



Content Management Interoperability Services (CMIS) Version 1.0 Errata 01

OASIS Approved Errata 01

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Specification URIs

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Related work:

This specification is related to:

- *Content Management Interoperability Services (CMIS) Version 1.0*. OASIS Standard.
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- <http://docs.oasis-open.org/ns/cmisis/core/200908/>
- <http://docs.oasis-open.org/ns/cmisis/restatom/200908/>
- <http://docs.oasis-open.org/ns/cmisis/messaging/200908/>
- <http://docs.oasis-open.org/ns/cmisis/ws/200908/>
- <http://docs.oasis-open.org/ns/cmisis/link/200908/>

Abstract:

This document lists approved errata to the CMIS Version 1.0 OASIS Standard.

Status:

This document was last revised or approved by the OASIS Content Management Interoperability Services (CMIS) TC on the above date. The level of approval is also listed above. Check the "Latest version" location noted above for possible later revisions of this document.

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1 Introduction

This document lists the approved errata to the CMIS v1.0 OASIS Standard. Each one has a number that refers to the issue that triggered the erratum.

As required by the OASIS Technical Committee Process, the approved errata represent changes that are not “substantive”. The changes focus on clarifications to ambiguous or conflicting specification text, where different compliant implementations might have reasonably chosen different interpretations. The intent of the CMIS TC has been to resolve such issues in service of improved interoperability based on implementation and deployment experience.

In this document, errata change instructions are presented with surrounding context as necessary to make the intent clear. Original specification text is often presented as follows, with problem text highlighted in bold:

This is an original specification sentence. **The second sentence needs to be changed, removed, or replaced.**

New specification text is typically presented as follows, with new or changed text highlighted in bold:

This is a **highly** original specification sentence. **This is the wholly new content to replace the old second sentence. It runs on and on and on.**

In a few cases, text needs only to be struck, in which case the change is shown as follows, with text to be removed both highlighted in bold and struck through:

This is yet another original specification sentence which contains ~~**an inappropriately**~~ long description.

In addition to this normative document, non-normative “errata composite” documents may be provided that combine the prescribed corrections with the original specification text, illustrating the changes with margin change bars, struck-through original text, and highlighted new text. These documents, if available, will be found at the same location as this approved form.

All cited line numbers refer to the Word document of the original OASIS Standard specifications in question, not to line numbers in this document or in the errata composite documents.

1.1 Normative References

- | | |
|-----------|--|
| [CMIS1.0] | <i>CMIS v1.0 OASIS Standard</i> , http://docs.oasis-open.org/cmisis/CMIS/v1.0/os/cmisis-spec-v1.0.doc , May 2010 |
|-----------|--|

33 2 Approved Errata

34 Following are the approved errata to the CMIS v1.0 OASIS Standard.

35 2.1 CMIS-534: getAllowableActions Service output seems to restrict to 36 XML based bindings

37 Change Section 2.2.1.2.6 at line 2853.

38 Original:

- AllowableActions: **See `cmisAllowableActionsType` in the CMIS schema.**

39 New:

- **<Array> AllowableActions: The list of allowable actions for the object.**

40 2.2 CMIS-537: getRenditionsExceptions – filterNotValid is overloaded

41 Change Section 2.2.3.1.3 at line 3206-3207.

42 Original:

- `filterNotValid`: The Repository MUST throw this exception if **this** property filter input parameter is not valid.

43 New:

- `filterNotValid`: The Repository MUST throw this exception if **the** property **or rendition** filter input parameter is not valid.

44 Change Section 2.2.3.2.3 at line 3249-3250.

45 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

46 New:

- `filterNotValid`: The Repository MUST throw this exception if **the** property **or rendition** filter input parameter is not valid.

47 Change Section 2.2.3.3.3 at line 3288-3289.

48 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

49 New:

- `filterNotValid`: The Repository MUST throw this exception if **the** property **or rendition** filter input parameter is not valid.

50 Change Section 2.2.3.5.3 at line 3337-3338.

51 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input

parameter is not valid.

52 New:

- `filterNotValid`: The Repository MUST throw this exception if **the property or rendition** filter input parameter is not valid.

53 Change Section 2.2.3.6.3 at line 3438.

54 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

55 New:

- `filterNotValid`: The Repository MUST throw this exception if **the property or rendition** filter input parameter is not valid.

56 Change Section 2.2.4.7.3 at line 3643-3644.

57 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

58 New:

- `filterNotValid`: The Repository MUST throw this exception if **the property or rendition** filter input parameter is not valid.

59 Change Section 2.2.4.9.3 at line 3677-3678.

60 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

61 New:

- `filterNotValid`: The Repository MUST throw this exception if **the property or rendition** filter input parameter is not valid.

62 Change Section 2.2.4.11.3 at line 3717.

63 Original:

- `filterNotValid`: The filter specified is not valid

64 New:

- `filterNotValid`: The **rendition** filter specified is not valid

65 Change Section 2.2.7.4.3 at line 4103-4104.

66 Original:

- `filterNotValid`: The Repository MUST throw this exception if this property filter input parameter is not valid.

67 New:

- `filterNotValid`: The Repository MUST throw this exception if **the property or rendition** filter input parameter is not valid.

68 **2.3 CMIS-564: createDocumentFromSource versioningState param**
69 **needs clarification**

70 Change section 2.2.4.2.1 at lines 3455-3456.

71 Original:

- Enum versioningState: An enumeration specifying what the **versioning** state of the newly-created object **MUST** be. Valid values are:

72 New:

- Enum versioningState: An enumeration specifying what the **versioning** state of the newly-created object **MUST** be. **If the repository does not support versioning, the repository **MUST** ignore the versioningState parameter.** Valid values are:

73 **2.4 CMIS-641: applyACLResponse does not match domain model - no**
74 **changeToken**

75 Change section 2.2.10.2.2 at line 4279.

76 New:

- ~~String changeToken: See section 2.2.1.3.~~

77 **2.5 CMIS-646: cmis:objectTypeId should not be required for**
78 **documents**

79 Change section 2.1.5.4.2 at line 1190.

80 Original:

Required: **False**

81 New:

Required: **True**

82 Change section 2.1.6.1.3 at line 1427.

83 Original:

Required: **False**

84 New:

Required: **True**

85 Change section 2.1.7.1.2 at line 1649.

86 Original:

Required: **False**

87 New:

Required: **True**

88 **2.6 CMIS-647: ACL propagation in ACL capabilities is supposed to be**
89 **an array**

90 Change section 2.1.8.3 at lines 1744-1745.

91 New:

- **<Array>** Enum propagation: specifies, how non-direct ACEs can be handled by the repository using the following values (see section 2.2.10.2 applyACL):

92 Change section 2.1.8.3 at lines 1748-1749.

93 Original:

- ~~propagate: indicates that the ACEs is to be applied to the given object and all inheriting objects.~~

94 New:

- propagate: indicates that the ACEs is to be applied to the given object and all inheriting objects. **Propagate incorporates the support for objectonly.**

95 **2.7 CMIS-648: AllowableActions keys inconsistencies**

96 Change section 2.1.8.3.1 at lines 1813-1818.

97 New:

canGetFolderTree

~~Description: Can get the sub-folder tree of the folder (getFolderTree)~~
~~Base Object: cmis:folder~~
~~Operand: cmis:folder~~
~~Key: canGetFolderTree.Folder~~
~~Permission: Read~~

98 Change section 2.1.8.3.1 at line 1831.

99 Original:

~~Key: canGetFolderParent.Folder~~

100 New:

Key: canGetFolderParent.**Object**

101 Change section 2.1.8.3.1 at line 1838.

102 Original:

~~Key: canGet**Object**Parents.Object~~

103 New:

Key: canGetParents.Object

104 Change section 2.1.8.3.1 at lines 1880-1885.

105 New:

canGetRenditions

~~Description: Can retrieve the renditions of this object (getRenditions)~~

Base Object:	cmis:document, or cmis:folder
Operand:	Object
Key:	canGetRenditions.Object
Permission:	Read

106 Change section 2.1.8.3.1 at lines 1887-1893.

107 New:

canGetContentStream	
Description:	Can get the content stream for the Document object (getContentStream)
Base Object:	cmis:document
Operand:	Object
Key:	canGetContentStream.Object
Permission:	Read

108 Change section 2.1.8.3.1 at line 1913.

109 Original:

Key:	canMoveObject.Target
------	----------------------

110 New:

Key:	canMove.Target
------	----------------

111 Change section 2.1.8.3.1 at line 1920.

112 Original:

Key:	canMoveObject.Source
------	----------------------

113 New:

Key:	canMove.Source
------	----------------

114 Change section 2.1.8.3.1 at lines 1930-1935.

115 New:

canDeleteObject	
Description:	Can delete an object that is a child of this folder (deleteObject)
Base Object:	cmis:folder
Operand:	Folder
Key:	canDelete.Folder
Permission:	Read

116 Change section 2.1.8.3.1, add after line 1935.

117 New:

canGetContentStream	
Base Object:	cmis:document
Action:	Can get the content stream for the Document object (getContentStream)
Operand:	Object

Key:	canViewContent.Object
Permission:	Read

118 Change section 2.1.8.3.1 at line 1942.

119 Original:

Key:	canSetContent Stream .Document
------	--

120 New:

Key:	canSetContent.Document
------	------------------------

121 Change section 2.1.8.3.1 at line 1950.

122 Original:

Key:	canDeleteContent Stream .Document
------	---

123 New:

Key:	canDeleteContent.Document
------	---------------------------

124 Change section 2.1.8.3.1 at line 1980.

125 Original:

Key:	canRemove Object FromFolder.Object
------	--

126 New:

Key:	canRemoveFromFolder.Object
------	----------------------------

127 Change section 2.1.8.3.1 at line 1996.

128 Original:

Key:	canCheckOut .Document
------	----------------------------------

129 New:

Key:	canCheckout .Document
------	------------------------------

130 Change section 2.1.8.3.1 at line 2017.

131 Original:

Key:	canGetAllVersions . Document
------	--

132 New:

Key:	canGetAllVersions. VersionSeries
------	---

133 **2.8 CMIS-650: change atom:id reference from URI to IRI**

134 Change section 3.5.1 at lines 5130-5131.

135 Original:

<ul style="list-style-type: none"> atom:id SHOULD be derived from cmis:objectId. This id MUST be compliant with atom's specification and be a valid URI.

136 New:

<ul style="list-style-type: none"> atom:id SHOULD be derived from cmis:objectId. This id MUST be compliant with atom's specification and be a valid IRI.
--

137 **2.9 CMIS-651: Clarify that URI templates are to be used with GET**

138 Change section 3.6.1, add after line 5361.

139 New:

URI Templates MUST only be used with HTTP GET.

140 **2.10 CMIS-656: Clarify how ETags and cmis:changeToken interact**

141 Change section 3.2.1, add after line 4402.

142 New:

On updates, perform the following checks (HTTP & CMIS levels):

1. If If-Match header is sent by client, ETag value is pulled from HTTP header If-Match per RFC2616. The supplied ETag is compared against the ETag on the server. If the match fails, then status code 412 is used.
2. If cmis:changeToken property is supplied by the client, compare the supplied and the cmis:changeToken on the server. If the comparison fails, then return status code 409 per CMIS.
3. If ETag and cmis:changeToken are both specified, the HTTP If-Match check should be performed first.

143 **2.11 CMIS- 657: Clarify cancelCheckout's proper behavior when doc**
144 **was created in a checked out state.**

145 Change section 2.2.4.1.1 at line 3395.

146 Original:

- ~~checkedout: The document MUST be created in the checked-out state.~~

147 New:

- checkedout: The document MUST be created in the checked-out state. **The checked-out document MAY be visible to other users.**

148 Change section 2.2.7.2 at lines 4023-4024.

149 Original:

~~Description: Reverses the effect of a check-out. Removes the private working copy of the checked-out document, allowing other documents in the version series to be checked out again.~~

150 New:

Description: Reverses the effect of a check-out. Removes the private working copy of the checked-out document, allowing other documents in the version series to be checked out again. **If the private working copy has been created by createDocument, cancelCheckOut MUST delete the created document.**

151 **2.12 CMIS-659: Clarification for properties in state "not set" required**

152 Change section 2.1.2.1 at lines 218-223.

153 Original:

If a value is not provided for a property, the property is in a "value not set" state. There is no "null" value for a property. Through protocol binding, a property is either not set, or is set to a particular value or a list of values.

A multi-valued property is either set or not set in its entirety. An individual value of a multi-valued property MUST NOT be in an individual "value not set" state and hold a position in the list of values. An empty list of values MUST NOT be allowed.

154 New:

A property, either single-valued or multi-valued, MAY be in a "not set" state. CMIS does not support "null" property value.

If a multi-valued property is not in a "not set" state, its property value MUST be a non-empty list of individual values. Each individual value in the list MUST NOT be in a "not set" state and MUST conform to the property's property-type.

155 Change section 2.2.1.2.1 at lines 2784-2785.

156 Original:

~~If a property filter specifies a property that is 'not set', it MUST be represented as a property element without a value element.~~

157 New:

If a property is requested by a filter, a property element MUST be returned for that property. A repository MAY return additional properties. If a returned property is in a "not set" state, a value element MUST NOT be returned for that property.

158 **2.13 CMIS-663: localName for type definition is optional according to** 159 **domain model but is required according to core.xsd schema**

160 Change section 2.1.3.2.1 at line 327 to match the CMIS schema.

161 New:

localName String **(optional)**

162 **2.14 CMIS-674: Change BNF comment to !! style comment**

163 Change section 2.2.1.2.4.1 at line 2826.

164 Original:

```
<text> ::= /* any char except whitespace */
```

165 New:

```
<text> ::= !! any char except whitespace
```

166 **2.15 CMIS-687: cmis:changeToken should not be mandatory if the** 167 **repository doesn't support change tokens**

168 Change section 2.1.4.3.3 at lines 845-846.

169 Original:

~~Repository MUST return this property with non-empty values when an object is requested and the property filter does not exclude them~~

170 New:

Repository **MUST** return this property with non-empty values when an object is requested and the property filter does not exclude them. **If the repository does not support change tokens, this property SHOULD not be set.**

171 Change section 2.1.5.4.2 at lines 1260-1261.

172 Original:

~~Repository **MUST** return this property with non-empty values when an object is requested and the property filter does not exclude them~~

173 New:

Repository **MUST** return this property with non-empty values when an object is requested and the property filter does not exclude them. **If the repository does not support change tokens, this property SHOULD not be set.**

174 Change section 2.1.6.1.3, add after line 1511.

175 New:

Repository **MUST** return this property with non-empty values when an object is requested and the property filter does not exclude them. **If the repository does not support change tokens, this property SHOULD not be set.**

176 Change section 2.1.7.1.2, add after line 1701.

177 New:

Repository **MUST** return this property with non-empty values when an object is requested and the property filter does not exclude them. **If the repository does not support change tokens, this property SHOULD not be set.**

178 **2.16 CMIS-688: Query sample incorrect**

179 Change section 2.1.10.2.4.2.2 at line 2549-2551.

180 Original:

```
SELECT      Y.CLAIM_NUM, X.PROPERTY_ADDRESS, Y.DAMAGE_ESTIMATES  
FROM POLICY AS X JOIN CLAIMS AS Y ON ( X.POLICY_NUM = Y.POLICY_NUM )  
WHERE ( 100000 = ANY Y.DAMAGE_ESTIMATES )
```

181 New:

```
SELECT      Y.CLAIM_NUM, X.PROPERTY_ADDRESS, Y.DAMAGE_ESTIMATES  
FROM ( POLICY AS X JOIN CLAIMS AS Y ON X.POLICY_NUM = Y.POLICY_NUM )  
WHERE ( 100000 = ANY Y.DAMAGE_ESTIMATES )
```

182 **2.17 CMIS-689: invalid property name cmis:createdDate referenced in** 183 **3.5.2**

184 Change section 3.5.2 at lines 5157-5159.

185 Original:

- ~~• app:edited **MUST** be cmis:lastModifiedDate~~
- ~~• atom:updated **MUST** be cmis:lastModifiedDate~~
- ~~• atom:published **MUST** be cmis:createdDate~~

186 New:

- app:edited MUST be **cmis:lastModificationDate**
- atom:updated MUST be **cmis:lastModificationDate**
- atom:published MUST be **cmis:creationDate**

187 **2.18 CMIS-690: cmis:versionLabel cardinality not specified**

188 Change section 2.1.4.3.3, add after line 903.

189 New:

Cardinality:	Single
--------------	--------

190 **2.19 CMIS-695: Escaping section should specify which BNF symbols it applies to**

192 Replace entire section 2.1.10.3 at lines: 2676-2681.

193 Original:

Repositories MUST support the escaping of characters using a backslash (\) in the query statement. The backslash character (\) will be used to escape characters *within quoted strings* in the query as follows:

1. \ ' will represent a single-quote(') character
2. \\ will represent a backslash (\) character
3. Within a LIKE string, \% and _ will represent the literal characters % and _, respectively.
4. All other instances of a \ are errors.

194 New:

Character escaping for character strings differs from SQL-92's escaping. A repository MUST support the escaping of certain literal characters in a character string, or in a text expression, using a backslash character (\) in the following manner. For a <character string literal>, which MUST BE a string enclosed in single-quotes according to the SQL-92 grammar, any occurrence of the single-quote character (') and the escape character (\) in the string MUST BE escaped. This applies to <folder id>, which is a <character string literal>. Furthermore, when a <character string literal> is used in a LIKE predicate, any occurrence of the percent character (%) and the underscore character (_) in the string as a literal MUST BE escaped also. Therefore, within a quoted string in a query:

- The double character \ ' represents a literal single-quote (') character.
- The double character \\ represents a literal backslash (\) character.
- Within a LIKE string, the double characters \% and _ represent a literal percent (%) character and a literal underscore (_) character respectively.
- All other instances of a backslash (\) character are errors.

Using double single-quotes (") as a SQL-92 way to escape a literal single-quote (') character SHOULD BE supported as an allowable alternative to the double character \ '.

For a <text search expression>, a second-level character escaping is required so that the <text search expression> sub-grammar is *isolatable* from the query statement-level grammar. When a text search expression is composed for a query according to the <text search expression> sub-grammar, any occurrence of the following three characters in the expression as a literal character MUST BE escaped: hyphen (-), single-quote ('), and the escape character (\). Then, before this expression is enclosed in single-quotes and inserted into a CONTAINS() predicate, the query statement-level escaping rules described in the above MUST BE applied. This two-level character escaping allows a query statement parser, using statement-level escaping rules, to correctly extract a <text search expression> as a

character string literal independent of the <text search expression> sub-grammar. This extracted <text search expression> can then be correctly interpreted by a full-text search parser independent of the query-statement grammar, using second-level escaping rules. Since the <text search expression> sub-grammar is isolated from the SQL-92 grammar, double single-quotes is not a valid way to escape a literal single-quote character for second-level character escaping.

An <identifier> in a query statement MUST conform to the SQL-92 identifier syntax, and MUST NOT require character escaping.

Example 1:

A query statement that contains a full-text search for the literal string "John'sPresentation-Version2" may be composed as:

```
SELECT ... FROM ... WHERE ... CONTAINS('John\\'sPresentation\\-Version2') ...
```

A query parser extracts from this statement the text search expression "John'sPresentation-Version2" as a character string literal, and passes it to a text-search parser, which interprets it as a single-word full-text search criteria: *John'sPresentation-Version2*.

Example 2:

A query statement that contains a full-text search for the phrase "Content Management" may be composed as:

```
SELECT ... FROM ... WHERE ... CONTAINS('\Content Management') ...
```

A query parser extracts from this statement the text search expression "'Content Management'" as a character string literal, and passes it to a text-search parser, which interprets it as a full-text search criteria consisting of a single phrase: *Content Management*. There is no second-level escaping.

195 **2.20 CMIS-697: Word plus phrase example for CONTAINS query**

196 Replace section 2.1.10.3. The same changes for CMIS-695.

197 **2.21 CMIS-706: Domain model should state objects are not**
198 **constrained**

199 Add to section 2.1.2 following line 212.

200 New:

CMIS objects MAY expose additional information, such as vendor-specific workflow data, beyond the attributes described above. In this respect, the data model can be extended as desired. This specification does not standardize such extensions.

201

202 **2.22 CMIS-725: Remove hyperlinks to namespace URIs in the**
203 **specification document**

204 Remove namespace URI hyperlinks from the following lines:

205 4319, 4321, 4323, 4325, 5057, 5064, 5070, 5077,5084, 5090, 5097, 5102, 5108, 5113, 5332, 5337, 5339,
206 5341, 6429, 7237, 7578, 8221, 8866, 8868, 8870, 8871, 9008, 9010, 9012, 9013, 9153, 9155, 9157,
207 9158, 9159, 9280, 9282, 9283, 9391, 9393, 9394

208 Remove all namespace URI hyperlinks from the title page (section " Declared XML Namespace(s)").

209

210 Additionally, remove other hyperlinks from the following lines that are either incorrect or rendered
211 incorrectly in some renditions of the specification document:
212 183, 285, 293, 294, 296, 297, 303, 371, 451, 584, 1075, 1076, 2124, 2292, 2440, 2577, 2613, 2672,
213 2695, 2724, 2877, 3007, 3037, 3053, 3069, 3104, 3119, 3126, 3150, 3210, 3880, 3989, 4041, 5574,
214 9710, 9743, 9778, 9812

215
216 Additionally, change section 1.2 at line 28-30. (Note the hyperlink.)
217 Original:

J. Reschke Editor, A. Brown, G. Clemm, *Link Relation Types for Simple Version Navigation
between Web Resources*, <http://www.ietf.org/id/draft-brown-versioning-link-relations-07.txt>, 2010

218 New:

J. Reschke Editor, A. Brown, G. Clemm, *Link Relation Types for Simple Version Navigation
between Web Resources*, <http://www.ietf.org/id/draft-brown-versioning-link-relations-08.txt>, 2010

219

220 Appendix A. Acknowledgements

221 The following individuals have participated in the creation of this specification and are gratefully
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223

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278 **Appendix B. Revision History**

279

Revision	Date	Editor	Changes Made
1.0	10/15/2010	Florian Müller	First draft

280