



## CHAPTER 5

# Event Commands

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Table 5-1 provides a summary of the event commands. Each command is described in detail in the section that is listed.

**Table 5-1**      **Event Command Summary**

<b>Name and Reference</b>	<b>Description</b>
<a href="#">Event Setup, page 5-2</a>	Sets up an event in VSMS.
<a href="#">Enable Event, page 5-9</a>	Enables an event previously set up or disabled in VSMS.
<a href="#">Disable Event, page 5-10</a>	Disables an event previously set up or enabled in VSMS.
<a href="#">Remove Event, page 5-11</a>	Removes an event previously set up in VSMS.
<a href="#">Trigger VSMS Event, page 5-13</a>	Triggers an event configured in VSMS.
<a href="#">Event Clip Start/Stop, page 5-18</a>	Starts or stops event-based clips.
<a href="#">Get Event Information, page 5-19</a>	Retrieves event information.

## Event Setup

`http://host/event.bwt?command=setup&data=xmlData`

**Purpose** Sets up an event in VSMS.

<b>Required Fields</b>	<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running.  By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
	<b>command=setup</b>	Setup command. The <b>setup</b> keyword associates the command with a setup action. The <b>setup</b> keyword is a reserved value.
	<b>data=xmlData</b>	XML data comprised of XML elements and values. The structure of the XML data is as follows:  <pre>&lt;xml&gt;   &lt;event&gt;     &lt;name&gt;&lt;/name&gt;     &lt;ipdevice&gt;&lt;/ipdevice&gt;     &lt;srctype&gt;&lt;/srctype&gt;     &lt;notifyURL&gt;&lt;/notifyURL&gt;     &lt;action&gt;       &lt;clip/&gt;       &lt;accelerate/&gt;     &lt;/action&gt;     &lt;cliphost&gt;       &lt;localhost/&gt;     &lt;/cliphost&gt;     &lt;trigger&gt;       &lt;input&gt;&lt;/input&gt;       &lt;state&gt;&lt;/state&gt;       &lt;type&gt;&lt;/type&gt;       &lt;notificationtype&gt;&lt;/notificationtype&gt;       &lt;maxevents&gt;&lt;/maxevents&gt;       &lt;daystolive&gt;&lt;/daystolive&gt;       &lt;framerate&gt;&lt;/framerate&gt;       &lt;acclframerate&gt;&lt;/acclframerate&gt;       &lt;duration&gt;&lt;/duration&gt;       &lt;prebuffer&gt;&lt;/prebuffer&gt;       &lt;postbuffer&gt;&lt;/postbuffer&gt;       &lt;proxysource&gt;&lt;/proxysource&gt;     &lt;/trigger&gt;   &lt;/event&gt; &lt;/xml&gt;</pre>

For more information about the XML elements, see [Table 5-2](#).

**Table 5-2 Event Setup XML Elements**

XML Element	Description
xml	Start XML parsing element; contains the event element.
event	Start event data element; contains the name, ipdevice, srctype, notifyurl, action, cliphost, and trigger elements.

**Table 5-2 Event Setup XML Elements**

XML Element	Description
name	<p>The name for this event. The name element may contain 1 to 32 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p>
ipdevice	<p>Can be one of the following:</p> <ul style="list-style-type: none"> <li>• Format: [IP address] IP address of device for a running proxy where the trigger is set up. This will enable the triggers from the event driver of the device.</li> <li>• Format: [unique ID] for soft triggers.</li> </ul> <p>Each event must be setup with a unique IP address or ID. Contains no other elements.</p>
srctype	<p>Specifies the type of video server to set up the trigger; contains no other elements.</p> <p><b>Note</b> Sending soft triggers from other devices or applications is supported by the generic &lt;srctype&gt;. Use input of Ø with a unique ID for ipdevice.</p>
notifyurl	<p>Format: <b>http://host/handlerPath</b>. The notification URL to use when an event trigger is received by VSMS, and if archive clips are requested, after archives are saved; contains no other elements.</p> <p>Use the notifyurl element in conjunction with the notificationtype element. Valid values for the notificationtype element can be one of the following:</p> <ul style="list-style-type: none"> <li>• <b>0</b>—An event notification is sent.</li> <li>• <b>2</b>—An event notification and after event clip saved notification are sent.</li> </ul> <p>For more information, see the <a href="#">“Event Setup Notification” section on page 5-7</a>.</p>
action	<p>Start action data element; contains the clip-ondemand, clip, and accelerate elements.</p> <p><b>Note</b> If the action element is not specified but notificationtype is set to 2 (record event triggered archives), event clips are still recorded.</p>
clip	<p>Tag Format: &lt;clip/&gt;. Creates a clip when an event occurs.</p> <p><b>Note</b> The notificationtype must be set to 2 (record event triggered archives).</p>
accelerate	<p>Tag Format: &lt;accelerate/&gt;. Accelerates the event archive recording framerate at the event for the postbuffer time.</p> <p><b>Note</b> The notificationtype must be set to 2 (record event triggered archives).</p>
cliphost	<p>Start cliphost data element; contains localhost element.</p> <p><b>Note</b> If no cliphost element is specified, then the event clip is saved to local host.</p>

Table 5-2 Event Setup XML Elements

XML Element	Description
localhost	<p>Tag Format: &lt;localhost/&gt;. Event clip is saved to the local host.</p> <p>Saves the event clip directly to the repository mount location. Only one mount will be recognized. If no repository is specified, an error will be generated when an event clip is attempted. This repository will also serve as a workspace area for remote event clip generation.</p> <p><b>Note</b> The clip repository option must be chosen from the Clipping drop-down menu on the VSMC Console page.</p>
trigger	Start trigger data element; contains the input, state, type, notificationtype, maxevents, daystolive, framerate, acclframerate, duration, prebuffer, postbuffer, and proxysource elements.
input	<p>Range: [0] Reserved for generic trigger input number. Make sure to pair this with a unique ID for the ipdevice value.</p> <p>Range: [1-6] Trigger input number on the device.</p> <p>Range: [1-10] Window number for motion detection.</p>
state	Reserved values: [rising   falling] Specifies whether the circuit for the event trigger mechanism is open (rising) or closed (falling).
type	Reserved values: [motion   alarm] Specifies whether the type of event is motion detection or trigger.
notificationtype	<p>Reserved values: [0   1   2   3]</p> <p>0: Only track events, no archives</p> <p>1: Unsupported</p> <p>2: Record event triggered archives (should have action type as clip)</p> <p>3: Unsupported</p>
maxevents	Format: [integer] Maximum number of events recorded per month.
daystolive	<p>Format: [integer] (default=0) Number of days from the date archive stops the archive will be stored before system removal.</p> <p>For permanent storage set daystolive to Ø.</p>
framerate	Range: [0.001-30](proxy frame rate) Maximum number of frames per second transmitted to record proxy.
acclframerate	<p>Range: [0.001-30] Accelerated archive frame rate that the event is recorded at.</p> <p><b>Note</b> The accelerated archive frame rate must be less than or equal to the proxy frame rate.</p>
duration	<p>Format: [integer] Duration of the event archive loop in seconds.</p> <p><b>Note</b> The only supported duration is 300 seconds.</p>
prebuffer	Format: [integer] (default=10 seconds) The number of seconds before the event that will be included in the event archive clip.

**Table 5-2** Event Setup XML Elements

XML Element	Description
postbuffer	Format: [integer] (default=30 seconds) The number of seconds after the event that will be included in the event archive clip.
proxysource	<p>Proxy name for event to archive. Each triggered event can record up to 10 different proxies. The proxysource element may contain 1 to 64 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p> <p><b>Note</b> The proxy must exist before adding an event trigger.</p>

**Return Values**

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

**Usage Guidelines**

When an event is set up using an IP address (device trigger), the device inputs are used to trigger the event through the event driver.

The event command uses the generic srctype and an <input> of Ø with a unique <ipdevice> value to set up events for systems not directly related to video encoding to send soft triggers. The <ipdevice> value must be unique as it used by VSMS internally as part of the unique key (input and ipdevice) for events. Then configure the trigger to send the correct URL notification to VSMS.

**Examples**

The following is an example of the XML data that is specified as an HTTP command to the VSM:

```
<xml>
  <event>
    <name>test_event</name>
    <ipdevice>1234567</ipdevice>
    <srctype>optelecom_c50</srctype>
    <trigger>
      <input>0</input>
      <state>rising</state>
      <type>alarm</type>
      <notificationtype>0</notificationtype>
    </trigger>
  </event>
</xml>
```

The above XML data is specified as an HTTP command to VSMS as follows:

```
http://vsms.cisco.com/event.bwt?command=setup&data=<xml><event><name>test_event</name><ipdevice>1234567</ipdevice><srctype>optelecom_c50</srctype><trigger><input>0</input><state>ring</state><type>alarm</type><notificationtype>0</notificationtype></trigger></event></xml>
```

## Event Setup Notification

### Purpose

When an event is set up with a notificationtype element value of 2, event setup notification data is sent to the specified notification URL.



### Note

No event setup notification data is sent when an event is set up with a notificationtype element value of 0.

```
notifyUrl?data=xmlData
```

### Required Fields

**notifyUrl** The notification URL specified by an Event Setup command. For more information, see the notifyurl XML element description in [Table 5-2 on page 5-2](#).

**data=xmlData** XML data comprised of XML elements and values. The structure of the XML data is as follows:

```
<xml>
  <ConfigNotification>
    <Host></Host>
    <VideoServer></VideoServer>
    <TriggerInput></TriggerInput>
    <ProxyName></ProxyName>
    <ArchiveName></ArchiveName>
    <StartUTC></StartUTC>
    <Duration></Duration>
    <StopMode></StopMode>
    <Type></Type>
  </ConfigNotification>
</xml>
```

For more information about the XML elements, see [Table 5-3](#).

**Table 5-3 Event Setup Notification XML Elements**

XML Element	Description
xml	Start XML parsing element; contains the TriggerNotification element.
ConfigNotification	Event configuration (setup) notification element. Contains the Host, VideoServer, TriggerInput, ProxyName, ArchiveName, StartUTC, Duration, StopMode, and Type elements.
Host	Format: [hostname.domain   IP address] The web address of the host where VSMS is running. VSMS runs on port 80 by default.

**Table 5-3 Event Setup Notification XML Elements**

XML Element	Description
VideoServer	Name of the event. The event name may contain 1 to 256 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul>
TriggerInput	Range: [0] Generic Trigger input number. Range: [1-6] Trigger input number on device. Range: [1-10] Window number for motion detection.
ProxyName	The proxy name for the event. The ProxyName element may contain 1 to 256 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1. <b>Note</b> The proxy must exist before adding an event trigger.
ArchiveName	The archive name for this event. The ArchiveName element may contain 1 to 256 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.
StartUTC	Format: [UTC milliseconds] Date of the event in UTC milliseconds. This date is when VSMS received notification of the event from the encoder.
Duration	Format: [integer] Duration of the event archive in seconds. <b>Note</b> The only supported duration is 300 seconds.
StopMode	Reserved values: [auto   manual] Specifies whether the clip is auto-stopped or manually stopped.
Type	Reserved values: [motion   alarm]. Specifies whether the type of event is motion detection or trigger.

## Enable Event

`http://host/event.bwt?command=enable&name=eventName`

### Purpose

Enables an event previously set up or disabled in VSMS.

For more information about setting up or disabling an event, see [Event Setup, page 5-2](#) or [Disable Event, page 5-10](#).

### Required Fields

<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
<b>command=enable</b>	Enable event command. The <b>enable</b> keyword associates the command with an enable event action. The <b>enable</b> keyword is a reserved value.
<b>name=eventName</b>	The name for the event to be enabled. The <i>eventName</i> value may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.

### Return Values

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

### Usage Guidelines

Enabling an event is accomplished by sending a HTTP request to VSMS with the event name to be enabled. This command enables the specified event set up in VSMS.

### Examples

The following example enables the event named test:

```
http://vsms.cisco.com/event.bwt?command=enable&name=test
```



## Disable Event

**`http://host/event.bwt?command=disable&name=eventName`**

### Purpose

Disables an event previously set up or enabled in VSMS.

For more information about setting up or enabling an event, see [Event Setup, page 5-2](#) or [Enable Event, page 5-9](#).

### Required Fields

<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
<b>command=disable</b>	Disable event command. The <b>disable</b> keyword associates the command with an disable event action. The <b>disable</b> keyword is a reserved value.
<b>name=eventName</b>	The name for the event to be disabled. The <i>eventName</i> value may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.

### Return Values

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

### Usage Guidelines

Disabling an event is accomplished by sending a HTTP request to VSMS with the event name to be disabled. This command disables the specified event set up in VSMS.

### Examples

The following example disables the event named test:

```
http://vsms.cisco.com/event.bwt?command=disable&name=test
```

## Remove Event

`http://host/event.bwt?name=eventName&command=remove&killarchive=boolValue`

### Purpose

Removes an event previously set up in VSMS.

For more information about setting up an event, see [Event Setup, page 5-2](#).

### Required Fields

<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
<b>command=remove</b>	Remove event command. The <b>remove</b> keyword associates the command with a remove event action. The <b>remove</b> keyword is a reserved value.
<b>name=eventName</b>	The name for the event to be removed. The <i>eventName</i> value may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.

### Optional Fields

<b>killarchive=boolVal</b>	Specifies whether the buffered event archive is removed when the event is removed. The <i>killVal</i> value is one of the following boolean values: <ul style="list-style-type: none"> <li>• <b>true</b>—The buffered event archive is stopped and removed from storage.</li> <li>• <b>false</b>—The buffered event archive is shelved after the event is removed.</li> </ul> The default value is true.
----------------------------	--

### Return Values

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

### Usage Guidelines

Removing an event set-up is accomplished by sending an HTTP request to VSMS with the event name to be removed. Because events require a unique name even for the same device, remove requests do not need the trigger parameter. The command removes the event set up for the trigger only in VSMS.

**Examples**

The following example removes the event named test:

```
http://vsmc.cisco.com/event.bwt?command=remove&name=test
```

## Trigger VSMS Event

`http://host/event.bwt?command=event&name=triggerName&nolog=1`

**Purpose** Triggers an event configured in VSMS.

<b>Required Fields</b>	<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
	<b>command=event</b>	Send event command. The <b>event</b> keyword associates the command with an send event action. The <b>event</b> keyword is a reserved value.
	<b>name=triggerName</b>	The name for the event. The <i>triggerName</i> element may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.
	<b>nolog=1</b>	specifies that clips will have no entry in media server database (repos.db).

**Return Values** A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

### Usage Guidelines

When an event occurs, the device sends an HTTP request to notify VSMS that an event has occurred. The HTTP request contains parameters for the event name. This command can also be used to manually tag events. Since event names are required to be unique on a given host, input numbers are not required.

VSMS sends a notification if the <notifyurl> is specified in the XML when the event was set up. Along with the notify URL, the following XML data, defined in the event trigger setup, is sent to a host. This URL must have a handler running that parses the XML data and can react to the notification.

When event archives are requested for this event setup, the notification is sent only after each archive clip has been created. That is, a separate notification is sent for each event archive clip after it has been saved.

### Examples

The following example notifies VSMS that an event named test has occurred on a trigger device.

```
http://host/event.bwt?command=event&name=test&nolog=1
```

## Event Trigger Notification

### Purpose

When an event is set up with a notificationtype element value of 0 or 2, and an event is triggered, event trigger notification information is sent to the specified notification URL.

*NnotifyUrl?info=xmlData*

### Required Fields

<i>notifyUrl</i>	The notification URL specified by an Event Setup command. For more information, see the notifyurl XML element description in <a href="#">Table 5-2 on page 5-2</a> .
<i>data=xmlData</i>	XML data comprised of XML elements and values. The structure of the XML data is as follows:  <pre>&lt;xml&gt;   &lt;TriggerNotification&gt;     &lt;Host&gt;&lt;/Host&gt;     &lt;EventUTC&gt;&lt;/EventUTC&gt;     &lt;Name&gt;&lt;/Name&gt;     &lt;IpDevice&gt;&lt;/IpDevice&gt;     &lt;SrcType&gt;&lt;SrcType&gt;     &lt;TriggerInput&gt;&lt;TriggerInput&gt;     &lt;ProxyList&gt;       &lt;ProxyName&gt;&lt;/ProxyName&gt;     &lt;/ProxyList&gt;     &lt;ArchiveList&gt;       &lt;ArchiveName&gt;&lt;/ArchiveName&gt;     &lt;/ArchiveList&gt;     &lt;/TriggerNotification&gt;   &lt;/xml&gt;</pre>

For more information about the XML elements, see [Table 5-5](#).

**Table 5-4** Event Trigger Notification XML Elements

XML Element	Description
xml	Start XML parsing element; Contains the TriggerNotification element.
TriggerNotification	Event trigger notification element. Contains the Host, EventUTC, Name, IpDevice, SrcType, TriggerInput, ProxyList, and ArchiveList elements.
Host	Format: [hostname.domain   IP address] The web address of the host where VSMS is running. VSMS runs on port 80 by default.
EventUTC	Format: [UTC milliseconds] Date of the event in UTC milliseconds. This date is when VSMS received notification of the event from the encoder.

**Table 5-4 Event Trigger Notification XML Elements**

XML Element	Description
Name	<p>The name of this event as defined in Event Setup as &lt;name&gt;. The name may contain 1 to 32 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p>
IpDevice	<p>Format: [hostname.domain   IP address] The web address where the trigger is set up; contains no other elements.</p>
SrcType	<p>Specifies the type of video server to set up the trigger.</p> <p><b>Note</b> Sending soft triggers from other devices or applications is supported by the generic &lt;srctype&gt;. Use input of Ø with a unique ID for ipdevice.</p>
TriggerInput	<p>Range: [0] Generic Trigger input number.  Range: [1-6] Trigger input number on device.  Range: [1-10] Window number for motion detection.</p>
ProxyList	<p>Proxy list element. Contains the ProxyName element.</p>
ProxyName	<p>The proxy name for the event. The ProxyName element may contain 1 to 256 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p> <p><b>Note</b> The proxy must exist before adding an event trigger.</p>
ArchiveList	<p>Archive list element. Contains the ArchiveName element.</p>
ArchiveName	<p>The archive name for this event. The ArchiveName element may contain 1 to 256 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p>

## Event Clip Creation Notification

*notifyUrl?data=xmlData*

### Purpose

When an event is set up with a notificationtype element value of 2, and an event is triggered, event clip creation notification data is sent to the specified notification URL.

### Required Fields

<i>notifyUrl</i>	The notification URL specified by an Event Setup command. For more information, see the notifyurl XML element description in <a href="#">Table 5-2 on page 5-2</a> .
<i>info=xmlData</i>	XML data comprised of XML elements and values. The structure of the XML data is as follows: <pre>&lt;xml&gt;   &lt;TriggerNotification&gt;     &lt;Host&gt;&lt;/Host&gt;     &lt;VideoServer&gt;&lt;/VideoServer&gt;     &lt;TriggerInput&gt;&lt;/TriggerInput&gt;     &lt;ProxyName&gt;&lt;/ProxyName&gt;     &lt;ArchiveName&gt;&lt;/ArchiveName&gt;     &lt;StartUTC&gt;&lt;/StartUTC&gt;     &lt;Duration&gt;&lt;/Duration&gt;     &lt;StopMode&gt;&lt;/StopMode&gt;     &lt;Type&gt;&lt;/Type&gt;   &lt;/TriggerNotification&gt; &lt;/xml&gt;</pre> <p>For more information about the XML elements, see <a href="#">Table 5-4</a>.</p>

**Table 5-5 Event Clip Creation Notification XML Elements**

XML Element	Description
xml	Start XML parsing element; contains the TriggerNotification element.
TriggerNotification	Trigger notification data element. Contains the Host, VideoServer, TriggerInput, ProxyName, ArchiveName, StartUTC, Duration, StopMode, and Type elements.
Host	Format: [hostname.domain   IP address] The web address of the host where VSMS is running. VSMS runs on port 80 by default.
VideoServer	Name of the event. The event name may contain 1 to 256 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul>
TriggerInput	Range: [0] Generic Trigger input number. Range: [1-6] Trigger input number on device. Range: [1-10] Window number for motion detection.

**Table 5-5** Event Clip Creation Notification XML Elements (continued)

XML Element	Description
ProxyName	<p>The proxy name for the event. The ProxyName element may contain 1 to 256 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p> <p><b>Note</b> The proxy must exist before adding an event trigger.</p>
ArchiveName	<p>The archive name for this event. The ArchiveName element may contain 1 to 256 of the following characters:</p> <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> <p>The reserved value is -1.</p>
StartUTC	<p>Format: [UTC milliseconds] Date of the event in UTC milliseconds. This date is when VSMS received notification of the event from the encoder.</p>
Duration	<p>Format: [integer] Duration of the event archive in seconds.</p> <p><b>Note</b> The only supported duration is 300 seconds.</p>
StopMode	<p>Reserved values: [auto   manual] Specifies whether the clip is auto-stopped or manually stopped.</p>
Type	<p>Reserved values: [motion   alarm]. Specifies whether the type of event is motion detection or trigger.</p>



## Event Clip Start/Stop

`http://host/event.bwt?command=event&name=triggerName&type=startStop`

### Purpose

Starts or stops event-based clips.

### Required Fields

<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
<b>command=event</b>	Event command. The <b>event</b> keyword associates the command with an event action. The <b>event</b> keyword is a reserved value.
<b>name=triggerName</b>	The name for the event. The <i>triggerName</i> element may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.
<b>type=startStop</b>	Start/stop type where <i>startStop</i> specifies whether to start or stop a clip. Valid <i>startStop</i> values can be one of the following reserved keywords: <ul style="list-style-type: none"> <li>• <b>start</b>—Starts the clip.</li> <li>• <b>stop</b>—Stops the clip.</li> </ul> The default value is <b>start</b> . No other values are supported.

### Return Values

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <1 or -1 or output>
    1 Successful completion of the URL command
    -1 Error in execution of the URL command
```

### Usage Guidelines

A clip will be created from the start command time minus the prebuffer time up to the time of the stop command. If the stop command is not issued before the post-buffer time elapses, the clip will be stopped when the post-buffer time is attained.

When the event has been setup to start the clip, use the soft-trigger

### Examples

The following example stops the clip that was started when the event named lobbyMotion was triggered:

```
http://vsms.cisco.com/event.bwt?command=event&name=lobbyMotion&type=stop
```

## Get Event Information

**http://host/info.bwt?type=event&property=propValue&name=eventName&startutc=utcMs  
&stoputc=utcMs&display=dispFormat**

---

### Purpose

Retrieves event information.

---

### Required Fields

<i>host</i>	IP address or hostname ( <i>hostname.domain</i> ) where VSMS is running. By default, VSMS runs on port 80 (HTTP), however, you can use an alternate port, such as port 8080. For example, to specify port 8080, use <i>host:8080</i> .
<b>type=event</b>	Event type. The <b>event</b> keyword associates the type with an event action. The <b>event</b> keyword is a reserved value.
<b>property=propValue</b>	Property type where <i>propValue</i> specifies which event information to retrieve. Valid <i>propValue</i> values can be one of the following reserved keywords: <ul style="list-style-type: none"> <li>• <b>setup</b>—List all events set up on the VSMS host being queried.</li> <li>• <b>proxies</b>—List all events, and the proxies they use to record event archives. Events with multiple proxies are listed per proxy.</li> <li>• <b>archives</b>—List each event trigger received, including any event archives that were requested. An event set up with trigger tracking is returned without archive clip names.</li> </ul>

---

### Optional Fields

<b>name=eventName</b>	The name of the event being queried. If no name is given, VSMS returns all events. The <i>eventName</i> value may contain 1 to 32 of the following characters: <ul style="list-style-type: none"> <li>• Digits (0 to 9)</li> <li>• Upper case letters (A to Z)</li> <li>• Lower case letters (a to z)</li> <li>• Underscore (_)</li> <li>• Hyphen (-)</li> </ul> The reserved value is -1.
<b>startutc=utcMs</b>	Start date filter for archives. The <i>utcMs</i> value is the start date in UTC milliseconds. <p><b>Note</b> This field is used only when <b>property=archives</b> is specified.</p>

---

<b>stoputc=<i>utcMs</i></b>	Stop date filter for archives. The <i>utcMs</i> value is the stop date in UTC milliseconds.
	<b>Note</b> This field is used only when <b>property=archives</b> is specified.
<b>display=<i>dispFormat</i></b>	Display format where <i>dispFormat</i> specifies the format to use when displaying the list of running proxies. Valid <i>dispFormat</i> values include the following keywords: <ul style="list-style-type: none"> <li>• <b>html</b>—Hypertext markup language format</li> <li>• <b>text</b>—Plain text format</li> <li>• <b>ssv</b>—Space-separated value format</li> </ul> <p>The default <i>dispFormat</i> value is <b>html</b>.</p>

---

### Return Values

A standard HTTP/1.x header followed by:

```
Content-Type: text/plain
Return Code: <[archive info] or -1 or output>
  [archive info] Successful completion of the URL command
    For property=archives, table containing the following columns: name, input/window,
    type, archive name, time
    For property=proxies, table containing the following columns: name, input/window,
    type, proxysource
    For property=setup, table containing the following columns: name, ipdevice,
    srctype, notifyURL, input/motion, type, state, notificationtype, maxevents,
    daystolive, framerate, prebuffer, postbuffer, totalevents, cliphost, action,
    acclframerate, duration
-1 Error in execution of the URL command
```

### Usage Guidelines

Information can be retrieved based on property type, event name, start and stop dates.

### Examples

#### Retrieving All Event Archive Information

The following example retrieves information about all event archives:

```
http://vmsms.cisco.com/info.bwt?type=event&property=archives
```

#### Retrieving Archive Information for a Specific Event

The following example retrieves information about the event archives for the event named abc:

```
http://vmsms.cisco.com/info.bwt?type=event&property=archives&name=abc
```

#### Retrieving Archive Information for a Specific Event Within a Specific Time Frame

The following example retrieves information about the event archives for the event named abc that start on or after 1018642188000 UTC and end on or before 1018642228000 UTC:

```
http://vmsms.cisco.com/info.bwt?type=event&property=archives&name=abc&startutc=1018642188000&stoputc=1018642228000
```

#### Retrieving Archive Information in SSV Format for a Specific Event Within a Specific Time Frame

The following example retrieves information in SSV format about all event archives for events named abc that start on or after 101864218800 UTC and end on or before 1018642228000 UTC:

```
http://vmsms.cisco.com/info.bwt?type=event&property=archives&name=abc&startutc=1018642188000&stoputc=1018642228000&display=ssv
```

## Motion Event Configuration and Event Handling

The following steps discuss motion event configuration and event handling.

- Step 1** An event profile is added in VSOM and associated with the required feed(s) on which motion detection is to be tracked. The actions are configured to occur upon event along with the relevant parameters to perform the action such as pre-buffer, post-buffer, rate, and resolution.
- Step 2** VSOM will send the event profile information to VSMS via the event.bwt apache module adding it as a software (soft) trigger (trigger input # 0, srctype generic). The event handler will parse the command and start the archives based on the actions to be performed when a motion event occurs.

### Command and sample xml

```
event.bwt?command=setup&
data=<xml><event>
  <name>e_SampleEvent</name>
  <ipdevice>1207870147</ipdevice>
  <srctype>generic</srctype> I
  <notifyurl> http://10.10.50.32/vsom/event_notify.php?</notifyurl>
  <trigger>
    <input>0</input>
    <state>rising</state>
    <type>alarm</type>
    <notificationtype>2</notificationtype>
    <maxevents>0</maxevents>
    <daystolive>30</daystolive>
    <framerate>5</framerate>
    <duration>300</duration>
    <prebuffer>30</prebuffer>
    <postbuffer>60</postbuffer>
    <proxysource>p_SampleFeed</proxysource>
  </trigger>
</event></xml>
```

- Step 3** On the VSOM motion configuration page, motion windows are configured on the applicable feed and the previously setup soft-trigger event profile is registered with this configuration.
- Step 4** VSOM sends the motion configuration data to VSMS through the motion.bwt handler.
- Step 5** Motion.bwt parses the data, writes it into conf/motion/proxy\_name.xml, and notifies the proxy.
- Step 6** The proxy communicates the motion configuration information to the device including the server and URL to notify when a motion occurs.
- Step 7** When motion is detected, the device sends a motion start command to VSMS via the motionrecv.bwt apache module.
- Step 8** The motionrecv.bwt apache handler forwards the message onto the proxy motion driver.
- Step 9** The proxy motion driver notifies VSOM using the starturl URL setup during motion configuration.
- Step 10** VSOM sends a start event command to the VSMS event.bwt module. The event module will perform the necessary actions such as update properties, start recording, and mark as event.

### Command

```
event.bwt?command=event&name=<e_SampleEvent>&type=start&nolog=1
```

The proxy motion driver keeps track of all the windows it receives motion start commands for. It also monitors the time elapsed since the last motion start command was received for any window exceeding the `ttl_motion_events`. The `ttl_motion_events` was configured in `conf/devices/Cisco-avg.xml` and the default is one second. A motion stop command is sent to VSOM using the `stopurl` URL, setup during motion configuration.

- Step 11** VSOM sends a stop event command to the VSMS `event.bwt` module. The event module with perform necessary actions such as set back feed properties and stop recording after post-buffer.
- 

#### Command

```
event.bwt?command=event&name=<e_SampleEvent>&type=stop&nolog=1
```

## Single Alarm (trigger) Event Configuration and Handling

The following steps discuss adding alarm triggered event configurations and handling triggered events.

---

- Step 1** An event profile is added in VSOM and associated with the required feed(s) on which motion detection is to be tracked. The actions are configured to occur upon event along with the relevant parameters to perform the action such as pre-buffer, post-buffer, rate, and resolution.
- Step 2** VSOM sends the event profile information to VSMS through the `event.bwt` apache module. The event handler parses the command and starts the archives depending on the actions to be performed when an event occurs. For devices such as `Cisco_avg`, the event driver will update the device so that the device communicates with the server with the relevant information when events occur via the following command.

#### Command

```
event.bwt?command=event&name=<e_SampleEvent>
```

- Step 3** When the `event.bwt` command is received from the IP device, the actions setup in the event profile are performed by VSMS and VSOM is notified that the event occurred.
- Step 4** Once the `event.bwt` module finishes processing the event, it notifies VSOM with the status of the actions taken.
- 

## Soft Trigger Event Configuration and Handling

Soft triggers are used when VSOM generates events in response to particular feedback. The following steps discuss adding soft triggered event configurations and handling triggered events.

---

- Step 1** An event profile is added in VSOM and associated with the required feed(s) along with the actions to occur upon event with the relevant parameters for the action such as pre-buffer, post-buffer, rate, and resolution.
- Step 2** VSOM sends the event profile information to VSMS through the `event.bwt` apache module. The event handler parses the command and starts the archives depending on the actions to be performed when an event occurs.

**Step 3** The application sends an event.bwt command to trigger the event. When the event.bwt command is received from the IP device, the actions setup in the event profile are performed by VSMS and VSOM is notified that the event occurred.

**Command**

```
event.bwt?command=event&name=<e_SampleEvent>
```

**Step 4** Once the event.bwt module finishes processing the event, it notifies VSOM with the status of the actions taken.

---



