[MS-TSCSOM]:

Translation Services Client-Side Object Model Protocol Specification

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Revision Summary

Date	Revision History	Revision Class	Comments
01/20/2012	0.1	New	Released new document.

Table of Contents

1	ntroduction	
	Glossary	
	References	6
	2.1 Normative References	6
	2.2 Informative References	
	Overview	
	Relationship to Other Protocols	
	Prerequisites/Preconditions	
	Applicability Statement	
	Versioning and Capability Negotiation	
	B Vendor-Extensible Fields	
	Standards Assignments	8
	lessages	
2	essages	9
	Transport	9
	Message Syntax	9
3	rotocol Details	. 10
	Translation Server Details	. 10
	3.1.1 Abstract Data Model	. 10
	3.1.2 Timers	. 10
	3.1.3 Initialization	10
	B.1.4 Higher-Layer Triggered Events	10
	1.4 Higher-Layer Higgereu Events	. 10
	8.1.5 Message Processing Events and Sequencing Rules	
	3.1.5.1 Microsoft.Office.TranslationServices.Client.ItemTypes	
	3.1.5.1.1 Field Values	
	3.1.5.1.1.1 Succeeded	. 10
	3.1.5.1.1.2 InProgress	. 11
	3.1.5.1.1.3 NotStarted	. 11
	3.1.5.1.1.4 Failed	. 11
	3.1.5.1.1.5 Canceled	. 11
	3.1.5.2 Microsoft.Office.TranslationServices.Client.SaveBehavior	
	3.1.5.2.1 Field Values	
	3.1.5.2.1.1 AppendIfPossible	11
	3.1.5.2.1.2 AlwaysOverwrite	
	3.1.5.2.1.3 AppendOnly	
	3.1.5.2.1.4 NeverOverwrite	
	3.1.5.3 Microsoft.Office.TranslationServices.Client.SyncTranslator	
	3.1.5.3.1 Properties	
	3.1.5.3.1.1 Scalar Properties	
	3.1.5.3.1.1.1 OutputSaveBehavior	
	3.1.5.3.1.2 ObjectPath Properties	. 12
	3.1.5.3.2 Methods	. 12
	3.1.5.3.2.1 Scalar Methods	. 12
	3.1.5.3.2.1.1 Translate	
	3.1.5.3.2.2 ObjectPath Methods	
	3.1.5.3.2.2.1 CSOM Constructor	
	3.1.5.4 Microsoft.Office.TranslationServices.Client.TranslationItemInfo	
	3.1.5.4.1 Properties	. 13
	3.1.5.4.1.1 Scalar Properties	. 13

3.1.5.4.1.1.1 Canceled	13
3.1.5.4.1.1.2 ErrorCode	13
3.1.5.4.1.1.3 ErrorMessage	14
3.1.5.4.1.1.4 Failed	
3.1.5.4.1.1.5 InProgress	
3.1.5.4.1.1.6 InputFile	
3.1.5.4.1.1.7 NotStarted	14
3.1.5.4.1.1.8 OutputFile	14
3.1.5.4.1.1.9 Succeeded	14
3.1.5.4.1.1.10 TranslationId	15
3.1.5.4.1.2 ObjectPath Properties	15
3.1.5.5 Microsoft.Office.TranslationServices.Client.TranslationJob	15
3.1.5.5.1 Properties	15
3.1.5.5.1.1 Scalar Properties	15
3.1.5.5.1.1.1 JobId	15
3.1.5.5.1.1.2 Name	
3.1.5.5.1.1.3 OutputSaveBehavior	15
3.1.5.5.1.2 ObjectPath Properties	16
3.1.5.5.2 Methods	16
3.1.5.5.2.1 Scalar Methods	
3.1.5.5.2.1.1 AddFile	
3.1.5.5.2.1.2 AddFolder	
3.1.5.5.2.1.3 AddLibrary	17
3.1.5.5.2.1.4 CancelJob	17
3.1.5.5.2.1.5 EnumerateSupportedFileExtensions	
3.1.5.5.2.1.6 EnumerateSupportedLanguages	
3.1.5.5.2.1.7 GetMaximumFileSize	18
3.1.5.5.2.1.8 IsFileExtensionSupported	18
3.1.5.5.2.1.9 IslanguageSupported	19
3.1.5.5.2.1.10 Start	19
3.1.5.5.2.1.11 TranslateFile	19
3.1.5.5.2.1.12 TranslateFolder	19
3.1.5.5.2.1.13 TranslateLibrary	20
3.1.5.5.2.2 ObjectPath Methods	
3.1.5.5.2.2.1 CSOM Constructor	
3.1.5.6 Microsoft.Office.TranslationServices.Client.TranslationJobInfo	21
3.1.5.6.1 Properties	21
3.1.5.6.1.1 Scalar Properties	21
3.1.5.6.1.1.1 Canceled	21
3.1.5.6.1.1.2 CancelTime	21
3.1.5.6.1.1.3 JobId	21
3.1.5.6.1.1.4 Name	21
3.1.5.6.1.1.5 PartiallySubmitted	
3.1.5.6.1.1.6 SubmittedTime	22
3.1.5.6.1.2 ObjectPath Properties	
3.1.5.7 Microsoft.Office.TranslationServices.Client.TranslationJobStatus	22
3.1.5.7.1 Properties	22
3.1.5.7.1.1 Scalar Properties	22
3.1.5.7.1.1.1 Canceled	
3.1.5.7.1.1.2 Count	
3.1.5.7.1.1.3 Failed	
3.1.5.7.1.1.4 InProgress	
3.1.5.7.1.1.5 Name	

	2.4.F.7.4.4.C. NetChested	2.5
	3.1.5.7.1.1.6 NotStarted	
	3.1.5.7.1.1.7 Succeeded	
	3.1.5.7.1.2 ObjectPath Properties	
	3.1.5.7.2 Methods	
	3.1.5.7.2.1 Scalar Methods	
	3.1.5.7.2.1.1 GetAllActiveJobs	
	3.1.5.7.2.1.2 GetAllItems	
	3.1.5.7.2.1.3 GetAllJobs	. 24
	3.1.5.7.2.1.4 GetItems	. 24
	3.1.5.7.2.1.5 Refresh	. 25
	3.1.5.7.2.2 ObjectPath Methods	
	3.1.5.7.2.2.1 CSOM Constructor	. 25
	3.1.6 Timer Events	. 25
	3.1.7 Other Local Events	. 25
4	4 Protocol Examples	. 26
	4.1 Submitting a translation job	
	4.2 Getting the status of a translation job	
	4.3 Submitting an immediate translation job	. 29
5	5 Security	. 31
	5.1 Security Considerations for Implementers	
	5.2 Index of Security Parameters	. 31
_	5 Appendix A: Product Behavior	
7	7 Change Tracking	22
•	Clialiye Hackilly	. 33
2	3 Index	34
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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 contain RFC 2119 language. Sections 1.5 and 1.9 are also normative but cannot contain RFC 2119 language. 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 Boolean
CSOM DateTime
CSOM GUID
CSOM Int32
CSOM String
file extension
immediate translation job
site
translation item
translation job
Uniform Resource Locator (URL)

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 Specification documents do not include a publishing year because links are to the latest version of the 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".

6 / 34

[MS-TSCSOM] — v20120122 Translation Services Client-Side Object Model Protocol Specification

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Release: Sunday, January 22, 2012

[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

[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

1.2.2 Informative References

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

[MS-OFCGLOS] Microsoft Corporation, "Microsoft Office Master Glossary".

1.3 Overview

This protocol enables protocol clients to perform machine translation of documents. 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

The Translation Services 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] or the SharePoint Client Query OData Protocol as described in [MS-CSOMREST]. 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.

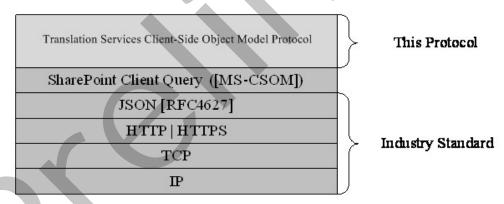


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against 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 should 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, the protocol server adds its translation items to a queue to be processed asynchronously.

Additionally, the protocol supports **immediate translation jobs**, which are high-priority translation jobs which contain 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.TranslationServices.Client.ItemTypes

ShortName: SP.Translation.ItemTypes

Flag: true

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

3.1.5.1.1 Field Values

3.1.5.1.1.1 Succeeded

Value: 1

10 / 34

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

3.1.5.1.1.2 InProgress

Value: 2

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

3.1.5.1.1.3 NotStarted

Value: 4

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

3.1.5.1.1.4 Failed

Value: 8

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

3.1.5.1.1.5 Canceled

Value: 16

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

3.1.5.2 Microsoft.Office.TranslationServices.Client.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.

3.1.5.2.1 Field Values

3.1.5.2.1.1 AppendIfPossible

Value: 0

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.

3.1.5.2.1.2 AlwaysOverwrite

Value: 1

The protocol server overwrites the existing file with the translated file.

3.1.5.2.1.3 AppendOnly

Value: 2

11 / 34

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.

3.1.5.2.1.4 NeverOverwrite

Value: 3

The protocol server does not overwrite the existing file and discards the translated file.

3.1.5.3 Microsoft.Office.TranslationServices.Client.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.

3.1.5.3.1 Properties

3.1.5.3.1.1 Scalar Properties

3.1.5.3.1.1.1 OutputSaveBehavior

Type: Microsoft.Office.TranslationServices.Client.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.

3.1.5.3.1.2 ObjectPath Properties

None.

3.1.5.3.2 Methods

3.1.5.3.2.1 Scalar Methods

3.1.5.3.2.1.1 Translate

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

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

Returns a **TranslationItemInfo** object (section 3.1.5.4) which contains the results of the translation item of the immediate translation job.

Parameters:

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

12 / 34

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 3.1.5.5.2.1.1).

outputFile: This value MUST be a full or relative path to the file to which 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.

3.1.5.3.2.2 ObjectPath Methods

3.1.5.3.2.2.1 CSOM Constructor

This constructor creates a **SyncTranslator** object which 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 3.1.5.5.2.1.9).

3.1.5.4 Microsoft.Office.TranslationServices.Client.TranslationItemInfo

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

ShortName: SP.Translation.TranslationItemInfo

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

3.1.5.4.1 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 to which the translation item belongs has been canceled.

3.1.5.4.1.1.2 ErrorCode

Type: CSOM Int32

Accessibility: Read Only

This property indicates the error status of the translation item. If the translation item has not completed or completed successfully, this property is 0. If the translation item completed but failed, this property is an integer error code greater than 0.

3.1.5.4.1.1.3 ErrorMessage

Type: CSOM String

Accessibility: Read Only

If the **ErrorCode** value is 0, this property is null. Otherwise, this property contains an error message describing the error condition denoted by **ErrorCode** (section 3.1.5.4.1.1.2).

3.1.5.4.1.1.4 Failed

Type: CSOM Boolean

Accessibility: Read Only

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

3.1.5.4.1.1.5 InProgress

Type: CSOM Boolean

Accessibility: Read Only

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

3.1.5.4.1.1.6 InputFile

Type: CSOM String

Accessibility: Read Only

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

3.1.5.4.1.1.7 NotStarted

Type: CSOM Boolean

Accessibility: Read Only

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

3.1.5.4.1.1.8 OutputFile

Type: CSOM String

Accessibility: Read Only

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

3.1.5.4.1.1.9 Succeeded

Type: CSOM Boolean

Accessibility: Read Only

This property is true if and only if the translation item has completed and succeeded.

3.1.5.4.1.1.10 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.

3.1.5.4.1.2 ObjectPath Properties

None.

3.1.5.5 Microsoft.Office.TranslationServices.Client.TranslationJob

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

ShortName: SP.Translation.TranslationJob

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

3.1.5.5.1 Properties

3.1.5.5.1.1 Scalar Properties

3.1.5.5.1.1.1 JobId

Type: CSOM GUID

Accessibility: Read Only

This property contains an identifier which 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 3.1.5.7).

3.1.5.5.1.1.2 Name

Type: CSOM String

Accessibility: Read/Write

The protocol client sets this optional property 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.

3.1.5.5.1.1.3 OutputSaveBehavior

Type: Microsoft.Office.TranslationServices.Client.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.

3.1.5.5.1.2 ObjectPath Properties

None.

3.1.5.5.2 Methods

3.1.5.5.2.1 Scalar Methods

3.1.5.5.2.1.1 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 3.1.5.5.2.1.10) is called.

Parameters:

inputFile: This value MUST be a full or relative path to the file which 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 3.1.5.5.2.1.5).

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 3.1.5.5.2.1.7).

outputFile: This value MUST be a full or relative path to the file to which 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.

3.1.5.5.2.1.2 AddFolder

Return Type: CSOM Boolean

The protocol client calls this method to add every translatable file in 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 3.1.5.5.2.1.1). This method MUST NOT be called after the **Start** method (section 3.1.5.5.2.1.10) is called.

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** ([MS-CSOMSPT] section 3.2.5.72) which contains the documents which are to be translated.

16 / 34

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Type: Microsoft.SharePoint.Client.Folder

outputFolder: This value MUST be a valid **Microsoft.SharePoint.Client.Folder** ([MS-CSOMSPT] section 3.2.5.72) in which 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 subfolders of inputFolder will not be added to the translation job. If this value is true, files in subfolders of inputFolder will be added.

Type: CSOM Boolean

3.1.5.5.2.1.3 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 3.1.5.5.2.1.1). This method MUST NOT be called after the **Start** method (section 3.1.5.5.2.1.10) is called.

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** ([MS-CSOMSPT] section 3.2.5.79) which contains the documents which are to be translated.

Type: Microsoft.SharePoint.Client.List

outputList: This value MUST be a valid **Microsoft.SharePoint.Client.List** ([MS-CSOMSPT] section 3.2.5.79) in which 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 <code>inputList</code>.

3.1.5.5.2.1.4 CancelJob

This method is a static CSOM method.

Return Type: None

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

Parameters:

jobId: This value MUST be the **JobId** (section 3.1.5.6.1.1.3) of a translation job which was submitted to the protocol server.

Type: CSOM GUID

3.1.5.5.2.1.5 EnumerateSupportedFileExtensions

This method is a static CSOM method.

Return Type: System.Collections.Generic.IEnumerable<System.String>

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

Returns an array of strings with an element for each supported file extension.

Parameters: None

3.1.5.5.2.1.6 EnumerateSupportedLanguages

This method is a static CSOM method.

Return Type: System.Collections.Generic.IEnumerable<System.String>

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

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

3.1.5.5.2.1.7 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.

Returns 0 if the file extension is not supported by the protocol server. Returns a size in bytes if the file extension is supported by the protocol server.

Parameters:

extension: This value MUST be the valid file extension for which to get the maximum file size.

Type: CSOM String

3.1.5.5.2.1.8 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.

Returns true if and only if the file extension is supported.

Parameters:

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

Type: CSOM String

3.1.5.5.2.1.9 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.

Returns true if and only if the language is supported.

Parameters:

language: This value MUST be the valid language tag to test as specified in [RFC1766].

Type: CSOM String

3.1.5.5.2.1.10 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

3.1.5.5.2.1.11 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 3.1.5.5.2.1.1) with the same parameters followed by calling the **Start** method (section 3.1.5.5.2.1.10).

Parameters:

inputFile: This value MUST have the same behavior as the **inputFile** parameter of the **AddFile** method (section 3.1.5.5.2.1.1).

Type: CSOM String

outputFile: This value MUST have the same behavior as the **outputFile** parameter of the **AddFile** method (section 3.1.5.5.2.1.1).

Type: CSOM String

3.1.5.5.2.1.12 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 3.1.5.5.2.1.2) with the same parameters followed by calling the **Start** method (section 3.1.5.5.2.1.10).

Parameters:

inputFolder: This value MUST have the same behavior as the *inputFolder* parameter of the **AddFolder** method (section <u>3.1.5.5.2.1.2</u>).

Type: CSOM String

outputFolder: This value MUST have the same behavior as the *outputFolder* parameter of the **AddFolder** method (section 3.1.5.5.2.1.2).

Type: CSOM String

recursion: This value MUST have the same behavior as the recursion parameter of the **AddFolder** method (section 3.1.5.5.2.1.2).

Type: CSOM Boolean

3.1.5.5.2.1.13 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 3.1.5.5.2.1.3) with the same parameters followed by calling the **Start** method (section 3.1.5.5.2.1.10).

Parameters:

inputLibrary: This value MUST have the same behavior as the *inputList* parameter of the **AddLibrary** method (section 3.1.5.5.2.1.3).

Type: CSOM String

outputLibrary: This value MUST have the same behavior as the outputList parameter of the **AddLibrary** method (section 3.1.5.5.2.1.3).

Type: CSOM String

3.1.5.5.2.2 ObjectPath Methods

3.1.5.5.2.2.1 CSOM Constructor

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

Parameters:

targetLanguage: The language to which documents will be translated.

Type: CSOM String

Translation Services Client-Side Object Model Protocol Specification

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This value MUST be a valid language tag as defined in [RFC1766] and MUST be a language supported by the protocol server (see section 3.1.5.5.2.1.9).

3.1.5.6 Microsoft.Office.TranslationServices.Client.TranslationJobInfo

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

ShortName: SP.Translation.TranslationJobInfo

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

3.1.5.6.1 Properties

3.1.5.6.1.1 Scalar Properties

3.1.5.6.1.1.1 Canceled

Type: CSOM Boolean

Accessibility: Read Only

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

3.1.5.6.1.1.2 CancelTime

Type: CSOM DateTime

Accessibility: Read Only

If the **Canceled** (section 3.1.5.6.1.1.1) property is true, this property contains the time that the translation job was canceled. Otherwise, this property is null.

3.1.5.6.1.1.3 JobId

Type: CSOM GUID

Accessibility: Read Only

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

3.1.5.6.1.1.4 Name

Type: CSOM String

Accessibility: Read Only

This property contains a name associated (see section 3.1.5.5.1.1.2) with the translation job.

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

3.1.5.6.1.1.5 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 which is partially submitted will not be processed.

3.1.5.6.1.1.6 **SubmittedTime**

Type: CSOM DateTime

Accessibility: Read Only

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

3.1.5.6.1.2 ObjectPath Properties

None.

3.1.5.7 Microsoft.Office.TranslationServices.Client.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 3.1.5.6) and **TranslationItemInfo** (section 3.1.5.4) objects.

3.1.5.7.1 Properties

3.1.5.7.1.1 Scalar Properties

3.1.5.7.1.1.1 Canceled

Type: CSOM Int32

Accessibility: Read Only

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

3.1.5.7.1.1.2 Count

Type: CSOM Int32

Accessibility: Read Only

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

3.1.5.7.1.1.3 Failed

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job which have completed and failed.

3.1.5.7.1.1.4 InProgress

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job which have started, but have not completed.

3.1.5.7.1.1.5 Name

Type: CSOM String

Accessibility: Read Only

This property contains a name associated (section 3.1.5.5.1.1.2) with the translation job.

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

3.1.5.7.1.1.6 NotStarted

Type: CSOM Int32

Accessibility: Read Only

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

3.1.5.7.1.1.7 Succeeded

Type: CSOM Int32

Accessibility: Read Only

This property contains the number of translation items associated with the translation job which have completed and succeeded.

3.1.5.7.1.2 ObjectPath Properties

None.

3.1.5.7.2 Methods

3.1.5.7.2.1 Scalar Methods

3.1.5.7.2.1.1 GetAllActiveJobs

This method is a static CSOM method.

Return Type:

System.Collections.Generic.IEnumerable<Microsoft.Office.TranslationServices.Client.TranslationJobI nfo>

The protocol client calls this static method to retrieve **TranslationJobInfo** objects (section 3.1.5.6) representing each translation job submitted by the current user which has not completed.

23 / 34

[MS-TSCSOM] - v20120122

Translation Services Client-Side Object Model Protocol Specification

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Returns a list of **TranslationJobInfo** objects (section <u>3.1.5.6</u>) which MUST contain an element for every translation job which was successfully submitted by the current user and which has not completed.

Parameters: None

3.1.5.7.2.1.2 GetAllItems

Return Type:

System. Collections. Generic. I Enumerable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Translation Services. Client. Translation I temporable < Microsoft. Office. Offi

The protocol client calls this method to retrieve **TranslationItemInfo** objects (section section 3.1.5.4) representing each translation item which belongs to the translation job.

Returns a list of **TranslationItemInfo** objects (section section <u>3.1.5.4</u>) which MUST contain an element for every translation item which belongs to the translation job.

Parameters: None

3.1.5.7.2.1.3 GetAllJobs

This method is a static CSOM method.

Return Type:

System.Collections.Generic.IEnumerable<Microsoft.Office.TranslationServices.Client.TranslationJobI nfo>

The protocol client calls this static method to retrieve **TranslationJobInfo** objects (section 3.1.5.6) representing each translation job submitted by the current user.

Returns a list of **TranslationJobInfo** objects (section 3.1.5.6) which MUST contain an element for every translation job which was successfully submitted by the current user and which has not expired.

The protocol server SHOULD remove the status of expired translation jobs, which are translation jobs which have been completed for a sufficient amount of time for protocol clients to view their status. This prevents the protocol server from using excessive storage for the status of completed translation jobs.

Parameters: None

3.1.5.7.2.1.4 GetItems

Return Type:

System. Collections. Generic. I Enumerable < Microsoft. Office. Translation Services. Client. Translation I tem Info>

The protocol client calls this method to retrieve **TranslationItemInfo** objects (section section 3.1.5.4) representing translation items which belong to the translation job.

Returns a list of **TranslationItemInfo** objects (section section 3.1.5.4) which MUST contain an element for every translation item which belongs to the translation job and which 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 which are in one of these states are returned by the method.

Type: Microsoft.Office.TranslationServices.Client.ItemTypes

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

3.1.5.7.2.1.5 Refresh

Return Type: None

The protocol client calls this method to update the **Failed** (section 3.1.5.7.1.1.3), **InProgress** (section 3.1.5.7.1.1.4), **NotStarted** (section 3.1.5.7.1.1.6) and **Succeeded** (section 3.1.5.7.1.1.7) properties to reflect the most current states of translation items associated with the translation job.

Parameters: None

3.1.5.7.2.2 ObjectPath Methods

3.1.5.7.2.2.1 CSOM Constructor

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

Parameters:

jobId: An identifier which uniquely identifies the translation job.

Type: CSOM GUID

This value MUST be equal to the **JobId** property (section 3.1.5.5.1.1.1) of a successfully submitted **TranslationJob** (section 3.1.5.5).

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 a **ClientContext** object.
- 2. Creates a **TranslationJob** (section <u>3.1.5.5</u>) object with the *targetLanguage* parameter set to "th".
- 3. Sets the **Name** property on the **TranslationJob** object to "Example1".
- Calls the AddFile (section 3.1.5.5.2.1.1) 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 3.1.5.5.2.1.10) method on the **TranslationJob** object.
- 6. Calls the ExecuteQuery method on the ClientContext object.

The following XML instructions are sent to the protocol server:

```
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"</pre>
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"</pre>
   <Method Name="AddFile" Id="77" ObjectPathId="75">
        <Parameter Type="String">http://server/test.docx</Parameter>
        <Parameter Type="String">http://server/Thai/test.docx</Parameter>
      </Parameters>
   <SetProperty Id="78" ObjectPathId="75" Name="Name">
     <Parameter Type="String">Example1
   </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}">
        <Parameter Type="String">th</Parameter>
      </Parameters>
    </Constructor>
  </ObjectPaths>
```

26 / 34

[MS-TSCSOM] - v20120122

Translation Services Client-Side Object Model Protocol Specification

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```
</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 a ClientContext object.
- 2. Call the **GetAllJobs** (section <u>3.1.5.7.2.1.3</u>) static method on the **TranslationJobStatus** (section <u>3.1.5.7</u>) type.
- 3. Call the **ExecuteQuery** method on the **ClientContext** object.

The following XML instructions are sent to the protocol server:

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 a ClientContext object.
- 2. Create a **TranslationJobStatus** object with the *jobId* parameter set to "00000000-0000-1015-8096-8e229d88f9ed".
- 3. Call the **GetItems** (section 3.1.5.7.2.1.4) method on the **TranslationJobStatus** object with the *types* parameter set to **ItemTypes.Succeeded**.
- Call the ExecuteQuery method on the ClientContext object.

The following XML instructions are sent to the protocol server:

```
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"</pre>
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 translation items in the translation job and responds with the following message:

```
{
"SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3420.1000","ErrorInfo":null
```

28 / 34

[MS-TSCSOM] — v20120122 Translation Services Client-Side Object Model Protocol Specification

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```
},175,[
{
"_ObjectType_":"SP.Translation.TranslationItemInfo","Canceled":false,"ErrorCode":0,"ErrorMess
age":"","Failed":false,"InProgress":false,"InputFile":"http:\u002f\u002fserver\u002ftest.docx
","NotStarted":false,"OutputFile":"http:\u002f\u002fserver\u002fThai\u002ftest.docx","Succeed
ed":true,"TranslationId":"\/Guid(0000001-0001-1015-8096-8e229d88f9ed)\/"
}
]
```

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 a ClientContext object.
- Create a SyncTranslator (section 3.1.5.3) object with the targetLanguage parameter set to "th".
- Set the OutputSaveBehavior property on the SyncTranslator object to SaveBehavior.AppendIfPossible.
- 4. Call the **Translate** (section 3.1.5.3.2.1.1) 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 **ClientContext** object.

The following XML instructions are sent to the protocol server:

```
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"</pre>
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>
```

29 / 34

[MS-TSCSOM] — v20120122 Translation Services Client-Side Object Model Protocol Specification

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```
</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,"ErrorMess
age":"","Failed":false,"InProgress":false,"InputFile":"http:\u002f\u002fserver\u002ftest.docx
","NotStarted":false,"OutputFile":"http:\u002f\u002fserver\u002fthai\u002ftest.docx","Succeed
ed":true,"TranslationId":"\/Guid(00000000-0000-1000-8000-0000000000)\/"
}
]
```

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 2010

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

No table of changes is available. The document is either new or has had no changes since its last release.



8 Index

A
Abstract data model
server 10 Applicability 8
С
Capability negotiation 8 Change tracking 33
D
Data model - abstract server 10
F
Fields - vendor-extensible 8
G
Glossary 6
н
Higher-layer triggered events <u>server</u> 10
I
Implementer - security considerations 31 Index of security parameters 31 Informative references 7 Initialization
server 10 Introduction 6
М
Messages transport 9
N
Normative references 6
0
Other local events server 25 Overview (synopsis) 7
P
Parameters - security index 31 Preconditions 8
Prerequisites 8 Product behavior 32

```
R
References
  informative 7
  normative 6
Relationship to other protocols 7
S
Security
  implementer considerations 31
  parameter index 31
Server
  abstract data model 10
  higher-layer triggered events 10
  initialization 10
other local events 25
  timer events 25
  timers 10
Standards assignments 8
Т
Timer events
  server 25
Timers
server 10
Tracking changes 33
Transport 9
Triggered events - higher-layer
  server 10
Vendor-extensible fields 8
Versioning 8
```

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Release: Sunday, January 22, 2012