DIN SPEC 15801:2023-12 (E)

Entertainment technology - My virtual rig (MVR); Text in English

Contents

Page

Foreword 7

Introduction 8

1 Scope 9

2 Normative references 9

3 Terms and definitions 9

4 MVR Definitions 10
4.1 General 10
4.2 File Format Definition 10
4.3 Generic Value Types 11
4.4 Node Definitions 12
4.5 GeneralSceneDescription Node 12
4.6 Node Definition: UserData 13
4.6.1 General 13
4.6.2 Node Definition: Data 13
4.7 Node Definition: Scene 13
4.8 Node Definition: AUXData 14
4.8.1 General 14
4.8.2 Node Definition: Symdef 14
4.8.3 Node Definition: Position 15
4.8.4 Node Definition: MappingDefinition 15
4.8.5 Node Definition: Class 16
4.8.6 Node Definition: Layers 16
4.9 Node Definition: ChildList 17
4.10 Node Definition for Parametric Objects 18
4.10.1 Node Definition: SceneObject 18
4.10.2 Node Definition: GroupObject 19
4.10.3 Node Definition: FocusPoint 20
4.10.4 Node Definition: Fixture 20
4.11 Node Definition: Truss 24
4.12 Node Definition: Support 25
4.13 Node Definition: VideoScreen 27
4.14 Node Definition: Projector 29
4.15 Other Node Definition 31
4.15.1 Node Definition: Matrix 31
4.15.2 Node Definition: Gobo 31
4.15.3 Node Definition: Sources 32
4.15.4 Node Definition: ScaleHandeling 33
4.16 Node Definition: Geometries 33
4.17 Node Definition: Symbol 33
4.18 Node Definition: Geometry3D 34
4.18.1 General 34
4.18.2 Supported 3D file formats 35
4.18.3 Node Definition: Projections 35
4.18.4 Node Definition: Addresses 36
4.18.5 Node Definition: Protocols 37

4.18.6 Node Definition: Protocol 37
4.18.7 Node Definition: Alignments 38
4.18.8 Node Definition: CustomCommands 39
4.18.9 Node Definition: Overwrites 39
4.18.10 Node Definition: Connections 40
4.18.11 Node Definition: Mappings 41

5 Communication Format Definition 42
5.1 General 42
5.2 TCP Mode of protocol 43
5.3 WebSocket Mode of protocol 43
5.4 Packet & Message definition 43
5.4.1 General 43
5.4.2 TCP Mode 44
5.4.3 WebSocket Mode 45
5.5 `MVR_JOIN` message 45
5.5.1 General 45
5.5.2 TCP Mode 45
5.5.3 WebSocket Mode 46
5.6 `MVR_LEAVE` message 50
5.7 `MVR_COMMIT` message 51
5.7.1 General 51
5.7.2 TCP Mode 52
5.7.3 WebSocket Mode 52
5.8 `MVR_REQUEST` message 55
5.9 `MVR_NEW_SESSION_HOST` message 59
5.9.1 General 59
5.9.2 Change Service URL/Name 59
5.10 Switch Mode of a Network 59

Annex A (informative) Object ID for Selection purposes 62

Annex B (informative) UUID purposes 63

Bibliography 64

Figures

Figure 1 — ScaleHandeling Node Attributes 33

Figure 2 — MVR-xchange mode of operation 42

Figure 3 — TCP mode: MVR-xchange client joining MVR-xchange group 46

Figure 4 — Websocket mode: MVR-xchange client joining MVR-xchange group 48

Figure 5 — MVR_LEAVE message to quit MVR-xchange group 50

Figure 6 — TCP mode: MVR-xchange client commits to MVR-xchange group. 52

Figure 7 — Websocket mode: MVR-xchange client commits to MVR-xchange group. 53

Figure 8 — Server makes the `MVR_COMMIT` itself, and only sends it to connected MVR-xchange clients 53

Figure 9 — Websocket mode: MVR-xchange client requesting file 57

Figure 10 — TCP mode: MVR-xchange client requesting file **58**

Tables

Table 1 — ***XML Generic Value Types*** **11**

Table 2 — ***GeneralSceneDescription Node Attributes*** **12**

Table 3 — ***GeneralSceneDescription Node Children*** **13**

Table 4 — ***UserData Node Children*** **13**

Table 5 — ***Data Node Attributes*** **13**

Table 6 — ***Scene Node Children*** **14**

Table 7 — ***AUXData Node Children*** **14**

Table 8 — ***Symdef Node Attributes*** **14**

Table 9 — ***Symdef Node Children*** **14**

Table 10 — ***Symdef Childlist Node Children*** **15**

Table 11 — ***Position Node Attributes*** **15**

Table 12 — ***MappingDefinition Node Attributes*** **15**

Table 13 — ***MappingDefinition Node Children*** **15**

Table 14 — ***Class Node Attributes*** **16**

Table 15 — ***Layers Node Children*** **16**

Table 16 — ***Layer Node Attributes*** **17**

Table 17 — ***Layer Node Children*** **17**

Table 18 — ***ChildList Node Children*** **17**

Table 19 — ***SceneObject Node Attributes*** **18**

Table 20 — ***SceneObject Node Children*** **18**

Table 21 — ***GroupObject Node Attributes*** **19**

Table 22 — ***GroupObject Node Children*** **20**

Table 23 — ***FocusPoint Node Attributes*** **20**

Table 24 — ***FocusPoint Node Children*** **20**

Table 25 — ***Fixture Node Attributes*** **21**

Table 26 — *Fixture Node Children* **21**

Table 27 — *Truss Node Attributes* **24**

Table 28 — *Truss Node Children* **24**

Table 29 — *Support Node Attributes* **25**

Table 30 — *Support Node Children* **26**

Table 31 — *VideoScreen Node Attributes* **27**

Table 32 — *VideoScreen Node Children* **27**

Table 33 — *Projector Node Attributes* **29**

Table 34 — *Projector Node Children* **29**

Table 35 — *Matrix Node Value Types* **31**

Table 36 — *Gobo Node Attributes* **31**

Table 37 — *Sources Node Children* **32**

Table 38 — *Source Node Attributes* **32**

Table 39 — *Source Node Value Types* **32**

Table 40 — *ScaleHandeling Node Attributes* **33**

Table 41 — *Geometries Node Children* **33**

Table 42 — *Symbol Node Attributes* **34**

Table 43 — *Symbol Node Children* **34**

Table 44 — *Geometry3D Node Attributes* **34**

Table 45 — *Geometry3D Node Children* **34**

Table 46 — *Supported 3D file formats* **35**

Table 47 — *Projections Node Children* **35**

Table 48 — *Projection Node Children* **35**

Table 49 — *Adresses Node Children* **36**

Table 50 — *Address Node Attributes* **36**

Table 51 — *Address Node Children* **36**

Table 52 — *Network Node Attributes* **37**

Table 53 — *Protocols Node Children* **37**

Table 54 — *Protocol Node Attributes* **37**

Table 55 — *Alignments Node Children* **38**

Table 56 — *Alignment Node Attributes* **38**

Table 57 — *CustomCommands Node Children* **39**

Table 58 — *Overwrites Node Children* **39**

Table 59 — *Overwrite Node Attributes* **40**

Table 60 — *Connections Node Children* **40**

Table 61 — *Connection Node Attributes* **40**

Table 62 — *Mappings Node Children* **41**

Table 63 — *Mapping Node Attributes* **41**

Table 64 — *Mapping Node Children* **41**

Table 65 — *TXT Record Attributes* **43**

Table 66 — *Packet & Message Definitions* **44**

Table 67 — *Data Type MVR-xchange package* **44**

Table 68 — *MVR_JOIN message Attributes* **48**

Table 69 — *MVR_JOIN response Attributes* **48**

Table 70 — *MVR_LEAVE message Attributes* **51**

Table 71 — *MVR_LEAVE response Attributes* **51**

Table 72 — *MVR_COMMIT message Attributes* **53**

Table 73 — *MVR_COMMIT response Attributes* **54**

Table 74 — *MVR_REQUEST message Attributes* **58**

Table 75 — *MVR_REQUEST error response Attributes* **58**

Table 76 — *MVR_NEW_SESSION_HOST message Attributes* **60**

Table 77 — *MVR_NEW_SESSION_HOST error response Attributes* **60**