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PEOPLE'S REPUBLIC OF CHINA**

GB/T 29833.1-2013

Portability of system and software -- Part 1: Indicator system

系统与软件可移植性 第1部分：指标体系

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Foreword

GB/T 29833 in the "System and software portability" general title, divided into the following three parts.

- Part 1. Index System;
- Part 2. Measurement Methods;
- Part 3. Test methods.

This is Part 1 GB/T 29833 of.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This part of the National Information Technology Standardization Technical Committee (SAC/TC28) and focal points.

This section is drafted. Shanghai computer software technology development center, China Electronics Standardization Institute, Zhejiang electronic products seized the inspection, Shenzhen City in the letter Information Technology Co., Ltd. Shanghai Pudong software platform, Shanghai Baoxin Software Co., Ltd., Liaoning Northern Laboratories Ltd., National Software Quality Supervision and Inspection Center, Nanning square Software Technology Co., Ltd., on Shanghai Municipal Electric Power Company Branch Ministry.

Introduction

This section GB/T 29833 with reference to GB/T 16260-2006 "Software engineering - Product quality" made portable systems and software Index system.

This section applies to consider the degree of difficulty of the same software product running between different environments and make transplantation, and/or by their Said the ability to adapt the environment. The development side, the maintenance side, the evaluator, quality management and the demand side can select the appropriate indicators, used to define portable of quality requirements, evaluating software products, portability, measure the quality of the case or for other purposes. Not every part of the indicators Applies to all computer systems and software, other interested parties may need to modify the metrics or indicators of actual use of the part not covered under.

The main users of this standard is expected to include.

a) software suppliers, when.

1) When you declare a need portability of software products;

2) Statement of portable control characteristic self assessment systems and software products;

3) software portability products for the design and implementation of the relevant time;

b) the portability certificate of conformity or third party evaluation agency logo testing;

c) the potential demand-side when.

1) a description of the information requirements of the upcoming purchase of software portability products and when compared to existing products;

2) the presence of difference between the actual operating environment and procurement environment;

3) test the portability requirement is satisfied.

GB/T 29833.2 "Systems and software portability - Part 2. Measurement Methods" shows how to get portability index measurements Measurement Method. GB/T 29833.3 "Systems and software portability - Part 3. Test methods" describes the test portability Index method. This section is intended and GB/T 29833.2 and GB/T 29833.3 combination.

Systems and software portability Part 1. Indicator System

1 Scope

GB/T 29833 provisions of this part of the system and software portability Index System and related definitions.

This section applies to the ability to adapt to the diversity of systems and software between environmental transport assessment. Users can target specific products Different migration needs, alternatives, modifications and applications of the section indicators.

NOTE: The system referred to in this section are primarily software system.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 11457 software engineering terminology

3 Terms and Definitions

GB/T 11457 and as defined in the following terms and definitions apply to this document.

Metric measure

Methods and measuring scale definition of the measurement.

[GB/T 18905.1-2002, the definition 4.20] 3.2 Portability or the ability of the system software to adapt software or hardware environment.

NOTE: Portability is the ability of the software product attributes, its behavior as a degree.

Quality

And the characteristics of the entity, either explicitly or implicitly indicate the entity meet the requirements of capacity.

[GB/T 18905.1-2002, the definition 4.21] 3.4 Quality Model the relationship between a feature and characteristic, which provide the basis for specifying quality requirements and evaluating quality.

[GB/T 18905.1-2002, the definition 4.24]

4 Overview

Systems and software to run, will be affected by many factors. These factors include.

--- Hardware-dependent software product basis;

Table 3. Easy Installation

Name	Description	Comments	Correctness of installation	Effective follow installation
Instructions, systems and software	Right in trying to adapt the provisions of environment is safe	Successfully installed in measuring this indicator should be taking into account the		

number of attempts to adapt to the requirements of the environment Volume and attempts to install, and the "successful installation" establish appropriate determination in accordance with Influence of the installation Effective follow installation instructions, system and software security Whether the installation process will affect other software or devices Normal operation, or other operating software or Whether the device will affect the installation process in measuring this indicator should consider the impact on the installation process, such as the installation Unable to successfully complete and so on. After the impact caused by the installation is complete Indicators should be adaptable by software or other indicators to measure Ease of installation System and software installation steps, whether by a simple User actions to achieve in the measurement of the indicator should be considered during the installation process, the step of human intervention, and other necessary support software or plug-in is to be included in the installation within Installation flexibility in systems and software implementation process is installed by the installation process for users to provide customized operations for content Installation efficiency Systems and software implementations consuming installation process time Since the influence of human factors during the installation of more or less exists, measure when the amount of the index, should perform installation times and averaged as the installation effect Rate, the need to eliminate the user's own operation delay time consumed. As complete Automated installation disposable desirable results

9 Transplantation integrity

Table 4 is appropriate transplant integrity properties were characterized.

Table 4 transplant integrity

Name	Description	Comments
Transplantation correctness	Systems and software to adapt to environmental regulations, the measured A fully functional level in a predetermined environment in measuring this indicator, the test range should be limited, as has been said, make a note Ming is not included in the regulations need to adapt to the environment in the function, you do not need to be included End Preparation level considerations Migration consistency	Systems and software to adapt to environmental regulations after being detected and whether the function is still keeping the same operation before Steps or using the same execution flow. user Ability to adapt to changes in the functional operation in the measurement of the indicator should be considered in adapting a plurality of predetermined environment, functional exercise as the degree of differences in implementation