Command & Control Software Tool : AEROPGLG04

The GLG Toolkit by Generic Logic is a high-performance graphical development framework used to build mission-critical Command and Control (C2), HMI, and SCADA applications. It allows developers to create data-driven, dynamic dashboards that visualize complex systems in real time. Industry leaders like NASA, the FAA, and BAE Systems deploy this toolkit to monitor low-latency telemetry, aerospace tracking, and defense infrastructure.

Core Components

- GLG Graphics Builder: A point-and-click vector graphics editor used to design custom interfaces without manual coding.
- GLG Object Engine: A highly optimized runtime engine that handles rapid data animation and user interactions.
- GLG Map Server: An integrated GIS component providing offline map rendering, critical for secure military and aerospace command tracking.

Key Technical Capabilities

Dimension	Capabilities & Supported Environments
Supported Frameworks	Native C/C++, Java, C#/.NET, and HTML5 JavaScript (including React, Angular, and Next.js).
Target Platforms	Cross-platform compatibility for Windows, Linux, Unix, and ARM-based embedded systems (e.g., Raspberry Pi, Beagle Bone).
Data Performance	Engineered for high-speed updates, handling tens of thousands of real-time data points simultaneously.
Architecture	A vendor-neutral, data-agnostic framework that binds backend system APIs directly to graphical metadata via an Open Data API.

C2 Specific Features

- Interactive Command Handling: Objects within drawings can contain direct, embedded metadata actions (e.g., triggering a backend write-back command or pulling up a regional satellite view) without rewriting the primary application logic.
- Avionics & Telemetry Palettes: Includes pre-built dynamic indicators such as custom gauges, dials, 3D pipelines, and multi-timeline strip charts out-of-the-box.
- Resolution Independence: The vector screens adapt automatically across diverse hardware setups—from massive multi-monitor control rooms down to rugged embedded field displays.

To best guide you with this platform, could you let me know what specific type of system you plan to build (e.g., defense tracking, industrial control)? If you are currently evaluating your tech stack, I can also explain how to set up the GLG Toolkit Free Community Edition for rapid prototyping

The **GLG Toolkit** by **Generic Logic** is a highly flexible graphical development framework designed for building sophisticated, real-time **Command and Control (C2), Human-Machine Interface (HMI), and SCADA software tools**. Rather than being a ready-to-use application, it is an open development framework that provides the visualization engine for mission-critical automation systems where low-latency telemetry and high-performance situational awareness are mandatory.

Specialised mission-critical providers, such as Command and Control Technologies Corporation (CCT), heavily rely on the GLG Toolkit as the foundational graphical and GIS engine for their range safety, satellite launch, and tactical surveillance control systems.

Key Capabilities for Command & Control Applications

- **Dynamic Graphics Builder**: A point-and-click HMI editor allows developers to draw and build complex graphical interfaces, dashboards, and system mimics without manual coding. The look of the interface remains decoupled from the source code backend.
- **Real-Time Data Streams**: Engineered for massive data throughput, handling ultra-low latency updates and complex charts processing tens of thousands of data points concurrently.

- Open Data API: A vendor-neutral, data-agnostic API that hooks the visualization interface cleanly to any backend database, network telemetry system, or physical hardware loop.
- Integrated GIS Map Server: Essential for tactical C2 systems, the GLG Map Server operates completely without an internet connection, allowing offline vector map handling, layered tactical icons, zooming, panning, and automatic coordinate conversion.
- Interactive SCADA Framework: Includes a pre-built SCADA viewer framework that supports secure write-backs to control hardware, alarm management, multi-level drill-down menus, and custom pop-up dialog boxes.

Target Industries

Because of its extreme resilience, low resource footprint, and real-time reliability, the software is deployed by global industry leaders in critical sectors:

- Aerospace & Defense: Embedded into satellite ground control stations, missile range tracking, air traffic control (FAA), and space flight automation (NASA).
- Industrial & Energy Automation: Power grid monitoring, oil and gas pipeline routing, and complex chemical plant process control systems.
- Network & Traffic Management: Large-scale telecommunications network architectures and metropolitan transit operations.

Deployment & Cross-Platform Support

Drawings built inside the toolkit require zero porting and translate fluidly across multiple OS environments and languages:

- Supported Languages: Full API libraries for native C/C++, Java, C#/.NET, and an HTML5-compliant JavaScript library (with integrations for React, Angular, and Next.js).

- **Operating Systems**: Deploys natively across Windows, Linux/Unix, real-time operating systems (RTOS), web browsers, and resource-constrained ARM embedded boards (such as Raspberry Pi, BeagleBone, and NVIDIA Jetson).

Getting Started

Developers looking to build or evaluate a command and control dashboard can download the GLG Toolkit Free Community Edition, which includes the full Graphics Builder, the native libraries, the map server, and pre-packaged SCADA/C2 telemetry examples to work from.

Would you like to explore **how the GLG Map Server integrates** with real-time tactical icons, or do you need a comparison between this toolkit and other **HMI/SCADA development frameworks**?

OS & HARDWARE SUPPORT	INDUSTRY APPLICATION

Note: ** Specifications are copied from manufacturer data. Please contact before buying.