

A Study of Cyber Security Policy in Industrial Control System using Data Diodes

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Abstract— The security of industrial control systems has been a big topic by the Stuxnet case in 2010. As a solution which can solve these requirements, data diode has emerged.

A data diode is a computer security device that restricts the communication along a network connection between two computers so that data can only be transmitted in one direction. This enables a more sensitive or highly classified computer network to receive data directly from a less secure source while prohibiting the transmission of data in the opposite direction.

In this paper, we describe data diode applied into industrial control system, after reviewing the commercial product, we address the various ways to apply a data diode in ICS and future works.

Keyword— ICS, Cyber Security, Data Diode, One-Way, Unidirectional Communication.



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