ISO/IEC 24775-8:2021-03 (E)

Information technology - Storage management - Part 8: Media libraries

Contents

Page

List of Figures 13
List of Tables 15
Foreword 17
1 Scope 19
2 Normative References 21
2.1 General 21
2.2 Approved references 21
2.3 References under development 21
3 Terms, Definitions, Symbols, Abbreviations, and Conventions 23
3.1 General 23
3.2 Terms and Definitions 23
4 Storage Library Profile 25
4.1 Synopsis 25
4.2 Description 25
4.3 Health and Fault Management Considerations 40
4.4 Methods of the Profile 40
4.5 Use Cases 40
4.6 CIM Elements 42
5 Storage Library Element Counting Profile 57
5.1 Synopsis 57
5.2 Description 57
5.3 Discovery 57
5.4 Health and Fault Management Considerations 57
5.5 Methods of the Profile 57
5.6 Use Cases 59
5.7 CIM Elements 61
6 Storage Library Capacity Profile 63
6.1 Synopsis 63
6.2 Description 63
6.3 Health and Fault Management Considerations 63
6.4 Methods of the Profile 63
6.5 Use Cases 64
6.6 CIM Elements 64
7 Storage Library Limited Access Port Elements Profile 67
7.1 Synopsis 67
7.2 Description 67
7.3 Instance Diagram 67
7.4 Health and Fault Management Considerations 68
7.5 Methods of the Profile 68
7.6 Use Cases 68
7.7 CIM Elements 68
Annex A (informative) SMI-S Information Model 73

LIST OF FIGURES

Figure 1 - Experimental Maturity Level Tag 8
Figure 2 - Implemented Maturity Level Tag 8
Figure 3 - Stable Maturity Level Tag 9
Figure 4 - Deprecated Tag 9
Figure 5 - Storage Library-centric Instance Diagram 27
Figure 6 - MediaAccessDevice-centric Instance Diagram 28
Figure 7 - ChangerDevice-centric Instance Diagram 28
Figure 8 - Physical View Instance Diagram 29
Figure 9 - StorageMediaLocation Instance Diagram 30
Figure 10 - Instance Diagram 57
Figure 11 - Storage Library Capacity Instance Diagram 63
Figure 12 - Tape Libraries with Magazines in LimitedAccessPorts 67
Figure 13 - Tape Libraries with no Magazines in LimitedAccessPorts 68

LIST OF TABLES

Table 1 - Supported Profiles for Storage Library 25
Table 2 - CIM Elements for Storage Library 42
Table 3 - SMI Referenced Properties/Methods for CIM_ChangerDevice 48
Table 4 - SMI Referenced Properties/Methods for CIM_Chassis 49
Table 5 - SMI Referenced Properties/Methods for CIM_ComputerSystem 50
Table 6 - SMI Referenced Properties/Methods for CIM_ComputerSystemPackage 50
Table 7 - SMI Referenced Properties/Methods for CIM_ElementCapabilities 50
Table 8 - SMI Referenced Properties/Methods for CIM_ElementSoftwareIdentity 51
Table 9 - SMI Referenced Properties/Methods for CIM_MediaAccessDevice 51
Table 10 - SMI Referenced Properties/Methods for CIM_PackagedComponent 52
Table 11 - SMI Referenced Properties/Methods for CIM_PhysicalMedia 52
Table 12 - SMI Referenced Properties/Methods for CIM_PhysicalMediaInLocation 52
Table 13 - SMI Referenced Properties/Methods for CIM_ProtocolControllerForUnit 53
Table 14 - SMI Referenced Properties/Methods for CIM_Realizes 53
Table 15 - SMI Referenced Properties/Methods for CIM_SCSIProtocolController 53
Table 16 - SMI Referenced Properties/Methods for CIM_SoftwareIdentity 54
Table 17 - SMI Referenced Properties/Methods for CIM_StorageLibraryCapabilities 55
Table 18 - SMI Referenced Properties/Methods for CIM_StorageMediaLocation 55
Table 19 - SMI Referenced Properties/Methods for CIM_SystemDevice (System to Changer Device) 56
Table 20 - SMI Referenced Properties/Methods for CIM_SystemDevice (System to MediaAccessDevice) 56
Table 21 - SMI Referenced Properties/Methods for CIM_SystemDevice (System to SCSIProtocolController) 56
Table 22 - CIM Elements for Storage Library Element Counting 61
Table 23 - SMI Referenced Properties/Methods for CIM_ConfigurationReportingService 61
Table 24 - SMI Referenced Properties/Methods for CIM_HostedService 62
Table 25 - CIM Elements for Storage Library Capacity 64
Table 26 - SMI Referenced Properties/Methods for CIM_ConfigurationCapacity 64
Table 27 - SMI Referenced Properties/Methods for CIM_ElementCapacity 65
Table 28 - CIM Elements for Storage Library Limited Access Port Elements 68
Table 29 - SMI Referenced Properties/Methods for CIM_Container 69
Table 30 - SMI Referenced Properties/Methods for CIM_LimitedAccessPort 70
Table 31 - SMI Referenced Properties/Methods for CIM_Magazine 70
Table 32 - SMI Referenced Properties/Methods for CIM_Realizes 71
Table 33 - SMI Referenced Properties/Methods for CIM_SystemDevice 71