

10 WAYS ArcGIS 10 Improves Productivity

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This release is all about helping you get more done and get it done more quickly and easily.

1 Find maps, data, tools, and symbols quickly.

The new Search window lets you manage a local index with links to geographic data, map documents, and geoprocessing tools. System geoprocessing tools are always indexed. You can add searchable keywords to metadata, maps, and user geoprocessing tools for instant access without browsing. Find symbol styles quickly with the Symbol Selector dialog box.

2 Automate map production workflows with Python scripting.

Python scripting at ArcGIS 10 goes beyond extending ArcGIS with generic modules and the geoprocessing framework. The ArcPy site package includes a mapping module for interacting with map documents. Data sources, map series, printing, and exporting can be automated using stand-alone scripts or geoprocessing tools. The ArcGIS Resource Center contains great examples of scripting with `arcpy.mapping`.

3 Manage map series in a single MXD with Data Driven Pages.

Create a map series from an index feature class. Multiple pages can be generated from a single map layout definition and an index layer using Data Driven Pages. Using a menu, users can interactively navigate the map series or, using the `arcpy.mapping` Python module, script bulk map production workflows.

4 Use more than 750 geoprocessing tools.

Geoprocessing science continues to advance in ArcGIS 10 with many new tools and workflow capabilities. In addition to accessing tools in the ArcToolbox window, you can access tools from the Catalog tree or the Search window. Tools can also be rerun from the Results window history tree. Geoprocessing tools can be dragged into the Python window for scripting use or run in the background, which keeps ArcGIS applications responsive during geoprocessing.

5 Map and analyze time-aware feature classes.

ArcGIS 10 supports time awareness in layers. Maps with time-aware layers can be displayed at a moment in time or visualized over time using the time slider.

6 Integrate workflows with ArcGIS Online Services.

Create and share layer and map packages interactively and through geoprocessing that incorporates the data and symbology of the source map document. These packages can be shared as file-based resources or from ArcGIS Online accounts, making data and published maps available to all users.

7 Use and manage imagery efficiently.

Process raster data on the fly using specified renderers and other processes that meet display and analysis requirements without writing new files. The Image Analysis window manages raster layers individually or in sets and allows you to work with image properties, radiometric bands, and pixel classifications without affecting the table of contents properties.

8 Connect to spatial databases with native queries.

Query and display native spatial data types for Microsoft SQL Server 2008, Oracle, DB2, Informix, and PostgreSQL databases (whether or not a shape column is present) using stan-

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standard database client connectivity and SQL statements. These query layers in ArcMap support read-only display and geoprocessing with dynamic access to the host database yet with intelligent extent filtering and support for Open Geospatial Consortium (OGC) standard spatial operators in the SQL layer definition.

9 Borrow concurrent ArcGIS Desktop licenses for fieldwork.

You can now borrow or check out a concurrent

use desktop license for use when you are disconnected from the network. Borrowed licenses expire after a predefined period of time, which can be set by the license administrator.

10 Edit geodatabase features in intuitive, map-driven feature templates.

Feature templates define the geometry type and construction tool, default attribution, and symbology for each feature type and are organized in the map document. If feature templates

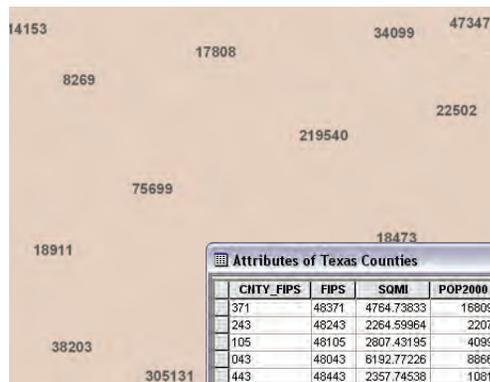
haven't been created when you begin editing, ArcGIS will create them automatically from layer definitions. These templates can be subsequently organized as required with names, descriptions, and tags. Because templates persist with a map document, they facilitate purpose-built editing of maps for efficient data automation.

Make Numeric Labels More Readable

Using table number field formatting is a quick solution

When labeling map features using a numeric field, you may need to add some basic formatting to those numbers. Often, the formatting required can be as simple as inserting a thousands separator character to make values more easily read. Although you could use a labeling expression to accomplish this effect, if you have write permission for the table used for labeling, formatting the labeling field can achieve the same effect more quickly and with less effort.

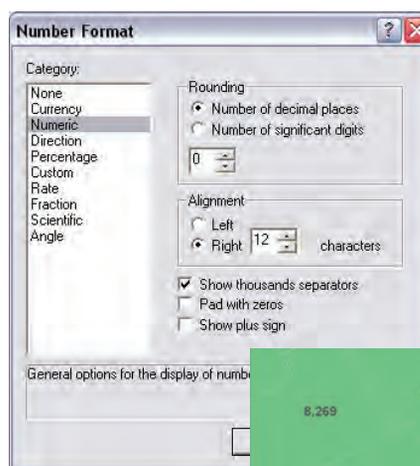
Changing the way numbers are displayed in tables and labels does not change the underlying data, because this formatting is only saved in the map layer. In addition to inserting thousands separators, this method can be used to adjust alignment, pad a number with zeroes, include a plus sign to indicate a positive number, and specify the number of decimal places or significant digits that will be displayed. Follow this



◀ These labels, showing the population of various counties in Texas, would be easier to read with some formatting.

▶ To quickly remedy this problem, open the table and right-click the heading for the field used for labeling.

CITY_FIPS	FIPS	SQMI	POP2000	POP2003	POP00_SQMI
371	48371	4764.73833	16809	16474	3.5
243	48243	2264.59964	2207	2276	1
105	48105	2807.43195	4099	3917	1.5
043	48043	8192.77226	8866	8912	1.4
443	48443	2357.74538	1081	1013	0.5
377	48377	3856.24436	7304	7615	1.9
109	48109	3812.68754	2975	2838	0.8
229	48229	4571.92792	3344	3453	0.7
141	48141	1014.66408	679622	706155	689.8
079	48079	775.30692	3730	3660	4.8
501	48501	799.76433	7322	7070	9.2
165	48165	1502.83973	14467	14338	9.6
003	48003	1500.99525	13004	12767	8.7
495	48495	841.23432	7173	6781	8.5
389	48389	2641.95333	13137	12403	5
301	48301	676.85033	67	62	0.1
475	48475	835.74011	10909	10327	13.1
107	48107	901.69238	7072	6928	7.8



◀ Select Numeric and check the Show thousands separators box.

▶ After closing all dialog boxes, refresh the map to apply the changes.



simple procedure to make any of these formatting changes:

1. Open the table being used for labeling.
2. Right-click the field heading for the field used for labeling and choose Properties. Click the ellipsis button next to Number Format.
3. On the Number Format dialog box, choose Numeric and check the box to display a comma separator.
4. Click OK to exit all dialog boxes. Click the refresh button on the lower left side of the map canvas to see the formatting changes.

Note: This dialog box can be used to format numbers for currency, directions, percentages, rates, fractions, scientific notation, and angles as well as applying a custom format.