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**NATIONAL STANDARD OF THE
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OPC unified architecture -- Part 1: Overview and concepts

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Foreword

GB/T 33863 "OPC unified architecture" consists of the following components.

- Part 1. Overview and concepts;

- Part 2. Safety model;

Part 3. Address space model;

- Part 4. Services;

- Part 5. Information model;

- Part 6. Mapping;

- Part 7. Statute;

- Part 8. Data access;

- Part 9. Alarms and conditions;

- Part 10. Procedures;

- Part 11. Historical visit;

- Part 12. Discovery;

Part 13. Aggregation.

This part is part 1 of GB/T 33863.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to IEC /T R62541-1..2010 "OPC Unified Architecture Part 1. Overview and Concepts".

This section makes the following editorial changes.

--- Delete references that are repeated with normative references.

This part is made by the China Machinery Industry Federation.

This part is headed by the National Industrial Process Measurement Control and Automation Standardization Technical Committee (SAC/TC124).

This part of the drafting unit. mechanical industry instrumentation integrated technology and economic research institute, Beijing three-dimensional force control Technology Co., Ltd., Shanghai automatic

Instrument Co., Ltd., Chongqing Sichuan Instrument Automation Co., Ltd., Southwest University, China Academy of Engineering Physics Power Department.

Introduction

This section provides specifications for OPC Unified Architecture application developers. This standard gives the analysis and design for the development of standard interfaces

The standard interface speeds up the application development done by multiple vendors and enables seamless connectivity of internal operations.

OPC Unified Architecture Part 1. Overview and Concepts

1 Scope

This part of GB/T 33863 gives the concept and overview of the OPC Unified Architecture and the contents of the other parts in the recommended reading order

The instructions will help the reader understand the OPCUA series of standards.

This section is used to guide the development of OPCUA client or server applications.

2 normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article

Pieces. For undated references, the latest edition (including all modifications) applies to this document.

IEC 62541 (all parts) OPC unified architecture (OPCunifiedarchitecture)

3.1 agreement

This part uses the same conventions as the rest of the referenced series of standards.

English is used to indicate a defined term or definition that appears in the terms and definitions of the series of standard parts.

English is also used to represent service input or output parameters, or structural names or structural elements that are often defined in the table.

English terms and names are often written by hump (combination of words or phrases used to write, there is no space between the elements, but the group

The capital of each element in the first letter). For example, the term "AddressSpace" is defined instead of "Address Space". It's easy

Understood as a definition of "AddressSpace", rather than a separate definition of "Address" and "Space".

3.2 Terms and definitions

The following terms and definitions apply to this document.

3.2.1

Address Space

The set of information visible to the client in the OPCUA server.

Note. The contents and structure of the server address space are described in IEC 62541-3.

3.2.2

Alarm Alarm

The type of event associated with the condition that normally needs to be confirmed.

Note. See IEC 62541-9 or the description of the alarm.

3.2.3

Attribute

The original characteristics of a node.

Note. All attributes are defined by OPCUA and can not be defined by the client or server. An attribute is the only element in the address space that is allowed to have a data value.

3.2.4

Certificate

A digitally signed data structure that describes the client or server capabilities.