



# GIS

*The Geographic Approach for the Nation*



## ESRI Federal User Conference

Washington, D.C. • February 17-19, 2010

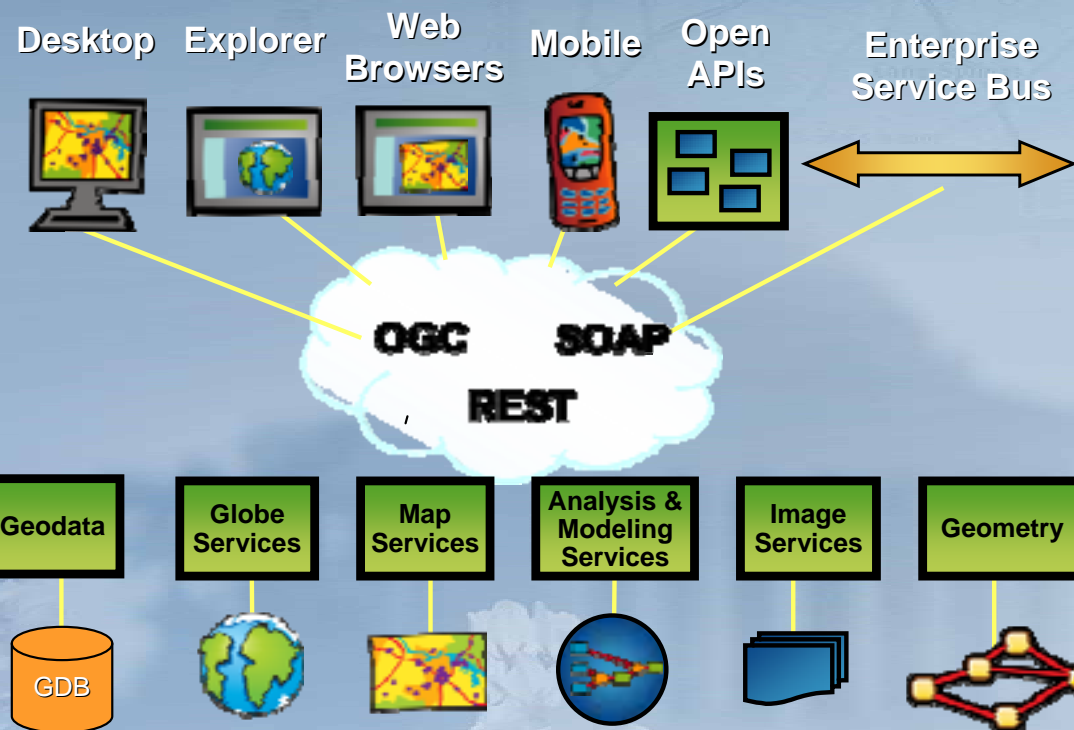


# What is coming in **ArcGIS Server 10**

Ismael Chivite  
ArcGIS Server Product Manager  
James Cardona  
Technical Marketing

# ArcGIS Server is a complete server based GIS

*Delivering GIS with powerful services and applications*

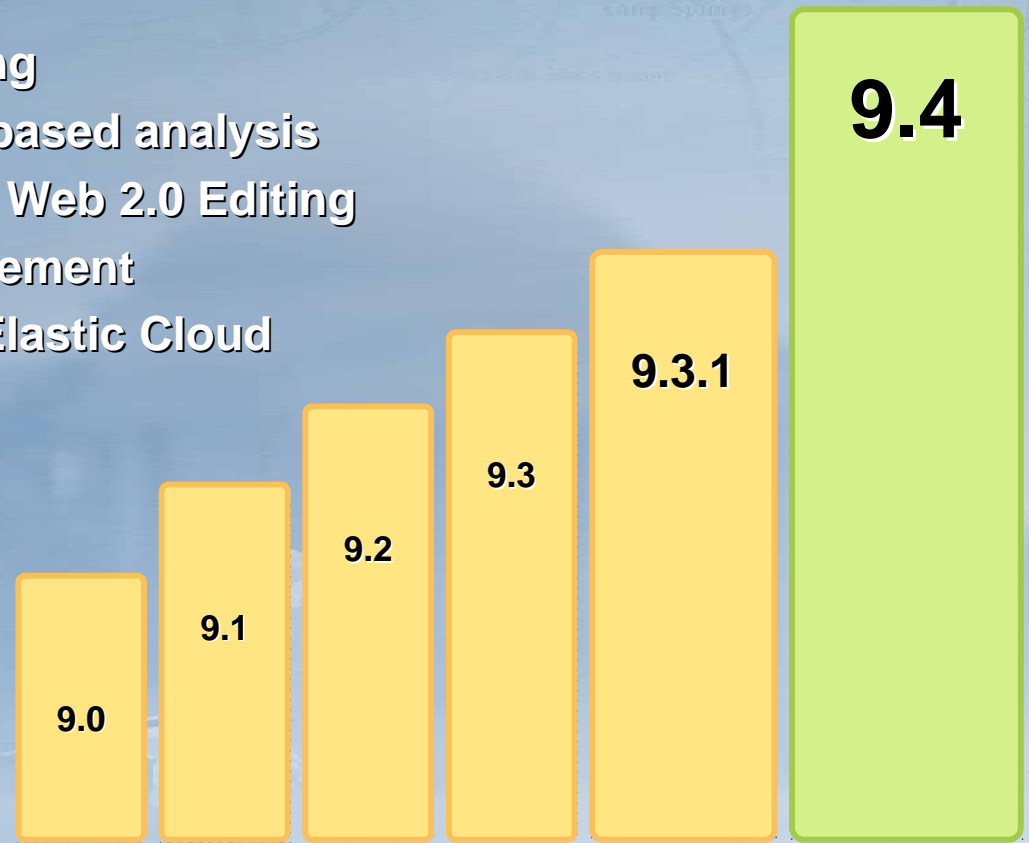


# 10 is the next big step for ArcGIS Server

*More powerful, faster and easier to maintain*



- Enhanced Web Mapping
- More powerful server-based analysis
- Geo-collaboration and Web 2.0 Editing
- Simplified data-management
- Runs on the Amazon Elastic Cloud



*...builds upon and enhances ArcGIS Server 9.3.1*

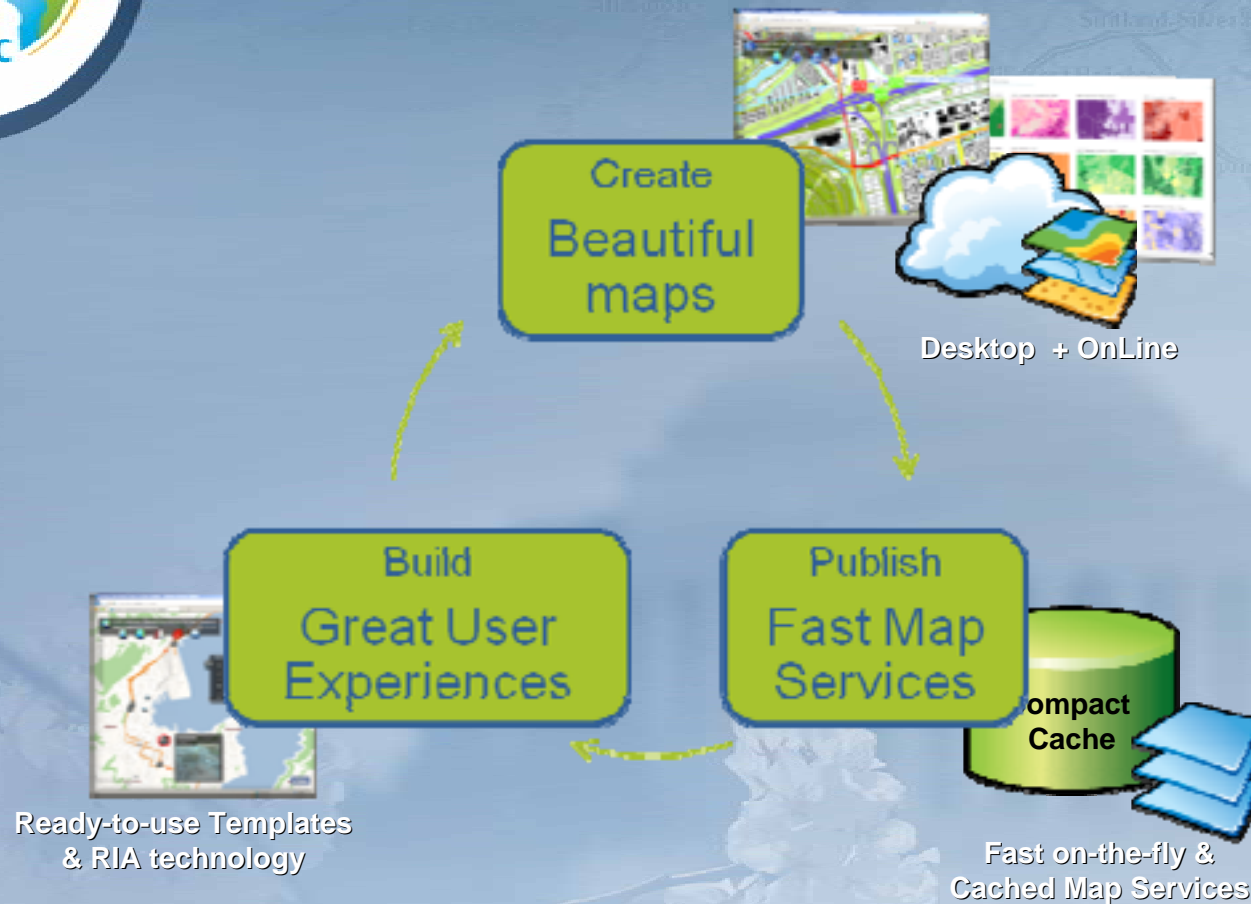




# Enhanced Web Mapping

# Enhanced Web Mapping

*Streamlining workflows and communicating with maps*

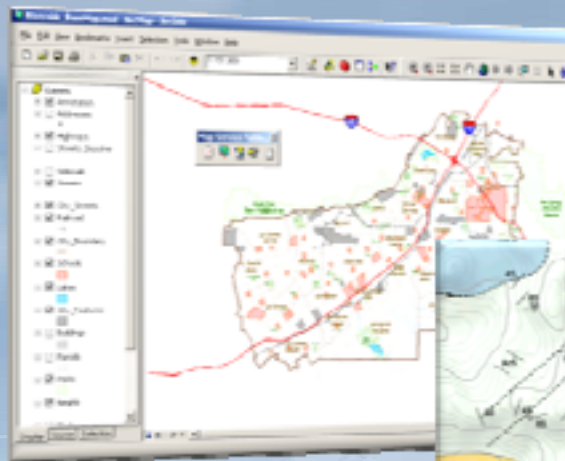


# More beautiful maps for the web

## *Richer symbology*



- Optimized Map Services support for
  - Maplex text placement
  - Cartographic Representations
  - Sharper looking True Type Fonts



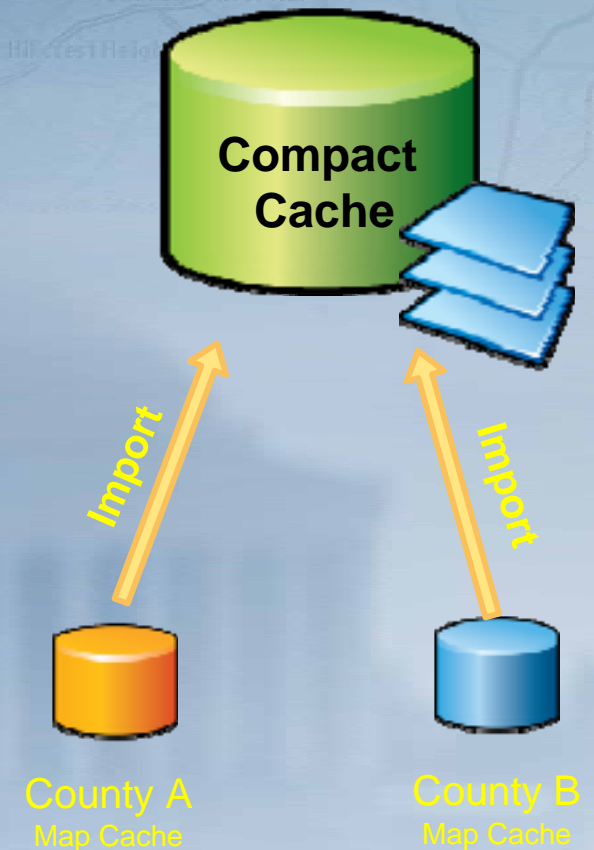
*... Authoring Professional Looking Maps for the Web*

# Simplified Cache Map Management

*Through the new compact cache format*



- Fewer files on disk = easier management
  - Quick to move around and update
  - Builds quicker (sometimes)
  - Great performance
- Enables collaborative caching



*...Faster map cache creation and updates*



# Compact cache

## Some numbers (a US State)



Map cache for the State of Louisiana

- Street Map
- Down to 1:4,000 map scale
- Over 1.5M map tiles



	Time to create	Space on disk	Time to move
Exploded	10 hours 50 minutes	1.54Gb	Almost 2 hours
Compact	9 hours 50 minutes	1.2 Gb	6 minutes

Staging environment



Create the map cache

Compact cache = less time

Production environment



Publish the cache

# Compact cache

## Some numbers (large cache)



- Map cache for Europe
  - Land use map
  - 3.8M map tiles



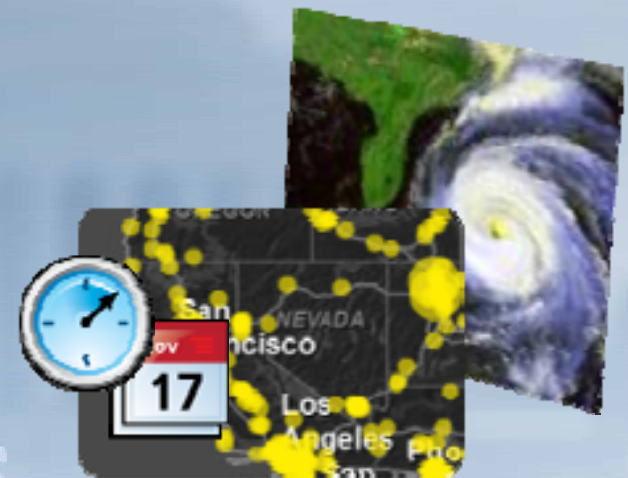
	Time to create	Space on disk	Time to move
Exploded	5 hours 17 minutes	5.02Gb	9 hours 11 minutes
Compact	1 hour 48 minutes	4.71Gb	8 minutes 13 seconds

# Map Animations on the Web Made Easy

## *Time Aware Map Services and Applications*



- Built in tools for authoring time aware map services
- Ready to use map animation tools





# Configurable Web Maps

## *Creating Web Maps In a Heart Beat*



- Configurable web maps for:
  - Map centric web browser map apps
  - Sharepoint sites
  - iPhone
- Industry Templates available



Download

Configure

Deploy

*...Simplifying the Creation Of Web Maps*



# Enhanced ArcGIS Web Mapping APIs

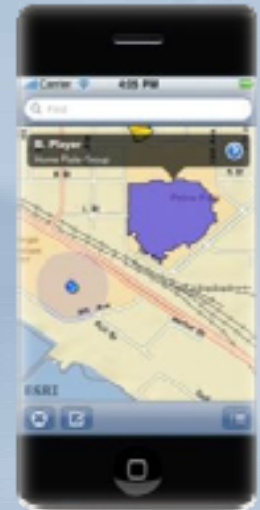
*Stronger SDKs for web and iPhone developers*



- APIs for JavaScript, Flex and Silverlight:
  - Richer and more samples
- New iPhone SDK
- Enhanced Map Services API
  - Attachments
  - Geodatabase Relationships
  - Enhanced Domain and Subtype support
  - Standalone tables
  - Faster Queries



Stronger Web 2.0 SDKs



New iPhone SDK!

# Continuously enhanced Map content

*Ready to use maps for ArcGIS Server users*



Imagery



Millions of Maps . . .  
. . . Being Served Each Day

Demographic & Thematic



Topographic



*. . . . Directly Integrated Into ArcGIS*



# More Powerful Server Side Analysis



# Stronger environment for analysis

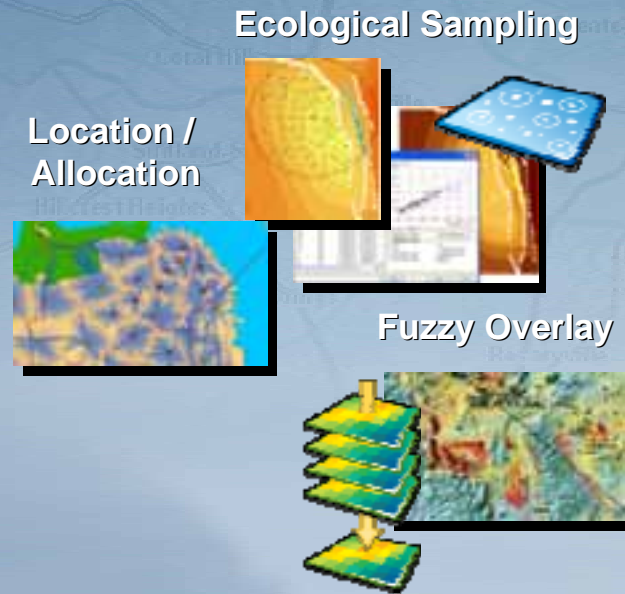
*More tools, easier access and faster execution*



- More than 130 new tools
- More efficient processing
  - Up to 15x faster
- Simplified authoring



PDF Maps on Demand



Data Extraction Services  
(CAD, shapefile, raster formats...)





# Simplified Data Management

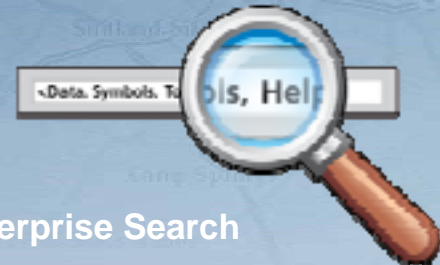
# Simplified Data Management



SQL



Native SQL access  
to databases



Enterprise Search



Mosaics with millions of images



Open File Geodatabase API

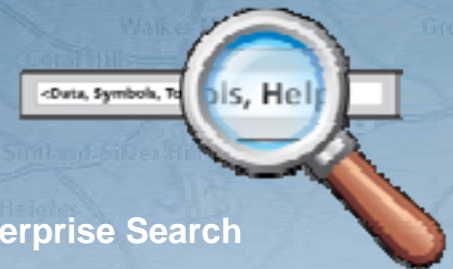
C, C++



Open API



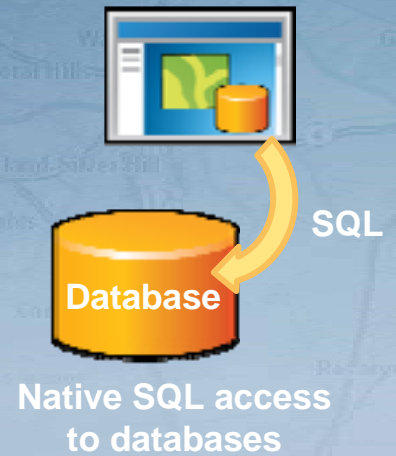
# New Search Service



Enterprise Search

- Centralize Search and Indexing of GIS Resources
- Security: Use several Search Services
- For use internally by Desktop users
- Not a Search Service for Web users
- Non spatial search on 'Item Descriptions'
- Very, very fast

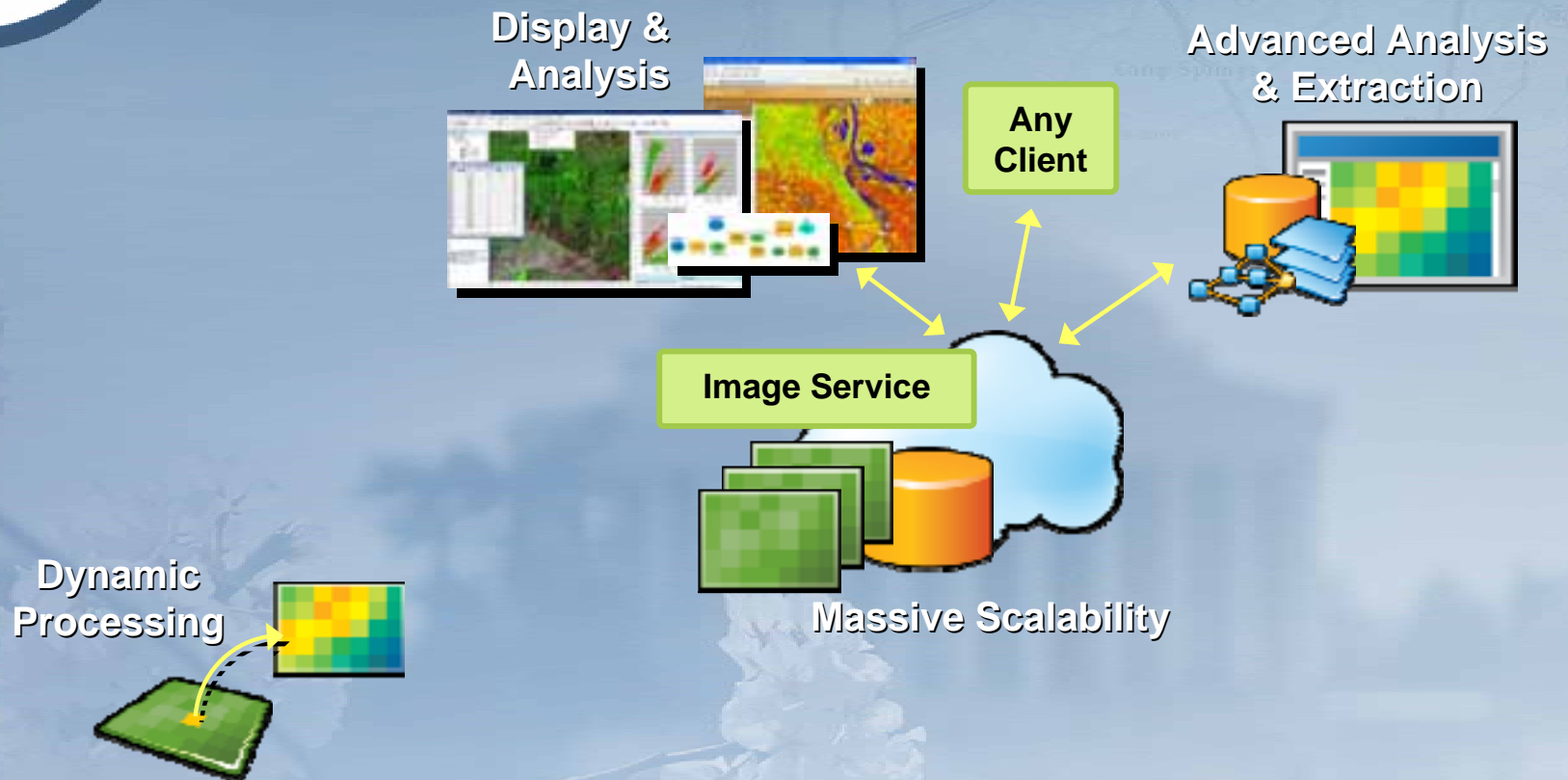
# Enhanced access to databases



- SQL based Tables and Feature Layers
- More flexible access to data
  - GroupBy, Joins...
  - No need for ArcSDE tables
- Author in ArcMap, publish to Server
- Will look as simple features
- Read only



# Enhanced Imagery in ArcGIS Server Through 'Mosaic Datasets'



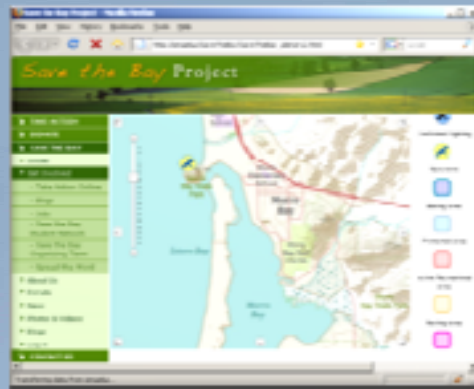
*Mosaic Datasets combine the best of Raster Catalogs and Raster Mosaics*



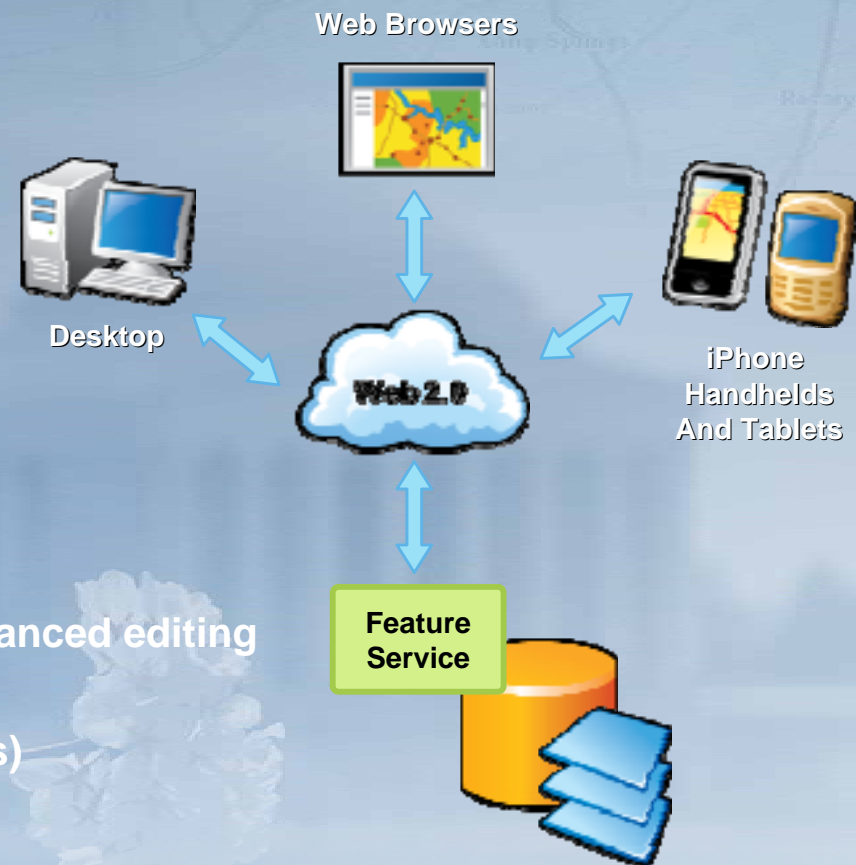
# Geocollaboration and Web 2.0 Editing

# Editing for all

*From Volunteered Geographic Information to sophisticated web editing*



- Enabling simple sketching & advanced editing
- Well defined Information Model
- Edit from anywhere (many clients)

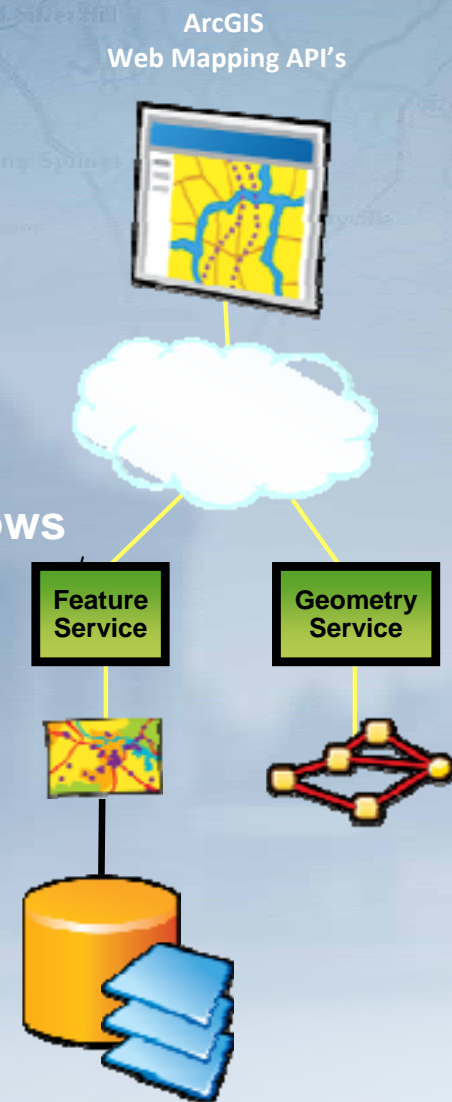


# The Geometry and Feature Services

*For Geodatabase editing over the internet*



- New Feature Service
  - For quick Geodatabase edits
  - Last in wins (stateless service)
  - Editing based on predefined templates
- Enhanced Geometry Service
  - Geometry manipulation to support edit workflows
  - Union, Reshape, Extend/Trim...
- Client-side Feature Layers



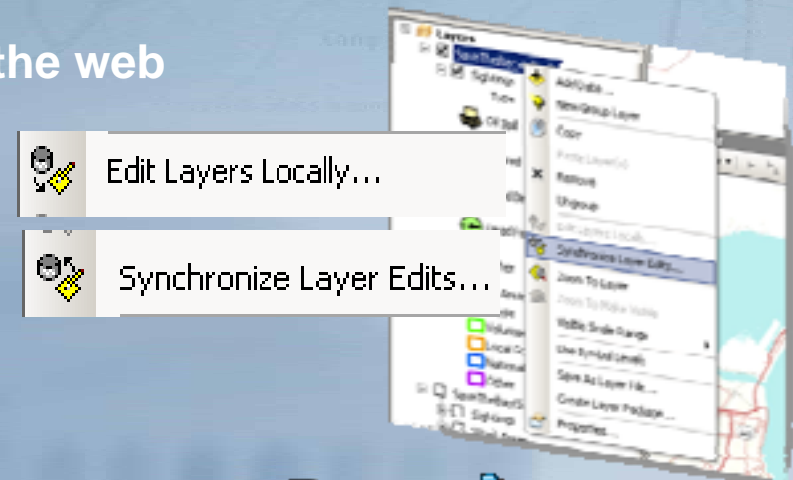


# Feature Editing Service for Desktop users

## Streamlined replication user experience



- For quick Check-in/Check-out over the web
  - & data replication workflows



# Editing from the field

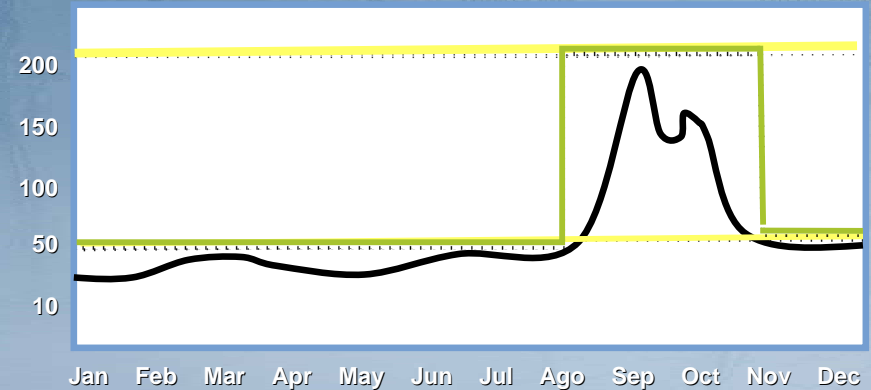
Supporting partially connected and fully connected editing





# Runs on Amazon

# Deploying ArcGIS Server In the Amazon Elastic Computing Cloud



- Quick deployment and provisioning
- Leverages elastic computing and other Amazon services
- Three AMLs:
  - ArcGIS Server Enterprise Advanced (Windows .Net)
  - ArcGIS Server Enterprise Advanced + Image Extension
  - ArcGIS Enterprise Geodatabase





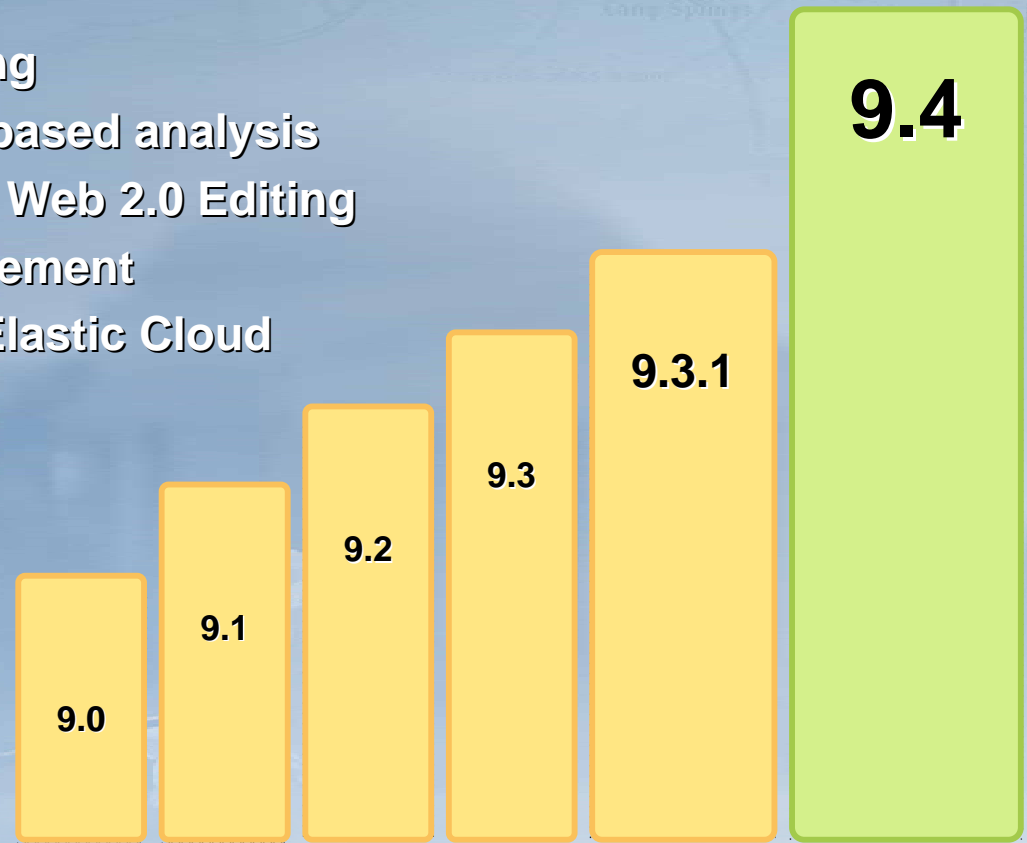
# Summary

# 10 is the next big step for ArcGIS Server

*More powerful, faster and easier to maintain*



- Enhanced Web Mapping
- More powerful server-based analysis
- Geo-collaboration and Web 2.0 Editing
- Simplified data-management
- Runs on the Amazon Elastic Cloud



*...builds upon and enhances ArcGIS Server 9.3.1*