One of the more visible components of GSE Systems’ JADE environment is the JADE Station. JStation provides a common graphical user interface for its instructor view and operator view. Using state-of-the-art technology and a design approach of extensive, forward thinking simulation user inputs, JStation delivers the flexibility and ease of use to meet all your needs.

JStation is a Java™ based, web-enabled client/server application with a very intuitive graphical user interface. Its platform independence means that a user has the choice of running on the widest variety of operating systems including Microsoft, Linux, and UNIX.

JStation provides a complete range of features to control and monitor your simulator. It allows you to set up a training session by choosing the initial plant starting conditions and configuring various equipment changes to occur during the training session. This may be done either by direct instructor actions, or by running a predefined automated plant procedure.

In the instructor view as a full featured instructor station, JStation allows you to introduce and cancel malfunctions, control locally operated equipment and environment conditions, override panel indications, and vary the time scale of simulation. It also provides many opportunities to evaluate the trainee behavior through backtrack to a previous condition, replay of the simulation, monitor the fluctuations in selected parameters, or review of instructor and trainee actions.

Key Features and Benefits

- Configurable look and feel to match individual project and user needs
- Powerful graphics engine to generate elaborate simulation drawings or life-like soft panels with touch screen capability
- Tabbed windows and property sheets allow instructors to perform multiple actions without opening an array of window
- Easier to integrate with legacy simulator or migrate as it is platform and operating system independent

Simulation Control

JStation provides a user friendly control environment that allows easy access to the instructor station control functions such as Run, Freeze, Reset, Snapshot, Backtrack, Event Triggers, Malfunctions, Remote Functions, Overrides, and more. It permits the user to bring up various control menus, displays, and dialogs to initiate simulation control functions. For experienced instructors, quick access expert commands are also provided to perform all control functions.

The control panel is designed to have an intuitive layout of user-controls for feedback, run status, and access to action-buttons.
JStation™ JADE™ Station for Instructors & Operators

Simulation Monitor

JStation allows the user to monitor the simulator by displaying critical plant parameter values, dynamic graphical system schematic diagrams, and the status of instructor/operation actions. A Real Time Trend is also provided to gather data from the simulator for performance analysis. In addition, the collected data may be exported to Microsoft Excel for analysis.

Virtual Panel

JStation provides a complete solution when using virtual panels for simulator or classroom training. This advanced graphical operator interface animates the actual control room devices with control through touch-screen or mouse. Its operating capability is effectively fully compatible with that offered by an actual hard panel simulator.

Training Session Management

The Automated Plant Procedure (APP) function allows the instructor to execute a previously composed user-defined command exercise. This exercise consists of a set of instructor’s commands that define a training exercise. It can be composed through the instructor station or can be written using any text editor.

The Trainee Performance Review (TPR) function effectively produces a report that logs, organizes, and interprets the operator actions that have taken place during a training session so that the instructor can review them easily.

Summary

As the market leader in real-time power plant simulators, GSE Systems is dedicated to providing our customers the most up-to-date, easy to use, and powerful tools for the purpose of training operators. JStation, as a part of GSE’s JADE environment, allows users to achieve their instructor and operator trainee objectives whether applied to a new simulator or the upgrade of an existing simulator.