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PEOPLE'S REPUBLIC OF CHINA**

GY/T 322.2-2019

**Audio applications of networks-open control architecture - Part
2: Class structure
(English Translation)**

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Foreword

GY/T 322 "Open Control Architecture for Network Audio Applications" is divided into the following three parts.

- Part 1. Framework;
- Part 2. Class structure;
- Part 3. Protocols for TCP/IP networks.

This part is the second part of GY/T 322.

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

This section is compiled with reference to AES70-2-2015 "Open Control Architecture for Network Audio Applications Part 2. Class Structure".

Please note that some elements of this document may involve patents. The issuer of this document is not responsible for identifying these patents.

This section is under the jurisdiction of the National Radio, Film and Television Standardization Technical Committee (SAC/TC 239).

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Company, Beijing Jebesen Century Technology Co., Ltd., and Suzhou University.

Introduction

This section defines the class structure of an open control architecture for media network monitoring. The class structure defines the contents of the control class.

The content of the class structure is a class defined according to the object-oriented design concept. Each class defines a specific monitoring interface element that can Access from the entire media network through one or more interactive protocols defined by an open control architecture. Open control architecture controllable equipment can be realized A collection of such interface elements; these collections constitute the destination interface for remote monitoring provided by the device to the network. Such an interface is called open the equipment model of the control architecture is defined by GY/T 322.1.

In order to distinguish between the classification structure class and the programmable class, the class of the class structure involved in the open control architecture refers to the "control class", and their examples are Control object. The control here should be understood as control and monitoring.

The class structure of the open control architecture consists of control classes, control data types, and control class construction parameters.

The first part of the open control architecture is based on AES70-1-2015 "Open control architecture for network audio applications Part 1. Framework" the second part of the open control architecture defines the class structure of the open control architecture for media network monitoring. Part 2 is a reference Prepared by AES70-2-2015 "Open Control

Architecture for Network Audio Applications Part 2. Class Structure" the third part of the open control architecture is based on AES70-3-2015 "Open control architecture for network audio applications Part 3. For "TCP/IP Network Protocol", the original English text can be obtained from Open control architecture for network audio applications Part 2. Class Structure

1 Scope

This part of GY/T 322 specifies the class structure of the open control architecture of network audio applications.

This section applies to the control and monitoring of network audio applications.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 28167-2011 Information Technology XML Metadata Interchange (XMI) (ISO/IEC 19503.:2005, IDT) GY/T 322.1-2019 Open Control Architecture for Network Audio Applications Part 1. Framework GY/T 322.3-2019 Open Control Architecture for Network Audio Applications Part 3. Protocols for TCP/IP Networks

3 Class, structure

The class structure shall be defined by the Universal Modeling Language (UML) document in XML Metadata Interchange (XMI) 2.1 format defined in GB/T 28167-2011 definition.

For access to related documents, see

Note 1: This XMI machine-readable format is designed to enable implementers to transcribe errors with maximum speed and minimal error compared to independent class models built with traditional text descriptions. Mistake risks directly obtain the class model.

Note 2: The XMI class model can be parsed with appropriate UML applications.

4.1 Overview

This chapter briefly describes the class structure of the open control architecture of network audio applications.

4.2 Control class

This section defines the following three control classes, as shown in Table 1.

Table 1 Three types of control

Control functions

Class of work unit responsible for signal processing and monitoring functions the class of the agent responsible for flow control processing functions Management unit is responsible for the class of device management functions the device model of the open control architecture is composed of the objects of the classes in Table 1.

4.3 Data types

This section also provides two sets of supported data type definitions, as shown in Table 2.

Table 2 Supported data types

Data type function

Data types used by control classes Control class construction parameters are used to build the data type of the control an overview of the class structure is shown in Figure 1.

Class structure of open control architecture Control class Unit of work Actuator sensor (Several) Blocks and matrices Network work unit (Several) (Several) Media port Snap-in Equipment Management Unit Security Management Unit Firmware management unit Subscription snap-in Network Management Unit Power Management Unit Media Clock Management Unit Audio processing management unit Library Management Unit proxy Networks and streaming networks Marshaller Fade in and fade out unit Numerical observer Media clock Power supply unit Event processing unit Controlling data types Control class construction parameters (Several) (Several) Explanation.

Represents the inheritance relationship. The flat-end object is a subclass of the arrow-end object.

Figure 1 Overview of Class Structures

4.4 Unit of work class

The unit of work class describes the application functions of the device. There are four types of work unit classes, see Table 3.

Table 3 Four classes of work units

Unit of work class function Actuator signal processing and routing functions Various monitoring functions of sensors. Such as signal level, gain attenuation, temperature, etc.

Blocks and matrices aggregate objects into classes in a structured collection. For