ISO/IEC 23005-4:2018-09 (E)

Information technology - Media context and control - Part 4: Virtual world object characteristics

Contents

Page

1 Scope 1

2 Normative references 1

3 Terms, definitions, abbreviated terms, schema documents and prefixes 1
3.1 Terms and definitions 1
3.2 Schema documents 3
3.3 Use of prefixes 3

4 Virtual world object metadata 4
4.1 General 4
4.2 Schema wrapper conventions 5
4.3 Root element and top-level tools 6
4.3.1 General 6
4.3.2 XML representation syntax 6
4.3.3 Binary representation syntax 6
4.3.4 Semantics 7
4.3.5 Examples 8
4.4 Virtual world object base type 9
4.4.1 General 9
4.4.2 XML representation syntax 10
4.4.3 Binary representation syntax 11
4.4.4 Semantics 13
4.4.5 Examples 14
4.4.6 IdentificationType 15
4.4.7 VWOSoundListType 18
4.4.8 VWOScentListType 19
4.4.9 VWOControlListType 20
4.4.10 VWOEventListType 20
4.4.11 VWOBehaviorModelListType 21
4.4.12 VWOSoundType 22
4.4.13 VWOScentType 24
4.4.14 VWOControlType 26
4.4.15 VWOEventType 29
4.4.16 VWOSensoryEffectType 33
4.4.17 VWOBehaviourModelType 35
4.5 Virtual world object common data types 37
4.5.1 VWOHapticPropertyType 38
4.5.2 AnimationDescriptionType 45
4.5.3 AnimationResourcesDescriptionType 48
4.5.4 Common simple data types 53

5 Avatar metadata 61
5.1 General 61
5.2 AvatarType 62
5.2.1 XML representation syntax 62
5.2.2 Binary representation syntax 63
5.2.3 Semantics 65
5.3 AvatarAppearanceType 67
5.3.1 XML representation syntax 67
5.3.2 Binary representation syntax 74

5.3.3 Semantics 111
5.3.4 Examples 143
5.4 AvatarAnimationType 145
5.4.1 XML representation syntax 145
5.4.2 Binary representation syntax 146
5.4.3 Semantics 150
5.4.4 Examples 172
5.5 AvatarCommunicationSkillsType 172
5.5.1 XML representation syntax 172
5.5.2 Binary representation syntax 173
5.5.3 Semantics 174
5.5.4 Examples 175
5.6 VerbalCommunicationType 176
5.6.1 XML representation syntax 176
5.6.2 Binary representation syntax 176
5.6.3 Semantics 177
5.7 LanguageType 178
5.7.1 XML representation syntax 178
5.7.2 Binary representation syntax 178
5.7.3 Semantics 178
5.8 communicationPreferenceType 178
5.8.1 XML representation syntax 178
5.8.2 Binary representation syntax 178
5.8.3 Semantics 179
5.9 communicationPreferenceLevelType 179
5.9.1 XML representation syntax 179
5.9.2 Binary representation syntax 179
5.9.3 Semantics 179
5.10 NonVerbalCommunicationType 179
5.10.1 XML representation syntax 179
5.10.2 Binary representation syntax 180
5.10.3 Semantics 181
5.11 SignLanguageType 181
5.11.1 XML representation syntax 181
5.11.2 Binary representation syntax 181
5.11.3 Semantics 182
5.12 AvatarPersonalityType 182
5.12.1 XML representation syntax 182
5.12.2 Binary representation syntax 182
5.12.3 Semantics 183
5.13 AvatarControlFeaturesType 184
5.13.1 XML representation syntax 184
5.13.2 Binary representation syntax 185
5.13.3 Semantics 185
5.13.4 Examples 186
5.14 ControlBodyFeaturesType 186
5.14.1 XML representation syntax 186
5.14.2 Binary representation syntax 187
5.14.3 Semantics 188
5.14.4 Examples 191
5.15 ControlBodyFeaturesDescriptionType 192
5.15.1 XML representation syntax 192
5.15.2 Binary representation syntax 193
5.15.3 Semantics 193
5.16 ControlFaceFeaturesType 194
5.16.1 XML representation syntax 194
5.16.2 Binary representation syntax 195
5.16.3 Semantics 197
5.16.4 Examples 202
5.17 OutlineType 203
5.17.1 XML representation syntax 203
5.17.2 Binary representation syntax 203

5.17.3 Semantics 204
5.18 Outline4PointsType 204
5.18.1 XML representation syntax 204
5.18.2 Binary representation syntax 205
5.18.3 Semantics 205
5.19 Outline5PointsType 205
5.19.1 XML representation syntax 205
5.19.2 Binary representation syntax 206
5.19.3 Semantics 206
5.20 Outline8PointsType 206
5.20.1 XML representation syntax 206
5.20.2 Binary representation syntax 207
5.20.3 Semantics 207
5.21 Outline14PointsType 208
5.21.1 XML representation syntax 208
5.21.2 Binary representation syntax 209
5.21.3 Semantics 209
5.22 VWOHapticPropertyListType 210
5.22.1 XML representation syntax 210
5.22.2 Binary representation syntax 210
5.22.3 Semantics 210
5.23 MakeupAvatarType 211
5.23.1 XML representation syntax 211
5.23.2 Binary representation syntax 212
5.23.3 Semantics 212
5.24 CosmeticType 213
5.24.1 XML representation syntax 213
5.24.2 Binary representation 214
5.24.3 Semantics 218
5.25 MakeupInfoType 222
5.25.1 XML representation syntax 222
5.25.2 Binary Representation 222
5.25.3 Semantics 222
5.26 MakeupToolType 223
5.26.1 XML representation syntax 223
5.26.2 Binary representation 223
5.26.3 Semantics 224
5.27 MakeupRegionType 226
5.27.1 XML representation syntax 226
5.27.2 Binary representation 227
5.27.3 Semantics 227
5.27.4 Examples 229

6 Virtual object metadata 231
6.1 General 231
6.2 VirtualObjectType 231
6.2.1 XML representation syntax 231
6.2.2 Binary representation syntax 232
6.2.3 Semantics 233
6.2.4 Examples 233
6.2.5 VOAnimationType 234

Annex A (normative) Classification schemes 238

Annex B (informative) Virtual world object characteristics schema 288

Annex C (informative) Possible usage of the schema in this document 289

Bibliography 291