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**Industrial internet platform - Technical requirement and testing
methods - Part 3: Industrial DaaS platform**

工业互联网平台 技术要求及测试方法 第3部分：工业DaaS平台

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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 44067 "Technical Requirements and Test Methods for Industrial Internet Platforms": GB/T 44067 has been The following parts were published:

--- Part 1: General;

--- Part 2: Industrial PaaS platform;

--- Part 3: Industrial DaaS Platform: 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 was proposed and coordinated by the National Technical Committee for Information Technology Standardization (SAC/TC28): This document was drafted by: China Industrial Internet Research Institute, Xinjiang Tianchi Energy Co., Ltd., Guangdong Runlian Information Technology Co., Ltd: China Resources Digital Technology Co., Ltd., Shandong Energy Group Co., Ltd., Inspur Electronic Information Industry Co., Ltd., China Electronics Technology Standard Institute of Standardization, Amiba Smart (Beijing) Energy Services Co., Ltd., Institute of Information Engineering, Chinese Academy of Sciences, Xiangtan University, Yunding Technology Co.,

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As an important tool for the transformation and upgrading of my country's manufacturing industry, the industrial Internet platform has developed rapidly in recent years with the support of governments at all levels: The platform application level has been significantly improved, and a multi-level systematic platform system has been initially formed: There are hundreds of platforms of various types in the country: There are so many companies, and a number of platforms with certain regional and industry influence have emerged, which have effectively promoted the digital transformation and upgrading of my country's manufacturing industry: In order to further promote the high-quality development of cross-industry and cross-field industrial Internet platforms, GB/T 44067 "Industrial Internet Platform Technology Requirements and Test Methods" divides the platform into layers according to the architecture and puts forward requirements for each part for the competent unit, users, suppliers and Independent evaluators carry out the research and development, testing, management and selection of industrial Internet platforms and related products: GB/T 44067 "Technical Requirements and Test Methods for Industrial Internet Platforms" is planned to consist of four parts:

--- Part 1: General: It puts forward technical requirements for the overall framework of the industrial Internet platform and describes the PaaS platform, The test content and test methods of edge computing platform, DaaS platform and industrial APP are aimed at carrying out the test of industrial Internet platform: Testing work:

--- Part 2: Industrial PaaS Platform: It puts forward technical requirements for the overall capabilities of the Industrial Internet Platform PaaS platform and describes Test contents of general PaaS, industrial models, industrial application development and human-computer

interaction, industrial APP market and platform calls, etc: And test methods: Aims to carry out testing of industrial PaaS platform:

---Part 3: Industrial DaaS Platform: Proposes the architecture and technical requirements of the Industrial Internet Data Service Platform (DaaS): The test content and test methods of industrial big data and related functional components in industrial data management of industrial DaaS platform are described: The purpose of this law is to guide the functional testing and certification evaluation of industrial DaaS platforms:

---Part 4: Edge computing platform: It puts forward technical requirements for the edge computing platform of the industrial Internet platform and describes the edge communication The test content and test methods include edge communication, protocol conversion, edge analysis and application deployment, edge operation and maintenance, etc: Computing platform testing work: Industrial Internet Platform Technical Requirements and Testing Methods Part 3: Industrial DaaS Platform

1 Scope

GB/T 44067.3-2024 covers the industrial DaaS platform, the data-as-a-service layer of the Chinese industrial internet platform series. Where Part 2 dealt with the PaaS layer, this part deals with the layer beneath the applications and above the metal: the one that takes in data from many industrial sources, holds it, processes it and serves it back. It gives the functional framework, sets the technical requirements and describes the test methods, in three layers. The digital resource layer covers the virtualised and non-virtualised resource systems; the resource management layer covers the virtual host and container resource management systems and the management systems for computing and storage clusters; the data application and management layer covers multi-source data access, the data processing, analysis and computing components, the data integration and visualisation, the data security, the data modelling and intelligence components and the industrial data governance components. Each of those is then given a corresponding set of testing requirements in equal detail, covering compute, storage and network virtualisation, the container and cluster management functions, and every data function down to governance. It is written to guide functional testing and certification assessment of industrial DaaS platforms, which is what makes it directly useful to a test laboratory or a platform vendor seeking certification in China.

This document provides the functional framework of the Industrial Internet Data as a Service (DaaS) platform, specifies technical requirements, and describes testing methods: This document is applicable to guiding the functional testing and certification evaluation of industrial DaaS platforms:

2 Normative references

The contents of the following documents constitute the 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 44067:1-2024 Technical requirements and test methods for industrial Internet platforms Part 1: General

GB/T 30994-2014 Relational Database Management System Testing Specification

GB/T 31916:2-2015 Information technology Cloud data storage and management Part 2: Object-based cloud storage application interface

GB/T 31916:3-2018 Information technology Cloud data storage and management Part 3: Distributed file storage application interface

GB/T 38634:1-2020 Systems and software engineering software testing Part 1: Concepts and definitions YD/T 3772-2020 Technical requirements and test methods for big data time series database

3 Terms and definitions

The following terms and definitions apply to this document: 3:

1 Provide data storage, analysis, processing, application and management capabilities for industrial Internet platform users to help users reduce business operations A service model that reduces costs and enhances industrial added value:

Note: Industrial DaaS has the ability to provide services in a platform-based manner: 3:2 data storage Collections used to persistently store and manage data: 3:

3 Digital Resource Layerdigitalresourcelayer The underlying support of the industrial DaaS platform for providing digital resources such as computing, storage, and network required for industrial big data applications and services technology:

Note: The digital resource layer is divided into two types: virtualized data resource system and non-virtualized data resource system, depending on whether virtualization technology is used: