

An Architecture for the Analysis and Management of Security in Industrial Control Systems.

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Abstract. The security of Industrial Control Systems (ICS) has become an important topic. Attacks such as the Stuxnet worm have shown that inadequately protecting control systems could have disastrous consequences for society.

Our research focuses on the creation of a tool that aims to enhance the security of Industrial Control Systems. It will be possible for system owners and operators to model their control systems in our tool. Using formal methodologies, the tool can extract a list of vulnerabilities in the system. Users can reason about the effects on system security of component changes or newly discovered vulnerabilities.

An initial model has been built and tested on a wind turbine case study.