

[MS-TSCSOM]: Translation Services Client-Side Object Model Protocol Specification

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1 Introduction

The Translation Services Client-Side Object Model Protocol enables protocol clients to perform machine translation of documents. Clients can request that documents be translated and view the status of translations.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

authentication
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)

The following terms are defined in [\[MS-OFCGLOS\]](#):

CSOM array
CSOM Boolean
CSOM DateTime
CSOM GUID
CSOM Int32
CSOM Stream
CSOM String
file extension
immediate translation job
JavaScript Object Notation (JSON)
list item
server-relative URL
site
static CSOM method
translation item
translation job
Uniform Resource Locator (URL)
variation label
website

The following terms are specific to this document:

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

1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the technical documents, which are updated frequently. References to other documents include a publishing year when one is available.

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. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

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

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

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

[RFC1766] Alvestrand, H., "Tags for the Identification of Languages", RFC 1766, March 1995, <http://www.ietf.org/rfc/rfc1766.txt>

[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>

1.2.2 Informative References

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

[MS-OFGLGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)".

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

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

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

1.3 Overview

This protocol enables protocol clients to perform machine translation of documents. The types of documents that can be translated are part of the implementation of the protocol server. The types are defined and exposed to the protocol client through the **TranslationJob.EnumerateSupportedFileExtensions** method as defined in section [3.1.5.3.2.1.5](#).

Clients can add documents to a queue of documents to be translated. Clients can query the status of documents in the queue. Alternatively, clients can request that a document be translated immediately, bypassing the queue for high priority jobs.

1.4 Relationship to Other Protocols

This protocol is a set of types, properties, and methods that can be accessed by using the SharePoint Client Query Protocol as described in [\[MS-CSOM\]](#) or the SharePoint Client Query OData Protocol as described in [\[MS-CSOMREST\]](#).

This protocol uses **JavaScript Object Notation (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.

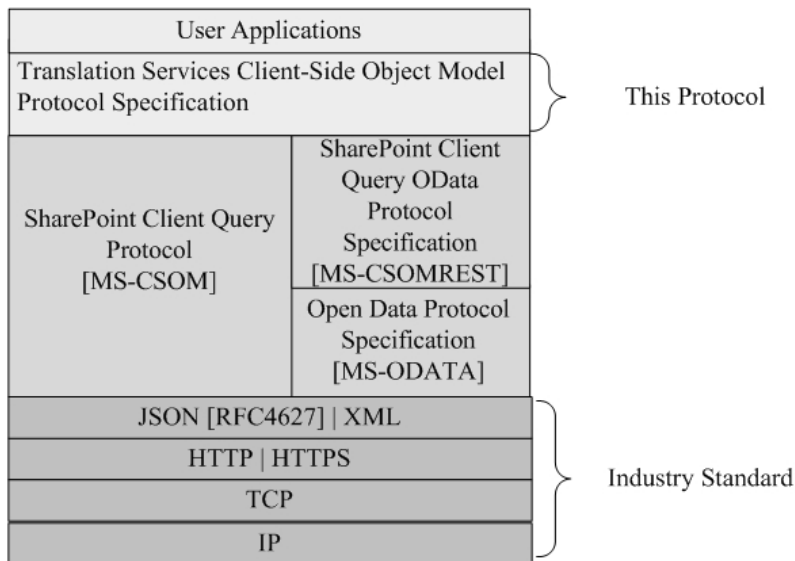


Figure 1

: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a **site (2)** that is identified by a **Uniform Resource Locator (URL)** that is known by protocol clients. This protocol assumes that authentication (2) has been performed by underlying protocols.

1.6 Applicability Statement

This protocol can be used by a protocol client to machine translate documents. This protocol is optimized to enable a protocol client to specify the exact set of operations to perform in a single batch, making it suitable for situations where the connection speed between the protocol client and the protocol server can be 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 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 Specification as specified in [\[MS-CSOM\]](#) or the SharePoint Client Query OData Protocol as specified in [\[MS-CSOMREST\]](#).

2.2 Message Syntax

None.

3 Protocol Details

3.1 Translation 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 uses the following two basic object types:

- **translation item**: Represents a single translation operation to be performed. A translation item contains the path to an input file and an output file. When a translation item is translated, the document content of the input file is translated and then written to the output file.
- **translation job**: A group of translation items that are submitted in the same request and share the same translation settings. When a translation job is submitted, its translation items are added to a queue to be processed asynchronously by the protocol server.

Additionally, the protocol supports **immediate translation jobs** that are high-priority translation jobs containing a single translation item. When an immediate translation job is submitted, the protocol server translates the translation item synchronously and returns the result to the protocol client.

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.Office.Client.TranslationServices.SyncTranslator

TypeId: {5286F36C-929C-49D8-BF42-39EFFC672AAF}

ShortName: SP.Translation.SyncTranslator

The **SyncTranslator** type is used to submit immediate translation jobs to the protocol server.

3.1.5.1.1 Properties

3.1.5.1.1.1 Scalar Properties

3.1.5.1.1.1.1 OutputSaveBehavior

Type: Microsoft.Office.Client.TranslationServices.SaveBehavior

Accessibility: Read/Write

The protocol client sets this property to determine the behavior of the protocol server in the case that the output file already exists when a translation occurs.

If the protocol client does not set this property, the **AppendIfPossible** (section [3.1.5.2.1.1](#)) behavior is used.

3.1.5.1.1.2 ObjectPath Properties

None.

3.1.5.1.2 Methods

3.1.5.1.2.1 Scalar Methods

3.1.5.1.2.1.1 Translate

Return Type: Microsoft.Office.Client.TranslationServices.TranslationItemInfo

The protocol client calls this method to submit an immediate translation job to the protocol server.

The method returns a **TranslationItemInfo** object (section [3.1.5.2](#)) that contains the results of the translation item of the immediate translation job.

Parameters:

inputFile: This value MUST be the full or relative path to the file that contains the document to be translated.

Type: **CSOM String**

The file MUST be translatable. A file is considered translatable if it conforms to the constraints enumerated in the description of the *inputFile* parameter of the **AddFile** method (section [3.1.5.3.2.1.1](#)).

outputFile: This value MUST be the full or relative path to the file to where the translated document will be stored.

Type: CSOM String

The **file extension** of the file MUST be the same as the file extension of the *inputFile* parameter.

3.1.5.1.2.1.2 TranslateStream

Return Type: **CSOM Stream**

The protocol client calls this method to submit an immediate translation job to the protocol server. The protocol client streams the file to be translated to the protocol server.

This method returns a CSOM Stream object which contains the translated file.

Parameters:

inputFile: This value MUST be a stream containing the file to be translated.

Type: CSOM Stream

The file MUST be translatable. A file is considered translatable if it conforms to the constraints enumerated in the description of the *inputFile* parameter of the **AddFile** method (section [3.1.5.3.2.1.1](#)).

fileExtension: This value MUST be the file extension of the file contained in the *inputFile* parameter.

Type: CSOM String

3.1.5.1.2.2 ObjectPath Methods

3.1.5.1.2.2.1 CSOM Constructor

This constructor creates a **SyncTranslator** object that translates documents to a particular language.

Parameters:

targetLanguage: The language to which documents will be translated.

Type: CSOM String

This value MUST be a valid language tag as defined in [\[RFC1766\]](#) and MUST be a language supported by the protocol server (see section [3.1.5.3.2.1.9](#)).

3.1.5.2 Microsoft.Office.Client.TranslationServices.TranslationItemInfo

TypeId: {F1A935C2-8E02-42E8-9391-86BFE6D56F06}

ShortName: SP.Translation.TranslationItemInfo

The **TranslationItemInfo** type contains information about a previously submitted translation item.

3.1.5.2.1 Properties

3.1.5.2.1.1 Scalar Properties

3.1.5.2.1.1.1 Canceled

Type: **CSOM Boolean**

Accessibility: Read Only

This property is true if and only if the translation job to which the translation item belongs has been canceled.

3.1.5.2.1.1.2 ErrorMessage

Type: CSOM String

Accessibility: Read Only

If the **Result** (section [3.1.5.2.1.1.10](#)) value is **Succeeded** (section [3.1.5.8.1.2](#)), this property is null; otherwise, this property contains an error message that describes the error condition specified by **Result**.

3.1.5.2.1.1.3 Failed

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation item has finished and failed.

3.1.5.2.1.1.4 InProgress

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation item has started but has not finished.

3.1.5.2.1.1.5 InputFile

Type: CSOM String

Accessibility: Read Only

This property contains the full path to the input file of the translation item.

3.1.5.2.1.1.6 NotStarted

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation item has not started.

3.1.5.2.1.1.7 OutputFile

Type: CSOM String

Accessibility: Read Only

This property contains the full path to the output file of the translation item.

3.1.5.2.1.1.8 Succeeded

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation item has finished successfully.

3.1.5.2.1.1.9 TranslationId

Type: CSOM GUID

Accessibility: Read Only

If this translation item belongs to an immediate translation job, this property MUST be ignored. Otherwise, this property contains an identifier uniquely identifying this translation item.

3.1.5.2.1.1.10 Result

Type: Microsoft.Office.Client.TranslationServices.TranslationResult

Accessibility: Read Only

This property indicates the status of the translation item. If the translation of the item has not finished, this value MUST be ignored; otherwise, this value MUST be a valid **TranslationResult** (section [3.1.5.8](#)). The item has not finished if **NotStarted** (section [3.1.5.2.1.1.6](#)) is true or **InProgress** (section [3.1.5.2.1.1.4](#)) is true.

3.1.5.2.1.2 ObjectPath Properties

None.

3.1.5.3 Microsoft.Office.Client.TranslationServices.TranslationJob

TypeId: {C85774BE-554A-4C27-9B0C-A34AB1C86B0D}

ShortName: SP.Translation.TranslationJob

The **TranslationJob** type is used to create new translation jobs.

3.1.5.3.1 Properties

3.1.5.3.1.1 Scalar Properties

3.1.5.3.1.1.1 JobId

Type: CSOM GUID

Accessibility: Read Only

This property contains an identifier that uniquely identifies the translation job.

The protocol server is responsible for generating this value. The protocol client uses this value to query the status of the translation job after it is submitted with the **TranslationJobStatus** type (section [3.1.5.5](#)).

3.1.5.3.1.1.2 Name

Type: CSOM String

Accessibility: Read/Write

Optional property that the protocol client sets to associate a name with the translation job. If the protocol client does not set this property, there is no name associated with the translation job.

3.1.5.3.1.1.3 OutputSaveBehavior

Type: Microsoft.Office.Client.TranslationServices.SaveBehavior

Accessibility: Read/Write

The protocol client sets this property to determine the behavior of the protocol server in the case that an output file already exists when a translation occurs for any translation item in the translation job.

If the protocol client does not set this property, the **AppendIfPossible** (section [3.1.5.2.1.1](#)) behavior is used.

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 AddFile

Return Type: None

The protocol client calls this method to add a single translation item to the translation job. This method MUST NOT be called after the **Start** method (section [3.1.5.3.2.1.10](#)) is called.

Parameters:

inputFile: This value MUST be the full or relative path to the file that contains the document to be translated.

Type: CSOM String

The file extension of the file MUST be a supported file extension as enumerated by the **EnumerateSupportedFileExtensions** method (section [3.1.5.3.2.1.5](#)).

The size of the file MUST be less than or equal to the maximum supported file size for the file's file extension as reported by the **GetMaximumFileSize** method (section [3.1.5.3.2.1.7](#)).

outputFile: This value MUST be the full or relative path to the file to where the translated document will be stored.

Type: CSOM String

The file extension of the file MUST be the same as the file extension of the *inputFile* parameter.

3.1.5.3.2.1.2 AddFolder

Return Type: CSOM Boolean

The protocol client calls the **AddFolder** method to add every translatable file to a folder as a translation item to the translation job. A file is considered translatable if it conforms to the constraints enumerated in the description of the *inputFile* parameter of the **AddFile** method (section

[3.1.5.3.2.1.1](#)). This method MUST NOT be called after the **Start** method (section [3.1.5.3.2.1.10](#)) is called.

This method returns true if and only if at least one translation item was added to the translation job.

Parameters:

inputFolder: This value MUST be a valid **Microsoft.SharePoint.Client.Folder** (see [\[MS-CSOMSPT\]](#) section 3.2.5.72) that contains the documents to be translated.

Type: Microsoft.SharePoint.Client.Folder

outputFolder: This value MUST be a valid **Microsoft.SharePoint.Client.Folder** (see [\[MS-CSOMSPT\]](#) section 3.2.5.72) where translated documents will be stored.

Type: Microsoft.SharePoint.Client.Folder

The translated files will have the same file names and be contained in the same subfolder structure as the input files from *inputFolder*.

recursion: If this value is false, files in the subfolders of *inputFolder* will not be added to the translation job. If this value is true, files in the subfolders of *inputFolder* will be added.

Type: CSOM Boolean

3.1.5.3.2.1.3 AddLibrary

Return Type: CSOM Boolean

The protocol client calls this method to add every translatable file in a document library as a translation item to the translation job. A file is considered translatable if it conforms to the constraints enumerated in the description of the *inputFile* parameter of the **AddFile** method (section [3.1.5.3.2.1.1](#)). This method MUST NOT be called after the **Start** method (section [3.1.5.3.2.1.10](#)) is called.

This method returns true if and only if at least one translation item was added to the translation job.

Parameters:

inputList: This value MUST be a valid **Microsoft.SharePoint.Client.List** (see [\[MS-CSOMSPT\]](#) section 3.2.5.79) that contains the documents to be translated.

Type: Microsoft.SharePoint.Client.List

outputList: This value MUST be a valid **Microsoft.SharePoint.Client.List** (see [\[MS-CSOMSPT\]](#) section 3.2.5.79) where the translated documents will be stored.

Type: Microsoft.SharePoint.Client.List

The translated files will have the same file names and be contained in the same subfolder structure as the input files from *inputList*.

3.1.5.3.2.1.4 CancelJob

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

Return Type: None

The protocol client calls this static method to cancel a translation job that was previously submitted.

Parameters:

jobId: This value MUST be the **JobId** (section [3.1.5.4.1.1.3](#)) of a translation job that was submitted to the protocol server.

Type: CSOM GUID

3.1.5.3.2.1.5 EnumerateSupportedFileExtensions

This method is a static CSOM method.

Return Type: **CSOM array** of CSOM String

The protocol client calls this static method to enumerate the file extensions supported by the protocol server.

This method returns an array of strings with an element for each supported file extension.

Parameters: None

3.1.5.3.2.1.6 EnumerateSupportedLanguages

This method is a static CSOM method.

Return Type: CSOM array of CSOM String

The protocol client calls this static method to enumerate the languages supported by the protocol server.

This method returns an array of strings with an element for each supported language. Each language is represented with a language tag as defined in [\[RFC1766\]](#).

Parameters: None

3.1.5.3.2.1.7 GetMaximumFileSize

This method is a static CSOM method.

Return Type: **CSOM Int32**

The protocol client calls this static method to get the maximum supported file size for a file of a given file extension.

This method returns zero if the file extension is not supported by the protocol server. It returns a size, in bytes, if the file extension is supported by the protocol server.

Parameters:

extension: This value MUST be a valid file extension in order to obtain the maximum file size.

Type: CSOM String

3.1.5.3.2.1.8 IsFileExtensionSupported

This method is a static CSOM method.

Return Type: CSOM Boolean

The protocol client calls this static method to determine if a file with a given file extension is supported by the protocol server.

This method returns true if and only if the file extension is supported.

Parameters:

extension: This value MUST be a valid file extension to test.

Type: CSOM String

3.1.5.3.2.1.9 IsLanguageSupported

This method is a static CSOM method.

Return Type: CSOM Boolean

The protocol client calls this static method to determine if translation to or from a given language is supported by the protocol server.

This method returns true if and only if the language is supported.

Parameters:

language: This value MUST be a valid language tag to test as specified in [\[RFC1766\]](#).

Type: CSOM String

3.1.5.3.2.1.10 Start

Return Type: None

The protocol client calls this method to submit the translation job to the protocol server. Translation items in the translation job are not processed until this method is called. The translation job MUST contain at least one translation item. This method MUST NOT be called twice for the same translation job.

Parameters: None

3.1.5.3.2.1.11 TranslateFile

Return Type: CSOM GUID

The protocol client calls this method to create and submit a translation job with a single translation item. The effect of this method MUST be the same as the effect of calling the **AddFile** method (section [3.1.5.3.2.1.1](#)) with the same parameters followed by calling the **Start** method (section [3.1.5.3.2.1.10](#)).

Returns the **JobId** (section [3.1.5.3.1.1.1](#)) of the translation job.

Parameters:

inputFile: This value MUST have the same behavior as the **inputFile** parameter of the **AddFile** method (section [3.1.5.3.2.1.1](#)).

Type: CSOM String

outputFile: This value MUST have the same behavior as the **outputFile** parameter of the **AddFile** method (section [3.1.5.3.2.1.1](#)).

Type: CSOM String

3.1.5.3.2.1.12 TranslateFolder

Return Type: CSOM GUID

The protocol client calls this method to create and submit a translation job with translation items derived from a folder. The effect of this method MUST be the same as the effect of calling the **AddFolder** method (section [3.1.5.3.2.1.2](#)) with the same parameters followed by calling the **Start** method (section [3.1.5.3.2.1.10](#)).

Returns the **JobId** (section [3.1.5.3.1.1.1](#)) of the translation job.

Parameters:

inputFolder: This value MUST have the same behavior as the *inputFolder* parameter of the **AddFolder** method (section [3.1.5.3.2.1.2](#)).

Type: CSOM String

outputFolder: This value MUST have the same behavior as the *outputFolder* parameter of the **AddFolder** method (section [3.1.5.3.2.1.2](#)).

Type: CSOM String

recursion: This value MUST have the same behavior as the *recursion* parameter of the **AddFolder** method (section [3.1.5.3.2.1.2](#)).

Type: CSOM Boolean

3.1.5.3.2.1.13 TranslateLibrary

Return Type: CSOM GUID

The protocol client calls this method to create and submit a translation job with translation items derived from a document library. The effect of this method MUST be the same as the effect of calling the **AddLibrary** method (section [3.1.5.3.2.1.3](#)) with the same parameters followed by calling the **Start** method (section [3.1.5.3.2.1.10](#)).

Returns the **JobId** (section [3.1.5.3.1.1.1](#)) of the translation job.

Parameters:

inputLibrary: This value MUST have the same behavior as the *inputList* parameter of the **AddLibrary** method (section [3.1.5.3.2.1.3](#)).

Type: CSOM String

outputLibrary: This value MUST have the same behavior as the *outputList* parameter of the **AddLibrary** method (section [3.1.5.3.2.1.3](#)).

Type: CSOM String

3.1.5.3.2.1.14 **IsServiceEnabled**

This method is a static CSOM method.

Return Type: CSOM Boolean

The protocol client calls this static method to determine if this protocol is enabled on the protocol server.

If the protocol server returns false, this protocol is not enabled for the current **Web site (2)**. In this case, the protocol server MUST NOT execute any other method calls of this protocol to the current Web site (2).

If the protocol server returns true, this protocol is enabled for the current Web site (2).

Parameters: None

3.1.5.3.2.2 **ObjectPath Methods**

3.1.5.3.2.2.1 **CSOM Constructor**

This constructor creates a **TranslationJob** object that translates documents to a particular language.

Parameters:

targetLanguage: The language to which documents will be translated.

Type: CSOM String

This value MUST be a valid language tag as defined in [\[RFC1766\]](#) and MUST be a language supported by the protocol server (see section [3.1.5.3.2.1.9](#)).

3.1.5.4 **Microsoft.Office.Client.TranslationServices.TranslationJobInfo**

TypeId: {39B8CBDB-B9F4-4A97-BCF9-B2F28359BF2A}

ShortName: SP.Translation.TranslationJobInfo

The **TranslationJobInfo** type contains information about a previously submitted translation job.

3.1.5.4.1 **Properties**

3.1.5.4.1.1 **Scalar Properties**

3.1.5.4.1.1.1 **Canceled**

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation job has been canceled.

3.1.5.4.1.1.2 **CancelTime**

Type: **CSOM DateTime**

Accessibility: Read Only

If the **Canceled** (section [3.1.5.4.1.1.1](#)) property is true, this property contains the time that the translation job was canceled. Otherwise, this property is null.

3.1.5.4.1.1.3 JobId

Type: CSOM GUID

Accessibility: Read Only

This property contains an identifier that uniquely identifies a translation job.

3.1.5.4.1.1.4 Name

Type: CSOM String

Accessibility: Read Only

This property contains a name associated (see section [3.1.5.3.1.1.2](#)) with the translation job.

If the protocol client did not associate a name with the translation job when it was submitted via the **Name** property of **TranslationJob** (section [3.1.5.3.1.1.2](#)), this property **MUST** be null.

3.1.5.4.1.1.5 PartiallySubmitted

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if an unexpected error on the protocol server, such as losing network connectivity, caused the translation job to be partially submitted.

A translation job that is partially submitted will not be processed.

3.1.5.4.1.1.6 SubmittedTime

Type: CSOM DateTime

Accessibility: Read Only

This property contains the time that the translation job was submitted by the protocol client.

3.1.5.4.1.2 ObjectPath Properties

None.

3.1.5.5 Microsoft.Office.Client.TranslationServices.TranslationJobStatus

TypeId: {A41FFF40-2FF3-44E6-9436-B3E3BA60E174}

ShortName: SP.Translation.TranslationJobStatus

The **TranslationJobStatus** type is used to get information about previously submitted translation jobs and the translation items associated with them. The type provides methods to retrieve **TranslationJobInfo** (section [3.1.5.4](#)) and **TranslationItemInfo** (section [3.1.5.2](#)) objects.

3.1.5.5.1 Properties

3.1.5.5.1.1 Scalar Properties

3.1.5.5.1.1.1 Canceled

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation jobs that have been canceled.

3.1.5.5.1.1.2 Count

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job.

3.1.5.5.1.1.3 Failed

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job that have failed.

3.1.5.5.1.1.4 InProgress

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with a translation job that have started, but have not finished.

3.1.5.5.1.1.5 Name

Type: CSOM String

Accessibility: Read Only

This property contains a name associated (section [3.1.5.3.1.1.2](#)) with the translation job.

If the protocol client did not associate a name with the translation job when it was submitted, this property MUST be null.

3.1.5.5.1.1.6 NotStarted

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job that have not started.

3.1.5.5.1.1.7 Succeeded

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job that have finished successfully.

3.1.5.5.1.2 ObjectPath Properties

None.

3.1.5.5.2 Methods

3.1.5.5.2.1 Scalar Methods

3.1.5.5.2.1.1 GetAllActiveJobs

This method is a static CSOM method.

Return Type: CSOM array of Microsoft.Office.Client.TranslationServices.TranslationJobInfo

The protocol client calls this static method to retrieve **TranslationJobInfo** objects (section [3.1.5.4](#)) representing translation jobs submitted by the current user that have not finished.

The method returns a list of **TranslationJobInfo** objects (section [3.1.5.4](#)) that MUST contain an element for every translation job that was successfully submitted by the current user and has not finished.

Parameters: None

3.1.5.5.2.1.2 GetAllItems

Return Type: CSOM array of Microsoft.Office.Client.TranslationServices.TranslationItemInfo

The protocol client calls this method to retrieve **TranslationItemInfo** objects (section [3.1.5.2](#)) representing translation items that belong to the translation job.

This method returns a list of **TranslationItemInfo** objects (section [3.1.5.2](#)) that MUST contain an element for every translation item that belongs to the translation job.

Parameters: None

3.1.5.5.2.1.3 GetAllJobs

This method is a static CSOM method.

Return Type: CSOM array of Microsoft.Office.Client.TranslationServices.TranslationJobInfo

The protocol client calls this static method to retrieve **TranslationJobInfo** objects (section [3.1.5.4](#)) representing each translation job submitted by the current user.

The method returns a list of **TranslationJobInfo** objects (section [3.1.5.4](#)) that MUST contain an element for every translation job that was successfully submitted by the current user and has not expired.

The protocol server SHOULD remove the status of expired translation jobs that have been completed for a sufficient amount of time for protocol clients to have viewed their status. This prevents the protocol server from using excessive storage for the status of completed translation jobs. The amount of time after which a translation job is removed is determined by the protocol server; it is not specified in this protocol.

Parameters: None

3.1.5.5.2.1.4 GetItems

Return Type: CSOM array of Microsoft.Office.Client.TranslationServices.TranslationItemInfo

The protocol client calls this method to retrieve **TranslationItemInfo** objects (section [3.1.5.2](#)) representing translation items that belong to the translation job.

The method returns a list of **TranslationItemInfo** objects (section [3.1.5.2](#)) that MUST contain an element for every translation item that belongs to the translation job and is in one of the states defined by the *types* parameter.

Parameters:

types: This value contains a set of translation item states. Only translation items that are in one of these states are returned by the method.

Type: Microsoft.Office.Client.TranslationServices.ItemTypes

This value MUST be either a single **ItemTypes** value (section [3.1.5.1](#)) or a bitwise OR of multiple **ItemTypes** values.

3.1.5.5.2.1.5 Refresh

Return Type: None

The protocol client calls this method to update the **Failed** (section [3.1.5.5.1.1.3](#)), **InProgress** (section [3.1.5.5.1.1.4](#)), **NotStarted** (section [3.1.5.5.1.1.6](#)) and **Succeeded** (section [3.1.5.5.1.1.7](#)) properties to reflect the most current states of translation items associated with the translation job.

Parameters: None

3.1.5.5.2.2 ObjectPath Methods

3.1.5.5.2.2.1 CSOM Constructor

This constructor creates a **TranslationJobStatus** that provides information about a single translation job.

Parameters:

jobId: An identifier that uniquely identifies a translation job.

Type: CSOM GUID

This value MUST be equal to the **JobId** property (section [3.1.5.3.1.1.1](#)) of a successfully submitted **TranslationJob** (section [3.1.5.3](#)).

3.1.5.6 Microsoft.Office.Client.TranslationServices.VariationsTranslationTimerJob

TypeId: {0E043428-89F2-4747-B485-BC6D77C90A11}

ShortName: SP.Translation.VariationsTranslationTimerJob

The **VariationsTranslationTimerJob** type provides methods to drive translation for **list items** in a **variation label**.

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 ExportItems

This method is a static CSOM method.

Return Type: None

The protocol client calls this method to export a specific set of list items.

Parameters:

list: The **server-relative URL** for the list containing the list items.

Type: CSOM String

itemIds: An array containing the identifiers of the list items to be exported.

Type: CSOM array of CSOM Int32

addressesToEmail: An array of the e-mail addresses that will be notified when the operation completes.

Type: CSOM array of CSOM String

3.1.5.6.2.1.2 ExportItemsRequiringTranslation

This method is a static CSOM method.

Return Type: None

The protocol client calls this method to export all list items requiring translation.

Parameters:

list: The server-relative URL for the list containing the list items.

Type: CSOM String

addressesToEmail: An array of the e-mail addresses that will be notified when the operation completes.

Type: CSOM array of CSOM String

3.1.5.6.2.1.3 ImportTranslationPackage

This method is a static CSOM method.

Return Type: None

The protocol client calls this method to import list item translations.

Parameters:

translatorName: The name of the entity that translated the package.

Type: CSOM String

packageId: The identifier of the package list item to be imported.

Type: CSOM Int32

addressesToEmail: An array of the e-mail addresses that will be notified when the operation completes.

Type: CSOM array of CSOM String

3.1.5.6.2.1.4 MachineTranslateItems

This method is a static CSOM method.

Return Type: None

The protocol client calls this method to translate a specific set of list items.

Parameters:

list: The server-relative URL for the list containing the list items.

Type: CSOM String

itemIds: An array containing the identifiers of the list items to be translated.

Type: CSOM array of CSOM Int32

addressesToEmail: An array of the e-mail addresses that will be notified when the operation completes.

Type: CSOM array of CSOM String

3.1.5.6.2.1.5 MachineTranslateItemsRequiringTranslation

This method is a static CSOM method.

Return Type: None

The protocol client calls this method to translate all list items requiring translation.

Parameters:

list: The server-relative URL for the list containing the list items.

Type: CSOM String

addressesToEmail: An array of the e-mail addresses that will be notified when the operation completes.

Type: CSOM array of CSOM String

3.1.5.6.2.2 ObjectPath Methods

None.

3.1.5.7 Microsoft.Office.Client.TranslationServices.ItemTypes

ShortName: SP.Translation.ItemTypes

Flag: true

ItemTypes is an enumeration of the possible states of a queued translation item.

3.1.5.7.1 Field Values

3.1.5.7.1.1 Succeeded

Value: 1

This value represents the state of a translation item that has been successfully translated.

3.1.5.7.1.2 InProgress

Value: 2

This value represents the state of a translation item that is currently being translated.

3.1.5.7.1.3 NotStarted

Value: 4

This value represents the state of a translation item that is queued for translation but has not been processed.

3.1.5.7.1.4 Failed

Value: 8

This value represents the state of a translation item where translation has been attempted, but failed.

3.1.5.7.1.5 Canceled

Value: 16

This value represents the state of a translation item that has been cancelled.

3.1.5.8 Microsoft.Office.Client.TranslationServices.SaveBehavior

ShortName: SP.Translation.SaveBehavior

Flag: false

SaveBehavior is an enumeration of the supported actions to be taken in the case that the output file of a translation item already exists when translation occurs.

3.1.5.8.1 Field Values

3.1.5.8.1.1 AppendIfPossible

Value: 0

This value indicates that if the output file location supports version history, the protocol server appends the translated file to the file's version history. If the output file location does not support version history, the protocol server overwrites the existing file with the translated file.

3.1.5.8.1.2 AlwaysOverwrite

Value: 1

This value indicates that the protocol server overwrites the existing file with the translated file.

3.1.5.8.1.3 AppendOnly

Value: 2

This value indicates that if the output file location supports version history, the protocol server appends the translated file to the file's version history. If the output file location does not support version history, the protocol server does not overwrite the existing file and discards the translated file.

3.1.5.8.1.4 NeverOverwrite

Value: 3

This value indicates that the protocol server does not overwrite the existing file and discards the translated file.

3.1.5.9 Microsoft.Office.Client.TranslationServices.TranslationResult

ShortName: SP.Translation.TranslationResult

Flag: false

This enumeration contains result codes that indicate the outcome of a translation operation.

3.1.5.9.1 Field Values

3.1.5.9.1.1 UnknownFailure

Value: -1

Translation failed because of an unknown reason.

3.1.5.9.1.2 Succeeded

Value: 0

Translation succeeded.

3.1.5.9.1.3 InputFileNotFound

Value: 1

Translation failed because the input file was not found.

3.1.5.9.1.4 UnauthorizedAccessToInputFile

Value: 2

Translation failed because the user is not authorized to read the input file.

3.1.5.9.1.5 InputFileUserTokenExpired

Value: 3

Translation failed because the user credentials used to read the input file have expired.

3.1.5.9.1.6 UnauthorizedAccessToOutputFile

Value: 4

Translation failed because the user is not authorized to write the output file.

3.1.5.9.1.7 OutputFileUserTokenExpired

Value: 5

Translation failed because the user credentials used to write the output file expired.

3.1.5.9.1.8 InputFileReadError

Value: 6

Translation failed because the input file could not be read because of an unexpected error.

3.1.5.9.1.9 OutputFileWriteError

Value: 7

Translation failed because the output file could not be written due to an unexpected error.

3.1.5.9.1.10 NotAssignedToWorker

Value: 8

Translation failed because the translation could not be assigned to a translation processor because of an unexpected error.

3.1.5.9.1.11 WorkerFailed

Value: 9

Translation failed because a translation processor failed because of an unexpected error.

3.1.5.9.1.12 Timeout

Value: 10

Translation failed because the translation exceeded the time to complete and timed out.

3.1.5.9.1.13 SyncTranslationLimitExceeded

Value: 11

Translation failed because there are too many immediate translation jobs in progress.

3.1.5.9.1.14 SyncTranslationDisabled

Value: 12

Translation failed because the protocol server cannot accept an immediate translation job.

3.1.5.9.1.15 OutputFileReadOnly

Value: 13

Translation failed because the output file is in read-only mode.

3.1.5.9.1.16 InputFileTooLarge

Value: 14

Translation failed because the input file is too large to be translated. A file is too large to be translated if the file size exceeds the amount returned by the **GetMaximumFileSize** method of the **TranslationJob** type (section [3.1.5.3.2.1.7](#)).

3.1.5.9.1.17 InputFileTooLong

Value: 15

Translation failed because the input file contains too much text to be translated. The maximum amount of text that can be translated is a value defined by the protocol server. This protocol does not specify a means for the protocol client to determine the value.

3.1.5.9.1.18 InputFileCorrupt

Value: 16

Translation failed because the input file is corrupt.

3.1.5.9.1.19 InputFileIRMProtected

Value: 17

Translation failed because rights to the input document are limited.

3.1.5.9.1.20 InputFileEncrypted

Value: 18

Translation failed because the input file is encrypted and cannot be translated.

3.1.5.9.1.21 InputFileTypeBlocked

Value: 19

Translation failed because the input file type has been disabled on the protocol server.

3.1.5.9.1.22 InputFileTypeNotSupported

Value: 20

Translation failed because the input file type is not supported by the protocol server.

3.1.5.9.1.23 InputFileHasActiveXControls

Value: 21

Translation failed because the input file contains unsupported controls and cannot be translated.

3.1.5.9.1.24 InputFileCannotBeTranslated

Value: 22

Translation failed because the input file contains text that cannot be translated.

3.1.5.9.1.25 TranslationServiceUnavailable

Value: 23

Translation failed because the translation service is temporarily unavailable.

3.1.6 Timer Events

None.

3.1.7 Other Local Events

None.

4 Protocol Examples

4.1 Submitting a translation job

This example demonstrates creating a translation job with one translation item. The protocol client performs the following steps:

1. Creates an object for the client context wrapper.
2. Creates a **TranslationJob** (section [3.1.5.3](#)) object with the *targetLanguage* parameter set to "th".
3. Sets the **Name** property on the **TranslationJob** object to "Example1".
4. Calls the **AddFile** (section [3.1.5.3.2.1.1](#)) method on the **TranslationJob** object with the *inputFile* parameter set to "http://server/test.docx" and the *outputFile* parameter set to "http://server/Thai/test.docx".
5. Calls the **Start** (section [3.1.5.3.2.1.10](#)) method on the **TranslationJob** object.
6. Calls the **ExecuteQuery** method on the object.

The following XML instructions are sent to the protocol server:

```
<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>
    <ObjectPath Id="72" ObjectPathId="71" />
    <ObjectPath Id="74" ObjectPathId="73" />
    <ObjectPath Id="76" ObjectPathId="75" />
    <Method Name="AddFile" Id="77" ObjectPathId="75">
      <Parameters>
        <Parameter Type="String">http://server/test.docx</Parameter>
        <Parameter Type="String">http://server/Thai/test.docx</Parameter>
      </Parameters>
    </Method>
    <SetProperty Id="78" ObjectPathId="75" Name="Name">
      <Parameter Type="String">Example1</Parameter>
    </SetProperty>
    <Method Name="Start" Id="79" ObjectPathId="75" />
    <Query Id="80" ObjectPathId="75">
      <Query SelectAllProperties="true">
        <Properties>
          <Property Name="Name" ScalarProperty="true" />
        </Properties>
      </Query>
    </Query>
  </Actions>
  <ObjectPaths>
    <StaticProperty Id="71" TypeId="{3747adcd-a3c3-41b9-bfab-4a64dd2f1e0a}" Name="Current" />
    <Property Id="73" ParentId="71" Name="Site" />
    <Constructor Id="75" TypeId="{c85774be-554a-4c27-9b0c-a34ab1c86b0d}">
      <Parameters>
        <Parameter Type="String">th</Parameter>
      </Parameters>
    </Constructor>
  </ObjectPaths>
```

```
</Request>
```

The protocol server adds the translation job to the queue and responds with the following message:

```
[
  {
    "SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3420.1000","ErrorInfo":null
  },72,{
    "IsNull":false
  },74,{
    "IsNull":false
  },76,{
    "IsNull":false
  },80,{
    "_ObjectType_":"SP.Translation.TranslationJob","JobId":"\\Guid(00000000-0000-1015-8096-8e229d88f9ed)\\","Name":"","OutputSaveBehavior":0
  }
]
```

The protocol client parses the **JobId** of the translation job, "00000000-0000-1015-8096-8e229d88f9ed", and stores it for later use.

4.2 Getting the status of a translation job

This example demonstrates getting a list of translation jobs, and getting the results of the translation item submitted in the previous example. First, the protocol client performs the following steps:

1. Create an object for the client context wrapper.
2. Call the **GetAllJobs** (section [3.1.5.5.2.1.3](#)) static method on the **TranslationJobStatus** (section [3.1.5.5](#)) type.
3. Call the **ExecuteQuery** method on the object.

The following XML instructions are sent to the protocol server:

```
<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>
    <ObjectPath Id="82" ObjectPathId="81" />
    <ObjectPath Id="84" ObjectPathId="83" />
    <StaticMethod TypeId="{a41fff40-2ff3-44e6-9436-b3e3ba60e174}" Name="GetAllJobs" Id="85"
  />
  </Actions>
  <ObjectPaths>
    <StaticProperty Id="81" TypeId="{3747adcd-a3c3-41b9-bfab-4a64dd2f1e0a}" Name="Current" />
    <Property Id="83" ParentId="81" Name="Site" />
  </ObjectPaths>
</Request>
```

The protocol server gets the list of translation jobs and responds with the following message:

```
[
```

```

{
  "SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3420.1000","ErrorInfo":null
},82,{
  "IsNull":false
},84,{
  "IsNull":false
},85,[
  {
    "_ObjectType_":"SP.Translation.TranslationJobInfo","Canceled":false,"CancelTime":"\\/Date(9999,11,31,23,59,59,999)\\/","JobId":"\\/Guid(00000000-0000-1015-8096-8e229d88f9ed)\\/","Name":null,"PartiallySubmitted":false,"SubmittedTime":"\\/Date(2011,10,8,14,23,1,67)\\/\"
  }
]
]

```

The protocol client sees that there is a translation job with **JobId** "00000000-0000-1015-8096-8e229d88f9ed", and attempts to get the status of its successful translation items by performing the following steps:

1. Create an object for the client context wrapper.
2. Create a **TranslationJobStatus** object with the *jobId* parameter set to "00000000-0000-1015-8096-8e229d88f9ed".
3. Call the **GetItems** (section [3.1.5.5.2.1.4](#)) method on the **TranslationJobStatus** object with the *types* parameter set to **ItemTypes.Succeeded**.
4. Call the **ExecuteQuery** method on the object.

The following XML instructions are sent to the protocol server:

```

<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>
    <Method Name="GetItems" Id="175" ObjectPathId="168">
      <Parameters>
        <Parameter Type="Enum">1</Parameter>
      </Parameters>
    </Method>
  </Actions>
  <ObjectPaths>
    <Constructor Id="168" TypeId="{a41fff40-2ff3-44e6-9436-b3e3ba60e174}">
      <Parameters>
        <Parameter Type="Guid">{00000000-0000-1015-8096-8e229d88f9ed}</Parameter>
      </Parameters>
    </Constructor>
  </ObjectPaths>
</Request>

```

The protocol server gets the list of the successfully translated translation items for the translation job, and responds with the following message:

```

[
{

```

```

"SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3420.1000","ErrorInfo":null
},175,[
{
  "_ObjectType_":"SP.Translation.TranslationItemInfo","Canceled":false,"ErrorCode":0,"ErrorMessage":"","Failed":false,"InProgress":false,"InputFile":"http:\u002f\u002fserver\u002ftest.docx","NotStarted":false,"OutputFile":"http:\u002f\u002fserver\u002fThai\u002ftest.docx","Succeeded":true,"TranslationId":"\Guid(00000001-0001-1015-8096-8e229d88f9ed)\\"
}
]
]

```

The protocol client sees that the translation item with output file "http://server/Thai/test.docx" has succeeded.

4.3 Submitting an immediate translation job

This example demonstrates creating an immediate translation job. The protocol client performs the following steps:

1. Create an object for the client context wrapper.
2. Create a **SyncTranslator** (section [3.1.5.1](#)) object with the *targetLanguage* parameter set to "th".
3. Set the **OutputSaveBehavior** property on the **SyncTranslator** object to **SaveBehavior.AlwaysOverwrite**.
4. Call the **Translate** (section [3.1.5.1.2.1.1](#)) method on the **SyncTranslator** object with the *inputFile* parameter set to "http://server/test.docx" and the *outputFile* parameter set to "http://server/Thai/test.docx".
5. Call the **ExecuteQuery** method on the object.

The following XML instructions are sent to the protocol server:

```

<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>
    <ObjectPath Id="64" ObjectPathId="63" />
    <ObjectPath Id="66" ObjectPathId="65" />
    <ObjectPath Id="68" ObjectPathId="67" />
    <SetProperty Id="69" ObjectPathId="67" Name="OutputSaveBehavior">
      <Parameter Type="Enum">1</Parameter>
    </SetProperty>
    <Method Name="Translate" Id="70" ObjectPathId="67">
      <Parameters>
        <Parameter Type="String">http://server/test.docx</Parameter>
        <Parameter Type="String">http://server/Thai/test.docx</Parameter>
      </Parameters>
    </Method>
  </Actions>
  <ObjectPaths>
    <StaticProperty Id="63" TypeId="{3747adcd-a3c3-41b9-bfab-4a64dd2f1e0a}" Name="Current" />
    <Property Id="65" ParentId="63" Name="Site" />
    <Constructor Id="67" TypeId="{5286f36c-929c-49d8-bf42-39effc672aaf}">
      <Parameters>

```

```
<Parameter Type="String">th</Parameter>
</Parameters>
</Constructor>
</ObjectPaths>
</Request>
```

The protocol server successfully processes the immediate translation job and responds with the following message:

```
[
{
  "SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3420.1000","ErrorInfo":null
},64,{
  "IsNull":false
},66,{
  "IsNull":false
},68,{
  "IsNull":false
},70,{
  "_ObjectType_":"SP.Translation.TranslationItemInfo","Canceled":false,"ErrorCode":0,"ErrorMessage":"","Failed":false,"InProgress":false,"InputFile":"http:\u002f\u002fserver\u002ftest.docx","NotStarted":false,"OutputFile":"http:\u002f\u002fserver\u002fThai\u002ftest.docx","Succeeded":true,"TranslationId":"\Guid(00000000-0000-1000-8000-000000000000)\\"
}
]
```

The protocol client sees that the translation succeeded.

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® Server 2013

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 the [MS-TSCSOM] protocol document between the September 2012 and October 2012 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

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 or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- The removal of a document from the documentation set.
- Changes made for template compliance.

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 **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.

- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- New content added for template compliance.
- Content updated for template compliance.
- Content removed for template compliance.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated**.

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

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

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
1.4 Relationship to Other Protocols	Updated protocol relationship diagram to include [MS-CSOMREST] as a possible transport.	N	Content updated.
1.4 Relationship to Other Protocols	Revised description for clarity.	N	Content updated.
1.4 Relationship to Other Protocols	Added "JavaScript Object Notation (JSON)" to glossary.	N	Content updated.
1.4 Relationship to Other Protocols	Added figure in section 1.4.	N	Content updated.
1.6 Applicability Statement	Revised for clarity.	N	Content updated.
3.1.5.2.1.1.2 ErrorMessage	Updated to Result instead of ErrorCode.	N	Content updated.
3.1.5.3.2.1.5 EnumerateSupportedFileExtensions	Updated the return type to be "CSOM Array".	Y	Content updated.
3.1.5.3.2.1.6 EnumerateSupportedLanguages	Updated the return type to be "CSOM Array".	Y	Content updated.
3.1.5.3.2.1.11 TranslateFile	Added description of return value.	N	New content added.
3.1.5.3.2.1.12	Added description of return value.	N	New

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
TranslateFolder			content added.
3.1.5.3.2.1.13 TranslateLibrary	Added description of return value.	N	New content added.
3.1.5.5.1.1.1 Canceled	Revised the description for clarity.	N	Content updated.
3.1.5.5.2.1.1 GetAllActiveJobs	Updated the return type to be "CSOM Array".	Y	Content updated.
3.1.5.5.2.1.2 GetAllItems	Updated the return type to be "CSOM Array".	Y	Content updated.
3.1.5.5.2.1.3 GetAllJobs	Updated the return type to be "CSOM Array". Also clarified the paragraph discussing expired translation jobs.	Y	Content updated.
3.1.5.5.2.1.4 GetItems	Updated the return type to be "CSOM Array".	Y	Content updated.
4.1 Submitting a translation job	Revised steps to include a description of the ClientContext object.	N	Content updated.
4.2 Getting the status of a translation job	Revised steps to include a description of the ClientContext object.	N	Content updated.
4.3 Submitting an immediate translation job	Revised steps to include a description of the ClientContext object.	N	Content updated.

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