ISO/IEC 29341-3-11:2008-11 (E)

Information technology_- UPnP Device Architecture_- Part_3-11: Audio Video Device Control Protocol_- Connection Manager Service

CONTENTS

FOREWORD 4

ORIGINAL UPNP DOCUMENTS (informative) 6

1. Overview and Scope 8

1.1. External dependencies 8

2. Service Modeling Definitions 9

2.1. ServiceType 9
2.2. State Variables 9
2.2.1. SourceProtocolInfo 9
2.2.2. SinkProtocolInfo 9
2.2.3. CurrentConnectionIDs 10
2.2.4. A_ARG_TYPE_ConnectionStatus 10
2.2.5. A_ARG_TYPE_ConnectionManager 10
2.2.6. A_ARG_TYPE_Direction 10
2.2.7. A_ARG_TYPE_ProtocolInfo 10
2.2.8. A_ARG_TYPE_ConnectionID 10
2.2.9. A_ARG_TYPE_AVTransportID 10
2.2.10. A_ARG_TYPE_RcsID 10
2.3. Eventing and Moderation 11
2.4. Actions 11
2.4.1. GetProtocolInfo 11
2.4.2. PrepareForConnection 12
2.4.3. ConnectionComplete 13
2.4.4. GetCurrentConnectionIDs 14
2.4.5. GetCurrentConnectionInfo 14
2.4.6. Common Error Codes 16
2.5. Theory of Operation 17
2.5.1. Purpose 17
2.5.2. ProtocolInfo Concept 17
2.5.3. Typical Control Point Operations 18
2.5.4. Relation to Devices without ConnectionManagers 19

3. XML Service Description 20

4. Test 23

Annex A (normative) **Protocol Specifics 24**

A.1 Application to 'HTTP GET' - streaming 24
A.1.1 ProtocolInfo definition 24
A.1.2 Implementation of ConnectionManager::PrepareForConnection 24
A.1.3 Implementation of ConnectionManager::ConnectionComplete 24
A.1.4 Automatic Connection Cleanup 24
A.2 Application to RTSP/RTP/UDP streaming 24
A.2.1 ProtocolInfo definition 24
A.2.2 Implementation of ConnectionManager::PrepareForConnection 25
A.2.3 Implementation of ConnectionManager::ConnectionComplete 25
A.2.4 Automatic Connection Cleanup 25
A.3 Application to device-internal streaming 25
A.4 Application to IEC61883 streaming 25
A.4.1 ProtocolInfo Definition 25
A.4.2 Implementation of ConnectionManager::PrepareForConnection 26
A.4.3 Implementation of ConnectionManager::ConnectionComplete 27
A.4.4 Automatic Connection Cleanup 27
A.5 Application to vendor-specific streaming 27

LIST OF TABLES

Table 1: State Variables 9
Table 2: Event Moderation 11
Table 3: Actions 11
Table 4: Arguments for GetProtocolInfo 11
Table 5: Arguments for PrepareForConnection 12
Table 6: Arguments for ConnectionComplete 13
Table 7: Arguments for GetCurrentConnectionIDs 14
Table 8: Arguments for GetCurrentConnectionInfo 15
Table 9: Common Error Codes 16
Table 10: Defined Protocol Info for ConnectionManager:1 18