

What's new in ArcGIS 9.3.1 for Java Developers

ArcGIS 9.3.1 is a focused release that includes some innovative new features and enhancements for Java developers. The following is a brief overview.

Note: You can upgrade to ArcGIS 9.3.1 without uninstalling ArcGIS 9.3.

Extending ArcGIS with Java

Starting with ArcGIS 9.3.1, you can develop ArcGIS extensions in a native Java environment using a simple develop and deploy workflow. As you are probably aware the ArcGIS family of products is built using extensible ArcObjects components. It is possible to extend ArcGIS by creating extensions which plug seamlessly into the ArcGIS framework alongside the existing ArcObjects components. You can develop ArcGIS Java extensions to enhance ArcGIS functionality, integrate external data sources, and leverage external Java libraries. Better yet, the extensions can be consumed in ArcGIS Desktop, ArcGIS Engine, and ArcGIS Server applications since they are all built on the common ArcObjects components.

The supported ArcGIS Java Extensions at 9.3.1 are:

- Custom Geoprocessing Tools for spatial analysis and modeling.
- Feature Renderers for custom visualization of data.
- Class extensions for customizing data behavior in a geodatabase.
- Plug-in Data sources to integrate external data formats.
- Utility Objects to improve performance of ArcGIS Server applications.
- Server Object Extensions to optimize ArcGIS Server application.

Performance Enhancements in the Web ADF

A major goal of the 9.3.1 release was to improve the performance of the Java Web ADF by decreasing transaction times, optimizing the way the ADF communicates from browser to server, and decreasing the memory used by the ADF in Java application servers. Developers won't need to do anything special to take advantage of these performance improvements.

Developers who have developed at an earlier version of the Web ADF and are moving their applications to 9.3.1 may need to go through a short migration process as described in this topic [Migration to 9.3.1](#). We have replaced the technology that makes SOAP calls to ArcGIS Server with a faster performing technology. Most of our beta testers found that their applications just worked without any changes. A small percentage of them reported that they had to fix a few compilation errors that took less

than an hour's worth of development time. No beta testers reported any problems at run-time due to this change.

Java Web ADF Enhancements

The Java Web ADF has been improved in the following ways:

- The Editing Task now supports “interrupted editing”. It is possible to be editing geometry and interrupt the editing process to identify a feature, run a task, or navigate on the map.
- A single editing task now supports the editing of multiple configurations and versions. Each editing configuration uniquely defines the layers and versions to edit from a map service’s workspace, and the settings to apply during editing. You can customize your web application to allow end users to select a configuration while editing. To learn more about editing in the Web ADF, view the presentation [Customizing Editing Workflows with the Java Web ADF](#).
- Secure WMS services can now be consumed in the Web ADF.