

Phone

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Example of web phone for audio calls

Phone Min

Connection

WCS URL

ws://localhost:8080



SIP Login

10006

SIP Auth Name

10006

SIP Password

.....



SIP Domain

sip.flashphoner.com

SIP Outbound
Proxy

sip.flashphoner.com

SIP Port

5060

Register
required



REGISTERED

Disconnect

Auth Token

/127.0.0.1:39798/127.0.0.1:8080-d43ebc

Disconnect

Mute

off

Callee SIP username

Call

Code of the example

The path to the source code of the example on WCS server is:

`/usr/local/FlashphonerWebCallServer/client/examples/demo/sip/phone`

phone.css - file with styles
phone.html - page of the web phone
call-fieldset.html - form with fields required for connection
call-controls.html - HTML code for call controls
phone.js - script providing functionality for the web phone

This example can be tested using the following address:

<https://host:8888/client/examples/demo/sip/phone/phone.html>

Here host is the address of the WCS server.

Analyzing the code

To analyze the code, let's take the version of file phone.js with hash `ecbadc3`, which is available [here](#) and can be downloaded with corresponding build [2.0.212](#).

1. Initialization of the API

Flashphoner.init() [code](#)

```
Flashphoner.init();
```

2. Connection to server.

Flashphoner.createSession() [code](#)

Object with connection options is passed to the method

- `urlServer` - URL for WebSocket connection to WCS server
- `sipOptions` - object with parameters for SIP connection

```
function createSession(authToken) {
    var url = $('#urlServer').val();

    var registerRequired = $("#sipRegisterRequired").is(':checked');
    var sipOptions = {
        login: $("#sipLogin").val(),
        authenticationName: $("#sipAuthenticationName").val(),
        password: $("#sipPassword").val(),
        domain: $("#sipDomain").val(),
        outboundProxy: $("#sipOutboundProxy").val(),
        port: $("#sipPort").val(),
        registerRequired: registerRequired
    };

    var connectionOptions = {
        urlServer: url,
        keepAlive: true
    };

    if (authToken) {
        connectionOptions.authToken = authToken;
    } else {
        connectionOptions.sipOptions = sipOptions;
    }

    //create session
    console.log("Create new session with url " + url);
    Flashphoner.createSession(connectionOptions).on(SESSION_STATUS.ESTABLISHED, function(session, connection){
        ...
    });
}
```

3.Receiving the event confirming successful connection

ConnectionStatusEvent ESTABLISHED [code](#)

On this event, the token is stored to connect to the same session in 1 hour

```
Flashphoner.createSession(connectionOptions).on(SESSION_STATUS.ESTABLISHED, function(session, connection){
    setStatus("#regStatus", SESSION_STATUS.ESTABLISHED);
    $("#authToken").val(connection.authToken);
    onConnected(session);
    if (!registerRequired) {
        disableOutgoing(false);
    }
}).on(SESSION_STATUS.REGISTERED, function(session){
    ...
}).on(SESSION_STATUS.DISCONNECTED, function(){
    ...
}).on(SESSION_STATUS.FAILED, function(){
    ...
}).on(SESSION_STATUS.INCOMING_CALL, function(call){
    ...
});
```

4.Receiving the event confirming successful registration on SIP server

ConnectionStatusEvent REGISTERED [code](#)

```
Flashphoner.createSession(connectionOptions).on(SESSION_STATUS.ESTABLISHED, function(session, connection){
    ...
}).on(SESSION_STATUS.REGISTERED, function(session){
    setStatus("#regStatus", SESSION_STATUS.REGISTERED);
    onConnected(session);
    if (registerRequired) {
        disableOutgoing(false);
    }
}).on(SESSION_STATUS.DISCONNECTED, function(){
    ...
}).on(SESSION_STATUS.FAILED, function(){
    ...
}).on(SESSION_STATUS.INCOMING_CALL, function(call){
    ...
});
```

5.Receiving the event on incoming call

ConnectionStatusEvent INCOMING_CALL [code](#)

```
Flashphoner.createSession(connectionOptions).on(SESSION_STATUS.ESTABLISHED, function(session, connection){
    ...
}).on(SESSION_STATUS.REGISTERED, function(session){
    ...
}).on(SESSION_STATUS.DISCONNECTED, function(){
    ...
}).on(SESSION_STATUS.FAILED, function(){
    ...
}).on(SESSION_STATUS.INCOMING_CALL, function(call){
    call.on(CALL_STATUS.RING, function(){
        ...
    });
    onIncomingCall(call);
});
```

6. Outgoing call.

session.createCall(), call.call() [code](#)

The following parameters are passed when call is created

- callee - callee SIP username
- visibleName - display name
- localVideoDisplay - <div> element for local display (will be used for Flash Player settings dialog in case of Flash media provider)
- remoteVideoDisplay - <div> element for remote audio
- constraints - constraints for the call (video set to false to make audio only call)
- receiveAudio - set to 'true' to receive audio
- receiveVideo - set to 'false' to receive audio only

```

var constraints = {
  audio: true,
  video: false
};

//prepare outgoing call
var outCall = session.createCall({
  callee: $("#callee").val(),
  visibleName: $("#sipLogin").val(),
  localVideoDisplay: localDisplay,
  remoteVideoDisplay: remoteDisplay,
  constraints: constraints,
  receiveAudio: true,
  receiveVideo: false,
  stripCodecs: "SILK"
  ...
});

outCall.call()

```

7. Answering incoming call.

`call.answer()` [code](#)

Object with answer options is passed to the method

- `localVideoDisplay` - `<div>` element for local display
- `remoteVideoDisplay` - `<div>` element for remote audio

```

$("#answerBtn").off('click').click(function(){
  $(this).prop('disabled', true);
  var constraints = {
    audio: true,
    video: false
  };
  inCall.answer({
    localVideoDisplay: localDisplay,
    remoteVideoDisplay: remoteDisplay,
    receiveVideo: false,
    constraints: constraints,
    stripCodecs: "SILK"
  });
  showAnswered();
}).prop('disabled', false);

```

8. Outgoing call hangup.

`call.hangup()` [code](#)

```

$("#callBtn").text("Hangup").off('click').click(function(){
  $(this).prop('disabled', true);
  outCall.hangup();
}).prop('disabled', false);

```

9. Incoming call hangup.

`call.hangup()` [code](#)

```

$("#hangupBtn").off('click').click(function(){
  $(this).prop('disabled', true);
  $("#answerBtn").prop('disabled', true);
  inCall.hangup();
}).prop('disabled', false);

```

10. Call hangup on session disconnection

`call.hangup()` [code](#)

```
function onConnected(session) {
    $("#connectBtn, #connectTokenBtn").text("Disconnect").off('click').click(function(){
        $(this).prop('disabled', true);
        if (currentCall) {
            showOutgoing();
            disableOutgoing(true);
            setStatus("#callStatus", "");
            currentCall.hangup();
        }
        session.disconnect();
    }).prop('disabled', false);
}
```

11. Mute/unmute audio

currentCall.muteAudio(), currentCall.unmuteAudio() [code](#)

```
// Mute audio in the call
function mute() {
    if (currentCall) {
        currentCall.muteAudio();
    }
}

// Unmute audio in the call
function unmute() {
    if (currentCall) {
        currentCall.unmuteAudio();
    }
}
```