

# 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 <i>AddRemoteDevices()</i> .....	9
Table 2-6 — Error Codes for <i>AddRemoteDevices()</i> .....	10
Table 2-7 — Arguments for <i>RemoveRemoteDevices()</i> .....	10
Table 2-8 — Error Codes for <i>RemoveRemoteDevices()</i> .....	11
Table 2-9 — Arguments for <i>SetDDDLocation()</i> .....	11
Table 2-10 — Error Codes for <i>SetDDDLocation()</i> .....	12
Table 2-11 — Arguments for <i>HeartbeatUpdate()</i> .....	12
Table 2-12 — Error Codes for <i>HeartbeatUpdate()</i> .....	13
Table 2-13 — Error Code Summary .....	13