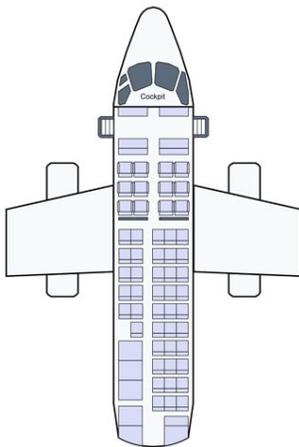


## Overview

Chart FX Maps provides a full library of dynamic maps that can be integrated with Chart FX to display any type of data graphically through the drawn objects in the map. In addition, it allows you to add any number of maps through the universal SVG standard. This sample provides information on how to prepare an SVG file to be used with Chart FX Maps. Although we recommend the use of Adobe Illustrator 9.0 or above for this process, any vector-editing tool that allows grouping of polygons and exports to SVG format will work. For the purpose of this example, however, we will use Adobe Illustrator 9.0.

Imagine we want to create an airplane seat reservation system for an airline. For this, we should have a map of the layout of each airplane. In this example, we will create the layout map of a particular plane. It is important to note that each seat in the plane can be reserved independently. Therefore, an independent object must be created for each seat in the plane. Each object should have a unique name. In this example, the unique name will be the seat number.

Objects to be used and dynamically modified with Chart FX Maps must to be generated in vector format. Vector is a resolution-independent format of describing graphics according to their geometric characteristics. These vector objects should then be exported to an SVG file that Chart FX Maps can access. The SVG (Scalable Vector Graphics) format is a World Wide Web Consortium (W3C) specification for a standard, two-dimensional vector graphics language.

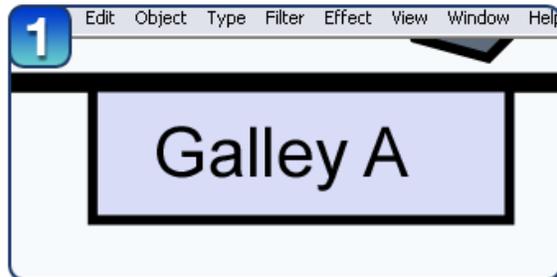


To show the proper method of generating a Chart FX Maps compatible file, we have provided an airplane seating diagram([link](#)) as an example. Remember that since you can add any file of your own to the Chart FX Maps library, you are not limited to geographical maps, but you can add any vector drawing of objects through which data can be represented. **When drawing the objects in the map, please be aware that you should only draw straight, point-to-point lines. The use of curves between two points is not supported.**

## Basic Grouping Methods

In order to associate each object with its proper name, groups must be created. In its simplest form, a group contains the path that defines the object and a text object that holds the name of that path. To group objects in Adobe Illustrator,

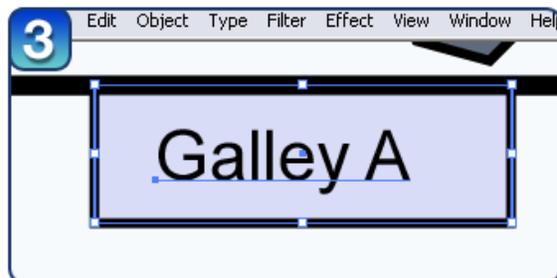
using the black pointer, press and hold the Shift key while selecting the desired objects. Once the objects are selected, click Object-Group on the menu.



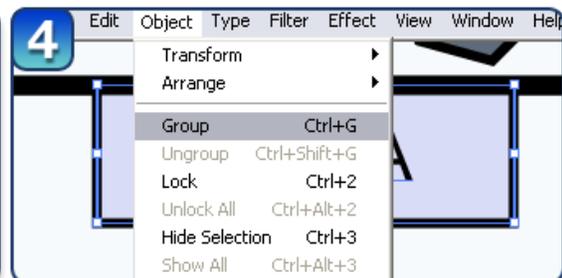
1. Draw and place the objects and text in the desired place.



2. With the black pointer and the Shift key pressed, select the object drawn.



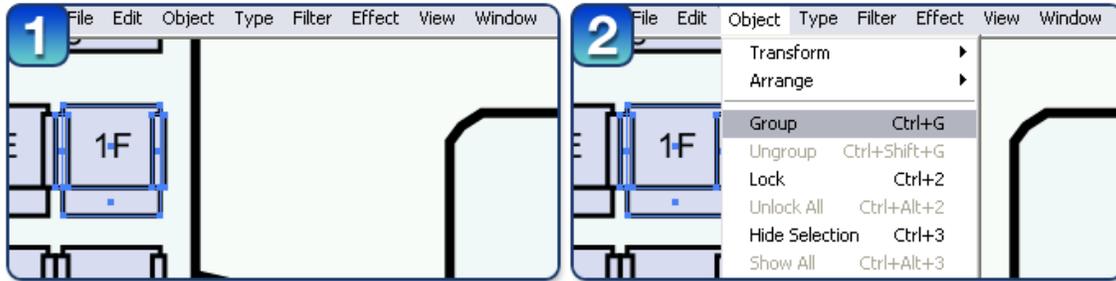
3. While still holding the Shift key, select the text that names the object.



4. On the Object menu, select group (or press Ctrl+G).

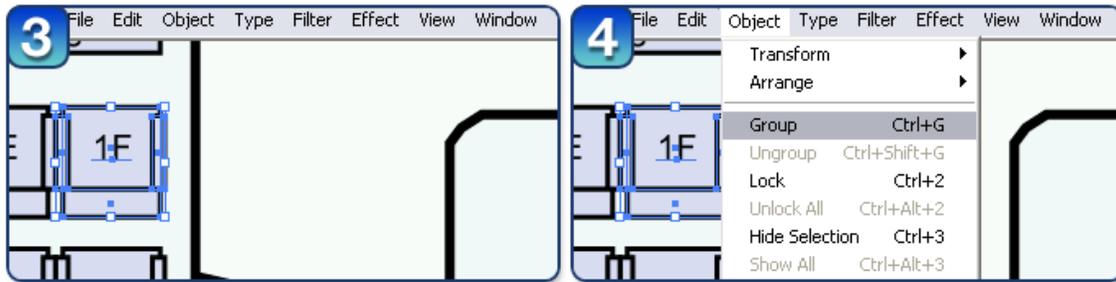
There are instances when the object you are calling contains more than one path. In this case, the grouping of the paths must be slightly different. First, you must select all the paths that form the object (black pointer, press and hold shift), and group them together (Object-Group or Ctrl+G). After the paths are grouped, select both this group and the text object, and make a group of this selection (Object-Group or Ctrl+G). This will result in a group of paths that is then grouped with the text object. This will allow for Chart FX Maps to treat a group of paths as one object.

**Tip:** When generating a map with an extensive amount of objects, it can be helpful to lock an object once properly grouped. This will allow you to select only those objects that have not been grouped yet. To lock an item in Adobe Illustrator, go to the Object menu and select Lock, or press Ctrl+2. To unlock all objects, go to the Object menu and select Unlock All, or press Ctrl+Alt+2.



1. Select all the paths that belong to the same object.

2. From the Object menu, select Group, or press Ctrl+G.



3. While selecting the group of paths, press shift and select the text object.

4. From the Object menu, select Group, or press Ctrl+G.

There might be occasions when you might want to place the text outside the object path and draw a line that points the text to the path or group of paths that make the object. In this case, you must select the text and paths that point to the text and group them together. Then group this set of objects with the path or group of paths that define the object.

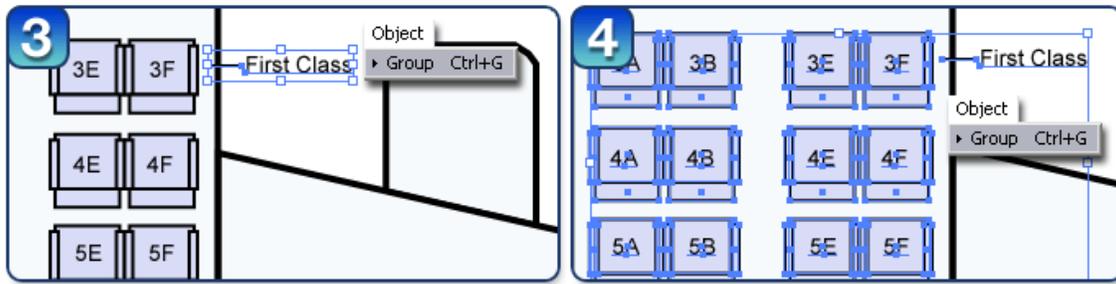
**Multi-Level Maps**

With Chart FX Maps, you not only have the option of drilling down to different maps, but you can also create a single map that contains all the different levels contained in your data. For example, you can have a map that contains the County, State and Regional subdivisions. In terms of our sample, imagine we want to gather information not only specific to each seat, but to the seating class. In our small plane diagram, we only have first class and coach. In order to set up the multilevel map, each individual object must be grouped as explained in the Basic Grouping Methods. Then, the collection of object must be selected (click on each object with the black-pointer while holding the Shift key) and grouped together (Object-Group or Ctrl+G). After the collection of objects is grouped, continue to hold the Shift key and select the text item, then group it (Object-Group or Ctrl+G) with the previous group.



1. Holding the Shift key down, select all the grouped objects that will form part of the collection of groups.

2. From the Object menu, select Group, or press Ctrl+G.



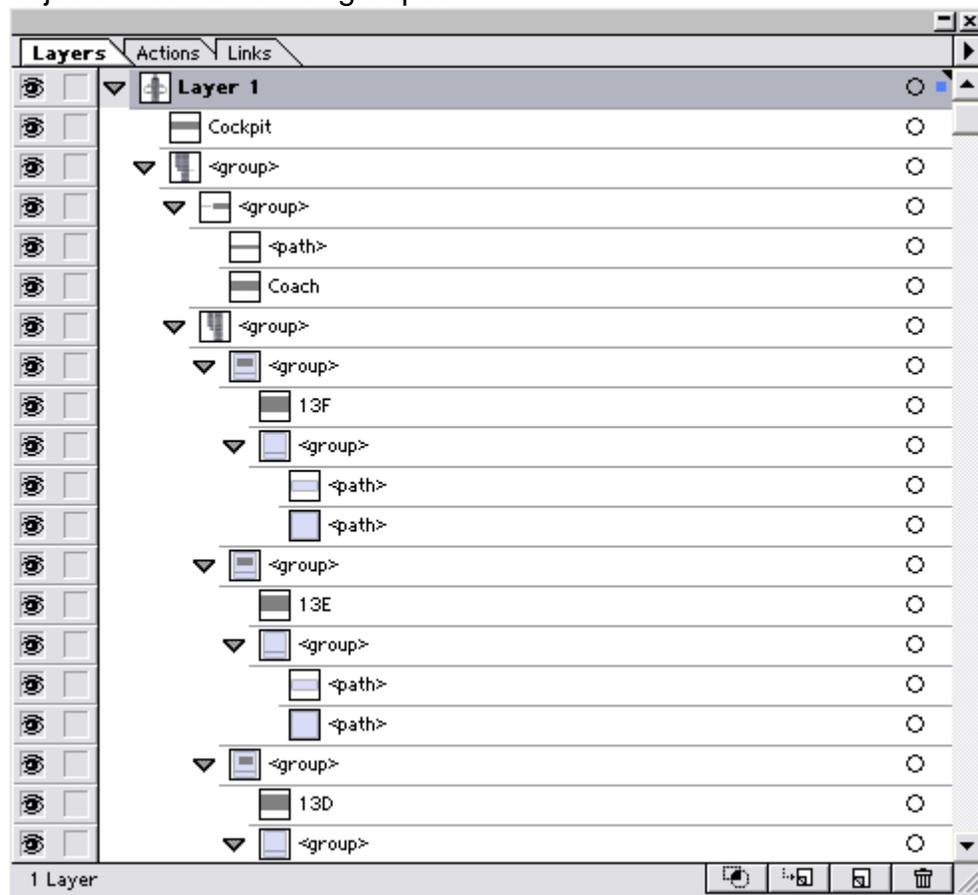
3. (Optional) if you wish to have a path pointing the text to the group it names, you can add this path, then select both the path and the text, and form a group (Object menu, select Group, or press Ctrl+G.) of just the text and the path. This will be your text object.

4. Select both the collection of objects (grouped in Step 1) and the text object, and group them (Object menu, select Group, or press Ctrl+G).

**Note:** The multi-level grouping technique can be used with maps that require 2 levels of data or more. As long as you follow the same guidelines you could add as many levels as your map needs. For example, you could choose to select both First Class and Coach collection of objects, group them together, and then group this collection with the a text object “Passenger Seating.”

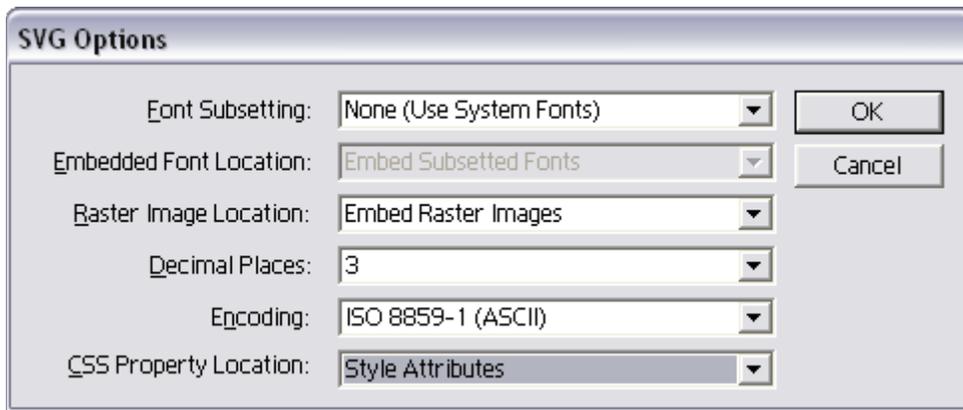
Any static shapes, as for example the outline of the airplane, the cockpit, etc. should be left ungrouped. Chart FX Maps assumes that any object grouped should be accessible for dynamic, data related changes, and thus should have a name associated with it. On the other hand, paths, polygons, or texts that form part of the map but are not grouped are considered static objects. Chart FX Maps will obtain the style information of these objects from the SVG file and paint them accordingly. Once painted however, you will not be able to modify them either dynamically with data or inside of Chart FX Maps, as you would grouped objects.

**Tip:** The Layers palette allows you to see all grouping levels on your map. This will allow you to make sure all objects are properly grouped before exporting. Remember, all dynamic objects must be grouped with a text while all static objects must remain ungrouped.



## Exporting the map as an SVG

Once you have finished the grouping of the objects in the map, it is time to generate the SVG file. To do this, simply go to the File menu, select Export, choose the name and location and press OK. A configuration panel will appear. Make sure the Font Subsetting is set to “None (Use System Fonts)”, Encoding is set to “ISO 8859-1 (ASCII)” and CSS Property Location is set to “Style Attributes.”



### Using your SVG map with Chart FX Maps

Once the map has been exported, all that is needed in order to use that file with Chart FX Maps is to add the following line of code:

```
Map.MapFileName = @"FileLocation.svg"
```