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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 16262.3-2025

Replacing GB/T 16262.3-2006

**Information technology - Abstract Syntax Notation One (ASN.1)
- Part 3: Constraint specification**

信息技术 抽象语法记法一 (ASN.1) 第3部分：约束规范
(English Translation)

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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.

This document is Part 3 of GB/T 16262 "Abstract Syntax Notation for Information Technology One (ASN.1)". GB/T 16262 has been published The following parts.

- Part 1: Basic notation specification;
- Part 2: Information object specifications;
- Part 3: Constraint specifications;
- Part 4: Parameterization of the ASN.1 specification.

This document replaces GB/T 16262.3-2006 "Information Technology Abstract Syntax Notation One (ASN.1) Part 3: Constraint Specification".

Compared with GB/T 16262.3-2006, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

a) Changed the description of parameters in "User-defined constraints" (see 9.3, 9.3 of the 2006 edition);

b) Added the relevant clauses on "table constraints, including component relationship constraints" (see 10.14).

This document is equivalent to ISO /IEC 8824-3:2021 "Information technology Abstract Syntax Notation One (ASN.1) Part 3: Constraints specification". The following minimal editorial changes were made to this document.

--- Added the title of Table 1 (see Chapter 10);

--- Added reference to Appendix B in the text.

Introduction

GB/T 16262 "Abstract Syntax Notation for Information Technology One (ASN.1)" aims to standardize the abstract syntax notation.

Based on ISO /IEC 8824 (all parts), GB/T 16262 is intended to consist of four parts.

--- Part 1: Basic notation specification. The purpose is to define data types, values and constraints on data types.

--- Part 2: Information object specifications. The purpose is to provide information object categories, information objects and information object sets. Memorization method.

--- Part 3: Constraint specification. The purpose is to provide a notation for specifying user-defined constraints, table constraints and content constraints.

--- Part 4: Parameterization of ASN.1 specifications. The purpose is to define the parameterization notation of ASN.1 specifications.

1 Scope

This document provides a notation for specifying user-defined constraints, table constraints, and content constraints.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 16262.1-2025 Information technology Abstract syntax notation 1 (ASN.1) Part 1:

Basic notation specification (ISO / IEC 8824-1:2021, IDT)

GB/T 16262.2-2025 Information technology Abstract syntax notation 1 (ASN.1) Part 2:
Information object specification (ISO / IEC 8824-2:2021, IDT)

GB/T 16262.4-2025 Information technology Abstract Syntax Notation One (ASN.1) Part 4:
Parameterization of ASN.1 specifications (ISO / IEC 8824-4:2021, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Basic Notation Standards

This document uses the terms defined in GB/T 16262.2-2025.

3.2 Information Object Specification

This document uses the terms defined in GB/T 16262.1-2025.

3.3 Parameterization of the ASN.1 Specification

This document uses the following terms defined in GB/T 16262.4-2025.

---Parameterized type parameterizedtype.

A constraint on a value of a collection type or sequence type that is textually related to a component type (reference group) of that collection type or sequence type.

A component is related to a referenced component and specifies the relationship between the value of that component and the values of one or more other components (referenced components).

3.4.2 Constrainedtype

The innermost "type" that contains the referencing component and all referenced components in a component relationship constraint.