

[MS-SPASA]:

SharePoint Analytics Service Application Protocol

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **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 may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft [Open Specification Promise](#) or the [Community Promise](#). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplg@microsoft.com.
- **Trademarks.** The names of companies and products contained in this documentation may 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.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events 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 specifically described above, whether by implication, estoppel, or otherwise.

Tools. The Open Specifications do 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 are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

Revision Summary

Date	Revision History	Revision Class	Comments
1/20/2012	0.1	New	Released new document.
4/11/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
7/16/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
9/12/2012	0.1	None	No changes to the meaning, language, or formatting of the technical content.
10/8/2012	1.0	Major	Significantly changed the technical content.
2/11/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
7/30/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
11/18/2013	1.0	None	No changes to the meaning, language, or formatting of the technical content.
2/10/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
4/30/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
7/31/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
10/30/2014	1.0	None	No changes to the meaning, language, or formatting of the technical content.
2/26/2016	2.0	Major	Significantly changed the technical content.

Table of Contents

1	Introduction	10
1.1	Glossary	10
1.2	References	11
1.2.1	Normative References	12
1.2.2	Informative References	12
1.3	Overview	12
1.4	Relationship to Other Protocols	12
1.5	Prerequisites/Preconditions	13
1.6	Applicability Statement	13
1.7	Versioning and Capability Negotiation	13
1.8	Vendor-Extensible Fields	13
1.9	Standards Assignments.....	13
2	Messages.....	14
2.1	Transport	14
2.2	Common Message Syntax	14
2.2.1	Namespaces	14
2.2.2	Messages.....	15
2.2.3	Elements	15
2.2.4	Complex Types.....	15
2.2.4.1	AnalyticsEventTypeDefinition	15
2.2.4.2	AnalyticsItemData.....	16
2.2.4.3	AnalyticsTenantSettingsData	17
2.2.4.4	ArrayOfAnalyticsItemData	18
2.2.4.5	ArrayOfint	18
2.2.5	Simple Types	18
2.2.5.1	AnalyticsTenantSettingOptions.....	19
2.2.5.2	char	19
2.2.5.3	duration.....	19
2.2.5.4	EventCountType	20
2.2.5.5	EventOptions.....	20
2.2.5.6	EventRollups	21
2.2.5.7	guid	21
2.2.6	Attributes	21
2.2.7	Groups	21
2.2.8	Attribute Groups.....	21
3	Protocol Details	22
3.1	Server Details.....	22
3.1.1	Abstract Data Model.....	22
3.1.2	Timers	23
3.1.3	Initialization.....	23
3.1.4	Message Processing Events and Sequencing Rules	23
3.1.4.1	DeleteAllUsageDataForTenant.....	24
3.1.4.1.1	Messages	24
3.1.4.1.1.1	IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage.....	24
3.1.4.1.1.2	IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage	25
3.1.4.1.2	Elements.....	25
3.1.4.1.2.1	DeleteAllUsageDataForTenant.....	25
3.1.4.1.2.2	DeleteAllUsageDataForTenantResponse	25
3.1.4.1.3	Complex Types	26

3.1.4.1.4	Simple Types	26
3.1.4.1.5	Attributes	26
3.1.4.1.6	Groups	26
3.1.4.1.7	Attribute Groups.....	26
3.1.4.2	DeleteCustomEventUsageDataForSite	26
3.1.4.2.1	Messages	26
3.1.4.2.1.1	IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage	27
3.1.4.2.1.2	IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage.....	27
3.1.4.2.2	Elements	27
3.1.4.2.2.1	DeleteCustomEventUsageDataForSite	27
3.1.4.2.2.2	DeleteCustomEventUsageDataForSiteResponse	28
3.1.4.2.3	Complex Types	28
3.1.4.2.4	Simple Types	28
3.1.4.2.5	Attributes	28
3.1.4.2.6	Groups.....	28
3.1.4.2.7	Attribute Groups.....	28
3.1.4.3	DeleteCustomEventUsageDataForTenant.....	28
3.1.4.3.1	Messages	29
3.1.4.3.1.1	IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage.....	29
3.1.4.3.1.2	IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage.....	29
3.1.4.3.2	Elements	30
3.1.4.3.2.1	DeleteCustomEventUsageDataForTenant	30
3.1.4.3.2.2	DeleteCustomEventUsageDataForTenantResponse	30
3.1.4.3.3	Complex Types	30
3.1.4.3.4	Simple Types	30
3.1.4.3.5	Attributes	31
3.1.4.3.6	Groups.....	31
3.1.4.3.7	Attribute Groups.....	31
3.1.4.4	DeleteRecommendationsDataForTenant	31
3.1.4.4.1	Messages	31
3.1.4.4.1.1	IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage.....	32
3.1.4.4.1.2	IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage.....	32
3.1.4.4.2	Elements	32
3.1.4.4.2.1	DeleteRecommendationsDataForTenant	32
3.1.4.4.2.2	DeleteRecommendationsDataForTenantResponse.....	33
3.1.4.4.3	Complex Types	33
3.1.4.4.4	Simple Types	33
3.1.4.4.5	Attributes	33
3.1.4.4.6	Groups.....	33
3.1.4.4.7	Attribute Groups.....	33
3.1.4.5	DeleteStandardEventUsageDataForSite.....	33
3.1.4.5.1	Messages	34
3.1.4.5.1.1	IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage.....	34

3.1.4.5.1.2	IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage	34
3.1.4.5.2	Elements	34
3.1.4.5.2.1	DeleteStandardEventUsageDataForSite	35
3.1.4.5.2.2	DeleteStandardEventUsageDataForSiteResponse	35
3.1.4.5.3	Complex Types	35
3.1.4.5.4	Simple Types	35
3.1.4.5.5	Attributes	35
3.1.4.5.6	Groups	35
3.1.4.5.7	Attribute Groups	36
3.1.4.6	DeleteStandardEventUsageDataForTenant	36
3.1.4.6.1	Messages	36
3.1.4.6.1.1	IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage	36
3.1.4.6.1.2	IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage	37
3.1.4.6.2	Elements	37
3.1.4.6.2.1	DeleteStandardEventUsageDataForTenant	37
3.1.4.6.2.2	DeleteStandardEventUsageDataForTenantResponse	37
3.1.4.6.3	Complex Types	38
3.1.4.6.4	Simple Types	38
3.1.4.6.5	Attributes	38
3.1.4.6.6	Groups	38
3.1.4.6.7	Attribute Groups	38
3.1.4.7	GetAnalyticsEventTypeDefinition	38
3.1.4.7.1	Messages	39
3.1.4.7.1.1	IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage	39
3.1.4.7.1.2	IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage	39
3.1.4.7.2	Elements	39
3.1.4.7.2.1	GetAnalyticsEventTypeDefinition	39
3.1.4.7.2.2	GetAnalyticsEventTypeDefinitionResponse	40
3.1.4.7.3	Complex Types	40
3.1.4.7.4	Simple Types	40
3.1.4.7.5	Attributes	40
3.1.4.7.6	Groups	40
3.1.4.7.7	Attribute Groups	40
3.1.4.8	GetAnalyticsEventTypeDefinitions	40
3.1.4.8.1	Messages	41
3.1.4.8.1.1	IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage	41
3.1.4.8.1.2	IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage	42
3.1.4.8.2	Elements	42
3.1.4.8.2.1	GetAnalyticsEventTypeDefinitions	42
3.1.4.8.2.2	GetAnalyticsEventTypeDefinitionsResponse	42
3.1.4.8.3	Complex Types	43
3.1.4.8.3.1	ArrayOfAnalyticsEventTypeDefinition	43
3.1.4.8.4	Simple Types	43
3.1.4.8.4.1	AnalyticsEventTypes	43

3.1.4.8.5	Attributes	44
3.1.4.8.6	Groups.....	44
3.1.4.8.7	Attribute Groups.....	44
3.1.4.9	GetAnalyticsItemData.....	44
3.1.4.9.1	Messages	45
3.1.4.9.1.1	IAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage ..	45
3.1.4.9.1.2	IAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage	45
3.1.4.9.2	Elements.....	45
3.1.4.9.2.1	GetAnalyticsItemData.....	45
3.1.4.9.2.2	GetAnalyticsItemDataResponse	46
3.1.4.9.3	Complex Types	46
3.1.4.9.4	Simple Types	46
3.1.4.9.5	Attributes.....	46
3.1.4.9.6	Groups.....	46
3.1.4.9.7	Attribute Groups.....	46
3.1.4.10	GetAnalyticsItemsData	46
3.1.4.10.1	Messages	47
3.1.4.10.1.1	IAnalyticsServiceApplication_GetAnalyticsItemsData_InputMessage .	47
3.1.4.10.1.2	IAnalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage	47
3.1.4.10.2	Elements.....	47
3.1.4.10.2.1	GetAnalyticsItemsData	48
3.1.4.10.2.2	GetAnalyticsItemsDataResponse	48
3.1.4.10.3	Complex Types	48
3.1.4.10.3.1	ArrayOfstring	49
3.1.4.10.4	Simple Types	49
3.1.4.10.5	Attributes.....	49
3.1.4.10.6	Groups.....	49
3.1.4.10.7	Attribute Groups.....	49
3.1.4.11	GetAnalyticsTenantConfiguration.....	49
3.1.4.11.1	Messages	50
3.1.4.11.1.1	IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputM essage	50
3.1.4.11.1.2	IAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputM essage	50
3.1.4.11.2	Elements.....	50
3.1.4.11.2.1	GetAnalyticsTenantConfiguration	50
3.1.4.11.2.2	GetAnalyticsTenantConfigurationResponse	51
3.1.4.11.3	Complex Types	51
3.1.4.11.3.1	AnalyticsTenantConfig	51
3.1.4.11.4	Simple Types	51
3.1.4.11.5	Attributes.....	52
3.1.4.11.6	Groups.....	52
3.1.4.11.7	Attribute Groups.....	52
3.1.4.12	GetGlobalAnalyticsItemDataBatch	52
3.1.4.12.1	Messages	53
3.1.4.12.1.1	IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputM essage	53
3.1.4.12.1.2	IAnalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_Output Message	53
3.1.4.12.2	Elements.....	53
3.1.4.12.2.1	GetGlobalAnalyticsItemDataBatch	54
3.1.4.12.2.2	GetGlobalAnalyticsItemDataBatchResponse	54
3.1.4.12.3	Complex Types	54
3.1.4.12.3.1	ContinuationTokenItemData	55

3.1.4.12.3.2	AnalyticsItemDataBatch.....	55
3.1.4.12.4	Simple Types	55
3.1.4.12.4.1	ContinuationTokenItemData.Scope	56
3.1.4.12.5	Attributes	56
3.1.4.12.6	Groups.....	56
3.1.4.12.7	Attribute Groups.....	56
3.1.4.13	GetRawAnalyticsTenantSettings.....	56
3.1.4.13.1	Messages	57
3.1.4.13.1.1	IAAnalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage	57
3.1.4.13.1.2	IAAnalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage	57
3.1.4.13.2	Elements.....	57
3.1.4.13.2.1	GetRawAnalyticsTenantSettings.....	58
3.1.4.13.2.2	GetRawAnalyticsTenantSettingsResponse	58
3.1.4.13.3	Complex Types	58
3.1.4.13.4	Simple Types	58
3.1.4.13.5	Attributes	58
3.1.4.13.6	Groups.....	58
3.1.4.13.7	Attribute Groups.....	58
3.1.4.14	GetRawAnalyticsTenantSettingsBatch	59
3.1.4.14.1	Messages	59
3.1.4.14.1.1	IAAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage	60
3.1.4.14.1.2	IAAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage.....	60
3.1.4.14.2	Elements.....	60
3.1.4.14.2.1	GetRawAnalyticsTenantSettingsBatch	60
3.1.4.14.2.2	GetRawAnalyticsTenantSettingsBatchResponse.....	60
3.1.4.14.3	Complex Types	61
3.1.4.14.3.1	AnalyticsTenantSettingsDataBatch	61
3.1.4.14.3.2	ArrayOfAnalyticsTenantSettingsData	61
3.1.4.14.4	Simple Types	62
3.1.4.14.5	Attributes	62
3.1.4.14.6	Groups.....	62
3.1.4.14.7	Attribute Groups.....	62
3.1.4.15	GetRollupAnalyticsItemData	62
3.1.4.15.1	Messages	63
3.1.4.15.1.1	IAAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage	63
3.1.4.15.1.2	IAAnalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage.....	63
3.1.4.15.2	Elements.....	63
3.1.4.15.2.1	GetRollupAnalyticsItemData	63
3.1.4.15.2.2	GetRollupAnalyticsItemDataResponse.....	64
3.1.4.15.3	Complex Types	64
3.1.4.15.4	Simple Types	64
3.1.4.15.5	Attributes	64
3.1.4.15.6	Groups.....	64
3.1.4.15.7	Attribute Groups.....	64
3.1.4.16	GetSearchReport	65
3.1.4.16.1	Messages	65
3.1.4.16.1.1	IAAnalyticsServiceApplication_GetSearchReport_InputMessage	65

3.1.4.16.1.2	IAalyticsServiceApplication_GetSearchReport_OutputMessage	65
3.1.4.16.2	Elements	65
3.1.4.16.2.1	GetSearchReport	66
3.1.4.16.2.2	GetSearchReportResponse	66
3.1.4.16.3	Complex Types	66
3.1.4.16.3.1	ArrayOfQueryReportData	67
3.1.4.16.3.2	QueryReportData	67
3.1.4.16.4	Simple Types	67
3.1.4.16.5	Attributes	67
3.1.4.16.6	Groups	67
3.1.4.16.7	Attribute Groups	67
3.1.4.17	GetTenantAnalyticsItemData	68
3.1.4.17.1	Messages	68
3.1.4.17.1.1	IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage	68
3.1.4.17.1.2	IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage	69
3.1.4.17.2	Elements	69
3.1.4.17.2.1	GetTenantAnalyticsItemData	69
3.1.4.17.2.2	GetTenantAnalyticsItemDataResponse	69
3.1.4.17.3	Complex Types	69
3.1.4.17.4	Simple Types	70
3.1.4.17.5	Attributes	70
3.1.4.17.6	Groups	70
3.1.4.17.7	Attribute Groups	70
3.1.4.18	SendAnalyticsUsageEvents	70
3.1.4.18.1	Messages	70
3.1.4.18.1.1	IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage	71
3.1.4.18.1.2	IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage	71
3.1.4.18.2	Elements	71
3.1.4.18.2.1	SendAnalyticsUsageEvents	71
3.1.4.18.2.2	SendAnalyticsUsageEventsResponse	71
3.1.4.18.3	Complex Types	72
3.1.4.18.3.1	ArrayOfAnalyticsUsageEvent	72
3.1.4.18.3.2	AnalyticsUsageEvent	72
3.1.4.18.4	Simple Types	73
3.1.4.18.5	Attributes	73
3.1.4.18.6	Groups	73
3.1.4.18.7	Attribute Groups	73
3.1.4.19	UpsertRawAnalyticsTenantSettings	73
3.1.4.19.1	Messages	74
3.1.4.19.1.1	IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage	74
3.1.4.19.1.2	IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage	74
3.1.4.19.2	Elements	74
3.1.4.19.2.1	UpsertRawAnalyticsTenantSettings	75
3.1.4.19.2.2	UpsertRawAnalyticsTenantSettingsResponse	75
3.1.4.19.3	Complex Types	75
3.1.4.19.4	Simple Types	75
3.1.4.19.5	Attributes	75

3.1.4.19.6	Groups.....	75
3.1.4.19.7	Attribute Groups.....	75
3.1.5	Timer Events.....	76
3.1.6	Other Local Events.....	76
4	Protocol Examples.....	77
4.1	Delete All Usage Data for a Tenant.....	77
4.2	Get an Analytics Event Type Definition.....	78
4.3	Get Analytics Item Data.....	79
4.4	Send Analytics Usage Events.....	82
5	Security.....	84
5.1	Security Considerations for Implementers.....	84
5.2	Index of Security Parameters.....	84
6	Appendix A: Full WSDL.....	85
7	Appendix B: Full XML Schema.....	94
7.1	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics Schema.....	94
7.2	http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema.....	95
7.3	http://schemas.microsoft.com/2003/10/Serialization/ Schema.....	95
7.4	http://tempuri.org/ Schema.....	96
7.5	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01 Schema.....	102
7.6	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05 Schema.....	104
7.7	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09 Schema.....	105
8	Appendix C: Product Behavior.....	107
9	Change Tracking.....	108
10	Index.....	110

1 Introduction

A protocol client uses the SharePoint Analytics Service Application Protocol to send usage events for processing by a protocol server and to retrieve aggregated usage information from a protocol server.

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:

globally unique identifier (GUID): A term used interchangeably with universally unique identifier (UUID) in Microsoft protocol technical documents (TDs). Interchanging the usage of these terms does not imply or require a specific algorithm or mechanism to generate the value. 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 **GUID**. See also universally unique identifier (UUID).

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 [\[RFC5246\]](#).

rollup: A type of calculated value that is derived from the aggregated scores of child or descendant key performance indicators (KPIs) in a scorecard.

search query: A complete set of conditions that are used to generate search results, including query text, sort order, and ranking parameters.

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.

SOAP: A lightweight protocol for exchanging structured information in a decentralized, distributed environment. **SOAP** uses XML technologies to define an extensible messaging framework, which provides a message construct that can be exchanged over a variety of underlying protocols. The framework has been designed to be independent of any particular programming model and other implementation-specific semantics. SOAP 1.2 supersedes SOAP 1.1. See [\[SOAP1.2-1/2003\]](#).

SOAP action: The HTTP request header field used to indicate the intent of the **SOAP** request, using a URI value. See [\[SOAP1.1\]](#) section 6.1.1 for more information.

SOAP body: A container for the payload data being delivered by a SOAP message to its recipient. See [\[SOAP1.2-1/2007\]](#) section 5.3 for more information.

SOAP fault: A container for error and status information within a SOAP message. See [\[SOAP1.2-1/2007\]](#) section 5.4 for more information.

tenant: A protocol client or protocol server that accesses a partition in a shared service database.

timestamp: A condition of a digital signature (2) that indicates whether the signature was created with a valid certificate (1) that has expired or was created with a certificate that had expired already. If the certificate expired after the signature was created, the signature can be trusted. If it expired before the signature was created, it cannot be trusted.

Transmission Control Protocol (TCP): A protocol used with the Internet Protocol (IP) to send data in the form of message units between computers over the Internet. TCP handles keeping track of the individual units of data (called packets) that a message is divided into for efficient routing through the Internet.

Unicode: A character encoding standard developed by the Unicode Consortium that represents almost all of the written languages of the world. The **Unicode** standard [\[UNICODE5.0.0/2007\]](#) provides three forms (UTF-8, UTF-16, and UTF-32) and seven schemes (UTF-8, UTF-16, UTF-16 BE, UTF-16 LE, UTF-32, UTF-32 LE, and UTF-32 BE).

Web Services Description Language (WSDL): An XML format for describing network services as a set of endpoints that operate on messages that contain either document-oriented or procedure-oriented information. The operations and messages are described abstractly and are bound to a concrete network protocol and message format in order to define an endpoint. Related concrete endpoints are combined into abstract endpoints, which describe a network service. WSDL is extensible, which allows the description of endpoints and their messages regardless of the message formats or network protocols that are used.

website: (1) A group of related webpages that is hosted by a server on the World Wide Web or an intranet. Each website has its own entry points, metadata, administration settings, and workflows. Also referred to as site.

(2) 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.

WSDL message: An abstract, typed definition of the data that is communicated during a **WSDL operation** [\[WSDL\]](#). Also, an element that describes the data being exchanged between web service providers and clients.

WSDL operation: A single action or function of a web service. The execution of a WSDL operation typically requires the exchange of messages between the service requestor and the service provider.

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 [\[XMLNS-2ED\]](#).

XML namespace prefix: An abbreviated form of an **XML namespace**, as described in [\[XML\]](#).

XML schema: A description of a type of XML document that is typically expressed in terms of constraints on the structure and content of documents of that type, in addition to the basic syntax constraints that are imposed by XML itself. An XML schema provides a view of a document type at a relatively high level of abstraction.

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.

[MS-SPSTWS] Microsoft Corporation, "[SharePoint Security Token Service Web Service Protocol](#)".

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

[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>

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", May 2000, <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>

[SOAP1.2/1] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part1-20030624>

[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>

[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/>

[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/>

[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/>

1.2.2 Informative References

[MS-SPTWS] Microsoft Corporation, "[Service Platform Topology Web Service Protocol](#)".

1.3 Overview

This protocol enables a protocol client to send usage events to the protocol server. The protocol server performs implementation specific aggregation of those events and produces historical usage information based on those events. This protocol further enables a protocol client to retrieve the aggregated usage information from the protocol server. A typical scenario for using this protocol is a reporting application that allows the users to visualize the usage of an item during its lifetime.

1.4 Relationship to Other Protocols

This protocol uses the **SOAP** message protocol for formatting request and response messages, as described in [\[SOAP1.1\]](#), [\[SOAP1.2/1\]](#) and [\[SOAP1.2/2\]](#). It transmits those messages by using **HTTP**, as described in [\[RFC2616\]](#), or **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [\[RFC2818\]](#).

The following diagram shows the underlying messaging and transport stack used by the protocol:

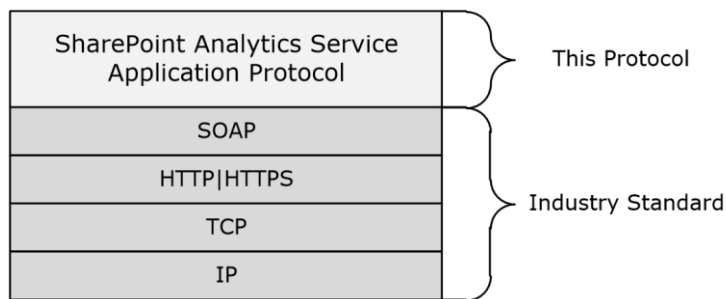


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a protocol server that exposes one or more endpoint URIs that are known by protocol clients. The endpoint URI of the protocol server and the transport that is used by the protocol server are either known by the protocol client or obtained by using the discovery mechanism that is described in [\[MS-SPTWS\]](#).

The protocol client obtains the requisite ApplicationClassId and ApplicationVersion values and the endpoint URI of the protocol server that provides the discovery mechanism, as described in [\[MS-SPTWS\]](#), by means that are independent of either protocol.

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

The protocol client implements the token-based security mechanisms that are required by the protocol server and related security protocols, as described in [\[MS-SPSTWS\]](#).

1.6 Applicability Statement

This protocol is intended for use by protocol clients and protocol servers that are connected by high-bandwidth, low-latency network connections.

The methods for sending data were designed to work with batches of 100 or fewer events.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol can be implemented by using transports that support sending SOAP messages, as specified in section 2.1.
- **Protocol Versions:** This protocol is not versioned.
- **Capability Negotiation:** This protocol does not support version negotiation.

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

2.1 Transport

Protocol servers MUST support SOAP over HTTP, HTTPS, or **TCP**.

All protocol messages MUST be transported by using HTTP or TCP bindings at the transport level.

Protocol messages MUST be formatted as specified in either [\[SOAP1.1\]](#) section 4 or [\[SOAP1.2/1\]](#) section 5. Protocol server faults MUST be returned by using HTTP status codes, as specified in [\[RFC2616\]](#) section 10, or **SOAP faults**, as specified in [\[SOAP1.1\]](#) section 4.4 or [\[SOAP1.2/1\]](#) section 5.4.

If the HTTPS transport is used, a server certificate MUST be deployed.

This protocol can transmit an additional SOAP header, the ServiceContext header, as described in [\[MS-SPSTWS\]](#).

This protocol does not define any means for activating a protocol server or protocol client. The protocol server MUST be configured and begin listening in an implementation-specific way. In addition, the protocol client MUST know the format and transport that is used by the server—for example, the SOAP format over an HTTP transport.

2.2 Common Message Syntax

This section contains common structures used by this protocol. The syntax of the structures uses **XML schema**, as specified in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), and WSDL, as specified in [\[WSDL\]](#).

2.2.1 Namespaces

This specification defines and references various **XML namespaces** using the mechanisms specified in [\[XMLNS\]](#). Although this specification associates a specific **XML namespace prefix** for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability.

Prefix	Namespace URI	Reference
q1	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01	
q25	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	
q34	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	
soap	http://schemas.xmlsoap.org/wsdl/soap/	[SOAP1.1]
tns	http://tempuri.org/	
tns1	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics	
tns2	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
tns3	http://schemas.microsoft.com/2003/10/Serialization/	
tns4	http://tempuri.org/Imports	
wsaw	http://www.w3.org/2006/05/addressing/wsdl	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]

Prefix	Namespace URI	Reference
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2 Messages

This specification does not define any common **WSDL message** definitions.

2.2.3 Elements

This specification does not define any common XML schema element definitions.

2.2.4 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
AnalyticsEventTypeDefinition	The AnalyticsEventTypeDefinition complex type defines an analytics event.
AnalyticsItemData	The AnalyticsItemData complex type defines the analytics usage data associated with an item or rollup scope.
AnalyticsTenantSettingsData	The AnalyticsTenantSettingsData complex type defines the analytics configuration settings for a tenant .
ArrayOfAnalyticsItemData	The ArrayOfAnalyticsItemData complex type defines a list of AnalyticsItemData elements.
ArrayOfint	The ArrayOfint complex type defines an array of integers.

2.2.4.1 AnalyticsEventTypeDefinition

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

The **AnalyticsEventTypeDefinition** complex type defines an analytics event.

```
<xs:complexType name="AnalyticsEventTypeDefinition"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns1:EventCountType"/>
    <xs:element minOccurs="0" name="AppEventTypeId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
    <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Options" type="tns1:EventOptions"/>
    <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
    <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

```

    <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
  </xs:element>
  xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
  minOccurs="0" name="Rollups" type="tns1:EventRollups"/>
    <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
    <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
  </xs:sequence>
</xs:complexType>

```

AggregationType: The type of aggregation to use for this event type.

AppEventTypeId: The identifier of the application registering the event type.

ApplicationName: The name of the application registering the event type.

EventName: The human-readable name of the event type.

EventTypeId: The identifier of the event type.

Options: Additional options for this event type.

RecentPopularityTimeframe: The timeframe for recent popularity for the event type.

RecommendationWeight: The weight this event type is given when considered for calculating recommended items.

RelevanceWeight: The weight this event type is given when considered for calculating relevant items.

Rollups: The rollup aggregations that can be calculated for this event type.

TailTrimming: The minimum number of events required to be considered at all for aggregations.

TenantId: The identifier of the tenant associated with this event type.

2.2.4.2 AnalyticsItemData

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

The **AnalyticsItemData** complex type defines the analytics usage data associated with an item or rollup scope.

```

<xs:complexType name="AnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="DailyHits" nillable="true" type="tns2:ArrayOfint"/>
    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="DailyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
    <xs:element minOccurs="0" name="EventType" type="xs:int"/>
    <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="LastProcessingHits" type="xs:int"/>
    <xs:element minOccurs="0" name="LastProcessingTime" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="LastProcessingUniqueUsers" type="xs:int"/>
    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="MonthlyHits" nillable="true" type="tns2:ArrayOfint"/>
    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="MonthlyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
    <xs:element minOccurs="0" name="ScopeId" nillable="true" type="tns3:guid"/>
    <xs:element minOccurs="0" name="SiteId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
    <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
  </xs:sequence>
</xs:complexType>

```



```
</xs:sequence>
</xs:complexType>
```

CurrentDate: The date when the analytics usage data was retrieved.

DailyHits: The raw historical hit data by day for the item or rollup scope.

DailyUniqueUsers: The raw historical unique user data by day for the item or rollup scope.

EventType: The identifier of the event type.

ItemId: The identifier of the item.

LastProcessingHits: The hit count for the associated item in the last processing interval.

LastProcessingTime: The last time that events for the associated item were aggregated.

LastProcessingUniqueUsers: The unique user count for the associated item in the last processing interval.

MonthlyHits: The raw historical hit data by month for the item or rollup scope.

MonthlyUniqueUsers: The raw historical unique user data by month for the item or rollup scope.

ScopeId: The identifier of an application-specific rollup scope.

SiteId: The identifier of the **Web site (2)**.

TenantId: The identifier of the tenant.

TotalHits: The lifetime hit count.

TotalUniqueUsers: The lifetime unique user count.

2.2.4.3 AnalyticsTenantSettingsData

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09>

The **AnalyticsTenantSettingsData** complex type defines the analytics configuration settings for a tenant.

```
<xs:complexType name="AnalyticsTenantSettingsData"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="EventFilters" nillable="true" type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="EventTypeDefinitions" nillable="true"
type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="LastUpdateTime" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="Options" type="q25:AnalyticsTenantSettingOptions"/>
    <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="Version" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

EventFilters: A serialized collection of all event filters for this tenant.

EventTypeDefinitions: A serialized collection of event type definitions for this tenant.

LastUpdateTime: A timestamp of the most recent time the configuration settings for the tenant were updated.

Options: Configuration options for the tenant. This must be a combination of one or more of the values defined in the **AnalyticsTenantSettingOptions** simple type, as specified in Section [2.2.5.1](#).

TenantId: The identifier of the tenant.

Version: The version number of the settings.

2.2.4.4 ArrayOfAnalyticsItemData

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

The **ArrayOfAnalyticsItemData** complex type defines a list of **AnalyticsItemData** elements.

```
<xs:complexType name="ArrayOfAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsItemData" nillable="true"
      type="ql:AnalyticsItemData"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsItemData: Analytics usage data associated with an item or rollup scope.

2.2.4.5 ArrayOfint

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/Arrays>

The **ArrayOfint** complex type defines an array of integers.

```
<xs:complexType name="ArrayOfint" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

int: An integer.

2.2.5 Simple Types

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

Simple type	Description
AnalyticsTenantSettingOptions	The AnalyticsTenantSettingOptions simple type defines options for tenant settings.
char	The char simple type represents a Unicode character.
duration	The duration simple type specifies the time interval or duration of time measured as positive or negative number of days, hours, minutes, seconds and fractions of a second.
EventCountType	The EventCountType simple type defines the type of aggregation for an event type.
EventOptions	The EventOptions simple type defines additional options for an event type.

Simple type	Description
EventRollups	The EventRollups simple type defines the rollup aggregations that can be calculated.
guid	The guid simple type contains an identifier that is globally unique.

2.2.5.1 AnalyticsTenantSettingOptions

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09>

The **AnalyticsTenantSettingOptions** simple type defines options for tenant settings.

The **AnalyticsTenantSettingOptions** MUST be a combination of one or more of the values in the following table:

Value	Meaning
None	The Analytics Tenant Setting is not specified.
AnalyticsDisabled	The Analytics Tenant Setting is disabled.
DoNotHashUserName	The Analytics Tenant Setting does not hash user name.

```
<xs:simpleType name="AnalyticsTenantSettingOptions"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string"/>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

2.2.5.2 char

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/>

The **char** simple type represents a Unicode character.

```
<xs:simpleType name="char" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:int"/>
</xs:simpleType>
```

2.2.5.3 duration

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/>

The **duration** simple type specifies the time interval or duration of time measured as positive or negative number of days, hours, minutes, seconds and fractions of a second.

```
<xs:simpleType name="duration" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:duration">
    <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?"/>
  </xs:restriction>
</xs:simpleType>
```

```

    <xs:minInclusive value="-P10675199DT2H48M5.4775808S"/>
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S"/>
  </xs:restriction>
</xs:simpleType>

```

2.2.5.4 EventCountType

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

The **EventCountType** simple type defines the type of aggregation for an event type.

```

<xs:simpleType name="EventCountType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="Count"/>
        <xs:enumeration value="UniqueUsers"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>

```

The following table specifies the allowable values for the **EventCountType** simple type.

Value	Meaning
Count	Aggregate by raw count.
UniqueUsers	Aggregate by the number of unique users.

2.2.5.5 EventOptions

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

The **EventOptions** simple type defines additional options for an event type.

```

<xs:simpleType name="EventOptions" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="None"/>
        <xs:enumeration value="AllowAnonymousWrite"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>

```

The following table specifies the allowable values for the **EventOptions** simple type.

Value	Meaning
None	No options are specified.
AllowAnonymousWrite	Allow anonymous users to generate events of this event type.

2.2.5.6 EventRollups

Namespace: <http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics>

The **EventRollups** simple type defines the rollout aggregations that can be calculated.

```
<xs:simpleType name="EventRollups" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="SiteSubscriptionId"/>
        <xs:enumeration value="SiteId"/>
        <xs:enumeration value="ScopeId"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

The following table specifies the allowable values for the **EventRollups** simple type.

Value	Meaning
SiteSubscriptionId	Site-subscription-level aggregation
SiteId	Site-level aggregation
ScopeId	Scope-level aggregation

2.2.5.7 guid

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/>

The **guid** simple type contains an identifier that is globally unique.

```
<xs:simpleType name="guid" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:pattern value="\da-fA-F}{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
```

2.2.6 Attributes

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

2.2.7 Groups

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

2.2.8 Attribute Groups

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

3 Protocol Details

In the following sections, the schema definition might be less restrictive than the processing rules imposed by the protocol. The WSDL in the specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL specifies additional restrictions that reflect protocol behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present**, but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **present** and **not null**.

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 that are returned by the protocol server as specified in [\[RFC2616\]](#), section 10.

This protocol allows protocol servers to notify protocol clients of application-level faults by using SOAP faults. Except where otherwise specified, these SOAP faults are not significant for interoperability and protocol clients can interpret them in an implementation-specific manner.

This protocol allows protocol servers to perform implementation-specific authorization checks and to notify clients of authorization faults by using either HTTP status codes or SOAP faults, as specified previously in this section.

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.

The protocol server receives usage events, which represent actions performed on the protocol client; for example, a view event on a Web site (2). An event includes, among other things, an event type and an associated item.

The protocol server maintains an event store, which provides persistent storage for events received by the protocol server.

The protocol server maintains various configuration settings for each tenant. These settings include, among other things, a collection of definitions of event types. Some of the event types are predefined by the protocol server, such as Views; whereas other event types are registered for use by specific applications on the protocol client.

The protocol server aggregates the events in the event store and stores the results of the processing in an aggregation store. The aggregation store keeps historic aggregated count of events of each event type for each item, as well as recommendations (related items), it determines based on the usage events.

The protocol server also stores historic aggregated counts of search-related events for **search queries**, such as how many times a search query was issued.

The protocol server also aggregates usage data by combining the events for multiple items from the same rollup scope, for example, items from the same Web site (2). Rollup scopes can be global, tenant, site, or specified by the application logging the event.

3.1.2 Timers

None.

3.1.3 Initialization

None.

3.1.4 Message Processing Events and Sequencing Rules

The following table summarizes the list of operations as defined by this specification.

Operation	Description
DeleteAllUsageDataForTenant	Initiates the deletion of aggregated data for a specified tenant.
DeleteCustomEventUsageDataForSite	Initiates the deletion of aggregated data for a specified Web site (2) for an application-specific event type.
DeleteCustomEventUsageDataForTenant	Initiates the deletion of aggregated data for a specified tenant for an application-specific event type.
DeleteRecommendationsDataForTenant	Initiates the deletion of aggregated recommendations for the specified tenant.
DeleteStandardEventUsageDataForSite	Initiates the deletion of aggregated data for a specified Web site (2) for a predefined event type.
DeleteStandardEventUsageDataForTenant	Initiates the deletion of aggregated data for a specified tenant for a predefined event type.
GetAnalyticsEventTypeDefinition	Retrieves the definition of an event type for the specified tenant.
GetAnalyticsEventTypeDefinitions	Retrieves a filtered set of definitions of event types for the specified tenant.
GetAnalyticsItemData	Retrieves aggregated usage data for a specified item for a specified event type.
GetAnalyticsItemsData	Retrieves aggregated usage data for multiple specified items for a specified event type.
GetAnalyticsTenantConfiguration	Retrieves the configuration settings for a specified tenant.
GetGlobalAnalyticsItemDataBatch	Retrieves aggregated usage data for multiple items for a specified event type and a specified scope that have been processed since a specified time.
GetRawAnalyticsTenantSettingsBatch	Retrieves the configuration settings for multiple tenants.
GetRawAnalyticsTenantSettings	Retrieves the configuration settings for a specified tenant.
GetRollupAnalyticsItemData	Retrieves aggregated usage data for a rollup scope for events of a specified event type.
GetSearchReport	Retrieves the aggregated top occurrences for the specified search event type within a scope.
GetTenantAnalyticsItemData	Retrieves aggregated usage data for a tenant for events of a specified event type.

Operation	Description
SendAnalyticsUsageEvents	Sends usage events to the protocol server.
UpsertRawAnalyticsTenantSettings	Updates the configuration settings for a specified tenant.

3.1.4.1 DeleteAllUsageDataForTenant

Initiates the deletion of aggregated data for a specified tenant.

The following is the **WSDL** port type specification of the **DeleteAllUsageDataForTenant WSDL operation**.

```
<wsdl:operation name="DeleteAllUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns:IAalyticsServiceApplication DeleteAllUsageDataForTenant InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenantRespo
nse" message="tns:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage** WSDL message and the protocol server responds with an **IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage** WSDL message as follows:

- The protocol server initiates the deletion of aggregated data for the specified **tenantId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.1.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage	The request WSDL message for the DeleteAllUsageDataForTenant WSDL operation.
IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage	The response WSDL message for the DeleteAllUsageDataForTenant WSDL operation.

3.1.4.1.1.1 IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage

The request WSDL message for the **DeleteAllUsageDataForTenant** WSDL operation.

The **SOAP action** value is:

```
http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant
```

The **SOAP body** contains the **DeleteAllUsageDataForTenant** element.

3.1.4.1.1.2 IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage

The response WSDL message for the **DeleteAllUsageDataForTenant** WSDL operation.

The SOAP body contains the **DeleteAllUsageDataForTenantResponse** element.

3.1.4.1.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteAllUsageDataForTenant	The input data for the DeleteAllUsageDataForTenant WSDL operation.
DeleteAllUsageDataForTenantResponse	The result data for the DeleteAllUsageDataForTenant WSDL operation.

3.1.4.1.2.1 DeleteAllUsageDataForTenant

The **DeleteAllUsageDataForTenant** element specifies the input data for the **DeleteAllUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteAllUsageDataForTenant" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

3.1.4.1.2.2 DeleteAllUsageDataForTenantResponse

The **DeleteAllUsageDataForTenantResponse** element specifies the result data for the **DeleteAllUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteAllUsageDataForTenantResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.1.3 Complex Types

None.

3.1.4.1.4 Simple Types

None.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None.

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 DeleteCustomEventUsageDataForSite

Initiates the deletion of aggregated data for a specified Web site (2) for an application-specific event type.

The following is the WSDL port type specification of the **DeleteCustomEventUsageDataForSite** WSDL operation.

```
<wsdl:operation name="DeleteCustomEventUsageDataForSite"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
    message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
    message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage** WSDL message as follows:

- The protocol server initiates the deletion of aggregated data on the Web site (2) corresponding to the specified **tenantId** and **siteId** for the application-specific event type corresponding to the specified **appEventTypeId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.2.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage	The request WSDL message for the DeleteCustomEventUsageDataForSite WSDL operation.
IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage	The response WSDL message for the DeleteCustomEventUsageDataForSite WSDL operation.

3.1.4.2.1.1 IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage

The request WSDL message for the **DeleteCustomEventUsageDataForSite** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite
```

The SOAP body contains the **DeleteCustomEventUsageDataForSite** element.

3.1.4.2.1.2 IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage

The response WSDL message for the **DeleteCustomEventUsageDataForSite** WSDL operation.

The SOAP body contains the **DeleteCustomEventUsageDataForSiteResponse** element.

3.1.4.2.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteCustomEventUsageDataForSite	The input data for the DeleteCustomEventUsageDataForSite WSDL operation.
DeleteCustomEventUsageDataForSiteResponse	The result data for the DeleteCustomEventUsageDataForSite WSDL operation.

3.1.4.2.2.1 DeleteCustomEventUsageDataForSite

The **DeleteCustomEventUsageDataForSite** element specifies the input data for the **DeleteCustomEventUsageDataForSite** WSDL operation.

```
<xs:element name="DeleteCustomEventUsageDataForSite"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
```

```

    <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
    <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns3:guid"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site (2).

appEventTypeId: The identifier of the application-specific event type. The identifier MUST correspond to an application-specific event type that is registered for this tenant.

3.1.4.2.2 DeleteCustomEventUsageDataForSiteResponse

The **DeleteCustomEventUsageDataForSiteResponse** element specifies the result data for the **DeleteCustomEventUsageDataForSite** WSDL operation.

```

<xs:element name="DeleteCustomEventUsageDataForSiteResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>

```

3.1.4.2.3 Complex Types

None.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None.

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.4.3 DeleteCustomEventUsageDataForTenant

Initiates the deletion of aggregated data for a specified tenant for an application-specific event type.

The following is the WSDL port type specification of the **DeleteCustomEventUsageDataForTenant** WSDL operation.

```

<wsdl:operation name="DeleteCustomEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant"
message="tns:IAalyticsServiceApplication DeleteCustomEventUsageDataForTenant InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenantResponse"
message="tns:IAalyticsServiceApplication DeleteCustomEventUsageDataForTenant OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage** WSDL message as follows:

- The protocol server initiates the deletion of aggregated data on the tenant corresponding to the specified **tenantId** for the application-specific event type corresponding to the specified **appEventTypeId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.3.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage	The request WSDL message for the DeleteCustomEventUsageDataForTenant WSDL operation.
IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage	The response WSDL message for the DeleteCustomEventUsageDataForTenant WSDL operation.

3.1.4.3.1.1 IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage

The request WSDL message for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant
```

The SOAP body contains the **DeleteCustomEventUsageDataForTenant** element.

3.1.4.3.1.2 IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage

The response WSDL message for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

The SOAP body contains the **DeleteCustomEventUsageDataForTenantResponse** element.

3.1.4.3.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteCustomEventUsageDataForTenant	The input data for the DeleteCustomEventUsageDataForTenant WSDL operation.
DeleteCustomEventUsageDataForTenantResponse	The result data for the DeleteCustomEventUsageDataForTenant WSDL operation.

3.1.4.3.2.1 DeleteCustomEventUsageDataForTenant

The **DeleteCustomEventUsageDataForTenant** element specifies the input data for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteCustomEventUsageDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

appEventTypeId: The identifier of the application-specific event type. The identifier MUST correspond to an application-specific event type that is registered for this tenant.

3.1.4.3.2.2 DeleteCustomEventUsageDataForTenantResponse

The **DeleteCustomEventUsageDataForTenantResponse** element specifies the result data for the **DeleteCustomEventUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteCustomEventUsageDataForTenantResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.3.3 Complex Types

None.

3.1.4.3.4 Simple Types

None.

3.1.4.3.5 Attributes

None.

3.1.4.3.6 Groups

None.

3.1.4.3.7 Attribute Groups

None.

3.1.4.4 DeleteRecommendationsDataForTenant

Initiates the deletion of aggregated recommendations for the specified tenant.

The following is the WSDL port type specification of the **DeleteRecommendationsDataForTenant** WSDL operation.

```
<wsdl:operation name="DeleteRecommendationsDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenant"
message="tns:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenantResponse"
message="tns:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage** WSDL message as follows:

- The protocol server initiates the deletion of aggregated recommendations for the tenant corresponding to the specified **tenantId**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.4.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage	The request WSDL message for the DeleteRecommendationsDataForTenant WSDL operation.
IAalyticsServiceApplication_DeleteRecommendationsDataForTenant	The response WSDL message for

Message	Description
nt_OutputMessage	the DeleteRecommendationsDataForTenant WSDL operation.

3.1.4.4.1.1 IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage

The request WSDL message for the **DeleteRecommendationsDataForTenant** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAnalyticsServiceApplication/DeleteRecommendationsDataForTenant
```

The SOAP body contains the **DeleteRecommendationsDataForTenant** element.

3.1.4.4.1.2 IAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage

The response WSDL message for the **DeleteRecommendationsDataForTenant** WSDL operation.

The SOAP body contains the **DeleteRecommendationsDataForTenantResponse** element.

3.1.4.4.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteRecommendationsDataForTenant	The input data for the DeleteRecommendationsDataForTenant WSDL operation.
DeleteRecommendationsDataForTenantResponse	The result data for the DeleteRecommendationsDataForTenant WSDL operation.

3.1.4.4.2.1 DeleteRecommendationsDataForTenant

The **DeleteRecommendationsDataForTenant** element specifies the input data for the **DeleteRecommendationsDataForTenant** WSDL operation.

```
<xs:element name="DeleteRecommendationsDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

3.1.4.4.2 DeleteRecommendationsDataForTenantResponse

The **DeleteRecommendationsDataForTenantResponse** element specifies the result data for the **DeleteRecommendationsDataForTenant** WSDL operation.

```
<xs:element name="DeleteRecommendationsDataForTenantResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.4.3 Complex Types

None.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.4.5 DeleteStandardEventUsageDataForSite

Initiates the deletion of aggregated data for a specified Web site (2) for a predefined event type.

The following is the WSDL port type specification of the **DeleteStandardEventUsageDataForSite** WSDL operation.

```
<wsdl:operation name="DeleteStandardEventUsageDataForSite"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
    message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
    message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage WSDL message, and the protocol server responds with an

IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage WSDL message as follows:

- The protocol server initiates the deletion of aggregated data for the Web site (2) corresponding to the specified **tenantId** and **siteId** for the predefined event type corresponding to the specified **eventType**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.5.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage	The request WSDL message for the DeleteStandardEventUsageDataForSite WSDL operation.
IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage	The response WSDL message for the DeleteStandardEventUsageDataForSite WSDL operation.

3.1.4.5.1.1 IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage

The request WSDL message for the **DeleteStandardEventUsageDataForSite** WSDL operation.

The SOAP action value is:

`http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite`

The SOAP body contains the **DeleteStandardEventUsageDataForSite** element.

3.1.4.5.1.2 IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage

The response WSDL message for the **DeleteStandardEventUsageDataForSite** WSDL operation.

The SOAP body contains the **DeleteStandardEventUsageDataForSiteResponse** element.

3.1.4.5.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteStandardEventUsageDataForSite	The input data for the DeleteStandardEventUsageDataForSite WSDL operation.
DeleteStandardEventUsageDataForSiteResponse	The result data for the DeleteStandardEventUsageDataForSite WSDL operation.

3.1.4.5.2.1 DeleteStandardEventUsageDataForSite

The **DeleteStandardEventUsageDataForSite** element specifies the input data for the **DeleteStandardEventUsageDataForSite** WSDL operation.

```
<xs:element name="DeleteStandardEventUsageDataForSite"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site (2).

eventType: The identifier of the event type. The identifier MUST correspond to a predefined event type.

3.1.4.5.2.2 DeleteStandardEventUsageDataForSiteResponse

The **DeleteStandardEventUsageDataForSiteResponse** element specifies the result data for the **DeleteStandardEventUsageDataForSite** WSDL operation.

```
<xs:element name="DeleteStandardEventUsageDataForSiteResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.5.3 Complex Types

None.

3.1.4.5.4 Simple Types

None.

3.1.4.5.5 Attributes

None.

3.1.4.5.6 Groups

None.

3.1.4.5.7 Attribute Groups

None.

3.1.4.6 DeleteStandardEventUsageDataForTenant

Initiates the deletion of aggregated data for a specified tenant for a predefined event type.

The following is the WSDL port type specification of the **DeleteStandardEventUsageDataForTenant** WSDL operation.

```
<wsdl:operation name="DeleteStandardEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enant"
message="tns:IAalyticsServiceApplication DeleteStandardEventUsageDataForTenant InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enantResponse"
message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage
" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage

WSDL message, and the protocol server responds with an

IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage

WSDL message as follows:

- The protocol server initiates the deletion of aggregated data for the tenant corresponding to the specified **tenantId** for the predefined event type corresponding to the specified **eventType**. For example, the protocol server might synchronously delete the relevant aggregated data, or it might queue up the command and delete the relevant aggregated data as part of a periodic aggregation.

3.1.4.6.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage	The request WSDL message for the DeleteStandardEventUsageDataForTenant WSDL operation.
IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage	The response WSDL message for the DeleteStandardEventUsageDataForTenant WSDL operation.

3.1.4.6.1.1 IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage

The request WSDL message for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenant
```

The SOAP body contains the **DeleteStandardEventUsageDataForTenant** element.

3.1.4.6.1.2 IAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage

The response WSDL message for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

The SOAP body contains the **DeleteStandardEventUsageDataForTenantResponse** element.

3.1.4.6.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteStandardEventUsageDataForTenant	The input data for the DeleteStandardEventUsageDataForTenant WSDL operation.
DeleteStandardEventUsageDataForTenantResponse	The result data for the DeleteStandardEventUsageDataForTenant WSDL operation.

3.1.4.6.2.1 DeleteStandardEventUsageDataForTenant

The **DeleteStandardEventUsageDataForTenant** element specifies the input data for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteStandardEventUsageDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

eventType: The identifier of the event type. The identifier MUST correspond to a predefined event type.

3.1.4.6.2.2 DeleteStandardEventUsageDataForTenantResponse

The **DeleteStandardEventUsageDataForTenantResponse** element specifies the result data for the **DeleteStandardEventUsageDataForTenant** WSDL operation.

```
<xs:element name="DeleteStandardEventUsageDataForTenantResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.6.3 Complex Types

None.

3.1.4.6.4 Simple Types

None.

3.1.4.6.5 Attributes

None.

3.1.4.6.6 Groups

None.

3.1.4.6.7 Attribute Groups

None.

3.1.4.7 GetAnalyticsEventTypeDefinition

Retrieves the definition of an event type for the specified tenant.

The following is the WSDL port type specification of the **GetAnalyticsEventTypeDefinition** WSDL operation.

```
<wsdl:operation name="GetAnalyticsEventTypeDefinition"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage WSDL message, and the protocol server responds with an

IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage WSDL message as follows:

- If the **eventType** corresponds to a predefined event type, the protocol server returns the definition of that event type.
- If the **eventType** corresponds to an application-specific event type that is registered for the tenant, the protocol server returns the definition of that event type.
- Otherwise, the protocol server returns a SOAP exception.

3.1.4.7.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Input Message	The request WSDL message for the GetAnalyticsEventTypeDefinition WSDL operation.
IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Output Message	The response WSDL message for the GetAnalyticsEventTypeDefinition WSDL operation.

3.1.4.7.1.1 IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Input Message

The request WSDL message for the **GetAnalyticsEventTypeDefinition** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition
```

The SOAP body contains the **GetAnalyticsEventTypeDefinition** element.

3.1.4.7.1.2 IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_Output Message

The response WSDL message for the **GetAnalyticsEventTypeDefinition** WSDL operation.

The SOAP body contains the **GetAnalyticsEventTypeDefinitionResponse** element.

3.1.4.7.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetAnalyticsEventTypeDefinition	The input data for the GetAnalyticsEventTypeDefinition WSDL operation.
GetAnalyticsEventTypeDefinitionResponse	The result data for the GetAnalyticsEventTypeDefinition WSDL operation.

3.1.4.7.2.1 GetAnalyticsEventTypeDefinition

The **GetAnalyticsEventTypeDefinition** element specifies the input data for the **GetAnalyticsEventTypeDefinition** WSDL operation.

```
<xs:element name="GetAnalyticsEventTypeDefinition"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

eventType: The identifier of the event type.

3.1.4.7.2.2 GetAnalyticsEventTypeDefinitionResponse

The **GetAnalyticsEventTypeDefinitionResponse** element specifies the result data for the **GetAnalyticsEventTypeDefinition** WSDL operation.

```
<xs:element name="GetAnalyticsEventTypeDefinitionResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionResult" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsEventTypeDefinitionResult: The definition of the event type.

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

None.

3.1.4.7.5 Attributes

None.

3.1.4.7.6 Groups

None.

3.1.4.7.7 Attribute Groups

None.

3.1.4.8 GetAnalyticsEventTypeDefinitions

Retrieves a filtered set of definitions of event types for the specified tenant.

The following is the WSDL port type specification of the **GetAnalyticsEventTypeDefinitions** WSDL operation.

```
<wsdl:operation name="GetAnalyticsEventTypeDefinitions"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
```



```

" message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
Response"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage** WSDL message, and the protocol server responds with an **._OutputMessage** WSDL message as follows:

- If the **filter** includes predefined event types, the protocol server returns the definitions of the predefined event type.
- If the **filter** includes application-specific event types, the protocol server returns the definition of any application-specific event types that are registered for the tenant.
- If the **filter** includes additional predefined event types, the protocol server returns the definition the additional predefined event types.

3.1.4.8.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage	The request WSDL message for the GetAnalyticsEventTypeDefinitions WSDL operation.
IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage	The response WSDL message for the GetAnalyticsEventTypeDefinitions WSDL operation.

3.1.4.8.1.1 IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage

The request WSDL message for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
```

The SOAP body contains the **GetAnalyticsEventTypeDefinitions** element.

3.1.4.8.1.2 IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage

The response WSDL message for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

The SOAP body contains the **GetAnalyticsEventTypeDefinitionsResponse** element.

3.1.4.8.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetAnalyticsEventTypeDefinitions	The input data for the GetAnalyticsEventTypeDefinitions WSDL operation.
GetAnalyticsEventTypeDefinitionsResponse	The result data for the GetAnalyticsEventTypeDefinitions WSDL operation.

3.1.4.8.2.1 GetAnalyticsEventTypeDefinitions

The **GetAnalyticsEventTypeDefinitions** element specifies the input data for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

```
<xs:element name="GetAnalyticsEventTypeDefinitions"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:q34="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q34:AnalyticsEventTypes"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

filter: The filter of which definitions of event types to retrieve.

3.1.4.8.2.2 GetAnalyticsEventTypeDefinitionsResponse

The **GetAnalyticsEventTypeDefinitionsResponse** element specifies the result data for the **GetAnalyticsEventTypeDefinitions** WSDL operation.

```
<xs:element name="GetAnalyticsEventTypeDefinitionsResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionsResult" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsEventTypeDefinitionsResult: A list of definitions of event types.

3.1.4.8.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
ArrayOfAnalyticsEventTypeDefinition	A list of type AnalyticsEventTypeDefinition.

3.1.4.8.3.1 ArrayOfAnalyticsEventTypeDefinition

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A list of definitions of event types.

```
<xs:complexType name="ArrayOfAnalyticsEventTypeDefinition"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsEventTypeDefinition"
nillable="true" type="q1:AnalyticsEventTypeDefinition"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsEventTypeDefinition: The definition of an event type.

3.1.4.8.4 Simple Types

The following table summarizes the XML schema simple type definitions that are specific to this operation.

Simple type	Description
AnalyticsEventTypes	A filter used for retrieving event types.

3.1.4.8.4.1 AnalyticsEventTypes

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05

A filter used for retrieving analytics event types.

```
<xs:simpleType name="AnalyticsEventTypes" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="None"/>
        <xs:enumeration value="Standard"/>
        <xs:enumeration value="Custom"/>
        <xs:enumeration value="Internal"/>
        <xs:enumeration value="All"/>
        <xs:enumeration value="AllIncludingInternal"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
```

The following table specifies the allowable values for the **AnalyticsEventTypes** simple type.

Value	Meaning
None	No event types
Standard	Predefined event types
Custom	Application-specific event types
Internal	Additional predefined event types, generally event types that are not commonly shown to end users.
All	All event types that are commonly shown to end users, including predefined and application-specific event types.
AllIncludingInternal	All event types

3.1.4.8.5 Attributes

None.

3.1.4.8.6 Groups

None.

3.1.4.8.7 Attribute Groups

None.

3.1.4.9 GetAnalyticsItemData

Retrieves aggregated usage data for a specified item for a specified event type.

The following is the WSDL port type specification of the **GetAnalyticsItemData** WSDL operation.

```
<wsdl:operation name="GetAnalyticsItemData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
    message="tns:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
    message="tns:IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage** request message and the protocol server responds with an **IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage** response message as follows:

- The protocol server returns aggregated usage data for the item if it has data for the specified **eventType**.
- Otherwise, the protocol server returns NULL.

3.1.4.9.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage	The request WSDL message for the GetAnalyticsItemData WSDL operation.
IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage	The response WSDL message for the GetAnalyticsItemData WSDL operation.

3.1.4.9.1.1 IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage

The request WSDL message for the **GetAnalyticsItemData** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData
```

The SOAP body contains the **GetAnalyticsItemData** element.

3.1.4.9.1.2 IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage

The response WSDL message for the **GetAnalyticsItemData** WSDL operation.

The SOAP body contains the **GetAnalyticsItemDataResponse** element.

3.1.4.9.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetAnalyticsItemData	The input data for the GetAnalyticsItemData WSDL operation.
GetAnalyticsItemDataResponse	The result data for the GetAnalyticsItemData WSDL operation.

3.1.4.9.2.1 GetAnalyticsItemData

The **GetAnalyticsItemData** element specifies the input data for the **GetAnalyticsItemData** WSDL operation.

```
<xs:element name="GetAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="itemId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site (2).

itemId: The identifier of the item.

3.1.4.9.2.2 GetAnalyticsItemDataResponse

The **GetAnalyticsItemDataResponse** element specifies the result data for the **GetAnalyticsItemData** WSDL operation.

```
<xs:element name="GetAnalyticsItemDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemDataResult" nillable="true" type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsItemDataResult: The aggregated usage data for the item.

3.1.4.9.3 Complex Types

None.

3.1.4.9.4 Simple Types

None.

3.1.4.9.5 Attributes

None.

3.1.4.9.6 Groups

None.

3.1.4.9.7 Attribute Groups

None.

3.1.4.10 GetAnalyticsItemsData

Retrieves aggregated usage data for multiple specified items for a specified event type.

The following is the WSDL port type specification of the **GetAnalyticsItemsData** WSDL operation.

```
<wsdl:operation name="GetAnalyticsItemsData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
```

```

message="tns:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage** WSDL message as follows:

- The protocol server returns aggregated usage data for each item corresponding to one of the specified **itemIds** for which it has data for the specified **eventType**.

3.1.4.10.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage	The request WSDL message for the GetAnalyticsItemsData WSDL operation.
IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage	The response WSDL message for the GetAnalyticsItemsData WSDL operation.

3.1.4.10.1.1 IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage

The request WSDL message for the **GetAnalyticsItemsData** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData
```

The SOAP body contains the **GetAnalyticsItemsData** element.

3.1.4.10.1.2 IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage

The response WSDL message for the **GetAnalyticsItemsData** WSDL operation.

The SOAP body contains the **GetAnalyticsItemsDataResponse** element.

3.1.4.10.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetAnalyticsItemsData	The input data for the GetAnalyticsItemsData WSDL operation.

Element	Description
GetAnalyticsItemsDataResponse	The result data for the GetAnalyticsItemsData WSDL operation.

3.1.4.10.2.1 GetAnalyticsItemsData

The **GetAnalyticsItemsData** element specifies the input data for the **GetAnalyticsItemsData** WSDL operation.

```
<xs:element name="GetAnalyticsItemsData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns2:ArrayOfstring"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site (2).

itemIds: A list of identifiers of the items whose associated analytics data is to be retrieved.

3.1.4.10.2.2 GetAnalyticsItemsDataResponse

The **GetAnalyticsItemsDataResponse** element specifies the result data for the **GetAnalyticsItemsData** WSDL operation.

```
<xs:element name="GetAnalyticsItemsDataResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemsDataResult" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetAnalyticsItemsDataResult: A list of aggregated usage data associated for the specified items.

3.1.4.10.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
ArrayOfstring	An array of strings.

3.1.4.10.3.1 ArrayOfstring

Namespace: http://schemas.microsoft.com/2003/10/Serialization/Arrays

A list of strings.

```
<xs:complexType name="ArrayOfstring" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

string: A non-empty sequence of characters.

3.1.4.10.4 Simple Types

None.

3.1.4.10.5 Attributes

None.

3.1.4.10.6 Groups

None.

3.1.4.10.7 Attribute Groups

None.

3.1.4.11 GetAnalyticsTenantConfiguration

Retrieves the configuration settings for a specified tenant.

The following is the WSDL port type specification of the **GetAnalyticsTenantConfiguration** WSDL operation.

```
<wsdl:operation name="GetAnalyticsTenantConfiguration"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage WSDL message, and the protocol server responds with an

IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage WSDL message as follows:

- The protocol server returns the configuration settings for the tenant corresponding to the specified **tenantId**.

3.1.4.11.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_Input Message	The request WSDL message for the GetAnalyticsTenantConfiguration WSDL operation.
IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage	The response WSDL message for the GetAnalyticsTenantConfiguration WSDL operation.

3.1.4.11.1.1 IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage

The request WSDL message for the **GetAnalyticsTenantConfiguration** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration
```

The SOAP body contains the **GetAnalyticsTenantConfiguration** element.

3.1.4.11.1.2 IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage

The response WSDL message for the **GetAnalyticsTenantConfiguration** WSDL operation.

The SOAP body contains the **GetAnalyticsTenantConfigurationResponse** element.

3.1.4.11.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetAnalyticsTenantConfiguration	The input data for the GetAnalyticsTenantConfiguration WSDL operation.
GetAnalyticsTenantConfigurationResponse	The result data for the GetAnalyticsTenantConfiguration WSDL operation.

3.1.4.11.2.1 GetAnalyticsTenantConfiguration

The **GetAnalyticsTenantConfiguration** element specifies the input data for the **GetAnalyticsTenantConfiguration** WSDL operation.

```

<xs:element name="GetAnalyticsTenantConfiguration"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

tenantId: The identifier of the tenant.

3.1.4.11.2 GetAnalyticsTenantConfigurationResponse

The **GetAnalyticsTenantConfigurationResponse** element specifies the result data for the **GetAnalyticsTenantConfiguration** WSDL operation.

```

<xs:element name="GetAnalyticsTenantConfigurationResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q25:AnalyticsTenantConfig"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetAnalyticsTenantConfigurationResult: The configuration settings for the specified tenant.

3.1.4.11.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
AnalyticsTenantConfig	The analytics configuration for a tenant.

3.1.4.11.3.1 AnalyticsTenantConfig

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09>

The analytics settings for a tenant.

```

<xs:complexType name="AnalyticsTenantConfig" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q25:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>

```

Settings: The analytics settings for a tenant.

3.1.4.11.4 Simple Types

None.

3.1.4.11.5 Attributes

None.

3.1.4.11.6 Groups

None.

3.1.4.11.7 Attribute Groups

None.

3.1.4.12 GetGlobalAnalyticsItemDataBatch

Retrieves aggregated usage data for multiple items for a specified event type and a specified scope that have been processed since a specified time.

The following is the WSDL port type specification of the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

```
<wsdl:operation name="GetGlobalAnalyticsItemDataBatch"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
    message="tns:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchResponse"
    message="tns:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage WSDL

message, and the protocol server responds with an

IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage WSDL

message as follows:

- The protocol server examines the **token.ScopeType**. If this value is
 - **Global**: The protocol server returns the next batch of items that have been modified after the time specified in the **since** parameter.
 - **Tenant**: The protocol server returns the next batch of items for the tenant corresponding to the specified **token.TenantId** after the time specified in the **since** parameter.
 - **Site**: The protocol server returns the next batch of items for the Web site (2) corresponding to the specified **token.TenantId** and **token.SiteId** after the time specified in the **since** parameter.
- If the number of items remaining to return is larger than **batchSize**, only the next **batchSize** number of items are returned.
- The protocol server sets the **Token** with the values corresponding to the last item returned in the batch of **Items**.

- This method is a batch method, that is, the protocol server returns a **Token** that represents state that allows the protocol server to resume a subsequent batch of items to return if the current batch is constrained by the **batchSize**. The protocol server expects the protocol client to provide a default initial **token** for a first batch and to provide the state it returns from a previous call for subsequent calls.

3.1.4.12.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage	The request WSDL message for the GetGlobalAnalyticsItemDataBatch WSDL operation.
IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage	The response WSDL message for the GetGlobalAnalyticsItemDataBatch WSDL operation.

3.1.4.12.1.1 IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage

The request WSDL message for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

The SOAP action value is:

`http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch`

The SOAP body contains the **GetGlobalAnalyticsItemDataBatch** element.

3.1.4.12.1.2 IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage

The response WSDL message for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

The SOAP body contains the **GetGlobalAnalyticsItemDataBatchResponse** element.

3.1.4.12.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetGlobalAnalyticsItemDataBatch	The input data for the GetGlobalAnalyticsItemDataBatch WSDL operation.
GetGlobalAnalyticsItemDataBatchResponse	The result data for the GetGlobalAnalyticsItemDataBatch WSDL operation.

3.1.4.12.2.1 GetGlobalAnalyticsItemDataBatch

The **GetGlobalAnalyticsItemDataBatch** element specifies the input data for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

```
<xs:element name="GetGlobalAnalyticsItemDataBatch"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element minOccurs="0" name="since" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
        minOccurs="0" name="token" nillable="true" type="q1:ContinuationTokenItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

since: A **timestamp**.

batchSize: The maximum number of rows to be retrieved. MUST be less than 1000.

token: A token that represents the end of the previous batch.

3.1.4.12.2.2 GetGlobalAnalyticsItemDataBatchResponse

The **GetGlobalAnalyticsItemDataBatchResponse** element specifies the result data for the **GetGlobalAnalyticsItemDataBatch** WSDL operation.

```
<xs:element name="GetGlobalAnalyticsItemDataBatchResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
        minOccurs="0" name="GetGlobalAnalyticsItemDataBatchResult" nillable="true"
        type="q1:AnalyticsItemDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetGlobalAnalyticsItemDataBatchResult: A batch of aggregated usage data processed since the given time, plus a token that represents the end of the current batch.

3.1.4.12.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
AnalyticsItemDataBatch	A batch of aggregated usage data, plus a token that represents the end of the batch.
ContinuationTokenItemData	A token that represents the end of a batch of data.

3.1.4.12.3.1 ContinuationTokenItemData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A token that represents the end of a batch of data.

```
<xs:complexType name="ContinuationTokenItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="EndPartitionId" nillable="true" type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
    <xs:element
      xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
      minOccurs="0" name="ScopeType" type="tns1:ContinuationTokenItemData.Scope"/>
    <xs:element minOccurs="0" name="StartPartitionId" nillable="true"
      type="xs:base64Binary"/>
  </xs:sequence>
</xs:complexType>
```

EndPartitionId: Together with **StartPartitionId** defines the partition range for which the token is valid.

ItemHash: If this is not the first batch to be retrieved, this is an implementation-specific hash code of the identifier of the last item from the previous batch. Otherwise, this MUST be 0.

ScopeType: The scope of the batch.

StartPartitionId: Together with **EndPartitionId** defines the partition range for which the token is valid.

3.1.4.12.3.2 AnalyticsItemDataBatch

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01

A batch of aggregated usage data, plus a token that represents the end of the batch.

```
<xs:complexType name="AnalyticsItemDataBatch" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Items" nillable="true"
      type="ql:ArrayOfAnalyticsItemData"/>
    <xs:element minOccurs="0" name="Token" nillable="true"
      type="ql:ContinuationTokenItemData"/>
  </xs:sequence>
</xs:complexType>
```

Items: The collection of analytics item data for each of the items in the batch.

Token: The continuation token, provided so that the subsequent batch can be retrieved, if there is one.

3.1.4.12.4 Simple Types

The following table summarizes the XML schema simple type definitions that are specific to this operation.

Simple type	Description
ContinuationTokenItemData.Scope	The scope for the batch associated with that continuation token.

3.1.4.12.4.1 ContinuationTokenItemData.Scope

Namespace: http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics

This value determines the scope of a batch.

```
<xs:simpleType name="ContinuationTokenItemData.Scope"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="Global"/>
    <xs:enumeration value="Tenant"/>
    <xs:enumeration value="Site"/>
  </xs:restriction>
</xs:simpleType>
```

The following table specifies the allowable values for the **ContinuationTokenItemData.Scope** simple type.

Value	Meaning
Global	The batch will contain all items.
Tenant	The batch will contain items from a specific tenant.
Site	The batch will contain items from a specific site .

3.1.4.12.5 Attributes

None.

3.1.4.12.6 Groups

None.

3.1.4.12.7 Attribute Groups

None.

3.1.4.13 GetRawAnalyticsTenantSettings

Retrieves the configuration settings for a specified tenant.

The following is the WSDL port type specification of the **GetRawAnalyticsTenantSettings** WSDL operation.

```
<wsdl:operation name="GetRawAnalyticsTenantSettings"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettings"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsResponse"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```


The protocol client sends an **IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage** WSDL message as follows:

- The protocol server returns the configuration settings for the tenant corresponding to the specified **tenantId**.

3.1.4.13.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage	The request WSDL message for the GetRawAnayticsTenantSettings WSDL operation.
IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage	The response WSDL message for the GetRawAnayticsTenantSettings WSDL operation.

3.1.4.13.1.1 IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage

The request WSDL message for the **GetRawAnayticsTenantSettings** WSDL operation.

The SOAP action value is:

`http://tempuri.org/IAalyticsServiceApplication/GetRawAnayticsTenantSettings`

The SOAP body contains the **GetRawAnayticsTenantSettings** element.

3.1.4.13.1.2 IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage

The response WSDL message for the **GetRawAnayticsTenantSettings** WSDL operation.

The SOAP body contains the **GetRawAnayticsTenantSettingsResponse** element.

3.1.4.13.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetRawAnayticsTenantSettings	The input data for the GetRawAnayticsTenantSettings WSDL operation.
GetRawAnayticsTenantSettingsResponse	The result data for the GetRawAnayticsTenantSettings WSDL operation.

3.1.4.13.2.1 GetRawAnalyticsTenantSettings

The **GetRawAnalyticsTenantSettings** element specifies the input data for the **GetRawAnalyticsTenantSettings** WSDL operation.

```
<xs:element name="GetRawAnalyticsTenantSettings" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

3.1.4.13.2.2 GetRawAnalyticsTenantSettingsResponse

The **GetRawAnalyticsTenantSettingsResponse** element specifies the result data for the **GetRawAnalyticsTenantSettings** WSDL operation.

```
<xs:element name="GetRawAnalyticsTenantSettingsResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsResult" nillable="true"
type="q25:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRawAnalyticsTenantSettingsResult: The configuration settings for the tenant.

3.1.4.13.3 Complex Types

None.

3.1.4.13.4 Simple Types

None.

3.1.4.13.5 Attributes

None.

3.1.4.13.6 Groups

None.

3.1.4.13.7 Attribute Groups

None.

3.1.4.14 GetRawAnalyticsTenantSettingsBatch

Retrieves the configuration settings for multiple tenants.

The following is the WSDL port type specification of the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

```
<wsdl:operation name="GetRawAnalyticsTenantSettingsBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatchResponse"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage WSDL message, and the protocol server responds with an

IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage WSDL message as follows:

- The protocol server returns the next batch of configuration settings for tenants that have identifiers greater than the **lastTenantId**.
- If the number of configuration settings remaining to return is larger than **batchSize**, only the next **batchSize** number of configuration settings are returned.
- The protocol server sets the **LastPartitionId** with the identifier of the tenant corresponding to the last configuration setting returned in the batch of **Settings**.
- This method is a batch method, that is, the protocol server returns a **LastPartitionId** that represents state that allows the protocol server to resume a subsequent batch of configuration settings to return if the current batch is constrained by the **batchSize**. The protocol server expects the protocol client to provide a default initial **lastPartitionId** for a first batch and to provide the state it returns from a previous call for subsequent calls.

3.1.4.14.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage	The request WSDL message for the GetRawAnalyticsTenantSettingsBatch WSDL operation.
IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage	The response WSDL message for the GetRawAnalyticsTenantSettingsBatch WSDL operation.

3.1.4.14.1.1 IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage

The request WSDL message for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAnalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch
```

The SOAP body contains the **GetRawAnalyticsTenantSettingsBatch** element.

3.1.4.14.1.2 IAnalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage

The response WSDL message for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

The SOAP body contains the **GetRawAnalyticsTenantSettingsBatchResponse** element.

3.1.4.14.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetRawAnalyticsTenantSettingsBatch	The input data for the GetRawAnalyticsTenantSettingsBatch WSDL operation.
GetRawAnalyticsTenantSettingsBatchResponse	The result data for the GetRawAnalyticsTenantSettingsBatch WSDL operation.

3.1.4.14.2.1 GetRawAnalyticsTenantSettingsBatch

The **GetRawAnalyticsTenantSettingsBatch** element specifies the input data for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

```
<xs:element name="GetRawAnalyticsTenantSettingsBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

batchSize: The maximum number of rows to be retrieved. MUST be less than 1000.

lastTenantId: If this is not the first batch to be retrieved, this is the identifier of the tenant containing the last item from the previous batch. Otherwise, this MUST be the empty **GUID**.

3.1.4.14.2.2 GetRawAnalyticsTenantSettingsBatchResponse

The **GetRawAnalyticsTenantSettingsBatchResponse** element specifies the result data for the **GetRawAnalyticsTenantSettingsBatch** WSDL operation.

```
<xs:element name="GetRawAnalyticsTenantSettingsBatchResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q25:AnalyticsTenantSettingsDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRawAnalyticsTenantSettingsBatchResult: A batch of configuration settings, plus the identifier of the tenant for the last configuration setting from the previous batch.

3.1.4.14.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
AnalyticsTenantSettingsDataBatch	A batch of configuration settings, plus the identifier of the tenant for the last configuration setting from the previous batch.
ArrayOfAnalyticsTenantSettingsData	A list of configuration settings.

3.1.4.14.3.1 AnalyticsTenantSettingsDataBatch

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

A batch of configuration settings, plus the identifier of the tenant for the last configuration setting from the previous batch.

```
<xs:complexType name="AnalyticsTenantSettingsDataBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="LastTenantId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q25:ArrayOfAnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

LastTenantId: The identifier of the tenant for the last configuration setting from the previous batch.

Settings: A list of configuration settings.

3.1.4.14.3.2 ArrayOfAnalyticsTenantSettingsData

Namespace: http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09

A list of configuration settings.

```

<xs:complexType name="ArrayOfAnalyticsTenantSettingsData"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q25:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>

```

AnalyticsTenantSettingsData: The configuration settings for a tenant.

3.1.4.14.4 Simple Types

None.

3.1.4.14.5 Attributes

None.

3.1.4.14.6 Groups

None.

3.1.4.14.7 Attribute Groups

None.

3.1.4.15 GetRollupAnalyticsItemData

Retrieves aggregated usage data for a rollup scope for events of a specified event type.

The following is the WSDL port type specification of the **GetRollupAnalyticsItemData** WSDL operation.

```

<wsdl:operation name="GetRollupAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataResponse"
message="tns:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage** WSDL message as follows:

- The protocol server determines the appropriate rollup scope as follows:
 - Tenant: the **siteId** and **scopeId** are all equal to the **tenantId**.
 - Web site: the **siteId** is the identifier of the Web site (2) and **scopeId** MUST be the empty GUID.

- Application-specific rollup scope: the **siteId** is the identifier of the Web site (2) and **scopeId** is the application-specific rollup scope.
- The protocol server returns the aggregated usage data corresponding to that rollup scope.

3.1.4.15.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage	The request WSDL message for the GetRollupAnalyticsItemData WSDL operation.
IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage	The response WSDL message for the GetRollupAnalyticsItemData WSDL operation.

3.1.4.15.1.1 IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage

The request WSDL message for the **GetRollupAnalyticsItemData** WSDL operation.

The SOAP action value is:

`http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData`

The SOAP body contains the **GetRollupAnalyticsItemData** element.

3.1.4.15.1.2 IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage

The response WSDL message for the **GetRollupAnalyticsItemData** WSDL operation.

The SOAP body contains the **GetRollupAnalyticsItemDataResponse** element.

3.1.4.15.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetRollupAnalyticsItemData	The input data for the GetRollupAnalyticsItemData WSDL operation.
GetRollupAnalyticsItemDataResponse	The result data for the GetRollupAnalyticsItemData WSDL operation.

3.1.4.15.2.1 GetRollupAnalyticsItemData

The **GetRollupAnalyticsItemData** element specifies the input data for the **GetRollupAnalyticsItemData** WSDL operation.

```
<xs:element name="GetRollupAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the tenant.

siteId: This is the identifier of the tenant or Web site (2).

scopeId: This is the identifier of the tenant, Web site (2), or application-specified rollup scope.

3.1.4.15.2 GetRollupAnalyticsItemDataResponse

The **GetRollupAnalyticsItemDataResponse** element specifies the result data for the **GetRollupAnalyticsItemData** WSDL operation.

```
<xs:element name="GetRollupAnalyticsItemDataResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetRollupAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetRollupAnalyticsItemDataResult: The aggregated usage data for the rollup scope.

3.1.4.15.3 Complex Types

None.

3.1.4.15.4 Simple Types

None.

3.1.4.15.5 Attributes

None.

3.1.4.15.6 Groups

None.

3.1.4.15.7 Attribute Groups

None.

3.1.4.16 GetSearchReport

Retrieves the aggregated top occurrences for the specified search event type within a scope.

The following is the WSDL port type specification of the **GetSearchReport** WSDL operation.

```
<wsdl:operation name="GetSearchReport" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
    message="tns:IAalyticsServiceApplication_GetSearchReport_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
    message="tns:IAalyticsServiceApplication_GetSearchReport_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_GetSearchReport_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_GetSearchReport_OutputMessage** WSDL message as follows:

- The protocol server returns the top **maxRows** search queries that have the most occurrence of the specified **reportType** event for search queries performed within the Web site (2) specified by **tenantId** and **siteId** during the day or month (depending on **bDaily**) indicated by **reportDate**.

3.1.4.16.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetSearchReport_InputMessage	The request WSDL message for the GetSearchReport WSDL operation.
IAalyticsServiceApplication_GetSearchReport_OutputMessage	The response WSDL message for the GetSearchReport WSDL operation.

3.1.4.16.1.1 IAalyticsServiceApplication_GetSearchReport_InputMessage

The request WSDL message for the **GetSearchReport** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetSearchReport
```

The SOAP body contains the **GetSearchReport** element.

3.1.4.16.1.2 IAalyticsServiceApplication_GetSearchReport_OutputMessage

The response WSDL message for the **GetSearchReport** WSDL operation.

The SOAP body contains the **GetSearchReportResponse** element.

3.1.4.16.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetSearchReport	The input data for the GetSearchReport WSDL operation.
GetSearchReportResponse	The result data for the GetSearchReport WSDL operation.

3.1.4.16.2.1 GetSearchReport

The **GetSearchReport** element specifies the input data for the **GetSearchReport** WSDL operation.

```
<xs:element name="GetSearchReport" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="reportType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="reportDate" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="bDaily" type="xs:boolean"/>
      <xs:element minOccurs="0" name="maxRows" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

reportType: The identifier of the search event type.

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site (2).

reportDate: A timestamp that indicates the day (if **bDaily** is true) or month (if **bDaily** is false) to be reported on.

bDaily: Whether the aggregation is for a day or a month.

maxRows: The maximum number of queries to return.

3.1.4.16.2.2 GetSearchReportResponse

The **GetSearchReportResponse** element specifies the result data for the **GetSearchReport** WSDL operation.

```
<xs:element name="GetSearchReportResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetSearchReportResult" nillable="true" type="q1:ArrayOfQueryReportData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetSearchReportResult: A list of the queries with occurrence counts.

3.1.4.16.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
ArrayOfQueryReportData	A list of queries with an event count.
QueryReportData	A query and an event count.

3.1.4.16.3.1 ArrayOfQueryReportData

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

A list of queries with occurrence counts.

```
<xs:complexType name="ArrayOfQueryReportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="QueryReportData" nillable="true"
type="ql:QueryReportData"/>
  </xs:sequence>
</xs:complexType>
```

QueryReportData: A query and an event count.

3.1.4.16.3.2 QueryReportData

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

Represents a query and its event count.

```
<xs:complexType name="QueryReportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Count" type="xs:int"/>
    <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Scope" type="tns3:guid"/>
  </xs:sequence>
</xs:complexType>
```

Count: The number of times that the specified search event occurred.

Query: The search query.

Scope: The scope in which the search query was executed.

3.1.4.16.4 Simple Types

None.

3.1.4.16.5 Attributes

None.

3.1.4.16.6 Groups

None.

3.1.4.16.7 Attribute Groups

None.

3.1.4.17 GetTenantAnalyticsItemData

Retrieves aggregated usage data for a tenant for events of a specified event type.

The following is the WSDL port type specification of the **GetTenantAnalyticsItemData** WSDL operation.

```
<wsdl:operation name="GetTenantAnalyticsItemData"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
    message="tns:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataResponse"
    message="tns:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage** WSDL message, and the protocol server MUST respond with an **IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage** WSDL message, as follows:

- The protocol server returns the aggregated usage data for the tenant specified by **tenantId**.

3.1.4.17.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage	The request WSDL message for the GetTenantAnalyticsItemData WSDL operation.
IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage	The response WSDL message for the GetTenantAnalyticsItemData WSDL operation.

3.1.4.17.1.1 IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage

The request WSDL message for the **GetTenantAnalyticsItemData** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData
```

The SOAP body contains the **GetTenantAnalyticsItemData** element.

3.1.4.17.1.2 IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage

The response WSDL message for the **GetTenantAnalyticsItemData** WSDL operation.

The SOAP body contains the **GetTenantAnalyticsItemDataResponse** element.

3.1.4.17.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetTenantAnalyticsItemData	The input data for the GetTenantAnalyticsItemData WSDL operation.
GetTenantAnalyticsItemDataResponse	The result data for the GetTenantAnalyticsItemData WSDL operation.

3.1.4.17.2.1 GetTenantAnalyticsItemData

The **GetTenantAnalyticsItemData** element specifies the input data for the **GetTenantAnalyticsItemData** WSDL operation.

```
<xs:element name="GetTenantAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

eventType: The identifier of the event type.

tenantId: The identifier of the tenant.

3.1.4.17.2.2 GetTenantAnalyticsItemDataResponse

The **GetTenantAnalyticsItemDataResponse** element specifies the result data for the **GetTenantAnalyticsItemData** WSDL operation.

```
<xs:element name="GetTenantAnalyticsItemDataResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetTenantAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
```

GetTenantAnalyticsItemDataResult: The aggregated usage data for the tenant.

3.1.4.17.3 Complex Types

None.

3.1.4.17.4 Simple Types

None.

3.1.4.17.5 Attributes

None.

3.1.4.17.6 Groups

None.

3.1.4.17.7 Attribute Groups

None.

3.1.4.18 SendAnalyticsUsageEvents

Sends usage events to the protocol server.

The following is the WSDL port type specification of the **SendAnalyticsUsageEvents** WSDL operation.

```
<wsdl:operation name="SendAnalyticsUsageEvents"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
    message="tns:IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
    message="tns:IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage** request message and the protocol server responds with an **IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage** response message as follows:

- The protocol server persists the events in the event store.

3.1.4.18.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage	The request WSDL message for the SendAnalyticsUsageEvents WSDL operation.
IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage	The response WSDL message for the SendAnalyticsUsageEvents WSDL operation.

3.1.4.18.1.1 IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage

The request WSDL message for the **SendAnalyticsUsageEvents** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents
```

The SOAP body contains the **SendAnalyticsUsageEvents** element.

3.1.4.18.1.2 IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage

The response WSDL message for the **SendAnalyticsUsageEvents** WSDL operation.

The SOAP body contains the **SendAnalyticsUsageEventsResponse** element.

3.1.4.18.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SendAnalyticsUsageEvents	The input data for the SendAnalyticsUsageEvents WSDL operation.
SendAnalyticsUsageEventsResponse	The result data for the SendAnalyticsUsageEvents WSDL operation.

3.1.4.18.2.1 SendAnalyticsUsageEvents

The **SendAnalyticsUsageEvents** element specifies the input data for the **SendAnalyticsUsageEvents** WSDL operation.

```
<xs:element name="SendAnalyticsUsageEvents" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
        minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

entriesList: A list of usage events.

3.1.4.18.2.2 SendAnalyticsUsageEventsResponse

The **SendAnalyticsUsageEventsResponse** element specifies the result data for the **SendAnalyticsUsageEvents** WSDL operation.

```
<xs:element name="SendAnalyticsUsageEventsResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.18.3 Complex Types

The following table summarizes the XML schema complex type definitions that are specific to this operation.

Complex type	Description
AnalyticsUsageEvent	A usage event.
ArrayOfAnalyticsUsageEvent	A list of usage events.

3.1.4.18.3.1 ArrayOfAnalyticsUsageEvent

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

A list of usage events.

```
<xs:complexType name="ArrayOfAnalyticsUsageEvent"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsUsageEvent"
nillable="true" type="q1:AnalyticsUsageEvent"/>
  </xs:sequence>
</xs:complexType>
```

AnalyticsUsageEvent: A usage event.

3.1.4.18.3.2 AnalyticsUsageEvent

Namespace: <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01>

A usage event.

```
<xs:complexType name="AnalyticsUsageEvent" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
    <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ScopeId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SiteId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
    <xs:element minOccurs="0" name="TimeStamp" type="xs:dateTime"/>
  </xs:sequence>
</xs:complexType>
```



```

    <xs:element minOccurs="0" name="UserId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="UserIdRaw" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Weight" type="xs:int"/>
  </xs:sequence>
</xs:complexType>

```

CustomData: Reserved. MUST be NULL.

EventTypeId: The identifier of the event type of the event.

ItemId: The identifier of the item associated with this event.

ScopeId: The identifier of an application-specific rollup scope.

SessionId: The identifier of the user session.

SiteId: The identifier for the Web site (2).

TenantId: The identifier for the tenant.

TimeStamp: The timestamp when the event occurred.

UserId: The identifier of the user that triggered the associated event.

UserIdRaw: The non-hashed identifier of the user that triggered the associated event.

Weight: This is reserved and SHOULD be 1, but it MAY be used to indicate the number of times this event occurred repeatedly.

3.1.4.18.4 Simple Types

None.

3.1.4.18.5 Attributes

None.

3.1.4.18.6 Groups

None.

3.1.4.18.7 Attribute Groups

None.

3.1.4.19 UpsertRawAnalyticsTenantSettings

Updates the configuration settings for a specified tenant.

The following is the WSDL port type specification of the **UpsertRawAnalyticsTenantSettings** WSDL operation.

```

<wsdl:operation name="UpsertRawAnalyticsTenantSettings"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
  " message="tns:IAalyticsServiceApplication UpsertRawAnalyticsTenantSettings InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>

```

```

    <wsdl:output
      wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
      Response"
      message="tns:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"
      xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    </wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage** WSDL message as follows:

- If configuration settings exist for the tenant specified by **ts.TenantId**, those settings are replaced with the values provided.
- Otherwise, configuration settings are initialized with the values provided.

3.1.4.19.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage	The request WSDL message for the UpsertRawAnalyticsTenantSettings WSDL operation.
IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage	The response WSDL message for the UpsertRawAnalyticsTenantSettings WSDL operation.

3.1.4.19.1.1 IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_Input Message

The request WSDL message for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

The SOAP action value is:

```
http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
```

The SOAP body contains the **UpsertRawAnalyticsTenantSettings** element.

3.1.4.19.1.2 IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_Output Message

The response WSDL message for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

The SOAP body contains the **UpsertRawAnalyticsTenantSettingsResponse** element.

3.1.4.19.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
UpsertRawAnalyticsTenantSettings	The input data for the UpsertRawAnalyticsTenantSettings WSDL operation.
UpsertRawAnalyticsTenantSettingsResponse	The result data for the UpsertRawAnalyticsTenantSettings WSDL operation.

3.1.4.19.2.1 UpsertRawAnalyticsTenantSettings

The **UpsertRawAnalyticsTenantSettings** element specifies the input data for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

```
<xs:element name="UpsertRawAnalyticsTenantSettings"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q25:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ts: The configuration settings.

3.1.4.19.2.2 UpsertRawAnalyticsTenantSettingsResponse

The **UpsertRawAnalyticsTenantSettingsResponse** element specifies the result data for the **UpsertRawAnalyticsTenantSettings** WSDL operation.

```
<xs:element name="UpsertRawAnalyticsTenantSettingsResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
```

3.1.4.19.3 Complex Types

None.

3.1.4.19.4 Simple Types

None.

3.1.4.19.5 Attributes

None.

3.1.4.19.6 Groups

None.

3.1.4.19.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 Delete All Usage Data for a Tenant

In this example, the protocol client sends a request as follows to delete all usage data associated with a specified tenant:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTen
ant</a:Action>
    <a:MessageID>urn:uuid:0cc7e833-004c-4d17-98ae-23a1fee6cf1</a:MessageID>
    <a:SequenceAcknowledgement>
    <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
    </a:SequenceAcknowledgement>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
    <devdashboardIsEnabled>>false</devdashboardIsEnabled>
    <language>en-US</language>
    <region>en-US</region>
    <scopeId>8864235033460737</scopeId>
    <siteSubscriptionId i:nil="true">
    </siteSubscriptionId>
    <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
    </ServiceContext>
    <a:To s:mustUnderstand="1"
u:Id=" 1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
  </s:Header>
  <s:Body>
    <DeleteAllUsageDataForTenant xmlns="http://tempuri.org/">
    <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
    </DeleteAllUsageDataForTenant>
  </s:Body>
</s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTen
antResponse</a:Action>
    <ActivityId CorrelationId="b42dec78-0431-4549-a958-69876e93b253"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">df8cd1bb-bb4d-41f8-
a75f-c99634642ff5</ActivityId>
    <a:RelatesTo>urn:uuid:0cc7e833-004c-4d17-98ae-23a1fee6cf1</a:RelatesTo>
    <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
    <u:Created u:Id=" 0">
    <u:Expires>2011-11-19T03:00:46.177Z</u:Expires>
    <u:Length>2011-11-19T03:05:46.177Z</u:Length>
    </u:Created>
    </o:Timestamp>
  </s:Header>
  <s:Body>
    <DeleteAllUsageDataForTenantResponse xmlns="http://tempuri.org/">
    </DeleteAllUsageDataForTenantResponse>
  </s:Body>
</s:Envelope>
```

4.2 Get an Analytics Event Type Definition

In the following example, the protocol client sends a request as follows to retrieve the definition of an event type for the specified tenant:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDef
inition</a:Action>
    <a:MessageID>urn:uuid:9961c974-35fb-4f90-b27d-7d1c1824e308</a:MessageID>
    <a:SequenceAcknowledgement>
      <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
    </a:SequenceAcknowledgement>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
      <devdashboardIsEnabled>>false</devdashboardIsEnabled>
      <language>en-US</language>
      <region>en-US</region>
      <scopeId>4270087397703681</scopeId>
      <siteSubscriptionId i:nil="true">
    </siteSubscriptionId>
      <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
    </ServiceContext>
    <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
  </s:Header>
  <s:Body>
    <GetAnalyticsEventTypeDefinition xmlns="http://tempuri.org/">
      <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
      <eventType>1</eventType>
    </GetAnalyticsEventTypeDefinition>
  </s:Body>
</s:Envelope>
```

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDef
initionResponse</a:Action>
    <ActivityId CorrelationId="a79acb3e-c3eb-4ece-a523-e8f37f131efa"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">e8a98b4f-c541-4603-
895b-70a0ac42a170</ActivityId>
    <a:RelatesTo>urn:uuid:9961c974-35fb-4f90-b27d-7d1c1824e308</a:RelatesTo>
    <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
      <u:Created u:Id=" 0">
        <u:Expires>2011-11-19T03:23:29.321Z</u:Expires>
        <u:Length>2011-11-19T03:28:29.321Z</u:Length>
      </u:Created>
    </o:Timestamp>
  </s:Header>
  <s:Body>
    <GetAnalyticsEventTypeDefinitionResponse xmlns="http://tempuri.org/">
      <GetAnalyticsEventTypeDefinitionResult
xmlns:b="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:AggregationType>Count UniqueUsers</b:AggregationType>
        <b:AppEventTypeId>00000000-0000-0000-0000-000000000000</b:AppEventTypeId>
        <b:ApplicationName>
        </b:ApplicationName>
        <b:EventName>Views</b:EventName>
      </GetAnalyticsEventTypeDefinitionResult>
    </s:Body>
  </s:Envelope>
```

```

    <b:EventTypeId>1</b:EventTypeId>
    <b:RecentPopularityTimeframe>14</b:RecentPopularityTimeframe>
    <b:RecommendationWeight>1</b:RecommendationWeight>
    <b:RelevanceWeight>1</b:RelevanceWeight>
    <b:Rollups>SiteSubscriptionId SiteId ScopeId</b:Rollups>
    <b:TailTrimming>2</b:TailTrimming>
    <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
  </GetAnalyticsEventTypeDefinitionResult>
</GetAnalyticsEventTypeDefinitionResponse>
</s:Body>
</s:Envelope>

```

4.3 Get Analytics Item Data

In the following example, the protocol client sends a request as follows to retrieve the aggregated data for views of the given item:

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData</a:
Action>
    <a:MessageID>urn:uuid:59957de8-e997-4a19-afde-f0183a7f3b9a</a:MessageID>
    <a:SequenceAcknowledgement>
    <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
    </a:SequenceAcknowledgement>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
    <devdashboardIsEnabled>>false</devdashboardIsEnabled>
    <language>en-US</language>
    <region>en-US</region>
    <scopeId>1251122339643393</scopeId>
    <siteSubscriptionId i:nil="true">
    </siteSubscriptionId>
    <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
    </ServiceContext>
    <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
  </s:Header>
  <s:Body>
    <GetAnalyticsItemData xmlns="http://tempuri.org/">
    <eventType>1</eventType>
    <tenantId>00000000-0000-0000-0000-000000000000</tenantId>
    <siteId>a97351de-40a9-4e05-b938-161ecf62e806</siteId>
    <itemId>http://contoso.com/sites/4af361d7-f60e-4aa5-a23d-488e0536eda1</itemId>
    </GetAnalyticsItemData>
  </s:Body>
</s:Envelope>

```

The protocol server responds as follows:

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResp
onse</a:Action>
    <ActivityId CorrelationId="33ce4125-16d1-4fba-9a73-7f643f7533ae"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">96b81d74-09e1-4809-
a074-7d865ffb4400</ActivityId>
    <a:RelatesTo>urn:uuid:59957de8-e997-4a19-afde-f0183a7f3b9a</a:RelatesTo>
    <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">

```



```
</s:Envelope>
```

4.4 Send Analytics Usage Events

In the following example, the protocol client sends a message as follows to add an event:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents
    </a:Action>
    <a:MessageID>urn:uuid:c54875f6-014b-4e86-b863-8f9463e08aac</a:MessageID>
    <a:SequenceAcknowledgement>
      <a:ReplyTo>http://www.w3.org/2005/08/addressing/anonymous</a:ReplyTo>
    </a:SequenceAcknowledgement>
    <ServiceContext xmlns="http://schemas.microsoft.com/sharepoint/servicecontext"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
      <correlationId>00000000-0000-0000-0000-000000000000</correlationId>
      <devdashboardIsEnabled>>false</devdashboardIsEnabled>
      <language>en-US</language>
      <region>en-US</region>
      <scopeId>878161965350913</scopeId>
      <siteSubscriptionId i:nil="true">
    </siteSubscriptionId>
      <ulstraceOverrideLevel>0</ulstraceOverrideLevel>
    </ServiceContext>
    <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
  </s:Header>
  <s:Body>
    <SendAnalyticsUsageEvents xmlns="http://tempuri.org/">
      <entriesList xmlns:b="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <b:AnalyticsUsageEvent>
          <b:CustomData>
          </b:CustomData>
          <b:EventTypeId>1</b:EventTypeId>
          <b:ItemId>http://testsite1/default.aspx</b:ItemId>
          <b:ScopeId>f36alae4-7b87-44da-bb5b-77a9212d1204</b:ScopeId>
          <b:SessionId>
          </b:SessionId>
          <b:SiteId>a97351de-40a9-4e05-b938-161ecf62e806</b:SiteId>
          <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
          <b:TimeStamp>2011-11-18T19:37:43.8500837-08:00</b:TimeStamp>
          <b:UserId>username1</b:UserId>
          <b:Weight>1</b:Weight>
        </b:AnalyticsUsageEvent>
        <b:AnalyticsUsageEvent>
          <b:CustomData>
          </b:CustomData>
          <b:EventTypeId>1</b:EventTypeId>
          <b:ItemId>http://testsite1/default.aspx</b:ItemId>
          <b:ScopeId>f36alae4-7b87-44da-bb5b-77a9212d1204</b:ScopeId>
          <b:SessionId>
          </b:SessionId>
          <b:SiteId>a97351de-40a9-4e05-b938-161ecf62e806</b:SiteId>
          <b:TenantId>00000000-0000-0000-0000-000000000000</b:TenantId>
          <b:TimeStamp>2011-11-18T19:37:43.8500837-08:00</b:TimeStamp>
          <b:UserId>username1</b:UserId>
          <b:Weight>1</b:Weight>
        </b:AnalyticsUsageEvent>
      </entriesList>
    </SendAnalyticsUsageEvents>
  </s:Body>
```

</s:Envelope>

The protocol server responds as follows:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents
Response</a:Action>
    <ActivityId CorrelationId="a059bc44-a54a-43b6-a6da-f13cd582274f"
xmlns="http://schemas.microsoft.com/2004/09/ServiceModel/Diagnostics">f5bdd7e7-86a3-41be-
a15c-8d5eeeb9e01c</ActivityId>
    <a:RelatesTo>urn:uuid:c54875f6-014b-4e86-b863-8f9463e08aac</a:RelatesTo>
    <o:Timestamp s:mustUnderstand="1" xmlns:o="http://www.w3.org/2001/04/xmlenc#">
      <u:Created u:Id="_0">
        <u:Expires>2011-11-19T03:38:30.045Z</u:Expires>
        <u:Length>2011-11-19T03:43:30.045Z</u:Length>
      </u:Created>
    </o:Timestamp>
  </s:Header>
  <s:Body>
    <SendAnalyticsUsageEventsResponse xmlns="http://tempuri.org/">
      </SendAnalyticsUsageEventsResponse>
    </s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

For ease of implementation, the full WSDL is provided in this appendix.

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns="http://tempuri.org/"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl" targetNamespace="http://tempuri.org/"
xmlns:wSDL="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema xmlns:tns4="http://tempuri.org/Imports"
targetNamespace="http://tempuri.org/Imports">
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="IAalyticsServiceApplication">
    <wsdl:operation name="SendAnalyticsUsageEvents">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
message="tns:IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
message="tns:IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
message="tns:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemsData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
message="tns:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchResponse"
message="tns:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRollupAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataResponse"
message="tns:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetTenantAnalyticsItemData">
```

```

    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataResponse"
message="tns:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetSearchReport">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
message="tns:IAalyticsServiceApplication_GetSearchReport_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
message="tns:IAalyticsServiceApplication_GetSearchReport_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnalyticsTenantSettings">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettings"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsResponse"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="UpsertRawAnalyticsTenantSettings">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings"
message="tns:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettingsResponse"
message="tns:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnalyticsTenantSettingsBatch">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatchResponse"
message="tns:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsTenantConfiguration">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfigurationResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsEventTypeDefinition">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitionResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsEventTypeDefinitions">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitionsResponse"
message="tns:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"/>
    </wsdl:operation>

```

```

        <wsdl:operation name="DeleteAllUsageDataForTenant">
            <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"/>
            <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenantResponse"
message="tns:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteRecommendationsDataForTenant">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenant"
message="tns:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"/>
                <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenantResponse"
message="tns:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenant"
message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage"/>
                <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenantResponse"
message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant"
message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"/>
                <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenantResponse"
message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteStandardEventUsageDataForSite">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"/>
                <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
message="tns:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteCustomEventUsageDataForSite">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"/>
                <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
message="tns:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"/>
            </wsdl:operation>
        </wsdl:portType>
        <wsdl:binding name="DefaultBinding_IAalyticsServiceApplication"
type="tns:IAalyticsServiceApplication">
            <soap:binding transport="http://schemas.xmlsoap.org/soap/http"/>
            <wsdl:operation name="SendAnalyticsUsageEvents">

```

```

    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAnalyticsItemData">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAnalyticsItemsData">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetRollupAnalyticsItemData">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetTenantAnalyticsItemData">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
style="document"/>
    <wsdl:input>
        <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
        <soap:body use="literal"/>
    </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetSearchReport">
    <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
style="document"/>

```



```

    <wsdl:input>
      <soap:body use="literal"/>
    </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetRawAnalyticsTenantSettings">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettings"
style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="UpsertRawAnalyticsTenantSettings">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings"
style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetRawAnalyticsTenantSettingsBatch">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatc
h" style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAnalyticsTenantConfiguration">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAnalyticsEventTypeDefinition">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>
  <wsdl:output>
    <soap:body use="literal"/>
  </wsdl:output>
</wsdl:operation>
<wsdl:operation name="GetAnalyticsEventTypeDefinitions">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions"
style="document"/>
  <wsdl:input>
    <soap:body use="literal"/>
  </wsdl:input>

```

```

        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteAllUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteRecommendationsDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenant"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenant"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteStandardEventUsageDataForSite">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForSite">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>

```

```

    </wsdl:operation>
</wsdl:binding>
<wsdl:message name="IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteAllUsageDataForTenant"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage">
  <wsdl:part name="parameters" element="tns:DeleteAllUsageDataForTenantResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForSite"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage">
  <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForSiteResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForTenant"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage">
  <wsdl:part name="parameters" element="tns:DeleteCustomEventUsageDataForTenantResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteRecommendationsDataForTenant"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage">
  <wsdl:part name="parameters" element="tns:DeleteRecommendationsDataForTenantResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForSite"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage">
  <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForSiteResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage">
  <wsdl:part name="parameters" element="tns:DeleteStandardEventUsageDataForTenant"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage">
  <wsdl:part name="parameters"
element="tns:DeleteStandardEventUsageDataForTenantResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage">
  <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinition"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage">
  <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitionResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage">
  <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitions"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage">
  <wsdl:part name="parameters" element="tns:GetAnalyticsEventTypeDefinitionsResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage">
  <wsdl:part name="parameters" element="tns:GetAnalyticsItemData"/>
</wsdl:message>

```

```

    <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetAnalyticsItemDataResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage">
      <wsdl:part name="parameters" element="tns:GetAnalyticsItemsData"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetAnalyticsItemsDataResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage">
      <wsdl:part name="parameters" element="tns:GetAnalyticsTenantConfiguration"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetAnalyticsTenantConfigurationResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage">
      <wsdl:part name="parameters" element="tns:GetGlobalAnalyticsItemDataBatch"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetGlobalAnalyticsItemDataBatchResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettingsBatch"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettingsBatchResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettings"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRawAnalyticsTenantSettingsResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage">
      <wsdl:part name="parameters" element="tns:GetRollupAnalyticsItemData"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetRollupAnalyticsItemDataResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetSearchReport_InputMessage">
      <wsdl:part name="parameters" element="tns:GetSearchReport"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetSearchReport_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetSearchReportResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage">
      <wsdl:part name="parameters" element="tns:GetTenantAnalyticsItemData"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage">
      <wsdl:part name="parameters" element="tns:GetTenantAnalyticsItemDataResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEvents"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage">
      <wsdl:part name="parameters" element="tns:SendAnalyticsUsageEventsResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage">
      <wsdl:part name="parameters" element="tns:UpsertRawAnalyticsTenantSettings"/>
    </wsdl:message>

```

```
<wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage">
  <wsdl:part name="parameters" element="tns:UpsertRawAnalyticsTenantSettingsResponse"/>
</wsdl:message>
</wsdl:definitions>
```

7 Appendix B: Full XML Schema

Schema name	Prefix	Section
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics	tns1	7.1
http://schemas.microsoft.com/2003/10/Serialization/Arrays	tns2	7.2
http://schemas.microsoft.com/2003/10/Serialization/	tns3	7.3
http://tempuri.org/	tns	7.4
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01	q1	7.5
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	q34	7.6
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	q25	7.7

For ease of implementation, the following sections provide the full XML schema for this protocol.

7.1 <http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics> Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
  elementFormDefault="qualified"
  targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <xs:complexType name="SignalStoreArguments">
    <xs:sequence/>
  </xs:complexType>
  <xs:element name="SignalStoreArguments" nillable="true" type="tns1:SignalStoreArguments"/>
  <xs:complexType name="SignalStoreResult">
    <xs:sequence/>
  </xs:complexType>
  <xs:element name="SignalStoreResult" nillable="true" type="tns1:SignalStoreResult"/>
  <xs:simpleType name="ContinuationTokenItemData.Scope">
    <xs:restriction base="xs:string">
      <xs:enumeration value="Global"/>
      <xs:enumeration value="Tenant"/>
      <xs:enumeration value="Site"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="ContinuationTokenItemData.Scope" nillable="true"
  type="tns1:ContinuationTokenItemData.Scope"/>
  <xs:simpleType name="EventCountType">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="Count"/>
          <xs:enumeration value="UniqueUsers"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:element name="EventCountType" nillable="true" type="tns1:EventCountType"/>
  <xs:simpleType name="EventOptions">
```

```

<xs:list>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="None"/>
      <xs:enumeration value="AllowAnonymousWrite"/>
    </xs:restriction>
  </xs:simpleType>
</xs:list>
</xs:simpleType>
<xs:element name="EventOptions" nillable="true" type="tns1:EventOptions"/>
<xs:simpleType name="EventRollups">
  <xs:list>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:enumeration value="SiteSubscriptionId"/>
        <xs:enumeration value="SiteId"/>
        <xs:enumeration value="ScopeId"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:list>
</xs:simpleType>
<xs:element name="EventRollups" nillable="true" type="tns1:EventRollups"/>
</xs:schema>

```

7.2 http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  elementFormDefault="qualified"
  targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="ArrayOfKeyValueOfstringstring">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValueOfstringstring">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Key" nillable="true" type="xs:string"/>
            <xs:element name="Value" nillable="true" type="xs:string"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfKeyValueOfstringstring" nillable="true"
  type="tns2:ArrayOfKeyValueOfstringstring"/>
  <xs:complexType name="ArrayOfint">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="int" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfint" nillable="true" type="tns2:ArrayOfint"/>
  <xs:complexType name="ArrayOfstring">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="string" nillable="true"
  type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfstring" nillable="true" type="tns2:ArrayOfstring"/>
</xs:schema>

```

7.3 http://schemas.microsoft.com/2003/10/Serialization/ Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
  attributeFormDefault="qualified" elementFormDefault="qualified"

```

```

targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
  <xs:element name="anyType" nillable="true" type="xs:anyType"/>
  <xs:element name="anyURI" nillable="true" type="xs:anyURI"/>
  <xs:element name="base64Binary" nillable="true" type="xs:base64Binary"/>
  <xs:element name="boolean" nillable="true" type="xs:boolean"/>
  <xs:element name="byte" nillable="true" type="xs:byte"/>
  <xs:element name="dateTime" nillable="true" type="xs:dateTime"/>
  <xs:element name="decimal" nillable="true" type="xs:decimal"/>
  <xs:element name="double" nillable="true" type="xs:double"/>
  <xs:element name="float" nillable="true" type="xs:float"/>
  <xs:element name="int" nillable="true" type="xs:int"/>
  <xs:element name="long" nillable="true" type="xs:long"/>
  <xs:element name="QName" nillable="true" type="xs:QName"/>
  <xs:element name="short" nillable="true" type="xs:short"/>
  <xs:element name="string" nillable="true" type="xs:string"/>
  <xs:element name="unsignedByte" nillable="true" type="xs:unsignedByte"/>
  <xs:element name="unsignedInt" nillable="true" type="xs:unsignedInt"/>
  <xs:element name="unsignedLong" nillable="true" type="xs:unsignedLong"/>
  <xs:element name="unsignedShort" nillable="true" type="xs:unsignedShort"/>
  <xs:element name="char" nillable="true" type="tns3:char"/>
  <xs:simpleType name="char">
    <xs:restriction base="xs:int"/>
  </xs:simpleType>
  <xs:element name="duration" nillable="true" type="tns3:duration"/>
  <xs:simpleType name="duration">
    <xs:restriction base="xs:duration">
      <xs:pattern value="-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?"/>
      <xs:minInclusive value="-P10675199DT2H48M5.4775808S"/>
      <xs:maxInclusive value="P10675199DT2H48M5.4775807S"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="guid" nillable="true" type="tns3:guid"/>
  <xs:simpleType name="guid">
    <xs:restriction base="xs:string">
      <xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:attribute name="FactoryType" type="xs:QName"/>
  <xs:attribute name="Id" type="xs:ID"/>
  <xs:attribute name="Ref" type="xs:IDREF"/>
</xs:schema>

```

7.4 http://tempuri.org/ Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://tempuri.org/"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
  <xs:element name="SendAnalyticsUsageEvents">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsUsageEventsResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsSignals">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="signals" nillable="true" type="q1:ArrayOfAnalyticsSignal"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```



```

    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsSignalsResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsSignalsWithArguments">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ql="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="signals" nillable="true" type="ql:ArrayOfAnalyticsSignal"/>
        <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="arguments" nillable="true" type="tns1:SignalStoreArguments"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsSignalsWithArgumentsResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="SendAnalyticsSignalsWithArgumentsResult" nillable="true"
type="tns1:SignalStoreResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsItemData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
        <xs:element minOccurs="0" name="itemId" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsItemDataResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ql="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemDataResult" nillable="true" type="ql:AnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsItemsData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns2:ArrayOfstring"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsItemsDataResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ql="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsItemsDataResult" nillable="true"
type="ql:ArrayOfAnalyticsItemData"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```

```

</xs:element>
<xs:element name="GetGlobalAnalyticsItemDataBatch">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element minOccurs="0" name="since" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="token" nillable="true" type="q1:ContinuationTokenItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetGlobalAnalyticsItemDataBatchResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetGlobalAnalyticsItemDataBatchResult" nillable="true"
type="q1:AnalyticsItemDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetRollupAnalyticsItemData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetRollupAnalyticsItemDataResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetRollupAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetTenantAnalyticsItemData">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetTenantAnalyticsItemDataResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetTenantAnalyticsItemDataResult" nillable="true"
type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetSearchReport">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="reportType" type="xs:int"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        <xs:element minOccurs="0" name="reportDate" type="xs:dateTime"/>
        <xs:element minOccurs="0" name="bDaily" type="xs:boolean"/>
        <xs:element minOccurs="0" name="maxRows" type="xs:unsignedInt"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetSearchReportResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetSearchReportResult" nillable="true" type="q1:ArrayOfQueryReportData"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettings">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsResult" nillable="true"
type="q25:AnalyticsTenantSettingsData"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UpsertRawAnalyticsTenantSettings">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q25:AnalyticsTenantSettingsData"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UpsertRawAnalyticsTenantSettingsResponse">
    <xs:complexType>
        <xs:sequence/>
    </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsBatch">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
            <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="tns3:guid"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsBatchResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q25:AnalyticsTenantSettingsDataBatch"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsTenantConfiguration">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        </xs:sequence>
    </xs:complexType>

```

```

</xs:element>
<xs:element name="GetAnalyticsTenantConfigurationResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q25:AnalyticsTenantConfig"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsEventTypeDefinition">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsEventTypeDefinitionResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionResult" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsEventTypeDefinitions">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
      <xs:element xmlns:q34="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q34:AnalyticsEventTypes"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsEventTypeDefinitionsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="GetAnalyticsEventTypeDefinitionsResult" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteAllUsageDataForTenant">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteAllUsageDataForTenantResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteRecommendationsDataForTenant">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteRecommendationsDataForTenantResponse">

```

```

    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteStandardEventUsageDataForTenant">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteStandardEventUsageDataForTenantResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteCustomEventUsageDataForTenant">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns3:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteCustomEventUsageDataForTenantResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteStandardEventUsageDataForSite">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteStandardEventUsageDataForSiteResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteCustomEventUsageDataForSite">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns3:guid"/>
        <xs:element xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns3:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="DeleteCustomEventUsageDataForSiteResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/
>

```

```

<xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
<xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays" />
<xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01" />
<xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05" />
<xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09" />
</xs:schema>

```

7.5 http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01 Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="ArrayOfAnalyticsUsageEvent">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsUsageEvent"
nillable="true" type="q1:AnalyticsUsageEvent"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsUsageEvent" nillable="true"
type="q1:ArrayOfAnalyticsUsageEvent"/>
  <xs:complexType name="AnalyticsUsageEvent">
    <xs:sequence>
      <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
      <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="ScopeId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="SiteId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="TimeStamp" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="UserId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="UserIdRaw" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="Weight" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsUsageEvent" nillable="true" type="q1:AnalyticsUsageEvent"/>
  <xs:complexType name="ArrayOfAnalyticsSignal">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsSignal" nillable="true"
type="q1:AnalyticsSignal"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsSignal" nillable="true"
type="q1:ArrayOfAnalyticsSignal"/>
  <xs:complexType name="AnalyticsSignal">
    <xs:sequence>
      <xs:element minOccurs="0" name="Action" nillable="true" type="q1:AnalyticsAction"/>
      <xs:element minOccurs="0" name="Actor" nillable="true" type="q1:AnalyticsActor"/>
      <xs:element minOccurs="0" name="Item" nillable="true" type="q1:AnalyticsItem"/>
      <xs:element minOccurs="0" name="Source" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsSignal" nillable="true" type="q1:AnalyticsSignal"/>
  <xs:complexType name="AnalyticsAction">
    <xs:sequence>
      <xs:element minOccurs="0" name="ActionType" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="ExpireTime" type="xs:dateTime"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
      <xs:element minOccurs="0" name="UserTime" type="xs:dateTime"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsAction" nillable="true" type="q1:AnalyticsAction"/>
  <xs:complexType name="AnalyticsActor">

```

```

    <xs:sequence>
      <xs:element minOccurs="0" name="Id" nillable="true" type="xs:string"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
      <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsActor" nillable="true" type="q1:AnalyticsActor"/>
  <xs:complexType name="AnalyticsItem">
    <xs:sequence>
      <xs:element minOccurs="0" name="Id" nillable="true" type="xs:string"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="Properties" nillable="true" type="tns2:ArrayOfKeyValueOfstringstring"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsItem" nillable="true" type="q1:AnalyticsItem"/>
  <xs:complexType name="AnalyticsItemData">
    <xs:sequence>
      <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyHits" nillable="true" type="tns2:ArrayOfint"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DailyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
      <xs:element minOccurs="0" name="EventType" type="xs:int"/>
      <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="LastProcessingHits" type="xs:int"/>
      <xs:element minOccurs="0" name="LastProcessingTime" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="LastProcessingUniqueUsers" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="MonthlyHits" nillable="true" type="tns2:ArrayOfint"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="MonthlyUniqueUsers" nillable="true" type="tns2:ArrayOfint"/>
      <xs:element minOccurs="0" name="ScopeId" nillable="true" type="tns3:guid"/>
      <xs:element minOccurs="0" name="SiteId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
      <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsItemData" nillable="true" type="q1:AnalyticsItemData"/>
  <xs:complexType name="ArrayOfAnalyticsItemData">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsItemData"
nillable="true" type="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsItemData" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
  <xs:complexType name="ContinuationTokenItemData">
    <xs:sequence>
      <xs:element minOccurs="0" name="EndPartitionId" nillable="true"
type="xs:base64Binary"/>
      <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
      <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="ScopeType" type="tns1:ContinuationTokenItemData.Scope"/>
      <xs:element minOccurs="0" name="StartPartitionId" nillable="true"
type="xs:base64Binary"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ContinuationTokenItemData" nillable="true"
type="q1:ContinuationTokenItemData"/>
  <xs:complexType name="AnalyticsItemDataBatch">
    <xs:sequence>
      <xs:element minOccurs="0" name="Items" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
      <xs:element minOccurs="0" name="Token" nillable="true"
type="q1:ContinuationTokenItemData"/>
    </xs:sequence>
  </xs:complexType>

```

```

    </xs:complexType>
    <xs:element name="AnalyticsItemDataBatch" nillable="true"
type="q1:AnalyticsItemDataBatch"/>
    <xs:complexType name="ArrayOfQueryReportData">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="QueryReportData" nillable="true"
type="q1:QueryReportData"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfQueryReportData" nillable="true"
type="q1:ArrayOfQueryReportData"/>
    <xs:complexType name="QueryReportData">
      <xs:sequence>
        <xs:element minOccurs="0" name="Count" type="xs:int"/>
        <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="Scope" type="tns3:guid"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="QueryReportData" nillable="true" type="q1:QueryReportData"/>
    <xs:complexType name="AnalyticsEventTypeDefinition">
      <xs:sequence>
        <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns1:EventCountType"/>
        <xs:element minOccurs="0" name="AppEventTypeId" type="tns3:guid"/>
        <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
        <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Options" type="tns1:EventOptions"/>
        <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
        <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
        <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
        <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Rollups" type="tns1:EventRollups"/>
        <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
        <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsEventTypeDefinition" nillable="true"
type="q1:AnalyticsEventTypeDefinition"/>
    <xs:complexType name="ArrayOfAnalyticsEventTypeDefinition">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsEventTypeDefinition"
nillable="true" type="q1:AnalyticsEventTypeDefinition"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfAnalyticsEventTypeDefinition" nillable="true"
type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
    <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/>
    <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
    <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
  </xs:schema>

```

7.6 <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05> Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:q34="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <xs:simpleType name="AnalyticsEventTypes">

```



```

<xs:list>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="None"/>
      <xs:enumeration value="Standard"/>
      <xs:enumeration value="Custom"/>
      <xs:enumeration value="Internal"/>
      <xs:enumeration value="All"/>
      <xs:enumeration value="AllIncludingInternal"/>
    </xs:restriction>
  </xs:simpleType>
</xs:list>
</xs:simpleType>
<xs:element name="AnalyticsEventTypes" nillable="true" type="q34:AnalyticsEventTypes"/>
</xs:schema>

```

7.7 <http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09> Schema

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:q25="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <xs:complexType name="AnalyticsTenantSettingsData">
    <xs:sequence>
      <xs:element minOccurs="0" name="EventFilters" nillable="true" type="xs:base64Binary"/>
      <xs:element minOccurs="0" name="EventTypeDefinitions" nillable="true"
type="xs:base64Binary"/>
      <xs:element minOccurs="0" name="LastUpdateTime" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="Options" type="q25:AnalyticsTenantSettingOptions"/>
      <xs:element minOccurs="0" name="TenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="Version" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsTenantSettingsData" nillable="true"
type="q25:AnalyticsTenantSettingsData"/>
  <xs:simpleType name="AnalyticsTenantSettingOptions">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string"/>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:element name="AnalyticsTenantSettingOptions" nillable="true"
type="q25:AnalyticsTenantSettingOptions"/>
  <xs:complexType name="AnalyticsTenantSettingsDataBatch">
    <xs:sequence>
      <xs:element minOccurs="0" name="LastTenantId" type="tns3:guid"/>
      <xs:element minOccurs="0" name="Settings" nillable="true"
type="q25:ArrayOfAnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsTenantSettingsDataBatch" nillable="true"
type="q25:AnalyticsTenantSettingsDataBatch"/>
  <xs:complexType name="ArrayOfAnalyticsTenantSettingsData">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q25:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsTenantSettingsData" nillable="true"
type="q25:ArrayOfAnalyticsTenantSettingsData"/>
  <xs:complexType name="AnalyticsTenantConfig">
    <xs:sequence>

```

```
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q25:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsTenantConfig" nillable="true" type="q25:AnalyticsTenantConfig"/>
</xs:schema>
```

8 Appendix C: Product Behavior

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

- Microsoft SharePoint Server 2013
- Microsoft SharePoint Server 2016

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

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

9 Change Tracking

This section identifies changes that were made to this document since the last release. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- The removal of a document from the documentation set.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical changes were introduced. Minor editorial and formatting changes may have been made, but the technical content of the document is identical to the last released version.

Major and minor changes can be described further using the following change types:

- New content added.
- Content updated.
- Content removed.
- New product behavior note added.
- Product behavior note updated.
- Product behavior note removed.
- New protocol syntax added.
- Protocol syntax updated.
- Protocol syntax removed.
- New content added due to protocol revision.
- Content updated due to protocol revision.
- Content removed due to protocol revision.
- New protocol syntax added due to protocol revision.
- Protocol syntax updated due to protocol revision.
- Protocol syntax removed due to protocol revision.
- Obsolete document removed.

Editorial changes are always classified with the change type **Editorially updated**.

Some important terms used in the change type descriptions are defined as follows:

- **Protocol syntax** refers to data elements (such as packets, structures, enumerations, and methods) as well as interfaces.
- **Protocol revision** refers to changes made to a protocol that affect the bits that are sent over the wire.

The changes made to this document are listed in the following table. For more information, please contact dochelp@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change type
8 Appendix C: Product Behavior	Updated list of supported products.	Y	Content updated due to protocol revision.

10 Index

A

Abstract data model
 [server](#) 22
[AnalyticsEventTypeDefinition complex type](#) 15
[AnalyticsItemData complex type](#) 16
[AnalyticsTenantSettingOptions simple type](#) 19
[AnalyticsTenantSettingsData complex type](#) 17
[Applicability](#) 13
[ArrayOfAnalyticsItemData complex type](#) 18
[ArrayOfint complex type](#) 18
[Attribute groups](#) 21
[Attributes](#) 21

C

[Capability negotiation](#) 13
[Change tracking](#) 108
[char simple type](#) 19
[Complex types](#) 15
 [AnalyticsEventTypeDefinition](#) 15
 [AnalyticsItemData](#) 16
 [AnalyticsTenantSettingsData](#) 17
 [ArrayOfAnalyticsItemData](#) 18
 [ArrayOfint](#) 18

D

Data model - abstract
 [server](#) 22
[Delete all usage data for a tenant example](#) 77
[duration simple type](#) 19

E

[EventCountType simple type](#) 20
[EventOptions simple type](#) 20
[EventRollups simple type](#) 21
Events
 [local - server](#) 76
 [timer - server](#) 76
Examples
 [Delete all usage data for a tenant](#) 77
 [Get an analytics event type definition](#) 78
 [Get analytics item data](#) 79
 [Send analytics usage events](#) 82

F

[Fields - vendor-extensible](#) 13
[Full WSDL](#) 85
[Full XML schema](#) 94

<http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics.Schema> 94

<http://schemas.microsoft.com/2003/10/Serialization/Schema> 95

<http://schemas.microsoft.com/2003/10/Serialization/Arrays.Schema> 95

<http://tempuri.org/Schema> 96

<http://www.microsoft.com/sharepoint/search/knownTypes/2011/01.Schema> 102

<http://www.microsoft.com/sharepoint/search/knownTypes/2011/05.Schema> 104

<http://www.microsoft.com/sharepoint/search/knownTypes/2011/09.Schema> 105

G

[Get an analytics event type definition example](#) 78
[Get analytics item data example](#) 79
[Glossary](#) 10
[Groups](#) 21
[guid simple type](#) 21

I

[Implementer - security considerations](#) 84
[Index of security parameters](#) 84
[Informative references](#) 12
Initialization
 [server](#) 23
[Introduction](#) 10

L

Local events
 [server](#) 76

M

Message processing
 [server](#) 23
Messages
 [AnalyticsEventTypeDefinition complex type](#) 15
 [AnalyticsItemData complex type](#) 16
 [AnalyticsTenantSettingOptions simple type](#) 19
 [AnalyticsTenantSettingsData complex type](#) 17
 [ArrayOfAnalyticsItemData complex type](#) 18
 [ArrayOfint complex type](#) 18
 [attribute groups](#) 21
 [attributes](#) 21
 [char simple type](#) 19
 [complex types](#) 15
 [duration simple type](#) 19
 [elements](#) 15
 [enumerated](#) 15
 [EventCountType simple type](#) 20
 [EventOptions simple type](#) 20
 [EventRollups simple type](#) 21
 [groups](#) 21
 [guid simple type](#) 21
 [namespaces](#) 14
 [simple types](#) 18
 [syntax](#) 14
 [transport](#) 14

N

[Namespaces](#) 14
[Normative references](#) 12

O

Operations

[DeleteAllUsageDataForTenant](#) 24
[DeleteCustomEventUsageDataForSite](#) 26
[DeleteCustomEventUsageDataForTenant](#) 28
[DeleteRecommendationsDataForTenant](#) 31
[DeleteStandardEventUsageDataForSite](#) 33
[DeleteStandardEventUsageDataForTenant](#) 36
[GetAnalyticsEventTypeDefinition](#) 38
[GetAnalyticsEventTypeDefinitions](#) 40
[GetAnalyticsItemData](#) 44
[GetAnalyticsItemsData](#) 46
[GetAnalyticsTenantConfiguration](#) 49
[GetGlobalAnalyticsItemDataBatch](#) 52
[GetRawAnalyticsTenantSettingsBatch](#) 59
[GetRawAnalyticsTenantSettings](#) 56
[GetRollupAnalyticsItemData](#) 62
[GetSearchReport](#) 65
[GetTenantAnalyticsItemData](#) 68
[SendAnalyticsUsageEvents](#) 70
[UpsertRawAnalyticsTenantSettings](#) 73
[Overview \(synopsis\)](#) 12

P

[Parameters - security index](#) 84
[Preconditions](#) 13
[Prerequisites](#) 13
[Product behavior](#) 107

Protocol Details
[overview](#) 22

R

[References](#) 11
[informative](#) 12
[normative](#) 12
[Relationship to other protocols](#) 12

S

Security

[implementer considerations](#) 84
[parameter index](#) 84
[Send analytics usage events example](#) 82

Sequencing rules
[server](#) 23

Server

[abstract data model](#) 22
[DeleteAllUsageDataForTenant operation](#) 24
[DeleteCustomEventUsageDataForSite operation](#) 26
[DeleteCustomEventUsageDataForTenant operation](#) 28
[DeleteRecommendationsDataForTenant operation](#) 31
[DeleteStandardEventUsageDataForSite operation](#) 33

[DeleteStandardEventUsageDataForTenant operation](#) 36
[GetAnalyticsEventTypeDefinition operation](#) 38
[GetAnalyticsEventTypeDefinitions operation](#) 40
[GetAnalyticsItemData operation](#) 44
[GetAnalyticsItemsData operation](#) 46
[GetAnalyticsTenantConfiguration operation](#) 49
[GetGlobalAnalyticsItemDataBatch operation](#) 52
[GetRawAnalyticsTenantSettingsBatch operation](#) 59
[GetRawAnalyticsTenantSettings operation](#) 56
[GetRollupAnalyticsItemData operation](#) 62
[GetSearchReport operation](#) 65
[GetTenantAnalyticsItemData operation](#) 68
[initialization](#) 23
[local events](#) 76
[message processing](#) 23
[SendAnalyticsUsageEvents operation](#) 70
[sequencing rules](#) 23
[timer events](#) 76
[timers](#) 23
[UpsertRawAnalyticsTenantSettings operation](#) 73
[Simple types](#) 18
[AnalyticsTenantSettingOptions](#) 19
[char](#) 19
[duration](#) 19
[EventCountType](#) 20
[EventOptions](#) 20
[EventRollups](#) 21
[guid](#) 21
[Standards assignments](#) 13
Syntax
[messages - overview](#) 14

T

Timer events
[server](#) 76
Timers
[server](#) 23
[Tracking changes](#) 108
[Transport](#) 14
Types
[complex](#) 15
[simple](#) 18

V

[Vendor-extensible fields](#) 13
[Versioning](#) 13

W

[WSDL](#) 85

X

[XML schema](#) 94

<http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics.Schema> 94

<http://schemas.microsoft.com/2003/10/Serialization/Schema> 95

<http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema> 95
<http://tempuri.org/ Schema> 96

<http://www.microsoft.com/sharepoint/search/OwnTypes/2011/01 Schema> 102

<http://www.microsoft.com/sharepoint/search/OwnTypes/2011/05 Schema> 104

<http://www.microsoft.com/sharepoint/search/OwnTypes/2011/09 Schema> 105