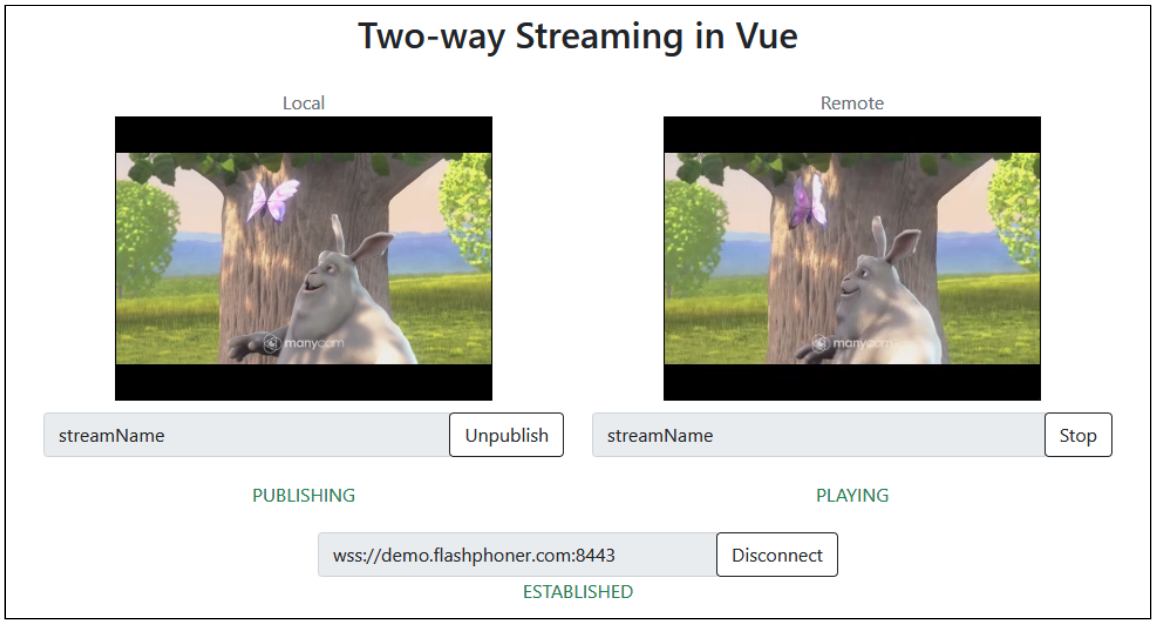
Two Way Streaming Vue

Overview

Two Way Streaming React application shows how to use Web SDK in Vue.js application to publish and play WebRTC stream



The project is available on GitHub and in Web SDK build archives since build 2.0.202 by the following path examples/react/two-way-streaming-vue.

Building the project

1. Download WebSDK source code

```
git clone https://github.com/flashphoner/flashphoner_client.git
```

2. Go to the example folder

```
cd flashphoner_client/examples/vue/two-way-streaming-vue
```

3. Install dependencies

```
npm install
```

4. Build for local testing

```
npm run serve
```

or to deploy to your web server

```
npm run build
```

Analyzing example code

To analyze the code take version with hash `6dc44b8` which is available here

Application code is in TwoWayStreamingApp.vue file, additional functions are in fp-utils.js file

1. API import

code

```
import * as FPUtils from './fp-utils.js';
import * as Flashphoner from '@flashphoner/websdk';
```

2. API initialization

`Flashphoner.init()` code

```
onLoad() {
   try {
     Flashphoner.init({});
     ...
   }
   catch(e) {
     console.log(e);
     ...
   }
}
```

3. Connecting to the server and receving the event confirming connection is established successfully

`Flashphoner.createSession()`, `SESSION_STATUS.ESTABLISHED` code

```
onConnectClick() {
   let url = this.serverUrl;
   let session = this.session;
```

```
    if (!session) {
      console.log("Create new session with url " + url);
      this.connectButtonDisabled = true;
      this.serverUrlDisabled = true;
      Flashphoner.createSession({urlServer:
url}).on(SESSION_STATUS.ESTABLISHED, (session) => {
        this.sessionStatus = SESSION_STATUS.ESTABLISHED;
        this.sessionStatusClass = 'text-success';
        this.onConnected(session);
      }).on(SESSION_STATUS.DISCONNECTED, () => {
        ...
      }).on(SESSION_STATUS.FAILED, () => {
        ...
      });
    }
    ...
}
```

4. Stream publishing

`Session.createStream()`, `Stream.publish()` code

```
publishStream() {
    let session = this.session;
    let streamName = this.publishStreamName;
    let localVideo = this.localVideo;

    if(session && localVideo) {
      session.createStream({
        name: streamName,
        display: localVideo,
        cacheLocalResources: true,
        receiveVideo: false,
        receiveAudio: false
      }).on(STREAM_STATUS.PUBLISHING, (stream) => {
        ...
      }).on(STREAM_STATUS.UNPUBLISHED, () => {
        ...
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).publish();
    }
}
```

5. Receiving the event confirming the stream is successfully published

`STREAM_STATUS.PUBLISHING` code

```
publishStream() {
    let session = this.session;
    let streamName = this.publishStreamName;
    let localVideo = this.localVideo;
```

```
    if(session && localVideo) {
      session.createStream({
        ...
      }).on(STREAM_STATUS.PUBLISHING, (stream) => {
        this.publishStatus = STREAM_STATUS.PUBLISHING;
        this.publishStatusClass = 'text-success';
        this.onPublishing(stream);
      }).on(STREAM_STATUS.UNPUBLISHED, () => {
        ...
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).publish();
    }
  }
```

6. Stream playback with picture resizing to div size

`Session.createStream()`, `Stream.play()`, `STREAM_STATUS.PENDING`, `FPUtils.resizeVideo()` code

```
playStream() {
    let session = this.session;
    let streamName = this.playStreamName;
    let remoteVideo = this.remoteVideo;

    if(session && remoteVideo) {
      session.createStream({
        name: streamName,
        display: remoteVideo
      }).on(STREAM_STATUS.PENDING, (stream) => {
        let video = document.getElementById(stream.id());
        if (!video.hasListeners) {
          video.hasListeners = true;
          video.addEventListener('resize', (event) => {
              FPUtils.resizeVideo(event.target);
          });
        }
      }).on(STREAM_STATUS.PLAYING, (stream) => {
        ...
      }).on(STREAM_STATUS.STOPPED, () => {
        ...
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).play();
    }
  }
```

7. Receiving the event confirming successful playback

`STREAM_STATUS.PLAYING` code

```
playStream() {
    let session = this.session;
```

```
    let streamName = this.playStreamName;
    let remoteVideo = this.remoteVideo;

    if(session && remoteVideo) {
      session.createStream({
        name: streamName,
        display: remoteVideo
      }).on(STREAM_STATUS.PENDING, (stream) => {
        ...
      }).on(STREAM_STATUS.PLAYING, (stream) => {
        this.playStatus = STREAM_STATUS.PLAYING;
        this.playStatusClass = 'text-success';
        this.onPlaying(stream);
      }).on(STREAM_STATUS.STOPPED, () => {
        ...
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).play();
    }
}
```

8. Playback stopping

`Stream.stop()` code

```
onPlayClick() {
    let stream = this.playStreamObj;
    ...

    if (!stream) {
      ...
      this.playStream();
    } else {
      this.playButtonDisabled = true;
      stream.stop();
    }
}
```

9. Receiving the event confirming playback is stopped

`STREAM_STATUS.STOPPED` code

```
playStream() {
    let session = this.session;
    let streamName = this.playStreamName;
    let remoteVideo = this.remoteVideo;

    if(session && remoteVideo) {
      session.createStream({
        name: streamName,
        display: remoteVideo
      }).on(STREAM_STATUS.PENDING, (stream) => {
        ...
```

```
      }).on(STREAM_STATUS.PLAYING, (stream) => {
        ...
      }).on(STREAM_STATUS.STOPPED, () => {
        this.playStatus = STREAM_STATUS.STOPPED;
        this.playStatusClass = 'text-success';
        this.onStopped();
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).play();
    }
}
```

10. Publishing stopping

`Stream.stop()` code

```
onPublishClick() {
    let stream = this.publishStreamObj;
    ...

    if (!stream) {
      ...
      this.publishStream();
    } else {
      this.publishButtonDisabled = true;
      stream.stop();
    }
}
```

11. Receiving the event confirming the stream is unpublished

`STREAM_STATUS.UNPUBLISHED` code

```
publishStream() {
    let session = this.session;
    let streamName = this.publishStreamName;
    let localVideo = this.localVideo;

    if(session && localVideo) {
      session.createStream({
        ...
      }).on(STREAM_STATUS.PUBLISHING, (stream) => {
        ...
      }).on(STREAM_STATUS.UNPUBLISHED, () => {
        this.publishStatus = STREAM_STATUS.UNPUBLISHED;
        this.publishStatusClass = 'text-success';
        this.onUnpublished();
      }).on(STREAM_STATUS.FAILED, () => {
        ...
      }).publish();
    }
}
```

12. Connection closing

`Session.disconnect()` code

```
onConnectClick() {
   let url = this.serverUrl;
   let session = this.session;

   if (!session) {
     ...
   } else {
     this.connectButtonDisabled = true;
     session.disconnect();
   }
}
```

13. Receiving the event confirming the connection is closed

`SESSION_STATUS.DISCONNECTED` code

```
onConnectClick() {
   let url = this.serverUrl;
   let session = this.session;

   if (!session) {
     ...
     Flashphoner.createSession({urlServer:
url}).on(SESSION_STATUS.ESTABLISHED, (session) => {
       ...
     }).on(SESSION_STATUS.DISCONNECTED, () => {
       this.sessionStatus = SESSION_STATUS.DISCONNECTED;
       this.sessionStatusClass = 'text-success';
       this.onDisconnected();
     }).on(SESSION_STATUS.FAILED, () => {
       ...
     });
   }
   ...
}
```