



General

Why is this release called ArcGIS 10 instead of 9.4?

ESRI have been working on this release for more than three years, and it's a very large release. Feedback from beta testers indicated that this is much bigger than a dot release and that it should be called ArcGIS 10. For ArcGIS 10, ESRI have integrated not only the work that has been performed in the base software but also initiatives in cloud computing and the Web.

Installation

Can ArcGIS 10 be installed on the same machine as ArcGIS 9.3.1?

No. Virtual Machines are the solutions for running the two different installs on the same machine.

Licensing

Single Use Licensing

Will I require new Single Use authorization numbers for ArcGIS 10 Desktop Products?

Yes, you will receive a new ArcGIS v10 authorization number to use during the authorization process of the software. All ArcGIS Desktop 10 users will need to register their software and receive a new license file when upgrading to ArcGIS 10.

Are Single Use licenses tied to specific machines?

The new Single Use license file will contain identifiers that will tie it to the computer it is authorized for. The authorization number can be authorized on only two machines at a time. This should only be for the same user (e.g. the user's desktop and laptop computer). Users will not be able to copy license files from one machine to another.

Will the license stop working if I change the configuration of my machine?

Since the license technology uses multiple machine identifiers, if you change the machine configuration by upgrading one or two components of the machine, the license will still be valid. However, a "repair" request will be triggered if too many identifiers are changed. Repairs, though uncommon, are available up to two times per year.

How do I transfer Single Use licenses?

Transferring a Single Use license to another machine can be accomplished by "de-authorizing" the license via the SAW (Software Authorization Wizard) and authorizing the license on another machine. When you de-authorize your license, you will de-authorize the core software license and all extensions

simultaneously. You can de-authorize your license up to four times per year in order to transfer a license to another machine.

Concurrent Use Licensing

Will I require a new Keycode file to set up my version 10 license server?

The ArcGIS 10 license manager no longer uses Keycode files based on a hardware key or MAC address, therefore your existing Keycode file will not work with version 10. Concurrent licenses will utilise various machine identifiers to establish Trusted Storage for the host server on which the License Manager is installed. This technology means the Sentinel key (dongle) is now obsolete (ESRI is not requesting the return of existing hardware keys). You will receive ArcGIS 10 authorization numbers to use during the authorization of the license manager.

How do I install and authorize my license server using my authorization numbers?

All older versions of the license manager software will need to be uninstalled first. Then the new license manager can be installed from the version 10 media.

Can I install Concurrent Use license managers on more than one machine?

Yes, you can divide up your licenses so that they can be installed on more than one machine. For example, if you have ten ArcView Concurrent Licenses, it is possible to run two license managers hosting five licenses each. You can also transfer the desired quantity of licenses from one server to another directly from within your network.

If I need to use ArcGIS Desktop while disconnected from the network, will I have the ability to “borrow” concurrent licenses?

Yes, in ArcGIS Desktop 10, you will now have the option to borrow a license from the license manager on the server for a specified period of time and return it when you can reconnect to the network. There is no set limit to the number of times a license can be borrowed. It is also possible to borrow extensions, provided they are part of your license pool.

General Licensing

Do these licensing changes apply to ArcGIS Server 10? Will there be new registration numbers?

There is no change to the current ArcGIS Server license management technology at version 10. ESRI will be incorporating this new license management technology in ArcGIS Server in a future release. However there will be a new authorization numbers for ArcGIS Server 10.

Am I still restricted to single use licensing when using ArcGIS Engine and Concurrent for ArcInfo?

No, concurrent licensing for ArcGIS Engine has been introduced at this release, as well as a single use ArcInfo license.

ArcGIS Desktop

What are the new features in ArcGIS Desktop?

ArcGIS 10 is a major release including a large amount of new functionality. Below is a summary of the key features:

User Interface – A New User Interface brings a new user experience to improve productivity. Many windows are now dockable and can auto-hide, the menus are better structured, icons and revised and a new ArcCatalog window is embedded in ArcMap.

Editing – Easy data entry for 2D and now 3D editing (via 3D Analyst in ArcGlobe and ArcScene) . The new ArcMap editing workflow allows symbol based editing by creating feature templates. These allow pre-attributed features to be added to the map. No more adding a feature that appears as a generic symbol and color and then having to set the attribute field value before the symbology changes. Simply pick the type of feature you need and it will be assigned the correct attribute and symbol. Many other editing improvements exist including changes around snapping and the way in which the edit menus are access.

Attribute Tables – Now as a dockable window, has a new toolbar to access functions giving easier access to tools. Multiple tables can be opened and appear in a tabbed interface.

Basemaps – This improves performance of background mapping by defining a read-only basemap that uses a new rendering engine to enable continuous fast redraw.

Search – There's a new search window that allows keyword searching of data and tools. Also there's a symbol search option in the symbology options to allow quick retrieval of symbols for rendering.

GeoProcessing – Now runs as a background process so ArcMap isn't locked. There's also a new results window. You can also drag and drop GP tools onto the User Interface for quick access to your commonly used tools.

ArcPy and Python – At ArcGIS 10 ArcGIS has fully embraced Python as its language for automation. Desktop includes a new python window that can be used for simple and quick execution of GP tools, for experimenting and learning Python and accessing other Python libraries. The Python window is interactive and allows things like layers to be dragged from the table of content into the window to act as inputs for tools. ArcPy is a new site package for analysis, data management and map automation and is the successor to the arcgis scripting module. Data Driven Pages is a new feature for creating a series of layout images from a single map document and can be automated using python. This replaces the much used DS Map Book sample.

Table of Contents – Now supports multiple views and has a new list by visibility option. This view shows only symbology for the features that are in your current visible map.

Temporal Mapping – The map is now time aware. This makes is easier to make temporal maps. A time properties tab allows the configuration of time attributes. These are then be used to facilitate time queries and to animate the map by time using a new Time Slider function. This also tied into a Time Aware graphing function.

Imagery – Big changes here. Some of the tools from the Image Server Extension for ArcGIS Server have been moved into core desktop functionality. This allows mosaics of raster data to easily be created and managed using the actual files rather than by loading them into geodatabase or by creating a raster catalog. A suite if Image Processing tools are now available as well to cover basic image processing tasks to reduce the need to use 3rd party image processing software. The image capabilities are also integrated into the Geoprocessing tools to allow automation of image data management and manipulation.

Query Layers – It's now possible to define query layers that issue SQL statements to a relational database (i.e. bypassing ArcSDE) to access spatial and tabular data. These layers are read-only and do not allow update of data.

Reporting – There is a new reporting capability that allows predefined templates to be implemented and reused.

Map and Layer Packages – Convenient way to package up layers or map documents (MXD) plus data to share with other. It creates zipped files with custom file extensions. Optionally these packages can be uploaded and shared via ArcGIS Online.

ArcGIS Server

Are there any new services available at ArcGIS Server 10?

A **Feature Service** has been added. This exposes access to vector feature geometries and attributes. A great benefit of feature services is the ability to expose feature editing through JavaScript, Flex, and Silverlight applications. Feature services are published from map documents, and the source datasets are required to reside in a single ArcSDE geodatabase.

A **Search Service** Search services allow you to index GIS content and folders throughout your enterprise and make them easily findable by users. Your intranet clients can then use the updated search interface in ArcGIS Desktop to connect to your search service and find useful content. They can then drag the results into their maps. Search services are most useful for scenarios where browsing to the data would be cumbersome because of the sheer volume of the data or the distribution of the data through many folders and geodatabases. They are designed for intranet use only. For outward publishing the GeoPortal Toolkit Extension for ArcGIS Server is recommended by ESRI Inc.

What are the Web APIs for ArcGIS Server?

The term Web APIs refer to the JavaScript, Silverlight and Flex APIs for ArcGIS Server.

Web Editing was possible in previous releases, are there any changes around Web Editing?

In addition to web editing available through the Web ADF at previous releases there is now a new type of editing. The new Feature Service mentioned above now allows editing to be performed using the Web APIs. These APIs use Feature Layers to access feature services through REST endpoints providing stateless, scalable editing to be performed. The edit functionality is more than just digitizing features, it allows existing features to be moved, deleted, reshaped, split, merged and more. Attributes and tabular data can also be edited. A workgroup or enterprise geodatabase is required by the feature service to underpin this, and both versioned and non-versioned feature classes are supported.

Are there any new out of the box web applications and has the existing Web ADF template application changed significantly?

The existing Web Mapping Application for the Web ADF has only had minor changes made to it. See below for details. However there is now an out of the box Flex Viewer as well. Furthermore, the

Silverlight API now provided templates from which you can develop applications (not quite out of the box, but certainly a help).

What is the current status of the Web ADF?

It is still supported and maintained for existing customers, but should not really be recommended for new implementations. There are some changes to the Web ADF at ArcGIS 10 in that the install has changed and is now a separate option from the main ArcGIS Server installation to facilitate installing the Web ADF separately on a server. Other changes include support for *relates* and stand-alone tables.

Have Map Caches been modified or improved?

There are a number of new key features around map caching. These are:

Compact map cache – Groups tile into *bundle* files resulting in a smaller number of files and uses less space on the disk. This doesn't really speed up the generation of the cache, but significantly improves the time it takes to copy them from one machine to another. Original style caches (exploded) can still be used as well. Existing caches can be converted to compact caches.

Mixed Mode – Allows different images types to be displayed in the same cache. This is helpful when displaying a raster cache on top of another raster cache. You can use JPEG for the tiles in the middle of the cache to keep your relative file size low while using PNG32 on the periphery of the cache where part of the tile needs to be transparent.

Caches treated as a raster dataset – Caches can be added into ArcMap or ArcGlobe as a raster dataset using the Add Data button. Removing the need to add the ArcGIS Server Service.

Collaborative tools – GP tools for importing and exporting areas of a cache.

Default tile size change – Default tile size is now 256 to match that of Bing and Google.

Are there more datatypes supported for Optimized Map Services and what are they?

The key new functions in Optimised Map Services include support for WFS, enhanced WMS support, publication and querying of standalone tables, query via joins and relationships, plus support for Maplex and Cartographic Representations. More complex data types such as dimensions and event layers are still not supported.

Temporal Mapping is now possible in desktop, can this be leveraged in ArcGIS Server?

The time-aware information is preserved and is accessible through the map service. You can use this information to change the display of your maps or perform temporal queries. The Web APIs include a Time Slider tool to help animate temporal maps.

Can the new Query Layers be used by ArcGIS Server?

Yes, be mindful of performance though.

Are there any changes around Imagery at ArcGIS Server 10?

The capabilities of the Image Extension for ArcGIS Server remain almost the same as in previous versions. However, there are architectural changes. Previously it was a standalone product installed separately and then registered with ArcGIS Server. It has now been integrated into ArcGIS Server like the other extensions. The standalone install is still available at ArcGIS 10 to allow customers that have Image Server but not ArcGIS Server to upgrade.

What new Geoprocessing tools can be leveraged by ArcGIS Server?

There are probably many new GP tools that can be utilized by ArcGIS Server, but an important set to note are new tools that facilitate a 'Clip, Zip and Ship' model for data supply over the web.

Mobile GIS

Has these ArcGIS Mobile Application been updated?

Yes, the enhancements include:

- Task driven for touch screen
- Improved Feature Attribution
- Picture view and capture
- Improved search
- Synchronisation updates
- Support for cartographic basemaps
- Can now deploy on windows
- Can dim applications
- GPS Streaming rather than averaging
- Repeat attributes
- Query builder rather than SQL input
- Field crew management capabilities
- Can integrate with ArcLogistics Navigator

Is there now support for the iPhone?

Yes. There will be an application that will be downloadable from the Apple App Store. It will allow you to View Corporate and Online Maps, pick maps from a map gallery, query and analyse data, collect and report information. There is also an SDK for developing custom iPhone applications. This will require a MAC computer for development and use of Objective

What has happened to ArcGIS Online?

ArcGIS Online is now ArcGIS.com. Although the name has changed you can still do everything you did before, and more.

Developer Changes

Is VB6 still supported at ArcGIS 10 and what is the story around VBA?

VB6 is no longer supported. Support for VB6 was dropped by Microsoft a long time ago. Extensions written in VB6 will need to be rewritten for ArcGIS 10. VBA is still supported at ArcGIS 10, but this will be the last release. Developers are encouraged to move to Python.

What are Add-Ins and how are they used?

Add-Ins are a new way to customise ArcGIS Desktop (not ArcGIS Engine). They are an easily deployable mechanism that doesn't require all the COM registration as with tool and commands etc. The traditional methods will still work though. Add-Ins do not cover everything that can be achieved using the traditional methods but a great deal of functionality can be accessed using them. Refer to the help or R&D pages for more details on what can and can't be done.

What is the file geodatabase API?

It is an API to allow developers to access the file geodatabase (both read and write) without using ArcObjects. This API uses c++. It is not designed as an open format to replace the shapefile.

What is ArcPy and how is Python used?

At ArcGIS 10 ArcGIS has fully embraced Python as its language for automation. Desktop includes a new python window that can be used for simple and quick execution of GP tools, for experimenting and learning Python and accessing other Python libraries. The Python window is interactive and allows things like layers to be dragged from the table of content into the window to act as inputs for tools. ArcPy is a new site package for analysis, data management and map automation and is the successor to the arcgisscripting module. Data Driven Pages is a new feature for creating a series of layout images from a single map document and can be automated using python. This replaces the much used DS Map Book sample. The ArcPy and Python workflows can be published as GeoProcessing Services using ArcGIS Server.

Miscellaneous

How do the new Search capabilities differ between ArcGIS Desktop, ArcGIS Server, and ArcGIS Online?

Search with ArcGIS Desktop, ArcGIS Server, and ArcGIS Online is based on a small collection of metadata stored with the GIS resources (title, user tags, etc). Keep in mind that this new search capability is not designed to handle indexing and searching of formal metadata documents and that spatial search against GIS resources is not supported at this time.

ArcGIS Desktop search - Desktop search allows every ArcGIS Desktop user to very quickly search across accessible network folders (shared folders) and databases.

ArcGIS Server search - ArcGIS Server introduces a new search service that allows you to index and search GIS resources within your Enterprise in a centralized manner. The search service is designed to be used by ArcGIS Desktop users within an organization's intranet.

ArcGIS Online search - ArcGIS Online provides a hosted catalog of information in which users can upload their own resources and create their own groups. The ArcGIS Online search is intended for organizations who want to share their data with the general public or within the organization via a group.

In addition, the GeoPortal Extension for ArcGIS Server allows users to quickly search GIS resources within the organization, via ArcGIS Online, or across other metadata catalogs.

Solution and Extension Name Changes

What happens to the ArcGIS Survey Analyst Extension at ArcGIS 10?

ArcGIS Survey Analyst is an extension product for ArcGIS Desktop 9.3.1 and earlier (it will be deprecated at ArcGIS 9.3.1 and will not ship with ArcGIS 10). ArcGIS Survey Analyst has had two distinct parts: the Survey Editor and the Cadastral Editor. The functional capabilities known as the Survey Editor will no longer be supported in ArcGIS 10. Users who require these tools should continue using

ArcGIS 9.3.1. The functional capabilities known as the Cadastral Editor and its Cadastral Fabric dataset are included in ArcGIS 10 (ArcEditor and ArcInfo) without a requirement to install or license any extension. The parcel editing functions have been greatly improved and are accessed through a new Parcel Editor toolbar in ArcMap. The Cadastral Fabric dataset has been enhanced and renamed the Parcel Fabric. ArcGIS 10 includes new geoprocessing tools to assist with migrating parcel data modeled as coverages or simple feature classes to a Parcel Fabric.

Note: The Parcel Editor toolbar will not be a component of ArcView. ArcView customers who have previously licensed ArcGIS Survey Analyst will need to migrate to ArcEditor or ArcInfo in order to use the Parcel Editor technology at ArcGIS 10.