



Cloud Data Management Interface Extension: Domain Authentication Methods

Version 1.0b

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Working Draft

Revision History

Date	Version	By	Comments
2011-12-12	1.0a	David Slik	Initial Creation
2012-01-18	1.0b	Marie McMinn	Tech edit
2012-01-24	1.0c	David Slik	Edits at the January face-to-face meeting.

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Domain Authentication Methods Extension

Overview

The CDMI standard provides guidance that either HTTP digest or basic authentication should be used. It also provides mechanisms by which additional authentication methods can be added to the standard. However, the standard neither provides a method by which a client can discover which authentication methods that the system supports, nor a method by which an administrator can specify which authentication methods should be provided to clients on a per-domain basis.

This proposed extension adds the ability to discover a list of supported authentication methods via capabilities. It also adds a method to indicate which authentication should be supported via domain data system metadata and a method to discover which authentication methods are being provided on a domain-by-domain basis.

Modifications to the CDMI 1.0.1 spec:

1) In Clause "10.1.1 Domain Object Metadata", Append to end

Domains may also contain domain-specific data system metadata items as defined in 16.4 and 16.5. Domain data system metadata shall be inherited to child domain objects.

2) In Clause "10.2.8 Example", replace the response body metadata field with:

```
"metadata":
{
  "cdmi_authentication_methods_provided": "anonymous, basic"
}
```

3) In Clause "10.3.8 Examples", in Example 1, replace the response body metadata field with:

```
"metadata":
{
  "cdmi_authentication_methods_provided": "anonymous, basic"
}
```

4) In Clause "12.1.3 Data System Metadata Capabilities", append to end of "Table 104 - Capabilities for Data System Metadata"

cdmi_authentication_methods	JSON Array of JSON Strings	<p>If present, this capability contains a list of authentication methods supported by a domain. The following values for authentication method strings are defined:</p> <ul style="list-style-type: none"> • "anonymous" – No authentication required • "basic" – HTTP basic authentication required • "digest" – HTTP digest authentication required <p>When present, the cdmi_authentication_methods data system metadata shall be supported for all domains.</p>
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5) In Clause "16.4 Support for Data System Metadata", append to end of "Table 118 - Data System Metadata"

cdmi_authentication_methods	JSON Array of JSON Strings	This metadata shall be set by the client to a list of authentication methods requested to be enabled for the domain. Supported authentication method values are indicated by the cdmi_authentication_methods capability.
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6) In Clause "16.5 Support for Provided Data System Metadata", append to end of "Table 119 - Provided Values of Data Systems Metadata Items"

cdmi_authentication_methods_provided	JSON Array of JSON Strings	Contains a list of authentication methods enabled for the domain. (See cdmi_authentication_methods in Table 118 for the format).
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