

ISO/IEC 29341-18-12:2011-08 (E)

Information technology - UPnP Device Architecture - Part 18-12: Remote Access Device Control Protocol - Remote Access Discovery Agent Synchronization Service

| Contents | Page |
|---|------|
| 1 Overview and Scope..... | 3 |
| 1.1 Introduction | 3 |
| 1.2 Notation | 4 |
| 1.3 Vendor-defined Extensions | 4 |
| 1.4 References..... | 4 |
| 1.4.1 Normative References | 4 |
| 1.4.2 Informative References | 5 |
| 2 Service Modeling Definitions..... | 5 |
| 2.1 Service Type | 5 |
| 2.2 Terms and Abbreviations | 6 |
| 2.2.1 Abbreviations..... | 6 |
| 2.2.2 Terms | 6 |
| 2.3 <i>RADASync</i> Service Architecture | 7 |
| 2.4 State Variables..... | 7 |
| 2.4.1 State Variable Overview..... | 7 |
| 2.4.2 <i>SystemInfo</i> | 7 |
| 2.4.3 <i>A_ARG_TYPE_DDDLocation</i> | 8 |
| 2.4.4 <i>A_ARG_TYPE_DeviceInfoList</i> | 8 |
| 2.4.5 <i>A_ARG_TYPE_UUID</i> | 8 |
| 2.5 Eventing and Moderation | 8 |
| 2.6 Actions..... | 9 |
| 2.6.1 <i>AddRemoteDevices()</i> | 9 |
| 2.6.2 <i>RemoveRemoteDevices()</i> | 10 |
| 2.6.3 <i>SetDDDLocation()</i> | 11 |
| 2.6.4 <i>HeartbeatUpdate()</i> | 12 |
| 2.6.5 Error Code Summary | 13 |
| 2.7 Description of Service Requirements | 13 |
| 2.7.1 Interaction | 13 |
| 2.7.2 Initialization | 13 |
| 2.7.3 Synchronization | 14 |
| 2.7.4 SSDP Offloading..... | 14 |
| 2.7.5 Heartbeat Mechanism | 15 |
| 2.7.6 Administrative Shutdown..... | 15 |
| 2.7.7 Signalling IPv6 Devices to Remote Networks..... | 16 |
| 3 XML Service Description | 16 |
| 4 Test | 17 |
| Annex A (normative) RADiscoveryAgent Data Structures..... | 18 |
| A.1 SystemInfo Template | 18 |
| A.2 DeviceInfoList Template | 21 |

| | |
|--|----|
| Figure 1-1 — SSDP Aggregation..... | 3 |
| Table 2-1 — Abbreviations..... | 6 |
| Table 2-2 — State Variables | 7 |
| Table 2-3 — Eventing and Moderation | 8 |
| Table 2-4 — Actions | 9 |
| Table 2-5 — Arguments for <u>AddRemoteDevices()</u> | 9 |
| Table 2-6 — Error Codes for <u>AddRemoteDevices()</u> | 10 |
| Table 2-7 — Arguments for <u>RemoveRemoteDevices()</u> | 10 |
| Table 2-8 — Error Codes for <u>RemoveRemoteDevices()</u> | 11 |
| Table 2-9 — Arguments for <u>SetDDDLocation()</u> | 11 |
| Table 2-10 — Error Codes for <u>SetDDDLocation()</u> | 12 |
| Table 2-11 — Arguments for <u>HeartbeatUpdate()</u> | 12 |
| Table 2-12 — Error Codes for <u>HeartbeatUpdate()</u> | 13 |
| Table 2-13 — Error Code Summary | 13 |