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Table of Contents:

I CDMI Preamble 1

Clause 1: Scope 3

Clause 2: Normative references 4

Clause 3: Terms, acronyms, and definitions 6

Clause 4: Conventions 11
4.1 Interface format . . . 11
4.2 Typographical conventions . . . 12
4.3 Request and response body requirements . . . 13
4.4 Key Word requirements . . . 14

Clause 5: Overview of Cloud Storage 15
5.1 Overview . . . 15
5.2 Reference model for cloud storage interfaces . . . 18
5.3 Cloud data management interface . . . 19
5.4 Security . . . 23
5.5 Required HTTP support . . . 25
5.6 Time representations . . . 28
5.7 Backwards compatibility . . . 29
5.8 Object references . . . 30

II Basic Cloud Storage 32

Clause 6: Data Object Resource Operations using HTTP 33
6.1 Overview . . . 33
6.2 Create a data object using HTTP . . . 34
6.3 Read a data object using HTTP . . . 36
6.4 Update a data object using HTTP . . . 39
6.5 Delete a data object using HTTP . . . 41

Clause 7: Container Object Resource Operations using HTTP 43
7.1 Overview . . . 43
7.2 Create a container object using HTTP . . . 44
7.3 Read a container object using HTTP . . . 46
7.4 Update a container object using HTTP . . . 47
7.5 Delete a container object using HTTP . . . 48
7.6 Create (POST) a new data object using HTTP . . . 50

III CDMI Core 52

Clause 8: Data Object Resource Operations using CDMI 53
8.1 Overview . . . 53
8.2 Data object details . . . 54
8.3 Create a data object using CDMI . . . 56
8.4 Read a data object using CDMI . . . 67
8.5 Update a data object using CDMI . . . 76
8.6 Delete a data object using CDMI . . . 85

Clause 9: Container Object Resource Operations using CDMI 87
9.1 Overview . . . 87
9.2 Container object details . . . 88
9.3 Create a container object using CDMI . . . 90
9.4 Read a container object using CDMI . . . 97
9.5 Update a container object using CDMI . . . 102

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9.6 Delete a container object using CDMI . . . 107
9.7 Create (POST) a new data object using CDMI . . . 109
9.8 Create (POST) a new queue object using CDMI . . . 119

IV CDMI Advanced 125

Clause 10: Domain object resource operations using CDMI 126
10.1 Overview . . . 126
10.2 Domain object details . . . 128
10.3 Domain object summaries . . . 131
10.4 Domain object membership . . . 134
10.5 Create a domain object using CDMI . . . 137
10.6 Read a domain object using CDMI . . . 141
10.7 Update a domain object using CDMI . . . 145
10.8 Delete a domain object using CDMI . . . 149

Clause 11: Queue object resource operations using CDMI 151
11.1 Overview . . . 151
11.2 Queue object details . . . 152
11.3 Create a queue object using CDMI . . . 155
11.4 Read a queue object using CDMI . . . 161
11.5 Update a queue object using CDMI . . . 168
11.6 Delete a queue object using CDMI . . . 172
11.7 Enqueue a new queue object value using CDMI . . . 174
11.8 Delete a queue object value using CDMI . . . 180

Clause 12: Capability object resource operations using CDMI 182
12.1 Overview . . . 182
12.2 Capability object details . . . 183
12.3 Read a capabilities object using CDMI . . . 199

Clause 13: Exported protocols 203
13.1 Overview . . . 203
13.2 Container object export details . . . 204
13.3 NFS exported protocol . . . 207
13.4 SMB exported protocol . . . 209
13.5 iSCSI exported protocol . . . 210
13.6 WebDAV exported protocol . . . 211
13.7 OCCI exported protocol . . . 212

Clause 14: CDMI snapshots 214
14.1 Overview . . . 214
14.2 Creating a snapshot . . . 215
14.3 Deleting a snapshot . . . 216

Clause 15: Serialization/deserialization 217
15.1 Overview . . . 217
15.2 Canonical format . . . 218
15.3 Exporting serialized data . . . 220
15.4 Importing serialized data . . . 221

Clause 16: Metadata 222
16.1 Overview . . . 222
16.2 Support for storage system metadata . . . 223
16.3 Support for data system metadata . . . 225
16.4 Support for provided data system metadata . . . 233
16.5 Support for user metadata . . . 235
16.6 Metadata update operations . . . 236

Clause 17: Access control 237
17.1 Overview . . . 237
17.2 Access control flow . . . 238

Clause 18: Retention and hold management 250
18.1 Overview . . . 250
18.2 Retention management disciplines . . . 251
18.3 CDMI retention . . . 252
18.4 CDMI hold . . . 254
18.5 CDMI auto-deletion . . . 257

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18.6 Retention security considerations . . . 258

Clause 19: Scope specification **259**
19.1 Overview . . . 259
19.2 Examples . . . 260
19.3 Query matching expressions . . . 262

Clause 20: Results specification **265**
20.1 Overview . . . 265
20.2 Examples . . . 266

Clause 21: Notification queues **267**
21.1 Overview . . . 267
21.2 Metadata . . . 268

Clause 22: Query queues **272**
22.1 Overview . . . 272
22.2 Extending CDMI query . . . 274

Clause 23: Encrypted objects **275**
23.1 Overview . . . 275
23.2 Encryption operations . . . 276
23.3 Example uses of encrypted objects . . . 279
23.4 KMS integration . . . 280
23.5 CMS format . . . 281
23.6 JOSE format . . . 282
23.7 Signature/digest verification . . . 283
23.8 Error handling . . . 284

Clause 24: Delegated access control **285**
24.1 Overview . . . 285
24.2 Delegated access control (DAC) . . . 287
24.3 Delegated access control message exchange . . . 289
24.4 Client header passthrough . . . 291
24.5 DAC request . . . 292
24.6 Packaged DAC request . . . 294
24.7 DAC response . . . 295
24.8 Packaged DAC response . . . 296
24.9 Error handling . . . 298
24.10Examples . . . 299

Clause 25: Data object versions **310**
25.1 Overview . . . 310
25.2 Traversing version-enabled data objects . . . 312
25.3 Concurrent updates and version-enabled data objects . . . 313
25.4 Capabilities for version-enabled data objects . . . 315
25.5 Updates triggering version creation . . . 316
25.6 Operations on version-enabled data objects . . . 317
25.7 Operations on data object versions . . . 318
25.8 Query of data object versions . . . 319
25.9 Version-enabled data object serialization . . . 320

V CDMI Annexes **322**

Clause 26: Extensions **323**
26.1 Overview . . . 323
26.2 Summary metadata for bandwidth . . . 324
26.3 Expiring access control entries (ACEs) . . . 326
26.4 Group storage system metadata . . . 327
26.5 Header-based metadata . . . 328
26.6 Immediate query . . . 336

VI References **339**

Bibliography **340**

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List of Figures

Fig. 1: Existing data storage interface standards . . . 16
Fig. 2: Storage interfaces for object storage client data . . . 16
Fig. 3: Cloud storage reference model . . . 18
Fig. 4: CDMI object model . . . 20
Fig. 5: Object transitions between named and ID-only . . . 21
Fig. 6: CDMI URI Components . . . 26

Fig. 7: Hierarchy of domains . . . 126

Fig. 8: Hierarchy of capabilities . . . 183

Fig. 9: CDMI and OCCI in an integrated cloud computing environment . . . 212

Fig. 10: Snapshot container structure . . . 214

Fig. 11: Access control flow . . . 238

Fig. 12: Object retention . . . 252
Fig. 13: Object hold . . . 254
Fig. 14: Object hold on object with retention . . . 254
Fig. 15: Object with multiple holds . . . 255

Fig. 16: Encrypted object state transistions . . . 276

Fig. 17: Non-delegated (ACL-based) access control data flow . . . 285
Fig. 18: Delegated access control data flow example for non-encrypted object . . . 289
Fig. 19: Delegated access control data flow example for encrypted object . . . 290

Fig. 20: Updates to a non-version-enabled data object . . . 310
Fig. 21: Updates to a version-enabled data object . . . 311
Fig. 22: Linkages between a version-enabled data object and data object versions . . . 312
Fig. 23: Overlapping concurrent updates . . . 313
Fig. 24: Linkages for overlapping updates . . . 313
Fig. 25: Nested concurrent updates . . . 314
Fig. 26: Linkages for nested updates . . . 314
Fig. 27: Version to `capabilityURI` relationships . . . 315

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List of Tables

Table 1: Overview of this document . . . 2

Table 2: Interface format . . . 11
Table 3: Key word requirements . . . 14

Table 4: Types of resources in the CDMI object model . . . 20
Table 5: Creation/consumption of storage system metadata . . . 21
Table 6: Object ID format . . . 22
Table 7: Relative URIs resolved against root URIs . . . 27

Table 8: Capabilities - Create a CDMI data object using HTTP . . . 34
Table 9: Request headers - Create a CDMI data object using HTTP . . . 34
Table 10: HTTP status codes - Create a data object using HTTP . . . 35
Table 11: Capabilities - Read a CDMI data object using HTTP . . . 36
Table 12: Request header - Read a CDMI data object using HTTP . . . 36
Table 13: Response headers - Read a CDMI Data Object using HTTP . . . 37
Table 14: HTTP status codes - Read a CDMI data object using HTTP . . . 37
Table 15: Capabilities - Update a CDMI data object using HTTP . . . 39
Table 16: Request headers - Update a CDMI data object using HTTP . . . 39
Table 17: Response header - Update a CDMI data object using HTTP . . . 40
Table 18: HTTP status codes - Update a CDMI data object using HTTP . . . 40
Table 19: Capabilities - Delete a CDMI data object using HTTP . . . 41
Table 20: HTTP status codes - Delete a CDMI data object using HTTP . . . 41

Table 21: Capabilities - Create a CDMI container object using HTTP . . . 44
Table 22: HTTP status codes - Create a container object using HTTP . . . 44
Table 23: Capabilities - Delete a CDMI container object using HTTP . . . 48
Table 24: HTTP status codes - Delete a CDMI container object using HTTP . . . 49
Table 25: Capabilities - Create a CDMI data object using HTTP POST . . . 50
Table 26: Request header - Create a new data object using HTTP . . . 50
Table 27: Response header - Create a new data object using HTTP . . . 51
Table 28: HTTP status codes - Create a new data object using HTTP . . . 51

Table 29: Capabilities - Create a CDMI data object using CDMI . . . 57
Table 30: Request headers - Create a CDMI data object using CDMI . . . 57
Table 31: Request message body - Create a data object using CDMI . . . 58
Table 32: Response headers - Create a data object using CDMI . . . 61
Table 33: Response message body - Create a data object using CDMI . . . 61
Table 34: HTTP status codes - Create a data object using CDMI . . . 62
Table 35: Capabilities - Read a CDMI data object using CDMI . . . 67
Table 36: Request headers - Read a CDMI data object using CDMI . . . 67
Table 37: Response headers - Read a CDMI data object using CDMI . . . 68
Table 38: Response message body - Read a CDMI data object using CDMI . . . 68
Table 39: HTTP status codes - Read a CDMI data object using CDMI . . . 70
Table 40: Capabilities - Update a CDMI data object using CDMI . . . 76
Table 41: Request headers - Update a CDMI data object using CDMI . . . 77
Table 42: Request message body - Update a CDMI data object using CDMI . . . 77
Table 43: Response header - Update a CDMI data object using CDMI . . . 80
Table 44: HTTP status codes - Update a CDMI data object using CDMI . . . 80
Table 45: Capabilities - Delete a CDMI data object using CDMI . . . 85
Table 46: HTTP status codes - Delete a CDMI data object using CDMI . . . 85

Table 47: Container metadata . . . 89
Table 48: Capabilities - Create a CDMI container object using CDMI . . . 91
Table 49: Request headers - Create a container object using CDMI . . . 91
Table 50: Request message body - Create a container object using CDMI . . . 91
Table 51: Response headers - Create a container object using CDMI . . . 93
Table 52: Response message body - Create a container object using CDMI . . . 93

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Table 53: HTTP status codes - Create a CDMI container object using CDMI . . . 94
Table 54: Capabilities - Read a CDMI Container Object using CDMI . . . 97
Table 55: Request headers - Read a container object using CDMI . . . 97
Table 56: Response headers - Read a container object using CDMI . . . 98
Table 57: Response message body - Read a container object using CDMI . . . 98
Table 58: HTTP status codes - Read a container object using CDMI . . . 99
Table 59: Capabilities - Update a CDMI container object using CDMI . . . 103
Table 60: Request headers - Update a container object using CDMI . . . 103
Table 61: Request message body - Update a container object using CDMI . . . 103
Table 62: Response header - Update a container object using CDMI . . . 105
Table 63: HTTP status codes - Update a container object using CDMI . . . 105
Table 64: Capabilities - Delete a CDMI container object using CDMI . . . 107
Table 65: HTTP status codes - Delete a container object using CDMI . . . 107
Table 66: Capabilities - Create a CDMI data object using CDMI . . . 110
Table 67: Request headers - Create a new data object Using CDMI . . . 111
Table 68: Request message body - Create a new data object Using CDMI . . . 111
Table 69: Response headers - Create a new data object using CDMI . . . 115
Table 70: Response message body - Create a new data object using CDMI . . . 115
Table 71: HTTP status codes - Create a new data object using CDMI . . . 116
Table 72: Capabilities - Create a CDMI Queue object using CDMI . . . 120
Table 73: Request headers - Create a new queue object using CDMI . . . 120
Table 74: Request message body - Create a new queue object using CDMI . . . 121
Table 75: Response headers - Create a new queue object using CDMI . . . 122
Table 76: Response message body - Create a new queue object using CDMI . . . 122
Table 77: HTTP status codes - Create a new queue object using CDMI . . . 123

Table 78: Required metadata for a domain object . . . 129
Table 79: Contents of domain summary objects . . . 132
Table 80: Required settings for domain member user objects . . . 134
Table 81: Required settings for domain member delegation objects . . . 135
Table 82: Capabilities - Create a CDMI domain object using CDMI . . . 137
Table 83: Request headers - Create a domain object using CDMI . . . 137
Table 84: Request message body - Create a domain object using CDMI . . . 138
Table 85: Response headers - Create a domain object using CDMI . . . 139
Table 86: Response message body - Create a domain object using CDMI . . . 139
Table 87: HTTP status codes - Create a domain object using CDMI . . . 140
Table 88: Capabilities - Read a CDMI domain object using CDMI . . . 141
Table 89: Request headers - Read a domain object using CDMI . . . 141
Table 90: Response headers - Read a domain object using CDMI . . . 142
Table 91: Response message body - Read a domain object using CDMI . . . 142
Table 92: HTTP status codes - Read a domain object using CDMI . . . 143
Table 93: Capabilities - Update a CDMI domain object using CDMI . . . 145
Table 94: Request headers - Update a domain object using CDMI . . . 145
Table 95: Request message body - Update a domain object using CDMI . . . 146
Table 96: Response header - Update a domain object using CDMI . . . 147
Table 97: HTTP status codes - Update a domain object using CDMI . . . 147
Table 98: Capabilities - Delete a CDMI domain object using CDMI . . . 149
Table 99: HTTP status codes - Delete a domain object using CDMI . . . 150

Table 100: Capabilities - Create a CDMI queue object using CDMI . . . 155
Table 101: Request headers - Create a queue object Using CDMI . . . 156
Table 102: Request message body - Create a queue object using CDMI . . . 156
Table 103: Response headers - Create a queue object Using CDMI . . . 158
Table 104: Response message body - Create a queue object using CDMI . . . 158
Table 105: HTTP status codes - Create a queue object using CDMI . . . 159
Table 106: Capabilities - Read a CDMI queue object using CDMI . . . 161
Table 107: Request headers - Read a queue object using CDMI . . . 162
Table 108: Response headers - Read a queue object using CDMI . . . 162
Table 109: Response message body - Read a queue object using CDMI . . . 162
Table 110: HTTP status codes - Read a queue object using CDMI . . . 165
Table 111: Capabilities - Update a queue object using CDMI . . . 168
Table 112: Request headers - Update a queue object Using CDMI . . . 168
Table 113: Request message body - Update a queue object Using CDMI . . . 168
Table 114: Response header - Update a queue object Using CDMI . . . 170
Table 115: HTTP status codes - Update a queue object using CDMI . . . 170
Table 116: Capabilities - Delete a queue object using CDMI . . . 172
Table 117: HTTP status codes - Delete a queue object Using CDMI . . . 173
Table 118: Capabilities - Enqueue a new queue object value using CDMI . . . 174
Table 119: Request headers - Enqueue a new queue object value using CDMI . . . 174
Table 120: Request message body - Enqueue a new queue object value using CDMI . . . 175

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Table 121: HTTP status codes - Enqueue a new queue object value Using CDMI . . . 177
Table 122: Capabilities - Delete a queue object value using CDMI . . . 180
Table 123: HTTP status codes - Delete a queue object value using CDMI . . . 181

Table 124: System-wide capabilities . . . 185
Table 125: Capabilities for storage system metadata . . . 189
Table 126: Capabilities for data system metadata . . . 190
Table 127: Capabilities for data objects . . . 193
Table 128: Capabilities for container objects . . . 194
Table 129: Capabilities for domain objects . . . 196
Table 130: Capabilities for queue objects . . . 198
Table 131: Capabilities - Read a capabilities object using CDMI . . . 199
Table 132: Request headers - Read a capabilities object using CDMI . . . 199
Table 133: Response headers - Read a capabilities object Using CDMI . . . 200
Table 134: Response message body - Read a capabilities object using CDMI . . . 200
Table 135: HTTP status codes - Read a capabilities object using CDMI . . . 200

Table 136: Elements of the NFS protocol export structure . . . 207
Table 137: Elements of the SMB protocol export structure . . . 209
Table 138: Elements of the iSCSI protocol export structure . . . 210
Table 139: Elements of the WebDAV protocol export structure . . . 211

Table 140: Serialization import behaviour . . . 221

Table 141: Storage system metadata . . . 223
Table 142: Data system metadata . . . 225
Table 143: Provided values of data system metadata . . . 233

Table 144: ACE types . . . 240
Table 145: Who identifiers . . . 240
Table 146: ACE flags . . . 240
Table 147: ACE masks bits . . . 242
Table 148: ACE bit mask/string . . . 248

Table 149: Query matching expressions . . . 262

Table 150: Required metadata for a notification queue . . . 268
Table 151: Notification status metadata . . . 271

Table 152: Required metadata for a query queue . . . 272
Table 153: Query status metadata . . . 273

Table 154: Access modes for DAC . . . 287
Table 155: DAC request . . . 292
Table 156: Packaged DAC request . . . 294
Table 157: DAC response . . . 295
Table 158: Packaged DAC response . . . 296

Table 159: Version-enabled data object metadata items . . . 312

Table 161: Response headers - Inspect a data object using HTTP . . . 329
Table 162: HTTP status codes - Inspect a data object using HTTP . . . 330
Table 163: Request headers - Create a container object using HTTP . . . 332
Table 164: Response Headers - Inspect a container object using HTTP . . . 333
Table 165: HTTP status codes - Inspect a container object using HTTP . . . 333
Table 167: Required metadata for a query queue . . . 337

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412 # Part I

413 # CDMI Preamble

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This Cloud Data Management Interface (CDMI™) International Standard is intended for application developers who are implementing or using cloud storage. It documents how to access cloud storage and to manage the data stored there.

This document is organized as follows:

Table 1: Overview of this document

Clause 1	Scope	Defines the scope of this document
Clause 2	Normative references	Lists the normative references for this document
Clause 3	Terms	Provides terminology used in this document
Clause 4	Conventions	Describes the conventions used in presenting the interfaces and the typographical conventions used in this document
Clause 5	Overview of Cloud Storage	Provides a brief overview of cloud storage and details the philosophy behind this International Standard as a model for the operations
Clause 6	Data Object Resource Operations using HTTP	Provides the normative standard of data object resource operations using HTTP
Clause 7	Container Object Resource Operations using HTTP	Provides the normative standard of container object resource operations using HTTP
Clause 8	Data Object Resource Operations using CDMI	Provides the normative standard of data object resource operations using CDMI
Clause 9	Container Object Resource Operations using CDMI	Provides the normative standard of container object resource operations using CDMI
Clause 10	Domain Object Resource Operations using CDMI	Provides the normative standard of domain object resource operations using CDMI
Clause 11	Queue Object Resource Operations using CDMI	Provides the normative standard of queue object resource operations using CDMI
Clause 12	Capability Object Resource Operations using CDMI	Provides the normative standard of capability object resource operations using CDMI
Clause 13	Exported Protocols	Discusses how virtual machines in the cloud computing environment can use the exported protocols from CDMI containers
Clause 14	Snapshots	Discusses how snapshots are accessed under CDMI containers
Clause 15	Serialization/ Deserialization	Discusses serialization and deserialization, including import and export of serialized data under CDMI
Clause 16	Metadata	Provides the normative standard of the metadata used in the interface
Clause 18	Retention and Hold Management	Describes the optional retention management disciplines to be implemented into the system management functions
Clause 19	Scope Specification	Describes the structure of the scope specification for JSON objects
Clause 20	Results Specification	Provides a standardized mechanism to define subsets of CDMI object contents
Clause 21	Notification Queues	Describes how CDMI clients can efficiently discover what changes have occurred to the system
Clause 22	Query Queues	Describes how CDMI clients can efficiently discover what content matches a given set of metadata query criteria or full-content search criteria
Clause 23	Encrypted Objects	Describes how to work with transparently encrypted objects
Clause 24	Delegated Access Control	Describes how to delegate access control to external systems
Clause 25	Data Object Versions	Describes how to work with versioned data objects
Clause 26	Extensions	Provides informative vendor extensions. Each extension is added to the standard when at least two vendors implement the extension.

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Clause 1

Scope

This CDMI™ International Standard specifies the interface to access cloud storage and to manage the data stored therein. This International Standard applies to developers who are implementing or using cloud storage.

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