

Идентификация аудио/видео дорожек

В сборке [2.0.186](#) добавлены примеры идентификации опубликованных аудио/видео дорожек.

На скриншоте ниже показаны имена аудио mic1 и видео cam1 дорожек в примере SFU Player

SFU Player

Server url

wss://test1.flashphoner.com:8443

Room name

ROOM1

Player

Player1-4f27 Stop

ESTABLISHED

Published by: Publisher1-1c49

320x180

cam1

360p send 720p send 180p send



Mute mic1

II 2:41

Анализ кода примеров

Рассмотрим исходный код примеров SFU SDK, доступный на [GitHub](#) с тэгом 8287dd9.

1. Обозначение треков для публикации в конфигурационном файле config.json

audio track type [code](#)

```
{
  ...,
  "media": {
    "audio": {
      "tracks": [{
        "source": "mic",
        "channels": 2,
        "type": "mic1"
      }]
    },
    ...
  }
}
```

video track type [code](#)

```
{
  ...,
  "media": {
    ...,
    "video": {
      "tracks": [
        {
          "source": "camera",
          "width": 1280,
          "height": 720,
          "codec": "H264",
          ...,
          "type": "cam1"
        }
      ]
    }
  }
}
```

2. Добавление обозначения треков в конфигурацию WebRTC при публикации

Room.join [code](#)

```

let streams = await getVideoStreams(mainConfig);
let audioStreams = await getAudioStreams(mainConfig);
if (state.isConnected() && state.isActive()) {
  //combine local video streams with audio streams
  streams.push.apply(streams, audioStreams);
  let config = {};
  //add our local streams to the room (to PeerConnection)
  streams.forEach(function (s) {
    let contentType = s.type || s.source;
    //add local stream to local display
    localDisplay.add(s.stream.id, $("#" + state.inputId()).val(), s.stream, contentType);
    //add each track to PeerConnection
    s.stream.getTracks().forEach((track) => {
      config[track.id] = contentType;
      addTrackToPeerConnection(state.pc, s.stream, track, s.encodings);
      subscribeTrackToEndedEvent(state.room, track, state.pc);
    });
  });
  //start WebRTC negotiation
  state.waitFor(state.room.join(state.pc, null, config), MAX_AWAIT_MS);
}

```

3. Получение события ADD_TRACKS на стороне зрителя

SFU_ROOM_EVENT.ADD_TRACKS, [setTrackInfo\(\)](#) [code](#)

```

room.on(constants.SFU_ROOM_EVENT.ADD_TRACKS, function(e) {
  console.log("Received ADD_TRACKS");
  ...
  for (const pTrack of e.info.info) {
    let createDisplay = true;
    for (let i = 0; i < participant.displays.length; i++) {
      let display = participant.displays[i];
      if (pTrack.type === "VIDEO") {
        if (display.hasVideo()) {
          continue;
        }
        display.videoMid = pTrack.mid;
        display.setTrackInfo(pTrack);
        createDisplay = false;
        break;
      } else if (pTrack.type === "AUDIO") {
        if (display.hasAudio()) {
          continue;
        }
        display.audioMid = pTrack.mid;
        display.setTrackInfo(pTrack);
        createDisplay = false;
        break;
      }
    }
    if (!createDisplay) {
      continue;
    }
    let display = createRemoteDisplay(participant.nickName, participant.nickName, mainDiv,
displayOptions);
    participant.displays.push(display);
    if (pTrack.type === "VIDEO") {
      display.videoMid = pTrack.mid;
      display.setTrackInfo(pTrack);
    } else if (pTrack.type === "AUDIO") {
      display.audioMid = pTrack.mid;
      display.setTrackInfo(pTrack);
    }
  }
}
...
});

```

4. Отображение идентификатора трека

AddRemoveTracks.info.info.contentType, setTrackInfo() [code](#)

```
setTrackInfo: function(trackInfo) {
  if (trackInfo) {
    ...
    if (trackInfo.type) {
      contentType = trackInfo.contentType || "";
      if (trackInfo.type == "VIDEO" && displayOptions.type && contentType !== "") {
        showItem(videoTypeDisplay);
        videoTypeDisplay.innerHTML = contentType;
      }
      if (trackInfo.type == "AUDIO") {
        audioStateButton.setContentType(contentType);
      }
    }
  }
},
...
```