
What's New in ArcGIS® 9.3 Service Packs

October 17, 2008

This document describes the main enhancements to ArcGIS® 9.3 added by the service packs. It does not cover the bug fixes and quality improvements which are the main purpose of our service packs. A full list of the quality issues that have been addressed is available on the ArcGIS® 9.3 SP1 download Web page.

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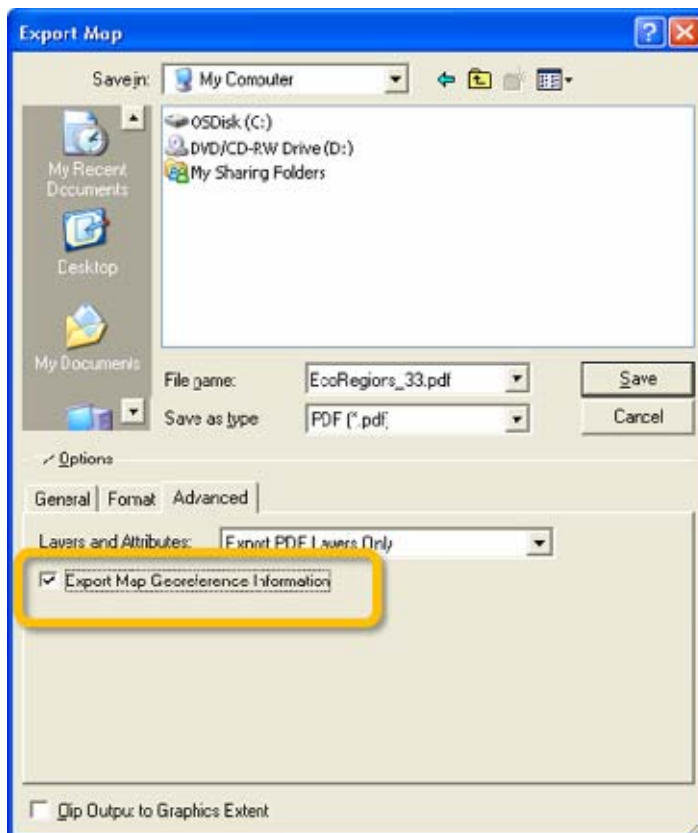
General

- **Adds ability to export to Adobe Acrobat 9 PDF from ArcGIS Desktop, Engine, and Server**

Adobe® Acrobat® and Adobe Reader® version 9 support a new version of PDF that allows for encoding of map coordinate system and georeference information inside the PDF file. Service Pack 1 for ArcGIS® 9.3 enables ArcGIS Desktop, Engine, and Server applications to export georeferenced PDF files. When a georeferenced PDF is opened in a compatible viewer, such as Adobe Reader 9, the user can access geospatial functions such as coordinate readout and find XY.

After installing the service pack, the new PDF export functionality can be controlled in ArcGIS Desktop via a new checkbox in the Export Map dialog box's PDF format Advanced options panel. Installing the service pack on ArcGIS Server or ArcGIS Engine will enable map georeference output by default. Export of georeference info during Server or Engine export can be suppressed via ArcObjects™ by setting the IExportPdf2:ExportMeasureInfo property to false.

Export Map dialog and the new 'Export Map Georeference Information' checkbox:



Note: This functionality was first released in a patch for ArcGIS 9.3 entitled 'ArcGIS (Desktop, Engine, Server) 9.3 Map Export Patch to support Adobe Acrobat 9 PDF'.

ArcGIS Desktop

- **ArcMap Tip**

One of the fixes in 9.3 SP1 corrects an issue with using cached ArcGIS Server map services (such as any of the ArcGIS Online services) in ArcMap™. When you use these services they get cached locally on your machine in your system's TEMP folder as you use them so that ArcMap doesn't have to request map tiles from the server that you've already viewed. The issue in 9.3 causes multiple local caches to sometimes be saved for the same map service. 9.3 SP1 fixes this so that only one local cache is ever saved for a particular map service you access. If you have used cached ArcGIS Server map services, such as ArcGIS Online services, in your map documents, you may be able to free up a lot of disk space in your TEMP folder by clearing all the local caches. To do this, start ArcCatalog™ and select the Tools > Options > GIS Servers tab. Press the 'Clear Local Cache Now' button. You can do this before or after installing 9.3 SP1. This can take a few minutes to complete if the current size of your local cache is large. You don't need to do this since your map documents will continue to function correctly whether you do this or not. In addition to reclaiming disk space, clearing the local cache for all the cached map services you have used has the advantage of ensuring that the next time you open a map that uses one of these services, you'll be seeing the latest content for those services. There have been a number of improvements to several of the ArcGIS Online services since we released 9.3.

- **Export to CAD now at the ArcView License level**

In 9.3 Service Pack 1, the geoprocessing tool Export to CAD has been moved to the ArcView® license level. The other CAD helper geoprocessing tools in the To CAD toolbox (Add CAD Fields, Set CAD Alias, and Create CAD XData) have also been moved to ArcView license levels, since they work with the Export to CAD tool.

ArcGIS Server

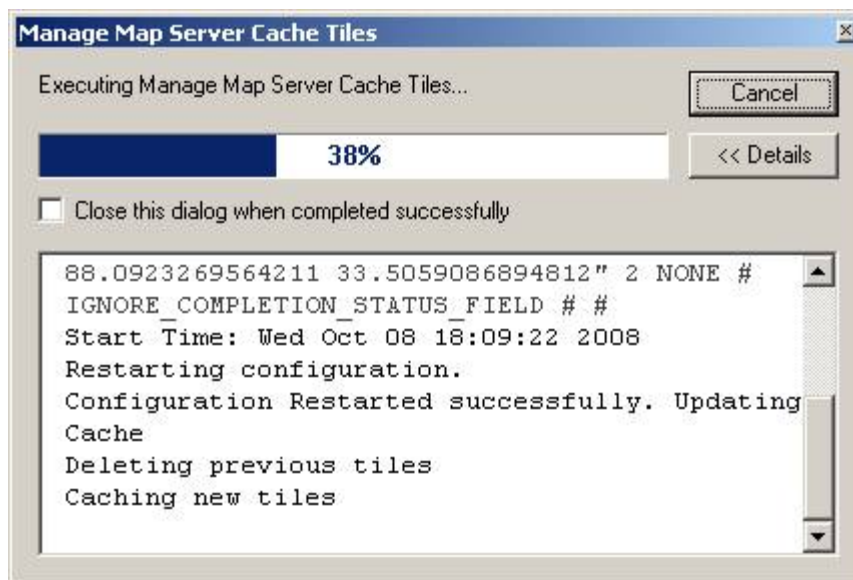
GIS Services

- **WFS 1.0 Support**

In addition to the support for WFS 1.1 offered with ArcGIS Server 9.3, the ArcGIS Server 9.3 Service Pack 1 supports the WFS 1.0 to assist with interoperability. The WFS 1.0 support is read-only and does not support transactions.

- **Progress indicator for map and globe caching**

Map and Globe caching tools have a progress bar to help estimate the approximate time it takes to complete a caching job.



ArcGIS Server Manager for the Microsoft .Net Framework

- **Enable Seamless Panning for Layers in Web Mapping Applications**

In ArcGIS Server Manager, for each layer added to your Web application, you can set whether seamless panning will be enabled. Seamless panning is the mode that allows you to see the map image as you are panning. When seamless panning is disabled, you can expect a faster map redraw. You may want to enable seamless panning for a cached map layer but leave it disabled for layers that are not cached.

You can find the Seamless Panning checkbox in the Layer Properties dialog box. Open the Layer Properties dialog box by clicking the map service layer in the Add Layers tab of ArcGIS Server Manager.

Layer Properties:

Name:	<input type="text" value="WashingtonDC"/>
Visible:	<input checked="" type="checkbox"/>
Server:	http://localhost:8080/arcgis/services - ArcGIS Server
Service:	WashingtonDC
Transparency:	<input type="text" value="0"/> (0% - 100%)
Request Image As:	<input type="text" value="PNG8"/> ▼
Seamless Panning:	<input type="checkbox"/>
Data Frame:	<input type="text" value="Layers"/> ▼

For those working in Visual Studio®, the seamless panning option is set from the MapResourceItem Collection Editor dialog box, in the Display Setting Editor, by setting the Dynamic Tiling property.

- **Set Static or Interactive Mode for Overview Map in Web Applications**

In ArcGIS Server Manager you can set either a static or interactive mode for the overview map in your Web application. By default, the mode is static, as this results in the best performance.

If your application requires that the overview map be closely in sync with the map, you can choose the interactive mode. With this setting, the overview map is set to update when the Web application user zooms in or re-centers the map; the extent on the overview map updates automatically.

Properties:

The Overview Map highlights the area shown on the main map. Select the layer to display as the Overview Map.

Layer:

Use a layer from the map
Layer:

Use another layer
Layer:
Request Image As:

Mode:

Static - Overview map is static for increased performance.

Interactive - Area of interest box can be dragged and resized. Overview map display changes with main map control.

For those working in Visual Studio, you can change this setting using the StaticMode property on the Overview Map control.

ArcGIS Server for the Microsoft .Net Framework Web Mapping Application

▪ Table of Contents Performance Improvements

Significant improvements were made to the table of contents control to improve memory usage and overall performance.

Java Web ADF

9.3 Service Pack 1 for the WebADF for the Java™ platform contains numerous quality and performance improvements.

The Java Server Faces (JSF) libraries have been upgraded from v1.1_01 to v1.1_02. This JSF version improves the ability of Web applications to handle concurrent Asynchronous JavaScript™ And XML (AJAX) requests.

The WebContext and GroupThreadPool classes now use the Java SE 5 Concurrent API and maintain a single thread pool for the entire Web application. This helps reduce the memory footprint of Web applications. Applications are also more scalable because the thread pool grows and shrinks automatically as required when load increases and decreases.

Web Geometry objects fully support two-step geotransformations and the overall Geometry package has been optimized for better performance while reprojecting geometries.

The WebMap allows zooming beyond the smallest and largest scales of cached services in the application if there is also at least one dynamic service. Users can take full advantage of dynamic services because they are no longer restricted to only the scales of cached base maps in their applications. This functionality can be enabled by setting the 'zoomBeyondCache' property of the WebMap object in faces-config.xml.

```
<managed-bean>
  <managed-bean-name>webappMap</managed-bean-name>
  <managed-bean-class>
    com.esri.adf.web.data.WebMap
  </managed-bean-class>
  <managed-bean-scope>none</managed-bean-scope>
  <managed-property>
    <property-name>zoomBeyondCache</property-name>
    <value>true</value>
  </managed-property>
```

The Scale Bar has been improved to be visible over black backgrounds.



Support has been extended for FireFox™ 3 browsers and 64-bit Java Virtual Machines (JVM); please see the System Requirements for further details.

ArcGIS Mobile

- **ArcGIS Mobile Application now supports Windows Mobile Smartphone's**

At the 9.3 release, the ArcGIS Mobile application supported Windows Mobile 5.0 Pocket PC/Windows Mobile 6.0 and 6.1 Windows Mobile Professional (touch screen) devices. At the 9.3 SP1 release, the application is now fully functional on the Windows Mobile 5.0 Smartphone/Windows Mobile 6.0 and 6.1 Windows Mobile Standard (non-touch screen) devices. All menu items have full keyboard access, list items are presented as full screen menus, and map navigation is optimized for rocker and keypad use.

- **Blob capture on Windows Mobile devices**

At the 9.3 SP1 release we have fixed a problem you may encounter when trying to capture and store pictures, voice or other information directly into a blob field.

- **Full support for PostGRES SQL**

At the 9.3 final release, ArcGIS Mobile did not support the editing of GIS data that was stored inside of a PostGRES SQL database. This is now fully supported with service pack 1.

ArcGIS Extensions

- **Spatial Analyst extension: Now supports ObjectID field as a valid type for feature class inputs**

This enhancement applies to tools that take a feature class as input for which a field can be specified. These tools include Feature to Raster conversion, Distance tools (Cost Allocation, Cost Path, Euclidean Allocation, and Path Distance Allocation), Hydrology tools with a pour point field (Snap Pour Point and Watershed), and Zonal tools (Tabulate Area, Zonal Geometry, and Zonal Statistics).

During analysis these tools internally convert the input feature class to a raster and use the field to define the values for the raster. Previously, only fields of type integer or string were accepted. We now support ObjectID as a valid field type for the input field parameter.

When specifying an input feature class, the field parameter will default to the first valid field of the input feature class (i.e., 'ID' or user-specified field). If no valid fields exist, it will default to the ObjectID field.
