ISO/IEC 29341-30-10:2017-06 (E)

Information technology - UPnP Device Architecture - Part 30-10: IoT management and control device control protocol - Data store service

Contents

Page

1 Scope 1
1.1 Introduction 1

2 Normative References 1

3 Terms, Definitions and Abbreviations 2

4 Notations and conventions 2
4.1 Notation 2
4.2 Data Types 3
4.3 Vendor-defined Extensions 3

5 Service Modeling Definitions 3
5.1 Service Type 3
5.2 DataStore Service Architecture 3
5.3 Key Concepts 3
5.3.1 DataTables 4
5.3.2 DataTable Dictionary 4
5.3.3 DataTables GUID 4
5.3.4 DataTable URN 4
5.3.5 DataTable DataRecords 5
5.3.6 DataTable DataItems 5
5.3.7 DataItem Description Documents 5
5.3.8 DataItem formats 6
5.3.9 DataTables Operations 6
5.3.10 DataTable HTTP/HTTPS Transport Protocol 6
5.3.11 DataStore Groups 7
5.3.12 DataStore Events 7
5.3.13 DataTable Permissions 7
5.3.14 DataTable Actions 7
5.4 Device Protection 8
5.5 State Variables 9
5.5.1 State Variable Overview 9
5.5.2 LastChange 9
5.5.3 A_ARG_TYPE_DataRecordCount 11
5.5.4 A_ARG_TYPE_DataRecordIndex 11
5.5.5 A_ARG_TYPE_DataRecordFilter 12
5.5.6 A_ARG_TYPE_DataTableID 13
5.5.7 A_ARG_TYPE_DataTableInfoElement 13
5.5.8 A_ARG_TYPE_DataTableKeyName 13
5.5.9 A_ARG_TYPE_DataTableKeyValue 13
5.5.10 A_ARG_TYPE_DataStoreGroups 13
5.5.11 A_ARG_TYPE_DataStoreInfo 14
5.5.12 A_ARG_TYPE_DataTableInfo 15
5.5.13 A_ARG_TYPE_DataTableResetReq 17
5.5.14 A_ARG_TYPE_DataRecordPropResolve 17
5.5.15 A_ARG_TYPE_DataRecords 17
5.5.16 A_ARG_TYPE_DataRecordsStatus 19
5.5.17 A_ARG_TYPE_DataTransportURL 19
5.6 Eventing and Moderation 19
5.6.1 Eventing of LastChange 20

5.7 Actions 20
5.7.1 CreateDataStoreGroups() 21
5.7.2 CreateDataStoreTable() 21
5.7.3 DeleteDataStoreGroups() 22
5.7.4 DeleteDataStoreTable() 23
5.7.5 GetDataStoreTableKeyValue() 24
5.7.6 GetDataStoreGroups() 25
5.7.7 GetDataStoreInfo() 26
5.7.8 GetDataStoreTableInfo() 27
5.7.9 GetDataStoreTransportURL() 27
5.7.10 ModifyDataStoreTableInfo() 28
5.7.11 ReadDataStoreTableRecords() 30
5.7.12 RemoveDataStoreTableKeyValue() 32
5.7.13 ResetDataStoreTable () 32
5.7.14 SetDataStoreTableKeyValue() 33
5.7.15 WriteDataStoreTableRecords() 34
5.7.16 Error Code Summary 35

6 XML Service Description 36

Table 1 -- State Variables 9

Table 2 -- Allowed filter condition attribute values 12

Table 3 -- Eventing and Moderation 19

Table 4 -- Actions 20

Table 5 -- Arguments for CreateDataStoreGroups() 21

Table 6 -- Error Codes for CreateDataStoreGroups() 21

Table 7 -- Arguments for CreateDataStoreTable() 22

Table 8 -- Error Codes for CreateDataStoreTable() 22

Table 9 -- Arguments for DeleteDataStoreGroups() 23

Table 10 -- Error Codes for DeleteDataStoreGroups() 23

Table 11 -- Arguments for DeleteDataStoreTable() 23

Table 12 -- Error Codes for DeleteDataStoreTable() 24

Table 13 -- Arguments for GetDataStoreTableKeyValue() 24

Table 14 -- Error Codes for GetDataStoreTableKeyValue() 25

Table 15 -- Arguments for GetDataStoreGroups() 25

Table 16 -- Error Codes for GetDataStoreGroups() 26

Table 17 -- Arguments for GetDataStoreInfo() 26

Table 18 -- Error Codes for GetDataStoreInfo() 26

Table 19 -- Arguments for GetDataStoreTableInfo() 27

Table 20 -- Error Codes for GetDataStoreTableInfo() 27

Table 21 -- Arguments for GetDataStoreTransportURL() 28

Table 22 -- Error Codes for GetDataStoreTransportURL() 28

Table 23 -- Arguments for ModifyDataStoreTableInfo() 29

Table 24 -- Error Codes for ModifyDataStoreTableInfo() 30

Table 25 -- Arguments for ReadDataStoreTableRecords() 30

Table 26 -- Error Codes for ReadDataStoreTableRecords() 31

Table 27 -- Arguments for RemoveDataStoreTableKeyValue() 32

Table 28 -- Error Codes for RemoveDataStoreTableKeyValue() 32

Table 29 -- Arguments for ResetDataStoreTable() 32

Table 30 -- Error Codes for ResetDataStoreTable() 33

Table 31 -- Arguments for SetDataTableKeyValue() 34

Table 32 -- Error Codes for SetDataStoreTableKeyValue() 34

Table 33 -- Arguments for WriteDataStoreTableRecords() 34

Table 34 -- Error Codes for WriteDataStoreTableRecords() 35

Table 35 -- Error Code Summary 36