Rogue Wave Visualization for C++ products provide graphical user interface (GUI) components for C++ developers, enabling them to deliver the information and interactivity that businesses need to stay agile.

With these products, developers can upgrade their user interfaces to highly-interactive, highly-graphical displays. These displays (including both standard user interface controls - such as menus and buttons, as well as advanced maps, charts, diagrams, schedules, schematics and more) enable users to better model, monitor, and analyze business information. User interface developers greatly reduce development time and risk, while end users benefit from more responsive, intuitive information displays.

### Product Applications Component

<table>
<thead>
<tr>
<th>Product</th>
<th>Applications</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rogue Wave Views - Portable and high performance C++ graphical user interfaces</td>
<td>Menus, buttons, text fields, toolbars, tables, trees, spreadsheets, Gantt displays, SCADA displays, custom graphic objects</td>
<td>Base Product</td>
</tr>
<tr>
<td>Rogue Wave Views Charts - High performance C++ charts for Views developers</td>
<td>Bar, line, point, area, stair, high-low, stacked, bubble, pie charts, real-time monitoring, performance analysis</td>
<td>Views Add-on</td>
</tr>
<tr>
<td>Rogue Wave Views Graph Layout - Diagram displays with automatic graph layout to Views applications</td>
<td>Network topologies, flowcharts, processes, organization charts, call graphs, schematics, hierarchies</td>
<td>Views Add-on</td>
</tr>
<tr>
<td>Rogue Wave Views Maps - High performance map displays for Views developers</td>
<td>Geographic map background, custom data-aware symbols, vector and raster maps</td>
<td>Views Add-on</td>
</tr>
<tr>
<td>Rogue Wave Views Data Access - Easy data connectivity for Views user interface controls</td>
<td>Data-aware controls</td>
<td>Views Add-on</td>
</tr>
<tr>
<td>Rogue Wave Server - GUI elements and topology as shared in-memory services</td>
<td>Connecting supervision GUIs</td>
<td>Modeling Framework</td>
</tr>
</tbody>
</table>

Visualization for C++ offers portability across multiple Unix™, Linux™, and Windows® platforms.
Rogue Wave Views: Portable, High-performance C++ GUIs

Rogue Wave Views provides C++ developers with cross-platform GUIs for mission-critical applications. Developers can quickly create powerful GUIs that target a large variety of platforms, including Windows, UNIX and Linux. Through dedicated components and tools, Rogue Wave Views dramatically reduces user interface development time and risk.

- Large collection of portable GUIs, such as menus, buttons, text fields, toolbars, tables and trees
- High-performance 2D vector graphics, to create highly custom applications
- A powerful GUI builder, to speed up interface development
- Support for internationalization
- Extensible Gantt charts
- Business Graphic Objects support and builder

Rogue Wave Views Charts: High-performance Chart Components

Rogue Wave Views Charts enables C++ developers to easily add a wide variety of chart displays to their Views-based user interfaces.

- Shorter development time and reduced maintenance costs, through ready to use cross-platform graphical user interface components.
- A wide variety of the most common chart formats and annotations are provided: bar, line, stair, high-low, bubble, pie, Linear or logarithmic scales, multiple axes, legend displays, etc.
- Powerful graphical user interface (GUI) builder to speed up interface development.
- Real-time performance updates, with fast refreshes.
- Full software development kit included, enabling exact control over the visual aspects and user interactions.

Rogue Wave Views Graph Layout: Automatically Organize Complex Diagram Displays

Rogue Wave Views Graph Layout provides algorithms to intelligently rearrange diagram displays for better readability. With Views Graph Layout, developers ensure that users can understand the data in network topology displays, workflows, organization charts, and other diagrams by organizing and presenting a more understandable view of the data and its relationships.

- Complex, out-of-the-box diagram display services, including the most common graph layout algorithms: hierarchical, tree, radial tree, and bus layouts.
- Optimally routes links (edges) between nodes and places labels to reduce overlapping elements
- Connected elements (nodes) can be represented by any Views graphic object
- Includes organization features, such as subgraphs, and editing features, including animation, undo and redo, and persistence
- Architected to support large data sets and to be extended with the included software development kit (SDK)
Rogue Wave Views Maps: Create Sophisticated, High-performance Map Displays

Rogue Wave Views Maps provides user interface developers with map display components for their mission-critical applications. C++ developers can add high-performance custom map displays to their Views user interfaces. These maps can be comprised of multiple layers of both raster and vector map data, and are typically overlaid with data-aware graphic objects that represent the current status of equipment, vehicles or other managed resources. The end result is a spatial display that is ideally suited for monitoring the position and status of an application’s assets.

- Extensive digital mapping services with high-performance graphics
- Supports background map data from many formats (vectors and rasters), with the ability to mix and match map data on different zoom-dependent layers
- Objects on the map overlay layer can be represented by any Views graphic object
- Load on Demand (LOD)
- Extensible projectors support
- Architected to handle very large data sets, with video-like, real-time updates of overlaid objects
- Includes complete software development kit (SDK), enabling customization of all aspects of the map

Sample map with mixed data sets
Georeferenced objects

Rogue Wave Views Data Access: Direct Connections to Data

Rogue Wave Views Data Access enhances underlying Views controls by connecting them to data sources for bi-directional data updates. Developers can quickly assemble an interface and no longer need to write difficult “glue code” to connect their user interfaces to the underlying data sources.

- Directly connect Views controls from within the Views GUI builder. This functionally is especially well-suited to visualize database content in tables, trees, and forms.
- Custom graphic objects, diagrams, and charts (from Views Charts) can also be made data-aware
- Connection types include databases, XML streams, and custom extensions.
- The same GUI can be connected to several databases managed by different connections.
- Once connected, data updates from the data source are automatically reflected in the user interfaces controls. Likewise, changes in the user interface (due to user interaction) are transmitted back to the data store.
- Views Data Access applications can be ported across operating systems and databases simply by recompiling or connecting with different credentials at runtime.

Views Data Access connection editor
ROGUE WAVE VISUALIZATION FOR C++

Rogue Wave Server: Highly Scalable Modeling Framework
Rogue Wave Server is a highly scalable, C++ object framework that provides powerful business modeling facilities for representing the elements and topology of a supervised system as shared in-memory services. Its modeling abstractions match those offered by object-oriented design notations, like UML, and bridge the gap between business model design and implementation. Objects stored in the Rogue Wave Server-based mediation server are active, meaning that all business events, such as object modifications and structural changes, are registered and buffered for forwarding to subscribing clients which can be created in either C++ or Java. Rogue Wave Server allows developers to define one or more mappings from the physical system’s object model to the graphical model. It provides ready-to-use graphical models for the Rogue Wave Views Data Access.

Supported Platforms: Available on Windows, UNIX and Linux. See the system requirements listed online for the latest on supported platforms, databases and operating systems.

About Rogue Wave Software
Rogue Wave Software, Inc. is the largest independent provider of cross-platform software development tools and embedded components for the next generation of HPC applications. Rogue Wave tools and components are designed to increase the productivity of developing applications that take advantage of parallel computing architectures. Rogue Wave’s strategy marries High Productivity Computing with High Performance Computing to enable developers to harness the power of parallel applications and multi-core computing. Our products reduce the complexity of prototyping, developing, debugging, and optimizing multi-processor and data-intensive applications. We are the foremost single source for HPC software development solutions in the market today.