XMap® 7 GIS

Getting Started Guide

WARNING: Messaging, tracking and SOS functions require an active Iridium satellite subscription. Always test your device before you go.

Table of Contents

Welcome to XMap 7

Thank you for your purchase. XMap® offers a unique combination of GIS, GPS, and navigation tools that meet all of your mapping needs in a single, easy-to-use package.

In this Getting Started Guide, you will learn about:

- Key XMap features
- The XMap family of products
- Installing and modifying XMap
- Upgrading from a previous version of XMap
- Migrating your data from another DeLorme product or GIS product
- Installing XMap datasets
- Troubleshooting

This is a reference guide. For detailed instructions for using XMap, see the XMap Help— open XMap, click the **Help** button ❓▾ on the toolbar, and then click **Help Topics**. A link to a printable User Guide on our website is also available from the Help menu.

ATTENTION!!! Important Information for Existing DeLorme Software Users

If you are migrating existing data from XMap 5.x or earlier, see the XMap Help topic *Migrating Data to the New DeLorme Docs Folder*.

Key Features

Embedded Documents and XMap Forms

XMap includes two features for field data collection and management:

- **Embedded Documents–**Store images, rich text documents, spreadsheets, and other files in your database and associate them with your GIS records. You can view, edit, or replace files by clicking on the map or in the Datasheet view of GIS Attributes.
- **XMap Forms (sold separately)–**Easily create, display, or change the attributes of records in your GIS layer using a customized dialog box alongside your map.

Use XMap Forms with XMap to create customizable electronic forms that affordably automate field data collection. XMap Forms are designed to enhance the accuracy and efficiency of field data collection across an enterprise but can be used in many ways.

To use XMap Forms with XMap Editor or XMap Professional, an administrator is required to own one license of XMap 7 GIS Enterprise, which includes the form builder and enables database synchronization across the network. An additional Forms license is also required. XMap Forms can then be used by other XMap users and Earthmate PN-Series GPS users. For more information and for sample OpenSpace files with form examples, visit www.xmap.com/forms.

Suggested uses for XMap Forms:

- Use in the field or office to set up regulatory compliance reporting and data collection.
- Combine with XMap pipeline stationing functionality to set up more productive field navigation and data collection.
- Attach images and other files to forms.
- Develop your own completely new approach to data collection.

Support for Earthmate PN-Series GPS Devices

XMap is compatible with DeLorme's Earthmate® PN-Series GPS handheld GPS receivers, which provide exceptional performance for outdoor and professional activities. Use XMap to create highly-detailed map packages to transfer to a PN-Series GPS device. Your map packages can include custom high-resolution imagery in MrSID or GeoTIFF files; individual GIS layers; DeLorme imagery (aerial, satellite, and USGS quad data) available through the NetLink tab; and a variety of symbols and waypoints. Once you select your areas of interest and create your map package, use the redesigned Handheld Export tab and the PN-Series Exchange dialog to send the maps to the device along with custom routes, tracks, and waypoints. You can also export and import GIS point layers as .gpx files using an SD card and use forms created with the XMap Forms module to collect data in the field.

For Earthmate PN-Series GPS device firmware updates, check the NetLink tab in XMap.

XMap API Command Window

XMap includes a command prompt utility (XMapi) that allows you to control the application

through the command line. The interface provides access to simple commands for performing a variety of basic operations, such as panning and zooming the map, performing quick searches, and creating routes. All operations are triggered from the command line but control the running application. Any commands that require further input prompt the user through the standard XMap user interface.

Database Manager

XMap automatically installs a DeLorme database application that provides essential tools for DeLorme OpenSpace database management. The easy-to-use interface allows database administrators to add new SQL server connections, add server account users, create databases and add users, easily manage multi-user database permissions or groups, and create database subscriptions. You can open the Database Manager within XMap or from the XMap install directory.

Bulk Importing and Exporting

The XMap GIS Bulk Importer/Exporter is a command prompt utility that installs with XMap GIS Editor and Enterprise. You can run the utility independently of the XMap application and use it to automate the import and export of vector GIS layers with DeLorme OpenSpace databases. Use batch files (.bat or .cmd) to import/export multiple files.

You can filter which attribute fields in a layer are included when exported, as well as reference an existing query to filter which geometries and associated attribute records are included in the exported data. Supported export formats include .openspace, .shp, .dxf, .dwg, .kml, and .txt (Enterprise and Editor only).

Note: The OpenSpace Transfer File is a DeLorme proprietary format that stores classification, query, label, form, and symbolization settings. The transfer file is designed to serve as an exact duplicate of its counterpart within the database and does not allow filtering of attribute fields during export; however, you can use queries to filter geometries and attribute records. All exported layers are in the latitude/longitude coordinate system and WGS1984 datum.

Importing from an ArcSDE 9.2 or 9.3 Database

XMap GIS Enterprise allows you to import layers directly from ESRI ArcSDE databases to DeLorme databases. To import layers, use the Connect to Database utility in the GIS Import

Wizard to connect to the ArcSDE database. You must provide the server name on which the ArcSDE installation resides, the port # (instance) of ArcSDE on the server (typically 5151), and the login name and password. When you have a connection to the ArcSDE instance, you can select available databases and use the Import Wizard or Bulk Importer to import layers from that database.

Spatial Queries

Spatial queries allow GIS users to ask direct geographic questions about how GIS data is spatially related. For example, "Which towns are located within a watershed?," "Which parcels contain toxic point source locations?," "Which rivers are within 1,000 meters of a road?," "Which cities are within 100 miles of a selected city," and so on. Spatial queries combined with attribute queries allow you to uncover complex patterns between spatial data layers and are a fundamental strength of a GIS. **Note:** XMap Professional users can run spatial queries but cannot create them.

Buffering

Use the Buffer tool to build polygon geometries, including zero and negative buffers, around existing geometries in a layer. The size of the buffer polygons is determined by a user-specified linear distance around the edge of the geometries in the existing layer. The new polygon geometries are a merged combination of the original polygons and the buffer polygons. Buffering is often used in GIS spatial analysis when proximity issues are of concern, such as site planning or risk assessment.

Multiple Classifications

XMap-compatible DeLorme OpenSpace databases support the storage of more than one classification against a GIS layer. The ability to create and store multiple classifications against a layer is particularly useful for rapid analysis of the data in the layer. Once the classifications are created, you can quickly switch between them for comparison to discover trends in the data, rather than recreating each classification and applying it each time. There is no limit to the number of classifications that can be stored against a layer, but only one classification can be active at a time. Like queries, classifications are transferred with a layer when it is duplicated or exported to an OpenSpace GIS file format.

Note: XMap Professional users can view layer classifications but cannot create them.

Classification Templates

Classification Templates (.xmc files) are available in XMap GIS Enterprise and XMap GIS Editor. They are very useful for quickly transferring an existing classification configuration from one layer to another or between classifications within the same layer. Classification templates are useful when multiple layers have the same attribute fields and general range of attribute values. Once you create a classification for one of the layers and customize the symbolization of each class, you can save this configuration to a template and then apply it to the other layers. This can make your workflow more efficient.

Layer Synchronization & Redlining

Redlining refers to the process of using draw symbols, lines, and polygons to "mark up" a GIS layer without actually editing the layer itself.

The process of redlining is useful when a field worker has a subscription to one or more layers in a database created with XMap GIS Enterprise but they do not have the proper level of user permissions to directly edit the GIS layers or they use XMap Professional and do not have the necessary editing tools. If, for instance, the field worker is tasked with inspecting and updating information contained in a layer based on any observed or measured changes (spatial or attribute), he or she can use the redline tool to make markups against the layer. On returning from the field, the field worker can submit redline layers to the data manager by clicking the synchronize button in the toolbar. The manager can evaluate the redlines and use them as a reference for updating the appropriate GIS layers.

Two-way syncing allows users with specific permissions to locally edit data and synchronize the edits with the master server. It is required that geometry and attributes be uploaded to the server.

Check-out/in

The Check-out/in tool in XMap GIS Enterprise is a data distribution feature for Enterprise data management, editing, and updating. Individuals who have access to a layer in another user's workspace can check out or check in portions of a layer or an entire layer. Checkout regions are determined by user-selected grids. These checkouts are exact copies of the geometries and attributes from the source layer and can be copied into any database to which the user has access. Once checked out, the user can edit the layer using the Editor

or Enterprise versions of XMap or simply use it for reference in the field. Once the user is finished with the layer, they can check it in to the original source layer. All changes made to the data in the check-out portion are updated in the source layer; this allows XMap users to modify and update different portions of a single layer at a time.

Other Features

- GIS layer append and replace features for import
- GIS stationing support for field line assets with user-defined distance measures (Enterprise and Editor only)
- Multi-point registration with transparency and color control (Enterprise and Editor only)
- Full U.S. National Grid support with easy to read grid and zone identifiers
- Topological editing and connectivity tools
- COGO—create vector GIS layers through coordinate geometry input
- Geocode addresses and coordinate databases directly into vector GIS layers
- GIS layer import from ESRI MapInfo and other sources
- AutoCAD DWG/DXF file import using embedded coordinates or manual registration
- Drag and drop importing of vector GIS layers
- Multiple base map data sets available—including the new World Data
- Enhanced 3-D terrain modeling with seamless fly over effect
- Customizable keyboard shortcuts
- Residential and business phone search

The XMap GIS Family of Products

XMap 7 GIS Enterprise, XMap 7 GIS Editor, and XMap 7 Professional provide a three-tiered GIS solution for efficiently creating, importing, editing, classifying, querying, and sharing your GIS data in an enterprise environment. XMap 7 is equally suited as a standalone GIS software solution or as a supplement component to your existing GIS infrastructure.

In addition to GIS, these versions of XMap include powerful routing and in-vehicle navigation tools; advanced GPS support for field tracking and navigation; interoperability with Earthmate PN-Series GPS devices for field data collection and exchange of map data, waypoints, and tracks; 3-D terrain modeling with simulated fly-over functionality; advanced printing tools; and much more.

XMap 7 GIS Enterprise

The upper tier of the XMap suite is designed to meet the specific needs of enterprise GIS managers who need to efficiently manage and deploy GIS data throughout a company. XMap GIS Enterprise also includes all of the features in XMap GIS Editor.

Create and distribute GPS data collection forms to XMap Editor and XMap Professional users and PN-Series GPS owners. XMap Professional users require an XMap Forms license.

- Quickly sync layers—increased sync speed for large databases
- Establish database permissions for Windows security groups
- Access your existing GIS databases with ArcSDE support. Supports Oracle and SQL Server databases
- Ensure data integrity with check-out/check-in tools
- Share data across the enterprise with database synchronization tools
- Use the API Command Window to perform basic mapping functions from a third-party application
- Automate the import and export of standard spatial data files with the bulk importer-exporter
- Supports Microsoft® SQL Server® 2008

XMap GIS Enterprise in conjunction with multiple copies of XMap Professional provides a complete field force GIS data collection system.

XMap 7 GIS Editor

XMap 6 GIS Editor is a perfect choice for small GIS departments or for a company or organization that is considering the development of a GIS to increase productivity. XMap GIS Editor also includes all the features in XMap Professional.

- Create forms in databases synchronized from an XMap Enterprise database
- Create zero and negative buffers for polygons
- Export KML files
- Geocode by State Plane and UTM coordinate systems
- Cut individual GIS layers to a PN-Series GPS device for field work
- Search for GIS objects using enhanced real-time proximity search for GIS objects using GPS Radar on the Find tab
- Import and work with a variety of GIS file formats including, ESRI .shp and .e00; MapInfo .mif and .tab; AutoCAD .dwg and .dxf; and more
- Geocode your existing data in .mdb, .xls, and other formats to create GIS layers
- Create and edit points, lines, and polygons with freehand draw tools or with precise coordinate geometry input tools
- Ensure the spatial integrity of your line layers with topological editing and edge matching
- Access advanced classification, annotation, buffer, and geospatial query tools
- Create your own raster data layers with multi-point image registration

XMap 7 Professional

XMap 7 Professional is ideally suited for field crews and mobile professionals. By offering access to GIS data that has been processed using the GIS Editor or GIS Enterprise editions of XMap, it provides an affordable alternative to a full-fledged GIS for use on the road and in the field.

- Collect and edit data using forms synchronized from an XMap Enterprise database—XMap Forms license required
- Optimize response time with the latest in-vehicle, voice-controlled navigation tools
- Perform country-wide searches of address locations and points of interest
- Easily redline data corrections to Enterprise GIS data and efficiently share these edits with your GIS administrator
- View your data in stunning 3-D with the latest terrain modeling technology
- Import ESRI shapefiles into the GIS tab and apply symbolization

XMap Professional offers essential and fundamental mapping functions that include data visualization, access to aerial and satellite imagery, address-to-address routing, annotation tools, document linking, advanced printing, GPS support, and more. In addition, you can view and print GIS maps created using XMap GIS Editor and XMap 7 GIS Enterprise.

Product Comparison

	Enterprise	Editor	Professional
Multiple DeLorme base map options	✓	✓	✓
Door-to-door GPS navigation	✓	✓	✓
3-D terrain modeling	✓	✓	✓
Phone number searching	✓	✓	✓
Third-party GPS support for data exchange	✓	✓	✓
Routable road adding tool	✓	✓	✓
MapShare for posting maps online	✓	✓	✓
OpenSpace (vector GIS format) viewing	✓	✓	✓
MrSID and GeoTIFF viewing	✓	✓	✓
Split screen for side-by-side map views	✓	✓	✓
Address geocoding	✓	✓	✓
Redlining for field data updating *	✓	✓	✓
Layer synchronization *	✓	✓	✓
Support for Earthmate PN-Series GPS devices	✓	✓	✓
API for remote access to basic mapping functions	✓	✓	✓
Data symbolization	✓	✓	✓
Shapefile import	✓	✓	✓
Other vector data importing (.dxf, .mif, .gml, etc.)	✓	✓	
Forms creation*	✓	✓	
Forms editing*	✓	✓	✓

	Enterprise	Editor	Professional
GIS check-out/check-in tool *	✓	✓	
Vector data creating and editing	✓	✓	
Attribute importing and editing	✓	✓	
Data classification (thematic mapping)	✓	✓	
Buffer tools	✓	✓	
Spatial and attribute query building	✓	✓	
XMap Web (online GIS) publishing	✓	✓	
Multi-point image registration	✓	✓	
ArcSDE support	✓		
Administer databases for check-out/check-in	✓		
Administer database subscriptions for synchronization	✓		
Redline administration and integration	✓		

Note: These features require database administration with XMap Enterprise. For XMap Professional, Forms editing also requires purchase of Forms license.

Installation Instructions

Follow the instructions below to install XMap 7.

1. Insert the installation DVD into your computer's DVD drive. Setup automatically begins. If not, browse to the DVD drive and double-click **Setup**.
2. On the License Verification screen, type your XMap license key in the text boxes.
3. Click **Validate**.
4. On the Welcome screen, click **Next**.
5. On the License Agreement screen, read the license agreement and select the **I accept**

the terms in the license agreement option. Then, click **Next**.

6. On the User Information and Registration screen, if your computer is connected to the Internet and you want to register online during the installation process, enter the required information. Then, click **Next**.

   OR

   If you want to register later, type your first and last names in the boxes, clear the **Register Online** check box, and then click **Next**.

7. On the Destination Folder screen, if you want to install XMap in a folder other than the default location, click **Change** and select an alternate folder. Otherwise, click **Next**.

8. On the Customize Setup screen, to install all features as shown, click **Next**.

   OR

   To select or modify the program features you want to install, click the arrow next to each feature to select an option. Then, click **Next**.

9. Click **Install**.

10. When prompted, click **Finish**. If you registered during installation, you will receive a verification e-mail at the e-mail address you specified. Your product will not be registered until you verify your registration.

Modifying, Repairing, or Removing the Installation Settings

After installation, you can modify, repair, or remove the installation using the Change option in Add/Remove Programs.

1. From the **Start** menu, point to **Control Panel** and then browse to **Add/Remove Programs**.

2. Under Currently Installed Programs, click to select your DeLorme XMap application.

3. In the highlighted block, click **Change**. The InstallShield wizard displays.

4. Click **Next**. The Program Maintenance screen displays.

- To modify which features are installed: Select the **Modify** option and click **Next**. To disable a feature, click the hard drive icon next to the option and then select the **This Feature Will Not Be Available** option in the menu.

Interface Guide

You can access most of the functions in XMap using the tabs below the map area.

Map Data—Add data to projects and manage projects

GIS—Import or create vector GIS layers; link attribute data; classify and adjust how the data displays; build queries; and more

Print—Print single or multi-page maps of the current map view, route details, elevation profiles, or XData datasets

Find—Search for locations on the map

Phone—Search for residential or business phone listings (Phone Data required)

Info—Get information about a map feature

NetLink—Purchase datasets, learn about product updates, link to www.delorme.com

ImageReg—Register images to a map

Draw—Add annotation or redline additions to a map

Profile—profile elevation graphs for a selected linear object on a map

3-D—View and fly over your map in 3-D

**Route**—Create and manage routes

GPS—Connect a compatible GPS device to your system and view your position in real time as you travel

Voice—Issue voice commands and receive spoken directions

Handheld Export—Export a map to an Earthmate PN-Series GPS receiver or a PDA

XData—Import, locate, and manage data using an address, ZIP Codes, or coordinates

Use the **toolbar** to perform many GIS- and toolbar functions. GIS toolbar task committing changes, synchronizing da managing projects, printing, routing, p

Not all of the toolbar features are activ want to view, right-click the toolbar. To currently displayed in the toolbar. Click
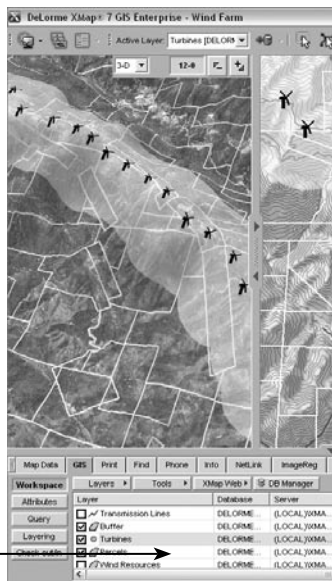
-related operations in addition to standard mapping s include redlining, COGO editing, editing a layer, ta, and more. Other toolbar features include rofiling, online sharing, panning the map, and more. ated by default. To modify which toolbar items you oolbar options with a check mark next to them are the item to toggle it to show or hide it in the toolbar.

The map area contains a primary map and a secondary map. Depending on the percentage of the map area you have exposed, you may see both maps or only one.

Viewing either the primary or secondary map is helpful when you want to view a large area on the map.

Splitting the map to view both the primary and secondary maps allows you to view multiple data types for the same geographic area, as shown to the left.

To conceal/expose the primary/secondary maps, either drag the map resize tool (the vertical bar that splits the two map views) or click the arrows on the resize tool to resize the map area.

The Control Panel includes features for viewing/controlling:
- Data zoom level
- Map panning
- Map rotation
- Coordinates
- Elevation
- Contour interval
- Map scale

Last Update	Min	Max	Map	Type	Geometry Count
5/28/2008 4:15:44 ...	0	20	Both	Line	16444
5/13/2008 3:24:57 ...	0	20	Both	Polygon	1
5/13/2008 3:25:16 ...	0	20	Both	Point	16
5/14/2008 4:51:48 ...	0	20	Both	Polygon	190462
5/14/2008 4:51:30 ...	0	20	Both	Polygon	197434

OR

To enable a feature, click the hard drive icon next to the option and then select the **This Feature Will Be Installed on Local Hard Drive** option in the menu. Click **Next** and then click **Install**. When prompted, click **Finish**.

- To repair any installation errors in the program (for example, if there are missing or corrupt files, shortcuts, and/or registry entries), select the **Repair** option, click **Next**, click **Install**, and then click **Finish**.

- To remove XMap from your computer, select the **Remove** option and click **Next**. Then, click **Remove** to begin the removal process.

Upgrading from a Previous Version of XMap

What to Do With Older OpenSpace GIS Layers

Use the Import Wizard in the GIS Workspace subtab to import OpenSpace layers from previous versions of XMap into XMap 7. **Note:** Layers that are stored in previous versions of XMap databases will not have access to all of the features available in XMap 7.

XMap Editor and Enterprise users—To upgrade your older files to the XMap 7 format, use the Layer > Import tool on the GIS tab and copy them to an XMap 7-compatible database. Advanced users can convert multiple files using the XMap GIS Bulk Importer/Exporter by exporting the layers from older XMap databases and OpenSpace files and importing them back into XMap 7 databases.

What to Do with Existing Datasets

If you have saved any imagery or data from NetLink, including Aerial Data Packets (ADPs), to the default location in previous versions of DeLorme software (*C:\DeLorme Docs\Downloads*), you must manually copy each file to the DeLorme Docs\Downloads folder located in Windows XP: *C:\Documents and Settings\All Users\Shared Documents\ DeLorme Docs\NetLink\Downloads or Windows Vista/Windows 7: C:\Documents\Public\ Public Documents\DeLorme Docs\NetLink\Downloads*. This allows the imagery or data to automatically display as map data.

If you have existing map datasets such as 3-D TopoQuads, XMap USA Street Level Data, or XMap USA Topographic Data, you can view them in this version of XMap. The procedure

for viewing map data in XMap 7 is the same in previous versions of XMap. The data can be viewed while it is in your DVD drive or from your computer's hard drive after the data is saved. If the data does not display in XMap, click the **Map Data** tab, click **Data**, and then click **Add**. Then, browse to the location of the dataset.

Migrating from other DeLorme Products

You can import and use all of the files you created in previous versions of DeLorme mapping software (including previous versions of XMap, Topo USA, and Street Atlas USA) in XMap 7.

If you are migrating existing data from Street Atlas USA, Topo USA, or XMap 5.x or earlier, see the XMap Help topic *Migrating Data to the New DeLorme Docs Folder.* The location of the Delorme Docs folder changed in XMap 6.

- You can open projects/map files from Topo USA and Street Atlas in XMap. To open a project, click the Map Data tab, click File, and then click Open to browse to the project you want to view.

- To add existing route and draw files from XMap, Topo USA, and Street Atlas USA to your current XMap project, click the Map Data tab, click the Data button, click Add, then browse to the route or draw file location (usually the Navigation and Draw folders in the DeLorme Docs folder).

- To add existing XData datasets from XMap or Street Atlas USA Plus to your current XMap project, click the Map Data tab, click the Data button, click Add, then browse to the XData dataset location (by default the Datasets folder in the DeLorme Docs folder).

Note: In XMap 7 GIS Editor or XMap 7 GIS Enterprise, you can directly import draw files and XData datasets into the OpenSpace GIS layers and use them in the GIS tab.

Migrating from other GIS Products

If you are replacing your current GIS with XMap, or if you are using XMap in conjunction with your current GIS, you must import your GIS files into XMap OpenSpace GIS databases to use in XMap. The first step in migration is to know your data. If your data does not have projection,

coordinate, and datum information embedded in the file, you must specify these parameters during import. This information is often included in an accompanying metadata file.

You can import your data using the XMap GIS Bulk Importer/Exporter (Editor or Enterprise) or the GIS Import Wizard on the GIS tab. You can also simply drag and drop the data files onto the map and the import wizard will automatically begin.

Once the data is imported, use the tools in XMap to create subscriptions to the layers, user accounts to OpenSpace databases, and more. For more information on these features, see the XMap Help topics.

To add raster GIS layers, such as MrSID or GeoTIFF files, to your current XMap project, select the **Map Data** tab, click the **Data** button and choose **Add**. Browse to the location of the file and click **OK**.

Basic Functions

The XMap Help Topics include instructions for using all of the basic and advanced functions of XMap. To access the Help Topics, click the **Help** button ?- on the toolbar and then click **Help Topics**.

Navigating the Map

There are multiple ways you can navigate the map:

* Use the Navigation tool to click the location on which you want to center the map.
* Use the grab-and-pan tool 🖐 on the toolbar to drag the map in any direction.
* Use the search features in the Find tab to center the map on your location of interest.
* Double-click a layer in your GIS workspace to center the map on that layer.
* Drag the view box in the Overview Map to center the map on the location you want.

Zooming the Map In or Out

XMap includes several methods for zooming the map in or out:

* Drag-and-zoom map controls—with the Navigation tool selected, left-click and drag the mouse in a down-right direction to zoom in or drag the mouse in an up-left direction to

zoom out. To move the view box to another location, press the SHIFT key at any time during this procedure without switching back to the Navigation tool.

- Manually adjust the data zoom level with the Data Zoom scroll box in the Control Panel.
- Use the zoom tools in the Control Panel to zoom the map in one level, out one level, or out three levels.
- Press ALT+PAGE UP on your keyboard to zoom out to the next full data zoom level. Press ALT+PAGE DOWN on your keyboard to zoom in to the next full data zoom level.
- Rotate the mouse wheel (if available) to zoom in by individual data zoom level steps or hold the SHIFT key while rotating the mouse wheel to zoom to the next full data zoom level.

Changing the Base Map

You can add map datasets, such as XMap USA Street Level Data and USA Topographic Data, to XMap using the Base Data tool. Click the **Map Data** tab, click **Data**, and then click **Base Data**. Then add the path where the data is stored on your system. Once a dataset has been added to base data, it is automatically loaded in all other projects.

By default, the DVD drive on your computer is a base data location. Also, any compatible datasets that you have saved to your hard drive since you installed XMap should display in the Base Data locations list.

Changing the Map View to Show a Single Map or a Split Map

Use the split-window in XMap to view two maps at the same time.

You can access the left (secondary) map by sliding the divider bar that runs perpendicular to the tab area. When you move the bar all the way to the left of the map, only the primary map is displayed. When you move the bar all the way to the right, only the secondary map is displayed. Drag the divider bar to adjust the display areas of the primary and secondary maps.

Importing GIS Layers

You can import ESRI (.shp, .e00), MapInfo (.mif, .tab), AutoCAD (.dxf, .dwf, .dwg), Geocode Types (.asc, .csv, .dbf, .txt, .mdb, .xls. .tab), XData datasets, DeLorme draw files, and DeLorme OpenSpace GIS transfer files into a database that you can then classify, symbolize, analyze, and edit. The import process varies depending on the type of file

that you are importing (for instance, if the file contains spatial reference information or if it is a geocode file type). You can also import data from an ArcSDE database. For more information, see the *Working with GIS/Managing Layers in Your Workspace/Importing a Layer into a Database* Help topics.

Installing XMap Datasets

Most of the datasets that are described in this section can be installed to your computer's hard drive (helpful when you want to view multiple data types in a single project) or viewed by inserting the data DVD into the DVD drive each time you want to view the data.

XMap Datasets

If XMap is not installed before you install the data or if your version of XMap is not listed during the install, you must use the Map Data tab in XMap to manually add the data to the base data. For more information, see *Changing the Base Map* on page 19.

The following datasets are available: XMap USA Topographic, XMap USA Street Level, and XMap World Base Map.

These datasets can be saved on a hard drive or run from a DVD drive. For best performance when using the DVD from a DVD drive, first complete a Compact installation (see step 6).

1. Ensure XMap is installed.
2. Insert the data DVD into your computer's DVD drive. Once the DVD is detected, you will be asked if you want to save the data to your hard drive. If you do want to save the data, click **Yes** and proceed with the following steps. If you do not want to save the data, click **No** (you will need to insert the data DVD into your DVD drive each time you want to view the data in the program).
3. Click **Next**. The Destination Folder Screen appears.
4. Optional. On the Destination Folder screen, if you want to save the data somewhere other than the default location, click **Change**. The Change Current Destination Folder screen opens. Then:

   Select a hard drive location from the Look In drop-down list. You can also browse to the location or click the New Folder button to create a new folder for the data. Click **OK**.

OR

If you know the path where you want to install the data, type (or paste) it into the Folder Name text box. Click **OK**.

5. Click **Next**. The Setup Type screen appears.

6. Select the **Complete** option if you want to install all of the data regions to your hard drive.

   OR

   Select the **Custom** option if you want to customize which data regions are saved to your hard drive.

   OR

   Select the **Compact** option if you want to use the data DVD each time you want to access the data. Select this option to install the minimum required amount of connectivity data to your hard drive; you must insert the DVD to view the map data.

7. Click **Next**.

8. If you selected **Complete** or **Compact** in step 6, go to step 9. If you selected **Custom** in step 6, the Custom Setup screen displays. Click the plus signs next to West Regions or East Regions to show the individual regions for each. To learn which states are included in a specific region, click to highlight it and then read the feature description to the right.

   • To disable a region, click the hard drive icon next to the option and then select the **This Region Will Not Be Available** option in the menu.

   • To change the location where a region is installed, highlight the region and then click **Change**. Use the Change Current Destination Folder screen to select a new hard drive location for the region.

   • To determine how much disk space is required/available for a data region, highlight the region and then click **Space**. The Disk Space Requirements screen displays the hard drive size and availability as well as the disk space required for the selected region. Click **OK**.

   Click **Next**.

9. On the Data Connection Options screen, select the check box next to each installed DeLorme program that you want to use to view the dataset and then click **Next**.

Note: If this screen does not appear or if your software is not listed, you must manually add the data to XMap. See *Changing the Base Map* on page 19.

10. On the Ready to Install program screen, click **Install**.

11. When prompted, click **Finish**. The data automatically displays in the programs you selected in step 9.

NetLink Imagery and Data

You can download imagery and data ordered through XMap's NetLink tab or receive it on DVD. For more information, click the **Map Library** subtab on the NetLink tab. Follow the steps below to save your data on DVD to your local hard drive.

Imagery and Data on DVD

1. Insert the DVD into your DVD drive.
2. Browse to your DVD drive.
3. Copy the entire contents of the DVD and paste it anywhere on your hard drive.

Sat 10

1. Insert the Sat 10 DVD into your DVD drive.
2. From the Start menu, click **Run**. Type **D:\Setup** (where D:\ is the letter of the DVD drive containing the Sat 10 DVD) in the command line text box and click **OK**.
3. Follow the on-screen directions to complete the data installation. The Sat 10 data folder is then saved on your hard drive at *Program Files\DeLorme\Sat*.

3-D TopoQuads Data (USGS 71/2' quads)

1. Create a folder on your hard drive called **3-D TopoQuads Data.**
2. Within the 3-D TopoQuads Data folder, create a subfolder for your data DVD or create subfolders for each of your regional data DVDs.
3. Insert the 3-D TopoQuads DVD into your DVD drive.
4. Using Microsoft Windows Explorer, browse to your DVD drive.
5. Right-click the DVD drive and click **Copy**.
6. Right-click the folder you created in step 2 and click **Paste**.

Adding Data to XMap

You can add imagery and data from NetLink to your base data to make it available in the current project and all future projects, or you can add it to a specific project.

To add it as base data, see *Changing the Base Map* on page 19.

To add it to a specific project, open the project, click the **Map Data** tab, click **Data**, and then click **Add**. Browse to your file and select it. Then select the map you want to add the file to and click **Add**.

Phone Data

To install the phone data, insert the Phone Data DVD into your computer's DVD drive and follow the on-screen instructions in the installation wizard. To use the phone data from the DVD without installing it, close the installation wizard, click the **Phone** tab, click **Data**, browse to your DVD drive, and click **OK**.

Add-ons for XMap

This section describes some of the many DeLorme software and hardware product offerings that work with your XMap system.

Map Datasets

DeLorme offers multiple base map datasets to suit your mapping and GIS needs. Some of the many options include:

- **XMap USA Topographic Data—**Vectorized USGS topographic and elevation data with over 300,000 miles of trails, as well as street-level detail for the United States.
- **XMap USA Street Level Data—**Vector maps with routable street-level detail and places of interest covering the United States and Canada. Major road routes in Mexico also included.
- **XMap World Base Map Data—**1:250,000 topographic, accurate, and seamless map of the world that includes major transportation layers, inland and shoreline hydrography, jurisdiction boundaries, and major geographic features.

- **Imagery and Data—**Various types of imagery and data, such as 10-meter satellite imagery, USGS DOQQ, USGS 7.5-Minute Quads, NOAA Charts, a Digital Elevation Model, and more.

For more information about these datasets and others that DeLorme offers, visit www.delorme.com or click the NetLink tab in XMap.

XMap Forms

For information about XMap Forms, see page 2.

Earthmate GPS

The Earthmate family of products offers Bluetooth, laptop, and handheld GPS solutions. For the latest in Earthmate offerings, visit www.xmap.com/gps.

Getting Help

The Help system provides explanations of all of the features and functions of XMap. To access the Help system, click the **Help** button ?? on the toolbar and then click **Help Topics**.

A link to a printable User Guide on our website is also available from the Help menu. The User Guide includes the entire Help system contents in a portable document format (.pdf). To access the User Guide, click the Help button in the toolbar and then click **User Guide**.

Training

An official DeLorme training program for you and your colleagues can help you appreciate the true worth of your purchase by optimizing your workflow and revealing the wide variety of mapping tools that you now have at your disposal. DeLorme can conduct a training program at your location, at DeLorme headquarters in Yarmouth, Maine, or online using a Web meeting service. For more information about our training programs, visit www.delorme.com/training.

To schedule your class, contact training@delorme.com or call 207-846-7020 and ask for the training coordinator.

Troubleshooting

Map Data Doesn't Display in All Projects

The procedure for adding data to XMap varies depending on if you want to add the data to the current project or if you want to add it to all projects. If you have only added the data to the current project and you want to view it in all projects, you will need to add the data as base data in the application.

Use the steps below to add a map dataset as base data.

1. Click the **Map Data** tab.
2. Click **Data** and then click **Base Data**. The Base Data Locations dialog box lists each of the data sources on your system.
3. Click **Add**. Select the hard drive location where you saved your data from the Browse for Folder dialog box, and click **OK**. The OK button is enabled when you select a folder containing a file that contains the properties of the map data being added.
4. Click **Done**.

What is my Server Name?

XMap uses Microsoft SQL Server as its DeLorme OpenSpace database engine. Your server name varies, depending on if you are connecting to or creating a DeLorme database in Microsoft SQL Server 2005 Express/Microsoft SQL Server 2008 or a Microsoft Enterprise SQL Server at your company.

- To establish a local connection to SQL Server 2005 Express or SQL Server 2008, use <computer name>\XMAP7 for the server name.
  To establish a connection to SQL Server 2005 Express on another computer in your network, use <computer name>\XMAP7.

- To establish a connection to a Microsoft Enterprise Microsoft SQL Server, use <Server Name> for the server name. You will need to ensure that you have the proper server and database permissions and you are connected to the network. Contact your administrator if you experience problems.

Workspace Does Not Display Any Layers

If there are no layers in your workspace, you may have accidentally removed the layers from the workspace. To retrieve the layers, click the **GIS** tab, click the **Workspace** subtab (if it is not currently selected), click the **Layers** button, and then click **Manage**. Select the Source Database you want to pull layers from, highlight the layers in the Database, and then click the Move or Move All button to move the layers into your workspace. If no source databases are listed, click the **Other** option to connect to an existing database. If no databases have been created, to recreate them with Database Manager or select the **New** option in the **Database** drop-down list in the Create Layer or Import dialogs.

If you use the above procedure and you still cannot view layers in your workspace, contact the Database Administrator to verify the database you are connected to is running correctly and is not disconnected.

The Map View is Blank

If you installed compatible data to your hard drive before XMap was installed, your map area may appear blank when you open the program. If your map area is blank, you must update the Base Data settings in the Map Data tab to include that data in your projects. For instructions on adding data to your base data settings, see the first *Troubleshooting topic, Map Data Doesn't Display in All Projects*.

Minimum System Requirements

- Microsoft® Windows XP, SP2 with 512 MB RAM (1 GB+ MB recommended)
- Microsoft Windows Vista™ Business, or Ultimate: 1 GB RAM (2+ GB recommended)
- Microsoft Windows 7 Business, or Ultimate: 1 GB RAM (2+ recommended)
- 1.5 GHz or higher processor (1.5+ GHz Dual Core recommended)*
- 1 GB of available hard-disk space (2 GB+ recommended). Note: 4.1 GB of available hard disk space required to install phone data for all regions (can be run from DVD)
- 3D-capable video card with 64 MB VRAM (128+ MB recommended)
- Microsoft Internet Explorer 6.02 or later
- DVD-ROM drive
- 1024 x 768 screen resolution or higher

* XMap 7.0 does not support the AMD Athlon XP family of microprocessors. It does support the AMD Athlon 64 family. XMap 7.0 supports **all** Intel® CPUs 1.5GHz or higher processors.

Contacting DeLorme

For sales and general product questions, phone 1-800-293-2389 Monday-Friday (excluding holidays). To order online, visit the XMap website at xmap.com

You can also receive product support using the following resources:

Support Website: support.delorme.com

Community Forums: forum.delorme.com

E-Mail: support@xmap.com