



Version 9.2

# SmartPTT Enterprise

## Web Client Installation Guide

December 2017



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## 1 About This Document

This guide describes how to install and configure SmartPTT Web Client. It also contains a list of issues that a user may experience while configuring it. This guide does not cover the installation or configuration of the SmartPTT desktop version or SmartPTT Radioserver.

For additional information, see the corresponding guides.

## 2 System Requirements

Before installing and configuring the SmartPTT Web Client, ensure your computer meets the following requirements:

### Operating system

- Windows “Client” systems: Windows 7 and newer
- Windows “Server” systems: Windows Server 2008 and newer

### Additional software

- Microsoft SQL Server 2008 Express (available at <https://www.microsoft.com/en-US/download/details.aspx?id=1695>)
- Microsoft .NET Framework 4 and newer (available at <https://www.microsoft.com/en-US/download/details.aspx?id=3556>)
- ASP.NET MVC Framework 3.0 (available at <https://www.microsoft.com/en-US/download/details.aspx?id=4211>)
- Internet Information Services 7.5 Express (available at <https://www.microsoft.com/en-US/download/details.aspx?id=1038>)

## 2.1 Supported Web Browsers

The following browsers can be used for connecting to the SmartPTT Web Client:

- Internet Explorer 11
- Google Chrome 43 and newer
- Mozilla Firefox 47 and newer

## 3 System Preconfiguration

Before preconfiguration, ensure that computer has all [additional software](#) installed. SmartPTT Web Client installation package is also necessary.

System preconfiguration is performed in the stated sequence:

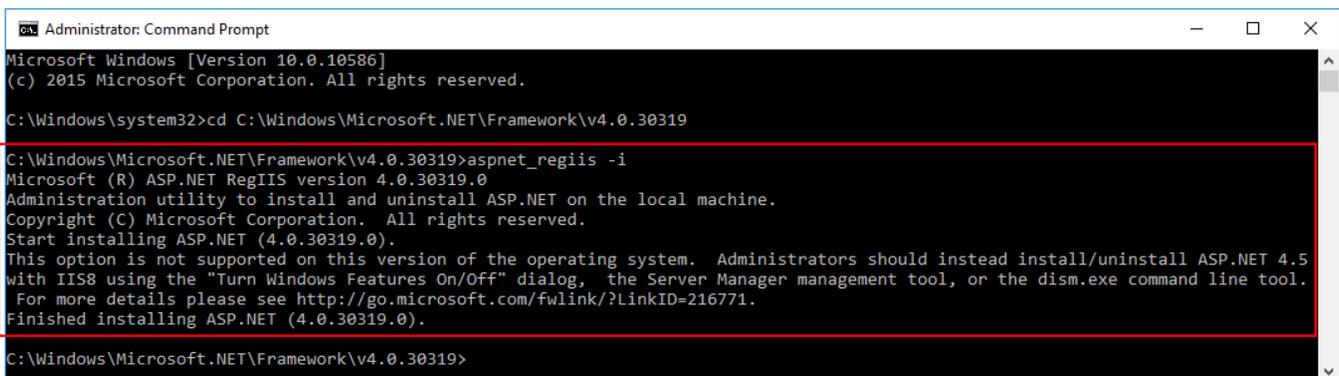
1. Registering ASP.NET.
2. Turning on Windows Features.
3. Preparing SmartPTT SmartPTT Web Client folder.

### 3.1 Registering ASP.NET

To register ASP.NET in Internet Information Services (IIS), follow these steps:

1. Run Command Prompt as an administrator.
2. In the **Administrator: Command Prompt** window, specify the file path to **Microsoft .NET Framework** and press Enter:
  - a. If 32-bit operating system and default file path, enter `cd C:\Windows\Microsoft.NET\Framework\v4.0.30319`
  - b. If 64-bit operating system and default file path, enter `cd C:\Windows\Microsoft.NET\Framework64\v4.0.30319`
3. Enter `aspnet_regiis.exe -i` to register ASP.NET.

If ASP.NET is successfully registered, the following message appears:

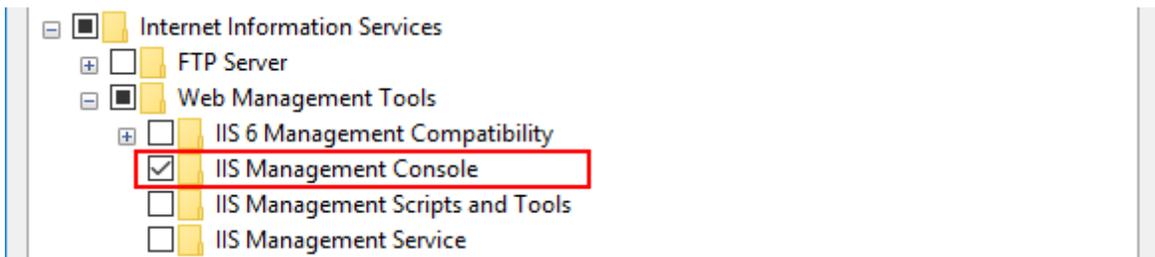


```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.10586]
(c) 2015 Microsoft Corporation. All rights reserved.
C:\Windows\system32>cd C:\Windows\Microsoft.NET\Framework\v4.0.30319
C:\Windows\Microsoft.NET\Framework\v4.0.30319>aspnet_regiis -i
Microsoft (R) ASP.NET RegIIS version 4.0.30319.0
Administration utility to install and uninstall ASP.NET on the local machine.
Copyright (C) Microsoft Corporation. All rights reserved.
Start installing ASP.NET (4.0.30319.0).
This option is not supported on this version of the operating system. Administrators should instead install/uninstall ASP.NET 4.5
with IIS8 using the "Turn Windows Features On/Off" dialog, the Server Manager management tool, or the dism.exe command line tool.
For more details please see http://go.microsoft.com/fwlink/?LinkID=216771.
Finished installing ASP.NET (4.0.30319.0).
C:\Windows\Microsoft.NET\Framework\v4.0.30319>
```

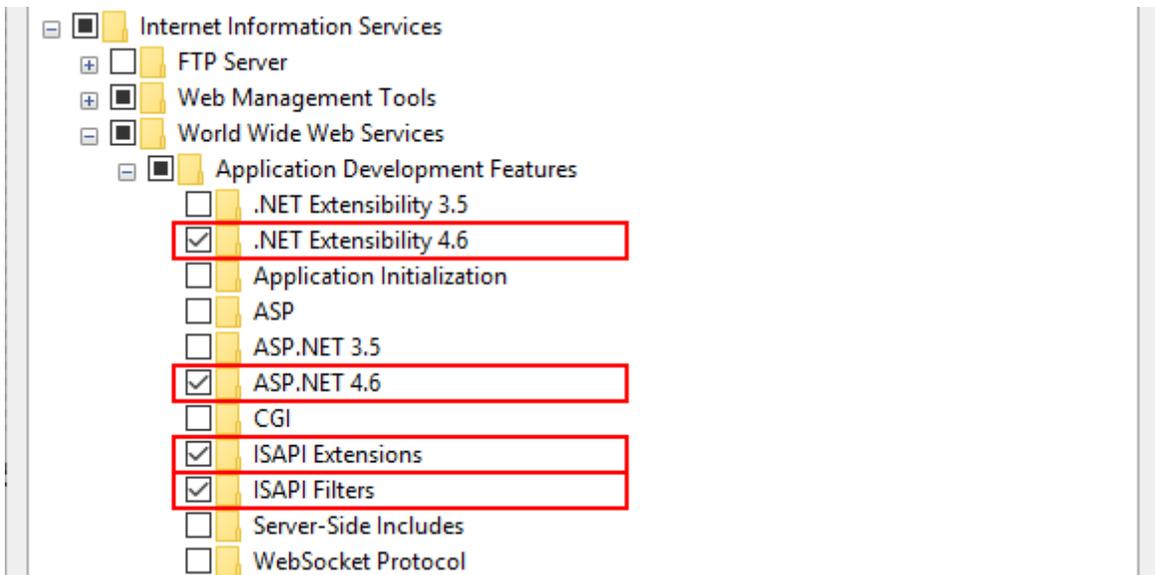
## 3.2 Turning on Windows Features

To turn on Windows features that are necessary for the SmartPTT Web Client work, follow these steps:

1. Open **Turn Windows features on or off**.
2. In the **Windows Features** window, expand **Internet Information Services** → **Web Management Tools**.
  - a. Select the items as it is shown on the figure below:



3. Expand **Internet Information Services** → **World Wide Web Services** → **Application Development Features**.
  - a. Select the items as it is shown on the figure below:



4. Expand **Internet Information Services** → **World Wide Web Services** → **Application Development Features**.

a. Select the items as it is shown on the figure below:

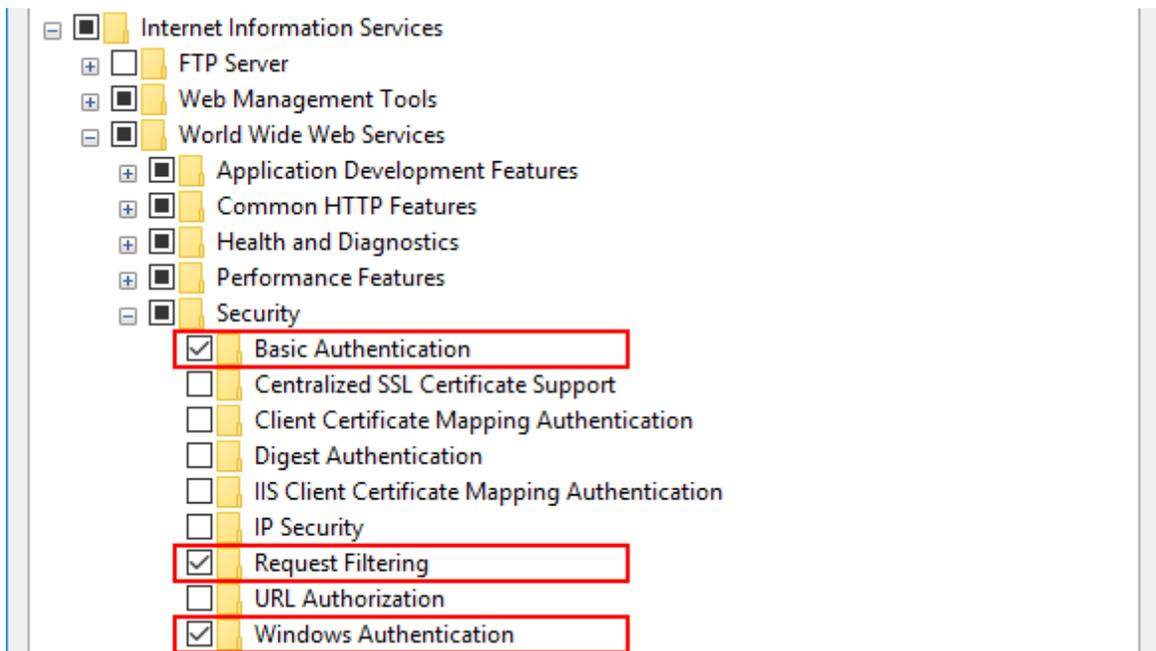


5. Expand **Internet Information Services** → **World Wide Web Services** → **Health and Diagnostics**.

a. Select the items as it is shown on the figure below:



6. Expand **Internet Information Services** → **World Wide Web Services** → **Security**.
  - a. Select the items as it is shown on the figure below:



7. Click **OK** and close the **Windows Features** window.

## 4 Web Client Access Configuration

SmartPTT Web Client can be accessed locally and globally. You can configure both local and global access to Web Client if required.

Access configuration consists of the following steps:

1. Preparing SmartPTT Web Client folder.
2. Managing website in Internet Information Services (IIS) Manager.
3. Forwarding router ports (for the global access).

### 4.1 Preparing Web Client Folder

To prepare the **SmartPTT Web Client** folder, follow these steps:

1. Ensure that *C:\inetpub* folder exists. If not, ensure you preconfigured system properly.
2. Unpack SmartPTT installation package.
3. From the SmartPTT installation package folder, copy the **SmartPTT Web Client** folder to *C:\inetpub*.
4. Rename the **SmartPTT Web Client** folder depending on the access you want to configure. We recommend you to use the following names:
  - **SmartPTT LAN** if you configure the local access
  - **SmartPTT WAN** if you configure the global access

#### NOTE

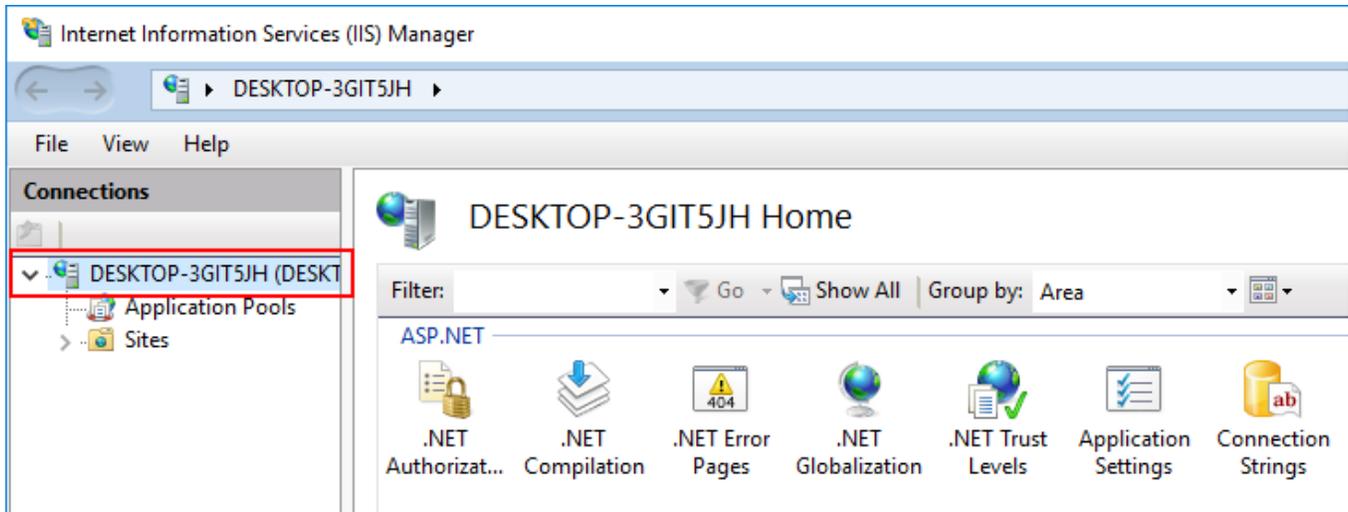
To make configuring both local and global access to Web Client possible, you should copy **SmartPTT Web Client** folder to **intepub** folder twice and rename the folders depending on the access type.

## 4.2 Managing Website

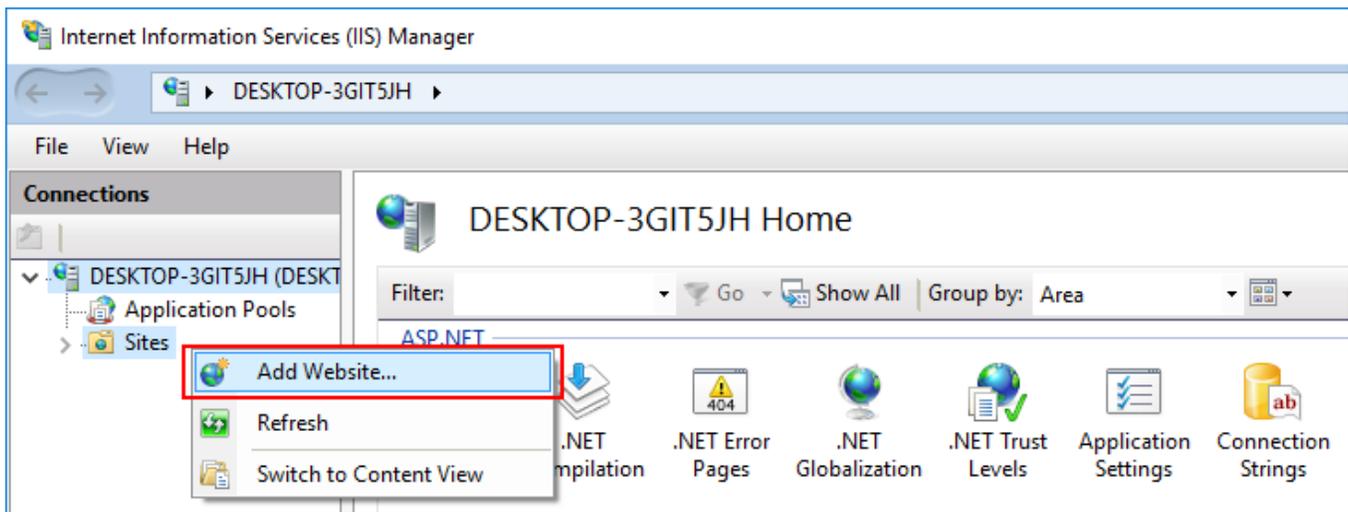
### 4.2.1 Adding Website

To add a web site to Internet Information Services (IIS), follow these steps:

1. Open **Internet Information Services (IIS) Manager**.
2. In the **Connections** pane, expand the main node.



3. Right-click **Sites** and click **Add Website**.



4. In the **Add Website** window, perform the following actions:

The screenshot shows the 'Add Website' dialog box with the following fields and options:

- Site name:** An empty text input field.
- Application pool:** A dropdown menu currently showing 'DefaultAppPool' and a 'Select...' button.
- Content Directory:**
  - Physical path:** An empty text input field with a browse button ('...').
  - Pass-through authentication:** A checked checkbox.
  - Buttons: 'Connect as...' and 'Test Settings...'.
- Binding:**
  - Type:** A dropdown menu showing 'http'.
  - IP address:** A dropdown menu showing 'All Unassigned'.
  - Port:** A text input field showing '80'.
  - Host name:** An empty text input field with the example text 'Example: www.contoso.com or marketing.contoso.com' below it.
- Start Website immediately:** An unchecked checkbox.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

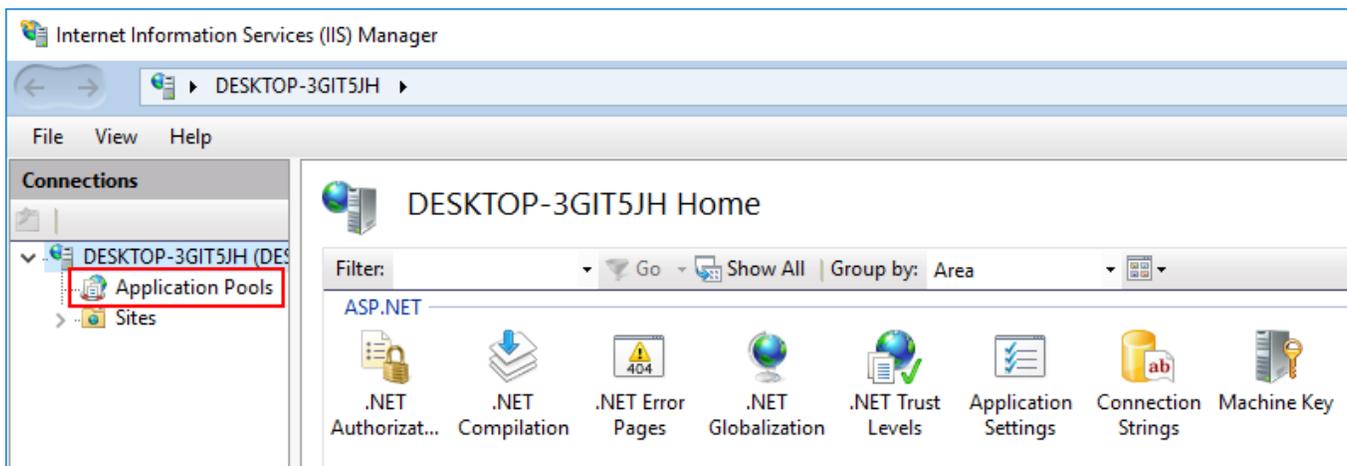
- a. In the **Site name** field, enter the name of a new website. It is recommended to use the following names:
- **SmartPTT LAN:** For a website intended for the local access.
  - **SmartPTT WAN:** For a website intended for the global access.

- b. In the **Physical path** field of the **Content Directory** area, specify the path to the [renamed SmartPTT Web Client](#) folder.
- c. Leave the **Type** field unchanged.
- d. From the **IP address** list, select an IP address that will be used to access to Web Client. IP-addresses of websites intended for different accesses should be the same.
- e. In the **Port** field, enter the port on which Web Client will be available in the browser. Ports of websites intended for different accesses should differ.
- f. Leave the **Host name** field unchanged.
- g. *Optional:* Select the **Start Website immediately** check box to start the website just after its creation.
- h. Click **OK** to apply changes and close the window.

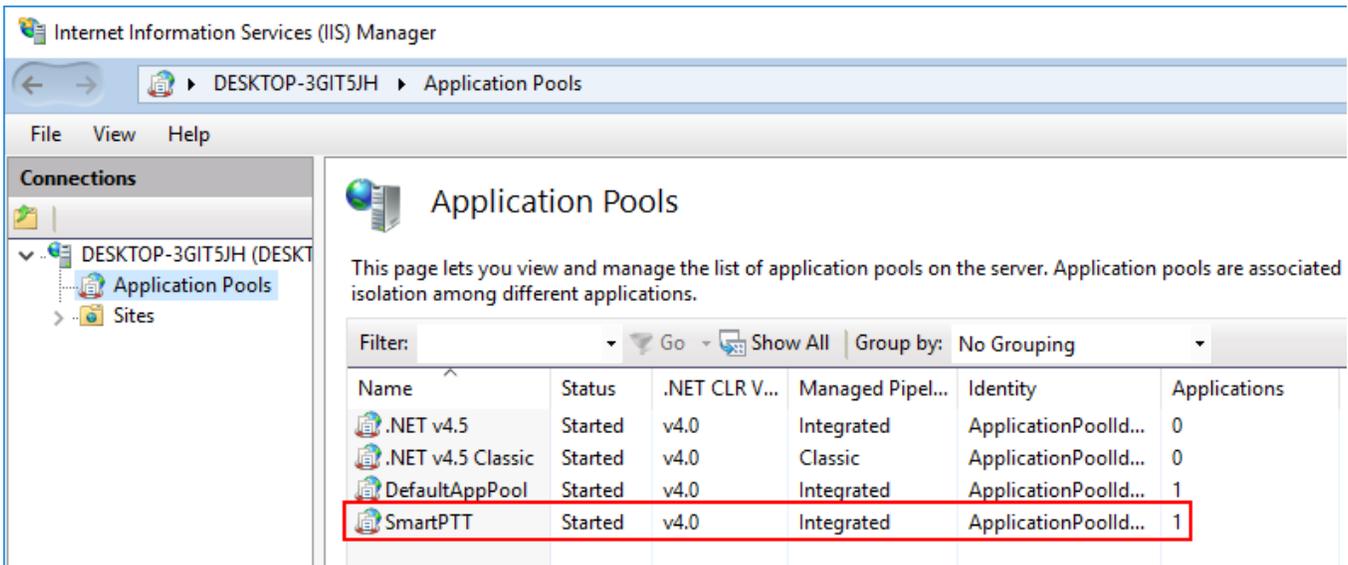
## 4.2.2 Configuring Website

To configure a website, follow these steps:

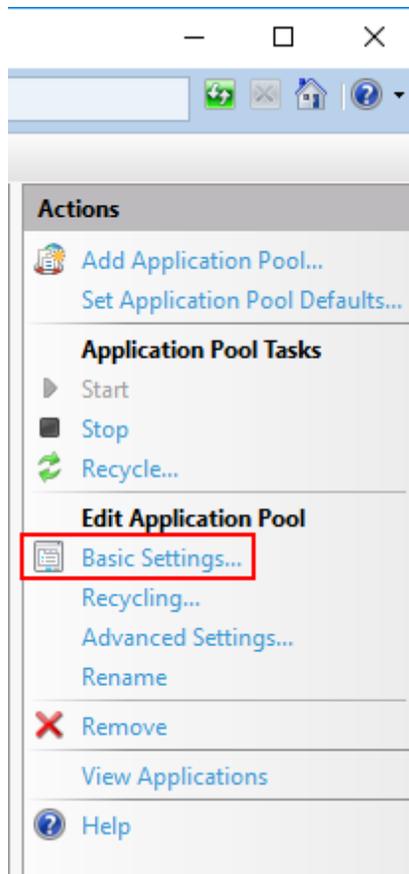
1. Open **Internet Information Services (IIS) Manager**.
2. In the **Connections** pane, expand the main node and click **Application Pools**.



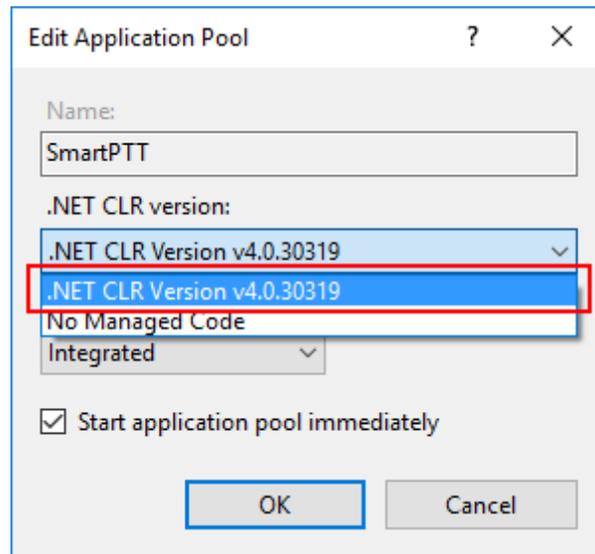
- In the **Application Pools** pane, click the created website.



- In the **Actions** pane, click **Basic Settings**.



5. In the **Edit Application Pool** window, select the [installed](#) Microsoft .NET Framework and click **OK**.



## 4.2.3 Starting Website

To start a website, follow these steps:

1. In the **Connections** pane, expand **<Your Main Node>** → **Sites**.

Internet Information Services (IIS) Manager

DESKTOP-3GIT5JH > Application Pools

File View Help

**Connections**

- DESKTOP-3GIT5JH (DESKT)
  - Application Pools
    - Sites
      - Default Web Site
        - SmartPTT

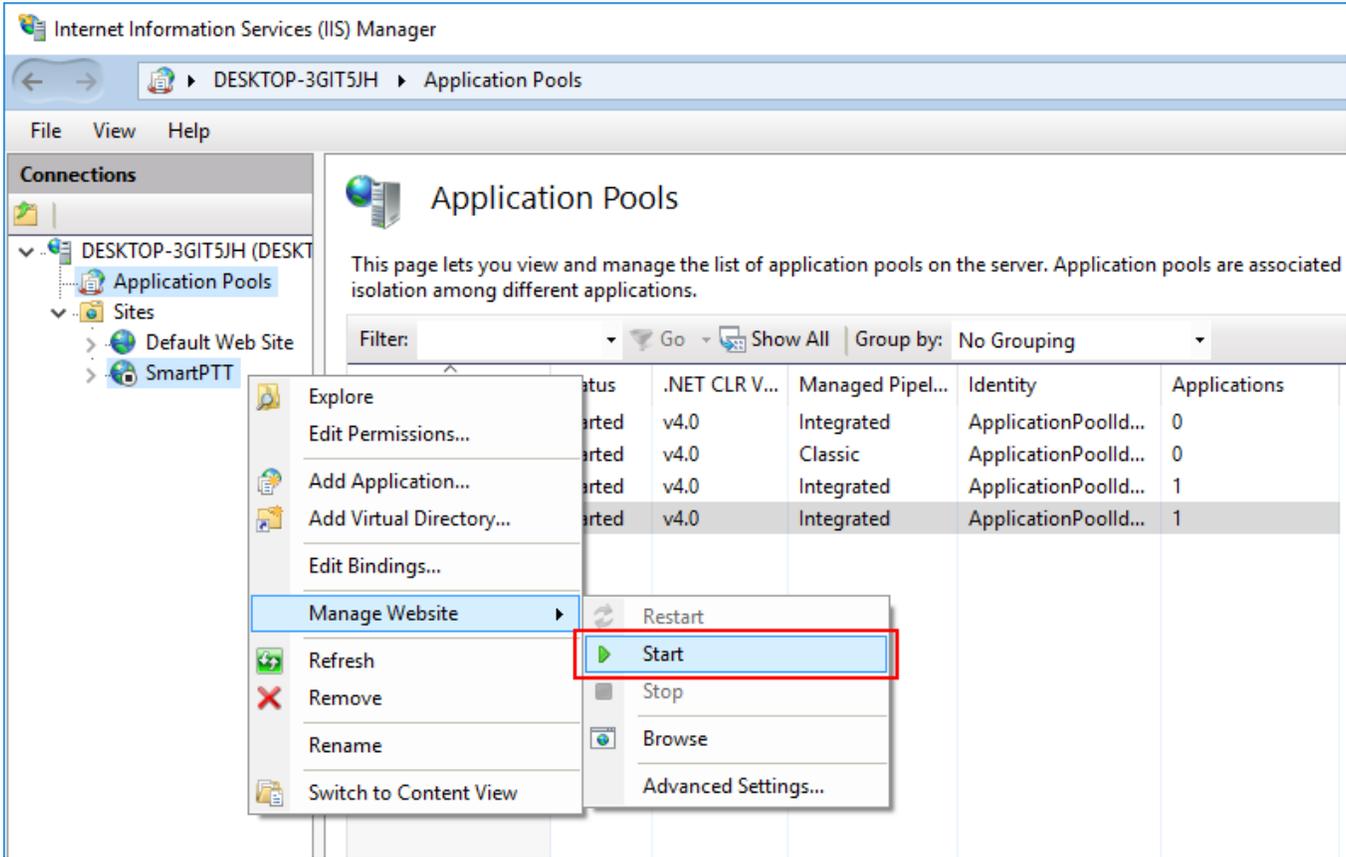
**Application Pools**

This page lets you view and manage the list of application pools on the server. Application pools are associated isolation among different applications.

Filter: [v] Go [v] Show All | Group by: No Grouping [v]

Name	Status	.NET CLR V...	Managed Pipel...	Identity	Applications
.NET v4.5	Started	v4.0	Integrated	ApplicationPoolId...	0
.NET v4.5 Classic	Started	v4.0	Classic	ApplicationPoolId...	0
DefaultAppPool	Started	v4.0	Integrated	ApplicationPoolId...	1
SmartPTT	Started	v4.0	Integrated	ApplicationPoolId...	1

2. Right-click the created website, then point to **Manage Website** and click **Start** to start Web Client.



**NOTE**

If you want to get both local and global access to Web Client, repeat adding, configuring, and starting procedures using corresponding settings.

### 4.3 Forwarding Router Ports

If you configure global access to Web Client, forward the following ports on your router:

- Port 8191
- Port 8888
- Port 18500
- Port you specified for the website

## 5 Configuration Procedure

Configuration procedures include SmartPTT Radioserver configuration to work with Web Client.

All necessary configuration is made via SmartPTT Radioserver Configurator. To apply changes you should save them and restart SmartPTT Radioserver.

You will also need to perform necessary configurations in SmartPTT Audio Proxy and SmartPTT WebSocket Server.

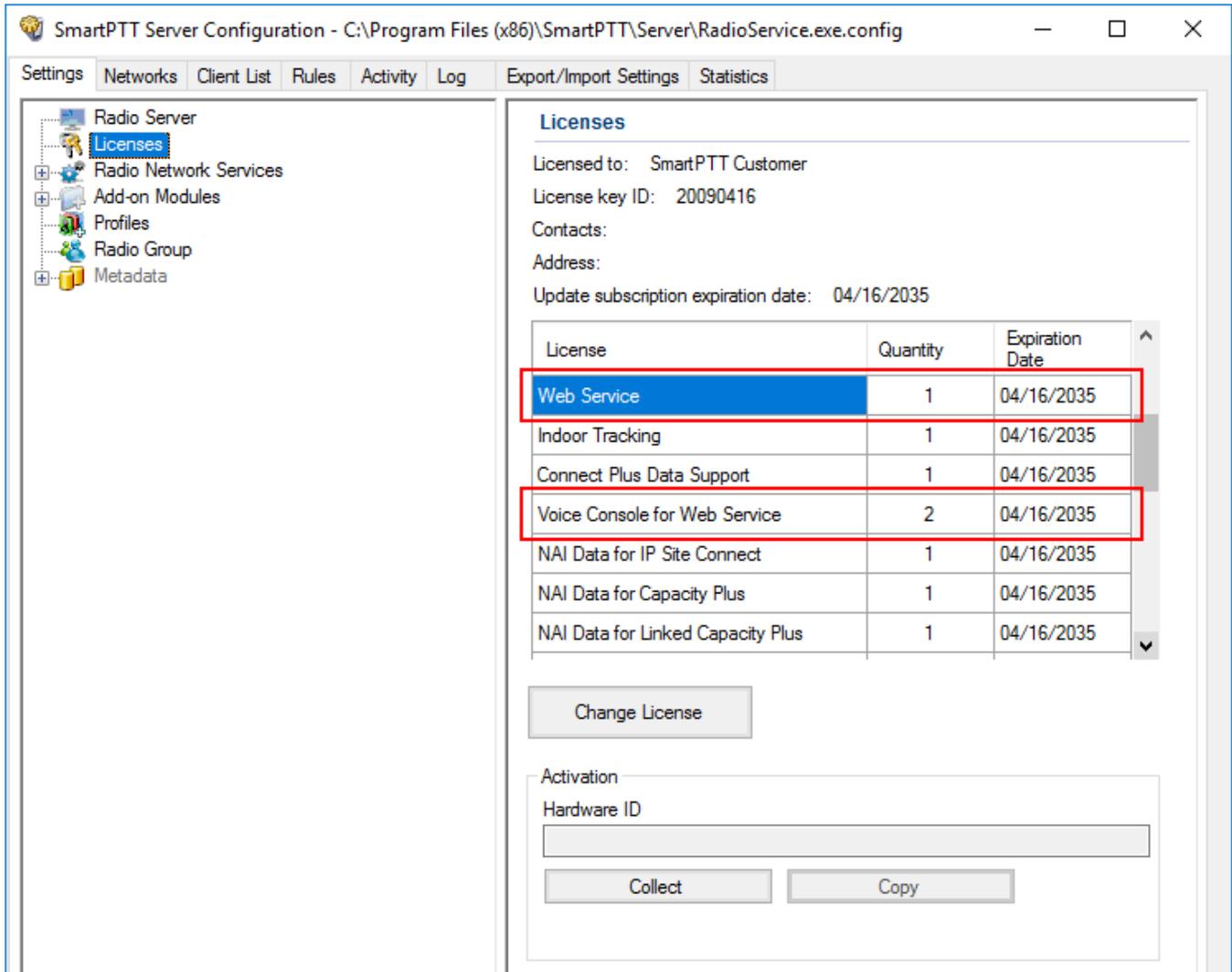
### 5.1 Checking Licenses

You should have proper licenses to use Web Client.

To check the license, follow these steps:

1. On the **Settings** tab of SmartPTT Radioserver Configurator, click **Licenses**.
2. In the **Licenses** pane scroll down the list of licenses and find the following items:
  - **Web Service:** Needed to allow the connection to SmartPTT Radioserver and transmit data to Web Client (GPS, text messages).

- **Voice Console for Web Services:** Needed for voice transmission between Web Client and SmartPTT Radioserver.



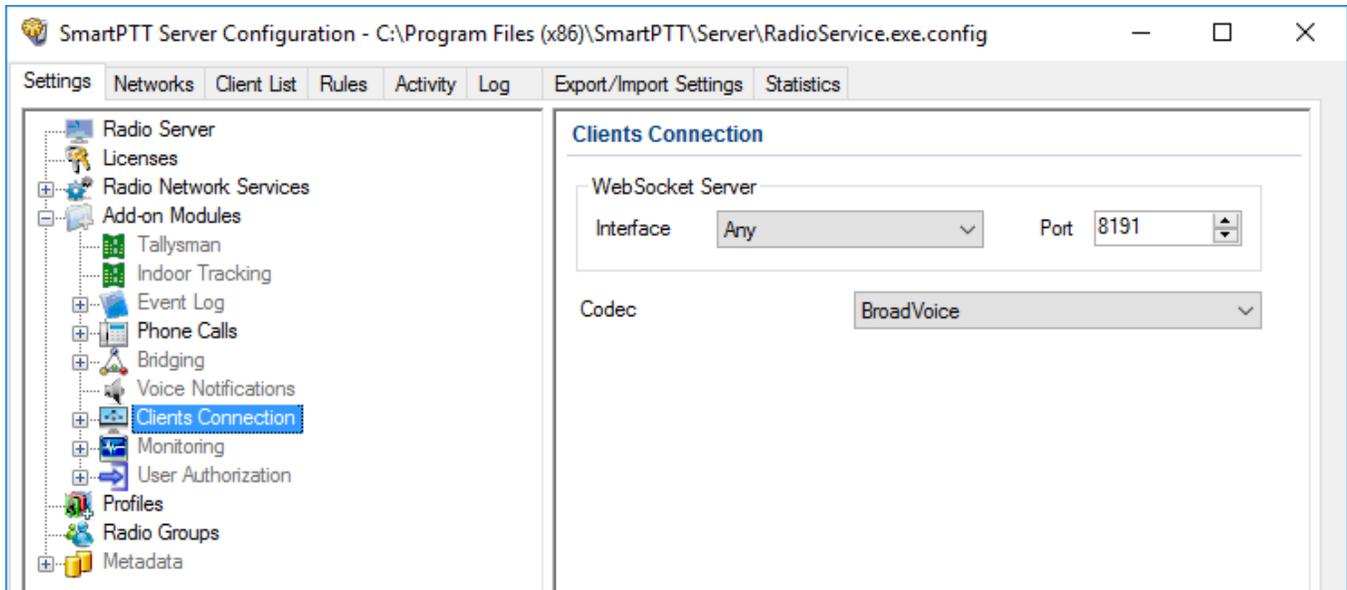
**NOTE**  
 Voice can be transmitted to Web Client only via Control Stations in any supported system.

## 5.2 Configuring WebSocket Server

Web Client accesses SmartPTT Radioserver via WebSocket Server.

To configure WebSocket Server, follow these steps:

1. On the **Settings** tab of SmartPTT Radioserver Configurator, expand **Add-on Modules** and click **Clients Connection**.



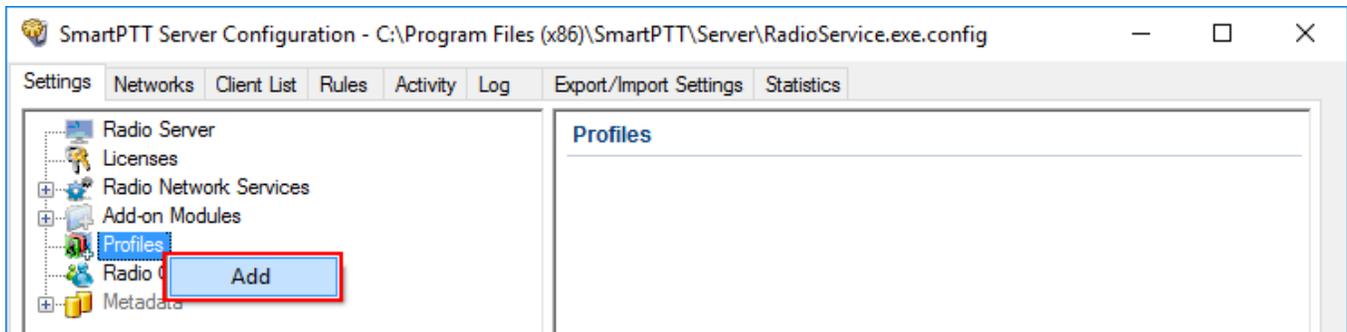
2. Select proper interface in the **Interface** field of the **WebSocket Server** list.
3. In the **Port** field enter the port for the WebSocket Server.
4. Select proper voice codec in the **Codec** list.
5. Click **Save**  to save changes.
6. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

## 5.3 Client Profile Management

### 5.3.1 Adding Profile

To add a new profile, follow these steps:

1. In the **Settings** tab of SmartPTT Radioserver Configurator, right-click **Profiles** and click **Add**.

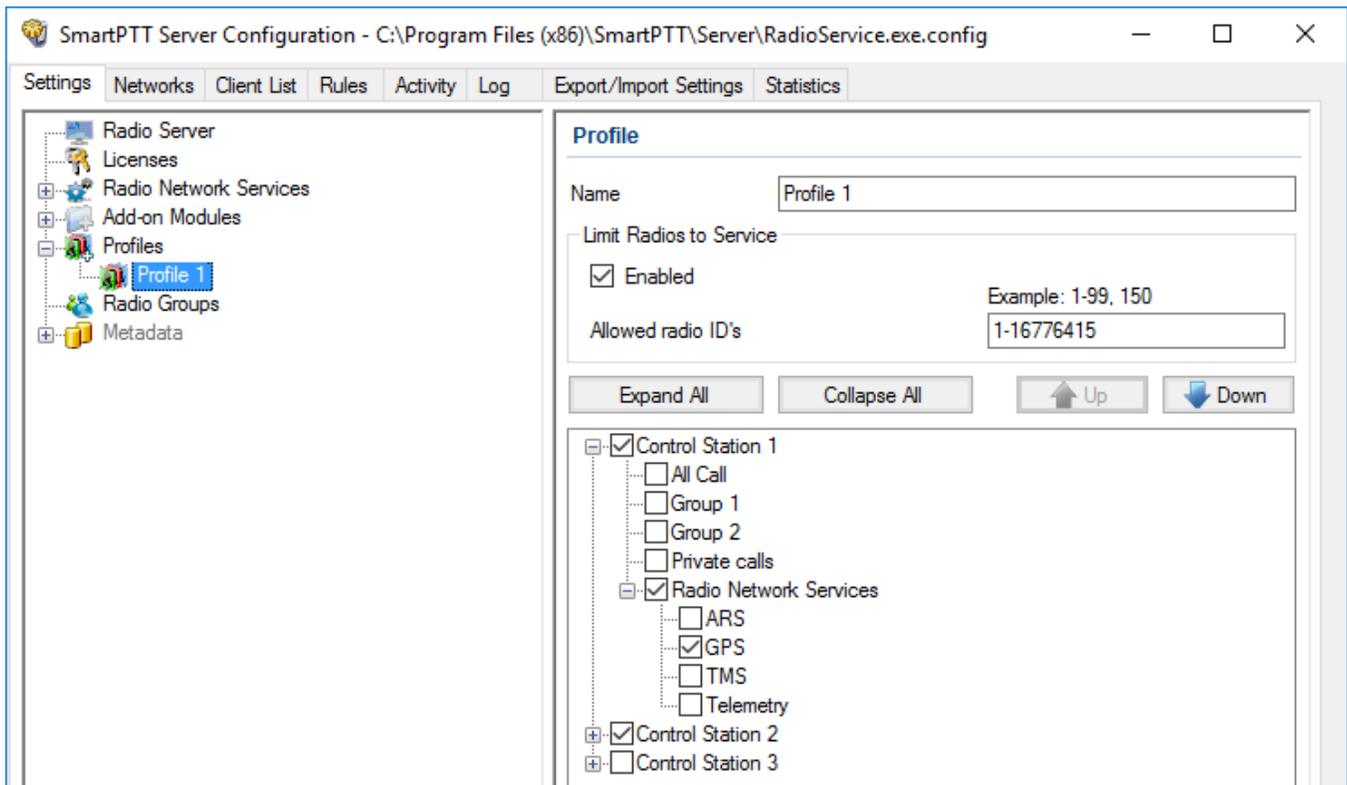


2. Click **Save**  to save changes.
3. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

## 5.3.2 Configuring Profile

To configure profile, follow these steps:

1. In the **Settings** tab of SmartPTT Radioserver Configurator, expand **Profiles** and click the needed profile. Its settings will appear in the **Profiles** pane.



2. Enter a new profile name in the **Name** field.
3. If needed, select **Limit radios to Service**. This option requires specification of available radio IDs.
4. Enter radio IDs in the **Allowed Radio IDs** field as presented in the example.
5. If needed, click **Collapse All** to facilitate systems visualization.
6. Select and expand the radio system you want to be available for the client then select the needed parameters for it.
  - a. Select **All Call** (if configured) to allow calling all radios on the related channel.
  - b. Select **Group #** (if configured) to allow group calls to the client on the related channel

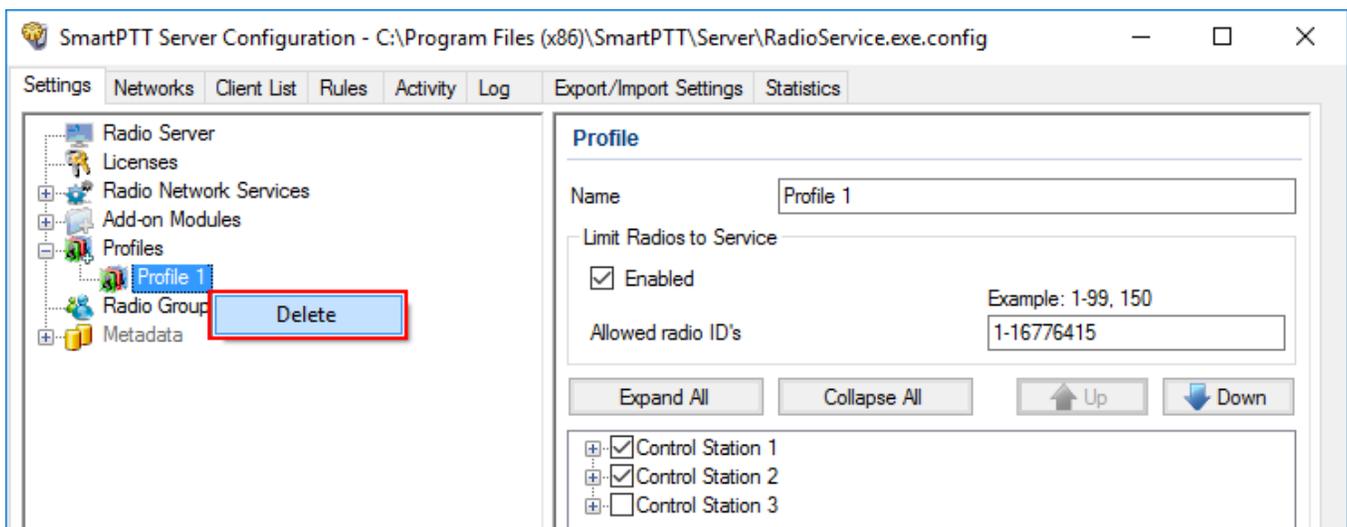
- c. Select **Private Calls** to allow private calls between the client and radio.
  - d. Select **Private calls monitoring** to allow Web Client listening private calls between radios.
  - e. Select and expand **Radio Network Service** to activate the following features:
    - i. Select **GPS** to allow location data transmission to Web Client.
    - ii. Select **TMS** to allow text messages transmission between SmartPTT Radioserver and Web Client.
7. Repeat step 6 with the substeps for other selected systems.
  8. Click **Save**  to save changes.
  9. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

### 5.3.3 Deleting Profile

Deleting profile is an irreversible action. No confirmation messages appear during the deleting.

To delete an existing profile, follow these steps:

1. On the **Settings** tab of SmartPTT Radioserver Configurator, right-click the needed profile and click **Delete**.



2. Click **Save**  to save changes.
3. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

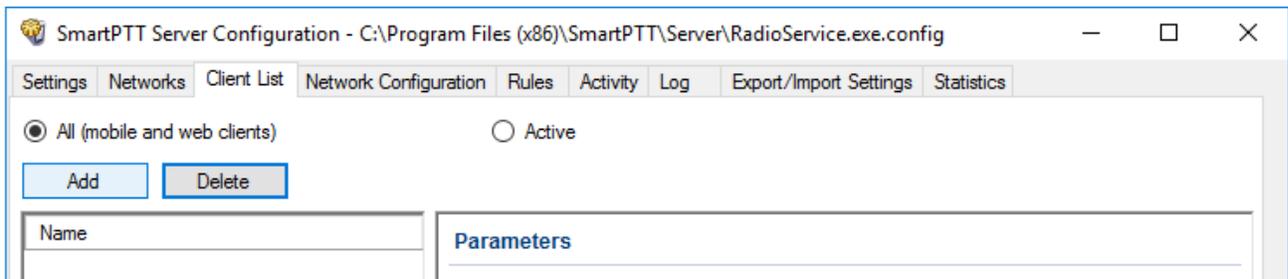
## 5.4 Client Account Management

### 5.4.1 Adding and Configuring Client Account

You should configure client account right after its creation. You can also reconfigure client account at any time.

To create and modify a new client account, follow these steps:

1. In the **Client List** tab of SmartPTT Radioserver Configurator, click **All**.

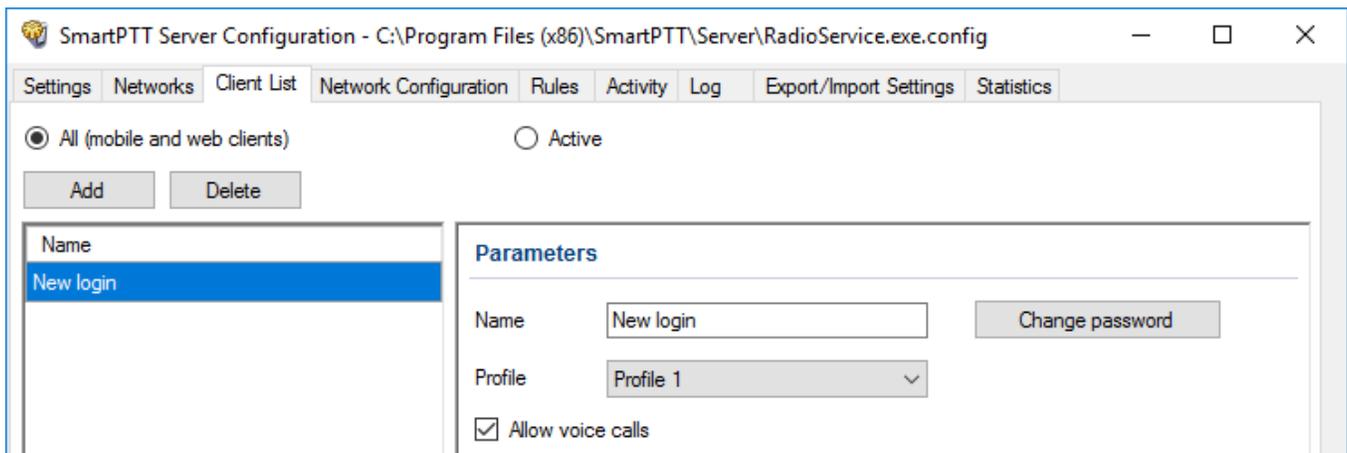


2. Click **Add** to add a new client account.

#### NOTE

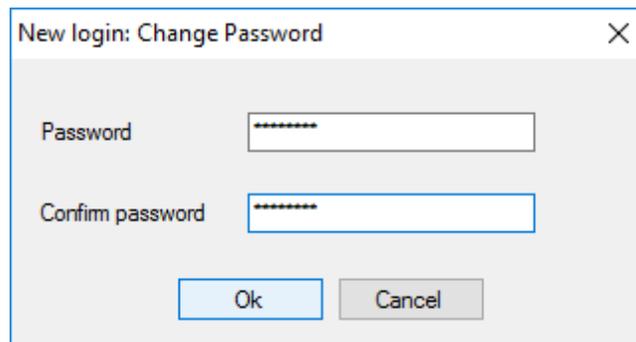
Both login and password are case sensitive.

3. In the **Name** field of the **Parameters** pane, enter client login.



4. Click **Change password**.

5. Enter and confirm the password. Click **OK** to close the **Change Password** window.



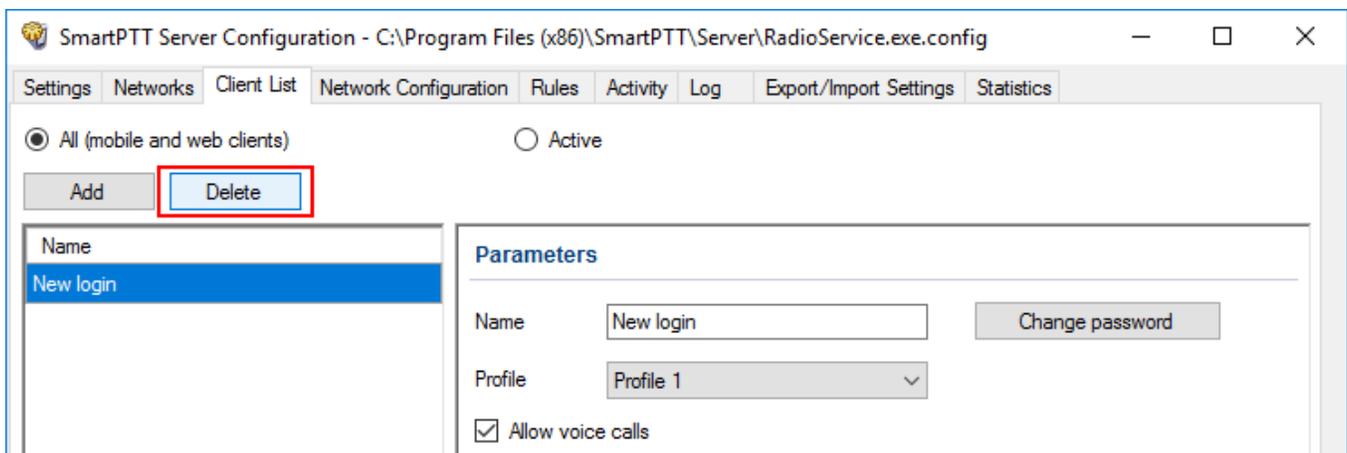
6. Select the profile from the **Profiles** list.
7. Select **Allow voice calls** to allow voice transmission between SmartPTT Radioserver and Web Client.
8. Click **Save**  to save changes.
9. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

## 5.4.2 Deleting Client Account

Deleting client account is an irreversible action. No confirmation messages appear during the deleting.

To delete an existing client account, follow these steps:

1. In the left pane of the **Client List** tab of SmartPTT Radioserver Configurator, click the desired client.
2. Click **Delete**.



3. Click **Save**  to save changes.
4. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

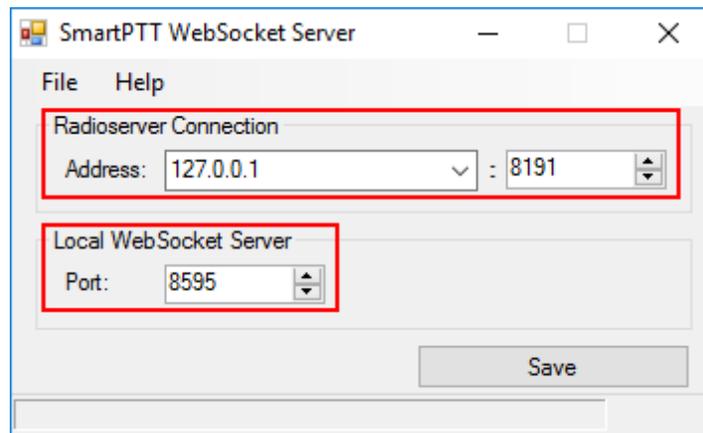
## 5.5 SmartPTT WebSocket Server Configuration

To provide connection of SmartPTT Web Client to SmartPTT Radioserver, the configuration of SmartPTT WebSocket Server is necessary. The program is included in the SmartPTT installation package and you can find it in the SmartPTT Web Client folder.

### 5.5.1 Configuring SmartPTT WebSocket Server for Local Access

To configure SmartPTT WebSocket Server, follow these steps:

1. In the <**SmartPTT LAN**> folder, run **WSS.exe** as administrator.
2. In the **SmartPTT Enterprise WebSocket Server** window, perform the following actions:



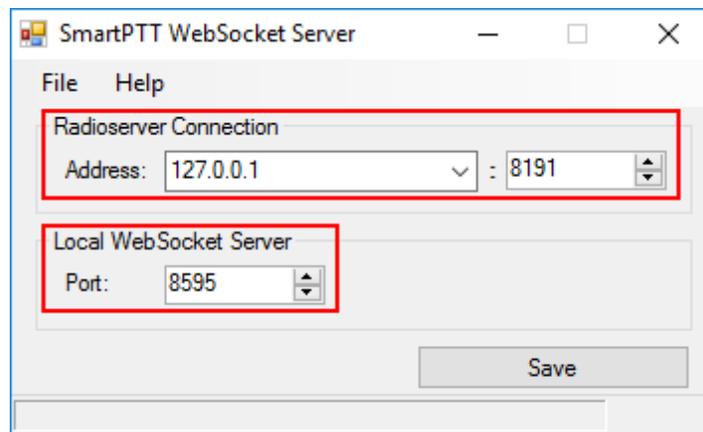
- a. In the **Radioserver Connection** area perform the following actions:
  - i. In the **Address** field, enter the IP address you specified in the [Clients Connection](#) pane of SmartPTT Radioserver Configurator.

- ii. In the following **Port** field enter the port you specified in the [Clients Connection](#) pane of SmartPTT Radioserver Configurator.
- b. In the **Local WebSocket Server** area, enter a free port for the SmartPTT Audio Proxy program.
- c. Click **Save** and close the window.

## 5.5.2 Configuring SmartPTT WebSocket Server for Global Access

To configure SmartPTT WebSocket Server, follow these steps:

1. In the <**SmartPTT WAN**> folder, run **WSS.exe** as administrator.
2. In the **SmartPTT Enterprise WebSocket Server** window, perform the following actions:

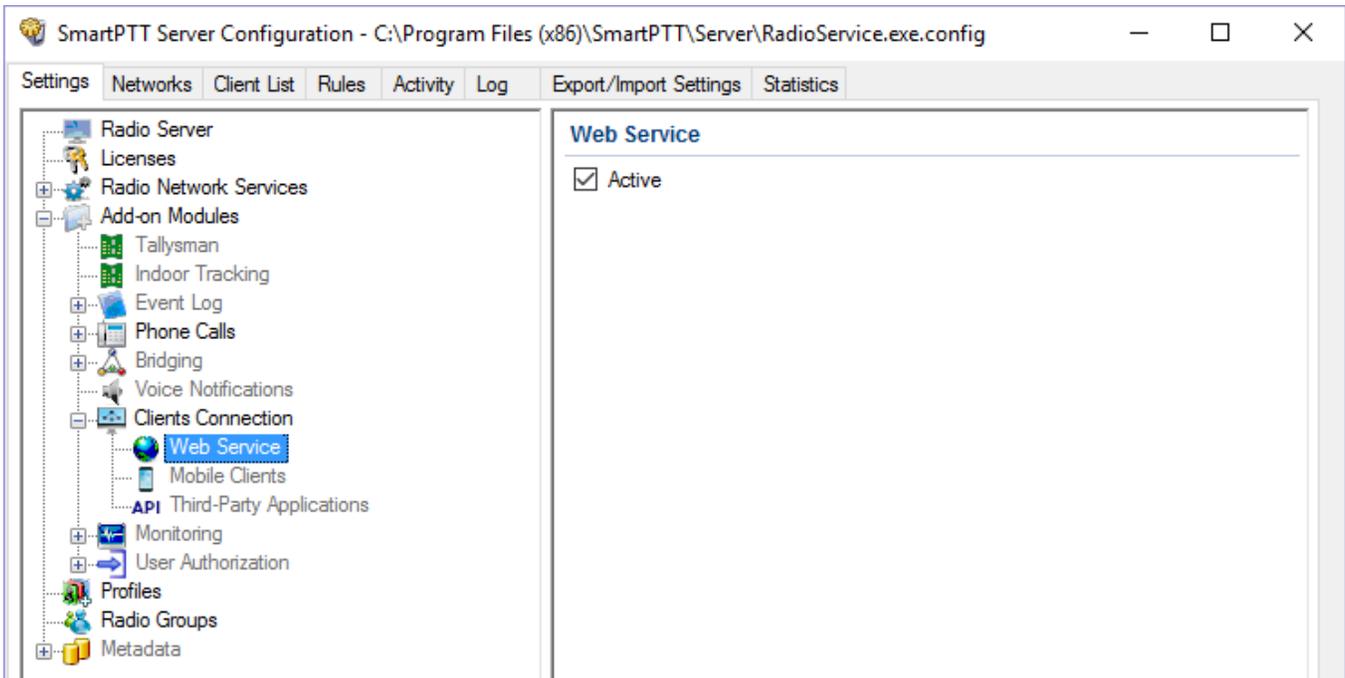


- a. In the **Radioserver Connection** area perform the following actions:
  - i. In the **Address** field, enter the IP address of an external router.
  - ii. In the following field enter the port number of an external router.
- b. In the **Local WebSocket Server** area, in the **Port** field enter 8595.
- c. Click **Save** and close the window.

## 5.6 Activating Client Support in SmartPTT Radioserver

To activate client support in SmartPTT Radioserver, follow these steps:

1. On the **Settings** tab of SmartPTT Radioserver Configurator, expand **Add-on Modules** → **Clients Connections**.
2. Click **Web Service**.



3. In the **Web Service** pane, select **Active**.
4. Click **Save**  to save changes.
5. Click **Restart**  to restart *SmartPTT Radioserver* and apply changes.

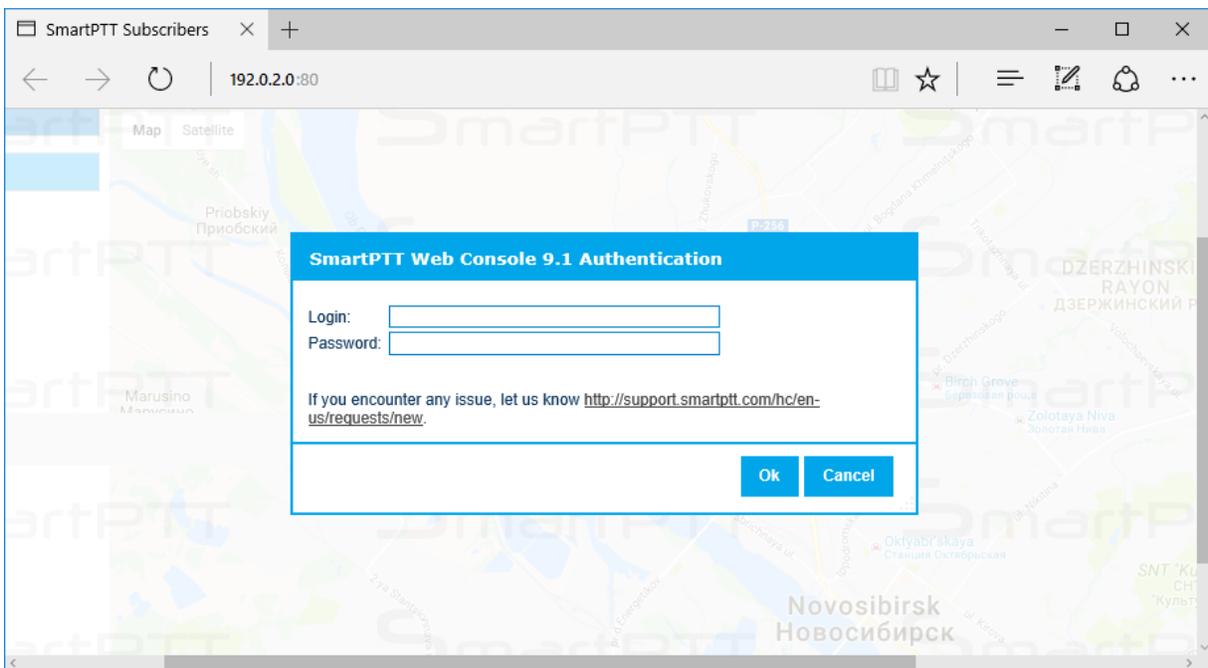
## 6 Checking Web Client Connection

To make sure websites are configured properly, you can perform the following actions:

### Checking from the web browser

1. Open a web browser.
2. In the address bar of the browser, enter the [IP address](#) and the [port](#) that you specified during the adding the web site procedure.

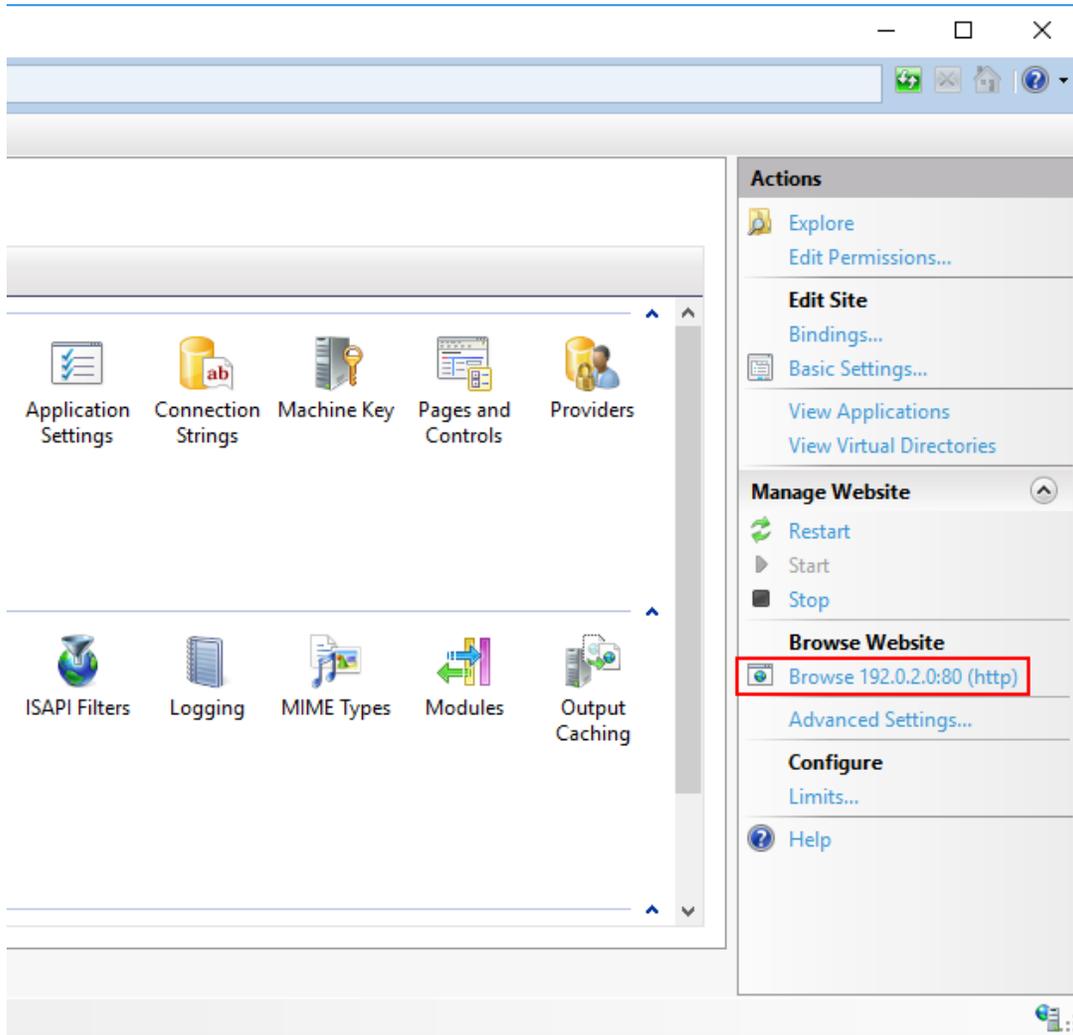
If Web Client is configured properly, the following window appears:



### Checking from the IIS Manager

1. Open **Internet Information Services (IIS) Manager**.

2. Click the name of the added website and then click **Browse <IP address of the web site>:<port> (http)** in the **Actions** pane.



If the website is configured properly, a browser with the SmartPTT Subscribers tab opens.