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AES standard for audio applications of networks - Open Control Architecture - Part 2: Class structure

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AES standard for audio applications of networks - Open Control Architecture - Part 2: Class structure

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Abstract

AES70 defines a scalable control-protocol architecture for professional media networks. AES70 addresses device control and monitoring only; it does not define standards for streaming media transport. However, AES70 is intended to cooperate with various media transport architectures.

AES70 is divided into a number of separate parts. AES70 is divided into a number of separate parts. This Part 2 specifies the control class structure for AES70 that defines the AES70 control and monitoring functional capabilities and should be read in conjunction with AES70 Part 1: Framework, and AES70 Part 3: OCP.1 Protocol for IP Networks.

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Foreword

This foreword is not part of this document, AES70, *AES standard for audio applications of networks - Open Control Architecture - Part 2: Class structure*.

This document, AES70-2, is a member of the three-document set that defines AES70, the Open Control Architecture (OCA). AES70-2 defines the control class structure. Other parts define the overall framework and the specific protocols used.

The development project for this standard was originally proposed by the Open Control Architecture Alliance (OCA Alliance) and initiated in October 2012 as project AES-X210 to be developed in task group SC-02-12-L. The OCA Alliance also contributed the task-group working draft and, as a direct result, there are a number of references to "OCA" in the protocol in order to maintain compatibility with implementations already in the field.

The members of the writing group that developed this document in draft are: J. Berryman, H. Hamamatsu, T. Head, S. Jones, M. Lave, N. O'Neill, M. Renz, M. Smaak, G. van Beuningen, S. van Tienen, E. Wetzell.

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Foreword to the 2018 edition

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Note on normative language

In AES standards documents, sentences containing the word "shall" are requirements for compliance with the document. Sentences containing the verb "should" are strong suggestions (recommendations). Sentences giving permission use the verb "may". Sentences expressing a possibility use the verb "can".

AES standard for Audio applications of networks - Open control architecture - Class Structure

0. Introduction

0.1. General

This document defines the class structure of the Open Control Architecture (OCA) for the control and monitoring of media networks. The class structure defines the control repertoire. In what follows, the class structure is referred to as AES70 OCC.

The elements of AES70 OCC are class definitions in the object-oriented design sense. Each class defines a particular control or monitoring interface element that is accessible over the media network via one or more communications protocols that AES70 defines. An AES70-controllable device may implement a set of these interface elements; the complete set constitutes the interface the device presents to the network for remote control and monitoring purposes. This interface is called the AES70 *device model* and is defined in [AES70-1].

To distinguish OCC classes from programming classes, this standard may where appropriate refer to OCC classes as *control classes*, and their instances as *control objects*, where it should be understood that "control" includes both control and monitoring functions.

AES70 specifies system control and monitoring only. It may be integrated with any streaming media transport scheme, as long as the underlying communication network is capable of carrying AES70 control and monitoring traffic.

AES70 does not define a complete device implementation model. For example, if a particular implementation element has no remotely controllable features, then that element is not represented in the AES70 device model.

0.2. Documentation conventions

Numerical values are decimal unless otherwise stated.

A **Courier** typeface is used to identify **programmatic names** to distinguish them from regular text.

Where a term is first introduced in body text, the term will be set in an *italic* typeface.

When normative references are cited in the text they are [enclosed in brackets].

1. Scope

AES70 defines a scalable control-protocol architecture for professional media networks. AES70 addresses device control and monitoring only; it does not define standards for streaming media transport.

AES70 is divided into several parts. This Part 2 specifies the control class structure for AES70 that defines the control and monitoring functional capabilities of the standard and should be read in conjunction with AES70-1.