

INTERACTIVE ON-THE-FLY SIMULATORS: BENEFITS, ADVANTAGES AND APPLICATIONS

Hosni Adra

CreateASoft, Inc.

Partner/Director of Simulation and Process Improvement

3909 75th St, Ste 105

Aurora, IL 60504, USA

ABSTRACT

Interactive on-the-fly simulators offer key advantages over traditional simulation tools in all aspects of a simulation project life cycle. Unlike traditional simulators that require constant starting and stopping of the simulation engine to validate and develop models, interactive on-the-fly simulators allow for model development while the simulator is running. This new breed of simulation tools impact model development, model validation, environment optimization, and provide a path to real-time self-modifying simulation models. The interactive component of the new simulators allows for additional uses of the completed model such as employee training, risk mitigation, and real-time optimization. Interactive on-the-fly simulators are being used to improve scheduling, optimize the flow, and provide simulation benefits to less experienced personnel. This new breed of simulation environment can learn the model behavior and dynamically optimize the process flow. They provide all the integration points required for IOT and Industry 4.0.

www.createasoft.com.