What's New in ArcGIS Server 9.3.1

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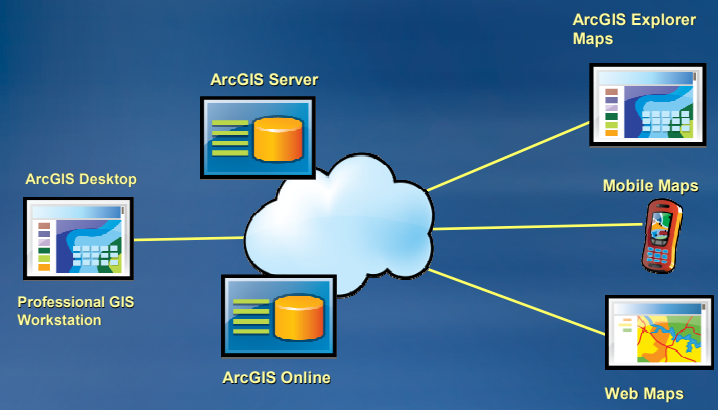
Agenda

- Overview
- ArcGIS Server 9.3.1: Improvements
  - Optimized Map Services
  - Major enhancements to .NET Web ADF
  - Extended Java Developer Support
  - ArcGIS API for Microsoft Silverlight/WPF
  - SharePoint integration

ArcGIS 9.3.1

Deploying Web GIS

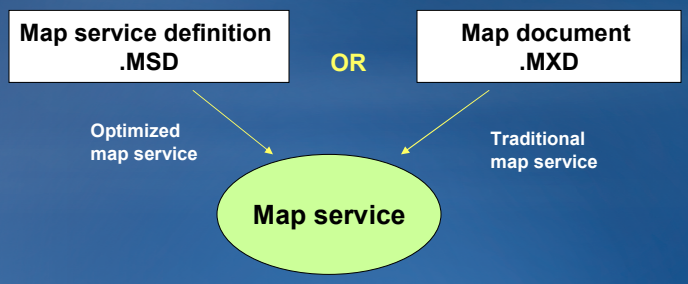


Author → Publish → Use

9.3.1 Provides on a framework and methodology for publishing great web GIS

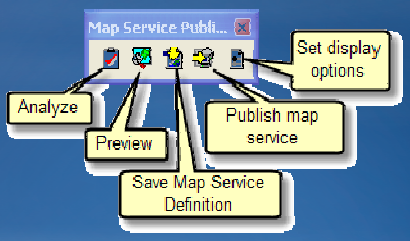
Map services at 9.3.1

- 9.3.1 optimized map services use new, faster drawing engine
- New file type: Map service definition (MSD)



Optimized map service

- Faster dynamic drawing than ArcIMS
- Supports a subset of the most common layer types
- Prepare and publish with new Map Services Publishing Toolbar in ArcMap



Demo

- Publishing a map service with ArcGIS Server 9.3.1
  - Open a map document
  - Analyze
  - Fix errors
  - Preview
  - Fix warnings
  - Preview again
  - Publish
  - Preview map service in a client application (“View in JavaScript”)
  - Browse to .MSD in file system

  - Map: Gulfport, Mississippi

Cartography choices with optimized MSD-based map services

- Antialiasing for features, text, or both
  - Improves visual quality
  - Slows performance
- Best quality antialiasing with PNG 32
  - Dynamic and cached
- Choose color transparency or feature transparency
- No need to use ESRI_Optimized style

What's available through optimized MSD-based services?

- All geodatabase, shapefile, SDC, and raster data types
- Feature, raster, and annotation layers
- Most 2D symbols, bookmarks, callouts, legends, etc.

Since we have “optimized map services” at 9.3.1, do I still need to cache?

- Doesn’t replace caching
  - Makes caching go faster
  - Improves performance of dynamic services that can’t be cached
- Dynamic maps will never be as scalable as cached maps
  - The internet is optimized for cached content

When should I use traditional MXD-based services?

- Fine-grained ArcObjects access (eg, Editor Task)
  - SOAP and REST APIs only for optimized map service
- Cartographic representations
- Unsupported layer type (TIN, CAD, Network Analyst etc.)
  - When possible, break out unsupported layers into own services

If you use a traditional MXD-based service…

- Continue to use ESRI_Optimized style
- Use the Map Services Publishing Toolbar to catch performance warnings

Improvements in the Web ADF for Microsoft .NET

- MapTips templates
- Microsoft Bing Maps (formerly Virtual Earth) support
- ArcGIS Image service support
- PrintTask templates
- UserControl task support
- Custom server object extension (SOE) and property page integration with Manager
- Standard design-time messaging for controls in Visual Studio
- Enhanced ScaleBar control – rendered on client by default
- Licensing

Demo

- Bing (Virtual Earth) layers
- MapTips templates
- UserControlTask, PrintTask template

Extended Java Developer Support

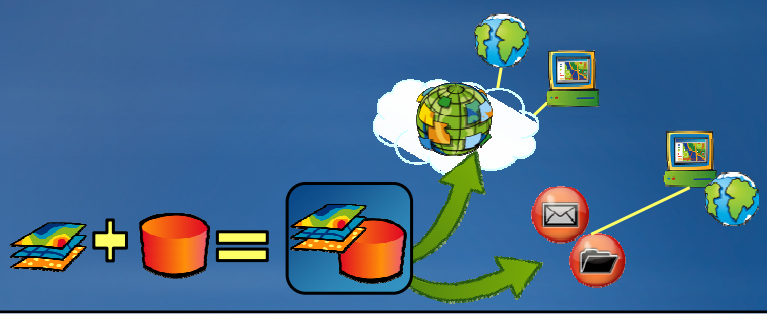
- Native Java development
  - To change or enhance the behavior of ArcObjects
  - To create their own ArcObjects
  - To extend ArcGIS Server
- Examples:
  - ArcGIS Server Object Extensions
  - Utility objects
  - Geoprocessing Tools
  - Custom layers and renderers
  - Class extensions
  - Plug-in new data sources

Extended Java Developer Support (cont.)

- New web services toolkit
  - More efficient use of memory, better performance
- ADF Editing task enhanced to support:
  - Multiple configurations
  - Navigation while editing features
- WMS layers
  - Scale dependency, define layer subsets
- REST API
  - Support for Network Analyst solve route operation
  - Return server version

ArcGIS 9.3.1: Data Sharing

- Package Layers easily using: Layer Packages
  - Easily share their data between ArcGIS Desktop and / or Explorer
  - Package up layer and associated data to be easily shared
  - Package is easily opened and used by Desktop and Explorer
- Share by file share, email or via ArcGIS Online
- ArcGIS Online extended to allow upload and download of shared layers/data, and sharing with groups and communities online.



ArcGIS API for Microsoft Silverlight/WPF

- Designed for the Silverlight and WPF Platform
- Integrate ArcGIS Server, MapIt, and Bing Maps Services and capabilities
- Create rich, interactive and expressive web applications
  - Use Maps, Locators, and Geoprocessing models
  - Use with Silverlight components
- WPF supports native 64 bit (x64) platforms
  - Pure managed code

Demo

- Silverlight/WPF resource center
- Build an app!

Other Aspects of ArcGIS 9.3.1

- Continued focus on Quality improvements abased on:
  - User reports
  - Support
  - Crash Dumps
- ArcGIS Online
  - More data and online services
  - New Data Sharing Service
- ArcGIS Explorer 900
  - Uses Layer Packages
  - 2D/3D Display
  - New streamlined UI for ease of use

Questions?