

Preliminary

[MS-SPASA]: SharePoint Analytics Service Application Protocol Specification

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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 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also

normative but cannot contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

base64
GUID
Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)

The following terms are defined in [\[MS-OFCGLOS\]](#):

search query
Simple Object Access Protocol (SOAP)
site
SOAP action
SOAP body
tenant
Web site
WSDL message
WSDL operation
XML namespace
XML namespace prefix
XML schema

The following terms are specific to this document:

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

1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

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. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

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

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[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-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

[MS-OFCGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)".

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

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

[SOAP1.2/2] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 2: Adjuncts", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part2-20030624>

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 **Simple Object Access Protocol (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:

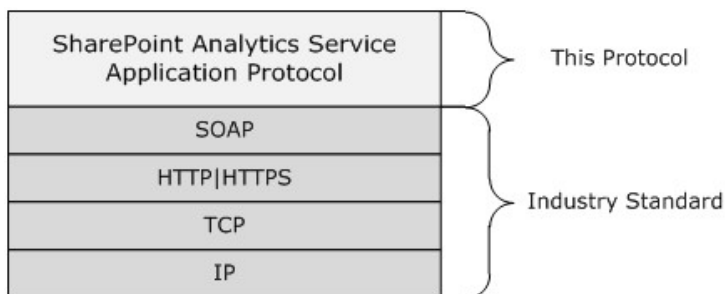


Figure 1: This protocol in relation to other protocols

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.

Preliminary

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 MAY transmit an additional SEAP header, the ServiceContext header, as specified 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	
q22	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	
q31	http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	
ser	http://schemas.microsoft.com/2003/10/Serialization/	
soap	http://schemas.xmlsoap.org/wSDL/soap/	[SOAP1.1]
tns	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics	
tns1	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
tns2	http://tempuri.org/	

Prefix	Namespace URI	Reference
tns3	http://tempuri.org/Imports	
wsaw	http://www.w3.org/2006/05/addressing/wsdl	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1 1] [XMLSCHEMA2 1]

2.2.2 Messages

This specification does not define any common XML schema 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
AnalyticsEventTypeDefintion	The AnalyticsEventTypeDefintion 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.
ArrayOfbase64Binary	The ArrayOfbase64Binary complex type defines a base64 encoded serialized object.
ArrayOfboolean	The ArrayOfboolean complex type defines an array of Boolean values.
ArrayOfdateTime	The ArrayOfdateTime complex type defines a list of dates with times.
ArrayOfdecimal	The ArrayOfdecimal type complex type defines an array of decimal numbers.
ArrayOfdouble	The ArrayOfdouble complex type defines an array of floating point numbers.

Complex Type	Description
ArrayOffloat	The ArrayOffloat complex type defines an array of floating point numbers.
ArrayOfguid	The ArrayOfguid complex type defines an array of GUID values.
ArrayOfint	The ArrayOfint complex type defines an array of integers.
ArrayOfKeyValueOfstringanyType	The ArrayOfKeyValueOfstringanyType complex type defines an array of key-value pairs
ArrayOfKeyValueOfstringstring	The ArrayOfKeyValueOfstringstring complex type defines an array of key-value pairs.
ArrayOflong	The ArrayOflong complex type defines an array of integers.

2.2.4.1 AnalyticsEventTypeDefintion

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

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

```
<xs:complexType name="AnalyticsEventTypeDefintion"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns:EventCountType"/>
    <xs:element minOccurs="0" name="AppEventTypeId" type="ser: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 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:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Rollups" type="tns:EventRollups"/>
    <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
    <xs:element minOccurs="0" name="TenantId" type="ser: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.

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 considering 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 xmlns:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="DailyHits" nillable="true" type="tns1:ArrayOfint"/>
    <xs:element xmlns:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="DailyUniqueUsers" nillable="true" type="tns1: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:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="MonthlyHits" nillable="true" type="tns1:ArrayOfint"/>
    <xs:element xmlns:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="MonthlyUniqueUsers" nillable="true" type="tns1:ArrayOfint"/>
    <xs:element minOccurs="0" name="ScopeId" nillable="true" type="ser:guid"/>
    <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
    <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

DailyHits: A list of hit counts for recent days.

DailyUniqueUsers: A list of unique user counts for recent days.

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: A list of hit counts for recent months.

MonthlyUniqueUsers: A list of unique user counts for recent months.

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

SiteId: The identifier of the **Web site**.

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="q22:AnalyticsTenantSettingOptions"/>
    <xs:element minOccurs="0" name="TenantId" type="ser: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 [2.2.5.4](#).

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="q1:AnalyticsItemData"/>
    </xs:sequence>
  </xs:complexType>

```

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

2.2.4.5 ArrayOfbase64Binary

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

The **ArrayOfbase64Binary** complex type defines a base64 encoded serialized object.

```

<xs:complexType name="ArrayOfbase64Binary" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="base64Binary" nillable="true"
type="xs:base64Binary"/>
  </xs:sequence>
</xs:complexType>

```

base64Binary: The serialized object.

2.2.4.6 ArrayOfdateTime

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

The **ArrayOfdateTime** complex type defines a list of dates with times.

```

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

```

dateTime: A date with a time.

2.2.4.7 ArrayOfdecimal

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

The **ArrayOfdecimal** type complex type defines an array of decimal numbers.

```

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

```

decimal: A decimal number

2.2.4.8 ArrayOfdouble

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

The **ArrayOfdouble** complex type defines an array of floating point numbers.

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

double: A floating point number.

2.2.4.9 ArrayOffloat

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

The **ArrayOffloat** complex type defines an array of floating point numbers.

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

float: A floating point number.

2.2.4.10 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.

2.2.4.11 ArrayOfKeyValueOfstringanyType

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

The **ArrayOfKeyValueOfstringanyType** complex type defines an array of key-value pairs

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

```

<xs:complexType>
  <xs:sequence>
    <xs:element name="Key" nillable="true" type="xs:string"/>
    <xs:element name="Value" nillable="true" type="xs:anyType"/>
  </xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>

```

KeyValueOfstringanyType: A dictionary entry that consists of a key and a value.

KeyValueOfstringanyType.Key: The name of a property. Each value MUST be unique within the list and MUST NOT be NULL.

KeyValueOfstringanyType.Value: The value of the property, which MUST NOT be null.

2.2.4.12 ArrayOflong

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

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

```

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

```

long: An integer

2.2.4.13 ArrayOfboolean

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

The **ArrayOfboolean** complex type defines an array of Boolean values.

```

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

```

boolean: A Boolean value.

2.2.4.14 ArrayOfguid

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

The **ArrayOfguid** complex type defines an array of GUID values.

```

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

```

```

<xs:sequence>
  <xs:element minOccurs="0" maxOccurs="unbounded" name="guid" type="ser:guid"/>
</xs:sequence>
</xs:complexType>

```

guid: A GUID value.

2.2.4.15 ArrayOfKeyValueOfstringstring

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

The **ArrayOfKeyValueOfstringstring** complex type defines an array of key-value pairs.

```

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

```

KeyValueOfstringstring: A dictionary entry that consists of a key and a value.

KeyValueOfstringstring.Key: The name of a property. Each value **MUST** be unique within the list and **MUST NOT** be NULL.

KeyValueOfstringstring.Value: The value of the property, which **MUST NOT** be null.

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.

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.
StreamBody	A base64 encoded binary stream.

2.2.5.1 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>
```

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

2.2.5.3 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>
```

2.2.5.4 AnalyticsTenantSettingOptions

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

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


```

<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>

```

2.2.5.5 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 **EventCountType**.

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

2.2.5.6 EventRollups

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

The **EventRollups** simple type defines the rollup 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 **EventRollups**.

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

2.2.5.7 StreamBody

Namespace: http://schemas.microsoft.com/Message

A base64 encoded binary stream.

```
<xs:simpleType name="StreamBody" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:restriction base="xs:base64Binary"/>  
</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.

2.2.9 Common Data Structures

This specification does not define any common XML Schema data structures.

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. 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. 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 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 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.
GetRawAnalyticsTenantSettings	Retrieves the configuration settings for a specified tenant.
GetRawAnalyticsTenantSettingsBatch	Retrieves the configuration settings for multiple tenants.

Operation	Description
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.
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.

```
<wsdl:operation name="DeleteAllUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns2:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenantResponse"
message="tns2:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage WSDL message** and the protocol server responds with a **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

Message	Description
e	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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

3.1.4.1.2.2 DeleteAllUsageDataForTenantResponse

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 for an application-specific event type.

```
<wsdl:operation name="DeleteCustomEventUsageDataForSite"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
    message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
    message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage** WSDL message, and the protocol server responds with a

IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage WSDL message as follows:

- The protocol server initiates the deletion of aggregated data the Web site 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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site.

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.

3.1.4.2.2.2 DeleteCustomEventUsageDataForSiteResponse

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.

```
<wsdl:operation name="DeleteCustomEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenantResponse"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage

WSDL message, and the protocol server responds with a

IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage

WSDL message as follows:

- The protocol server initiates the deletion of aggregated data 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	The response WSDL message for the

Message	Description
_OutputMessage	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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="appEventTypeId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</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 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.

```
<wsdl:operation name="DeleteRecommendationsDataForTenant"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenant"
    message="tns2:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenantResponse"
  </wsdl:output>
```

```

message="tns2:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends a **IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage** WSDL message, and the protocol server responds with a **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_OutputMessage	The response WSDL message for the DeleteRecommendationsDataForTenant WSDL operation.

3.1.4.4.1.1

IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage

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

The SOAP action value is:

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

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

3.1.4.4.1.2

IAalyticsServiceApplication_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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

tenantId: The identifier of the tenant.

3.1.4.4.2.2 DeleteRecommendationsDataForTenantResponse

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 for a predefined event type.

```
<wsdl:operation name="DeleteStandardEventUsageDataForSite"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage WSDL message, and the protocol server responds with a

IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage WSDL message as follows:

- The protocol server initiates the deletion of aggregated data for the Web site 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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="siteId" type="ser: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.

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

3.1.4.5.2.2 DeleteStandardEventUsageDataForSiteResponse

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.

```
<wsdl:operation name="DeleteStandardEventUsageDataForTenant"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenant"
    message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenantResponse"
    message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage WSDL message, and the protocol server responds with a **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

IAalyticsServiceApplication_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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser: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 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.

```
<wsdl:operation name="GetAnalyticsEventTypeDefinition"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns2:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns2:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage WSDL message, and the protocol server responds with a

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 **FaultException<ExceptionDetail>**.

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_InputMessage	The request WSDL message for the GetAnalyticsEventTypeDefinition WSDL operation.
IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage	The response WSDL message for the GetAnalyticsEventTypeDefinition WSDL operation.

3.1.4.7.1.1

IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage

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

The SOAP action value is:

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

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

3.1.4.7.1.2

IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage

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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="ser: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.

3.1.4.7.2.2 GetAnalyticsEventTypeDefinitionResponse

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.

```
<wsdl:operation name="GetAnalyticsEventTypeDefinitions"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input>
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions"
    message="tns2:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output>
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
    Response"
    message="tns2:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage WSDL message, and the protocol server responds with a **IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage** WSDL message as follows:

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

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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:q31="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q31: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 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 **AnalyticsEventTypes**.

Value	Meaning
None	No event types
Standard	Predefined event types

Value	Meaning
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.

```
<wsdl:operation name="GetAnalyticsItemData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
    message="tns2:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
    message="tns2: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
IAAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage	The request WSDL message for the GetAnalyticsItemData WSDL operation.
IAAnalyticsServiceApplication_GetAnalyticsItemData_OutputMessage	The response WSDL message for the GetAnalyticsItemData WSDL operation.

3.1.4.9.1.1 IAAnalyticsServiceApplication_GetAnalyticsItemData_InputMessage

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

The SOAP action value is:

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

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

3.1.4.9.1.2 IAAnalyticsServiceApplication_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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element minOccurs="0" name="itemId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

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

eventType: The identifier of the event type.

tenantId: The identifier of the tenant.

siteId: The identifier of the Web site.

itemId: The identifier of the item.

3.1.4.9.2.2 GetAnalyticsItemDataResponse

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.

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

```

message="tns2:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns2:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends a **IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage** WSDL message, and the protocol server responds with a **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.
GetAnalyticsItemsDataResponse	The result data for the GetAnalyticsItemsData WSDL operation.

3.1.4.10.2.1 GetAnalyticsItemsData

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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns1: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.

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

3.1.4.10.2.2 GetAnalyticsItemsDataResponse

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.

```
<wsdl:operation name="GetAnalyticsTenantConfiguration"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns2:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns2:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage** WSDL message, and the protocol server responds with a **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_InputMessage	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.

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

3.1.4.11.2.1 GetAnalyticsTenantConfiguration

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

tenantId: The identifier of the tenant.

3.1.4.11.2.2 GetAnalyticsTenantConfigurationResponse

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:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q22: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="q22: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.

```

<wsdl:operation name="GetGlobalAnalyticsItemDataBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns2:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
esponse"
message="tns2:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends a **IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage** WSDL message, and the protocol server responds with a **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 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 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 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
ContinuationTokenItemData	A token that represents the end of a batch of data.
AnalyticsItemDataBatch	A batch of aggregated usage data, plus a token that represents the end of the batch.

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="ItemHash" type="xs:int"/>
    <xs:element
      xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
      minOccurs="0" name="ScopeType" type="tns:ContinuationTokenItemData.Scope"/>
    <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
  </xs:sequence>
</xs:complexType>
```

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.

SiteId: If this is not the first batch to be retrieved, this is the identifier of the Web site containing the last item from the previous batch. Otherwise,

- If **ScopeType** is **Site**, this is the identifier of the Web site.
- Otherwise, this MUST be the empty GUID.

TenantId: 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,

- If **ScopeType** is **Site** or **Tenant**, this is the identifier of the tenant.
- Otherwise, this MUST be the empty GUID.

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="q1:ArrayOfAnalyticsItemData"/>
    <xs:element minOccurs="0" name="Token" nillable="true"
      type="q1: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 may 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 **ContinuationTokenItemData.Scope**.

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 GetRawAnayticsTenantSettings

Retrieves the configuration settings for a specified tenant.

```
<wsdl:operation name="GetRawAnayticsTenantSettings"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnayticsTenantSettings"
message="tns2:IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnayticsTenantSettingsResp
onse" message="tns2:IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage** WSDL message, and the protocol server responds with a **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 GetRawAnayticsTenantSettings

The input data for the **GetRawAnayticsTenantSettings** WSDL operation.

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

tenantId: The identifier of the tenant.

3.1.4.13.2.2 GetRawAnayticsTenantSettingsResponse

The result data for the **GetRawAnayticsTenantSettings** WSDL operation.

```
<xs:element name="GetRawAnayticsTenantSettingsResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
        minOccurs="0" name="GetRawAnayticsTenantSettingsResult" nillable="true"
        type="q22:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```



```
</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.

```
<wsdl:operation name="GetRawAnalyticsTenantSettingsBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch" message="tns2:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatchResponse"
message="tns2:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage** WSDL message, and the protocol server responds with a **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_GetRawAnayticsTenantSettingsBatch_InputMessage	The request WSDL message for the GetRawAnayticsTenantSettingsBatch WSDL operation.
IAalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_OutputMessage	The response WSDL message for the GetRawAnayticsTenantSettingsBatch WSDL operation.

3.1.4.14.1.1

IAalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_InputMessage

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

The SOAP action value is:

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

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

3.1.4.14.1.2

IAalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_OutputMessage

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

The SOAP body contains the **GetRawAnayticsTenantSettingsBatchResponse** 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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="ser: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 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:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q22: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="ser:guid"/>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q22: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="q22: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.

```
<wsdl:operation name="GetRollupAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns2:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataResponse"
message="tns2:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a

IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage WSDL message, and the protocol server responds with a

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 and **scopeId** MUST be the empty GUID.
 - Application-specific rollup scope: the **siteId** is the identifier of the Web site 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

Message	Description
	GetRollupAnalyticsItemData WSDL operation.

3.1.4.15.1.1

IAAnalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage

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

The SOAP action value is:

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

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

3.1.4.15.1.2

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

```
</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.

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

3.1.4.15.2 GetRollupAnalyticsItemDataResponse

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.

```
<wsdl:operation name="GetSearchReport" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
```

```

    <wsdl:input wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
    message="tns2:IAalyticsServiceApplication_GetSearchReport_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
    message="tns2:IAalyticsServiceApplication_GetSearchReport_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  </wsdl:operation>

```

The protocol client sends a **IAalyticsServiceApplication_GetSearchReport_InputMessage** WSDL message, and the protocol server responds with a **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 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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="ser: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.

scopeId: Reserved. MUST be ignored.

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 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="q1: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

A query and an 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:sequence>
</xs:complexType>
```

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

Query: The search query.

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.

```
<wsdl:operation name="GetTenantAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns2:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataResponse"
message="tns2:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage** WSDL message, and the protocol server MUST respond with a **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 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:ser="http://schemas.microsoft.com/2003/10/Serialization/"  
minOccurs="0" name="tenantId" type="ser: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 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>

```

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.

```

<wsdl:operation name="SendAnalyticsUsageEvents"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
    message="tns2:IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
    message="tns2: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 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 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
ArrayOfAnalyticsUsageEvent	A list of usage events.
AnalyticsUsageEvent	A usage event.

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="ser:guid"/>
    <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="ser: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="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.

TenantId: The identifier for the tenant.

TimeStamp: The timestamp when the event occurred.

UserId: The 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 in duplicate fashion.

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.

```
<wsdl:operation name="UpsertRawAnalyticsTenantSettings"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
" message="tns2:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
Response"
message="tns2:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends a **IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage** WSDL message, and the protocol server responds with a **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_InputMessage

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_OutputMessage

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 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:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
        minOccurs="0" name="ts" nillable="true" type="q22:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ts: The configuration settings.

3.1.4.19.2.2 UpsertRawAnalyticsTenantSettingsResponse

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-23a1fee6cfa1</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-23a1fee6cfa1</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>
      <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>

```



```

<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>f36a1ae4-7b87-44da-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>f36a1ae4-7b87-44da-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>

```

```
</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.

Preliminary

6 Appendix A: Full WSDL

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

```
<?xml version="1.0"?>
<wsdl:definitions xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:tns2="http://tempuri.org/" xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" targetNamespace="http://tempuri.org/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema xmlns:tns3="http://tempuri.org/Imports"
targetNamespace="http://tempuri.org/Imports">
      <xs:import namespace="http://tempuri.org/" />
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
      <xs:import
namespace="http://schemas.microsoft.com/ceres/contenttransformation/2009/11/submission"/>
      <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
      <xs:import namespace="http://schemas.microsoft.com/Message"/>
      <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"/>
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage">
    <wsdl:part name="parameters" element="tns2:SendAnalyticsUsageEvents"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage">
    <wsdl:part name="parameters" element="tns2:SendAnalyticsUsageEventsResponse"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetAnalyticsItemData"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAnalyticsItemDataResponse"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetAnalyticsItemsData"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAnalyticsItemsDataResponse"/>
  </wsdl:message>
  <wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetGlobalAnalyticsItemDataBatch"/>
  </wsdl:message>
  <wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetGlobalAnalyticsItemDataBatchResponse"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage">
    <wsdl:part name="parameters" element="tns2:GetRollupAnalyticsItemData"/>
  </wsdl:message>
  <wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetRollupAnalyticsItemDataResponse"/>
  </wsdl:message>
```

```

</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetTenantAnalyticsItemData"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetTenantAnalyticsItemDataResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetSearchReport_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetSearchReport"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetSearchReport_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetSearchReportResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetRawAnayticsTenantSettings"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetRawAnayticsTenantSettingsResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage">
  <wsdl:part name="parameters" element="tns2:UpsertRawAnalyticsTenantSettings"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage">
  <wsdl:part name="parameters" element="tns2:UpsertRawAnalyticsTenantSettingsResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetRawAnayticsTenantSettingsBatch"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetRawAnayticsTenantSettingsBatchResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetAnalyticsTenantConfiguration"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetAnalyticsTenantConfigurationResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetAnalyticsEventTypeDefinition"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage">
  <wsdl:part name="parameters" element="tns2:GetAnalyticsEventTypeDefinitionResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage">
  <wsdl:part name="parameters" element="tns2:GetAnalyticsEventTypeDefinitions"/>
</wsdl:message>

```

```

    <wsdl:message
name="IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage">
    <wsdl:part name="parameters" element="tns2:GetAnalyticsEventTypeDefinitionsResponse"/>
</wsdl:message>
    <wsdl:message name="IAAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteAllUsageDataForTenant"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteAllUsageDataForTenantResponse"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteRecommendationsDataForTenant"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteRecommendationsDataForTenantResponse"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteStandardEventUsageDataForTenant"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters"
element="tns2:DeleteStandardEventUsageDataForTenantResponse"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteCustomEventUsageDataForTenant"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteCustomEventUsageDataForTenantResponse"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteStandardEventUsageDataForSite"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteStandardEventUsageDataForSiteResponse"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteCustomEventUsageDataForSite"/>
</wsdl:message>
    <wsdl:message
name="IAAnalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage">
    <wsdl:part name="parameters" element="tns2:DeleteCustomEventUsageDataForSiteResponse"/>
</wsdl:message>
    <wsdl:portType name="IAAnalyticsServiceApplication">
    <wsdl:operation name="SendAnalyticsUsageEvents">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/SendAnalyticsUsageEvents"
message="tns2:IAAnalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"/>

```

```

        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
" message="tns2:IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetAnalyticsItemData">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
message="tns2:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
message="tns2:IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetAnalyticsItemsData">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
message="tns2:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns2:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns2:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
esponse"
message="tns2:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetRollupAnalyticsItemData">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns2:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataRespon
se" message="tns2:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetTenantAnalyticsItemData">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns2:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataRespon
se" message="tns2:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetSearchReport">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
message="tns2:IAalyticsServiceApplication_GetSearchReport_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
message="tns2:IAalyticsServiceApplication_GetSearchReport_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetRawAnyaticsTenantSettings">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnyaticsTenantSettings"
message="tns2:IAalyticsServiceApplication_GetRawAnyaticsTenantSettings_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnyaticsTenantSettingsResp

```



```

onse"
message="tns2:IAAnalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage"/>
  </wsdl:operation>
  <wsdl:operation name="UpsertRawAnalyticsTenantSettings">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
" message="tns2:IAAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
Response"
message="tns2:IAAnalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnayticsTenantSettingsBatch">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetRawAnayticsTenantSettingsBatc
h"
message="tns2:IAAnalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetRawAnayticsTenantSettingsBatc
hResponse"
message="tns2:IAAnalyticsServiceApplication_GetRawAnayticsTenantSettingsBatch_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="GetAnalyticsTenantConfiguration">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns2:IAAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns2:IAAnalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetAnalyticsEventTypeDefinition">
          <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns2:IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"/>
          <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns2:IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"/>
          </wsdl:operation>
          <wsdl:operation name="GetAnalyticsEventTypeDefinitions">
            <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
" message="tns2:IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"/>
            <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
Response"
message="tns2:IAAnalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="DeleteAllUsageDataForTenant">
              <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns2:IAAnalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"/>
              <wsdl:output
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/DeleteAllUsageDataForTenantRespo
nse" message="tns2:IAAnalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"/>
              </wsdl:operation>
              <wsdl:operation name="DeleteRecommendationsDataForTenant">
                <wsdl:input
wsaw:Action="http://tempuri.org/IAAnalyticsServiceApplication/DeleteRecommendationsDataForTena

```

```

nt"
message="tns2:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenantResponse"
message="tns2:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"/>
  </wsdl:operation>
  <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenant"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForTenantResponse"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenant"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTenantResponse"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteStandardEventUsageDataForSite">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
message="tns2:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="DeleteCustomEventUsageDataForSite">
          <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"/>
          <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
message="tns2:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"/>
          </wsdl:operation>
        </wsdl:portType>
        <wsdl:binding name="DefaultBinding_IAalyticsServiceApplication"
type="tns2: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/GetRawAnalyticsTenantSettingsBatch"
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: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>
<wsdl:operation name="DeleteCustomEventUsageDataForTenant">
  <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTena
nt" 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/DeleteStandardEventUsageDataForSi
te" 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:binding>
</wsdl:definitions>

```

7 Appendix B: Full XML Schema

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

Schema name	Prefix	Section
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics	tns	7.1
http://schemas.microsoft.com/2003/10/Serialization/Arrays	tns1	7.2
http://schemas.microsoft.com/2003/10/Serialization/	ser	7.3
http://schemas.microsoft.com/Message	Unassigned	7.4
http://tempuri.org/	tns2	7.5
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01	q1	7.6
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05	q31	7.7
http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09	q22	7.8

7.1

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

```
<?xml version="1.0"?>
<xs:schema
  xmlns:tns="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: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="tns: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="tns:EventCountType"/>
  <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="tns:EventRollups"/>
</xs:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:tns1="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:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <xs:complexType name="ArrayOfKeyValueOfstringanyType">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="KeyValueOfstringanyType">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Key" nillable="true" type="xs:string"/>
            <xs:element name="Value" nillable="true" type="xs:anyType"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfKeyValueOfstringanyType" nillable="true"
type="tns1:ArrayOfKeyValueOfstringanyType"/>
  <xs:complexType name="ArrayOfdouble">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="double" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfdouble" nillable="true" type="tns1:ArrayOfdouble"/>
  <xs:complexType name="ArrayOffloat">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="float" type="xs:float"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOffloat" nillable="true" type="tns1:ArrayOffloat"/>
  <xs:complexType name="ArrayOfdecimal">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="decimal" type="xs:decimal"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfdecimal" nillable="true" type="tns1:ArrayOfdecimal"/>
  <xs:complexType name="ArrayOfbase64Binary">
    <xs:sequence>

```



```

        <xs:element minOccurs="0" maxOccurs="unbounded" name="base64Binary" nillable="true"
type="xs:base64Binary"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfbase64Binary" nillable="true" type="tns1:ArrayOfbase64Binary"/>
<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="tns1:ArrayOfstring"/>
<xs:complexType name="ArrayOfdateTime">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="dateTime" type="xs:dateTime"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfdateTime" nillable="true" type="tns1:ArrayOfdateTime"/>
<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="tns1:ArrayOfint"/>
<xs:complexType name="ArrayOflong">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="long" type="xs:long"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOflong" nillable="true" type="tns1:ArrayOflong"/>
<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="tns1:ArrayOfKeyValueOfstringstring"/>
<xs:complexType name="ArrayOfboolean">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="boolean" type="xs:boolean"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfboolean" nillable="true" type="tns1:ArrayOfboolean"/>
<xs:complexType name="ArrayOfguid">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="guid" type="ser:guid"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfguid" nillable="true" type="tns1:ArrayOfguid"/>
</xs:schema>

```

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

```
<?xml version="1.0"?>
<xs:schema xmlns:ser="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="ser:char"/>
  <xs:simpleType name="char">
    <xs:restriction base="xs:int"/>
  </xs:simpleType>
  <xs:element name="duration" nillable="true" type="ser: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="ser: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://schemas.microsoft.com/Message> Schema

```
<?xml version="1.0"?>
<xs:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/Message"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="StreamBody">
```

```

    <xs:restriction base="xs:base64Binary"/>
  </xs:simpleType>
</xs:schema>

```

7.5 http://tempuri.org/ Schema

```

<?xml version="1.0"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://tempuri.org/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"/>
  <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/2011/09"/>
  <xs:import namespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"/>
  <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="GetAnalyticsItemData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser: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: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>
  <xs:element name="GetAnalyticsItemsData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>

```

```

        <xs:element xmlns:tns1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="itemIds" nillable="true" type="tns1:ArrayOfstring"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsItemsDataResponse">
    <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>
<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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
            <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="ser: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="ser:guid"/>
      <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="ser: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>
<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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsResult" nillable="true"
type="q22:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="UpsertRawAnalyticsTenantSettings">

```

```

    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q22: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetRawAnalyticsTenantSettingsBatchResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q22:AnalyticsTenantSettingsDataBatch"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsTenantConfiguration">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsTenantConfigurationResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q22="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q22:AnalyticsTenantConfig"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsEventTypeDefinition">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element xmlns:q31="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q31: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser: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:ser="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="ser:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

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

```



```

</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="ItemHash" type="xs:int"/>
    <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="ScopeType" type="tns:ContinuationTokenItemData.Scope"/>
    <xs:element minOccurs="0" name="SiteId" type="ser:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
  </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: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:sequence>
</xs:complexType>
<xs:element name="QueryReportData" nillable="true" type="q1:QueryReportData"/>
<xs:complexType name="AnalyticsEventTypeDefinition">
  <xs:sequence>
    <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="AggregationType" type="tns:EventCountType"/>
    <xs:element minOccurs="0" name="AppEventTypeId" type="ser: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 minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
    <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
  </xs:sequence>

```

```

        <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
        <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
minOccurs="0" name="Rollups" type="tns:EventRollups"/>
        <xs:element minOccurs="0" name="TailTrimming" type="xs:int"/>
        <xs:element minOccurs="0" name="TenantId" type="ser: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:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:q31="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="q31:AnalyticsEventTypes"/>
</xs:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:ser="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:q22="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="q22:AnalyticsTenantSettingOptions"/>
    <xs:element minOccurs="0" name="TenantId" type="ser:guid"/>
    <xs:element minOccurs="0" name="Version" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsTenantSettingsData" nillable="true"
type="q22: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="q22:AnalyticsTenantSettingOptions"/>
<xs:complexType name="AnalyticsTenantSettingsDataBatch">
  <xs:sequence>
    <xs:element minOccurs="0" name="LastTenantId" type="ser:guid"/>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q22:ArrayOfAnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsTenantSettingsDataBatch" nillable="true"
type="q22:AnalyticsTenantSettingsDataBatch"/>
<xs:complexType name="ArrayOfAnalyticsTenantSettingsData">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q22:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfAnalyticsTenantSettingsData" nillable="true"
type="q22:ArrayOfAnalyticsTenantSettingsData"/>
<xs:complexType name="AnalyticsTenantConfig">
  <xs:sequence>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q22:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsTenantConfig" nillable="true" type="q22: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 15 Technical Preview

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

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

9 Change Tracking

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

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