Federal GIS Conference 2014

February 10–11, 2014 | Washington DC

Deploying Portal for ArcGIS Within Your Own Infrastructure

Witt Mathot & Dan O'Leary

Empower people

to use and create maps

More apps

Collector for ArcGIS

Operations Dashboard for ArcGIS

Web Application Templates

Esri Maps for Office

Maps everywhere

Organize your maps and apps

enable discovery

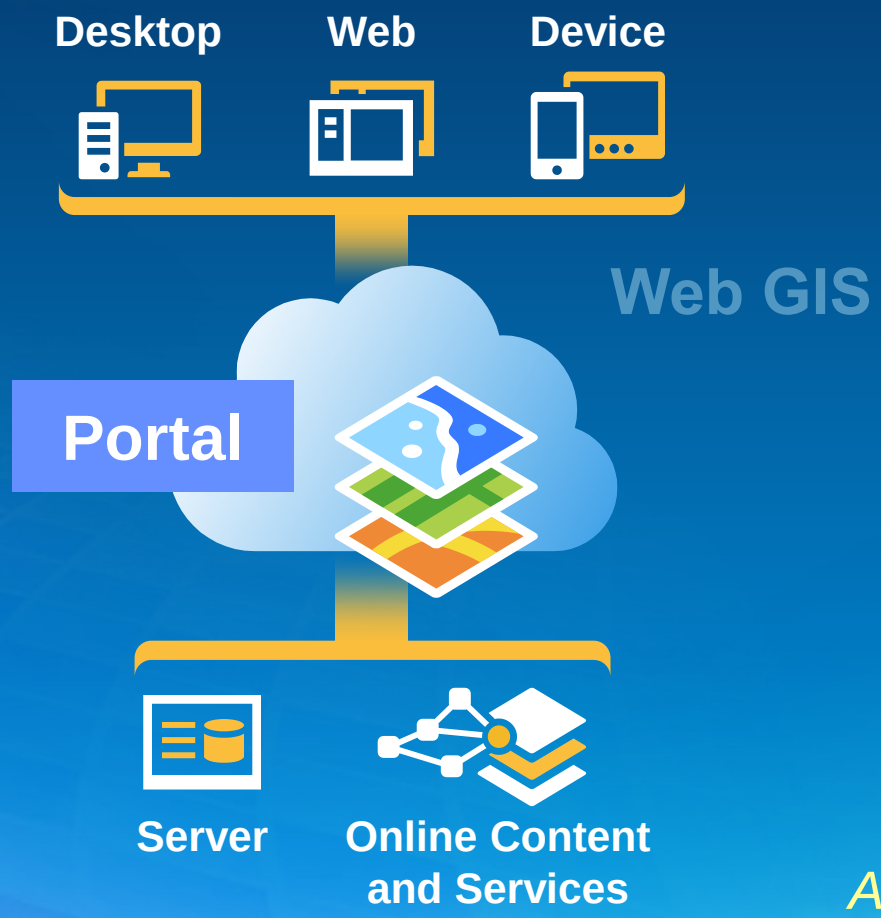
ArcGIS Is a Platform

Enabling GIS Everywhere

Simple

Integrated

Open



Available in the Cloud . . .
. . . and On-Premises

Portal for ArcGIS

New Extension to ArcGIS for Server Advanced

. . . Implements Web GIS on Premises

Portal Examples

USDA

USDOT

USFS Wildland Fires

DDOT/UFA

NOAA

DHS

FEMA

FDA

Digital Humanitarian Network

VDEM

BLM

GSA

EPA

GEOSS

GEOPLATFORM.gov

GeoWB World Bank

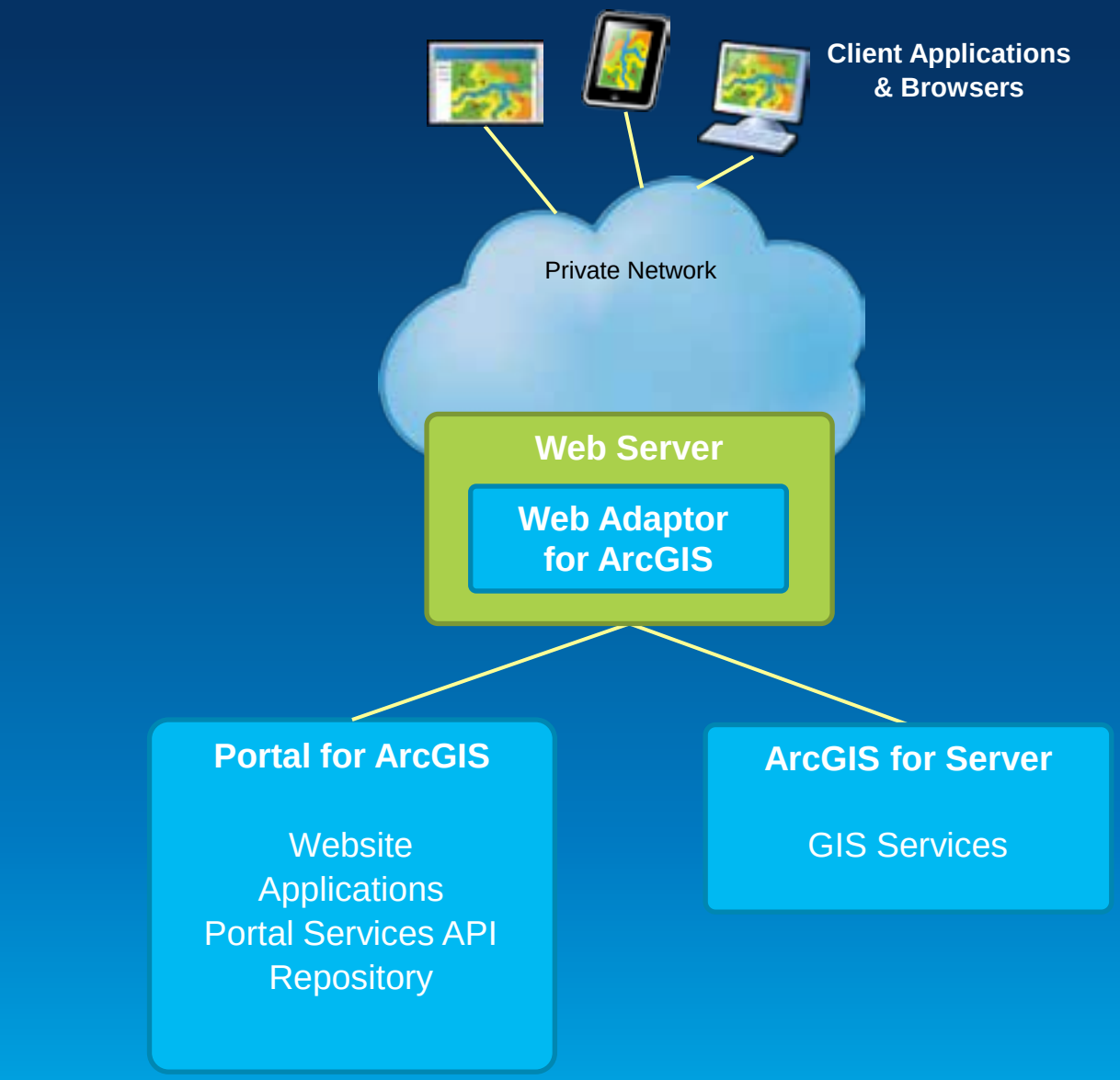
US Senate

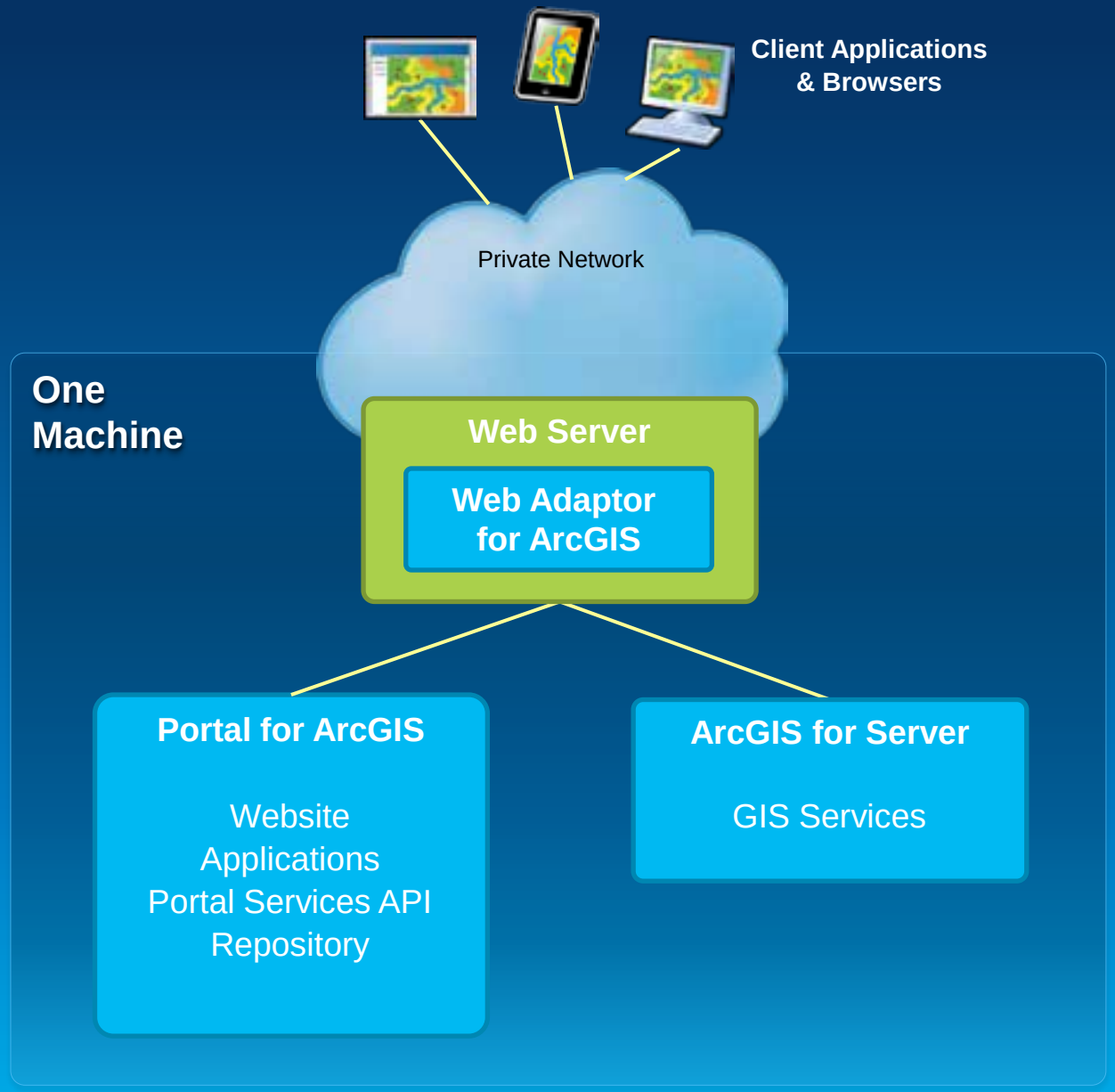
Senator James Risch

Portal for ArcGIS

Is it Right for Me?

- Typical reasons for choosing Portal for ArcGIS
  - Have no internet / www connection
  - Have strict SLAs and governance
  - Are not ready for the cloud yet
- Typical reason for choosing ArcGIS Online
  - Lower overall cost (faster start, less admin costs)
  - Continuous updates and improvements
  - Elasticity


Client Applications
& Browsers
Private Network
Web Server
Web Adaptor
for ArcGIS
Portal for ArcGIS
Website
Applications
Portal Services API
Repository
ArcGIS for Server
GIS Services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Portal for ArcGIS System Requirements

Same Supported Operating Systems as ArcGIS Server

Windows

Supported operating systems

The Portal for ArcGIS setup will only proceed if the operating system is 64-bit; 32-bit operating systems are not supported. The operati

- Windows Server 2012 R2 Standard and Datacenter
- Windows Server 2012 Standard and Datacenter
- Windows Server 2008 R2 Standard, Enterprise, and Datacenter (maximum version supported is SP1)
- Windows Server 2008 Standard, Enterprise, and Datacenter (maximum version supported is SP2)
- Windows 8.1 Professional and Enterprise
- Windows 8 Professional and Enterprise
- Windows 7 Ultimate, Enterprise, Professional, Home Premium
- Windows Vista Service Pack 2 Ultimate, Enterprise, Business, and Home

Linux

Supported Linux operating systems

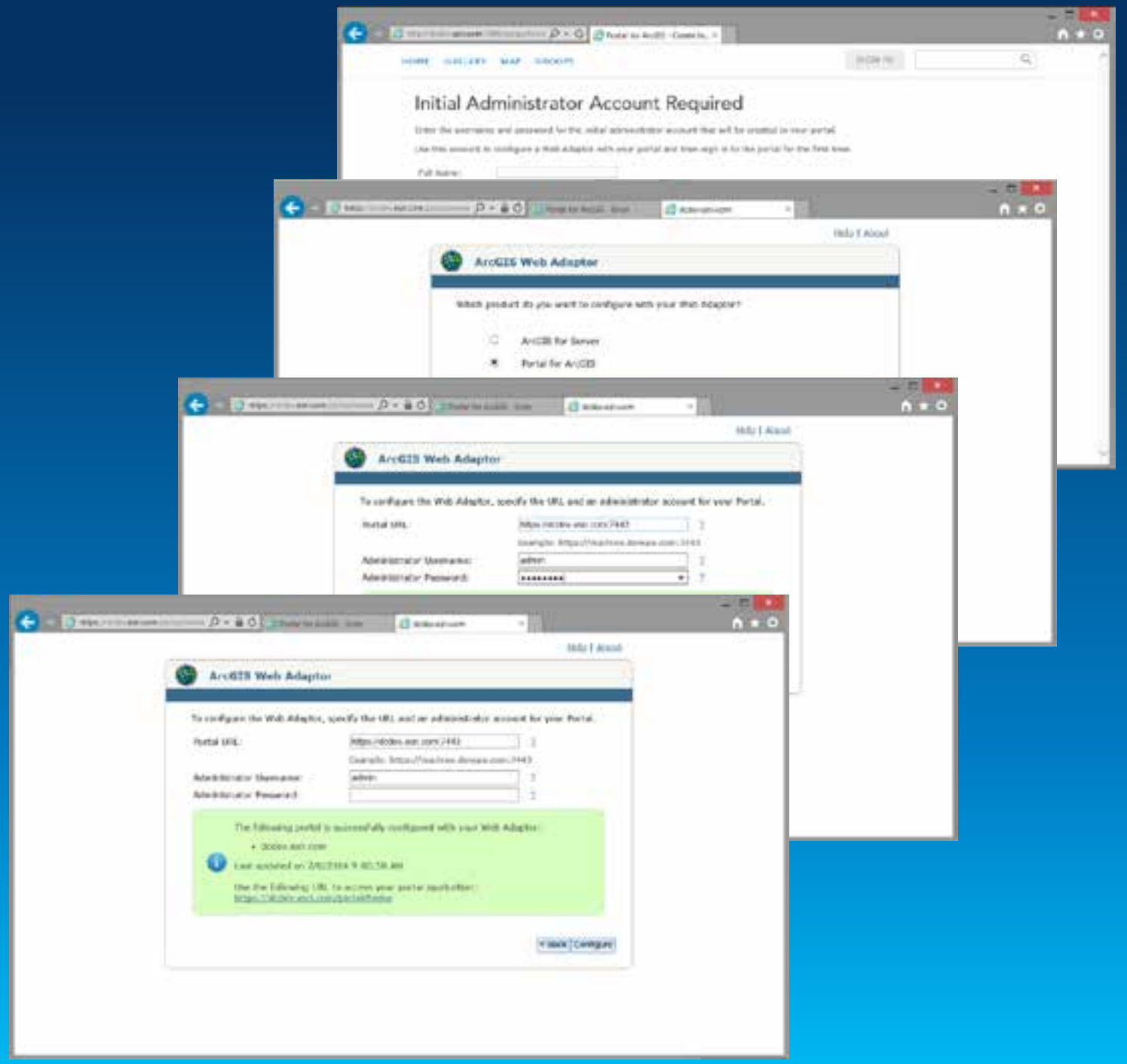
The Portal for ArcGIS setup will only proceed if the operating system is 64-bit; 32-bit operating systems are not supported. The operating sy

- Red Hat Enterprise Linux Server 6
- Red Hat Enterprise Linux Server 5 Update 7 with libX11 patch
- SUSE Linux Enterprise Server 11 Service Pack 1

Installing Portal for ArcGIS

Can be Scripted for Silent Installs

- **Simple 4 step workflow**
  1. **Run installer**
  2. **Authorize software**
  3. **Create initial admin account**
  4. **Configure Web Adapter**



Portal for ArcGIS

Your Web GIS Platform

Install & Configure Portal

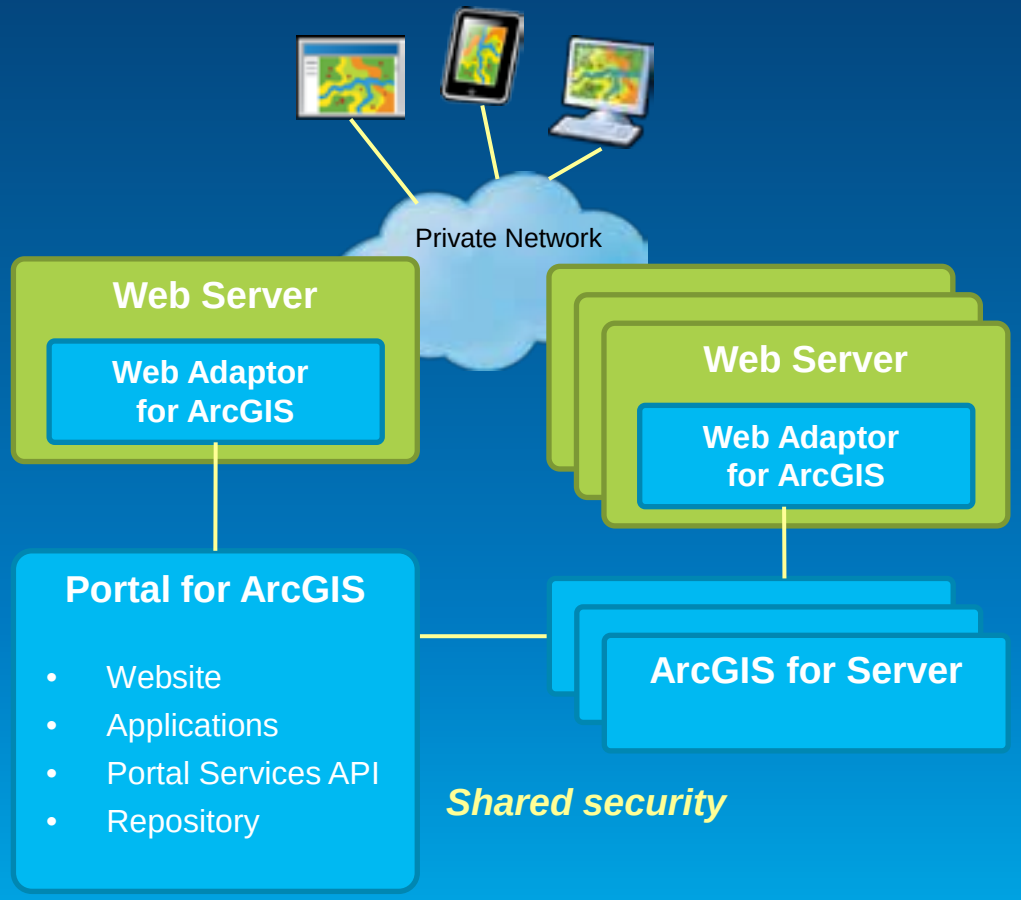
Using Your Portal with ArcGIS Server

Three Integration Approaches

1. Registering services
2. Federating a server
3. Designating a hosting server

Federating a Server with Portal

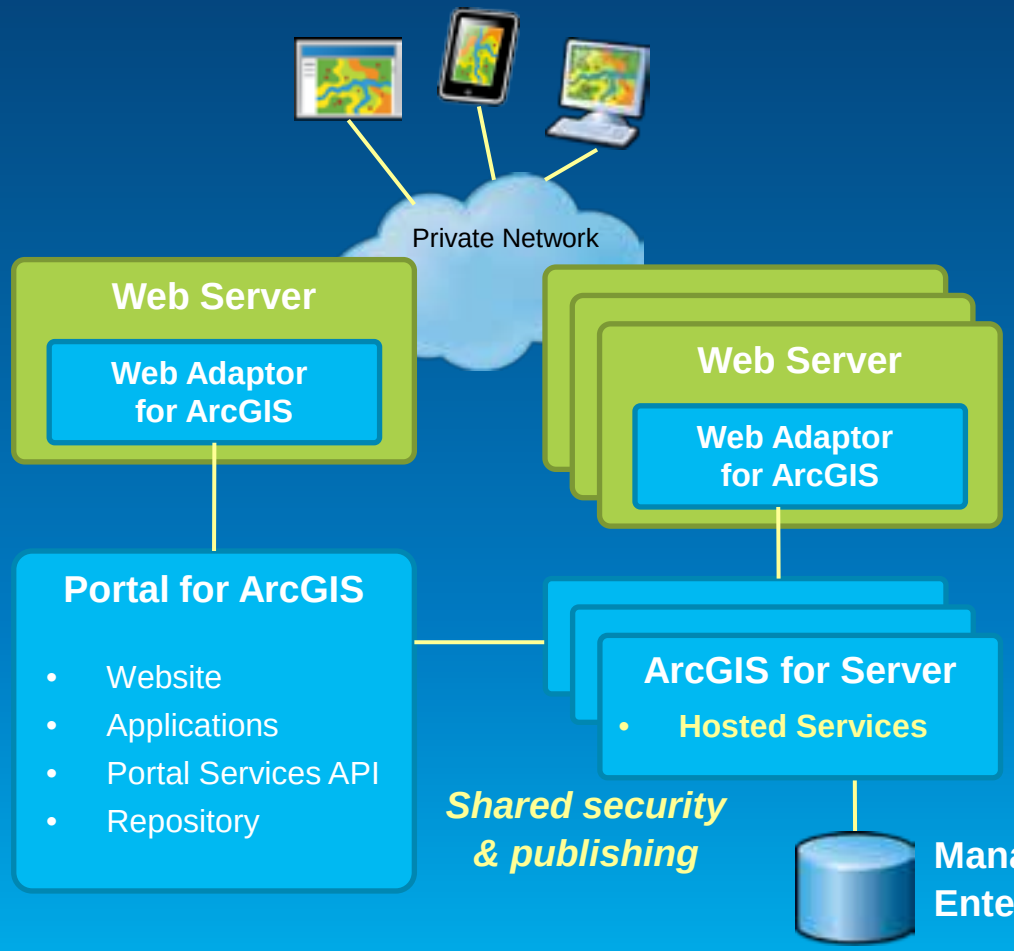
Integrates Security



- Provides SSO to secure services
- Access ArcGIS Server using Portal users
- Control access to services with the Portal sharing model
- Auto-sharing of services in Portal

Designating a Hosting Server for Portal

Enables Publishing



- Publish tiled map and feature services to the portal from ArcGIS for Desktop
- Share layers & maps from Excel
- Create maps by adding CSV files and shapefiles to the portal map viewer
- Publish CSV and shapefiles as feature services from the portal website

Portal for ArcGIS

Your Web GIS Platform

ArcGIS for Server & Utility Services

Security

Integrates with Your Enterprise Security Infrastructure

- **Authentication**
  - **Supports web tier authentication, including PKI & Windows Authentication**
  - **Supports SSO to your ArcGIS Servers** *(federated servers)*
- **Users, Groups, and Roles**

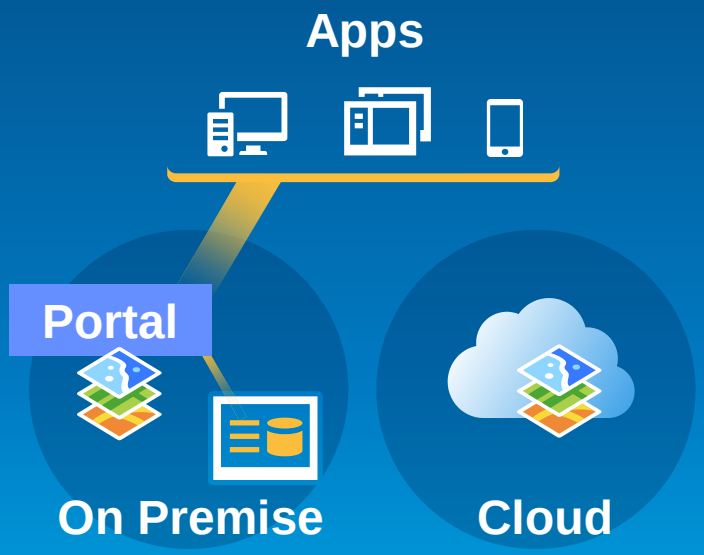
Users	Groups	Roles

• Built-in
• Enterprise
  • *Active Directory*
  • *LDAP*
	• Built-in	• *Anonymous*
		• User
		• Publisher
		• Administrator

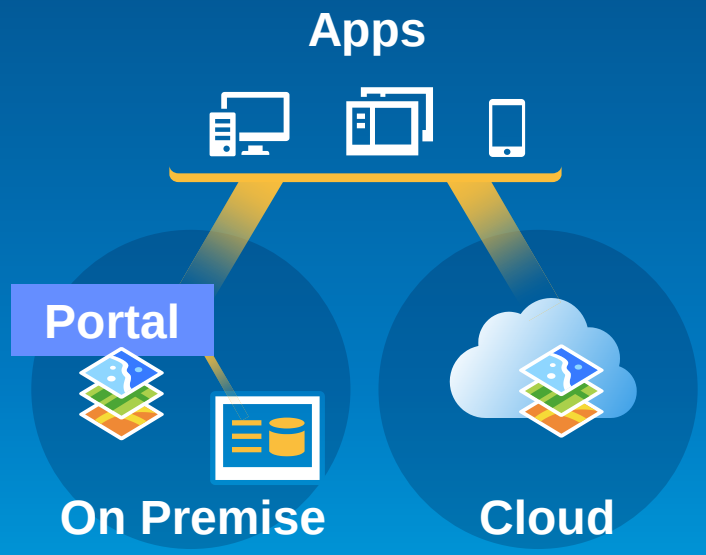
Common Deployment Patterns for Government

On-Premises & Hybrid

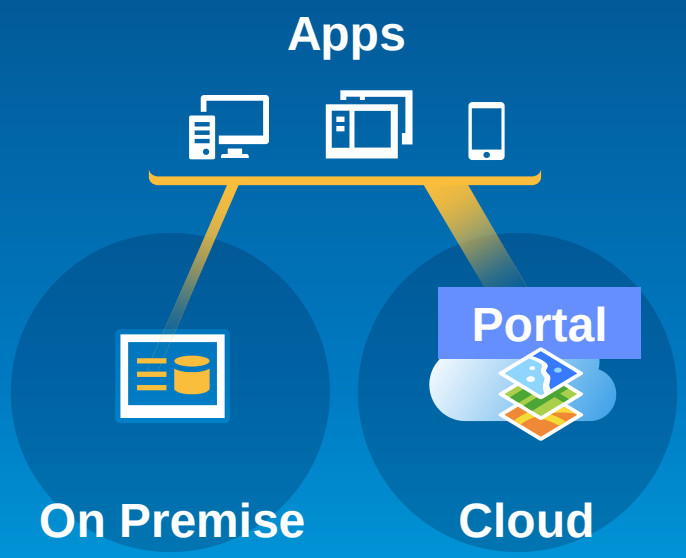
All On-Premises



Hybrid with On-Premises Portal



Hybrid with Cloud Portal



Basemaps & Utility Services

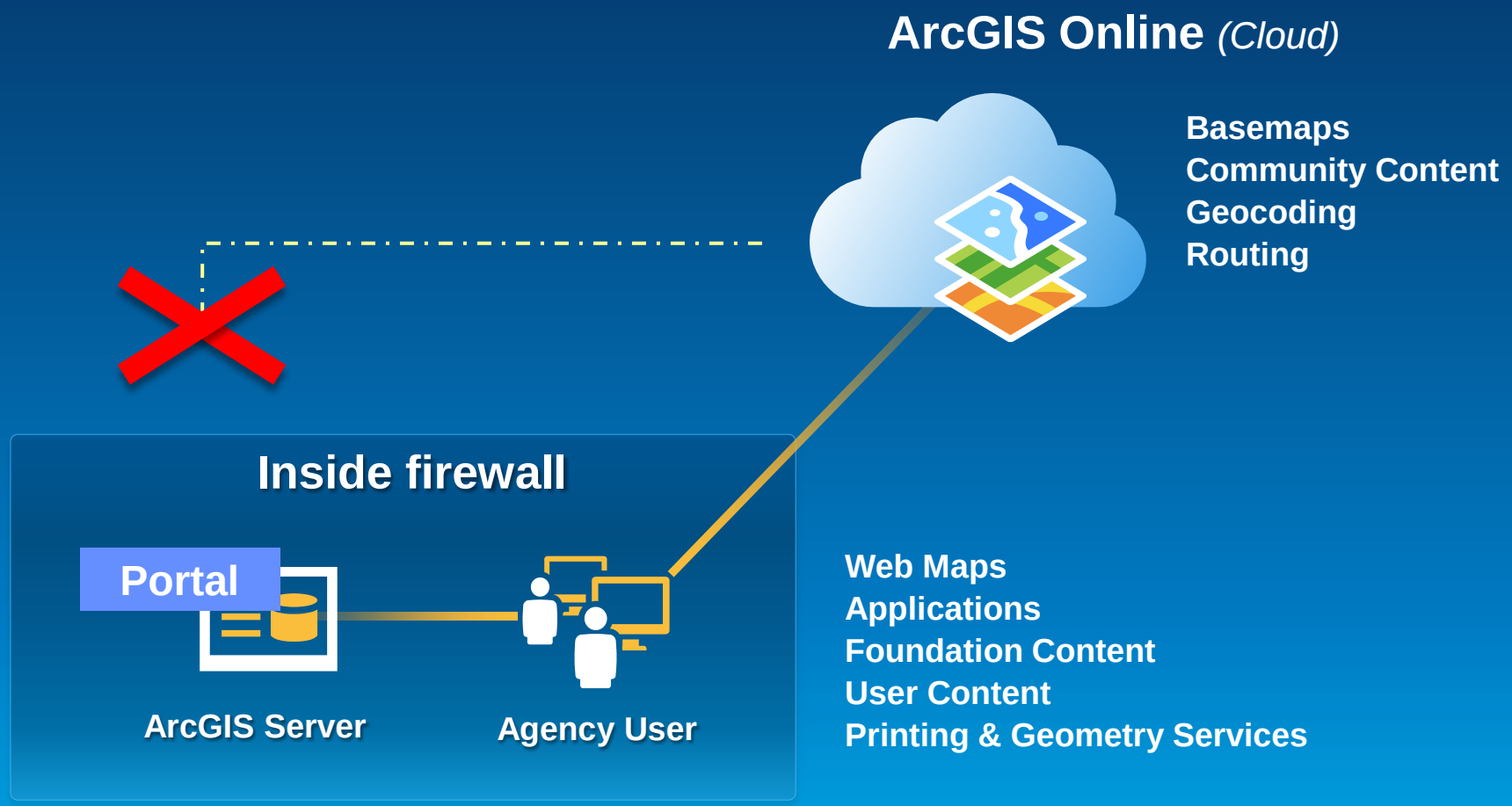
Important Consideration for an On-Premises Web GIS

- **Includes:**
  - **Basemaps**
  - **Geocoding**
  - **Routing & Network Analysis**
  - **Geometric Operations**
  - **Printing**

- **Can be hosted:**
  - **Online** *(by Esri)*
  - **On-Premises** *(by you)*
  - **Both** *(combination)*

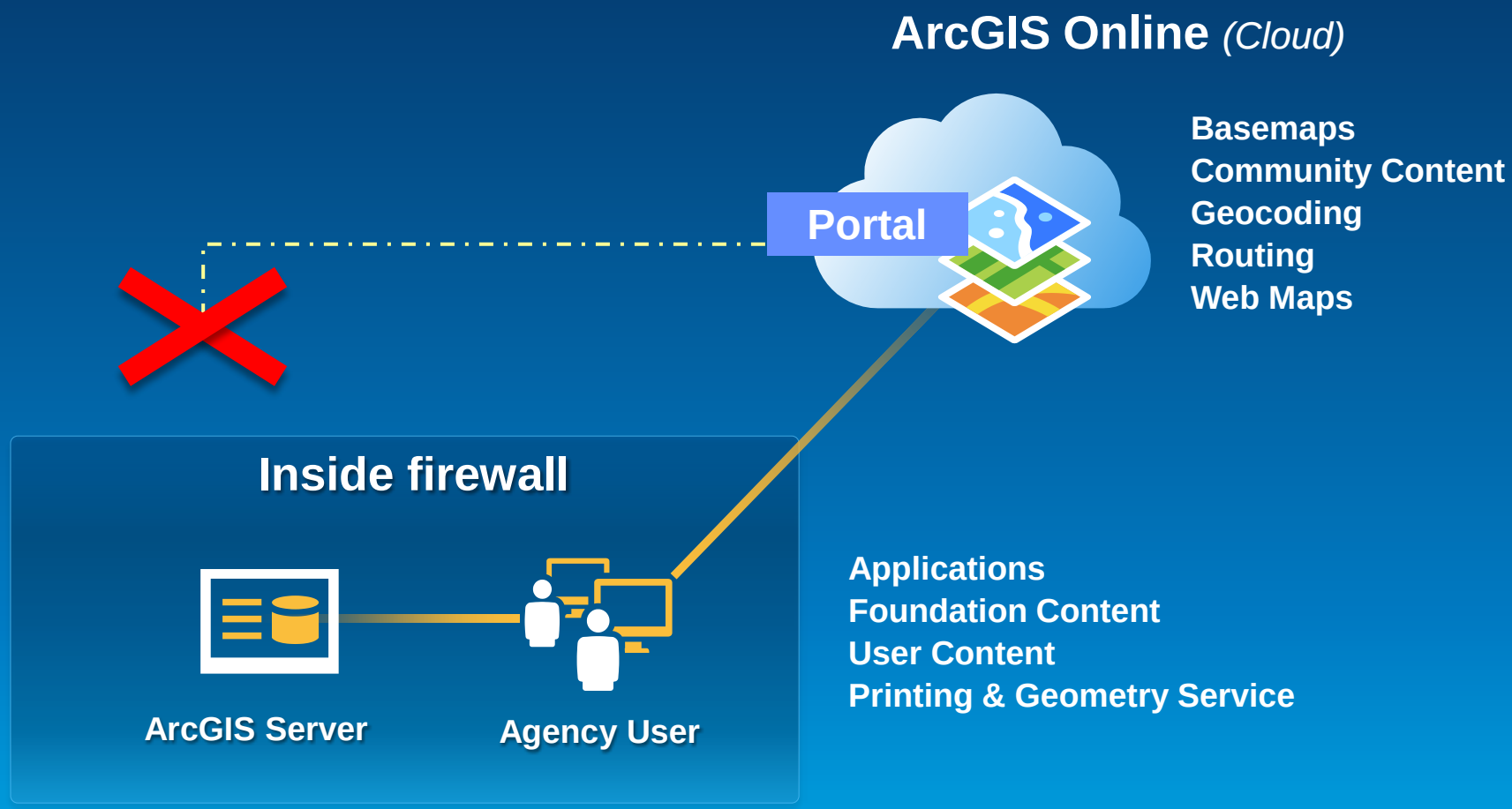
Hybrid Pattern with an On-Premises Portal

Deeper Dive



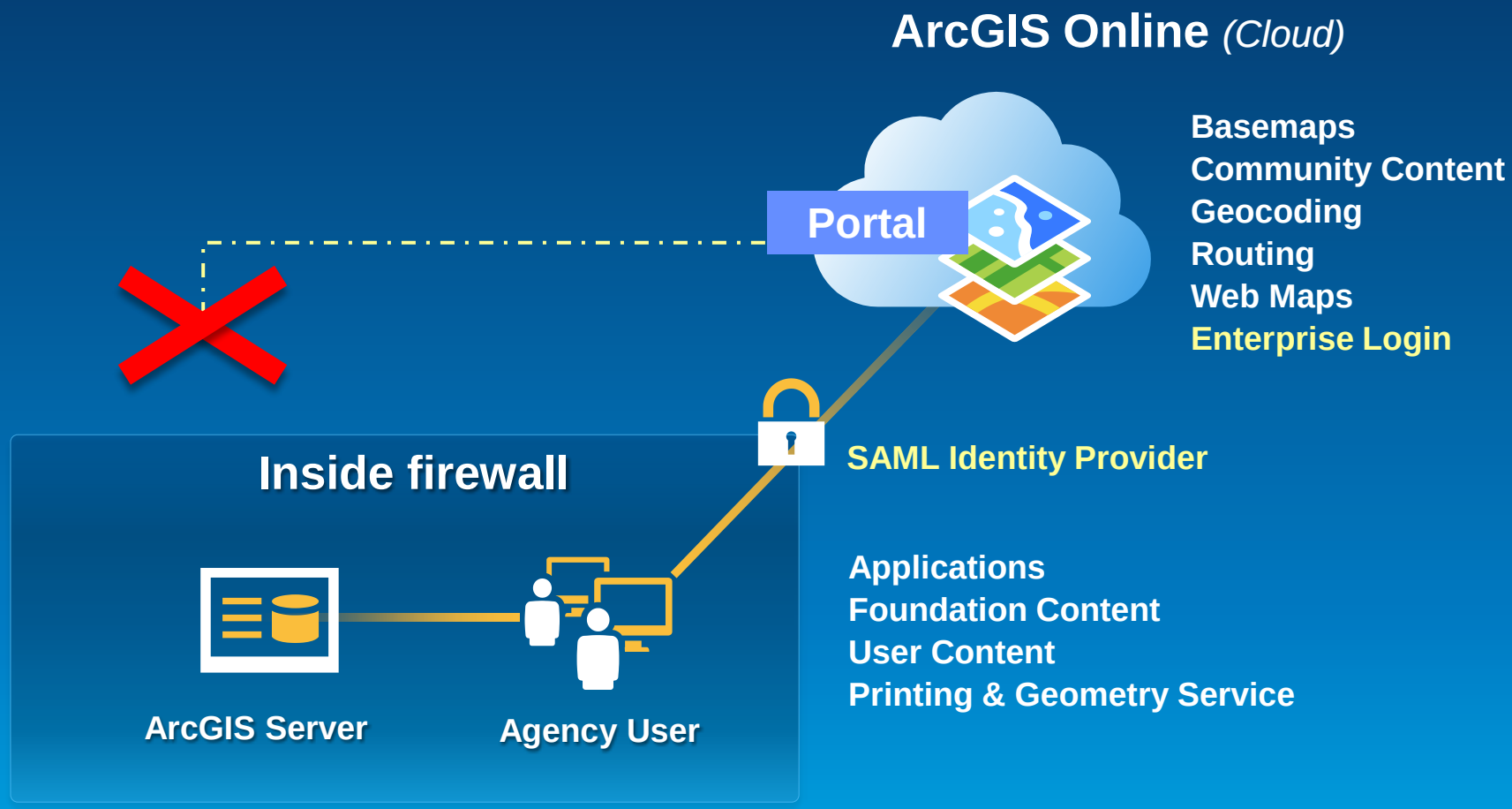
Hybrid Pattern with a Cloud Portal

Deeper Dive



Hybrid Pattern with a Cloud Portal & Enterprise Logins

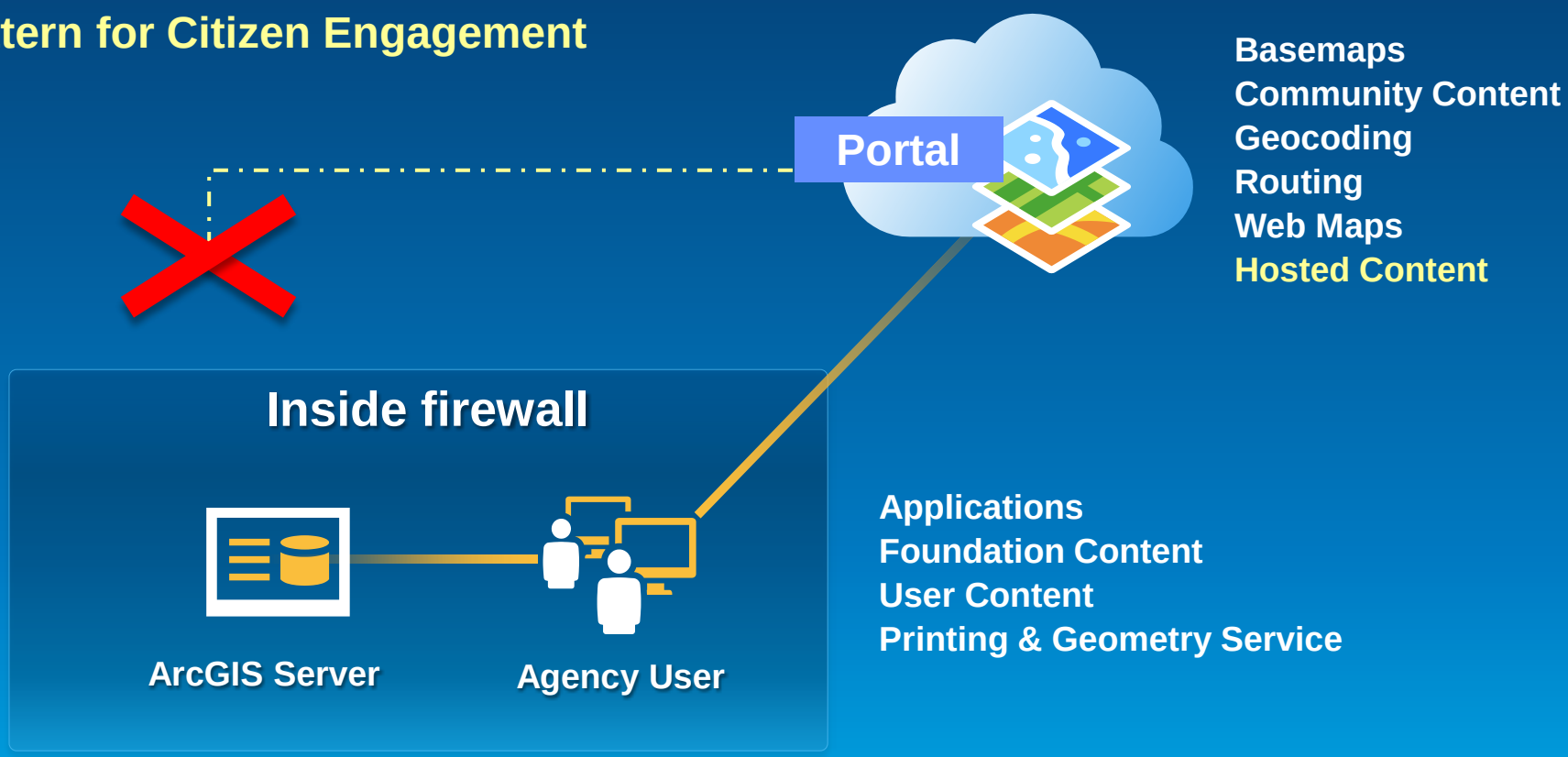
Deeper Dive



Hybrid Pattern with a Cloud Portal & Hosted Services

Deeper Dive

A Pattern for Citizen Engagement



Ready to Use Apps & Templates

Makes Mapping Easy and Accessible – Designed to Fit Your Workflows

Also

- Microsoft Office
- Landscape Analysis Apps
- Business Analyst
- Community Analyst
- Enterprise Systems (SAP, IBM…)
- …

Portal for ArcGIS

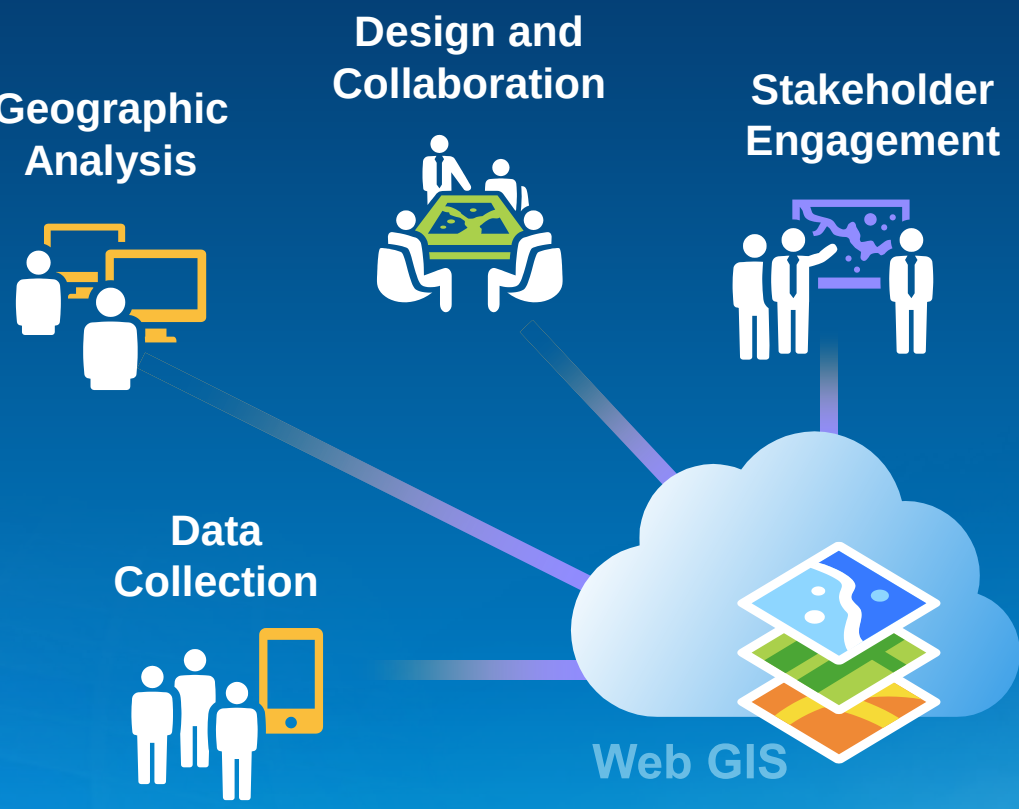
Your Web GIS Platform

Bringing It All Together

Deploying a GIS Platform

Requires More Than Technology

- Vision and Leadership
- Education
- Understanding How GIS Contributes
- Workflows
- Good People



A Culture Sharing Data, Technology and Apps

Content is Key!

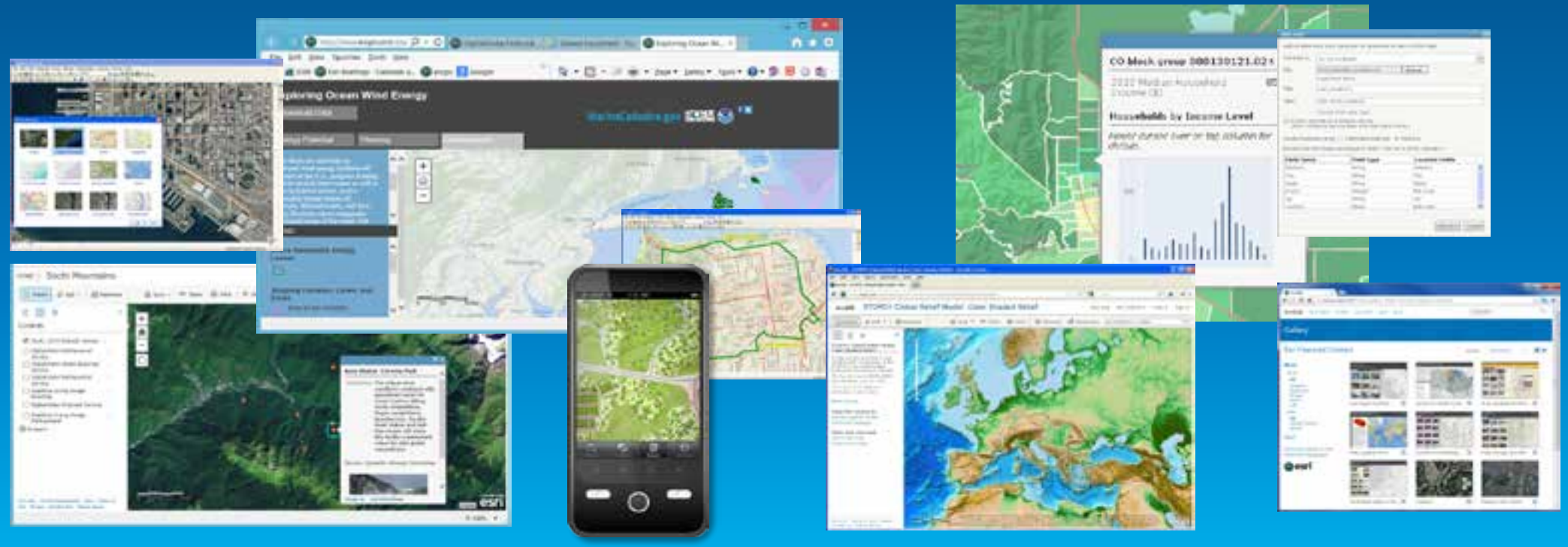
A Map Is Only as Good As the Data

- Chinese Embassy in Belgrade Bombed – 3 Maps Used (NY Times, CNN)
- Ship Grounds on Reef: Was the Chart Up-to-Date? (Breaking Defense)
- Success of Bosnia Peace Talks Rely On Map Content – 2D & 3D (IBRU Bulletin)
- Incorrect Web Map Leads to Raid in Central America (Fox News)

ArcGIS Includes Content

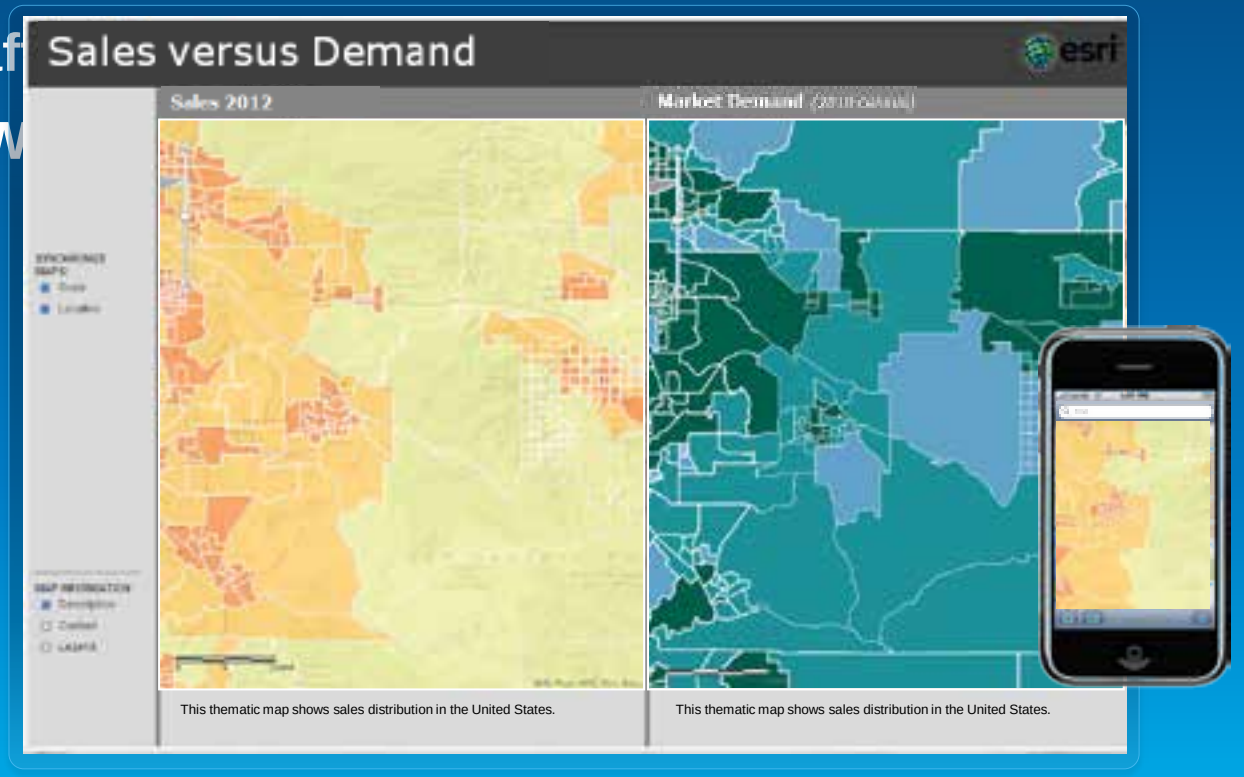
Ready to Use, Online or On-Premises

- **Provided for the entire ArcGIS Platform** *(Desktop, Server, Mobile, Web)*
- **Easy to find, always available, and accessible to all users**



Keys to Success

- Stay focused on the information products
- Embrace the idea of maps everywhere
- Model Portal af
- Consider the W



Thank You For Coming!

Questions?

Understanding our world.