
Information security — Redaction of authentic data —

Part 1: General

*Sécurité de l'information — Rédaction de données authentifiées —
Partie 1: Généralités*





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Foreword

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A list of all parts in the ISO/IEC 23264 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Digital attestation schemes, in particular digital signature schemes or message authentication codes, can be used to provide data integrity and data origin authentication. A redactable attestation scheme enables the attestation of a message in such a way that, if certain parts of the attested message (known as fields) are redacted (erased, blanked out or permanently removed), the attestation of the redacted message can still be verified. More precisely, upon attesting a message, the attestor knowing the private attestation key can define which parts of the message can later be redacted (in the sense of ISO/IEC 27038) by any entity only knowing the message, the attestation, and the attestor's redaction key. Any other modification of the attested message (e.g. redaction of other message parts or insertion/modification of any parts) invalidates the attestation.

Redactable attestation schemes are a basic building block in many privacy-preserving applications, such as privacy-preserving data sharing or authentication, where an entity can decide to only reveal the information that is absolutely necessary to forward to a receiver, while the latter is still assured that the received information was previously attested, e.g. by a public authority.

The goal of the ISO/IEC 23264 series is to remedy existing incompatibilities or inconsistently defined properties in existing specifications of such schemes, and to ease the real-world adoption of this technology. Specifically, the goal of this document is to lay the foundations for subsequent parts (e.g. focusing on concrete algorithms for the authenticity-preserving redaction of specific document formats like text, pictures, video, etc.) by specifying and defining common terminology and properties for such schemes.

The ISO/IEC 23264 series complements ISO/IEC 27038, which specifies the redaction of digital documents without addressing the authenticity of the data.

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Part 1: General

1 Scope

This document specifies properties of cryptographic mechanisms to redact authentic data. In particular, it defines the processes involved in those mechanisms, the participating parties, and the cryptographic properties.

2 Normative references

There are no normative references in this document.