Stopping the video stream on the server side

Overview

Any stream published or captured by WCS can be stopped on the server side.

To stop publishing or playing the stream on the side of the WCS server, use one of the following:

1. Return HTTP `403 FORBIDDEN` state in response to a keep-alive query for the stream
2. Make a REST-query to the WCS server

Keep-Alive of a video stream

Keep-alive messages can be used to terminate streams by the initiative of the WCS server.

To do this, the backend server where REST Hooks are configured should return the HTTP `403 FORBIDDEN` state in response to a keep-alive request for the stream.

This way you can stop publishing or playing the stream, or both. To distinguish published and played streams, the script of the backend server should handle the `published` parameter of the `StreamKeepAliveEvent` method.

REST hook configuration

Configure the web server to use REST Hooks. The server must handle keep-alive requests from the WCS server using, for example, a PHP script and define `restClientConfig` for the `StreamKeepAliveEvent` method.

```
"StreamKeepAliveEvent" : {
    "clientExclude" : "",
    "restExclude" : "sdp",
    "restOnError" : "FAIL",
    "restPolicy" : "NOTIFY",
    "restOverwrite" : ""
}
```

Server side

To enable sending keep-alive messages for streams you need:

1. Enable the keep-alive setting in flashphoner.properties

```
keep_alive_streaming_sessions_enabled=true
```

2. Define the keep-alive interval and the application that will receive responses to keep-alive REST-queries

```
streaming_sessions_keep_alive_interval=10000
streaming_sessions_keep_alive_app_keys=defaultApp
```

   You can use an application other than the `defaultApp`. Use Command Line Interface and the `show apps` command to see the list of applications and their keys.

3. Add the `StreamKeepAliveEvent` REST method to this application using the following command

```
add app-rest-method defaultApp StreamKeepAliveEvent
```

4. Add REST hook endpoint to the application from the command line

```
update app defaultApp http://my-web-server.com/MyAPI
```

   Here:

5. `my-web-server.com` is the address of the backend server,
6. `MyAPI` - is the REST hook enpoint path.

REST queries to stop the stream

To stop a stream, use the `/stream/terminate` REST query.

A REST-query must be an HTTP/HTTPS POST query in the following form:

- HTTP: `http://streaming.flashphoner.com:8081/rest-api/stream/terminate`
- HTTPS: `https://streaming.flashphoner.com:8444/rest-api/stream/terminate`

Here:

- `streaming.flashphoner.com` - is the address of the WCS server
- `8081` - is the standard REST / HTTP port of the WCS server
- `8444` - is the standard HTTPS port
- `rest-api` - is the required part of the URL
- `/stream/terminate` - is the REST method used

REST methods and responses

/stream/terminate

Terminate a stream

```
POST /rest-api/stream/terminate HTTP/1.1
Host: localhost:8081
Content-Type: application/json

{
    "mediaSessionId": "41c3f621-a847-4639"
}
```

RESPONSE EXAMPLE

```
HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Content-Type: application/json
```

RETURN CODES

Code	Reason
200	OK
404	Not found

Parameters

Parameter	Description	Example
mediaSessionId	Media session identifier	`41c3f621-a847-4639`
name	Stream name	`streamName`
published	If true, the stream is published; if false, the stream is played	`true`
status	Current status of the stream	`PUBLISHING`

Stream filtering by parameters

A `/stream/terminate` query parameters are considered as filters, all the steams that conforms to those fliters will be stopped. For example, we can stop all subscribers for all the streams published

```
{
    "published": false
```

```
}
```

or all subsribers for certain stream

```
{
    "name": "streamName",
    "published": false
}
```

Streams published can be stopped by status

```
{
    "name": "streamName",
    "status": "PUBLISHING"
}
```

Also all streams in certain mediasessions can be stopped

```
{
    "mediaSessionIds":
    [
        "41c3f621-a847-4639",
        "554916e0-931c-2479"
    ]
}
```

or in one mediasession

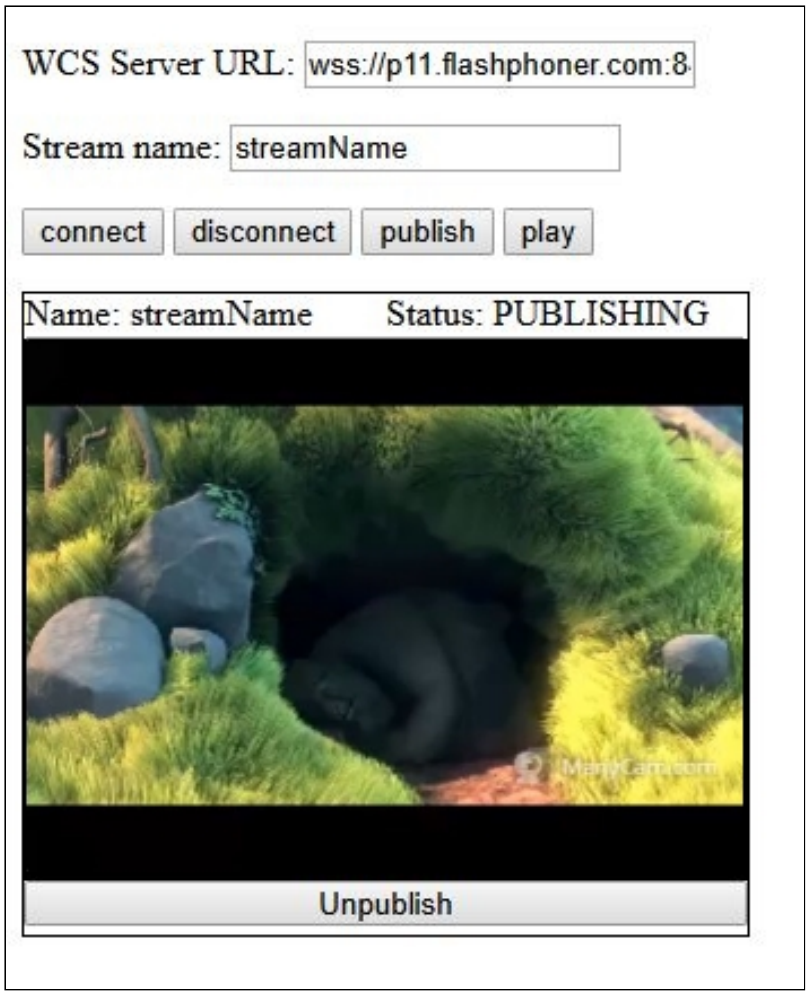
```
{
    "mediaSessionId": "41c3f621-a847-4639"
}
```

Resuming the stream

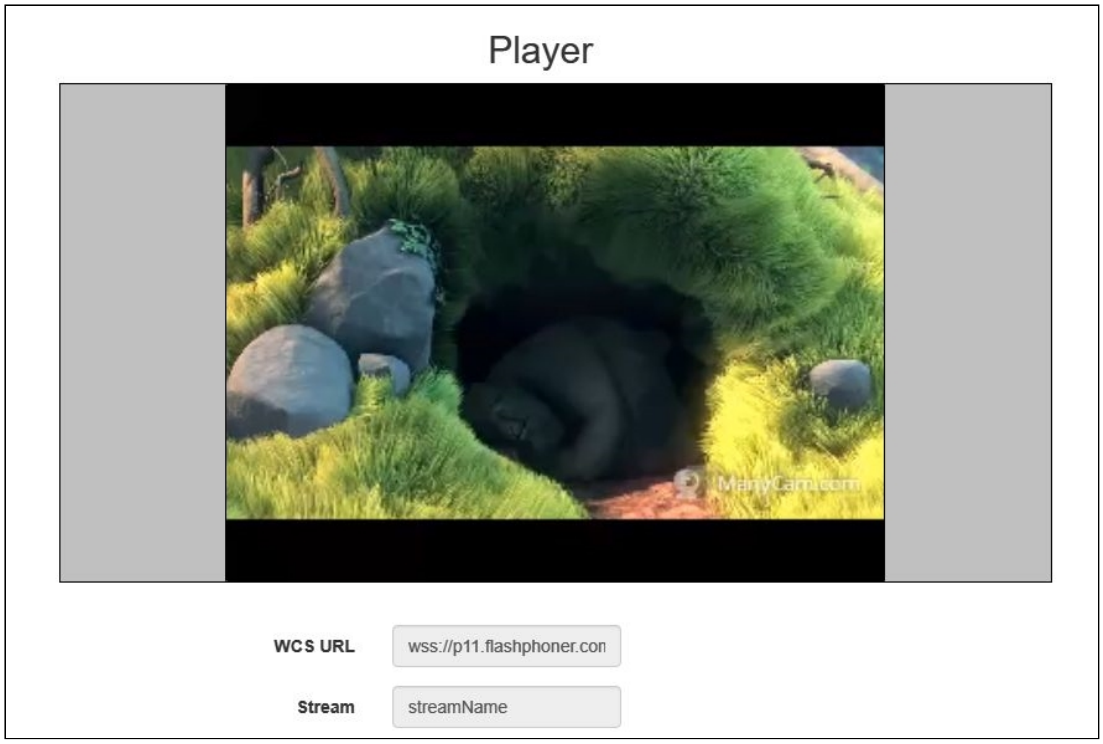
After a stream was stopped from the server side, publishing or playing of the stream can be resumed. This will be a new media stream.

For example, if a WebRTC stream is published using the `client2/examples/min/streaming.html` client and played using the `client2/examples/demo/streaming/player/player.html` client:

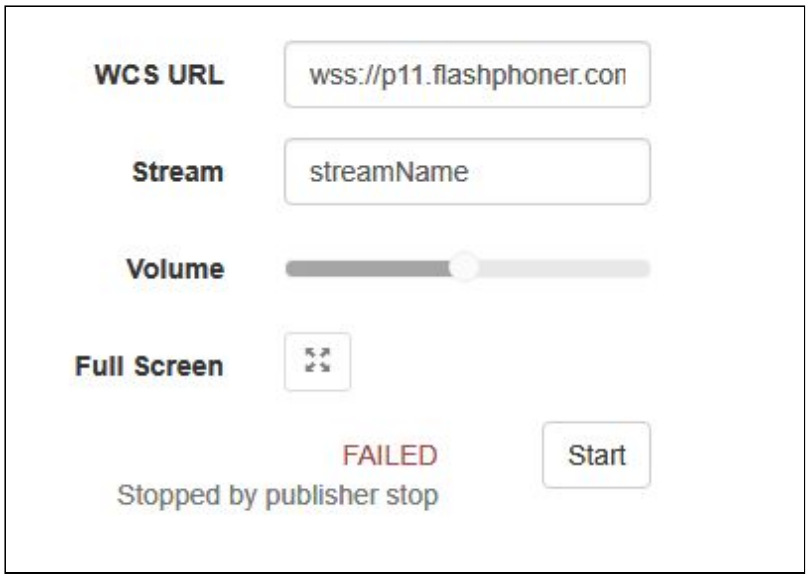
1. The stream is published



2. The stream is playing



3. Stream playback is stopped by the initiative of the WCS server



Publishing of the stream will resume after the `publish` button is clicked.
Playing of the stream will resume after the `Start` button is clicked.

Known issues

1. `Can't find mediasession` messages in client log file

Symptoms

If an RTMFP stream is stopped on the server side and if that stream was published using the `client2/examples/demo/streaming/flash_client/chat.html` client, publishing of the stream stops, but stream session is not terminated. In the client log file the following messages may occur: `Can't find mediasession`

Solution

Terminate the session after stopping the stream