



DeLorme Professional Newsletter - May 2008

XMap at Work

Mobile Airport Authority Chooses XMap for Mapping of Properties and Facilities

DeLorme is pleased to announce that the Mobile Airport Authority's Brookley Complex in Mobile, Alabama, has selected XMap to help build and manage their Geographic Information System.



MAA staff members are using XMap GIS Enterprise for a wide variety of spatial data management functions, including property and building footprint mapping, tenant and lease management, marketing, strategic planning, and much more.

The MAA opted for the Enterprise version of XMap as it offers a multiple point image registration tool. Having recently captured high resolution aerial imagery of the entire Brookley complex, the ImageReg function was used to accurately create a raster layer as a base map for a variety of mapping tasks.

"We selected XMap because it was relatively easy to use," said Jana Stupavsky, of the MAA marketing department. "Because none of us had any previous experience in GIS, it was important that the software we chose was uncomplicated yet powerful enough for our needs. XMap met these criteria."

To help get the most out of XMap and to acquire a basic understanding of the principles of GIS, several MAA staff members attended a Web-based XMap training program. "The training class was very worthwhile investment," said Ms. Stupavsky. "Because it focused specifically on our intended use of XMap, we were able to quickly learn how the software could help us surmount the unique challenges that we face."

About the MAA's Brookley Complex

Situated on the site of a former U.S. Air Force base, The Brookley Complex is the region's foremost industrial and aviation technology center. The 1,700 acre complex, which includes a 9,600 ft runway, is home to over 100 companies with a combined workforce of over 4,000 highly skilled employees. Aerospace companies, including US Airways and United Airlines, are among the major tenants at the complex. Recently, it was announced that a new U.S. Air Force refueling tanker, a joint \$40 billion EADS/Northrop Grumman project, would be built at the Brookley Complex along with Airbus's A330 freighter aircrafts.

Special Offer

Buy an Earthmate Blue Logger GPS for under \$100 - 33% off the regular price

The Earthmate Blue Logger is arguably the most versatile GPS receiver that DeLorme has ever produced. This remarkable device can wirelessly transmit a GPS signal to virtually any Bluetooth enabled computer or PDA, turning your laptop, Palm, or Windows Mobile device into a portable navigation tool.

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Buy an Earthmate Blue Logger GPS for under \$100 - 33% off the regular price (continued)

The pocket-sized Blue Logger is also a powerful standalone data collector. Simply turn it on and, as soon as it picks up a GPS fix, it will begin to record its location, speed, and more, at a distance or time interval that is established using the included Blue Logger Manager software. The collected data is downloaded wirelessly in one of a number of formats and can be easily imported, displayed, and managed in XMap.



Actual size 1.75" x 3.25" x 0.75"

The Blue Logger GPS has been used in a wide variety of applications including:

- Monitoring fleet movements
- Creating trail and road networks
- Managing highway maintenance crews
- Mapping forest stands
- Recording vehicle location and speed

For more information on the Earthmate Blue Logger GPS or to order yours today, visit: www.delorme.com/bluelogger

XMap Q&A

Can I overlay roads or GIS data on an aerial image on my PN-20?



In short, yes you can. Since it was first released almost two years ago, the Earthmate GPS PN-20 has been periodically updated and enhanced. While the device itself has remained the same, the firmware, or internal programming that determines how the device functions, has been revised and new versions have been released several times. Each firmware update improves the performance of the device, upgrades the existing functionality, and often adds new features and functions. Running the firmware updater is like trading in your old PN-20 for the latest model. If only trading in your car was that simple.

The most recent firmware update (version 1.4) was released in mid-April, 2008 and offers a number of significant enhancements for PN-20 users. Perhaps the most noteworthy, especially for XMap users, is the option to display hybrid maps, meaning that both raster and vector data layers can be displayed simultaneously. For instance, you can now view an aerial image on the PN-20 screen and overlay OpenSpace GIS data layers, which can be independently turned on or off as needed. This function also provides the means to display the roads and streets from the USA Topographic Data on top of an image.

To display a hybrid map on the PN-20, follow these steps:

- In XMap, create the required map package or packages containing the imagery, road network, GIS data, or any other features. Note that multiple data types can be combined in a single map package however you might find it easier to manage your multiple data types by creating a unique package for each type of map layer.

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Can I overlay roads or GIS data on an aerial image on my PN-20?

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- Transfer the saved packages to the device using the Exchange wizard in XMap. For larger files, it is recommended that transfer the map packages to the external SD card using a dedicated SD card reader.
- After the transfer of data is complete, click the Page button on the device until the map screen is displayed.
- Press the Menu button and select Map Setup
- The first item on the list is Data Layering. This provides the tools for enabling or disabling a particular type of data and for adjusting the layering sequence. The type of data appears at the top of the list will be topmost layer on the map. To create a hybrid map, ensure that both the image and the appropriate vector data are visible and that the image or raster layer is on top.
- Press the Quit button to return to the Map Setup list and scroll down to Data Management. This list displays all of the map packages that have been transferred to the PN-20's internal memory or SD card. If you combined several data types into one map package, then you may see only one item listed. On the other hand, if you created different map package for each data type, these will be individually listed and can be independently controlled. Make sure that the map package or packages containing the imagery and the vector data are visible.
- Press the Quit button and continue to scroll down the Map Setup list until you see the Show Hybrid Maps option, which will be turned off by default. Select the check box to enable this feature.
- Finally, press the Quit button again to return to the map view. All active line and point objects such as roads, rivers, borders, draw objects, or OpenSpace GIS data will appear on top of the image. Note that the display of polygons such as lakes, parks, or OpenSpace polygon layers is not supported using the hybrid map option.



For more information on creating map packages and transferring data to and from the PN-20, refer to the documentation that was included with the device. To check the firmware edition on your PN-20, press the Menu button, select Device Setup and scroll down to About this Device. For a list of firmware enhancements and to download the latest release, visit: <http://www.delorme.com/support/supporttemplate.aspx?id=380> or check the NetLink tab in XMap for the latest available downloads.

Tab Tip

Adding New Attribute Fields to an OpenSpace GIS Layer

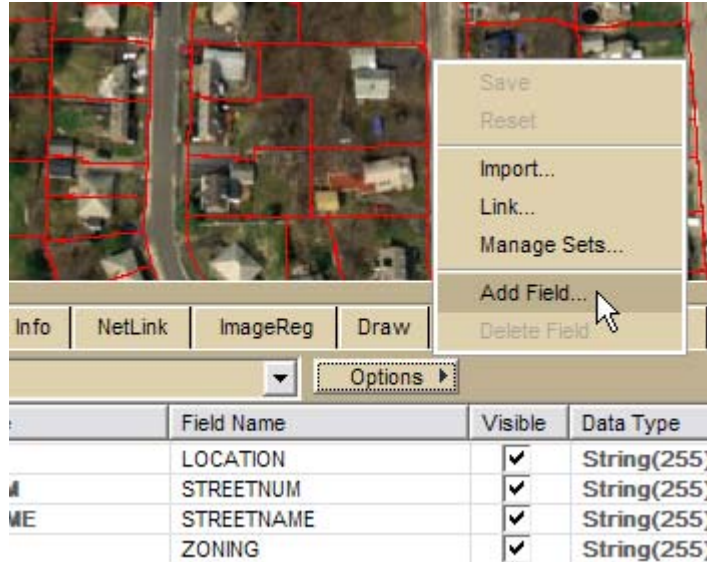
The Field Creation dialog box is among the most powerful components of the GIS tab in XMap. Admittedly, it is quite difficult to find this tool, but if you click the Design View button in the Attributes tab, you'll see an Options menu that contains several field management tools including Add Field... Sooner or later, most XMap GIS Enterprise or Editor users will encounter a situation that requires that they visit this area of the software.

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Adding New Attribute Fields to an OpenSpace GIS Layer (continued)

The basic function of the Field Creation dialog box is to generate a new field or column of attributes for an OpenSpace GIS layer. For instance, if you import a shapefile containing local property polygons, you may need to add a field that allows you to include information on the value of each property, or if you download waypoints from the Earthmate GPS PN-20 and import them into the GIS tab, you will likely need to use the Field Creation function to assign the appropriate data to each collected location. There are two approaches to creating a new attribute field: you can either create an empty field that allows you to manually type the required information for each object, or you can build a formula that creates data from your existing data fields. An example of the latter would be if you want to convert the values in the area field for a polygon layer from square kilometers to acres.



In either case, the initial steps for creating a new field are the same:

- Open the Field Creation dialog box in the attribute Options menu as noted above.
- In the Field Name area, type a name for your new field.
- Select a Data Type from the drop-down list.
- The most common type selections from this list are String, Integer, and Float (a numeric field-type that allows decimals). It is important that the appropriate consideration is given to this selection as a new data value cannot be typed into an incompatible field. For instance, you cannot enter alphabetic characters into an integer field. Also note that if you need to create a range classification based on the new field, the field-type must be one of the numeric options. For more information on the other data-type options, refer to the help documentation within XMap.
- If appropriate, select the String Size, which determines how many characters the new field will accommodate.
- If you need to create an empty field, simply click the OK button and return to the Datasheet View to enter the necessary data.

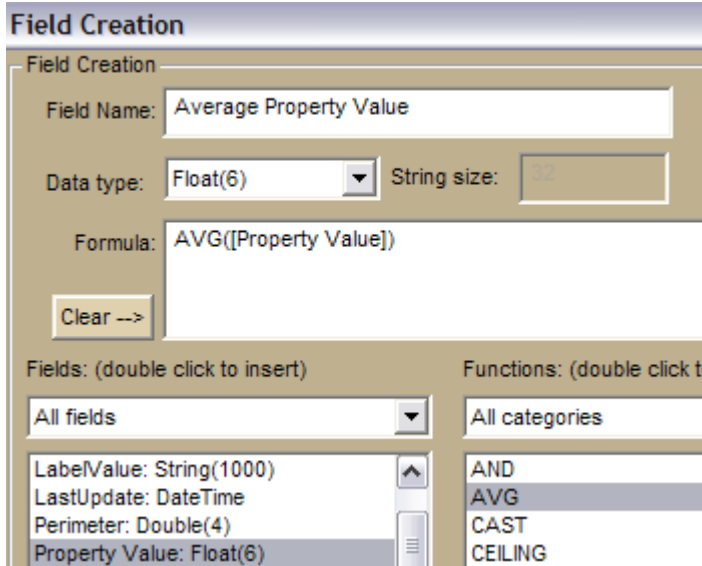
The additional components of the Field Creation dialog box control the development of a formula that can be applied to one or more of your existing fields to create new data. To simplify the process, a selection of preformatted functions is provided in the window on the right side of the dialog box. As each function is highlighted, a brief explanation of the resulting formula is displayed at the bottom of the window. To build a formula based on one of these functions, double-click the function name to automatically add it to the Formula window.

The window on the left side lists all of the current attribute fields for the selected OpenSpace layer. After highlighting the appropriate section of a formula, double-clicking the required field will automatically add it to the formula.

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Adding New Attribute Fields to an OpenSpace GIS Layer (continued)



For example, if you choose the AVG(field) formula to generate a new field containing the average property values, highlight the "field" statement in the formula and double-click the existing property values field to add it to the formula. The new formula will read like this: AVG([Property Value]).

The Formula window can also be used to manually create a formula. For example, to create a new field that converts the existing Area value in square kilometers to acres, type the following into the formula window: [Area*247.1054].

For new fields that have been created using a formula, modifying, deleting, or

updating the original fields that were used in the formula will alter the values or text that appear in the new field.

For more information on this or any other XMap function, refer to the Help Topics or click the User Guide link in the software's Help menu.

Where on Eartha

Last month we asked you to identify a capital city close to a body of water and the country in which it is located. As many of you pointed out, the body of water is Lake Victoria, which straddles the borders of Tanzania, Kenya, and Uganda, and it was the latter whose capital was designated with the pushpin. A surprisingly high number of entrants were able to correctly identify Kampala, which is situated just north of the equator.

The first correct response drawn at random belongs to Jacque La Croix from the La Croix Computer Services in Kearns, UT. Jacque will be receiving a copy of XMap Professional with USA Topographic data and a USB GPS receiver, which will turn his laptop computer into a voice-controlled, in-vehicle navigation system.

If you'd like to join Jacque as a winner of XMap, take a look at the location of the pushpin in the image to the right and try to figure out the name of the capital city and country on which the pushpin has been placed. Write your response in an email and send it to contest@delorme.com before June 6, 2008.





DeLorme Professional Newsletter now available in PDF format



Over the last few weeks, we have heard from several subscribers who have told us that the articles in the reformatted newsletter are difficult to print. Many of you, we have learned, like to keep your own archive of stories, features, and user tips for future reference.

To simplify the printing process, the entire newsletter is now available for download in PDF format. In the coming weeks, we will work on converting the previous editions into PDF files. Check the newsletter page at www.delorme.com/customerservice/newsletters.aspx for the latest information.

Did You Know...

Did you know that you can publish a map to the Web using XMap?

In fact, XMap offers two innovative tools for creating an online map. The first option is MapShare, a free service hosted by DeLorme that allows a snapshot of any map to be captured from within XMap, transferred to DeLorme's MapShare server, and assigned a unique URL, all within a few seconds. Instantly share map views, including route details, GIS layers, imagery, or any other user-added feature, with a virtually unlimited audience. MapShare sites are managed from within XMap and can be deactivated or deleted by the user as needed.



MapShare, which requires an active Internet connection, is managed using the MapShare button in the toolbar. If you don't see the button, right-click anywhere on the toolbar to drop down a list of available toolbar options and make sure it is checked. To see an example of a MapShare site, visit: <http://mapshare.delorme.com/Consumer/V.aspx?p=1b1p5gm7>

Users of the Editor or Enterprise versions of XMap can share data by creating an XMap Web site, to which they can publish OpenSpace GIS layers. Visitors to the site can zoom and pan the map, select on an object on the map to all of the available attribution, run queries, print a custom map, and much more. As the site administrator, the XMap user can decide who has access to the site, what level of data will be available, how it will appear, and if it can be downloaded.

XMap Web is a subscription-based service; however, all registered XMap customers can create a free 30-day trial site. Just click the XMap Web button in the Workspace area of the GIS tab, and within minutes your custom site will be up and running. For an example of an XMap Web site showing property parcels, visit: <http://xmapweb.delorme.com/SABath/XMap.asp>

We Want to Meet You

Visit us at this upcoming event:

Windpower 2008 (www.windpowerexpo.org)
Houston, TX
June 1-4, 2008