

# OPS & PROCESS CONTROL

## Industrial Control & Automation System

GenSym's powerful Real-time Expert System G2 automates the control and decision management of any complex system, process or simulation, and is an on-premise solution available in both 32-bit and 64-bit platforms.

Customer Success

### Space Program Uses Ignite's GenSym G2 for Real-Time Management of Mission Critical Systems

#### COMPANY

Space Program

#### ESTIMATED REVENUE

\$22 billion / year

#### INDUSTRY

GOVERNMENT | Aerospace Program

#### IGNITE SOLUTIONS

GenSym G2

#### DEPLOYMENT

On Premise

#### Summary

The space program uses GenSym to build control systems for testing and validation of space assets such as the "ground refueling system". GenSym is also used for fully autonomous control systems for deep space asset control, monitoring, as well as simulation systems for deep space experiments in various scientific fields.

#### Why GenSym

GenSym was chosen for its ability for quick prototyping and productionization of expert system applications from within the same development/deployment system. The solution also saves time by leveraging other frameworks (e.g., programming language stacks like Java, Visual Studio) reducing the time required to build the basic platform for real-time

#### Customer Benefit

GenSym provides autonomous control without human intervention, which has been far more cost-effective and safer. It has also reduced costs because simulations provide data-points and signals on the behavior of models before deploying control models in live assets.

#### Customer Outcome

Ability to run production processes very close to optimal specifications, which provides better yield and quality while saving waste resulting in cost savings and improved revenue. The customer can leverage the common platform to develop applications that suite their industry and are also able to build simulation models, which provide key signals for 'real' world decisions. Industries such as nuclear waste control, oil/gas pipelines and space use G2 based models for predictive modeling.

## Solution Benefits

- 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.