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GB/T 44280-2024

**Industrial internet platform - Guidance for monitoring and
analysis**

工业互联网平台 监测分析指南

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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 is required. 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 by the Ministry of Industry and Information Technology of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee for Standardization of Information and Industrialization Integration Management (SAC/TC 573). This document was drafted by: National Industrial Information Security Development Research Center, China Academy of Information and Communications Technology, China Industrial Internet Research Institute, China Electronics Information Industry Development Research Institute, Manyuanhong (Shenzhen) Quality Technology Innovation Development Co., Ltd., Aerospace Cloud Network Technology Development Co., Ltd. Responsible Company, Inspur Yunzhou (Shandong) Industrial

Internet Co., Ltd., Shanghai Ideal Information Industry (Group) Co., Ltd., Caos Industrial Intelligence Research Institute (Qingdao) Co., Ltd., Yundi Wisdom Technology Co., Ltd., UFIDA Network Technology Co., Ltd., Chongqing Humi Network Technology Co., Ltd. Company, Beijing Baidu Netcom Technology Co., Ltd., Guoneng Dadu River Big Data Service Co., Ltd., China Cable Network Information Technology (Shandong) Co., Ltd. Co., Ltd., Shanghai Quality Management Science Research Institute Co., Ltd., Shandong Jade Bird Industrial Internet Co., Ltd., Bozhi Security Technology Co., Ltd., Guangdong Radio and Television Measurement and Testing Group Co., Ltd., Guangdong Power Grid Co., Ltd. Guangzhou Power Supply Bureau, Zhejiang Jiangshan Transformer Co., Ltd., Levi Intelligent (Shenzhen) Co., Ltd., Ningbo Juxuan Information Technology Co., Ltd., and Zhongshan Kopit Automation Equipment Co., Ltd. The main drafters of this document are. Xiao Linlin, Xia Yijun, Guo Chaoyu, Huang Jie, Wang Ruizhe, Zhang Mengzhe, Zhu Tuo, Tian Hongchuan, Yang Haoting, Tian Ye, Du Dongdong, Yang Chunli, Wang Keyi, Wang Tingting, Wang Meirong, Ni Kuokuo, Li Qingmin, Qiao Rui, Zhu Yongwei, Wen Sichao, Xiao Xue, Ma Siming, Chen Guorun, Sheng Guojun, Guo Hui, Luo Difeng, Wang Yong, Jiang Renjie, Li Shuo, Li Jun, Man Min, Luo Wei, Zhai Jianfei, Wang Jinde, Su Guanqun, Fu Tao, Ming Zhimao, Zhao Kelun, Lu Youfei, Jiang Zhenjun, Li Huijun, Zhou Weiping, Zhou Ke.

As a product of the deep integration of new-generation information technology and manufacturing, the industrial Internet platform is a platform to promote the integration of all factors and industries in the industrial economy. The deep interconnection of the industrial chain and the entire value chain is the key support for driving the digital transformation of the real economy. At present, my country's industrial Internet platform is accelerating its development. The breadth and depth of platform applications are constantly improving, and the industrial Internet platform has a comprehensive grasp of development foundations, application results, ecological services, economic operations, etc. The overall development trend is of great significance. Therefore, it is urgent to establish a unified, standardized and operational monitoring and analysis process and indicator system to provide Provide reference for monitoring and analysis of industrial operations in various industries and regions. This document is one of a series of standardized documents on the industrial Internet platform management system. The normative documents related to this document include. --GB/T 41870-2022 Industrial Internet platform enterprise application level and performance evaluation; --GB/T 23031.1-2022 Industrial Internet Platform Application Implementation Guidelines Part

1 Scope

GB/T 44280-2024 is the Chinese guidance for monitoring and analysing an industrial internet platform. It answers a question that becomes pressing once a platform is carrying real production: how the operator knows whether the platform is healthy, whether it is delivering what its users need, and where it is failing them, when the platform is a stack of infrastructure, data services and applications serving many industrial customers at once.

The standard sets the working principles and then the monitoring and analysis framework: the objects to be monitored across the infrastructure, platform and application layers, the indicators for each, covering availability, performance, capacity, data quality, service usage and business value, the collection of the monitoring data and its storage, the analysis methods including baselining, correlation and trend analysis, the alarming and the reporting, and the use of the results to guide operation and improvement. It took effect on 23 August 2024.

This document describes the formulation of monitoring and analysis objectives, sample scope determination, indicator system construction, and technical solution formulation for the Industrial Internet platform. The method provides content on monitoring data docking, monitoring data analysis and monitoring data management. This document is applicable to organizations of different sizes, types and natures to carry out monitoring and analysis work scientifically and effectively and to build a monitoring and analysis system.

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 23000 Fundamentals and terminology of information and industrialization integration management system

3.1 Terms and Definitions The terms and definitions defined in

GB/T 23000 apply to this document.

3.2 Abbreviations The following abbreviations apply to this document. API. Application Programming Interface APP: Application

4 Working Principles

When organizing and carrying out monitoring and analysis work, the following principles should be followed.

- a) Technical accessibility. Monitoring data can be automatically collected to avoid manual reporting.
- b) Scientificity. The monitoring data can scientifically and accurately reflect industrial changes.
- c) Integrity. The monitoring data fully covers the Industrial Internet platform itself as well as the services provided to developers and application companies.

d) Non-confidentiality. Monitoring data collection does not touch the commercial secrets of the Industrial Internet platform.

5 Workflow

The main process of monitoring and analysis of the industrial Internet platform includes clarifying the implementation goals, determining the sample scope, building an indicator system, and formulating Technical solutions, data docking, analysis of monitoring data, and promotion of continuous improvement, etc., see Figure 1.

- a) Clarify implementation objectives. Determine implementation objectives based on monitoring and analysis work needs and form a catalog of analytical products and services.
- b) Determine the sample scope. select platforms with good industry representativeness and scientific characterization significance as monitoring and analysis objects.
- c) Construct an indicator system. clarify the content of monitoring indicators and data collection items.