



What's NEW in Maptitude® 2013

Maptitude 2013: New Features Overview

Maptitude 2013 is a major new release of Caliper Corporation's popular GIS (Geographic Information System) and mapping software. Maptitude continues to provide easy-to-use, professional mapping tools at an affordable price. This version also includes the most detailed and accurate U.S. data ever included with Maptitude.

The new features and enhancements enable you to create the maps you need more quickly, with better accuracy, more attractively, and with the most powerful analytical tools available.

Maptitude costs just us\$695, while annual (optional) upgrades cost us\$395 per user/license. For pricing and ordering information please visit the [Mapping Software Store](#), [e-mail Maptitude Sales](#), or call us at +1 617-527-4700.

New Data

Country Packages

Maptitude 2013 ships with one detailed Country Package of your choice, and additional Packages can be purchased separately. Each package contains a wealth of data unavailable in any other product, including an up-to-date street layer with addresses for pin mapping (geocoding) and travel time information for computing routes and drive-time rings. Also included are building footprints for many urban locations, railways, and comprehensive named landmarks that range from public facilities to commercial buildings, including restaurants and retail stores. Postal data and detailed demographics (where available) are also provided in the Country Packages.

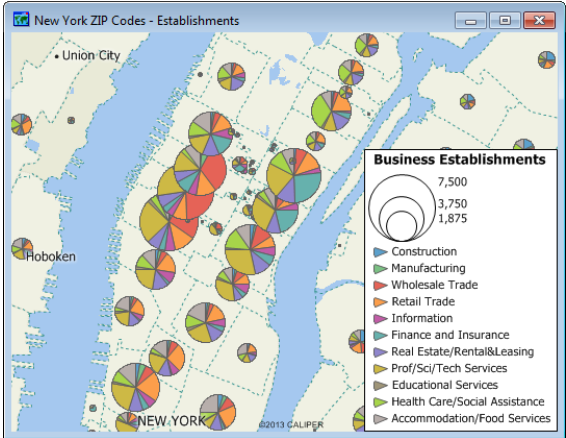
You can switch between the countries you have purchased, and Maptitude will seamlessly refresh the interface with country-specific tools such as those for finding, pin-mapping, routing, and creating maps. Also, new Map Libraries allow you to easily create attractive geographic and demographic maps and locate unlimited numbers of addresses and territory-based records.

A basic global map is provided with every Maptitude license, allowing you to view your data anywhere on Earth and to map your locations by coordinate, manually, or by any populated place (village/town/city). This has been updated for country boundaries, provinces, and populated places.

United States

New U.S. data sets provide access to up-to-date geographic information. Maptitude now includes an October 2012 NAVTEQ® map, allowing accurate address locating and street visualization, plus robust data on which to calculate routes, drive-time rings (network bands), and drive-time territories (network partitions). Other revised 2012 U.S. layers from NAVTEQ® include buildings, highways, railroads, and landmarks. The Points of Interest layer contains over two million named public and business locations.

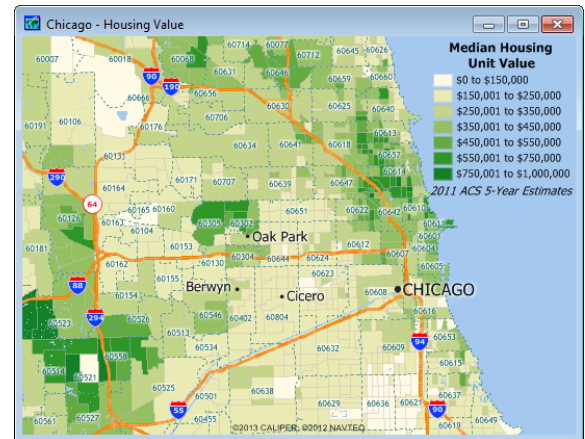
Maptitude 2013 ships with the January 2013 ZIP Code® updates ensuring that you are using the latest data. The 5-digit and 3-digit ZIP Code



boundary layers contain ZIP Codes for all 50 states, the District of Columbia, Puerto Rico, and the territories. The ZIP Code area layers extend into non-deliverable areas, providing complete coverage of the continental U.S. They also include the number of businesses by detailed industry type (retail, finance, etc.), the number of employees and annual payrolls, and a classification of rural-urban commuting characteristics. There is also an updated ZIP Code centroid layer for the entire country.

All of the US Census boundaries (e.g., Tracts, Counties, MCDs, MSAs, States) that are included with Maptitude, plus 3- and 5-digit ZIP Code areas, contain several [demographic profiles](#) based on the data reported in the 2010 Census and the 2011 American Community Survey (ACS). The Map Librarian makes it easy to access a series of pre-defined thematic visualizations of these data.

Finally, Maptitude includes some refreshed boundary files. CBSAs have been split into two layers to allow direct mapping of Metropolitan Statistical Areas (MSAs), and there is a new landmass database covering the western hemisphere.



Australia

The Australia Country Package contains the latest geographic and demographic data:

- October 2012 NAVTEQ data
- Australian Bureau of Statistics 2011 Census of Population and Housing data for multiple levels of statistical areas describing population, age, birthplace, language spoken, educational attainment, income, marital status, religion, dwellings, employment, and method to work.
- New Oceania Landmass layer, Significant Urban Area layer, and Urban Centre Locality layer

Brazil

The Brazil Country Package contains the latest geographic data:

- October 2012 NAVTEQ data
- New American Landmass layer

Canada

The Canada Country Package contains the latest geographic and demographic data:

- October 2012 NAVTEQ data
- Statistics Canada 2011 Census data
- New American Landmass layer

United Kingdom

The United Kingdom Country Package contains the latest geographic and demographic data:

- October 2012 NAVTEQ data
- Office for National Statistics Census 2011 data
- New Western Europe Landmass layer

Network Analysis and Routing

Shortest Path Toolbox

The revamped Shortest Path Toolbox creates routes and shortest paths with improved speed and efficiency. In addition:

- Create routes from specific points, in addition to node locations, allowing point-to-point shortest path calculations
- Save routes as selection sets

Network Bands Toolbox

Enhancements to the Network Bands tool reinforce its ability to create the most accurate drive-time ring analysis on the market. There are now fewer “spikes” and “islands” in the rings. In addition:

- The maximum ring size increased to 500 miles or 240 minutes
- The maximum number of rings increased to 40

New Map Styles

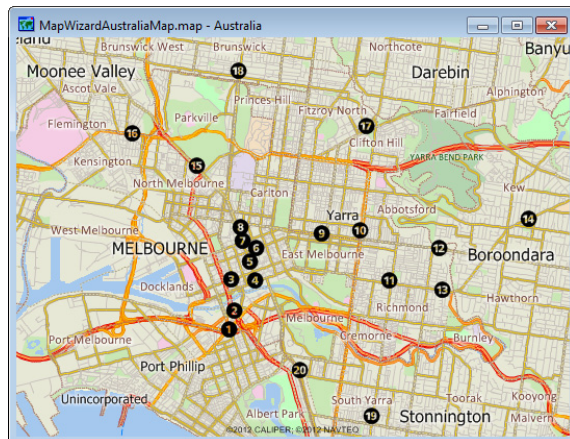
Mapitude 2013 gives you the greatest flexibility to date in setting the styles of map features, themes, and selection sets.

Area Layers

- Control the opacity/transparency of all types of area borders

Themes

- The 3D Prism scale/legend is turned on by default
- The Create Districts tool default Color Theme is named by territory rather than by numeric ID
- The new pattern theme font “Caliper Number Bullets” supports numbering locations in the map with a corresponding named entry in the legend
- A default semi-transparent Scaled Symbol Theme allows the visualization of overlaps



New Database Functionality

New database capabilities, primarily in support of date and time fields, include:

- Three new field types supported: date and time, date, time
- New field formats are provided for date/time fields
- Date and time pickers (calendars and clocks) are available when editing date/time fields and when setting default cell values
- Date fields in dBASE tables and date/time fields in Excel, ODBC, Oracle, and SQL Server tables are read as date/time values
- Support for large comma- or tab-separated files, up to 32,767 fields and 1 billion records, with unlimited record length
- The Browse tool allows record highlighting in a layer's dataview to automatically zoom the corresponding map

Labels

Maptitude 2013 builds upon the powerful labeling engine with the following refinements:

- Label settings can be saved from or applied to Feature Display styles
- Labels now use full table and field specifications, allowing labels to be retained when, for example, database joins with duplicate field names are created
- Scaled-symbol themes no longer prevent overlapping labels by default

Locating Data

Geocoding and location enhancements include:

- The Locate by Address and Locate by ZIP/Postal Code tools use the new street and postal data for more accuracy
- The Locate by Pointing tool automatically lists fields for address, city, state, and postal code, when these fields are detected
- The Locate by Address tool automatically lists fields for city and state, when these fields are detected
- The Index Locations tool can create indices from lines or points and their associated street information, and these can be used in the Find or Locate by Address tools
- The Locate by Address tool can use a standard geographic file (*.dbf) street database

Enhancements to the Display Manager

Maptitude 2013 improves the map window Display Manager by providing:

- A default option to hide node layers
- Context-sensitive commands to show layers, Feature Display styles, labels, and sets that are not visible
- The ability to show Features Display Settings that are autoscaled off
- A menu item to access and modify label autoscale settings

System and Interface

Maptitude 2013 supports the latest Windows operating systems, file types, and common design elements:

- Maptitude runs as a 32-bit or 64-bit application on 32-bit or 64-bit Windows 8, 7, Vista or XP
- The many advantages of a 64-bit Maptitude include the ability to save to higher resolution images, use more memory than the 4GB 32-bit limit, and open/import files via 64-bit Microsoft Office (e.g., Excel and Access)
- There are new buttons in several toolbars including those in the Selection toolbar
- A software-keyed version of Maptitude 2013 allows the installation of Maptitude in remote desktop, VPN, Citrix, or Terminal Services environments
- Intelligent positioning of toolbars and toolboxes within dual monitors environments is supported
- Dialog boxes display based on updated Windows standards

New File Import Support

- Microsoft SQL Server 2012 Spatial Layer
- Oracle Database 11g Release 2
- OpenStreetMap (OSM) Highway (roads and footpaths) Features
- Garmin MapSource "GPS Database" (GDB)
- Excel file scan of all records (to determine field types, widths, etc.)
- Tab-delimited text (TAB)
- Microsoft Access and Excel 2013 (and earlier versions) even when Office 2013 is not installed
- 64-bit Microsoft Office (e.g., Excel and Access)

New File Export Support

- Layer conversions to Google Earth Documents (*.kml, *.kmz)
- Microsoft SQL Server 2012 Spatial Layer
- Oracle Database 11g Release 2

New Native File Support

- Microsoft SQL Server 2012 Spatial Layer
- Oracle Database 11g Release 2
- Tab-delimited text (TAB)
- Microsoft Access and Excel 2013 (and earlier versions) even when Office 2013 is not installed
- 64-bit Microsoft Office (e.g., Excel and Access)

Improved Create-a-Map Wizard

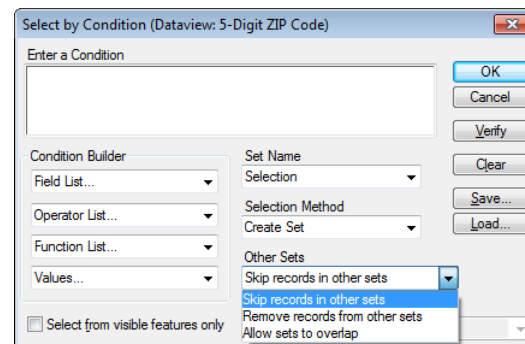
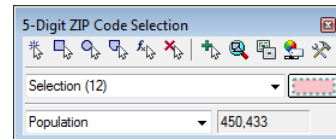
Create-a-Map Wizard™ is now more robust and easier to use:

- Revised maps use the latest geography
- The “Open geographic file” and “Combine existing maps” options are now separate menu commands
- A new “Add layer to an existing map” option allows the Wizard to geocode multiple tables to the same map
- The Wizard can locate records by coordinate (including longitude/latitude) with auto-detection of the the best fields to use
- Labels displaying the number of records in an area include only the areas in your table
- The option to click Finish is available at any step in the Wizard

Creating Selections and Formulas

There are several changes to the selection and condition-building tools:

- Separate tools allow selecting by pointing and for selecting by rectangle
- The Selection toolbar displays the summed value of a field of your choice and automatically updates it as records are added or removed from the selection set
- The Selection toolbar displays the number of selected records in each set
- The Select by Pointing toggle feature deselects features that are already selected
- When selecting areas, there is an option to prevent records from being in more than one set
- When selecting areas, there is an option to remove records from other existing sets
- There is a new Options button on the Selection toolbar for changing the selection preferences
- There is support for date/time filters and conditions
- There are five date/time functions accessible directly from the Select by Condition and Formula dialog boxes
- The “Select by Value” tool has been renamed “Select by Related Values”



New Documentation

Mapitude continues to offer numerous ways to get you started with the software. There is a brand new color PDF User Guide, along with new and revised 60-second tutorials and training videos. The 60-second tutorials and video tutorials are incorporated into the Online Help.

Projections and Datums

Maptitude 2013 has expanded support for datums and projections:

- There are new datum conversions for Brazil, Portugal, and Austria
- There is a new "Australia and Oceania" coordinate system that groups all the Oceania coordinate systems together
- There is an updated projection library that results in faster performance

Analysis Tools

Modifications to existing analysis tools include:

- The default overlay aggregation methods now support weighted fields
- The "Evenly spaced" bands option can start at zero
- The **Tools-Geographic Utilities-Connect Points** tool can connect points by category/type
- Dataviews displaying the results of joins, overlays, and tagging highlight the newly attached fields
- The **Tools-Geographic Analysis-Create Districts** tool automatically labels territories and calculates attributes on the input fields
- The **Tools-Map Editing-Multi-User Setup** tool provides an interface to configure the required multi-user settings, including the environment variables, for multi-user editing of standard format geographic files (*.dbd)

Imagery Improvements

Image layer access and visualization is a core feature of Maptitude 2013. Maptitude now supports the GDAL 1.9.0 image library, which improves the handling of various image layer formats especially for JPEG 2000.

Options and Defaults

There are several new defaults and options in Maptitude 2013:

- The **Map-Bookmarks-Create** command has an option to add bookmarks "At the Beginning" of the bookmark list
- The **Map-Combine Existing Maps** command allows increased control over which layers to combine, offers a layer name filter, and automatically orders the layers for display in the new map
- Original sheet and file names are used to provide a default database name for imported Excel sheets
- The **Map-Synchronize** command updates synchronized maps based on changes in any linked map

Geographic Information System Developer's Kit (GISDK)

New GISDK functions and changes include:

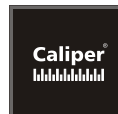
- A GISDK .NET extension API: With this API you can write an assembly with any .NET language that can be loaded by Maptitude to make calls to GISDK macro functions or compiled macro language code
- A simpler and more powerful geocoding API: A catalog defines all GISDK objects and there are two new GISDK classes, the "Data.Finder" and the "Data.Geocoder" that can be used with the country specific Catalogs
- A new DateTime GISDK compound value type with date and time properties
- New date/time functions: CreateDate(), CreateTime(), CreateDateTime(), FormatDateTime(), ParseDateTime()
- Several functions that handle date/time values: GetFieldInfo(), GetFieldType()
- New functions: GetLineLength(), ReverseArray(), GetMapRedraw()
- A new option that returns an array of options for GetDataVectors()
- A new option that converts Western European accented characters into their no-accented equivalent for Upper()
- A new "Trace" option that displays the results of immediately executed commands below the statements
- A new data cursor type which provides an alternative way of navigating and reading tabular data

The "Listing of GISDK Functions" topic in the Online Help provides a full list of added, changed, or replaced functions.

About Caliper

[Caliper Corporation](#) develops state-of-the-art [Geographic Information Systems \(GIS\) software](#). With a focus on usability, [Maptitude](#) is designed to be a cost-effective professional [mapping software](#) product. Maptitude enables organizations to leverage their location-based data to improve decision making and planning, while minimizing expenditure through competitively priced solutions.

Caliper is a privately held corporation and is a leading developer of [mapping](#), [redistricting](#), [transportation](#), [traffic simulation](#), and [GIS software](#).



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