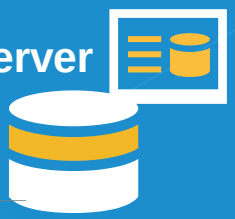
Desktop Web Device



ArcGIS Online Portal



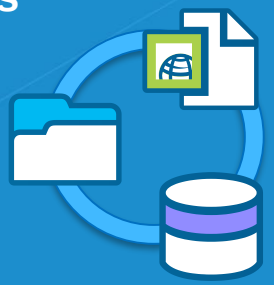
Server



Online Content and Services

$$TH = \frac{Users}{Response\ Time + Think\ Time}$$

$$\#\ CPU_t = \frac{ST_b \times TH_t \times 100}{3600 \times \%CPU} \times \frac{SpecRatePerCPU_b}{SpecRatePerCPU_t}$$



Implementation with Purpose

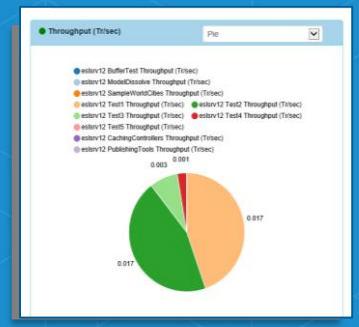
Sum is Greater Than the Parts

Desktop

Web

Device

ArcGIS Online Portal



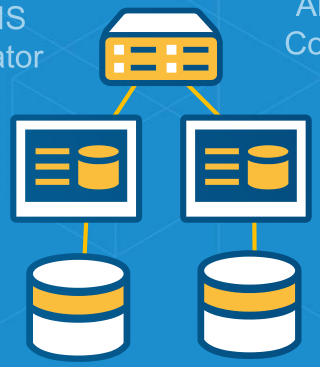
Server

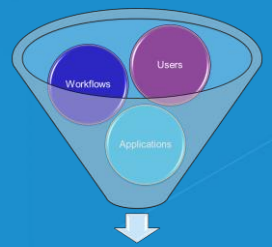
Online Content and Services

ArcGIS Navigator

Operations Dashboard

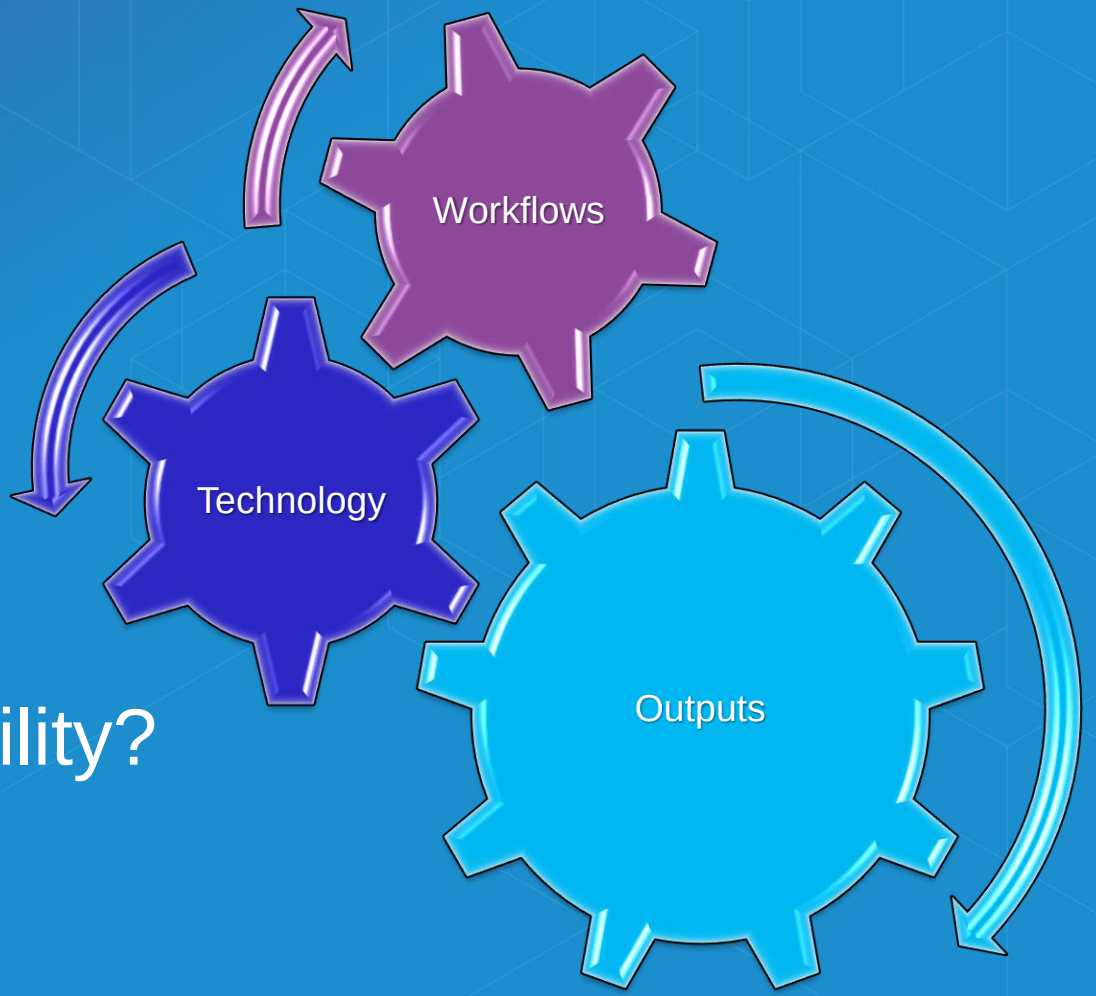
ArcGIS Collector





Capacity

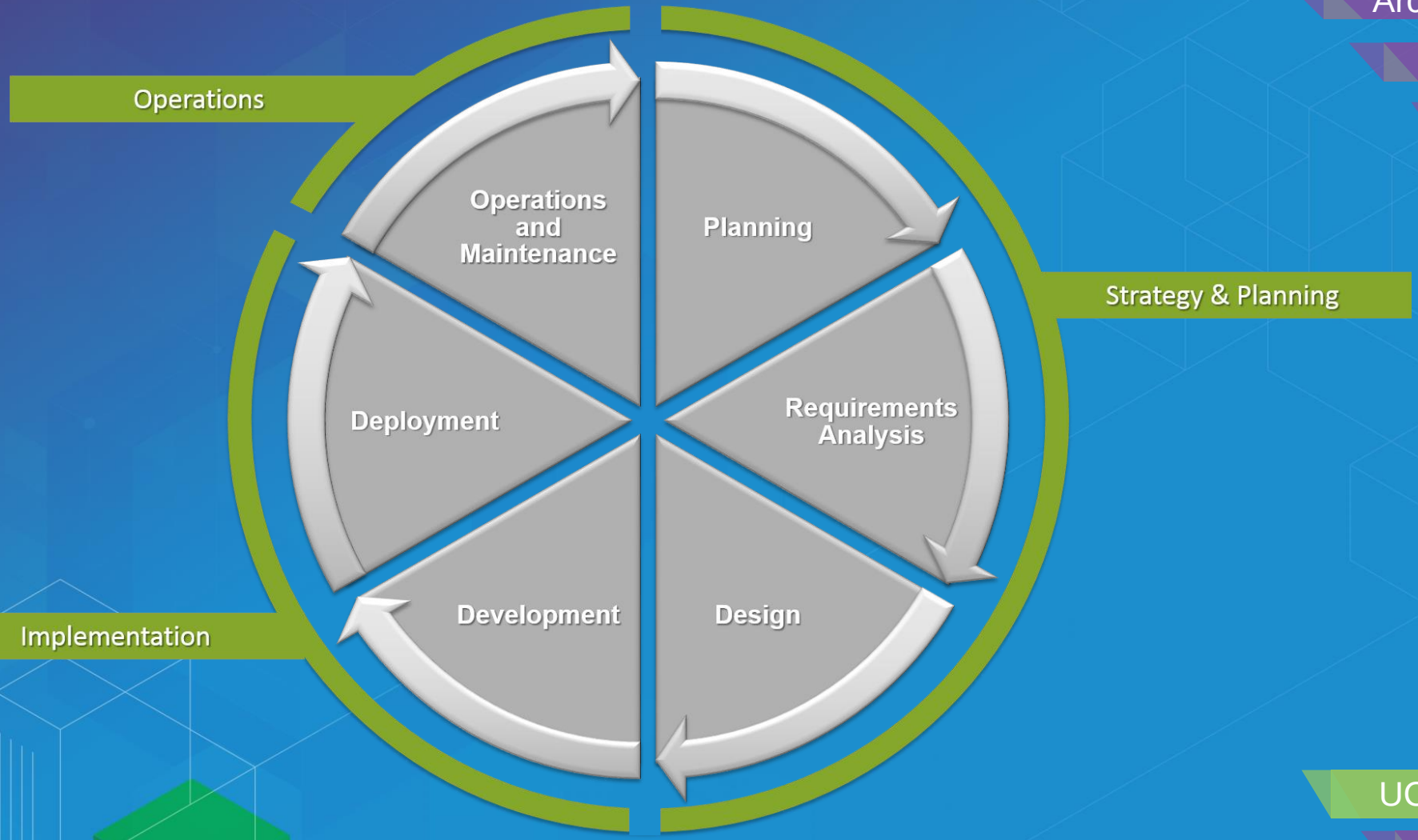
What is Initial Operating Capability?



“The state achieved when a capability is available in its minimum usefully deployable form”

Initial Operating Capability

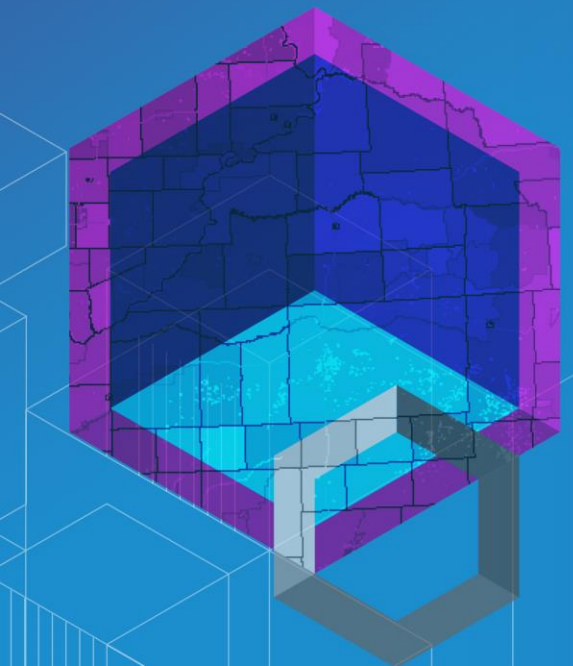
Enable & Empower Your Organization



- Configuration & Integration
- Strategy Planning
- Architecture & Security
- Geodata Engineering
- Training & Certification
- Premium Support

- UC Session
- Platform Enablement Island
- Esri Publication

Strategy & Planning



Organizational Vision

What is the Overarching Goal?

The primary mission of the Department of Building Safety is to safeguard the public, promote the health, safety and welfare of the City…..

…..helps its clients achieve profitable growth with a combination of specialized broking expertise, strategic advisory services…..

Esri Professional Services supports customers and partners in the effective implementation and application of ArcGIS software

Discover the Location Dimension of your Business

Identify the Location Value in Your Business

Strategy & Planning

Launching your Location Platform

Establish Key Users

How is Location Valuable to Them?

Desktop Analyst

What is being collected?

Team Supervisor

Where is my team?

Field Worker

Where is my next task?

Document Workflows

Start with Patterns of Use

Location Enablement	Constituent Engagement	Decision Support	Field Mobility	Analytics	Location Data Management
Discover, use, make, and share maps at work – anywhere, anytime	Facilitate and manage communication with stakeholder	Inform execs and management with maps and location intelligence	Get authoritative information into and out of the field	Describe, predict, and improve business performance	Collect and organize location data about your assets and resources

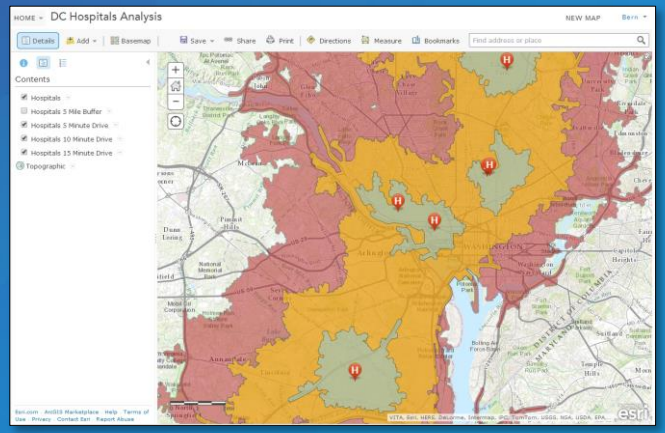
How to Put the User First In Your Web Application

Strategy & Planning

Architecting the ArcGIS Platform: Best Practices

Determine Core Web Maps

Common Maps with Broad Use



Web GIS: Unlock the Power of Maps Across Your Organization

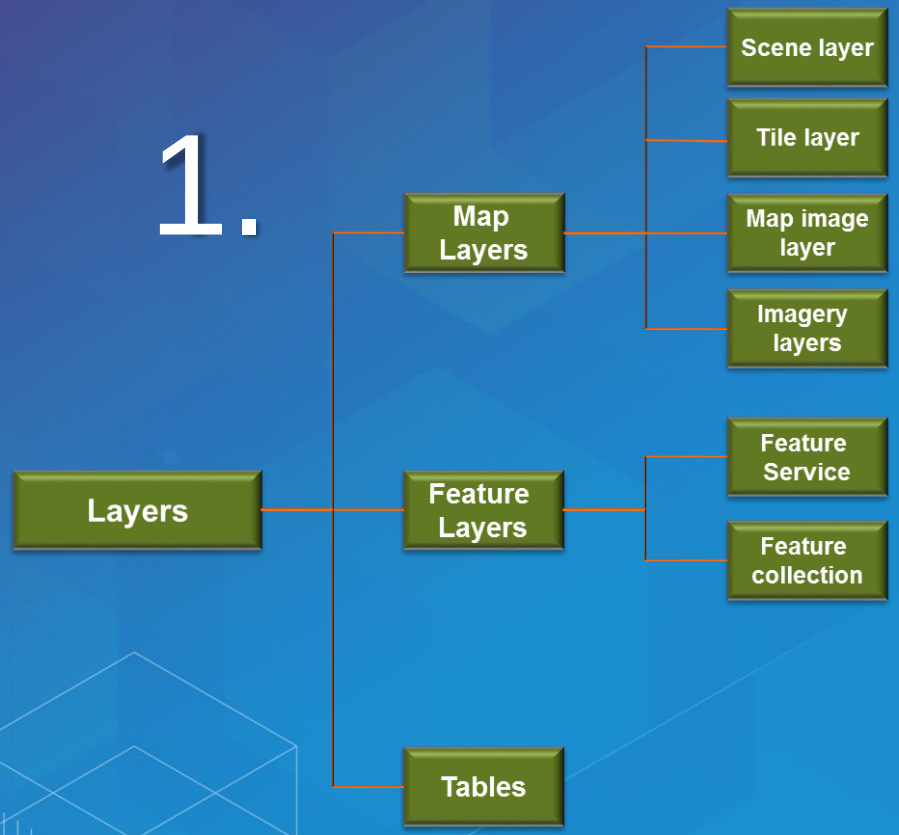
Maximize Value using ArcGIS Web App Templates

Configuration & Integration

Geodatabase Design

Minimum Data Required to Meet Users Needs

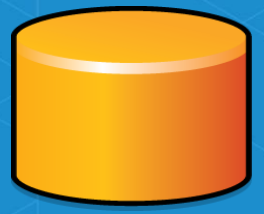
1.



2.

ArcGIS Data Store

Files

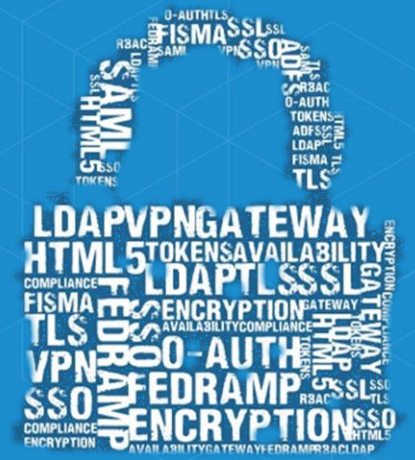


Enterprise Geodatabase

Security Strategy

Align to your Industry and IT Standards

- ✓ Access
- ✓ Authentication
- ✓ Authorization
- ✓ Encryption



Designing an Enterprise GIS Security Strategy

Building Security into Your System

Architecture & Security

Capacity Planning

Sizing Based on Workflows & Usage

Assemble Requirements

Apply Methodology

Determine Needs

$$Mbps = \frac{TH \times Mbits / req}{3600}$$

Concurrent users

Workflows

GIS Services

$$TH = \frac{Users}{Response\ Time + Think\ Time}$$

throughput

response time

Network capacity

software distribution

Core SpecRate

$$\#\ CPU_t = \frac{ST_b \times TH_t \times 100}{3600 \times \%CPU} \times \frac{SpecRatePerCPU_b}{SpecRatePerCPU_t}$$

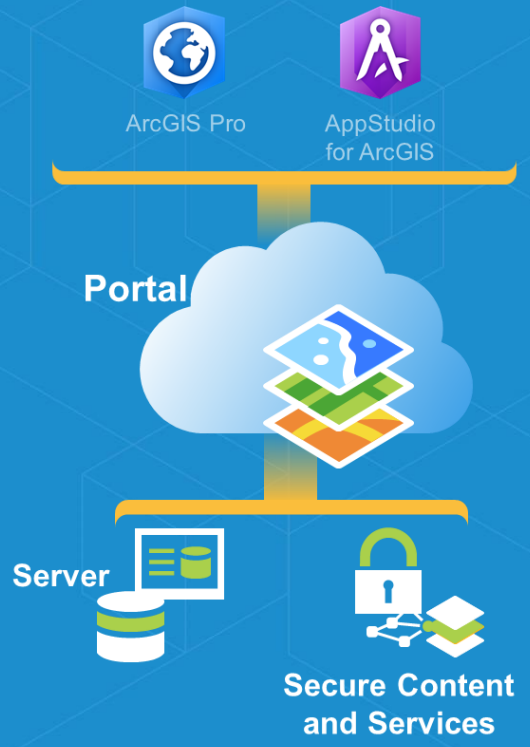
CPUs

Web GIS Architecture Deployment Options

Architecture & Security

Platform Architecture

Minimum Technology – Minimum Size

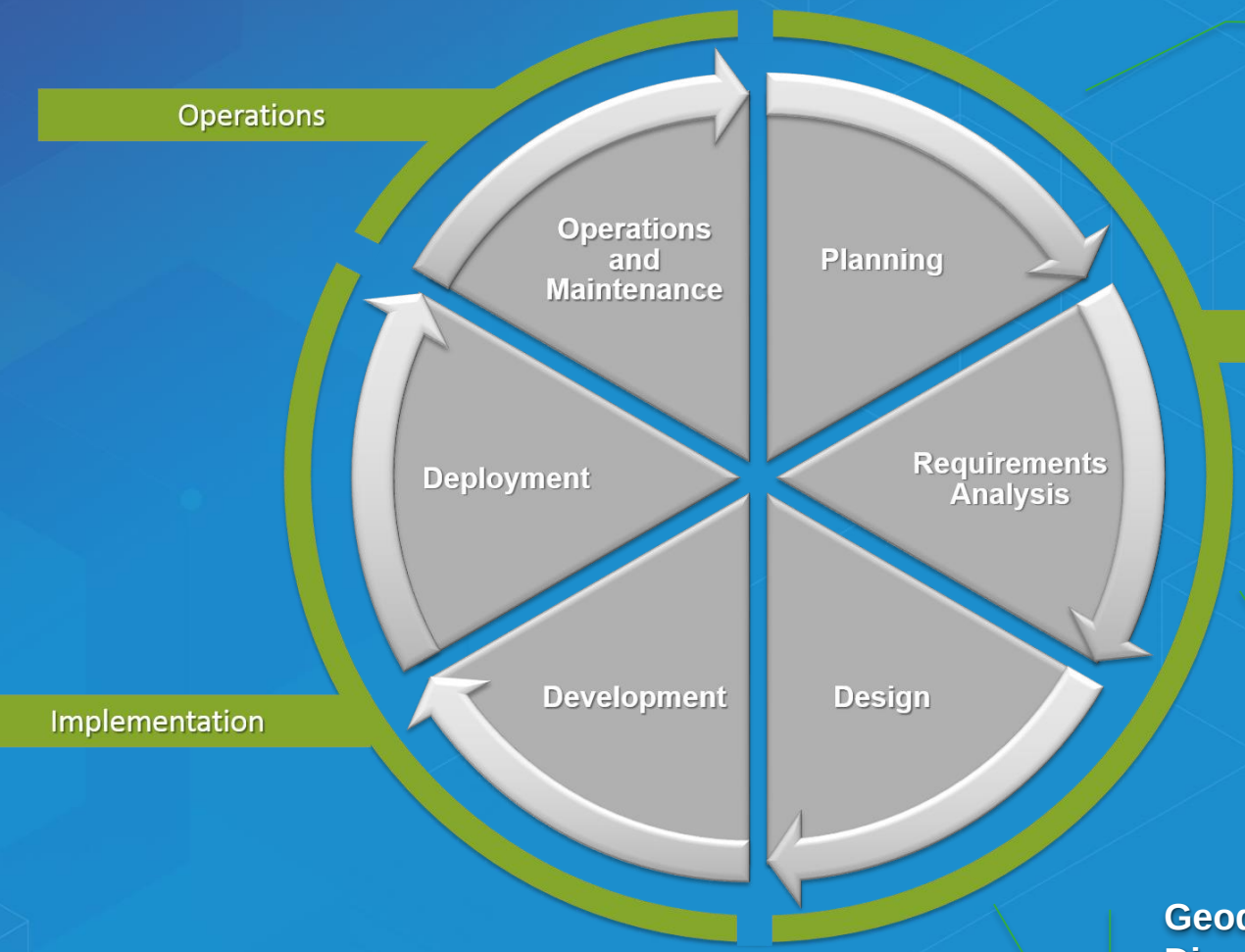


Architecture Best Practices

Architecture & Security

Initial Operating Capability

Enable & Empower Your Organization

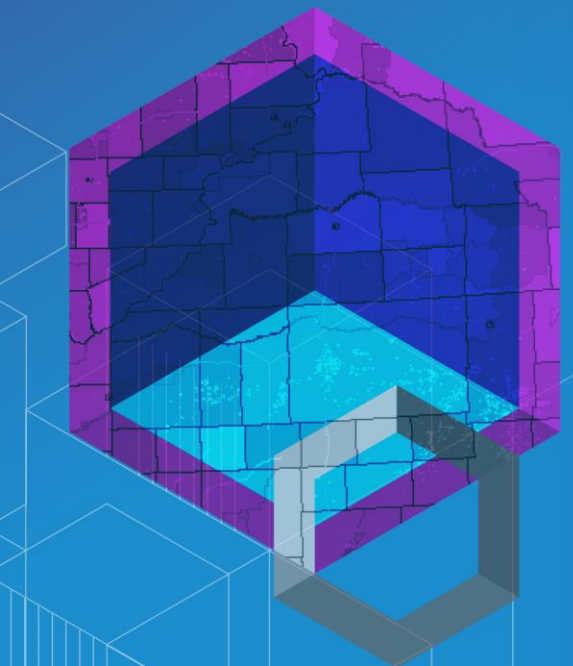


Organizational Vision
Establish Key Users
Identify Location Value

Document Workflows
Determine Core Web Maps

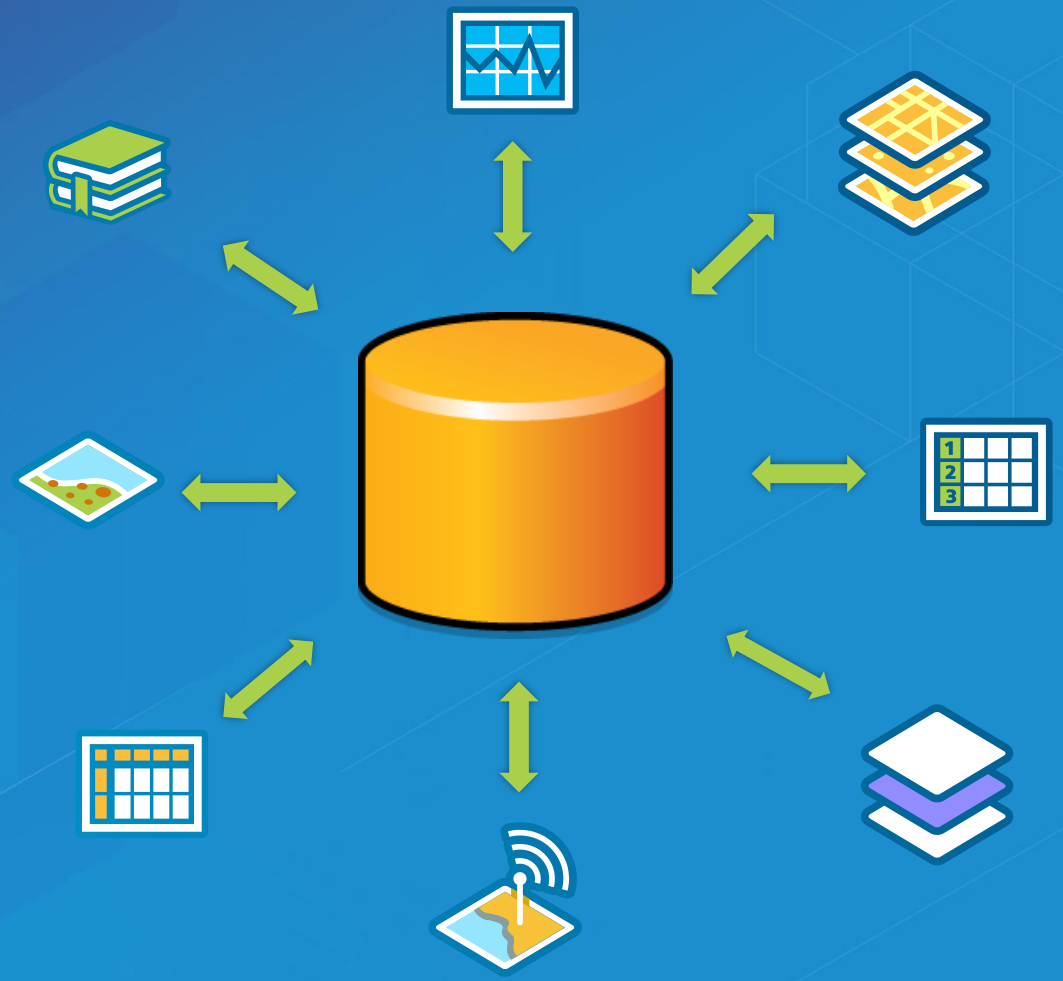
Geodatabase Design
Discuss Security Strategy
Capacity Planning & Architecture

Implementation



Building Data

Central & Authoritative Content

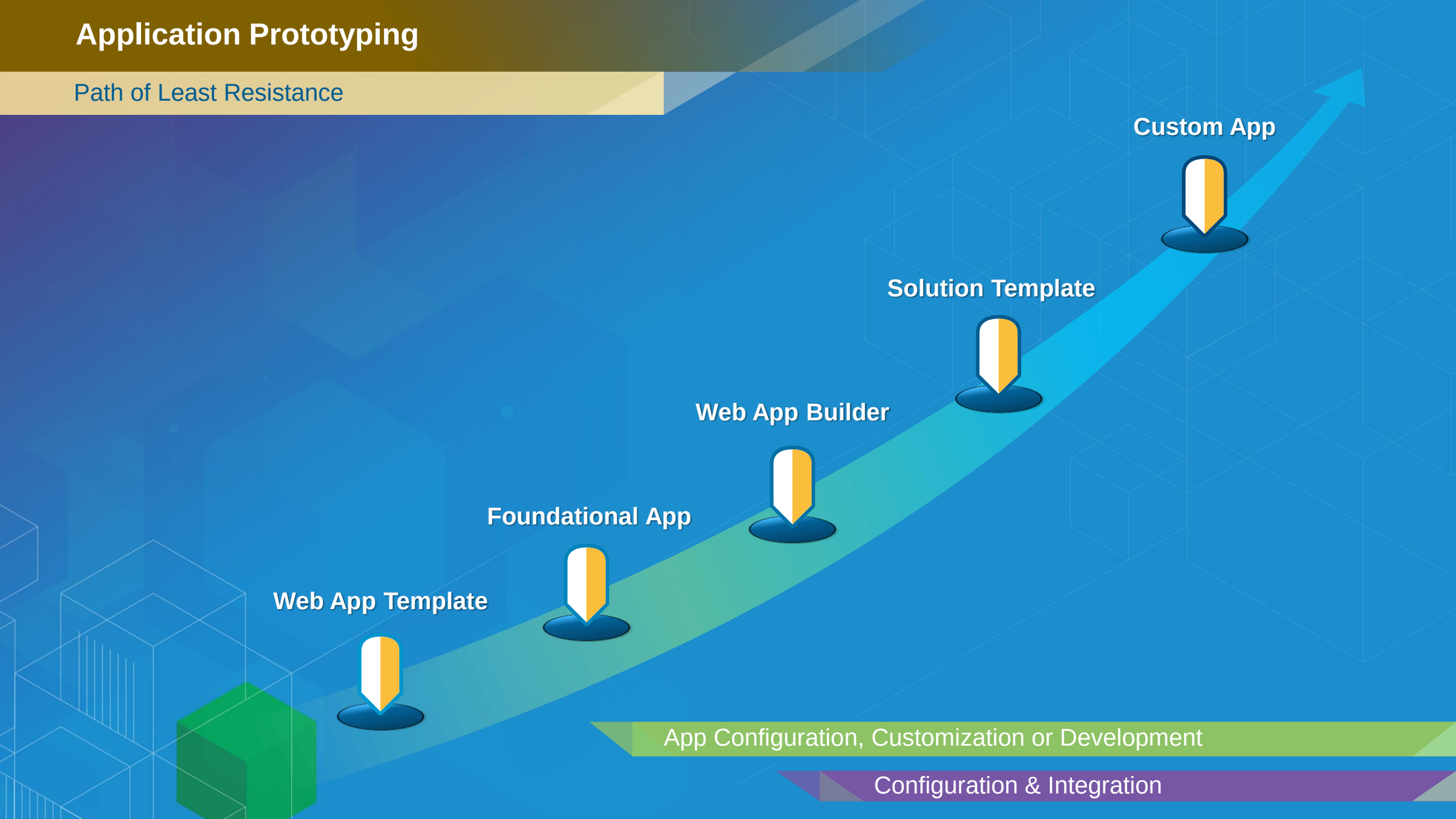


Design a Geodatabase

Geodata Engineering

Application Prototyping

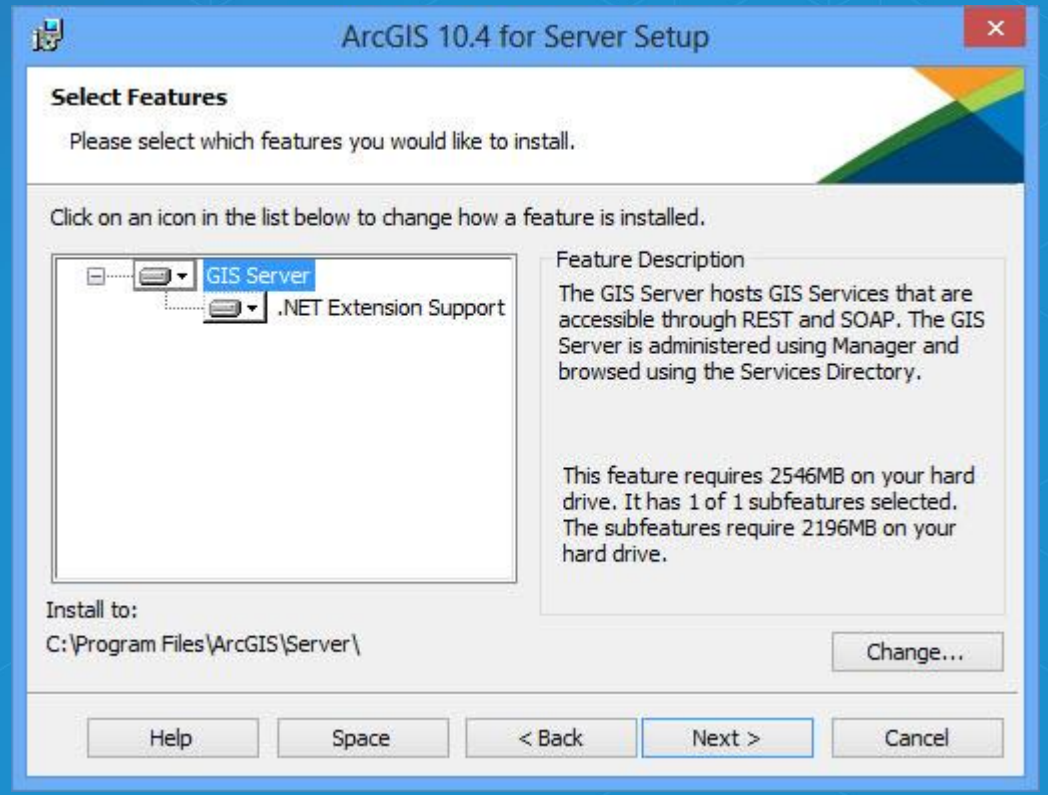
Path of Least Resistance



Software Installation

Distribute Content to Users

- Prepare Environment
- Run ArcGIS Server Installation
- Create or Join Site
- Install Web Adaptor
- Connect in ArcGIS for Desktop
- Grant Permissions to Data
- Publish Services



ArcGIS for Server: An Introduction

Portal for ArcGIS: An Introduction

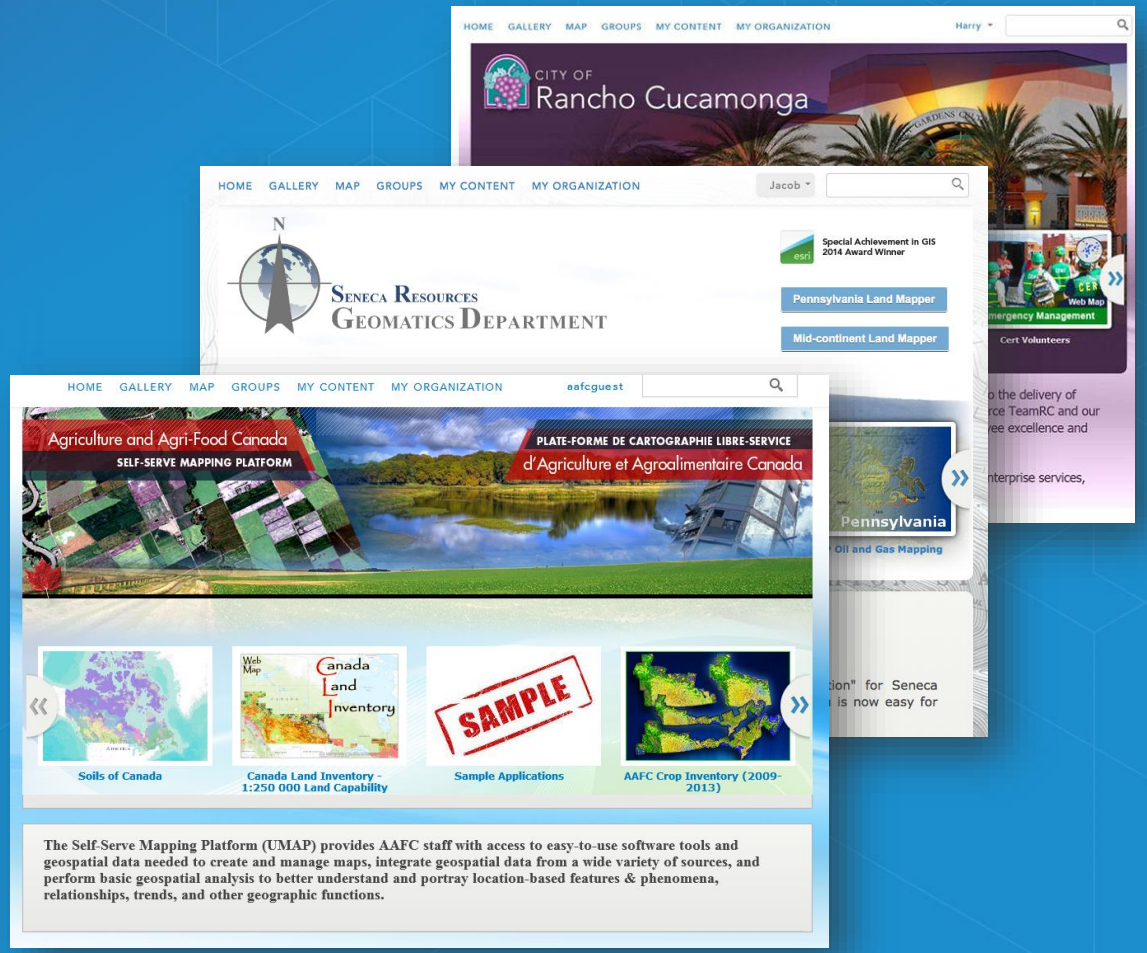
Configuration & Integration

Architecting the ArcGIS Platform: Best Practices

Configure Organizational Site

Your User's First Impression

- Use your organizational brand
- Use consistent visual cues
- Intuitive naming conventions
- Add useful descriptions
- Pre-populate with content
- Create a resource destination



Configure and manage an ArcGIS Online Organization

Configuration & Integration

Getting to know Web GIS

Configure Maps & Apps

Finalize Your Prototypes

Business Analyst Online

AppStudio for ArcGIS

Operations Dashboard

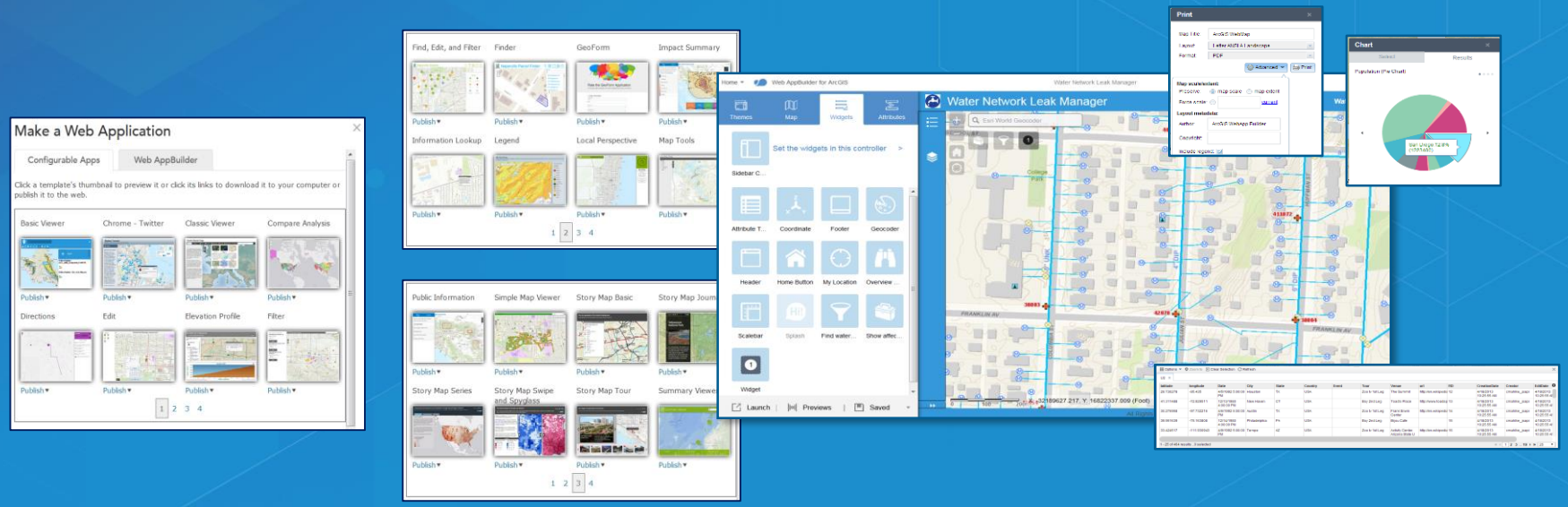
ArcGIS Collector

ArcGIS Explorer

ArcGIS Earth

Survey123

ArcGIS Navigator



Web GIS: Unlock the Power of Maps Across Your Organization

Maximize Value using ArcGIS Web App Templates

Configuration & Integration

Rollout

Get People Working!

❑ Users Empowered

❑ Next Big Idea

✓ Technology Implemented

✓ Information Products Ready

✓ Location Strategy

✓ Detailed Plan

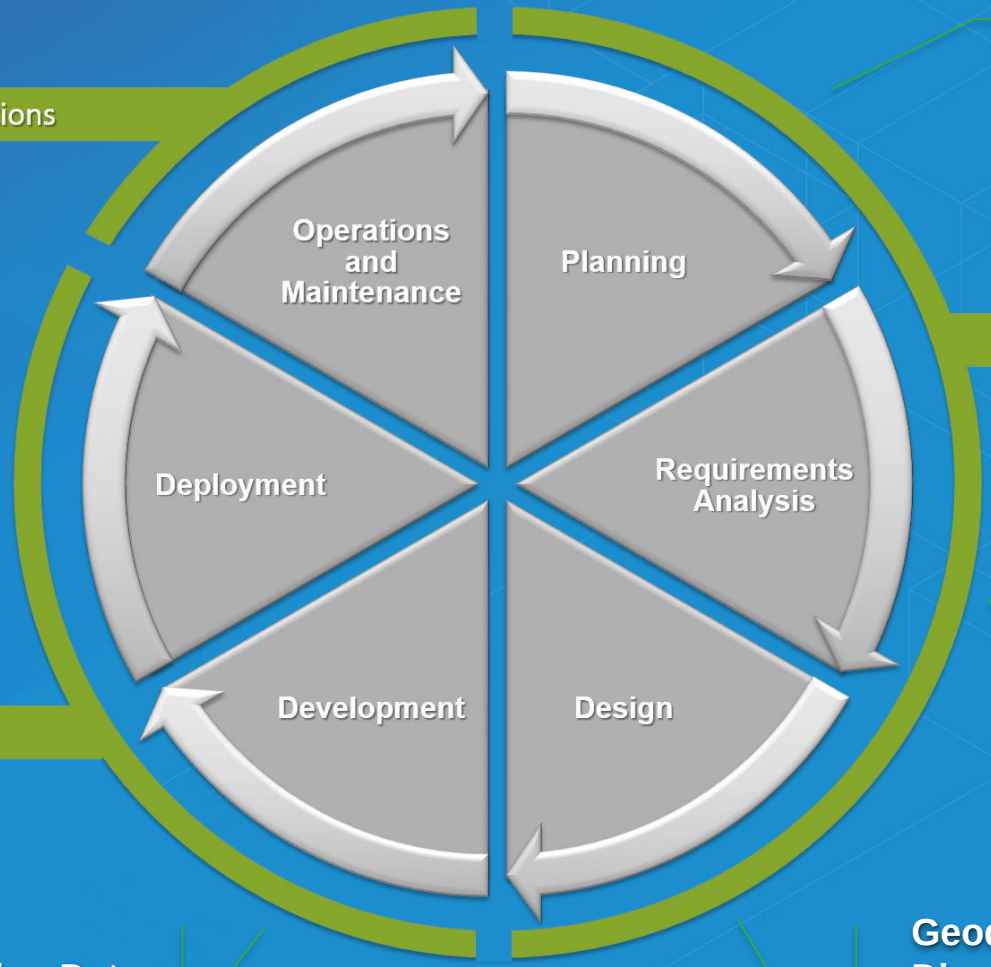
Best Practices for Technology Change Management

Strategy & Planning

Launching Your Location Platform

Initial Operating Capability

Enable & Empower Your Organization



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Application Prototyping

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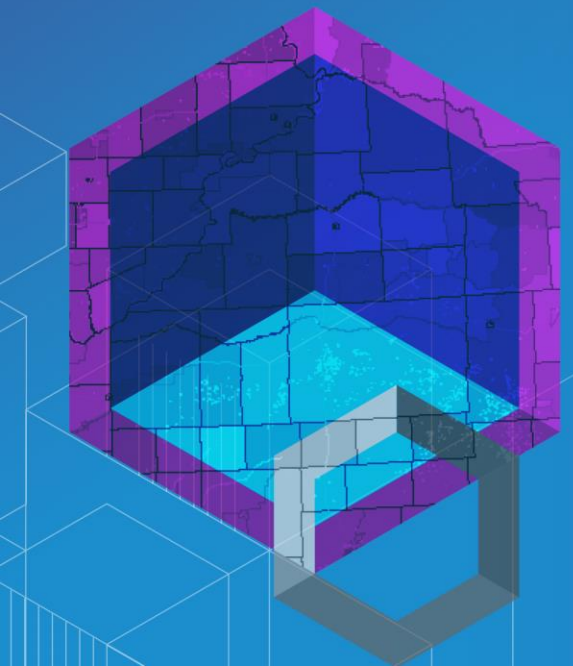
Rollout

Operations



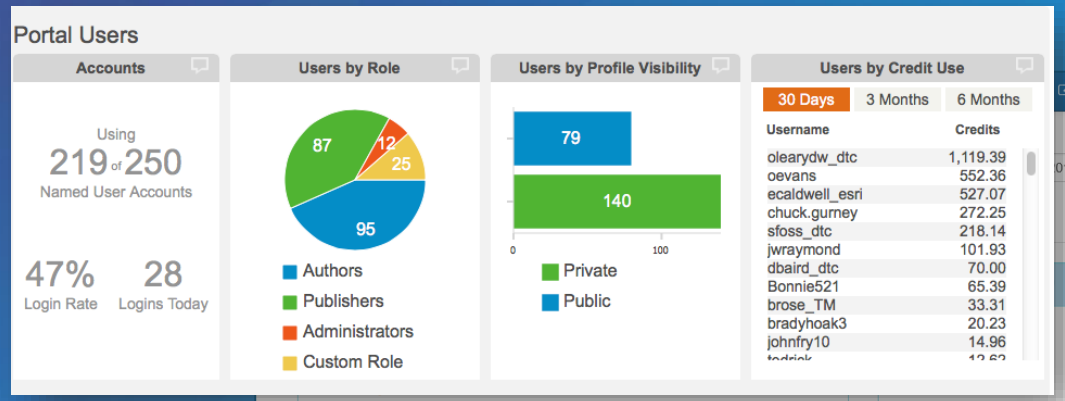
Maintenance

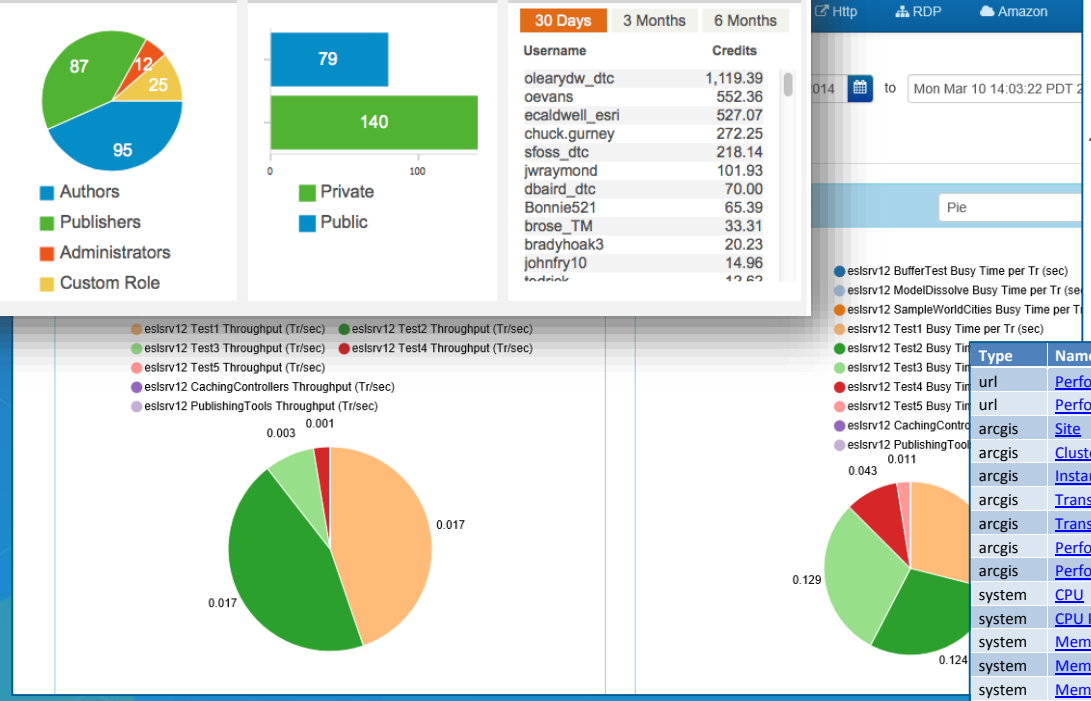
All Facets of Your Implementation

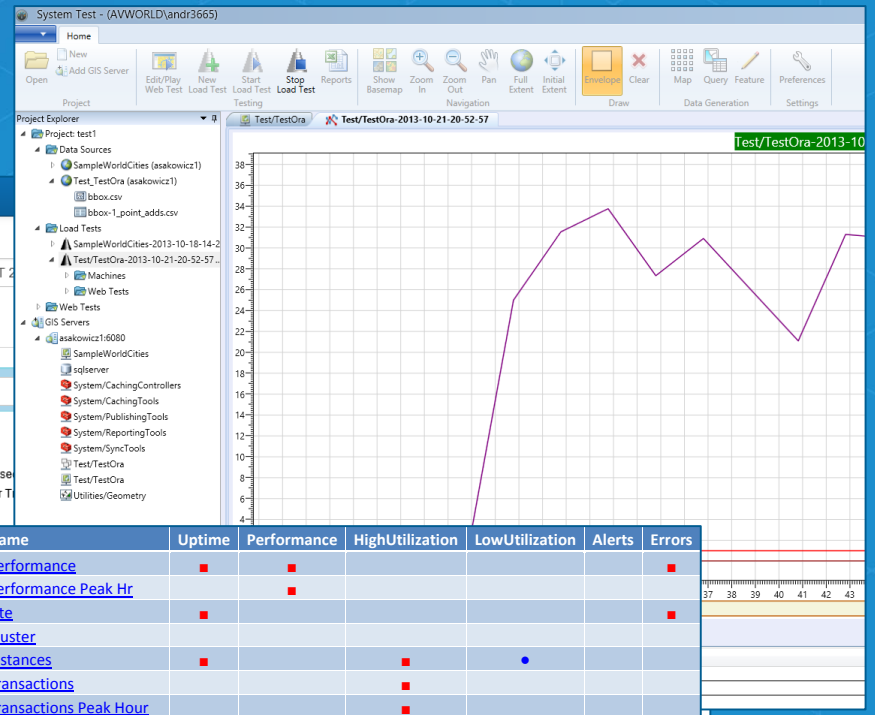
- Troubleshooting Performance Issues with Enterprise Geodatabases
- Administering Your GIS Server
- Portal for ArcGIS: Administration
- Configuration & Integration
- Geodata Engineering

Monitoring

Proactively Review Your Status







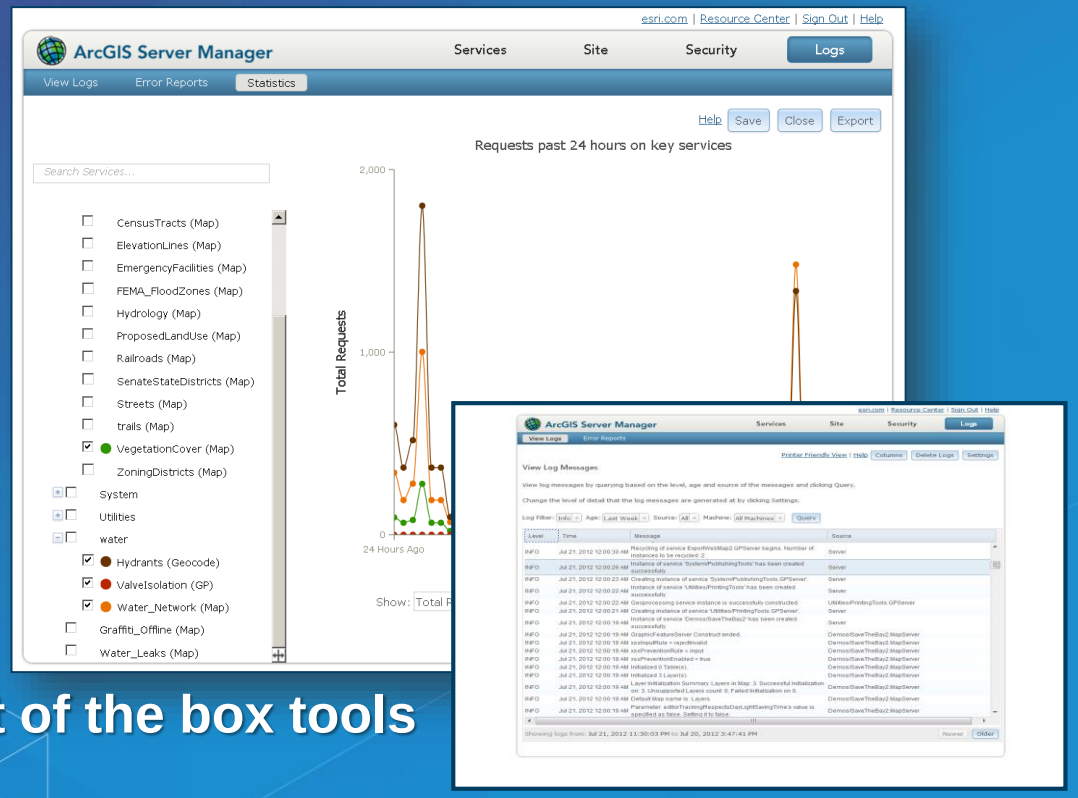
Type	Name	Uptime	Performance	HighUtilization	LowUtilization	Alerts	Errors
url	Performance	■	■				■
url	Performance Peak Hr		■				
arcgis	Site	■					■
arcgis	Cluster						
arcgis	Instances	■		■	●		
arcgis	Transactions			■			
arcgis	Transactions Peak Hour			■			
arcgis	Performance		■				
arcgis	Performance Peak Hour						
system	CPU	■		▲	●	■	
system	CPU Peak Hr			■	●	■	
system	Memory Physical	■		▲			
system	Memory Physical Peak Hr			▲			
system	Memory Virtual	■		■	●		
system	Memory Virtual Peak Hr			■			
system	Disk IO	■		■			
system	Disk IO Peak Hr			■	●		
system	Disk Space	■		■	●		

Get a Second Opinion: Enterprise GIS Health Checks

Architecture & Security

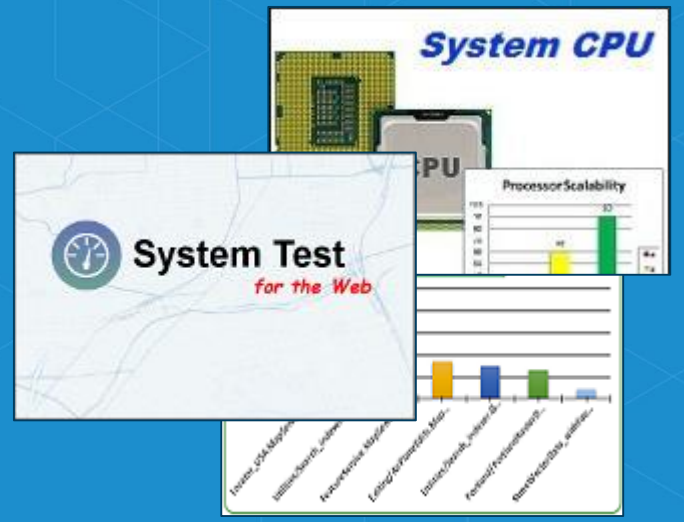
Testing, Tuning, & Scaling

Fixing Issues – Preparing For Expansion



Out of the box tools

Custom Tools



Performance and Scalability for Web GIS

Architecture & Security

Training

Evolve Your People with Your Technology

The Power of Workforce Development: A People Strategy for Organizations

Modernize Your GIS: A People Strategy Approach

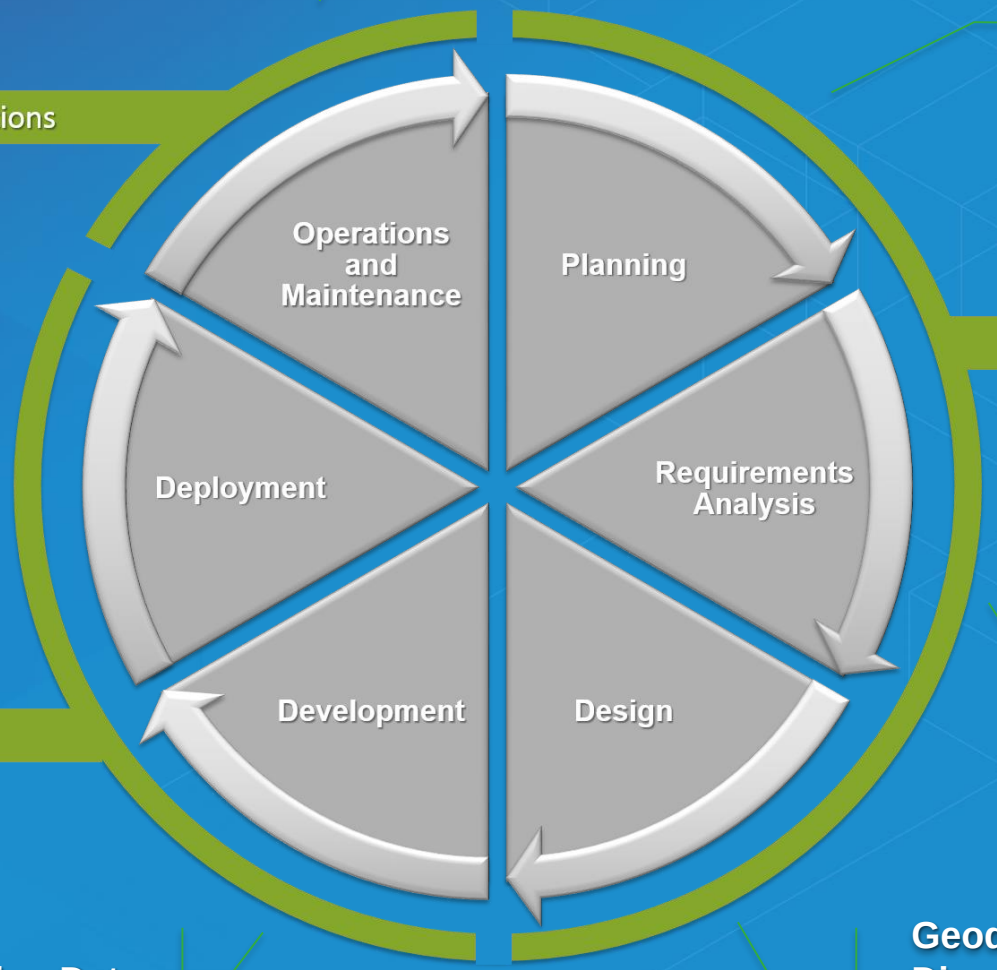
Training & Certification

Reconnect With Users

Have Needs Changed?

Initial Operating Capability

Enable & Empower Your Organization



Monitoring & Maintenance
Testing & Training
User Engagement

Organizational Vision
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Identify Location Value

Document Workflows
Determine Core Web Maps

Geodatabase Design
Discuss Security Strategy
Capacity Planning & Architecture

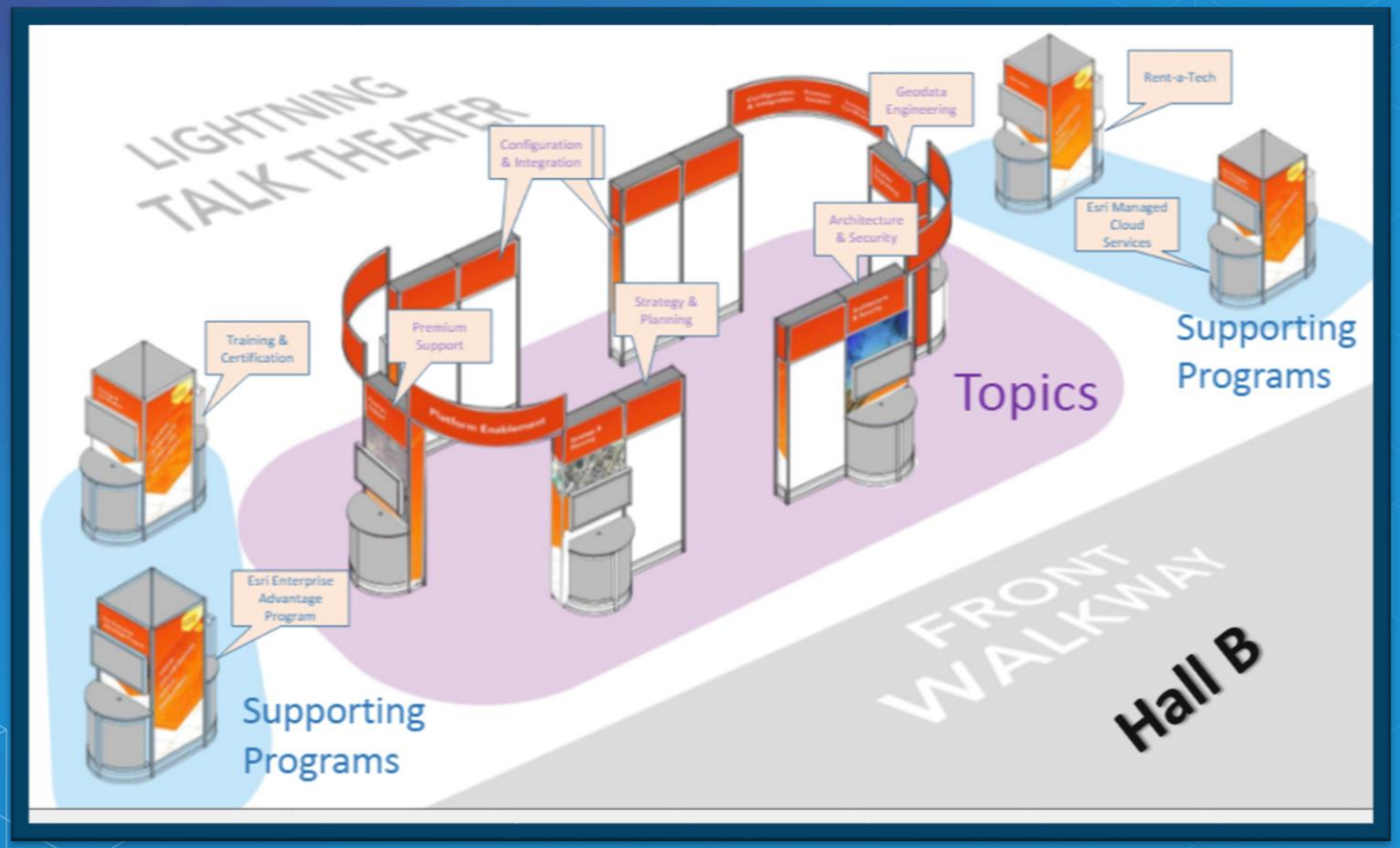
Building Data
Application Prototyping

Installation
Configure Maps & Apps
Rollout

What Now?

Platform Enablement Pavilion

- Configuration & Integration
- Strategy Planning
- Architecture & Security
- Geodata Engineering
- Training & Certification
- Premium Support

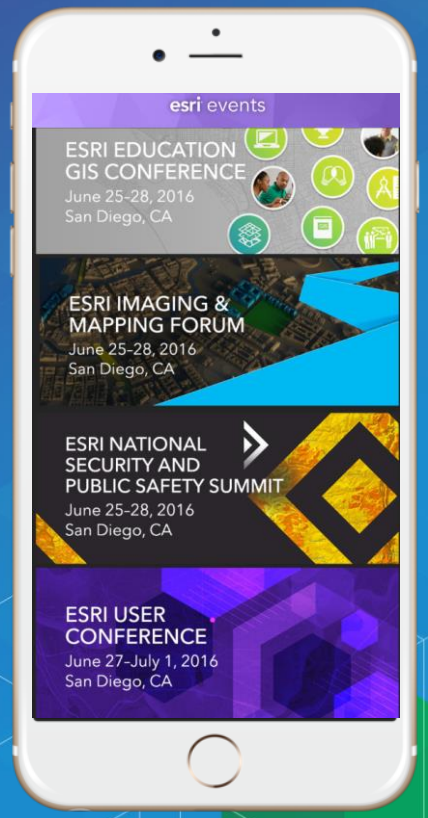


Esri Professional Services supports customers and partners in the effective implementation and application of ArcGIS software

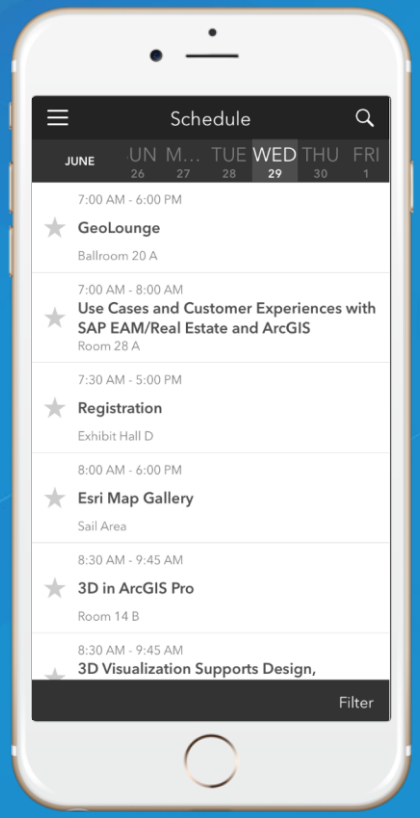
Please take our Survey

Your feedback allows us to help maintain high standards and to help presenters

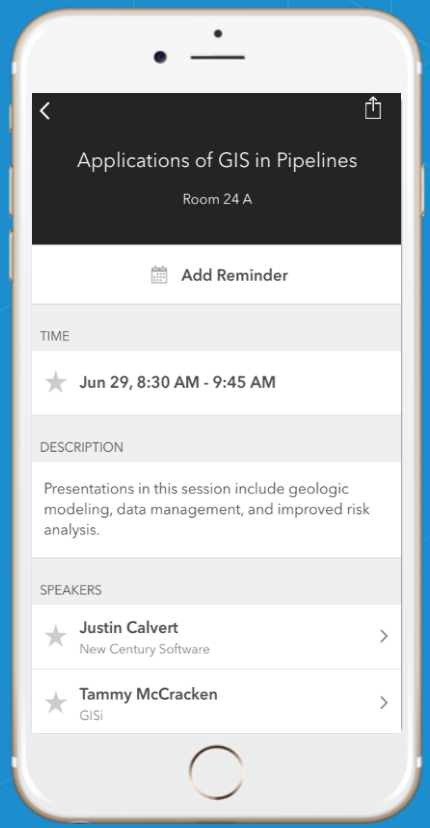
Find your event in the Esri Events App



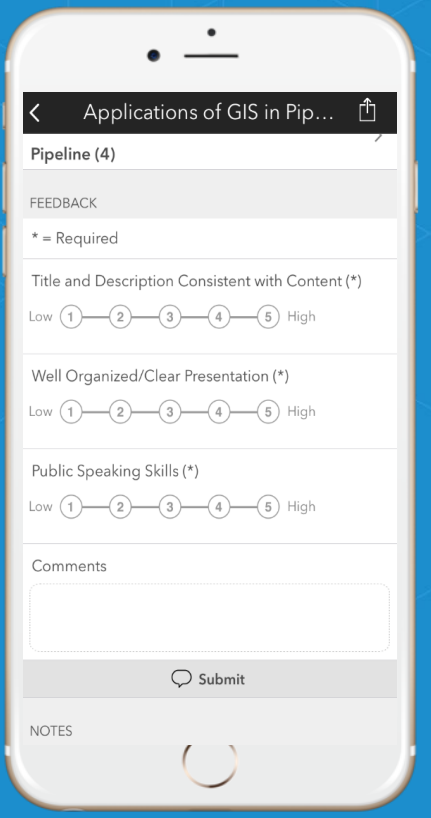
Find the session you want to review



Scroll down to the bottom of the session



Answer survey questions and submit



Questions