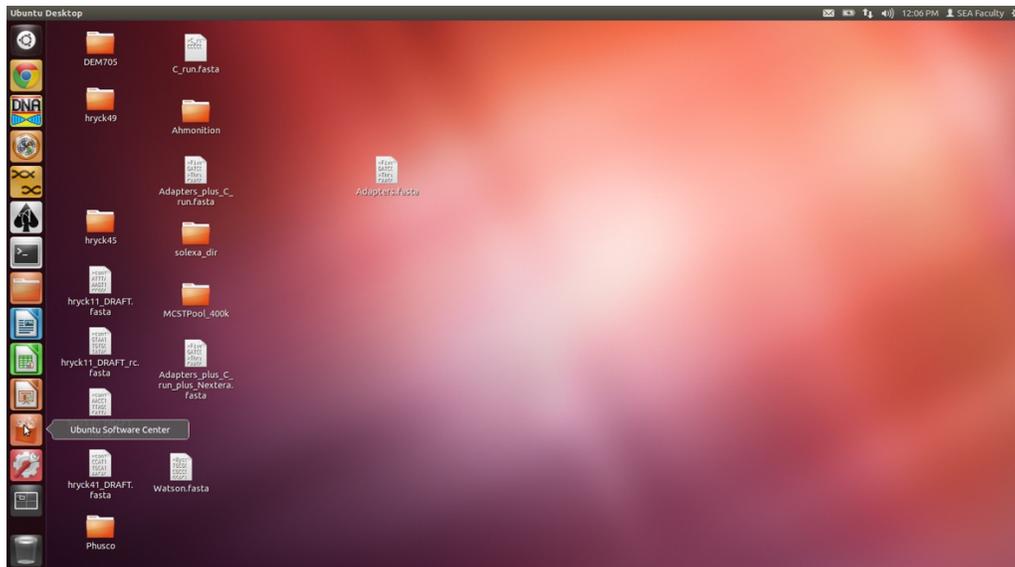


Editing Phamerator Maps for Presentation and Publication using Inkscape

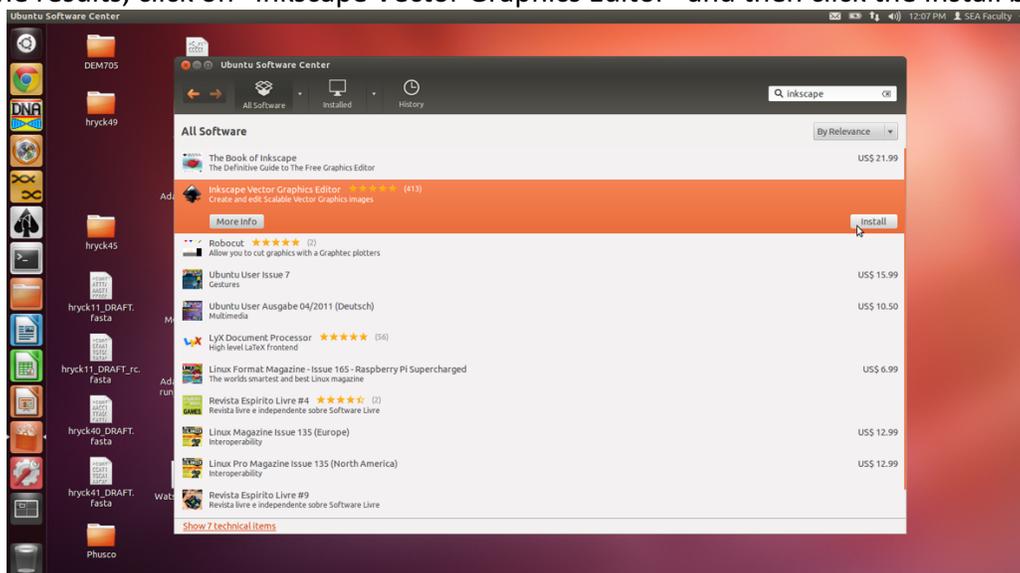
Installing Inkscape

Inkscape is a free vector graphics editing program. Vector graphics are based on mathematical formulas instead of individual pixels, and thus can be scaled up or down without losing sharpness or clarity. You should always use a vector-editing program to edit Phameartor maps, otherwise your output may be pixelated and low-quality.

1. Within the virtual machine, open the “Ubuntu Software Center” from the left bar, as shown below.



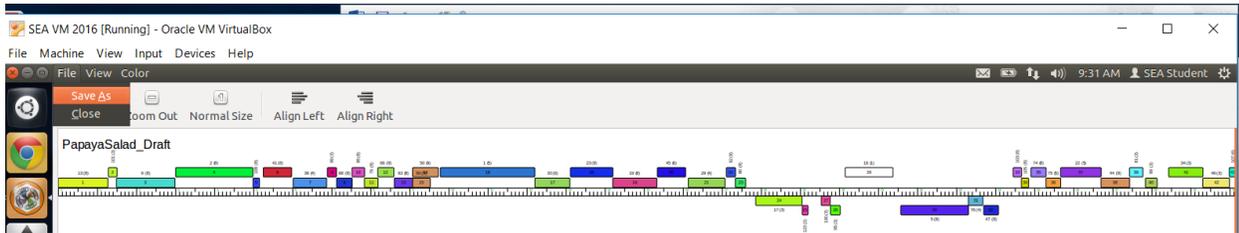
2. In the Search box on the upper right of the Ubuntu Software Center, type “Inkscape” and hit Enter.
3. From the results, click on “Inkscape Vector Graphics Editor” and then click the Install button.



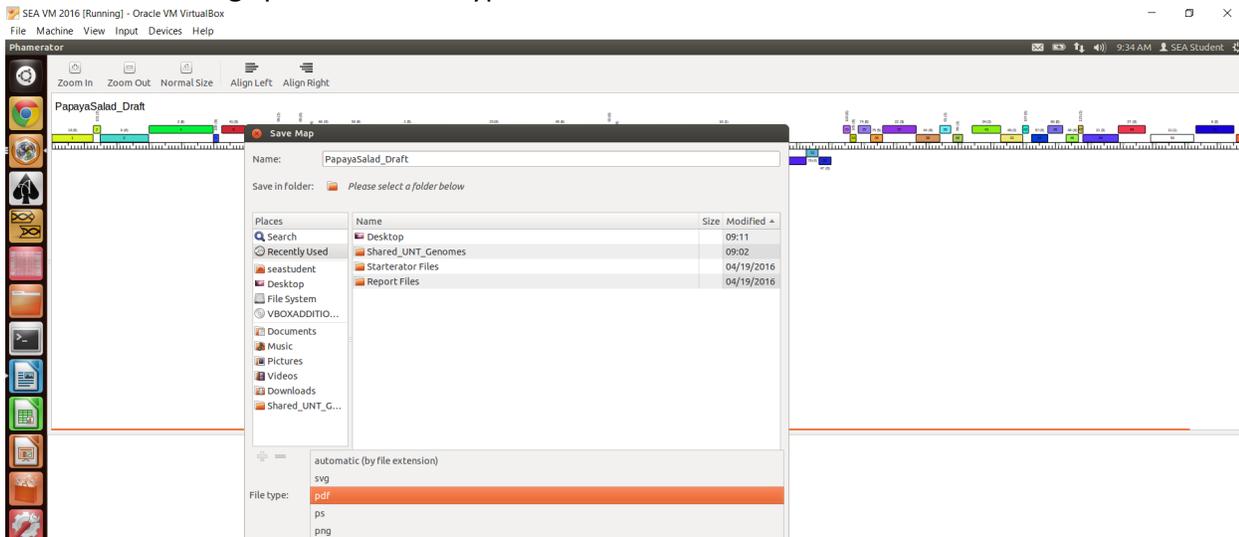
4. A new Inkscape icon will be added to the Launcher on the left side of the screen.

Creating the Map

1. Create the map of the genome or genomes that you need in Phamerator.
2. Save the map in PDF format using: File -> Save As

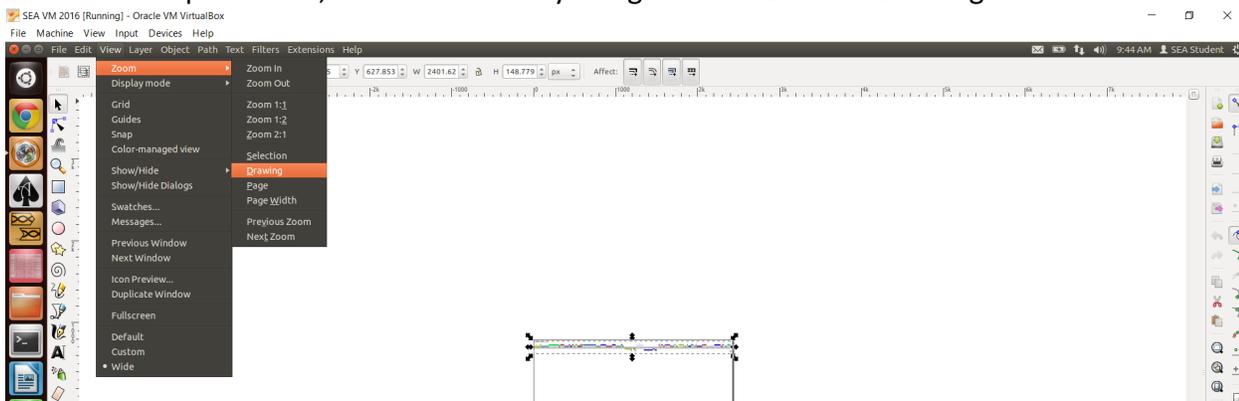


and then selecting “pdf” as the file type.

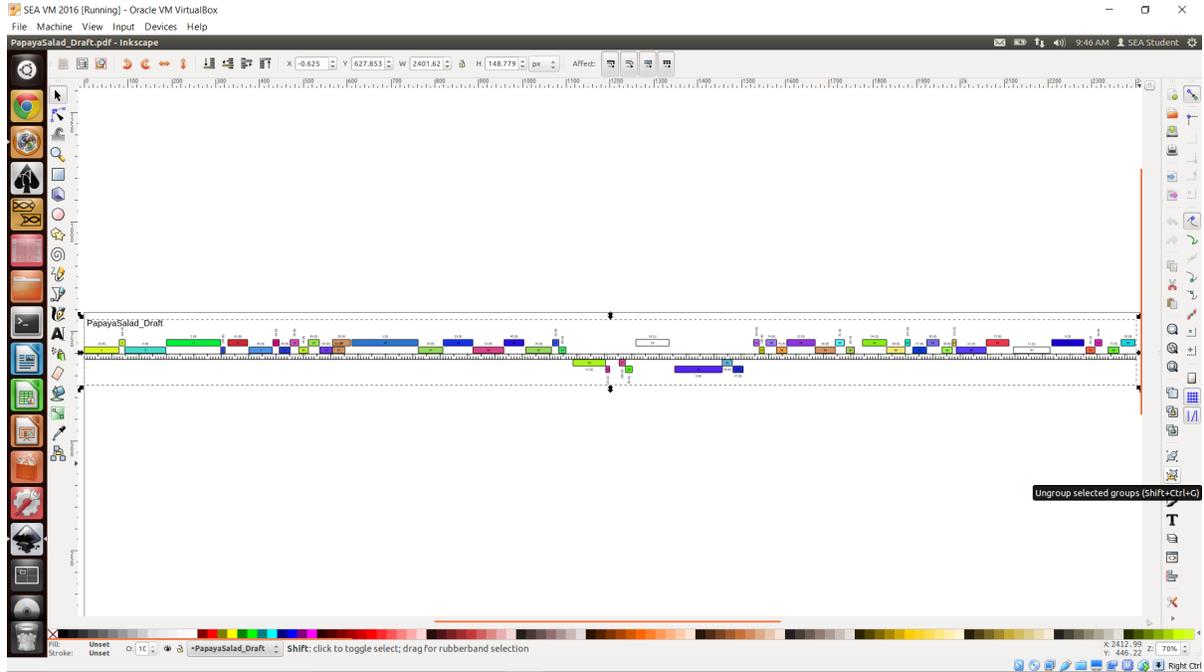


Editing the Map in Inkscape

1. Open the map in Inkscape and accept the default settings for PDF import.
2. Click on map to select, and then zoom by using: View -> Zoom -> Drawing.



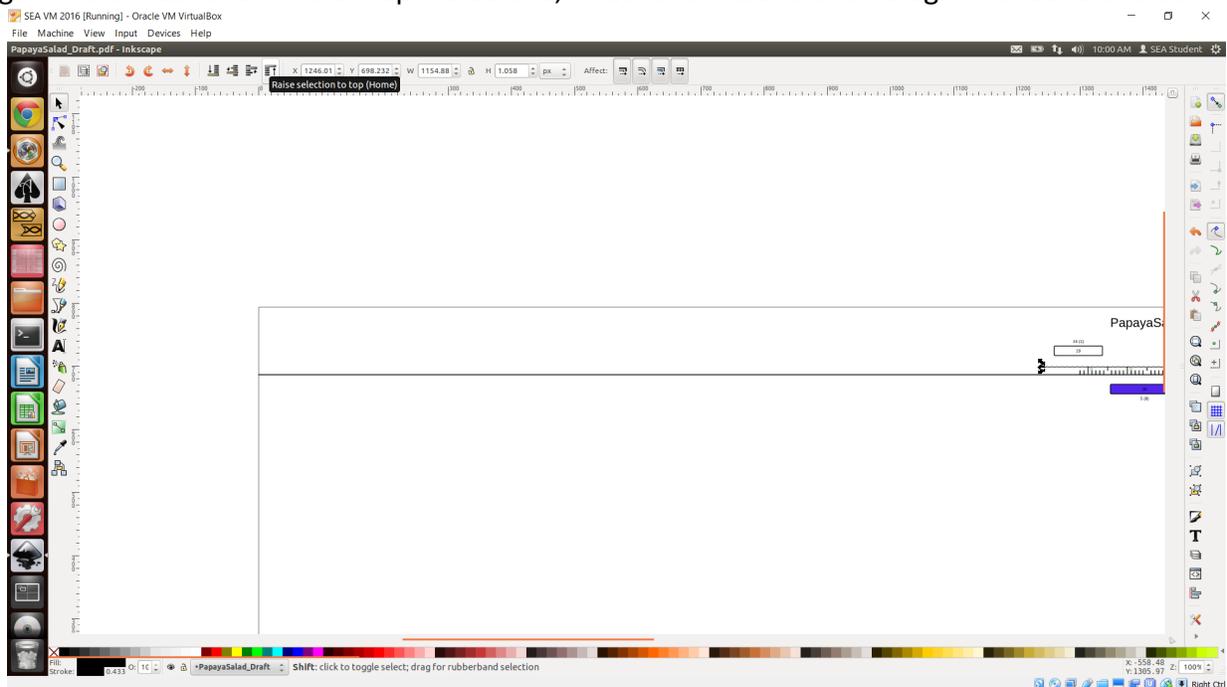
3. Ungroup the components of the map by clicking the “Ungroup selected groups” icon on the right-hand side of the screen.



4. Click off of the picture to deselect all items, then click on individual elements that you wish to move or edit.

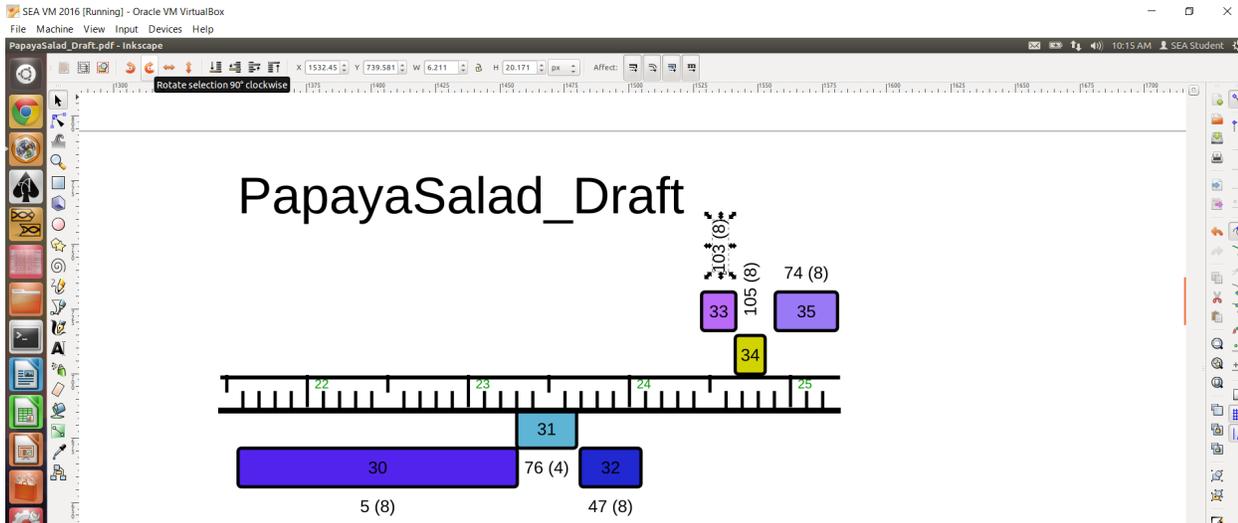
5. To select multiple objects, click in the empty space near the drawing and then pull the cursor to draw a box. Everything in the box will be selected when you release (this is very useful for deleting sections of the map you do not need).

6. When deleting all but one region, you can delete all the features but you will have to resize the length of the main lines of the map. To do this, select the line and then drag the ends to shorten.



7. It is preferred to have all horizontal text in the final figure, so where possible rotate any vertical text to the horizontal orientation by selecting the text and then clicking the “Rotate selection 90° clockwise” button. Recenter over gene as needed and move down as well to match other labels.

(Note: not all text can be rotated this way due to space limitations)



8. When done editing, select all parts of the drawing and save as PDF. [Note: If you have deleted a large part of the original file, you can crop the drawing window to be a closer fit for your final image. Use Ctrl+Shift+D and then change the width and height of the drawing window. Be sure to Zoom to full page before doing this as your drawing area and window might no longer overlap and you will need to drag your drawing back into the window before saving).