

2021 - All about



Canvas Overlays & Improvements

By Dennis Francis

Consultant Developer



Collabora
Online

dennis.francis@
collabora.com

Canvas Overlays & Improvements

Overlays on main canvas


- Text Selection (Self or other views)
- Cell cursor (Self or other views)
- Cell area selection (Self or other views)
- Reference selection

Client side grids (Calc)

- Draw grids on canvas using sheet geometry info from core.
- Document background color from core
- No grids or background painting on tiles from core.

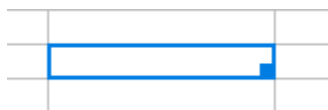
Overlays on main canvas

Text Selection



An ius suas legendos perpetua. Percipit legendos sed cu. Vim idque
 graeci ne porteat scribentur usu ne. Per constituto incorrupte
 ut, no per elit percipit. a paulo constituto contentiones an,
 vel delicata efficiantur ex. Partem debitis inciderint an eam, mea

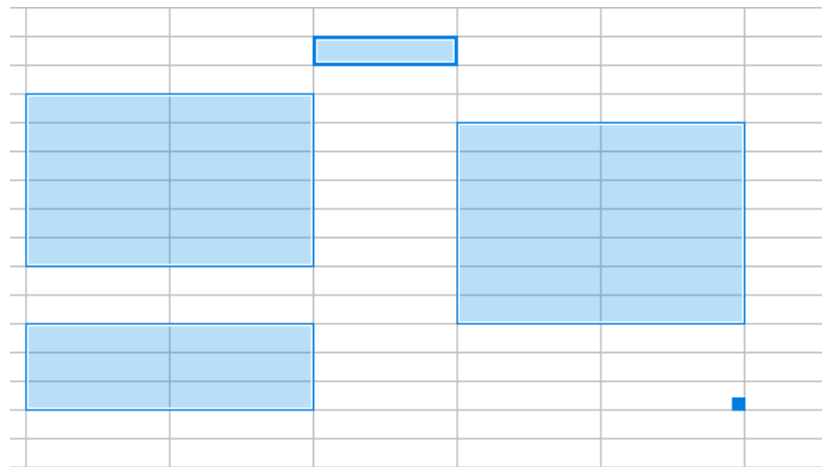
Cell cursor



Reference selection

		=SUM(A14:A16)+SUM(B17:B19)+SUM(C14:C16)	
	76		56
	45		44
	67		34
		342	
		54	
		77	

Cell area selection



Overlays on main canvas

Migration from older SVG based overlays

- New code in Typescript.
- No intermediate Latitude-Longitude coordinates. All in core-pixels.
- Typescript Mocha tests for internal data structures.

Painting

- Paints on main canvas document area after drawing grids and tiles.
- This painting order is configured in the canvas-section-container.

Styling

- CSS variables
- Fill/Stroke Color, Opacity, Border thickness, Contrast border.

Cypress Test

- Tests use the overlay state exposed as JSON text in helper <div> elements (Only in Cypress mode).
- No absolute coordinates based assertion.

Client side grids (Calc)

Core side tile painting

- No grids drawn.
- No background color painted.
- Draws borders for cells in merged area using background color. (Client has no info on merged cells)

Performance win

- Tiles for empty areas are ~empty.
- Can render empty areas without waiting for tiles. This improves UX esp. when quickly scrolling down/right.

Client side

- Document area painted with document background color info from core(callback).
- Grids drawn using sheet-geometry data before tiles are drawn.

Code relevant to Overlays

- `lleaflet/src/layer/vector/`
 - `CanvasOverlay.ts` (generic overlay painting)
 - `CPath.ts` (Base class for all overlay objects)
 - `CPolyline.ts`, `CPolygon.ts` (Line and polygon abstraction)
 - `CRectangle.ts` (Text/Cell selection, Cell cursor)
 - `CSplitterLine.ts` (For freeze/split pane lines)
 - `CPointSet.ts` (Point set data structure needed to represent Polygons/Polylines)
- `lleaflet/mocha_tests/` (Mocha Unit tests)
 - `CPointSet.test.ts`

2021 - All about



Collabora Online

Thanks !



Collabora
Online

By Dennis Francis

dennis.francis@collabora.com
hello@collaboraoffice.com
Collaboraoffice.com