Multi-Model Based Incident Prediction and Risk Assessment in Dynamic Cybersecurity Protection for Industrial Control Systems

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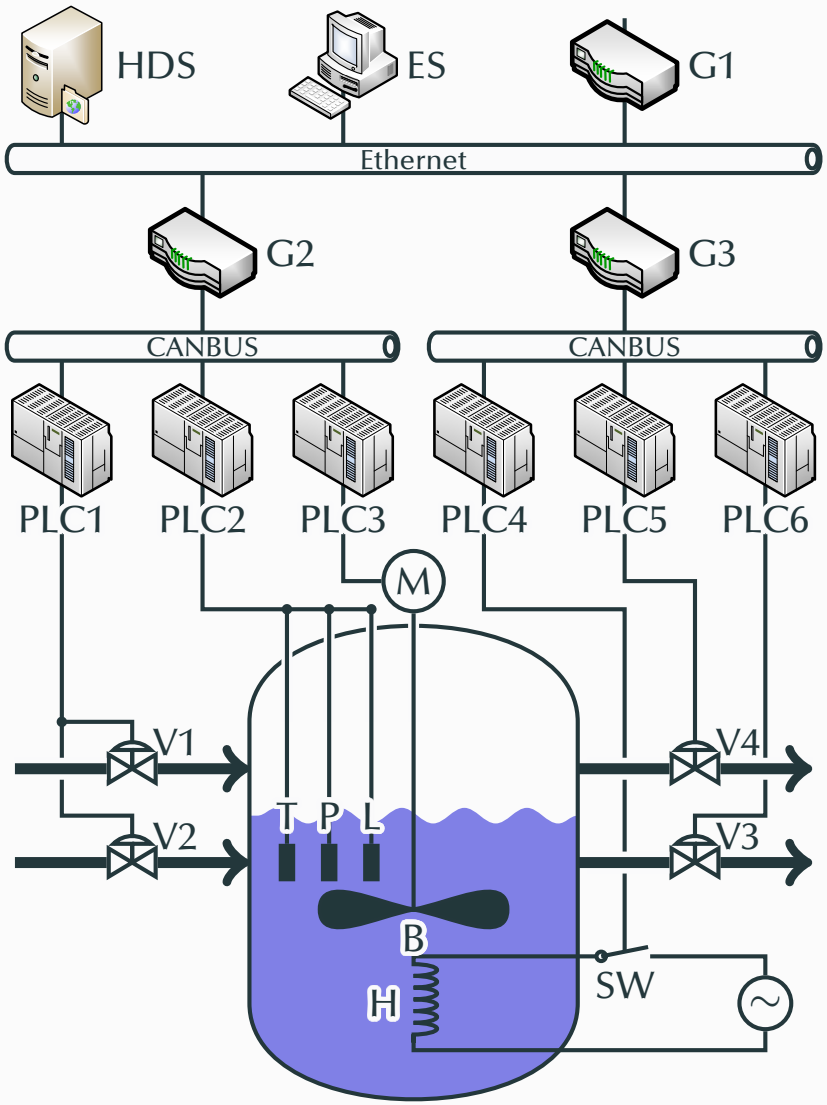
Outlines

Simulation

Knowledge Modeling and Simulation Platform

The simulation object is a chemical reactor whose control structure is shown as the following figure.



Legend

HDS	Historical data server
ES	Engineer station
G1	Gateway of Ethernet
G2	Gateway of CANBUS
G3	Gateway of CANBUS
PLC1	Controller of V1 and V2
PLC2	Data collection of P, T and L
PLC3	Controller of M
PLC4	Controller of SW
PLC5	Controller of V4
PLC6	Controller of V3
V1	Valve of material
V2	Valve of another material
V3	Valve of product
V4	Valve of pressure reducing
M	Motor of B
SW	Switch of H
P	Pressure sensor
T	Temperature sensor
L	Liquid level sensor
B	Blender
H	Heater

Simulation and Result Analysis

Questions?