

## INTRODUCTION

There is no simple recipe for how to secure an industrial automation and control system (IACS) and there is good reason for this. It is because security is a matter of risk management. Every IACS presents a different risk to the organization depending upon the threats it is exposed to, the likelihood of those threats arising, the inherent vulnerabilities in the system and the consequences if the system were to be compromised. Furthermore, every organization that owns and operates an IACS has a different tolerance for risk.

This document strives to define a set of engineering measures that will guide an organization through the process of assessing the risk of a particular IACS and identifying and applying security countermeasures to reduce that risk to tolerable levels.

A key concept in this document is the application of IACS security zones and conduits. Zones and conduits are introduced in IEC TS 62443-1-1.

This document has been developed in cooperation with the ISA99 liaison. ISA99 is the committee on Industrial Automation and Control Systems Security of the International Society of Automation (ISA).

The audience for this document is intended to include the asset owner, system integrator, product supplier, service provider, and compliance authority.

This document provides a basis for specifying security countermeasures by aligning the target security levels (SL-Ts) identified in this document with the required capability security levels (SL-Cs) specified in IEC 62443-3-3.