The Open Graph Drawing Framework (OGDF)

www.ogdf.net

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Design

- Open source (GPL license)
- Portable C++ Code (Linux, Mac OS, Windows)
- Self-contained core library
- Optional exact algorithms (using COIN Osi, Abacus)
- Reusable data structures
- Modular algorithm design

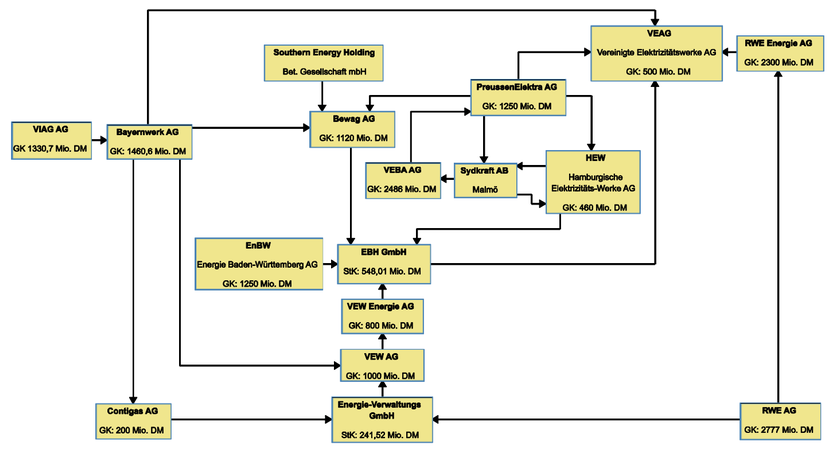
Key Features

- BC- and SPQR-trees (static and dynamic)
- Planarity testing
  - Booth/Lueker and Boyer/Myrvold
  - Cluster (Feng et al.)
  - Upward (Bertolazzi et al.)
- Customizable planarization method
  - Edge insertion (fixed & variable embedding)
- Crossing Minimization
  - optimal, minor-monotone, simultaneous
- Orthogonal layout
  - Compaction (constructive + improvement)
- Customizable Sugiyama layout
- Energy-based layout (FM^3, ...)
- Tree-, Circular-, Balloon-layout, ...

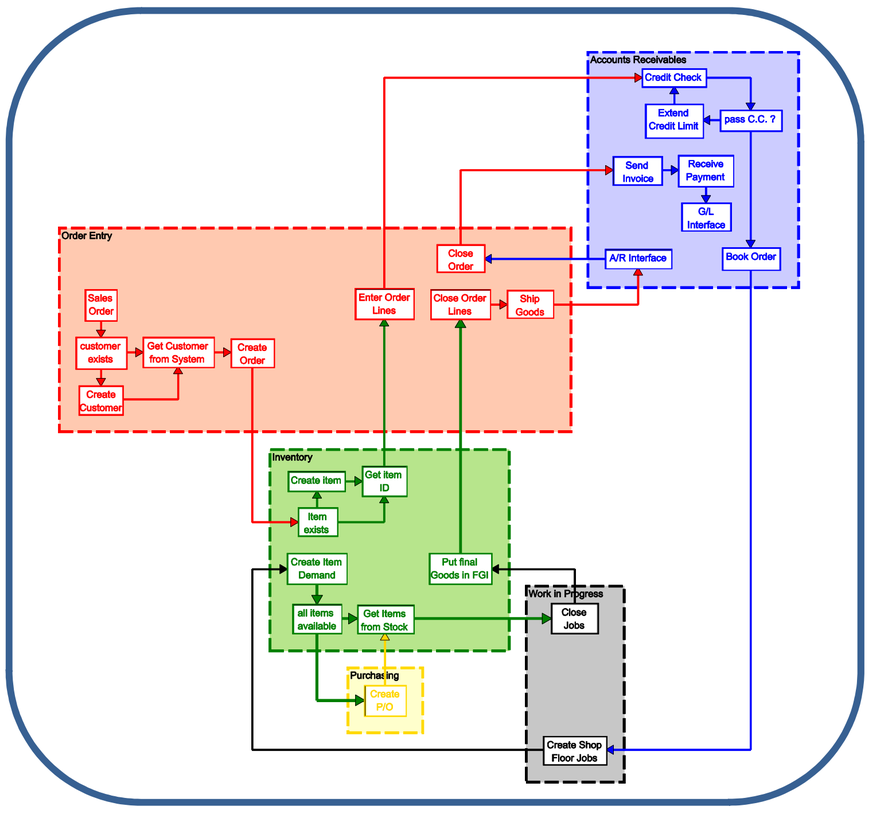
Graph Editor

- Based on OGDF & cross-platform library Qt 4
- Graph perspectives
- SVG-image support
- Export by drag & drop
- Powerful plug-in mechanisms
  - Node objects
  - Layout algorithms
  - Other graph algorithms
- Currently under development

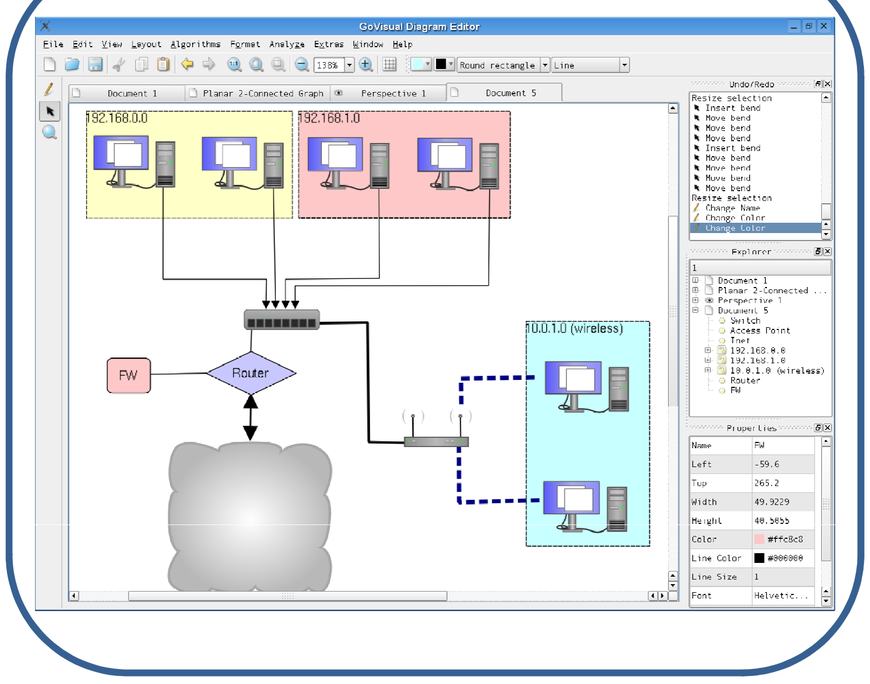
Orthogonal Layout



Cluster Layout



GDE Graph Editor



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