

# 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
<b>1. Overview and Scope .....</b>	<b>8</b>
1.1. External dependencies .....	8
<b>2. Service Modeling Definitions .....</b>	<b>9</b>
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
<b>3. XML Service Description .....</b>	<b>20</b>
<b>4. Test .....</b>	<b>23</b>
<b>Annex A (normative) Protocol Specifics .....</b>	<b>24</b>
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