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INFORMATION TECHNOLOGY – UPNP DEVICE ARCHITECTURE –

Part 17-12: Quality of Service Device Control Protocol – Level 3 – Quality of Service Policy Holder Service

FOREWORD

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International Standard ISO/IEC 29341-17-12 was prepared by UPnP Forum Steering committee[1], was adopted, under the fast track procedure, by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of the ISO/IEC 29341 series, under the general title *Information technology – UPnP device architecture*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

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1 UPnP Forum Steering committee, UPnP Forum, 3855 SW 153rd Drive, Beaverton, Oregon 97006 USA. See also “Introduction”.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

1 Overview and Scope

This service definition is compliant with the UPnP Device Architecture version 1.0.

This service type enables modeling of the '*QosPolicyHolder*' function capabilities. The functionality for the *QosPolicyHolder* Service can be implemented by any device on the network. The *QosPolicyHolder* Service is responsible for providing the traffic policy values for any given traffic stream as requested by an entity that manages the network traffic, typically a *QoS Manager*. The traffic policy values are determined by applying the policy rules, which are configured for the network, to the requested traffic information.

A *QosPolicyHolder* is a dual-role entity that exposes a *QosPolicyHolder* Service to the Control Point (mainly the *QoS Manager*) while acting as a Control Point for the *QosDevice* Services running on the network. This document describes the components of the *QosPolicyHolder* Service and the *QoS Policy Holder*. The *QoS Policy Holder* provides the Control Point functionality that discovers and controls *QosDevice* Services, mainly for the propagation and synchronization of the preferred *QosPolicyHolder* Service information. Additional information concerning the *QoS Policy Holder* may be found in:

- UPnP-QoS Architecture document
- UPnP QosDevice Service Definition Document

1.1 Referenced Specifications

Unless explicitly stated otherwise herein, implementation of the mandatory provisions of any standard referenced by this specification shall be mandatory for compliance with this specification.

1.1.1 Normative References

This clause lists the normative references used in this document and includes the tag inside square brackets that is used for each sub reference:

[XML] – *Extensible Markup Language (XML) 1.0 (Second Edition)*, T. Bray, J.Paoli, C. M. Sperberg-McQueen, E Maler, eds. W3C Recommendations, 6 October 2000.

[DEVICE] - UPnP Device Architecture, version 1.0, UPnP Forum, July 20, 2006. Available at: http://upnp.org/specs/arch/UPnP-arch-DeviceArchitecture-v1.0-20060720.pdf Latest version available at: http://upnp.org/specs/arch/UPnP-arch-DeviceArchitecture-v1.0.pdf

[QM] – UPnP QosManager:3 Service Document: This reference is informative except for the definitions of the following state variables, which are normative: *A_ARG_TYPE_TrafficDescriptor*, and *A_ARG_TYPE_ListOfTrafficDescriptors*. Available at: http://www.upnp.org/specs/qos/UPnP-qos-QosManager-v3-Service-20081130.pdf
Latest version available at: http://www.upnp.org/specs/qos/UPnP-qos-QosManager-v3-Service.pdf

[RFC3339] – *Date and Time on the Internet: Timestamps*, G. Klyne, July 2002. http://www.ietf.org/rfc/rfc3339.txt

1.1.2 Informative References

This clause lists the informative references used in this document and includes the tag inside square brackets that is used for each sub reference:

[QoS Architecture] – *UPnP QoS Architecture V3.0* Available at: http://www.upnp.org/specs/qos/UPnP-qos-Architecture-v3-20081130.pdf Latest version available at: http://www.upnp.org/specs/qos/UPnP-qos-Architecture-v3.pdf

[QoS DEV] – *UPnP QosDevice:3* Service Document Available at: http://www.upnp.org/specs/qos/UPnP-qos-QosDevice-v3-Service-20081130.pdf Latest version available at: http://www.upnp.org/specs/qos/UPnP-qos-QosDevice-v3-Service.pdf

[IEEE 802.1D] – IEEE 802.1D-2004, Annex G, IEEE Standard for Information technology - Telecommunications and information exchange between systems - IEEE standard for local and metropolitan area networks - Common specifications - Media access control (MAC) Bridges, 2004.