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](https://microsoft.com/openspecificationspromise) or the [Microsoft Community Promise](https://microsoft.com/communitypromises). 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](https://microsoft.com/patentmap).

- **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](https://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

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision History</th>
<th>Revision Class</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/20/2012</td>
<td>0.1</td>
<td>New</td>
<td>Released new document.</td>
</tr>
<tr>
<td>4/11/2012</td>
<td>0.1</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>7/16/2012</td>
<td>0.1</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>9/12/2012</td>
<td>0.1</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>10/8/2012</td>
<td>1.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
<tr>
<td>2/11/2013</td>
<td>1.0</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>7/30/2013</td>
<td>1.0</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>11/18/2013</td>
<td>1.1</td>
<td>Minor</td>
<td>Clarified the meaning of the technical content.</td>
</tr>
<tr>
<td>2/10/2014</td>
<td>1.1</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>4/30/2014</td>
<td>1.2</td>
<td>Minor</td>
<td>Clarified the meaning of the technical content.</td>
</tr>
<tr>
<td>7/31/2014</td>
<td>1.2</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>10/30/2014</td>
<td>1.3</td>
<td>Minor</td>
<td>Clarified the meaning of the technical content.</td>
</tr>
<tr>
<td>2/26/2016</td>
<td>2.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
<tr>
<td>7/15/2016</td>
<td>2.0</td>
<td>None</td>
<td>No changes to the meaning, language, or formatting of the technical content.</td>
</tr>
<tr>
<td>12/15/2016</td>
<td>3.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
<tr>
<td>7/24/2018</td>
<td>4.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
<tr>
<td>10/1/2018</td>
<td>5.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
<tr>
<td>12/11/2018</td>
<td>5.1</td>
<td>Minor</td>
<td>Clarified the meaning of the technical content.</td>
</tr>
<tr>
<td>3/19/2019</td>
<td>6.0</td>
<td>Major</td>
<td>Significantly changed the technical content.</td>
</tr>
</tbody>
</table>
# Table of Contents

1 **Introduction** .................................................................................................................. 15
   1.1 Glossary .......................................................................................................................... 15
   1.2 References ....................................................................................................................... 19
      1.2.1 Normative References .............................................................................................. 19
      1.2.2 Informative References ........................................................................................... 20
   1.3 Overview .......................................................................................................................... 20
   1.4 Relationship to Other Protocols ...................................................................................... 20
   1.5 Prerequisites/Preconditions ............................................................................................. 21
   1.6 Applicability Statement ................................................................................................... 21
   1.7 Versioning and Capability Negotiation ............................................................................. 21
   1.8 Vendor-Extensible Fields ................................................................................................. 21
   1.9 Standards Assignments ................................................................................................... 21

2 **Messages** .......................................................................................................................... 22
   2.1 Transport .......................................................................................................................... 22
   2.2 Message Syntax ............................................................................................................... 22

3 **Protocol Details** ................................................................................................................. 23
   3.1 Server Details ................................................................................................................. 23
      3.1.1 Abstract Data Model ................................................................................................. 23
         3.1.1.1 Parent Type ........................................................................................................ 23
      3.1.2 Timers ......................................................................................................................... 23
      3.1.3 Initialization ............................................................................................................... 23
      3.1.4 Higher-Layer Triggered Events .................................................................................. 23
      3.1.5 Message Processing Events and Sequencing Rules ..................................................... 23
            3.1.5.1.1 Properties ...................................................................................................... 24
               3.1.5.1.1.1 Scalar Properties ....................................................................................... 24
                  3.1.5.1.1.1.1 DisplayName ......................................................................................... 24
                  3.1.5.1.1.1.2 IsSource ................................................................................................. 24
                  3.1.5.1.1.1.3 Language ............................................................................................... 24
                  3.1.5.1.1.1.4 Locale .................................................................................................... 24
                  3.1.5.1.1.1.5 Title ........................................................................................................ 25
                  3.1.5.1.1.1.6 TopWebUrl ............................................................................................ 25
               3.1.5.1.1.2 ObjectPath Properties ............................................................................... 25
            3.1.5.1.2 Methods ............................................................................................................ 25
               3.1.5.1.2.1 Scalar Methods ......................................................................................... 25
               3.1.5.1.2.2 ObjectPath Methods ................................................................................. 25
            3.1.5.2 Microsoft.SharePoint.Client.Publishing.Variations ............................................. 25
               3.1.5.2.1 Properties ...................................................................................................... 25
                  3.1.5.2.1.1 Scalar Properties ....................................................................................... 25
                  3.1.5.2.1.2 ObjectPath Properties ............................................................................... 25
               3.1.5.2.2 Methods ........................................................................................................... 25
                  3.1.5.2.2.1 Scalar Methods ......................................................................................... 25
                     3.1.5.2.2.1.1 GetPeerUrl ......................................................................................... 25
                     3.1.5.2.2.1.2 UpdateListItems ................................................................................. 26
                  3.1.5.2.2.2 ObjectPath Methods ............................................................................... 26
                     3.1.5.2.2.2.1 GetLabels .............................................................................................. 26
                  3.1.5.3.1 Field Values .................................................................................................. 27
                     3.1.5.3.1.1 Root .......................................................................................................... 27
                     3.1.5.3.1.2 FriendlyUrl ............................................................................................. 27
                     3.1.5.3.1.3 SimpleLink .............................................................................................. 27
                  3.1.5.4.1 Properties ...................................................................................................... 27
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.5.4.1.1</td>
<td>Scalar Properties</td>
<td>27</td>
</tr>
<tr>
<td>3.1.5.4.1.2</td>
<td>ObjectPath Properties</td>
<td>27</td>
</tr>
<tr>
<td>3.1.5.4.2</td>
<td>Methods</td>
<td>27</td>
</tr>
<tr>
<td>3.1.5.4.2.1</td>
<td>Scalar Methods</td>
<td>27</td>
</tr>
<tr>
<td>3.1.5.4.2.1.1</td>
<td>FlushSiteFromCache</td>
<td>27</td>
</tr>
<tr>
<td>3.1.5.4.2.1.2</td>
<td>FlushTermSetFromCache</td>
<td>28</td>
</tr>
<tr>
<td>3.1.5.4.2.1.3</td>
<td>FlushWebFromCache</td>
<td>28</td>
</tr>
<tr>
<td>3.1.5.4.2.1.4</td>
<td>GetNavigationLcidForWeb</td>
<td>28</td>
</tr>
<tr>
<td>3.1.5.4.2.1.5</td>
<td>SetCrawlAsFriendlyUrlPage</td>
<td>29</td>
</tr>
<tr>
<td>3.1.5.4.2.2</td>
<td>ObjectPath Methods</td>
<td>29</td>
</tr>
<tr>
<td>3.1.5.4.2.2.1</td>
<td>GetTermSetForWeb</td>
<td>29</td>
</tr>
<tr>
<td>3.1.5.4.2.2.2</td>
<td>GetWebNavigationSettings</td>
<td>30</td>
</tr>
<tr>
<td>3.1.5.5.1</td>
<td>Properties</td>
<td>30</td>
</tr>
<tr>
<td>3.1.5.5.1.1</td>
<td>Scalar Properties</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.1</td>
<td>AssociatedFolderUrl</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.2</td>
<td>ExcludeFromCurrentNavigation</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.3</td>
<td>ExcludeFromGlobalNavigation</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.4</td>
<td>HoverText</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.5</td>
<td>Id</td>
<td>31</td>
</tr>
<tr>
<td>3.1.5.5.1.1.6</td>
<td>IsDeprecated</td>
<td>32</td>
</tr>
<tr>
<td>3.1.5.5.1.1.7</td>
<td>LinkType</td>
<td>32</td>
</tr>
<tr>
<td>3.1.5.5.1.1.8</td>
<td>SimpleLinkUrl</td>
<td>32</td>
</tr>
<tr>
<td>3.1.5.5.1.1.9</td>
<td>TaxonomyName</td>
<td>32</td>
</tr>
<tr>
<td>3.1.5.5.1.1.10</td>
<td>IsPinned</td>
<td>32</td>
</tr>
<tr>
<td>3.1.5.5.1.1.11</td>
<td>IsPinnedRoot</td>
<td>33</td>
</tr>
<tr>
<td>3.1.5.5.1.1.12</td>
<td>IsReadOnly</td>
<td>33</td>
</tr>
<tr>
<td>3.1.5.5.1.1.13</td>
<td>CategoryImageUrl</td>
<td>33</td>
</tr>
<tr>
<td>3.1.5.5.1.2</td>
<td>ObjectPath Properties</td>
<td>33</td>
</tr>
<tr>
<td>3.1.5.5.1.2.1</td>
<td>CatalogTargetUrl</td>
<td>33</td>
</tr>
<tr>
<td>3.1.5.5.1.2.2</td>
<td>CatalogTargetUrlForChildTerms</td>
<td>34</td>
</tr>
<tr>
<td>3.1.5.5.1.2.3</td>
<td>FriendlyUrlSegment</td>
<td>34</td>
</tr>
<tr>
<td>3.1.5.5.1.2.4</td>
<td>Parent</td>
<td>34</td>
</tr>
<tr>
<td>3.1.5.5.1.2.5</td>
<td>TargetUrl</td>
<td>35</td>
</tr>
<tr>
<td>3.1.5.5.1.2.6</td>
<td>TargetUrlForChildTerms</td>
<td>35</td>
</tr>
<tr>
<td>3.1.5.5.1.2.7</td>
<td>Terms</td>
<td>35</td>
</tr>
<tr>
<td>3.1.5.5.1.2.8</td>
<td>TermSet</td>
<td>35</td>
</tr>
<tr>
<td>3.1.5.5.1.2.9</td>
<td>Title</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.1.2.10</td>
<td>View</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.1.2.11</td>
<td>ExcludedProviders</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.2</td>
<td>Methods</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.2.1</td>
<td>Scalar Methods</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.2.1.1</td>
<td>DeleteObject</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.2.1.2</td>
<td>GetResolvedAssociatedFolderUrl</td>
<td>36</td>
</tr>
<tr>
<td>3.1.5.5.2.1.3</td>
<td>GetResolvedDisplayUrl</td>
<td>37</td>
</tr>
<tr>
<td>3.1.5.5.2.1.4</td>
<td>GetResolvedTargetUrl</td>
<td>37</td>
</tr>
<tr>
<td>3.1.5.5.2.1.5</td>
<td>GetWebRelativeFriendlyUrl</td>
<td>37</td>
</tr>
<tr>
<td>3.1.5.5.2.1.6</td>
<td>Move</td>
<td>38</td>
</tr>
<tr>
<td>3.1.5.5.2.1.7</td>
<td>GetResolvedTargetUrlWithoutQuery</td>
<td>38</td>
</tr>
<tr>
<td>3.1.5.5.2.2</td>
<td>ObjectPath Methods</td>
<td>38</td>
</tr>
<tr>
<td>3.1.5.5.2.2.1</td>
<td>CreateTerm</td>
<td>38</td>
</tr>
<tr>
<td>3.1.5.5.2.2.2</td>
<td>GetAsEditable</td>
<td>39</td>
</tr>
<tr>
<td>3.1.5.5.2.2.3</td>
<td>GetTaxonomyTerm</td>
<td>39</td>
</tr>
<tr>
<td>3.1.5.5.2.2.4</td>
<td>GetWithNewView</td>
<td>39</td>
</tr>
<tr>
<td>3.1.5.5.2.2.5</td>
<td>GetAsResolvedByView</td>
<td>39</td>
</tr>
<tr>
<td>3.1.5.5.2.2.6</td>
<td>GetAsResolvedByWeb</td>
<td>40</td>
</tr>
<tr>
<td>3.1.5.5.2.2.7</td>
<td>GetTaxonomyTermStore</td>
<td>40</td>
</tr>
<tr>
<td>3.1.5.5.2.2.8</td>
<td>GetAllParentTerms</td>
<td>40</td>
</tr>
</tbody>
</table>
3.1.5.6.1  Properties ......................................................... 41
  3.1.5.6.1.1  Scalar Properties ........................................ 41
  3.1.5.6.1.2  ObjectPath Properties .................................... 41
3.1.5.6.2  Methods ........................................................ 41
  3.1.5.6.2.1  Scalar Methods ........................................... 41
  3.1.5.6.2.2  ObjectPath Methods ....................................... 41
3.1.5.7.1  Properties ..................................................... 42
  3.1.5.7.1.1  Scalar Properties ......................................... 42
    3.1.5.7.1.1.1  Id ................................................... 42
    3.1.5.7.1.1.2  IsNavigationTermSet .................................. 42
    3.1.5.7.1.1.3  Lcid ................................................ 42
    3.1.5.7.1.1.4  LinkType ............................................. 42
    3.1.5.7.1.1.5  TaxonomyName ........................................ 42
    3.1.5.7.1.1.6  TermGroupId ......................................... 43
    3.1.5.7.1.1.7  TermStoreId ........................................... 43
    3.1.5.7.1.1.8  IsReadOnly ........................................... 43
    3.1.5.7.1.1.9  LoadedFromPersistedData ............................ 43
  3.1.5.7.1.2  ObjectPath Properties .................................. 43
    3.1.5.7.1.2.1  CatalogTargetUrlForChildTerms ..................... 43
    3.1.5.7.1.2.2  TargetUrlForChildTerms .................................... 43
    3.1.5.7.1.2.3  Terms ................................................ 44
    3.1.5.7.1.2.4  Title ................................................ 44
    3.1.5.7.1.2.5  View ................................................ 44
3.1.5.7.2  Methods ....................................................... 44
  3.1.5.7.2.1  Scalar Methods ........................................... 44
    3.1.5.7.2.1.1  GetResolvedDisplayUrl ................................ 44
  3.1.5.7.2.2  ObjectPath Methods ...................................... 44
    3.1.5.7.2.2.1  CreateTerm ............................................ 44
    3.1.5.7.2.2.2  FindTermForUrl ....................................... 45
    3.1.5.7.2.2.3  GetAllTerms .......................................... 45
    3.1.5.7.2.2.4  GetAsEditable ......................................... 45
    3.1.5.7.2.2.5  GetTaxonomyTermSet .................................. 45
    3.1.5.7.2.2.6  GetWithNewView ...................................... 46
    3.1.5.7.2.2.7  GetAsResolvedByView .................................. 46
    3.1.5.7.2.2.8  GetAsResolvedByWeb ................................... 46
    3.1.5.7.2.2.9  GetTaxonomyTermStore ................................ 47
3.1.5.8.1  Properties .................................................... 47
  3.1.5.8.1.1  Scalar Properties ....................................... 47
    3.1.5.8.1.1.1  Id .................................................. 47
    3.1.5.8.1.1.2  LinkType ............................................. 48
    3.1.5.8.1.1.3  TaxonomyName ........................................ 48
    3.1.5.8.1.1.4  IsReadOnly ........................................... 48
  3.1.5.8.1.2  ObjectPath Properties .................................. 48
    3.1.5.8.1.2.1  CatalogTargetUrlForChildTerms ..................... 48
    3.1.5.8.1.2.2  TargetUrlForChildTerms .................................... 48
    3.1.5.8.1.2.3  Terms ................................................ 49
    3.1.5.8.1.2.4  Title ................................................ 49
    3.1.5.8.1.2.5  View ................................................ 49
3.1.5.8.2  Methods ....................................................... 49
  3.1.5.8.2.1  Scalar Methods ........................................... 49
    3.1.5.8.2.1.1  GetResolvedDisplayUrl ................................ 49
  3.1.5.8.2.2  ObjectPath Methods ...................................... 50
    3.1.5.8.2.2.1  CreateTerm ............................................ 50
    3.1.5.8.2.2.2  GetTaxonomyTermStore ................................ 51
3.1.5.9.1 Properties ................................................................. 51
  3.1.5.9.1.1 Scalar Properties ............................................... 51
    3.1.5.9.1.1.1 ExcludeDeprecatedTerms ................................. 51
    3.1.5.9.1.1.2 ExcludeTermsByPermissions ............................. 52
    3.1.5.9.1.1.3 ExcludeTermsByProvider ................................. 52
    3.1.5.9.1.1.4 ServerRelativeSiteUrl .................................. 52
    3.1.5.9.1.1.5 ServerRelativeWebUrl .................................. 53
    3.1.5.9.1.1.6 SiteMapProviderName ................................... 53
    3.1.5.9.1.1.7 WebId ..................................................... 53
    3.1.5.9.1.1.8 WebTitle ................................................ 53
  3.1.5.9.1.2 ObjectPath Properties ...................................... 53

3.1.5.9.2 Methods ............................................................. 53
  3.1.5.9.2.1 Scalar Methods ............................................... 54
  3.1.5.9.2.2 ObjectPath Methods ......................................... 54
    3.1.5.9.2.2.1 CreateEmptyInstance ..................................... 54
    3.1.5.9.2.2.2 GetCopy .................................................. 54
    3.1.5.9.2.2.3 CSOM Constructor ....................................... 54

  3.1.5.10.1 Properties ....................................................... 55
    3.1.5.10.1.1 Scalar Properties ......................................... 55
      3.1.5.10.1.1.1 Source ............................................... 55
      3.1.5.10.1.1.2 TermSetId .......................................... 55
      3.1.5.10.1.1.3 TermStoreId ....................................... 55
    3.1.5.10.1.2 ObjectPath Properties ................................... 55
  3.1.5.10.2 Methods ........................................................ 55
    3.1.5.10.2.1 Scalar Methods .......................................... 56
    3.1.5.10.2.2 ObjectPath Methods ..................................... 56

  3.1.5.11.1 Field Values .................................................. 56
    3.1.5.11.1.1 Unknown ............................................... 56
    3.1.5.11.1.2 PortalProvider .......................................... 56
    3.1.5.11.1.3 TaxonomyProvider ....................................... 56
    3.1.5.11.1.4 InheritFromParentWeb .................................. 56

3.1.5.12 Microsoft.SharePoint.Client.Publishing.WebNavigationSettings ... 57
  3.1.5.12.1 Properties ...................................................... 57
    3.1.5.12.1.1 Scalar Properties ....................................... 57
      3.1.5.12.1.1.1 AddNewPagesToNavigation ............................ 57
      3.1.5.12.1.1.2 CreateFriendlyUrlsForNewPages .................... 57
    3.1.5.12.1.2 ObjectPath Properties .................................. 57
    3.1.5.12.1.2.1 CurrentNavigation .................................. 57
    3.1.5.12.1.2.2 GlobalNavigation .................................... 57
  3.1.5.12.2 Methods ........................................................ 58
    3.1.5.12.2.1 Scalar Methods .......................................... 58
      3.1.5.12.2.1.1 Update .............................................. 58
      3.1.5.12.2.1.2 ResetToDefaults .................................... 58
    3.1.5.12.2.2 ObjectPath Methods ..................................... 58
      3.1.5.12.2.2.1 CSOM Constructor .................................. 58

  3.1.5.13.1 Properties ...................................................... 59
    3.1.5.13.1.1 Scalar Properties ....................................... 59
      3.1.5.13.1.1.1 Description ......................................... 59
      3.1.5.13.1.1.2 Markup ............................................. 59
      3.1.5.13.1.1.3 Title ............................................... 59
    3.1.5.13.1.2 ObjectPath Properties .................................. 59
  3.1.5.13.2 Methods ........................................................ 59
    3.1.5.13.2.1 Scalar Methods .......................................... 59
    3.1.5.13.2.2 ObjectPath Methods ..................................... 59
      3.1.5.13.2.2.1 CSOM Constructor .................................. 59
3.1.5.14.1  Properties ............................................................ 60
   3.1.5.14.1.1  Scalar Properties ........................................... 60
      3.1.5.14.1.1.1  Description ........................................... 60
      3.1.5.14.1.1.2  Enabled ............................................... 60
      3.1.5.14.1.1.3  HeadScript ........................................... 60
      3.1.5.14.1.1.4  HtmlEndBody .......................................... 60
      3.1.5.14.1.1.5  HtmlStartBody ........................................ 60
      3.1.5.14.1.1.6  Id .................................................... 60
      3.1.5.14.1.1.7  MetaTagPagePropertyMappings .......................... 61
      3.1.5.14.1.1.8  Namespace ............................................ 61
      3.1.5.14.1.1.9  Title ................................................ 61
   3.1.5.14.1.2  ObjectPath Properties ..................................... 61
3.1.5.14.2  Methods ............................................................ 61
   3.1.5.14.2.1  Scalar Methods ........................................... 61
   3.1.5.14.2.2  ObjectPath Methods ....................................... 61
      3.1.5.14.2.2.1  CSOM Constructor ................................... 61
3.1.5.15.1  Properties ....................................................... 62
   3.1.5.15.1.1  Scalar Properties ........................................ 62
      3.1.5.15.1.1.1  DefaultValue ....................................... 62
      3.1.5.15.1.1.2  UsesDefaultValue .................................. 62
      3.1.5.15.1.1.3  Value .............................................. 62
   3.1.5.15.1.1.2  ObjectPath Properties ................................ 62
3.1.5.15.2  Methods ............................................................ 63
   3.1.5.15.2.1  Scalar Methods ........................................... 63
   3.1.5.15.2.2  ObjectPath Methods ....................................... 63
3.1.5.16.1  Properties ....................................................... 63
   3.1.5.16.1.1  Scalar Properties ........................................ 63
   3.1.5.16.1.2  ObjectPath Properties ................................... 63
3.1.5.16.2  Methods ............................................................ 63
   3.1.5.16.2.1  Scalar Methods ........................................... 63
      3.1.5.16.2.1.1  Apply ............................................... 63
      3.1.5.16.2.1.2  ExportEnterprise .................................... 63
      3.1.5.16.2.1.3  ExportSmallBusiness ................................ 64
      3.1.5.16.2.1.4  Install ............................................ 64
      3.1.5.16.2.1.5  UnInstall ........................................... 64
   3.1.5.16.2.2  ObjectPath Methods ....................................... 65
3.1.5.17.1  Properties ....................................................... 65
   3.1.5.17.1.1  Scalar Properties ........................................ 65
      3.1.5.17.1.1.1  MajorVersion ....................................... 65
      3.1.5.17.1.1.2  MinorVersion ........................................ 65
      3.1.5.17.1.1.3  PackageGuid ......................................... 65
      3.1.5.17.1.1.4  PackageName ......................................... 65
   3.1.5.17.1.1.2  ObjectPath Properties ................................ 66
3.1.5.18.1  Properties ....................................................... 66
   3.1.5.18.1.1  Scalar Properties ........................................ 66
      3.1.5.18.1.1.1  Height ............................................... 66
      3.1.5.18.1.1.2  Id .................................................... 66
      3.1.5.18.1.1.3  IdCsom ............................................... 66
      3.1.5.18.1.1.4  Name ................................................ 67
      3.1.5.18.1.1.5  Version .............................................. 67
      3.1.5.18.1.1.6  Width .............................................. 67
      3.1.5.18.1.1.7  Group ............................................... 67
   3.1.5.18.1.1.2  ObjectPath Properties ................................... 67
Collection........................................................................ 67
3.1.5.19.1 Properties ................................................................ 68
  3.1.5.19.1.1 Scalar Properties.................................................. 68
  3.1.5.19.1.2 ObjectPath Properties............................................ 68
3.1.5.19.2 Methods ................................................................. 68
  3.1.5.19.2.1 Scalar Methods.................................................... 68
    3.1.5.19.2.1.1 Add .............................................................. 68
    3.1.5.19.2.1.2 Clear............................................................ 68
    3.1.5.19.2.1.3 Remove ........................................................ 68
  3.1.5.19.2.2 ObjectPath Methods .......................................... 68
3.1.5.20.1 Properties ............................................................... 69
  3.1.5.20.1.1 Scalar Properties.................................................. 69
    3.1.5.20.1.1.1 EndDate ........................................................ 69
    3.1.5.20.1.1.2 StartDate ...................................................... 69
  3.1.5.20.1.2 ObjectPath Properties ......................................... 69
    3.1.5.20.1.2.1 ListItem ....................................................... 69
3.1.5.20.2 Methods ............................................................... 69
  3.1.5.20.2.1 Scalar Methods .................................................. 69
    3.1.5.20.2.1.1 AddFriendlyUrl ............................................ 69
    3.1.5.20.2.1.2 Schedule ...................................................... 70
  3.1.5.20.2.2 ObjectPath Methods .......................................... 71
    3.1.5.20.2.2.1 GetPublishingPage ........................................ 71
3.1.5.21.1 Properties ............................................................... 71
  3.1.5.21.1.1 Scalar Properties.................................................. 71
    3.1.5.21.1.1.1 Name .......................................................... 71
  3.1.5.21.1.2 ObjectPath Properties ......................................... 72
    3.1.5.21.1.2.1 Folder .......................................................... 72
    3.1.5.21.1.2.2 PageLayoutListItem ...................................... 72
3.1.5.22.1 Properties ............................................................... 72
  3.1.5.22.1.1 Scalar Properties.................................................. 72
  3.1.5.22.1.2 ObjectPath Properties ......................................... 72
    3.1.5.22.1.2.1 Web ............................................................ 72
3.1.5.22.2 Methods ............................................................... 73
  3.1.5.22.2.1 Scalar Methods .................................................. 73
  3.1.5.22.2.2 ObjectPath Methods .......................................... 73
    3.1.5.22.2.2.1 AddPublishingPage ....................................... 73
    3.1.5.22.2.2.2 GetPublishingWeb ........................................ 73
3.1.5.23  Microsoft.SharePoint.Client.Publishing.ScheduledItem ...................................... 74
3.1.5.23.1 Properties ............................................................... 74
  3.1.5.23.1.1 Scalar Properties.................................................. 74
    3.1.5.23.1.1.1 EndDate ........................................................ 74
    3.1.5.23.1.1.2 StartDate ...................................................... 74
  3.1.5.23.1.2 ObjectPath Properties ......................................... 74
    3.1.5.23.1.2.1 ListItem ....................................................... 74
3.1.5.23.2 Methods ............................................................... 75
  3.1.5.23.2.1 Scalar Methods .................................................. 75
    3.1.5.23.2.1.1 Schedule ...................................................... 75
  3.1.5.23.2.2 ObjectPath Methods .......................................... 75
3.1.5.24  Microsoft.SharePoint.Client.Publishing.SiteImageRenditions ................................75
3.1.5.24.1 Properties ............................................................... 75
  3.1.5.24.1.1 Scalar Properties.................................................. 75
  3.1.5.24.1.2 ObjectPath Properties ......................................... 75
3.1.5.24.2 Methods ............................................................... 75
3.1.5.24.2.1 Scalar Methods .......................................................... 75
3.1.5.24.2.1.1 GetRenditions .................................................... 75
3.1.5.24.2.1.2 SetRenditions ................................................... 75
3.1.5.24.2.2 ObjectPath Methods .................................................. 76
3.1.5.25 Microsoft.SharePoint.Client.Publishing.SiteServicesAddins .............. 76
3.1.5.25.1 Properties .................................................................. 76
3.1.5.25.1.1 Scalar Properties ................................................... 76
3.1.5.25.1.2 ObjectPath Properties ............................................... 76
3.1.5.25.2 Methods .................................................................. 76
3.1.5.25.2.1 Scalar Methods ....................................................... 76
3.1.5.25.2.1.1 DeletePlugin ......................................................... 76
3.1.5.25.2.1.2 DeleteSettings ...................................................... 77
3.1.5.25.2.1.3 SetPlugin .......................................................... 77
3.1.5.25.2.1.4 SetSettings ......................................................... 77
3.1.5.25.2.2 ObjectPath Methods .................................................. 77
3.1.5.25.2.2.1 GetPlugin .......................................................... 77
3.1.5.25.2.2.2 GetSettings ......................................................... 78
3.1.5.26 Microsoft.SharePoint.Client.Publishing.PageLayoutCreationInformation ... 78
3.1.5.26.1 Properties .................................................................. 78
3.1.5.26.1.1 Scalar Properties ................................................... 78
3.1.5.26.1.1.1 AssociatedContentTypeId ........................................ 78
3.1.5.26.1.1.2 MasterPageUrl .................................................... 78
3.1.5.26.1.1.3 NewPageLayoutEditablePath .................................... 78
3.1.5.26.1.1.4 NewPageLayoutNameWithoutExtension .......................... 79
3.1.5.26.1.2 ObjectPath Properties ............................................... 79
3.1.5.26.1.2.1 Web ................................................................ 79
3.1.5.27 Microsoft.SharePoint.Client.Publishing.PublishingSite ...................... 79
3.1.5.27.1 Properties .................................................................. 79
3.1.5.27.1.1 Scalar Properties ................................................... 79
3.1.5.27.1.2 ObjectPath Properties ............................................... 79
3.1.5.27.2 Methods .................................................................. 79
3.1.5.27.2.1 Scalar Methods ....................................................... 79
3.1.5.27.2.1.1 CreatePageLayout ................................................ 79
3.1.5.27.2.2 ObjectPath Methods .................................................. 80
3.1.5.28 Microsoft.SharePoint.Client.Publishing.AcronymInformation .............. 80
3.1.5.28.1 Properties .................................................................. 80
3.1.5.28.1.1 Scalar Properties ................................................... 80
3.1.5.28.1.1.1 Acronym .......................................................... 80
3.1.5.28.1.1.2 Color ............................................................... 80
3.1.5.28.1.1.3 Lcid ................................................................. 80
3.1.5.28.1.1.4 Text ................................................................. 80
3.1.5.28.1.2 ObjectPath Properties ............................................... 81
3.1.5.29 Microsoft.SharePoint.Client.Publishing.CommunicationSite .............. 81
3.1.5.29.1 Properties .................................................................. 81
3.1.5.29.1.1 Scalar Properties ................................................... 81
3.1.5.29.1.2 ObjectPath Properties ............................................... 81
3.1.5.29.2 Methods .................................................................. 81
3.1.5.29.2.1 Scalar Methods ....................................................... 81
3.1.5.29.2.1.1 Create ............................................................. 81
3.1.5.29.2.1.2 Status ............................................................... 81
3.1.5.29.2.2 ObjectPath Methods .................................................. 82
3.1.5.29.2.2.1 CSOM Constructor ............................................... 82
3.1.5.30 Microsoft.SharePoint.Client.Publishing.EmbedDataV1 ....................... 82
3.1.5.30.1 Properties .................................................................. 82
3.1.5.30.1.1 Scalar Properties ................................................... 82
3.1.5.30.1.1.1 AllowHttpsEmbed ................................................ 82
3.1.5.30.1.1.2 CreatorName ....................................................... 82
3.1.5.30.1.1.3 DatePublishedAt .................................................. 83
3.1.5.30.1.1.4 Description ........................................................................... 83
3.1.5.30.1.1.5 EmbedServiceResponseCode .............................................. 83
3.1.5.30.1.1.6 ErrorMessage ....................................................................... 83
3.1.5.30.1.1.7 Html ................................................................................. 83
3.1.5.30.1.1.8 ListId ................................................................................. 83
3.1.5.30.1.1.9 PublisherName .................................................................... 83
3.1.5.30.1.1.10 ResponseCode ................................................................. 83
3.1.5.30.1.1.11 SiteId .............................................................................. 84
3.1.5.30.1.1.12 ThumbnailUrl .................................................................... 84
3.1.5.30.1.1.13 Title ............................................................................... 84
3.1.5.30.1.1.14 Type ............................................................................... 84
3.1.5.30.1.1.15 UniqueId ......................................................................... 84
3.1.5.30.1.1.16 Url .................................................................................. 84
3.1.5.30.1.1.17 VideoId ........................................................................... 85
3.1.5.30.1.1.18 WebId ............................................................................. 85
3.1.5.30.1.2 ObjectPath Properties .......................................................... 85
3.1.5.30.2 Methods ................................................................................. 85
3.1.5.30.2.1 Scalar Methods ................................................................... 85
3.1.5.30.2.2 ObjectPath Methods ............................................................. 85
3.1.5.31.1 Properties ............................................................................... 85
3.1.5.31.1.1 Scalar Properties ................................................................. 85
3.1.5.31.1.2 ObjectPath Properties .......................................................... 85
3.1.5.31.2 Methods ................................................................................. 85
3.1.5.31.2.1 Scalar Methods .................................................................. 85
3.1.5.31.2.2 ObjectPath Methods ............................................................. 86
3.1.5.31.2.2.1 CSOM Constructor ........................................................... 86
3.1.5.31.2.2.2 EmbedData ..................................................................... 86
3.1.5.32 Microsoft.SharePoint.Client.Publishing.PrimaryCityTime ............... 86
3.1.5.32.1 Properties ............................................................................... 86
3.1.5.32.1.1 Scalar Properties ................................................................. 86
3.1.5.32.1.1.1 Location .......................................................................... 86
3.1.5.32.1.1.2 Time .............................................................................. 86
3.1.5.32.1.1.3 UtcOffset ........................................................................ 86
3.1.5.32.1.2 ObjectPath Properties .......................................................... 87
3.1.5.32.2 Methods ................................................................................. 87
3.1.5.32.2.1 Scalar Methods .................................................................. 87
3.1.5.32.2.2 ObjectPath Methods ............................................................. 87
3.1.5.33.1 Properties ............................................................................... 87
3.1.5.33.1.1 Scalar Properties ................................................................. 87
3.1.5.33.1.2 ObjectPath Properties .......................................................... 87
3.1.5.33.2 Methods ................................................................................. 87
3.1.5.33.2.1 Scalar Methods .................................................................. 87
3.1.5.33.2.1.1 SharePointByEmail .......................................................... 87
3.1.5.33.2.1.2 SharePointByEmail .......................................................... 87
3.1.5.33.2.2 ObjectPath Methods ............................................................. 87
3.1.5.33.2.2.1 CSOM Constructor ........................................................... 88
3.1.5.34 Microsoft.SharePoint.Client.Publishing.SharePagePreviewByEmailFieldsData .......................................................... 88
3.1.5.34.1 Properties ............................................................................... 88
3.1.5.34.1.1 Scalar Properties ................................................................. 88
3.1.5.34.1.1.1 message ......................................................................... 88
3.1.5.34.1.1.2 recipientEmails ................................................................. 88
3.1.5.34.1.2 ObjectPath Properties .......................................................... 88
3.1.5.35 Microsoft.SharePoint.Client.Publishing.SharePointHomeServiceManager ........................................................................ 88
3.1.5.35.1 Properties ............................................................................... 89
3.1.5.35.1.1 Scalar Properties ................................................................. 89
3.1.5.35.1.2 ObjectPath Properties .......................................................... 89
3.1.5.35.2 Methods

3.1.5.35.2.1 Scalar Methods

3.1.5.35.2.1.1 GetAcronymsAndColors

3.1.5.35.2.2 ObjectPath Methods

3.1.5.35.2.2.1 CSOM Constructor

3.1.5.36 Microsoft.SharePoint.Client.Publishing.SitePage

3.1.5.36.1 Properties

3.1.5.36.1.1 Scalar Properties

3.1.5.36.1.1.1 AbsoluteUrl

3.1.5.36.1.1.2 AlternativeUrlMap

3.1.5.36.1.1.3 BannerImageUrl

3.1.5.36.1.1.4 CanvasContent1

3.1.5.36.1.1.5 CanvasJson1

3.1.5.36.1.1.6 CommentsDisabled

3.1.5.36.1.1.7 ContentTypeId

3.1.5.36.1.1.8 Description

3.1.5.36.1.1.9 DoesUserHaveEditPermission

3.1.5.36.1.1.10 FileName

3.1.5.36.1.1.11 FirstPublished

3.1.5.36.1.1.12 FirstPublishedRelativeTime

3.1.5.36.1.1.13 Id

3.1.5.36.1.1.14 IsPageCheckedOutToCurrentUser

3.1.5.36.1.1.15 IsWebWelcomePage

3.1.5.36.1.1.16 LayoutWebpartsContent

3.1.5.36.1.1.17 ListId

3.1.5.36.1.1.18 Modified

3.1.5.36.1.1.19 ModifiedRelativeTime

3.1.5.36.1.1.20 PageLayoutType

3.1.5.36.1.1.21 Path

3.1.5.36.1.1.22 PromotedState

3.1.5.36.1.1.23 SocialBarOnSitePagesDisabled

3.1.5.36.1.1.24 Title

3.1.5.36.1.1.25 UniqueId

3.1.5.36.1.1.26 Url

3.1.5.36.1.1.27 Version

3.1.5.36.1.1.28 VersionInfo

3.1.5.36.1.2 ObjectPath Properties

3.1.5.36.1.2.1 CreatedBy

3.1.5.36.1.2.2 LastModifiedBy

3.1.5.36.2 Methods

3.1.5.36.2.1 Scalar Methods

3.1.5.36.2.1.1 CheckOut

3.1.5.36.2.1.2 DemoteFromNews

3.1.5.36.2.1.3 PromoteToNews

3.1.5.36.2.1.4 Publish

3.1.5.36.2.1.5 SavePage

3.1.5.36.2.1.6 SaveDraft

3.1.5.36.2.1.7 SavePageAsDraft

3.1.5.36.2.1.8 SharePagePreviewByEmail

3.1.5.36.2.1.9 Update

3.1.5.36.2.2 ObjectPath Methods

3.1.5.36.2.2.1 CheckoutPage

3.1.5.36.2.2.2 Copy

3.1.5.36.2.2.3 DiscardPage

3.1.5.37 Microsoft.SharePoint.Client.Publishing.SitePageCollection

3.1.5.37.1 Properties

3.1.5.37.1.1 Scalar Properties

3.1.5.37.1.2 ObjectPath Properties
3.1.5.37.2 Methods .................................................................................................. 96
3.1.5.37.2.1 Scalar Methods ............................................................................... 96
3.1.5.37.2.1.1 EnsureTitleResource ................................................................. 96
3.1.5.37.2.1.2 GetPageColumnState ............................................................... 96
3.1.5.37.2.1.3 IsSitePage .................................................................................. 97
3.1.5.37.2.2 ObjectPath Methods ...................................................................... 97
3.1.5.37.2.2.1 CSOM Constructor .................................................................. 97
3.1.5.37.2.2.2 Feed ......................................................................................... 97
3.1.5.37.2.2.3 GetById ................................................................................... 97
3.1.5.37.2.2.4 GetByUrl ............................................................................... 98

3.1.5.38.1 Properties ............................................................................................ 98
3.1.5.38.1.1 Scalar Properties ........................................................................... 98
3.1.5.38.1.1.1 BannerImageUrl ........................................................................ 98
3.1.5.38.1.1.2 CanvasContent1 ....................................................................... 98
3.1.5.38.1.1.3 CanvasJson1 ........................................................................... 98
3.1.5.38.1.1.4 LayoutWebpartsContent ........................................................... 98
3.1.5.38.1.1.5 Modified .................................................................................. 100
3.1.5.38.1.1.6 Title ......................................................................................... 100
3.1.5.38.1.2 ObjectPath Properties .................................................................. 99

3.1.5.39.1 Properties ............................................................................................ 99
3.1.5.39.1.1 Scalar Properties ........................................................................... 99
3.1.5.39.1.1.1 AbsoluteUrl ............................................................................ 99
3.1.5.39.1.1.2 BannerImageUrl ....................................................................... 99
3.1.5.39.1.1.3 CommentsDisabled .................................................................. 99
3.1.5.39.1.1.4 ContentTypeId ......................................................................... 100
3.1.5.39.1.1.5 Description ............................................................................. 100
3.1.5.39.1.1.6 DoesUserHaveEditPermission ............................................... 100
3.1.5.39.1.1.7 FileName .................................................................................. 100
3.1.5.39.1.1.8 FirstPublished ......................................................................... 100
3.1.5.39.1.1.9 FirstPublishedRelativeTime .................................................. 100
3.1.5.39.1.1.10 Id ......................................................................................... 100
3.1.5.39.1.1.11 IsPageCheckedOutToCurrentUser .......................................... 101
3.1.5.39.1.1.12 IsWebWelcomePage .............................................................. 101
3.1.5.39.1.1.13 ListId .................................................................................... 101
3.1.5.39.1.1.14 Modified ............................................................................. 101
3.1.5.39.1.1.15 ModifiedRelativeTime ........................................................... 101
3.1.5.39.1.1.16 PageLayoutType ................................................................... 101
3.1.5.39.1.1.17 Path ....................................................................................... 101
3.1.5.39.1.1.18 PromotedState ...................................................................... 101
3.1.5.39.1.1.19 SocialBarOnSitePagesDisabled ............................................ 102
3.1.5.39.1.1.20 Title ...................................................................................... 102
3.1.5.39.1.1.21 UniqueId .............................................................................. 102
3.1.5.39.1.1.22 Url ....................................................................................... 102
3.1.5.39.1.1.23 Version ............................................................................... 102
3.1.5.39.1.1.24 VersionInfo ......................................................................... 102
3.1.5.39.1.2 ObjectPath Properties .................................................................. 102
3.1.5.39.1.2.1 CreatedBy .............................................................................. 102
3.1.5.39.1.2.2 LastModifiedBy ..................................................................... 103

3.1.5.39.2 Methods ............................................................................................. 103
3.1.5.39.2.1 Scalar Methods ........................................................................... 103
3.1.5.39.2.2 ObjectPath Methods ................................................................... 103

3.1.5.40 Microsoft.SharePoint.Client.Publishing.SitePageMetadataCollection .... 103
3.1.5.40.1 Properties .......................................................................................... 103
3.1.5.40.1.1 Scalar Properties ........................................................................... 103
3.1.5.40.1.2 ObjectPath Properties ................................................................. 103
3.1.5.40.2 Methods ........................................................................................... 103
4 Protocol Examples

4.1 Create a New Navigation Hierarchy

4.2 Resolve URLs
4.3 Changing a View ........................................................................................................119

5 Security ..........................................................................................................................125
  5.1 Security Considerations for Implementers ...............................................................125
  5.2 Index of Security Parameters ...................................................................................125

6 Appendix A: Product Behavior .......................................................................................126

7 Change Tracking ...............................................................................................................127

8 Index ..................................................................................................................................129
1 Introduction

The Publishing Client-Side Object Model Protocol defines types, methods, and properties that a protocol client uses to manage publishing Web sites on a protocol server, for example operations involving the navigation hierarchy or URLs.

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:

Boolean: An operation or expression that can be evaluated only as either true or false.

catalog friendly URL: A web address that is designed to be easily readable by both people and search engine web crawler programs. This type of URL has additional segments appended to control the webpage content.

catalog friendly URL suffix: The additional segment that is appended to a friendly Uniform Resource Locator (URL) in order to construct a catalog friendly URL.

checked out: A publishing level that indicates that a document has been created and locked for exclusive editing by a user in a version control system.

Collaborative Application Markup Language (CAML): An XML-based language that is used to describe various elements, such as queries and views, in sites that are based on SharePoint Products and Technologies.

content type identifier: A unique identifier that is assigned to a content type.

Coordinated Universal Time (UTC): A high-precision atomic time standard that approximately tracks Universal Time (UT). It is the basis for legal, civil time all over the Earth. Time zones around the world are expressed as positive and negative offsets from UTC. In this role, it is also referred to as Zulu time (Z) and Greenwich Mean Time (GMT). In these specifications, all references to UTC refer to the time at UTC-0 (or GMT).

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 dictionary: An object that contains an unordered collection of key/value pairs that can be used in an XML request or JSON response text. Each key in a CSOM dictionary has a unique name.

CSOM GUID: A GUID, as described in [MS-DTYP], that can be used in an XML request or as a string in JSON response text.
CSOM 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 Stream: A series of bytes that is used to transfer data and that supports reading, writing, and seeking.

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

current navigation menu: The navigation menu that appears vertically on the left side of the default master page and shows the set of current navigation nodes.

current user: The user who is authenticated during processing operations on a front-end web server or a back-end database server.

datetime: A data type that represents the date and time when a document can be normalized and indexed as a numeric value by a search application. The range and degree of granularity varies according to search application and implementation.

default scalar property set: A set of properties that are retrieved by default for an object. The properties map to fields in a storage schema.

deprecated term: A term that persists in the term store but cannot be used in future applications of metadata.

document library: A type of list that is a container for documents and folders.

empty GUID: A 128-bit, 16-byte identification number that is represented by all zeros.

empty string: A string object or variable that is initialized with the value "".

field: A container for metadata within a SharePoint list and associated list items.

global navigation menu: The navigation menu that appears horizontally at the top of the default master page and shows the set of navigation nodes from the site map provider's root node.

Hypertext Markup Language (HTML): An application of the Standard Generalized Markup Language (SGML) that uses tags to mark elements in a document, as described in [HTML].

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].

item: A unit of content that can be indexed and searched by a search application.

JavaScript Object Notation (JSON): A text-based, data interchange format that is used to transmit structured data, typically in Asynchronous JavaScript + XML (AJAX) web applications, as described in [RFC7159]. The JSON format is based on the structure of ECMAScript (Jscript, JavaScript) objects.

language code identifier (LCID): A 32-bit number that identifies the user interface human language dialect or variation that is supported by an application or a client computer.

list: A container within a SharePoint site that stores list items. A list has a customizable schema that is composed of one or more fields.
list item: An individual entry within a SharePoint list. Each list item has a schema that maps to fields in the list that contains the item, depending on the content type of the item.

list item identifier: See item identifier.

locale: A collection of rules and data that are specific to a language and a geographical area. A locale can include information about sorting rules, date and time formatting, numeric and monetary conventions, and character classification.

login name: A string that is used to identify a user or entity to an operating system, directory service, or distributed system. For example, in Windows-integrated authentication, a login name uses the form "DOMAIN\username".

major version: An iteration of a software component, document, or list item that is ready for a larger group to see, or has changed significantly from the previous major version. For an item on a SharePoint site, the minor version is always "0" (zero) for a major version.

master page: An ASP.NET file that has a predefined layout that can include static text, HTML elements, and server controls.

minor version: An iteration of a software component, document, or list item that is in progress or has changed only slightly from the previous version. For an item on a SharePoint site, the minor version number is never "0" (zero) and is incremented for each new version of an item, unless a major version is explicitly published. When minor versioning is disabled on a SharePoint site, only major version numbers are incremented, and the minor version is always "0" (zero).

navigation node: An element in the navigational structure of a site. The element is a link or a series of links to a specific page in the site.

page: A file that consists of HTML and can include references to graphics, scripts, or dynamic content such as Web Parts.

page layout: A dynamic web template that is stored as a document. It contains content placeholders that bind to fields of a publishing page. A page layout has an associated content type that determines which publishing pages it can be bound to.

parent site: The site that is above the current site in the hierarchy of the site collection.

pinned term: A term in a term set that cannot be directly moved or deleted.

portal site map provider: A site map provider that uses the location of objects, such as pages, in the file system as its source data for constructing a site map.

published version: The version of a list item that is approved and can be seen by all users. The user interface (UI) version number for a published version is incremented to the next positive major version number and the minor version is "0" (zero). See also major version and minor version.

publishing page: A document that binds to a page layout to generate an HTML page for display to a reader. Publishing pages have specific fields that contain the content that is displayed in an HTML page.

red-green-blue (RGB): A color model that describes color information in terms of the red (R), green (G), and blue (B) intensities in a color.

Red-Green-Blue (RGB): A mapping of color components in which red, green, and blue and an intensity value are combined in various ways to reproduce a range of colors.

root node: The highest-ranking or uppermost node in a hierarchy of information.
**server-relative URL**: A relative URL that does not specify a scheme or host, and assumes a base URI of the root of the host, as described in [RFC3986].

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

**site collection**: A set of websites that are in the same content database, have the same owner, and share administration settings. A site collection can be identified by a GUID or the URL of the top-level site for the site collection. Each site collection contains a top-level site, can contain one or more subsites, and can have a shared navigational structure.

**site map provider**: An object that provides a hierarchy of nodes that represent navigation for a site.

**site subscription**: A logical grouping of site collections that share a common set of features and service data.

**site template**: An XML-based definition of site settings, including formatting, lists, views, and elements such as text, graphics, page layout, and styles. Site templates are stored in .stp files in the content database.

**site-relative URL**: A URL that is relative to the site that contains a resource and does not begin with a leading slash (/).

**solution gallery**: A gallery that is used to store solution packages.

**solution package**: A compressed file that can be deployed to a server farm or a site. It can contain assemblies, resource files, site and feature definitions, templates, code access security policies, and Web Parts. Solution packages have a .wsp file name extension.

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

**switchable site map provider**: A site map provider that uses other site map providers as its source data when constructing a site map.

**taxonomy navigation**: A hierarchy of navigation menus that represents the navigation menus in terms and term sets and are independent of where their underlying objects, such as pages, are located.

**taxonomy site map provider**: A site map provider that uses taxonomy navigation as its source data for constructing a site map.

**term**: A concept or an idea that is stored and can be used as metadata.

**term set**: A collection of terms that are arranged into and stored as a hierarchy or a flat list.

**term store**: A database in which managed metadata is stored in the form of term sets and terms.

**time zone**: A geographical area that observes the same local time. The local time has a positive, zero, or negative offset from Coordinated Universal Time (UTC). The offset can be different during standard time and daylight saving time.

**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].

**universally unique identifier (UUID)**: A 128-bit value. UUIDs can be used for multiple purposes, from tagging objects with an extremely short lifetime, to reliably identifying very persistent objects in cross-process communication such as client and server interfaces, manager entry-point vectors, and RPC objects. UUIDs are highly likely to be unique. UUIDs are also
known as globally unique identifiers (GUIDs) and these terms are used interchangeably in the Microsoft protocol technical documents (TDs). Interchanging the usage of these terms does not imply or require a specific algorithm or mechanism to generate the UUID. Specifically, the use of this term does not imply or require that the algorithms described in [RFC4122] or [C706] must be used for generating the UUID.

**URI query**: The portion of a Uniform Resource Identifier (URI) that, in conjunction with the data in the path component, identifies a resource within the scope of a URI's scheme and naming authority, if any, as described in [RFC3986]. A query component is indicated by the first question mark (?) character and is terminated by a number sign (#) or the end of the URI.

**variation label**: A hierarchy of sites, typically in one language and are identified by the URL name of the site at the top of the hierarchy and often contain recognizable locale identifiers such as "en-us", "en-uk", and "fr-fr".

**variations**: An application that facilitates translation and related management processes for websites and publishing pages. It can be used to copy content from one site, which is referred to as the source variation site, to one or more other sites, which are referred to as target variation sites. After the content is copied, it can be translated into different languages for those target variation sites.

**website**: 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 site.

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

### 1.2 References

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

#### 1.2.1 Normative References

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


**Note** There is a charge to download the specification.


**Note** There is a charge to download the specification.


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

1.2.2 Informative References

None.

1.3 Overview

This protocol defines types, methods, and properties that a protocol client uses to manage publishing Web sites on a protocol server. For example, a protocol client can retrieve a tree of menu entries from the protocol server. The menu data could be used to provide custom rendering for various scenarios, such as custom menus for a mobile device. Also, a protocol client can update the managed navigation data on the protocol server. This enables a protocol client to modify URLs, the hierarchy, and other aspects of menu navigation.

1.4 Relationship to Other Protocols

The Publishing Client-Side Object Model Protocol is a set of types, properties, and methods that can be accessed by using the SharePoint Client Query Protocol as described in [MS-CSOM]. This protocol uses JavaScript Object Notation (JSON) as described in [RFC4627] to format data returned to a protocol client. 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.

![Layering Diagram]

This Protocol

Industry Standard

TCP

IP

JSON [RFC4627]

HTTP | HTTPS

SharePoint Client Query ([MS-CSOM])

Publishing Client-Side Object Model Protocol
1.5 Prerequisites/Preconditions

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

1.6 Applicability Statement

This protocol can be used by a protocol client to manage publishing Web sites on a protocol server, for example operations involving the navigation hierarchy or URLs. This protocol is optimized to enable a protocol client to specify the exact set of data and operations to perform in a single batch, making it suitable for situations where the connection speed between the protocol client and the protocol server can be slow. This protocol is not suitable and is inefficient if both the protocol client and protocol server are on the same computer. In this case, the client uses an API that does not require communication over a network.

1.7 Versioning and Capability Negotiation

None.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.
2 Messages

2.1 Transport
Messages are transported by using the SharePoint Client Query Protocol, as specified in [MS-CSOM].

2.2 Message Syntax

None.
3 Protocol Details

3.1 Server Details

3.1.1 Abstract Data Model

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

This protocol deals with various structures associated with sites, items, navigation, and other structures as specified in [MS-WSSTS].

This protocol also deals with terms, term sets, and other Enterprise managed metadata as specified in [MS-EMMCSOM]. Changes by types in this protocol that affect underlying terms do not apply until the protocol client calls the TermStore.CommitAll ([MS-EMMCSOM] section 3.1.5.23.2.1.1) method.

3.1.1.1 Parent Type

This protocol deals with various types that are logically derived from a parent type. The following table lists the relationship between such types.

<table>
<thead>
<tr>
<th>Parent type</th>
<th>Derived type(s)</th>
</tr>
</thead>
</table>

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Higher-Layer Triggered Events

None.

3.1.5 Message Processing Events and Sequencing Rules

3.1.5.1 Microsoft.SharePoint.Client.Publishing.VariationLabel

TypeId: {FD2E4D24-40A9-4E14-9233-05AFE7BCA149}
ShortName: SP.Publishing.VariationLabel

Represents a variation label.

3.1.5.1.1 Properties

3.1.5.1.1.1 Scalar Properties

3.1.5.1.1.1.1 DisplayName

Type: CSOM String

Accessibility: Read Only

Gets the UI display name of the label.

Remarks:

The default value for this property is the value of the Title (section 3.1.5.1.1.5) property.

3.1.5.1.1.1.2 IsSource

Type: CSOM Boolean

Accessibility: Read Only

Gets whether the VariationLabel (section 3.1.5.1) is set as the source label.

Remarks:

Returns true if the VariationLabel is a source label; otherwise, false. A source label represents the site or pages that are the source of authoring and publishing and are used to copy changes to target variation sites.

3.1.5.1.1.1.3 Language

Type: CSOM String

Accessibility: Read Only

Gets the language of the VariationLabel (section 3.1.5.1).

Remarks:

This property specifies the language value in the format "languagecode2-country/regioncode2" as specified in [RFC1766], where "languagecode2" is a lowercase two-letter code derived as specified in [ISO-639-1] and "country/regioncode2" is an uppercase two-letter code derived as specified in [ISO-3166].

3.1.5.1.1.1.4 Locale

Type: CSOM String

Accessibility: Read Only

Gets the locale of the VariationLabel (section 3.1.5.1).

Remarks:

The locale is specified in the format of the language code identifier (LCID).
3.1.5.1.1.5 Title
Type: CSOM String
Accessibility: Read Only

Gets the title of the VariationLabel (section 3.1.5.1), that is the unique string identifier of the label.

3.1.5.1.1.6 TopWebUrl
Type: CSOM String
Accessibility: Read Only

Gets the URL of the top site that is used to publish the hierarchy of sites and pages associated with this VariationLabel (section 3.1.5.1).

3.1.5.1.2 ObjectPath Properties
None.

3.1.5.1.2 Methods

3.1.5.1.2.1 Scalar Methods
None.

3.1.5.1.2.2 ObjectPath Methods
None.

3.1.5.2 Microsoft.SharePoint.Client.Publishing.Variations
TypeId: {1339CD8A-5DC8-4932-9BB3-32A5BC2C0D48}
ShortName: SP.Publishing.Variations

The Variations class exposes essential information for managing variations.

3.1.5.2.1 Properties

3.1.5.2.1.1 Scalar Properties
None.

3.1.5.2.1.2 ObjectPath Properties
None.

3.1.5.2.2 Methods

3.1.5.2.2.1 Scalar Methods

3.1.5.2.2.1.1 GetPeerUrl
This method is a static CSOM method.

Return Type: CSOM String
Retrieves the **URL** of the object that corresponds to the requested page in the specified label.

**Parameters:**

- `currentUrl`: The server-relative URL of the page whose corresponding object in the specified label is requested.  
  Type: CSOM String
- `labelTitle`: The Title of the target label that the page is requested in.  
  Type: CSOM String

**Remarks:**

This method returns the server-relative URL of the corresponding page in the indicated label if there is one. If the server-relative URL is not found, then this method returns the corresponding **Web site URL** in that label. Finally, if the Web site URL is not found, then this method returns the corresponding URL of the label.

### 3.1.5.2.2.1.2 UpdateListItems

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

**Return Type:** None

Copies the content of the selected items into all variation labels that the list is nominated to.

**Parameters:**

- `listId`: Identifies the list that contains the items referenced in the `itemIds` parameter.  
  Type: CSOM GUID
- `itemIds`: An array of list item identifiers to update in the target labels that this list is nominated to.  
  Type: CSOM array of CSOM Int32

**Remarks:**

When a variation is created, the entire hierarchy of **Web sites** is copied to the new variation for translation. Lists are excluded unless a user nominates them to the new variation. Items in lists that are nominated are updated by this method.

### 3.1.5.2.2.2 ObjectPath Methods

#### 3.1.5.2.2.2.1 GetLabels

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

**Return Type:** CSOM array of Microsoft.SharePoint.Client.Publishing.VariationLabel

Returns the list of **VariationLabels** (section 3.1.5.1) that are available for the **Web site** in the context.

**Parameters:** None


**ShortName:** SP.Publishing.Navigation.NavigationLinkType
Flag: false

**NavigationLinkType** is an enumeration that describes the type of navigation node for the **NavigationTerm** (section 3.1.5.5) class.

### 3.1.5.3.1 Field Values

#### 3.1.5.3.1.1 Root

**Value:** 0

The navigation node is a root node in the navigation tree that corresponds to the **NavigationTermSet** (section 3.1.5.7) class.

#### 3.1.5.3.1.2 FriendlyUrl

**Value:** 1

The navigation node defines a friendly URL that maps to an existing page on the site.

#### 3.1.5.3.1.3 SimpleLink

**Value:** 2

The navigation node has a URL that is not restricted in any way and is not required to map to an existing page on the site. This value is also used to define a navigation node with no associated URL.


**TypeId:** {F3724139-55ED-4C05-8576-2C3830831C10}

**ShortName:** SP.Publishing.Navigation.TaxonomyNavigation

Provides common operations related to the **NavigationTermSet** (section 3.1.5.7), **NavigationTerm** (section 3.1.5.5), and **WebNavigationSettings** (section 3.1.5.12) classes, as well as basic management and querying of the taxonomy navigation cache.

#### 3.1.5.4.1 Properties

##### 3.1.5.4.1.1 Scalar Properties

None.

##### 3.1.5.4.1.2 ObjectPath Properties

None.

#### 3.1.5.4.2 Methods

##### 3.1.5.4.2.1 Scalar Methods

#### 3.1.5.4.2.1.1 FlushSiteFromCache

This method is a static CSOM method.

**Return Type:** None
Removes the indicated site and all of its associated Web sites from the taxonomy navigation cache. Note this method does not flush the associated navigation term sets.

**Parameters:**

*site:* The site to remove from the taxonomy navigation cache.

Type: Microsoft.SharePoint.Client.Site

The site ([MS-CSOMSPT] section 3.2.5.119) parameter is used to locate the taxonomy navigation cache item to flush.

### 3.1.5.4.2.1.2 FlushTermSetFromCache

This method is a static CSOM method.

**Return Type:** None

Removes the indicated term set from the taxonomy navigation cache, for a specific site subscription.

**Parameters:**

*webForPermissions:* A Web site used for permissions checks.

Type: Microsoft.SharePoint.Client.Web

The webForPermissions parameter ([MS-CSOMSPT] section 3.2.5.143) is used to provide a user identity that will be used to determine whether the caller has permissions to flush the cache. This parameter also identifies the site subscription whose cache will be flushed.

*termStoreId:* The identifier of the term store that contains the term set.

Type: CSOM GUID

*termSetId:* The identifier of the term set to flush from the taxonomy navigation cache.

Type: CSOM GUID

### 3.1.5.4.2.1.3 FlushWebFromCache

This method is a static CSOM method.

**Return Type:** None

Removes the indicated Web site from the taxonomy navigation cache.

**Parameters:**

*web:* A Web site associated with the taxonomy navigation cache.

Type: Microsoft.SharePoint.Client.Web

The web parameter ([MS-CSOMSPT] section 3.2.5.143) is used to identify the taxonomy navigation cache item to flush.

### 3.1.5.4.2.1.4 GetNavigationLcidForWeb

This method is a static CSOM method.

**Return Type:** CSOM Int32
Returns the **language code identifier (LCID)** that is in use for **taxonomy navigation** when retrieving a **Term** ([MS-EMMCSOM] section 3.1.5.16) object for the specified **Web site**. The client **SHOULD** assign this LCID as the **TermStore.WorkingLanguage** ([MS-EMMCSOM] section 3.1.5.23.1.1.6) when making changes to taxonomy navigation.

**Parameters:**

*web:* The Web site ([MS-CSOMSPT] section 3.2.5.143) from which to retrieve the LCID.

**Type:** Microsoft.SharePoint.Client.Web

### 3.1.5.4.2.1.5 SetCrawlAsFriendlyUrlPage

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

**Return Type:** CSOM Boolean

This method assigns a **Boolean** property stored with the specified **publishing page**: If this property is true, then the search crawler will omit the page's physical **URL** from the search index, because the search index already contains one or more friendly URLs for the page. If this property is false, then the page is indexed in the normal manner.

If the update was performed successfully, or if the page property was already in the specified state, then the return value **MUST** be true. The return value **MUST** be false otherwise, including cases such as: the **navigationTerm** is null, the **navigationTerm** is not a friendly URL, the target page is invalid, the target page cannot be found, the caller does not have permissions to perform the change, and so on.

**Parameters:**

*navigationTerm:* A navigation term indicating the publishing page to be updated.


The **navigationTerm** property **SHOULD** have **NavigationTerm.LinkType** property (section 3.1.5.5.1.1.7) equal to **NavigationLinkType.FriendlyUrl** (section 3.1.5.3.1.2), and its **NavigationTerm.TargetUrl** property (section 3.1.5.5.1.2.5) is used to identify the publishing page to be updated. (The page is specified in this way because it is convenient for a specific editing surface.)

**crawlAsFriendlyUrlPage:** The new value of the publishing page property.

**Type:** CSOM Boolean

### 3.1.5.4.2.2 ObjectPath Methods

#### 3.1.5.4.2.2.1 GetTermSetForWeb

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


Returns a cached **NavigationTermSet** (section 3.1.5.7) object for the specified **Web site**. If the object is not already in the taxonomy navigation cache, it will be added.

**Parameters:**

*web:* The Web site ([MS-CSOMSPT] section 3.2.5.143) from which to retrieve the **NavigationTermSet** object

**Type:** Microsoft.SharePoint.Client.Web

*siteMapProviderName:* The name of the **site map provider** associated with the **NavigationTermSet**.
Type: **CSOM String**

**includeInheritedSettings**: If true, then the returned term set MAY be inherited from a parent Web site, for example as specified by the **StandardNavigationSource.InheritFromParentWeb** setting (section 3.1.5.11.1.4). If false, then this method will only return term sets bound to the Web site indicated by the **web** parameter.

Type: **CSOM Boolean**

### 3.1.5.4.2.2.2 GetWebNavigationSettings

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


Returns a cached **WebNavigationSettings** (section 3.1.5.12) object. If the object is not already in the taxonomy navigation cache, it will be added. This method returns null if there are no navigation settings defined for the **Web site**, or if the settings data is not valid (such as a user entering a wrong value for a setting).

**Parameters**:

- **web**: The Web site ([MS-CSOMSPT] section 3.2.5.143) from which to retrieve the navigation settings.
  
  Type: Microsoft.SharePoint.Client.Web

**Remarks**:

Because the object is fetched from the cache, this method is more efficient than explicitly constructing an instance of **WebNavigationSettings**.


**TypeId**: {74B7367A-E303-43E8-891E-DAC764C96E53}

**ShortName**: SP.Publishing.Navigation.NavigationTerm

Specifies navigation behavior and properties for a **term** that is used for **taxonomy navigation**. The **NavigationTerm** class is based on the **Term** class ([MS-EMMCSOM] section 3.1.5.16). **NavigationTerm** inherits from the **NavigationTermSetItem** class (section 3.1.5.8).

**Remarks**:

The properties of the **NavigationTerm** class MAY be stored in **TermSet.CustomProperties** ([MS-EMMCSOM] section 3.1.5.20.1.1.3). However, this protocol intends that the properties be accessed through the **NavigationTerm** class for clarity and efficiency.

Each **NavigationTerm** object belongs to a **NavigationTermSet** object (section 3.1.5.7).

The **NavigationTerm** object has two modes: an "editable" mode that is required in order to make updates to the object, and a "read-only" mode that, when used, improves performance by retrieving the object from the taxonomy navigation cache. The read-only mode is indicated by the **NavigationTermSetItem.IsReadOnly** property (section 3.1.5.8.1.1.4).

If the **NavigationTerm** is read-only and the protocol client attempts to assign any property or call any method that would change the object state, then the protocol server MUST return an **InvalidOperationException** error.

### 3.1.5.5.1 Properties
3.1.5.5.1.1 Scalar Properties

3.1.5.5.1.1.1 AssociatedFolderUrl

**Type:** CSOM String

**Accessibility:** Read/Write

Gets or sets a URL value that is used to associate certain page URLs with this object, associating it with a particular location in the site map provider hierarchy.

**Remarks:**

This property is used to help calculate the current node for a site map provider. The current node indicates a page's location in the navigation hierarchy, for example as displayed by a breadcrumb control "Investor Relations > News > Press Releases". Typically the current node is determined by searching the navigation hierarchy to find a node whose link matches the URL of the page being viewed, for example "/Pages/PressReleases/January2010.aspx". If a current node cannot be found (for example, the January2010.aspx page is not linked by any navigation node), then the breadcrumb would be empty. This problem could be solved by assigning the containing folder "/Pages/PressReleases" to the AssociatedFolderUrl property of the "Press Releases" term; the breadcrumb will now show "Investor Relations > News > Press Releases" for any page in that folder (unless the page is explicitly linked by a navigation node).

3.1.5.5.1.1.2 ExcludeFromCurrentNavigation

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Gets or sets whether this navigation term (and its child terms) will be hidden from the current navigation menu. The current navigation menu (also called the "left nav") is the contextual navigation pane typically on the left side of the page.

3.1.5.5.1.1.3 ExcludeFromGlobalNavigation

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Gets or sets a value that indicates whether this navigation term (and its child terms) will be hidden from the global navigation menu. Global navigation (also called "top nav") is the unchanging menu bar along the top of the page.

3.1.5.5.1.1.4 HoverText

**Type:** CSOM String

**Accessibility:** Read/Write

Gets or sets an informational description that is typically displayed by menu and breadcrumb controls when the cursor hovers over the navigation link.

3.1.5.5.1.1.5 Id

**Type:** CSOM GUID

**Accessibility:** Read Only

3.1.5.5.1.1.6 IsDeprecated
Type: CSOM Boolean
Accessibility: Read Only

Gets a value that indicates whether the underlying term is a deprecated term.

Remarks:
This property returns the underlying Term.IsDeprecated ([MS-EMMCSOM] section 3.1.5.16.1.1.6) property. It is true if the term is deprecated; otherwise, false.

3.1.5.5.1.1.7 LinkType
Accessibility: Read/Write


3.1.5.5.1.1.8 SimpleLinkUrl
Type: CSOM String
Accessibility: Read/Write

Gets or sets a URL that this NavigationTerm (section 3.1.5.5) object links to.

Remarks:
This property is only used when LinkType (section 3.1.5.5.1.1.7) is set to NavigationLinkType.SimpleLink (section 3.1.5.3.1.3). If the protocol client attempts to assign the property for a different link type, then the protocol server MAY return an InvalidOperationException error.

3.1.5.5.1.1.9 TaxonomyName
Type: CSOM String
Accessibility: Read Only


3.1.5.5.1.1.10 IsPinned
Type: CSOM Boolean
Accessibility: Read Only

Gets a value that indicates whether the term is pinned.

Remarks:
Returns true if the term is a **pinned term**; otherwise false. This property returns the `Term.IsPinned` property ([MS-EMMCSOM] section 3.1.5.16.1.1.15) for the underlying term.

### 3.1.5.5.1.1.11  
**IsPinnedRoot**

**Type:** CSOM Boolean  

**Accessibility:** Read Only  

Gets a value that indicates whether the term is the root of a subtree of pinned terms.

**Remarks:**

Returns true if the term is the root of a hierarchy of pinned terms; otherwise, false. This property returns the `Term.IsPinnedRoot` ([MS-EMMCSOM] section 3.1.5.16.1.1.20) property for the underlying term.

### 3.1.5.5.1.1.12  
**IsReadOnly**

**Type:** CSOM Boolean  

**Accessibility:** Read Only  


### 3.1.5.5.1.1.13  
**CategoryImageUrl**

**Type:** CSOM String  

**Accessibility:** Read/Write  

Specifies the URL for an image resource that can be used by controls on the target publishing page. The usage of this property is application-defined.

### 3.1.5.5.1.2  
**ObjectPath Properties**

#### 3.1.5.5.1.2.1  
**CatalogTargetUrl**

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString  

**Accessibility:** Read Only  

Gets the target URL used when performing URL rewriting for catalog friendly URLs based on this term.

**Remarks:**

Normally the protocol server performs URL rewriting to render the friendly URL for a navigation term using the page specified by the `TargetUrl` property (section 3.1.5.5.1.2.5). For example, for the term "Cameras" the URLs might look like this:

- friendly URL: http://example.com/products/cameras  
- target URL: /store/Pages/TopicTemplate.aspx

However, if a **catalog friendly URL suffix** is appended, then the `CatalogTargetUrl` property will be used instead. Continuing the example term "Cameras":

- catalog friendly URL: http://example.com/products/cameras/nice-pix-35mm/sku12345
Typically catalog friendly URLs are used for products such as the hypothetical "Nice Pix 35mm camera" in the preceding example, which do not have a corresponding navigation term, but belong to the category represented by that term. However, the interpretation of the catalog friendly URL suffix is left to the target URL and other usage scenarios are possible.

If the CatalogTargetUrl value is an empty string, then URL rewriting will not be performed for the term and the catalog friendly URL MAY result in an HTTP 404 error.

The protocol server MAY support implementation-specific relative URL syntaxes such as "~site/Pages/TopicTemplate.aspx" or "~sitecollection/Pages/TopicTemplate.aspx".

The CatalogTargetUrl property is a CustomizableString (section 3.1.5.15) object. The default value is inherited from the CatalogTargetUrlForChildTerms.Value (section 3.1.5.5.1.2.2) property of the immediate parent node.

This property is only used when the LinkType (section 3.1.5.5.1.1.7) is NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2). If the protocol client attempts to assign the property for a different link type, then the protocol server MAY return an InvalidOperationException error.

### 3.1.5.5.1.2.2 CatalogTargetUrlForChildTerms

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only


### 3.1.5.5.1.2.3 FriendlyUrlSegment

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only

Gets a friendly URL segment for the node represented by the NavigationTerm (section 3.1.5.5) object.

**Remarks:**

This property is a CustomizableString (section 3.1.5.15) object. The default value can be based on the Term.Name ([MS-EMMCSOM] section 3.1.5.16.1.1.12) property. The value MUST exclude reserved characters as specified in [RFC3986], and the value MUST NOT be percent-encoded as specified in [RFC3986].

This property is only used when the LinkType (section 3.1.5.5.1.1.7) is NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2). If the protocol client attempts to assign the property for a different link type, then the protocol server MAY return an InvalidOperationException error.

### 3.1.5.5.1.2.4 Parent


**Accessibility:** Read Only
Gets the parent **NavigationTerm** (section 3.1.5) object.

**Remarks:**

If this **NavigationTerm** object is a top-level term in the **NavigationTermSet** (section 3.1.7), then null is returned.

### 3.1.5.5.1.2.5 TargetUrl

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only

 Gets the URL of a publishing page that will be used to render the friendly URL.

**Remarks:**

The protocol server performs URL rewriting to render the friendly URL for a navigation term using the page specified by the TargetUrl property. For example, for the term "Cameras" the URLs might look like this:

- friendly URL: http://example.com/products/cameras
- target URL: /store/Pages/TopicTemplate.aspx

The protocol server MAY support implementation-specific relative URL syntaxes such as "~site/Pages/TopicTemplate.aspx" or "~sitecollection/Pages/TopicTemplate.aspx".

The TargetUrl property is a CustomizableString (section 3.1.5.15) object. The default value is inherited from the TargetUrlForChildTerms.Value (section 3.1.5.5.1.2.6) property of the immediate parent node.

This property is only used when the LinkType (section 3.1.5.5.1.1.7) is NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2). If the protocol client attempts to assign the property for a different link type, then the protocol server MAY return an InvalidOperationException error.

### 3.1.5.5.1.2.6 TargetUrlForChildTerms

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only


### 3.1.5.5.1.2.7 Terms


**Accessibility:** Read Only


### 3.1.5.5.1.2.8 TermSet

**Accessibility:** Read Only

Gets the associated `NavigationTermSet` (section 3.1.5.7) object that this `NavigationTerm` (section 3.1.5.5) object belongs to.

### 3.1.5.5.1.2.9 Title

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only


### 3.1.5.5.1.2.10 View


**Accessibility:** Read Only


### 3.1.5.5.1.2.11 ExcludedProviders


**Accessibility:** Read Only

A collection of site map provider names that will exclude this navigation term from their results when `NavigationTermSetView.ExcludeTermsByProvider` (section 3.1.5.9.1.1.3) is true. This collection includes the names corresponding to `NavigationTerm.ExcludeFromGlobalNavigation` (section 3.1.5.5.1.1.3) and `NavigationTerm.ExcludeFromCurrentNavigation` (section 3.1.5.5.1.1.2).

### 3.1.5.5.2 Methods

#### 3.1.5.5.2.1 Scalar Methods

#### 3.1.5.5.2.1.1 DeleteObject

**Return Type:** None

Deletes this `NavigationTerm` (section 3.1.5.5) object and its child objects from the `TermStore` ([MS-EMMCSOM] section 3.1.5.23) object.

**Remarks:**

This operation is equivalent to calling the `Term.DeleteObject` method ([MS-EMMCSOM] section 3.1.5.16.2.1.2) for the underlying term.

**Parameters:** None

**3.1.5.5.2.1.2 GetResolvedAssociatedFolderUrl**

**Return Type:** CSOM String
Uses the **NavigationTerm.View** (section 3.1.5.5.1.2.10) property to calculate and return a resolved server-relative URL from the **NavigationTerm.AssociatedFolderUrl** (section 3.1.5.5.1.1) property.

**Remarks:**

This property returns null if no associated folder URL is specified.

**Parameters:** None

### 3.1.5.5.2.1.3 GetResolvedDisplayUrl

**Return Type:** CSOM String


**Parameters:**

`browserQueryString:` Optional. If it is provided, this query string is used as the query string part of the resulting URL. If this parameter is not null or an empty string, it MUST be prefixed with the ? character.

Type: CSOM String

### 3.1.5.5.2.1.4 GetResolvedTargetUrl

**Return Type:** CSOM String

Uses the **NavigationTerm.View** (section 3.1.5.5.1.2.10) property to calculate and return a resolved server-relative URL from the **NavigationTerm.TargetUrl** (section 3.1.5.5.1.2.5) property.

**Remarks:**

This property is only used when the **LinkType** (section 3.1.5.5.1.1.7) is **NavigationLinkType.FriendlyUrl** (section 3.1.5.3.1.2).

**Parameters:**

`browserQueryString:` A query string that, if specified, is merged into the resulting URL.

Type: CSOM String

`remainingUrlSegments:` Specifies a catalog friendly URL suffix, as an array of URL segments. The segments will be assigned as the value of the "UrlSuffix=” URI query parameter.

Type: CSOM array of CSOM String

If `remainingUrlSegments` is specified, then the **NavigationTerm.CatalogTargetUrl** (section 3.1.5.5.1.2.1) property is used as the basis for the returned URL instead of the **NavigationTerm.TargetUrl** property.

### 3.1.5.5.2.1.5 GetWebRelativeFriendlyUrl

**Return Type:** CSOM String

Returns a friendly URL relative to the Web site in use.

**Remarks:**
This method is intended for advanced operations that need to consider the underlying technical details for how a URL is calculated. A protocol client can also call GetResolvedDisplayUrl (section 3.1.5.5.2.1.3) to obtain a friendly URL. GetWebRelativeFriendlyUrl returns the portion of the friendly URL that SHOULD be appended to the Web.Url ([MS-CSOMSPT] section 3.2.5.143.1.1.22). It does not include any query parameters.

**Parameters:** None

### 3.1.5.5.2.1.6 Move

**Return Type:** None

Moves this NavigationTerm (section 3.1.5.5) object to be a child of the specified NavigationTerm or NavigationTermSet (section 3.1.5.7).

**Parameters:**

- `newParent`: The NavigationTerm or NavigationTermSet that becomes the new parent of this NavigationTerm object.


**Remarks:**

If this NavigationTerm object is editable, then this method performs an operation analogous to Term.Move ([MS-EMMCSOM] section 3.1.5.16.2.1.7).

### 3.1.5.5.2.1.7 GetResolvedTargetUrlWithoutQuery

**Return Type:** CSOM String

This method is similar to NavigationTerm.GetResolvedTargetUrl (section 3.1.5.5.2.1.4) except that the returned URL does not include the query string, and the NavigationTerm.CatalogTargetUrl property (section 3.1.5.5.1.2.1) is not considered. If there is no target URL, or if NavigationTerm.LinkType (section 3.1.5.5.1.7) is not NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2), then the return value is the empty string. This method never returns a null string.

**Parameters:** None

### 3.1.5.5.2.2 ObjectPath Methods

#### 3.1.5.5.2.2.1 CreateTerm


**Parameters:**

- `termName`: Default label for the LCID.

  Type: CSOM String

- `linkType`: LCID to create the label on.


- `termId`: GUID for the term.
Type: **CSOM GUID**

### 3.1.5.5.2.2.2 GetAsEditable


Returns an editable copy of this **NavigationTerm** (section 3.1.5.5) object.

**Remarks:**

After calling this method, the protocol client can update properties on the returned **NavigationTerm** object. Save the changes by calling the **TermStore.CommitAll** ([MS-EMMCSOM] section 3.1.5.23.2.1.1) method.

**Parameters:**

taxonomySession: The container for all of the associated **TermStore** ([MS-EMMCSOM] section 3.1.5.23) objects for a site collection.

Type: Microsoft.SharePoint.Client.Taxonomy.TaxonomySession

This parameter is defined in [MS-EMMCSOM] section 3.1.5.15.

### 3.1.5.5.2.2.3 GetTaxonomyTerm

**Return Type:** Microsoft.SharePoint.Client.Taxonomy.Term

If this **NavigationTerm** (section 3.1.5.5) object is in the "editable" mode, then this method returns the underlying **Term** ([MS-EMMCSOM] section 3.1.5.16) object.

If the protocol client calls this method when the **NavigationTerm** object is read-only, then the protocol server MUST return an **InvalidOperationException** error.

**Parameters:** None

### 3.1.5.5.2.2.4 GetWithNewView


This method returns a **NavigationTerm** (section 3.1.5.5) object that refers to the same underlying term, but replaces its view with the **NavigationTermSetView** (section 3.1.5.9) object specified by `newView`. For example, to enable security trimming while traversing the navigation hierarchy, a `newView` could be provided with **NavigationTermSetView.ExcludeTermsByPermissions** (section 3.1.5.9.1.1.2) changed to true.

**Parameters:**

`newView`: The **NavigationTermSetView** object to apply to the **NavigationTerm** (section 3.1.5.5) object.


### 3.1.5.5.2.2.5 GetAsResolvedByView

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


This method returns a **NavigationTerm** (section 3.1.5.5) object that is editable and bound to the specified term object, using the specified view.
Parameters:

**term**: The Term ([MS-EMMCSOM] section 3.1.5.16) object that the new **NavigationTerm** object will be bound to.
Type: Microsoft.SharePoint.Client.Taxonomy.Term

**view**: The **NavigationTermSetView** (section 3.1.5.9) used to resolve the properties of the new **NavigationTerm** object.

Remarks:

This method supports editing of **NavigationTerm** objects that are not yet in use by a Web site. If a **NavigationTerm** object is in use, then a simpler approach is to call the **GetAsEditable** (section 3.1.5.5.2.2.2) method to obtain a copy of the **NavigationTerm** object that can be edited.

### 3.1.5.5.2.2.6 GetAsResolvedByWeb

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


This method returns a **NavigationTerm** (section 3.1.5.5) object that is editable and bound to the specified **term** object, using a new **NavigationTermSetView** (section 3.1.5.9) instance that is constructed from the provided **web**.

**Parameters**:

**term**: The Term ([MS-EMMCSOM] section 3.1.5.16) object that the new **NavigationTerm** object will be bound to.
Type: Microsoft.SharePoint.Client.Taxonomy.Term

**web**: The **Web site** ([MS-CSOMSPT] section 3.2.5.143) that will be used to construct the **NavigationTermSetView** (section 3.1.5.9) object.
Type: Microsoft.SharePoint.Client.Web

**siteMapProviderName**: The name of the **site map provider** to be used for the new **NavigationTerm** object.
Type: CSOM String

This method supports editing of **NavigationTerm** objects that are not yet in use by a Web site. If a **NavigationTerm** object is in use, then the preferred approach is to call the **GetAsEditable** (section 3.1.5.5.2.2.2) method to obtain a copy of the **NavigationTerm** object that can be edited.

### 3.1.5.5.2.2.7 GetTaxonomyTermStore

**Return Type**: Microsoft.SharePoint.Client.Taxonomy.TermStore


**Parameters**: None

### 3.1.5.5.2.2.8 GetAllParentTerms

Returns the NavigationTerm.Parent (section 3.1.5.5.1.2.4) object and all of its parents. If there is no parent, then the collection will be empty.

**Parameters:** None


**TypeId:** {E651F3AF-BF88-44BA-8208-798EBF7D4F1F}

**ShortName:** SP.Publishing.Navigation.NavigationTermCollection

Represents a collection of NavigationTerm (section 3.1.5) objects.

### 3.1.5.6.1 Properties

#### 3.1.5.6.1.1 Scalar Properties

None.

#### 3.1.5.6.1.2 ObjectPath Properties

None.

### 3.1.5.6.2 Methods

#### 3.1.5.6.2.1 Scalar Methods

None.

#### 3.1.5.6.2.2 ObjectPath Methods

None.


**TypeId:** {5ED5AE4C-8E92-4E56-AF6E-D349611614D8}

**ShortName:** SP.Publishing.Navigation.NavigationTermSet

Specifies navigation behavior and properties for a term set that is used for taxonomy navigation. The NavigationTermSet class is based on the TermSet class ([MS-EMMCSOM] section 3.1.5.20). NavigationTermSet inherits from the NavigationTermSetItem class (section 3.1.5.8).

**Remarks:**

The properties of the NavigationTermSet class MAY be stored in TermSet.CustomProperties ([MS-EMMCSOM] section 3.1.5.20.1.1.3). However, this protocol intends that the properties be accessed through the NavigationTermSet class for clarity and efficiency.

The NavigationTermSet object has two modes: an "editable" mode that is required in order to make updates to the object, and a "read-only" mode that, when used, improves performance by retrieving the object from the taxonomy navigation cache. The read-only mode is indicated by the NavigationTermSetItem.IsReadOnly property (section 3.1.5.8.1.1.4). Use the GetAsEditable (section 3.1.5.7.2.2.4) method to obtain an editable instance.
If the `NavigationTermSet` is read-only and the protocol client attempts to assign any property or call any method that would change the object state, then the protocol server MUST return an `InvalidOperationException` error.

### 3.1.5.7.1 Properties

#### 3.1.5.7.1.1 Scalar Properties

##### 3.1.5.7.1.1.1 Id

**Type:** CSOM GUID  
**Accessibility:** Read Only


##### 3.1.5.7.1.1.2 IsNavigationTermSet

**Type:** CSOM Boolean  
**Accessibility:** Read/Write

Gets or sets a value that indicates whether the underlying term set is intended to be used for taxonomy navigation.

**Remarks:**

True if the term set is intended to be used for taxonomy navigation; otherwise, false. This property is used by to affect the appearance of the term set in administrative screens. A value of true does not guarantee that the term set is currently in use by any taxonomy site map provider, nor does a value of false guarantee that the term set is not in use.

##### 3.1.5.7.1.1.3 Lcid

**Type:** CSOM Int32  
**Accessibility:** Read Only

Gets the language code identifier (LCID) that is used when accessing properties on the `NavigationTermSet` (section 3.1.5.7) object that have multiple representations based on language or culture.

##### 3.1.5.7.1.1.4 LinkType

**Accessibility:** Read/Write


##### 3.1.5.7.1.1.5 TaxonomyName

**Type:** CSOM String  
**Accessibility:** Read Only
See
specified in section 3.1.5.8.1.1.3.

3.1.5.7.1.1.6 TermGroupId
Type: CSOM GUID
Accessibility: Read Only
Gets the underlying TermGroupId ([MS-EMMCSOM] section 3.1.5.18.1.1.3) value.

3.1.5.7.1.1.7 TermStoreId
Type: CSOM GUID
Accessibility: Read Only
Gets the underlying TermStore.Id ([MS-EMMCSOM] section 3.1.5.23.1.1.2) value.

3.1.5.7.1.1.8 IsReadOnly
Type: CSOM Boolean
Accessibility: Read Only
specified in section 3.1.5.8.1.1.4.

3.1.5.7.1.1.9 LoadedFromPersistedData
Type: CSOM Boolean
Accessibility: Read Only
Indicates whether the term set was loaded from persisted storage, rather than obtained from the
taxonomy service. If true, this indicates that the contents of the NavigationTermSet might be
outdated, and cannot be relied upon for security purposes.

3.1.5.7.1.2 ObjectPath Properties

3.1.5.7.1.2.1 CatalogTargetUrlForChildTerms
Accessibility: Read Only
See
ForChildTerms, specified in section 3.1.5.8.1.2.1.

3.1.5.7.1.2.2 TargetUrlForChildTerms
Accessibility: Read Only

### 3.1.5.7.1.2.3 Terms


**Accessibility:** Read Only


### 3.1.5.7.1.2.4 Title

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only


### 3.1.5.7.1.2.5 View


**Accessibility:** Read Only


### 3.1.5.7.2 Methods

#### 3.1.5.7.2.1 Scalar Methods

#### 3.1.5.7.2.1.1 GetResolvedDisplayUrl

**Return Type:** CSOM String


**Parameters:**

- `browserQueryString`: Optional. If it is provided, this query string is used as the query string part of the resulting URL. If this parameter is not `null` or an empty string, it MUST be prefixed with the `?` character.

  **Type:** CSOM String

#### 3.1.5.7.2.2 ObjectPath Methods

#### 3.1.5.7.2.2.1 CreateTerm


Parameters:

termName: Default label for the LCID.
Type: CSOM String

linkType: LCID to create the label on.
termId: GUID for the term.
Type: CSOM GUID

3.1.5.7.2.2.2 FindTermForUrl


This method is used for example by breadcrumb controls to determine the location of the current page in the navigation hierarchy. It searches all child NavigationTerm objects for a navigation node whose hyperlink URL matches the specified URL. The matching algorithm used by the protocol server is implementation-defined, and MAY ignore certain query parameters or character casing/encoding differences, and MAY normalize relative URL syntaxes (for example "/Pages/Example.aspx" or "~site/Pages/Example.aspx"), but MUST honor the NavigationTerm.AssociatedFolderUrl property (section 3.1.5.5.1.1). If a match is not found, then null is returned.

Parameters:

url: The URL to search for.
Type: CSOM String

3.1.5.7.2.2.3 GetAllTerms


Returns a collection of the complete tree of child NavigationTerm (section 3.1.5.5) objects in the NavigationTermSet (section 3.1.5.7).

Parameters: None

3.1.5.7.2.2.4 GetAsEditable


Returns an editable copy of the NavigationTermSet (section 3.1.5.7) object.

Parameters:

taxonomySession: A TaxonomySession ([MS-EMMCSOM] section 3.1.5.15) object that is used to help construct the editable underlying Term object ([MS-EMMCSOM] section 3.1.5.16).
Type: Microsoft.SharePoint.Client.Taxonomy.TaxonomySession

3.1.5.7.2.2.5 GetTaxonomyTermSet

Return Type: Microsoft.SharePoint.Client.Taxonomy.TermSet

Returns the underlying TermSet ([MS-EMMCSOM] section 3.1.5.20) object.

Remarks:
If the **NavigationTermSet** (section 3.1.5.7) object is in the "editable" mode, then this method returns the underlying **TermSet** object. If the protocol client calls this method when the **NavigationTerm** object is read-only, then the protocol server MUST return an **InvalidOperationException** error.

**Parameters:** None

### 3.1.5.7.2.2.6 GetWithNewView


Returns a **NavigationTermSet** (section 3.1.5.7) object that will reflect the **NavigationTermSetView** (section 3.1.5.9) object specified by `newView`.

**Parameters:**

`newView`: The **NavigationTermSetView** object to apply to the **NavigationTermSet** (section 3.1.5.7) object.


### 3.1.5.7.2.2.7 GetAsResolvedByView

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


Creates and returns a **NavigationTermSet** (section 3.1.5.7) object that can be edited.

**Parameters:**

`termSet`: The **TermSet** ([MS-EMMCSOM] section 3.1.5.20) object that the new **NavigationTermSet** object will be bound to.

Type: `Microsoft.SharePoint.Client.Taxonomy.TermSet`

`view`: The **NavigationTermSetView** (section 3.1.5.9) used to resolve the properties of the new **NavigationTermSet** object.


**Remarks:**

This method supports editing of **NavigationTermSet** objects that are not yet in use by a **Web site**. If a **NavigationTermSet** object is in use, then a simpler approach is to call the **GetAsEditable** (section 3.1.5.7.2.2.4) method to obtain a copy of the **NavigationTermSet** object that can be edited.

### 3.1.5.7.2.2.8 GetAsResolvedByWeb

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


Creates and returns a **NavigationTermSet** (section 3.1.5.7) object that can be edited.

**Parameters:**

`termSet`: The **TermSet** ([MS-EMMCSOM] section 3.1.5.20) object that the new **NavigationTermSet** object will be bound to.

Type: `Microsoft.SharePoint.Client.Taxonomy.TermSet`
web: The Web site ([MS-CSOMSPT] section 3.2.5.143) that is a context for URLs for the new NavigationTermSet object.

Type: Microsoft.SharePoint.Client.Web

siteMapProviderName: The name of the site map provider to be used for the new NavigationTermSet object.

Type: CSOM String

Remarks:

This method supports editing of NavigationTermSet objects that are not yet in use by a Web site. If a NavigationTermSet object is in use, then the preferred approach is to call the GetAsEditable (section 3.1.5.7.2.2.4) method to obtain a copy of the NavigationTermSet object that can be edited.

3.1.5.7.2.2.9 GetTaxonomyTermStore

Return Type: Microsoft.SharePoint.Client.Taxonomy.TermStore


Parameters: None


TypeId: {F99351D7-E3F3-4185-A0CA-D0426FF83FDE}


The NavigationTermSetItem class is an abstract base class for the NavigationTermSet (section 3.1.5.7) and NavigationTerm (section 3.1.5.8) classes.

Remarks:

The NavigationTermSetItem class is analogous to the TermSetItem ([MS-EMMCSOM] section 3.1.5.22) class.

The NavigationTerm and NavigationTermSet objects have two modes: an "editable" mode that is required in order to make updates to the object, and a "read-only" mode that, when used, improves performance by retrieving the object from the taxonomy navigation cache. The read-only mode is indicated by the NavigationTermSetItem.IsReadOnly property (section 3.1.5.8.1.1.4).

If the NavigationTermSetItem is read-only and the protocol client attempts to assign any property or call any method that would change the object state, then the protocol server MUST return an InvalidOperationException error.

3.1.5.8.1 Properties

3.1.5.8.1.1 Scalar Properties

3.1.5.8.1.1.1 Id

Type: CSOM GUID

Accessibility: Read Only
Gets the underlying `Term.Id` ([MS-EMMCSOM] section 3.1.5.16.1.1.4) or `TermSet.Id` ([MS-EMMCSOM] section 3.1.5.20.1.1.6) property.

### 3.1.5.8.1.1.2 LinkType


**Accessibility:** Read/Write

Gets or sets a value that indicates what kind of link is used by the navigation node that the taxonomy site map provider creates for a NavigationTerm. For a NavigationTermSet (section 3.1.5.7) object, the value is always `NavigationLinkType.Root` (section 3.1.5.3.1.1).

**Remarks:**

The link type is specified by the `NavigationLinkType` (section 3.1.5.3) enumeration. The link type also determines whether the protocol server will use URL rewriting to implement a friendly URL or catalog friendly URL for a NavigationTerm. The URL rewriting is implementation-specific.

### 3.1.5.8.1.1.3 TaxonomyName

**Type:** CSOM String

**Accessibility:** Read Only

Gets the underlying `Term.Name` ([MS-EMMCSOM] section 3.1.5.16.1.1.12) or `TermSet.Name` ([MS-EMMCSOM] section 3.1.5.20.1.1.10) property.

### 3.1.5.8.1.1.4 IsReadOnly

**Type:** CSOM Boolean

**Accessibility:** Read Only

This returns true if the object is in "read-only" mode; otherwise it is in "editable" mode. See the NavigationTermSetItem documentation (section 3.1.5.8) for a discussion of these two modes.

### 3.1.5.8.1.2 ObjectPath Properties

#### 3.1.5.8.1.2.1 CatalogTargetUrlForChildTerms

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString

**Accessibility:** Read Only

Gets the default value of the `CatalogTargetUrl` property for child NavigationTerm (section 3.1.5) objects.

**Remarks:**

This property does not affect the current node.

This property is a `CustomizableString` (section 3.1.5.15) object. The default value is inherited from the `CatalogTargetUrlForChildTerms.Value` (section 3.1.5.5.1.2.2) property of the immediate parent node. In the case of a NavigationTermSet (section 3.1.5.7) object, the default value is an empty string.

#### 3.1.5.8.1.2.2 TargetUrlForChildTerms

**Type:** Microsoft.SharePoint.Client.Publishing.CustomizableString
Accessibility: Read Only

Gets the default value that is to be used for the TargetUrl (section 3.1.5.5.1.2.5) property on child NavigationTerm (section 3.1.5.5) objects.

Remarks:

This property does not affect the current node.

This property is a CustomizableString (section 3.1.5.15) object. The default value is inherited from the TargetUrlForChildTerms.Value (section 3.1.5.5.1.2.6) property of the immediate parent node. In the case of a NavigationTermSet (section 3.1.5.7) object, the default value is an empty string.

3.1.5.8.1.2.3 Terms


Accessibility: Read Only

Gets a collection of all immediate child NavigationTerm (section 3.1.5.5) objects of this NavigationTerm or NavigationTermSet (section 3.1.5.7) object.

Remarks:

The Terms collection excludes certain objects according to the trimming specified by the associated NavigationTerm.View (section 3.1.5.5.1.2.10). For example, if NavigationTermSetView.ExcludeDeprecatedTerms (section 3.1.5.9.1.1.1) is true, then objects will be trimmed (that is, excluded) from the collection if their NavigationTerm.IsDeprecated property (section 3.1.5.5.1.6) is true.

3.1.5.8.1.2.4 Title


Accessibility: Read Only

Gets the title that menus and breadcrumbs will display for the navigation node.

Remarks:

This property is a CustomizableString (section 3.1.5.15) object. For a NavigationTerm object, the default value MUST be the Term.Name ([MS-EMMCSOM] section 3.1.5.16.1.1.12) property for the underlying term. For a NavigationTermSet object, this property SHOULD be the same as the Web site title, as indicated by the NavigationTermSetView.WebTitle property (section 3.1.5.9.1.1.8) for the current view.

3.1.5.8.1.2.5 View


Accessibility: Read Only

Gets the NavigationTermSetView (section 3.1.5.9) object that is used to calculate certain properties for this NavigationTerm.

3.1.5.8.2 Methods

3.1.5.8.2.1 Scalar Methods

3.1.5.8.2.1.1 GetResolvedDisplayUrl
Return Type: CSOM String

Returns the server-relative URL that is displayed for this NavigationTermSet (section 3.1.5.7) or NavigationTerm (section 3.1.5.5) object.

Parameters:

browserQueryString: A query string that, if specified, is included in the resolved URL.

Remarks:

The URL MAY be resolved by expanding any implementation-specific tokens such as "~sitecollection/". If the browserQueryString parameter is provided, it is used as the query string part of the resulting URL.

The URL is derived differently depending on the NavigationLinkType (section 3.1.5.3) value. If the term is of type NavigationLinkType.SimpleLink (section 3.1.5.3.1.3) then the NavigationTerm.SimpleLinkUrl (section 3.1.5.5.1.1.8) property MUST be returned. If the term is of type NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2), then the friendly URL MUST be returned. If a valid URL is not specified, then the protocol server MUST return null.

3.1.5.8.2.2 ObjectPath Methods

3.1.5.8.2.2.1 CreateTerm


Creates a new NavigationTerm (section 3.1.5.5) object with the specified termName for the Term.Name property ([MS-EMMCSOM] section 3.1.5.16.1.1.12). This operation is similar to TermSetItem.CreateTerm method ([MS-EMMCSOM] section 3.1.5.22.2.2.1), but with two important differences:

1. If the Terms collection ([MS-EMMCSOM] section 3.1.5.22.1.2.1) already contains a sibling term whose Term.Name property would conflict with termName, then the protocol server MUST generate a unique name. For example, if the name "St. Louis" is already in use, the termName could be changed to "St. Louis (2)". The method for generating the unique value is implementation-specific and MAY depend on the active language code identifier (LCID).

2. If the linkType is NavigationLinkType.FriendlyUrl (section 3.1.5.3.1.2), and if the Terms collection already contains a sibling term whose NavigationTerm.FriendlyUrlSegment (section 3.1.5.5.1.2.3) would conflict with the default FriendlyUrlSegment for the newly created term, then the protocol server MUST generate a unique segment and assign it as the custom value for the CustomizableString object (section 3.1.5.15). For example, suppose termName is "St. Louis" but there is already a friendly URL "http://example.com/locations/st-louis". In this case, the newly created term's URL segment could be assigned as "st-louis-2" instead of "st-louis". The method for generating the unique value is implementation-specific and MAY depend on the active language code identifier (LCID).

Parameters:

termName: The name for the new NavigationTerm object. The name to be stored in the NavigationTerm.TaxonomyName (section 3.1.5.5.1.1.9) property.

Type: CSOM String

linkType: The type of link for the new NavigationTerm object as specified by the NavigationLinktype (section 3.1.5.3) enumeration.

termId: A unique identifier for the new NavigationTerm object.

Type: CSOM GUID

Remarks:

The new NavigationTerm will be a child of this object.

3.1.5.8.2.2.2 GetTaxonomyTermStore

Return Type: Microsoft.SharePoint.Client.Taxonomy.TermStore

Returns the underlying TermStore ([MS-EMMCSOM] section 3.1.5.23) object.

Remarks:

If the NavigationTermSet (section 3.1.5.7) object is in the "editable" mode, then this method returns the underlying TermStore object. If the protocol client calls this method when the NavigationTermSet object is read-only, then the protocol server MUST return an InvalidOperationException error.

Parameters: None


TypeId: {097234E9-47DA-431F-BD12-173C296B187B}


The NavigationTermSetView class stores contextual information (for example the active Web site, site map provider, and policy for trimming child nodes) that affects the calculation of certain properties for the NavigationTerm (section 3.1.5.5) objects in a NavigationTermSet (section 3.1.5.7).

Remarks:

Resolving URLs depends on which Web site is in use. For example, the NavigationTerm.GetResolvedDisplayUrl (section 3.1.5.5.2.1.3) method resolves a relative URL differently when the TermSet ([MS-EMMCSOM] section 3.1.5.20) object is attached to a different Web site.

To minimize the size of NavigationTermSet objects in the taxonomy navigation cache, this additional contextual information is separated into the NavigationTermSetView class. This allows the protocol server to return different cached views of the NavigationTermSet without making expensive copies of the internal tree structure. The protocol client can call NavigationTermSet.GetWithNewView (section 3.1.5.7.2.2.6) to switch between views.

3.1.5.9.1 Properties

3.1.5.9.1.1 Scalar Properties

3.1.5.9.1.1.1 ExcludeDeprecatedTerms

Type: CSOM Boolean

Accessibility: Read/Write
Gets or sets a value that indicates whether `NavigationTerm` (section 3.1.5.5) objects are trimmed if the underlying term is a deprecated term.

**Remarks:**

When traversing a tree of `NavigationTerm` objects, if this property is true the objects MUST be excluded from the `NavigationTermSetItem.Terms` collection (section 3.1.5.8.1.2.3) whenever the `NavigationTerm.IsDeprecated` property is true (section 3.1.5.1.1.6).

### 3.1.5.9.1.1.2 ExcludeTermsByPermissions

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Gets or sets a value that indicates whether `NavigationTerm` (section 3.1.5.5) objects are trimmed if the current user does not have permission to view the linked URL.

**Remarks:**

When traversing a tree of `NavigationTerm` objects, if this property is true then objects MUST be excluded from the `NavigationTermSetItem.Terms` collection (section 3.1.5.8.1.2.3) whenever the current user does not have permissions to view the page referenced by `NavigationTerm.GetResolvedTargetUrl` (section 3.1.5.5.2.1.4). This property only applies to publishing pages within the current Web site.

### 3.1.5.9.1.1.3 ExcludeTermsByProvider

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Gets or sets a value that indicates whether `NavigationTerm` (section 3.1.5.5) objects are trimmed according to the active site map provider.

**Remarks:**

When traversing a tree of `NavigationTerm` objects, if this property is true then objects MUST be excluded from the `NavigationTermSetItem.Terms` collection (section 3.1.5.8.1.2.3) whenever the term is marked as hidden for the site map provider indicated by the `NavigationTermSetView.SiteMapProviderName` property (section 3.1.5.9.1.1.6). To mark a term as hidden, use the properties `NavigationTerm.ExcludeFromGlobalNavigation` (section 3.1.5.5.1.1.3) and `NavigationTerm.ExcludeFromCurrentNavigation` (section 3.1.5.5.1.1.2).

### 3.1.5.9.1.1.4 ServerRelativeSiteUrl

**Type:** CSOM String

**Accessibility:** Read Only

Returns the server-relative URL for the site collection associated with this view.

**Remarks:**

For example, this property MAY be used by the `NavigationTerm.GetResolvedTargetUrl` method (section 3.1.5.5.2.1.4) to resolve an implementation-defined relative URL syntax. For example, if the `ServerRelativeSiteUrl` is "/sites/spsite", then the protocol server could resolve "~/sitecollection/Pages/Example.aspx" as "/sites/spsite/Pages/Example.aspx". This property's value can also be an empty string.
3.1.5.9.1.1.5 ServerRelativeWebUrl

**Type:** CSOM String

**Accessibility:** Read Only

Returns the server-relative URL for the Web site associated with this view.

**Remarks:**

For example, this property MAY be used by the NavigationTerm.GetResolvedTargetUrl method (section 3.1.5.2.1.4) to resolve an implementation-defined relative URL syntax. For example, if the ServerRelativeWebUrl is "/sites/spsite/spweb", then the protocol server could resolve "~/site/Pages/Example.aspx" as "/sites/spsite/spweb/Pages/Example.aspx".

This property’s value can also be an empty string.

3.1.5.9.1.1.6 SiteMapProviderName

**Type:** CSOM String

**Accessibility:** Read/Write

Gets or sets the name used to refer to the site map provider to be used for trimming NavigationTerm (section 3.1.5.5) objects.

**Remarks:**

This property is used to trim child navigation nodes when ExcludeTermsByProvider (section 3.1.5.9.1.1.3) is true. It is valid to assign an empty string to SiteMapProviderName; in this case, no trimming is performed for the current view.

3.1.5.9.1.1.7 WebId

**Type:** CSOM GUID

**Accessibility:** Read Only

Gets the unique identifier of the Web site associated with this view.

3.1.5.9.1.1.8 WebTitle

**Type:** CSOM String

**Accessibility:** Read Only

Gets the title of the Web site associated with this view.

**Remarks:**

This property is used as the NavigationTermSetItem.Title property (section 3.1.5.8.1.2.4) for the NavigationTermSet (section 3.1.5.7) object that is the root of the navigation hierarchy.

This property’s value can also be an empty string.

3.1.5.9.1.2 ObjectPath Properties

None.

3.1.5.9.2 Methods
3.1.5.9.2.1 Scalar Methods
None.

3.1.5.9.2.2 ObjectPath Methods

3.1.5.9.2.2.1 CreateEmptyInstance
This method is a static CSOM method.


Creates and returns a new instance of the NavigationTermSetView (section 3.1.5.9) class. The WebId property (section 3.1.5.9.1.1.7) will be assigned the empty GUID, the string typed properties will be assigned as empty strings, and the Boolean typed properties will be initialized to false.

**Parameters:** None

3.1.5.9.2.2.2 GetCopy


Returns a copy of this NavigationTermSetView (section 3.1.5) object.

**Parameters:** None

3.1.5.9.2.2.3 CSOM Constructor

Creates a new instance of the NavigationTermSetView class and initializes its properties. The Boolean typed properties will be initialized to false, and the other properties will be assigned according to the web and siteMapProviderName parameters.

**Parameters:**
- **web:** The Web site ([MS-CSOMSPT] section 3.2.5.143) whose data will be used to initialize the NavigationTermSetView properties.
  Type: Microsoft.SharePoint.Client.Web
- **siteMapProviderName:** The site map provider name to be assigned to the SiteMapProviderName property (section 3.1.5.9.1.1.6).
  Type: CSOM String


**TypeId:** {5EBDD423-1350-43F9-AD8C-CBE0887C7C42}

**ShortName:** SP.Publishing.Navigation.StandardNavigationSettings

The StandardNavigationSettings class is used to manage the standard navigation schemes (global navigation and current navigation) for a site collection.

**Remarks:**

The protocol server's administrative user interface presents a simplified perspective with two standard schemes: global navigation and current navigation. Each standard scheme can be configured for only one of three navigation sources: taxonomy site map provider, portal site map provider, or...
inherit from parent site. These configurations correspond to predefined configurations of the underlying providers, that is, binding a specific switchable site map provider to a specific taxonomy site map provider and assigning the navigation term set. Other "nonstandard" configurations are possible by configuring the providers individually.

3.1.5.10.1 Properties

3.1.5.10.1.1 Scalar Properties

3.1.5.10.1.1.1 Source


Accessibility: Read/Write

Gets or sets the navigation source for the site collection.

Remarks:

This property determines whether the switchable site map provider will use the taxonomy site map provider or the portal site map provider in the standard configurations. If the settings are in an advanced configuration, then this property returns StandardNavigationSource.Unknown (section 3.1.5.11.1.1). If the protocol client attempts to assign the StandardNavigationSource.Unknown value to this property, the protocol server MUST return an InvalidOperationException error.

3.1.5.10.1.1.2 TermSetId

Type: CSOM GUID

Accessibility: Read/Write

Gets or sets a unique identifier for the TermSet ([MS-EMMCSOM] section 3.1.5.20) object used by the taxonomy site map provider.

Remarks:

This property is ignored unless StandardNavigationSource.TaxonomyProvider (section 3.1.5.11.1.3) is selected.

3.1.5.10.1.1.3 TermStoreId

Type: CSOM GUID

Accessibility: Read/Write

Gets or sets a unique identifier for the TermStore ([MS-EMMCSOM] section 3.1.5.23) object used by the taxonomy site map provider.

Remarks:

This property is ignored unless StandardNavigationSource.TaxonomyProvider (section 3.1.5.11.1.3) is selected.

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

None.


Flag: false

StandardNavigationSource is an enumeration that specifies the three configuration choices for the standard navigation schemes (global navigation and current navigation).

Remarks:
See the StandardNavigationSettings class (section 3.1.5.10) for more information about the standard navigation schemes.

3.1.5.11.1 Field Values

3.1.5.11.1.1 Unknown

Value: 0
Indicates that the navigation scheme is in an advanced configuration that does not correspond to one of the standard configurations.

3.1.5.11.1.2 PortalProvider

Value: 1
Indicates that the navigation scheme is configured so that the switchable site map provider is pointing to the portal site map provider, and the taxonomy site map provider is disabled so that the protocol server will not process its friendly URLs.

3.1.5.11.1.3 TaxonomyProvider

Value: 2
Indicates that the navigation scheme is configured so that the switchable site map provider is pointing to the taxonomy site map provider.

3.1.5.11.1.4 InheritFromParentWeb

Value: 3
Indicates that the navigation scheme is inheriting its settings from the parent site. If this value is used, then the switchable site map provider, portal site map provider, and taxonomy site map provider are all configured to inherit their settings from the parent site.

TypeId: {00AC02AA-86E2-4D48-AA73-341ED7962374}


The WebNavigationSettings class manages navigation settings for a Web site.

3.1.5.12.1  Properties

3.1.5.12.1.1  Scalar Properties

3.1.5.12.1.1.1  AddNewPagesToNavigation

Type: CSOM Boolean

Accessibility: Read/Write

Gets or sets a value that indicates whether clicking the New Page button will automatically create a NavigationTerm (section 3.1.5.5) in the term set for the active taxonomy site map provider.

Remarks:

True if new pages will automatically create a NavigationTerm (section 3.1.5.5); otherwise, false.

3.1.5.12.1.1.2  CreateFriendlyUrlsForNewPages

Type: CSOM Boolean

Accessibility: Read/Write

Gets or sets a value that indicates whether clicking the New Page button will automatically create a friendly URL for the newly created page.

Remarks:

True if new pages will automatically create a friendly URL; otherwise, false.

3.1.5.12.1.2  ObjectPath Properties

3.1.5.12.1.2.1  CurrentNavigation


Accessibility: Read Only

Returns an object that manages the settings for "current navigation", one of the two standard navigation schemes. See the StandardNavigationSettings class (section 3.1.5.10) for more information about the standard navigation schemes.

Remarks:

The protocol server MUST NOT return null.

It MUST NOT be NULL.

3.1.5.12.1.2.2  GlobalNavigation

Accessibility: Read Only

Returns an object that manages the settings for "global navigation", one of the two standard navigation schemes. See the StandardNavigationSettings class (section 3.1.5.10) for more information about the standard navigation schemes.

Remarks:
The protocol server MUST NOT return null.
It MUST NOT be NULL.

3.1.5.12.2  Methods

3.1.5.12.2.1  Scalar Methods

3.1.5.12.2.1.1  Update

Return Type: None

Writes the new settings to the Web site that was passed to the constructor (section 3.1.5.12.2.2.1).

Remarks:
This method also checks whether the navigation term set is being changed for any taxonomy site map providers. If so, changes MAY be written to both the old term set and the new term set to indicate whether they are attached to (that is, in use by) this Web site.

Parameters:
taxonomySession: The TaxonomySession ([MS-EMMCSOM] section 3.1.5.15) object to use to make the update.
Type: Microsoft.SharePoint.Client.Taxonomy.TaxonomySession

3.1.5.12.2.1.2  ResetToDefaults

Return Type: None

This operation resets the WebNavigationSettings object to the default state that the protocol server would use for a newly created Web site. This default state MAY depend on whether the Web site is located at the root of its site collection, for example because the StandardNavigationSource.InheritFromParentWeb setting (section 3.1.5.11.1.4) is not applicable there.

Parameters: None

3.1.5.12.2.2  ObjectPath Methods

3.1.5.12.2.2.1  CSOM Constructor

Creates a new instance of the WebNavigationSettings class that will be used to access the settings for the specified Web site.

Parameters:
web: The Web site ([MS-CSOMSPT] section 3.2.5.143) whose settings will be accessed.
Type: Microsoft.SharePoint.Client.Web
3.1.5.13  **Microsoft.SharePoint.Client.Publishing.AddinPlugin**

**TypeId:** `{698097B9-BBE7-4C07-A37B-23E2F07BC9A4}`

**ShortName:** SP.Publishing.AddinPlugin

Class that represents the settings of a social plugin. A social plug-in contains HTML/JavaScript that will be rendered/executed on pages where the social plug-in is inserted. All social plug-ins are available in the "Social Plug-ins" WebPart category.

### 3.1.5.13.1  Properties

#### 3.1.5.13.1.1  Scalar Properties

##### 3.1.5.13.1.1.1  Description

**Type:** CSOM String  
**Accessibility:** Read/Write

Gets or sets the value of the *Description* property of the social plug-in.

##### 3.1.5.13.1.1.2  Markup

**Type:** CSOM String  
**Accessibility:** Read/Write

Gets or sets the value of the *Markup* property which is the HTML/JavaScript codes contained in the social plug-in and will be rendered/executed when inserting the plug-in onto a page.

##### 3.1.5.13.1.1.3  Title

**Type:** CSOM String  
**Accessibility:** Read/Write

Gets or sets the value of the *Title* property of the social plug-in.

The *Title* property is used as the identifier for setting and updating a social plug-in.

#### 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 instance of the *AddinPlugin* class that represents the settings of a social plugin.

**Parameters:** None

TypeId: {7BC23BC0-CB63-4523-B967-A910C8B43668}

ShortName: SP.Publishing.AddinSettings

Class that represents the settings of a site services add-in.

The site services addin can be used to inject HTML/JavaScript on different locations on a page. The site services add-in will be applied on every site page in the site collection.

3.1.5.14.1    Properties

3.1.5.14.1.1    Scalar Properties

3.1.5.14.1.1.1    Description

Type: CSOM String

Accessibility: Read/Write

Gets or sets the Description property of a site services add-in.

3.1.5.14.1.1.2    Enabled

Type: CSOM Boolean

Accessibility: Read/Write

Gets or sets the Enabled property that indicates whether a site services add-in is enabled.

3.1.5.14.1.1.3    HeadScript

Type: CSOM String

Accessibility: Read/Write

Gets or sets the HeadScript property which is the HTML and JavaScript that will be inserted within the <header> tag on every page in the site collection.

3.1.5.14.1.1.4    HtmlEndBody

Type: CSOM String

Accessibility: Read/Write

Gets or sets the HtmlEndBody property which is HTML and JavaScript that will be inserted at the end of the <body> tag on every page in the site collection.

3.1.5.14.1.1.5    HtmlStartBody

Type: CSOM String

Accessibility: Read/Write

Gets or sets the HtmlStartBody property which is HTML and JavaScript that will be inserted at the start of the <body> tag on every page in the site collection.

3.1.5.14.1.1.6    Id
Type: **CSOM GUID**  

**Accessibility:** Read Only  

Gets or sets the **Id** property of the site services add-in.  

The **Id** property is the unique identifier used for getting, setting, and deleting site services add-ins.

### 3.1.5.14.1.1.7 MetaTagPagePropertyMappings  

**Type:** **CSOM dictionary**  

**Accessibility:** Read/Write

Gets or sets the **MetaTagPagePropertyMappings** property. The **MetaTagPagePropertyMappings** property is a dictionary that stores the meta tag and page property mappings. Mappings will be generated and inserted into `<meta>` tags which are located right after the `<header>` tag on every page in the site collection.

For example, the key value pair `{"tag:newTag", "Title"}` in the **MetaTagPagePropertyMappings** property will add the meta tag `<meta property="tag:newTag" content="[Value]"/>` after the `<header>` tag. "Title" in `{"tag:newTag", "Title"}` refers to the name of the page property. `[Value]` will be replaced with the value of the page property called "Title".

### 3.1.5.14.1.1.8 Namespace  

**Type:** **CSOM String**  

**Accessibility:** Read/Write

Gets or sets the **Namespace** property that will add its content inside the `<html>` tag on every page in the site collection.

### 3.1.5.14.1.1.9 Title  

**Type:** **CSOM String**  

**Accessibility:** Read/Write

Title of the site services addin.

### 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 instance of the **AddinSettings** class that represents the settings of a site services add-in.

**Parameters:**
**id**: The **Id** property (section 3.1.5.14.1.1.6) of the new **AddinSettings** (section 3.1.5.14).

**Type**: **CSOM GUID**

### 3.1.5.15 Microsoft.SharePoint.Client.Publishing.CustomizableString

**Type Id**: `{13EBB0D0-559A-4248-BA69-C57D5FABF4C4}`

**Short Name**: SP.Publishing.CustomizableString

This is a helper class used by the **NavigationTerm** (section 3.1.5.5) class to represent properties that are string types, and that have a default value that can be optionally overridden by a custom value.

#### 3.1.5.15.1 Properties

##### 3.1.5.15.1.1 Scalar Properties

#### 3.1.5.15.1.1.1 DefaultValue

**Type**: **CSOM String**

**Accessibility**: Read Only

Gets the default value for the property, as described in the documentation for the various instances of the **CustomizableString** object (section 3.1.5.15).

**Remarks**:

The protocol server MUST NOT return null for this property. The protocol server can return an **empty string** as a valid value.

#### 3.1.5.15.1.1.2 UsesDefaultValue

**Type**: **CSOM Boolean**

**Accessibility**: Read/Write

Gets or sets whether the **CustomizableString** object (section 3.1.5.15) uses the default value.

#### 3.1.5.15.1.1.3 Value

**Type**: **CSOM String**

**Accessibility**: Read/Write

Gets or sets the current value of the property. The protocol server MUST NOT return null for this property.

**Remarks**:

If the **UsesDefaultValue** (section 3.1.5.15.1.1.2) property is true, then the **Value** property MUST return the default value, as specified by the **DefaultValue** (section 3.1.5.15.1.1.1) property. If the **UsesDefaultValue** property is false, then the **Value** property returns the custom value.

If the protocol client makes an assignment to the **Value** property (even if the new value is the same as the current value), then the **UsesDefaultValue** property MUST change to false on the protocol server.

#### 3.1.5.15.1.2 ObjectPath Properties
None.

3.1.5.15.2 Methods

3.1.5.15.2.1 Scalar Methods

None.

3.1.5.15.2.2 ObjectPath Methods

None.

3.1.5.16 Microsoft.SharePoint.Client.Publishing.DesignPackage

TypeId: {D21214D9-63F5-488B-A665-2B7F9ABC1604}

ShortName: SP.Publishing.DesignPackage

Class that represents operations that can be used to perform around the design solution package for a site collection.

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 Apply

This method is a static CSOM method.

Return Type: None

Activates your design solution package on your site collection.

Parameters:

- site: The site collection of the design solution package to activate.
  Type: Microsoft.SharePoint.Client.Site

- info: Information about the design solution package to activate.

3.1.5.16.2.1.2 ExportEnterprise

This method is a static CSOM method.

Exports the design **solution package** for a **site template** that is not a small business site template into the **solution gallery** and returns information about the design solution package.

**Parameters:**

*site:* The **site collection** that will be used to export the design solution package.

Type: Microsoft.SharePoint.Client.Site

*includeSearchConfiguration:* Indicates whether the search configuration will be exported in the design solution package.

Type: **CSOM Boolean**

### 3.1.5.16.2.1.3 ExportSmallBusiness

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

**Return Type:** Microsoft.SharePoint.Client.Publishing.DesignPackageInfo

Exports the design **solution package** for a small business **site template** to the **solution gallery** and returns information about the design solution package.

**Parameters:**

*site:* The **site collection** that will be used to export the design solution package.

Type: Microsoft.SharePoint.Client.Site

*packageName:* The name of the design solution package.

Type: **CSOM String**

*includeSearchConfiguration:* Indicates whether the search configuration will be exported in the design solution package.

Type: **CSOM Boolean**

### 3.1.5.16.2.1.4 Install

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

**Return Type:** None

Installs the design **solution package** specified.

**Parameters:**

*site:* The **site collection** that will be used to install the design solution package.

Type: Microsoft.SharePoint.Client.Site

*info:* Information about the design solution package to install.


*path:* The **site-relative URL** of the design solution package to install.

Type: **CSOM String**

### 3.1.5.16.2.1.5 UnInstall
This method is a static CSOM method.

Return Type: None

Uninstalls the design solution package specified.

Parameters:

site: The site collection of the design solution package to uninstall.
Type: Microsoft.SharePoint.Client.Site

info: Information about the design solution package to uninstall.

3.1.5.16.2.2 ObjectPath Methods

None.


TypeId: {5332B37D-A6D1-4231-83CD-D7DD274540B7}

ShortName: SP.Publishing.DesignPackageInfo

Represents information about a design solution package.

3.1.5.17.1 Properties

3.1.5.17.1.1 Scalar Properties

3.1.5.17.1.1.1 MajorVersion

Type: CSOM Int32

Accessibility: Read/Write

Represents the major version of the design solution package.

3.1.5.17.1.1.2 MinorVersion

Type: CSOM Int32

Accessibility: Read/Write

Represents the minor version of the design solution package.

3.1.5.17.1.1.3 PackageGuid

Type: CSOM GUID

Accessibility: Read/Write

Represents a unique identifier for the design solution package.

3.1.5.17.1.1.4 PackageName

Type: CSOM String
Accessibility: Read/Write

Represents the name of the design solution package.

3.1.5.17.1.2 ObjectPath Properties

None.


TypeId: {CB63161F-1F15-446F-9BA9-AF89AE03CD45}

ShortName: SP.Publishing.ImageRendition

The ImageRendition object contains the configuration of an image rendition in a specific site. An image rendition MUST specify a width and/or height and MUST have a name associated with it.

The image rendition configuration is used to create copies of an image stored in a site that are cropped and scaled to match the configuration specified.

When a rendition only specifies a width or a height, the output image MUST keep the original image aspect ratio.

3.1.5.18.1 Properties

3.1.5.18.1.1 Scalar Properties

3.1.5.18.1.1.1 Height

Type: CSOM Int32

Accessibility: Read/Write

Gets or sets the image rendition height in pixels.

It MUST be greater than zero and less than or equal to 2048 to specify a height.

It MUST be 0 or -1 to not specify a height.

If the value is not set, Width (section 3.1.5.18.1.6) MUST be specified.

3.1.5.18.1.1.2 Id

Type: CSOM Int32

Accessibility: Read Only

Gets the unique identifier of the image rendition.

The Id MUST be assigned by the server when the rendition is first created.

3.1.5.18.1.1.3 IdCsom

Type: CSOM Int32

Accessibility: Read/Write

Internal property used by the server to identify the rendition when making updates.

It MUST be set to the same value as Id (section 3.1.5.18.1.2).
The client MUST NOT change or set this value.

### 3.1.5.18.1.1.4 Name
**Type:** CSOM String
**Accessibility:** Read/Write

Gets or sets the name for the image rendition.
It MUST NOT be NULL or empty.

### 3.1.5.18.1.1.5 Version
**Type:** CSOM Int32
**Accessibility:** Read Only

Gets the current version of the image rendition.
It MUST be set by the server when the rendition is first created.
It MUST be incremented by the server when the **Width** (section 3.1.5.18.1.1.6) or **Height** (section 3.1.5.18.1.1.1) values of the rendition change.

### 3.1.5.18.1.1.6 Width
**Type:** CSOM Int32
**Accessibility:** Read/Write

Gets or sets the image rendition width in pixels.
MUST be greater than zero and less than or equal to 2048 to specify a width.
MUST be 0 or -1 to not specify a width.
If the value is not set, **Height** (section 3.1.5.18.1.1.1) MUST be specified.

### 3.1.5.18.1.1.7 Group
**Type:** CSOM String
**Accessibility:** Read/Write

Gets or sets the group for the image rendition.


**TypeId:** {4C6CC6D4-AEBF-4C8E-9575-BCBB7034AA92}
**ShortName:** SP.Publishing.Navigation.NavigationTermProviderNameCollection

Represents a collection of text strings stored by the **NavigationTerm.ExcludedProviders** property (section 3.1.5.1.2.11).
3.1.5.19.1 Properties

3.1.5.19.1.1 Scalar Properties

None.

3.1.5.19.1.2 ObjectPath Properties

None.

3.1.5.19.2 Methods

3.1.5.19.2.1 Scalar Methods

3.1.5.19.2.1.1 Add

Return Type: None

Adds a text string to the collection. The value MUST NOT be null.

Parameters:

item: The text string to be added.

Type: CSOM String

3.1.5.19.2.1.2 Clear

Return Type: None

Removes all strings from the collection.

Parameters: None

3.1.5.19.2.1.3 Remove

Return Type: CSOM Boolean

Removes a text string from the collection. If the collection did not contain the specified string, then false is returned; otherwise true is returned.

Parameters:

item: The text string to be removed.

Type: CSOM String

3.1.5.19.2.2 ObjectPath Methods

None.


TypeId: {E361280D-01DC-431A-9823-4AFACD06418B}

ShortName: SP.Publishing.PublishingPage

The PublishingPage class provides publishing-related behavior for an ASPX page that is stored in a PublishingWeb (section 3.1.5.22).
Instantiate this class by using the static `GetPublishingPage` (section 3.1.5.20.2.2.1) method.

This class also directly exposes the underlying `ListItem` ([MS-CSOMSPT] section 3.2.5.87) through the `ListItem` (section 3.1.5.20.1.2.1) property, so that additional `ListItem` functionality can be easily accessed.

### 3.1.5.20.1 Properties

#### 3.1.5.20.1.1 Scalar Properties

#### 3.1.5.20.1.1.1 EndDate

**Type:** CSOM DateTime  
**Accessibility:** Read/Write  

Represents the Coordinated Universal Time (UTC) at which the `ListItem` (section 3.1.5.20.1.2.1) is no longer a published version.

#### 3.1.5.20.1.1.2 StartDate

**Type:** CSOM DateTime  
**Accessibility:** Read/Write  

Represents the Coordinated Universal Time (UTC) at which the `ListItem` (section 3.1.5.20.1.2.1) starts to be a published version.

#### 3.1.5.20.1.2 ObjectPath Properties

#### 3.1.5.20.1.2.1 ListItem

**Type:** Microsoft.SharePoint.Client.ListItem  
**Accessibility:** Read Only  

Represents the list item used to perform operations.

### 3.1.5.20.2 Methods

#### 3.1.5.20.2.1 Scalar Methods

#### 3.1.5.20.2.1.1 AddFriendlyUrl

**Return Type:** CSOM String  

Add a user-friendly URL for this `PublishingPage` (section 3.1.5.20).

**Exceptions:**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2147024809</td>
<td>ArgumentException</td>
<td>The <code>friendlyUrlSegment</code> MUST NOT be null or empty.</td>
</tr>
<tr>
<td>-2147467261</td>
<td>ArgumentException</td>
<td>The <code>editableParent</code> MUST NOT be null.</td>
</tr>
<tr>
<td>-2147024891</td>
<td>UnauthorizedAccessException</td>
<td>The protocol client has insufficient permissions to perform this operation.</td>
</tr>
</tbody>
</table>
Parameters:

friendlyUrlSegment: The user-friendly text to use as the URL segment.
Type: CSOM String

editableParent: The parent NavigationTermSetItem (section 3.1.5.8) under which this new friendly URL is created.

Note that it MUST be retrieved as an editable item (see NavigationTermSet.GetAsEditable (section 3.1.5.7.2.2.4) and NavigationTerm.GetAsEditable (section 3.1.5.5.2.2.2)).

doAddToNavigation: Indicates whether to add the friendly URL into the managed navigation.
Type: CSOM Boolean

3.1.5.20.2.1.2 Schedule

Return Type: None

Schedule a ListItem ([MS-CSOMSPT] section 3.2.5.87) to automatically be approved (start) and be unpublished (expire) on certain dates.

Remarks:

Scheduling a ListItem indicates that it has already been effectively approved.

The StartDate (section 3.1.5.20.1.1.2) and EndDate (section 3.1.5.20.1.1.1) values are used to determine the publication schedule. If the start date is earlier than now, the ListItem is published immediately. Otherwise, it is scheduled to publish at a future date. If the end date is specified, the ListItem is scheduled to unpublish at a future date.

Exceptions:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1</td>
<td>SPException</td>
<td>Documents can be scheduled only in a minor version-enabled list.</td>
</tr>
<tr>
<td>-1</td>
<td>SPException</td>
<td>Documents can be scheduled only in a list with content approval enabled.</td>
</tr>
<tr>
<td>-1</td>
<td>SPException</td>
<td>Scheduling a start date for a currently approved item is not supported. Items MUST be in the minor version state.</td>
</tr>
<tr>
<td>-1</td>
<td>SPException</td>
<td>Scheduling is not supported in this content database. Use Approve ([MS-CSOMSPT] section 3.2.5.64.2.1.13) or UnPublish ([MS-CSOMSPT] section 3.2.5.64.2.1.10) instead.</td>
</tr>
<tr>
<td>-2147024891</td>
<td>UnauthorizedAccessException</td>
<td>The protocol client has insufficient permissions to perform this operation.</td>
</tr>
</tbody>
</table>

Parameters:
approvalComment: Comments to be set when the ListItem is approved if the StartDate is in the future.

Type: CSOM String

3.1.5.20.2.2 ObjectPath Methods

3.1.5.20.2.2.1 GetPublishingPage

This method is a static CSOM method.


Static method to retrieve a PublishingPage (section 3.1.5.20) object that wraps the given ListItem ([MS-CSOMSPT] section 3.2.5.87) object.

Remarks:

The sourceListItem MUST be a non-null ListItem object.

Exceptions:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2147024809</td>
<td>ArgumentException</td>
<td>Invalid ListItem. The ListItem provided is not compatible with a PublishingPage.</td>
</tr>
<tr>
<td>-2147467261</td>
<td>ArgumentNullException</td>
<td>The sourceListItem is null, which is not valid.</td>
</tr>
</tbody>
</table>

Parameters:

sourceListItem: A ListItem object for which to retrieve a PublishingPage wrapper.

Type: Microsoft.SharePoint.Client.ListItem


TypeId: {68F48886-1E99-4D5A-BE5C-F0F0D53F371B}

ShortName: SP.Publishing.PublishingPageInformation

This class is used as an input parameter for methods that create PublishingPage (section 3.1.5.20) objects.

Remarks:

For details about how to set each value of this class please refer to the method that is using this class as an input parameter.

3.1.5.21.1 Properties

3.1.5.21.1.1 Scalar Properties

3.1.5.21.1.1.1 Name

Type: CSOM String
**Accessibility:** Read/Write

The name for a **PublishingPage** (section 3.1.5.20), or null if a default name SHOULD be used.

Defaults to null.

### 3.1.5.21.1.2 ObjectPath Properties

#### 3.1.5.21.1.2.1 Folder

**Type:** Microsoft.SharePoint.Client.Folder

**Accessibility:** Read/Write

The **Folder** ([MS-CSOMSPT] section 3.2.5.72) object in which the **PublishingPage** (section 3.1.5.20) is created, or null if a folder SHOULD NOT be used.

Defaults to null.

#### 3.1.5.21.1.2.2 PageLayoutListItem

**Type:** Microsoft.SharePoint.Client.ListItem

**Accessibility:** Read/Write

**ListItem** ([MS-CSOMSPT] section 3.2.5.87) of the page layout to use for the **PublishingPage** (section 3.1.5.20), or null if the default page layout SHOULD be used.

Defaults to null.

### 3.1.5.22 Microsoft.SharePoint.Client.Publishing.PublishingWeb

**TypeId:** {55927360-235B-4ACE-9DCF-C574D6E517EA}

**ShortName:** SP.Publishing.PublishingWeb

The **PublishingWeb** (section 3.1.5.22) class provides publishing behavior for a **Web** ([MS-CSOMSPT] section 3.2.5.143) instance that supports publishing.

The **PublishingWeb** class includes support for creation of **PublishingPage** objects.

Instantiate this class by using the static **GetPublishingWeb** (section 3.1.5.22.2.2) method.

This class also directly exposes the underlying **Web** through the **Web** (section 3.1.5.22.1.2.1) property, so that additional **Web** functionality can be easily accessed.

#### 3.1.5.22.1 Properties

##### 3.1.5.22.1.1 Scalar Properties

None.

##### 3.1.5.22.1.2 ObjectPath Properties

#### 3.1.5.22.1.2.1 Web

**Type:** Microsoft.SharePoint.Client.Web

**Accessibility:** Read Only
Gets the Web ([MS-CSOMSPT] section 3.2.5.143) object that is wrapped by this PublishingWeb (section 3.1.5.22) object.

The PublishingWeb class wraps the Web class. This property directly exposes the underlying Web so that additional Web functionality can be easily accessed.

3.1.5.22.2 Methods

3.1.5.22.2.1 Scalar Methods

None.

3.1.5.22.2.2 ObjectPath Methods

3.1.5.22.2.2.1 AddPublishingPage


Creates a new PublishingPage (section 3.1.5.20) in the PublishingWeb (section 3.1.5.22).

Remarks:

The following combination of PublishingPageInformation (section 3.1.5.21) values can be set:

- PublishingPageInformation with all defaults.

If the combination of PublishingPageInformation values is invalid an ArgumentException will be thrown indicating the invalid setting.

Exceptions:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2147024809</td>
<td>ArgumentException</td>
<td>Incorrect combination of PublishingPageInformation settings provided.</td>
</tr>
<tr>
<td>-2147024891</td>
<td>UnauthorizedAccessException</td>
<td>The current user has insufficient permissions to perform this operation.</td>
</tr>
</tbody>
</table>

Parameters:

pageInformation: Indicates the PublishingPage information to use when creating a new PublishingPage.


3.1.5.22.2.2 GetPublishingWeb

This method is a static CSOM method.

Static method to retrieve a PublishingWeb instance that wraps the specified Web ([MS-CSOMSPST]) section 3.2.5.143) object.

### Exceptions:

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2147467261</td>
<td>ArgumentException</td>
<td>The web is null, which is not valid.</td>
</tr>
</tbody>
</table>

### Parameters:

**web**: The Web object to wrap in a PublishingWeb instance.

Type: Microsoft.SharePoint.Client.Web

The **web** MUST NOT be null.

#### 3.1.5.23 Microsoft.SharePoint.Client.Publishing.ScheduledItem

**TypeId**: {E4353749-4AA8-438C-8A8D-AC8052B60449}

**ShortName**: SP.Publishing.ScheduledItem

Represents a list item that can be scheduled to have a published version during a specified time span.

#### 3.1.5.23.1 Properties

#### 3.1.5.23.1.1 Scalar Properties

##### 3.1.5.23.1.1.1 EndDate

**Type**: CSOM DateTime  

**Accessibility**: Read/Write

Represents the Coordinated Universal Time (UTC) at which the ListItem (section 3.1.5.20.1.2.1) is no longer a published version.

##### 3.1.5.23.1.1.2 StartDate

**Type**: CSOM DateTime  

**Accessibility**: Read/Write

Represents the Coordinated Universal Time (UTC) at which the ListItem (section 3.1.5.20.1.2.1) starts to be a published version.

#### 3.1.5.23.1.2 ObjectPath Properties

##### 3.1.5.23.1.2.1 ListItem

**Type**: Microsoft.SharePoint.Client.ListItem

**Accessibility**: Read Only

The list item used to perform the scheduling operation.
3.1.5.23.2 Methods

3.1.5.23.2.1 Scalar Methods

3.1.5.23.2.1.1 Schedule

Return Type: None

Schedules the ListItem (section 3.1.5.20.1.2.1) to become a published version when the current time is between the specified StartDate (section 3.1.5.23.1.1.2) and the specified EndDate (section 3.1.5.23.1.1.1).

Parameters:

approvalComment: Represents the comments to describe the transaction of the list item when it becomes a published version.

Type: CSOM String

3.1.5.23.2.2 ObjectPath Methods

None.


TypeId: {324675A4-AA0D-47DB-A937-C2E5DC53457E}

ShortName: SP.Publishing.SiteImageRenditions

The SiteImageRenditions object exposes the operations to get and modify the ImageRendition (section 3.1.5.18) from a site collection.

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

3.1.5.24.2.1.1 GetRenditions

This method is a static CSOM method.


Returns the ImageRendition (section 3.1.5.18) for the context site collection. If no image renditions exist for the site collection, it MUST return an empty array.

Parameters: None

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

**Return Type:** None

Sets the **ImageRenditions** (section 3.1.5.18) for the context **site collection**.

**Exceptions:**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Error Type Name</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2147024891</td>
<td>UnauthorizedAccessException</td>
<td>The current user has insufficient permissions to perform this operation.</td>
</tr>
<tr>
<td>-2147024809</td>
<td>ArgumentException</td>
<td>One of the specified renditions is not valid.</td>
</tr>
</tbody>
</table>

**Parameters:**

renditions: An array of **ImageRendition** (section 3.1.5.18) objects to be set as the image renditions for the site collection.

Type: **CSOM array** of Microsoft.SharePoint.Client.Publishing.ImageRendition

It MUST NOT be NULL.

### 3.1.5.24.2.2 ObjectPath Methods

None.

### 3.1.5.25 Microsoft.SharePoint.Client.Publishing.SiteServicesAddins

**TypeId:** {31738358-BAAD-400C-9678-B5528C432AB5}

**ShortName:** SP.Publishing.SiteServicesAddins

Provides methods that manage site services addins and social plugins.

### 3.1.5.25.1 Properties

### 3.1.5.25.1.1 Scalar Properties

None.

### 3.1.5.25.1.2 ObjectPath Properties

None.

### 3.1.5.25.2 Methods

### 3.1.5.25.2.1 Scalar Methods

#### 3.1.5.25.2.1.1 DeletePlugin

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

**Return Type:** None
Delete a social plugin by its **Title** property (section 3.1.5.13.1.1.3).

**Parameters:**

(pluginName: The **Title** property (section 3.1.5.13.1.1.3) of the social plugin.

Type: **CSOM String**

This method requires site designer permission level.

3.1.5.25.2.1.2 **DeleteSettings**

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

**Return Type:** None

Delete a site services addin by its **Id** property (section 3.1.5.14.1.1.6).

**Parameters:**

(addinId: The **Id** property (section 3.1.5.14.1.1.6) of the site services addin.

Type: **CSOM GUID**

This method requires site owner permission level.

3.1.5.25.2.1.3 **SetPlugin**

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

**Return Type:** None

Add a social plugin if it does not exist; otherwise, update it.

**Parameters:**

(plugin: The social plugin to add or update.


This method requires site designer permission level.

3.1.5.25.2.1.4 **SetSettings**

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

**Return Type:** None

Add the site services addin if it does not exist; otherwise, update it.

**Parameters:**

(addin: Site services addin to add or update.


This method requires site owner permission level.

3.1.5.25.2.2 **ObjectPath Methods**

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

**Return Type:** Microsoft.SharePoint.Client.Publishing.AddinPlugin

Gets the setting of a social plugin by its **Title** property (section 3.1.5.13.1.1.3).

**Parameters:**

*pluginName:* The title of the social plugin.

Type: **CSOM String**

This method requires site designer permission level.

---

### 3.1.5.25.2.2.2 GetSettings

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

**Return Type:** Microsoft.SharePoint.Client.Publishing.AddinSettings

Gets the setting of a site services addin by its **Id** property (section 3.1.5.14.1.1.6).

**Parameters:**

*addinId:* The ID property of the site services add-in.

Type: **CSOM GUID**

This method requires site designer permission level.

---

### 3.1.5.26 Microsoft.SharePoint.Client.Publishing.PageLayoutCreationInformation

**TypeId:** {D36987C1-DDF0-4E73-8B1A-E7E444EF3D3F}

**ShortName:** SP.Publishing.PageLayoutCreationInformation

A data structure representing information that is required to create a new page layout.

---

#### 3.1.5.26.1 Properties

**3.1.5.26.1.1 Scalar Properties**

**3.1.5.26.1.1.1 AssociatedContentTypeId**

Type: **CSOM String**

**Accessibility:** Read/Write

Represents the content type identifier associated with the new page layout.

**3.1.5.26.1.1.2 MasterPageUrl**

Type: **CSOM String**

**Accessibility:** Read/Write

Represents the server-relative URL of the master page HTML design to be used to generate the new page layout.

**3.1.5.26.1.1.3 NewPageLayoutEditablePath**
Type: CSOM String
Accessibility: Read/Write

Represents the server-relative URL location of the new page layout HTML design.

3.1.5.26.1.1.4  NewPageLayoutNameWithoutExtension
Type: CSOM String
Accessibility: Read/Write

Represents the name of the page layout.

3.1.5.26.1.2  ObjectPath Properties

3.1.5.26.1.2.1  Web
Type: Microsoft.SharePoint.Client.Web
Accessibility: Read/Write

Represents the site to use to create the new page layout.

3.1.5.27  Microsoft.SharePoint.Client.Publishing.PublishingSite
TypeId: {8A896237-0D29-4A38-A399-C8FDE4B09D80}
ShortName: SP.Publishing.PublishingSite

Represents a publishing site collection.

3.1.5.27.1  Properties

3.1.5.27.1.1  Scalar Properties
None.

3.1.5.27.1.2  ObjectPath Properties
None.

3.1.5.27.2  Methods

3.1.5.27.2.1  Scalar Methods

3.1.5.27.2.1.1  CreatePageLayout
This method is a static CSOM method.

Return Type: None

Create a new page layout.

Parameters:

parameters: Specification of the page layout to create.

3.1.5.27.2.2 ObjectPath Methods

None.

3.1.5.28 Microsoft.SharePoint.Client.Publishing.AcronymInformation

TypeId: {DF8F1D94-C876-4325-8584-95861846041C}

ShortName: SP.Publishing.AcronymInformation

Represents a short acronym and color generated for the specified text and LCID combination. The acronym usually corresponds to the first letters of each word of text that are capitalized, but the exact algorithm for generating acronym is an implementation detail of the server. The acronym and color MUST be the same for a given text and LCID combination.

3.1.5.28.1 Properties

3.1.5.28.1.1 Scalar Properties

3.1.5.28.1.1.1 Acronym

Type: CSOM String

Accessibility: Read/Write

Short string representing a generated acronym for the text field of this object in a given LCID. Typically, it’s generated by concatenating and capitalizing the first letters of each word in the text field, but the exact implementation is subject to the server implementation details. The acronym and color MUST be the same for a given combination of text and LCID fields.

3.1.5.28.1.1.2 Color

Type: CSOM String

Accessibility: Read/Write

Red-Green-Blue (RGB) color generated for a given text. The field MUST be in the format of #RRGGBB, as specified in [RFC2083].

3.1.5.28.1.1.3 Lcid

Type: CSOM Int32

Accessibility: Read/Write

LCID for generating the acronym. The acronym MUST be the same for a given text and LCID combination. The server SHOULD tokenize the text according to language specific rules for the specified locale and combine capitalized first letters of each word of text field into the acronym. The exact implementation of the algorithm for generating the acronym is implementation detail of the server.

3.1.5.28.1.1.4 Text

Type: CSOM String

Accessibility: Read/Write

Text used to generate the acronym.
3.1.5.28.1.2 ObjectPath Properties
None.

3.1.5.29 Microsoft.SharePoint.Client.Publishing.CommunicationSite

TypeId: {9A1B7768-601D-4BA0-915A-9841FB4D4A91}

ShortName: SP.Publishing.CommunicationSite

Represents a Communication Site.

3.1.5.29.1 Properties

3.1.5.29.1.1 Scalar Properties
None.

3.1.5.29.1.2 ObjectPath Properties
None.

3.1.5.29.2 Methods

3.1.5.29.2.1 Scalar Methods

3.1.5.29.2.1.1 Create


Initiates creation of a Communication Site.

If the SiteStatus returns 1, the Communication Site is in the process of being created asynchronously.

If the SiteStatus returns 2 and the SiteUrl returns a non-empty, non-null value, the site was created synchronously and is available at the specified URL.

If the SiteStatus returns 2 and the SiteUrl returns an empty or null value, the site already exists but is inaccessible for some reason, such as being "locked".

If the SiteStatus returns 3 or 0, the Communication site failed to be created.

Parameters:

request: Options for configuring the Communication Site that will be created.

Type: Microsoft.SharePoint.Client.Publishing.CommunicationSiteCreationRequest

The Title and URL of the request are mandatory. The rest of the members of the CommunicationSiteCreationRequest are optional. The URL SHOULD be absolute.

3.1.5.29.2.1.2 Status


Retrieves the status of creation of a Communication site.
If the SiteStatus returned is 0, then no work item for a site with the specified URL was found, and no site was found with the specified URL. This could mean either that a creation attempt hasn’t started yet, or that it failed with a “non-retryable” exception and did not preserve a work item for further attempts.

If the SiteStatus returns 1, the Communication Site is in the process of being created asynchronously.

If the SiteStatus returns 2 and the SiteUrl returns a non-empty, non-null value, the site was created synchronously and is available at the specified URL.

If the SiteStatus returns 2 and the SiteUrl returns an empty or null value, the site already exists but is inaccessible for some reason, such as being “locked”.

If the SiteStatus returns 3 or 0, the Communication site failed to be created.

**Parameters:**

url: The absolute URL of the site for which the status is being checked

Type: CSOM String

### 3.1.5.29.2.2 ObjectPath Methods

#### 3.1.5.29.2.2.1 CSOM Constructor

Creates a new instance of the CommunicationSite class that represents a Communication Site.

**Parameters:** None

### 3.1.5.30 Microsoft.SharePoint.Client.Publishing.EmbedDataV1

**TypeId:** {67742FF3-8503-4EE9-9364-5467D9D73B4}

**ShortName:** SP.Publishing.EmbedDataV1

Represents embedded meta data of the page.

#### 3.1.5.30.1 Properties

#### 3.1.5.30.1.1 Scalar Properties

##### 3.1.5.30.1.1.1 AllowHttpsEmbed

**Type:** CSOM Boolean

**Accessibility:** Read/Write

Indicates whether the page can be embedded using an iframe html tag with SRC value starting with "https".

##### 3.1.5.30.1.1.2 CreatorName

**Type:** CSOM String

**Accessibility:** Read/Write

Creator Name of the page.
3.1.5.30.1.1.3 DatePublishedAt
Type: CSOM String
Accessibility: Read/Write
The Date when the page was published.

3.1.5.30.1.1.4 Description
Type: CSOM String
Accessibility: Read/Write
Description of the page.

3.1.5.30.1.1.5 EmbedServiceResponseCode
Type: CSOM Int32
Accessibility: Read/Write
HTTP response code when trying to access third-party service to get the page’s meta data.

3.1.5.30.1.1.6 ErrorMessage
Type: CSOM String
Accessibility: Read/Write
Details error message when trying to get meta data for the page. If no error, then the value will be empty.

3.1.5.30.1.1.7 Html
Type: CSOM String
Accessibility: Read/Write
Embedded iframe HTML code for the page.

3.1.5.30.1.1.8 ListId
Type: CSOM String
Accessibility: Read/Write
If the page belongs to a list, the value will be list id for the list, otherwise the value will be empty.

3.1.5.30.1.1.9 PublisherName
Type: CSOM String
Accessibility: Read/Write
Publisher of the page.

3.1.5.30.1.1.10 ResponseCode
Type: CSOM Int32
**Accessibility:** Read/Write

Response status Code of the page’s meta data:

0: means response meta data ok;
5: means response meta data ok, but not allow embed in other's page;
1: means response meta data failed, internal error happened;
2: means response meta data failed, no third-party service found for the page;
3: means response meta data failed, failed to get metadata for the page;
4: means response meta data failed, permission check failed.

### 3.1.5.30.1.1.11 SiteId

**Type:** CSOM String  
**Accessibility:** Read/Write

If the page belongs to a site collection, the value will be site collection id, otherwise the value will be empty.

### 3.1.5.30.1.1.12 ThumbnailUrl

**Type:** CSOM String  
**Accessibility:** Read/Write

Thumbnail URL of the page.

### 3.1.5.30.1.1.13 Title

**Type:** CSOM String  
**Accessibility:** Read/Write

Title of the page.

### 3.1.5.30.1.1.14 Type

**Type:** CSOM String  
**Accessibility:** Read/Write

Type of the page.

- photo: the page is static image;
- video: the page is video;
- rich: the other type.

### 3.1.5.30.1.1.15 UniqueId

**Type:** CSOM String  
**Accessibility:** Read/Write

If the page belongs to a list item, the value will unique Id for the item, otherwise the value will be empty.

### 3.1.5.30.1.1.16 Url

**Type:** CSOM String
**Accessibility:** Read/Write

The URL of the page.

**3.1.5.30.1.1.17**  
**VideoId**

**Type:** CSOM String

**Accessibility:** Read/Write

If the page represents a video, the value will be video id.

**3.1.5.30.1.1.18**  
**WebId**

**Type:** CSOM String

**Accessibility:** Read/Write

If the page belongs to website, the value will be website id, otherwise the value will be empty.

**3.1.5.30.1.2**  
**ObjectPath Properties**

None.

**3.1.5.30.2**  
**Methods**

**3.1.5.30.2.1**  
**Scalar Methods**

None.

**3.1.5.30.2.2**  
**ObjectPath Methods**

None.

**3.1.5.31**  

**TypeId:** {761DF48C-5556-4E5A-BACA-85DF30A007C8}

**ShortName:** SP.Publishing.EmbedService

The class was used to get embed meta data for the page.

**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**

None.
3.1.5.31.2.2 ObjectPath Methods

3.1.5.31.2.2.1 CSOM Constructor

Creates a new instance of the EmbedService class that will be used to get embed meta data for the page.

Parameters: None

3.1.5.31.2.2.2 EmbedData

Return Type: Microsoft.SharePoint.Client.Publishing.EmbedDataV1

The method was used to get embed meta data for the page.

Parameters:

url: The url of the page.
Type: CSOM String

version: Version of the method.
Type: CSOM Int32

Currently we only support 1.

3.1.5.32 Microsoft.SharePoint.Client.Publishing.PrimaryCityTime

TypeId: {C159D8DC-3CE2-4257-9C16-18592EF88AD}

ShortName: SP.Publishing.PrimaryCityTime

Represents the date and time, in UTC, of the geographic location.

3.1.5.32.1 Properties

3.1.5.32.1.1 Scalar Properties

3.1.5.32.1.1.1 Location

Type: CSOM String

Accessibility: Read/Write

The name of the geographic location.

3.1.5.32.1.1.2 Time

Type: CSOM String

Accessibility: Read/Write

The current date and time of the location, in UTC.

3.1.5.32.1.1.3 UtcOffset

Type: CSOM String
**Accessibility:** Read/Write

Specifies the offset or difference between this time and **UTC**.

### 3.1.5.32.1 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

None.

### 3.1.5.33 Microsoft.SharePoint.Client.Publishing.RichSharing

**TypeId:** {8505B9A3-AD00-4F95-BB10-8CE96F2090F6}

**ShortName:** SP.Publishing.RichSharing

This class is used to send sharing page email.

#### 3.1.5.33.1 Properties

#### 3.1.5.33.1.1 Scalar Properties

None.

#### 3.1.5.33.1.2 ObjectPath Properties

None.

#### 3.1.5.33.2 Methods

#### 3.1.5.33.2.1 Scalar Methods

#### 3.1.5.33.2.1.1 SharePageByEmail

**Return Type:** None

Sends sharing page email by notification service.

**Parameters:**

- **url:** Specifies the page **URL** to share.
  
  **Type:** **CSOM String**

- **message:** Specifies the comment message in the email.
  
  **Type:** **CSOM String**

- **recipientEmails:** Specifies the recipient email address.
Type: **CSOM array** of CSOM String

### 3.1.5.33.2.1.2 ShareSiteByEmail

**Return Type:** None

Sends sharing page email by notification service using a context information.

**Parameters:**

- **siteSharingEmailContext:** Specifies the information used in the site sharing email.
  
  Type: Microsoft.SharePoint.Client.Publishing.SiteSharingEmailContext

- **recipientEmails:** Specifies the recipient email address.
  
  Type: **CSOM array** of **CSOM String**

### 3.1.5.33.2.2 ObjectPath Methods

#### 3.1.5.33.2.2.1 CSOM Constructor

Creates a new instance of the **RichSharing** class that will be to send sharing page email.

**Parameters:** None

### 3.1.5.34 Microsoft.SharePoint.Client.Publishing.SharePagePreviewByEmailFieldsData

**TypeId:** `{848BCECF-DD16-4694-86A5-AC9ABB70628D}`

**ShortName:** SP.Publishing.SharePagePreviewByEmailFieldsData

This class contains the information used by **SharePagePreviewByEmail** method (section 3.1.5.36.2.1.8).

#### 3.1.5.34.1 Properties

#### 3.1.5.34.1.1 Scalar Properties

##### 3.1.5.34.1.1.1 message

**Type:** **CSOM String**

**Accessibility:** Read/Write

Specifies the message in the email.

##### 3.1.5.34.1.1.2 recipientEmails

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

**Accessibility:** Read/Write

Specifies the recipient email address.

#### 3.1.5.34.1.2 ObjectPath Properties

None.
3.1.5.35  Microsoft.SharePoint.Client.Publishing.SharePointHomeServiceManager

TypeId: {F99172B0-755C-4C90-A30A-1A216DD51803}

ShortName: SP.Publishing.SharePointHomeServiceManager

Provides a method for generating an acronym and color for a specified text and LCID combination, as specified in section 3.1.5.28

3.1.5.35.1  Properties

3.1.5.35.1.1  Scalar Properties

None.

3.1.5.35.1.2  ObjectPath Properties

None.

3.1.5.35.2  Methods

3.1.5.35.2.1  Scalar Methods

3.1.5.35.2.1.1  GetAcronymsAndColors


Returns acronym and color for a specified text and LCID combination.

Parameters:

labels: Array of text and LCID combinations for which to generate acronym and color.

Type: CSOM array of Microsoft.SharePoint.Client.Publishing.TextValueWithLanguage

3.1.5.35.2.2  ObjectPath Methods

3.1.5.35.2.2.1  CSOM Constructor

Constructs the instance of the object.

Parameters: None

3.1.5.36  Microsoft.SharePoint.Client.Publishing.SitePage

TypeId: {F03BA8FB-D55E-4745-8EB1-D6ADE479311B}

ShortName: SP.Publishing.SitePage

Represents a site Page.

The CanvasJson1, CommentsDisabled, FirstPublishedRelativeTime, ListId, ModifiedRelativeTime and SocialBarOnSitePagesDisabled properties are not included in the default scalar property set for this type.

3.1.5.36.1  Properties

3.1.5.36.1.1  Scalar Properties
3.1.5.36.1.1.1  AbsoluteUrl
Type: CSOM String
Accessibility: Read Only
Gets the absolute Url of the Site Page.

3.1.5.36.1.1.2  AlternativeUrlMap
Type: CSOM String
Accessibility: Read Only
Gets the AlternativeUrlMap value for the current Site Page.

3.1.5.36.1.1.3  BannerImageUrl
Type: CSOM String
Accessibility: Read/Write
Gets or sets the banner image Url.

3.1.5.36.1.1.4  CanvasContent1
Type: CSOM String
Accessibility: Read/Write
Gets or sets the CanvasContent1 for the current Site Page.

3.1.5.36.1.1.5  CanvasJson1
Type: CSOM String
Accessibility: Read/Write
Gets or sets the CanvasContent1 of the current Site Page based on a stringified JSON object structure.

3.1.5.36.1.1.6  CommentsDisabled
Type: CSOM Boolean
Accessibility: Read Only
Indicates if comments are disabled for the current Site Page.

3.1.5.36.1.1.7  ContentTypeId
Type: CSOM String
Accessibility: Read/Write
Gets or sets the content type ID of the current Site Page.

3.1.5.36.1.1.8  Description
Type: CSOM String
**Accessibility:** Read/Write

Gets the description for the current Site Page.

### 3.1.5.36.1.1.9 **DoesUserHaveEditPermission**

**Type:** CSOM Boolean

**Accessibility:** Read Only

Indicates if the current user has edit permission to the Site Page.

### 3.1.5.36.1.1.10 **FileName**

**Type:** CSOM String

**Accessibility:** Read Only

Gets the file name of the current Site Page.

### 3.1.5.36.1.1.11 **FirstPublished**

**Type:** CSOM DateTime

**Accessibility:** Read Only

**Datet ime** of when the site page was initially published. The server MUST return Datetime.MinValue (00:00:00:000000 UTC) when the site page has never been published.

### 3.1.5.36.1.1.12 **FirstPublishedRelativeTime**

**Type:** CSOM String

**Accessibility:** Read Only

Returns a user readable representation of the time difference between the current time and first published time for the site page. The exact algorithm for generating user readable representation is an implementation detail of the server. For example, the user readable representation of the time difference would be returned as: "a few seconds ago", "about a minute ago", "number of minutes ago", "about an hour ago", "yesterday", "at particular date", "day of week at particular time", "number of days ago".

### 3.1.5.36.1.1.13 **Id**

**Type:** CSOM Int32

**Accessibility:** Read Only

Gets the item ID of the Site Page.

### 3.1.5.36.1.1.14 **IsPageCheckedOutToCurrentUser**

**Type:** CSOM Boolean

**Accessibility:** Read Only

Indicates if the Site Page is checked out to the current user.

### 3.1.5.36.1.1.15 **IsWebWelcomePage**
**Type:** CSOM Boolean  
**Accessibility:** Read Only  
Indicates if the current Site Page is set as a homepage.

### 3.1.5.36.1.1.16 LayoutWebpartsContent

**Type:** CSOM String  
**Accessibility:** Read/Write  
Gets or sets the LayoutWebPartsContent field for the current Site Page.

### 3.1.5.36.1.1.17 ListId

**Type:** CSOM GUID  
**Accessibility:** Read Only  
Gets the ID of the parent list for the current Site Page.

### 3.1.5.36.1.1.18 Modified

**Type:** CSOM DateTime  
**Accessibility:** Read Only  
Get the date in UTC when the Site Page was last modified.

### 3.1.5.36.1.1.19 ModifiedRelativeTime

**Type:** CSOM String  
**Accessibility:** Read Only  
Gets the difference between the current time and when the Site Page was last modified.

### 3.1.5.36.1.1.20 PageLayoutType

**Type:** CSOM String  
**Accessibility:** Read Only  
Gets the type of page layout used for the current Site Page.

### 3.1.5.36.1.1.21 Path

**Type:** Microsoft.SharePoint.Client.ResourcePath  
**Accessibility:** Read Only  
Gets the site relative path ([MS-CSOMSPT] section 3.2.5.422) of the Site Page.

### 3.1.5.36.1.1.22 PromotedState

**Type:** Microsoft.SharePoint.Client.Publishing.PromotedState  
**Accessibility:** Read Only
PromotedState of the site page. MUST be 0 if the site page is not a news article. MUST be 1 if the site page is a news article that hasn’t been published yet. MUST be 2 if the site page is a published news article.

3.1.5.36.1.1.23  **SocialBarOnSitePagesDisabled**

**Type:** CSOM Boolean

**Accessibility:** Read Only

Indicates if the social bar is disabled for the current Site Page.

3.1.5.36.1.1.24  **Title**

**Type:** CSOM String

**Accessibility:** Read/Write

Gets or sets the title for the Site Page.

3.1.5.36.1.1.25  **UniqueId**

**Type:** CSOM GUID

**Accessibility:** Read Only

Gets the unique ID of the current Site Page.

3.1.5.36.1.1.26  **Url**

**Type:** CSOM String

**Accessibility:** Read Only

Gets the site relative Url of the Site Page.

3.1.5.36.1.1.27  **Version**

**Type:** CSOM String

**Accessibility:** Read Only

Gets the version of the Site Page.

The format of the version string is m.n where 'm' is the major version number and 'n' is the minor version number.

3.1.5.36.1.1.28  **VersionInfo**

**Type:** Microsoft.SharePoint.Client.Publishing.SitePageVersionInfo

**Accessibility:** Read Only

Gets the version information for the most recently checked in version of the Site Page.

3.1.5.36.1.2  **ObjectPath Properties**

3.1.5.36.1.2.1  **CreatedBy**

**Type:** Microsoft.SharePoint.Client.Publishing.UserInfo
Accessibility: Read Only

Gets the user who is attributed with authoring the current Site Page.

This user is the preferred author to be shown in rollup experiences, although they might not be the original creator of the Site Page.

3.1.5.36.1.2.2 LastModifiedBy

Type: Microsoft.SharePoint.Client.Publishing.UserInfo

Accessibility: Read Only

Gets the user who last modified the current Site Page.

3.1.5.36.2 Methods

3.1.5.36.2.1 Scalar Methods

3.1.5.36.2.1.1 CheckOut

Return Type: CSOM Boolean

Checks out the page if available.

Parameters: None

3.1.5.36.2.1.2 DemoteFromNews

Return Type: CSOM Boolean

Updates the promoted state of the site page to 0. On success MUST return true. If the site page already has promoted state as 0, MUST return true. If the site page is not checked out to the current user, the server MUST throw Microsoft.SharePoint.Client.ClientServiceException with ErrorInformation.HttpStatusCode set to 409.

Parameters: None

3.1.5.36.2.1.3 PromoteToNews

Return Type: CSOM Boolean

Updates the promoted state of the site page to 1 if the site page has not been published yet. Updates the promoted state of the site page to 2 if the site page has already been published. If the site page already has promoted state set to 1 or 2, MUST return true. If the site page is not checked out to the current users, the server MUST throw Microsoft.SharePoint.Client.ClientServiceException with ErrorInformation.HttpStatusCode set to 409.

Parameters: None

3.1.5.36.2.1.4 Publish

Return Type: CSOM Boolean

Publishes a major version of the current Site Page. Returns TRUE on success, FALSE otherwise.

Parameters: None

3.1.5.36.2.1.5 SaveDraft
Return Type: **CSOM Boolean**

Checks the page in as minor version.

**Parameters:**

`sitePage`: Specifies the site page metadata.

Type: `Microsoft.SharePoint.Client.Publishing.SitePageFieldsData`

---

### 3.1.5.36.2.1.6 **SavePage**

**Return Type:** None

Updates the current Site Page with the provided `pageStream` content.

**Parameters:**

`pageStream`: The binary stream to save for the current Site Page.

Type: **CSOM Stream**

It MUST NOT be NULL.

---

### 3.1.5.36.2.1.7 **SavePageAsDraft**

**Return Type:** **CSOM Boolean**

Updates the Site Page with the provided `pageStream` content and checks in a minor version if the page library has minor versions enabled.

**Parameters:**

`pageStream`: The binary stream to save for the current Site Page.

Type: **CSOM Stream**

It MUST NOT be NULL.

---

### 3.1.5.36.2.1.8 **SharePagePreviewByEmail**

**Return Type:** None

Share this page's preview content by email.

**Parameters:**

`sharePagePreviewByEmailData`: Specifies the information used for this sharing.

Type: `Microsoft.SharePoint.Client.Publishing.SharePagePreviewByEmailFieldsData`

---

### 3.1.5.36.2.1.9 **Update**

**Return Type:** None

Saves the page without incrementing the version. The page stays checked-out.

**Parameters:** None

---

### 3.1.5.36.2.2 **ObjectPath Methods**
3.1.5.36.2.2.1  CheckoutPage

Return Type: Microsoft.SharePoint.Client.Publishing.SitePage

Checks out the current Site Page if it is available to be checked out.

Parameters: None

3.1.5.36.2.2.2  Copy

Return Type: Microsoft.SharePoint.Client.Publishing.SitePage

Creates a copy of the current Site Page and returns the resulting new SitePage.

Parameters: None

3.1.5.36.2.2.3  DiscardPage

Return Type: Microsoft.SharePoint.Client.Publishing.SitePage

Discards the current checked out version of the Site Page. Returns the resulting SitePage after discard.

Parameters: None

3.1.5.37  Microsoft.SharePoint.Client.Publishing.SitePageCollection

TypeId: {2F94EC4F-F009-497D-BF0C-B520E0619EDF}

ShortName: SP.Publishing.SitePageCollection

Represents a collection of Site Pages.

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

3.1.5.37.2.1.1  EnsureTitleResource

Return Type: None

Ensure the web title is set correctly for the parent web of the site page collection.

Parameters: None

3.1.5.37.2.1.2  GetPageColumnState

Determines whether a specific SitePage is a single or multicolumn page.

**Parameters:**

*url*: URL of the SitePage for which to return state.

Type: **CSOM String**

### 3.1.5.37.2.1.3 IsSitePage

**Return Type:** **CSOM Boolean**

Indicates whether a specific item is a modern site page.

**Parameters:**

*url*: URL of the SitePage to be checked.

Type: **CSOM String**

### 3.1.5.37.2.2 ObjectPath Methods

#### 3.1.5.37.2.2.1 CSOM Constructor

Constructor for the SitePageCollection.

**Parameters:** None

#### 3.1.5.37.2.2.2 Feed

**Return Type:** Microsoft.SharePoint.Client.Publishing.SitePageMetadataCollection

Returns a collection of site pages that meet the specified filtering criteria.

**Parameters:**

*promotedState*: Specifies filtering on the promoted state field. Default value is -1. If -1 is or default value specified, the server MUST return all site pages in the site pages document library. Otherwise, the server MUST return only site pages having promoted state equal to the specified value.

Type: **CSOM Int32**

*published*: Specifies filtering only on published pages. Default value is false. When false or default is specified, the server MUST return pages that are in published or draft state. Otherwise, the server MUST return only site pages in the published state.

Type: **CSOM Boolean**

*metadataFilter*: Optional CAML query clause. If present, the server MUST add the metadata filter to the query matching the site pages in the site pages document library.

Type: **CSOM String**

#### 3.1.5.37.2.2.3 GetByld

**Return Type:** Microsoft.SharePoint.Client.Publishing.SitePage

Gets a SitePage based upon its ID.

**Parameters:**
id: The ID of the SitePage to be retrieved
Type: **CSOM Int32**

### 3.1.5.37.2.2.4 GetByUrl

**Return Type:** Microsoft.SharePoint.Client.Publishing.SitePage

Gets a SitePage by URL.

**Parameters:**

- **url:** URL of the SitePage to retrieve
  
  Type: **CSOM String**

### 3.1.5.38 Microsoft.SharePoint.Client.Publishing.SitePageFieldsData

**TypeId:** {1CD13100-0AFE-4014-BE26-FDCB2B10EBA5}

**ShortName:** SP.Publishing.SitePageFieldsData

Represents Site Page metadata for use in page authoring operations.

The CanvasJson1 property is not included in the **default scalar property set** for this type.

### 3.1.5.38.1 Properties

#### 3.1.5.38.1.1 Scalar Properties

##### 3.1.5.38.1.1.1 BannerImageUrl

**Type:** **CSOM String**

**Accessibility:** Read/Write

Gets or sets the preview image URL for the current Site Page.

This image will appear in rollups such as search.

##### 3.1.5.38.1.1.2 CanvasContent1

**Type:** **CSOM String**

**Accessibility:** Read/Write

Gets or sets the CanvasContent1 for the current Site Page.

##### 3.1.5.38.1.1.3 CanvasJson1

**Type:** **CSOM String**

**Accessibility:** Read/Write

Gets or sets the CanvasContent1 of the current Site Page based on a stringified JSON object structure.

##### 3.1.5.38.1.1.4 LayoutWebpartsContent

**Type:** **CSOM String**

---

[MS-PUBCSOM] - v20190319
Publishing Client-Side Object Model Protocol
Copyright © 2019 Microsoft Corporation
Release: March 19, 2019
Accessibility: Read/Write

Gets or sets the LayoutWebPartsContent field for the current Site Page.

3.1.5.38.1.1.5 Modified

Type: CSOM DateTime

Accessibility: Read/Write

Gets or sets the last modified date for the current Site Page.

3.1.5.38.1.1.6 Title

Type: CSOM String

Accessibility: Read/Write

Gets or sets the Page title.

3.1.5.38.1.2 ObjectPath Properties

None.


TypeId: {47B3A86A-7F8A-4AF8-8D31-C6064B62E03B}

ShortName: SP.Publishing.SitePageMetadata

Represents the core properties of a Site Page.

The CommentsDisabled, FirstPublishedRelativeTime, ListId, ModifiedRelativeTime and SocialBarOnSitePagesDisabled properties are not included in the default scalar property set for this type.

3.1.5.39.1 Properties

3.1.5.39.1.1 Scalar Properties

3.1.5.39.1.1.1 AbsoluteUrl

Type: CSOM String

Accessibility: Read Only

Gets the absolute Url of the Site Page.

3.1.5.39.1.1.2 BannerImageUrl

Type: CSOM String

Accessibility: Read/Write

Gets or sets the banner image Url.

3.1.5.39.1.1.3 CommentsDisabled

Type: CSOM Boolean


**Accessibility:** Read Only
Indicates if comments are disabled for the current Site Page.

3.1.5.39.1.1.4 **ContentTypeId**
*Type:* CSOM String

**Accessibility:** Read/Write
Gets or sets the content type ID of the current Site Page.

3.1.5.39.1.1.5 **Description**
*Type:* CSOM String

**Accessibility:** Read/Write
Gets the description for the current Site Page.

3.1.5.39.1.1.6 **DoesUserHaveEditPermission**
*Type:* CSOM Boolean

**Accessibility:** Read Only
Indicates if the current user has edit permission to the Site Page.

3.1.5.39.1.1.7 **FileName**
*Type:* CSOM String

**Accessibility:** Read Only
Gets the file name of the current Site Page.

3.1.5.39.1.1.8 **FirstPublished**
*Type:* CSOM DateTime

**Accessibility:** Read Only
As specified in section 3.1.5.36.1.1.11

3.1.5.39.1.1.9 **FirstPublishedRelativeTime**
*Type:* CSOM String

**Accessibility:** Read Only
As specified in section 3.1.5.36.1.1.12

3.1.5.39.1.1.10 **Id**
*Type:* CSOM Int32

**Accessibility:** Read Only
Gets the item ID of the Site Page.
3.1.5.39.1.1.11  **IsPageCheckedOutToCurrentUser**
Type: **CSOM Boolean**
Accessibility: Read Only
Indicates if the Site Page is checked out to the current user.

3.1.5.39.1.1.12  **IsWebWelcomePage**
Type: **CSOM Boolean**
Accessibility: Read Only
Indicates if the current Site Page is set as a homepage.

3.1.5.39.1.1.13  **ListId**
Type: **CSOM GUID**
Accessibility: Read Only
Gets the ID of the parent list for the current Site Page.

3.1.5.39.1.1.14  **Modified**
Type: **CSOM DateTime**
Accessibility: Read Only
Gets the date in UTC when the Site Page was last modified.

3.1.5.39.1.1.15  **ModifiedRelativeTime**
Type: **CSOM String**
Accessibility: Read Only
Gets the difference between the current time and when the Site Page was last modified.

3.1.5.39.1.1.16  **PageLayoutType**
Type: **CSOM String**
Accessibility: Read Only
Gets the type of page layout used for the current Site Page.

3.1.5.39.1.1.17  **Path**
Type: Microsoft.SharePoint.Client.ResourcePath
Accessibility: Read Only
Gets the site relative path ([MS-CSOMSPT] section 3.2.5.422) of the Site Page.

3.1.5.39.1.1.18  **PromotedState**
Accessibility: Read Only
As specified in section 3.1.5.36.1.1.22

3.1.5.39.1.1.19  SocialBarOnSitePagesDisabled
Type: CSOM Boolean
Accessibility: Read Only
Indicates if the social bar is disabled for the current Site Page.

3.1.5.39.1.1.20  Title
Type: CSOM String
Accessibility: Read/Write
Gets or sets the title for the Site Page.

3.1.5.39.1.1.21  UniqueId
Type: CSOM GUID
Accessibility: Read Only
Gets the unique ID of the current Site Page.

3.1.5.39.1.1.22  Url
Type: CSOM String
Accessibility: Read Only
Gets the site relative Url of the Site Page.

3.1.5.39.1.1.23  Version
Type: CSOM String
Accessibility: Read Only
Gets the version of the Site Page.

The format of the version string is m.n where 'm' is the major version number and 'n' is the minor version number.

3.1.5.39.1.1.24  VersionInfo
Accessibility: Read Only
Gets the version information for the most recently checked in version of the Site Page.

3.1.5.39.1.2  ObjectPath Properties

3.1.5.39.1.2.1  CreatedBy
Type: Microsoft.SharePoint.Client.Publishing.UserInfo
Accessibility: Read Only
Specifies the user who created the page.

3.1.5.39.1.2.2 LastModifiedBy
Type: Microsoft.SharePoint.Client.Publishing.UserInfo
Accessibility: Read Only
Gets the user who last modified the current Site Page.

3.1.5.39.2 Methods

3.1.5.39.2.1 Scalar Methods
None.

3.1.5.39.2.2 ObjectPath Methods
None.

3.1.5.40 Microsoft.SharePoint.Client.Publishing.SitePageMetadataCollection
TypeId: {2BFE7293-9251-4061-9B40-7059BECC014C}
ShortName: SP.Publishing.SitePageMetadataCollection
Specifies a collection of site pages.

3.1.5.40.1 Properties

3.1.5.40.1.1 Scalar Properties
None.

3.1.5.40.1.2 ObjectPath Properties
None.

3.1.5.40.2 Methods

3.1.5.40.2.1 Scalar Methods
None.

3.1.5.40.2.2 ObjectPath Methods

3.1.5.40.2.2.1 GetById
Return Type: Microsoft.SharePoint.Client.Publishing.SitePageMetadata
Retrieves a site page by specified identifier.

Parameters:

id: A list item identifier of the site page to retrieve.
Type: **CSOM Int32**

### 3.1.5.41 Microsoft.SharePoint.Client.Publishing.SitePageService

**TypeId:** {BD3B709A-892E-419B-9D14-56BBEC1169B9}

**ShortName:** SP.Publishing.SitePageService

Represents a set of APIs to use for managing site pages.

The CustomContentApprovalEnabled property is not included in the default scalar property set for this type.

#### 3.1.5.41.1 Properties

#### 3.1.5.41.1.1 Scalar Properties

#### 3.1.5.41.1.1.1 CustomContentApprovalEnabled

**Type:** **CSOM Boolean**

**Accessibility:** Read/Write

Specifies whether the custom content approval is enabled.

#### 3.1.5.41.1.2 ObjectPath Properties

#### 3.1.5.41.1.2.1 CommunicationSite

**Type:** Microsoft.SharePoint.Client.Publishing.CommunicationSite

**Accessibility:** Read Only

Gets a CommunicationSite for the current web.

#### 3.1.5.41.1.2.2 Pages

**Type:** Microsoft.SharePoint.Client.Publishing.SitePageCollection

**Accessibility:** Read Only

Gets the SitePageCollection for the current web.

#### 3.1.5.41.2 Methods

#### 3.1.5.41.2.1 Scalar Methods

#### 3.1.5.41.2.1.1 CanCreatePromotedPage

**Return Type:** **CSOM Boolean**

Checks if the current user has permission to create a site page on the site pages document library. MUST return true if the user has permission to create a site page, otherwise MUST return false.

**Parameters:** None

### 3.1.5.41.2.1.2 IsFilePickerExternalImageSearchEnabled
This method is a **static CSOM method**.

**Return Type:** CSOM Boolean

Specifies whether the tenant administrator has opted out of ability to use Bing search in the file picker for images.

**Parameters:** None

### 3.1.5.41.2.1.3 Update

**Return Type:** None

Updates for the SitePageCollection.

**Parameters:** None

### 3.1.5.41.2.2 ObjectPath Methods

#### 3.1.5.41.2.2.1 CSOM Constructor

CSOM constructor for the SitePageService.

**Parameters:** None

#### 3.1.5.41.2.2.2 AddImage

**Return Type:** Microsoft.SharePoint.Client.File

Adds an image to the site assets library of the current web. Returns a File object ([MS-CSOMSPT] section 3.2.5.64) that represents the image.

**Parameters:**

*pageName:* Indicates the name of that site page that the image is to be used in.

Type: **CSOM String**

It MUST NOT be empty.

*imageFileName:* Indicates the file name of the image to be added.

Type: CSOM String

It MUST NOT be empty.

*imageStream:* The image stream.

Type: **CSOM Stream**

It MUST NOT be NULL.

#### 3.1.5.41.2.2.3 AddImageFromExternalUrl

**Return Type:** Microsoft.SharePoint.Client.File

Adds an image retrieved from an external web site to the site assets library of the current web. Returns a File object ([MS-CSOMSPT] section 3.2.5.64) that represents the image.

**Parameters:**
**pageName**: Indicates the name of that site page that the image is to be used in.
Type: **CSOM String**
It MUST NOT be empty.

**imageFileName**: Indicates the file name of the image to be added.
Type: **CSOM String**
It MUST NOT be empty.

**externalUrl**: The URL of the external web site where the image to be retrieved.
Type: **CSOM String**
It MUST NOT be empty.

**subFolderName**: The name of the subfolder to be added for the image.
Type: **CSOM String**

### 3.1.5.41.2.2.4 GetTimeZone

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

**Return Type**: Microsoft.SharePoint.Client.Publishing.PrimaryCityTime

Gets time zone data for specified city.

**Parameters**:

**cityName**: The name of the city.
Type: **CSOM String**

### 3.1.5.42 Microsoft.SharePoint.Client.Publishing.SitePageVersionInfo

**TypeId**: {A76110E2-0BE3-4472-950B-F45D7EFAB716}

**ShortName**: SP.Publishing.SitePageVersionInfo

Represents the version information for a given SitePage.

#### 3.1.5.42.1 Properties

#### 3.1.5.42.1.1 Scalar Properties

#### 3.1.5.42.1.1.1 LastVersionCreated

**Type**: **CSOM DateTime**

**Accessibility**: Read/Write

Gets the date that the last version of the Site Page was created.

#### 3.1.5.42.1.1.2 LastVersionCreatedBy

**Type**: **CSOM String**
Accessibility: Read/Write

Gets the name of the user who last checked in the Site Page.

3.1.5.42.1.2 ObjectPath Properties

None.

3.1.5.43 Microsoft.SharePoint.Client.Publishing.SiteSharingEmailContext

TypeId: {2D732678-A6FF-42A8-91E0-EE9FF0B3213C}

ShortName: SP.Publishing.SiteSharingEmailContext

Represents information used in a sharing email which can be sent when a site is shared with a set of users.

3.1.5.43.1 Properties

3.1.5.43.1.1 Scalar Properties

3.1.5.43.1.1.1 CustomDescription

Type: CSOM String

Accessibility: Read/Write

Gets or sets a custom description to be displayed in the site sharing email, describing the site that is being shared.

3.1.5.43.1.1.2 CustomTitle

Type: CSOM String

Accessibility: Read/Write

Gets or sets the name of the site to be used in the site sharing email.

3.1.5.43.1.1.3 Message

Type: CSOM String

Accessibility: Read/Write

Gets or sets an optional message which will appear in the body of the site sharing email.

3.1.5.43.1.1.4 Url

Type: CSOM String

Accessibility: Read/Write

Gets or sets the URL of the home page of the site that has been shared so that users can navigate to the site from the site sharing email.

3.1.5.43.1.2 ObjectPath Properties

None.
3.1.5.44  Microsoft.SharePoint.Client.Publishing.TextValueWithLanguage

TypeId: {545721CC-4296-4516-9050-7A718496B415}
ShortName: SP.Publishing.TextValueWithLanguage

Specifies a combination of parameters for which to generate an acronym and color. The protocol client MAY use the generated acronym and color for rendering to the user an abbreviated title of a site and corresponding color of the background or logo to allow consistent representation of the site across different user experiences.

3.1.5.44.1  Properties

3.1.5.44.1.1  Scalar Properties

3.1.5.44.1.1.1  ColorSeed

Type: CSOM String
Accessibility: Read/Write

MUST be a universally unique identifier (UUID) or NULL. The server SHOULD use the ColorSeed to generate the RGB color for the color seed. The server MUST generate the same color for the same value of the color seed. If not specified, the server MUST use the text field to generate color.

3.1.5.44.1.1.2  Lcid

Type: CSOM Int32
Accessibility: Read/Write

LCID that SHOULD be used to generate the acronym of the specified text.

3.1.5.44.1.1.3  Text

Type: CSOM String
Accessibility: Read/Write

Text for which to generate an acronym. The acronym SHOULD be a concatenation of capitalized first letters of each word in the text. The exact implementation of acronym generation is an implementation detail of the server.

3.1.5.44.1.2  ObjectPath Properties

None.

3.1.5.45  Microsoft.SharePoint.Client.Publishing.UserInfo

TypeId: {A4A306FE-9F8A-4F2E-834C-03605925B872}
ShortName: SP.Publishing.UserInfo

Represents user information of a user with consistent color and acronym for client rendering.

3.1.5.45.1  Properties

3.1.5.45.1.1  Scalar Properties
3.1.5.45.1.1.1  AccountName
Type: CSOM String
Accessibility: Read/Write
The login name of the user.

3.1.5.45.1.1.2  Acronym
Type: CSOM String
Accessibility: Read/Write
Short abbreviation of the user name. MUST be the same value for a specified user. The exact
algorithm is an implementation detail of the server. Typically it’s a concatenation of the capitalized
first letters of the first and last name.

3.1.5.45.1.1.3  Color
Type: CSOM String
Accessibility: Read/Write
MUST be in RGB format, as specified in [RFC2083]. Background color for the user. The server MUST
return the same value for the same user. The exact algorithm for how user is mapped to color is an
implementation detail of the server.

3.1.5.45.1.1.4  Name
Type: CSOM String
Accessibility: Read/Write
Name of the user.

3.1.5.45.2  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
None.

3.1.6  Timer Events
None.

3.1.7  Other Local Events
None.
4 Protocol Examples

4.1 Create a New Navigation Hierarchy

In this example, a new navigation hierarchy is created. The navigation hierarchy will be created using the menu names, link types, and URLs specified in the following table.

<table>
<thead>
<tr>
<th>Menu name</th>
<th>Link type</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>Simple</td>
<td><a href="http://www.contoso.com">http://www.contoso.com</a></td>
</tr>
<tr>
<td>Products</td>
<td>Friendly URL</td>
<td>/sites/site1/products</td>
</tr>
<tr>
<td>Bicycles</td>
<td>Friendly URL</td>
<td>/sites/site1/products/bicycles</td>
</tr>
<tr>
<td>Skis</td>
<td>Friendly URL</td>
<td>/sites/site1/products/skis</td>
</tr>
<tr>
<td>Events</td>
<td>Friendly URL</td>
<td>/sites/site1/events</td>
</tr>
<tr>
<td>Summer Expo</td>
<td>Friendly URL</td>
<td>/sites/site1/events/summer-expo</td>
</tr>
</tbody>
</table>

The operation is summarized in the following sequence of requests and responses.

The protocol client creates a **TaxonomySession** ([MS-EMMCSOM] section 3.1.5.15) object, and queries for all **TermStore** ([MS-EMMCSOM] section 3.1.5.23) objects.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName=".NET Library" xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <ObjectPath Id="2" ObjectPathId="1" />
    <ObjectPath Id="4" ObjectPathId="3" />
    <ObjectPath Id="6" ObjectPathId="5" />
    <Query Id="7" ObjectPathId="5">
      <Query SelectAllProperties="false">
        <Properties>
          <Property Name="TermStores" SelectAll="true">
            <Query SelectAllProperties="false">
              <Properties />
            </Query>
          </Property>
        </Properties>
      </Query>
    </ObjectPath>
  </Actions>
  <ObjectPaths>
    <StaticProperty Id="1" TypeId="{3747addc-a3c3-41b9-bf6b-4a64dd2f1e0a}" Name="Current" />
    <Property Id="3" ParentId="1" Name="Site" />
    <Constructor Id="5" TypeId="{981bcb68-9edc-4f8d-872f-71146fcb84f}">
      <Parameters>
        <Parameter ObjectPathId="3" />
        <Parameter Type="Boolean">true</Parameter>
      </Parameters>
    </Constructor>
    </ObjectPaths>
</Request>
```

The protocol server returns a collection of **TermStore** objects. In this case, there is only one.

**Response:**

The protocol server returns a collection of **TermStore** objects. In this case, there is only one.
The protocol client calls the `TermStore.GetSiteCollectionGroup` (as specified in [MS-EMMCSOM] section 3.1.5.23.2.2.8) method to retrieve a `TermGroup` object. Then it calls the `TermGroup.CreateTermSet` (as specified in [MS-EMMCSOM] section 3.1.5.18.2.2.1) method to create a new navigation term set. The name of the new term set is "Navigation Demo".

Request:

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
<Actions>
  <ObjectPath Id="30" ObjectPathId="29" />
  <ObjectIdentityQuery Id="31" ObjectPathId="29" />
  <ObjectPath Id="33" ObjectPathId="32" />
  <ObjectIdentityQuery Id="34" ObjectPathId="32" />
  <Method Name="CommitAll" Id="35" ObjectPathId="11" />
</Actions>
<ObjectPaths>
  <Method Id="29" ParentId="11" Name="GetSiteCollectionGroup">
    <Parameters>
      <Parameter ObjectPathId="3" />
      <Parameter Type="Boolean">true</Parameter>
    </Parameters>
  </Method>
  <Method Id="32" ParentId="29" Name="CreateTermSet">
    <Parameters>
      <Parameter Type="String">Navigation Demo</Parameter>
      <Parameter Type="Guid">{e742cc24-69e6-428e-81ca-156119ff0979}</Parameter>
      <Parameter Type="Int32">1033</Parameter>
    </Parameters>
  </Method>
  <Identity Id="11" Name="fec14c62-7c3b-481b-851b-c80d7802b224:st:TKE6KUAnlkq7BYswGJADmQ==" />
  <Property Id="3" ParentId="11" Name="Site" />
  <StaticProperty Id="1" TypeId="{3747adcc-a3c3-41b9-bfab-4a64dd2f1e0a}" Name="Current" />
</ObjectPaths>
</Request>
```

The protocol server returns the identifier of the new `TermSet` object.
Response:

```json
[
  {
    "SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3410.1000","ErrorInfo":null,
    "IsNull":false
  },
  {
    "_ObjectIdentity_":"fec14c62-7c3b-481b-851b-c80d7802b224:gr:TKE6KUAnlkq7BYswGJADmeRwDFiGK2tPuhG99p0rWMc=",
    "IsNull":false
  },
  {
    "_ObjectIdenity_":"fec14c62-7c3b-481b-851b-c80d7802b224:se:TKE6KUAnlkq7BYswGJADmeRwDFiGK2tPuhG99p0rWMckzELn5mmQoHKFWEZ\u002fwl5"
  }
]
```

The protocol client calls the `NavigationTermSet.GetAsResolvedByWeb` (section 3.1.5.7.2.2.8) method to create a new `NavigationTermSet` (section 3.1.5.7) object using the global navigation taxonomy provider. It sets the `IsNavigationTermSet` (section 3.1.5.7.1.1.2) property to true, and the `TargetUrlForChildTerms.Value` (section 3.1.5.7.1.2) property to "~site/Pages/Topics/Topic.aspx".

Request:

```xml
<Response AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName=".NET Library" xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <ObjectPath Id="39" ObjectPathId="38" />
    <ObjectPath Id="41" ObjectPathId="40" />
    <ObjectIdentityQuery Id="42" ObjectPathId="40" />
    <SetProperty Id="43" ObjectPathId="40" Name="IsNavigationTermSet" />
    <ObjectPath Id="45" ObjectPathId="44" />
    <SetProperty Id="46" ObjectPathId="44" Name="Value" />
    <Method Name="CommitAll" Id="47" ObjectPathId="11" />
  </Actions>
  <ObjectPaths>
    <Property Id="38" ParentId="1" Name="Web" />
    <StaticMethod Id="40" Name="GetAsResolvedByWeb" TypeId="{5ed5ae4c-8e92-4e56-af6e-d349611614d8}" />
    <Parameters>
      <Parameter ObjectPathId="32" />
      <Parameter ObjectPathId="38" />
      <Parameter Type="String">GlobalNavigationTaxonomyProvider</Parameter>
    </Parameters>
  </ObjectPaths>
</Response>
```

The protocol server returns the identifier of the new `NavigationTermSet` object.

Response:
Finally the protocol client creates the navigation hierarchy of NavigationTerm (section 3.1.5.5) objects. It calls the NavigationTermSet.CreateTerm (section 3.1.5.7.2.2.1) and NavigationTerm.CreateTerm (section 3.1.5.5.2.2.1) methods on objects to construct each node in the hierarchy. For the "Home" menu item, it sets the SimpleLinkUrl (section 3.1.5.5.1.1.8) property to "http://www.contoso.com". All other NavigationTerm objects are configured to use a friendly URL.

Request:

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
  ApplicationName=".NET Library"
  xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <ObjectPath Id="50" ObjectPathId="49" />
    <ObjectIdentityQuery Id="51" ObjectPathId="49" />
    <SetProperty Id="52" ObjectPathId="49" Name="SimpleLinkUrl">
      <Parameter Type="String">http://www.contoso.com/</Parameter>
    </SetProperty>
    <ObjectPath Id="54" ObjectPathId="53" />
    <ObjectIdentityQuery Id="55" ObjectPathId="53" />
    <ObjectPath Id="57" ObjectPathId="56" />
    <ObjectIdentityQuery Id="58" ObjectPathId="56" />
    <ObjectPath Id="60" ObjectPathId="59" />
    <ObjectIdentityQuery Id="61" ObjectPathId="59" />
    <ObjectPath Id="63" ObjectPathId="62" />
    <ObjectIdentityQuery Id="64" ObjectPathId="62" />
    <ObjectPath Id="66" ObjectPathId="65" />
    <ObjectIdentityQuery Id="67" ObjectPathId="65" />
    <Method Name="CommitAll" Id="68" ObjectPathId="11" />
  </Actions>
  <ObjectPaths>
    <Method Id="49" ParentId="40" Name="CreateTerm">
      <Parameters>
        <Parameter Type="String">Home</Parameter>
        <Parameter Type="Enum">2</Parameter>
        <Parameter Type="Guid">{33e12d60-2332-4612-917d-48b2896699b9}</Parameter>
      </Parameters>
    </Method>
    <Method Id="53" ParentId="40" Name="CreateTerm">
      <Parameters>
        <Parameter Type="String">Products</Parameter>
        <Parameter Type="Enum">1</Parameter>
        <Parameter Type="Guid">{87faa433-4e3e-4500-aa5b-e04330b12acd}</Parameter>
      </Parameters>
    </Method>
    <Method Id="56" ParentId="53" Name="CreateTerm">
      <Parameters>
        <Parameter Type="String">Bicycles</Parameter>
        <Parameter Type="Enum">1</Parameter>
        <Parameter Type="Guid">{d85e60a5-d339-44c9-8c8f-a7e66aa2d587}</Parameter>
      </Parameters>
    </Method>
  </ObjectPaths>
</Request>

<Method Id="59" ParentId="53" Name="CreateTerm">
    <Parameters>
        <Parameter Type="String">Skis</Parameter>
        <Parameter Type="Enum">1</Parameter>
        <Parameter Type="Guid">{d30a51bf-a71b-45b5-ae1e-945327df6f49}</Parameter>
    </Parameters>
</Method>

<Method Id="62" ParentId="40" Name="CreateTerm">
    <Parameters>
        <Parameter Type="String">Events</Parameter>
        <Parameter Type="Enum">1</Parameter>
        <Parameter Type="Guid">{7408f146-623e-4384-a53a-ec0a8c39a17a}</Parameter>
    </Parameters>
</Method>

<Method Id="65" ParentId="62" Name="CreateTerm">
    <Parameters>
        <Parameter Type="String">Summer Expo</Parameter>
        <Parameter Type="Enum">1</Parameter>
        <Parameter Type="Guid">{2236b9e8-5d6e-42fc-bf47-49a02af1ca4e}</Parameter>
    </Parameters>
</Method>

<Identity Id="11" Name="fec14c62-7c3b-481b-851b-c80d78022b44:st:TKE6KUAnlkq7BYswGJADmQ=="/>
<Identity Id="40" Name="c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ/w15/sites/pub1||`1|0"/>

The protocol server returns the IDs of the new NavigationTerm objects.

Response:

```json
[
    {
        "SchemaVersion": "15.0.0.0",
        "LibraryVersion": "15.0.3410.1000",
        "ErrorInfo": null
    },
    {
        "IsNull": false
    },
    {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ\u002fw15Yc3hMzLjEkARfVIyiWAzuQ==;\u002fsites\u002fpub1||`1|0"
    },
    {
        "IsNull": false
    },
    {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ\u002fw15M6T6h5Q5EkwQ+BDMLEqQ==;\u002fsites\u002fpub1||`1|0"
    },
    {
        "IsNull": false
    },
    {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ\u002fw15pWBe2jTYUSWj6f6qLVVw==;\u002fsites\u002fpub1||`1|0"
    },
    {
        "IsNull": false
    },
    {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ\u002fw15v1RK0xuntUNuwMRTJ99vQ==;\u002fsites\u002fpub1||`1|0"
    },
    {
        "IsNull": false
    },
    {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRWDf1GK2PuhG99p0rWMckzELn5mmQoHKFWEZ\u002fw15RvEIdD5iheEO1OwUjRhW==;\u002fsites\u002fpub1||`1|0"
]```
4.2 Resolve URLs

In this example, URLs for navigation terms are resolved and returned to the protocol client. This is a useful operation in scenarios where the protocol client needs custom control over navigation. An example is where the protocol client is a mobile application that is rendering the menus for a small screen.

Using the menu items described in section 4.1, this example shows how to resolve the URLs for each top-level menu item: Home, Products, and Events.

The operation is summarized in the following sequence of requests and responses.

The protocol client creates a TaxonomySession ([MS-EMMCSOM] section 3.1.5.15) object, and queries for all TermStore ([MS-EMMCSOM] section 3.1.5.23) objects.

Request:

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName=".NET Library" xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <ObjectPath Id="2" ObjectPathId="1" />
    <ObjectPath Id="4" ObjectPathId="3" />
    <ObjectPath Id="6" ObjectPathId="5" />
    <Query Id="7" ObjectPathId="5">
      <Query SelectAllProperties="false">
        <Properties>
          <Property Name="TermStores" SelectAll="true">
            <Query SelectAllProperties="false">
              <Properties />
            </Query>
          </Property>
        </Properties>
      </Query>
    </Query>
  </Actions>
</ObjectPaths>
</Request>
```

The protocol server returns a collection of TermStore objects. In this case, there is only one.

Response:

```xml
[
]
```
The protocol client calls the `TermStore.GetTermSet` ([MS-EMMCSOM] section 3.1.5.23.2.2.6) passing the identifier of the "Navigation Demo" term set. It calls the `NavigationTermSet.GetAsResolvedByWeb` (section 3.1.5.7.2.2.8) method to get the `NavigationTermSet` (section 3.1.5.7) wrapper for the term set. Finally, it queries for all child `NavigationTerm` (section 3.1.5.5) objects and their `Title` (section 3.1.5.5.1.2.9) properties to be loaded into the new `NavigationTermSet` object.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
<Actions>
    <ObjectPath Id="13" ObjectPathId="12" />
    <ObjectIdentityQuery Id="14" ObjectPathId="12" />
    <ObjectPath Id="16" ObjectPathId="15" />
    <ObjectPath Id="18" ObjectPathId="17" />
    <ObjectIdentityQuery Id="19" ObjectPathId="17" />
    <Query Id="20" ObjectPathId="17">
        <Query SelectAllProperties="false">
            <Properties>
                <Property Name="Terms">
                    <Query SelectAllProperties="false">
                        <Properties />
                    </Query>
                    <ChildItemQuery SelectAllProperties="false">
                        <Properties>
                            <Property Name="Title">
                                <Query SelectAllProperties="false">
                                    <Properties>
                                        <Property Name="Value" ScalarProperty="true" />
                                    </Properties>
                                </Query>
                            </Property>
                        </Properties>
                    </ChildItemQuery>
                </Properties>
            </Query>
        </Query>
    </Query>
    </Actions>
    </ObjectPaths>
</Request>
```
The protocol server returns the identifier of the new NavigationTermSet object and loads it with the three child NavigationTerm objects: Events, Home, and Products.

Response:

```json
[
  {
    "SchemaVersion": "15.0.0.0",
    "LibraryVersion": "15.0.3410.1000",
    "IsNull": false
  },
  {
    "ObjectIdentity": "fec14c62-7c3b-481b-c80d7802b224:st:TKE6KUAnlkq7BYswGJADmQ==",
    "IsNull": false
  },
  {
    "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15",
    "IsNull": false
  },
  {
    "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15;\u002fsites\u002fpub1||`1|0",
    "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15;\u002fsites\u002fpub1||`1|0",
    "Child_Items": [
      {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15;\u002fsites\u002fpub1||`1|0",
        "Title": {
          "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15;\u002fsites\u002fpub1||`1|0"
        }
      },
      {
        "ObjectIdentity": "c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdF1GK2tPuhG99p0rWMckzELn5mmOQoHKFWEZ\u002fw15;\u002fsites\u002fpub1||`1|0"
      }]
}]
```
The protocol client iterates through the three child `NavigationTerm` objects. It calls the `GetResolvedTargetUrl` (section 3.1.5.2.1.4) method on the Events `NavigationTerm` object.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
 <Actions>
 <Method Name="GetResolvedTargetUrl" Id="34" ObjectPathId="28">
  <Parameters>
   <Parameter Type="Null" />
   <Parameter Type="Array" />
  </Parameters>
 </Method>
 </Actions>
 <ObjectPaths>
  <Identity Id="28" Name="c9a9c738-3bb7-475b-83f4-7edbc963099e:name:ERGEKUAnlk7BYswGJADmeRWdF1GK2tPuhG99p0rWMckzELn5mmQoHKFWEZ/w158Ho9SKGXCUqgbjzajsELQ="/sites/pub1|`1|0" />
 </ObjectPaths>
</Request>
```

The protocol server returns the resolved URL for Events.

**Response:**

```
[
{
 "SchemaVersion":"15.0.0.0","LibraryVersion":"15.0.3410.1000","ErrorInfo":null
},34,"u02fpages/u02fTopics/u02fTopic.aspx?TermStoreId=293aa14c-2740-4a96-bb05-8b3018900399&TermSetId=e742cc24-69e6-428e-81ca-156119ff0979&TermId=483d7af0-97a1-4a09-aa6d-d8f36ac2442d"
]
```

Next, the protocol client calls the `GetResolvedTargetUrl` method on the Home `NavigationTerm` object.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
 <Actions>
 <Method Name="GetResolvedTargetUrl" Id="35" ObjectPathId="30">
  <Parameters>
   <Parameter Type="Null" />
   <Parameter Type="Array" />
  </Parameters>
 </Method>
 </Actions>
 <ObjectPaths>
</Request>
```
Because the Home menu item is a simple link URL, the protocol server returns null.

**Response:**

```xml
[{
  "SchemaVersion": "15.0.0.0",
  "LibraryVersion": "15.0.3410.1000",
  "ErrorInfo": null
}, 35, null]
```

Finally the protocol client calls the `GetResolvedTargetUrl` method on the `Products` `NavigationTerm` object.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
  ApplicationName=".NET Library"
  xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <Method Name="GetResolvedTargetUrl" Id="36" ObjectPathId="32">
      <Parameters>
        <Parameter Type="Null" />
        <Parameter Type="Array" />
      </Parameters>
    </Method>
  </Actions>
  <ObjectPaths>
    <Identity Id="32" Name="c9a9c738-3bb7-475b-83f4-7edbc963099e:nt:te:TKE6KUAnlkq78YswGJADmeRwdfP1GK3tPuhG99p0rWMckzELn5mmQoHKFWEZ/wl15uTfp1XVHWE
SrCVYyjTJQA==;/sites/pub1||`1|0" />
  </ObjectPaths>
</Request>
```

The protocol server returns the resolved URL for Products.

**Response:**

```xml
[{
  "SchemaVersion": "15.0.0.0",
  "LibraryVersion": "15.0.3410.1000",
  "ErrorInfo": null
}, 36, "u002fsites\u002fpub1\u002fpages\u002ftopics\u002ftopic.aspx?TermStoreId=293aa14c-2740-4a96-bb05-8b301890399&TermSetId=e742cc24-69e6-428e-81ca-156119ff0979&TermId=87f0a433-43e4-4500-a5b-e04330b12acd"]
```

### 4.3 Changing a View

In this example, the protocol client applies a `NavigationTermSetView` (section 3.1.5.9) object to a `NavigationTermSet` (section 3.1.5.7) object to exclude deprecated terms. This example uses the same menu items that are specified in section 4.1. The only change is that the `NavigationTerm` (section 3.1.5.5) object that represents the Events menu item is deprecated.
In the first query for NavigationTerm objects, the protocol client will receive the NavigationTerm objects for the Home, Products, and Events menu items. The protocol client then creates a NavigationTermSetView object that excludes deprecated terms. After applying the new NavigationTermSetView object, and querying again, the protocol client will receive only the NavigationTerm objects for Home and Products.

The operation is summarized in the following sequence of requests and responses.

The protocol client creates a TaxonomySession ([MS-EMMCSOM] section 3.1.5.15) object, and queries for all TermStore ([MS-EMMCSOM] section 3.1.5.23) objects.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
ApplicationName=".NET Library"
xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
<Actions>
  <ObjectPath Id="2" ObjectPathId="1" />
  <ObjectPath Id="4" ObjectPathId="3" />
  <ObjectPath Id="6" ObjectPathId="5" />
  <Query Id="7" ObjectPathId="5">
    <Query SelectAllProperties="false">
      <Properties>
        <Property Name="TermStores" SelectAll="true">
          <Query SelectAllProperties="false">
            <Properties />
          </Query>
        </Property>
      </Properties>
    </Query>
  </Query>
</Actions>
<ObjectPaths>
  <StaticProperty Id="1" TypeId="{3747adc3-a3c3-41b9-bf46-4a64dd2fe0a}" Name="Current" />
  <Property Id="3" ParentId="1" Name="Site" />
  <Constructor Id="5" TypeId="{981bc689-edc4-8fd1-7146-fcbba84f6a}">
    <Parameters>
      <Parameter ObjectPathId="3" />
      <Parameter Type="Boolean">true</Parameter>
    </Parameters>
  </Constructor>
</ObjectPaths>
</Request>
```

The protocol server returns a collection of TermStore objects. In this case, there is only one.

**Response:**

```json
[
  {
    "SchemaVersion": "15.0.0.0",
    "LibraryVersion": "15.0.3410.1000",
    "ErrorInfo": "null",
    "IsNull": false,
    "ContentTypePublishingHub": null,
    "DefaultLanguage": 1033,
    "Id": "/Guid(293aa14c-2740-4a96-bb05-8b3018900399)/",
    "IsOnline": true,
    "Languages": [
      
```
The protocol client calls the `GetAsResolvedByWeb` (section 3.1.5.7.2.2.8) method to obtain a `NavigationTermSet` object. The protocol client queries to load the child `NavigationTerm` objects for the `NavigationTermSet`.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0" ApplicationName=".NET Library" xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
  <Actions>
    <ObjectPath Id="13" ObjectPathId="12" />
    <ObjectIdentityQuery Id="14" ObjectPathId="12" />
    <ObjectPath Id="16" ObjectPathId="15" />
    <ObjectIdentityQuery Id="18" ObjectPathId="17" />
    <Query Id="19" ObjectPathId="17">
      <Query SelectAllProperties="false">
        <Properties>
          <Property Name="Terms">
            <Query SelectAllProperties="false">
              <Properties />
            </Query>
            <ChildItemQuery SelectAllProperties="false">
              <Properties>
                <Property Name="Title">
                  <Query SelectAllProperties="false">
                    <Properties>
                      <Property Name="Value" ScalarProperty="true" />
                    </Properties>
                  </Query>
                </Property>
                <Property Name="IsDeprecated" ScalarProperty="true" />
              </Properties>
            </ChildItemQuery>
          </Property>
        </Properties>
      </Query>
    </Query>
    <Property Id="11" Name="fec14c62-7c3b-8481b-851b-c80f7802b224:st:TKE6KUAnlkkqTByswGJDmpQ==" />
  </Actions>
  <ObjectPaths>
    <Method Id="12" ParentId="11" Name="GetTermSet">
      <Parameters>
        <Parameter Type="Guid">{e742cc24-69e6-428e-81ca-156119f0979}</Parameter>
      </Parameters>
    </Method>
    <Property Id="15" ParentId="1" Name="Web" />
    <StaticMethod Id="17" Name="GetAsResolvedByWeb" TypeId="{5ed5ae4c-8e92-4e56-af6e-d349611614d8}">
      <Parameters>
        <Parameter ObjectPathId="12" />
        <Parameter ObjectPathId="15" />
        <Parameter Type="String">GlobalNavigationTaxonomyProvider</Parameter>
      </Parameters>
    </StaticMethod>
    <Identity Id="11" Name="fec14c62-7c3b-8481b-851b-c80f7802b224:st:TKE6KUAnlkkqTByswGJDmpQ==" />
    <StaticProperty Id="1" TypeId="{3747adcd-a3c3-41b9-bfab-4a64dd2f0e0a}" Name="Current" />
  </ObjectPaths>
</Request>
```
The protocol server returns the new NavigationTermSet, and 3 NavigationTerm objects. The 3 NavigationTerm objects represent the 3 menu items: Home, Products, and Events.

Response:

```json
[
  {
    "SchemaVersion": "15.0.0.0",
    "LibraryVersion": "15.0.3410.1000",
    "ErrorInfo": null
  },
  {
    "IsNull": false
  },
  {
    "ObjectIdentity_": "fec14c62-7c3b-481b-851b-c80d7802b224:se:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5"
  },
  {
    "IsNull": false
  },
  {
    "ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5;\\002fsites\u002fpub1\|`1|0"
  },
  {
    "ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edc963099e:nt:se:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5;\\002fsites\u002fpub1\|`1|0",
    "Terms": [
      {
        "_Child_Items_": [
          {
            "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5Ez3RQqmod02eII2HbRGvzA==;\u002fsites\u002fpub1\|`1|0",
            "Title": {
              "_ObjectType_": "SP.Publishing.CustomizableString",
              "Value": "Events"
            },
            "IsDeprecated": true
          },
          {
            "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5fNhsJpWSkx221n3xNA6Ttw==;\u002fsites\u002fpub1\|`1|0",
            "Title": {
              "_ObjectType_": "SP.Publishing.CustomizableString",
              "Value": "Home"
            },
            "IsDeprecated": false
          },
          {
            "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edc963099e:nt:te:TKE6KUAnlkq7BYswGJADmeRwdFlGK2tPuhG99p0rWMckzELn5mmQOqHKFWEZ\u002fwl5M6T6hz5OAEMkH+BDMLEqxQ==;\u002fsites\u002fpub1\|`1|0",
            "Title": {
              "_ObjectType_": "SP.Publishing.CustomizableString",
              "Value": "Products"
            },
            "IsDeprecated": false
          }
        ]
      }
    ]
  }
]
```

The protocol client calls the CreateEmptyInstance (section 3.1.5.9.2.2.1) method to create a new NavigationTermSetView object. Then it sets the ExcludeDeprecatedTerms (section 3.1.5.9.1.1.1) property to true on the new object. Then it calls GetWithNewView (section 3.1.5.7.2.2.6) to obtain a new NavigationTermSet object that will exclude deprecated terms.

Request:
The protocol server returns the identifier of the new **NavigationTermSetView** object.

**Response:**

```
[ {
  "SchemaVersion": "15.0.0.0", "LibraryVersion": "15.0.3410.1000", "ErrorInfo": null
 }, 35, {
  "IsNull": false
 }, 38, {
  "IsNull": false
 }, 39, {
  "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edbc963099e:int:TEKk6KUAnlkq7BYswGJAdmeRWdf1GK2tPuh99p0rWMckzELn5mmOQoHKFWEZ\u002fwl5;|||1"
 }]
```

The protocol client queries to load the child **NavigationTerm** objects that match the new **NavigationTermSetView** object.

**Request:**

```xml
<Request AddExpandoFieldTypeSuffix="true" SchemaVersion="15.0.0.0" LibraryVersion="15.0.0.0"
 ApplicationName=".NET Library"
 xmlns="http://schemas.microsoft.com/sharepoint/clientquery/2009">
 <Actions>
  <Query Id="41" ObjectPathId="37">
   <Query SelectAllProperties="false">
    <Properties>
     <Property Name="Terms">
      <Query SelectAllProperties="false">
       <Properties />
      </Query>
     </Property>
    </Properties>
   </Query>
  </Query>
 </Actions>
</Request>
```
The protocol server returns 2 NavigationTerm objects that represent the menu items Home, and Products. Because the new view excludes deprecated terms, the NavigationTerm for Events is not returned.

Response:

```json
[
  {
    "SchemaVersion": "15.0.0.0",
    "LibraryVersion": "15.0.3410.1000",
    "ErrorInfo": null,
    "_ObjectType_": "SP.Publishing.Navigation.NavigationTermSet",
    "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edbc06d099e:nt:se:TKE6KUAnlkq7BYswGJADmeRWdFlGK2tPuhG99p0rWmckzELn5mQQoHKFWEZ/w15;|||1",
    "Terms": [
      {
        "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edbc06d099e:nt:se:TKE6KUAnlkq7BYswGJADmeRWdFlGK2tPuhG99p0rWmckzELn5mQQoHKFWEZ/w15fNhasJpWSxk221H3zNA65Tw==;|||1",
        "Title": {
          "_ObjectType_": "SP.Publishing.CustomizableString",
          "Value": "Home"
        },
        "IsDeprecated": false
      },
      {
        "_ObjectIdentity_": "c9a9c738-3bb7-475b-83f4-7edbc06d099e:nt:se:TKE6KUAnlkq7BYswGJADmeRWdFlGK2tPuhG99p0rWmckzELn5mQQoHKFWEZ/w1556T6h2zGAEK6qW+BDMLeqZQ==;|||1",
        "Title": {
          "_ObjectType_": "SP.Publishing.CustomizableString",
          "Value": "Products"
        },
        "IsDeprecated": false
      }
    ]
  }
]
```
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
- Microsoft SharePoint Server 2016
- Microsoft SharePoint Server 2019

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.
## Change Tracking

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

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

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

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

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

The changes made to this document are listed in the following table. For more information, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com).

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Revision class</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.5.29.2.1.1 Create</td>
<td>Updated description for Create method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.29.2.2.1 CSOM Constructor</td>
<td>Updated description for this method.</td>
<td>Major</td>
</tr>
<tr>
<td>3.1.5.30.1.1.8 ListId</td>
<td>Updated description for ListId.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.30.1.1.11 SiteId</td>
<td>Updated description for SiteId.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.32 Microsoft.SharePoint.Client.Publishing.PrimaryCityTime</td>
<td>Added description for PrimaryCityTime.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.33 Microsoft.SharePoint.Client.Publishing.RichSharing</td>
<td>Updated description for this section</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.33.2.1.1 SharePageByEmail</td>
<td>Added description for the SharePageByEmail method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.33.2.1.2 ShareSiteByEmail</td>
<td>Added description for the ShareSiteByEmail method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.33.2.2.1 CSOM Constructor</td>
<td>Added description for the CSOM constructor.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.34 Microsoft.SharePoint.Client.Publishing.SharePagePreviewByEmailFieldsData</td>
<td>Added description for the SharePagePreviewByEmailFieldsData class.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.34.1.1.1 message</td>
<td>Added description for this property.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.34.1.1.2 recipientEmails</td>
<td>Added description for this property.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.36 Microsoft.SharePoint.Client.Publishing.SitePage</td>
<td>Updated description for</td>
<td>Minor</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Revisions class</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>SP.Publishing.SitePage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.5.36.2.1.5 SaveDraft</td>
<td>Added description for the SaveDraft method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.36.2.1.8 SharePagePreviewByEmail</td>
<td>Added description for the SharePagePreviewByEmail method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.36.2.1.9 Update</td>
<td>Added description for Update method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.39.1.2.1 CreatedBy</td>
<td>Added description for CreatedBy property.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.41.1.1.1 CustomContentApprovalEnabled</td>
<td>Added description for CustomContentApprovalEnabled property.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.41.2.1.2 IsFilePickerExternalImageSearchEnabled</td>
<td>Added description for IsFilePickerExternalImageSearchEnabled method.</td>
<td>Minor</td>
</tr>
<tr>
<td>3.1.5.41.2.2.3 AddImageFromExternalUrl</td>
<td>Updated description for the AddImageFromExternalUrl method.</td>
<td>Major</td>
</tr>
<tr>
<td>3.1.5.41.2.2.4 GetTimeZone</td>
<td>Added description for the GetTimeZone method.</td>
<td>Minor</td>
</tr>
</tbody>
</table>
8 Index

A
Abstract data model
  server 23
Applicability 21

C
Capability negotiation 21
Change tracking 127
changing a view example 119
create a new navigation hierarchy example 110

D
Data model - abstract
  server 23

E
Examples
  changing a view 119
create a new navigation hierarchy 110
resolve URLs example 115

F
Fields - vendor-extensible 21

G
Glossary 15

H
Higher-layer triggered events
  server 23

I
Implementer - security considerations 125
Index of security parameters 125
Informative references 20
Initialization
  server 23
Introduction 15

M
Message processing
  server 23
Messages
  syntax 22
transport 22

N
Normative references 19

O
Other local events
  server 109
Overview (synopsis) 20

P
Parameters - security index 125
Preconditions 21
Prerequisites 21
Product behavior 126

R
References 19
  informative 20
  normative 19
Relationship to other protocols 20
resolve URLs example 115

S
Security
  implementer considerations 125
parameter index 125
Sequencing rules
  server 23
Server
  abstract data model 23
  higher-layer triggered events 23
  initialization 23
message processing 23
other local events 109
sequencing rules 23
timer events 109
timers 23
Standards assignments 21
Syntax 22

T
Timer events
  server 109
Timers
  server 23
Tracking changes 127
Transport 22
Triggered events - higher-layer
  server 23

V
Vendor-extensible fields 21
Versioning 21