

# [MS-WMCSOM]:

## Work Management Client-Side Object Model Protocol

---

### Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation (“this documentation”) for protocols, file formats, data portability, computer languages, and standards support. Additionally, overview documents cover inter-protocol relationships and interactions.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you can make copies of it in order to develop implementations of the technologies that are described in this documentation and can distribute portions of it in your implementations that use these technologies or in your documentation as necessary to properly document the implementation. You can also distribute in your implementation, with or without modification, any schemas, IDLs, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications documentation.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that might cover your implementations of the technologies described in the Open Specifications documentation. Neither this notice nor Microsoft's delivery of this documentation grants any licenses under those patents or any other Microsoft patents. However, a given Open Specifications document might be covered by the Microsoft [Open Specifications Promise](#) or the [Microsoft Community Promise](#). If you would prefer a written license, or if the technologies described in this documentation are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting [iplg@microsoft.com](mailto:iplg@microsoft.com).
- **License Programs.** To see all of the protocols in scope under a specific license program and the associated patents, visit the [Patent Map](#).
- **Trademarks.** The names of companies and products contained in this documentation might be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights. For a list of Microsoft trademarks, visit [www.microsoft.com/trademarks](http://www.microsoft.com/trademarks).
- **Fictitious Names.** The example companies, organizations, products, domain names, email addresses, logos, people, places, and events that are depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

**Reservation of Rights.** All other rights are reserved, and this notice does not grant any rights other than as specifically described above, whether by implication, estoppel, or otherwise.

**Tools.** The Open Specifications documentation does not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments, you are free to take advantage of them. Certain Open Specifications documents are intended for use in conjunction with publicly available standards specifications and network programming art and, as such, assume that the reader either is familiar with the aforementioned material or has immediate access to it.

**Support.** For questions and support, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com).

## Revision Summary

Date	Revision History	Revision Class	Comments
1/20/2012	0.1	New	Released new document.
4/11/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
7/16/2012	0.2	Major	Significantly changed the technical content.
9/12/2012	0.2	None	No changes to the meaning, language, or formatting of the technical content.
10/8/2012	1.0	Major	Significantly changed the technical content.
2/11/2013	2.0	Major	Significantly changed the technical content.
7/30/2013	2.1	Minor	Clarified the meaning of the technical content.
11/18/2013	2.1	None	No changes to the meaning, language, or formatting of the technical content.
2/10/2014	2.1	None	No changes to the meaning, language, or formatting of the technical content.
4/30/2014	2.2	Minor	Clarified the meaning of the technical content.
7/31/2014	2.3	Minor	Clarified the meaning of the technical content.
10/30/2014	2.3	None	No changes to the meaning, language, or formatting of the technical content.
6/23/2016	2.3	None	No changes to the meaning, language, or formatting of the technical content.
9/19/2017	3.0	Major	Significantly changed the technical content.
12/12/2017	3.0	None	No changes to the meaning, language, or formatting of the technical content.

# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>16</b>
1.1	Glossary .....	16
1.2	References .....	17
1.2.1	Normative References .....	17
1.2.2	Informative References .....	17
1.3	Overview .....	18
1.4	Relationship to Other Protocols .....	18
1.5	Prerequisites/Preconditions .....	18
1.6	Applicability Statement .....	18
1.7	Versioning and Capability Negotiation .....	19
1.8	Vendor-Extensible Fields .....	19
1.9	Standards Assignments.....	19
<b>2</b>	<b>Messages.....</b>	<b>20</b>
2.1	Transport .....	20
2.2	Message Syntax.....	20
2.2.1	Common Exceptions.....	20
<b>3</b>	<b>Protocol Details.....</b>	<b>21</b>
3.1	Server Details.....	21
3.1.1	Abstract Data Model.....	21
3.1.2	Timers .....	21
3.1.3	Initialization.....	21
3.1.4	Higher-Layer Triggered Events .....	21
3.1.5	Message Processing Events and Sequencing Rules .....	21
3.1.5.1	Microsoft.SharePoint.WorkManagement.Client.BaseSession .....	21
3.1.5.1.1	Properties.....	21
3.1.5.1.1.1	Scalar Properties.....	21
3.1.5.1.1.2	ObjectPath Properties.....	21
3.1.5.1.2	Methods .....	21
3.1.5.1.2.1	Scalar Methods .....	22
3.1.5.1.2.1.1	BeginExchangeSync.....	22
3.1.5.1.2.1.2	IsExchangeJobPending .....	22
3.1.5.1.2.2	ObjectPath Methods .....	22
3.1.5.1.2.2.1	AddAttributeToTask .....	22
3.1.5.1.2.2.2	BeginCacheRefresh .....	22
3.1.5.1.2.2.3	CreateTask .....	22
3.1.5.1.2.2.4	DeleteTask .....	23
3.1.5.1.2.2.5	GetRefreshHistory .....	23
3.1.5.1.2.2.6	GetRefreshStatus .....	23
3.1.5.1.2.2.7	PinTask .....	24
3.1.5.1.2.2.8	RemoveAttributeFromTask.....	24
3.1.5.1.2.2.9	RemovePinOnTask.....	24
3.1.5.1.2.2.10	UpdateTaskWithLocalizedValue.....	24
3.1.5.1.2.2.11	GetCalloutInfo.....	25
3.1.5.1.2.2.12	ReadAllNonTaskData.....	25
3.1.5.1.2.2.13	RefreshSingleTask .....	25
3.1.5.1.2.2.14	GetRefreshHealthInfo.....	25
3.1.5.1.2.2.15	CreatePersonalTaskAndPromoteToProviderTask.....	25
3.1.5.1.2.2.16	PromotePersonalTaskToProviderTaskInLocation.....	26
3.1.5.2	Microsoft.SharePoint.WorkManagement.Client.BooleanCompareType .....	26
3.1.5.2.1	Field Values .....	26
3.1.5.2.1.1	NoValue.....	26
3.1.5.2.1.2	IsTrue .....	27
3.1.5.2.1.3	IsFalse .....	27

3.1.5.3	Microsoft.SharePoint.WorkManagement.Client.BooleanCriterion	27
3.1.5.3.1	Properties	27
3.1.5.3.1.1	Scalar Properties	27
3.1.5.3.1.1.1	CompareType	27
3.1.5.3.1.2	ObjectPath Properties	27
3.1.5.3.2	Methods	27
3.1.5.3.2.1	Scalar Methods	27
3.1.5.3.2.2	ObjectPath Methods	27
3.1.5.3.2.2.1	CSOM Constructor	27
3.1.5.4	Microsoft.SharePoint.WorkManagement.Client.CreateRefreshJobResult	27
3.1.5.4.1	Properties	28
3.1.5.4.1.1	Scalar Properties	28
3.1.5.4.1.1.1	CreatedJob	28
3.1.5.4.1.1.2	CurrentJobId	28
3.1.5.4.1.1.3	EncounteredError	28
3.1.5.4.1.2	ObjectPath Properties	28
3.1.5.4.2	Methods	28
3.1.5.4.2.1	Scalar Methods	28
3.1.5.4.2.2	ObjectPath Methods	28
3.1.5.5	Microsoft.SharePoint.WorkManagement.Client.CriterionConcatType	28
3.1.5.5.1	Field Values	28
3.1.5.5.1.1	NoValue	28
3.1.5.5.1.2	All	29
3.1.5.5.1.3	Any	29
3.1.5.6	Microsoft.SharePoint.WorkManagement.Client.CustomAttributeFilter	29
3.1.5.6.1	Properties	29
3.1.5.6.1.1	Scalar Properties	29
3.1.5.6.1.1.1	Attributes	29
3.1.5.6.1.1.2	ConcatType	29
3.1.5.6.1.2	ObjectPath Properties	29
3.1.5.6.2	Methods	29
3.1.5.6.2.1	Scalar Methods	29
3.1.5.6.2.2	ObjectPath Methods	29
3.1.5.6.2.2.1	CSOM Constructor	29
3.1.5.7	Microsoft.SharePoint.WorkManagement.Client.DashboardScriptExtensionInfo	30
3.1.5.7.1	Properties	30
3.1.5.7.1.1	Scalar Properties	30
3.1.5.7.1.1.1	ProviderKey	30
3.1.5.7.1.1.2	ScriptClass	30
3.1.5.7.1.1.3	ScriptData	30
3.1.5.7.1.1.4	ScriptFiles	30
3.1.5.7.1.2	ObjectPath Properties	30
3.1.5.7.2	Methods	30
3.1.5.7.2.1	Scalar Methods	30
3.1.5.7.2.2	ObjectPath Methods	30
3.1.5.8	Microsoft.SharePoint.WorkManagement.Client.DateRangeCriterion	31
3.1.5.8.1	Properties	31
3.1.5.8.1.1	Scalar Properties	31
3.1.5.8.1.1.1	RangeEndValue	31
3.1.5.8.1.1.2	RangeStartValue	31
3.1.5.8.1.2	ObjectPath Properties	31
3.1.5.8.2	Methods	31
3.1.5.8.2.1	Scalar Methods	31
3.1.5.8.2.2	ObjectPath Methods	31
3.1.5.8.2.2.1	CSOM Constructor	31
3.1.5.9	Microsoft.SharePoint.WorkManagement.Client.RefreshHealthInfo	31
3.1.5.9.1	Properties	31
3.1.5.9.1.1	Scalar Properties	32

3.1.5.9.1.1.1	LatestRefreshTime.....	32
3.1.5.9.1.1.2	Succeeded.....	32
3.1.5.9.1.1.3	NewTasks.....	32
3.1.5.9.1.2	ObjectPath Properties.....	32
3.1.5.9.1.2.1	ProviderErrors.....	32
3.1.5.9.2	Methods.....	32
3.1.5.9.2.1	Scalar Methods.....	32
3.1.5.9.2.2	ObjectPath Methods.....	32
3.1.5.10	Microsoft.SharePoint.WorkManagement.Client.Location.....	32
3.1.5.10.1	Properties.....	32
3.1.5.10.1.1	Scalar Properties.....	32
3.1.5.10.1.1.1	Color.....	33
3.1.5.10.1.1.2	Id.....	33
3.1.5.10.1.1.3	Name.....	33
3.1.5.10.1.1.4	ParentId.....	33
3.1.5.10.1.1.5	RootProviderKey.....	33
3.1.5.10.1.1.6	Url.....	33
3.1.5.10.1.1.7	Important.....	33
3.1.5.10.1.2	ObjectPath Properties.....	33
3.1.5.10.2	Methods.....	34
3.1.5.10.2.1	Scalar Methods.....	34
3.1.5.10.2.2	ObjectPath Methods.....	34
3.1.5.10.2.2.1	CSOM Constructor.....	34
3.1.5.11	Microsoft.SharePoint.WorkManagement.Client.LocationClientCollection.....	34
3.1.5.11.1	Properties.....	34
3.1.5.11.1.1	Scalar Properties.....	34
3.1.5.11.1.2	ObjectPath Properties.....	34
3.1.5.11.2	Methods.....	34
3.1.5.11.2.1	Scalar Methods.....	34
3.1.5.11.2.2	ObjectPath Methods.....	34
3.1.5.12	Microsoft.SharePoint.WorkManagement.Client.LocationDisplaySetting.....	34
3.1.5.12.1	Properties.....	34
3.1.5.12.1.1	Scalar Properties.....	34
3.1.5.12.1.1.1	Color.....	34
3.1.5.12.1.1.2	Id.....	35
3.1.5.12.1.2	ObjectPath Properties.....	35
3.1.5.12.2	Methods.....	35
3.1.5.12.2.1	Scalar Methods.....	35
3.1.5.12.2.2	ObjectPath Methods.....	35
3.1.5.13	Microsoft.SharePoint.WorkManagement.Client.LocationFilter.....	35
3.1.5.13.1	Properties.....	35
3.1.5.13.1.1	Scalar Properties.....	35
3.1.5.13.1.1.1	LocationKeys.....	35
3.1.5.13.1.1.2	IncludeUncategorizedTasks.....	35
3.1.5.13.1.2	ObjectPath Properties.....	35
3.1.5.13.2	Methods.....	36
3.1.5.13.2.1	Scalar Methods.....	36
3.1.5.13.2.2	ObjectPath Methods.....	36
3.1.5.13.2.2.1	CSOM Constructor.....	36
3.1.5.14	Microsoft.SharePoint.WorkManagement.Client.LocationGroupClientCollection.....	36
3.1.5.14.1	Properties.....	36
3.1.5.14.1.1	Scalar Properties.....	36
3.1.5.14.1.2	ObjectPath Properties.....	36
3.1.5.14.2	Methods.....	36
3.1.5.14.2.1	Scalar Methods.....	36
3.1.5.14.2.2	ObjectPath Methods.....	36
3.1.5.14.2.2.1	CSOM Constructor.....	36

3.1.5.15	Microsoft.SharePoint.WorkManagement.Client.LocationOrientedSortableSession	36
3.1.5.15.1	Properties	37
3.1.5.15.1.1	Scalar Properties	37
3.1.5.15.1.2	ObjectPath Properties	37
3.1.5.15.2	Methods	37
3.1.5.15.2.1	Scalar Methods	37
3.1.5.15.2.1.1	MovePersonalTaskToLocation	37
3.1.5.15.2.1.2	BeginExchangeSync	37
3.1.5.15.2.1.3	IsExchangeJobPending	37
3.1.5.15.2.2	ObjectPath Methods	37
3.1.5.15.2.2.1	AddAttributeToTask	37
3.1.5.15.2.2.2	BeginCacheRefresh	38
3.1.5.15.2.2.3	CreateTask	38
3.1.5.15.2.2.4	DeleteTask	38
3.1.5.15.2.2.5	GetRefreshHistory	39
3.1.5.15.2.2.6	GetRefreshStatus	39
3.1.5.15.2.2.7	PinTask	39
3.1.5.15.2.2.8	ReadTasks	39
3.1.5.15.2.2.9	RemoveAttributeFromTask	39
3.1.5.15.2.2.10	RemovePinOnTask	40
3.1.5.15.2.2.11	UpdateTaskWithLocalizedValue	40
3.1.5.15.2.2.12	GetCalloutInfo	40
3.1.5.15.2.2.13	ReadAllNonTaskData	40
3.1.5.15.2.2.14	RefreshSingleTask	40
3.1.5.15.2.2.15	GetRefreshHealthInfo	41
3.1.5.15.2.2.16	CreatePersonalTaskAndPromoteToProviderTask	41
3.1.5.15.2.2.17	PromotePersonalTaskToProviderTaskInLocation	42
3.1.5.16	Microsoft.SharePoint.WorkManagement.Client.LocationOrientedUserOrderedSession	42
3.1.5.16.1	Properties	42
3.1.5.16.1.1	Scalar Properties	42
3.1.5.16.1.2	ObjectPath Properties	42
3.1.5.16.2	Methods	42
3.1.5.16.2.1	Scalar Methods	42
3.1.5.16.2.1.1	MovePersonalTaskToLocation	42
3.1.5.16.2.1.2	ReorderTask	43
3.1.5.16.2.1.3	BeginExchangeSync	43
3.1.5.16.2.1.4	IsExchangeJobPending	43
3.1.5.16.2.2	ObjectPath Methods	43
3.1.5.16.2.2.1	AddAttributeToTask	43
3.1.5.16.2.2.2	BeginCacheRefresh	43
3.1.5.16.2.2.3	CreateTask	44
3.1.5.16.2.2.4	DeleteTask	44
3.1.5.16.2.2.5	GetRefreshHistory	44
3.1.5.16.2.2.6	GetRefreshStatus	45
3.1.5.16.2.2.7	PinTask	45
3.1.5.16.2.2.8	ReadTasks	45
3.1.5.16.2.2.9	RemoveAttributeFromTask	45
3.1.5.16.2.2.10	RemovePinOnTask	46
3.1.5.16.2.2.11	UpdateTaskWithLocalizedValue	46
3.1.5.16.2.2.12	GetCalloutInfo	46
3.1.5.16.2.2.13	ReadAllNonTaskData	46
3.1.5.16.2.2.14	RefreshSingleTask	46
3.1.5.16.2.2.15	GetRefreshHealthInfo	47
3.1.5.16.2.2.16	CreatePersonalTaskAndPromoteToProviderTask	47
3.1.5.16.2.2.17	PromotePersonalTaskToProviderTaskInLocation	47

3.1.5.17	Microsoft.SharePoint.WorkManagement.Client.LocationUpdateResult	48
3.1.5.17.1	Properties	48
3.1.5.17.1.1	Scalar Properties	48
3.1.5.17.1.1.1	ActiveAddedCount	48
3.1.5.17.1.1.2	AddedCount	48
3.1.5.17.1.1.3	RemovedCount	48
3.1.5.17.1.1.4	RootLocationId	48
3.1.5.17.1.1.5	UpdatedCount	48
3.1.5.17.1.2	ObjectPath Properties	49
3.1.5.17.2	Methods	49
3.1.5.17.2.1	Scalar Methods	49
3.1.5.17.2.2	ObjectPath Methods	49
3.1.5.18	Microsoft.SharePoint.WorkManagement.Client.LocationUpdateResultClientCollection	49
3.1.5.18.1	Properties	49
3.1.5.18.1.1	Scalar Properties	49
3.1.5.18.1.2	ObjectPath Properties	49
3.1.5.18.2	Methods	49
3.1.5.18.2.1	Scalar Methods	49
3.1.5.18.2.2	ObjectPath Methods	49
3.1.5.19	Microsoft.SharePoint.WorkManagement.Client.NameCriterion	49
3.1.5.19.1	Properties	50
3.1.5.19.1.1	Scalar Properties	50
3.1.5.19.1.1.1	CompareType	50
3.1.5.19.1.1.2	CompareValue	50
3.1.5.19.1.2	ObjectPath Properties	50
3.1.5.19.2	Methods	50
3.1.5.19.2.1	Scalar Methods	50
3.1.5.19.2.2	ObjectPath Methods	50
3.1.5.19.2.2.1	CSOM Constructor	50
3.1.5.20	Microsoft.SharePoint.WorkManagement.Client.OrderInfo	50
3.1.5.20.1	Properties	50
3.1.5.20.1.1	Scalar Properties	50
3.1.5.20.1.1.1	Field	50
3.1.5.20.1.1.2	IsDescending	51
3.1.5.20.1.2	ObjectPath Properties	51
3.1.5.20.2	Methods	51
3.1.5.20.2.1	Scalar Methods	51
3.1.5.20.2.2	ObjectPath Methods	51
3.1.5.20.2.2.1	CSOM Constructor	51
3.1.5.21	Microsoft.SharePoint.WorkManagement.Client.PinAge	51
3.1.5.21.1	Field Values	51
3.1.5.21.1.1	NoValue	51
3.1.5.21.1.2	Fresh	51
3.1.5.21.1.3	Stale	51
3.1.5.22	Microsoft.SharePoint.WorkManagement.Client.PinnedState	51
3.1.5.22.1	Field Values	52
3.1.5.22.1.1	NoValue	52
3.1.5.22.1.2	Pinned	52
3.1.5.22.1.3	NotPinned	52
3.1.5.23	Microsoft.SharePoint.WorkManagement.Client.ProviderErrorInfo	52
3.1.5.23.1	Properties	52
3.1.5.23.1.1	Scalar Properties	52
3.1.5.23.1.1.1	CorrelationId	52
3.1.5.23.1.1.2	LastSuccessfulRefresh	52
3.1.5.23.1.1.3	LocalizedName	52
3.1.5.23.1.2	ObjectPath Properties	53

3.1.5.23.2	Methods .....	53
3.1.5.23.2.1	Scalar Methods .....	53
3.1.5.23.2.2	ObjectPath Methods .....	53
3.1.5.24	Microsoft.SharePoint.WorkManagement.Client.ProviderErrorInfoClientCollection .....	53
3.1.5.24.1	Properties .....	53
3.1.5.24.1.1	Scalar Properties .....	53
3.1.5.24.1.2	ObjectPath Properties .....	53
3.1.5.24.2	Methods .....	53
3.1.5.24.2.1	Scalar Methods .....	53
3.1.5.24.2.2	ObjectPath Methods .....	53
3.1.5.25	Microsoft.SharePoint.WorkManagement.Client.ProviderRefreshStatus .....	53
3.1.5.25.1	Properties .....	53
3.1.5.25.1.1	Scalar Properties .....	53
3.1.5.25.1.1.1	ProviderKey .....	53
3.1.5.25.1.1.2	ProviderLocalizedName .....	54
3.1.5.25.1.1.3	RefreshFinished .....	54
3.1.5.25.1.1.4	RefreshStarted .....	54
3.1.5.25.1.1.5	RootLocationId .....	54
3.1.5.25.1.2	ObjectPath Properties .....	54
3.1.5.25.2	Methods .....	54
3.1.5.25.2.1	Scalar Methods .....	54
3.1.5.25.2.2	ObjectPath Methods .....	54
3.1.5.26	Microsoft.SharePoint.WorkManagement.Client.ProviderRefreshStatusClientCollection .....	54
3.1.5.26.1	Properties .....	55
3.1.5.26.1.1	Scalar Properties .....	55
3.1.5.26.1.2	ObjectPath Properties .....	55
3.1.5.26.2	Methods .....	55
3.1.5.26.2.1	Scalar Methods .....	55
3.1.5.26.2.2	ObjectPath Methods .....	55
3.1.5.27	Microsoft.SharePoint.WorkManagement.Client.RefreshResult .....	55
3.1.5.27.1	Properties .....	55
3.1.5.27.1.1	Scalar Properties .....	55
3.1.5.27.1.1.1	AggregatorRefreshState .....	55
3.1.5.27.1.1.2	CorrelationId .....	55
3.1.5.27.1.1.3	RefreshFinished .....	55
3.1.5.27.1.1.4	RefreshId .....	56
3.1.5.27.1.2	ObjectPath Properties .....	56
3.1.5.27.1.2.1	TaskChangesByLocation .....	56
3.1.5.27.1.2.2	ProviderStatuses .....	56
3.1.5.27.2	Methods .....	56
3.1.5.27.2.1	Scalar Methods .....	56
3.1.5.27.2.2	ObjectPath Methods .....	56
3.1.5.28	Microsoft.SharePoint.WorkManagement.Client.RefreshEventInfoClientCollection .....	56
3.1.5.28.1	Properties .....	56
3.1.5.28.1.1	Scalar Properties .....	56
3.1.5.28.1.2	ObjectPath Properties .....	56
3.1.5.28.2	Methods .....	56
3.1.5.28.2.1	Scalar Methods .....	56
3.1.5.28.2.2	ObjectPath Methods .....	57
3.1.5.29	Microsoft.SharePoint.WorkManagement.Client.RefreshHistory .....	57
3.1.5.29.1	Properties .....	57
3.1.5.29.1.1	Scalar Properties .....	57
3.1.5.29.1.2	ObjectPath Properties .....	57
3.1.5.29.1.2.1	Refreshes .....	57



3.1.5.29.2	Methods	57
3.1.5.29.2.1	Scalar Methods	57
3.1.5.29.2.2	ObjectPath Methods	57
3.1.5.30	Microsoft.SharePoint.WorkManagement.Client.RefreshState	57
3.1.5.30.1	Field Values	57
3.1.5.30.1.1	NoValue	57
3.1.5.30.1.2	Pending	58
3.1.5.30.1.3	Ignored	58
3.1.5.30.1.4	Succeeded	58
3.1.5.30.1.5	Failed	58
3.1.5.31	Microsoft.SharePoint.WorkManagement.Client.SortableSession	58
3.1.5.31.1	Properties	58
3.1.5.31.1.1	Scalar Properties	58
3.1.5.31.1.2	ObjectPath Properties	58
3.1.5.31.2	Methods	58
3.1.5.31.2.1	Scalar Methods	58
3.1.5.31.2.1.1	BeginExchangeSync	58
3.1.5.31.2.1.2	IsExchangeJobPending	58
3.1.5.31.2.2	ObjectPath Methods	59
3.1.5.31.2.2.1	AddAttributeToTask	59
3.1.5.31.2.2.2	BeginCacheRefresh	59
3.1.5.31.2.2.3	CreateTask	59
3.1.5.31.2.2.4	DeleteTask	60
3.1.5.31.2.2.5	GetRefreshHistory	60
3.1.5.31.2.2.6	GetRefreshStatus	60
3.1.5.31.2.2.7	PinTask	60
3.1.5.31.2.2.8	ReadTasks	60
3.1.5.31.2.2.9	RemoveAttributeFromTask	61
3.1.5.31.2.2.10	RemovePinOnTask	61
3.1.5.31.2.2.11	UpdateTaskWithLocalizedValue	61
3.1.5.31.2.2.12	GetCalloutInfo	61
3.1.5.31.2.2.13	ReadAllNonTaskData	62
3.1.5.31.2.2.14	RefreshSingleTask	62
3.1.5.31.2.2.15	GetRefreshHealthInfo	62
3.1.5.31.2.2.16	CreatePersonalTaskAndPromoteToProviderTask	62
3.1.5.31.2.2.17	PromotePersonalTaskToProviderTaskInLocation	63
3.1.5.32	Microsoft.SharePoint.WorkManagement.Client.SortableSessionManager	63
3.1.5.32.1	Properties	63
3.1.5.32.1.1	Scalar Properties	63
3.1.5.32.1.2	ObjectPath Properties	63
3.1.5.32.2	Methods	63
3.1.5.32.2.1	Scalar Methods	63
3.1.5.32.2.2	ObjectPath Methods	64
3.1.5.32.2.2.1	CreateLocationOrientedSession	64
3.1.5.32.2.2.2	CreateSession	64
3.1.5.32.2.2.3	CSOM Constructor	64
3.1.5.33	Microsoft.SharePoint.WorkManagement.Client.SortableTaskField	64
3.1.5.33.1	Field Values	64
3.1.5.33.1.1	NoValue	64
3.1.5.33.1.2	IsCompleted	64
3.1.5.33.1.3	Id	64
3.1.5.33.1.4	DueDate	64
3.1.5.33.1.5	Description	65
3.1.5.33.1.6	PinAge	65
3.1.5.33.1.7	Location	65
3.1.5.33.1.8	LastModified	65
3.1.5.33.1.9	DiscoveredDate	65
3.1.5.33.1.10	Title	65

3.1.5.34	Microsoft.SharePoint.WorkManagement.Client.SortableTaskQuery	65
3.1.5.34.1	Properties	65
3.1.5.34.1.1	Scalar Properties	65
3.1.5.34.1.2	ObjectPath Properties	65
3.1.5.34.1.2.1	CoreQuery	65
3.1.5.34.1.2.2	Order	66
3.1.5.34.2	Methods	66
3.1.5.34.2.1	Scalar Methods	66
3.1.5.34.2.2	ObjectPath Methods	66
3.1.5.34.2.2.1	CSOM Constructor	66
3.1.5.35	Microsoft.SharePoint.WorkManagement.Client.StringCompareType	66
3.1.5.35.1	Field Values	66
3.1.5.35.1.1	NoValue	66
3.1.5.35.1.2	Equals	66
3.1.5.35.1.3	Contains	66
3.1.5.35.1.4	BeginsWith	66
3.1.5.36	Microsoft.SharePoint.WorkManagement.Client.Task	67
3.1.5.36.1	Properties	67
3.1.5.36.1.1	Scalar Properties	67
3.1.5.36.1.1.1	CustomAttributes	67
3.1.5.36.1.1.2	Description	67
3.1.5.36.1.1.3	DueDate	67
3.1.5.36.1.1.4	EditUrl	67
3.1.5.36.1.1.5	Id	67
3.1.5.36.1.1.6	IsCompleted	67
3.1.5.36.1.1.7	IsPersonal	68
3.1.5.36.1.1.8	LastModified	68
3.1.5.36.1.1.9	Name	68
3.1.5.36.1.1.10	PinAge	68
3.1.5.36.1.1.11	SerializedCustomDataForClient	68
3.1.5.36.1.1.12	StartDate	68
3.1.5.36.1.1.13	LocationId	68
3.1.5.36.1.1.14	IsReadOnly	68
3.1.5.36.1.2	ObjectPath Properties	69
3.1.5.36.2	Methods	69
3.1.5.36.2.1	Scalar Methods	69
3.1.5.36.2.2	ObjectPath Methods	69
3.1.5.36.2.2.1	CSOM Constructor	69
3.1.5.37	Microsoft.SharePoint.WorkManagement.Client.TaskClientCollection	69
3.1.5.37.1	Properties	69
3.1.5.37.1.1	Scalar Properties	69
3.1.5.37.1.2	ObjectPath Properties	69
3.1.5.37.2	Methods	69
3.1.5.37.2.1	Scalar Methods	69
3.1.5.37.2.2	ObjectPath Methods	69
3.1.5.37.2.2.1	CSOM Constructor	69
3.1.5.38	Microsoft.SharePoint.WorkManagement.Client.TaskFilter	69
3.1.5.38.1	Properties	70
3.1.5.38.1.1	Scalar Properties	70
3.1.5.38.1.1.1	CriterionConcatType	70
3.1.5.38.1.1.2	IdsToFilterBy	70
3.1.5.38.1.2	ObjectPath Properties	70
3.1.5.38.1.2.1	CompletedCriterion	70
3.1.5.38.1.2.2	DueDateRangeCriterion	70
3.1.5.38.1.2.3	IsNewCriterion	70
3.1.5.38.1.2.4	NameCriterion	70
3.1.5.38.1.2.5	StartDateRangeCriterion	70
3.1.5.38.2	Methods	71

3.1.5.38.2.1	Scalar Methods	71
3.1.5.38.2.2	ObjectPath Methods	71
3.1.5.38.2.2.1	CSOM Constructor	71
3.1.5.39	Microsoft.SharePoint.WorkManagement.Client.TaskQuery	71
3.1.5.39.1	Properties	71
3.1.5.39.1.1	Scalar Properties	71
3.1.5.39.1.1.1	KeywordFilter	71
3.1.5.39.1.1.2	LastQueryTime	71
3.1.5.39.1.1.3	PinnedFilter	71
3.1.5.39.1.2	ObjectPath Properties	71
3.1.5.39.1.2.1	CustomAttributeFilter	72
3.1.5.39.1.2.2	FieldFilter	72
3.1.5.39.1.2.3	LastModifiedDateRangeFilter	72
3.1.5.39.1.2.4	LocationFilter	72
3.1.5.39.2	Methods	72
3.1.5.39.2.1	Scalar Methods	72
3.1.5.39.2.2	ObjectPath Methods	72
3.1.5.39.2.2.1	CSOM Constructor	72
3.1.5.40	Microsoft.SharePoint.WorkManagement.Client.TaskWriteResult	72
3.1.5.40.1	Properties	72
3.1.5.40.1.1	Scalar Properties	72
3.1.5.40.1.1.1	Error	73
3.1.5.40.1.1.2	ErrorMessage	73
3.1.5.40.1.2	ObjectPath Properties	73
3.1.5.40.1.2.1	Result	73
3.1.5.40.2	Methods	73
3.1.5.40.2.1	Scalar Methods	73
3.1.5.40.2.2	ObjectPath Methods	73
3.1.5.41	Microsoft.SharePoint.WorkManagement.Client.UserOrderedSession	73
3.1.5.41.1	Properties	73
3.1.5.41.1.1	Scalar Properties	73
3.1.5.41.1.2	ObjectPath Properties	73
3.1.5.41.2	Methods	73
3.1.5.41.2.1	Scalar Methods	73
3.1.5.41.2.1.1	ReorderTask	74
3.1.5.41.2.1.2	BeginExchangeSync	74
3.1.5.41.2.1.3	IsExchangeJobPending	74
3.1.5.41.2.2	ObjectPath Methods	74
3.1.5.41.2.2.1	AddAttributeToTask	74
3.1.5.41.2.2.2	BeginCacheRefresh	74
3.1.5.41.2.2.3	CreateTask	75
3.1.5.41.2.2.4	DeleteTask	75
3.1.5.41.2.2.5	GetRefreshHistory	75
3.1.5.41.2.2.6	GetRefreshStatus	76
3.1.5.41.2.2.7	PinTask	76
3.1.5.41.2.2.8	ReadTasks	76
3.1.5.41.2.2.9	RemoveAttributeFromTask	76
3.1.5.41.2.2.10	RemovePinOnTask	76
3.1.5.41.2.2.11	UpdateTaskWithLocalizedValue	77
3.1.5.41.2.2.12	GetCalloutInfo	77
3.1.5.41.2.2.13	ReadAllNonTaskData	77
3.1.5.41.2.2.14	RefreshSingleTask	77
3.1.5.41.2.2.15	GetRefreshHealthInfo	77
3.1.5.41.2.2.16	CreatePersonalTaskAndPromoteToProviderTask	78
3.1.5.41.2.2.17	PromotePersonalTaskToProviderTaskInLocation	78
3.1.5.42	Microsoft.SharePoint.WorkManagement.Client.UserOrderedSessionManager	79
3.1.5.42.1	Properties	79
3.1.5.42.1.1	Scalar Properties	79

3.1.5.42.1.2	ObjectPath Properties .....	79
3.1.5.42.2	Methods .....	79
3.1.5.42.2.1	Scalar Methods .....	79
3.1.5.42.2.2	ObjectPath Methods .....	79
3.1.5.42.2.2.1	CreateLocationOrientedSession .....	79
3.1.5.42.2.2.2	CreateSession .....	79
3.1.5.42.2.2.3	CSOM Constructor .....	79
3.1.5.43	Microsoft.SharePoint.WorkManagement.Client.UserSettings .....	80
3.1.5.43.1	Properties.....	80
3.1.5.43.1.1	Scalar Properties.....	80
3.1.5.43.1.1.1	DaysAfterCurrentDateTimelineEnds .....	80
3.1.5.43.1.1.2	DaysATaskIsConsideredNewTask .....	80
3.1.5.43.1.1.3	DaysBeforeCurrentDateTimelineStarts.....	80
3.1.5.43.1.1.4	ImportantTasksLimit.....	80
3.1.5.43.1.1.5	InactiveMonthsBeforeLocationExpiration.....	80
3.1.5.43.1.1.6	LateTasksLimit .....	80
3.1.5.43.1.1.7	OldTasksLimit .....	81
3.1.5.43.1.1.8	UpcomingTasksLimit .....	81
3.1.5.43.1.1.9	ImportantLocationIds.....	81
3.1.5.43.1.2	ObjectPath Properties .....	81
3.1.5.43.2	Methods .....	81
3.1.5.43.2.1	Scalar Methods .....	81
3.1.5.43.2.2	ObjectPath Methods .....	81
3.1.5.43.2.2.1	CSOM Constructor .....	81
3.1.5.44	Microsoft.SharePoint.WorkManagement.Client.UserSettingsManager .....	81
3.1.5.44.1	Properties.....	81
3.1.5.44.1.1	Scalar Properties.....	81
3.1.5.44.1.2	ObjectPath Properties .....	81
3.1.5.44.2	Methods .....	82
3.1.5.44.2.1	Scalar Methods .....	82
3.1.5.44.2.1.1	SetUserSettings .....	82
3.1.5.44.2.1.2	IsExchangeJobPending .....	82
3.1.5.44.2.1.3	OptIntoExchangeSync .....	82
3.1.5.44.2.1.4	OptOutOfExchangeSync .....	82
3.1.5.44.2.1.5	SetPersistedProperties .....	82
3.1.5.44.2.2	ObjectPath Methods .....	82
3.1.5.44.2.2.1	GetAllLocations .....	83
3.1.5.44.2.2.2	GetImportantLocations.....	83
3.1.5.44.2.2.3	GetUserSettings .....	83
3.1.5.44.2.2.4	GetLocations.....	83
3.1.5.44.2.2.5	CSOM Constructor .....	83
3.1.5.44.2.2.6	GetExchangeSyncInfo .....	83
3.1.5.44.2.2.7	GetPersistedProperties .....	83
3.1.5.45	Microsoft.SharePoint.WorkManagement.Client.ViewSelectionInfo .....	84
3.1.5.45.1	Properties.....	84
3.1.5.45.1.1	Scalar Properties.....	84
3.1.5.45.1.1.1	Id.....	84
3.1.5.45.1.1.2	Image.....	84
3.1.5.45.1.1.3	Name.....	84
3.1.5.45.1.2	ObjectPath Properties.....	84
3.1.5.45.2	Methods .....	84
3.1.5.45.2.1	Scalar Methods .....	84
3.1.5.45.2.2	ObjectPath Methods .....	84
3.1.5.45.2.2.1	CSOM Constructor .....	84
3.1.5.46	Microsoft.SharePoint.WorkManagement.Client.WritableTaskField.....	84
3.1.5.46.1	Field Values .....	85
3.1.5.46.1.1	NoValue.....	85
3.1.5.46.1.2	IsCompleted.....	85

3.1.5.46.1.3	DueDate .....	85
3.1.5.46.1.4	Description.....	85
3.1.5.46.1.5	Title .....	85
3.1.5.46.1.6	EditUrl .....	85
3.1.5.46.1.7	StartDate.....	85
3.1.5.47	Microsoft.SharePoint.WorkManagement.Client.WriteFieldType.....	85
3.1.5.47.1	Field Values .....	85
3.1.5.47.1.1	NoValue.....	86
3.1.5.47.1.2	TaskNotFound .....	86
3.1.5.47.1.3	InvalidInput .....	86
3.1.5.47.1.4	TaskDeleted .....	86
3.1.5.47.1.5	FieldConflict .....	86
3.1.5.47.1.6	Validation .....	86
3.1.5.47.1.7	LocationInvalid .....	86
3.1.5.47.1.8	Unknown .....	86
3.1.5.47.1.9	DueDateInvalid.....	86
3.1.5.47.1.10	StartDateInvalid .....	86
3.1.5.47.1.11	DescriptionInvalid .....	87
3.1.5.47.1.12	IsCompletedInvalid .....	87
3.1.5.47.1.13	TitleInvalid.....	87
3.1.5.47.1.14	EditUrlInvalid .....	87
3.1.5.47.1.15	AccessDenied .....	87
3.1.5.47.1.16	PromoteTargetTaskNotPersonal .....	87
3.1.5.47.1.17	PromotionFailedInProvider .....	87
3.1.5.48	Microsoft.SharePoint.WorkManagement.Client.PrivacyType .....	87
3.1.5.48.1	Field Values .....	87
3.1.5.48.1.1	None .....	87
3.1.5.48.1.2	Personal .....	87
3.1.5.48.1.3	Public .....	88
3.1.5.49	Microsoft.SharePoint.WorkManagement.Client.CalloutInfo .....	88
3.1.5.49.1	Properties.....	88
3.1.5.49.1.1	Scalar Properties.....	88
3.1.5.49.1.1.1	Contacts.....	88
3.1.5.49.1.1.2	DirectLinkTitle.....	88
3.1.5.49.1.1.3	DirectLinkUrl.....	88
3.1.5.49.1.1.4	Hierarchy .....	88
3.1.5.49.1.1.5	Predecessors.....	88
3.1.5.49.1.1.6	Successors .....	89
3.1.5.49.1.1.7	Title.....	89
3.1.5.49.1.1.8	Url.....	89
3.1.5.49.1.2	ObjectPath Properties.....	89
3.1.5.49.2	Methods .....	89
3.1.5.49.2.1	Scalar Methods.....	89
3.1.5.49.2.2	ObjectPath Methods .....	89
3.1.5.50	Microsoft.SharePoint.WorkManagement.Client.DashboardScriptExtensionInfoClientCollection .....	89
3.1.5.50.1	Properties.....	89
3.1.5.50.1.1	Scalar Properties.....	89
3.1.5.50.1.2	ObjectPath Properties.....	89
3.1.5.50.2	Methods .....	90
3.1.5.50.2.1	Scalar Methods.....	90
3.1.5.50.2.2	ObjectPath Methods .....	90
3.1.5.51	Microsoft.SharePoint.WorkManagement.Client.ExchangeOptInResult .....	90
3.1.5.51.1	Field Values .....	90
3.1.5.51.1.1	NoValue.....	90
3.1.5.51.1.2	Success .....	90
3.1.5.51.1.3	UnknownError .....	90

3.1.5.51.1.4	CouldNotConnectToExchange	90
3.1.5.51.1.5	CouldNotFindOrCreateMySite	90
3.1.5.51.1.6	UserAlreadyOptedIn	90
3.1.5.51.1.7	UserExchangeOperationPending	91
3.1.5.51.1.8	UnsupportedExchangeVersion	91
3.1.5.51.1.9	MissingEmailAddress	91
3.1.5.51.1.10	ExchangeWebServiceClientMissing	91
3.1.5.51.1.11	UnsupportedSharePointConfiguration	91
3.1.5.51.1.12	InvalidOrUnauthorizedUser	91
3.1.5.51.1.13	CouldNotActivateExchangeSyncFeatureOnSiteSubscription	91
3.1.5.52	Microsoft.SharePoint.WorkManagement.Client.ExchangeSyncResult	91
3.1.5.52.1	Field Values	91
3.1.5.52.1.1	NoValue	91
3.1.5.52.1.2	Success	92
3.1.5.52.1.3	UnknownError	92
3.1.5.52.1.4	CouldNotConnectToExchange	92
3.1.5.52.1.5	CouldNotGetUserCredentials	92
3.1.5.52.1.6	CouldNotKickoffJob	92
3.1.5.52.1.7	SyncWithErrors	92
3.1.5.53	Microsoft.SharePoint.WorkManagement.Client.ExchangeUserSyncState	92
3.1.5.53.1	Properties	92
3.1.5.53.1.1	Scalar Properties	92
3.1.5.53.1.1.1	IsOptedIn	92
3.1.5.53.1.1.2	LastEndTime	92
3.1.5.53.1.1.3	LastSyncResult	93
3.1.5.53.1.2	ObjectPath Properties	93
3.1.5.53.2	Methods	93
3.1.5.53.2.1	Scalar Methods	93
3.1.5.53.2.2	ObjectPath Methods	93
3.1.5.54	Microsoft.SharePoint.WorkManagement.Client.NonTaskDataReadResult	93
3.1.5.54.1	Properties	93
3.1.5.54.1.1	Scalar Properties	93
3.1.5.54.1.2	ObjectPath Properties	93
3.1.5.54.1.2.1	AllLocatons	93
3.1.5.54.1.2.2	PersistedProperties	93
3.1.5.54.1.2.3	RefreshHistory	94
3.1.5.54.1.2.4	ScriptExtensions	94
3.1.5.54.1.2.5	UserSettings	94
3.1.5.54.2	Methods	94
3.1.5.54.2.1	Scalar Methods	94
3.1.5.54.2.2	ObjectPath Methods	94
3.1.5.55	Microsoft.SharePoint.WorkManagement.Client.PersistedProperties	94
3.1.5.55.1	Properties	94
3.1.5.55.1.1	Scalar Properties	94
3.1.5.55.1.1.1	FilteredLocationIds	94
3.1.5.55.1.1.2	GroupByProjects	94
3.1.5.55.1.1.3	HasShownMarkAsImportantCallout	95
3.1.5.55.1.1.4	HasShownTaskListTooLongNotification	95
3.1.5.55.1.1.5	QuickLaunchLandingPage	95
3.1.5.55.1.2	ObjectPath Properties	95
3.1.5.55.2	Methods	95
3.1.5.55.2.1	Scalar Methods	95
3.1.5.55.2.2	ObjectPath Methods	95
3.1.5.55.2.2.1	CSOM Constructor	95
3.1.5.56	Microsoft.SharePoint.WorkManagement.Client.TaskRefreshResult	95
3.1.5.56.1	Properties	95
3.1.5.56.1.1	Scalar Properties	95
3.1.5.56.1.1.1	ErrorCorrelationId	96

3.1.5.56.1.1.2	RefreshState.....	96
3.1.5.56.1.2	ObjectPath Properties.....	96
3.1.5.56.1.2.1	Result.....	96
3.1.5.56.2	Methods.....	96
3.1.5.56.2.1	Scalar Methods.....	96
3.1.5.56.2.2	ObjectPath Methods.....	96
3.1.5.57	Microsoft.SharePoint.WorkManagement.Client.TaskQueryByLocationResult... 96	
3.1.5.57.1	Properties.....	96
3.1.5.57.1.1	Scalar Properties.....	96
3.1.5.57.1.1.1	Error.....	96
3.1.5.57.1.1.2	ErrorMessage.....	97
3.1.5.57.1.2	ObjectPath Properties.....	97
3.1.5.57.1.2.1	Results.....	97
3.1.5.57.2	Methods.....	97
3.1.5.57.2.1	Scalar Methods.....	97
3.1.5.57.2.2	ObjectPath Methods.....	97
3.1.5.58	Microsoft.SharePoint.WorkManagement.Client.TaskQueryErrorType..... 97	
3.1.5.58.1	Field Values.....	97
3.1.5.58.1.1	NoValue.....	97
3.1.5.58.1.2	QueryThrottled.....	97
3.1.5.59	Microsoft.SharePoint.WorkManagement.Client.TaskQueryResult..... 97	
3.1.5.59.1	Properties.....	97
3.1.5.59.1.1	Scalar Properties.....	97
3.1.5.59.1.1.1	Error.....	98
3.1.5.59.1.1.2	ErrorMessage.....	98
3.1.5.59.1.2	ObjectPath Properties.....	98
3.1.5.59.1.2.1	Results.....	98
3.1.5.59.2	Methods.....	98
3.1.5.59.2.1	Scalar Methods.....	98
3.1.5.59.2.2	ObjectPath Methods.....	98
3.1.6	Timer Events.....	98
3.1.7	Other Local Events.....	98
<b>4</b>	<b>Protocol Examples.....</b>	<b>99</b>
4.1	Retrieving Active Tasks for a User.....	99
4.2	Updating a Task.....	102
4.3	Creating a New Task.....	102
<b>5</b>	<b>Security.....</b>	<b>105</b>
5.1	Security Considerations for Implementers.....	105
5.2	Index of Security Parameters.....	105
<b>6</b>	<b>Appendix A: Product Behavior.....</b>	<b>106</b>
<b>7</b>	<b>Change Tracking.....</b>	<b>107</b>
<b>8</b>	<b>Index.....</b>	<b>108</b>

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

## 1.1 Glossary

This document uses the following terms:

**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 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>

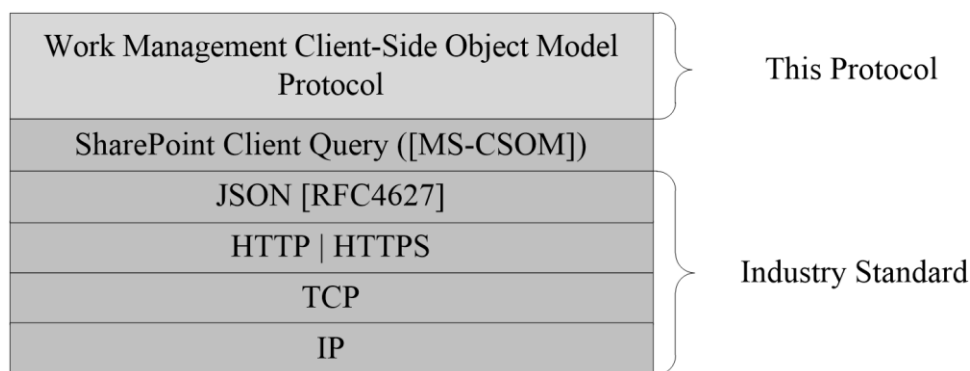
### 1.3 Overview

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.

### 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 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.

### 3.1.5.5 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 RangeStartValue

**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:** {8FE9D942-9CC1-47C0-9153-02A636BFD5DF}

**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-DCACFBAE647C}

**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

#### 3.1.5.32.2.2.3 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.WriteFieldType

**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.

**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.

**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.

**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.WriteFieldType**

**ShortName:** SP.WorkManagement.OM.WriteFieldType

**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

**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-d569-40f8-8c01-1d48fbf5243c}" />
  <Constructor Id="39" TypeId="{16d379b2-e752-405e-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)/"
}
]
```



## **5 Security**

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

None.

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

None.

## 6 Appendix A: Product Behavior

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

- Microsoft SharePoint Server 2013

Exceptions, if any, are noted in this section. If an update version, service pack or Knowledge Base (KB) number appears with a product name, the behavior changed in that update. The new behavior also applies to subsequent updates unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

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

## 7 Change Tracking

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

## 8 Index

### A

Abstract data model  
[server](#) 21  
[Applicability](#) 18

### C

[Capability negotiation](#) 19  
[Change tracking](#) 107  
[Client – message processing](#) 21  
[Client – sequencing rules](#) 21  
[Common Exceptions message](#) 20  
[Creating a new task example](#) 102

### D

Data model - abstract  
[server](#) 21

### E

Examples  
[creating a new task](#) 102  
[retrieving active tasks for a user](#) 99  
[updating a task](#) 102

### F

[Fields - vendor-extensible](#) 19

### G

[Glossary](#) 16

### H

Higher-layer triggered events  
[server](#) 21

### I

[Implementer - security considerations](#) 105  
[Index of security parameters](#) 105  
[Informative references](#) 17  
Initialization  
[server](#) 21  
[Introduction](#) 16

### M

[Message processing - client](#) 21  
Messages  
[Common Exceptions](#) 20  
[transport](#) 20  
Microsoft.SharePoint.WorkManagement.Client...  
[BaseSession](#) 21  
[BooleanCompareType](#) 26  
[BooleanCriterion](#) 27  
[CalloutInfo](#) 88  
[CreateRefreshJobResult](#) 27

[CriterionConcatType](#) 28  
[CustomAttributeFilter](#) 29  
[DashboardScriptExtensionInfo](#) 30  
[DashboardScriptExtensionInfoClientCollection](#) 89  
[DateRangeCriterion](#) 31  
[ExchangeOptInResult](#) 90  
[ExchangeSyncResult](#) 91  
[ExchangeUserSyncState](#) 92  
[GetRefreshHistoryResponse](#) 31  
[Location](#) 32  
[LocationClientCollection](#) 34  
[LocationDisplaySetting](#) 34  
[LocationFilter](#) 35  
[LocationGroupClientCollection](#) 36  
[LocationOrientedSortableSession](#) 36  
[LocationOrientedUserOrderedSession](#) 42  
[LocationUpdateResult](#) 48  
[LocationUpdateResultClientCollection](#) 49  
[NameCriterion](#) 49  
[NonTaskDataReadResult](#) 93  
[OrderInfo](#) 50  
[PersistedProperties](#) 94  
[PinAge](#) 51  
[PinnedState](#) 51  
[PrivacyType](#) 87  
[ProviderErrorInfo](#) 52  
[ProviderErrorInfoClientCollection](#) 53  
[ProviderRefreshStatus](#) 53  
[ProviderRefreshStatusClientCollection](#) 54  
[RefreshEventInfo](#) 55  
[RefreshEventInfoClientCollection](#) 56  
[RefreshHistory](#) 57  
[RefreshState](#) 57  
[SortableSession](#) 58  
[SortableSessionManager](#) 63  
[SortableTaskField](#) 64  
[SortableTaskQuery](#) 65  
[StringCompareType](#) 66  
[Task](#) 67  
[TaskClientCollection](#) 69  
[TaskFilter](#) 69  
[TaskQuery](#) 71  
[TaskRefreshResult](#) 95  
[TaskWriteResult](#) 72  
[UserOrderedSession](#) 73  
[UserOrderedSessionManager](#) 79  
[UserSettings](#) 80  
[UserSettingsManager](#) 81  
[ViewSelectionInfo](#) 84  
[WritableTaskField](#) 84  
[WriteFieldErrorType](#) 85

### N

[Normative references](#) 17

### O

Other local events  
[server](#) 98  
[Overview \(synopsis\)](#) 18

## P

[Parameters - security index](#) 105  
[Preconditions](#) 18  
[Prerequisites](#) 18  
[Product behavior](#) 106

## R

[References](#) 17  
    [informative](#) 17  
    [normative](#) 17  
[Relationship to other protocols](#) 18  
[Retrieving active tasks for a user example](#) 99

## S

Security  
    [implementer considerations](#) 105  
    [parameter index](#) 105  
[Sequencing rules - client](#) 21  
Server  
    [abstract data model](#) 21  
    [higher-layer triggered events](#) 21  
    [initialization](#) 21  
    [other local events](#) 98  
    [timer events](#) 98  
    [timers](#) 21  
[Standards assignments](#) 19

## T

Timer events  
    [server](#) 98  
Timers  
    [server](#) 21  
[Tracking changes](#) 107  
[Transport](#) 20  
Triggered events - higher-layer  
    [server](#) 21

## U

[Updating a task example](#) 102

## V

[Vendor-extensible fields](#) 19  
[Versioning](#) 19