

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

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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 [\[MS-GLOS\]](#):

- GUID**
- Hypertext Transfer Protocol (HTTP)**
- Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**
- SOAP**
- SOAP action**
- SOAP body**
- SOAP fault**
- Transmission Control Protocol (TCP)**
- Unicode**
- XML namespace**

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

- rollup**
- search query**
- site**
- tenant**
- timestamp**
- Web Services Description Language (WSDL)**
- website**
- WSDL message**
- WSDL operation**
- 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](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information.

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

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[XMLSCHEMA1] Thompson, H.S., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSCHEMA2] Biron, P.V., and Malhotra, A., Eds., "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](#)".

[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>

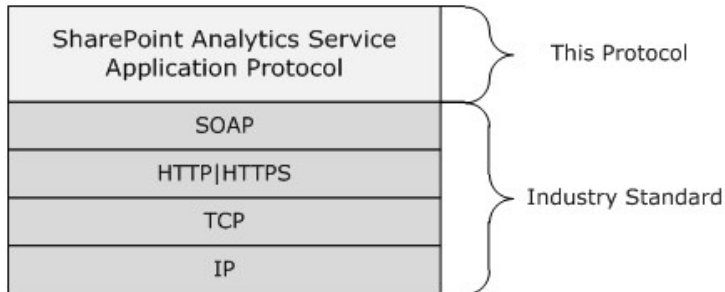
### 1.3 Overview

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

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



**Figure 1: This protocol in relation to other protocols**

## 1.5 Prerequisites/Preconditions

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

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

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

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

## 1.6 Applicability Statement

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

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

## 1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

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

## **1.8 Vendor-Extensible Fields**

None.

## **1.9 Standards Assignments**

None.

## 2 Messages

### 2.1 Transport

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

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

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

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

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

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

### 2.2 Common Message Syntax

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

#### 2.2.1 Namespaces

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

Prefix	Namespace URI	Reference
q1	<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01</a>	
q21	<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09</a>	
q30	<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05</a>	
soap	<a href="http://schemas.xmlsoap.org/wsd/soap/">http://schemas.xmlsoap.org/wsd/soap/</a>	<a href="#">[SOAP1.1]</a>
tns	<a href="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics">http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics</a>	
tns1	<a href="http://schemas.microsoft.com/2003/10/Serialization/Arrays">http://schemas.microsoft.com/2003/10/Serialization/Arrays</a>	
tns2	<a href="http://schemas.microsoft.com/2003/10/Serialization/">http://schemas.microsoft.com/2003/10/Serialization/</a>	
tns3	<a href="http://tempuri.org/">http://tempuri.org/</a>	
tns4	<a href="http://tempuri.org/Imports">http://tempuri.org/Imports</a>	

Prefix	Namespace URI	Reference
wsaw	http://www.w3.org/2006/05/addressing/wsd	
wSDL	http://schemas.xmlsoap.org/wsd/	<a href="#">[WSDL]</a>
xs	http://www.w3.org/2001/XMLSchema	<a href="#">[XMLSCHEMA1]</a> 1 <a href="#">[XMLSCHEMA2]</a> 1

## 2.2.2 Messages

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

## 2.2.3 Elements

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

## 2.2.4 Complex Types

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

Complex type	Description
<b>AnalyticsEventDefinition</b>	The <b>AnalyticsEventDefinition</b> complex type defines an analytics event.
<b>AnalyticsItemData</b>	The <b>AnalyticsItemData</b> complex type defines the analytics usage data associated with an item or <b>rollup</b> scope.
<b>AnalyticsTenantSettingsData</b>	The <b>AnalyticsTenantSettingsData</b> complex type defines the analytics configuration settings for a <b>tenant</b> .
<b>ArrayOfAnalyticsItemData</b>	The <b>ArrayOfAnalyticsItemData</b> complex type defines a list of <b>AnalyticsItemData</b> elements.
<b>ArrayOfint</b>	The <b>ArrayOfint</b> complex type defines an array of integers.

### 2.2.4.1 AnalyticsEventDefinition

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

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

```
<xs:complexType name="AnalyticsEventDefinition"
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="tns:guid"/>
    <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```



```

    <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
  <xs:element
    xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
    minOccurs="0" name="Options" type="tns:EventOptions"/>
    <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
    <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
    <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
  <xs:element
    xmlns: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="tns2:guid"/>
  </xs:sequence>
</xs:complexType>

```

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

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

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

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

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

**Options:** Additional options for this event type.

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

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

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

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

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

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

## 2.2.4.2 AnalyticsItemData

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

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

```

<xs:complexType name="AnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
    <xs:element xmlns: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="EventTypeId" type="xs:int"/>
    <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>

```

```

<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="tns2:guid"/>
<xs:element minOccurs="0" name="SiteId" type="tns2:guid"/>
<xs:element minOccurs="0" name="TenantId" type="tns2:guid"/>
<xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
<xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
</xs:sequence>
</xs:complexType>

```

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

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

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

**EventType:** The identifier of the event type.

**ItemId:** The identifier of the item.

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

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

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

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

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

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

**SiteId:** The identifier of the [Web site \(2\)](#).

**TenantId:** The identifier of the tenant.

**TotalHits:** The lifetime hit count.

**TotalUniqueUsers:** The lifetime unique user count.

### 2.2.4.3 AnalyticsTenantSettingsData

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

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

```

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

```

```

    <xs:element minOccurs="0" name="EventTypeDefinitions" nillable="true"
type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="LastUpdateTime" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="Options" type="q21:AnalyticsTenantSettingOptions"/>
    <xs:element minOccurs="0" name="TenantId" type="tns2:guid"/>
    <xs:element minOccurs="0" name="Version" type="xs:int"/>
  </xs:sequence>
</xs:complexType>

```

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

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

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

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

**TenantId:** The identifier of the tenant.

**Version:** The version number of the settings.

#### 2.2.4.4 ArrayOfAnalyticsItemData

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

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

```

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

```

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

#### 2.2.4.5 ArrayOfint

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

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

```

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

```

**int:** An integer.

## 2.2.5 Simple Types

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

Simple type	Description
<b>AnalyticsTenantSettingOptions</b>	The <b>AnalyticsTenantSettingOptions</b> simple type defines options for tenant settings.
<b>char</b>	The <b>char</b> simple type represents a <b>Unicode</b> character.
<b>duration</b>	The <b>duration</b> 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.
<b>EventCountType</b>	The <b>EventCountType</b> simple type defines the type of aggregation for an event type.
<b>EventOptions</b>	The <b>EventOptions</b> simple type defines additional options for an event type.
<b>EventRollups</b>	The <b>EventRollups</b> simple type defines the rollup aggregations that can be calculated.
<b>guid</b>	The <b>guid</b> simple type contains an identifier that is globally unique.

### 2.2.5.1 AnalyticsTenantSettingOptions

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

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

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

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

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

### 2.2.5.2 char

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

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

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

### 2.2.5.3 duration

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

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

```
<xs:simpleType name="duration" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:restriction base="xs:duration">  
    <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?"/>  
    <xs:minInclusive value="-P10675199DT2H48M5.4775808S"/>  
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S"/>  
  </xs:restriction>  
</xs:simpleType>
```

### 2.2.5.4 EventCountType

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

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

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

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

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

### 2.2.5.5 EventOptions

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

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

```
<xs:simpleType name="EventOptions" xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```

<xs:list>
  <xs:simpleType>
    <xs:restriction base="xs:string">
      <xs:enumeration value="None"/>
      <xs:enumeration value="AllowAnonymousWrite"/>
    </xs:restriction>
  </xs:simpleType>
</xs:list>
</xs:simpleType>

```

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

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

### 2.2.5.6 EventRollups

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

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

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

### 2.2.5.7 guid

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

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

```

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

```

```
<xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
</xs:restriction>
</xs:simpleType>
```

### **2.2.6 Attributes**

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

### **2.2.7 Groups**

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

### **2.2.8 Attribute Groups**

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

## 3 Protocol Details

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

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

Except where specified, protocol clients SHOULD interpret HTTP status codes that are returned by the protocol server as specified in [\[RFC2616\]](#), section 10.

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

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

### 3.1 Server Details

#### 3.1.1 Abstract Data Model

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

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

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

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

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

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



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

### 3.1.2 Timers

None.

### 3.1.3 Initialization

None.

### 3.1.4 Message Processing Events and Sequencing Rules

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

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

Operation	Description
<b>GetRollupAnalyticsItemData</b>	Retrieves aggregated usage data for a rollup scope for events of a specified event type.
<b>GetSearchReport</b>	Retrieves the aggregated top occurrences for the specified search event type within a scope.
<b>GetTenantAnalyticsItemData</b>	Retrieves aggregated usage data for a tenant for events of a specified event type.
<b>SendAnalyticsUsageEvents</b>	Sends usage events to the protocol server.
<b>UpsertRawAnalyticsTenantSettings</b>	Updates the configuration settings for a specified tenant.

### 3.1.4.1 DeleteAllUsageDataForTenant

Initiates the deletion of aggregated data for a specified tenant.

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

```
<wsdl:operation name="DeleteAllUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns3:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenantResponse"
message="tns3:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_DeleteAllUsageDataForTenant\_InputMessage** WSDL message and the protocol server responds with an **IAalyticsServiceApplication\_DeleteAllUsageDataForTenant\_OutputMessage** WSDL message as follows:

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

#### 3.1.4.1.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage</b>	The request WSDL message for the <b>DeleteAllUsageDataForTenant</b> WSDL operation.

Message	Description
<b>IAalyticsServiceApplication_DeleteAllUsageDataForTenant_Output Message</b>	The response WSDL message for the <b>DeleteAllUsageDataForTenant</b> 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
<b>DeleteAllUsageDataForTenant</b>	The input data for the <b>DeleteAllUsageDataForTenant</b> WSDL operation.
<b>DeleteAllUsageDataForTenantResponse</b>	The result data for the <b>DeleteAllUsageDataForTenant</b> WSDL operation.

### 3.1.4.1.2.1 DeleteAllUsageDataForTenant

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

```
<xs:element name="DeleteAllUsageDataForTenant" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

### 3.1.4.1.2.2 DeleteAllUsageDataForTenantResponse

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

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

### 3.1.4.1.3 Complex Types

None.

### 3.1.4.1.4 Simple Types

None.

### 3.1.4.1.5 Attributes

None.

### 3.1.4.1.6 Groups

None.

### 3.1.4.1.7 Attribute Groups

None.

## 3.1.4.2 DeleteCustomEventUsageDataForSite

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

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

```
<wsdl:operation name="DeleteCustomEventUsageDataForSite"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
    message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
    message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_DeleteCustomEventUsageDataForSite\_InputMessage** WSDL

message, and the protocol server responds with an **IAalyticsServiceApplication\_DeleteCustomEventDataForSite\_OutputMessage** WSDL message as follows:

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

### 3.1.4.2.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteCustomEventDataForSite_InputMessage</b>	The request WSDL message for the <b>DeleteCustomEventDataForSite</b> WSDL operation.
<b>IAalyticsServiceApplication_DeleteCustomEventDataForSite_OutputMessage</b>	The response WSDL message for the <b>DeleteCustomEventDataForSite</b> WSDL operation.

#### 3.1.4.2.1.1

### **IAalyticsServiceApplication\_DeleteCustomEventDataForSite\_InputMessage**

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

The SOAP action value is:

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

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

#### 3.1.4.2.1.2

### **IAalyticsServiceApplication\_DeleteCustomEventDataForSite\_OutputMessage**

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

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

### 3.1.4.2.2 Elements

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

Element	Description
<b>DeleteCustomEventUsageDataForSite</b>	The input data for the <b>DeleteCustomEventUsageDataForSite</b> WSDL operation.
<b>DeleteCustomEventUsageDataForSiteResponse</b>	The result data for the <b>DeleteCustomEventUsageDataForSite</b> WSDL operation.

### 3.1.4.2.2.1 DeleteCustomEventUsageDataForSite

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

```
<xs:element name="DeleteCustomEventUsageDataForSite"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

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

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

### 3.1.4.2.2.2 DeleteCustomEventUsageDataForSiteResponse

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

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

### 3.1.4.2.3 Complex Types

None.

### 3.1.4.2.4 Simple Types

None.

### 3.1.4.2.5 Attributes

None.

### 3.1.4.2.6 Groups

None.

### 3.1.4.2.7 Attribute Groups

None.

### 3.1.4.3 DeleteCustomEventDataForTenant

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

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

```
<wsdl:operation name="DeleteCustomEventDataForTenant"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventDataForTenant"
    message="tns3:IAalyticsServiceApplication_DeleteCustomEventDataForTenant_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventDataForTenantResponse"
    message="tns3:IAalyticsServiceApplication_DeleteCustomEventDataForTenant_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

**IAalyticsServiceApplication\_DeleteCustomEventDataForTenant\_InputMessage**

WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_DeleteCustomEventDataForTenant\_OutputMessage**

WSDL message as follows:

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

#### 3.1.4.3.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteCustomEventDataForTenant_InputMessage</b>	The request WSDL message for the <b>DeleteCustomEventDataForTenant</b> WSDL operation.

Message	Description
<b>IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage</b>	The response WSDL message for the <b>DeleteCustomEventUsageDataForTenant</b> 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
<b>DeleteCustomEventUsageDataForTenant</b>	The input data for the <b>DeleteCustomEventUsageDataForTenant</b> WSDL operation.
<b>DeleteCustomEventUsageDataForTenantResponse</b>	The result data for the <b>DeleteCustomEventUsageDataForTenant</b> WSDL operation.

### 3.1.4.3.2.1 DeleteCustomEventUsageDataForTenant

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

```
<xs:element name="DeleteCustomEventUsageDataForTenant"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```



```

    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns2:guid"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

**tenantId:** The identifier of the tenant.

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

### 3.1.4.3.2 DeleteCustomEventUsageDataForTenantResponse

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

```

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

```

### 3.1.4.3.3 Complex Types

None.

### 3.1.4.3.4 Simple Types

None.

### 3.1.4.3.5 Attributes

None.

### 3.1.4.3.6 Groups

None.

### 3.1.4.3.7 Attribute Groups

None.

### 3.1.4.4 DeleteRecommendationsDataForTenant

Initiates the deletion of aggregated recommendations for the specified tenant.

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

```

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

```

```

nt"
message="tns3:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTenantResponse"
message="tns3:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an

**IAalyticsServiceApplication\_DeleteRecommendationsDataForTenant\_InputMessage**

WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_DeleteRecommendationsDataForTenant\_OutputMessage**

WSDL message as follows:

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

### 3.1.4.4.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage</b>	The request WSDL message for the <b>DeleteRecommendationsDataForTenant</b> WSDL operation.
<b>IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage</b>	The response WSDL message for the <b>DeleteRecommendationsDataForTenant</b> 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
<b>DeleteRecommendationsDataForTenant</b>	The input data for the <b>DeleteRecommendationsDataForTenant</b> WSDL operation.
<b>DeleteRecommendationsDataForTenantResponse</b>	The result data for the <b>DeleteRecommendationsDataForTenant</b> WSDL operation.

#### 3.1.4.4.2.1 DeleteRecommendationsDataForTenant

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

```
<xs:element name="DeleteRecommendationsDataForTenant"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

#### 3.1.4.4.2.2 DeleteRecommendationsDataForTenantResponse

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

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

#### 3.1.4.4.3 Complex Types

None.

#### 3.1.4.4.4 Simple Types

None.

### 3.1.4.4.5 Attributes

None.

### 3.1.4.4.6 Groups

None.

### 3.1.4.4.7 Attribute Groups

None.

## 3.1.4.5 DeleteStandardEventUsageDataForSite

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

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

```
<wsdl:operation name="DeleteStandardEventUsageDataForSite"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSite"
    message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
    message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

**IAalyticsServiceApplication\_DeleteStandardEventUsageDataForSite\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_DeleteStandardEventUsageDataForSite\_OutputMessage** WSDL message as follows:

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

### 3.1.4.5.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage</b>	The request WSDL message for the <b>DeleteStandardEventUsageDataForSite</b> WSDL operation.

Message	Description
<b>IAAnalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage</b>	The response WSDL message for the <b>DeleteStandardEventUsageDataForSite</b> WSDL operation.

### 3.1.4.5.1.1

#### **IAAnalyticsServiceApplication\_DeleteStandardEventUsageDataForSite\_InputMessage**

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

The SOAP action value is:

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

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

### 3.1.4.5.1.2

#### **IAAnalyticsServiceApplication\_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
<b>DeleteStandardEventUsageDataForSite</b>	The input data for the <b>DeleteStandardEventUsageDataForSite</b> WSDL operation.
<b>DeleteStandardEventUsageDataForSiteResponse</b>	The result data for the <b>DeleteStandardEventUsageDataForSite</b> WSDL operation.

#### 3.1.4.5.2.1 DeleteStandardEventUsageDataForSite

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

```
<xs:element name="DeleteStandardEventUsageDataForSite"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

    <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
    <xs:element minOccurs="0" name="eventType" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

**tenantId:** The identifier of the tenant.

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

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

### 3.1.4.5.2.2 DeleteStandardEventUsageDataForSiteResponse

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

```

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

```

### 3.1.4.5.3 Complex Types

None.

### 3.1.4.5.4 Simple Types

None.

### 3.1.4.5.5 Attributes

None.

### 3.1.4.5.6 Groups

None.

### 3.1.4.5.7 Attribute Groups

None.

### 3.1.4.6 DeleteStandardEventUsageDataForTenant

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

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

```

<wsdl:operation name="DeleteStandardEventUsageDataForTenant"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enant"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage
" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enantResponse"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessag
e" xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an

**IAalyticsServiceApplication\_DeleteStandardEventUsageDataForTenant\_InputMessage**

WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_DeleteStandardEventUsageDataForTenant\_OutputMessage**

WSDL message as follows:

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

### 3.1.4.6.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage</b>	The request WSDL message for the <b>DeleteStandardEventUsageDataForTenant</b> WSDL operation.
<b>IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessage</b>	The response WSDL message for the <b>DeleteStandardEventUsageDataForTenant</b> 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\_Output Message

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
<b>DeleteStandardEventUsageDataForTenant</b>	The input data for the <b>DeleteStandardEventUsageDataForTenant</b> WSDL operation.
<b>DeleteStandardEventUsageDataForTenantResponse</b>	The result data for the <b>DeleteStandardEventUsageDataForTenant</b> WSDL operation.

#### 3.1.4.6.2.1 DeleteStandardEventUsageDataForTenant

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

```
<xs:element name="DeleteStandardEventUsageDataForTenant"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

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

#### 3.1.4.6.2.2 DeleteStandardEventUsageDataForTenantResponse

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

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



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

### 3.1.4.6.3 Complex Types

None.

### 3.1.4.6.4 Simple Types

None.

### 3.1.4.6.5 Attributes

None.

### 3.1.4.6.6 Groups

None.

### 3.1.4.6.7 Attribute Groups

None.

### 3.1.4.7 GetAnalyticsEventTypeDefintion

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

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

```
<wsdl:operation name="GetAnalyticsEventTypeDefintion"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefintion"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefintion_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefintionR
    esponse"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefintion_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

**IAalyticsServiceApplication\_GetAnalyticsEventTypeDefintion\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_GetAnalyticsEventTypeDefintion\_OutputMessage** WSDL message as follows:

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

### 3.1.4.7.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage</b>	The request WSDL message for the <b>GetAnalyticsEventTypeDefinition</b> WSDL operation.
<b>IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage</b>	The response WSDL message for the <b>GetAnalyticsEventTypeDefinition</b> WSDL operation.

#### 3.1.4.7.1.1

#### **IAalyticsServiceApplication\_GetAnalyticsEventTypeDefinition\_InputMessage**

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

The SOAP action value is:

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

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

#### 3.1.4.7.1.2

#### **IAalyticsServiceApplication\_GetAnalyticsEventTypeDefinition\_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
<b>GetAnalyticsEventTypeDefinition</b>	The input data for the <b>GetAnalyticsEventTypeDefinition</b> WSDL operation.
<b>GetAnalyticsEventTypeDefinitionResponse</b>	The result data for the <b>GetAnalyticsEventTypeDefinition</b> WSDL operation.

#### 3.1.4.7.2.1 GetAnalyticsEventTypeDefinition

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

```

<xs:element name="GetAnalyticsEventTypeDefinition"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2: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 **GetAnalyticsEventTypeDefinitionResponse** element specifies the result data for the **GetAnalyticsEventTypeDefinition** WSDL operation.

```

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

```

**GetAnalyticsEventTypeDefinitionResult:** The definition of the event type.

### 3.1.4.7.3 Complex Types

None.

### 3.1.4.7.4 Simple Types

None.

### 3.1.4.7.5 Attributes

None.

### 3.1.4.7.6 Groups

None.

### 3.1.4.7.7 Attribute Groups

None.

### 3.1.4.8 GetAnalyticsEventTypeDefinitions

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

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

```
<wsdl:operation name="GetAnalyticsEventTypeDefinitions"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
  " message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitions
  Response"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_GetAnalyticsEventTypeDefinitions\_InputMessage** WSDL message, and the protocol server responds with an **\_OutputMessage** WSDL message as follows:

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

#### 3.1.4.8.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage</b>	The request WSDL message for the <b>GetAnalyticsEventTypeDefinitions</b> WSDL operation.
<b>IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage</b>	The response WSDL message for the <b>GetAnalyticsEventTypeDefinitions</b> 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
<b>GetAnalyticsEventTypeDefinitions</b>	The input data for the <b>GetAnalyticsEventTypeDefinitions</b> WSDL operation.
<b>GetAnalyticsEventTypeDefinitionsResponse</b>	The result data for the <b>GetAnalyticsEventTypeDefinitions</b> WSDL operation.

#### 3.1.4.8.2.1 GetAnalyticsEventTypeDefinitions

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

```
<xs:element name="GetAnalyticsEventTypeDefinitions"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:q30="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
        minOccurs="0" name="filter" type="q30:AnalyticsEventTypes"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

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

#### 3.1.4.8.2.2 GetAnalyticsEventTypeDefinitionsResponse

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

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

```

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

```

**GetAnalyticsEventTypeDefinitionsResult:** A list of definitions of event types.

### 3.1.4.8.3 Complex Types

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

Complex type	Description
<b>ArrayOfAnalyticsEventTypeDefinition</b>	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
<b>AnalyticsEventTypes</b>	A filter used for retrieving event types.

##### 3.1.4.8.4.1 AnalyticsEventTypes

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

A filter used for retrieving analytics event types.

```

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

```

```

    <xs:enumeration value="None"/>
    <xs:enumeration value="Standard"/>
    <xs:enumeration value="Custom"/>
    <xs:enumeration value="Internal"/>
    <xs:enumeration value="All"/>
    <xs:enumeration value="AllIncludingInternal"/>
  </xs:restriction>
</xs:simpleType>
</xs:list>
</xs:simpleType>

```

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

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

### 3.1.4.8.5 Attributes

None.

### 3.1.4.8.6 Groups

None.

### 3.1.4.8.7 Attribute Groups

None.

### 3.1.4.9 GetAnalyticsItemData

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

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

```

<wsdl:operation name="GetAnalyticsItemData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
    message="tns3: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
<b>IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage</b>	The request WSDL message for the <b>GetAnalyticsItemData</b> WSDL operation.
<b>IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage</b>	The response WSDL message for the <b>GetAnalyticsItemData</b> WSDL operation.

#### 3.1.4.9.1.1 IAalyticsServiceApplication\_GetAnalyticsItemData\_InputMessage

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

The SOAP action value is:

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

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

#### 3.1.4.9.1.2 IAalyticsServiceApplication\_GetAnalyticsItemData\_OutputMessage

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

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

### 3.1.4.9.2 Elements

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



Element	Description
<b>GetAnalyticsItemData</b>	The input data for the <b>GetAnalyticsItemData</b> WSDL operation.
<b>GetAnalyticsItemDataResponse</b>	The result data for the <b>GetAnalyticsItemData</b> WSDL operation.

### 3.1.4.9.2.1 GetAnalyticsItemData

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

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

**eventType:** The identifier of the event type.

**tenantId:** The identifier of the tenant.

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

**itemId:** The identifier of the item.

### 3.1.4.9.2.2 GetAnalyticsItemDataResponse

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

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

**GetAnalyticsItemDataResult:** The aggregated usage data for the item.

### 3.1.4.9.3 Complex Types

None.

### 3.1.4.9.4 Simple Types

None.

### 3.1.4.9.5 Attributes

None.

### 3.1.4.9.6 Groups

None.

### 3.1.4.9.7 Attribute Groups

None.

### 3.1.4.10 GetAnalyticsItemsData

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

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

```
<wsdl:operation name="GetAnalyticsItemsData" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
    message="tns3:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

**IAalyticsServiceApplication\_GetAnalyticsItemsData\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_GetAnalyticsItemsData\_OutputMessage** WSDL message as follows:

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

#### 3.1.4.10.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage</b>	The request WSDL message for the <b>GetAnalyticsItemsData</b> WSDL operation.
<b>IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage</b>	The response WSDL message for the <b>GetAnalyticsItemsData</b> WSDL operation.

### 3.1.4.10.1.1 IAnalyticsServiceApplication\_GetAnalyticsItemsData\_InputMessage

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

The SOAP action value is:

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

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

### 3.1.4.10.1.2

#### IAnalyticsServiceApplication\_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
<b>GetAnalyticsItemsData</b>	The input data for the <b>GetAnalyticsItemsData</b> WSDL operation.
<b>GetAnalyticsItemsDataResponse</b>	The result data for the <b>GetAnalyticsItemsData</b> WSDL operation.

#### 3.1.4.10.2.1 GetAnalyticsItemsData

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

```
<xs:element name="GetAnalyticsItemsData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2: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 (2).

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

### 3.1.4.10.2.2 GetAnalyticsItemsDataResponse

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

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

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

### 3.1.4.10.3 Complex Types

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

Complex type	Description
<b>ArrayOfstring</b>	An array of strings.

#### 3.1.4.10.3.1 ArrayOfstring

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

A list of strings.

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

**string:** A non-empty sequence of characters.

#### 3.1.4.10.4 Simple Types

None.

#### 3.1.4.10.5 Attributes

None.

#### 3.1.4.10.6 Groups

None.

### 3.1.4.10.7 Attribute Groups

None.

### 3.1.4.11 GetAnalyticsTenantConfiguration

Retrieves the configuration settings for a specified tenant.

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

```
<wsdl:operation name="GetAnalyticsTenantConfiguration"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns3:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfigurationR
esponse"
message="tns3:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_GetAnalyticsTenantConfiguration\_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication\_GetAnalyticsTenantConfiguration\_OutputMessage** WSDL message as follows:

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

#### 3.1.4.11.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_Inp utMessage</b>	The request WSDL message for the <b>GetAnalyticsTenantConfigur ation</b> WSDL operation.
<b>IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_Out putMessage</b>	The response WSDL message for the <b>GetAnalyticsTenantConfigur ation</b> 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
<b>GetAnalyticsTenantConfiguration</b>	The input data for the <b>GetAnalyticsTenantConfiguration</b> WSDL operation.
<b>GetAnalyticsTenantConfigurationResponse</b>	The result data for the <b>GetAnalyticsTenantConfiguration</b> WSDL operation.

##### 3.1.4.11.2.1 GetAnalyticsTenantConfiguration

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

```
<xs:element name="GetAnalyticsTenantConfiguration"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
        minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**tenantId:** The identifier of the tenant.

##### 3.1.4.11.2.2 GetAnalyticsTenantConfigurationResponse

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

```
<xs:element name="GetAnalyticsTenantConfigurationResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
        minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
        type="q21: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
<b>AnalyticsTenantConfig</b>	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="q21:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

**Settings:** The analytics settings for a tenant.

#### 3.1.4.11.4 Simple Types

None.

#### 3.1.4.11.5 Attributes

None.

#### 3.1.4.11.6 Groups

None.

#### 3.1.4.11.7 Attribute Groups

None.

### 3.1.4.12 GetGlobalAnalyticsItemDataBatch

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

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

```

<wsdl:operation name="GetGlobalAnalyticsItemDataBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns3:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
esponse"
message="tns3:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication\_GetGlobalAnalyticsItemDataBatch\_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication\_GetGlobalAnalyticsItemDataBatch\_OutputMessage** WSDL message as follows:

- The protocol server examines the **token.ScopeType**. If this value is
  - **Global**: The protocol server returns the next batch of items that have been modified after the time specified in the **since** parameter.
  - **Tenant**: The protocol server returns the next batch of items for the tenant corresponding to the specified **token.TenantId** after the time specified in the **since** parameter.
  - **Site**: The protocol server returns the next batch of items for the Web site (2) corresponding to the specified **token.TenantId** and **token.SiteId** after the time specified in the **since** parameter.
- If the number of items remaining to return is larger than **batchSize**, only the next **batchSize** number of items are returned.
- The protocol server sets the **Token** with the values corresponding to the last item returned in the batch of **Items**.
  - This method is a batch method, that is, the protocol server returns a **Token** that represents state that allows the protocol server to resume a subsequent batch of items to return if the current batch is constrained by the **batchSize**. The protocol server expects the protocol client to provide a default initial **token** for a first batch and to provide the state it returns from a previous call for subsequent calls.

### 3.1.4.12.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage</b>	The request WSDL message for the <b>GetGlobalAnalyticsItemDataBatch</b> WSDL operation.
<b>IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage</b>	The response WSDL message for the



Message	Description
	<b>GetGlobalAnalyticsItemDataBatch</b> 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
<b>GetGlobalAnalyticsItemDataBatch</b>	The input data for the <b>GetGlobalAnalyticsItemDataBatch</b> WSDL operation.
<b>GetGlobalAnalyticsItemDataBatchResponse</b>	The result data for the <b>GetGlobalAnalyticsItemDataBatch</b> WSDL operation.

### 3.1.4.12.2.1 GetGlobalAnalyticsItemDataBatch

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

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

**eventType:** The identifier of the event type.

**since:** A **timestamp**.

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

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

### 3.1.4.12.2.2 GetGlobalAnalyticsItemDataBatchResponse

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

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

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

### 3.1.4.12.3 Complex Types

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

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

#### 3.1.4.12.3.1 ContinuationTokenItemData

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

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

```
<xs:complexType name="ContinuationTokenItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="EndPartitionId" nillable="true" type="xs:base64Binary"/>
    <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
  </xs:sequence>
  <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="StartPartitionId" nillable="true"
    type="xs:base64Binary"/>
</xs:complexType>
```

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

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

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

**ScopeType:** The scope of the batch.

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

### 3.1.4.12.3.2 AnalyticsItemDataBatch

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

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

```
<xs:complexType name="AnalyticsItemDataBatch" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Items" nillable="true"
      type="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 can be retrieved, if there is one.

### 3.1.4.12.4 Simple Types

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

Simple type	Description
<b>ContinuationTokenItemData.Scope</b>	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>
```

```
</xs:restriction>
</xs:simpleType>
```

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

Value	Meaning
Global	The batch will contain all items.
Tenant	The batch will contain items from a specific tenant.
Site	The batch will contain items from a specific <b>site (2)</b> .

### 3.1.4.12.5 Attributes

None.

### 3.1.4.12.6 Groups

None.

### 3.1.4.12.7 Attribute Groups

None.

### 3.1.4.13 GetRawAnalyticsTenantSettings

Retrieves the configuration settings for a specified tenant.

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

```
<wsdl:operation name="GetRawAnalyticsTenantSettings"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettings"
message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsResp
onse" message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettings\_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettings\_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
<b>IAalyticsServiceApplication_GetRawAnayticsTenantSettings_Input Message</b>	The request WSDL message for the <b>GetRawAnayticsTenantSettings</b> WSDL operation.
<b>IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage</b>	The response WSDL message for the <b>GetRawAnayticsTenantSettings</b> 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
<b>GetRawAnayticsTenantSettings</b>	The input data for the <b>GetRawAnayticsTenantSettings</b> WSDL operation.
<b>GetRawAnayticsTenantSettingsResponse</b>	The result data for the <b>GetRawAnayticsTenantSettings</b> WSDL operation.

#### 3.1.4.13.2.1 GetRawAnayticsTenantSettings

The **GetRawAnayticsTenantSettings** element specifies 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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
          minOccurs="0" name="tenantId" type="tns2:guid"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```

**tenantId:** The identifier of the tenant.

### 3.1.4.13.2 GetRawAnalyticsTenantSettingsResponse

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

```

<xs:element name="GetRawAnalyticsTenantSettingsResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
        minOccurs="0" name="GetRawAnalyticsTenantSettingsResult" nillable="true"
        type="q21:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

**GetRawAnalyticsTenantSettingsResult:** The configuration settings for the tenant.

### 3.1.4.13.3 Complex Types

None.

### 3.1.4.13.4 Simple Types

None.

### 3.1.4.13.5 Attributes

None.

### 3.1.4.13.6 Groups

None.

### 3.1.4.13.7 Attribute Groups

None.

### 3.1.4.14 GetRawAnalyticsTenantSettingsBatch

Retrieves the configuration settings for multiple tenants.

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

```

<wsdl:operation name="GetRawAnalyticsTenantSettingsBatch"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch"
message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch"
message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettingsBatch\_InputMessage** WSDL message, and the protocol server responds with an **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettingsBatch\_OutputMessage** WSDL message as follows:

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

### 3.1.4.14.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage</b>	The request WSDL message for the <b>GetRawAnalyticsTenantSettingsBatch</b> WSDL operation.
<b>IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage</b>	The response WSDL message for the <b>GetRawAnalyticsTenantSettingsBatch</b> WSDL operation.

### 3.1.4.14.1.1

#### **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettingsBatch\_InputMessage**

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

The SOAP action value is:

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

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

### 3.1.4.14.1.2

#### **IAalyticsServiceApplication\_GetRawAnalyticsTenantSettingsBatch\_OutputMessage**

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

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

### 3.1.4.14.2 Elements

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

Element	Description
<b>GetRawAnalyticsTenantSettingsBatch</b>	The input data for the <b>GetRawAnalyticsTenantSettingsBatch</b> WSDL operation.
<b>GetRawAnalyticsTenantSettingsBatchResponse</b>	The result data for the <b>GetRawAnalyticsTenantSettingsBatch</b> WSDL operation.

### 3.1.4.14.2.1 GetRawAnalyticsTenantSettingsBatch

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

```
<xs:element name="GetRawAnalyticsTenantSettingsBatch"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="batchSize" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

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



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

### 3.1.4.14.2.2 GetRawAnalyticsTenantSettingsBatchResponse

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

```
<xs:element name="GetRawAnalyticsTenantSettingsBatchResponse"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q21: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
<b>AnalyticsTenantSettingsDataBatch</b>	A batch of configuration settings, plus the identifier of the tenant for the last configuration setting from the previous batch.
<b>ArrayOfAnalyticsTenantSettingsData</b>	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="tns2:guid"/>
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q21: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="q21:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
```

**AnalyticsTenantSettingsData:** The configuration settings for a tenant.

### 3.1.4.14.4 Simple Types

None.

### 3.1.4.14.5 Attributes

None.

### 3.1.4.14.6 Groups

None.

### 3.1.4.14.7 Attribute Groups

None.

### 3.1.4.15 GetRollupAnalyticsItemData

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

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

```
<wsdl:operation name="GetRollupAnalyticsItemData"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns3:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataRespon
se" message="tns3:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_GetRollupAnalyticsItemData\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_GetRollupAnalyticsItemData\_OutputMessage** WSDL message as follows:

- The protocol server determines the appropriate rollup scope as follows:
  - Tenant: the **siteId** and **scopeId** are all equal to the **tenantId**.
  - Web site: the **siteId** is the identifier of the Web site (2) and **scopeId** MUST be the empty GUID.
  - Application-specific rollup scope: the **siteId** is the identifier of the Web site (2) and **scopeId** is the application-specific rollup scope.
- The protocol server returns the aggregated usage data corresponding to that rollup scope.

### 3.1.4.15.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage</b>	The request WSDL message for the <b>GetRollupAnalyticsItemData</b> WSDL operation.
<b>IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage</b>	The response WSDL message for the <b>GetRollupAnalyticsItemData</b> WSDL operation.

#### 3.1.4.15.1.1

### **IAalyticsServiceApplication\_GetRollupAnalyticsItemData\_InputMessage**

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

The SOAP action value is:

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

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

#### 3.1.4.15.1.2

### **IAalyticsServiceApplication\_GetRollupAnalyticsItemData\_OutputMessage**

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

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

### 3.1.4.15.2 Elements

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

Element	Description
<b>GetRollupAnalyticsItemData</b>	The input data for the <b>GetRollupAnalyticsItemData</b> WSDL operation.
<b>GetRollupAnalyticsItemDataResponse</b>	The result data for the <b>GetRollupAnalyticsItemData</b> WSDL operation.

### 3.1.4.15.2.1 GetRollupAnalyticsItemData

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

```
<xs:element name="GetRollupAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**eventType:** The identifier of the event type.

**tenantId:** The identifier of the tenant.

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

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

### 3.1.4.15.2.2 GetRollupAnalyticsItemDataResponse

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

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

**GetRollupAnalyticsItemDataResult:** The aggregated usage data for the rollup scope.

### 3.1.4.15.3 Complex Types

None.

### 3.1.4.15.4 Simple Types

None.

### 3.1.4.15.5 Attributes

None.

### 3.1.4.15.6 Groups

None.

### 3.1.4.15.7 Attribute Groups

None.

### 3.1.4.16 GetSearchReport

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

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

```
<wsdl:operation name="GetSearchReport" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
  message="tns3:IAalyticsServiceApplication_GetSearchReport_InputMessage"
  xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
  wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
  message="tns3:IAalyticsServiceApplication_GetSearchReport_OutputMessage"
  xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IAalyticsServiceApplication\_GetSearchReport\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_GetSearchReport\_OutputMessage** WSDL message as follows:

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

#### 3.1.4.16.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetSearchReport_InputMessage</b>	The request WSDL message for the <b>GetSearchReport</b> WSDL operation.

Message	Description
<b>IAalyticsServiceApplication_GetSearchReport_OutputMessage</b>	The response WSDL message for the <b>GetSearchReport</b> 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
<b>GetSearchReport</b>	The input data for the <b>GetSearchReport</b> WSDL operation.
<b>GetSearchReportResponse</b>	The result data for the <b>GetSearchReport</b> WSDL operation.

#### 3.1.4.16.2.1 GetSearchReport

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

```
<xs:element name="GetSearchReport" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="reportType" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="reportDate" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="bDaily" type="xs:boolean"/>
      <xs:element minOccurs="0" name="maxRows" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**reportType:** The identifier of the search event type.

**tenantId:** The identifier of the tenant.

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

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

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

**maxRows:** The maximum number of queries to return.

### 3.1.4.16.2.2 GetSearchReportResponse

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

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

**GetSearchReportResult:** A list of the queries with occurrence counts.

### 3.1.4.16.3 Complex Types

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

Complex type	Description
<b>ArrayOfQueryReportData</b>	A list of queries with an event count.
<b>QueryReportData</b>	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

Represents a query and its event count.

```
<xs:complexType name="QueryReportData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Count" type="xs:int"/>
    <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Scope" type="tns2:guid"/>
  </xs:sequence>
</xs:complexType>
```

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

**Query:** The search query.

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

### 3.1.4.16.4 Simple Types

None.

### 3.1.4.16.5 Attributes

None.

### 3.1.4.16.6 Groups

None.

### 3.1.4.16.7 Attribute Groups

None.

### 3.1.4.17 GetTenantAnalyticsItemData

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

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

```
<wsdl:operation name="GetTenantAnalyticsItemData"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
    message="tns3:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataResponse"
    message="tns3:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```



The protocol client sends an **IAalyticsServiceApplication\_GetTenantAnalyticsItemData\_InputMessage** WSDL message, and the protocol server MUST respond with an **IAalyticsServiceApplication\_GetTenantAnalyticsItemData\_OutputMessage** WSDL message, as follows:

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

### 3.1.4.17.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage</b>	The request WSDL message for the <b>GetTenantAnalyticsItemData</b> WSDL operation.
<b>IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage</b>	The response WSDL message for the <b>GetTenantAnalyticsItemData</b> 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
<b>GetTenantAnalyticsItemData</b>	The input data for the <b>GetTenantAnalyticsItemData</b> WSDL operation.
<b>GetTenantAnalyticsItemDataResponse</b>	The result data for the <b>GetTenantAnalyticsItemData</b> WSDL operation.

### 3.1.4.17.2.1 GetTenantAnalyticsItemData

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

```
<xs:element name="GetTenantAnalyticsItemData" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**eventType:** The identifier of the event type.

**tenantId:** The identifier of the tenant.

### 3.1.4.17.2.2 GetTenantAnalyticsItemDataResponse

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

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

**GetTenantAnalyticsItemDataResult:** The aggregated usage data for the tenant.

### 3.1.4.17.3 Complex Types

None.

### 3.1.4.17.4 Simple Types

None.

### 3.1.4.17.5 Attributes

None.

### 3.1.4.17.6 Groups

None.

### 3.1.4.17.7 Attribute Groups

None.

### 3.1.4.18 SendAnalyticsUsageEvents

Sends usage events to the protocol server.

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

```
<wsdl:operation name="SendAnalyticsUsageEvents"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
    message="tns3:IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
    message="tns3: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
<b>IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage</b>	The request WSDL message for the <b>SendAnalyticsUsageEvents</b> WSDL operation.
<b>IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage</b>	The response WSDL message for the <b>SendAnalyticsUsageEvents</b> 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
<b>SendAnalyticsUsageEvents</b>	The input data for the <b>SendAnalyticsUsageEvents</b> WSDL operation.
<b>SendAnalyticsUsageEventsResponse</b>	The result data for the <b>SendAnalyticsUsageEvents</b> WSDL operation.

##### 3.1.4.18.2.1 SendAnalyticsUsageEvents

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

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

**entriesList:** A list of usage events.

##### 3.1.4.18.2.2 SendAnalyticsUsageEventsResponse

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

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

### 3.1.4.18.3 Complex Types

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

Complex type	Description
<b>AnalyticsUsageEvent</b>	A usage event.
<b>ArrayOfAnalyticsUsageEvent</b>	A list of usage events.

#### 3.1.4.18.3.1 ArrayOfAnalyticsUsageEvent

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

A list of usage events.

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

**AnalyticsUsageEvent:** A usage event.

#### 3.1.4.18.3.2 AnalyticsUsageEvent

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

A usage event.

```
<xs:complexType name="AnalyticsUsageEvent" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
    <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ScopeId" type="tns2:guid"/>
    <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SiteId" type="tns2:guid"/>
    <xs:element minOccurs="0" name="TenantId" type="tns2: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 (2).

**TenantId:** The identifier for the tenant.

**TimeStamp:** The timestamp when the event occurred.

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

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

#### 3.1.4.18.4 Simple Types

None.

#### 3.1.4.18.5 Attributes

None.

#### 3.1.4.18.6 Groups

None.

#### 3.1.4.18.7 Attribute Groups

None.

#### 3.1.4.19 UpsertRawAnalyticsTenantSettings

Updates the configuration settings for a specified tenant.

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

```
<wsdl:operation name="UpsertRawAnalyticsTenantSettings"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
    " message="tns3:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings
    Response"
    message="tns3:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an

**IAalyticsServiceApplication\_UpsertRawAnalyticsTenantSettings\_InputMessage** WSDL message, and the protocol server responds with an

**IAalyticsServiceApplication\_UpsertRawAnalyticsTenantSettings\_OutputMessage** WSDL message as follows:

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

### 3.1.4.19.1 Messages

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

Message	Description
<b>IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage</b>	The request WSDL message for the <b>UpsertRawAnalyticsTenantSettings</b> WSDL operation.
<b>IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage</b>	The response WSDL message for the <b>UpsertRawAnalyticsTenantSettings</b> 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
<b>UpsertRawAnalyticsTenantSettings</b>	The input data for the <b>UpsertRawAnalyticsTenantSettings</b> WSDL operation.
<b>UpsertRawAnalyticsTenantSettingsResponse</b>	The result data for the <b>UpsertRawAnalyticsTenantSettings</b> WSDL operation.

### 3.1.4.19.2.1 UpsertRawAnalyticsTenantSettings

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

```
<xs:element name="UpsertRawAnalyticsTenantSettings"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
        minOccurs="0" name="ts" nillable="true" type="q21:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

**ts:** The configuration settings.

### 3.1.4.19.2.2 UpsertRawAnalyticsTenantSettingsResponse

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

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

### 3.1.4.19.3 Complex Types

None.

### 3.1.4.19.4 Simple Types

None.

### 3.1.4.19.5 Attributes

None.

### 3.1.4.19.6 Groups

None.

### 3.1.4.19.7 Attribute Groups

None.

### 3.1.5 Timer Events

None.



### 3.1.6 Other Local Events

None.

## 4 Protocol Examples

### 4.1 Delete All Usage Data for a Tenant

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

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>
    <a:Action
      s:mustUnderstand="1">http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant</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/DeleteAllUsageDataForTenantResponse</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>
    <a:To s:mustUnderstand="1"
u:Id="_1">http://contoso.com:32843/9970df23629e42a39aa9383e64b537c9/SearchService.svc</a:To>
  </s:Header>
  <s:Body>
    <GetAnalyticsItemData xmlns="http://tempuri.org/">

```







```

    <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>

```

The protocol server responds as follows:

```

<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope"
xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:u="Security">
  <s:Header>

```



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

## **5 Security**

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

None.

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

None.

## 6 Appendix A: Full WSDL

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

```
<?xml version="1.0"?>
<wsdl:definitions xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:tns3="http://tempuri.org/"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl" targetNamespace="http://tempuri.org/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:types>
    <xs:schema xmlns:tns4="http://tempuri.org/Imports"
targetNamespace="http://tempuri.org/Imports">
      <xs:import
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:portType name="IAalyticsServiceApplication">
    <wsdl:operation name="SendAnalyticsUsageEvents">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEvents"
message="tns3:IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/SendAnalyticsUsageEventsResponse"
message="tns3:IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemData"
message="tns3:IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemDataResponse"
message="tns3:IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsItemsData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsData"
message="tns3:IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsItemsDataResponse"
message="tns3:IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetGlobalAnalyticsItemDataBatch">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatch"
message="tns3:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage"/>
      <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetGlobalAnalyticsItemDataBatchR
esponse"
message="tns3:IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRollupAnalyticsItemData">
      <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemData"
message="tns3:IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage"/>
```

```

    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRollupAnalyticsItemDataResponse"
message="tns3:IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetTenantAnalyticsItemData">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemData"
message="tns3:IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetTenantAnalyticsItemDataResponse"
message="tns3:IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetSearchReport">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReport"
message="tns3:IAalyticsServiceApplication_GetSearchReport_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetSearchReportResponse"
message="tns3:IAalyticsServiceApplication_GetSearchReport_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnayticsTenantSettings">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnayticsTenantSettings"
message="tns3:IAalyticsServiceApplication_GetRawAnayticsTenantSettings_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnayticsTenantSettingsResponse"
message="tns3:IAalyticsServiceApplication_GetRawAnayticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="UpsertRawAnalyticsTenantSettings">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettings"
message="tns3:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/UpsertRawAnalyticsTenantSettingsResponse"
message="tns3:IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetRawAnalyticsTenantSettingsBatch">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatch"
message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetRawAnalyticsTenantSettingsBatchResponse"
message="tns3:IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsTenantConfiguration">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfiguration"
message="tns3:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage"/>
    <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsTenantConfigurationResponse"
message="tns3:IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="GetAnalyticsEventTypeDefinition">
    <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinition"
message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage"/>

```

```

        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventTypeDefinitionR
esponse"
message="tns3:IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="GetAnalyticsEventDefinitions">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventDefinitions
" message="tns3:IAalyticsServiceApplication_GetAnalyticsEventDefinitions_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/GetAnalyticsEventDefinitions
Response"
message="tns3:IAalyticsServiceApplication_GetAnalyticsEventDefinitions_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="DeleteAllUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenant"
message="tns3:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteAllUsageDataForTenantRespo
nse" message="tns3:IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="DeleteRecommendationsDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTena
nt"
message="tns3:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteRecommendationsDataForTena
ntResponse"
message="tns3:IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage"/
>
        </wsdl:operation>
        <wsdl:operation name="DeleteStandardEventUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enant"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_InputMessage
"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForT
enantResponse"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForTenant_OutputMessag
e"/>
        </wsdl:operation>
        <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTen
ant"
message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_InputMessage"/
>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForTen
antResponse"
message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForTenant_OutputMessage"
/>
        </wsdl:operation>
        <wsdl:operation name="DeleteStandardEventUsageDataForSite">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForS
ite"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_InputMessage"/
>

```

```

        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteStandardEventUsageDataForSiteResponse"
message="tns3:IAalyticsServiceApplication_DeleteStandardEventUsageDataForSite_OutputMessage"
/>
        </wsdl:operation>
        <wsdl:operation name="DeleteCustomEventUsageDataForSite">
        <wsdl:input
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSite"
message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage"/>
        <wsdl:output
wsaw:Action="http://tempuri.org/IAalyticsServiceApplication/DeleteCustomEventUsageDataForSiteResponse"
message="tns3:IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_OutputMessage"/>
        </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="DefaultBinding_IAalyticsServiceApplication"
type="tns3: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: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/DeleteStandardEventUsageDataForTe
nant" style="document"/>
        <wsdl:input>
            <soap:body use="literal"/>
        </wsdl:input>
        <wsdl:output>
            <soap:body use="literal"/>
        </wsdl:output>
    </wsdl:operation>
    <wsdl:operation name="DeleteCustomEventUsageDataForTenant">
        <soap:operation
soapAction="http://tempuri.org/IAalyticsServiceApplication/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:message name="IAalyticsServiceApplication_DeleteAllUsageDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteAllUsageDataForTenant"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteAllUsageDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteAllUsageDataForTenantResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventUsageDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteCustomEventUsageDataForSite"/>

```

```

    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventDataForSite_OutputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteCustomEventDataForSiteResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteCustomEventDataForTenant"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteCustomEventDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteCustomEventDataForTenantResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteRecommendationsDataForTenant"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteRecommendationsDataForTenant_OutputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteRecommendationsDataForTenantResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventDataForSite_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteStandardEventDataForSite"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventDataForSite_OutputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteStandardEventDataForSiteResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventDataForTenant_InputMessage">
    <wsdl:part name="parameters" element="tns3:DeleteStandardEventDataForTenant"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_DeleteStandardEventDataForTenant_OutputMessage">
    <wsdl:part name="parameters"
element="tns3:DeleteStandardEventDataForTenantResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_InputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsEventTypeDefinition"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinition_OutputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsEventTypeDefinitionResponse"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_InputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsEventTypeDefinitions"/>
    </wsdl:message>
    <wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsEventTypeDefinitions_OutputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsEventTypeDefinitionsResponse"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_InputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsItemData"/>
    </wsdl:message>
    <wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemData_OutputMessage">
    <wsdl:part name="parameters" element="tns3:GetAnalyticsItemDataResponse"/>
    </wsdl:message>

```

```

<wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetAnalyticsItemsData"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetAnalyticsItemsData_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetAnalyticsItemsDataResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetAnalyticsTenantConfiguration"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetAnalyticsTenantConfiguration_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetAnalyticsTenantConfigurationResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetGlobalAnalyticsItemDataBatch"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetGlobalAnalyticsItemDataBatch_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetGlobalAnalyticsItemDataBatchResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetRawAnalyticsTenantSettingsBatch"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettingsBatch_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetRawAnalyticsTenantSettingsBatchResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetRawAnalyticsTenantSettings"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_GetRawAnalyticsTenantSettings_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetRawAnalyticsTenantSettingsResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetRollupAnalyticsItemData"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetRollupAnalyticsItemData_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetRollupAnalyticsItemDataResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetSearchReport_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetSearchReport"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetSearchReport_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetSearchReportResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_InputMessage">
  <wsdl:part name="parameters" element="tns3:GetTenantAnalyticsItemData"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_GetTenantAnalyticsItemData_OutputMessage">
  <wsdl:part name="parameters" element="tns3:GetTenantAnalyticsItemDataResponse"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_InputMessage">
  <wsdl:part name="parameters" element="tns3:SendAnalyticsUsageEvents"/>
</wsdl:message>
<wsdl:message name="IAalyticsServiceApplication_SendAnalyticsUsageEvents_OutputMessage">

```

```
<wsdl:part name="parameters" element="tns3:SendAnalyticsUsageEventsResponse"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_InputMessage">
  <wsdl:part name="parameters" element="tns3:UpsertRawAnalyticsTenantSettings"/>
</wsdl:message>
<wsdl:message
name="IAalyticsServiceApplication_UpsertRawAnalyticsTenantSettings_OutputMessage">
  <wsdl:part name="parameters" element="tns3:UpsertRawAnalyticsTenantSettingsResponse"/>
</wsdl:message>
</wsdl:definitions>
```

## 7 Appendix B: Full XML Schema

Schema name	Prefix	Section
<a href="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics">http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics</a>	tns	<a href="#">7.1</a>
<a href="http://schemas.microsoft.com/2003/10/Serialization/Arrays">http://schemas.microsoft.com/2003/10/Serialization/Arrays</a>	tns1	<a href="#">7.2</a>
<a href="http://schemas.microsoft.com/2003/10/Serialization/">http://schemas.microsoft.com/2003/10/Serialization/</a>	tns2	<a href="#">7.3</a>
<a href="http://tempuri.org/">http://tempuri.org/</a>	tns3	<a href="#">7.4</a>
<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01</a>	q1	<a href="#">7.5</a>
<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05</a>	q30	<a href="#">7.6</a>
<a href="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09">http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09</a>	q21	<a href="#">7.7</a>

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

### 7.1

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

```
<?xml version="1.0"?>
<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:import namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
  <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="EventOptions">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:enumeration value="None" />
        </xs:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
</xs:schema>
```

```

        <xs:enumeration value="AllowAnonymousWrite"/>
    </xs:restriction>
</xs:simpleType>
</xs:list>
</xs:simpleType>
<xs:element name="EventOptions" nillable="true" type="tns:EventOptions"/>
<xs:simpleType name="EventRollups">
    <xs:list>
        <xs:simpleType>
            <xs:restriction base="xs:string">
                <xs:enumeration value="SiteSubscriptionId"/>
                <xs:enumeration value="SiteId"/>
                <xs:enumeration value="ScopeId"/>
            </xs:restriction>
        </xs:simpleType>
    </xs:list>
</xs:simpleType>
<xs:element name="EventRollups" nillable="true" type="tns:EventRollups"/>
</xs:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema 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: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="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:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:tns2="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="tns2:char"/>
<xs:simpleType name="char">
  <xs:restriction base="xs:int"/>
</xs:simpleType>
<xs:element name="duration" nillable="true" type="tns2: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="tns2:guid"/>
<xs:simpleType name="guid">
  <xs:restriction base="xs:string">
    <xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
<xs:attribute name="FactoryType" type="xs:QName"/>
<xs:attribute name="Id" type="xs:ID"/>
<xs:attribute name="Ref" type="xs:IDREF"/>
</xs:schema>

```

## 7.4 http://tempuri.org/ Schema

```

<?xml version="1.0"?>
<xs:schema elementFormDefault="qualified" targetNamespace="http://tempuri.org/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="SendAnalyticsUsageEvents">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
minOccurs="0" name="entriesList" nillable="true" type="q1:ArrayOfAnalyticsUsageEvent"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="SendAnalyticsUsageEventsResponse">
    <xs:complexType>
      <xs:sequence/>
    </xs:complexType>
  </xs:element>
  <xs:element name="GetAnalyticsItemData">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="eventType" type="xs:int"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>

```

```

        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
            <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
        <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="scopeId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
            <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsResult" nillable="true"
type="q21:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="UpsertRawAnalyticsTenantSettings">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="ts" nillable="true" type="q21: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="lastTenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetRawAnalyticsTenantSettingsBatchResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetRawAnalyticsTenantSettingsBatchResult" nillable="true"
type="q21:AnalyticsTenantSettingsDataBatch"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsTenantConfiguration">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsTenantConfigurationResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
minOccurs="0" name="GetAnalyticsTenantConfigurationResult" nillable="true"
type="q21:AnalyticsTenantConfig"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetAnalyticsEventTypeDefinition">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
            <xs:element xmlns:q30="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/05"
minOccurs="0" name="filter" type="q30: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="eventType" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteStandardEventUsageDataForTenantResponse">
  <xs:complexType>
    <xs:sequence/>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteCustomEventUsageDataForTenant">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2: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:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="tenantId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="siteId" type="tns2:guid"/>
      <xs:element xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
minOccurs="0" name="appEventTypeId" type="tns2:guid"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

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

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:q1="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
elementFormDefault="qualified"
targetNamespace="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/01"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="ArrayOfAnalyticsUsageEvent">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsUsageEvent"
nillable="true" type="q1:AnalyticsUsageEvent"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsUsageEvent" nillable="true"
type="q1:ArrayOfAnalyticsUsageEvent"/>
  <xs:complexType name="AnalyticsUsageEvent">
    <xs:sequence>
      <xs:element minOccurs="0" name="CustomData" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
      <xs:element minOccurs="0" name="ItemId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="ScopeId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="SessionId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="SiteId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="TenantId" type="tns2: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>
  <xs:element name="AnalyticsUsageEvent" nillable="true" type="q1:AnalyticsUsageEvent"/>
  <xs:complexType name="AnalyticsItemData">
    <xs:sequence>
      <xs:element minOccurs="0" name="CurrentDate" type="xs:dateTime"/>
      <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="EventTypeId" 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:sequence>
  </xs:complexType>

```

```

        <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="tns2:guid"/>
        <xs:element minOccurs="0" name="SiteId" type="tns2:guid"/>
        <xs:element minOccurs="0" name="TenantId" type="tns2:guid"/>
        <xs:element minOccurs="0" name="TotalHits" type="xs:int"/>
        <xs:element minOccurs="0" name="TotalUniqueUsers" type="xs:int"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsItemData" nillable="true" type="q1:AnalyticsItemData"/>
<xs:complexType name="ArrayOfAnalyticsItemData">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsItemData"
nillable="true" type="q1:AnalyticsItemData"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfAnalyticsItemData" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
<xs:complexType name="ContinuationTokenItemData">
    <xs:sequence>
        <xs:element minOccurs="0" name="EndPartitionId" nillable="true"
type="xs:base64Binary"/>
        <xs:element minOccurs="0" name="ItemHash" type="xs:int"/>
        <xs:element
xmlns: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="StartPartitionId" nillable="true"
type="xs:base64Binary"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ContinuationTokenItemData" nillable="true"
type="q1:ContinuationTokenItemData"/>
<xs:complexType name="AnalyticsItemDataBatch">
    <xs:sequence>
        <xs:element minOccurs="0" name="Items" nillable="true"
type="q1:ArrayOfAnalyticsItemData"/>
        <xs:element minOccurs="0" name="Token" nillable="true"
type="q1:ContinuationTokenItemData"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsItemDataBatch" nillable="true"
type="q1:AnalyticsItemDataBatch"/>
<xs:complexType name="ArrayOfQueryReportData">
    <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="QueryReportData" nillable="true"
type="q1:QueryReportData"/>
    </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfQueryReportData" nillable="true"
type="q1:ArrayOfQueryReportData"/>
<xs:complexType name="QueryReportData">
    <xs:sequence>
        <xs:element minOccurs="0" name="Count" type="xs:int"/>
        <xs:element minOccurs="0" name="Query" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="Scope" type="tns2:guid"/>
    </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="tns2:guid"/>
        <xs:element minOccurs="0" name="ApplicationName" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="EventName" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="EventTypeId" type="xs:int"/>
        <xs:element
          xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"
          minOccurs="0" name="Options" type="tns:EventOptions"/>
        <xs:element minOccurs="0" name="RecentPopularityTimeframe" type="xs:int"/>
        <xs:element minOccurs="0" name="RecommendationWeight" type="xs:int"/>
        <xs:element minOccurs="0" name="RelevanceWeight" type="xs:int"/>
        <xs:element
          xmlns: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="tns2:guid"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="AnalyticsEventTypeDefinition" nillable="true"
      type="q1:AnalyticsEventTypeDefinition"/>
    <xs:complexType name="ArrayOfAnalyticsEventTypeDefinition">
      <xs:sequence>
        <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsEventTypeDefinition"
          nillable="true" type="q1:AnalyticsEventTypeDefinition"/>
      </xs:sequence>
    </xs:complexType>
    <xs:element name="ArrayOfAnalyticsEventTypeDefinition" nillable="true"
      type="q1:ArrayOfAnalyticsEventTypeDefinition"/>
    <xs:import
      namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Search.Analytics"/>
    <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/">
    <xs:import namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
  </xs:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:q30="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:restriction>
      </xs:simpleType>
    </xs:list>
  </xs:simpleType>
  <xs:element name="AnalyticsEventTypes" nillable="true" type="q30:AnalyticsEventTypes"/>
</xs:schema>

```

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

```

<?xml version="1.0"?>
<xs:schema xmlns:q21="http://www.microsoft.com/sharepoint/search/KnownTypes/2011/09"
  xmlns:tns2="http://schemas.microsoft.com/2003/10/Serialization/"
  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="q21:AnalyticsTenantSettingOptions"/>
      <xs:element minOccurs="0" name="TenantId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="Version" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsTenantSettingsData" nillable="true"
type="q21: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="q21:AnalyticsTenantSettingOptions"/>
  <xs:complexType name="AnalyticsTenantSettingsDataBatch">
    <xs:sequence>
      <xs:element minOccurs="0" name="LastTenantId" type="tns2:guid"/>
      <xs:element minOccurs="0" name="Settings" nillable="true"
type="q21:ArrayOfAnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="AnalyticsTenantSettingsDataBatch" nillable="true"
type="q21:AnalyticsTenantSettingsDataBatch"/>
  <xs:complexType name="ArrayOfAnalyticsTenantSettingsData">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="AnalyticsTenantSettingsData"
nillable="true" type="q21:AnalyticsTenantSettingsData"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfAnalyticsTenantSettingsData" nillable="true"
type="q21:ArrayOfAnalyticsTenantSettingsData"/>
  <xs:complexType name="AnalyticsTenantConfig">
    <xs:sequence>

```



```
    <xs:element minOccurs="0" name="Settings" nillable="true"
type="q21:AnalyticsTenantSettingsData"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="AnalyticsTenantConfig" nillable="true" type="q21:AnalyticsTenantConfig"/>
</xs:schema>
```

## 8 Appendix C: Product Behavior

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

- Microsoft SharePoint Server 2013

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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