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Cybersecurity technology - Implementation guideline of digital watermarking technology

网络安全技术 数字水印技术实现指南

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Cybersecurity Standardization Technical Committee (SAC/TC260).

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Network Security Technology Digital Watermarking Technology Implementation Guide

1 Scope

This document provides the implementation framework, functions, processes, watermark algorithm selection, watermark service packaging selection and other aspects of digital watermark technology. suggestions.

This document applies to the design, development, application and testing of digital watermarking technology.

2 Normative references

GB/T 25069

3 Terms and Definitions

The terms and definitions defined in GB/T 25069 and the following apply to this document.

3.1

Identify or protect the copyright, source, or content security of digital media by embedding subtle specific information in digital content. technology.

Note. Digital watermark is short for digital watermark. The "digital watermark" in this document refers to implicit watermark (also called "dark watermark", "invisible watermark", "implicit watermark", "invisible watermark").

The embedded information is hidden and unidentifiable to the data user.

3.2 watermark information

Specific information embedded in digital media through digital watermarking technology (3.1).

Note. Common watermark information includes but is not limited to copyright information, traceability information, link information, organization/employee identifier (ID), time information, etc.

3.3 watermark carrier watermarkcarrier

Digital content such as documents, images, audio, video, web pages, databases, etc. that are used to embed or carry watermark information (3.2).

Note. In this document, it is referred to as vector.

3.4 Watermark encoding

The watermark information (3.2) is converted into a form or format suitable for embedding into a watermark carrier (3.3).

3.5 Watermark decoding watermarkdecoding

The watermark information (3.2) extracted from the watermark carrier (3.3) is restored to its original form or format.

3.6 Watermark embedding

The process of embedding watermark information (3.2) into the watermark carrier (3.3).