

# ISO/IEC 29341-17-12:2011-08 (E)

## Information technology - UPnP Device Architecture - Part 17-12: Quality of Service Device Control Protocol - Level 3 - Quality of Service Policy Holder Service

---

### Contents

Page

1	Overview and Scope.....	3
1.1	Referenced Specifications .....	3
1.1.1	Normative References .....	3
1.1.2	Informative References .....	3
2	Service Modeling Definitions.....	4
2.1	ServiceType .....	4
2.2	Derived Data Types .....	4
2.2.1	XML Fragments as UPnP Arguments.....	4
2.2.2	Extensibility of XML .....	4
2.3	State Variables.....	6
2.3.1	A_ARG_TYPE_TrafficDescriptor .....	6
2.3.2	A_ARG_TYPE_TrafficPolicy.....	6
2.3.3	A_ARG_TYPE_ListOfTrafficDescriptors .....	8
2.3.4	A_ARG_TYPE_ListOfTrafficPolicies .....	8
2.3.5	A_ARG_TYPE_IsPreferred.....	9
2.3.6	A_ARG_TYPE_QphPolicyRule .....	9
2.3.7	A_ARG_TYPE_ListOfQphPolicyRule .....	13
2.3.8	A_ARG_TYPE_Position .....	14
2.3.9	A_ARG_TYPE_TIN .....	14
2.3.10	A_ARG_TYPE_IN .....	14
2.3.11	A_ARG_TYPE_ReasonCode.....	14
2.3.12	A_ARG_TYPE_PolicyHandle.....	15
2.3.13	A_ARG_TYPE_ListPolicyHandle .....	15
2.3.14	PolicyVersion.....	15
2.3.15	Relationships Between State Variables .....	15
2.4	Eventing and Moderation .....	16
2.4.1	Event Model.....	16
2.5	Actions.....	16
2.5.1	GetTrafficPolicy .....	17
2.5.2	GetListOfTrafficPolicies .....	18
2.5.3	SetAsPreferred .....	20
2.5.4	AddQphPolicy .....	22
2.5.5	RemoveQphPolicy .....	23
2.5.6	RetrieveQphPolicy .....	24
2.5.7	GetPolicyVersion .....	24
2.5.8	Non-Standard Actions Implemented by a UPnP Vendor .....	25
2.5.9	Error Code Summary .....	25

3	Theory of Operation (Informative) .....	27
3.1	Retrieving Policies.....	27
3.2	Preferred QosPolicyHolder Service Selection.....	27
3.3	QosPolicyHolder Service Configuration.....	28
4	XML Service Description .....	29
5	Test .....	32
	Table 2-1 — State Variables .....	6
	Table 2-2 — Event Moderation.....	16
	Table 2-3 — Actions .....	16
	Table 2-4 — Arguments for GetTrafficPolicy.....	17
	Table 2-5 — Error Codes for GetTrafficPolicy.....	18
	Table 2-6 — Arguments for GetListOfTrafficPolicies .....	18
	Table 2-7 — Error Codes for GetListOfTrafficPolicies .....	19
	Table 2-8 — Arguments for SetAsPreferred.....	20
	Table 2-9 — Error Codes for SetAsPreferred .....	22
	Table 2-10 — Arguments for <i>AddQphPolicy</i> .....	22
	Table 2-11 — Reason code for AddQphPolicy .....	23
	Table 2-12 — Error code for AddQphPolicy .....	23
	Table 2-13 — Arguments for RemoveQphPolicy .....	23
	Table 2-14 — Error code for RemoveQphPolicy .....	23
	Table 2-15 — Arguments for RetrieveQphPolicy.....	24
	Table 2-16 — Arguments for <i>GetPolicyVersion</i> .....	25
	Table 2-17 — Common Error Codes .....	26