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IBM ILOG Visualization

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Agenda

- Introduction to Visualization
- IBM ILOG Visualization offering
- Technical Details
- Conclusion

Information presented as text

Distribution Center	Product	Customer	Quantity
Philadelphia	SKU 1099	Malden	25
Philadelphia	SKU 1099	Medford	26
Philadelphia	SKU 1099	Quincy	25
Philadelphia	SKU 1099	Brockton	28
Philadelphia	SKU 1099	Bristol	28
Philadelphia	SKU 1099	Manchester	26
Philadelphia	SKU 1099	Milford	24
Philadelphia	SKU 1099	New Haven	24
Philadelphia	SKU 1099	Stamford	25
Philadelphia	SKU 1099	Bayonne	29
Philadelphia	SKU 1099	Passaic	30
Philadelphia	SKU 1099	Union City	34
Philadelphia	SKU 1099	West New York	25
Philadelphia	SKU 1099	Irvington	27
Philadelphia	SKU 1099	Jersey City	29
Philadelphia	SKU 1099	Wayne	27
Philadelphia	SKU 1099	Lakewood	26
Philadelphia	SKU 1099	Toms River	31
Philadelphia	SKU 1099	Piscataway	24
Philadelphia	SKU 1099	New York	53
Philadelphia	SKU 1099	Staten Island	41
Philadelphia	SKU 1099	Bronx	40
Philadelphia	SKU 1099	Yonkers	29
Philadelphia	SKU 1099	Brooklyn	52
Philadelphia	SKU 1099	Flushing	37
Philadelphia	SKU 1099	Corona	38
Philadelphia	SKU 1099	Jackson Heights	
Philadelphia	SKU 1099	Elmhurst	
Philadelphia	SKU 1099	Forest Hills	
Philadelphia	SKU 1099	Woodside	
Philadelphia	SKU 1099	Ridgewood	
Philadelphia	SKU 1099	Jamaica	
Philadelphia	SKU 1099	Hempstead	
Philadelphia	SKU 1099	Piscataway	
Philadelphia	SKU 1099		
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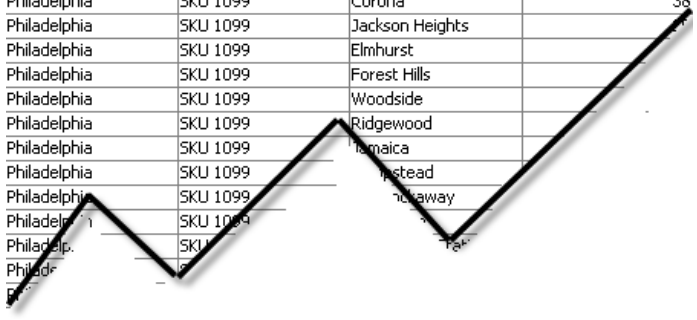
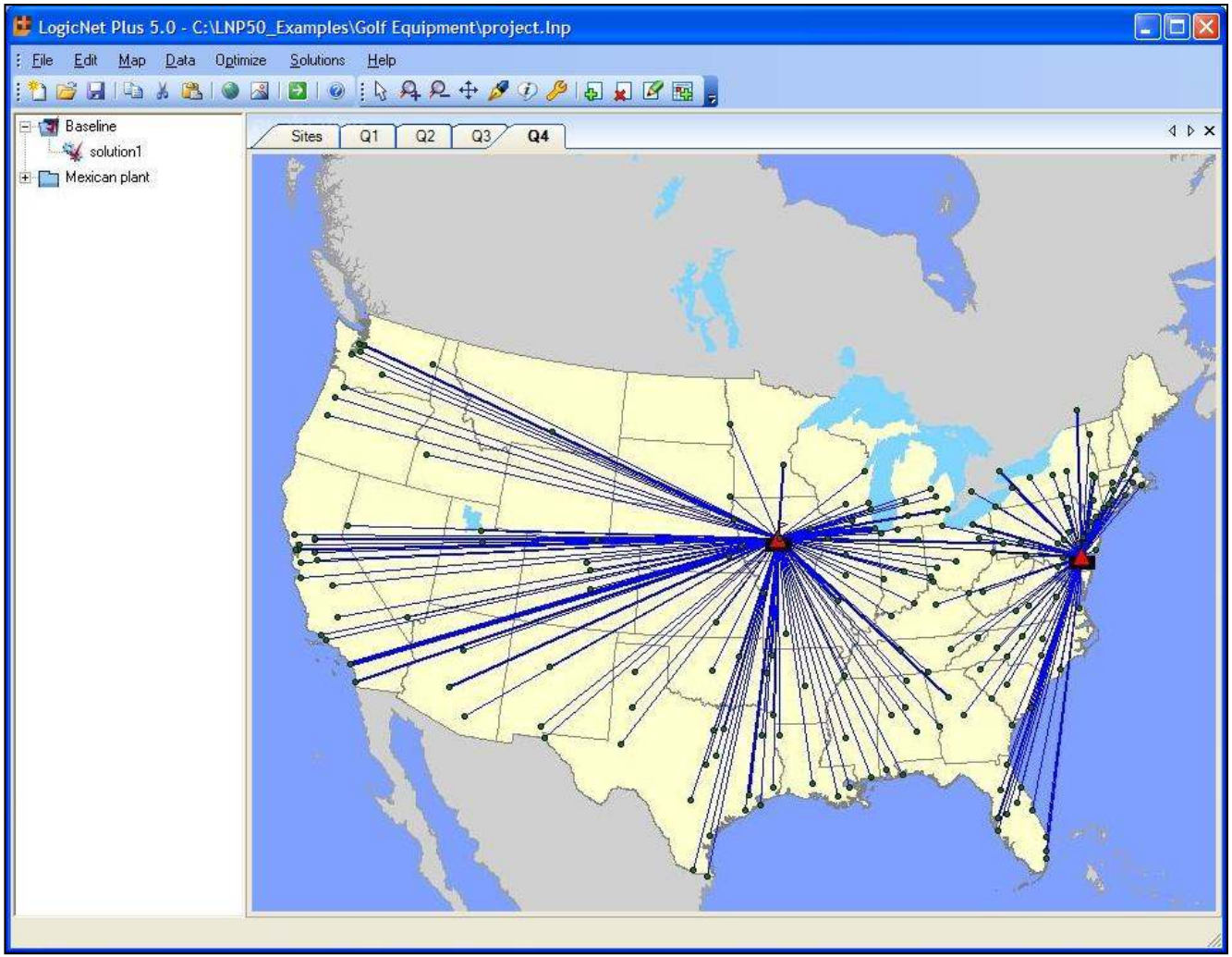


Philadelphia	☑	2,283,556.686	757,300
Akron	☑	959,494.279	375,200
Denver	☑	4,157,189.358	508,500
Los Angeles	☑	369,516.075	740,800
San Francisco	☑	286,215.75	295,200

Plant	Product	Distribution Center	Quantity
Denver	SKU 1099	San Francisco	922
Denver	SKU 1099	Los Angeles	2,406
Denver	SKU 1099	Denver	1,604
Philadelphia	SKU 1099	Akron	1,214
Philadelphia	SKU 1099	Philadelphia	2,559
Denver	SKU 1199	San Francisco	751
Denver	SKU 1199	Los Angeles	1,718
Denver	SKU 1199	Denver	1,530
Philadelphia	SKU 1199	Akron	956
Philadelphia	SKU 1199	Philadelphia	1,702
Denver	SKU 1299	San Francisco	357
Denver	SKU 1299	Los Angeles	878
Denver	SKU 1299	Denver	347
Philadelphia	SKU 1299	Akron	368
Philadelphia	SKU 1299	Philadelphia	753

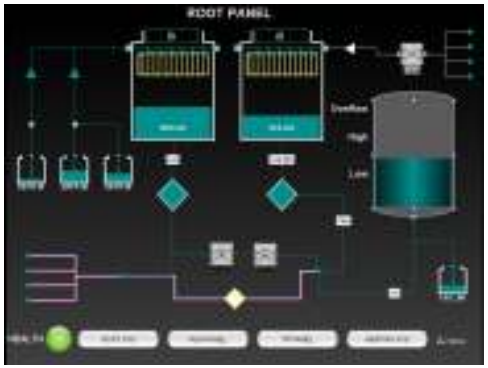
Information presented graphically



GUI Development Challenges

- Adapt an existing product or custom build ?
- Build issues
  - Development language
  - Deployment choices
  - Team skills
- Leveraging existing components

Typical Industries, Typical Customers



- Key Industry Segments
  - Network Management
  - Defense (C4I)
  - Industrial supervision (Energy/utilities, SCADA, traffic)
  - Planning & Scheduling (ERP, SCM, transportation)
  - Enterprise business (BPM, BAM, BI)
- What do they have in common ?
  - Mission-critical business apps
  - Custom graphical displays
  - Highly interactive

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IBM ILOG Visualization products

- ILOG JViews
  - **Diagrammer ***
  - **Charts ***
  - **Gantt ***
  - Maps *
  - Graph Layout for Eclipse
  - Telecom Graphic Objects
  - Maps for Defense
- ILOG Views (C++)
- ILOG for .NET
  - Diagram
  - Gantt
- Elixir

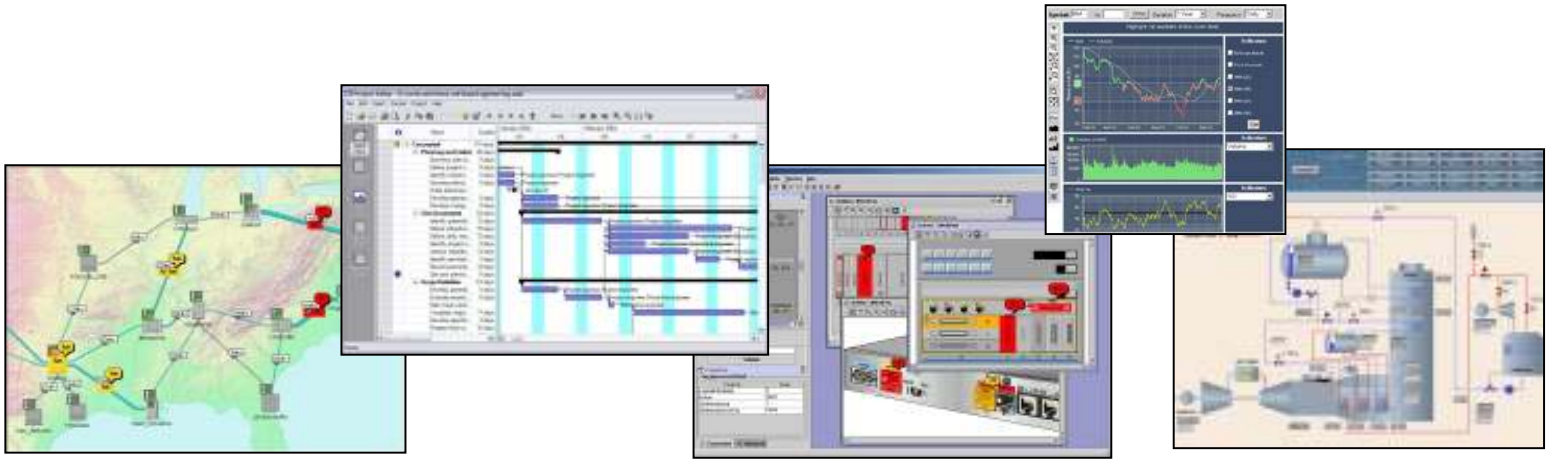
**** Available in IBM ILOG JViews Enterprise***

IBM ILOG Visualization offering

- IBM offers customizable display components
  - For advanced business applications
  - Charts, maps, diagrams, time-based displays, and more
  - Designed for UI developers
- Components, tools, and SDK
  - Working with Java, Adobe® Flex® , C++, .NET
  - Deploying to Desktop or the Web
- Note : Product features differ by platform

The short story

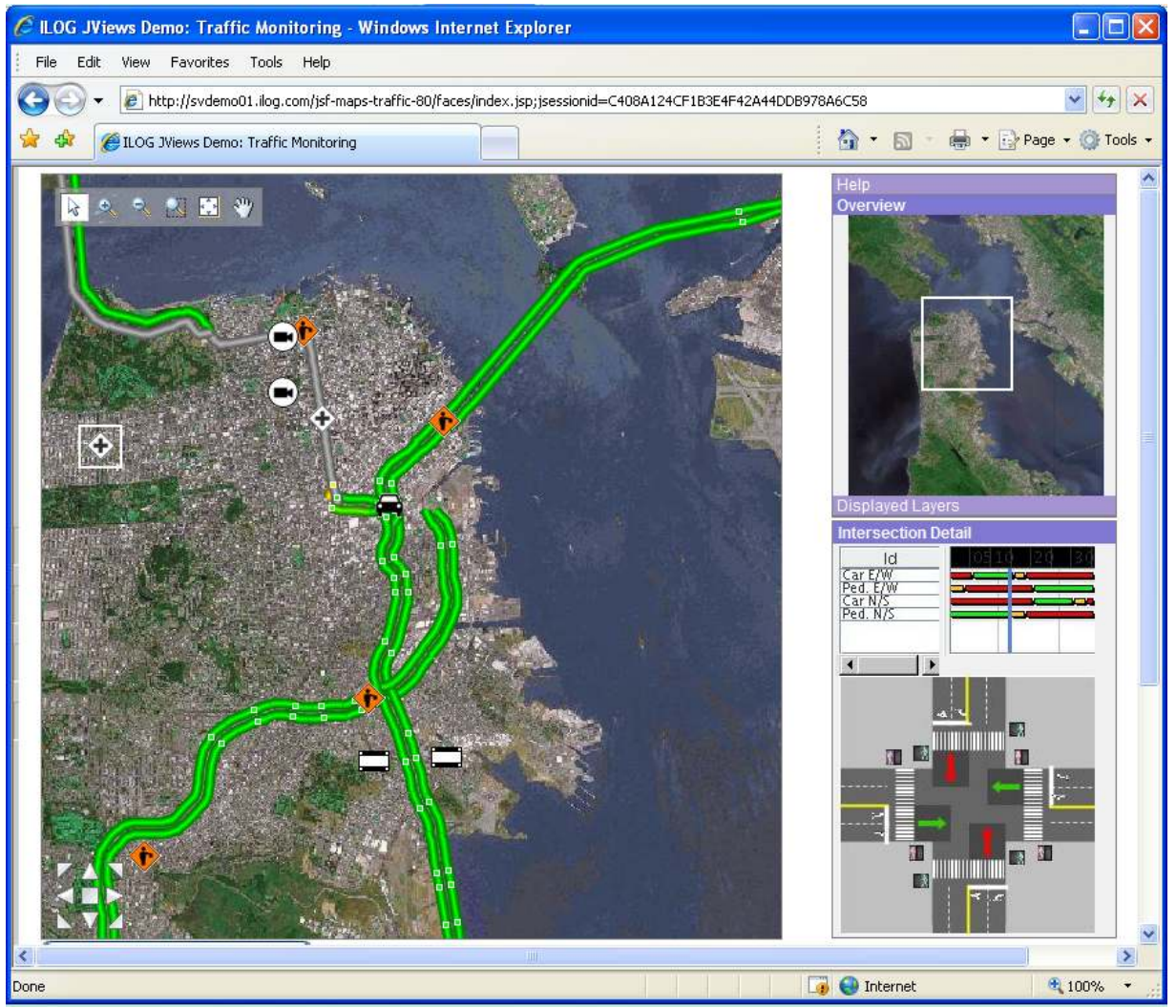
- **Elevator pitch**
  - IBM ILOG Jviews Enterprise enables Java user interface developers to add highly graphical and interactive displays to their line-of-business applications.
- **Value Proposition**
  - Developers save time, and reduce project risk
  - The resulting product is visually appealing, and easier to market
  - End users receive a superior user experience



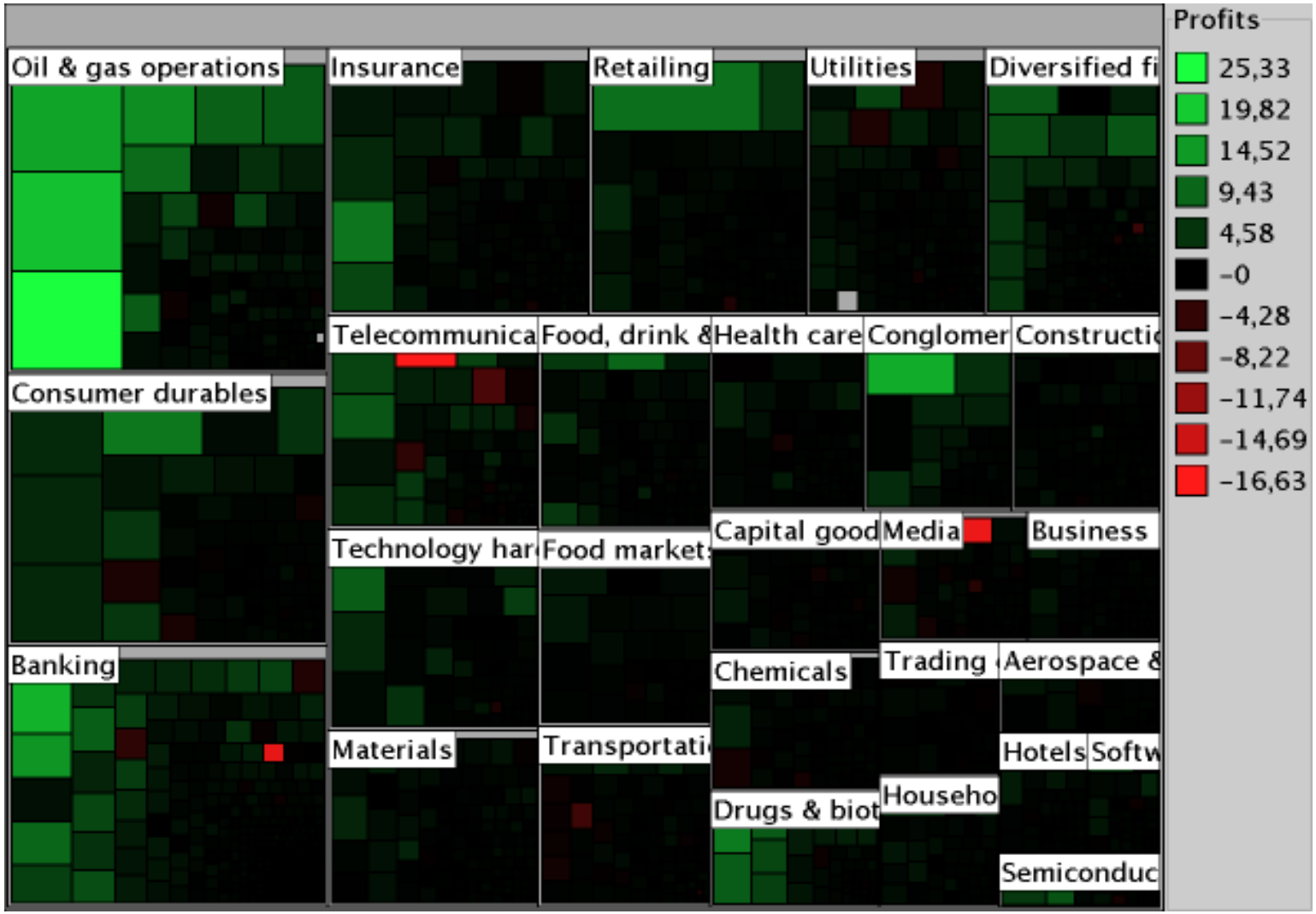
JViews is a *Visualization* product

- **Visualization**
  - Creating advanced graphical displays that convey meaning to the end user in the most meaningful way
  - Example : A chart is a very natural way to display series data
- **How does JViews Enterprise support Visualization ?**
  - « Building blocks » to help software developers deliver advanced graphical displays
  - These building blocks get embedded into an application, e.g., a car has an embedded engine, a finance application might have a chart embedded in its display
- **Three areas where JViews Enterprise/Visualization fit very well**
  - Monitoring: Users want to understand changes to their underlying system data, better and faster
  - Data Analysis: Users can spot trends or outliers more easily
  - Modeling: Users can model their system information more naturally

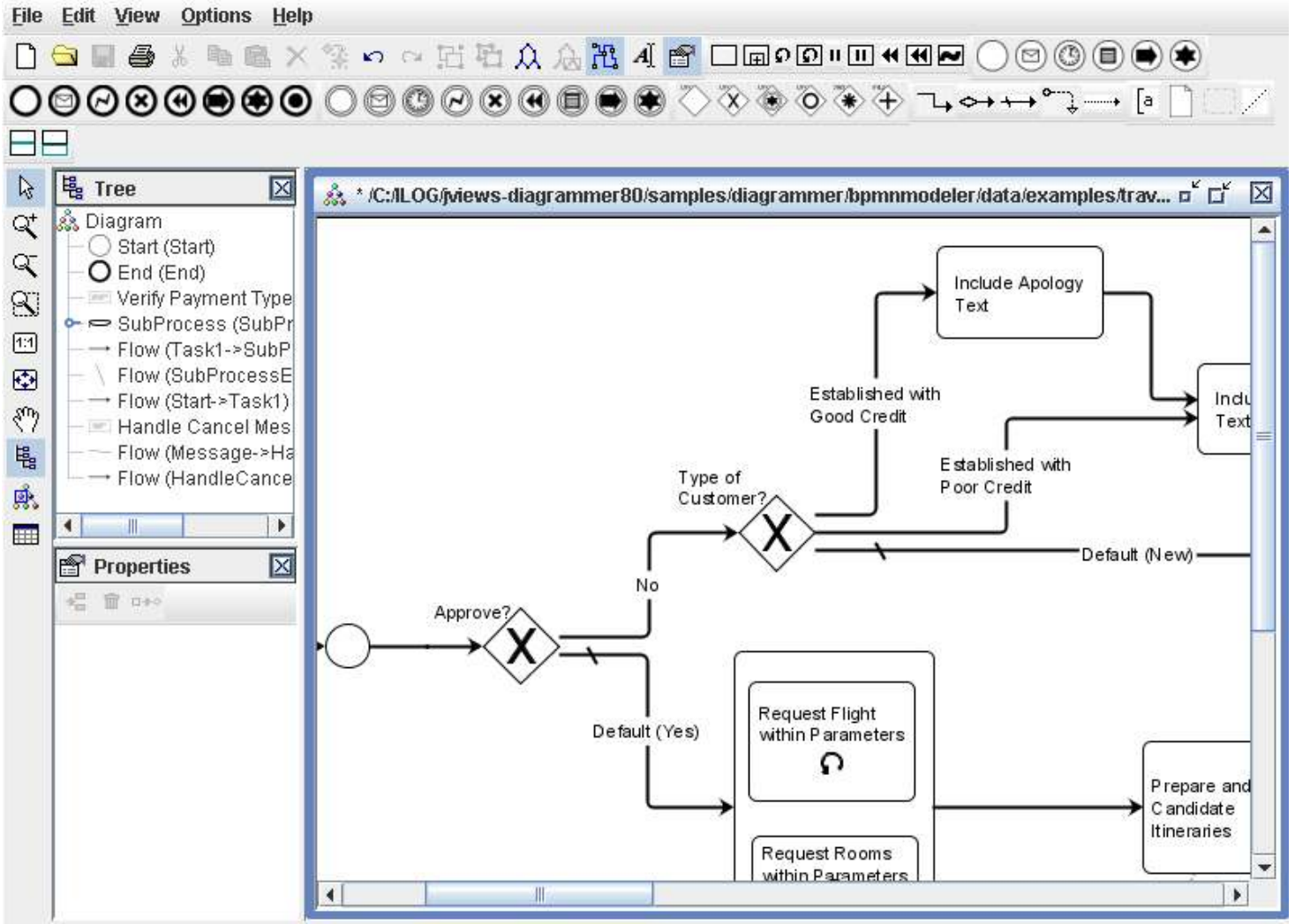
Example : Monitoring display



Example: a data analysis display



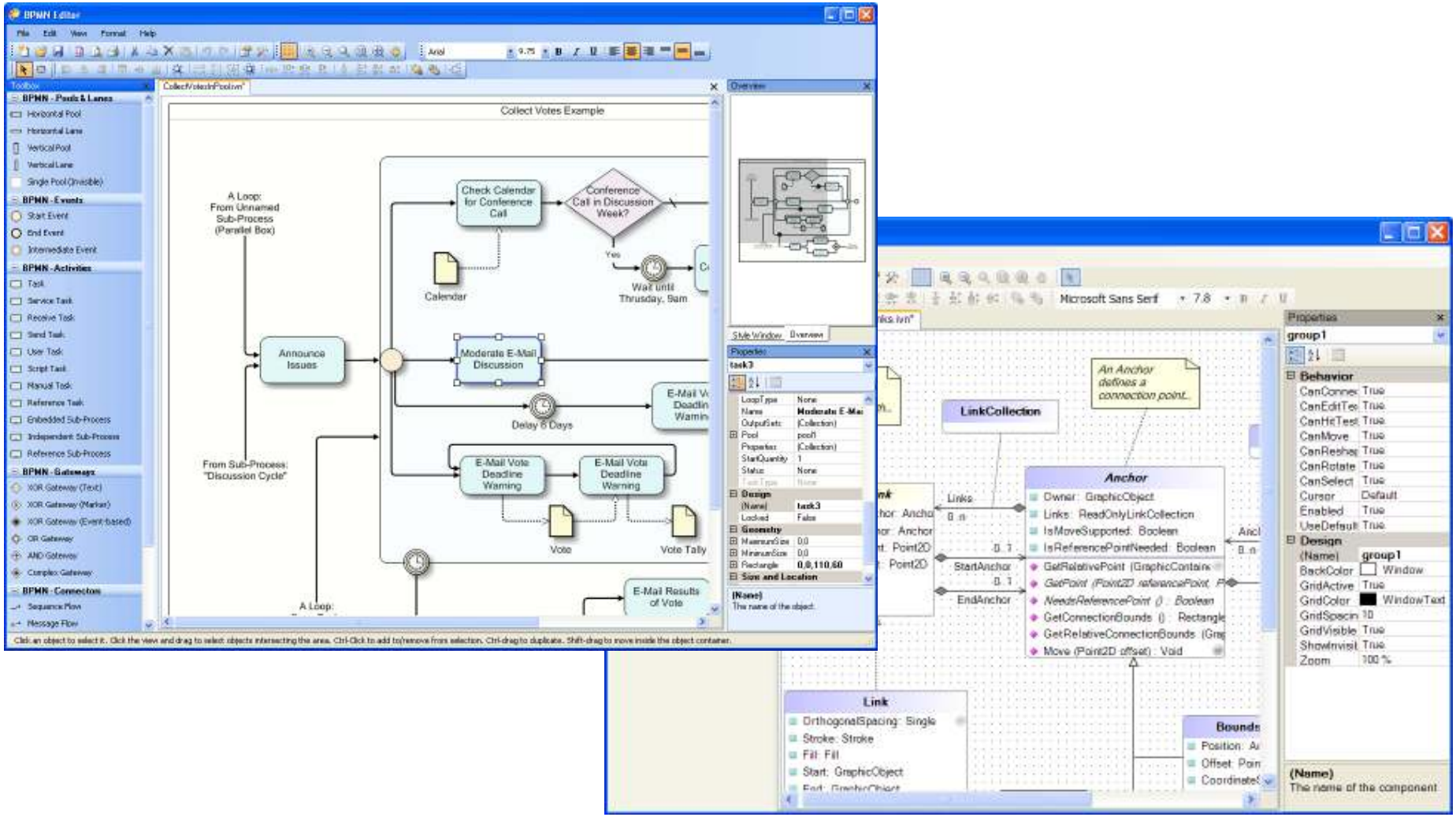
Example : Modeling



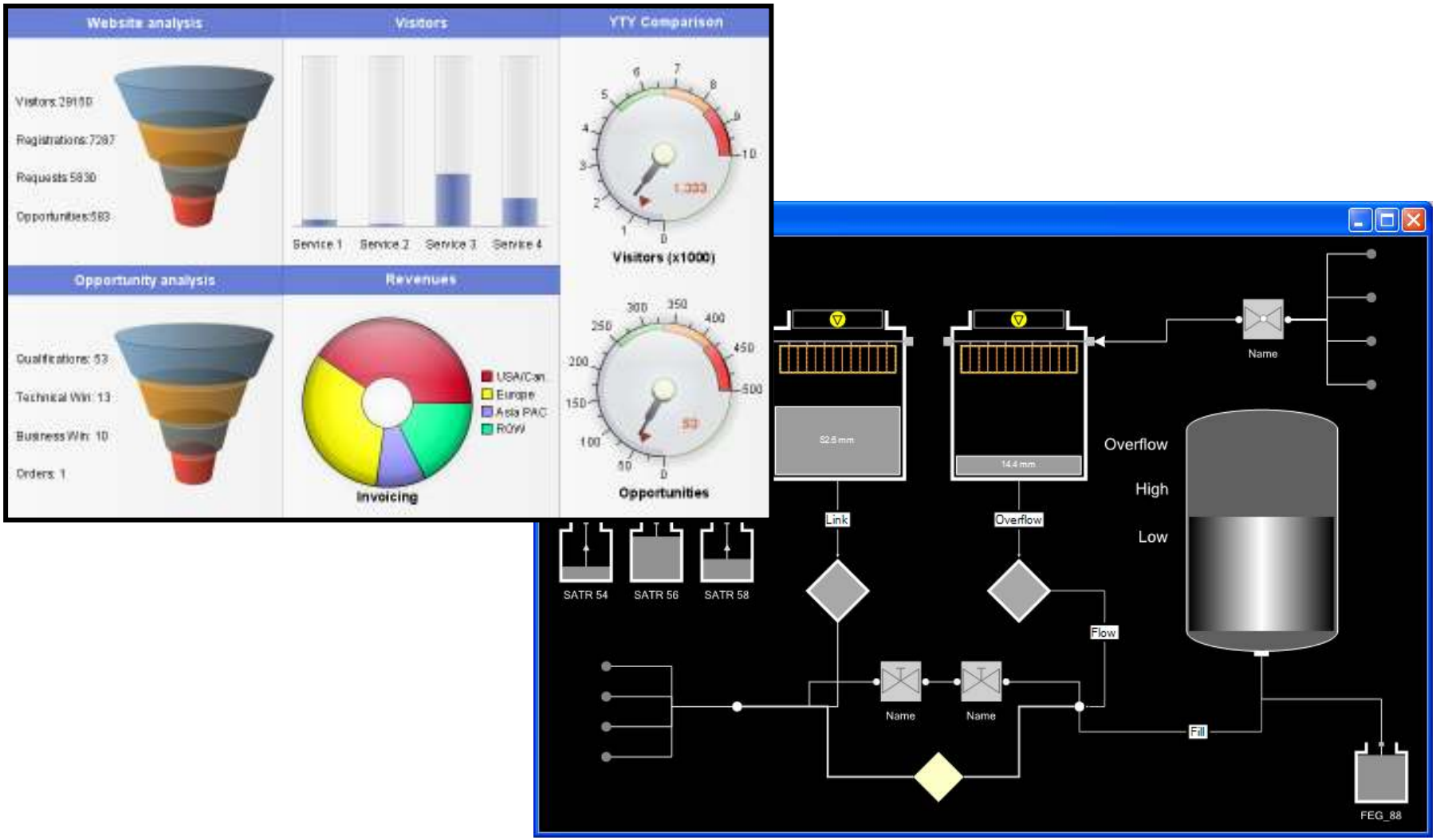
Who is this product for ?

- **Jviews enterprise is designed for**
  - User interface developers working in Java
  - …who wants to build a solution…
  - …for a business application with demanding display requirements…
  - …and who want to rely on an experienced, trusted vendor
- **The displays that can be built with Jviews Enterprise**
  - Diagrams, Dashboards, Maps, Schedule displays, Charts
- **These 5 displays are available from within a single product**
  - …addressing the advanced display needs of many enterprise-class companies (large end-users, OEMS, and system integrators)
  - …and it has a proven track record

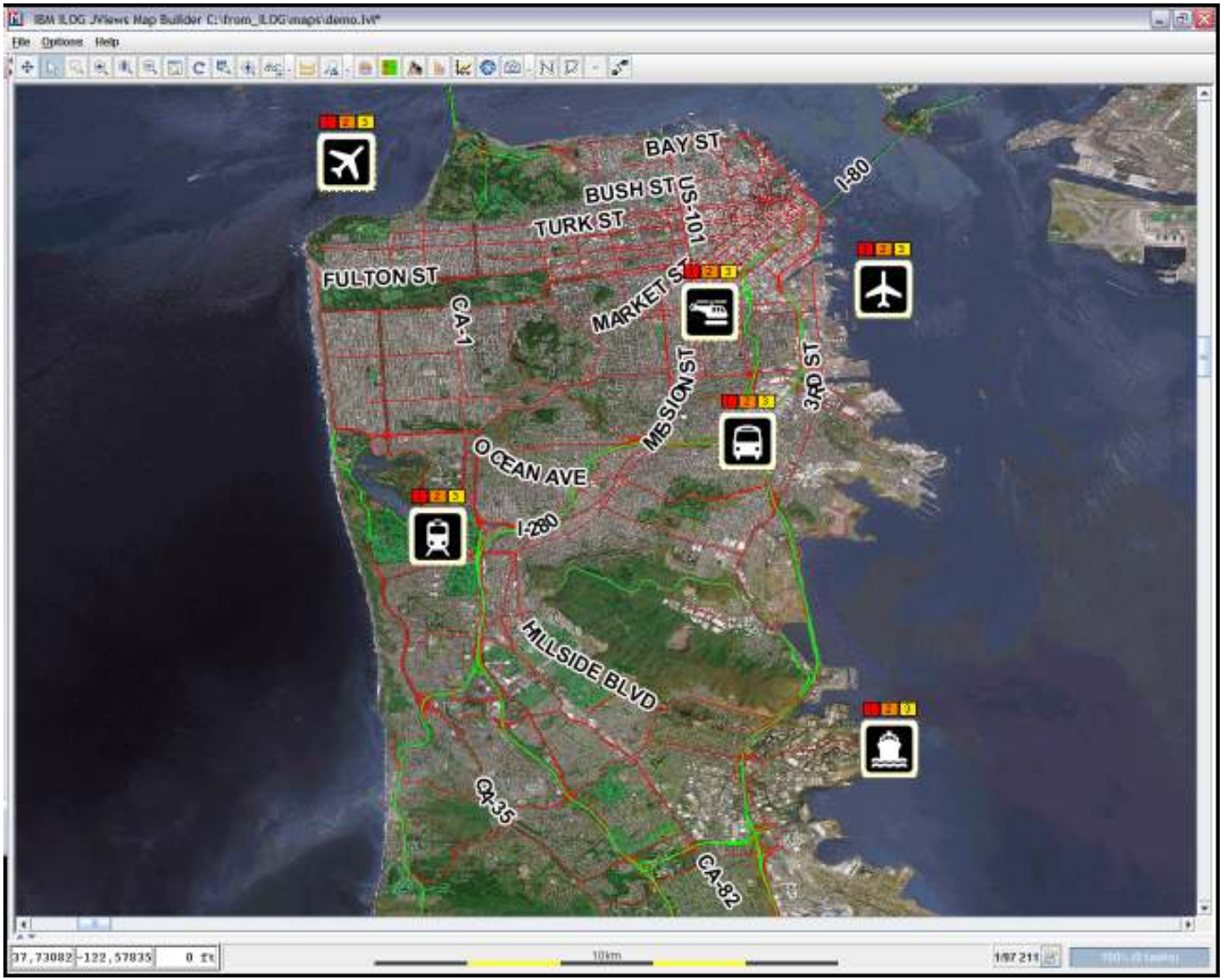
Diagrams



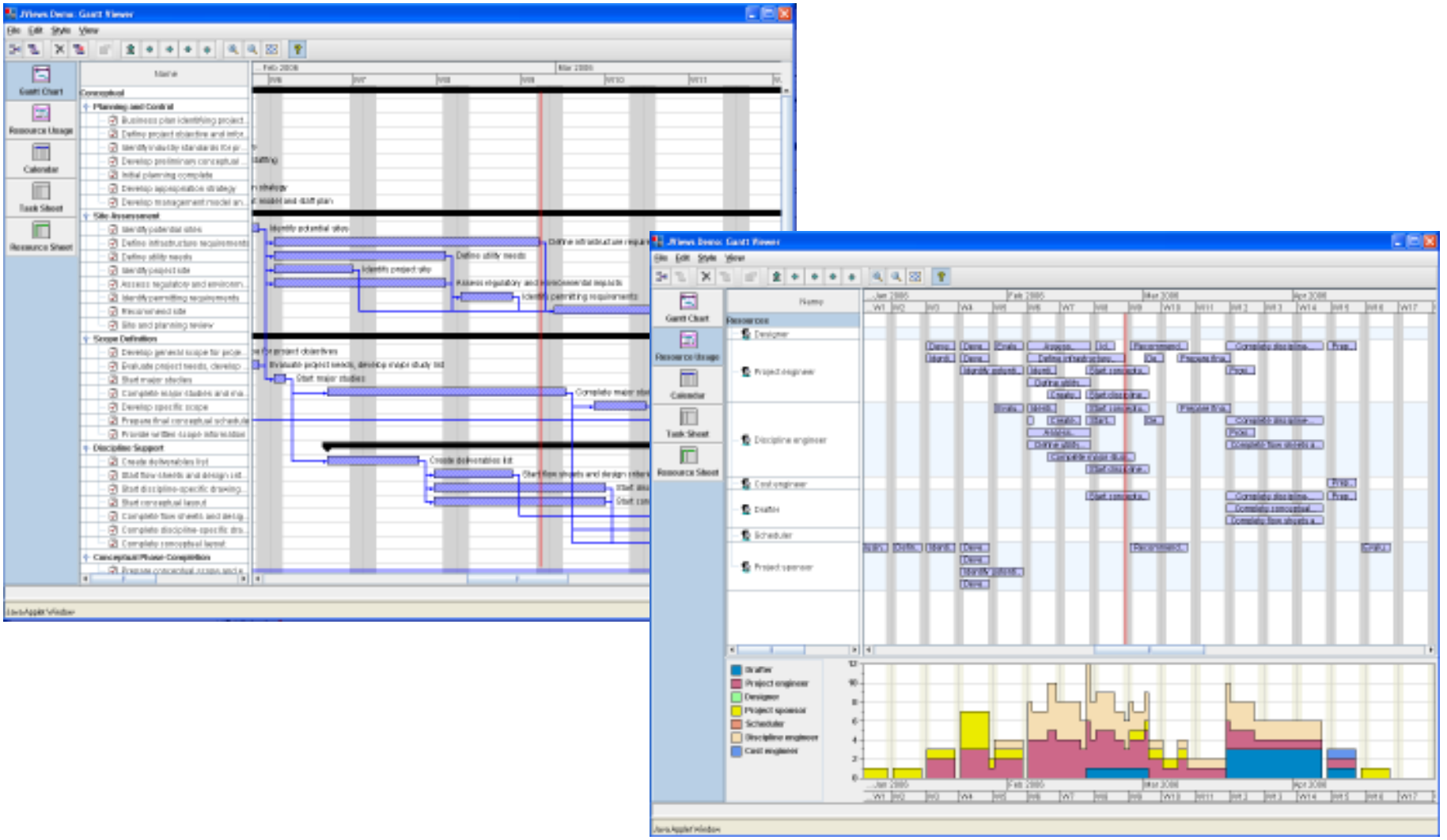
Dashboards



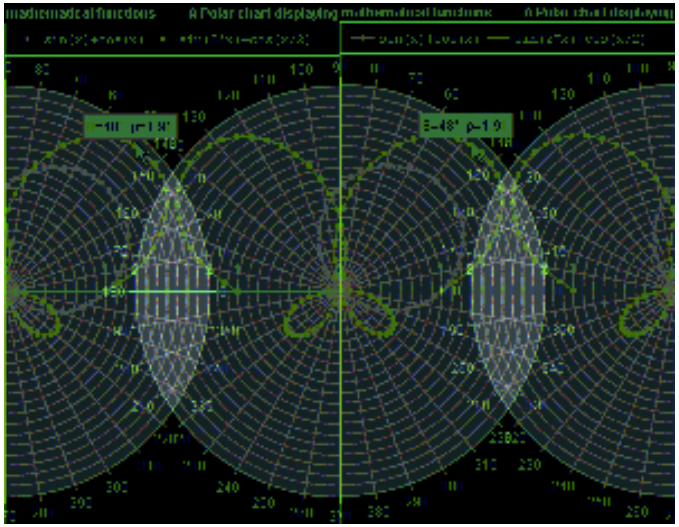
Maps

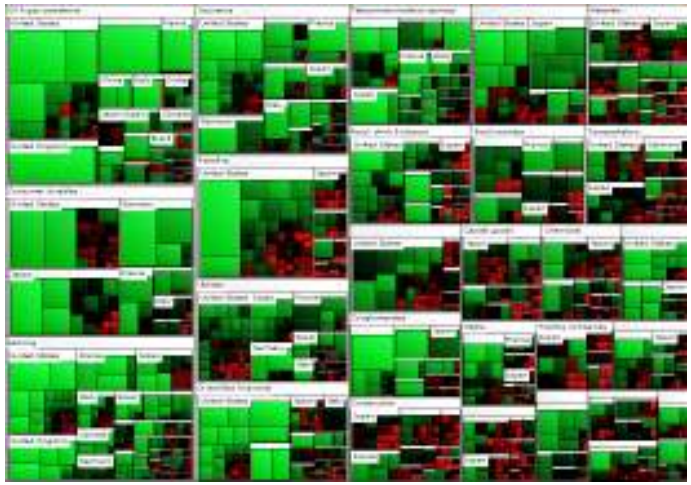


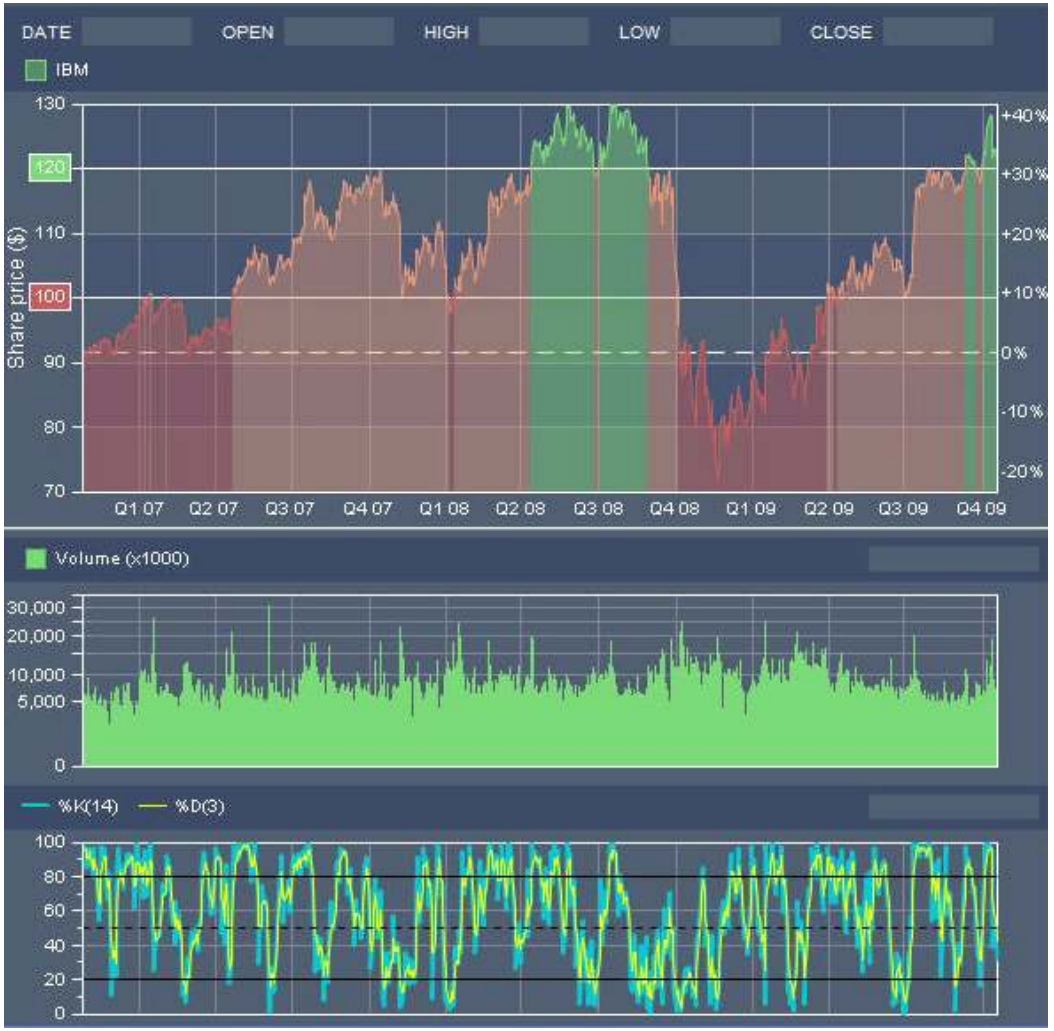
Schedule displays



Charts







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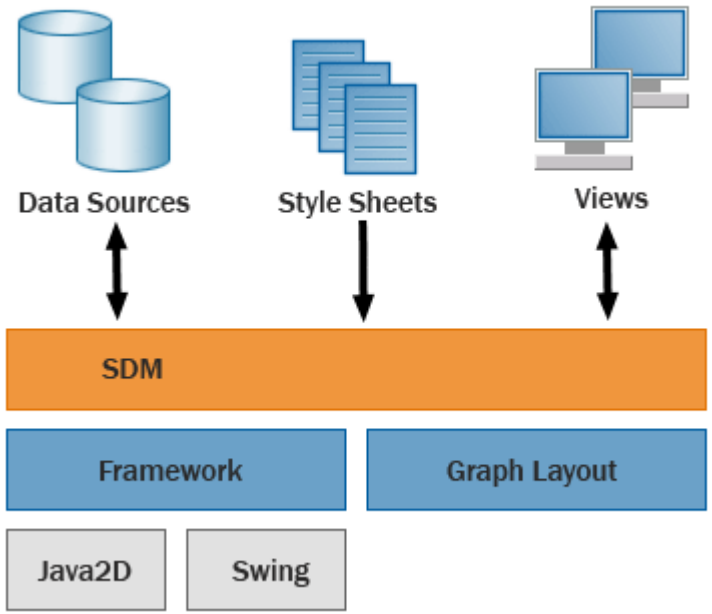
Technical Information

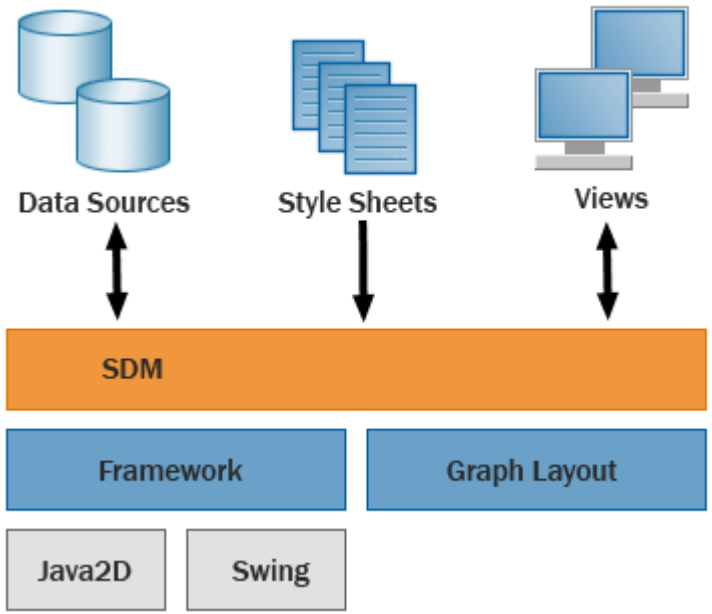
- **Product delivered as**
  - Customizing tools, for Rapid Application Development
  - A set of ready-to-use (and ready-to-tailor) display components
  - Full Java API included
- Advantages
  - Common tools and architectures reduce learning curve
    - …even though the 5 types of displays provided are different
  - Documentation is fully integrated
  - Common features accross the different display types
    - Full customizability, to meet exact end user requirements
    - Scales well to handle large data sets
    - Fast screen redraws
    - Deploy to the desktop and the Ajax-enhanced Web

General Architecture



- Swing-like model-view architecture
- **Styling and Data Mapping** (SDM) engine
  - Data Model to map to application data
  - Notification
  - Styling
- JViews Framework
- Graph Layout

General Architecture



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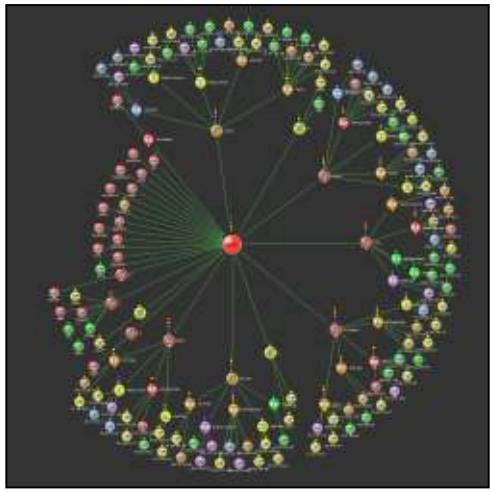
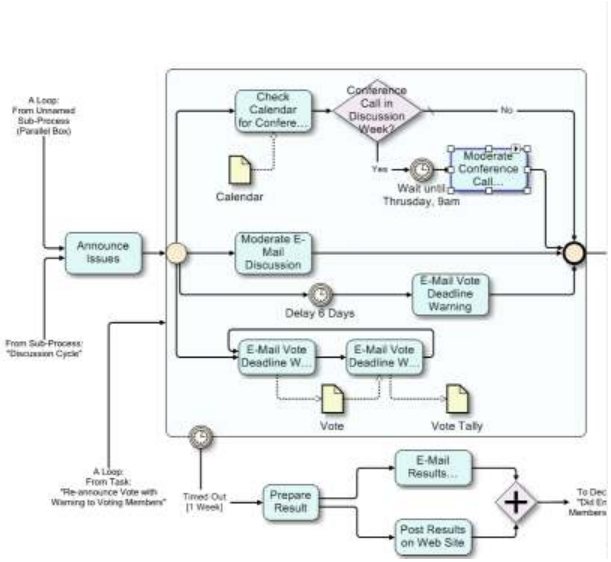
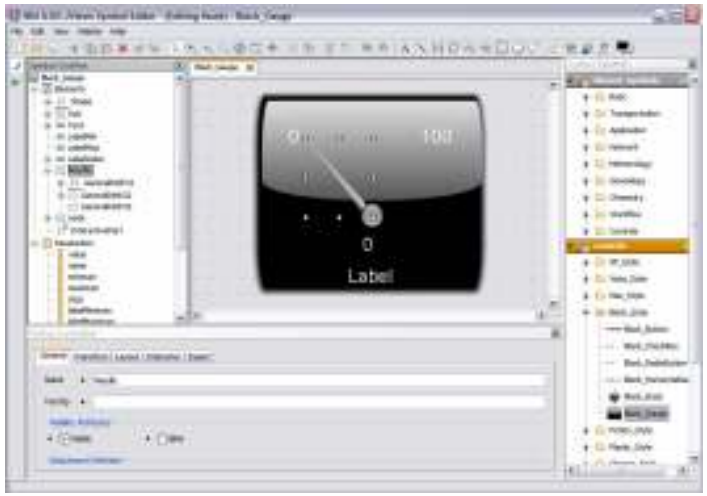
Diagrams

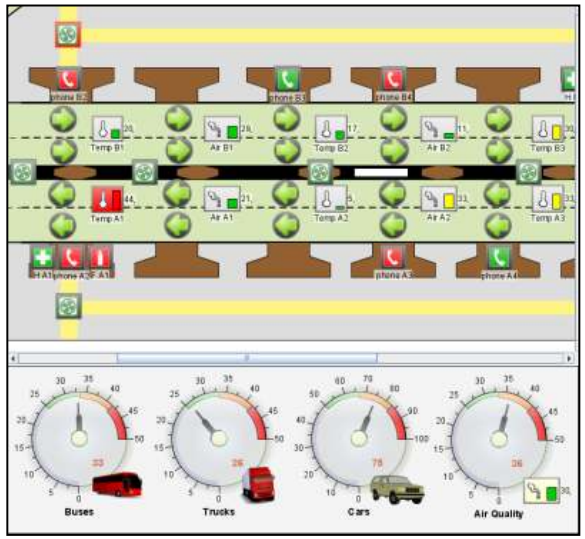




- Interactive Diagrams
  - Ideal for both modeling and monitoring
  - Custom nodes and links
- Advanced organization services
  - Many graph layout algorithms
  - Node, link, label layout
  - Sub-graphs, expand/collapse
  - Symbol decluttering
- Business Process Management support
  - BPMN, swimlanes, BPMN modeler
  - Visual tool chain for fast development
    - Symbol editor : create custom objects
    - Styling editor : define diagram displays

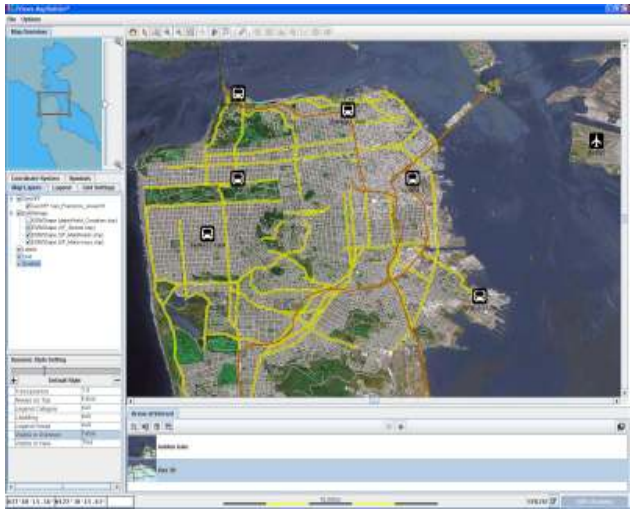
Dashboards





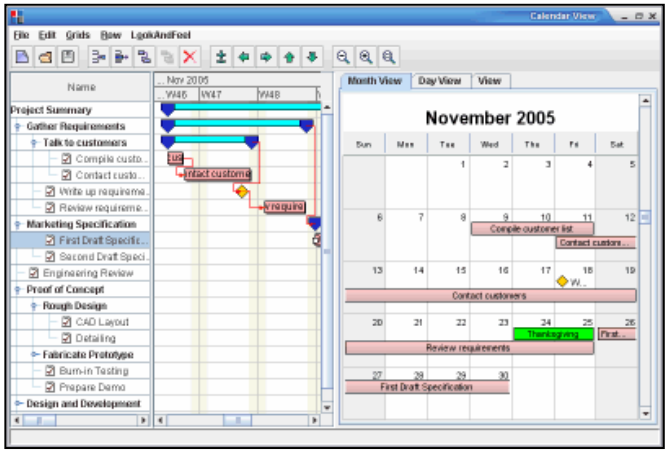
- Supports Business Dashboards
  - Real-time BAM, BI
  - Graphics represent business KPIs
  - Use standard or custom graphics
- Also supports Industrial Dashboards
  - HMI or SCADA displays
  - Graphics represent physical objects
- Tool chain enables fast development
  - Symbol editor : create custom objects
  - Dashboard editor : position symbols and connect them

Maps



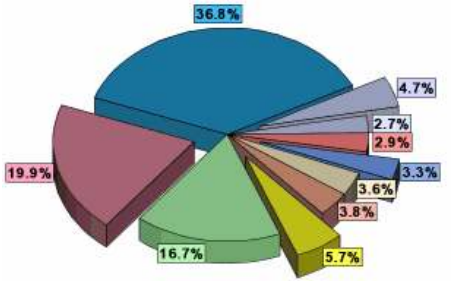
- Interactive, high-performance maps
  - Ideal for asset management monitoring
  - Mix and match map data
  - Overlaid with data-aware objects
  - Multi-threaded load on demand
- Supports most map formats
  - Shapefile, MID/MIF, Tiger/Line, GeoTIFF, GIF, JPEG, DTED, DXF, KML, KMZ, etc
  - Integration with Safe FME's 160+ readers
- Visual tool chain for fast development
  - Symbol editor : create custom objects
  - Map builder: define map data used

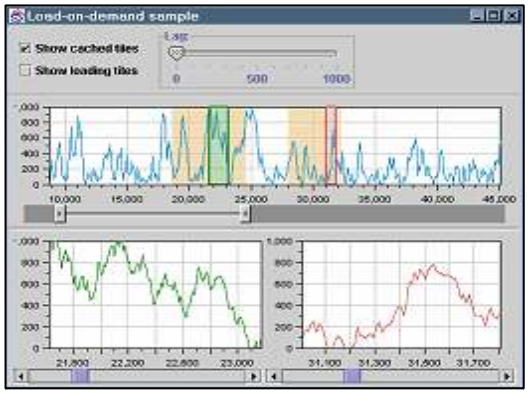
Schedule displays

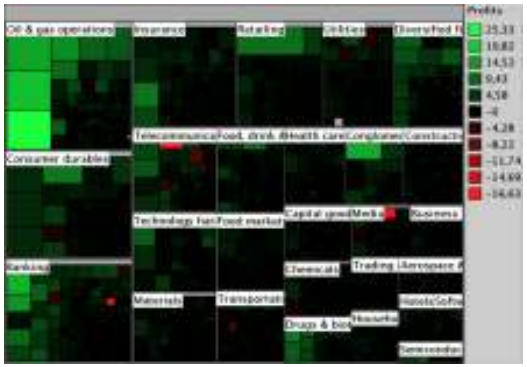


- Interactive Schedules and plans
  - Gantt task views (for project scheduling)
  - Gantt resource views (for resource allocation)
  - Resource load charts
  - Calendar view
  - PERT chart view
  - Tree table
  - Critical path computation
- Visual tool for
  - With static and dynamic styling

Charts







- Interactive high-performance charts
  - Wide variety of business, scientific, and data exploration charts
  - Real-time performance
  - Custom interaction
  - Scales to large data sets
- Visual tool for fast parameterization
  - Static and dynamic styling…
  - …at design time and at runtime

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Other IBM products

- **How does this compare to Cognos Now? Tivoli Netcool? Maximo?**
  - This question may arise because the products look similar
- **Key difference to remember**
  - Other IBM products are finished applications
  - JViews Enterprise is a product for developers building a solution
- **IBM ILOG JViews Enterprise can be chosen when**
  - The available packaged solutions are not a good fit
    - e.g. they cannot be customized, they are overkill, too costly, etc.
  - …and the customer has determined that a custom solution is needed
  - …and they want a product from an experienced and trusted vendor
- **Bottom line**
  - if a customer is not satisfied with a packaged application, and decides they need to build a solution, then JViews Enterprise is a good fit

Summary

- **Elevator pitch**
  - IBM ILOG JViews Enterprise enables Java user interface developers to add highly graphical and interactive displays to their line-of-business applications
- **A visualization product for common advanced displays**
  - Diagrams, Dashboards, Maps, Schedule displays, Charts
- **Value proposition**
  - Saves development time
  - Reduces risk
  - Enhances the end-user interface experience
- **A proven product from a trusted vendor**

"IBM ILOG makes the possible easy and the impossible possible"