



INKSCAPE 0.92

Tutorial 5

Layers

Map Tracing

A1: Get Bitmap Into Course Folder (From Another Folder) Click in Windows Task Bar and open File Explorer.

Scroll and Click to navigate through lists of Folders and the Files they contain.

Locate the host Folder and the File: `imgAustStatesMap.png`.

Right-Click the file to Select it and open File Explorer's Context Menu. Click Copy Command.

Navigate File Explorer's lists of Folders and locate the destination Course Folder. Open it.

Right-Click inside the folder to open File Explorer's Context Menu. Click Paste Command.

A2: Get Bitmap Into Course Folder (From An Internet Page) In a Web Browser, open the webpage

that contains the Image: `imgAustStatesMap.png`.

Right-Click the Image to Select it and open the Browser's Context Menu.

Click on Save Picture As Command. File Explorer's Save As Dialog then opens.

Navigate File Explorer's lists of Folders and locate the destination Course Folder. Open it.

Note The File Name: box may be typed into should a change of name be desired.

Click Save.

B: Launch Inkscape



C: Import Bitmap Click the File Menu then the Import... Command then, in the Select File to Import Dialog,

choose your Course Folder and select the File: `imgAustStatesMap.png`. Click Enter.

Allow Image Input Type as Embed. Click OK.

Click Selector Tool and click on the map then Ctrl+Click-Drag its corner scaling handles to locate it large and in the centre of the page.

D:- Add SA Layer Click the Layer Menu then the Layers... Command to open the Layers Dialog.

Click Layer1 then Right-Click and choose the Rename Layer... Command.

Replace the text Layer1 with Bitmap then click Rename.

Click the Lock Icon to lock the layer.

Click the Plus Sign in the dialog to create a new layer.

Type the layer name as SA, choose its position as Above current and click Add.

Click the SA Layer to select it and Zoom the page so that South Australia fills the screen.

Technique: Create a New Layer:

Click the Layer Menu then the Layers... Command to open the Layers Dialog.

Click the Plus Sign in the dialog to create a new layer.

Type in the Layer Name: box, choose its position relative to the current layer then Click Add.

Click any listed Layer then Right-Click and choose the Rename Layer... Command.

Type in the Layer Name box to change to a new name then click Rename.

Click the Arrows in the Dialog to raise or lower the stacking level of a Layer.

Click any listed Layer to Select it as the Active Layer for editing a drawing.

Click the Lock Icon on any Layer to allow or prevent editing of that Layer's contents.

Click the Eye Icon on any Layer to make that Layer's contents visible or hidden.

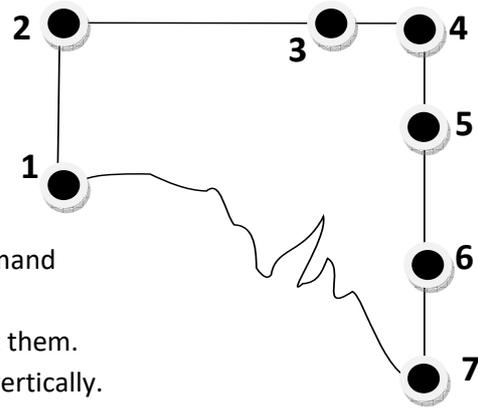
Note Drawing elements may be Copied or Cut and Pasted In Place between Layers.

Note Drawing elements on selected layers may be selectively excluded from export and printing.



E:- Draw SA Path

Click Pen Tool then Click six times around South Australia's land border points, finishing with a Double-Click on the seventh.



Click the Object Menu then the Align and Distribute...Command to open the Align and Distribute Dialog.

Click Node Tool then Shift-Click nodes 1 & 2 to group select them.

In Nodes in the dialog, choose to align the selected nodes vertically.

Shift-Click nodes 2, 3 & 4 then choose to align them horizontally.

Shift-Click nodes 4, 5, 6 & 7 then choose to align them vertically.

Click Pen Tool, click exactly on node 7, then click roughly ten points round the coast line and finish exactly on node 1 to complete the SA path on the SA layer.

Click Node Tool then successively Click-Drag on the various line segments to trace the coastal curves.

Use Fill & Stroke Dialog to make SA's Stroke red in Colour and 2px in Width.

F:- Draw VIC Path

Click Selector Tool then Click the SA Layer.

Click the Layer Menu then the Duplicate Current Layer Command to create a new SA Copy Layer.

Click the old SA Layer then Click to Lock it and Click its Eye Icon to make it invisible.

Click the SA Copy layer then Right-Click, choose the Rename Layer.. Command and rename it VIC.

Click Node Tool and Shift-Click nodes 6 & 5 to group-select them then, on the Commands Bar, Click the Delete Segment Between Two Non-Endpoint Nodes Icon to break the SA path.

Shift-Click node 7 and the node immediately to its left then delete the segment between them.

Group-select all nodes other than nodes 6 & 7 and Press Delete to leave only Victoria's western border.

Click Selector Tool and the border segment to select it.

Click Pen Tool, Click exactly on node 6 then click roughly twelve points round the NSW border and coast line and finish exactly on node 7 to complete the VIC path on the VIC layer.

Click Node Tool then successively Click-Drag on the various line segments to trace the border curves.

Use Fill & Stroke Dialog to make VIC's Stroke navy in Colour and 2px in Width.

G:- Draw NSW Path

Click Selector Tool then Click the VIC Layer.

Click the Layer Menu then the Duplicate Current Layer Command to create a new VIC Copy Layer.

Click the old VIC Layer then Click to Lock it and Click its Eye Icon to make it invisible.

Click the VIC Copy layer then Right-Click, choose the Rename Layer.. Command and rename it NSW.

Click the SA Layer then Click to Unlock it and Click its Eye Icon to make it visible.

Click Selector Tool, Click on the SA Path, then Click the Edit Menu and Copy, then Edit and Paste in Place.

Click the SA Layer then Click to Lock it again and Click its Eye Icon to make it invisible.

NOTE: A copy of the SA map and a copy of the VIC map are visible on the NSW Layer.

Click Node Tool, Click on the SA Path and Shift-Click nodes 4 & 5 to group-select them then, on the

Commands Bar, Click the Delete Segment Between Two Non-Endpoint Nodes Icon to break the SA path.

Shift-Click nodes 6 & 7 to group-select them then, on the Commands Bar, Click the Delete Segment Between Two Non-Endpoint Nodes Icon to break the SA path.

Group-select all nodes other than nodes 5 & 6 and Press Delete to leave only NSW's western border.

Click Node Tool, Click on the VIC Path and Shift-Click nodes 6 & 7 to group-select them then, on the

Commands Bar, Click the Delete Segment Between Two Non-Endpoint Nodes Icon to break the VIC path.

Shift-Click the node on the coast in Victoria's north-east and the node immediately following it clockwise then delete the segment between them.

Group-select all southern nodes and Press Delete to leave only Victoria's northern border.

Note NSW's western and southern borders are drawn but on separate paths.



Click Node Tool, Hold Shift down and Click the VIC Path, Click the far left node, Click the SA Path, Click the southern node. The Status Bar should show that 2 nodes are jointly selected.

On the Commands Bar Click the Join Select Nodes Icon to make the two paths one.

Click Selector Tool and a border segment to select the NSW Path (so far).

Click Pen Tool, Click exactly on node 5 then click roughly twelve points round the NSW northern border and coastline and finish exactly on the southern coast node to complete the NSW path on the NSW layer.

Click Node Tool then successively Click-Drag on the various line segments to trace the border curves.

Use Fill & Stroke Dialog to make NSW's Stroke green in Colour and 2px in Width.

H:- Save Map Click the File Menu then the Save As... Command, choose a Folder and type a Filename. Click OK.

ALSO: Ensure the Bitmap Layer is locked but unlock the other three layers.

Click the Edit Menu and the Select All in All Layers Command to select all 3 drawn maps together.

Click the File Menu and the Export PNG Image Command to open the Export PNG Image Dialog.

For Filename Click the Export As... Button.

Choose a Folder and type a Filename. (It must have a png extension.) Click Enter.

You now have two files, the SVG which opens in Inkscape and keeps all layers, paths, etc and may be edited and reused. Also a bitmap which is flat and pixelated but may be imported into documents such as MS Word and PowerPoint and resized there and printed.

I:- Enhance Map Click Selector Tool and ensure SA Layer is unlocked and visible.

Use Fill & Stroke Dialog to make SA's Fill a pale red in Colour.

Click SA Path then Click the Edit Menu and Copy Command then Edit and Paste in Place.

Use Fill & Stroke Dialog and the Fill Tab to give SA's path copy a Fill which is a Pattern.

Click the Pattern List Box for a Pattern Fill and choose Polka Dots Medium White.

Note The white polka dots will overlay the pale red as separate Paths on different levels.

Note To cycle between the red-filled and pattern-filled objects, select one and Press Tab. The status bar reports which of the two is selected.

Also Pressing Shift+Tab cycles through selections in reverse.

Use Fill & Stroke Dialog to make NSW's Fill a pale green in Colour.

Click NSW Path then Click the Edit Menu and Copy Command then Edit and Paste in Place.

Use Fill & Stroke Dialog and the Fill Tab to give NSW's path copy a Fill which is a Pattern.

Click the Pattern List Box for a Pattern Fill and choose a striped Pattern Fill.

Use Fill & Stroke Dialog to make VIC's Fill a pale yellow in Colour.

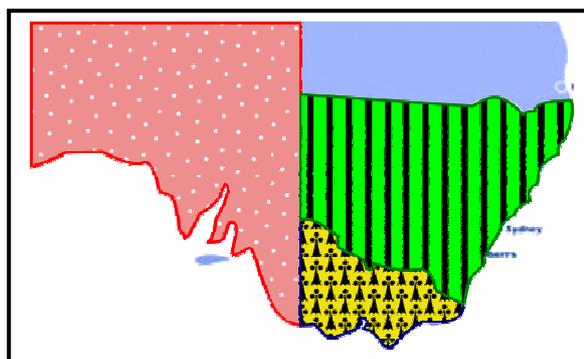
Click VIC Path then Click the Edit Menu and Copy Command then Edit and Paste in Place.

Use Fill & Stroke Dialog and the Fill Tab to give VIC's path copy a Fill which is a Pattern.

Click the Pattern List Box for a Pattern Fill and choose Ermine Pattern Fill.

J:- Edit Pattern Select VIC's Pattern-Filled Path then Click the Node Tool to reveal Move, Rotate and Scale Handles for the pattern at the top-left corner of the page.

Ctrl-Click the Scale handle closer to the corner to uniformly scale the pattern smaller.



K: Save Drawing Save the Drawing (on all its layers) as InkDrawTut5MapTracing.svg.

Export the Drawing (excluding the imported map) in a Bitmap file as InkDrawTut5MapTracing.png.