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# Information technology — Security techniques — Secret sharing —

Part 1: **General** 

Technologies de l'information — Techniques de sécurité — Partage de secret —

Partie 1: Général





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The committee responsible for this document is ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 27, *IT Security techniques*.

A list of all parts in the ISO/IEC 19592 series can be found on the ISO website.

#### Introduction

A secret sharing scheme is a cryptographic technique used to protect the confidentiality of a message by dividing it into a number of pieces called shares. A secret sharing scheme has two main parts: a message sharing algorithm for dividing the message into shares and a message reconstruction algorithm for recovering the message from all or a subset of the shares.

Secret sharing can be used to store data (for example, confidential values or cryptographic keys) securely in distributed systems. Moreover, secret sharing is a fundamental technology for secure multi-party computation that can be used to protect the processing of data in a distributed system. To facilitate the effective use of the technology and to maintain interoperability, ISO/IEC 19592 (all parts) specifies secret sharing and related technology.

# Information technology — Security techniques — Secret sharing —

### Part 1: **General**

#### 1 Scope

ISO/IEC 19592 (all parts) specifies cryptographic secret sharing schemes and their properties. This document defines the parties involved in a secret sharing scheme, the terminology used in the context of secret sharing schemes, the parameters and the properties of such a scheme.

#### 2 Normative references

There are no normative references in this document.