



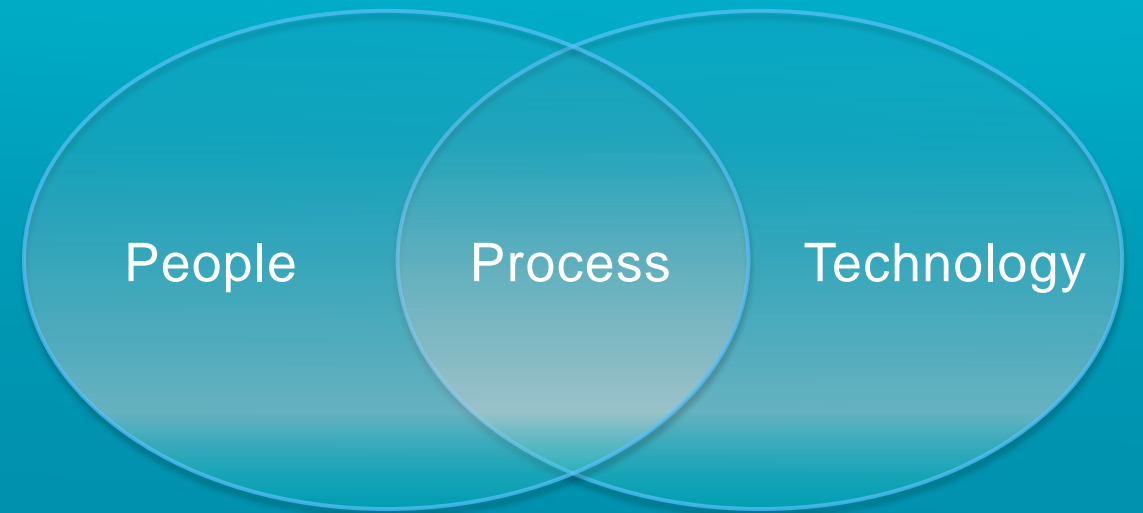
Esri International Developer Summit
Palm Springs, CA

Architecture Best Practices for the ArcGIS Platform

Dave Wrazien, Solution Architect, Esri

Andrew Hendrickson, Solution Architect, Esri

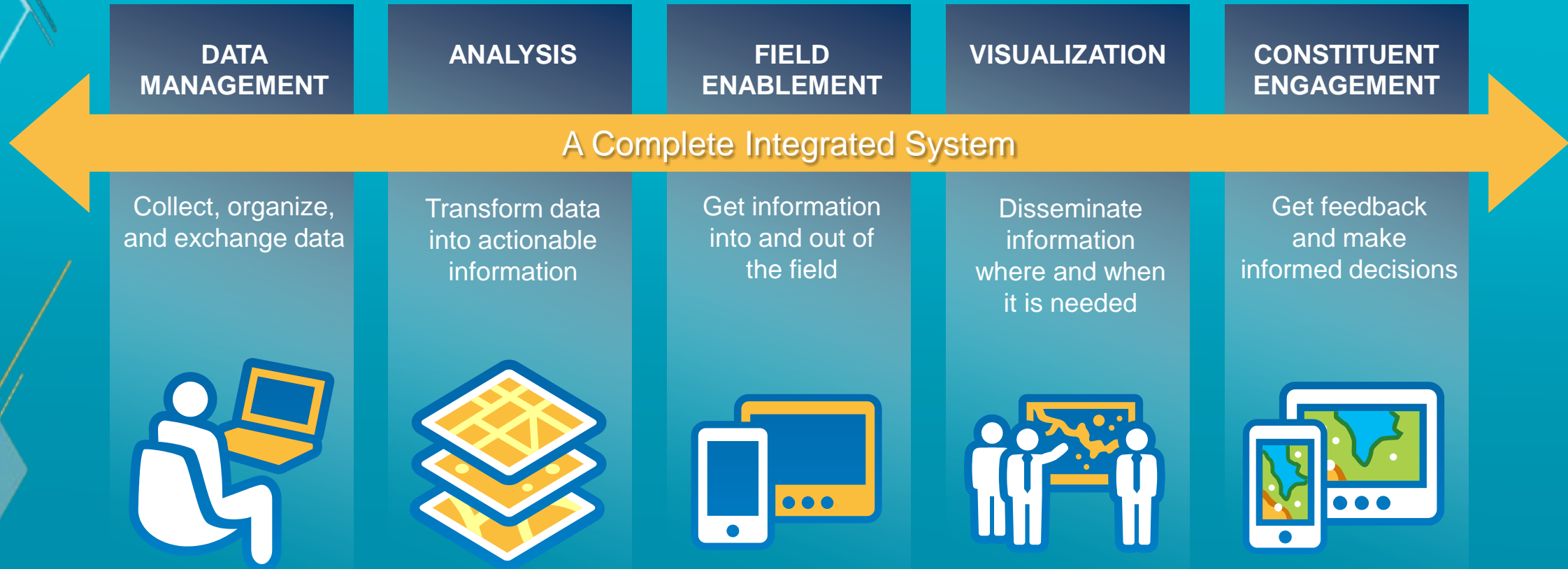
- Best Practices – People
- Best Practices – Process
- Best Practices – Technology



Session Topics



Best Practice: People



How People Use the ArcGIS Platform

Use Patterns as Framework



Naveen
Corporate Accounting



Kristin
Human Resources



David
Sales



Manny
Creative Lab



Meghan
Industry Solutions

People at work
have an identity.

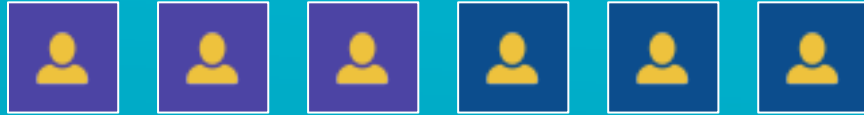
My Corporate Identity

● dwrazien@esri.com	e-mail
● 1616	Time Card
● dave.wrazien	Cloud File Share
● dwrazien	CRM
● dwrazien1616	Payroll
● davew	Active Directory
● d_wrazien	ArcGIS
● @dwrazien	Twitter

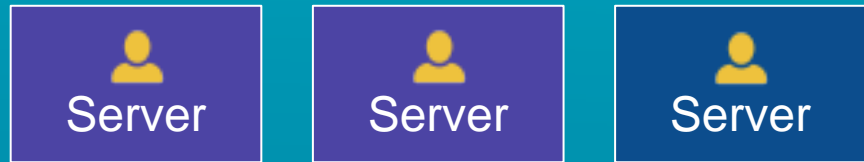
Identity Matters

Too Many Individual Identities








Esri Apps



Partner Apps



Users

-  Bryce Harrison
-  Emily Mars
-  Jacob Ruiz
-  Jason Key
-  Jay Tomas
-  Jon Connor
-  Kelvin Hernandez

Identity in the ArcGIS Platform

Connect Users to Apps

Users


- Bryce Harrison
- Emily Mars
- Jacob Ruiz
- Jason Key
- Jay Tomas
- Jon Connor
- Kelvin Hernandez



- Java Script
- WPF
- Android
- ...

Username
|
Password
|
 Keep me signed in.
SIGN IN
Forgot Username or Password?

J



Name: Jon Connor
Title: Project Manager
Organization: Star Consulting
Role: User

Incorporating Identities in Your Apps

Adding Code

Organizational Roles

User
Publisher
Administration
Analyst
Public
Viewer
Editor
...

Standard Roles

New Custom Roles

Defining Identities

Configured by You—
Based on Your Business

Small Organizations

Avery,Francis,Avery.Francis@star-con.com,User
Ben,Bentz,Ben.Bentz@star-con.com,Analyst
Brittney,Brown,Brittney.Wrazien@star-con.com,User
Bryce,Harrison,Bryce.Harrison@star-con.com,Publisher
Carter,Henritzy,Carter.Henritzy@star-con.com,User
Christian,Beebe,Christian.Beebe@star-con.com,Publisher
Emily,Strunk,Emily.Strunk@star-con.com,Analyst
Emily,Mars,Emily.Mars@star-con.com,Publisher
Jacob,Ruiz,Jacob.Ruiz@star-con.com,User
Javon,Key,Javon.Key@star-con.com,User

XLS / CSV

Import

Users



Bryce Harrison



Emily Mars



Jacob Ruiz



Jason Key



Jay Tomas



Jon Connor



Kelvin Hernandez

Adding Identities to the Platform

Small Organization Pattern

Small Organizations

Avery,Francis,Avery.Francis@star-con.com,User
Ben,Bentz,Ben.Bentz@star-con.com,Analyst
Brittney,Brown,Brittney.Wrazien@star-con.com,User
Bryce,Harrison,Bryce.Harrison@star-con.com,Publisher
Carter,Henritzy,Carter.Henritzy@star-con.com,User
Christian,Beebe,Christian.Beebe@star-con.com,Publisher
Emily,Strunk,Emily.Strunk@star-con.com,Analyst
Emily,Mars,Emily.Mars@star-con.com,Publisher
Jacob,Ruiz,Jacob.Ruiz@star-con.com,User
Javon,Key,Javon.Key@star-con.com,User

XLS / CSV

Import








Large Organizations



Enterprise Identity Management System

SAML

Users

-  Bryce Harrison
-  Emily Mars
-  Jacob Ruiz
-  Jason Key
-  Jay Tomas
-  Jon Connor
-  Kelvin Hernandez

Adding Identities to the Platform

Large Organization Pattern

My Corporate Identity

● dwrazien@esri.com	e-mail
● 1616	Time Card
● dave.wrazien	Cloud File Share
● dwrazien	CRM
● dwrazien1616	Payroll
● davew	Active Directory
● d_wrazien	ArcGIS
● @dwrazien	Twitter



 Shared Identity

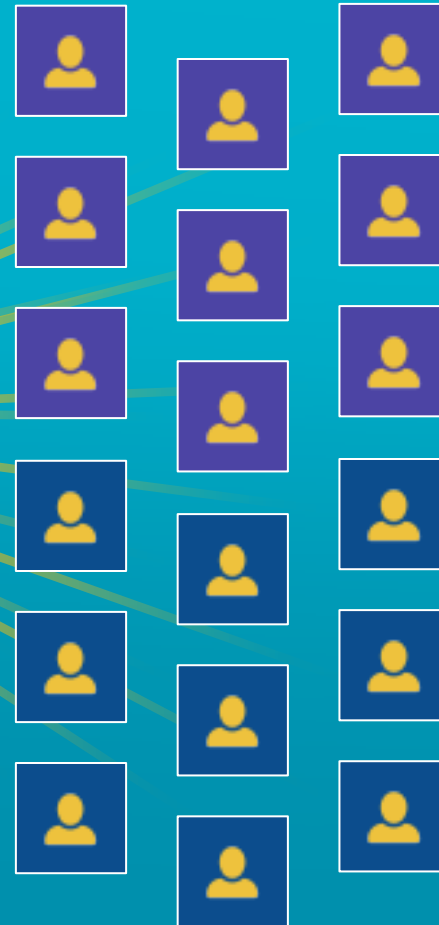
Leverage Identity

Many to One

ArcGIS Community



 Shared Identity



Esri Apps

Partner Apps

Leverage Identity

One Shared by Many

GOVERNANCE IN ACTION

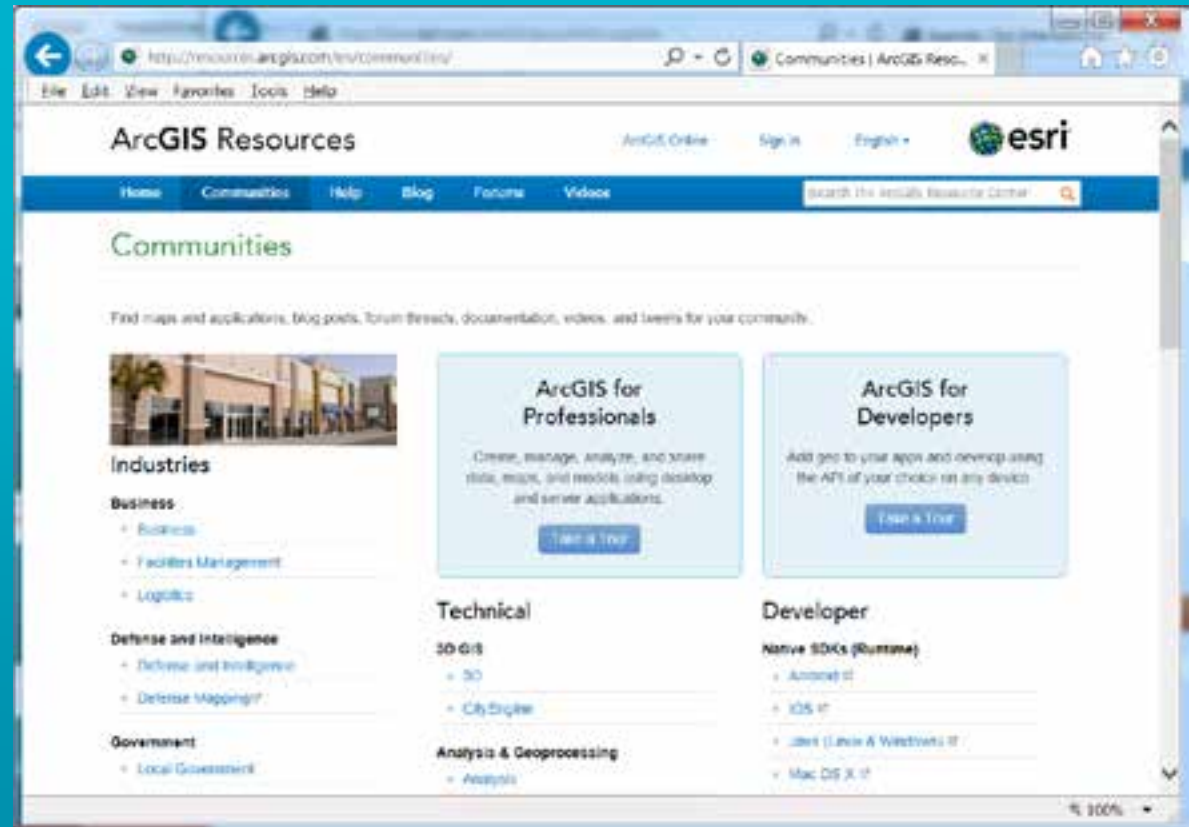
Well, technically
Anarchy is a
form of
governance...

May 24, 2007

www.ComicStripGenerator.com

Best Practice: Process

1. Configure First
2. Customize Second
3. Create New Last



Approach/Process to Providing Solutions

Maintain focus on the business!

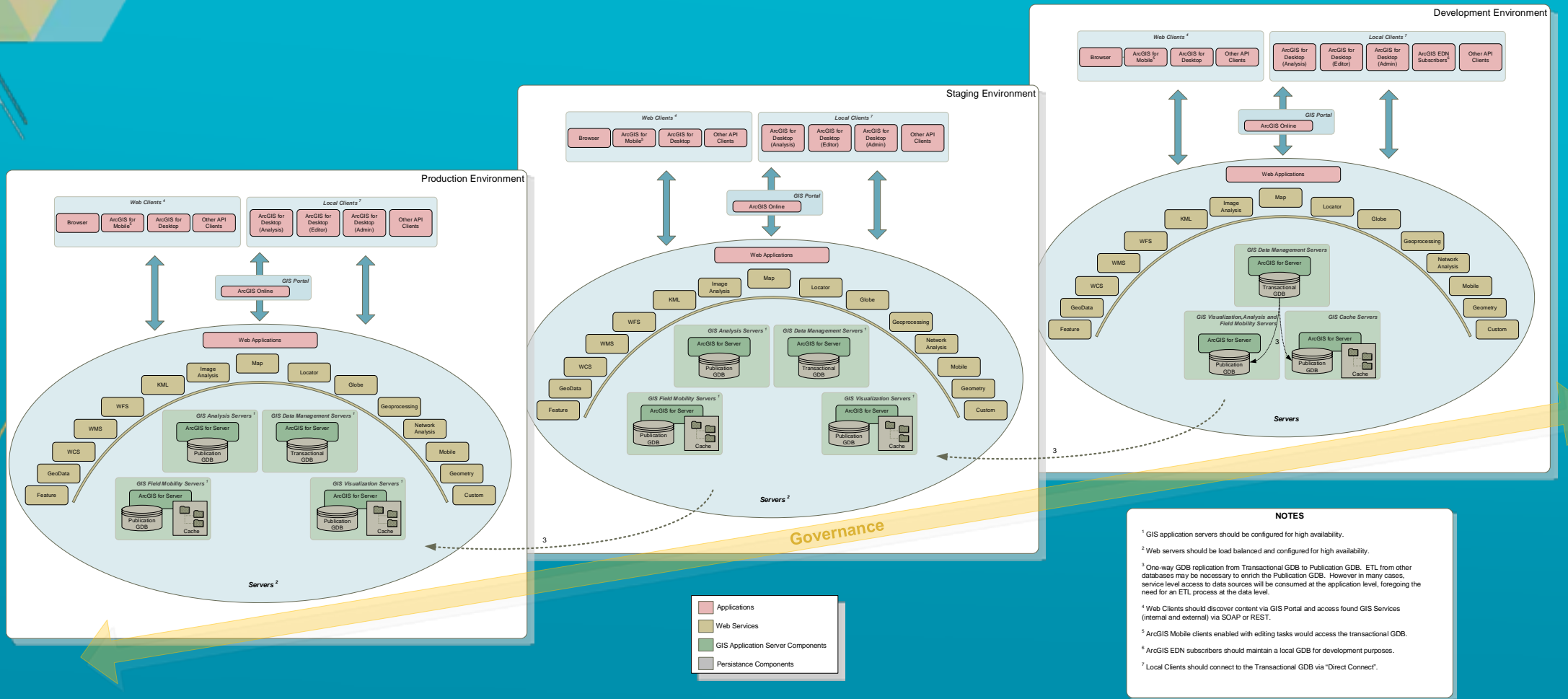
- Understand / Engage Mission & Priorities
- Understand Business Processes & SLAs
 - Distill Processes
 - Define Services
- Construct Common Services
- Develop Applications
- Rapidly Prototype
- Consider Other Technologies
 - Bus & Orchestration Tools
- Implement Standards
 - WSDL, UDDI, REST, XML, SOAP,

Implementation Process

Rapid and Agile



Best Practice: Technology



Conceptual Reference Architecture



- Supports developer creativity
- Individual “build” environment
- Promotes creative development of new applications without the fear of impacting other systems.

Development Environment

Defined: a limited scale and scope environment sufficient for the development of primary code and data modeling.



- Allows insight into what may break with patching, software upgrades, & etc.
- Promotes use of a QC/QA environment
- Supports performance testing
- Ensures a stable, extensible, and high performing system

Staging Environment

Defined: a separate mirrored pre-production environment

- Reduce risks
- Improve service delivery
- reduced system resource contention

Data and Asset Management



Constituent Engagement



Typically SLAs will often determine which server deployments need to be separated.

Pattern Segregation

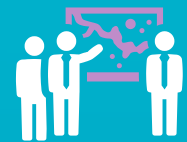
Defined: separate technology deployments by solution pattern

- improved performance
- reduce data security risks
- reduce system resource contention

Data and Asset
Management



Operational
Awareness



replication

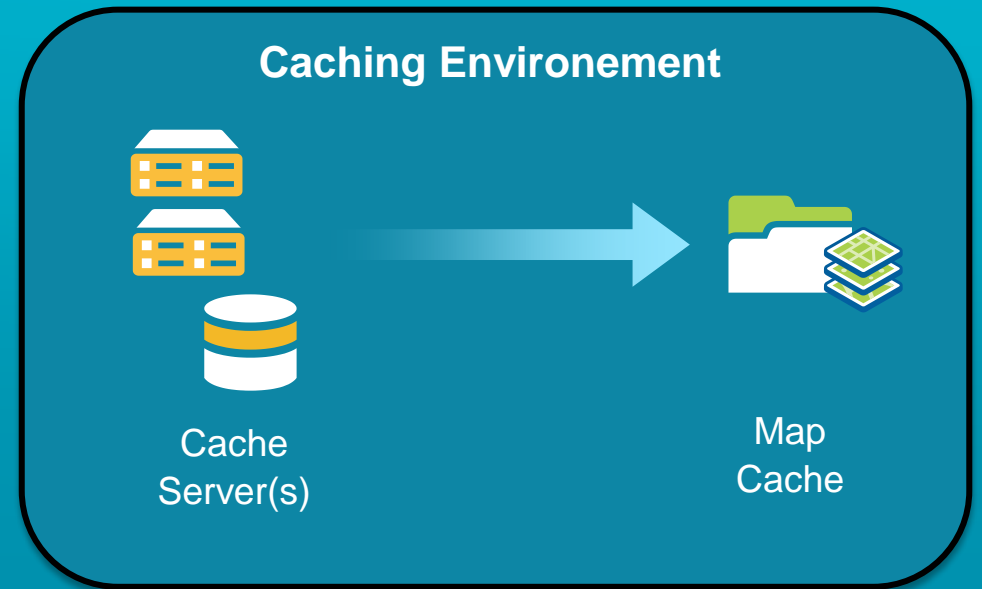


Decouple contending usage patterns
from a common enterprise
geodatabase.

Publication Geodatabase

Defined: a unique instance of a transactional geodatabase used to support the dissemination of geographic data, services and applications.

- reduce system resource contention
- support QA/QC of published map content



Caching Environment

Defined: separate server(s) to support map cache creation and maintenance.

- 
- Best Practices: People – **Leverage Identity**
 - Best Practices: Process - **Rapid / Agile Development (*configure before customize*)**
 - Best Practices: Technology - **Use Conceptual Reference Architecture**

Summary



Dave Wrazien
Solution Architect, Esri
dwrazien@esri.com

Thank you

Please Fill Out Session Survey!