What's New in **Maptitude 2017**

Maptitude 2017: New Features Overview

Maptitude 2017 is a major release of Caliper Corporation's popular GIS (Geographic Information System) and mapping software. The 2017 version provides the most up-to-date and accurate data available.

Maptitude 2017 provides the business value you should expect when investing in mapping software. Maptitude includes the latest streets, postal data, and demographics. Maptitude 2017 is the fastest and most intuitive professional mapping application, with significant enhancements to usability, travel time calculations, and information sharing.

Key Features of Maptitude 2017:

1. The most up-to-date geographic and demographic data available
2. A streamlined and **reorganized interface** that emphasizes user workflow
3. A **new distance and drive-time tool** that creates Excel tables listing the cost of travel between any number of origins and destinations, allowing you to quickly identify the closest and backup locations ranked by travel time or distance
4. The one-click Export to Excel report automatically includes travel time and distance and can be used with any layer or selection/filter
5. The Routing and Directions Manager can apply a **default vehicle stop time** or can read stop times from an Excel table
6. The **improved Routing and Directions Manager** allows you to lock the first and last stops, specify the route color, and click on the directions to label route segments
7. A **list of route stops** can be immediately exported to Excel along with the longitude and latitude of each stop
8. A **Drive-time ring** can be created down to 1 minute intervals
9. The installer has been improved to better support **enterprise installations**
10. The void left by the discontinued Microsoft MapPoint is now dominated by Maptitude, which now supports **MapPoint territory files** (*.ptm, *.est, *.axe) without data columns or that have County and State information in separate columns

Maptitude can map your information whether you have data from Google Maps, a Microsoft mapping product such as MapPoint, or from Microsoft Office. You can analyze your information using the intuitive Maptitude 2017 mapping wizards, and export your results as attractive preformatted Excel or PDF reports.

Maptitude delivers easy-to-use professional mapping tools and data at the unbeatable price of only US$695 (or US$395 for upgrades.) For pricing and ordering information, please visit the Mapping Software Store, e-mail Maptitude Sales, or call US sales at +1 617-527-4700.

New Data

Country Packages

Maptitude 2017 comes standard with one detailed Country Package of your choice and additional Packages can be purchased separately. Each Package includes a wealth of data unavailable in any other product, such as an up-to-date street layer with addresses for pin-mapping (geocoding) and travel time information for computing routes and drive-time rings. Features such as building footprints for many urban locations, railways, and named landmarks are also built-in to the software. The comprehensive landmarks range from public facilities to commercial buildings including shops, restaurants, and retail stores. Where available, postal data and detailed demographics are shipped with the product.

As you switch between the countries you have purchased, Maptitude will seamlessly refresh the interface with country-specific tools such as the Create-A-Map Wizard™ and tools for finding, pin-mapping, and routing. New Map Libraries allow you to easily create attractive geographic and demographic maps while locating unlimited numbers of addresses and territory-based records.

The basic global map that is provided with every Maptitude license enables you to view your data anywhere on Earth, and it allows you to map your locations by coordinate, manually, or by any populated place (village/town/city).

United States

New U.S. data sets provide access to the most up-to-date geographic information available. Maptitude 2017 comes with October 2016 HERE® Map Content, which allows for accurate address locating and street visualization, in addition to robust data with which you can calculate shortest paths, drive-time rings, and drive-time territories (network partitions). Speeds based on HERE® Traffic Patterns are now included.

Other 2016 U.S. map layers from HERE® include those for buildings, highways, railroads, and landmarks. The Points of Interest layer contains over two million named public and business locations.

Maptitude 2017 ships with the January 2017 ZIP Code update to ensure that you are using the latest data. The 5-digit ZIP Code boundaries are a nationwide area database with ZIP Codes for all 50 states, the District of Columbia, Puerto Rico, and the territories. Other standard features of Maptitude 2017 are updated 3-digit ZIP Code areas and a point database of ZIP Code centroids for the entire country. The ZIP Code area layers extend into non-deliverable areas to provide complete coverage of the USA. The 3-digit and 5-digit ZIP Code areas include updated counts of businesses by detailed industry type (retail, finance, etc.), along with how many employees work at each business and annual payroll figures. The ZIP Codes are also classified by their updated rural-urban commuting characteristics and with the numbers of hospitals, hospital beds, and healthcare providers.

The US Census boundaries (e.g., Tracts, Counties, MCDs, MSAs, States) and the 3- and 5-digit ZIP code areas that come with Maptitude contain some or all of several demographic profiles from a variety of data providers. These sources include the 2010 Census and the 2015 American

Community Survey (ACS) to name a few. This data is available for the USA, Puerto Rico, and the Territories. The ZIP Code, Tract, County, and State layers also include updated buying power (disposable income) figures. Tracts also list updated banking compliance FFIEC data for 2016. The Map Librarian makes it easy to access a series of pre-defined thematic and shaded maps of these data.

There is a new North American telephone area code layer (ccNorthAmericanAreaCode.Cdf) that covers the USA and Canada.

The planned Country Package updates are listed below:

Australia
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal boundaries and centroids

Brazil
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal point layer

Canada
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal FSA boundaries and centroids
- Updated HERE postal point layer

Germany
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal boundaries

United Kingdom
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal boundaries
- Updated Caliper postal boundaries

Mexico
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal boundaries and centroids

New Zealand
- October 2016 HERE update with speeds based on noontime HERE® Traffic Patterns
- Updated HERE postal boundaries and centroids

Network Analysis and Routing

Shortest Path Toolbox

The revamped Shortest Path Toolbox now:

- Allows duplicate stops/addresses
- Fixes the first and/or last stops
- Specifies stop times based on imported user data (by adding locations based on a selection set) or through a route setting (under the Route Options Itinerary)
- Provides improved route directions
- Exports route stops to Excel with longitude/latitude
- Bookmarks the Route Summary and Route Overview in the PDF directions reports
- Allows stops with departure times before arrival times for next day departures
- Supports a choice of route color
- Toggles stop name/address labels
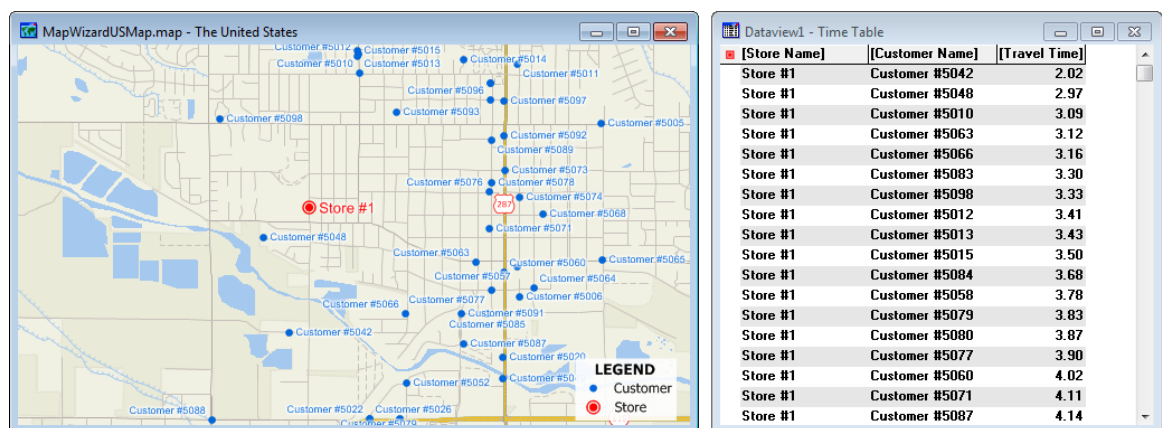- Runs in 32-bit and 64-bit Windows OS

Drive Time Rings Toolbox

The Drive Time Rings Toolbox creates the most accurate drive-distance travel analysis on the market with the following enhancements to the tool:

- Runs in 32-bit and 64-bit Windows OS
- Creates drive-time rings of sizes as small as 1 minute

Distance and Travel Time Tables Tool

Maptitude 2017 makes it easy to identify alternative service suppliers, backup field representatives, and the closest locations. A new distance and drive-time tool creates an Excel table that lists the costs of travel between any number of origins and destinations, allowing you to easily sort the data to identify the closest locations.

New Map Styles

Maptitude 2017 gives you the greatest flexibility to date in setting the styles of map features, themes, and selection sets.

Styles

- The point style tool now makes it easy to see all the available icons
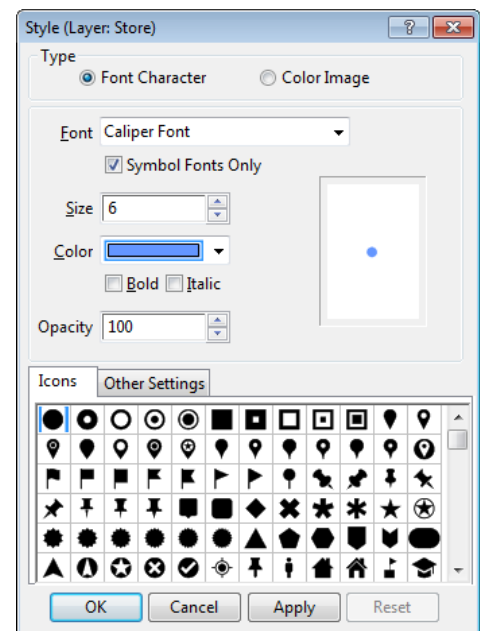
Layers

- The 2017 Country Packages' maps and the world maps have updated global layers including country and province boundaries

Themes

- The Chart theme font sizes and icon better reflect user font size choices and the underlying data range
- The Multiple-symbol MapWizard™ categorizes points by symbol

Labels

- The Hover Tool temporary balloon "labels" (tool-tip type popups) show ring size for drive-time layers

Locating Data

The geocoding tools support multi-country functionality. When you switch between the countries you have purchased, Maptitude seamlessly refreshes the interface, including the Create-a-Map Wizard™, with country-specific tools such as those for finding and pin-mapping (geocoding).

The geocoding tools use the updated street and postal data, making the results of location matching more accurate.
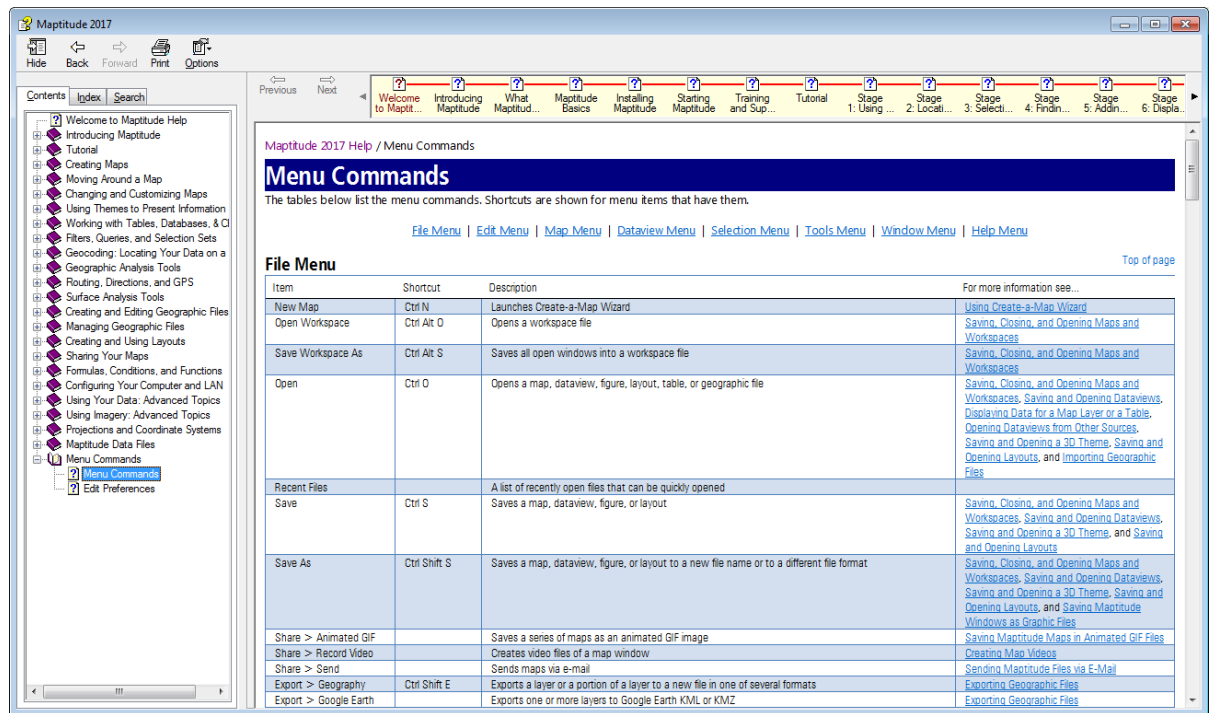
Country Package specific changes:

- Germany and Australia:
  - Improved address geocoding with more accurate match rates

New Documentation

Maptitude continues to provide numerous ways to get you started with the software. There is a brand-new color PDF User Guide. New and revised tutorials are incorporated into the Help. In addition, videos and live and pre-recorded training webinars are available on the Caliper Corporation website.

Maptitude 2017 has a reorganized menu system. The Maptitude Help (choose **Help-Maptitude Help**) has a listing of every menu item and what it does. The topic is "Menu Commands" and is the last branch under Contents, as shown in the screenshot below.

Maptitude 2017 includes a Windows Microsoft Office style question mark icon on most windows. Clicking this will take you to the relevant section of the Help. You can also hover over any menu item and click F1 to access the Help.

System and Interface

Maptitude 2017 supports the latest Windows operating systems, file types, and common design elements. Maptitude 2017:

- supports installation on a 32-bit Windows operating system
- supports installation in 64-bit Windows 10
- has an improved installer that:
   - adds a shortcut to Maptitude 2017 on the desktop
   - supports the BypassActivation command line switch for corporate installations
   - works for network drive installations
   - supports a user Documents folder on a network share
- includes new and redesigned menus, buttons and toolbars that make tools more distinguishable, familiar, and accessible
- provides improved usability features:
   - **Edit-Preferences** for German in the "Language" drop-down list that translates the distance units displayed in Maptitude, allowing you to publish maps with your local language in the legend

- o *Edit-Preferences* for opening a layer and automatically adding it to the existing map or to the default Country Package map
- supports high resolution screens:
  - o Auto-adjusts button and icon sizes based on resolution
  - o Adjusts the font sizes in Maptitude windows using Ctrl +, Ctrl -, and Ctrl 0

New File Import Support

- MapPoint (*.PTM, *.EST, *.AXE) territory layers with no data fields
- Microsoft Access and Excel 2016 (and earlier versions) even when Office 2016 is not installed
- PostgreSQL Spatial Layer
- PostgreSQL Table

New File Export Support

- PostgreSQL Spatial Layer
- Microsoft Excel 2016 (and earlier versions) even when Office 2016 is not installed

New Native File Support

- PostgreSQL Spatial Layer
- PostgreSQL Table
- Microsoft Access and Excel 2016 (and earlier versions) even when Office 2016 is not installed

Improved Create-a-Map Wizard™

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

- The maps have been updated with the latest geography
- The Finish step has been removed
- The Create-a-Map Wizard has been added to the Map menu, allowing you to immediately add a layer to the current working map

Creating Selections and Formulas

The condition building tools have these improvements:

- Deleting records in a selection is faster
- Exporting to Excel on area layer selections is supported for Caliper CDF/DBD, Esri Shapefile, and MapInfo layers

Projections/Datums

Maptitude 2017 has expanded support for datums and projections with:

- Support for the "geodetic" coordinate system for ECW imagery

Analysis Tools

Completely new and innovative analytics were added to Maptitude 2017:

- The Territory Wizard has a State field drop-down when County is a separate field in the user data
- The Territory Wizard supports unlimited input records
- The Export Territory List to Excel tool includes the additional territory fields chosen by the user
- The Radius drawing tool allows the label and line style to be shown or hidden
- The Export to Excel reports include both the straight-line distance and travel time between the drawing item radius center and any point layer locations that are within the radius
- The Export to Excel reports include data sheets for unprotected point layers
- The Straight-Line Influence Areas tool allows multiple naming fields for inclusion in reports
- The database Join operation allows multiple fields to be used to create the join

Imagery Improvements

Accessing, creating, and visualizing image layers is a core feature of Maptitude:

- If an image from an Image Library file is missing, you will be offered to skip that image file

Geographic Information System Developer's Kit (GISDK)

APIs

The GISDK .NET APIs make it easy to add mapping functionality to any Windows desktop application written in C# or any other .NET programming language.

Code examples are here: http://www.caliper.com/Maptitude/extending-maptitude-in-dot-net.htm

There is an additional User Guide for the Routing and Directions API and you can contact Caliper Sales if you would like a copy.

GISDK Functions

Please see the "Listing of GISDK Functions" topic in the Online Help to view a full list of GISDK functions that were added, changed, or replaced in Maptitude 2017. One highlight of these changes includes:

- The ImportKml() function that imports Google KML format files

About Caliper

Caliper Corporation develops state-of-the-art Geographic Information Systems (GIS) software. With a focus on usability, Maptitude is designed to be the most 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, and GIS software.