# Visualizing Graphs in GT

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Goal

Approach

Glamorous Toolkit

Unorganized Graph

GtMondrianLayoutBuilder

Graphviz4GT

Organized Graph

FFI

Text

.Dot File

Graphviz

Dynamic Library

.txt File
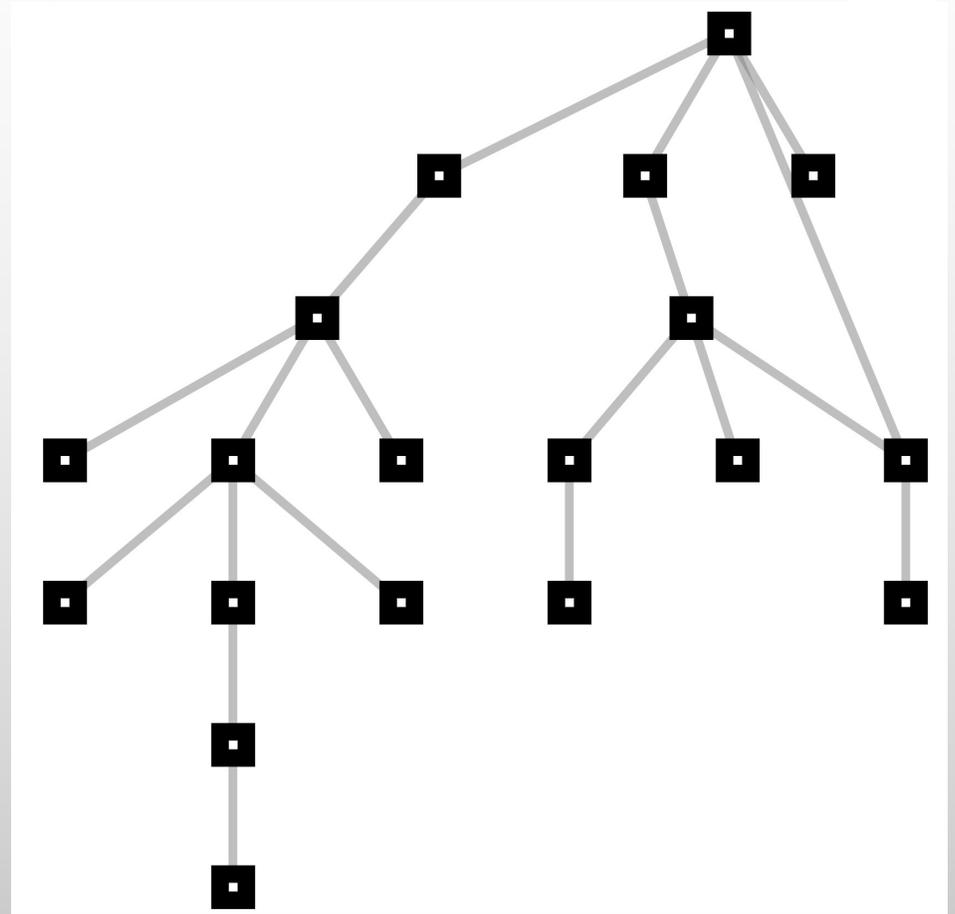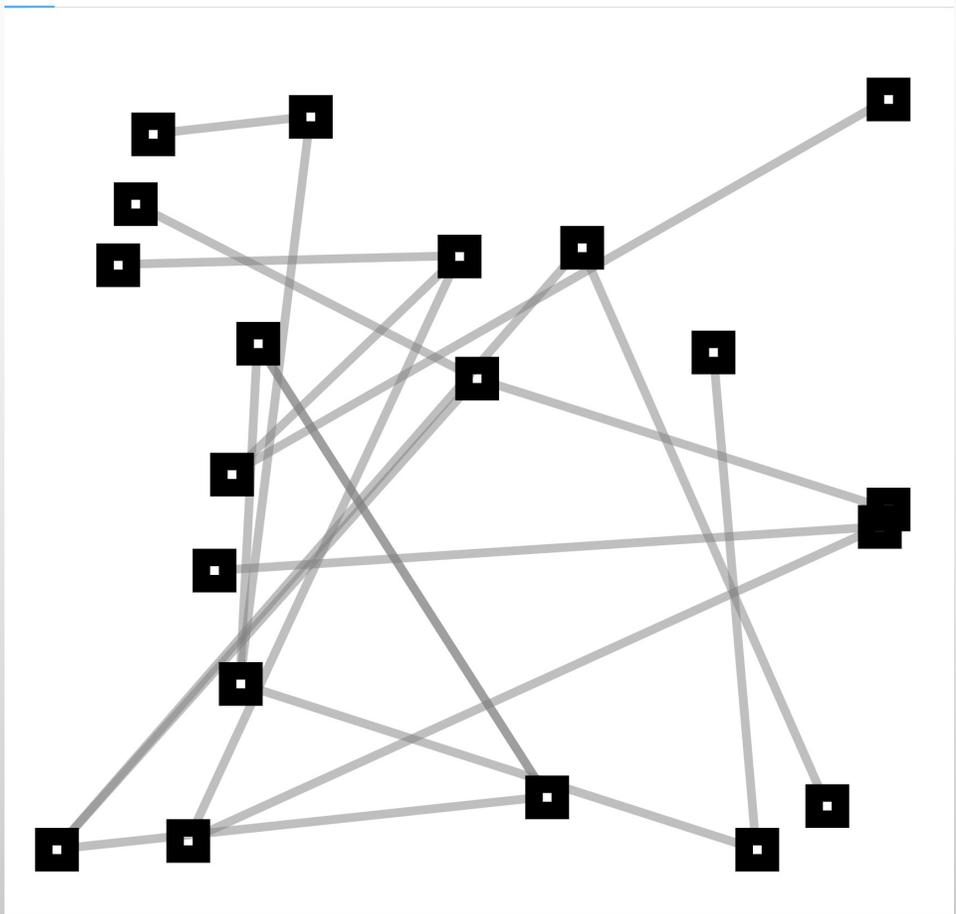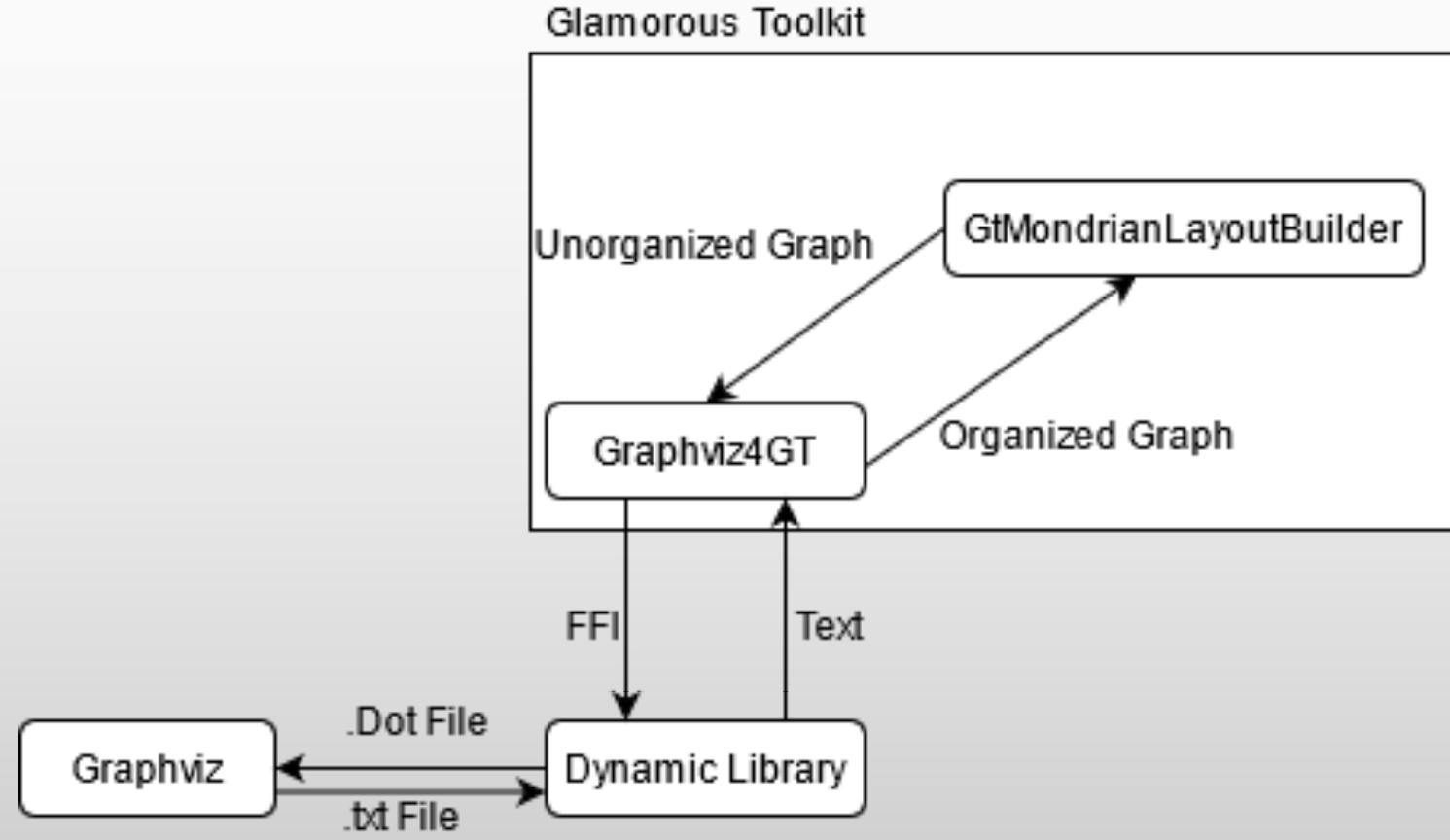
Graphviz4GT Package
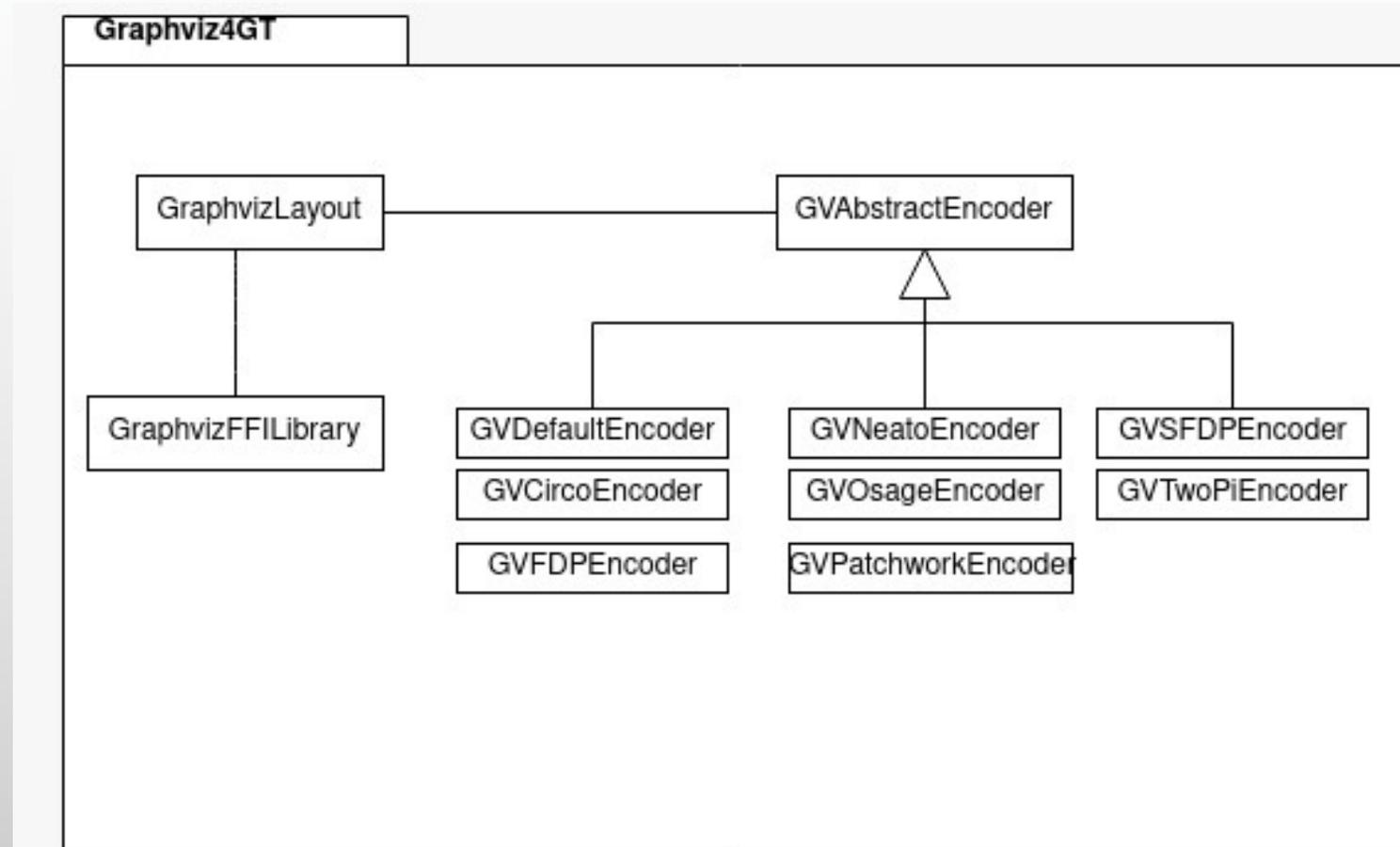
Challenges

- Universal Foreign Function Interface

- Scaling Graphs

Demonstration
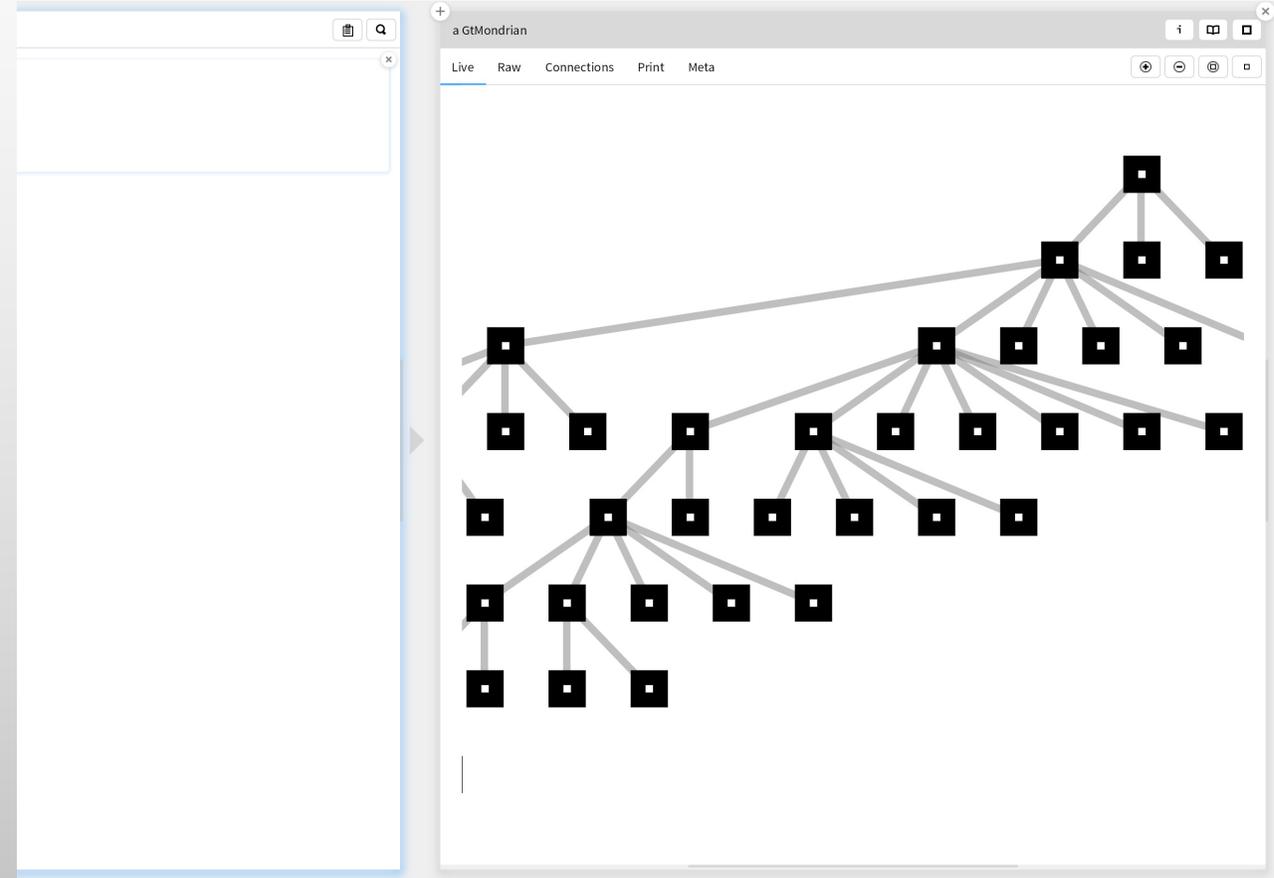
- Code at https://github.com/rafibu/Graphviz4GT

Further advances

- Library for Windows
- Scaling for bigger Graphs
- Curved Edges
- Grouping Nodes in a Graph
- Automatically detecting optimal layout

Summary

Implemented Graph Visualization for GT by:

- Creating a .Dot file describing the graph
- Calling graphviz through a FFI
- Parsing graphvizs description of the graph
- Returning this new graph