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EventSubscription Service SD

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# EventSubscription Service SD

# 1. Service Description Overview

The EventSubscription Service provides 1 interface to subscribe to events, and 1 interfaces unsubscribe from events.

## 2. Abstract Interfaces

This Service provides two functionalities.

### 2.1. Subscribe

This request has a payload called EventFilter. The EventFilter must contain the Subscriber ArrowheadSystem and the event type. This way new events (with the correct type) can be directed to the Subscriber. Additionally, the payload contains fields that can narrow down the events the Subscriber should receive even more. For example the request can specify the list of event sources (ArrowheadSystems) the Subscriber is interested in.

### 2.2. Unsubscribe

Subscriber should invoke this method to stop receiving a certain event type.

## 3. Abstract Information Model

An EventFilter contains the following information, as presented in Table 1.

**Table 1 EventFilter type description**

Field	Description
EventType: String	Event type, similar to topics in MQTT.
Consumer: ArrowheadSystem	The Subscriber ArrowheadSystem, that will consume the new events.
Sources: List<ArrowheadSystem>	List of ArrowheadSystem the Subscriber wants to receive events from.

StartDate: LocalDateTime	If set, the Subscriber wants to receive events with timestamps after this date-time.
EndDate: LocalDateTime	If set, the Subscriber wants to receive events with timestamps before this date-time.
FilterMetadata: Map<String, String>	Metadata about the events, which can be used for further filtering.
NotifyUri: String	The URL subpath where the Event Handler should sent the new events to.
MatchMetadata: Boolean	Should the Event Handler filter events based on the metadata.

## 4. Non-functional Requirements

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## 5. Revision history

### 5.1. Amendments

No.	Date	Version	Subject of Amendments	Author
1	2018-05-22	G4.0	Initial	Zoltán Umlauf
2	2019-12-03	G4.1.3	Update	Gabor Majoros

### 5.2. Quality Assurance

No.	Date	Version	Approved by
1			
2			