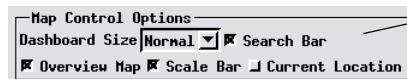
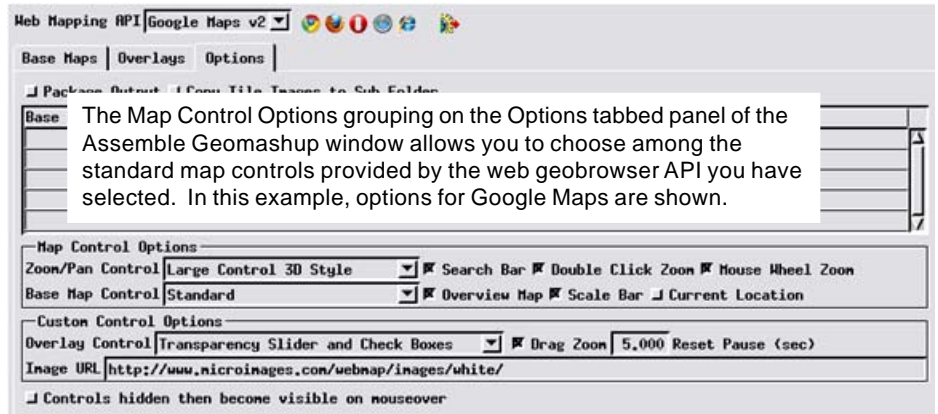


# Geomashup Map Control Options

Geomashups include a variety of controls to allow the viewer to select which data layers and area to view and other components providing view enhancements such as an overview map and search bar. MicroImages uses the term *standard map controls* to refer to controls and features that are provided and supported directly by the web mapping API you have selected (i.e., the geobrowser in which the geomashup will be viewed). Standard map controls include base map selection and zooming / panning, as well as various view enhancements. A selection of different control styles are available for these functions, depending on which web mapping API you have selected as your target geobrowser (Google Maps v2 and v3 [mobile], Google Earth, Bing Maps, or Open Layers). You can also add different types of custom controls (supported by JavaScript libraries provided by MicroImages) to your geomashups, as described in the Technical Guide entitled *Geomedia Publishing: Geomashup Custom Overlay Controls*.

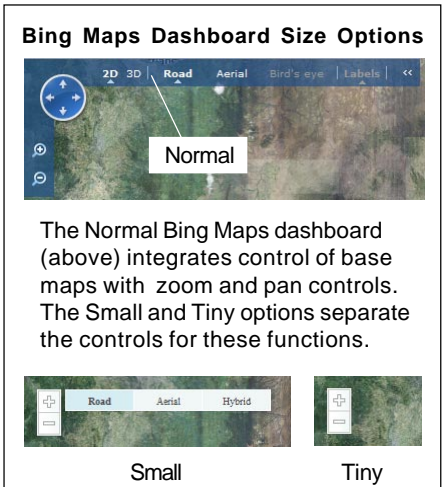
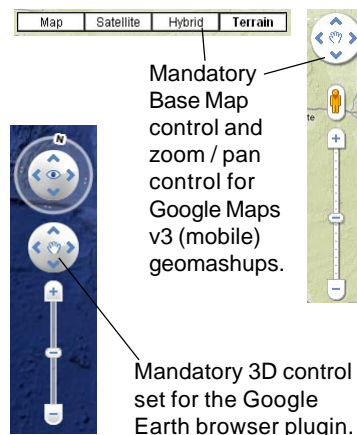
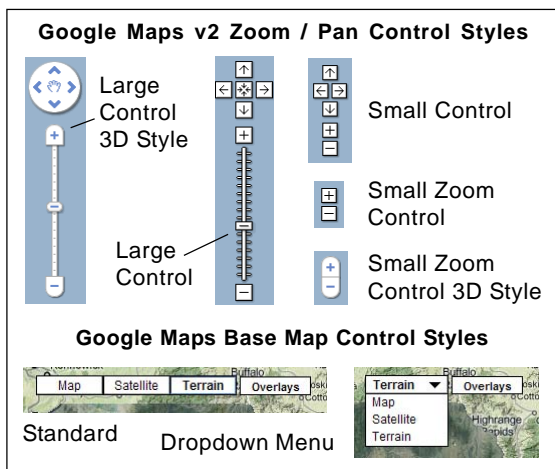
Other aspects of the Assemble Geomashups process are covered in the Technical Guides on *Geomedia Publishing* entitled *Introduction to Geomashups*, *Managing Custom Base Maps for Geomashups*, *Managing Custom Overlays for Geomashups*, and *Geomashup Data Management Options*.



Standard map control options for Bing Maps. The Dashboard Size menu provides a choice of the control styles illustrated below.

## Base Map and View Controls

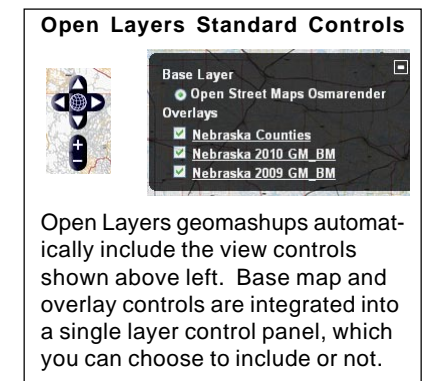
The Map Control Options section of the Options panel allows you to select among the standard controls and features that are available for the selected web mapping API. The Map Control Options sections for Google Maps v2 and Bing Maps are shown in separate illustrations above.



The Normal Bing Maps dashboard (above) integrates control of base maps with zoom and pan controls. The Small and Tiny options separate the controls for these functions.

The Google Maps v2 geomashup interface has a zoom/pan control and a separate base map control for switching base maps (proprietary and custom). You can choose from the several styles available for each type of control (illustrated above left) using menus in the Map Control Options panel for Google Maps v2. The Google Maps v3 (mobile) interface does not provide a choice of standard map controls, so there is no Map Control Options group for this API. A Google Maps v3 geomashup is automatically provided with a standard basemap control and view controls (illustrated above center).

In Bing Maps, basemap selection and view controls are integrated in dashboard control sets (illustrated above right), which you can select using the Dashboard Size menu in the Bing Maps version of the Map Control Options. The Small and Tiny options are suitable for geomashups designed for mobile devices.



Open Layers geomashups automatically include the view controls shown above left. Base map and overlay controls are integrated into a single layer control panel, which you can choose to include or not.

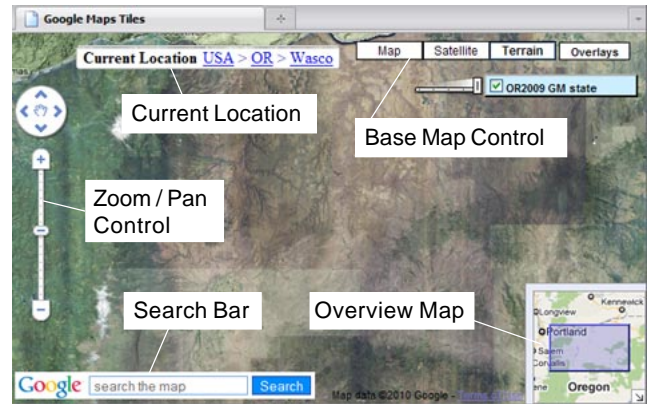
(over)

There is no Map Control Options grouping on the Options panel for Google Earth, as Google Earth geomashups are automatically provided with a single mandatory 3D view control set and no base map controls are available in Google Earth.

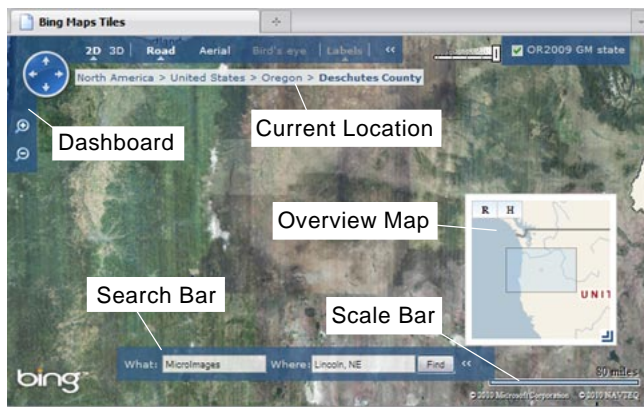
Open Layers geomashups are also automatically provided with a single mandatory view control set. Base map selection is controlled by check boxes integrated into a general layer controls panel for both base maps and overlays. You can choose whether or not to include the layer controls (via a Layer Controls toggle) and, if included, whether the layer controls panel should be initially open or collapsed to an icon. The Google Earth and Open Layers standard controls are illustrated on the front side of this page.

### Additional Enhancements

In Google Maps v2, Bing Maps, and Google Earth geomashups you can include additional enhancement features provided by the selected API. These options are selected via toggle buttons in the Map Control Options grouping on the Options tabbed panel.



Nomenclature of standard map controls and enhancements (those available in the selected web mapping API) using a Google Maps v2 geomashup as an example. It is not useful to use the Google Maps v2 Scale Bar and Search Bar together, as both are rendered in the same lower left corner position in the geobrowser view.



Standard map controls and enhancements available in Bing Maps geomashups.

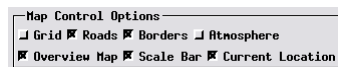


Map controls and enhancements available in a Google Earth geomashup.

Geomashups for Google Maps v2, Bing Maps, and Google Earth can include an overview map inset, scale bar, and current location indicator. The latter feature shows a sequence of progressively more specific location labels at the top of the geobrowser view. You can also include a standard search control for Google Maps and Bing Maps (a custom search control for Google Earth geomashups is available from the Custom Control Options; see the *Geomashup Custom Overlay Controls* TechGuide for details). In addition to these on-screen controls, for Google Maps v2 geomashups you can choose to implement zooming by double-clicking in the view and by using the mouse wheel. The checklist to the right lists the standard controls and their availability by API. The various controls are also shown for each geobrowser type in the illustrations above.

For Google Earth geomashups, the Map Control Options also include toggles to enable atmospheric effects and to add the Google Earth reference overlays listed below:

- Grid: latitude/longitude grid lines
- Roads: roads and road names
- Borders: country and area borders and place names.



Enhancement Options for Google Earth geomashups.

| Additional Enhancements Checklist |             |           |              |
|-----------------------------------|-------------|-----------|--------------|
| Control                           | Google Maps | Bing Maps | Google Earth |
| Search Bar                        | ✓           | ✓         |              |
| Double-click Zoom                 | ✓           |           |              |
| Mouse Wheel Zoom                  | ✓           |           |              |
| Overview Map                      | ✓           | ✓         | ✓            |
| Scale Bar                         | ✓           | ✓         | ✓            |
| Current Location                  | ✓           | ✓         | ✓            |

No enhancements are available for Google Maps v3 (mobile) and Open Layers geomashups.