

## Graphs in GGobi

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One of the motivations for writing GGobi was the need to visualize graphs that arise naturally in telecommunications data. An important feature of such data is that they contain not only covariates of CASES or NODES, but also covariates of PAIRS OF CASES, that is, EDGES in a telecom network thought of as a graph. The basic requirements for visualizing such data are:

- a need to lay out graphs in natural coordinates that reflect various interpretations of vicinity, and
- a need to link edges in a graph display to points in a scatterplot whose points represent edges in the graph.

We will demonstrate some of these requirements in GGobi. The layout computations will make use of the link of GGobi to R. The lines-to-points and points-to-lines linking relies on a linking model to be described.