THE WORLD'S LEADING SOFTWARE PLATFORM FOR REAL-TIME EXPERT SYSTEM APPLICATIONS

IgniteTech's powerful real-time expert system Gensym G2 automates the control and decision management of any complex system, process or simulation. It is an on-premise solution available in both 32-bit and 64-bit platforms.

- Real-time reasoning and inference engine for developing expert systems for simulation, process and production control
- World's only expert system platform that facilitates enablement of many use cases by providing a unified development, test, deployment and management platform
- Builds applications that cater to unique use cases in industries as different as terrestrial mining and manufacturing, as well as telemetry-based management of space assets like satellites, aircraft engines and everything in between

YOUR INDUSTRIAL CONTROL AND AUTOMATION SOLUTION

IgniteTech's Gensym G2 allows you to create, deploy and adapt real-time, rule-driven, mission-critical expert applications that automate decision making in telecommunications, finance, government, military, manufacturing, utilities and transportation.

Gensym G2 is proven in the world's largest enterprises that require 24×7 uptime in true mission-critical production installations. With G2, builders of rule-driven, mission-critical applications work more productively, minimize their project delivery risks and increase their success in building long-lasting systems.

Gensym G2 transforms real-time operations data into automated decisions and actions, all in real time. G2 applications work in concert with existing operational systems, including enterprise systems, databases, automation systems, data historians, network management systems, telemetry systems and many more.

- Increase business agility and performance
- Improve asset and service availability
- Rapidly build and deploy business-critical applications
- Preserve, enhance and leverage operations knowledge

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BUILDING YOUR APPLICATION WITH GENSYM G2

Real-Time Reasoning for Time-Critical Decisions

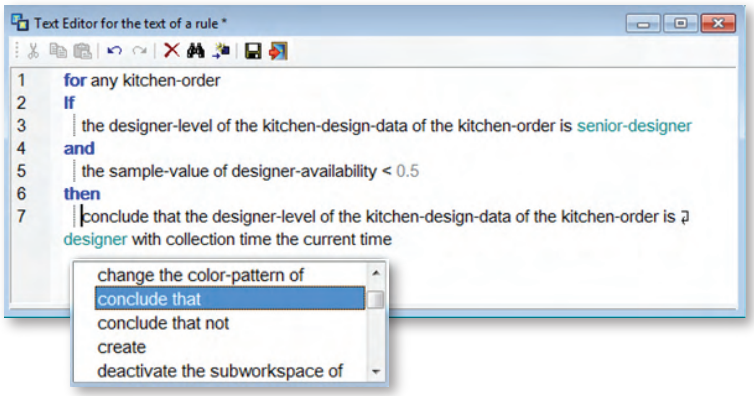
Gensym G2 is designed at its core for real-time reasoning and execution. All of its technologies work together in real time to drive decisions and actions. With G2, application builders have a comprehensive infrastructure of capabilities for working with the time-based requirements of their applications. This built-in infrastructure is an important productivity booster vs. traditional coding.

G2's real-time capabilities include:

- Processing tens of thousands of rules per second for high performance
- Data histories kept locally for high-performance time-based reasoning
- Timestamping of data to support time-based reasoning
- Getting the best answer within a fixed time (reasoning within a deadline)
- Reasoning when data is missing (default reasoning)
- Built-in expressions for reasoning about time-based events and histories

Natural Language Rule Definition

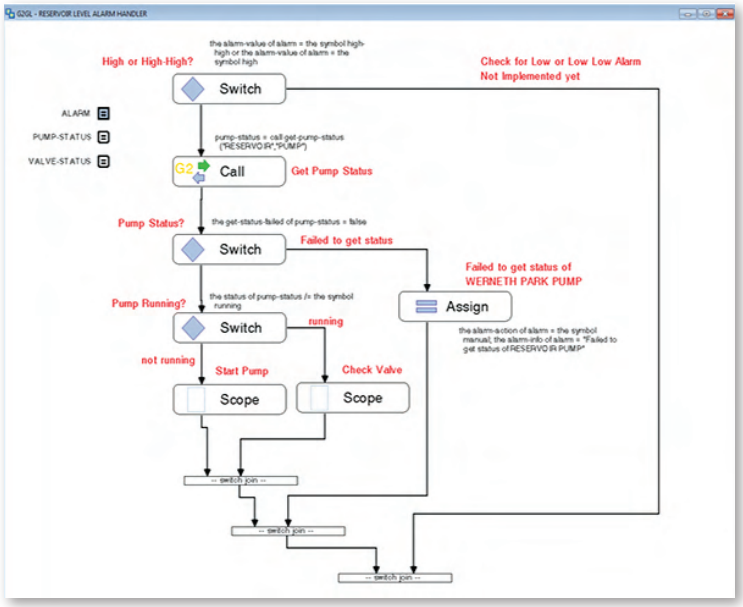
G2 rules, which are in the form of "if...then" statements, reach conclusions and drive decisions, typically in real time. Rules reach conclusions from historical trends, predict problems, determine what actions to take to avoid or minimize loss, provide guidance to increase performance and so forth. G2 represents rules in a natural language form, enabling domain experts to be directly part of rule creation and maintenance.



Rules and associated logic can be organized in several ways to facilitate their management, including via tables, tree diagrams and hierarchical workspaces. Rule logic can also be represented in graphical structures to illustrate sequencing, relationships and integration with process models.

Graphical Coordination of Business Processes and Workflows

For real-time coordination of business and workflow processes, G2 incorporates a high-performance graphical language, G2GL, directly into the platform that is based on the Business Process Execution Language for Web Services (BPEL) standard. With G2GL, users graphically model and execute parallel and sequential flow logic in real time for a wide variety of business and workflow processes.



Updating in Run Mode to Immediately Adapt Logic

G2's ability to update any modeling or logic changes during runtime, without stopping to recompile and reload, is a major advantage for business agility, development productivity and application maintenance.

For application development and maintenance, runtime editing adds tremendous value. While the application is being prototyped and built, developers and business users immediately see the impact of logic changes. During ongoing maintenance, logic edits are also immediate — there is no need to stop the application and reload the compiled code or the loaded operational data.

Mission-Critical Reliability

Nonstop execution is a fundamental capability of G2. Many applications have been operating continuously around the clock for years, except during power failures. In one deployment, for one of the world's largest mutual fund companies, G2 has run nonstop for over eight years with zero downtime.

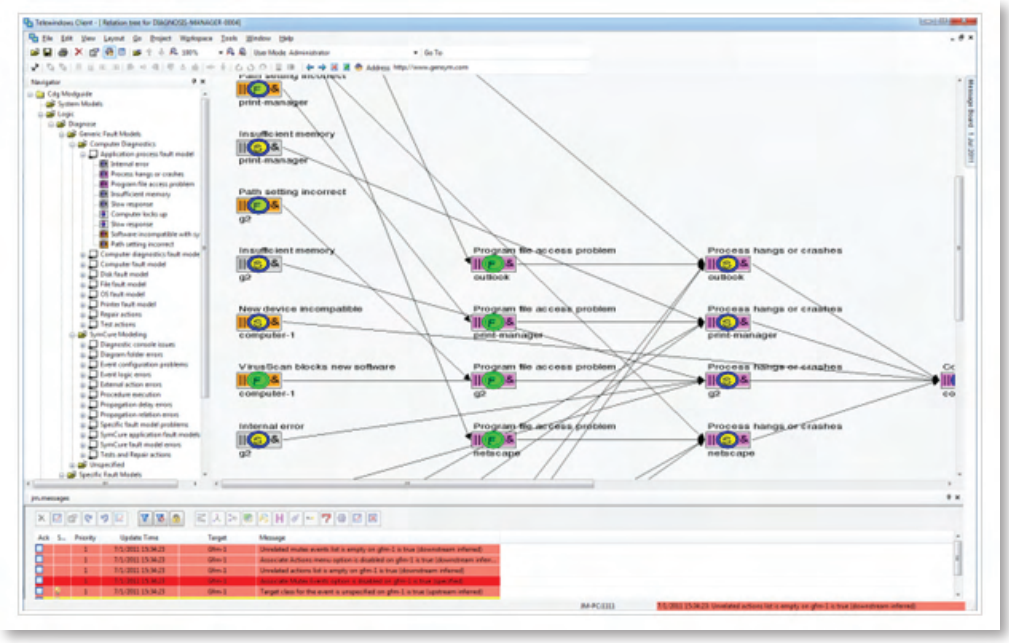
G2 delivers mission-critical reliability through several means. First, G2 is mature. It has been tested with many millions of hours of deployment in the most demanding installations. Through the experiences of these types of deployments, G2's engineering team has continuously enhanced the platform's design to ensure high levels of platform reliability.

Object Modeling for Understandability and Reusability

G2's object-oriented modeling offers highly reusable code and an application structure that is much more intuitive than those built with conventional programming tools. G2 objects graphically represent the properties and behaviors of items of interest and their relationships — such as physical items like a tank, pump or instrument, or abstract items like an event, task, decision, order, message or logical connection.

Other Important G2 Object Modeling Advantages Include:

- **Inheritance** — Single and multiple hierarchical inheritances provide high levels of modeling productivity
- **Properties** — Representable as real-time data, simulated data, text or logical variables, or even as another object
- **Methods** — Represent object behaviors in real time as procedural code
- **Relationships** — Intuitive creation of relationships via graphical connections and flexible definitions
- **Animation** — Object icons have programmable animation layers to enhance human-to-machine interactions
- **Organization** — Placement of objects and knowledge on graphical and programmable, hierarchical workspaces simplifies application organization and maintenance



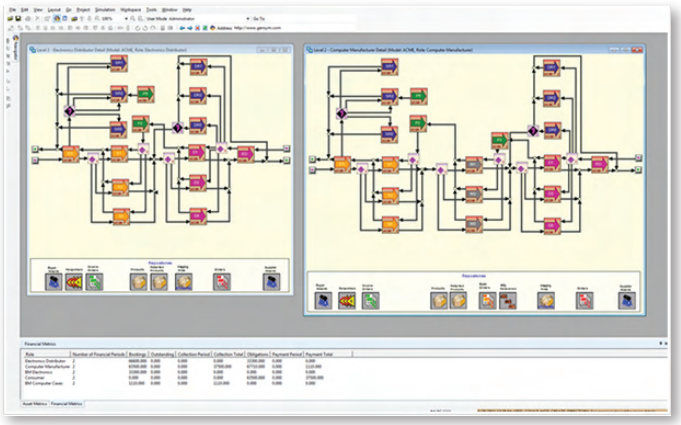
Rapid Prototyping to Involve and Engage End Users

G2's capabilities for runtime edits, intuitive graphical representation of object models and intuitive natural language representation of rules and procedures provide a rapid prototyping and development environment. It is not unusual for first prototypes to be up and running within hours or days.

With rapid prototyping and development comes a major advantage of enabling close involvement with end users to help ensure that application functionality meets business requirements. End user experts can literally "look over the shoulder" of the application builder as object models and rule logic are created, and in many cases, take the lead for entering logic.

Unified Modeling, Simulation and Deployment Platform for Greater Productivity

Unlike other rule engines, G2 unifies object modeling, simulation, rules, procedures and deployment in one comprehensive and holistic real-time environment. This unification offers a tremendous benefit for efficiently managing an application's lifecycle from prototyping to development to deployment to ongoing maintenance.



Task Priority Scheduling

G2's real-time processing begins within its internal scheduling engine for concurrently executing rules, procedures, models and other tasks. Typically, many threads of reasoning, models and other activities are occurring concurrently. The scheduler cycles according to a clock "tick" that can be specified at the millisecond level. Everything has a priority, so critical items can take action first. G2 takes care of the scheduling of tasks for the user based on simple configuration choices.

G2 CoPilot

G2 CoPilot is an AI programming assistant that helps you write code and debug applications faster in Gensym G2. It turns natural language prompts into coding advice and suggests complete code snippets for implementation.

LINKING YOUR G2 APPLICATIONS WITH EXTERNAL SYSTEMS AND SOURCES

Experience has shown us that accelerated innovation is enabled by depth of platform focus, not breadth. For that reason, IgniteTech's focus is consistent innovation of Gensym G2 on a targeted set of stable and powerful platforms:

- ODBC, JDBC, Oracle SQL, Sybase SQL for relational databases
- JMS for enterprise information systems
- JMail for network email communication
- HTML for browser messaging
- XML / SOAP for internet application information exchange
- OPC and OSISoft PI for process control devices
- HP OpenView for telecommunication systems
- SNMP for telecommunications messages
- G2 Sockets for network socket connections
- ActiveX/COM for PC applications and .NET programmers
- G2 Gateway Standard Interface for C/C++ programmers
- G2 JavaLink for Java programmers

FOR MORE INFORMATION

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