# Superset

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# Business Intelligence meets Cartography

Jan Suleiman, terrestris GmbH & Co. KG

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# Jan Suleiman

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- OSGeo Charter Member
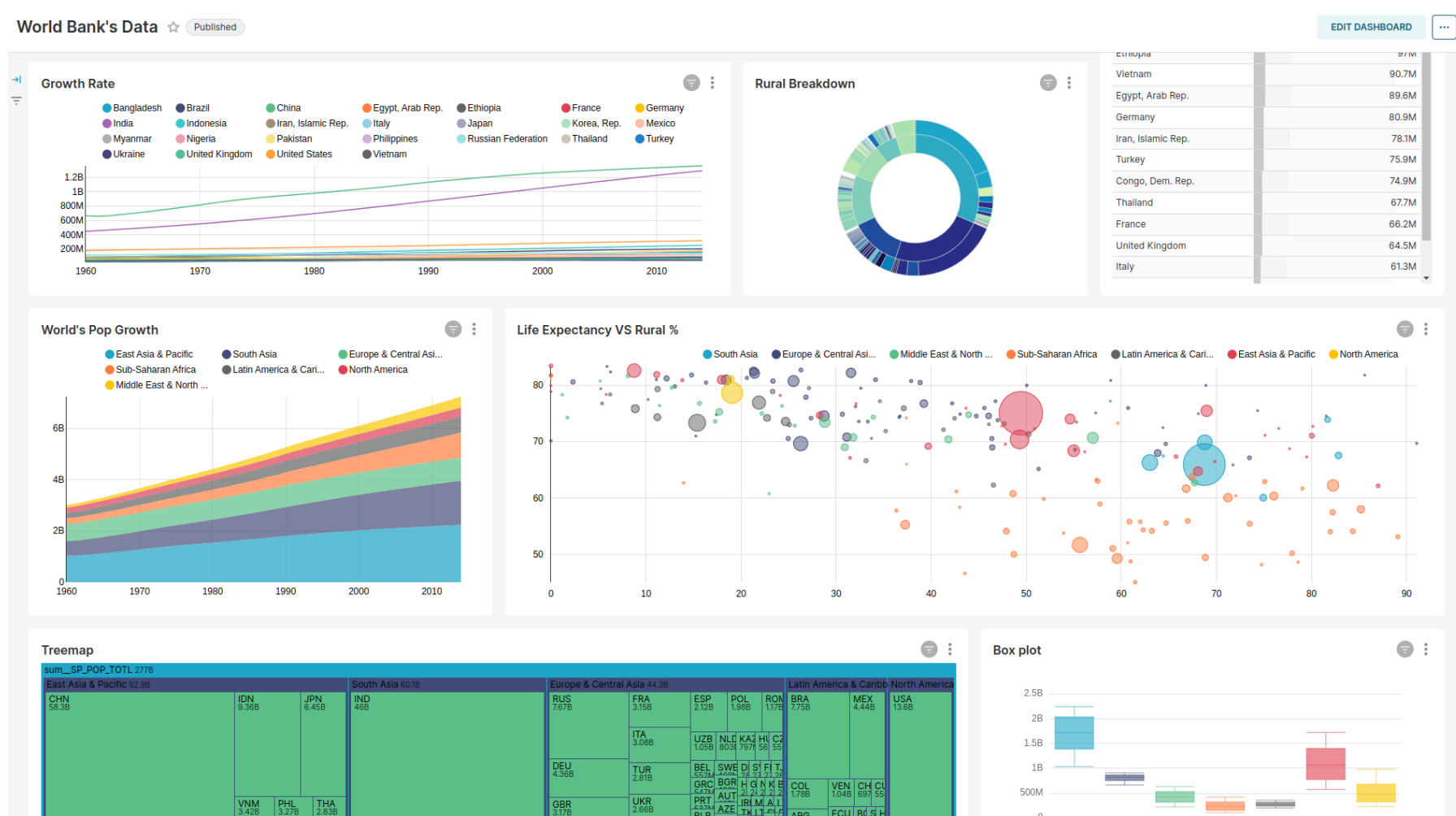- GeoStyler Core Developer
- Superset Plugin Developer

# Content

1. Superset Basics
2. Thematic Maps in Superset
3. State of Development
4. Future Developments

Link to slides:
https://terrestris.github.io/foss4g-e-2025/talks/2025-07-16-suleiman-superset.html
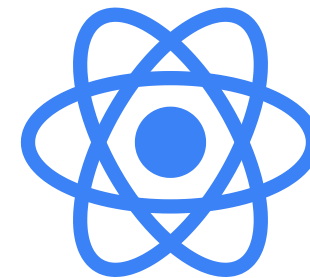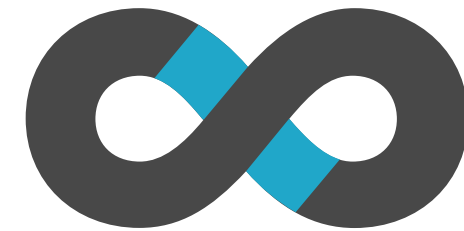
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# Superset Basics



- Data exploration and visualization platform
- No-Code / Low-Code
- Arrange charts on interactive dashboards

# Superset Basics

- Apache-2.0 license
- Active community
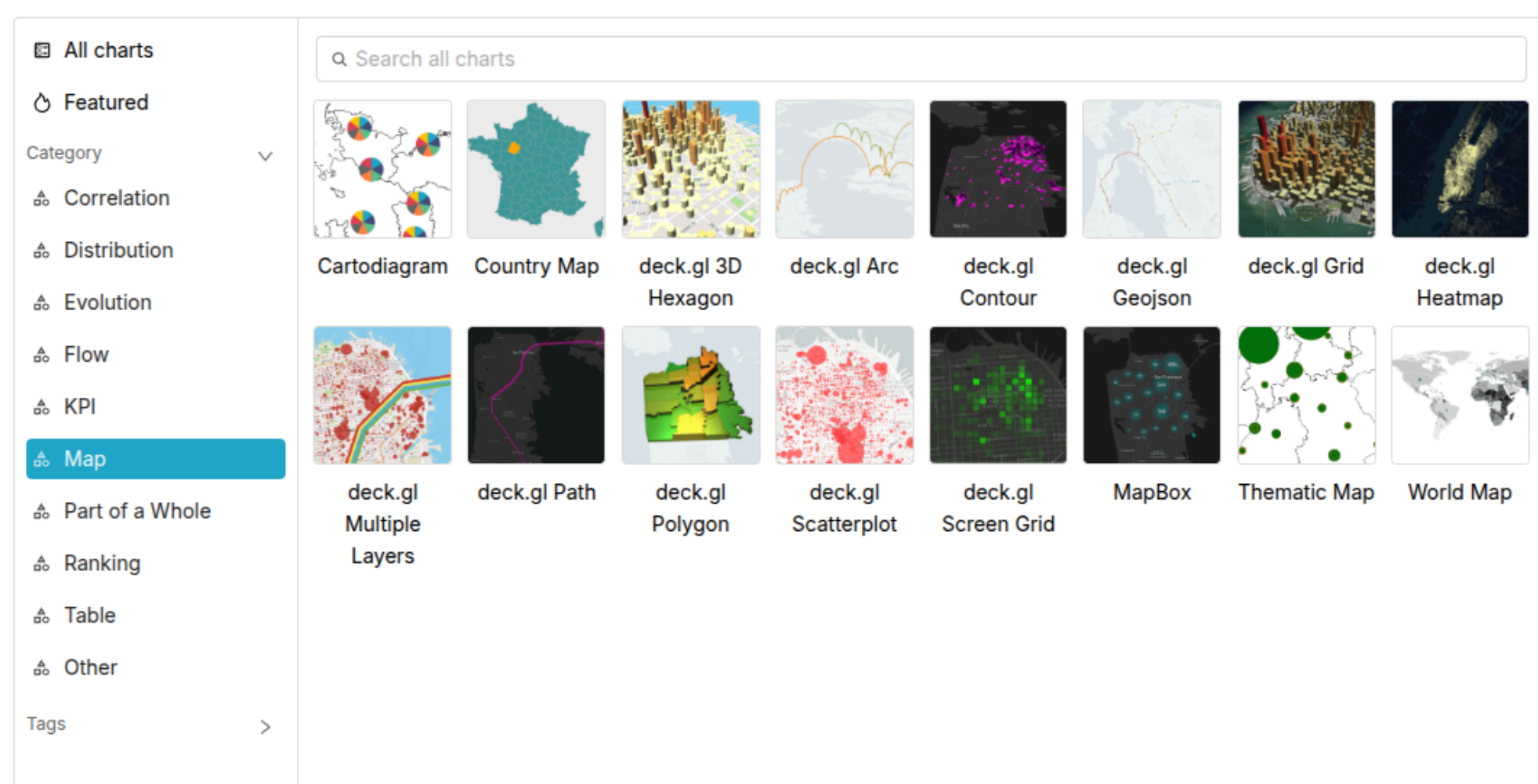- Plugin architecture for visualizations

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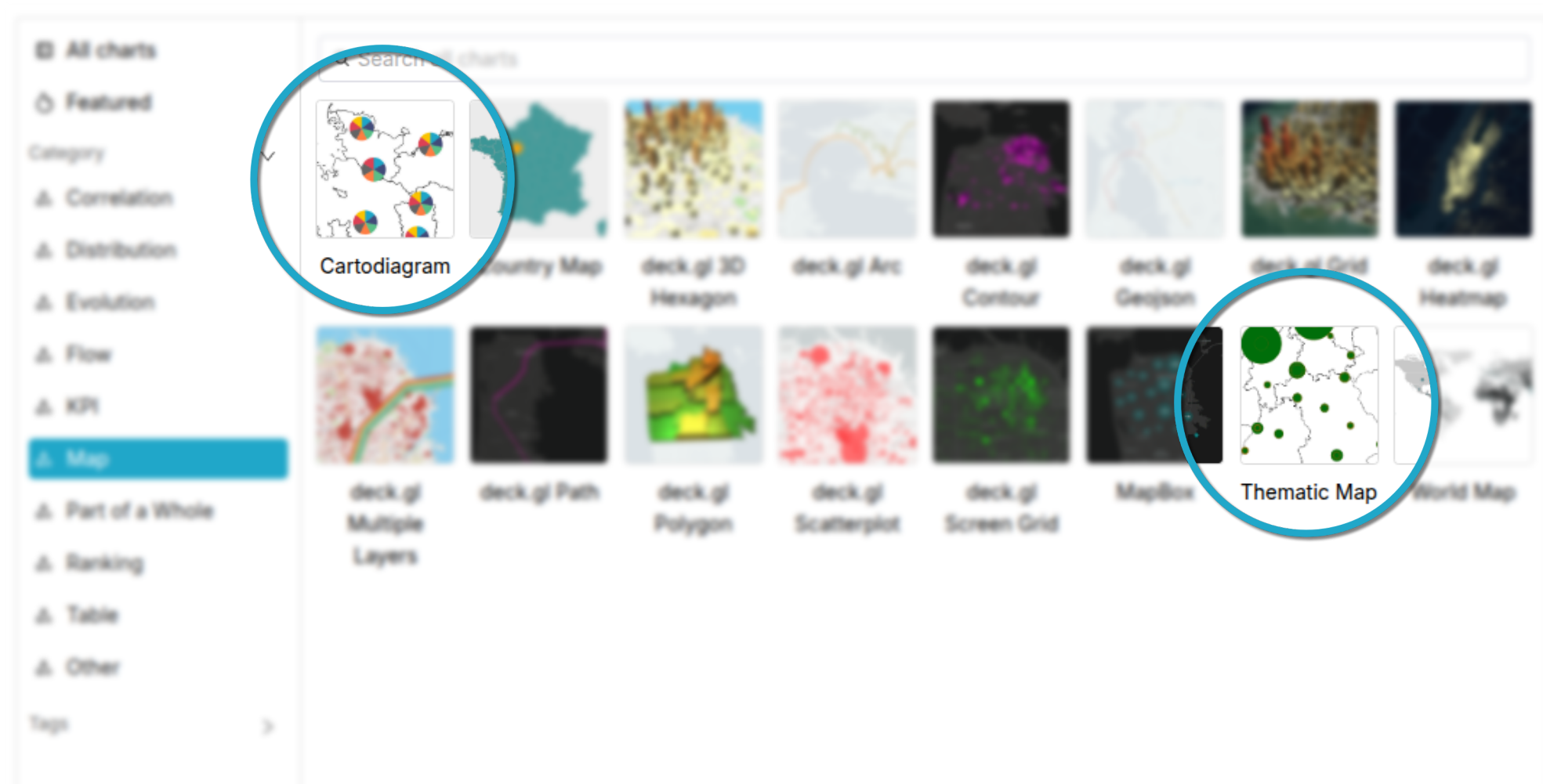
# Superset Basics

# Thematic Maps in Superset

## Current Map Plugins



- Broad Variety
- **But:** many based on mapbox-gl
  - Closed Source

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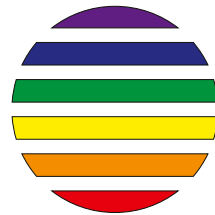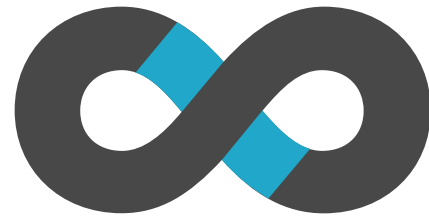# Thematic Maps in Superset

## Current Map Plugins



- *Cartodiagram*
  - Arbitrary charts on maps
  - Released in Superset 5

- *Thematic Map*
  - Choropleth, Proportional Symbol, …
  - Currently as fork

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# Thematic Maps in Superset

## Libraries

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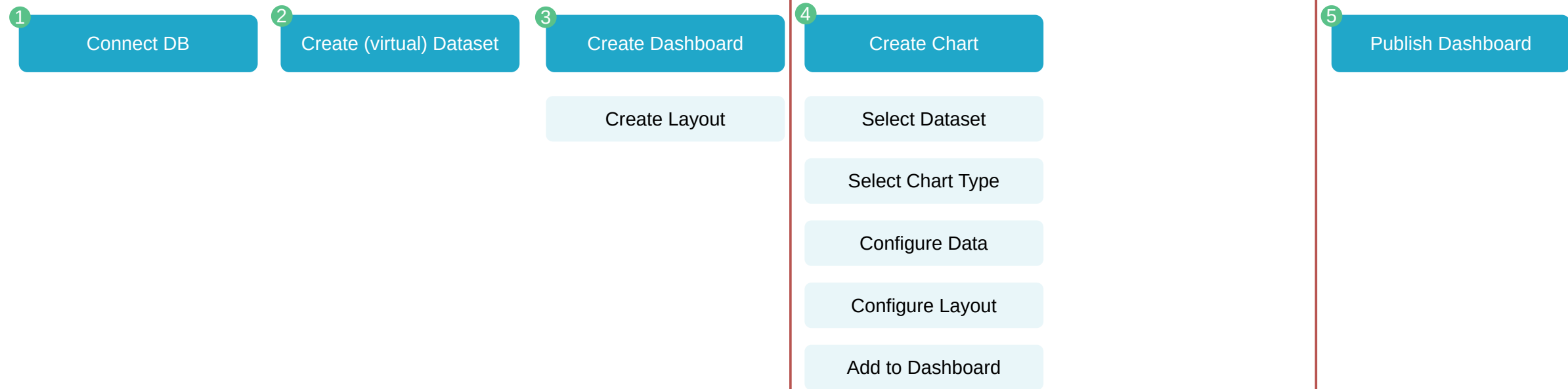
# Thematic Maps in Superset

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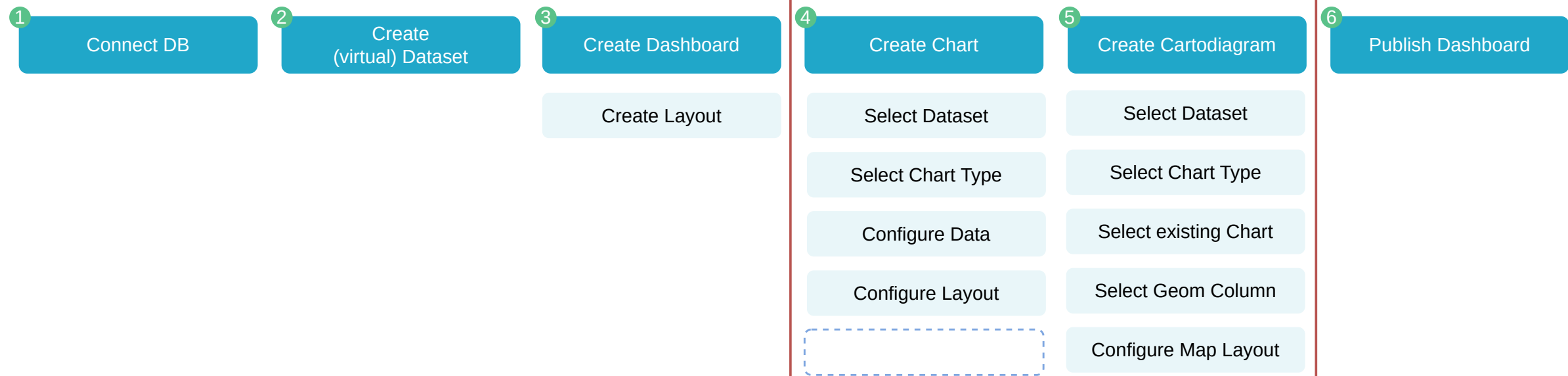
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# Thematic Maps in Superset

**Workflow Thematic Map**

| 1 | Connect DB |
| 2 | Create (virtual) Dataset |
| 3 | Create Dashboard |
| 4 | Create Chart |
| 5 | Publish Dashboard |

**Create Dashboard** (3)
- Create Layout

**Create Chart** (4)
- Select Dataset
- Select Chart Type
- Configure Data
- Configure Layout
- Add to Dashboard

**Workflow Cartodiagram**

| 1 | Connect DB |
| 2 | Create (virtual) Dataset |
| 3 | Create Dashboard |
| 4 | Create Chart |
| 5 | Create Cartodiagram |
| 6 | Publish Dashboard |

**Create Dashboard** (3)
- Create Layout

**Create Chart** (4)
- Select Dataset
- Select Chart Type
- Configure Data
- Configure Layout

**Create Cartodiagram** (5)
- Select Dataset
- Select Chart Type
- Select existing Chart
- Select Geom Column
- Configure Map Layout

# State of Development

## Done

- Official Cartodiagram Plugin (Superset 5)
- Support for GeoJSON
- Arbitrary map projections
- Configurability
  - Map extent
  - Zoom levels
  - Background layers
  - ...

## In Development

- Support for WKB, WKT
- Support for WFS as data source
- Finalizing Thematic Map Plugin
- Cross Filters for Thematic Maps

Up-to-date dev image: ghcr.io/terrestris/superset:latest

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# Future Developments

- Sensor Things API as data source
- OGC API Features as data source
- OGC API Tiles background layers
- Animated timeslider
- Metrics for Thematic Maps
- UI improvements
- ...

Up-to-date dev image: ghcr.io/terrestris/superset:latest

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# Imprint

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## Licence

# Questions?

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