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

GY/T 345-2021

**Internet TV integration platform program integration system
technical requirements and interface specifications
(English Translation)**

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: State Administration of Radio and Television

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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 of Standardization Documents" Drafting.

1 Scope

This document specifies the technical requirements for the Internet TV integration platform program integration system and the interface with the Internet TV content service platform.

This document is applicable to the planning, design, construction, acceptance, operation, management and maintenance of the program integration system of the Internet TV integration platform.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated reference

documents, Only the version corresponding to that date is applicable to this document; for undated references, the latest version (including all amendments) is applicable to this document file.

GB/T 17964-2008 Information Security Technology Block Cipher Algorithm Working Mode
GB/T 32905-2016 Information Security Technology SM3 Cipher Hash Algorithm GB/T
32918.2-2016 Information Security Technology SM2 Elliptic Curve Public Key Cryptography
Algorithm Part 2: Digital Signature Algorithm GY/T 342-2021 General Technical
Requirements for Internet TV GY/T 343-2021 Technical Requirements for Internet TV
Integration Platform

3.1 Terms and definitions

The following terms and definitions apply to this document.

3.1.1

Internet TV over the top TV; OTT TV Based on the public Internet to transmit video, audio, graphics, text and data, etc., through the terminal receiving equipment such as televisions and set-top boxes, Provide the public with safe, reliable, interactive and manageable multimedia audio-visual services.

Note: The Internet TV in this document refers to the requirements of the State Administration of Radio, Film and Television "Operation and Management Requirements for Organizations Holding Internet TV Licenses" (Guangbanfa Wang Zi [2011]

181) Internet TV business.

3.1.2

OTT TV integration platform Integrate and manage Internet TV services, provide program integration and broadcast, EPG management, user management, digital copyright protection, A platform for billing management and other services, hereinafter referred to as "integrated platform".

Note 1: Program integration refers to the integration of content service platform programs and applications.

Note 2: The EPG management of the integrated platform refers to the management of the terminal desktop.

3.1.3

OTT TV content service platform Provide a content service platform that meets the broadcasting requirements for the collection, review, scheduling and copyright management of Internet TV programs, hereinafter referred to as "internal Content service platform".

3.1.4

Program integrating system the subsystem of the integration platform is responsible for the integration, broadcasting and management of the program content of the content service platform.

3.1.5

Program collection

The program integration system collects all the contents containing multiple video and audio programs. Each program collection can contain one or more programs.

3.2 Abbreviations

The following abbreviations apply to this document.

CDN Content Delivery Network (Content Delivery Network) HD High Definition HTTP HyperText Transfer Protocol (HyperText Transfer Protocol) ID (Identifier) JSON JavaScript Object Notation (JavaScript Object Notation) SD Standard Definition SSL Secure Sockets Layer (Secure Sockets Layer) URL Uniform Resource Locator (Uniform Resource Locator)

4 Technical requirements

The program integration system shall comply with the regulations of GY/T 342-2021 and GY/T 343-2021, and shall meet the following technical requirements.

- a) Management functions such as access and exit of the content service platform should be supported;
- b) Unified identification and certification of the content service platform to be accessed;
- c) It should support the access management of various video and audio types of program collections and programs such as film and television dramas and short videos;
- d) Program collection and program query, detailed information view, emergency offline, program collection and program list viewing, program monitoring, etc. should be provided Features;
- e) The program broadcast function should be provided, and the program broadcast address used when the program is broadcast can be provided by the content service platform;
- f) The program collection and program metadata injection interface should be provided to meet the requirements of the content service platform for the program collection and program metadata information (including Program release status) requirements provided to the integrated platform;
- g) When performing emergency offline operations on program collections and programs, call the program collection and program emergency offline interfaces provided by the content service platform, Notify the content service platform to do corresponding

emergency offline processing;

h) The CDN where the program is broadcast should meet the technical requirements of the Internet TV content distribution network, see Appendix A.

5.1 Function Architecture of Program Integration System

The schematic diagram of the functional architecture of the program integration system is shown in Figure 1.

Figure 1 Schematic diagram of the functional architecture of the program integration system

5.2 Injection function

The program integration system provides an injection interface for the program metadata integration of the content service platform, and the content service platform provides an injection interface according to the program integration system.

The provided program collection injection interface specification and program injection interface specification complete the integration and docking of the content service platform and the integration platform.

5.3 Management function

The program collection management functions include querying program collection information according to conditions, viewing program collection details, viewing program lists and festivals contained in the program collection.

Functions such as emergency offline of the project set.

Program management functions include functions such as querying program information, viewing program details, broadcasting programs, and program emergency offline according to conditions.

5.4 Emergency offline management function

Emergency offline includes the offline of related content on the integrated platform, content service platform, terminal, and CDN platform. Each system should be offline urgently.

Should content. When the program integration system performs emergency offline processing of program collections or programs, it must call the program collections and program emergency services provided by the content service platform.

The emergency offline interface informs the content service platform to do the corresponding offline processing.