



Comprehensive Video Analytics Solutions

innoVi WebHook API Document



1. General

A WebHook (also called a web callback or HTTP push API) is a way for an application to provide 3rd party applications with real-time information. It is unlike typical APIs whereby the 3rd party application needs to poll for data very frequently in order to receive information in real-time. This makes WebHooks much more efficient for both the originating application and the receiving 3rd party application.

2. Revisions

The following table lists the document versions and major changes:

Version	Date	Change
1.2	Dec. 2017	Original document
1.3	29/1/2018	Support additional variables: <ul style="list-style-type: none">• Camera folder• Camera Name
1.4	17/1/2019	Support additional variables: <ul style="list-style-type: none">• Object sub-type• Description Support additional rule type Support additional object type

3. innoVi WebHook

innoVi WebHook API is designed to push events detected in real-time to 3rd party applications by invoking HTTP POST requests to the endpoint provided by the 3rd party application. The innoVi WebHook API is designed to support many 3rd party applications by providing a highly customized data transformation mechanism (using a template engine) to enable the user to design the data structure in line with their needs, rather than re-writing their existing HTTP endpoint (which is not possible in cases where the user employs a closed commercial package without the ability to modify the API).

4. Using innoVi's WebHook API

The user can use innoVi's default WebHook definitions or customize the data according to their needs:

Log into your innoVi account and open the Account's 'Settings' tab, select 'WebHook' as Alarm Automation Software:

Alarm Automation Software: WebHook

URL:

Headers:

New key	value	+
content-type:application/json		

Body:

```
{
  "event_id": "<%= eventId %>",
  "camera_id": "<%= cameraId %>",
  "external_id": "<%= externalId %>",
  "rule_id": "<%= ruleId %>",
  "object_type": "<%= objectType %>",
  "rule_type": "<%= ruleType %>",
  "event_time": "<%= eventTimestampIDD-MM-YYYY hh:mm:ss%>".
```

Test

Enable

Configure the following data:

4.1. URL

You must provide the HTTP URL endpoint to which innoVi will submit POST requests.

Note: Both HTTP and HTTPS URLs are supported. HTTPS is recommended for security reasons.

4.2. HTTP Headers

You may provide a list of HTTP headers that will be added to the POST request. By default, the following header is used:

Content-Type: application/json

The default charset is utf-8.

If you would like to change the default content type (e.g. sending XML instead of JSON), you should override the default content-type header.

The most common case is adding a security token so that the 3rd-party application can identify the caller as innoVi (and not a DDOS attack) for example:

X-Security-Token: ukjKbvoDnEzrQ8XqHiwn9M2sQ1hUTcMEfjYyhJtd

In this case, add 'X-Security-Token' as New key and 'ukjKbvoDnEzrQ8XqHiwn9M2sQ1hUTcMEfjYyhJtd' as Value.

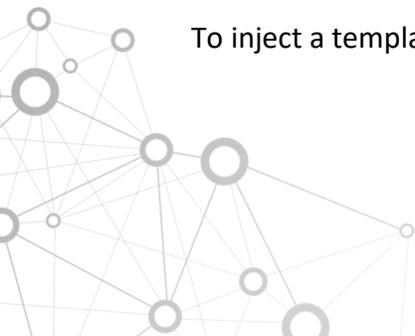
4.3. HTTP Body

The user can use a template to customize the HTTP body. Any format can be used, with the user's choice of content (text). Template variables (place holders) can be inserted for event specific data. These will be replaced by the system with event specific data at run-time.

List of Template Variables

Variable	Type	Description
<i>eventId</i>	Number	The event unique id
<i>cameraId</i>	Number	The camera unique id
<i>externalId</i>	String	Camera's external id as defined by the user
<i>cameraFolder</i>	String	Camera's folders, separated by commas
<i>cameraName</i>	String	Camera's name
<i>ruleId</i>	Number	The event rule id
<i>objectType</i>	String	The object detected by the event [Person Vehicle Bicycle Motorcycle Unknown] Note: additional object types may be added in the future
<i>objectSubType</i>	String	Sub type (if exists) of the object detected by the event. This field is applicable only in case of objectType=Vehicle And in this case may contain one of the following values: [Car Bus Truck]
<i>ruleType</i>	String	The breached rule [MovingInArea LineCrossing Occupancy Stopped Anomaly] Note: additional rule types may be added in the future
<i>eventTimestamp format</i>	String	Event time represented in the format specified by the user. The format is ISO 8601 compliant string specified after the pipe sign (). If the pipe and format are not specified, the default format is a number representing the unix epoch timestamp (the original value)
<i>imageUrl</i>	String	Event image URL (including object's bounding box)
<i>image</i>	String	Event image encoded as Base64 (including object's bounding box)
<i>clipUrl</i>	String	Event clip URL
<i>metadata</i>	Array	Object metadata in JSON format
<i>rois</i>	Array	Rule's regions of interest
<i>description</i>	String	Textual description of the event

To inject a template variable, use the syntax `<%= variable_name %>` in the template text.



Example

The following template:

```
{
  "source_id": "<%= cameraId %>",
  "event_id": "<%= eventId %>",
  "object_type": "<%= objectType %>",
  "rule_type": "<%= ruleType %>",
  "event_time": "<%= eventTimestamp|DD/MM/YYYY hh:mm:ss A %>",
  "event_image": "<%= imageUrl %>",
  "event_clip": "<%= clipUrl %>"
}
```

Will result in the following example:

```
{
  "source_id": "246",
  "event_id": "1639",
  "object_type": "Vehicle",
  "rule_type": "MovingInArea",
  "event_time": "08/12/2017 04:35:20 PM",
  "event_image": "http://some/domain/image.jpg",
  "event_clip": "http://some/domain/clip.mp4"
}
```

Default Template

By default, innoVi shall use the following template:

```
{
  "event_id": <%= eventId %>,
  "camera_id": <%= cameraId %>,
  "external_id": "<%= externalId %>",
  "rule_id": <%= ruleId %>,
  "object_type": "<%= objectType %>",
  "rule_type": "<%= ruleType %>",
  "event_time": "<%= eventTimestamp|DD-MM-YYYY hh:mm:ss%>",
  "event_image": "<%= imageUrl %>",
  "event_clip": "<%= clipUrl %>",
  "meta_data": <%= metadata %>,
  "rois": <%= rois %>
}
```



Comprehensive Video Analytics Solutions

Notice

Copyright © 2003-2019 by Agent Video Intelligence Ltd.

Agent Video Intelligence Ltd. holds the copyright to this manual. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without prior written consent from Agent Video Intelligence Ltd.

Disclaimer

The information in this manual was accurate and reliable at the time of its release for this specific version. However, Agent Video Intelligence Ltd. reserves the right to change the specifications of the product described in this manual without prior notice at any time. The customer should note that in the field of video there are a number of patents held by various parties. It is the responsibility of the user to assure that a particular implementation does not infringe on those patents. Agent Video Intelligence Ltd. does not indemnify the user from any patent or intellectual property infringement.

Trademarks

Agent Vi™, Vi™, innoVi™ are trademarks of Agent Video Intelligence Ltd.

All other proprietary names mentioned in this manual are the trademarks of their respective owners.

November 2019

USA: +1-855-AgentVi (+1-855-2436884) EMEA: +972-72-220-1500 S.E. Asia: +65-6813-2064

For more information, visit: www.agentvi.com or email: sales@agentvi.com