
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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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General model of secret sharing	2
4.1 Parties involved.....	2
4.2 Parameters.....	3
4.2.1 Overview.....	3
4.2.2 Message space.....	3
4.2.3 Share space.....	3
4.2.4 Number of shares.....	3
4.2.5 Access structure.....	3
4.3 Message sharing process.....	4
4.4 Message reconstruction process.....	4
5 Properties of secret sharing schemes	5
5.1 Fundamental requirements.....	5
5.1.1 Overview.....	5
5.1.2 Message confidentiality.....	6
5.1.3 Message recoverability.....	6
5.2 Optional requirements.....	6
5.2.1 Overview.....	6
5.2.2 Homomorphicity.....	6
5.2.3 Verifiability.....	6
5.3 Other properties.....	7
5.3.1 Overview.....	7
5.3.2 Confidentiality guarantees.....	7
5.3.3 Complexity.....	7
5.3.4 Information rate.....	7

Foreword

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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.

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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.