

## [MS-WMCSOM]:

# Work Management Client-Side Object Model Protocol

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Preliminary

## Revision Summary

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# 1 Introduction

The Work Management Client-Side Object Model Protocol defines types, methods, and properties that protocol clients use to access and manipulate **tasks (2)** assigned to a user on a protocol **server** that proxies to a Work Management **service application**.

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 [\[RFC2119\]](#). Sections 1.5 and 1.9 are also normative but do not contain those terms. All other sections and examples in this specification are informative.

## 1.1 Glossary

The following terms are specific to this document:

**CSOM array:** An ordered collection of values that can be used in an XML request or JSON response text. The values are identified by their position and their position is determined by a zero-based integer index.

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

**CSOM DateTime:** An Int64 value that represents the number of 100-nanosecond time intervals that have elapsed since 12:00:00, January 1, 0001. It can be used in an XML request or as a string in JSON response text. The value can represent time intervals through 23:59:59.9999999, December 31, 9999. It can also specify whether a local, UTC, or no time zone applies.

**CSOM Int32:** A 32-bit, signed integer value, which is the INT32 type described in [\[MS-DTYP\]](#), that can be used in an XML request or as a number in JSON response text. The range of CSOM Int32 values is from "-2147483648" to "2147483647".

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

**CSOM UInt32:** A 32-bit, unsigned integer value, which is the UINT32 type described in [\[MS-DTYP\]](#), that can be used in an XML request or as a number in JSON response text. The range of CSOM UInt32 values is from "0" to "4294967295".

**endpoint:** A communication port that is exposed by an application server for a specific shared service and to which messages can be addressed.

**Hypertext Transfer Protocol (HTTP):** An application-level protocol for distributed, collaborative, hypermedia information systems (text, graphic images, sound, video, and other multimedia files) on the World Wide Web.

**Hypertext Transfer Protocol Secure (HTTPS):** An extension of HTTP that securely encrypts and decrypts web page requests. In some older protocols, "Hypertext Transfer Protocol over Secure Sockets Layer" is still used (Secure Sockets Layer has been deprecated). For more information, see [\[SSL3\]](#) and [\[RFC5246\]](#).

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

**server:** A replicating machine that sends replicated files to a partner (client). The term "server" refers to the machine acting in response to requests from partners that want to receive replicated files.

**service application:** A middle-tier application that runs without any user interface components and supports other applications by performing tasks such as retrieving or modifying data in a database.

**session:** A representation of application data in system memory. It is used to maintain state for application data that is being manipulated or monitored on a protocol server by a user.

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

**task:** (1) An act to be executed by all query servers, and any requisite information for those query servers to execute that act correctly.

(2) An object (1) that represents an assignment to be completed.

**Uniform Resource Identifier (URI):** A string that identifies a resource. The URI is an addressing mechanism defined in Internet Engineering Task Force (IETF) Uniform Resource Identifier (URI): Generic Syntax [\[RFC3986\]](#).

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

**User Profile Service:** A data source that stores, provides, and applies information about users.

**view:** See form view (Microsoft InfoPath), list view (SharePoint Products and Technologies), or View (Microsoft Business Connectivity Services).

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

## 1.2 References

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

### 1.2.1 Normative References

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

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

[MS-WMS] Microsoft Corporation, "[Work Management Service Web Service Protocol](#)".

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

### 1.2.2 Informative References

[MS-WSSTS] Microsoft Corporation, "[Windows SharePoint Services](#)".

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

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

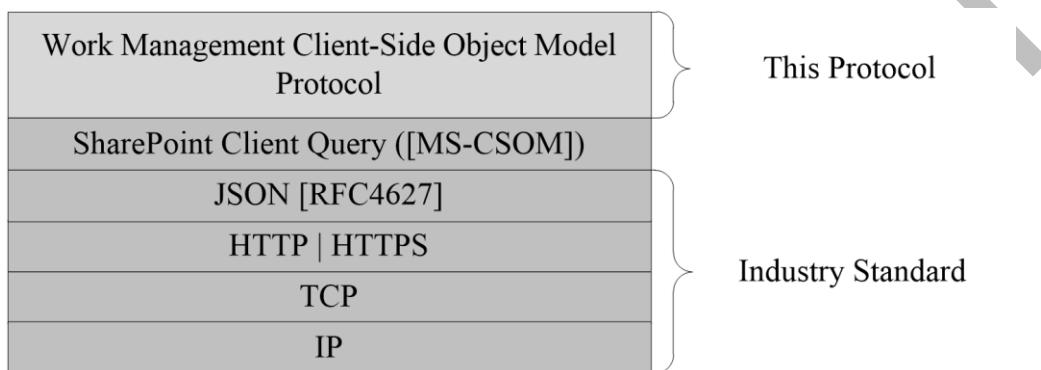
## 1.3 Overview

This protocol defines types, methods, and properties that protocol clients use to access and manipulate tasks (2) assigned to a user on a protocol server that proxies to an instance of the Work Management service application.

Some typical scenarios in which a protocol client could use this protocol are: retrieving a user's task (2) **list**, updating a task (2), and changing the order of tasks (2).

## 1.4 Relationship to Other Protocols

The Work Management Client-Side Object Model protocol is a set of types, properties, and methods that can be accessed by using the SharePoint Client Query Protocol as described in [\[MS-CSOM\]](#). This protocol also uses **Hypertext Transfer Protocol (HTTP)**, as described in [\[RFC2616\]](#) and **Hypertext Transfer Protocol over Secure Sockets Layer (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 depends on the **User Profile Service** APIs to determine the **Uniform Resource Locator (URL)** for the **site** to retrieve tasks (2) from.

This protocol operates against a protocol server that exposes one or more **endpoint Uniform Resource Identifiers (URI)** that are known by protocol clients.

This protocol assumes that authentication has been performed by underlying protocols.

This protocol requires the protocol client to have appropriate permission to call the methods on the protocol server (2).

## 1.6 Applicability Statement

This protocol can be used by a protocol client to read data from, write data to, and execute operations against a protocol server. The protocol is optimized to enable a protocol client to specify the exact set of data and operations to perform in a single batch, making it suitable for situations where the connection speed between the protocol client and the protocol server can be slow. Because of the complexity of the structure of requests and responses, it is not suitable for cases where the inputs and outputs need to be quickly understood and specified by a human. Because the protocol features minimal services for type and operation discovery, it is not suitable for protocol servers that implement a different set of functionality compared to the set of functionality described for a collaboration server in [\[MS-WSSTS\]](#).

## **1.7 Versioning and Capability Negotiation**

This protocol operates in the context of the authenticated user that made a request to the service, and it runs in the context of a particular site. Localization-specific properties, such as the title of a list, are returned by using the preferred language of the user, if available, or by using the default language of the site as a fallback.

## **1.8 Vendor-Extensible Fields**

A protocol server can provide additional properties and methods beyond those specified in this document to provide extended collaboration server functionality; however, because no means are provided for a protocol client to discover that extended functionality, the functionality is taken advantage of only by protocol clients that have built-in knowledge of the extensions.

A protocol client is expected to be tolerant of the situation where particular methods and properties specified in this document are not available, because either the protocol server does not support the functionality or the administrator has disabled specific functionalities.

## **1.9 Standards Assignments**

None.

## 2 Messages

### 2.1 Transport

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

### 2.2 Message Syntax

#### 2.2.1 Common Exceptions

The protocol server MUST validate the request from the protocol client. When a protocol server processes a CSOM operation in the request, the following table lists common exceptions that could occur when accessing or updating a property or invoking a method.

Error code	Error type name	Condition
-2147024891	System.UnauthorizedAccessException	The user does not have permission to access a property, update a property, or call a method.

Besides the preceding exceptions and the exceptions that are listed for the specific properties or methods, the protocol server (2) can return other exceptions to the protocol client, for which the protocol client could use the error message for display purpose but could not use the error code or error type to determine the causes of the exception.

Exceptions listed for the specific properties are thrown for both read and write operations, unless otherwise specified.

## 3 Protocol Details

### 3.1 Server Details

#### 3.1.1 Abstract Data Model

This protocol shares the abstract data model used by the SharePoint Client Query Protocol, as specified in [\[MS-CSOM\]](#) section [3.1.1](#), to communicate with the protocol server.

The protocol server maintains a collection of tasks (2) assigned to the current user that serves as a task (2) cache. It also maintains a collection of locations from which the source tasks (2) originate, which can consist of locations on the protocol server or external server, and settings for the user for managing tasks (2).

Most methods in this protocol perform operations that create, read, update, or delete data on these stored tasks (2). However, the **BeginCacheRefresh** and **BeginExchangeSync** methods call web service endpoints on a service application that implements the Work Management Service Web Service protocol specified in [\[MS-WMS\]](#) to trigger refresh operations that update the cache with new and modified tasks (2), or synchronize tasks (2) assigned to the user with another task (2) server determined by the configuration of the service application. Tasks (2) are aggregated from other locations through providers configured on the service application.

#### 3.1.2 Timers

None.

#### 3.1.3 Initialization

None.

#### 3.1.4 Higher-Layer Triggered Events

None.

#### 3.1.5 Message Processing Events and Sequencing Rules

##### 3.1.5.1 Microsoft.SharePoint.WorkManagement.Client.BaseSession

**TypeId:** {3FE45B91-5B30-447C-884F-0E1837215FF9}

**ShortName:** SP.WorkManagement.OM.BaseSession

Represents a base **session** that is used to access the work management tasks (2).

###### 3.1.5.1.1 Properties

###### 3.1.5.1.1.1 Scalar Properties

None.

###### 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 BeginExchangeSync**

**Return Type:** CSOM Boolean

Starts a server synchronization for the current user. Returns true if the synchronization started successfully.

**Parameters:** None

##### **3.1.5.1.2.1.2 IsExchangeJobPending**

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

#### **3.1.5.1.2.2 ObjectPath Methods**

##### **3.1.5.1.2.2.1 AddAttributeToTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Adds the specified string as a property on a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be added.

Type: CSOM String

##### **3.1.5.1.2.2.2 BeginCacheRefresh**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult

Starts an operation to update a user's task (2) list with new tasks (2) and with changes to existing tasks (2).

**Parameters:** None

##### **3.1.5.1.2.2.3 CreateTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Creates a new task (2).

**Parameters:**

*taskName*: Specifies the task (2) name.

Type: CSOM String

*description*: Specifies the task (2) description.

Type: CSOM String

*localizedStartDate*: Specifies the start date as a string represented in the locale of the protocol client.

Type: CSOM String

*localizedDueDate*: Specifies the due date as a string represented in the locale of the protocol client.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished (true) or not (false).

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned (true) or not (false).

Type: CSOM Boolean

*locationKey*: Specifies the task (2) location identifier. Use -1 to specify that the task (2) has no location.

Type: CSOM Int32

*editUrl*: Specifies the URL to edit the task (2).

Type: CSOM String

#### **3.1.5.1.2.2.4 DeleteTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Deletes a task (2).

#### **Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

#### **3.1.5.1.2.2.5 GetRefreshHistory**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

Returns information about the latest task (2) cache refresh.

#### **Parameters:**

*since*: Specifies the date on which the history starts.

Type: **CSOM DateTime**

#### **3.1.5.1.2.2.6 GetRefreshStatus**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshResult

Returns the status of a refresh operation.

#### **Parameters:**

*refreshId*: Specifies the refresh identifier.

Type: CSOM Int32

### 3.1.5.1.2.2.7 PinTask

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### 3.1.5.1.2.2.8 RemoveAttributeFromTask

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Removes the specified string property from a task (2). This will only remove properties that were added through the **AddAttributeToTask** method, as specified in section [3.1.5.1.2.2.1](#).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be removed.

Type: CSOM String

### 3.1.5.1.2.2.9 RemovePinOnTask

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as not pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### 3.1.5.1.2.2.10 UpdateTaskWithLocalizedValue

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Updates a task (2) field with a localized value.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*field*: Specifies the field to be updated.

Type: Microsoft.SharePoint.WorkManagement.Client.WritableTaskField

*value*: Specifies the new value of the field.

Type: CSOM String

### **3.1.5.1.2.2.11      GetCalloutInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

Returns supplemental information about a task (2).

**Parameters:**

*taskKey*: Identifier of the task (2) to retrieve information for.

Type: CSOM Int32

### **3.1.5.1.2.2.12      ReadAllNonTaskData**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult

Returns information about a user's task (2) settings that is not specific to tasks (2) themselves.

**Parameters:** None

### **3.1.5.1.2.2.13      RefreshSingleTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult

Refreshes information about a specific task (2) with updates from the source.

**Parameters:**

*taskKey*: Identifier of the task (2) to refresh information for.

Type: CSOM Int32

### **3.1.5.1.2.2.14      GetRefreshHealthInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo

Gets the refresh health information.

**Parameters:** None

### **3.1.5.1.2.2.15      CreatePersonalTaskAndPromoteToProviderTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **CreatePersonalTaskAndPromoteToProviderTask** method creates a new personal task (2) and then tries to promote it to the provider specified by the *locationKey* parameter.

This is a convenience method that is the equivalent of calling **CreateTask** and then **PromotePersonalTaskToProviderTaskInLocation**.

If the location key is invalid, or the promote fails in the provider, the personal task (2) can already have been created and will not be cleaned up.

For more details on how the promote step works, please check the **PromotePersonalTaskToProviderTaskToLocation** method.

**Parameters:**

*taskName*: The name of the task (2).

Type: CSOM String

*description*: The description of the task (2).

Type: CSOM String

*localizedStartDate*: The start date in a localized string.

Type: CSOM String

*localizedDueDate*: The due date in a localized string.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished.

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned.

Type: CSOM Boolean

*locationKey*: The location of the task (2). -1 for personal tasks (2).

Type: CSOM Int32

### **3.1.5.1.2.2.16 PromotePersonalTaskToProviderTaskInLocation**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **PromotePersonalTaskToProviderTaskInLocation** method makes a copy of the specified task (2) in the data source of the specified location and links it to the AWIOP (All My Work In One Place) representation.

For example, if the location identifier points to a list, calling this method would result in a task (2) being created in that list. The AWIOP task (2) would be changed to be a linked task (2) rather than a personal one, as if the task (2) had been created in the list and then aggregated by AWIOP.

#### **Parameters:**

*taskKey*: The identifier of the task (2).

Type: CSOM Int32

*locationId*: The identifier of the location.

Type: CSOM Int32

### **3.1.5.2 Microsoft.SharePoint.WorkManagement.Client.BooleanCompareType**

**ShortName:** SP.WorkManagement.OM.BooleanCompareType

**Flag:** false

Defines the Boolean comparison result values.

#### **3.1.5.2.1 Field Values**

##### **3.1.5.2.1.1 NoValue**

**Value:** 0

No value.

### **3.1.5.2.1.2 IsTrue**

**Value:** 1

The result SHOULD be true.

### **3.1.5.2.1.3 IsFalse**

**Value:** 2

The result SHOULD be false.

## **3.1.5.3 Microsoft.SharePoint.WorkManagement.Client.BooleanCriterion**

**TypeId:** {16D379B2-E752-405E-A05F-A8FE05AA0D07}

**ShortName:** SP.WorkManagement.OM.BooleanCriterion

Object used to filter a task (2) list on a Boolean property.

### **3.1.5.3.1 Properties**

#### **3.1.5.3.1.1 Scalar Properties**

##### **3.1.5.3.1.1.1 CompareType**

**Type:** Microsoft.SharePoint.WorkManagement.Client.BooleanCompareType

**Accessibility:** Read/Write

Specifies the value to evaluate when filtering tasks (2).

#### **3.1.5.3.1.2 ObjectPath Properties**

None.

### **3.1.5.3.2 Methods**

#### **3.1.5.3.2.1 Scalar Methods**

None.

#### **3.1.5.3.2.2 ObjectPath Methods**

##### **3.1.5.3.2.2.1 CSOM Constructor**

Creates a new **BooleanCriterion** object.

**Parameters:** None

## **3.1.5.4 Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult**

**TypeId:** {B020A172-1E1C-4327-A356-6002D815E3EA}

**ShortName:** SP.WorkManagement.OM.CreateRefreshJobResult

Represents the result of a **BeginCacheRefresh** method, as specified in sections [3.1.5.1.2.2.2](#), [3.1.5.15.2.2.2](#), [3.1.5.16.2.2.2](#), [3.1.5.31.2.2.2](#), and [3.1.5.41.2.2.2](#).

### **3.1.5.4.1 Properties**

#### **3.1.5.4.1.1 Scalar Properties**

##### **3.1.5.4.1.1.1 CreatedJob**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether a job was created (true) or not (false).

##### **3.1.5.4.1.1.2 CurrentJobId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the created job identifier.

##### **3.1.5.4.1.1.3 EncounteredError**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether an error was encountered.

#### **3.1.5.4.1.2 ObjectPath Properties**

None.

### **3.1.5.4.2 Methods**

#### **3.1.5.4.2.1 Scalar Methods**

None.

#### **3.1.5.4.2.2 ObjectPath Methods**

None.

## **3.1.5 Microsoft.SharePoint.WorkManagement.Client.CriterionConcatType**

**ShortName:** SP.WorkManagement.OM.CriterionConcatType

**Flag:** false

Defines the logical types of criterion concatenation.

### **3.1.5.5.1 Field Values**

#### **3.1.5.5.1.1 NoValue**

**Value:** 0

No value.

### **3.1.5.5.1.2 All**

**Value:** 1

All criteria SHOULD be true (logical AND).

### **3.1.5.5.1.3 Any**

**Value:** 2

At least one criterion SHOULD be true (logical OR).

## **3.1.5.6 Microsoft.SharePoint.WorkManagement.Client.CustomAttributeFilter**

**TypeId:** {0E21BB74-7473-48B1-9F7B-D1185BA1CA71}

**ShortName:** SP.WorkManagement.OM.CustomAttributeFilter

Represents a filter with custom attributes.

### **3.1.5.6.1 Properties**

#### **3.1.5.6.1.1 Scalar Properties**

##### **3.1.5.6.1.1.1 Attributes**

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies the array of attributes defined by the user or the system.

##### **3.1.5.6.1.1.2 ConcatType**

**Type:** Microsoft.SharePoint.WorkManagement.Client.CriterionConcatType

**Accessibility:** Read/Write

Specifies how to concatenate the attribute results.

#### **3.1.5.6.1.2 ObjectPath Properties**

None.

#### **3.1.5.6.2 Methods**

##### **3.1.5.6.2.1 Scalar Methods**

None.

##### **3.1.5.6.2.2 ObjectPath Methods**

###### **3.1.5.6.2.2.1 CSOM Constructor**

Creates a new **CustomAttributeFilter** object.

**Parameters:** None

### **3.1.5.7 Microsoft.SharePoint.WorkManagement.Client.DashboardScriptExtensionInfo**

**TypeId:** {D262CC71-32DB-4F83-8A1C-6986BD6F733F}

**ShortName:** SP.WorkManagement.OM.DashboardScriptExtensionInfo

Represents the JavaScript file and class that are associated with a specific task provider for retrieving information that a protocol client can use to extend its user interface or other functionality. Information provided by the extension class is custom to each provider.

#### **3.1.5.7.1 Properties**

##### **3.1.5.7.1.1 Scalar Properties**

###### **3.1.5.7.1.1.1 ProviderKey**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the provider identifier.

###### **3.1.5.7.1.1.2 ScriptClass**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the name of the JavaScript class to call to provide information for the user interface.

###### **3.1.5.7.1.1.3 ScriptData**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies provider-specific custom data for a JavaScript extension.

###### **3.1.5.7.1.1.4 ScriptFiles**

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies the JavaScript files that SHOULD be loaded by the user interface.

#### **3.1.5.7.1.2 ObjectPath Properties**

None.

#### **3.1.5.7.2 Methods**

##### **3.1.5.7.2.1 Scalar Methods**

None.

##### **3.1.5.7.2.2 ObjectPath Methods**

None.

## **3.1.5.8 Microsoft.SharePoint.WorkManagement.Client.DateRangeCriterion**

**TypeId:** {C9C79001-8E9D-4F24-860B-55BD22C13EAE}

**ShortName:** SP.WorkManagement.OM.DateRangeCriterion

Filters a task (2) list on a **DateTime** property.

### **3.1.5.8.1 Properties**

#### **3.1.5.8.1.1 Scalar Properties**

##### **3.1.5.8.1.1.1 RangeEndValue**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the end date of the range. Use 00:00:00.0000000, January 1, 0001 to represent no end date.

##### **3.1.5.8.1.1.2 RangeStartTime**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the start date of the range. Use 00:00:00.0000000, January 1, 0001 to represent no start date.

#### **3.1.5.8.1.2 ObjectPath Properties**

None.

### **3.1.5.8.2 Methods**

#### **3.1.5.8.2.1 Scalar Methods**

None.

#### **3.1.5.8.2.2 ObjectPath Methods**

##### **3.1.5.8.2.2.1 CSOM Constructor**

Creates a new **DateRangeCriterion** object.

**Parameters:** None

## **3.1.5.9 Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo**

**TypeId:** {8FEBD942-9CC1-47C0-9153-02A636BFD5DF}

**ShortName:** SP.WorkManagement.OM.RefreshHealthInfo

Specifies the result of a **GetRefreshHistory** method, as specified in section [3.1.5.1.2.2.5](#), [3.1.5.15.2.2.5](#), [3.1.5.16.2.2.5](#), [3.1.5.31.2.2.5](#), and [3.1.5.41.2.2.5](#).

### **3.1.5.9.1 Properties**

### **3.1.5.9.1.1 Scalar Properties**

#### **3.1.5.9.1.1.1 LatestRefreshTime**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time of the most recent refresh.

#### **3.1.5.9.1.1.2 Succeeded**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies a value that indicates whether the refresh succeeded (true) or failed (false).

#### **3.1.5.9.1.1.3 NewTasks**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of new tasks (2) that were found during the refresh.

### **3.1.5.9.1.2 ObjectPath Properties**

#### **3.1.5.9.1.2.1 ProviderErrors**

**Type:** Microsoft.SharePoint.WorkManagement.Client.ProviderErrorInfoClientCollection

**Accessibility:** Read/Write

Specifies a collection of provider errors.

### **3.1.5.9.2 Methods**

#### **3.1.5.9.2.1 Scalar Methods**

None.

#### **3.1.5.9.2.2 ObjectPath Methods**

None.

### **3.1.5.10 Microsoft.SharePoint.WorkManagement.Client.Location**

**TypeId:** {0280FFCA-96C5-4C96-BBBB-759887950AFD}

**ShortName:** SP.WorkManagement.OM.Location

Represents information about a source location of the task (2). Locations can be hierarchical, where one location is located inside another.

### **3.1.5.10.1 Properties**

#### **3.1.5.10.1.1 Scalar Properties**

### **3.1.5.10.1.1.1 Color**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the display color of the location as a hexadecimal number.

### **3.1.5.10.1.1.2 Id**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the location identifier.

### **3.1.5.10.1.1.3 Name**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the name of the location.

### **3.1.5.10.1.1.4 ParentId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the location's parent identifier. MUST return -1 if it has no parent location.

### **3.1.5.10.1.1.5 RootProviderKey**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the root provider identifier of the location.

### **3.1.5.10.1.1.6 Url**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the URL of the location.

### **3.1.5.10.1.1.7 Important**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the location is important (true) or not (false).

## **3.1.5.10.1.2 ObjectPath Properties**

None.

### **3.1.5.10.2 Methods**

#### **3.1.5.10.2.1 Scalar Methods**

None.

#### **3.1.5.10.2.2 ObjectPath Methods**

##### **3.1.5.10.2.2.1 CSOM Constructor**

Creates a new **Location** object.

**Parameters:** None

### **3.1.5.11 Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection**

**TypeId:** {2F28E64C-57DE-436F-B455-DCACFBAAE647C}

**ShortName:** SP.WorkManagement.OM.LocationClientCollection

Represents a collection of locations.

#### **3.1.5.11.1 Properties**

##### **3.1.5.11.1.1 Scalar Properties**

None.

##### **3.1.5.11.1.2 ObjectPath Properties**

None.

#### **3.1.5.11.2 Methods**

##### **3.1.5.11.2.1 Scalar Methods**

None.

##### **3.1.5.11.2.2 ObjectPath Methods**

None.

### **3.1.5.12 Microsoft.SharePoint.WorkManagement.Client.LocationDisplaySetting**

**TypeId:** {C9D8B21D-774A-4940-A45D-DC74859C0E6F}

**ShortName:** SP.WorkManagement.OM.LocationDisplaySetting

Represents the display settings for a location.

#### **3.1.5.12.1 Properties**

##### **3.1.5.12.1.1 Scalar Properties**

###### **3.1.5.12.1.1.1 Color**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the display color of the location as a hexadecimal number.

#### **3.1.5.12.1.1.2 Id**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the location identifier.

#### **3.1.5.12.1.2 ObjectPath Properties**

None.

#### **3.1.5.12.2 Methods**

##### **3.1.5.12.2.1 Scalar Methods**

None.

##### **3.1.5.12.2.2 ObjectPath Methods**

None.

#### **3.1.5.13 Microsoft.SharePoint.WorkManagement.Client.LocationFilter**

**TypeId:** {D9CE752E-01ED-4872-B4DA-FC362038FBF0}

**ShortName:** SP.WorkManagement.OM.LocationFilter

Represents a task (2) filter by location.

#### **3.1.5.13.1 Properties**

##### **3.1.5.13.1.1 Scalar Properties**

###### **3.1.5.13.1.1.1 LocationKeys**

**Type:** CSOM array of CSOM Int32

**Accessibility:** Read/Write

Specifies the location identifiers that SHOULD be included in the query.

###### **3.1.5.13.1.1.2 IncludeUncategorizedTasks**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether to include tasks (2) that do not have a location in the results (true) or not (false).

##### **3.1.5.13.1.2 ObjectPath Properties**

None.

### **3.1.5.13.2 Methods**

#### **3.1.5.13.2.1 Scalar Methods**

None.

#### **3.1.5.13.2.2 ObjectPath Methods**

##### **3.1.5.13.2.2.1 CSOM Constructor**

Creates a new **LocationFilter** object.

**Parameters:** None

### **3.1.5.14 Microsoft.SharePoint.WorkManagement.Client.LocationGroupClientCollection**

**TypeId:** {25ACD8C5-C100-45DA-B4C5-2BF698F65649}

**ShortName:** SP.WorkManagement.OM.LocationGroupClientCollection

Represents a collection of tasks (2), ordered by location.

### **3.1.5.14.1 Properties**

#### **3.1.5.14.1.1 Scalar Properties**

None.

#### **3.1.5.14.1.2 ObjectPath Properties**

None.

### **3.1.5.14.2 Methods**

#### **3.1.5.14.2.1 Scalar Methods**

None.

#### **3.1.5.14.2.2 ObjectPath Methods**

##### **3.1.5.14.2.2.1 CSOM Constructor**

Creates a new **LocationGroupClientCollection** object.

**Parameters:** None

### **3.1.5.15 Microsoft.SharePoint.WorkManagement.Client.LocationOrientedSortableSession**

**TypeId:** {A4DA2E47-975B-4352-934A-4DFE0167D509}

**ShortName:** SP.WorkManagement.OM.LocationOrientedSortableSession

Represents a session with tasks (2) grouped by location and sorted within each location group.

### **3.1.5.15.1 Properties**

#### **3.1.5.15.1.1 Scalar Properties**

None.

#### **3.1.5.15.1.2 ObjectPath Properties**

None.

### **3.1.5.15.2 Methods**

#### **3.1.5.15.2.1 Scalar Methods**

##### **3.1.5.15.2.1.1 MovePersonalTaskToLocation**

**Return Type:** CSOM Boolean

Moves a task (2) to a new location if the task (2) is personal but does nothing if the task (2) comes from an external location. Returns true if the task (2) was moved successfully or false otherwise.

**Parameters:**

*taskKey*: Identifier of the task (2) to move.

Type: CSOM Int32

*newLocationKey*: Identifier of the new location.

Type: CSOM Int32

##### **3.1.5.15.2.1.2 BeginExchangeSync**

**Return Type:** CSOM Boolean

Starts a server synchronization for the current user. Returns true if the synchronization started successfully.

**Parameters:** None

##### **3.1.5.15.2.1.3 IsExchangeJobPending**

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

#### **3.1.5.15.2.2 ObjectPath Methods**

##### **3.1.5.15.2.2.1 AddAttributeToTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Adds the specified string as a property on a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the string to be added.

Type: CSOM String

### **3.1.5.15.2.2.2      BeginCacheRefresh**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult

Starts an operation to update a user's task (2) list with new tasks (2) and with changes to existing tasks (2).

**Parameters:** None

### **3.1.5.15.2.2.3      CreateTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Creates a new task (2).

**Parameters:**

*taskName*: Specifies the name of the task (2).

Type: CSOM String

*description*: Specifies the description of the task (2).

Type: CSOM String

*localizedStartDate*: Specifies the start date as a string represented in the locale of the protocol client.

Type: CSOM String

*localizedDueDate*: Specifies the due date as a string represented in the locale of the protocol client.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished (true) or not (false)

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned (true) or not (false).

Type: CSOM Boolean

*locationKey*: Specifies the location of the task (2). Use -1 to specify that the task (2) has no location.

Type: CSOM Int32

*editUrl*: Specifies the URL to edit the task (2).

Type: CSOM String

### **3.1.5.15.2.2.4      DeleteTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Deletes a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.15.2.2.5      GetRefreshHistory**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

Returns information about the latest task (2) cache refresh.

**Parameters:**

*since*: Specifies the date on which the history starts.

Type: CSOM DateTime

### **3.1.5.15.2.2.6      GetRefreshStatus**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshResult

Returns the status of a refresh operation.

**Parameters:**

*refreshId*: Specifies the refresh identifier.

Type: CSOM Int32

### **3.1.5.15.2.2.7      PinTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.15.2.2.8      ReadTasks**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationGroupClientCollection

Returns a collection of tasks (2) ordered and grouped by location, and filtered by the query parameter.

**Parameters:**

*query*: Specifies the query.

Type: Microsoft.SharePoint.WorkManagement.Client.SortableTaskQuery

### **3.1.5.15.2.2.9      RemoveAttributeFromTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Removes the specified string property from a task (2). This will only remove properties that were added through the **AddAttributeToTask** method, as specified in section [3.1.5.15.2.2.1](#).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be removed.

Type: CSOM String

### **3.1.5.15.2.2.10 RemovePinOnTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as not pinned.

#### **Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.15.2.2.11 UpdateTaskWithLocalizedValue**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Updates a field of the task (2) with a string represented in the locale of the protocol client.

#### **Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*field*: Specifies the field to be updated.

Type: Microsoft.SharePoint.WorkManagement.Client.WritableTaskField

*value*: Specifies the new value for the field.

Type: CSOM String

### **3.1.5.15.2.2.12 GetCalloutInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

Returns supplemental information about a task (2).

#### **Parameters:**

*taskKey*: Identifier of the task (2) to retrieve information for.

Type: CSOM Int32

### **3.1.5.15.2.2.13 ReadAllNonTaskData**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult

Returns information about a user's task (2) settings that is not specific to tasks (2) themselves.

#### **Parameters:** None

### **3.1.5.15.2.2.14 RefreshSingleTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult

Refreshes information about a specific task (2) with updates from the source.

**Parameters:**

*taskKey*: Identifier of the task (2) to be refreshed.

Type: CSOM Int32

### 3.1.5.15.2.2.15      **GetRefreshHealthInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo

Gets the refresh health information.

**Parameters:** None

### 3.1.5.15.2.2.16      **CreatePersonalTaskAndPromoteToProviderTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **CreatePersonalTaskAndPromoteToProviderTask** method creates a new personal task (2) and then tries to promote it to the provider specified by the *locationKey* parameter.

This is a convenience method that is the equivalent of calling **CreateTask** and then **PromotePersonalTaskToProviderTaskInLocation**.

If the location key is invalid, or the promote fails in the provider, the personal task (2) can already have been created and will not be cleaned up.

For more details on how the promote step works, please check the **PromotePersonalTaskToProviderTaskToLocation** method.

**Parameters:**

*taskName*: The name of the task (2).

Type: CSOM String

*description*: The description of the task (2).

Type: CSOM String

*localizedStartDate*: The start date in a localized string.

Type: CSOM String

*localizedDueDate*: The due date in a localized string.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished.

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned.

Type: CSOM Boolean

*locationKey*: The location of the task (2). -1 for personal tasks (2).

Type: CSOM Int32

### 3.1.5.15.2.2.17 PromotePersonalTaskToProviderTaskInLocation

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **PromotePersonalTaskToProviderTaskInLocation** makes a copy of the specified task (2) in the data source of the specified location and links it to the AWIOP representation.

For example, if the location identifier points to a list, calling this method would result in a task (2) being created in that list. The AWIOP task (2) would be changed to be a linked task (2) rather than a personal one, as if the task (2) had been created in the list and then aggregated by AWIOP.

#### Parameters:

*taskKey*: The identifier of the task (2).

Type: CSOM Int32

*locationId*: The identifier of the location.

Type: CSOM Int32

## 3.1.5.16 Microsoft.SharePoint.WorkManagement.Client.LocationOrientedUserOrderedSession

**TypeId:** {3ACA594A-48B1-47AA-BBCD-7FD1A2DEC5F9}

**ShortName:** SP.WorkManagement.OM.LocationOrientedUserOrderedSession

Represents a session with tasks (2) grouped by location, and with user sorting.

### 3.1.5.16.1 Properties

#### 3.1.5.16.1.1 Scalar Properties

None.

#### 3.1.5.16.1.2 ObjectPath Properties

None.

### 3.1.5.16.2 Methods

#### 3.1.5.16.2.1 Scalar Methods

##### 3.1.5.16.2.1.1 MovePersonalTaskToLocation

**Return Type:** CSOM Boolean

Moves a task (2) to a new location if the task (2) is personal but does nothing if the task (2) comes from an external location. Returns true if the task (2) was moved successfully or false otherwise.

#### Parameters:

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*newLocationKey*: Specifies the new location identifier.

Type: CSOM Int32

### **3.1.5.16.2.1.2 ReorderTask**

**Return Type:** None

Changes the order of a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*newAfterTaskKey*: Specifies the task (2) identifier for the task (2) that @*taskKey* will be moved after.

Type: CSOM Int32

### **3.1.5.16.2.1.3 BeginExchangeSync**

**Return Type:** CSOM Boolean

Starts a server synchronization for the current user. Returns true if the synchronization started successfully.

**Parameters:** None

### **3.1.5.16.2.1.4 IsExchangeJobPending**

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

## **3.1.5.16.2.2 ObjectPath Methods**

### **3.1.5.16.2.2.1 AddAttributeToTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Adds the specified string as a property on a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be added.

Type: CSOM String

### **3.1.5.16.2.2.2 BeginCacheRefresh**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult

Starts an operation to update a user's task (2) list with new tasks (2) and with changes to existing tasks (2).

**Parameters:** None

### 3.1.5.16.2.2.3      **CreateTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Creates a new task (2).

**Parameters:**

*taskName*: Specifies the task (2) name.

Type: CSOM String

*description*: Specifies the task (2) description.

Type: CSOM String

*localizedStartDate*: Specifies the task (2) start date as a string represented in the locale of the protocol client.

Type: CSOM String

*localizedDueDate*: Specifies the task (2) due date as a string represented in the locale of the protocol client.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished (true) or not (false).

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned (true) or not (false).

Type: CSOM Boolean

*locationKey*: Specifies the task (2) location identifier. Use -1 to specify that the task (2) has no location.

Type: CSOM Int32

*editUrl*: Specifies the URL to edit the task (2).

Type: CSOM String

### 3.1.5.16.2.2.4      **DeleteTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Deletes a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### 3.1.5.16.2.2.5      **GetRefreshHistory**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

Returns information about the latest task (2) cache refresh.

**Parameters:**

*since*: Specifies the date on which the history starts.

Type: CSOM DateTime

**3.1.5.16.2.2.6      GetRefreshStatus**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshResult

Returns the status of a refresh operation.

**Parameters:**

*refreshId*: Specifies the refresh identifier.

Type: CSOM Int32

**3.1.5.16.2.2.7      PinTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

**3.1.5.16.2.2.8      ReadTasks**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationGroupClientCollection

Returns a collection of tasks (2) sorted in a user-defined order, filtered by the given query, and grouped by location.

**Parameters:**

*query*: Specifies the query.

Type: Microsoft.SharePoint.WorkManagement.Client.TaskQuery

**3.1.5.16.2.2.9      RemoveAttributeFromTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **RemoveAttributeFromTask** method removes the specified string property from a task (2). This will only remove properties that were added through the **AddAttributeToTask** method, as specified in section [3.1.5.16.2.2.1](#).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be removed.

Type: CSOM String

### **3.1.5.16.2.2.10 RemovePinOnTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as not pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.16.2.2.11 UpdateTaskWithLocalizedValue**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Updates a field of the task (2) with a string represented in the locale of the protocol client.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*field*: Specifies the field to be updated.

Type: Microsoft.SharePoint.WorkManagement.Client.WritableTaskField

*value*: Specifies the new value for the field.

Type: CSOM String

### **3.1.5.16.2.2.12 GetCalloutInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

Returns supplemental information about a task (2).

**Parameters:**

*taskKey*: Identifier of the task (2) to retrieve information for.

Type: CSOM Int32

### **3.1.5.16.2.2.13 ReadAllNonTaskData**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult

Returns information about a user's task (2) settings that is not specific to tasks (2) themselves.

**Parameters:** None

### **3.1.5.16.2.2.14 RefreshSingleTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult

Refreshes information about a specific task (2) with updates from the source.

**Parameters:**

*taskKey*: Identifier of the task (2) to be refreshed.

Type: CSOM Int32

### 3.1.5.16.2.2.15     **GetRefreshHealthInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo

Returns information about the state of the last refresh operation.

**Parameters:** None

### 3.1.5.16.2.2.16     **CreatePersonalTaskAndPromoteToProviderTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **CreatePersonalTaskAndPromoteToProviderTask** method creates a new personal task (2) and then tries to promote it to the provider specified by the *locationKey* parameter.

This is a convenience method that is the equivalent of calling **CreateTask** and then **PromotePersonalTaskToProviderTaskInLocation**.

If the location key is invalid, or the promote fails in the provider, the personal task (2) can already have been created and will not be cleaned up.

For more details on how the promote step works, please check the **PromotePersonalTaskToProviderTaskToLocation** method.

**Parameters:**

*taskName*: The name of the task (2).

Type: CSOM String

*description*: The description of the task (2).

Type: CSOM String

*localizedStartDate*: The start date in a localized string.

Type: CSOM String

*localizedDueDate*: The due date in a localized string.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished.

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned.

Type: CSOM Boolean

*locationKey*: The location key for the task (2). -1 for personal tasks (2).

Type: CSOM Int32

### 3.1.5.16.2.2.17     **PromotePersonalTaskToProviderTaskInLocation**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **PromotePersonalTaskToProviderTaskInLocation** method makes a copy of the specified task (2) in the data source of the specified location and links it to the AWIOP representation.

For example, if the location identifier points to a list, calling this method would result in a task (2) being created in that list. The AWIOP task (2) would be changed to be a linked task (2) rather than a personal one, as if the task (2) had been created in the list and then aggregated by AWIOP.

**Parameters:**

*taskKey*: The identifier of the task (2).

Type: CSOM Int32

*locationId*: The identifier of the location.

Type: CSOM Int32

### **3.1.5.17 Microsoft.SharePoint.WorkManagement.Client.LocationUpdateResult**

**TypeId:** {4D0A3245-9B4F-4986-8B91-87F209FC8BC7}

**ShortName:** SP.WorkManagement.OM.LocationUpdateResult

Represents the result information from updating a location.

#### **3.1.5.17.1 Properties**

##### **3.1.5.17.1.1 Scalar Properties**

###### **3.1.5.17.1.1.1 ActiveAddedCount**

**Type:** CSOM UInt32

**Accessibility:** Read/Write

Specifies the number of active tasks (2) added since the last update.

###### **3.1.5.17.1.1.2 AddedCount**

**Type:** CSOM UInt32

**Accessibility:** Read/Write

Specifies the number of tasks (2) added since the previous update.

###### **3.1.5.17.1.1.3 RemovedCount**

**Type:** CSOM UInt32

**Accessibility:** Read/Write

Specifies the number of tasks (2) removed since the previous update.

###### **3.1.5.17.1.1.4 RootLocationId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the provider's root location identifier.

###### **3.1.5.17.1.1.5 UpdatedCount**

**Type:** CSOM UInt32

**Accessibility:** Read/Write

Specifies the number of tasks (2) updated since the previous update.

### **3.1.5.17.1.2 ObjectPath Properties**

None.

### **3.1.5.17.2 Methods**

#### **3.1.5.17.2.1 Scalar Methods**

None.

#### **3.1.5.17.2.2 ObjectPath Methods**

None.

### **3.1.5.18 Microsoft.SharePoint.WorkManagement.Client.LocationUpdateResultClientCollection**

**TypeId:** {ADC959FA-E5E6-4575-A998-A00CE60A9201}

**ShortName:** SP.WorkManagement.OM.LocationUpdateResultClientCollection

Represents a collection of **LocationUpdateResult** objects as specified in section [3.1.5.17](#).

### **3.1.5.18.1 Properties**

#### **3.1.5.18.1.1 Scalar Properties**

None.

#### **3.1.5.18.1.2 ObjectPath Properties**

None.

### **3.1.5.18.2 Methods**

#### **3.1.5.18.2.1 Scalar Methods**

None.

#### **3.1.5.18.2.2 ObjectPath Methods**

None.

### **3.1.5.19 Microsoft.SharePoint.WorkManagement.Client.NameCriterion**

**TypeId:** {1C2A7A53-2CDD-4C21-8DD6-1673656ECA45}

**ShortName:** SP.WorkManagement.OM.NameCriterion

Object used to filter tasks (2) based on a string property representing the name of a task (2).

### **3.1.5.19.1 Properties**

#### **3.1.5.19.1.1 Scalar Properties**

##### **3.1.5.19.1.1.1 CompareType**

**Type:** Microsoft.SharePoint.WorkManagement.Client.StringCompareType

**Accessibility:** Read/Write

Specifies the comparison operation to use when filtering on a string property.

##### **3.1.5.19.1.1.2 CompareValue**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the value to evaluate against when filtering tasks (2).

#### **3.1.5.19.1.2 ObjectPath Properties**

None.

### **3.1.5.19.2 Methods**

#### **3.1.5.19.2.1 Scalar Methods**

None.

#### **3.1.5.19.2.2 ObjectPath Methods**

##### **3.1.5.19.2.2.1 CSOM Constructor**

Creates a new **NameCriterion** object.

**Parameters:** None

### **3.1.5.20 Microsoft.SharePoint.WorkManagement.Client.OrderInfo**

**TypeId:** {8C385903-1E43-4256-8037-F7FF442154EC}

**ShortName:** SP.WorkManagement.OM.OrderInfo

Represents how to order the results of a sortable task (2) query.

### **3.1.5.20.1 Properties**

#### **3.1.5.20.1.1 Scalar Properties**

##### **3.1.5.20.1.1.1 Field**

**Type:** Microsoft.SharePoint.WorkManagement.Client.SortableTaskField

**Accessibility:** Read/Write

Specifies the field to be used for sorting.

### **3.1.5.20.1.1.2 IsDescending**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the sorting SHOULD be descending (true) or ascending (false).

### **3.1.5.20.1.2 ObjectPath Properties**

None.

### **3.1.5.20.2 Methods**

#### **3.1.5.20.2.1 Scalar Methods**

None.

#### **3.1.5.20.2.2 ObjectPath Methods**

##### **3.1.5.20.2.2.1 CSOM Constructor**

Creates a new **OrderInfo** object.

**Parameters:** None

### **3.1.5.21 Microsoft.SharePoint.WorkManagement.Client.PinAge**

**ShortName:** SP.WorkManagement.OM.PinAge

**Flag:** false

Defines the time period since the pin was created.

#### **3.1.5.21.1 Field Values**

##### **3.1.5.21.1.1 NoValue**

**Value:** 0

No value.

##### **3.1.5.21.1.2 Fresh**

**Value:** 1

Specifies that the pin is fresh.

##### **3.1.5.21.1.3 Stale**

**Value:** 2

Specifies that the pin is stale.

### **3.1.5.22 Microsoft.SharePoint.WorkManagement.Client.PinnedState**

**ShortName:** SP.WorkManagement.OM.PinnedState

**Flag:** false

Defines the pin state values.

### **3.1.5.22.1 Field Values**

#### **3.1.5.22.1.1 NoValue**

**Value:** 0

No value.

#### **3.1.5.22.1.2 Pinned**

**Value:** 1

Specifies that the task (2) is pinned.

#### **3.1.5.22.1.3 NotPinned**

**Value:** 2

Specifies that the task (2) is not pinned.

### **3.1.5.23 Microsoft.SharePoint.WorkManagement.Client.ProviderErrorInfo**

**TypeId:** {86FAD6B1-B741-43FD-8822-EE12938C5C13}

**ShortName:** SP.WorkManagement.OM.ProviderErrorInfo

Represents information about an error coming from a task provider.

### **3.1.5.23.1 Properties**

#### **3.1.5.23.1.1 Scalar Properties**

##### **3.1.5.23.1.1.1 CorrelationId**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the unique identifier for the request or operation on the server associated with the error.

##### **3.1.5.23.1.1.2 LastSuccessfulRefresh**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time of the last successful refresh.

##### **3.1.5.23.1.1.3 LocalizedName**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the localized name of the provider that caused the error.

### **3.1.5.23.1.2 ObjectPath Properties**

None.

### **3.1.5.23.2 Methods**

#### **3.1.5.23.2.1 Scalar Methods**

None.

#### **3.1.5.23.2.2 ObjectPath Methods**

None.

### **3.1.5.24 Microsoft.SharePoint.WorkManagement.Client.ProviderErrorInfoClientCollection**

**TypeId:** {8D2243E2-6F6F-47F1-A0CA-97DBA1D8AA25}

**ShortName:** SP.WorkManagement.OM.ProviderErrorInfoClientCollection

Represents a collection of **ProviderErrorInfo** objects as specified in section [3.1.5.23](#).

### **3.1.5.24.1 Properties**

#### **3.1.5.24.1.1 Scalar Properties**

None.

#### **3.1.5.24.1.2 ObjectPath Properties**

None.

### **3.1.5.24.2 Methods**

#### **3.1.5.24.2.1 Scalar Methods**

None.

#### **3.1.5.24.2.2 ObjectPath Methods**

None.

### **3.1.5.25 Microsoft.SharePoint.WorkManagement.Client.ProviderRefreshStatus**

**TypeId:** {1B347470-E983-40EE-A794-0719DE3B37E6}

**ShortName:** SP.WorkManagement.OM.ProviderRefreshStatus

Represents the status of a provider refresh.

### **3.1.5.25.1 Properties**

#### **3.1.5.25.1.1 Scalar Properties**

##### **3.1.5.25.1.1.1 ProviderKey**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the provider identifier.

#### **3.1.5.25.1.1.2 ProviderLocalizedname**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the localized name of the provider.

#### **3.1.5.25.1.1.3 RefreshFinished**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time when the refresh finished.

#### **3.1.5.25.1.1.4 RefreshStarted**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time when the refresh started.

#### **3.1.5.25.1.1.5 RootLocationId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the root location identifier of the provider.

### **3.1.5.25.1.2 ObjectPath Properties**

None.

### **3.1.5.25.2 Methods**

#### **3.1.5.25.2.1 Scalar Methods**

None.

#### **3.1.5.25.2.2 ObjectPath Methods**

None.

### **3.1.5.26 Microsoft.SharePoint.WorkManagement.Client.ProviderRefreshStatusClientCollection**

**TypeId:** {934100A6-C55C-4CB5-BE34-E723029FC017}

**ShortName:** SP.WorkManagement.OM.ProviderRefreshStatusClientCollection

Represents a collection of **ProviderRefreshStatus** objects as specified in section [3.1.5.25](#).

### 3.1.5.26.1 Properties

#### 3.1.5.26.1.1 Scalar Properties

None.

#### 3.1.5.26.1.2 ObjectPath Properties

None.

### 3.1.5.26.2 Methods

#### 3.1.5.26.2.1 Scalar Methods

None.

#### 3.1.5.26.2.2 ObjectPath Methods

None.

### 3.1.5.27 Microsoft.SharePoint.WorkManagement.Client.RefreshResult

**TypeId:** {AF042356-0857-4F34-B227-2E0B90956E3F}

**ShortName:** SP.WorkManagement.OM.RefreshResult

Represents information about a refresh.

### 3.1.5.27.1 Properties

#### 3.1.5.27.1.1 Scalar Properties

##### 3.1.5.27.1.1.1 AggregatorRefreshState

**Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshState

**Accessibility:** Read/Write

Specifies the state of the aggregator refresh.

##### 3.1.5.27.1.1.2 CorrelationId

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the **CorrelationId** of the error.

##### 3.1.5.27.1.1.3 RefreshFinished

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time when the refresh finished.

### **3.1.5.27.1.1.4      RefreshId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the refresh identifier.

### **3.1.5.27.1.2    ObjectPath Properties**

#### **3.1.5.27.1.2.1    TaskChangesByLocation**

**Type:** Microsoft.SharePoint.WorkManagement.Client.LocationUpdateResultClientCollection

**Accessibility:** Read/Write

Specifies a collection of updated task (2) results per location.

#### **3.1.5.27.1.2.2    ProviderStatuses**

**Type:** Microsoft.SharePoint.WorkManagement.Client.ProviderRefreshStatusClientCollection

**Accessibility:** Read/Write

Specifies the collection containing the statuses of the providers.

### **3.1.5.27.2    Methods**

#### **3.1.5.27.2.1    Scalar Methods**

None.

#### **3.1.5.27.2.2    ObjectPath Methods**

None.

### **3.1.5.28      Microsoft.SharePoint.WorkManagement.Client.RefreshEventInfoClientCollection**

**TypeId:** {D81EC1DF-7F4B-4654-A46D-518DDEB9D674}

**ShortName:** SP.WorkManagement.OM.RefreshEventInfoClientCollection

Represents a collection of **RefreshEventInfo** objects as specified in section [3.1.5.27](#).

### **3.1.5.28.1    Properties**

#### **3.1.5.28.1.1    Scalar Properties**

None.

#### **3.1.5.28.1.2    ObjectPath Properties**

None.

### **3.1.5.28.2    Methods**

#### **3.1.5.28.2.1    Scalar Methods**

None.

### **3.1.5.28.2.2 ObjectPath Methods**

None.

## **3.1.5.29 Microsoft.SharePoint.WorkManagement.Client.RefreshHistory**

**TypeId:** {7F30CB13-9617-4FE3-936F-D3C0BEA1B2F7}

**ShortName:** SP.WorkManagement.OM.RefreshHistory

Represents information about the refresh history.

### **3.1.5.29.1 Properties**

#### **3.1.5.29.1.1 Scalar Properties**

None.

#### **3.1.5.29.1.2 ObjectPath Properties**

##### **3.1.5.29.1.2.1 Refreshes**

**Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshEventInfoClientCollection

**Accessibility:** Read/Write

Specifies the **RefreshEventInfo** objects (section [3.1.5.27](#)) representing all refresh operations for the current user.

### **3.1.5.29.2 Methods**

#### **3.1.5.29.2.1 Scalar Methods**

None.

#### **3.1.5.29.2.2 ObjectPath Methods**

None.

## **3.1.5.30 Microsoft.SharePoint.WorkManagement.Client.RefreshState**

**ShortName:** SP.WorkManagement.OM.RefreshState

**Flag:** false

Defines the refresh state values.

### **3.1.5.30.1 Field Values**

#### **3.1.5.30.1.1 NoValue**

**Value:** 0

No value.

### **3.1.5.30.1.2 Pending**

**Value:** 1

Specifies that the refresh is pending.

### **3.1.5.30.1.3 Ignored**

**Value:** 2

Specifies that the refresh was ignored.

### **3.1.5.30.1.4 Succeeded**

**Value:** 3

Specifies that the refresh succeeded.

### **3.1.5.30.1.5 Failed**

**Value:** 4

Specifies that the refresh failed.

## **3.1.5.31 Microsoft.SharePoint.WorkManagement.Client.SortableSession**

**TypeId:** {5C81F0EA-999B-411E-A692-5962B32B206F}

**ShortName:** SP.WorkManagement.OM.SortableSession

Represents a session of tasks (2) with a sort order.

### **3.1.5.31.1 Properties**

#### **3.1.5.31.1.1 Scalar Properties**

None.

#### **3.1.5.31.1.2 ObjectPath Properties**

None.

### **3.1.5.31.2 Methods**

#### **3.1.5.31.2.1 Scalar Methods**

##### **3.1.5.31.2.1.1 BeginExchangeSync**

**Return Type:** CSOM Boolean

Starts a server synchronization for the current user. Returns true if the synchronization started successfully.

**Parameters:** None

##### **3.1.5.31.2.1.2 IsExchangeJobPending**

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

### **3.1.5.31.2.2 ObjectPath Methods**

#### **3.1.5.31.2.2.1 AddAttributeToTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Adds the specified string as a property on a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be added.

Type: CSOM String

#### **3.1.5.31.2.2.2 BeginCacheRefresh**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult

Starts an operation to update a user's task (2) list with new tasks (2) and with changes to existing tasks (2).

**Parameters:** None

#### **3.1.5.31.2.2.3 CreateTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Creates a new task (2).

**Parameters:**

*taskName*: Specifies the task (2) name.

Type: CSOM String

*description*: Specifies the task (2) description.

Type: CSOM String

*localizedStartDate*: Specifies the start date as a string represented in the locale of the protocol client.

Type: CSOM String

*localizedDueDate*: Specifies the due date as a string represented in the locale of the protocol client.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished (true) or not (false).

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned (true) or not (false).

Type: CSOM Boolean

*locationKey*: Specifies the task (2) location identifier. Use -1 to specify that the task (2) has no location.

Type: CSOM Int32

*editUrl*: Specifies the URL to edit the task (2).

Type: CSOM String

#### **3.1.5.31.2.2.4      DeleteTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Deletes a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

#### **3.1.5.31.2.2.5      GetRefreshHistory**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

Returns information about the latest task (2) cache refresh.

**Parameters:**

*since*: Specifies the date on which the history starts.

Type: CSOM DateTime

#### **3.1.5.31.2.2.6      GetRefreshStatus**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshResult

Returns the status of a refresh operation.

**Parameters:**

*refreshId*: Specifies the refresh identifier.

Type: CSOM Int32

#### **3.1.5.31.2.2.7      PinTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

#### **3.1.5.31.2.2.8      ReadTasks**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskClientCollection

Returns an ordered collection of tasks (2), filtered by the given query.

**Parameters:**

*query*: Specifies the query.

Type: Microsoft.SharePoint.WorkManagement.Client.SortableTaskQuery

### **3.1.5.31.2.2.9 RemoveAttributeFromTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Removes the specified string property from a task (2). This will only remove properties that were added through the **AddAttributeToTask** method, as specified in section [3.1.5.31.2.2.1](#).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be removed.

Type: CSOM String

### **3.1.5.31.2.2.10 RemovePinOnTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as not pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.31.2.2.11 UpdateTaskWithLocalizedValue**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Updates a field of the task (2) with a string represented in the locale of the protocol client.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*field*: Specifies the field to be updated.

Type: Microsoft.SharePoint.WorkManagement.Client.WritableTaskField

*value*: Specifies the new value of the field.

Type: CSOM String

### **3.1.5.31.2.2.12 GetCalloutInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

Returns supplemental information about a task (2).

**Parameters:**

*taskKey*: Identifier of the task (2) to retrieve information for.

Type: CSOM Int32

**3.1.5.31.2.2.13      ReadAllNonTaskData**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult

Returns information about a user's task (2) settings that is not specific to tasks (2) themselves.

**Parameters:** None

**3.1.5.31.2.2.14      RefreshSingleTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult

Refreshes information about a specific task (2) with updates from the source.

**Parameters:**

*taskKey*: Identifier of the task (2) to be refreshed.

Type: CSOM Int32

**3.1.5.31.2.2.15      GetRefreshHealthInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo

Gets the refresh health information.

**Parameters:** None

**3.1.5.31.2.2.16      CreatePersonalTaskAndPromoteToProviderTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **CreatePersonalTaskAndPromoteToProviderTask** method creates a new personal task (2) and then tries to promote it to the provider specified by the *locationKey* parameter.

This is a convenience method that is the equivalent of calling **CreateTask** and then **PromotePersonalTaskToProviderTaskInLocation**.

If the location key is invalid, or the promote fails in the provider, the personal task (2) can already have been created and will not be cleaned up.

For more details on how the promote step works, please check the **PromotePersonalTaskToProviderTaskToLocation** method.

**Parameters:**

*taskName*: The name of the task (2).

Type: CSOM String

*description*: The description of the task (2).

Type: CSOM String

*localizedStartDate*: The start date in a localized string.

Type: CSOM String

*localizedDueDate*: The due date in a localized string.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished.

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned.

Type: CSOM Boolean

*locationKey*: The location of the task (2). -1 for personal tasks (2).

Type: CSOM Int32

### **3.1.5.31.2.2.17 PromotePersonalTaskToProviderTaskInLocation**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **PromotePersonalTaskToProviderTaskInLocation** method makes a copy of the specified task (2) in the data source of the specified location and links it to the AWIOP representation.

For example, if the location identifier points to a list, calling this method would result in a task (2) being created in that list. The AWIOP task (2) would be changed to be a linked task (2) rather than a personal one, as if the task (2) had been created in the list and then aggregated by AWIOP.

#### **Parameters:**

*taskKey*: The identifier of the task (2).

Type: CSOM Int32

*locationId*: The identifier of the location.

Type: CSOM Int32

## **3.1.5.32 Microsoft.SharePoint.WorkManagement.Client.SortableSessionManager**

**TypeId:** {924B1779-998E-4C60-A291-78EDEBC3C202}

**ShortName:** SP.WorkManagement.OM.SortableSessionManager

Manages sortable sessions, as specified in section [3.1.5.31](#).

### **3.1.5.32.1 Properties**

#### **3.1.5.32.1.1 Scalar Properties**

None.

#### **3.1.5.32.1.2 ObjectPath Properties**

None.

### **3.1.5.32.2 Methods**

#### **3.1.5.32.2.1 Scalar Methods**

None.

### 3.1.5.32.2.2 ObjectPath Methods

#### 3.1.5.32.2.2.1 CreateLocationOrientedSession

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationOrientedSortableSession

Creates a location-oriented sortable session.

**Parameters:** None

#### 3.1.5.32.2.2.2 CreateSession

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.SortableSession

Creates a sortable session.

**Parameters:** None

#### 3.1.5.32.2.3 CSOM Constructor

Creates a new **SortableSessionManager** object.

**Parameters:** None

### 3.1.5.33 Microsoft.SharePoint.WorkManagement.Client.SortableTaskField

**ShortName:** SP.WorkManagement.OM.SortableTaskField

**Flag:** false

Defines the sortable task (2) fields.

#### 3.1.5.33.1 Field Values

##### 3.1.5.33.1.1 NoValue

**Value:** 0

No value.

##### 3.1.5.33.1.2 IsCompleted

**Value:** 13

Specifies the **IsCompleted** field.

##### 3.1.5.33.1.3 Id

**Value:** 1

Specifies the **Id** field.

##### 3.1.5.33.1.4 DueDate

**Value:** 5

Specifies the **DueDate** field.

### **3.1.5.33.1.5 Description**

**Value:** 4

Specifies the **Description** field.

### **3.1.5.33.1.6 PinAge**

**Value:** 22

Specifies the **PinAge** field.

### **3.1.5.33.1.7 Location**

**Value:** 18

Specifies the **Location** field.

### **3.1.5.33.1.8 LastModified**

**Value:** 17

Specifies the **LastModified** field.

### **3.1.5.33.1.9 DiscoveredDate**

**Value:** 2

Specifies the date when the task (2) was discovered.

### **3.1.5.33.1.10 Title**

**Value:** 21

Specifies the **Title** field.

## **3.1.5.34 Microsoft.SharePoint.WorkManagement.Client.SortableTaskQuery**

**TypeId:** {F43AB2F6-B0E1-46F7-8FF6-A96540F7F595}

**ShortName:** SP.WorkManagement.OM.SortableTaskQuery

Represents a task (2) query with a sort order.

### **3.1.5.34.1 Properties**

#### **3.1.5.34.1.1 Scalar Properties**

None.

#### **3.1.5.34.1.2 ObjectPath Properties**

##### **3.1.5.34.1.2.1 CoreQuery**

**Type:** Microsoft.SharePoint.WorkManagement.Client.TaskQuery

**Accessibility:** Read/Write

Specifies the core task (2) query.

### **3.1.5.34.1.2.2 Order**

**Type:** Microsoft.SharePoint.WorkManagement.Client.OrderInfo

**Accessibility:** Read/Write

Specifies the ordering for the task (2) query result.

### **3.1.5.34.2 Methods**

#### **3.1.5.34.2.1 Scalar Methods**

None.

#### **3.1.5.34.2.2 ObjectPath Methods**

##### **3.1.5.34.2.2.1 CSOM Constructor**

Creates a new **SortableTaskQuery** object.

**Parameters:** None

### **3.1.5.35 Microsoft.SharePoint.WorkManagement.Client.StringCompareType**

**ShortName:** SP.WorkManagement.OM.StringCompareType

**Flag:** false

Defines string comparison operators that can be used when filtering queries on a string property.

#### **3.1.5.35.1 Field Values**

##### **3.1.5.35.1.1 NoValue**

**Value:** 0

No value.

##### **3.1.5.35.1.2 Equals**

**Value:** 1

Specifies that the strings are equal.

##### **3.1.5.35.1.3 Contains**

**Value:** 2

Specifies that one string is a substring of the other string.

##### **3.1.5.35.1.4 BeginsWith**

**Value:** 3

Specifies that one string begins with the other string.

### **3.1.5.36 Microsoft.SharePoint.WorkManagement.Client.Task**

**TypeId:** {AF0507B6-EF4F-4029-A48A-943AFE14AEA6}

**ShortName:** SP.WorkManagement.OM.Task

Represents a task (2).

#### **3.1.5.36.1 Properties**

##### **3.1.5.36.1.1 Scalar Properties**

###### **3.1.5.36.1.1.1 CustomAttributes**

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies the custom attributes of the task (2).

###### **3.1.5.36.1.1.2 Description**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the task (2) description.

###### **3.1.5.36.1.1.3 DueDate**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the task (2) due date.

###### **3.1.5.36.1.1.4 EditUrl**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the URL to edit the task (2).

###### **3.1.5.36.1.1.5 Id**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the task (2) identifier.

###### **3.1.5.36.1.1.6 IsCompleted**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the task (2) is finished (true) or not (false).

### **3.1.5.36.1.1.7      IsPersonal**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the task (2) is personal (true) or not (false).

### **3.1.5.36.1.1.8      LastModified**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the last time the task (2) was modified.

### **3.1.5.36.1.1.9      Name**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the task (2) name.

### **3.1.5.36.1.1.10      PinAge**

**Type:** Microsoft.SharePoint.WorkManagement.Client.PinAge

**Accessibility:** Read/Write

Specifies the time period since the pin of the task (2) was created.

### **3.1.5.36.1.1.11      SerializedCustomDataForClient**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies serialized custom data for a task (2).

### **3.1.5.36.1.1.12      StartDate**

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the time when the task (2) starts.

### **3.1.5.36.1.1.13      LocationId**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the location identifier.

### **3.1.5.36.1.1.14      IsReadOnly**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

A property that MAY be used to specify whether a task (2) is read-only (true) or not (false).

### **3.1.5.36.1.2 ObjectPath Properties**

None.

### **3.1.5.36.2 Methods**

#### **3.1.5.36.2.1 Scalar Methods**

None.

#### **3.1.5.36.2.2 ObjectPath Methods**

##### **3.1.5.36.2.2.1 CSOM Constructor**

Creates a new **Task** object.

**Parameters:** None

### **3.1.5.37 Microsoft.SharePoint.WorkManagement.Client.TaskClientCollection**

**TypeId:** {1A855A95-EE52-4A94-B0AB-7020DDA6972A}

**ShortName:** SP.WorkManagement.OM.TaskClientCollection

Represents a collection of tasks (2).

### **3.1.5.37.1 Properties**

#### **3.1.5.37.1.1 Scalar Properties**

None.

#### **3.1.5.37.1.2 ObjectPath Properties**

None.

### **3.1.5.37.2 Methods**

#### **3.1.5.37.2.1 Scalar Methods**

None.

#### **3.1.5.37.2.2 ObjectPath Methods**

##### **3.1.5.37.2.2.1 CSOM Constructor**

Creates a new **TaskClientCollection** object.

**Parameters:** None

### **3.1.5.38 Microsoft.SharePoint.WorkManagement.Client.TaskFilter**

**TypeId:** {3188516D-D569-40F8-8C01-1D48FBF5243C}

**ShortName:** SP.WorkManagement.OM.TaskFilter

Represents task (2) filter parameters for a task (2) query.

### 3.1.5.38.1 Properties

#### 3.1.5.38.1.1 Scalar Properties

##### 3.1.5.38.1.1.1 CriterionConcatType

**Type:** Microsoft.SharePoint.WorkManagement.Client.CriterionConcatType

**Accessibility:** Read/Write

Specifies the operator type for evaluating multiple filter clauses or task (2) identifiers in the query.

##### 3.1.5.38.1.1.2 IdsToFilterBy

**Type:** CSOM array of CSOM Int32

**Accessibility:** Read/Write

Specifies the task (2) identifiers to be included in the query.

#### 3.1.5.38.1.2 ObjectPath Properties

##### 3.1.5.38.1.2.1 CompletedCriterion

**Type:** Microsoft.SharePoint.WorkManagement.Client.BooleanCriterion

**Accessibility:** Read/Write

Represents the conditions used for filtering tasks (2) by completion state.

##### 3.1.5.38.1.2.2 DueDateRangeCriterion

**Type:** Microsoft.SharePoint.WorkManagement.Client.DateRangeCriterion

**Accessibility:** Read/Write

Represents the conditions used for filtering tasks (2) by due date within a specified range.

##### 3.1.5.38.1.2.3 IsNewCriterion

**Type:** Microsoft.SharePoint.WorkManagement.Client.BooleanCriterion

**Accessibility:** Read/Write

Represents the conditions used for filtering tasks (2) that are newly discovered.

##### 3.1.5.38.1.2.4 NameCriterion

**Type:** Microsoft.SharePoint.WorkManagement.Client.NameCriterion

**Accessibility:** Read/Write

Represents the conditions used for filtering tasks (2) by name.

##### 3.1.5.38.1.2.5 StartDateRangeCriterion

**Type:** Microsoft.SharePoint.WorkManagement.Client.DateRangeCriterion

**Accessibility:** Read/Write

Represents the conditions used for filtering tasks (2) by start date in a specified range.

### 3.1.5.38.2 Methods

#### 3.1.5.38.2.1 Scalar Methods

None.

#### 3.1.5.38.2.2 ObjectPath Methods

##### 3.1.5.38.2.2.1 CSOM Constructor

Creates a new **TaskFilter** object.

**Parameters:** None

### 3.1.5.39 Microsoft.SharePoint.WorkManagement.Client.TaskQuery

**TypeId:** {70C9591D-9A78-404A-9FE8-B50B1E02CD93}

**ShortName:** SP.WorkManagement.OM.TaskQuery

Represents a query used to retrieve tasks (2) from the server.

### 3.1.5.39.1 Properties

#### 3.1.5.39.1.1 Scalar Properties

##### 3.1.5.39.1.1.1 KeywordFilter

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the keywords for the query.

##### 3.1.5.39.1.1.2 LastQueryTime

**Type:** CSOM DateTime

**Accessibility:** Read/Write

Specifies the last query time.

##### 3.1.5.39.1.1.3 PinnedFilter

**Type:** Microsoft.SharePoint.WorkManagement.Client.PinnedState

**Accessibility:** Read/Write

Specifies the pinned state for the query.

#### 3.1.5.39.1.2 ObjectPath Properties

### **3.1.5.39.1.2.1      CustomAttributeFilter**

**Type:** Microsoft.SharePoint.WorkManagement.Client.CustomAttributeFilter

**Accessibility:** Read/Write

Specifies the custom attributes for the query.

### **3.1.5.39.1.2.2      FieldFilter**

**Type:** Microsoft.SharePoint.WorkManagement.Client.TaskFilter

**Accessibility:** Read/Write

Specifies the fields for the query.

### **3.1.5.39.1.2.3      LastModifiedDateRangeFilter**

**Type:** Microsoft.SharePoint.WorkManagement.Client.DateRangeCriterion

**Accessibility:** Read/Write

Specifies the last modified date range for the query.

### **3.1.5.39.1.2.4      LocationFilter**

**Type:** Microsoft.SharePoint.WorkManagement.Client.LocationFilter

**Accessibility:** Read/Write

Specifies the location for the query.

## **3.1.5.39.2      Methods**

### **3.1.5.39.2.1    Scalar Methods**

None.

### **3.1.5.39.2.2    ObjectPath Methods**

#### **3.1.5.39.2.2.1      CSOM Constructor**

Creates a new **TaskQuery** object.

**Parameters:** None

## **3.1.5.40      Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult**

**TypeId:** {B43C5CFA-0632-4F49-B196-0AF62106CC46}

**ShortName:** SP.WorkManagement.OM.TaskWriteResult

Represents the result of a task (2) write operation.

## **3.1.5.40.1      Properties**

### **3.1.5.40.1.1    Scalar Properties**

### **3.1.5.40.1.1.1 Error**

**Type:** Microsoft.SharePoint.WorkManagement.Client.WriteFieldErrorType

**Accessibility:** Read/Write

Specifies the error type of the operation.

### **3.1.5.40.1.1.2 ErrorMessage**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the error message of the operation.

## **3.1.5.40.1.2 ObjectPath Properties**

### **3.1.5.40.1.2.1 Result**

**Type:** Microsoft.SharePoint.WorkManagement.Client.Task

**Accessibility:** Read/Write

Specifies the updated task (2) after the write operation.

## **3.1.5.40.2 Methods**

### **3.1.5.40.2.1 Scalar Methods**

None.

### **3.1.5.40.2.2 ObjectPath Methods**

None.

## **3.1.5.41 Microsoft.SharePoint.WorkManagement.Client.UserOrderedSession**

**TypeId:** {76163D46-CD0D-4782-9069-9143CC45B991}

**ShortName:** SP.WorkManagement.OM.UserOrderedSession

Represents a session with tasks (2) sorted by user.

## **3.1.5.41.1 Properties**

### **3.1.5.41.1.1 Scalar Properties**

None.

### **3.1.5.41.1.2 ObjectPath Properties**

None.

## **3.1.5.41.2 Methods**

### **3.1.5.41.2.1 Scalar Methods**

### **3.1.5.41.2.1.1      ReorderTask**

**Return Type:** None

Changes the order of a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*newAfterTaskKey*: Specifies the task (2) identifier for the task (2) that @*taskKey* will be moved after.

Type: CSOM Int32

### **3.1.5.41.2.1.2      BeginExchangeSync**

**Return Type:** CSOM Boolean

Starts a server synchronization for the current user. Returns true if the synchronization started successfully.

**Parameters:** None

### **3.1.5.41.2.1.3      IsExchangeJobPending**

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

## **3.1.5.41.2.2 ObjectPath Methods**

### **3.1.5.41.2.2.1      AddAttributeToTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Adds the specified string as a property on a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be added.

Type: CSOM String

### **3.1.5.41.2.2.2      BeginCacheRefresh**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult

Starts an operation to update a user's task (2) list with new tasks (2) and with changes to existing tasks (2).

**Parameters:** None

### **3.1.5.41.2.2.3      CreateTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Creates a new task (2).

**Parameters:**

*taskName*: Specifies the task (2) name.

Type: CSOM String

*description*: Specifies the task (2) description.

Type: CSOM String

*localizedStartDate*: Specifies the start date as a string represented in the locale of the protocol client.

Type: CSOM String

*localizedDueDate*: Specifies the due date as a string represented in the locale of the protocol client.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished (true) or not (false).

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned (true) or not (false).

Type: CSOM Boolean

*locationKey*: Specifies the task (2) location identifier. Use -1 to specify that the task (2) has no location.

Type: CSOM Int32

*editUrl*: Specifies the URL to edit the task (2).

Type: CSOM String

### **3.1.5.41.2.2.4      DeleteTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Deletes a task (2).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.41.2.2.5      GetRefreshHistory**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

Returns information about the latest task (2) cache refresh.

**Parameters:**

*since*: Specifies the date on which the history starts.

Type: CSOM DateTime

### **3.1.5.41.2.2.6      GetRefreshStatus**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshResult

Returns the status of a refresh operation.

**Parameters:**

*refreshId*: Specifies the refresh identifier.

Type: CSOM Int32

### **3.1.5.41.2.2.7      PinTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

### **3.1.5.41.2.2.8      ReadTasks**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskClientCollection

Returns a collection of tasks (2) sorted by user-defined order, filtered by the given query.

**Parameters:**

*query*: Specifies the query.

Type: Microsoft.SharePoint.WorkManagement.Client.TaskQuery

### **3.1.5.41.2.2.9      RemoveAttributeFromTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Removes the specified string property from a task (2). This will only remove properties that were added through the **AddAttributeToTask** method, as specified in section [3.1.5.41.2.2.1](#).

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*attribute*: Specifies the attribute to be removed.

Type: CSOM String

### **3.1.5.41.2.2.10      RemovePinOnTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Marks a task (2) as not pinned.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

**3.1.5.41.2.2.11      UpdateTaskWithLocalizedValue**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

Updates a field of the task (2) with a string represented in the locale of the protocol client.

**Parameters:**

*taskKey*: Specifies the task (2) identifier.

Type: CSOM Int32

*field*: Enumerator indicating which field SHOULD be updated.

Type: Microsoft.SharePoint.WorkManagement.Client.WritableTaskField

*value*: Specifies the new value of the field.

Type: CSOM String

**3.1.5.41.2.2.12      GetCalloutInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

Returns supplemental information about a task (2).

**Parameters:**

*taskKey*: Identifier of the task (2) to retrieve information for.

Type: CSOM Int32

**3.1.5.41.2.2.13      ReadAllNonTaskData**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult

Returns information about a user's task (2) settings that is not specific to tasks (2) themselves.

**Parameters:** None

**3.1.5.41.2.2.14      RefreshSingleTask**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult

Refreshes information about a specific task (2) with updates from the source.

**Parameters:**

*taskKey*: Identifier of the task (2) to be refreshed.

Type: CSOM Int32

**3.1.5.41.2.2.15      GetRefreshHealthInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo

Gets the refresh health information.

**Parameters:** None

### 3.1.5.41.2.2.16 CreatePersonalTaskAndPromoteToProviderTask

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **CreatePersonalTaskAndPromoteToProviderTask** method creates a new personal task (2) and then tries to promote it to the provider specified by the *locationKey* parameter.

This is a convenience method that is the equivalent of calling **CreateTask** and then **PromotePersonalTaskToProviderTaskInLocation**.

If the location key is invalid, or the promote fails in the provider, the personal task (2) can already have been created and will not be cleaned up.

For more details on how the promote step works, please see the **PromotePersonalTaskToProviderTaskToLocation** method.

**Parameters:**

*taskName*: The name of the task (2).

Type: CSOM String

*description*: The description of the task (2).

Type: CSOM String

*localizedStartDate*: The start date in a localized string.

Type: CSOM String

*localizedDueDate*: The due date in a localized string.

Type: CSOM String

*completed*: Specifies whether the task (2) is finished.

Type: CSOM Boolean

*pinned*: Specifies whether the task (2) is pinned.

Type: CSOM Boolean

*locationKey*: The location of the task (2). -1 for personal tasks (2).

Type: CSOM Int32

### 3.1.5.41.2.2.17 PromotePersonalTaskToProviderTaskInLocation

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult

The **PromotePersonalTaskToProviderTaskInLocation** method makes a copy of the specified task (2) in the data source of the specified location and links it to the AWIOP representation.

For example, if the location identifier points to a list, calling this method would result in a task (2) being created in that list. The AWIOP task (2) would be changed to be a linked task (2) rather than a personal one, as if the task (2) had been created in the list and then aggregated by AWIOP.

**Parameters:**

*taskKey*: The identifier of the task (2).

Type: CSOM Int32

*locationId*: The identifier of the location.

Type: CSOM Int32

### **3.1.5.42 Microsoft.SharePoint.WorkManagement.Client.UserOrderedSessionManager**

**TypeId:** {D82117FB-E4AA-4AB8-B590-CB2BE4B2F078}

**ShortName:** SP.WorkManagement.OM.UserOrderedSessionManager

Manages sessions that have a sort order, as specified in section [3.1.5.16](#) and section [3.1.5.41](#).

#### **3.1.5.42.1 Properties**

##### **3.1.5.42.1.1 Scalar Properties**

None.

##### **3.1.5.42.1.2 ObjectPath Properties**

None.

#### **3.1.5.42.2 Methods**

##### **3.1.5.42.2.1 Scalar Methods**

None.

##### **3.1.5.42.2.2 ObjectPath Methods**

###### **3.1.5.42.2.2.1 CreateLocationOrientedSession**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationOrientedUserOrderedSession

Creates a user-ordered location-oriented session.

**Parameters:** None

###### **3.1.5.42.2.2.2 CreateSession**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.UserOrderedSession

Creates a user-ordered session.

**Parameters:** None

###### **3.1.5.42.2.2.3 CSOM Constructor**

Creates a new **UserOrderedSessionManager** object.

**Parameters:** None

### **3.1.5.43 Microsoft.SharePoint.WorkManagement.Client.UserSettings**

**TypeId:** {BEA67FB5-FB82-4388-B0E7-174BAA0EB51A}

**ShortName:** SP.WorkManagement.OM.UserSettings

Represents the settings for a user.

#### **3.1.5.43.1 Properties**

##### **3.1.5.43.1.1 Scalar Properties**

###### **3.1.5.43.1.1.1 DaysAfterCurrentDateTimelineEnds**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of days after the current day when the timeline ends.

###### **3.1.5.43.1.1.2 DaysATaskIsConsideredNewTask**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of days during which a task (2) is considered new.

###### **3.1.5.43.1.1.3 DaysBeforeCurrentDateTimelineStarts**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of days before the current day when the timeline started.

###### **3.1.5.43.1.1.4 ImportantTasksLimit**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the maximum number of days during which a task (2) is marked as important.

###### **3.1.5.43.1.1.5 InactiveMonthsBeforeLocationExpiration**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of months a location needs to be inactive before it expires.

###### **3.1.5.43.1.1.6 LateTasksLimit**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the maximum number of days to show a late task (2).

### **3.1.5.43.1.1.7      OldTasksLimit**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of months after which a task (2) is marked as old.

### **3.1.5.43.1.1.8      UpcomingTasksLimit**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the number of days to show a task (2) in the upcoming task (2) list.

### **3.1.5.43.1.1.9      ImportantLocationIds**

**Type:** CSOM array of CSOM Int32

**Accessibility:** Read/Write

Specifies the locations that are important.

## **3.1.5.43.1.2 ObjectPath Properties**

None.

## **3.1.5.43.2 Methods**

### **3.1.5.43.2.1 Scalar Methods**

None.

### **3.1.5.43.2.2 ObjectPath Methods**

#### **3.1.5.43.2.2.1      CSOM Constructor**

Creates a new **UserSettings** object.

**Parameters:** None

## **3.1.5.44 Microsoft.SharePoint.WorkManagement.Client.UserSettingsManager**

**TypeId:** {73B6F1D6-C69C-4787-8413-2BB14D336410}

**ShortName:** SP.WorkManagement.OM.UserSettingsManager

Manages user settings, as specified in section [3.1.5.43](#).

## **3.1.5.44.1 Properties**

### **3.1.5.44.1.1 Scalar Properties**

None.

### **3.1.5.44.1.2 ObjectPath Properties**

None.

### 3.1.5.44.2 Methods

#### 3.1.5.44.2.1 Scalar Methods

##### 3.1.5.44.2.1.1 SetUserSettings

**Return Type:** None

Saves the user settings.

**Parameters:**

*settings*: Specifies the user settings.

Type: Microsoft.SharePoint.WorkManagement.Client.UserSettings

*locationColorUpdates*: Specifies the display settings of the location.

Type: CSOM array of Microsoft.SharePoint.WorkManagement.Client.LocationDisplaySetting

##### 3.1.5.44.2.1.2 IsExchangeJobPending

**Return Type:** CSOM Boolean

Returns true if there is a server synchronization in progress for the user, or false otherwise.

**Parameters:** None

##### 3.1.5.44.2.1.3 OptIntoExchangeSync

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.ExchangeOptInResult

Turns on synchronization with a task (2) server for a user. [<1>](#)

**Parameters:** None

##### 3.1.5.44.2.1.4 OptOutOfExchangeSync

**Return Type:** CSOM Boolean

Turns off task (2) synchronization with a task (2) server for a user. [<2>](#)

**Parameters:** None

##### 3.1.5.44.2.1.5 SetPersistedProperties

**Return Type:** None

Sets metadata that persists across sessions for a user.

**Parameters:**

*persistedProperties*: Specifies the property values to persist.

Type: Microsoft.SharePoint.WorkManagement.Client.PersistedProperties

#### 3.1.5.44.2.2 ObjectPath Methods

### **3.1.5.44.2.2.1      GetAllLocations**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection

Returns all the locations.

**Parameters:** None

### **3.1.5.44.2.2.2      GetImportantLocations**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection

Returns all the important locations.

**Parameters:** None

### **3.1.5.44.2.2.3      GetUserSettings**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.UserSettings

Returns the user settings.

**Parameters:** None

### **3.1.5.44.2.2.4      GetLocations**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection

Returns a collection of locations.

**Parameters:**

*locationsId*: Specifies the location identifiers.

Type: CSOM array of CSOM Int32

### **3.1.5.44.2.2.5      CSOM Constructor**

Creates a new **UserSettingsManager** object.

**Parameters:** None

### **3.1.5.44.2.2.6      GetExchangeSyncInfo**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.ExchangeUserSyncState

Returns information about a server synchronization for a user. [<3>](#)

**Parameters:** None

### **3.1.5.44.2.2.7      GetPersistedProperties**

**Return Type:** Microsoft.SharePoint.WorkManagement.Client.PersistedProperties

Returns metadata that is persisted across sessions for a user.

**Parameters:** None

### **3.1.5.45 Microsoft.SharePoint.WorkManagement.Client.ViewSelectionInfo**

**TypeId:** {9C4B64C1-8722-45C0-9D9D-E61C2F36BB44}

**ShortName:** SP.WorkManagement.OM.ViewSelectionInfo

Represents information about the task (2) **view** selection.

#### **3.1.5.45.1 Properties**

##### **3.1.5.45.1.1 Scalar Properties**

###### **3.1.5.45.1.1.1 Id**

**Type:** CSOM Int32

**Accessibility:** Read/Write

Specifies the view identifier.

###### **3.1.5.45.1.1.2 Image**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the image identifier.

###### **3.1.5.45.1.1.3 Name**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the view name.

##### **3.1.5.45.1.2 ObjectPath Properties**

None.

#### **3.1.5.45.2 Methods**

##### **3.1.5.45.2.1 Scalar Methods**

None.

##### **3.1.5.45.2.2 ObjectPath Methods**

###### **3.1.5.45.2.2.1 CSOM Constructor**

Creates a new **ViewSelectionInfo** object.

**Parameters:** None

### **3.1.5.46 Microsoft.SharePoint.WorkManagement.Client.WritableTaskField**

**ShortName:** SP.WorkManagement.OM.WritableTaskField

**Flag:** false

Defines the fields that can be updated on a task (2).

### **3.1.5.46.1 Field Values**

#### **3.1.5.46.1.1 NoValue**

**Value:** 0

No value.

#### **3.1.5.46.1.2 IsCompleted**

**Value:** 13

Specifies the **IsCompleted** field.

#### **3.1.5.46.1.3 DueDate**

**Value:** 5

Specifies the **DueDate** field.

#### **3.1.5.46.1.4 Description**

**Value:** 4

Specifies the **Description** field.

#### **3.1.5.46.1.5 Title**

**Value:** 21

Specifies the **Title** field.

#### **3.1.5.46.1.6 EditUrl**

**Value:** 6

Specifies the **EditUrl** field.

#### **3.1.5.46.1.7 StartDate**

**Value:** 28

Specifies the **StartDate** field.

### **3.1.5.47 Microsoft.SharePoint.WorkManagement.Client.WriteFieldErrorType**

**ShortName:** SP.WorkManagement.OM.WriteFieldErrorType

**Flag:** false

Defines the error values from a field write.

### **3.1.5.47.1 Field Values**

### **3.1.5.47.1.1 NoValue**

**Value:** 0

No value.

### **3.1.5.47.1.2 TaskNotFound**

**Value:** 1

Specifies that the task (2) was not found.

### **3.1.5.47.1.3 InvalidInput**

**Value:** 2

Specifies that the format of the input was not valid.

### **3.1.5.47.1.4 TaskDeleted**

**Value:** 3

Specifies that the task (2) was deleted.

### **3.1.5.47.1.5 FieldConflict**

**Value:** 4

Specifies that there was a field conflict error.

### **3.1.5.47.1.6 Validation**

**Value:** 5

Specifies that there was a validation error.

### **3.1.5.47.1.7 LocationInvalid**

**Value:** 6

Specifies that the location was not valid.

### **3.1.5.47.1.8 Unknown**

**Value:** 7

Specifies that there was an unknown error.

### **3.1.5.47.1.9 DueDateInvalid**

**Value:** 8

Specifies that the due date was not valid.

### **3.1.5.47.1.10StartDateInvalid**

**Value:** 9

Specifies that the start date was not valid.

### **3.1.5.47.1.11DescriptionInvalid**

**Value:** 10

Specifies that the description was not valid.

### **3.1.5.47.1.12IsCompletedInvalid**

**Value:** 11

Specifies that the completion value was not valid.

### **3.1.5.47.1.13TitleInvalid**

**Value:** 12

Specifies that the title was not valid.

### **3.1.5.47.1.14EditUrlInvalid**

**Value:** 13

Specifies that the edit URL was not valid.

### **3.1.5.47.1.15AccessDenied**

**Value:** 14

Specifies that the user does not have sufficient privileges to write to the field

### **3.1.5.47.1.16PromoteTargetTaskNotPersonal**

**Value:** 15

Specifies that the task (2) is not a personal task (2), and therefore cannot be promoted.

### **3.1.5.47.1.17PromotionFailedInProvider**

**Value:** 16

Specifies that the provider failed to promote the task (2).

## **3.1.5.48 Microsoft.SharePoint.WorkManagement.Client.PrivacyType**

**ShortName:** SP.WorkManagement.OM.PrivacyType

**Flag:** false

Defines the privacy state values.

### **3.1.5.48.1 Field Values**

#### **3.1.5.48.1.1 None**

**Value:** 0

None.

#### **3.1.5.48.1.2 Personal**

**Value:** 1

Specifies that a task (2) is personal and visible only to the user.

### 3.1.5.48.1.3 Public

**Value:** 2

Specifies that the task (2) was aggregated from another location.

## 3.1.5.49 Microsoft.SharePoint.WorkManagement.Client.CalloutInfo

**TypeId:** {B869CD40-9A6E-4C16-916F-C73EE85745CB}

**ShortName:** SP.WorkManagement.OM.CalloutInfo

Represents supplemental information about a task (2).

### 3.1.5.49.1 Properties

#### 3.1.5.49.1.1 Scalar Properties

##### 3.1.5.49.1.1.1 Contacts

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies users that the current task (2) is assigned to other than the current user.

##### 3.1.5.49.1.1.2 DirectLinkTitle

**Type:** CSOM String

**Accessibility:** Read/Write

The title of the direct link for the list of tasks (2) where this task (2) is included.

##### 3.1.5.49.1.1.3 DirectLinkUrl

**Type:** CSOM String

**Accessibility:** Read/Write

Url for the direct link for the list of tasks (2) where this task (2) is included.

##### 3.1.5.49.1.1.4 Hierarchy

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies tasks (2) that are parents of the current task (2).

##### 3.1.5.49.1.1.5 Predecessors

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies tasks (2) that the current task (2) depends on.

#### **3.1.5.49.1.1.6 Successors**

**Type:** CSOM array of CSOM String

**Accessibility:** Read/Write

Specifies tasks (2) that depend on the current task (2).

#### **3.1.5.49.1.1.7 Title**

**Type:** CSOM String

**Accessibility:** Read/Write

The title of the tasks (2) container.

#### **3.1.5.49.1.1.8 Url**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the URL to edit the task (2).

### **3.1.5.49.1.2 ObjectPath Properties**

None.

### **3.1.5.49.2 Methods**

#### **3.1.5.49.2.1 Scalar Methods**

None.

#### **3.1.5.49.2.2 ObjectPath Methods**

None.

### **3.1.5.50 Microsoft.SharePoint.WorkManagement.Client.DashboardScriptExtension InfoClientCollection**

**TypeId:** {03644911-E5E9-4504-9F73-85D50B9DD6A0}

**ShortName:** SP.WorkManagement.OM.DashboardScriptExtensionInfoClientCollection

Represents a collection of **DashboardScriptExtensionInfo** objects (section [3.1.5.7](#)).

#### **3.1.5.50.1 Properties**

##### **3.1.5.50.1.1 Scalar Properties**

None.

##### **3.1.5.50.1.2 ObjectPath Properties**

None.

### **3.1.5.50.2 Methods**

#### **3.1.5.50.2.1 Scalar Methods**

None.

#### **3.1.5.50.2.2 ObjectPath Methods**

None.

### **3.1.5.51 Microsoft.SharePoint.WorkManagement.Client.ExchangeOptInResult**

**ShortName:** SP.WorkManagement.OM.ExchangeOptInResult

**Flag:** false

Represents status information for an operation to enable synchronization with an external task (2) server for a user.

#### **3.1.5.51.1 Field Values**

##### **3.1.5.51.1.1 NoValue**

**Value:** 0

No value.

##### **3.1.5.51.1.2 Success**

**Value:** 1

Specifies that the operation succeeded.

##### **3.1.5.51.1.3 UnknownError**

**Value:** 2

Specifies that there was an unknown error when enabling synchronization.

##### **3.1.5.51.1.4 CouldNotConnectToExchange**

**Value:** 3

Specifies that the operation could not connect with the external task (2) server.

##### **3.1.5.51.1.5 CouldNotFindOrCreateMySite**

**Value:** 4

Specifies that the synchronization operation could not find or create the user's personal site in which to store synchronization data.

##### **3.1.5.51.1.6 UserAlreadyOptedIn**

**Value:** 5

Specifies that the user has already enabled task (2) server synchronization.

### **3.1.5.51.1.7 UserExchangeOperationPending**

**Value:** 6

Specifies that an operation to enable synchronization is already in process.

### **3.1.5.51.1.8 UnsupportedExchangeVersion**

**Value:** 7

Specifies that the version of the task (2) server is not compatible with the synchronization operation.

### **3.1.5.51.1.9 MissingEmailAddress**

**Value:** 8

Specifies that the user's email address could not be found in the User Profile Service.

### **3.1.5.51.1.10 ExchangeWebServiceClientMissing**

**Value:** 9

Specifies that the component required to connect to the external task (2) server is not available.

### **3.1.5.51.1.11 UnsupportedSharePointConfiguration**

**Value:** 10

Specifies that the local server is not configured correctly for synchronization with an external task (2) server.

### **3.1.5.51.1.12 InvalidOrUnauthorizedUser**

**Value:** 11

Specifies that the user specified is not valid or unauthorized on the external task (2) server.

### **3.1.5.51.1.13 CouldNotActivateExchangeSyncFeatureOnSiteSubscription**

**Value:** 12

Specifies that the synchronization operation could not be activated on the local server.

## **3.1.5.52 Microsoft.SharePoint.WorkManagement.Client.ExchangeSyncResult**

**ShortName:** SP.WorkManagement.OM.ExchangeSyncResult

**Flag:** false

Represents information about a task (2) server synchronization operation.

### **3.1.5.52.1 Field Values**

#### **3.1.5.52.1.1 NoValue**

**Value:** 0

No value.

### **3.1.5.52.1.2 Success**

**Value:** 1

Specifies that the synchronization operation succeeded.

### **3.1.5.52.1.3 UnknownError**

**Value:** 2

Specifies that there was an unknown error during the synchronization.

### **3.1.5.52.1.4 CouldNotConnectToExchange**

**Value:** 3

Specifies that the operation could not connect with the external task (2) server.

### **3.1.5.52.1.5 CouldNotGetUserCredentials**

**Value:** 4

Specifies that the operation could not get credentials for the user it was trying to synchronize.

### **3.1.5.52.1.6 CouldNotKickoffJob**

**Value:** 5

Specifies that a synchronization operation could not be started.

### **3.1.5.52.1.7 SyncWithErrors**

**Value:** 6

Specifies that the synchronization finished but with errors.

## **3.1.5.53 Microsoft.SharePoint.WorkManagement.Client.ExchangeUserSyncState**

**TypeId:** {DF02E325-1546-4E32-BEDE-704630D31669}

**ShortName:** SP.WorkManagement.OM.ExchangeUserSyncState

Represents status for external task (2) server synchronization operations for a user.

### **3.1.5.53.1 Properties**

#### **3.1.5.53.1.1 Scalar Properties**

##### **3.1.5.53.1.1.1 IsOptedIn**

**Type:** CSOM Boolean

**Accessibility:** Read Only

Specifies whether synchronization is enabled for a user or not.

##### **3.1.5.53.1.1.2 LastEndTime**

**Type:** CSOM DateTime

**Accessibility:** Read Only

Specifies when the last synchronization operation finished.

### **3.1.5.53.1.1.3      LastSyncResult**

**Type:** Microsoft.SharePoint.WorkManagement.Client.ExchangeSyncResult

**Accessibility:** Read Only

Specifies the outcome of the last synchronization operation for the user.

### **3.1.5.53.1.2    ObjectPath Properties**

None.

### **3.1.5.53.2    Methods**

#### **3.1.5.53.2.1    Scalar Methods**

None.

#### **3.1.5.53.2.2    ObjectPath Methods**

None.

### **3.1.5.54      Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult**

**TypeId:** {D1A564B4-5E35-4A5B-92B6-99DC85DACDA4}

**ShortName:** SP.WorkManagement.OM.NonTaskDataReadResult

Represents information about a user's task (2) list and experience settings that is not specific to the tasks (2) themselves.

### **3.1.5.54.1    Properties**

#### **3.1.5.54.1.1    Scalar Properties**

None.

#### **3.1.5.54.1.2    ObjectPath Properties**

#### **3.1.5.54.1.2.1    AllLocatons**

**Type:** Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection

**Accessibility:** Read Only

Specifies the location of sources from which tasks (2) were aggregated.

#### **3.1.5.54.1.2.2    PersistedProperties**

**Type:** Microsoft.SharePoint.WorkManagement.Client.PersistedProperties

**Accessibility:** Read Only

Specifies persisted properties for the user.

### **3.1.5.54.1.2.3 RefreshHistory**

**Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshHistory

**Accessibility:** Read Only

Specifies information about the last time the user's tasks (2) list was updated.

### **3.1.5.54.1.2.4 ScriptExtensions**

**Type:** Microsoft.SharePoint.WorkManagement.Client.DashboardScriptExtensionInfoClientCollection

**Accessibility:** Read Only

Specifies script extensions for task providers.

### **3.1.5.54.1.2.5 UserSettings**

**Type:** Microsoft.SharePoint.WorkManagement.Client.UserSettings

**Accessibility:** Read Only

Specifies the setting values for the user.

## **3.1.5.54.2 Methods**

### **3.1.5.54.2.1 Scalar Methods**

None.

### **3.1.5.54.2.2 ObjectPath Methods**

None.

## **3.1.5.55 Microsoft.SharePoint.WorkManagement.Client.PersistedProperties**

**TypeId:** {C05EBF4C-F2C5-4167-9043-F21C4E1B682D}

**ShortName:** SP.WorkManagement.OM.PersistedProperties

Represents properties about the user's last interaction with system that is persisted the next time the user loads the user experience.

### **3.1.5.55.1 Properties**

#### **3.1.5.55.1.1 Scalar Properties**

##### **3.1.5.55.1.1.1 FilteredLocationIds**

**Type:** CSOM array of CSOM Int32

**Accessibility:** Read/Write

Specifies the locations filtered by the user in the user experience.

##### **3.1.5.55.1.1.2 GroupByProjects**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the user's task (2) list is displayed as grouped by project or as a flat list.

### **3.1.5.55.1.1.3      HasShownMarkAsImportantCallout**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the user has been prompted to try to set a pin on a task (2) or not.

### **3.1.5.55.1.1.4      HasShownTaskListTooLongNotification**

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Specifies whether the user has been prompted that the user's task (2) list has accumulated a large number of tasks (2) or not.

### **3.1.5.55.1.1.5      QuickLaunchLandingPage**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the default view when navigating to the user experience.

## **3.1.5.55.1.2 ObjectPath Properties**

None.

## **3.1.5.55.2 Methods**

### **3.1.5.55.2.1 Scalar Methods**

None.

### **3.1.5.55.2.2 ObjectPath Methods**

#### **3.1.5.55.2.2.1      CSOM Constructor**

Creates a new **PersistedProperties** object.

**Parameters:** None

## **3.1.5.56      Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult**

**TypeId:** {7F3B5192-690D-40F0-A69F-553268333A61}

**ShortName:** SP.WorkManagement.OM.TaskRefreshResult

Represents result information when updating a specific task (2) from its source.

### **3.1.5.56.1 Properties**

#### **3.1.5.56.1.1 Scalar Properties**

### **3.1.5.56.1.1.1      ErrorCorrelationId**

**Type:** CSOM String

**Accessibility:** Read/Write

Specifies the unique identifier for the request or operation associated with an error if an error occurred during the update.

### **3.1.5.56.1.1.2      RefreshState**

**Type:** Microsoft.SharePoint.WorkManagement.Client.RefreshState

**Accessibility:** Read/Write

Specifies the refresh state for the operation.

## **3.1.5.56.1.2    ObjectPath Properties**

### **3.1.5.56.1.2.1      Result**

**Type:** Microsoft.SharePoint.WorkManagement.Client.Task

**Accessibility:** Read/Write

Specifies the updated task (2) after applying the updates.

## **3.1.5.56.2    Methods**

### **3.1.5.56.2.1    Scalar Methods**

None.

### **3.1.5.56.2.2    ObjectPath Methods**

None.

## **3.1.5.57      Microsoft.SharePoint.WorkManagement.Client.TaskQueryByLocationResult**

**It**

**TypeId:** {C71139AF-B900-4597-B03F-B46E7605C163}

**ShortName:** SP.WorkManagement.OM.TaskQueryByLocationResult

Represents the result of reading tasks (2) by location.

## **3.1.5.57.1    Properties**

### **3.1.5.57.1.1    Scalar Properties**

#### **3.1.5.57.1.1.1      Error**

**Type:** Microsoft.SharePoint.WorkManagement.Client.TaskQueryErrorType

**Accessibility:** Read/Write

The error type of the operation.

### **3.1.5.57.1.1.2 ErrorMessage**

**Type:** CSOM String

**Accessibility:** Read/Write

The error message for the failed task (2) query.

### **3.1.5.57.1.2 ObjectPath Properties**

#### **3.1.5.57.1.2.1 Results**

**Type:** Microsoft.SharePoint.WorkManagement.Client.LocationGroupClientCollection

**Accessibility:** Read/Write

A collection with information about each task (2).

### **3.1.5.57.2 Methods**

#### **3.1.5.57.2.1 Scalar Methods**

None.

#### **3.1.5.57.2.2 ObjectPath Methods**

None.

### **3.1.5.58 Microsoft.SharePoint.WorkManagement.Client.TaskQueryErrorType**

**ShortName:** SP.WorkManagement.OM.TaskQueryErrorType

**Flag:** false

A method that enumerates the error during a task (2) query.

#### **3.1.5.58.1 Field Values**

##### **3.1.5.58.1.1 NoValue**

**Value:** 0

##### **3.1.5.58.1.2 QueryThrottled**

**Value:** 1

### **3.1.5.59 Microsoft.SharePoint.WorkManagement.Client.TaskQueryResult**

**TypeId:** {CB846FB7-0B8D-4D39-B1AE-6229C635F25B}

**ShortName:** SP.WorkManagement.OM.TaskQueryResult

A method that represents the result of reading tasks (2).

#### **3.1.5.59.1 Properties**

##### **3.1.5.59.1.1 Scalar Properties**

### **3.1.5.59.1.1.1 Error**

**Type:** Microsoft.SharePoint.WorkManagement.Client.TaskQueryErrorType

**Accessibility:** Read/Write

The error type of the operation.

### **3.1.5.59.1.1.2 ErrorMessage**

**Type:** CSOM String

**Accessibility:** Read/Write

The error message for the failed task (2) query.

## **3.1.5.59.1.2 ObjectPath Properties**

### **3.1.5.59.1.2.1 Results**

**Type:** Microsoft.SharePoint.WorkManagement.Client.TaskClientCollection

**Accessibility:** Read/Write

A collection with information about each task (2).

## **3.1.5.59.2 Methods**

### **3.1.5.59.2.1 Scalar Methods**

None.

### **3.1.5.59.2.2 ObjectPath Methods**

None.

## **3.1.6 Timer Events**

None.

## **3.1.7 Other Local Events**

None.

## 4 Protocol Examples

### 4.1 Retrieving Active Tasks for a User

This example calls **ReadTasks** (section [3.1.5.16.2.2.8](#)) to get all tasks (2) that are not complete for the current user.

#### Request

```
<Request xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009"
SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName="Javascript Library">
  <Actions>
    <ObjectPath Id="17" ObjectPathId="16" />
    <ObjectPath Id="19" ObjectPathId="18" />
    <ObjectPath Id="21" ObjectPathId="20" />
    <ObjectPath Id="23" ObjectPathId="22" />
    <ObjectPath Id="25" ObjectPathId="24" />
    <ObjectPath Id="27" ObjectPathId="26" />
    <ObjectPath Id="29" ObjectPathId="28" />
    <ObjectPath Id="31" ObjectPathId="30" />
    <SetProperty Id="32" ObjectPathId="28" Name="LocationFilter">
      <Parameter ObjectPathId="30" />
    </ SetProperty>
    <SetProperty Id="33" ObjectPathId="30" Name="LocationKeys">
      <Parameter Type="Array" />
    </ SetProperty>
    <SetProperty Id="34" ObjectPathId="30" Name="IncludeUncategorizedTasks">
      <Parameter Type="Boolean">true</Parameter>
    </ SetProperty>
    <SetProperty Id="35" ObjectPathId="28" Name="KeywordFilter">
      <Parameter Type="Null" />
    </ SetProperty>
    <ObjectPath Id="37" ObjectPathId="36" />
    <SetProperty Id="38" ObjectPathId="28" Name="FieldFilter">
      <Parameter ObjectPathId="36" />
    </ SetProperty>
    <ObjectPath Id="40" ObjectPathId="39" />
    <SetProperty Id="41" ObjectPathId="36" Name="CompletedCriterion">
      <Parameter ObjectPathId="39" />
    </ SetProperty>
    <SetProperty Id="42" ObjectPathId="39" Name="CompareType">
      <Parameter Type="Number">2</Parameter>
    </ SetProperty>
    <ObjectPath Id="44" ObjectPathId="43" />
    <SetProperty Id="45" ObjectPathId="28" Name="LastModifiedDateRangeFilter">
      <Parameter ObjectPathId="43" />
    </ SetProperty>
    <SetProperty Id="46" ObjectPathId="43" Name="RangeStartValue">
      <Parameter Type="DateTime">2009-11-17T23:34:52.370-08:00</Parameter>
    </ SetProperty>
    <ObjectPath Id="48" ObjectPathId="47" />
    <ObjectPath Id="50" ObjectPathId="49" />
    <Query Id="51" ObjectPathId="49">
      <Query SelectAllProperties="true">
        <Properties />
      </Query>
    </Query>
    <ObjectPath Id="53" ObjectPathId="52" />
    <Query Id="54" ObjectPathId="52">
      <Query SelectAllProperties="true">
        <Properties />
      </Query>
    <ChildItemQuery SelectAllProperties="true">
```

```

        <Properties />
        </ChildItemQuery>
    </Query>
</Actions>
<ObjectPaths>
    <Constructor Id="16" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="18" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="20" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="22" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="24" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="26" TypeId="{9c4b64c1-8722-45c0-9d9d-e61c2f36bb44}" />
    <Constructor Id="28" TypeId="{70c9591d-9a78-404a-9fe8-b50b1e02cd93}" />
    <Constructor Id="30" TypeId="{d9ce752e-01ed-4872-b4da-fc362038fbf0}" />
    <Constructor Id="36" TypeId="{3188516d-d569-40f8-8c01-1d48fb5243c}" />
    <Constructor Id="39" TypeId="{16d379b2-e752-405f-a05f-a8fe05aa0d07}" />
    <Constructor Id="43" TypeId="{c9c79001-8e9d-4f24-860b-55bd22c13eae}" />
    <Constructor Id="47" TypeId="{d82117fb-e4aa-4ab8-b590-cb2be4b2f078}" />
    <Method Id="49" ParentId="47" Name="CreateLocationOrientedSession" />
    <Method Id="52" ParentId="49" Name="ReadTasks">
        <Parameters>
            <Parameter ObjectPathId="28" />
        </Parameters>
    </Method>
</ObjectPaths>
</Request>

```

## Response

The server returns a list of tasks (2), which are named "Pay Rent", "Get Groceries", and "Remember the Milk".

```

[ { "ErrorInfo" : null,
  "LibraryVersion" : "15.0.3510.3000",
  "SchemaVersion" : "15.0.0.0"
},
17,
{ "IsNull" : false },
19,
{ "IsNull" : false },
21,
{ "IsNull" : false },
23,
{ "IsNull" : false },
25,
{ "IsNull" : false },
27,
{ "IsNull" : false },
29,
{ "IsNull" : false },
31,
{ "IsNull" : false },
37,
{ "IsNull" : false },
40,
{ "IsNull" : false },
44,
{ "IsNull" : false },
48,
{ "IsNull" : false },
50,
{ "IsNull" : false },
51,
{ "ObjectType" : "SP.WorkManagement.OM.LocationOrientedUserOrderedSession" },
53,
{ "IsNull" : false },

```

```

54,
{

    "_ObjectType_" : "SP.WorkManagement.OM.LocationGroupClientCollection"
    "_Child_Items_" : [ {
        "_ObjectType_" : "SP.WorkManagement.OM.Task"
        "CustomAttributes" : [ ],
        "Description" : null,
        "DueDate" : "/Date(2011,10,18,0,0,0,0)/",
        "EditUrl" : "EditTask.aspx?taskId=13",
        "Id" : 13,
        "IsCompleted" : false,
        "IsPersonal" : true,
        "LastModified" : "/Date(1321572834000)/",
        "LocationId" : -1,
        "Name" : "Remember the Milk",
        "PinAge" : 0,
        "SerializedCustomDataForClient" : null,
        "StartDate" : "/Date(1,0,1,0,0,0,0)/"
    },
    {

        "_ObjectType_" : "SP.WorkManagement.OM.Task"
        "CustomAttributes" : [ ],
        "Description" : null,
        "DueDate" : "/Date(2011,3,29,10,0,0,0)/",
        "EditUrl" : "http://office:80/project/TaskDetails.aspx?proj=dca8826e-6562-49b1-
a968-853400d76085&assn=f4a10d33-dd48-4d1e-8b17-3dd327e9e219",
        "Id" : 1,
        "IsCompleted" : false,
        "IsPersonal" : false,
        "LastModified" : "/Date(1321572850000)/",
        "LocationId" : 2,
        "Name" : "Get Groceries",
        "PinAge" : 0,
        "SerializedCustomDataForClient" :
        "{\"isProjectServerTask\":true,\"taskData\":\"\\\\\"pwaUrl\\\\\"\\\\:\\\\\\\"http://office/project\\\\\\\",\\
\\\\\"assnUid\\\\\"\\\\:\\\\\\\"f4a10d33-dd48-4d1e-8b17-3dd327e9e219\\\\\\\",\\\\\"taskUid\\\\\"\\\\:\\\\\\\"cfba49cb-
3548-468c-91c0-e6df5f63ab75\\\\\\\"\\\\}\\\"}",
        "StartDate" : "/Date(2011,3,11,1,0,0,0)/"
    },
    {

        "_ObjectType_" : "SP.WorkManagement.OM.Task"
        "CustomAttributes" : [ ],
        "Description" : null,
        "DueDate" : "/Date(2011,7,16,5,0,0,0)/",
        "EditUrl" : "http://office:80/project/TaskDetails.aspx?proj=a2178405-843c-447b-
91ee-8bdeef8d9498&assn=6ed66c3f-5e51-4a3c-a5b0-6e2c6bc7b3c2",
        "Id" : 2,
        "IsCompleted" : false,
        "IsPersonal" : false,
        "LastModified" : "/Date(1321572857000)/",
        "LocationId" : 4,
        "Name" : "Pay Rent",
        "PinAge" : 0,
        "SerializedCustomDataForClient" :
        "{\"isProjectServerTask\":true,\"taskData\":\"\\\\\"pwaUrl\\\\\"\\\\:\\\\\\\"http://office/project\\\\\\\",\\
\\\\\"assnUid\\\\\"\\\\:\\\\\\\"6ed66c3f-5e51-4a3c-a5b0-6e2c6bc7b3c2\\\\\\\",\\\\\"taskUid\\\\\"\\\\:\\\\\\\"42cad6a0-
3bf7-44ae-b953-0acaad394a6f\\\\\\\"\\\\}\\\"}",
        "StartDate" : "/Date(2011,7,7,1,0,0,0)/"
    }
}

```

```
        ]  
    }  
]
```

## 4.2 Updating a Task

In this example, the protocol client updates the title of a task (2) to "Remember the chocolate".

### Request

```
<Request xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009"  
SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName="Javascript Library">  
    <Actions>  
        <ObjectPath Id="156" ObjectPathId="155" />  
        <ObjectPath Id="158" ObjectPathId="157" />  
        <Query Id="159" ObjectPathId="157">  
            <Query SelectAllProperties="true">  
                <Properties />  
            </Query>  
        </Query>  
        <ObjectPath Id="161" ObjectPathId="160" />  
    </Actions>  
    <ObjectPaths>  
        <Constructor Id="155" TypeId="{d82117fb-e4aa-4ab8-b590-cb2be4b2f078}" />  
        <Method Id="157" ParentId="155" Name="CreateLocationOrientedSession" />  
        <Method Id="160" ParentId="157" Name="UpdateTaskWithLocalizedValue">  
            <Parameters>  
                <Parameter Type="Number">13</Parameter>  
                <Parameter Type="Number">1</Parameter>  
                <Parameter Type="String">Remember the Chocolate</Parameter>  
            </Parameters>  
        </Method>  
    </ObjectPaths>  
</Request>
```

### Response

The protocol server responds with the new position of the updated task (2) in the sort order of the list.

```
[ { "ErrorInfo" : null,  
    "LibraryVersion" : "15.0.3510.3000",  
    "SchemaVersion" : "15.0.0.0"  
},  
156,  
{ "IsNull" : false },  
158,  
{ "IsNull" : false },  
159,  
{ "_ObjectType_" : "SP.WorkManagement.OM.LocationOrientedUserOrderedSession" },  
161,  
{ "IsNull" : false }  
]
```

## 4.3 Creating a New Task

In this example, the protocol client creates a new task (2) with the name "Go to concert".

### Request

```

<Request xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009"
SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName="Javascript Library">
<Actions>
<ObjectPath Id="1" ObjectPathId="0" />
<ObjectPath Id="3" ObjectPathId="2" />
<Query Id="4" ObjectPathId="2">
<Query SelectAllProperties="true">
<Properties />
</Query>
</Query>
<ObjectPath Id="6" ObjectPathId="5" />
<Query Id="7" ObjectPathId="5">
<Query SelectAllProperties="true">
<Properties />
</Query>
</Query>
<ObjectPath Id="9" ObjectPathId="8" />
<Query Id="10" ObjectPathId="8">
<Query SelectAllProperties="true">
<Properties />
</Query>
</Query>
</Actions>
<ObjectPaths>
<Constructor Id="0" TypeId="{924b1779-998e-4c60-a291-78edebc3c202}" />
<Method Id="2" ParentId="0" Name="CreateSession" />
<Method Id="5" ParentId="2" Name="CreateTask">
<Parameters>
<Parameter Type="String">Go to concert</Parameter>
<Parameter Type="String"></Parameter>
<Parameter Type="String"></Parameter>
<Parameter Type="String">11/23/2011</Parameter>
<Parameter Type="Boolean">false</Parameter>
<Parameter Type="Boolean">false</Parameter>
<Parameter Type="String"></Parameter>
<Parameter Type="Number">-1</Parameter>
</Parameters>
</Method>
<Property Id="8" ParentId="5" Name="Result" />
</ObjectPaths>
</Request>

```

## Response

The protocol server responds with the metadata of the new task (2) and its position in the sort order of the list.

```

[ { "ErrorInfo" : null,
  "LibraryVersion" : "15.0.3510.3000",
  "SchemaVersion" : "15.0.0.0"
},
1,
{ "IsNull" : false },
3,
{ "IsNull" : false },
4,
{ "_ObjectType_" : "SP.WorkManagement.OM.SortableSession" },
6,
{ "IsNull" : false },
7,
{ "_ObjectType_" : "SP.WorkManagement.OM.TaskWriteResult"
  "Error" : 0,
  "ErrorMessage" : null
},
9,

```

```
{ "IsNull" : false },
10,
{ "_ObjectType_" : "SP.WorkManagement.OM.Task"
  "CustomAttributes" : [ ],
  "Description" : null,
  "DueDate" : "/Date(2011,10,23,0,0,0,0)/",
  "EditUrl" : "EditTask.aspx?taskId=15",
  "Id" : 15,
  "IsCompleted" : false,
  "IsPersonal" : true,
  "LastModified" : "/Date(1321573451000)/",
  "LocationId" : -1,
  "Name" : "Go to concert",
  "PinAge" : 0,
  "SerializedCustomDataForClient" : null,
  "StartDate" : "/Date(1,0,1,0,0,0,0)/"
}
]
```

Preliminary

## **5 Security**

### **5.1 Security Considerations for Implementers**

None.

### **5.2 Index of Security Parameters**

None.

Preliminary

## 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
- Microsoft SharePoint Server 2016 Preview

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.

[<1> Section 3.1.5.44.2.1.3](#): This method is only supported by Microsoft Exchange Server 2013.

[<2> Section 3.1.5.44.2.1.4](#): This method is only supported by Exchange 2013.

[<3> Section 3.1.5.44.2.2.6](#): This method is only supported by Exchange 2013.

## 7 Change Tracking

This section identifies changes that were made to this document since the last release. 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.
- The removal of a document from the documentation set.

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 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 changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

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.
- 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 [dochelp@microsoft.com](mailto:dochelp@microsoft.com).

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
<a href="#">6 Appendix A: Product Behavior</a>	Updated list of supported products.	Y	Content updated due to protocol revision.

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