

[MS-DMCSOM]:

Document Management Client-Side Object Model Protocol

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Table of Contents

1	Introduction	6
1.1	Glossary	6
1.2	References	7
1.2.1	Normative References	7
1.2.2	Informative References	7
1.3	Overview	7
1.4	Relationship to Other Protocols	8
1.5	Prerequisites/Preconditions	8
1.6	Applicability Statement	8
1.7	Versioning and Capability Negotiation	8
1.8	Vendor-Extensible Fields	8
1.9	Standards Assignments.....	8
2	Messages.....	9
2.1	Transport	9
2.2	Message Syntax.....	9
3	Protocol Details.....	10
3.1	Server Details.....	10
3.1.1	Abstract Data Model.....	10
3.1.2	Timers	10
3.1.3	Initialization.....	10
3.1.4	Higher-Layer Triggered Events	10
3.1.5	Message Processing Events and Sequencing Rules	10
3.1.5.1	Microsoft.SharePoint.Client.Video.EmbedCodeConfiguration	10
3.1.5.1.1	Properties.....	10
3.1.5.1.1.1	Scalar Properties.....	10
3.1.5.1.1.1.1	AutoPlay.....	10
3.1.5.1.1.1.2	DisplayTitle.....	10
3.1.5.1.1.1.3	LinkToOwnerProfilePage	11
3.1.5.1.1.1.4	LinkToVideoHomePage	11
3.1.5.1.1.1.5	Loop	11
3.1.5.1.1.1.6	PixelHeight	11
3.1.5.1.1.1.7	PixelWidth	11
3.1.5.1.1.1.8	PreviewImagePath.....	11
3.1.5.1.1.1.9	StartTime	12
3.1.5.1.1.2	ObjectPath Properties.....	12
3.1.5.2	Microsoft.SharePoint.Client.Video.VideoSet	12
3.1.5.2.1	Properties.....	12
3.1.5.2.1.1	Scalar Properties.....	12
3.1.5.2.1.2	ObjectPath Properties.....	12
3.1.5.2.2	Methods	12
3.1.5.2.2.1	Scalar Methods.....	12
3.1.5.2.2.1.1	GetEmbedCode	12
3.1.5.2.2.1.2	UploadVideo	13
3.1.5.2.2.1.3	Create.....	14
3.1.5.2.2.1.4	CreateVideo.....	15
3.1.5.2.2.2	ObjectPath Methods	15
3.1.5.2.2.2.1	MigrateVideo.....	15
3.1.5.2.2.2.2	GetDocumentSet	16
3.1.5.3	Microsoft.SharePoint.Client.DocumentSet.DocumentSet.....	16
3.1.5.3.1	Properties.....	16
3.1.5.3.1.1	Scalar Properties.....	16
3.1.5.3.1.2	ObjectPath Properties.....	17
3.1.5.3.2	Methods	17

3.1.5.3.2.1	Scalar Methods	17
3.1.5.3.2.1.1	Create	17
3.1.5.3.2.2	ObjectPath Methods	17
3.1.5.3.2.2.1	GetDocumentSet	17
3.1.5.4	Microsoft.SharePoint.Client.DocumentSet.AllowedContentTypeCollection	18
3.1.5.4.1	Properties	18
3.1.5.4.1.1	Scalar Properties	18
3.1.5.4.1.2	ObjectPath Properties	18
3.1.5.4.2	Methods	18
3.1.5.4.2.1	Scalar Methods	18
3.1.5.4.2.1.1	Add	18
3.1.5.4.2.1.2	Remove	18
3.1.5.4.2.2	ObjectPath Methods	19
3.1.5.5	Microsoft.SharePoint.Client.DocumentSet.DefaultDocument	19
3.1.5.5.1	Properties	19
3.1.5.5.1.1	Scalar Properties	19
3.1.5.5.1.1.1	ContentTypeId	19
3.1.5.5.1.1.2	Name	19
3.1.5.5.1.2	ObjectPath Properties	19
3.1.5.5.2	Methods	19
3.1.5.5.2.1	Scalar Methods	19
3.1.5.5.2.2	ObjectPath Methods	19
3.1.5.6	Microsoft.SharePoint.Client.DocumentSet.DefaultDocumentCollection	19
3.1.5.6.1	Properties	20
3.1.5.6.1.1	Scalar Properties	20
3.1.5.6.1.2	ObjectPath Properties	20
3.1.5.6.2	Methods	20
3.1.5.6.2.1	Scalar Methods	20
3.1.5.6.2.1.1	ChangeContentTypeForDocument	20
3.1.5.6.2.1.2	Remove	20
3.1.5.6.2.2	ObjectPath Methods	20
3.1.5.6.2.2.1	Add	20
3.1.5.7	Microsoft.SharePoint.Client.DocumentSet.DocumentSetTemplate	21
3.1.5.7.1	Properties	21
3.1.5.7.1.1	Scalar Properties	21
3.1.5.7.1.2	ObjectPath Properties	21
3.1.5.7.1.2.1	AllowedContentTypes	21
3.1.5.7.1.2.2	DefaultDocuments	21
3.1.5.7.1.2.3	SharedFields	21
3.1.5.7.1.2.4	WelcomePageFields	21
3.1.5.7.2	Methods	22
3.1.5.7.2.1	Scalar Methods	22
3.1.5.7.2.1.1	GetContentTypeId	22
3.1.5.7.2.1.2	IsChildOfDocumentSetContentType	22
3.1.5.7.2.1.3	Update	22
3.1.5.7.2.2	ObjectPath Methods	22
3.1.5.7.2.2.1	GetDocumentSetTemplate	22
3.1.5.8	Microsoft.SharePoint.Client.DocumentSet.SharedFieldCollection	23
3.1.5.8.1	Properties	23
3.1.5.8.1.1	Scalar Properties	23
3.1.5.8.1.2	ObjectPath Properties	23
3.1.5.8.2	Methods	23
3.1.5.8.2.1	Scalar Methods	23
3.1.5.8.2.1.1	Add	23
3.1.5.8.2.1.2	Remove	23
3.1.5.8.2.2	ObjectPath Methods	23
3.1.5.9	Microsoft.SharePoint.Client.DocumentSet.WelcomePageFieldCollection	24
3.1.5.9.1	Properties	24

3.1.5.9.1.1	Scalar Properties.....	24
3.1.5.9.1.2	ObjectPath Properties.....	24
3.1.5.9.2	Methods.....	24
3.1.5.9.2.1	Scalar Methods.....	24
3.1.5.9.2.1.1	Add.....	24
3.1.5.9.2.1.2	Remove.....	24
3.1.5.9.2.2	ObjectPath Methods.....	24
3.1.6	Timer Events.....	24
3.1.7	Other Local Events.....	25
4	Protocol Examples.....	26
4.1	Upload a Video.....	26
4.2	Retrieve the Embed Code for a Video.....	26
5	Security.....	28
5.1	Security Considerations for Implementers.....	28
5.2	Index of Security Parameters.....	28
6	Appendix A: Product Behavior.....	29
7	Change Tracking.....	30
8	Index.....	31

1 Introduction

The Document Management Client-Side Object Model Protocol provides types, methods, and properties to enable a protocol client to upload videos and update video display properties on a collaboration server.

Sections 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

1.1 Glossary

This document uses the following terms:

absolute URL: The full Internet address of a page or other World Wide Web resource. The absolute URL includes a protocol, such as "http," a network location, and an optional path and file name — for example, <http://www.treyresearch.net/>.

authentication: The act of proving an identity to a server while providing key material that binds the identity to subsequent communications.

content type: A named and uniquely identifiable collection of settings and fields that store metadata for individual items in a SharePoint list. One or more content types can be associated with a list, which restricts the contents to items of those types.

CSOM binary: An array of 8-bit, unsigned integers that can be used in an XML request or as a string in JSON response text.

CSOM Boolean: A Boolean value that can be used in an XML request or JSON response text. A CSOM Boolean value is either "true" or "false".

CSOM GUID: A GUID, as described in [\[MS-DTYP\]](#), that can be used in an XML request or as a string in JSON response text.

CSOM Stream: A series of bytes that is used to transfer data and that supports reading, writing, and seeking.

CSOM String: A representation of text as a series of Unicode characters. It can be used in an XML request or JSON response text.

CSOM UInt32: A 32-bit, unsigned integer value, which is the UInt32 type described in [\[MS-DTYP\]](#), that can be used in an XML request or as a number in JSON response text. The range of CSOM UInt32 values is from "0" to "4294967295".

embed code: A block of data containing information needed to embed a video in a user interface element. This information can include the path to the video, the height and width of the video, and so on.

folder: A file system construct. File systems organize a volume's data by providing a hierarchy of objects, which are referred to as folders or directories, that contain files and can also contain other folders.

link: When the value of an attribute refers to a directory object, and the attribute's Attribute-Schema object has an even value for attribute linkId, then that attribute value is a link. Sometimes referred to as a forward link.

list: A container within a SharePoint site that stores list items. A list has a customizable schema that is composed of one or more fields.

list item: An individual entry within a SharePoint list. Each list item has a schema that maps to fields in the list that contains the item, depending on the content type of the item.

root folder: The folder at the top of a hierarchy of folders in a list.

server-relative URL: A relative URL that does not specify a scheme or host, and assumes a base URI of the root of the host, as described in [\[RFC3986\]](#).

site: A group of related pages and data within a SharePoint site collection. The structure and content of a site is based on a site definition. Also referred to as SharePoint site and web site.

static CSOM method: A class method that is accessed through the type name rather than an instance of the class.

Uniform Resource Locator (URL): A string of characters in a standardized format that identifies a document or resource on the World Wide Web. The format is as specified in [\[RFC1738\]](#).

video container: A data type that stores information needed to display videos on a collaboration server.

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as defined in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the [Errata](#).

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information.

[MS-CSOMSPT] Microsoft Corporation, "[SharePoint Client-Side Object Model Protocol](#)".

[MS-CSOM] Microsoft Corporation, "[SharePoint Client Query Protocol](#)".

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, <http://www.rfc-editor.org/rfc/rfc2616.txt>

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, <http://www.rfc-editor.org/rfc/rfc2818.txt>

[RFC4627] Crockford, D., "The application/json Media Type for JavaScript Object Notation (JSON)", RFC 4627, July 2006, <http://www.rfc-editor.org/rfc/rfc4627.txt>

1.2.2 Informative References

None.

1.3 Overview

This protocol defines types, methods, and properties that protocol clients use to access video data on a **site** on a protocol server. The set of types, properties, and methods provide the ability for remote clients to upload video, and view and update the **embed code** for a **video container**.

1.4 Relationship to Other Protocols

The Document Management Client Side Object Model Protocol is a set of types, properties, and methods that can be accessed by using the SharePoint Client Query protocol as described in [\[MS-CSOM\]](#). This protocol uses JSON as described in [\[RFC4627\]](#) to format data returned to a protocol client. This protocol also uses HTTP, as described in [\[RFC2616\]](#), and HTTPS, as described in [\[RFC2818\]](#). The dependencies for this protocol are shown in the following layering diagram.

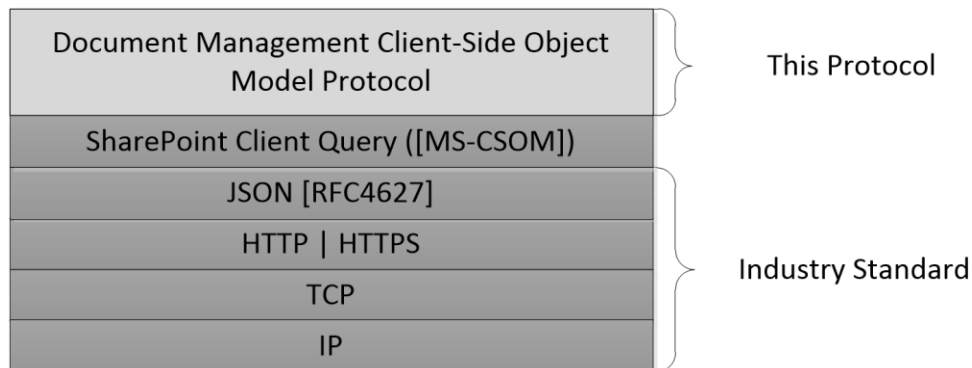


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against video loaded on a **site** that is identified by a **Uniform Resource Locator (URL)** that is recognized by protocol clients. This protocol assumes that **authentication** has been performed by underlying protocols.

1.6 Applicability Statement

This protocol can be used by a protocol client to manage video data on a protocol server. This protocol is optimized to enable a protocol client to specify the exact set of data and operations to perform in a single batch, making it a suitable solution when the connection speed between the protocol client and the protocol server is slow. This protocol is not suitable and is inefficient if both the protocol client and protocol server are on the same computer. In this case, the protocol client can use an API that does not require communication over a network.

1.7 Versioning and Capability Negotiation

None.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

Messages are transported by using the SharePoint Client Query Protocol, as specified in [\[MS-CSOM\]](#).

2.2 Message Syntax

None.

3 Protocol Details

3.1 Server Details

3.1.1 Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

This protocol provides three parent types:

- **Microsoft.SharePoint.Client.Video.EmbedCodeConfiguration** (section [3.1.5.1](#))
- **Microsoft.SharePoint.Client.Video.VideoSet** (section [3.1.5.2](#))
- **Microsoft.SharePoint.Client.DocumentSet.DocumentSet** (section [3.1.5.3](#))

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

None.

3.1.5 Message Processing Events and Sequencing Rules

3.1.5.1 Microsoft.SharePoint.Client.Video.EmbedCodeConfiguration

TypeId: {294CF1EB-CEF4-49E0-B114-648ABB3916AF}

ShortName: SP.Video.EmbedCodeConfiguration

Specifies the set of properties used in configuring the **embed code** for a video.

3.1.5.1.1 Properties

3.1.5.1.1.1 Scalar Properties

3.1.5.1.1.1.1 AutoPlay

Type: **CSOM Boolean**

Accessibility: Read/Write

Specifies whether to start playing the video automatically. If not specified, defaults to false.

3.1.5.1.1.1.2 DisplayTitle

Type: CSOM Boolean

Accessibility: Read/Write

Specifies whether to display title of the video in the **video container**. If not specified, defaults to false.

3.1.5.1.1.1.3 LinkToOwnerProfilePage

Type: CSOM Boolean

Accessibility: Read/Write

Specifies whether to, in the title bar of the video, add a **link** to the profile page of the video owner. If not specified, defaults to false.

3.1.5.1.1.1.4 LinkToVideoHomePage

Type: CSOM Boolean

Accessibility: Read/Write

Specifies whether to, in the title bar of the video, add a **link** to the video player page. If not specified, defaults to false.

3.1.5.1.1.1.5 Loop

Type: CSOM Boolean

Accessibility: Read/Write

Specifies whether to automatically restart the video from the beginning after it finishes. If not specified, defaults to false.

3.1.5.1.1.1.6 PixelHeight

Type: CSOM UInt32

Accessibility: Read/Write

Specifies the **video container** height in pixels. If not specified, the height will be taken from the video dimensions.

3.1.5.1.1.1.7 PixelWidth

Type: CSOM UInt32

Accessibility: Read/Write

Specifies the **video container** width in pixels. If not specified, the width will be taken from the video dimensions.

3.1.5.1.1.1.8 PreviewImagePath

Type: CSOM String

Accessibility: Read/Write

Specifies **Uniform Resource Locator (URL)** for the preview image that displays before the video plays.

3.1.5.1.1.1.9 StartTime

Type: **CSOM UInt32**

Accessibility: Read/Write

Specifies the offset in seconds from the beginning of the video stream when playback starts. If not specified, defaults to 0.

3.1.5.1.1.2 ObjectPath Properties

None.

3.1.5.2 Microsoft.SharePoint.Client.Video.VideoSet

TypeId: {999F0B44-5022-4C04-A0C3-D0705E44395F}

ShortName: SP.Video.VideoSet

A class that specifies a **folder** that contains all related information about a video, such as different renditions of the video or the thumbnail image.

3.1.5.2.1 Properties

3.1.5.2.1.1 Scalar Properties

None.

3.1.5.2.1.2 ObjectPath Properties

None.

3.1.5.2.2 Methods

3.1.5.2.2.1 Scalar Methods

3.1.5.2.2.1.1 GetEmbedCode

This method is a **static CSOM method**.

Return Type: **CSOM String**

Returns a string containing an embed code for the video at the specified path. The returned embed code is an HTML string containing an iframe element whose attributes are determined by the properties, as specified in section [3.1.5.1.1](#), that are used as input parameters. This iframe element MUST conform to the following schema:

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema elementFormDefault="qualified"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="iframe">
    <xs:complexType>
      <xs:attribute name="type" type="xs:string"/></xs:attribute>
      <xs:attribute name="width" type="xs:string"/></xs:attribute>
      <xs:attribute name="height" type="xs:string"/></xs:attribute>
      <xs:attribute name="src" type="xs:string"/></xs:attribute>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

```

    <xs:attribute name ="data-title" type="xs:string"></xs:attribute>
    <xs:attribute name ="data-description" type ="xs:string"></xs:attribute>
    <xs:attribute name ="data-duration" type ="xs:string"></xs:attribute>
  </xs:complexType>
</xs:element>
</xs:schema>

```

With the following attributes:

type: The format type of the embed code used to specify the video properties. MUST be "text/html".

width: The width of the video container in pixels.

height: The height of the video container in pixels.

src: A string containing the **URL** of the resource on the server that will play the video inside the iframe.

data-title: The title of the video.

data-description: The description of the video.

data-duration: The duration of the video in seconds.

Parameters:

videoPath: **Absolute URL** or relative Uniform Resource Locator (URL) for the video item or player page.

Type: CSOM String

It MUST NOT be NULL. It MUST NOT be empty.

properties: Optional properties to be used to configure the **embed code**.

Type: Microsoft.SharePoint.Client.Video.EmbedCodeConfiguration

Exceptions:

Error Code	Error Type Name	Condition
-2147024809	System.ArgumentException	Video cannot be found at the specified path.
-2147467261	System.ArgumentNullException	Video cannot be found if the path provided is blank or NULL.

3.1.5.2.2.1.2 UploadVideo

This method is a **static CSOM method**.

Return Type: CSOM String

Uploads the video file with the specified file name to the specified **list**.

Returns the **absolute URL** of the uploaded video file.

Parameters:

list: List where the file is uploaded.

Type: Microsoft.SharePoint.Client.List

Microsoft.SharePoint.Client.List is defined in [\[MS-CSOMSPT\]](#) section 3.2.5.79.

It MUST NOT be NULL.

fileName: File name of the video, including the extension.

Type: CSOM String

It MUST NOT be NULL. It MUST NOT be empty.

file: File stream to be uploaded.

Type: **CSOM Stream**

It MUST NOT be NULL.

overwriteIfExists: Overwrites the existing file, if set to **true**. If set to **false**, and the file with this name exists, it will not be modified and this method call will have no effect.

Type: **CSOM Boolean**

parentFolderPath: Optional **server-relative URL** for the **folder** within the list where the file can be uploaded. If **NULL**, the file will be uploaded to the **root folder**.

Type: CSOM String

Exceptions:

Error Code	Error Type Name	Condition
-1	System.InvalidOperationException	Cannot upload video because another folder with the same name as specified in <i>fileName</i> without the extension already exists.

3.1.5.2.2.1.3 Create

This method is a **static CSOM method**.

Return Type: **CSOM String**

Creates a **VideoSet** (section [3.1.5.2](#)) object on the server and returns the **URL** of the new **VideoSet** as a string.

Parameters:

parentFolder: The **folder** inside which to create the new **VideoSet**.

Type: Microsoft.SharePoint.Client.Folder

It MUST NOT be NULL.

name: The name to give to the new **VideoSet**.

Type: CSOM String

It MUST NOT be empty.

ctid: The identifier of the content type to give to the new **VideoSet**.

Type: Microsoft.SharePoint.Client.ContentTypeId

This identifier MUST be of a content type that exists in the target library and that is a child of the base **VideoSet** content type.

It MUST NOT be NULL.

Exceptions:

Error Code	Error Type Name	Condition
-1	System.InvalidOperationException	Cannot create video set because another file or folder with this name already exists.

3.1.5.2.2.1.4 CreateVideo

This method is a **static CSOM method**.

Return Type: CSOM String

Creates a **VideoSet** (section [3.1.5.2](#)) object on the server and returns the **URL** of the new **VideoSet** as a string.

Parameters:

parentFolder: The folder inside which to create the new **VideoSet**.

Type: Microsoft.SharePoint.Client.Folder

It MUST NOT be NULL.

name: The name to give to the new **VideoSet**.

Type: CSOM String

It MUST NOT be empty.

ctid: The identifier of the content type to give to the new **VideoSet**.

Type: Microsoft.SharePoint.Client.ContentTypeId

This identifier MUST be of a content type that exists in the target library and that is a child of the base **VideoSet** content type.

It MUST NOT be NULL.

Exceptions:

Error Code	Error Type Name	Condition
-1	System.InvalidOperationException	Cannot create video set because another file or folder with this name already exists.

3.1.5.2.2.2 ObjectPath Methods

3.1.5.2.2.2.1 MigrateVideo

This method is a **static CSOM method**.

Return Type: Microsoft.SharePoint.Client.ListItem

Migrates specified standalone video file into the representation required by video **content type**.

Returns the **list item** ([\[MS-CSOMSPT\]](#) section [3.2.5.87](#)) corresponding to the migrated video or to the specified input file, if migration could not complete.

For migration to be attempted, the input file MUST be in a **list** which contains the video content type and recognized by the server as a video file. Otherwise the specified file will not be modified.

Parameters:

videoFile: Standalone video file to be migrated, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.64](#).

Type: Microsoft.SharePoint.Client.File

It MUST NOT be NULL.

Exceptions:

Error Code	Error Type Name	Condition
-2147467261	System.ArgumentNullException	Video file parent hierarchy cannot be established.
-2147024894	System.IO.FileNotFoundException	Video file cannot be found.

3.1.5.2.2.2.2 GetDocumentSet

This method is a **static CSOM method**.

Return Type: Microsoft.SharePoint.Client.DocumentSet.DocumentSet

See section [3.1.5.3.2.2.1](#)

Parameters:

folder: The SP.Folder ([\[MS-CSOMSPT\]](#) section [3.2.5.72](#)) object from which to create the video set.

Type: Microsoft.SharePoint.Client.Folder

It MUST NOT be NULL.

3.1.5.3 Microsoft.SharePoint.Client.DocumentSet.DocumentSet

TypeId: {E32A87F7-B866-407D-971D-027ED940D50F}

ShortName: SP.DocumentSet.DocumentSet

Represents a document set object on the server.

3.1.5.3.1 Properties

3.1.5.3.1.1 Scalar Properties

None.

3.1.5.3.1.2 ObjectPath Properties

None.

3.1.5.3.2 Methods

3.1.5.3.2.1 Scalar Methods

3.1.5.3.2.1.1 Create

This method is a **static CSOM method**.

Return Type: **CSOM String**

Creates a **DocumentSet** (section [3.1.5.3](#)) object on the server and returns the **URL** of the new **DocumentSet** as a string.

Parameters:

parentFolder: The **folder** inside which to create the new **DocumentSet**.

Type: Microsoft.SharePoint.Client.Folder

It MUST NOT be NULL.

name: The name to give to the new **DocumentSet**.

Type: CSOM String

All the rules for naming folders ([\[MS-CSOMSPT\]](#) section [3.2.5.72.1.1.5](#)) apply to this string.

It MUST NOT be empty.

ctid: The identifier of the content type to give to the new document set.

Type: Microsoft.SharePoint.Client.ContentTypeId

This identifier MUST be of a content type that exists in the target library and that is a child of the base **DocumentSet** content type.

It MUST NOT be NULL.

Exceptions:

Error Code	Error Type Name	Condition
-1	System.InvalidOperationException	Cannot create document set because another file or folder with this name already exists.

3.1.5.3.2.2 ObjectPath Methods

3.1.5.3.2.2.1 GetDocumentSet

This method is a **static CSOM method**.

Return Type: Microsoft.SharePoint.Client.DocumentSet.DocumentSet

Retrieves the document set object from a specified folder object

Parameters:

folder: the SP.Folder (as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.72) object from which to create the document set

Type: Microsoft.SharePoint.Client.Folder

It MUST NOT be NULL.

3.1.5.4 Microsoft.SharePoint.Client.DocumentSet.AllowedContentTypeCollection

TypeId: {60664BB3-3D6D-49C5-9573-1D524EE82E34}

ShortName: SP.DocumentSet.AllowedContentTypeCollection

Collection of content type identifiers (as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.30) that are allowed on the document set that use a particular document set template.

3.1.5.4.1 Properties

3.1.5.4.1.1 Scalar Properties

None.

3.1.5.4.1.2 ObjectPath Properties

None.

3.1.5.4.2 Methods

3.1.5.4.2.1 Scalar Methods

3.1.5.4.2.1.1 Add

Return Type: None

Adds a content type identifier to the collection, if it does not already exist in the collection.

Parameters:

ctId: content type identifier to be added.

Type: Microsoft.SharePoint.Client.ContentTypeId

3.1.5.4.2.1.2 Remove

Return Type: None

Removes a content type identifier from the collection. MUST throw System.InvalidOperationException if the content type identifier is not present in the collection.

Parameters:

ctId: content type identifier to be removed from the collection.

Type: Microsoft.SharePoint.Client.ContentTypeId

3.1.5.4.2.2 ObjectPath Methods

None.

3.1.5.5 Microsoft.SharePoint.Client.DocumentSet.DefaultDocument

TypeId: {3857FB61-5135-4F22-91AE-F5DD7BF7A3A9}

ShortName: SP.DocumentSet.DefaultDocument

Default documents are provisioned for a document set when the document set is created. The collection of default documents (as specified in section [3.1.5.6](#)) to be provisioned when creating a document set is configured on the document set template (as specified in section [3.1.5.7](#)).

3.1.5.5.1 Properties

3.1.5.5.1.1 Scalar Properties

3.1.5.5.1.1.1 ContentTypeId

Type: Microsoft.SharePoint.Client.ContentTypeId

Accessibility: Read/Write

Content type identifier of the default document, as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.30

3.1.5.5.1.1.2 Name

Type: **CSOM String**

Accessibility: Read Only

Name of the default document

3.1.5.5.1.2 ObjectPath Properties

None.

3.1.5.5.2 Methods

3.1.5.5.2.1 Scalar Methods

None.

3.1.5.5.2.2 ObjectPath Methods

None.

3.1.5.6 Microsoft.SharePoint.Client.DocumentSet.DefaultDocumentCollection

TypeId: {36D215C9-7F02-426F-9689-E08BEA511D74}

ShortName: SP.DocumentSet.DefaultDocumentCollection

Collection of the default documents (as specified in section [3.1.5.5](#)) to be provisioned on the document set when document set is created.

3.1.5.6.1 Properties

3.1.5.6.1.1 Scalar Properties

None.

3.1.5.6.1.2 ObjectPath Properties

None.

3.1.5.6.2 Methods

3.1.5.6.2.1 Scalar Methods

3.1.5.6.2.1.1 ChangeContentTypeForDocument

Return Type: CSOM Boolean

Updates the content type identifier (as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.30) of the default document. Returns false if the current content type identifier on the specified document is identical to the new one. If the document is not found throws System.ArgumentOutOfRangeException. Otherwise returns true.

Parameters:

name: Name of the default document to be updated. MUST NOT be NULL or empty string

Type: CSOM String

contentTypeId: New content type identifier for the default document.

Type: Microsoft.SharePoint.Client.ContentTypeId

3.1.5.6.2.1.2 Remove

Return Type: None

Removes the specified default document from the collection. If the document is not found, ignores the error.

Parameters:

name: Name of the default document to be removed. MUST NOT be NULL or empty string.

Type: CSOM String

3.1.5.6.2.2 ObjectPath Methods

3.1.5.6.2.2.1 Add

Return Type: Microsoft.SharePoint.Client.DocumentSet.DefaultDocument

If a default document with specified content type identifier already exists in the collection, or if the default document with the specified name already exists in the collection, throws System.InvalidOperationException. Otherwise, adds a new default document to the collection.

Parameters:

name: Name of the default document

Type: **CSOM String**

ctId: Content type identifier of the default document.

Type: Microsoft.SharePoint.Client.ContentTypeId

content: file content of the default document. The format of the file content is client implementation details and is opaque to the server.

Type: **CSOM binary**

3.1.5.7 Microsoft.SharePoint.Client.DocumentSet.DocumentSetTemplate

TypeId: {1554AF8C-7213-418C-A4A8-B06E7603C68A}

ShortName: SP.DocumentSet.DocumentSetTemplate

Template of the document set, associated with the content type identifier. When a new document set is created a template is applied according to the specified content type identifier of the document set. Document set template provides extensions specific to configuring document sets on top of content types.

3.1.5.7.1 Properties**3.1.5.7.1.1 Scalar Properties**

None.

3.1.5.7.1.2 ObjectPath Properties**3.1.5.7.1.2.1 AllowedContentTypes**

Type: Microsoft.SharePoint.Client.DocumentSet.AllowedContentTypeCollection

Accessibility: Read Only

Collection of the content type identifiers that are allowed to be associated with the documents in the document set. Every document in the document set **MUST** be associated with one of the content types in the AllowedContentTypeCollection.

3.1.5.7.1.2.2 DefaultDocuments

Type: Microsoft.SharePoint.Client.DocumentSet.DefaultDocumentCollection

Accessibility: Read Only

Collection of default documents that will be provisioned with the document set when a new document set is created, as specified in section [3.1.5.6](#).

3.1.5.7.1.2.3 SharedFields

Type: Microsoft.SharePoint.Client.DocumentSet.SharedFieldCollection

Accessibility: Read Only

Collection of shared fields that will be provisioned on the document set when a new document set is created, as specified in section [3.1.5.8](#).

3.1.5.7.1.2.4 WelcomePageFields

Type: Microsoft.SharePoint.Client.DocumentSet.WelcomePageFieldCollection

Accessibility: Read Only

Collection of welcome page fields provisioned on the document set when a new document set is created, as specified in section [3.1.5.9](#).

3.1.5.7.2 Methods

3.1.5.7.2.1 Scalar Methods

3.1.5.7.2.1.1 GetContentTypeId

This method is a **static CSOM method**.

Return Type: Microsoft.SharePoint.Client.ContentTypeId

Returns the content type identifier of the document set. MUST be equal to 0x0120D520.

Parameters: None

3.1.5.7.2.1.2 IsChildOfDocumentSetContentType

This method is a **static CSOM method**.

Return Type: **CSOM Boolean**

Returns TRUE if the content type identifier of the specified content type is derived from the document set content type identifier, as specified in section [3.1.5.7.2.1.1](#).

Parameters:

ct: content type, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.27](#).

Type: Microsoft.SharePoint.Client.ContentType

3.1.5.7.2.1.3 Update

Return Type: None

Saves any changes made to the document set template to the server.

Parameters:

bPushDown: If TRUE, applies the changes to the template to any content types derived from the content type specified in this document set template. Otherwise, only applies the changes to the current template.

Type: **CSOM Boolean**

3.1.5.7.2.2 ObjectPath Methods

3.1.5.7.2.2.1 GetDocumentSetTemplate

This method is a **static CSOM method**.

Return Type: Microsoft.SharePoint.Client.DocumentSet.DocumentSetTemplate

Returns a document set template, as specified in section [3.1.5.7](#), for a specified content type.

Parameters:

ct: content type, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.27](#).

Type: Microsoft.SharePoint.Client.ContentType

3.1.5.8 Microsoft.SharePoint.Client.DocumentSet.SharedFieldCollection

TypeId: {8F34CAB0-298C-42ED-BF09-46357C7E9B15}

ShortName: SP.DocumentSet.SharedFieldCollection

Collection of shared SP.Field objects (as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.37) that will be provisioned for a new document set when a document set is created with the specified template.

3.1.5.8.1 Properties

3.1.5.8.1.1 Scalar Properties

None.

3.1.5.8.1.2 ObjectPath Properties

None.

3.1.5.8.2 Methods

3.1.5.8.2.1 Scalar Methods

3.1.5.8.2.1.1 Add

Return Type: None

Adds a new shared field into the collection.

Parameters:

fld: The field to be added, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.37](#). MUST NOT be null

Type: Microsoft.SharePoint.Client.Field

3.1.5.8.2.1.2 Remove

Return Type: None

Removes the specified field from the collection, if the field is found, otherwise does nothing.

Parameters:

fld: Field to be removed from the collection, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.37](#). MUST NOT be NULL.

Type: Microsoft.SharePoint.Client.Field

3.1.5.8.2.2 ObjectPath Methods

None.

3.1.5.9 Microsoft.SharePoint.Client.DocumentSet.WelcomePageFieldCollection

TypeId: {D9662ECF-16A1-4530-84EA-029E69FF60AA}

ShortName: SP.DocumentSet.WelcomePageFieldCollection

Collection of SPField objects (as specified in [\[MS-CSOMSPT\]](#) section 3.2.5.37) that will be provisioned for the welcome page of the document set when a new document set gets created with the content type identifier of the specified document set template.

3.1.5.9.1 Properties

3.1.5.9.1.1 Scalar Properties

None.

3.1.5.9.1.2 ObjectPath Properties

None.

3.1.5.9.2 Methods

3.1.5.9.2.1 Scalar Methods

3.1.5.9.2.1.1 Add

Return Type: None

Adds a new field to the collection, if the field is not already contained in the collection.

Parameters:

fld: Field to be added to the collection, as specified in [\[MS-CSOMSPT\]](#) section [3.2.5.37](#). MUST NOT be null.

Type: Microsoft.SharePoint.Client.Field

3.1.5.9.2.1.2 Remove

Return Type: None

Removes the specified field from the collection. If the collection does not contain the specified field, does nothing.

Parameters:

fieldId: Identifier of the field. MUST NOT be null.

Type: **CSOM GUID**

3.1.5.9.2.2 ObjectPath Methods

None.

3.1.6 Timer Events

None.

3.1.7 Other Local Events

None.

4 Protocol Examples

4.1 Upload a Video

In this example, a video file, with the specified filename (videoname.mp4), is uploaded to the specified **list**:

Request:

```
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <StaticMethod TypeId="{999f0b44-5022-4c04-a0c3-d0705e44395f}" Name="UploadVideo" Id="11">
      <Parameters>
        <Parameter ObjectPathId="7" />
        <Parameter Type="String">videoname.mp4</Parameter>
        <Parameter Type="Binary">
          <Include href="cid:http://sharepoint.microsoft.com/12" />
        </Parameter>
        <Parameter Type="Boolean">>true</Parameter>
        <Parameter Type="Null" />
      </Parameters>
    </StaticMethod>
  </Actions>
  <ObjectPaths>
    <Identity Id="7" Name="740c6a0b-85e2-48a0-a494-e0f1759d4aa7:web:5eff230f-43c6-4941-b0d9-
f7de8d2a4bce:list:a3b41eec-5f8a-4450-905f-9166df2dda39" />
  </ObjectPaths>
</Request>
```

Response:

```
[
{
  "SchemaVersion": "15.0.0.0", "LibraryVersion": "15.0.3410.1000", "ErrorInfo": null
}, 11, "http:\u002f\u002fserverName\u002flibraryName\u002fvideoname"
]
```

4.2 Retrieve the Embed Code for a Video

In this example, the **embed code** for a video with a specified **URL** is retrieved.

Request:

```
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <StaticMethod TypeId="{999f0b44-5022-4c04-a0c3-d0705e44395f}" Name="GetEmbedCode" Id="1">
      <Parameters>
        <Parameter Type="String">/libraryName/videoName</Parameter>
        <Parameter TypeId="{294cf1eb-cef4-49e0-b114-648abb3916af}">
          <Property Name="AutoPlay" Type="Boolean">>false</Property>
          <Property Name="DisplayTitle" Type="Boolean">>true</Property>
          <Property Name="LinkToOwnerProfilePage" Type="Boolean">>true</Property>
          <Property Name="LinkToVideoHomePage" Type="Boolean">>true</Property>
          <Property Name="Loop" Type="Boolean">>false</Property>
          <Property Name="PixelHeight" Type="UInt32">240</Property>
          <Property Name="PixelWidth" Type="UInt32">320</Property>
        </Parameter>
      </Parameters>
    </StaticMethod>
  </Actions>
</Request>
```

```
        <Property Name="PreviewImagePath"
Type="String">/libraryName/previewImage.jpg</Property>
        <Property Name="StartTime" Type="UInt32">10</Property>
    </Parameter>
</Parameters>
</StaticMethod>
</Actions>
<ObjectPaths /></Request>
```

Response:

```
[
{
  "SchemaVersion": "15.0.0.0", "LibraryVersion": "15.0.3410.1000", "ErrorInfo": null
}, 1, "<iframe type='text\u002fhtml' width='320' height='240'
src='http:\u002f\u002fserverName\u002f_layouts\u002f15\u002fvideoembedplayer.aspx?site=e233b4
fd10cc40f493fa245f49717531&web=44aa6759312640999cd0e372b622c813&folder=ccd17bc6952f41
f9a701df4b52f613cb&img=%2FlibraryName%2FpreviewImage%2Ejpg&t=10&title=1&lHome
=1&lOwner=1' data-title='videoName' data-description='' data-
duration='100'><\u002fiframe>"
]
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs.

- Microsoft SharePoint Foundation 2013
- Microsoft SharePoint Server 2016

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms "SHOULD" or "SHOULD NOT" implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term "MAY" implies that the product does not follow the prescription.

7 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as Major, Minor, or None.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements.
- A document revision that captures changes to protocol functionality.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **None** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the relevant technical content is identical to the last released version.

The changes made to this document are listed in the following table. For more information, please contact dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
3.1.5.2.2.1.3 Create	Updated prescriptive language by changing must to MUST.	Y	Content update.
3.1.5.2.2.1.3 Create	Updated Condition text in Exceptions table.	N	Content update.
3.1.5.2.2.1.4 CreateVideo	Updated prescriptive language by changing must to MUST.	Y	Content update.
3.1.5.2.2.2.1 MigrateVideo	Updated prescriptive language by changing must to MUST.	Y	Content update.
3.1.5.2.2.2.2 GetDocumentSet	Added a description for the folder parameter.	N	New content added.
3.1.5.3.2.1.1 Create	Updated prescriptive language by changing must to MUST.	Y	Content update.

8 Index

A

Abstract data model
[server](#) 10
[Applicability](#) 8

C

[Capability negotiation](#) 8
[Change tracking](#) 30

D

Data model - abstract
[server](#) 10

E

Examples
[retrieve the embed code for a video](#) 26
[upload a video](#) 26

F

[Fields - vendor-extensible](#) 8

G

[Glossary](#) 6

H

Higher-layer triggered events
[server](#) 10

I

[Implementer - security considerations](#) 28
[Index of security parameters](#) 28
[Informative references](#) 7
Initialization
[server](#) 10
[Introduction](#) 6

M

Message processing
[server](#) 10
Messages
[transport](#) 9

N

[Normative references](#) 7

O

Other local events
[server](#) 25
[Overview \(synopsis\)](#) 7

P

[Parameters - security index](#) 28
[Preconditions](#) 8
[Prerequisites](#) 8
[Product behavior](#) 29

R

[References](#) 7
[informative](#) 7
[normative](#) 7
[Relationship to other protocols](#) 8
[Retrieve the embed code for a video example](#) 26

S

Security
[implementer considerations](#) 28
[parameter index](#) 28
Sequencing rules
[server](#) 10
Server
[abstract data model](#) 10
[higher-layer triggered events](#) 10
[initialization](#) 10
[message processing](#) 10
[other local events](#) 25
[sequencing rules](#) 10
[timer events](#) 24
[timers](#) 10
[Standards assignments](#) 8

T

Timer events
[server](#) 24
Timers
[server](#) 10
[Tracking changes](#) 30
[Transport](#) 9
Triggered events - higher-layer
[server](#) 10

U

[Upload a video example](#) 26

V

[Vendor-extensible fields](#) 8
[Versioning](#) 8