# OSSIM

# RecceVue User Guide

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## Features

The RecceVue application allows users to view post processing geographic images, add annotations and save annotated image to disk. The image portion visible in viewport can be printed.

Features	
Image Viewing	
Zoom In/Out	
Mosaicking	
Blending	
Panning	
Annotations	
Rectangles	
Ellipses	
Polygons	
Text	
lcons	Icon List
	Battle Position
	Mines (Anti-Personnel, Anti-Tank)
	Points (Coordinating, General or Unspecified, Target Reference)
	Obstacles (Anti-Tank Ditch, Wire)
	Weaponry (Machine Gun, Tanks)

## **Screen Layout**



## **Adding Images**



 $\Rightarrow$  Files opened in RecceVue are post image processing.

- $\Rightarrow$  Files must be geo-referenced or will not register (blend).
- $\Rightarrow$  Each image opened in RecceVue occupies a layer.
- $\Rightarrow$  Vector images are transparent.
- $\Rightarrow$  File formats supported: .ccf, geotiff (.tif), jpeg (with associated geo-reference file).
- $\Rightarrow$  Many overlapping images (layers) can be added to form a mosaic.

#### Add image (layer)

1. Click Layer Editor Add button.

Select a File dialog box will appear.

2. Select desired file and click ok.

If image load successful: Overview and Viewport windows are updated; image filename added to layer list.

#### Layer Editor $\,\,\vee\,\,$

Add	Uр
Remove	Down

Select a file >



#### Remove image (layer)

1. Click to select image filename (layer) in Layer Editor.

Remove should become enabled.

2. Click Remove to delete layer.

#### Change layer order (within viewport image)

1. Click layer filename in Layer Editor.

Up and Down buttons should be enabled.

2. Click Up or Down to move layer.

If image is in first or last position, **Up** or **Down** button will be disabled accordingly. This has no effect on output if blending option is enabled.

#### Show or hide layer(s) in Viewport

1. Click file from Layer List to toggle show/hide layer.

An [X] indicates checked (visible) layer in viewport. An [] indicates unchecked (not visible) layer.

The viewport will refresh after changing a layer's state.

[x] /data/test2/drb/otest
 [x] /data/test2/drb/otest

[X] /data/test2/drb/ot
 [] /data/test2/drb/ot

## Blending





 $\Rightarrow$  When blending is disabled, layer order affects viewport image.

#### Enable or disabled blending

- To enable blending in viewport, select Use Blending checkbox.
- To disable blending in viewport, deselect Use Blending checkbox.

#### Layer Blending (adjust layers transparency/opaqueness)

1. Selecting Blend Tool.

Change blending window will open.

2. Select layer.



Aerial Image  $\vee$ 

3. Using Weight slider, adjust layer transparency/opaqueness weight.

Increase slider value to increase layer opaqueness. Lower slider value to increase layer transparency.

4. Select another layer and repeat if required.

Adjust multiple layers before clicking Ok. It may take the Viewport a few moments to refresh.

Change blending >



#### **Blending Example**

The following example includes a blend of two images; an aerial image (.tif) and a map (.ccf).

50/50 Blend >



25% Map 75% Image Blend  $\,\,\vee\,\,$ 



75% Map 25% Image Blend  $\vee$ 



## Pan & Zoom



- $\Rightarrow$  Zoom in is by a factor of two (2X).
- $\Rightarrow$  The Viewport center point remains fixed when zooming.
- $\Rightarrow$  Overview image provides a thumbnail view of Viewport image.
- $\Rightarrow$  Red crosshair in Overview indicates the current viewport center position.

### Zoom in/out of viewport

- 1. Select zoom tool to enable zooming.
- Zoom in, left click in viewport.
- Zoom out, right click in viewport.





#### Panning image using Overview

Overview window, left click and drag red crosshairs until viewport shows desired area.

A green crosshair will appear, showing new viewport center point, while dragging cursor. Red crosshair will remain at original position as reference.

Panning speed may be sluggish at first but will become faster as necessary image tiles are loaded into memory.

Overview window, single left click to move to a new center point in viewport.

## **Changing Style**



- $\Rightarrow$  Change line and text color
- $\Rightarrow$  Change line thickness
- $\Rightarrow$  Select fill option for rectangle, ellipse or polygon annotations

#### **Changing line thickness**

- A custom color square must be selected before clicking Add to custom colours button.
- 1. Click Style Menu.

Change drawing style window will open.

- 2. Change thickness, from 1 to 100, by typing in number or using arrows.
- 3. Select Fill: to fill in rectangle, ellipse or polygon.

Change drawing style window >

ring sty 🛯 😒 😒 😣
1
Cancel

4. Click Ok.

#### **Changing color - from color palette**

1. Click Style Menu.

Change drawing style window will open.

2. Click Color icon.



Color window will open.

**3.** Select a color from the palette. Change colors and click Ok.

To create a custom color, see Changing color - creating custom color.

Color window >



#### Changing color - creating custom color

1. Click Style Menu.

Change drawing style window will open.

2. Click Color icon.



Color window will open.

- 3. Click empty custom color square.
- 4. Move slider bars to desired Red Green Blue (RGB) composite color.
- 5. Click Add to custom colours and click OK.



## **Adding Annotations**



- $\Rightarrow$  Annotations occupy their own layer.
- $\Rightarrow$  Show/Hide annotations.
- $\Rightarrow$  Change style before adding annotations.

#### Add line, rectangle or ellipse annotation to viewport

- 1. Using Style Menu, select color and line size.
  - 2. Select line, rectangle or ellipse tool.

Rectangle Tool3. Left click and hold mouse button at an anchor point (upper left, upper right, lower left or lower right). Drag to adjust shape size and release mouse button.

#### Add polygon annotation to viewport



- Polygon Tool
- 1. Select Polygon tool. Left click and release mouse to add a point to polygon.
- 2. Move cursor to next desired position and repeat as necessary.
- 3. On last point, click and release right mouse button to stop adding points.



#### Text annotations to viewport

- 1. To add text annotations to viewport, select Text tool.
- 2. In viewport, left click at desired point.

Input Text window will open.

3. Type in text and click OK.

Input Text >

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	Please entited	the first you wish to take I	to the servicitation inper-
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	<u>.</u>	1	







#### **Change annotation style**

- 1. To change the annotation style (color, fill, or thickness), select the Style icon from the toolbar and the Style Dialog will appear.
- 2. To modify the current color setting, press the color button and select the desired color from the Color Dialog.



3. To change fill, use provided checkbox.

If checked, the fill will be solid; otherwise shapes will be drawn hollow.

4. To adjust line thickness, use spinner provided.

The larger the number, the thicker the appearance of the line.

5. Click Ok to save or click Cancel to discard changes.



 $(\mathbf{i})$ 

Change style (line thickness, fill, or thickness) before adding annotations.

Color Dialog >



#### Add icon annotation to viewport

1. Select Icon tool from toolbar.

Icon Dialog will appear.

Icon Dialog >



2. Select icon by clicking icon image. Selected icon appears white.

Placing cursor over icon will display icon's description. See Icon Legend for list.

3. Left click in viewport to place icon.

You may continue placing same icon or click another icon from Icon Dialog. Icons will be color selected from Style window.

Clear deletes all annotation objects whether in Hide or Show mode.

#### Add Battle Position annotation to viewport

Adding a battle position annotation requires adding an ellipse and battle icon.

- 1. Select ellipse tool.
- 2. In Viewport, click and drag to mark area of interest.
- 3. Select Icon tool.
- 4. From icon palette, select Battle Position icon.
- 5. In Viewport, align cursor arrow tip on ellipse outline and left click to place.

P Annotation	Citrar
🖓 Use Blend	

#### **Show/Hide Annotations**

- Select to show all objects on annotation layer.
- Deselect to hide all objects on annotation layer.
  Annotations will not print if not shown in Viewport.

#### Clear all objects on annotation layer

• To remove all objects on annotation layer, press Clear button.

## Printing



- $\Rightarrow$  Printer must be setup before printing.
- $\Rightarrow$  Printing to file creates a.ps postscript file.
- ⇒ Only what is currently visable in Viewport will print. If annotations are in Hide mode they will not print.



Print Dialog ∧

#### **Printer Setup**

- 1. From File, select Print Setup or press Setup button from Print dialog.
- 2. In Printer command text field, type lpr.
- 3. In Printer Options field, enter -P <printer\_name>.
- 4. Select Paper size, Orientation and Options as desired.

Printer Setup Dialog >

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Late, a trax to al	Parante
Orantakon Pomat = Lanaziga Optime	Partie options
P Prof & color	
Encounter 1	International I

#### Printing



#### Print preview

1. From File menu, select Print Preview.

The print preview window (scaled) will appear.

**2.** Zoom from 10% to 200% using zoom drop-down menu.

This does not have an effect on print size.

3. Press Print button to bring up Print window or click Close.



**Print Preview** >

#### **Print Viewport Image**

1. From File menu, select Print.

The print dialog will appear. The output can be sent to printer or postscript file.

2. Print Range and Copies as desired.

	Print Print Print Setup
Print window >	Print Range
	From: 1 To: 1 Copies: 1
	OK Cancel

**3.** Select Print to File to save image as a postscript (.ps) file. Select file location. Type in file name and click ok.

EI (#		1	<u>a</u>
Current directory:	/work/sb/ossim/bin		
Cvs			
			ОК
*.ps	-1	_ Show hidden files	Cancel

Print to file >

Recceivue

Print Setup

Print Preview

File Save

Print

Exit

Help

## **Saving Annotated Image**

 $\Rightarrow$  You my also Print to File to save image as a postscript (.ps) file.

#### Save viewport image to disk

1. From File menu, select Save.

The file dialog will appear to prompt for output file name. Click Save, to saved in GeoTIFF format, to disk. To cancel, without saving, click Cancel.

- 2. Save options.
  - $\Rightarrow$  GSD Ground Sample Distance
  - $\Rightarrow$  Default Original from when image was loaded.
  - $\Rightarrow$  Viewport Reflects current setting in viewport; changes on zoom.

Use if zoomed into AOI for annotations with icons.

 $\Rightarrow$  Custom - User specified.

Filotare	Set
- Default GSD	37 566575,29 62
🚽 Viewport GSD	37.566575,29.62
- Custon GSD:	
OL   1	Cancel

## Icon Legend



Antipersonnel	Antitank Ditch	Antitank Ditch	Antitank	Antitank
Mine	Complete	Underconstuction	Mine	Weapon
Battle	Coordinating	Enemy	General	Machine Gun
Position	Point	Tank	Unspecified Point	Heavy
Machine Gun	Machine Gun	Observation	Tank Friendly	Tank Friendly
Light	Medium	Point	Heavy	Light
Tank Friendly Medium	Target Reference Point	Wire Obstacle Unspecified		

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