STANDARDS AND INFORMATION DOCUMENTS

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STANDARDS

**AES standard for
audio applications of networks -
Open Control Architecture -
Part 3: Protocol for TCP/IP Networks**

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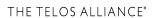
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AES standard for
audio applications of networks -
Open Control Architecture -
Part 3: OCP.1: Protocol for IP Networks

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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, the Open Control Architecture (OCA) is intended to cooperate with various media transport architectures.

AES70 is divided into a number of separate parts. This Part 3 defines a communications protocol of AES70. This protocol supports AES70-compliant remote control and monitoring of media devices over IP networks. This document should be read together with Part 1, Framework, and Part 2, Class structure.

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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 3: Protocol for IP Networks.

This document, AES70-3, OCP.1 Protocol for IP Networks, is a member of the three-document set that defines AES70, the Open Control Architecture. AES70-3 defines OCP.1, the IP-based communications protocol for AES70. Other parts define the architectural framework and the specific control repertoire.

AES70 is based on a proposed standard provided to the AES by the OCA Alliance, a trade association dedicated to the development, standardization, promotion, and support of the Open Control Architecture.

The development project for this standard was originly proposed by the Open Control Architecture Alliance (OCA Alliance) and initiated in October 2012 as project 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 protocol for TCP/IP networks in early drafts is also known as "OCP.1".

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.

J. Berryman led the task group.

Richard Foss
Chair, working group SC-02-12
2015-11-12

Foreword to the 2018 edition

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 specification. These references are retained in AES70 in order to maintain compatibility with implementations already in the field. The protocol for IP networks is known as "OCP.1".

The members of the writing group that drafted this version of the document are: F. Bergholtz, J. Berryman, A. Gödeke, J. Grant, A. Kuzub, M. Lave, G. Linis, S. Price, M. Renz, A. Rosen, S. Scott, G. Shay, P. Stevens, P. Treleaven, S. van Tienen, and E. Wetzell. As well, the writing group was materially assisted by contributions from T. de Brouwer, B. Escalante, S. Jones, M. Smaak, and M. Versteeg.

J. Berryman led the writing group.

Morten Lave
Chair, working group SC-02-12

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
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Open Control Architecture -
Part 3: OCP.1: Protocol for IP Networks

0. Introduction

0.1. General

This document contains the technical specification of the OCP.1 protocol of AES70, the Open Control Architecture. OCP.1 supports AES70-compliant remote control and monitoring of media devices over IP networks.

0.2. Documentation conventions

This document refers both to general data types that are used in all AES70 protocols and to specific data types that are only used in OCP.1. To differentiate between the general and the specific data types, the names of the general data types start with '`Oca`,' while the names of the specific data types start with '`Ocp1`'.

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.

The AES70 specification is divided into a number of separate parts. This Part 3 specifies a protocol implementation for IP networks. It should be read in conjunction with AES70-1, Framework, and AES70-2, Class Structure.

2. Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AES70-1 *AES70 Part 1: AES standard for Audio applications of networks - Open Control Architecture - Framework*. Audio Engineering Society, New York, NY., US.

AES70-2 *AES70 Part 2: AES standard for Audio applications of networks - Open Control Architecture - Class Structure*. Audio Engineering Society, New York, NY., US.