Getting Started with Oasis montaj

Oasis montaj Mapping and Processing System (MAPS) is Geosoft’s core software platform for working with large volume spatial data. The platform provides the functionality required to locate, manage, visualise, manipulate, display and share located Earth Science data.

The Oasis montaj environment provides direct access to data contained in Oasis databases through a Spreadsheet window and an integrated Profile display window. The Oasis database is a high-performance database that provides efficient storage and access for very large spatial data sets.

Metadata (data about data) is captured by Oasis montaj from the first time the data is touched. The metadata information, which is based on ISO 19115 standards, is stored inside the data (if supported) or as a companion XML file.

The Interface provides visual Data links that enable you to dynamically connect data in the Spreadsheet, Profile, Map and ArcGIS MXD views. DAT Technology (for Accessing Grids and Images) enables the Interface to use a variety of grid and image formats in Oasis montaj.

The Oasis montaj core platform provides the basic resources for all Geosoft Applications and Tools. Geosoft provides a variety of systems that address specific applications in exploration geophysics, drillhole geology, exploration geochemistry and other areas. These systems consist of menus and corresponding Geosoft executables (GXs) that run on the core platform.

Oasis montaj Mapping and Processing System

The Oasis montaj Mapping and Processing System contains a variety of built-in data import, processing, analysis, visualization, mapping, and integration capabilities. This system enables you to perform complex processing, editing, mapping, and interpretation tasks including the ability to:

- Create, import and export: maps, databases, grids, voxels, MXD files, images and profiles
- Automatic Metadata Creation. Oasis montaj creates metadata automatically when you work with data, storing the name of the user, date, time and actions performed. A XML Metadata viewer and editor enables easy access to your metadata.
- Process data using Geosoft’s gridding, contouring and 1D filter algorithms
- Advanced grid utilities and gridding toolkit
- 3-dimensional mapping that includes a range of options for visualizing data including: voxels, multiple surfaces and sections, each with own relief and contents, and each with its own orientation in 3D space
- Design and layout maps, consisting of base maps, grids, images, customized annotations, labels, colour symbols, multi-parameter symbol plotting, and other entities
- Advanced CAD tools to draw interpretation features on your maps
- Communication Service that enables interoperability between multiple instances of Oasis montaj, Target for ArcGIS and other third party applications
- Automate tasks using scripts
Get Started!

Getting Started with Oasis montaj
# Software and Hardware Requirements

| Operating System | Windows 8 (32-bit and 64-bit)  
 Windows 7 SP1 (32-bit and 64-bit) - Recommended  
 Windows Vista Business SP2 (32-bit and 64-bit)  
 Windows XP Service Pack 3 (32-bit) - Minimum requirement  
 Windows 2000, 95, 98, ME, NT are not supported. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>A Dual Core processor is recommended. An Intel Celeron processor is not recommended.</td>
</tr>
<tr>
<td>RAM</td>
<td>3+ GB recommended, 1 GB minimum required.</td>
</tr>
<tr>
<td>Printer/Plotter</td>
<td>Any Windows® supported colour printer. Hewlett Packard® large-format ink-jet plotters are recommended.</td>
</tr>
<tr>
<td>Installation</td>
<td>You must be logged on with Administrator permissions when installing Oasis montaj.</td>
</tr>
<tr>
<td>Installation Disk Space</td>
<td>2 GB or more of free space on the Program Files drive is required for the installation process.</td>
</tr>
<tr>
<td>Data Disk Space</td>
<td>Data disk space depends on the volume of project data to be processed and the printer driver you are using, however 100 GB is recommended. This is largely based on your business and data requirements.</td>
</tr>
</tbody>
</table>
| Internet         | Internet Connection: To use VOXI, we recommend a medium to high-speed internet connection (512Kbps upload and 1Mbps download or higher). The faster your internet connection, the faster you will be able to upload your modelling information to the VOXI cloud servers and download your results.  
 Internet Browser: To use the internet capabilities in Oasis montaj or Target, you will need to install Internet Explorer 8.0 or later. This does not mean that you have to have Internet Explorer as your default browser; Oasis montaj and Target just use the internet connection technology supplied in IE8. |
| Supporting Software | The following software prerequisites are required and will be downloaded and installed if not present:  
 • Microsoft .NET 4  
 • ESRI ArcEngine 10.2 |
Geosoft Connect and Geosoft ID

Geosoft Connect is a service available through the Oasis montaj application. Geosoft users can sign in to their Geosoft ID, using Geosoft Connect, to access any online service that requires a secure sign in, including online licensing, online updates, VOXI Earth Modelling and Bing Map services. Geosoft Connect enables you to sign in from your desktop when you are connected to the Internet.

As a customer, your Geosoft ID is the only sign in you'll need to remember when accessing any of our services, resources, community activities or our web site.

⚠️ For more information see the Geosoft ID Common Questions on the Geosoft web site.

Create your Geosoft ID

Your Geosoft ID is the only sign in you'll need to remember when accessing any of our secure online services, including online licensing, online updates, VOXI Earth Modelling and Bing Map services.

Create Geosoft ID:

1. Connect to the Internet.
2. Go to the, Register Geosoft ID (https://www.geosoft.com/geosoftid/) web page.
3. Click the Create a Geosoft ID button. The Create a Geosoft ID web page is displayed.
4. Enter your information as required and then click the Create a Geosoft ID button.

⚠️ We prefer if you use your business email for your Geosoft ID. You may get a message saying 'A user account already exists for that e-mail address.' If you don't know or have forgotten the associated password, you may need to reset it.

5. Once you have registered, Geosoft will immediately send you an activation link to the e-mail address you provided (within 20 minutes).
6. When you receive the activation e-mail, click the Click to Activate link. Your Geosoft ID will be activated.

⚠️ Geosoft Connect is a service available through the Oasis montaj application. You can use this service to sign in to your Geosoft ID from your desktop, when you are connected to the Internet.

Welcome to the Oasis montaj Environment

This guide walks you through the basic steps to start working with your new software.

Opening Oasis montaj

Oasis montaj can be opened from the Start menu.

⚠️ Oasis montaj should already be installed.
To Start Oasis montaj

1. On the Start menu, select Programs, and then select Geosoft.

3. Select Oasis montaj and then select Oasis montaj.

The Oasis montaj Graphical User Interface (GUI) opens with standard Windows style elements, including the Main Menu, Pop-up Menus and Application Help as shown below:

---

Oasis montaj System Files

As you work with the system, you will become familiar with a variety of standard files used for specific functions. The following list provides a short summary of the more important files.
### Oasis montaj System Files

<table>
<thead>
<tr>
<th>Oasis montaj System Files</th>
<th>System File Extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geosoft database file</td>
<td>*.GDB</td>
</tr>
<tr>
<td>Map file, including plots and grids</td>
<td>*.MAP</td>
</tr>
<tr>
<td>Geosoft grid file</td>
<td>*.GRD</td>
</tr>
<tr>
<td>Colour information for grids/images</td>
<td>*.AGG</td>
</tr>
<tr>
<td>Geosoft voxel file</td>
<td>*.GEOSOFT_VOXEL</td>
</tr>
<tr>
<td>ArcGIS MXD file</td>
<td>*.MXD</td>
</tr>
<tr>
<td>Oasis XML file</td>
<td>*.XML</td>
</tr>
<tr>
<td>Geosoft eXecutable</td>
<td>*.GX</td>
</tr>
<tr>
<td>Geosoft script file</td>
<td>*.GS</td>
</tr>
<tr>
<td>Oasis menu, Oasis sub-menu</td>
<td>*.OMN, *.SMN</td>
</tr>
<tr>
<td>Geosoft project file</td>
<td>*.GPF</td>
</tr>
<tr>
<td>Geosoft projection information file</td>
<td>*.GI</td>
</tr>
<tr>
<td>Geosoft map file (used in the MapInfo software to distinguish a Geosoft map file from a MapInfo (*.map) file)</td>
<td>*.GM</td>
</tr>
</tbody>
</table>

### Oasis montaj Projects

Oasis montaj requires an open project. An Oasis montaj "Project" encompasses every item in your working project. This includes the data files in your project (databases, maps, and grids), the tools used (including auxiliary tools such as histograms, scatter plots etc.) and the project setup. A project includes the menus you have displayed and whether you are working on a map or profile and the state in which you left it the last time you used it.

#### Creating a Project

The project also controls your working folder. The system enables you to access files anywhere, but it is a good strategy to carefully organize your data (project information and files) before carrying out any processing.

💡 *A general rule to follow is to avoid working in the Geosoft folder.*

💡 *Use your Windows Explorer tools to create a working folder, for example E:\Geosoft_Projects.*

Projects are saved as (*.gpf) files. If you open an existing project from a folder, the system assumes that all your project files are located in the same folder. To streamline your work, as well as keep it organized, you may wish to make sure that
your project file is in the same folder as the other files you want to use. We recommend that each project you work on have its own project (*.gpf) file. If you use a number of applications or extension tools in Oasis montaj that have different menus, you can use the project to display only the menus you require.

**To Create a Project**

1. Start Oasis montaj.
2. On the **File** menu, click **Project** and then click **New**. The **New Project** dialog appears.

   ![](image)

   **Oasis montaj assumes that your data is in the folder containing this project.**

3. Specify a **File name** and folder for the project.
4. Click **Save**. The system saves the project and indicates it is open by adding menus to the menu bar, adding buttons to the Standard Short-cut bar and by displaying the Project Explorer window. These are visual clues indicating that
you are ready to start working with the system.

The *Project Explorer* tool enables you to browse as well as open any data that has already been loaded into the project. The Project Explorer has two windows, the *Data* window that includes all data files included in the project and the *Tools* window that organizes and maintains the project tools. To access the Tools window click the *Tools* bar on the bottom of the Project Explorer. To return to the Data window, click the *Data* bar on the top the Project Explorer.

**Closing a Project**

Closing a project will save all of your project databases, maps and profiles, plus information that tells the system whether you are working on a map or profile and the state in which you left it the last time you used it.

**To Close a Project**

1. On the *File* menu, click *Project* and then click *Close*. The *Save Modified Documents* dialog appears.

   **Warning** *Modified Documents* refers to items in your project that you have modified since the project was last saved, such as databases and maps.

2. Click *All* to save all open document(s) in your project. Alternately, you may select specific document(s) to save by highlighting the document(s) and click *Selected* or click *None* to abandon document(s) changes.
Oasis montaj Menus

The Oasis montaj Mapping and Processing System menus are displayed directly under the Title Bar when you open a project. These dropdown menus provide direct access to all of the systems capabilities.

Loading Applications and Tools

In addition to the Oasis montaj base functionality, you may be licensed to access specialised applications, which we call "Extensions". Extensions are accessed by loading a menu file (*.omn), which in turn will load all of the menus and sub-menus associated with that extension. Examples include (geophysical and geochemical analysis, 3D drillhole plotting, gravity and magnetic filtering, levelling, interpretation etc.).

Your Oasis montaj project keeps track of which menus are displayed. This means that you can have a different set of menus displayed for each project. This is especially useful if you are working on multiple projects and using many applications or tools. For example, if you are working on a geochemistry project, you may want to display different menus than if you are working on an UXO project. By creating separate projects with differing menus you can customise the Oasis montaj environment to suit your current project.

To Load an Application or Extension Menu

1. On the GX menu, select Load Menu. The Load Menu dialog appears.
2. Select the menu file (*.omn) from the list of files and click **Open**. The new menu appears on your menu bar.

*If you want to modify your default menus (i.e. load a specified menu with every new project) you can use the GX|Global Settings|General menu to display the Default settings dialog to change your settings. If you are really interested in system configurations and want to view all of the System settings, open the Advanced Settings file from the GX|Global Settings|Advanced menu. The Advanced Settings will be displayed in the Metadata Browser.*

### Oasis montaj Settings

The Oasis montaj program has standard default settings which are designed to work well in most environments. However if you have particular personal or computing requirements you may overwrite the defaults to suit your needs.

**To Change the Default Settings of the Oasis montaj Environment**

1. On the GX menu, select **Global Settings** and then click **General**. The **Default settings** dialog appears.

   ![Default settings dialog](image)

2. Select the desired choices from the available selections.
3. Click **Next** to navigate through the **Default settings** dialogs.
4. Click **Finish** when complete.

   *For more information on the available selections, click the **Help** button on your dialog of interest.*

### Common Default Settings

The following table summarizes some of the more frequently changed settings.
**Default menus**
Select the menu files (.omn) to load as the default menus when creating a new project. If more than one menu is selected, each menu must be separated by the | character.

**Default grid colour table**
Select the default colour table to use for displaying grids.

**Default symbol colour table**
Select the default symbol colour table (*.tbl).

**Default map font**
Select the default map font. The file TRUETYPE.INI will be modified to map the "default" font from Geosoft PLT files to the TrueType font specified here. To change the mappings of other Geosoft fonts you can modify the TRUETYPE.INI file directly.

Click **Next** for More settings

**Default input grid format**
Select the input grid format you would like to use by default.

**Default output grid format**
Select the output grid format you would like to use by default.

**Default grid element type**
This is the default grid element type to use for Geosoft grids. If grids will be used with Geosoft DOS programs, select "16-bit (DOS compatible)".

**Error level reporting**
If All errors are selected, you will see more error messages each time an error occurs. This is useful for GX programmers who may need to see more error context when debugging GX’s.

---

### Auto Save Time

Oasis montaj has an **Auto Save Time** feature that enables databases and maps to be saved automatically. When AutoSave is enabled a popup dialog will be displayed asking if you want to save the changes to all open documents.

The frequency of the AutoSave (in minutes) can be modified or shut-off from the GX|Global Settings|Advanced menu.

💡 **Changing this setting to zero (0) shuts-off the AutoSave feature.**

---

### Metadata

Metadata (data about data) is captured by Oasis montaj from the first time a dataset is opened by the program. The metadata information, which is based on ISO 19115 standards, is stored inside the data (if supported) or as a companion XML file. When you import or work with data in Oasis montaj, **User name, Date, Time** and any actions performed on the data will be maintained in the Metadata. When data is derived from other data, the Metadata is passed on and the lineage of what was done to the data is maintained in the Lineage section. Note that, memory intensive GDB processing tasks are not recorded in the lineage.

⚠️ **When working with script files you have the ability to turn off the XML metadata file creation.**
Attributes (or metadata), information about data, can be simple or complex and the descriptive needs of different kinds of data are infinitely diverse. To allow for this and provide flexibility, Geosoft developed the XML Metadata Viewer and Metadata Editor to help you organize your metadata.

Even though each Geosoft data type (Database, Grid, Map, ArcGIS MXD, Voxel, etc) exhibits many different attributes, using these tools are easy. The current selection drives what exists inside the tool.

**Metadata Viewer**

Use the Metadata Viewer dialog to view the metadata associated with selected data files.

**To View and/or Edit Metadata**

1. On the Project Explorer window, select the data of interest.
2. Right-click and select Metadata from the pop-up menu. The Metadata Viewer appears.

3. Click Edit and the Edit Metadata dialog appears.
4. Make any necessary changes.
5. Click Close when finished and then click OK to close the Metadata Viewer.

**Metadata Tool**

The Metadata Tool is a context-oriented, interactive method for viewing and editing attributes assigned to Geosoft Global Setting, DAP Data etc.

⚠️ Values displayed in a grey box cannot be edited. Values displayed in a white box may be edited.
To View the Metadata Tool

1. On the GX menu, select Global Settings and then select **Advanced**.
The advanced global settings will be displayed in the **Metadata Tool**.

2. Make any necessary changes.

3. Click **OK** when finished or click **Cancel** to close the Metadata Tool.

**Shortcut Keys**

Oasis montaj now provides configurable Shortcut Keys (Hotkeys) enabling quick and easy access to menu functions. To view or modify these settings, you have two options:

- **Database Shortcut Keys**: Select GX | Database Settings | Configure GDB Shortcut Keys.
- **Map Shortcut Keys**: Select GX | Map Settings | Configure Map Shortcut Keys.

Both options provide an interactive dialog enabling you to configure your own shortcut keys (hotkeys) or view the provided defaults.
Shortcut Keys

Select a macro:
- Copy
- Cut
- Delete
- Paste

Description
Copy the database selection and put it on the Clipboard

Assigned shortcuts:
- Ctrl+C

Create Shortcut
Remove

How-To Guide Publication Date: 29/04/2014
Copyright 2014 Geosoft Inc. All rights reserved.