
Esri ArcGIS in Azure: 3-Wk Proof of Concept





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PROOF OF CONCEPT

Esri ArcGIS in Azure: 3-Wk Proof of Concept

Esri ArcGIS in Azure Proof of Concept (POC) to evaluate risk and accelerate Azure cloud adoption.

GCS provides ArcGIS cloud migration services from assessing migration readiness to defining strategy to implementing Proof of Concept (POC) cloud deployments to evaluate your existing on-premise architecture to a comparable system in a cloud. We aim to help define and meet your specific cloud implementation objectives.

An ArcGIS Azure POC will introduce your organization to the benefits of an ArcGIS Azure cloud migration without risk and with minimal cost. POC testing is a common practice for technology adoption decision making. In isolation at a defined smaller scale, it allows you to evaluate one or more deployment scenarios before committing to a large migration.

GCS's team is comprised of certified ArcGIS and cloud professionals who are solution architects, system integrators, native cloud developers, data scientists, and professional project managers.

Agenda

Week 1: Assessment, Environment Preparation, ArcGIS Installation & Configuration

- Determine POC requirements via Cloud Readiness Assessment
- Identify ArcGIS business applications and data
- Identify ArcGIS COTS (ArcGIS Enterprise, ArcGIS GIS Server, ArcGIS GeoAnalytics Server, ArcGIS Data Store, ArcGIS Notebooks, ArcGIS GeoEvent Server, ArcGIS Image Server; Enterprise Geodatabases; virtualized ArcGIS Pro (Desktop)
- Identify deployment scenarios; replicated, auto-scaling, high-availability, geographic redundancy
- Define ArcGIS Enterprise security model
- Determine right size Azure resources
- Define ArcGIS Azure POC System Design
- Provision, install, configure ArcGIS COTS in Azure

Week 2: Migration

- Migrate ArcGIS Enterprise configuration, i.e. WebGIS DR
- Migrate POC spatial and non-spatial data
- Migrate POC business applications
- Validation of Migration

Week 3: Testing

- Execution of Testing Scenarios
- Validation of POC & Pilot objectives
- Closure and Next steps



PROJECT TIMELINE & DELIVERABLES

Deliverables

- Bill of Material (BOM) with Azure Servers for selected ArcGIS system
- ArcGIS architecture diagram
- Azure infrastructure setup and configured ArcGIS System
- ArcGIS Proof of Concept workload running in Azure

Price: \$12,000 (Estimated)

Please contact GCS today to commence your ArcGIS Cloud Digital Transformation journey.

GCS

ABOUT GCS



Microsoft Partner
Silver Application Development

GCS delivers highly customized solutions that communicate meaningful geographic information and enhance workflow optimization. Our clients come to us from a broad spectrum of industry sectors with a common need: streamlined access to business insights distilled from complex data. Our technical expertise and collaborative client relationships allow us to design the powerful, elegant solutions needed to maximize productivity. Our systems are crafted at the convergence of cloud, analytics, and mobility to ensure access to answers everywhere, all the time.

Since 2002, we have delivered award-winning solutions for public and private organizations in diverse disciplines, including Natural Resources, Defense/Intelligence, Insurance, and all levels of Government.

We bring decades of technical expertise to the table in designing these customized geographic intelligence systems. For nearly 20 years, our award-winning team of experts has integrated and adapted best-of-class GIS platforms with cutting-edge technology to extract value from data, and opportunities from information. Dedicated teams work with clients for the life of a project to ensure the delivery of precise solutions for unique business challenges. Our ability to remain agile and responsive sets GCS apart from industry giants.

Clients choose GCS – and engage us again and again – because our solutions exceed their expectations, and because our team demonstrates unwavering commitment to harnessing innovation that works. In every project and for every client, we judge our success by the satisfaction of the people who use the solutions we craft for them.

ABOUT GCS

With our solutions, clients will:

- Boost access to spatial data and tools by serving apps on the web or in mobile devices people regularly use
- Add geospatial context to previously unmapped data to produce new insights
- Optimize business processes and workflows
- Minimize data maintenance costs by establishing cloud databases
- Receive stable hosting and dynamically expanding user capacity
- Minimize cost by serving applications in the cloud
- Reduce expense and simplify workflows through systems integrations
- Achieve insights and intelligence through advanced analytics
- Save time with intuitive, accessible public tools for non-GIS professionals



Solution Development Methodology

The GCS Solution Development Methodology (SDM) is a set of processes and document templates that guide our project management. This timetested method ensures our solutions meet consistent standards of quality, with many checks and balances, opportunities for client collaboration and feedback, quality assurance, and clearly defined milestones for delivering on any contract. This process, defined by the Project Management Institute (PMI), ensures success through:

- Enhanced product quality
- Better management of risks
- Dependable, productive communication with customers
- Improved control over project schedule and scope

The GCS SDM includes six project phases. We plan each project around these phases, to maintain quality, though individual projects may not require every document or a lot of tasks in every phase. Our complete SDM, listing all document templates and typical tasks, is available upon request.



CLIENT OVERVIEW

We provide solutions to organizations of all sizes in both the private and public sectors, including agencies at all levels of government and Native American tribes. Our diverse clientele spans a broad spectrum of industries and professions, such as Natural Resources, Forestry, Defense/Intelligence, Insurance, Health Care, Cyber-Security and Energy. For every challenge, we create a fully customized solution.

County Government

- | | |
|----------------------------|-----------------------|
| Boulder County, CO | Flathead County, MT |
| Missoula County, MT | Lake County, MT |
| Lewis and Clark County, MT | Clearwater County, ID |
| Gallatin County, MT | |

Local & State

- | | |
|--|---|
| Colorado State Land Board | Municipalities including:
City of Billings
City of Columbia Falls
City of Missoula |
| Clark Fork Coalition (River Health NPO) | Montana Governor's Office of Economic Development |
| Montana Information Technology Services Division | Montana Department of Health and Human Services |
| Montana Department of Natural Resources and Conservation | Montana Department of Fish, Wildlife, and Parks |
| University of Montana | Montana Dept. Transportation |
| Montana Historical Society | |



CLIENT OVERVIEW

While many of our clients are in the Rocky Mountain West and Pacific Northwest regions, we support clients as far away as Vienna, Austria.

Federal Government	U.S. Army - NVESD U.S. Marine Corps - 1 - MEF U.S. Navy - NUWC - NAVSEA USDA Foreign Agricultural Service U.S Fish and Wildlife Service	DOE - Idaho National Laboratory U.S. Geological Survey Army Corps of Engineers U.S. Forest Service - Fire Sciences Lab
Tribal	Kalispel Tribe of Indians Fort Peck Tribes	Fort Belknap Reservation Nooksack Tribe
United Nations	International Atomic Energy Agency	
Private Sector	Esri The SI Organization OmniTRAX PIAL GeoNav Group International Firewise Communities Program CACI Inc. Alion Science & Technology Inc. Economic Development Lethbridge, Canada Institute for Health Metrics and Evaluation	Sarnoff Inc. GeoEye Weyerhaeuser Idaho Survey and Rating Bureau Oxford University Press Missouri Botanical Garden Immersive Media Inc. National Fire Protection Association Washington Survey and Rating Bureau Agren

CLIENT PROFILES

AGREN

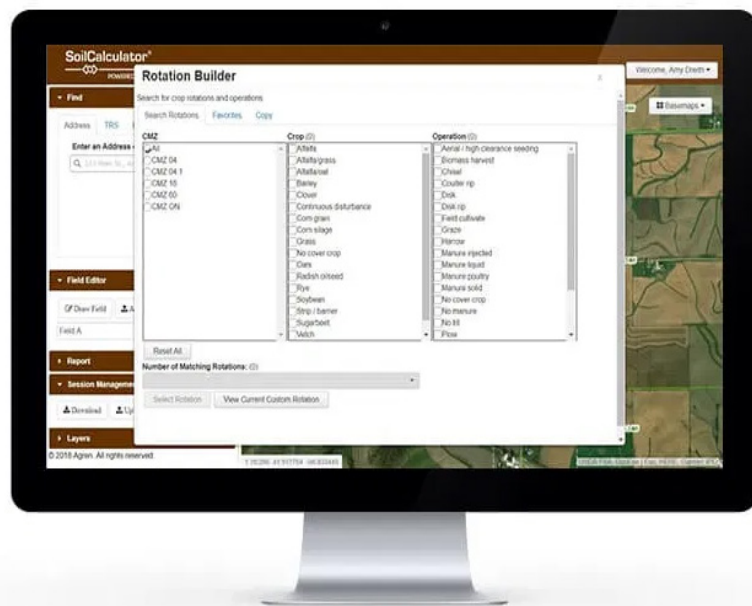
Problem

In 2016, Agren was looking to develop a web interface which would enable users to accomplish in minutes what farmers have traditionally waited weeks, to months, for from local public agencies. They wanted to empower farmers and land managers to make profitable decisions while simultaneously enhancing agricultural productivity and supporting sustainability.

Solution

Working closely with Agren, GCS delivered, from the ground up, Agren's precision conservation suite of geospatial based web tools: WaterwayBuilder, PondBuilder, BasinBuilder, and WetlandBuilder. In addition, GCS supplemented Agren's internal agile development team to support operations and create new feature enhancements to SoilCalculator and BufferBuilder solutions.

Agren SoilCalculator allows service providers to plug in various crop rotations, tillage systems, and conservation practices and view the resulting erosion predictions for up to three scenarios. Color-coded maps, similar to a GIS yield map, pinpoint areas of high erosion. Growers can easily evaluate alternatives side by side to maximize profits, conserve soil, preserve yields, and reduce nutrient inputs.



CLIENT PROFILES

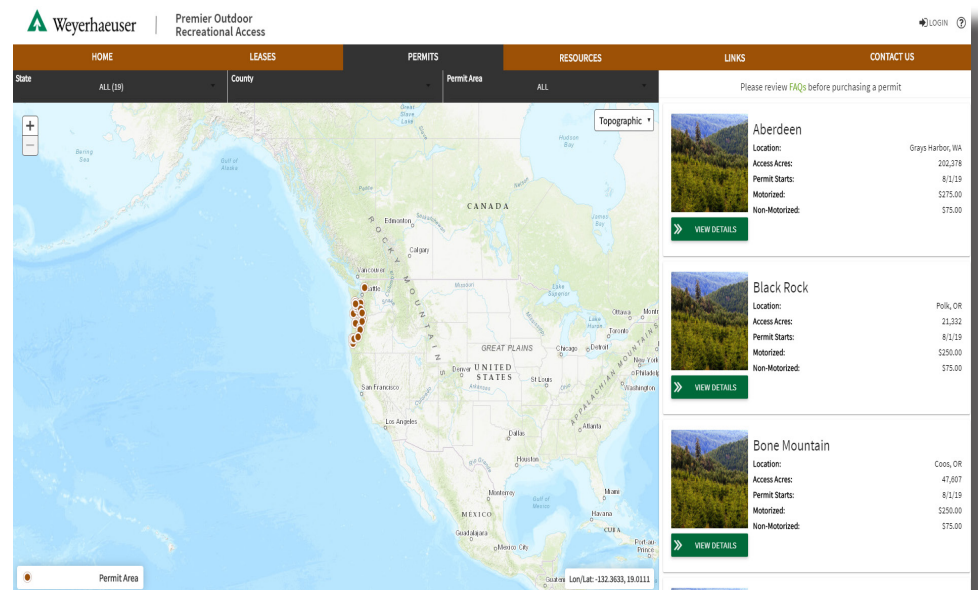
WEYERHAEUSER

Problem

Weyerhaeuser needed a simple, user-friendly, easily accessible way to market and manage leasable land for people looking to hunt, camp, fish, or engage in other recreational activities. They wanted a publicly-accessible web portal which would show areas on a map, display the type of forests available, and also display any accessible amenities available on the property.

Solution

Weyerhaeuser contracted GCS to create Recreation Lease Management (RLM), a publicly accessible web portal that allowed the company to offer their land for lease and keep track of who was leasing it at any given time. GCS developed an interactive mapping portal which displayed all relevant information about the properties, as well as pricing and availability. This streamlined system helped Weyerhaeuser cut down on complicated, time-consuming tasks related to the leasing process, and made it easier for the public to find what they were looking for.



CLIENT PROFILES

Montana DNRC

Problem

In 2015, the Montana DNRC was searching for a new timber cruising platform that would replace a legacy system that was no longer supported by their IT department. The Esri ArcGIS Online/Collector platform seemed to be a great fit, but they needed a contractor to customize this off-the-shelf software to enable them to design cruises and allocate plots via a web interface, collect tree data in Collector, and compile/report the results.

Solution

The DNRC partnered with GCS, and together we developed a project called NextGen Cruiser. NextGen Cruiser entailed creating several hosted geoprocessing tools which included complex formulas and code. GCS kept in frequent contact with the DNRC to test builds of the application; and in its completed form, even their most tech-shy and skeptical foresters easily adapted to the new platform. It quickly became their most reliable GIS/Web app. The DNRC used the platform on hundreds of timber cruise projects without any issues.

“We found GCS to be: easy to communicate with, conscientious and mindful of budget & timelines, willing to provide advice when they discovered a better/more efficient way of accomplishing a task, and very supportive after the release to fix bugs.”

- Mark Slaten, Forest Informatics Analyst, Montana DNRC

