**[MS-SPAFWI]:**

**SharePoint Activity Feed Web Interfaces Protocol**

Intellectual Property Rights Notice for Open Specifications Documentation

* **Technical Documentation.** Microsoft publishes Open Specifications documentation (“this documentation”) for protocols, file formats, data portability, computer languages, and standards support. Additionally, overview documents cover inter-protocol relationships and interactions.
* **Copyrights**. This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you can make copies of it in order to develop implementations of the technologies that are described in this documentation and can distribute portions of it in your implementations that use these technologies or in your documentation as necessary to properly document the implementation. You can also distribute in your implementation, with or without modification, any schemas, IDLs, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications documentation.
* **No Trade Secrets**. Microsoft does not claim any trade secret rights in this documentation.
* **Patents**. Microsoft has patents that might cover your implementations of the technologies described in the Open Specifications documentation. Neither this notice nor Microsoft's delivery of this documentation grants any licenses under those patents or any other Microsoft patents. However, a given Open Specifications document might be covered by the Microsoft [Open Specifications Promise](https://go.microsoft.com/fwlink/?LinkId=214445) or the [Microsoft Community Promise](https://go.microsoft.com/fwlink/?LinkId=214448). 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://aka.ms/AA9ufj8).
* **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).

**Preliminary Documentation.** This particular Open Specifications document provides documentation for past and current releases and/or for the pre-release version of this technology. This document provides final documentation for past and current releases and preliminary documentation, as applicable and specifically noted in this document, for the pre-release version. Microsoft will release final documentation in connection with the commercial release of the updated or new version of this technology. Because this documentation might change between the pre-release version and the final version of this technology, there are risks in relying on this preliminary documentation. To the extent that you incur additional development obligations or any other costs as a result of relying on this preliminary documentation, you do so at your own risk.

**Revision Summary**

| Date | Revision History | Revision Class | Comments |
| --- | --- | --- | --- |
| 11/6/2009 | 0.1 | Major | Initial Availability |
| 2/19/2010 | 1.0 | Minor | Updated the technical content |
| 3/31/2010 | 1.01 | Editorial | Revised and edited the technical content |
| 4/30/2010 | 1.02 | Editorial | Revised and edited the technical content |
| 6/7/2010 | 1.03 | Editorial | Revised and edited the technical content |
| 6/29/2010 | 1.04 | Editorial | Changed language and formatting in the technical content. |
| 7/23/2010 | 1.04 | None | No changes to the meaning, language, or formatting of the technical content. |
| 9/27/2010 | 1.04 | None | No changes to the meaning, language, or formatting of the technical content. |
| 11/15/2010 | 1.05 | Editorial | Changed language and formatting in the technical content. |
| 12/17/2010 | 1.05 | None | No changes to the meaning, language, or formatting of the technical content. |
| 3/18/2011 | 1.05 | None | No changes to the meaning, language, or formatting of the technical content. |
| 6/10/2011 | 1.05 | None | No changes to the meaning, language, or formatting of the technical content. |
| 1/20/2012 | 2.0 | Major | Significantly changed the technical content. |
| 4/11/2012 | 2.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 7/16/2012 | 2.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 9/12/2012 | 2.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 10/8/2012 | 2.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 2/11/2013 | 2.0.1 | Editorial | Changed language and formatting in the technical content. |
| 7/30/2013 | 2.1 | Minor | Clarified the meaning of the technical content. |
| 11/18/2013 | 2.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 2/10/2014 | 2.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 4/30/2014 | 2.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 7/31/2014 | 2.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 10/30/2014 | 2.1 | None | No changes to the meaning, language, or formatting of the technical content. |
| 3/16/2015 | 3.0 | Major | Significantly changed the technical content. |
| 2/26/2016 | 4.0 | Major | Significantly changed the technical content. |
| 7/15/2016 | 4.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 9/14/2016 | 4.0 | None | No changes to the meaning, language, or formatting of the technical content. |
| 7/24/2018 | 5.0 | Major | Significantly changed the technical content. |
| 10/1/2018 | 6.0 | Major | Significantly changed the technical content. |
| 4/22/2021 | 7.0 | Major | Significantly changed the technical content. |

Table of Contents

[1 Introduction 7](#_Toc69362440)

[1.1 Glossary 7](#_Toc69362441)

[1.2 References 7](#_Toc69362442)

[1.2.1 Normative References 7](#_Toc69362443)

[1.2.2 Informative References 8](#_Toc69362444)

[1.3 Protocol Overview (Synopsis) 8](#_Toc69362445)

[1.4 Relationship to Other Protocols 8](#_Toc69362446)

[1.5 Prerequisites/Preconditions 8](#_Toc69362447)

[1.6 Applicability Statement 8](#_Toc69362448)

[1.7 Versioning and Capability Negotiation 8](#_Toc69362449)

[1.8 Vendor-Extensible Fields 8](#_Toc69362450)

[1.9 Standards Assignments 9](#_Toc69362451)

[2 Messages 10](#_Toc69362452)

[2.1 Transport 10](#_Toc69362453)

[2.2 Common Message Syntax 10](#_Toc69362454)

[2.2.1 Namespaces 10](#_Toc69362455)

[2.2.2 Messages 10](#_Toc69362456)

[2.2.3 Elements 10](#_Toc69362457)

[2.2.3.1 AccountName within the author element 12](#_Toc69362458)

[2.2.3.2 ActivityType within the entry or item element 12](#_Toc69362459)

[2.2.3.3 Content within the entry or item element 12](#_Toc69362460)

[2.2.3.4 DateOnly within the entry or item element 12](#_Toc69362461)

[2.2.3.5 Id within the author element 12](#_Toc69362462)

[2.2.3.6 Link within the entry or item element 13](#_Toc69362463)

[2.2.3.7 Link2 within the entry or item element 13](#_Toc69362464)

[2.2.3.8 List within the entry or item element 13](#_Toc69362465)

[2.2.3.9 Name within the entry or item element 13](#_Toc69362466)

[2.2.3.10 Picture within the author element 13](#_Toc69362467)

[2.2.3.11 Separator within the entry or item element 13](#_Toc69362468)

[2.2.3.12 Size within the entry or item element 13](#_Toc69362469)

[2.2.3.13 Template within the entry or item element 14](#_Toc69362470)

[2.2.3.14 TTL within the feed or channel element 14](#_Toc69362471)

[2.2.3.15 Type within the author element 14](#_Toc69362472)

[2.2.3.16 Updated within the entry or item element 14](#_Toc69362473)

[2.2.3.17 Value within the entry or item element 14](#_Toc69362474)

[2.2.4 Complex Types 15](#_Toc69362475)

[2.2.4.1 AF:Link 15](#_Toc69362476)

[2.2.4.2 AF:List 15](#_Toc69362477)

[2.2.5 Simple Types 15](#_Toc69362478)

[2.2.6 Attributes 15](#_Toc69362479)

[2.2.7 Groups 15](#_Toc69362480)

[2.2.8 Attribute Groups 15](#_Toc69362481)

[3 Protocol Details 16](#_Toc69362482)

[3.1 Server Details 16](#_Toc69362483)

[3.1.1 Abstract Data Model 16](#_Toc69362484)

[3.1.2 Timers 16](#_Toc69362485)

[3.1.3 Initialization 16](#_Toc69362486)

[3.1.4 Message Processing Events and Sequencing Rules 17](#_Toc69362487)

[3.1.5 Timer Events 17](#_Toc69362488)

[3.1.6 Other Local Events 17](#_Toc69362489)

[4 Protocol Examples 18](#_Toc69362490)

[4.1 ATOM 1.0 Formatted Feed 18](#_Toc69362491)

[4.2 RSS 2.0 Formatted Feed 22](#_Toc69362492)

[5 Security 27](#_Toc69362493)

[5.1 Security Considerations for Implementers 27](#_Toc69362494)

[5.2 Index of Security Parameters 27](#_Toc69362495)

[6 Appendix A: Full WSDL 28](#_Toc69362496)

[7 Appendix B: Product Behavior 29](#_Toc69362497)

[8 Change Tracking 30](#_Toc69362498)

[9 Index 31](#_Toc69362499)

# Introduction

The SharePoint Activity Feed Web Interfaces Protocol specifies extensions for serializing and distributing social networking activity data of the users.

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.

## Glossary

This document uses the following terms:

**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.

**social networking**: The use of websites and services that provide enhanced information and interaction capabilities with regard to people and resources.

**Uniform Resource Identifier (URI)**: A string that identifies a resource. The URI is an addressing mechanism defined in Internet Engineering Task Force (IETF) Uniform Resource Identifier (URI): Generic Syntax [[RFC3986]](https://go.microsoft.com/fwlink/?LinkId=90453).

**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.

**XML**: The Extensible Markup Language, as described in [[XML1.0]](https://go.microsoft.com/fwlink/?LinkId=90599).

**XML namespace**: A collection of names that is used to identify elements, types, and attributes in XML documents identified in a URI reference [RFC3986]. A combination of XML namespace and local name allows XML documents to use elements, types, and attributes that have the same names but come from different sources. For more information, see [[XMLNS-2ED]](https://go.microsoft.com/fwlink/?LinkId=90602).

**XML namespace prefix**: An abbreviated form of an [**XML namespace**](#gt_485f05b3-df3b-45ac-b8bf-d05f5d185a24), as described in [[XML]](https://go.microsoft.com/fwlink/?LinkId=90598).

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as defined in [[RFC2119]](https://go.microsoft.com/fwlink/?LinkId=90317). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 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](https://go.microsoft.com/fwlink/?linkid=850906).

### Normative References

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

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, [http://www.rfc-editor.org/rfc/rfc2119.txt](https://go.microsoft.com/fwlink/?LinkId=90317)

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, [http://www.rfc-editor.org/rfc/rfc2616.txt](https://go.microsoft.com/fwlink/?LinkId=90372)

[RFC4287] Nottingham, M., and Sayre, R., Eds., "The Atom Syndication Format", RFC 4287, December 2005, [http://www.rfc-editor.org/rfc/rfc4287.txt](https://go.microsoft.com/fwlink/?LinkId=140877)

[RSS2.0] Winer, D., "RSS 2.0 Specification", Fall 2002, version 2.0.1: July 2003, [http://cyber.law.harvard.edu/rss/rss.html](https://go.microsoft.com/fwlink/?LinkId=113933)

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, [http://www.w3.org/TR/2001/NOTE-wsdl-20010315](https://go.microsoft.com/fwlink/?LinkId=90577)

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, [http://www.w3.org/TR/2009/REC-xml-names-20091208/](https://go.microsoft.com/fwlink/?LinkId=191840)

[XMLSCHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, [http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/](https://go.microsoft.com/fwlink/?LinkId=90608)

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, [http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/](https://go.microsoft.com/fwlink/?LinkId=90610)

### Informative References

[MS-SPRSS] Microsoft Corporation, "[RSS 2.0 Format Extensions](%5bMS-SPRSS%5d.pdf#Section_66fc9b5004c54f4dbe47d969ab226667)".

## Protocol Overview (Synopsis)

This protocol defines the extensions to the [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) and Microsoft RSS 2.0 Format Extensions, [[MS-SPRSS]](%5bMS-SPRSS%5d.pdf#Section_66fc9b5004c54f4dbe47d969ab226667) and ATOM 1.0, as described in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), XML structures to support serializing and distributing [**social networking**](#gt_2e992b7a-5b43-4329-afc2-6605164eb8ef) activity data for [**website**](#gt_04b6a259-c555-4695-a236-57a32087deac) users. This protocol exposes social networking activities for any authenticated user accessing the website, whether or not the user accessing the website participates in social networking activities.

## Relationship to Other Protocols

This protocol is an extension of [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) and ATOM [**XML**](#gt_982b7f8e-d516-4fd5-8d5e-1a836081ed85) structure, as described in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877). It has the same relationship to other protocols that the standard [RSS2.0] and ATOM 1.0 protocols have.

## Prerequisites/Preconditions

None.

## Applicability Statement

This protocol is designed for serializing and distributing [**social networking**](#gt_2e992b7a-5b43-4329-afc2-6605164eb8ef) activity data of less than 200 distinct activities at a time, and activities that are less than two weeks old. This protocol is also designed for low impact social networking activities that typically take place at a much lower frequency than other online activities; for example, sending and receiving e-mail, or performing Web search.

## Versioning and Capability Negotiation

None.

## Vendor-Extensible Fields

None.

## Standards Assignments

None.

# Messages

## Transport

This protocol does not require any specific transports; they are implementation-specific.

## Common Message Syntax

This section contains common definitions used by this protocol. The syntax of the definitions uses XML Schema as defined in [[XMLSCHEMA1]](https://go.microsoft.com/fwlink/?LinkId=90608)and [[XMLSCHEMA2]](https://go.microsoft.com/fwlink/?LinkId=90610), and WSDL as defined in [[WSDL]](https://go.microsoft.com/fwlink/?LinkId=90577).

### Namespaces

This specification defines and references various [**XML namespaces**](#gt_485f05b3-df3b-45ac-b8bf-d05f5d185a24) using the mechanisms specified in [[XMLNS]](https://go.microsoft.com/fwlink/?LinkId=191840). Although this specification associates a specific [**XML namespace prefix**](#gt_b9a20be7-31d9-4dcd-9cb9-ba72302857a2) for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability. The namespaces are described in the following table.

| Prefix | Namespace URI | Reference |
| --- | --- | --- |
| s | http://www.w3.org/2001/XMLSchema | [[XMLSCHEMA1]](https://go.microsoft.com/fwlink/?LinkId=90608) |
| xs | http://www.w3.org/2001/XMLSchema | [XMLSCHEMA1] |
| A10 | ATOM 1.0 (also the default if none is specified) | [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877) |
| AF | http://schemas.microsoft.com/SharePoint/ActivityFeed |  |

### Messages

This specification does not define any common WSDL message definitions.

### Elements

The elements in the following table are the additional elements in the namespace http://schemas.microsoft.com/SharePoint/ActivityFeed (denoted by prefix "AF" in section [2.2.1](#Section_bd5b8990a99a4976869ea43d1ab92de4)) that are specific to this protocol. These elements will be recognized as part of this protocol only if they are present in this namespace.

| Element | Description |
| --- | --- |
| **AccountName** | Within the **author** element. The login user name of the [**site**](#gt_8abdc986-5679-42d9-ad76-b11eb5a0daba) user that is represented by the **author** of an **entry**. |
| **ActivityType** | Within the **entry** or **item** element. The locale and language neutral string that indicates the type of social networking activity represented by an **entry** or **item**; for example, profile changes, colleague changes, social tags, and so on. These can be used by clients of this protocol to group related **entry** elements in the feed together for display. |
| **Author** | As specified by ATOM 1.0, in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), and RSS 2.0 as specified in [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) |
| **Content** | Within the **entry** or **item** element. The content or links to the content related to the activity represented by the **entry** or **item** element. |
| **DateOnly** | Within the **entry** or **item** element. The date portion of the date-time at which the activity took place. For example, if an anniversary activity was logged with the ATOM 1.0 **updated** tag being "20091023T15.10.45.000-7:00" (October 10, 2009 at 3:10:45 PM in PDT), the **DateOnly** tag would be "20091023T00.00.00" in UTC. |
| **Entry** | As specified by ATOM 1.0, in [RFC4287] |
| **Id** | Within the **author** element (ATOM 1.0 as specified in [RFC4287] or RSS 2.0 as specified in [RSS2.0]). A unique identifier of the [**website**](#gt_04b6a259-c555-4695-a236-57a32087deac) user that is represented by the **author** of an **entry** (ATOM 1.0 as specified in [RFC4287]). |
| **item** | As specified in [RSS2.0]. |
| **Link** | Within the **entry** or **item** element. A [**Uniform Resource Identifier (URI)**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) and URI-related information for the subject of the social networking activity represented by an **entry** or **item**. |
| **Link2** | Within the **entry** or **item** element. Another URI and URI-related information for the subject of the social networking activity represented by an **entry** or **item**. |
| **List** | Within the **entry** or **item** element. A list of URIs and URI-related information for the social networking activity represented by an **entry** or **item**. |
| **Name** | Within the **entry** or **item** element. The name of the subject of the social networking activity represented by an **entry** or **item**. |
| **Picture** | Within the **author** element. The URI of a representation of the site users that is represented by the **author** of an **entry**. |
| **Separator** | Within the **entry** or **item** element. A formatting hint that specifies how elements of a **List** element need to be separated during display for the social networking activity represented by an **entry** or **item**. |
| **Size** | Within the **entry** or **item** element. Number of elements in the **List** element of the social networking activity represented by an **entry** or **item**. |
| **Template** | Within the **entry** or **item** element. A formatting hint that specifies how a client can obtain the **content** in ATOM 1.0, specified in [RFC4287] of an **entry** or **description** in RSS 2.0, specified in [RSS2.0] of an **item**. This is done by using the information in one of the preceding tags, or one of the other tags in the standard ATOM 1.0 or RSS 2.0 formats. |
| **TTL** | Within the **feed** element (ATOM 1.0 as specified in [RFC4287]) or the **channel** element (RSS 2.0 as specified in [RSS2.0]). The validity period of the entire [**social networking**](#gt_2e992b7a-5b43-4329-afc2-6605164eb8ef) activity feed, expressed in seconds. |
| **Type** | Within the **author** element. The type of the site user that is represented by the **author** of an **entry**. For example, "User", "Group", "Organization", "Contact", and so on. This value could be any string; the preceding are just typical examples. The value of this element does not drive any protocol behavior: it is informational only. |
| **Updated** | Within the **entry** or **item** element. The last instant in time that the item was updated. |
| **Value** | Within the **entry** or **item** element. The value of the subject of the social networking activity represented by an **entry** or **item**. |

#### AccountName within the author element

1. <xs:element name="AccountName" type="xs:string" />

Contains the login name of the author represented by the **author** tag of ATOM 1.0.

#### ActivityType within the entry or item element

1. <xs:element name="ActivityType" type="xs:string" />

Contains a locale and language independent name of the type of activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0. The ActivityType is not limited to a finite set of strings because users can create new types on the server.

#### Content within the entry or item element

1. <xs:element name="Content" type="xs:string" maxOccurs="1" minOccurs="0" />

The content or links to the content as specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877) related to the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.[<1>](#Appendix_A_1" \o "Product behavior note 1)

#### DateOnly within the entry or item element

1. <xs:element name="DateOnly" type="xs:dateTime" maxOccurs="1" minOccurs="0" />

Essentially, the date portion of the date-time at which the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0 occurred. (The time portion of this date-time MUST be 00:00:00.)

#### Id within the author element

1. <xs:element name="Id" type="xs:long" />

Contains a unique identifier for the author represented by the **author** tag of ATOM 1.0.

#### Link within the entry or item element

1. <xs:element name="Link" type="AF:Link" maxOccurs="1" minOccurs="0" />

A [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) and URI-related information for the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### Link2 within the entry or item element

1. <xs:element name="Link2" type=" AF:Link" maxOccurs="1" minOccurs="0" />

A second [**URI**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) and URI-related information for the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### List within the entry or item element

1. <xs:element name="List" type="AF:List" maxOccurs="1" minOccurs="0" />

A list of [**URIs**](#gt_e18af8e8-01d7-4f91-8a1e-0fb21b191f95) and URI-related information for the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### Name within the entry or item element

1. <xs:element name="Name" type="xs:string" maxOccurs="1" minOccurs="0" />

Contains the subject of the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### Picture within the author element

1. <xs:element name="Picture" type="xs:anyURI" maxOccurs="1" minOccurs="0" />

Contains a URI of the picture of the author represented by the **author** tag of ATOM 1.0.

#### Separator within the entry or item element

1. <xs:element name="Separator" type="xs:string" maxOccurs="1" minOccurs="0" />

The separator to be used between the **List** elements during display related to the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### Size within the entry or item element

1. <xs:element name="Size" type="xs:int" maxOccurs="1" minOccurs="0" />

The number of elements contained in the **List** element related to the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

#### Template within the entry or item element

1. <xs:element name="Template" type="xs:string" />

Contains a formatting hint that can be used to compute the **content** of ATOM 1.0, specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877) and **description** of RSS 2.0, specified in [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933).

The template is a string in any language, with special markers that indicate areas of replaceable text that are demarcated to be within enclosing curly braces, ({ }). Anything that occurs between braces is taken to be one of the following:

* One of the tags in the "AF" namespace as described in this section (section [2.2.3](#Section_75cf9e52932e49fc8c8f89c671e8af67)).
* The string "Publisher", which indicates (is an alias for) the **author** tag of ATOM 1.0 or of RSS 2.0.

There is no support for tags within tags, that is, the following "{some\_text{nested\_text}more\_text}" is not a valid template.

A client that is rendering a feed returned by this protocol MAY use the template string to generate alternate textual descriptions of the activity represented by the **entry** tag of ATOM 1.0 and the **item** tag of RSS 2.0 by taking the template string and replacing the regions within curly braces (including the braces) with information from one of the preceding tags or a subset of those tags. However, there is no requirement in this protocol for clients to generate alternate textual representations, because this protocol already computes an ATOM 1.0 / RSS 2.0 compliant textual representation in the **content** and **description** tags respectively, which ATOM 1.0 or RSS 2.0 clients can render natively. Hence, the **Template** has informational content only and its usage is optional.

#### TTL within the feed or channel element

1. <xs:element name="TTL" type="xs:int" />

Contains the time to live in seconds. Defaults to 2 weeks in seconds.

#### Type within the author element

1. <xs:element name="Type" type="xs:string" />

Contains the name of the type of user represented by the **author** tag of ATOM 1.0.

#### Updated within the entry or item element

1. <xs:element name="Updated" type="xs:dateTime" maxOccurs="1" minOccurs="0" />

The instant in time that the item was updated as specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877) related to the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.[<2>](#Appendix_A_2" \o "Product behavior note 2)

#### Value within the entry or item element

1. <xs:element name="Value" type="xs:string" maxOccurs="1" minOccurs="0" />

Contains the value of the subject of the activity represented by the **entry** tag of ATOM 1.0 and **item** tag of RSS 2.0.

### Complex Types

The following table summarizes the set of common XML Schema complex type definitions defined by this specification. XML Schema complex type definitions that are specific to a particular operation are described with the operation.

| Complex type | Description |
| --- | --- |
| **AF:Link** | Specifies the structure of a **Link** element. |
| **AF:List** | Specifies a list of **AF:Link** elements. |

#### AF:Link

1. <s:complexType name="Link">
2. <s:sequence>
3. <s:element name="Uri" maxOccurs="1" minOccurs="1" type="xs:string" />
4. <s:element name="Title" maxOccurs="1" minOccurs="1" type="xs:string" />
5. </s:sequence>
6. </s:complexType>

**Uri:** Specifies the URI pointed by this link.

**Title:** Specifies the title of this link.

#### AF:List

1. <s:complexType name="List">
2. <s:sequence>
3. <s:element name="Link" minOccurs="0" maxOccurs="unbounded" type="AF:Link" />
4. </s:sequence>
5. </s:complexType>

**Link:** Specifies the **Link** element or elements contained in this list.

### Simple Types

This specification does not define any common XML Schema simple type definitions.

### Attributes

This specification does not define any common XML Schema attribute definitions.

### Groups

This specification does not define any common XML Schema group definitions.

### Attribute Groups

This specification does not define any common XML Schema attribute group definitions.

# Protocol Details

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

Except where specified, protocol clients SHOULD interpret HTTP status codes returned by the protocol server, as specified in [[RFC2616]](https://go.microsoft.com/fwlink/?LinkId=90372) section 10.

This protocol allows clients to retrieve social networking activities of Web interface users serialized in ATOM 1.0, as specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), or [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) formats.

In the case of the [RSS2.0] serialization format, this protocol deviates from and extends the [RSS2.0] format specification by eliminating the requirement that link and description elements be included in all channel elements.

## Server Details

This protocol is completely stateless, which means that the server does not retain information about any previous client connections or details of any previous requests. This protocol does not allow any changes ([**social networking**](#gt_2e992b7a-5b43-4329-afc2-6605164eb8ef) or otherwise) to be made by the protocol client and there are no events that a client can listen to. Upon client request, the protocol server returns a feed of social networking activities that currently exist on the protocol server to the protocol client after serializing them into the [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) or ATOM 1.0, specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), formats.

### 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 is used to distribute [**social networking**](#gt_2e992b7a-5b43-4329-afc2-6605164eb8ef) activity data to any client that understands [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) or ATOM 1.0, specified in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), syndication and serialization formats. This protocol describes the behavior of the protocol client and the protocol server. The only requirement is that the protocol client is authenticated by using standard mechanisms supported by the [**website**](#gt_04b6a259-c555-4695-a236-57a32087deac). The client can request social networking activity data for any SharePoint user, including itself, and also specifies the format of either RSS 2.0 or ATOM 1.0. The server simply retrieves the requested data and returns it to the client after formatting it appropriately.

The only state relevant for this protocol is the current server state of the social networking activities done by the users of the [**site**](#gt_8abdc986-5679-42d9-ad76-b11eb5a0daba). This state changes as website users perform social networking activities, and this protocol allows clients to see those changes upon request. It is completely up to the protocol implementation to decide which social networking activities to make available through this protocol: the protocol itself imposes no restrictions or requirements on protocol implementations.

### Timers

None.

### Initialization

None.

### Message Processing Events and Sequencing Rules

None.

### Timer Events

None.

### Other Local Events

None.

# Protocol Examples

## ATOM 1.0 Formatted Feed

This example describes an ATOM 1.0, as described in [[RFC4287]](https://go.microsoft.com/fwlink/?LinkId=140877), formatted feed.

1. <feed xmlns="http://www.w3.org/2005/Atom">
2. <title type="text">Activity Feed</title>
3. <id>uuid:a523a693-d80c-44b6-aa74-fe8af92c7c32;id=1</id>
4. <rights type="text">Copyright (c) Microsoft Corporation. All rights reserved.</rights>
5. <updated>2010-01-30T02:26:58Z</updated>
6. <TTL xmlns="AF">1209600</TTL>
7. <entry xml:base="http://mosslatest/my">
8. <id>7</id>
9. <title type="text">Birthday</title>
10. <summary type="html">
11. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; is celebrating a birthday today.&lt;br/&gt;Wish &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; a happy birthday!
12. </summary>
13. <published>2010-01-30T02:26:32-08:00</published>
14. <updated>2010-01-30T02:25:59-08:00</updated>
15. <author>
16. <name>Dag Rovik</name>
17. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
18. <email>dagro@contoso.com</email>
19. <Id xmlns="AF">10</Id>
20. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
21. <Type xmlns="AF">user</Type>
22. </author>
23. <content type="html">
24. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; is celebrating a birthday today.&lt;br/&gt;Wish &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; a happy birthday!
25. </content>
26. <ActivityType xmlns="AF">Birthday\_Today</ActivityType>
27. <Template xmlns="AF">
28. {Publisher} is celebrating a birthday today.&lt;br/&gt;Wish {Publisher} a happy birthday!
29. </Template>
30. <Name xmlns="AF">Saturday, January 30, 2010</Name>
31. <DateOnly xmlns="AF">2010-01-30T00:00:00</DateOnly>
32. </entry>
33. <entry xml:base="http://mosslatest/my">
34. <id>5</id>
35. <title type="text">Profile update</title>
36. <summary type="html">
37. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;&lt;ol&gt;&lt;li&gt;Birthday: January 30&lt;/li&gt;&lt;li&gt;Hire date: 2/1/2007&lt;/li&gt;&lt;/ol&gt;
38. </summary>
39. <published>2010-01-30T02:26:32-08:00</published>
40. <updated>2010-01-30T02:25:05-08:00</updated>
41. <author>
42. <name>Dag Rovik</name>
43. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
44. <email>dagro@contoso.com</email>
45. <Id xmlns="AF">10</Id>
46. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
47. <Type xmlns="AF">user</Type>
48. </author>
49. <content type="html">
50. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;&lt;ol&gt;&lt;li&gt;Birthday: January 30&lt;/li&gt;&lt;li&gt;Hire date: 2/1/2007&lt;/li&gt;&lt;/ol&gt;
51. </content>
52. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
53. <Template xmlns="AF">
54. {Publisher} updated profile.&lt;br/&gt;{List}
55. </Template>
56. <Size xmlns="AF">2</Size>
57. <List xmlns="AF">
58. <Link>
59. <Uri></Uri>
60. <Title>Birthday: January 30</Title>
61. </Link>
62. <Link>
63. <Uri></Uri>
64. <Title>Hire date: 2/1/2007</Title>
65. </Link>
66. </List>
67. </entry>
68. <entry xml:base="http://mosslatest/my">
69. <id>8</id>
70. <title type="text">Note Board post</title>
71. <summary type="html">
72. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; posted a note on &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro'&gt;CONTOSO\dagro&lt;/a&gt;.&lt;br/&gt;sample noteboard post
73. </summary>
74. <published>2010-01-30T02:26:32-08:00</published>
75. <updated>2010-01-30T02:21:39-08:00</updated>
76. <author>
77. <name>Dag Rovik</name>
78. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
79. <email>dagro@contoso.com</email>
80. <Id xmlns="AF">10</Id>
81. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
82. <Type xmlns="AF">user</Type>
83. </author>
84. <content type="html">
85. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; posted a note on &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro'&gt;CONTOSO\dagro&lt;/a&gt;.&lt;br/&gt;sample noteboard post
86. </content>
87. <ActivityType xmlns="AF">NoteboardPosts</ActivityType>
88. <Template xmlns="AF">
89. {Publisher} posted a note on {Link}.&lt;br/&gt;{Value}
90. </Template>
91. <Value xmlns="AF">sample noteboard post</Value>
92. <Link xmlns="AF">
93. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro</Uri>
94. <Title>CONTOSO\dagro</Title>
95. </Link>
96. </entry>
97. <entry xml:base="http://mosslatest/my">
98. <id>6</id>
99. <title type="text">New colleague</title>
100. <summary type="html">
101. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; added 3 new colleagues.&lt;br/&gt;&lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1'&gt;pkmuser1&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst'&gt;CONTOSO\starltst&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale'&gt;CONTOSO\pauldale&lt;/a&gt;
102. </summary>
103. <published>2010-01-30T02:26:32-08:00</published>
104. <updated>2010-01-30T02:21:23-08:00</updated>
105. <author>
106. <name>Dag Rovik</name>
107. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
108. <email>dagro@contoso.com</email>
109. <Id xmlns="AF">10</Id>
110. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
111. <Type xmlns="AF">user</Type>
112. </author>
113. <content type="html">
114. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; added 3 new colleagues.&lt;br/&gt;&lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1'&gt;pkmuser1&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst'&gt;CONTOSO\starltst&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale'&gt;CONTOSO\pauldale&lt;/a&gt;
115. </content>
116. <ActivityType xmlns="AF">ColleagueAddition</ActivityType>
117. <Template xmlns="AF">
118. {Publisher} added {Size} new colleagues.&lt;br/&gt;{List}
119. </Template>
120. <Link xmlns="AF">
121. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1</Uri>
122. <Title>pkmuser1</Title>
123. </Link>
124. <Size xmlns="AF">3</Size>
125. <Separator xmlns="AF">, </Separator>
126. <List xmlns="AF">
127. <Link>
128. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1</Uri>
129. <Title>pkmuser1</Title>
130. </Link>
131. <Link>
132. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst</Uri>
133. <Title>CONTOSO\starltst</Title>
134. </Link>
135. <Link>
136. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale</Uri>
137. <Title>CONTOSO\pauldale</Title>
138. </Link>
139. </List>
140. </entry>
141. <entry xml:base="http://mosslatest/my">
142. <id>4</id>
143. <title type="text">Profile update</title>
144. <summary type="html">
145. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Interests: interest1, interest2
146. </summary>
147. <published>2010-01-30T02:26:32-08:00</published>
148. <updated>2010-01-30T02:15:45-08:00</updated>
149. <author>
150. <name>Dag Rovik</name>
151. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
152. <email>dagro@contoso.com</email>
153. <Id xmlns="AF">10</Id>
154. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
155. <Type xmlns="AF">user</Type>
156. </author>
157. <content type="html">
158. &lt;ahref="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Interests: interest1, interest2
159. </content>
160. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
161. <Template xmlns="AF">
162. {Publisher} updated profile.&lt;br/&gt;{List}
163. </Template>
164. <Size xmlns="AF">2</Size>
165. <Separator xmlns="AF">, </Separator>
166. <List xmlns="AF">
167. <Link>
168. <Uri></Uri>
169. <Title>Interests: interest1</Title>
170. </Link>
171. <Link>
172. <Uri></Uri>
173. <Title>interest2</Title>
174. </Link>
175. </List>
176. </entry>
177. <entry xml:base="http://mosslatest/my">
178. <id>3</id>
179. <title type="text">Profile update</title>
180. <summary type="html">
181. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Skills: skill1, skill2
182. </summary>
183. <published>2010-01-30T02:26:32-08:00</published>
184. <updated>2010-01-30T02:15:45-08:00</updated>
185. <author>
186. <name>Dag Rovik</name>
187. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
188. <email>dagro@contoso.com</email>
189. <Id xmlns="AF">10</Id>
190. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
191. <Type xmlns="AF">user</Type>
192. </author>
193. <content type="html">
194. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Skills: skill1, skill2
195. </content>
196. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
197. <Template xmlns="AF">
198. {Publisher} updated profile.&lt;br/&gt;{List}
199. </Template>
200. <Size xmlns="AF">2</Size>
201. <Separator xmlns="AF">, </Separator>
202. <List xmlns="AF">
203. <Link>
204. <Uri></Uri>
205. <Title>Skills: skill1</Title>
206. </Link>
207. <Link>
208. <Uri></Uri>
209. <Title>skill2</Title>
210. </Link>
211. </List>
212. </entry>
213. <entry xml:base="http://mosslatest/my">
214. <id>2</id>
215. <title type="text">Profile update</title>
216. <summary type="html">
217. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Ask Me About: Activity Feed, Sync, Profile Store
218. </summary>
219. <published>2010-01-30T02:26:32-08:00</published>
220. <updated>2010-01-30T02:15:45-08:00</updated>
221. <author>
222. <name>Dag Rovik</name>
223. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
224. <email>dagro@contoso.com</email>
225. <Id xmlns="AF">10</Id>
226. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
227. <Type xmlns="AF">user</Type>
228. </author>
229. <content type="html">
230. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Ask Me About: Activity Feed, Sync, Profile Store
231. </content>
232. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
233. <Template xmlns="AF">
234. {Publisher} updated profile.&lt;br/&gt;{List}
235. </Template>
236. <Size xmlns="AF">3</Size>
237. <Separator xmlns="AF">, </Separator>
238. <List xmlns="AF">
239. <Link>
240. <Uri></Uri>
241. <Title>Ask Me About: Activity Feed</Title>
242. </Link>
243. <Link>
244. <Uri></Uri>
245. <Title>Sync</Title>
246. </Link>
247. <Link>
248. <Uri></Uri>
249. <Title>Profile Store</Title>
250. </Link>
251. </List>
252. </entry>
253. <entry xml:base="http://mosslatest/my">
254. <id>1</id>
255. <title type="text">Status Message</title>
256. <summary type="html">
257. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; says "Testing Feeds".
258. </summary>
259. <published>2010-01-30T02:26:32-08:00</published>
260. <updated>2010-01-30T02:14:40-08:00</updated>
261. <author>
262. <name>Dag Rovik</name>
263. <uri>http://example/my/person.aspx?accountname=CONTOSO%5Cdagro</uri>
264. <email>dagro@contoso.com</email>
265. <Id xmlns="AF">10</Id>
266. <AccountName xmlns="AF">CONTOSO\dagro</AccountName>
267. <Type xmlns="AF">user</Type>
268. </author>
269. <content type="html">
270. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; says "Testing Feeds".
271. </content>
272. <ActivityType xmlns="AF">StatusMessage</ActivityType>
273. <Template xmlns="AF">
274. {Publisher} says "{Value}".
275. </Template>
276. <Name xmlns="AF">Status Message</Name>
277. <Value xmlns="AF">Testing Feeds</Value>
278. </entry>
279. </feed>

## RSS 2.0 Formatted Feed

This example describes the same feed as the one in section [4.1](#Section_bad94953c6124919a61025b9a3b17fe4), but in RSS 2.0, described in [[RSS2.0]](https://go.microsoft.com/fwlink/?LinkId=113933) format.

1. <rss xmlns:a10="http://www.w3.org/2005/Atom" version="2.0">
2. <channel>
3. <title>Activity Feed</title>
4. <description />
5. <copyright>Copyright (c) Microsoft Corporation. All rights reserved.</copyright>
6. <lastBuildDate>Sat, 30 Jan 2010 02:43:33 Z</lastBuildDate>
7. <TTL xmlns="AF">1209600</TTL>
8. <item xml:base="http://mosslatest/my">
9. <guid isPermaLink="false">7</guid>
10. <author>Dag Rovik</author>
11. <title>Birthday</title>
12. <description>
13. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; is celebrating a birthday today.&lt;br/&gt;Wish &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; a happy birthday!
14. </description>
15. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
16. <a10:updated>2010-01-30T02:25:59-08:00</a10:updated>
17. <a10:content type="html">
18. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; is celebrating a birthday today.&lt;br/&gt;Wish &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; a happy birthday!
19. </a10:content>
20. <ActivityType xmlns="AF">Birthday\_Today</ActivityType>
21. <Template xmlns="AF">
22. {Publisher} is celebrating a birthday today.&lt;br/&gt;Wish {Publisher} a happy birthday!
23. </Template>
24. <Name xmlns="AF">Saturday, January 30, 2010</Name>
25. <DateOnly xmlns="AF">2010-01-30T00:00:00</DateOnly>
26. </item>
27. <item xml:base="http://mosslatest/my">
28. <guid isPermaLink="false">5</guid>
29. <author>Dag Rovik</author>
30. <title>Profile update</title>
31. <description>
32. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;&lt;ol&gt;&lt;li&gt;Birthday: January 30&lt;/li&gt;&lt;li&gt;Hire date: 2/1/2007&lt;/li&gt;&lt;/ol&gt;
33. </description>
34. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
35. <a10:updated>2010-01-30T02:25:05-08:00</a10:updated>
36. <a10:content type="html">
37. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;&lt;ol&gt;&lt;li&gt;Birthday: January 30&lt;/li&gt;&lt;li&gt;Hire date: 2/1/2007&lt;/li&gt;&lt;/ol&gt;
38. </a10:content>
39. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
40. <Template xmlns="AF">
41. {Publisher} updated profile.&lt;br/&gt;{List}
42. </Template>
43. <Size xmlns="AF">2</Size>
44. <List xmlns="AF">
45. <Link>
46. <Uri></Uri>
47. <Title>Birthday: January 30</Title>
48. </Link>
49. <Link>
50. <Uri></Uri>
51. <Title>Hire date: 2/1/2007</Title>
52. </Link>
53. </List>
54. </item>
55. <item xml:base="http://mosslatest/my">
56. <guid isPermaLink="false">8</guid>
57. <author>Dag Rovik</author>
58. <title>Note Board post</title>
59. <description>
60. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; posted a note on &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro'&gt;CONTOSO\dagro&lt;/a&gt;.&lt;br/&gt;sample noteboard post
61. </description>
62. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
63. <a10:updated>2010-01-30T02:21:39-08:00</a10:updated>
64. <a10:content type="html">
65. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; posted a note on &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro'&gt;CONTOSO\dagro&lt;/a&gt;.&lt;br/&gt;sample noteboard post
66. </a10:content>
67. <ActivityType xmlns="AF">NoteboardPosts</ActivityType>
68. <Template xmlns="AF">
69. {Publisher} posted a note on {Link}.&lt;br/&gt;{Value}
70. </Template>
71. <Value xmlns="AF">sample noteboard post</Value>
72. <Link xmlns="AF">
73. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cdagro</Uri>
74. <Title>CONTOSO\dagro</Title>
75. </Link>
76. </item>
77. <item xml:base="http://mosslatest/my">
78. <guid isPermaLink="false">6</guid>
79. <author>Dag Rovik</author>
80. <title>New colleague</title>
81. <description>
82. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; added 3 new colleagues.&lt;br/&gt;&lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1'&gt;pkmuser1&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst'&gt;CONTOSO\starltst&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale'&gt;CONTOSO\pauldale&lt;/a&gt;
83. </description>
84. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
85. <a10:updated>2010-01-30T02:21:23-08:00</a10:updated>
86. <a10:content type="html">
87. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; added 3 new colleagues.&lt;br/&gt;&lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1'&gt;pkmuser1&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst'&gt;CONTOSO\starltst&lt;/a&gt;, &lt;a href='http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale'&gt;CONTOSO\pauldale&lt;/a&gt;
88. </a10:content>
89. <ActivityType xmlns="AF">ColleagueAddition</ActivityType>
90. <Template xmlns="AF">
91. {Publisher} added {Size} new colleagues.&lt;br/&gt;{List}
92. </Template>
93. <Link xmlns="AF">
94. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1</Uri>
95. <Title>pkmuser1</Title>
96. </Link>
97. <Size xmlns="AF">3</Size>
98. <Separator xmlns="AF">, </Separator>
99. <List xmlns="AF">
100. <Link>
101. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpkmuser1</Uri>
102. <Title>pkmuser1</Title>
103. </Link>
104. <Link>
105. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cstarltst</Uri>
106. <Title>CONTOSO\starltst</Title>
107. </Link>
108. <Link>
109. <Uri>http://example/my/Person.aspx?accountname=CONTOSO%5Cpauldale</Uri>
110. <Title>CONTOSO\pauldale</Title>
111. </Link>
112. </List>
113. </item>
114. <item xml:base="http://mosslatest/my">
115. <guid isPermaLink="false">4</guid>
116. <author>Dag Rovik</author>
117. <title>Profile update</title>
118. <description>
119. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Interests: interest1, interest2
120. </description>
121. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
122. <a10:updated>2010-01-30T02:15:45-08:00</a10:updated>
123. <a10:content type="html">
124. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Interests: interest1, interest2
125. </a10:content>
126. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
127. <Template xmlns="AF">
128. {Publisher} updated profile.&lt;br/&gt;{List}
129. </Template>
130. <Size xmlns="AF">2</Size>
131. <Separator xmlns="AF">, </Separator>
132. <List xmlns="AF">
133. <Link>
134. <Uri></Uri>
135. <Title>Interests: interest1</Title>
136. </Link>
137. <Link>
138. <Uri></Uri>
139. <Title>interest2</Title>
140. </Link>
141. </List>
142. </item>
143. <item xml:base="http://mosslatest/my">
144. <guid isPermaLink="false">3</guid>
145. <author>Dag Rovik</author>
146. <title>Profile update</title>
147. <description>
148. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Skills: skill1, skill2
149. </description>
150. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
151. <a10:updated>2010-01-30T02:15:45-08:00</a10:updated>
152. <a10:content type="html">
153. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Skills: skill1, skill2
154. </a10:content>
155. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
156. <Template xmlns="AF">
157. {Publisher} updated profile.&lt;br/&gt;{List}
158. </Template>
159. <Size xmlns="AF">2</Size>
160. <Separator xmlns="AF">, </Separator>
161. <List xmlns="AF">
162. <Link>
163. <Uri></Uri>
164. <Title>Skills: skill1</Title>
165. </Link>
166. <Link>
167. <Uri></Uri>
168. <Title>skill2</Title>
169. </Link>
170. </List>
171. </item>
172. <item xml:base="http://mosslatest/my">
173. <guid isPermaLink="false">2</guid>
174. <author>Dag Rovik</author>
175. <title>Profile update</title>
176. <description>
177. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Ask Me About: Activity Feed, Sync, Profile Store
178. </description>
179. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
180. <a10:updated>2010-01-30T02:15:45-08:00</a10:updated>
181. <a10:content type="html">
182. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; updated profile.&lt;br/&gt;Ask Me About: Activity Feed, Sync, Profile Store
183. </a10:content>
184. <ActivityType xmlns="AF">ProfilePropertyChange</ActivityType>
185. <Template xmlns="AF">
186. {Publisher} updated profile.&lt;br/&gt;{List}
187. </Template>
188. <Size xmlns="AF">3</Size>
189. <Separator xmlns="AF">, </Separator>
190. <List xmlns="AF">
191. <Link>
192. <Uri></Uri>
193. <Title>Ask Me About: Activity Feed</Title>
194. </Link>
195. <Link>
196. <Uri></Uri>
197. <Title>Sync</Title>
198. </Link>
199. <Link>
200. <Uri></Uri>
201. <Title>Profile Store</Title>
202. </Link>
203. </List>
204. </item>
205. <item xml:base="http://mosslatest/my">
206. <guid isPermaLink="false">1</guid>
207. <author>Dag Rovik</author>
208. <title>Status Message</title>
209. <description>
210. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; says "Testing Feeds".
211. </description>
212. <pubDate>Sat, 30 Jan 2010 02:26:32 -0800</pubDate>
213. <a10:updated>2010-01-30T02:14:40-08:00</a10:updated>
214. <a10:content type="html">
215. &lt;a href="http://example/my/person.aspx?accountname=CONTOSO%5Cdagro" title="Dag Rovik"&gt;CONTOSO\dagro&lt;/a&gt; says "Testing Feeds".
216. </a10:content>
217. <ActivityType xmlns="AF">StatusMessage</ActivityType>
218. <Template xmlns="AF">
219. {Publisher} says "{Value}".
220. </Template>
221. <Name xmlns="AF">Status Message</Name>
222. <Value xmlns="AF">Testing Feeds</Value>
223. </item>
224. </channel>
225. </rss>

# Security

## Security Considerations for Implementers

None.

## Index of Security Parameters

None.

# Appendix A: Full WSDL

None.

# Appendix B: 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 Outlook 2010
* Microsoft Outlook 2013
* Microsoft SharePoint Server 2010
* Microsoft SharePoint Server 2013
* Microsoft Outlook 2016
* Microsoft SharePoint Server 2016
* Microsoft Outlook 2019
* Microsoft SharePoint Server 2019
* Microsoft Office 2021

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.

[<1> Section 2.2.3.3](#Appendix_A_Target_1): This element is available only in Outlook 2013 and SharePoint Server 2013.

[<2> Section 2.2.3.16](#Appendix_A_Target_2): This element is available only in Outlook 2013 and SharePoint Server 2013.

# 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).

| Section | Description | Revision class |
| --- | --- | --- |
| [7](#Section_fae655cef715413b8b42d35631b9aaf6) Appendix B: Product Behavior | Updated list of supported products. | major |

# Index

A

Abstract data model

[server](#section_bdfffbcf08cb4ccda1ea864d2e3fd169) 16

[AccountName within the author element](#section_129d26bb4dd544a0a75db44b54698ec0) 12

[ActivityType within the entry or item element](#section_b1b4a90709e64dc580e1a88b90b0ec0f) 12

[AF:Link complex type](#section_4ca00fad3c274cc8a98af11b6af5693f) 15

[AF:List complex type](#section_b79aeb9f3b8b4e3d9071d3dde64ff28a) 15

[Applicability](#section_ddb02db7daf742fbb6bc887b7ee2248e) 8

[ATOM 1.0 formatted feed example](#section_bad94953c6124919a61025b9a3b17fe4) 18

[Attribute groups](#section_66ae793e87524f2eb7f0a0044c1e6d8c) 15

[Attributes](#section_eb69af52d1a041de8e05a5f74ba745ed) 15

C

[Capability negotiation](#section_41c6fb177d60448f9f0a21f21c14d2c5) 8

[Change tracking](#section_c1e6ce94d2ca4e5ea71b57a4ea256497) 30

[Complex types](#section_c3eac4b6345941b8a2879ec6ac3c962c) 15

[AF:Link](#section_4ca00fad3c274cc8a98af11b6af5693f) 15

[AF:List](#section_b79aeb9f3b8b4e3d9071d3dde64ff28a) 15

[Content within the entry or item element](#section_b4ad6d363e724a6fb65720e845a50c03) 12

D

Data model - abstract

[server](#section_bdfffbcf08cb4ccda1ea864d2e3fd169) 16

[DateOnly within the entry or item element](#section_12a83543a8a940fd8ff59083df9ff8ff) 12

E

Elements

[AccountName within the author](#section_129d26bb4dd544a0a75db44b54698ec0) 12

[ActivityType within the entry or item](#section_b1b4a90709e64dc580e1a88b90b0ec0f) 12

[Content within the entry or item](#section_b4ad6d363e724a6fb65720e845a50c03) 12

[DateOnly within the entry or item](#section_12a83543a8a940fd8ff59083df9ff8ff) 12

[Id within the author](#section_6c85eb91faf547d7a13c49a415829076) 12

[Link within the entry or item](#section_127dd99181074830a1afef3f7cd88434) 13

[Link2 within the entry or item](#section_b4885cebad4c4882b90083eed64df263) 13

[List within the entry or item](#section_c4e65c5405f2416db65104ac3618ae72) 13

[Name within the entry or item](#section_c6218a215e4046a79a29db9dba24cb03) 13

[Picture within the author](#section_0ae04ec0621e449aaa825cc55febe183) 13

[Separator within the entry or item](#section_21e9384c45254a10b7c2f038a23a3bb4) 13

[Size within the entry or item](#section_30f47551e78840188d4b141b16cd7956) 13

[Template within the entry or item](#section_35628894e0c341399767d14c55f195fb) 14

[TTL within the feed or channel](#section_ad2d9de1512044e597d3a7aa06797ef5) 14

[Type within the author](#section_f06d992631b34907a1ce89e02136767f) 14

[Updated within the entry or item](#section_a716af99151a46f6b8941f0df780d4c1) 14

[Value within the entry or item](#section_f893acc4b12d427eae7b1ef8a727c928) 14

Events

[local - server](#section_9c5f74584243461ea8d90c5f18608261) 17

[timer - server](#section_317c9d6cf92a4b0287480e409914850f) 17

Examples

[ATOM 1.0 formatted feed](#section_bad94953c6124919a61025b9a3b17fe4) 18

[overview](#section_adeccac521e740369558743f321a469f) 18

[RSS 2.0 formatted feed](#section_a1a8ef9388bc4ef88f1955a977cdd4fe) 22

F

[Fields - vendor-extensible](#section_5a36a1e2ba8e4ffaba9b9b76c4d38258) 8

[Full WSDL](#section_74ed6990461d40949e7f0dfc4a147be4) 28

G

[Glossary](#section_a45d570e22354950ac76cfe50793d9c7) 7

[Groups](#section_73b791f1aac241828b2f5eb3c078ee64) 15

I

[Id within the author element](#section_6c85eb91faf547d7a13c49a415829076) 12

[Implementer - security considerations](#section_889c83617f0345eeb707649ba69120e8) 27

[Index of security parameters](#section_9c6891237bc24e6a9b71e5233f0f1360) 27

[Informative references](#section_9da79213601c4e469049a0820864885c) 8

Initialization

[server](#section_aef6ae17da19412cb698100a1b0e456e) 16

[Introduction](#section_9c253dcfd8ae4683bbc107737e3c4d3c) 7

L

[Link within the entry or item element](#section_127dd99181074830a1afef3f7cd88434) 13

[Link2 within the entry or item element](#section_b4885cebad4c4882b90083eed64df263) 13

[List within the entry or item element](#section_c4e65c5405f2416db65104ac3618ae72) 13

Local events

[server](#section_9c5f74584243461ea8d90c5f18608261) 17

M

Message processing

[server](#section_4fe97eb68614420aaf0b048b7a045a21) 17

Messages

[AccountName within the author element](#section_129d26bb4dd544a0a75db44b54698ec0) 12

[ActivityType within the entry or item element](#section_b1b4a90709e64dc580e1a88b90b0ec0f) 12

[AF:Link complex type](#section_4ca00fad3c274cc8a98af11b6af5693f) 15

[AF:List complex type](#section_b79aeb9f3b8b4e3d9071d3dde64ff28a) 15

[attribute groups](#section_66ae793e87524f2eb7f0a0044c1e6d8c) 15

[attributes](#section_eb69af52d1a041de8e05a5f74ba745ed) 15

[complex types](#section_c3eac4b6345941b8a2879ec6ac3c962c) 15

[Content within the entry or item element](#section_b4ad6d363e724a6fb65720e845a50c03) 12

[DateOnly within the entry or item element](#section_12a83543a8a940fd8ff59083df9ff8ff) 12

[elements](#section_75cf9e52932e49fc8c8f89c671e8af67) 10

[enumerated](#section_5f582fede410451691a3c8ac5bd161f4) 10

[groups](#section_73b791f1aac241828b2f5eb3c078ee64) 15

[Id within the author element](#section_6c85eb91faf547d7a13c49a415829076) 12

[Link within the entry or item element](#section_127dd99181074830a1afef3f7cd88434) 13

[Link2 within the entry or item element](#section_b4885cebad4c4882b90083eed64df263) 13

[List within the entry or item element](#section_c4e65c5405f2416db65104ac3618ae72) 13

[Name within the entry or item element](#section_c6218a215e4046a79a29db9dba24cb03) 13

[namespaces](#section_bd5b8990a99a4976869ea43d1ab92de4) 10

[Picture within the author element](#section_0ae04ec0621e449aaa825cc55febe183) 13

[Separator within the entry or item element](#section_21e9384c45254a10b7c2f038a23a3bb4) 13

[simple types](#section_8fc22635502d44a9b3c7a7359b81a2b3) 15

[Size within the entry or item element](#section_30f47551e78840188d4b141b16cd7956) 13

[syntax](#section_8d5ad6e3743f417985b46a47b3cc8bb5) 10

[Template within the entry or item element](#section_35628894e0c341399767d14c55f195fb) 14

[transport](#section_c458f0d22e404c7fb244a738402a4f36) 10

[TTL within the feed or channel element](#section_ad2d9de1512044e597d3a7aa06797ef5) 14

[Type within the author element](#section_f06d992631b34907a1ce89e02136767f) 14

[Updated within the entry or item element](#section_a716af99151a46f6b8941f0df780d4c1) 14

[Value within the entry or item element](#section_f893acc4b12d427eae7b1ef8a727c928) 14

N

[Name within the entry or item element](#section_c6218a215e4046a79a29db9dba24cb03) 13

[Namespaces](#section_bd5b8990a99a4976869ea43d1ab92de4) 10

[Normative references](#section_3ec0d98d6d6a40d593e595b2fb64895b) 7

O

[Overview (synopsis)](#section_d4cbb35cea174e70b03e3bfdab4bf718) 8

P

[Parameters - security index](#section_9c6891237bc24e6a9b71e5233f0f1360) 27

[Picture within the author element](#section_0ae04ec0621e449aaa825cc55febe183) 13

[Preconditions](#section_b3406d6b98f44a1ab20920ff8ea887fb) 8

[Prerequisites](#section_b3406d6b98f44a1ab20920ff8ea887fb) 8

[Product behavior](#section_fae655cef715413b8b42d35631b9aaf6) 29

Protocol Details

[overview](#section_55b4cdb39a54400885a313e8d2b54061) 16

R

[References](#section_7062fc0effb6446b8affd60ca0ff1e51) 7

[informative](#section_9da79213601c4e469049a0820864885c) 8

[normative](#section_3ec0d98d6d6a40d593e595b2fb64895b) 7

[Relationship to other protocols](#section_9c7d2d4749c644b3972d1e5cec7dc734) 8

[RSS 2.0 formatted feed example](#section_a1a8ef9388bc4ef88f1955a977cdd4fe) 22

S

Security

[implementer considerations](#section_889c83617f0345eeb707649ba69120e8) 27

[parameter index](#section_9c6891237bc24e6a9b71e5233f0f1360) 27

[Separator within the entry or item element](#section_21e9384c45254a10b7c2f038a23a3bb4) 13

Sequencing rules

[server](#section_4fe97eb68614420aaf0b048b7a045a21) 17

Server

[abstract data model](#section_bdfffbcf08cb4ccda1ea864d2e3fd169) 16

[initialization](#section_aef6ae17da19412cb698100a1b0e456e) 16

[local events](#section_9c5f74584243461ea8d90c5f18608261) 17

[message processing](#section_4fe97eb68614420aaf0b048b7a045a21) 17

[sequencing rules](#section_4fe97eb68614420aaf0b048b7a045a21) 17

[timer events](#section_317c9d6cf92a4b0287480e409914850f) 17

[timers](#section_495d1822151443e4a5b5f00f96a7b31b) 16

[Simple types](#section_8fc22635502d44a9b3c7a7359b81a2b3) 15

[Size within the entry or item element](#section_30f47551e78840188d4b141b16cd7956) 13

[Standards assignments](#section_536c8054c98d4e43b9b441485d67e6bd) 9

Syntax

[messages - overview](#section_8d5ad6e3743f417985b46a47b3cc8bb5) 10

T

[Template within the entry or item element](#section_35628894e0c341399767d14c55f195fb) 14

Timer events

[server](#section_317c9d6cf92a4b0287480e409914850f) 17

Timers

[server](#section_495d1822151443e4a5b5f00f96a7b31b) 16

[Tracking changes](#section_c1e6ce94d2ca4e5ea71b57a4ea256497) 30

[Transport](#section_c458f0d22e404c7fb244a738402a4f36) 10

[TTL within the feed or channel element](#section_ad2d9de1512044e597d3a7aa06797ef5) 14

[Type within the author element](#section_f06d992631b34907a1ce89e02136767f) 14

Types

[complex](#section_c3eac4b6345941b8a2879ec6ac3c962c) 15

[simple](#section_8fc22635502d44a9b3c7a7359b81a2b3) 15

U

[Updated within the entry or item element](#section_a716af99151a46f6b8941f0df780d4c1) 14

V

[Value within the entry or item element](#section_f893acc4b12d427eae7b1ef8a727c928) 14

[Vendor-extensible fields](#section_5a36a1e2ba8e4ffaba9b9b76c4d38258) 8

[Versioning](#section_41c6fb177d60448f9f0a21f21c14d2c5) 8

W

[WSDL](#section_74ed6990461d40949e7f0dfc4a147be4) 28