SmartPTT Express Quick Start Guide

About This Document

SmartPTT Express Quick Start Guide briefly explains how to install and configure SmartPTT Express and prepare it for supervision and operation.

Before Installation

Before you install and configure SmartPTT Express, ensure that the following prerequisites are fulfilled.

Computer Prerequisites

- Use a computer/workstation that complies with SmartPTT Express hardware and operating system requirements.

- Assign an IPv4 address to each of the SmartPTT Express computers to support IP connection, voice calls, and radio user tracking on maps.

- Assign a second IP address to the SmartPTT Express Server computer if required to use both voice dispatch and voice logging.

- IP addresses must be always assigned to the computer, even if they are provided over a DHCP server.

Authorization Requirements

- If you intend to use local groups authorization in SmartPTT Express, perform the following actions:

  - Create at least one Windows user account on SmartPTT Express Server host to serve as SmartPTT Express administrator (an existing account can be used).

  - Create at least one user group on SmartPTT Express Server host to fill the administrator role in SmartPTT Express (an existing group can be used) and add the desired user account(s) to it.

- If you intend to use domain authorization, perform the following actions:

  - In the domain to which SmartPTT Express Server host belongs, create at least one group to fill the administrator role in SmartPTT Express (an existing group can be used).

  - Add the desired domain user accounts to the groups corresponding to their intended role in SmartPTT Express.
  For details and assistance, contact your system administrator.

IMPORTANT: The administrator group needs to be specified during SmartPTT Express installation. Four groups are required to fill all SmartPTT Express user roles. If there is no valid user with SmartPTT Express administrator privileges, it will not be possible to log on to SmartPTT Express Configurator.

For details, see "System Roles & Authorization" in *SmartPTT Express Installation and Configuration Guide*.

DIMETRA Express Prerequisites

- Ensure that DIMETRA Express contains the following licenses:

Name	Necessity	Description
DIMETRA Express Core	Required	Core license.
Dispatch Console Position	Optional	Supports dispatch console connection with voice call, emergency alarm, patching and other functionality.
Voice Logging Capacity	Optional	Supports SmartPTT Express Server connection as an external voice logger and limits the number of simultaneous transmissions that can be recorded.
Radio Users	Required	Limits the number of radio users and console users in DIMETRA Express. Each console user refers to an authorized SmartPTT Express dispatcher.
Analog Gateway Channel	optional	Limits the number of donor radios connected via CCGW radio gateway.

NOTICE: Outdoor positioning functionality requires one of the optional licenses.

- Configure IP addresses of SmartPTT Express Server in DIMETRA Express according to the expected SmartPTT Express functions (Dispatch Console and/or External Voice Logger).

- If voice dispatch is required in SmartPTT Express, add console users in DIMETRA Express.

- If voice logging is required in SmartPTT Express, configure voice logging in DIMETRA Express.

- If location service is required in SmartPTT Express, configure the Short Data Transport Service in DIMETRA Express:

    - Ensure that at least one SDTS Host is configured.

- Ensure that radios are configured to send their coordinates to that SDTS Host using the Location Information Protocol (LIP). The system may have several SDTS hosts, each receiving location updates from different radios.

- Obtain the following DIMETRA Express configuration parameters:

  - IP address of the DIMETRA Express system.

  - Credentials of the voice logging client account.

  - DIMETRA Express host names used in communication with third-party (API) consoles and voice loggers.

  - Short Data host IDs and passnumbers (required for outdoor location support in SmartPTT Express).

If you need assistance in DIMETRA Express configuration or information gathering, contact Motorola Solutions representative in your region.

Map Access Prerequisites

SmartPTT Express supports maps in the OpenStreetMap (OSM) format. To show radio user location on the map, SmartPTT Express requires either an HTTP/HTTPS server that hosts OSM maps or an OSM map stored as files accessible by SmartPTT Express Client applications.

SmartPTT Express supports basic HTTP authentication in the map server. It also supports authorization with credentials (login and/or password) provision in the URL address.

Installing SmartPTT Express

1. Run the installation file from the computer where you want to install SmartPTT Express.

2. Select the language that will be used during installation and set as the initial language of SmartPTT Express Configurator and SmartPTT Express Client.

3. Read and accept the license agreement.

4. Select the SmartPTT Express components you want to install.
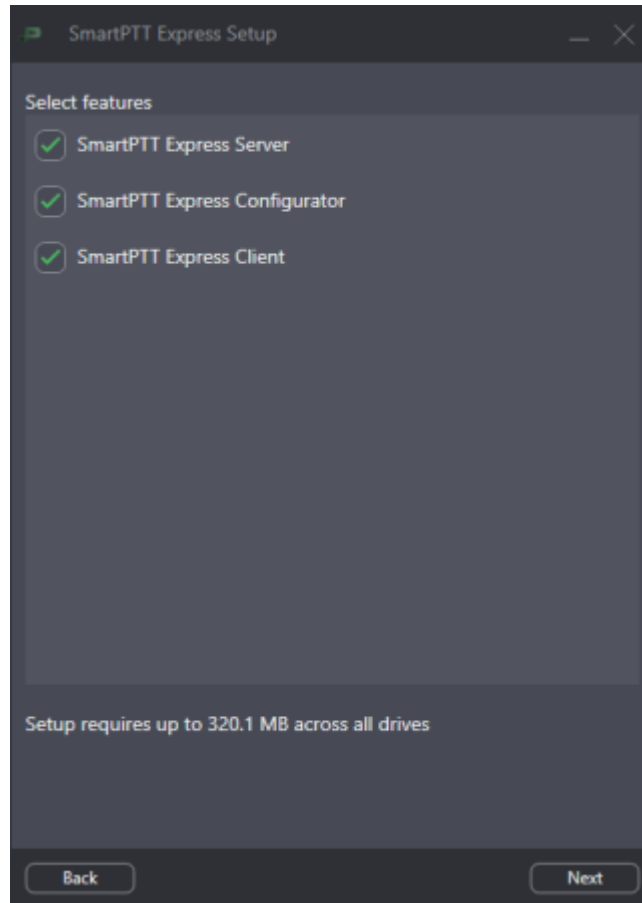
5. Leave default installation paths unchanged unless required to install to a different location.
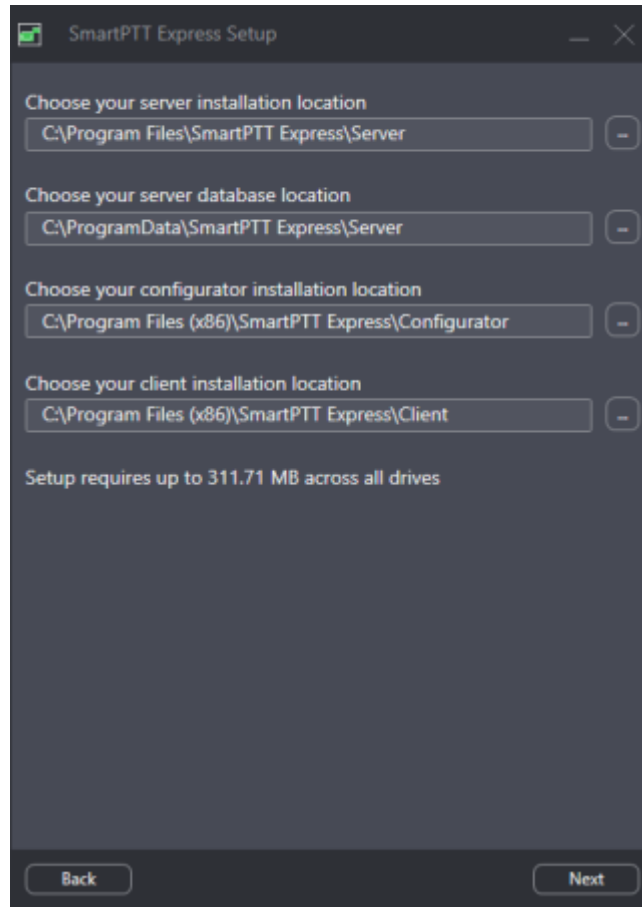
IMPORTANT: If you are planning to maintain a large audio archive, it is advised to select a non-system drive with ample free space for server database location.

6. If you are installing SmartPTT Express Server, configure the following parameters:
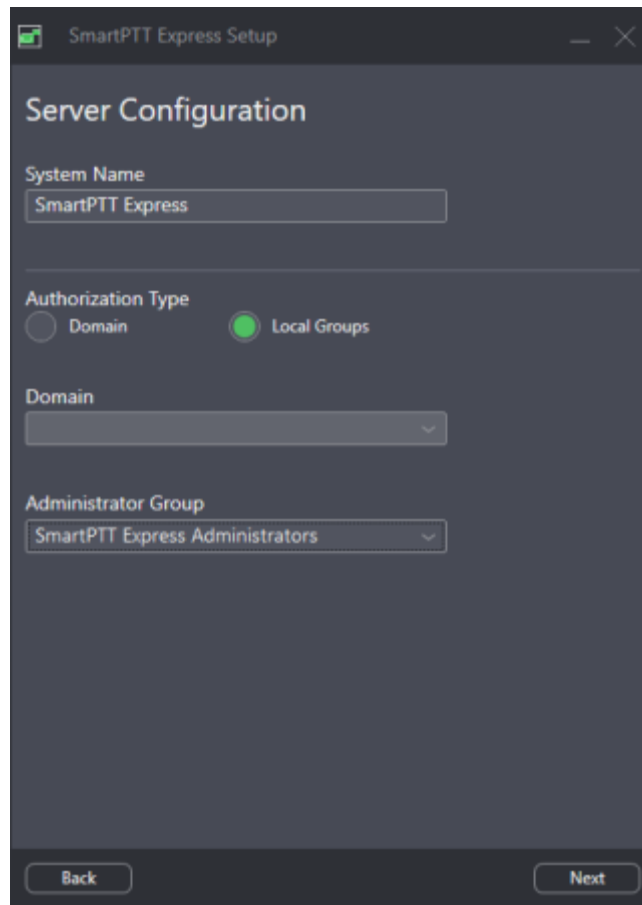
a. In the **System Name** field, type the SmartPTT Express system name.

b. Configure user authorization:

|	
To configure domain authorization,	perform the following actions: 1. Under **Authorization Type**, select the **Domain** option. 2. From the **Domain** list, select the desired domain name. 3. From the **Admin Group** list, select the domain user group that will have administrator privileges in SmartPTT Express.
To configure local authorization,	perform the following actions: 1. Under **Authorization Type**, select the **Local Groups** option. 2. From the **Admin Group** list, select the Windows user group that will have administrator privileges in SmartPTT Express.

    c. In the **Server IP Address** field, type the IP address of the SmartPTT Express Server computer that will be used for communication with SmartPTT Express Configurator.

7. If you are installing SmartPTT Express Client, in the **Client Configuration** area, in the **Server IP Address** field, type the IP address of the SmartPTT Express Server computer that will be used for communication with SmartPTT Express Client applications.
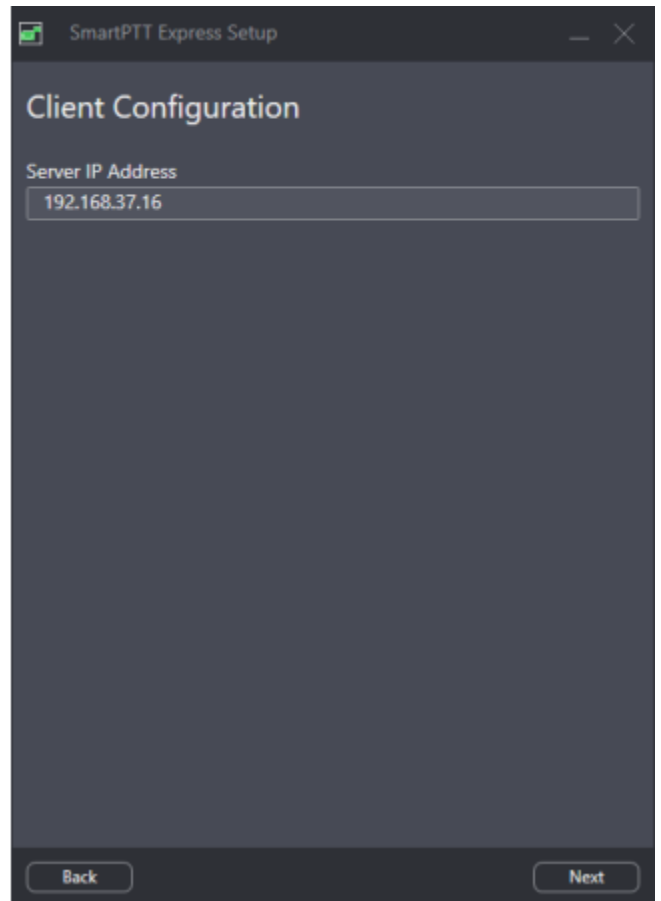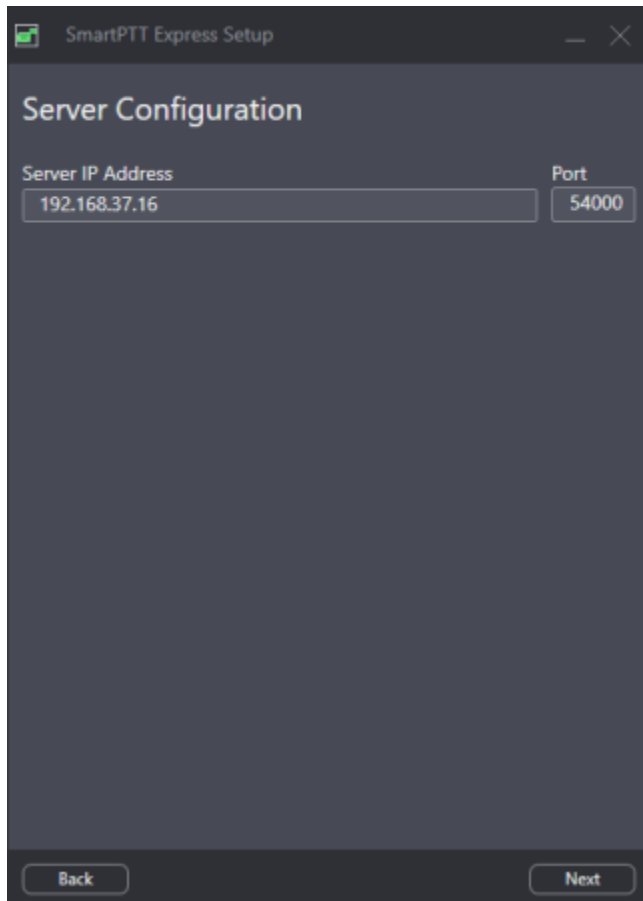

8. Determine if shortcuts must appear on Windows Desktop or not.

9. Initiate installation. After it completes, restart the computer.

Configuring SmartPTT Express Server

1. Run SmartPTT Express Configurator, and then log on to it using SmartPTT Express administrator credentials.

2. On the left pane, click the **Licenses** tab, and then perform the following actions:

   a. Click **Show Hardware ID** to obtain the Hardware ID, and then order the license file.

   b. Install the received file.
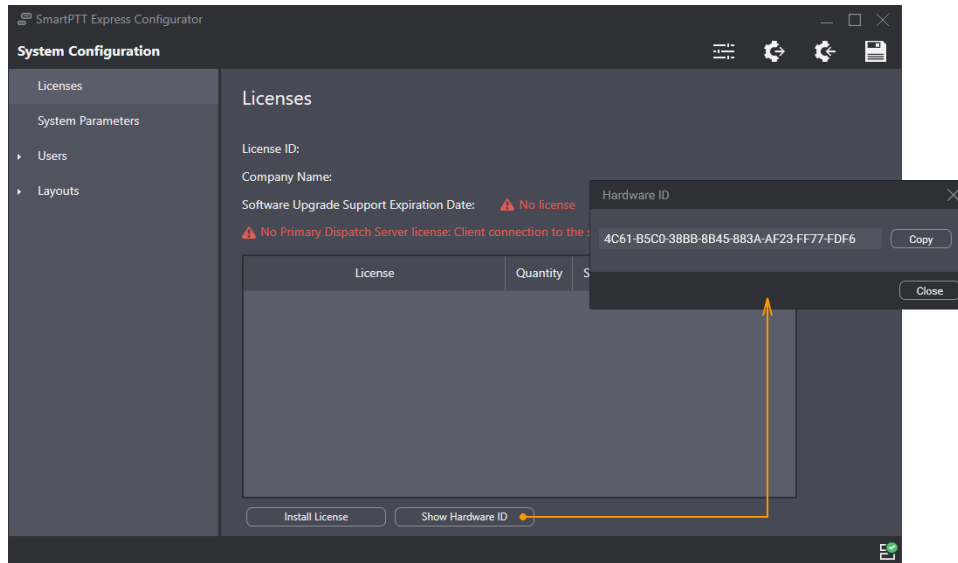
3. On the left pane, click **System Parameters**, and then perform the following actions:

   a. In the **System Roles** area, select user groups for the remaining system roles.
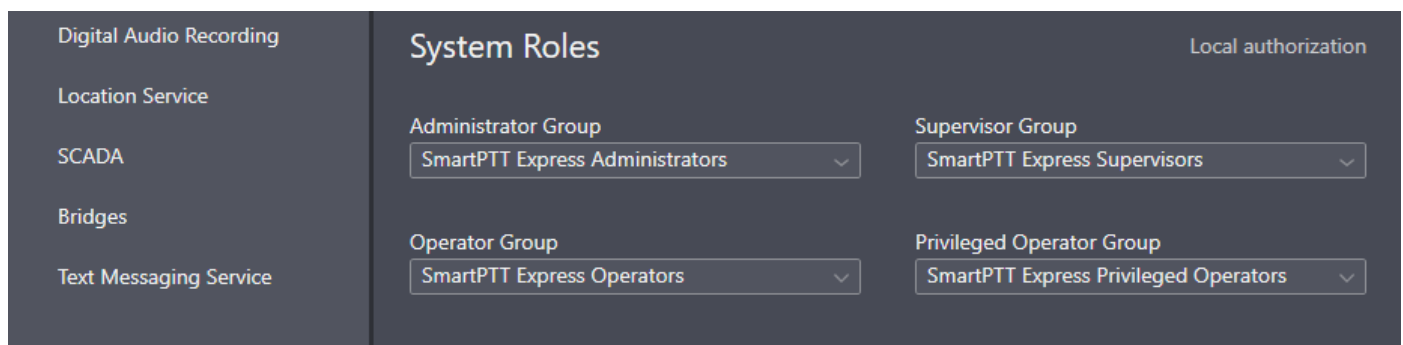
   b. In the **Server Parameters** area, type the SmartPTT Express Server IP address that will be used for communication with SmartPTT Express Client.
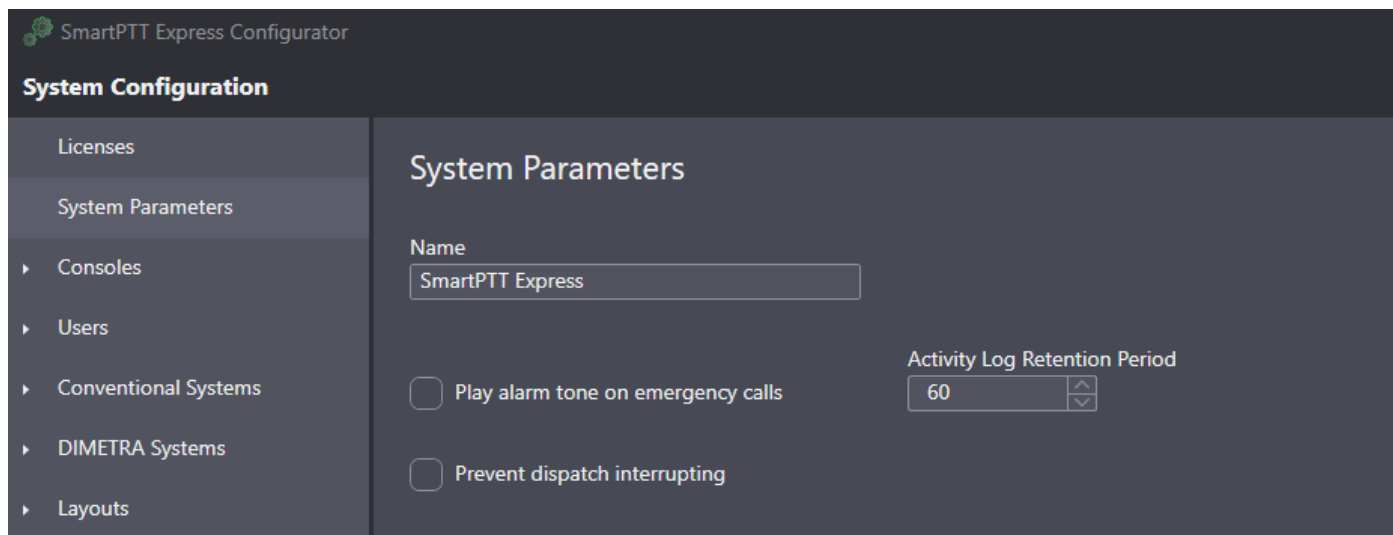
4. On the left pane, expand the **Consoles** tab, and then add and configure dispatch consoles.
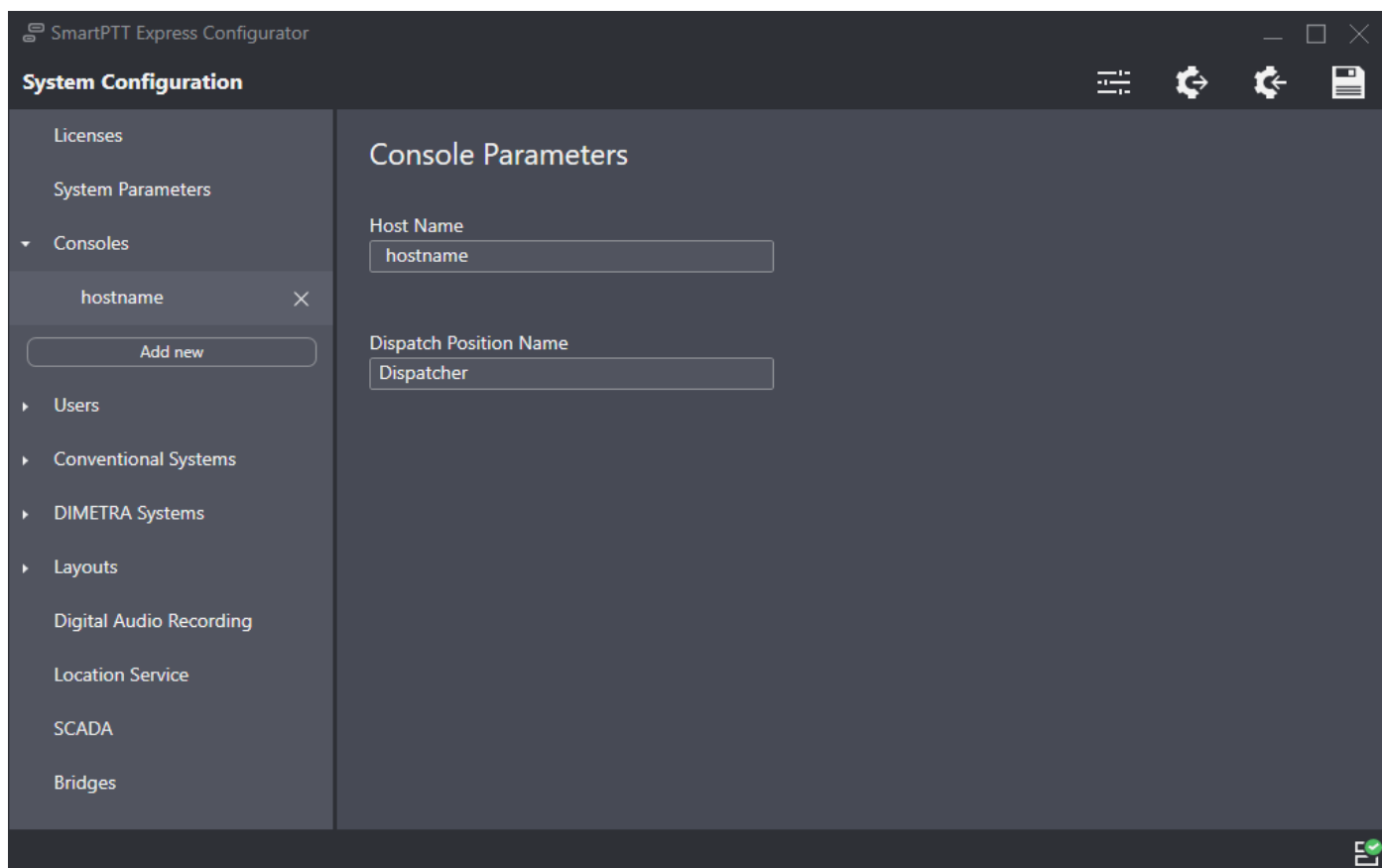

5. Expand the **Users** tab, and then add users whose names must be equal to Windows user names belonging to the groups configured for SmartPTT Express user roles.
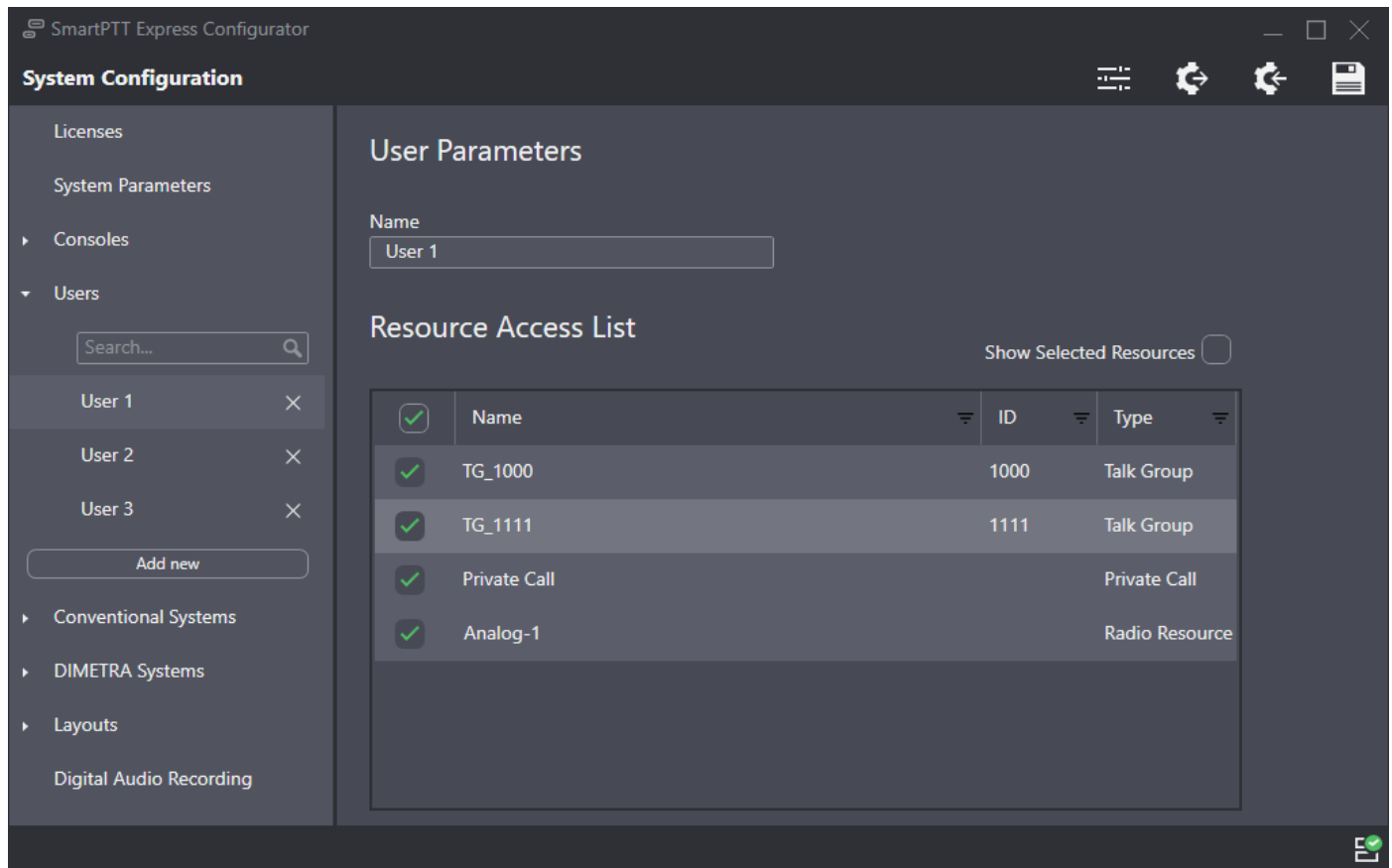
6. If the installed license includes SmartPTT Express SCADA integration, on the left pane, click
    SCADA and enter the URL address of SmartPTT Express SCADA GUI.

Configuring DIMETRA Express Connection

1. Expand the **DIMETRA Systems** tab, and then click **Add new**.

2. In the **Radio System Parameters** area, enter DIMETRA Express IP address.
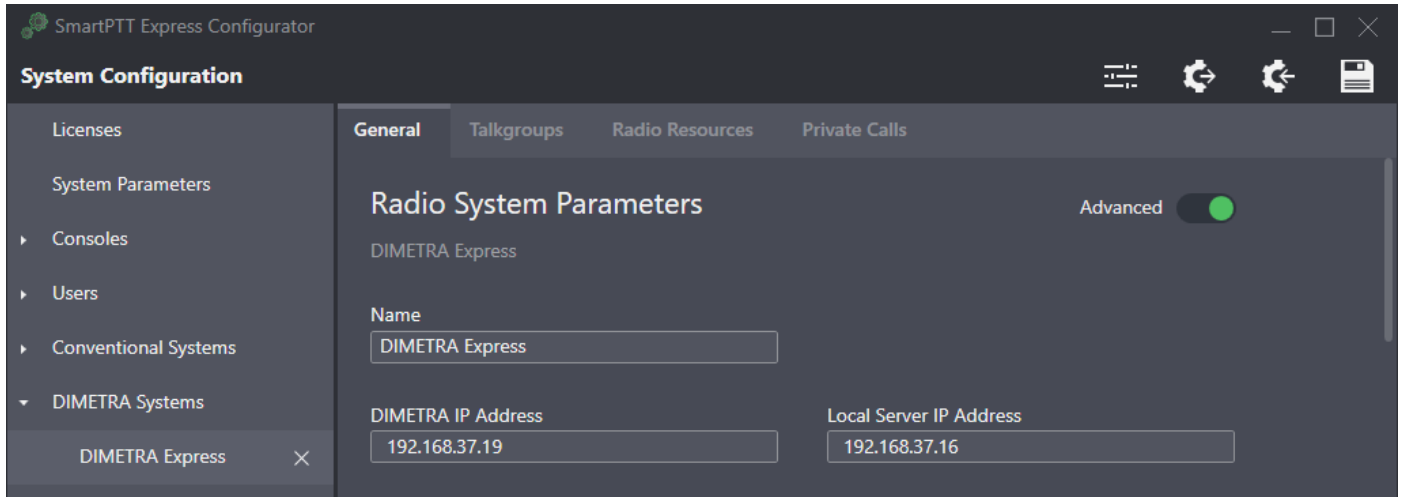
3. If voice dispatch is required and licensed, in the **Voice Dispatch Parameters** area, perform the following actions:
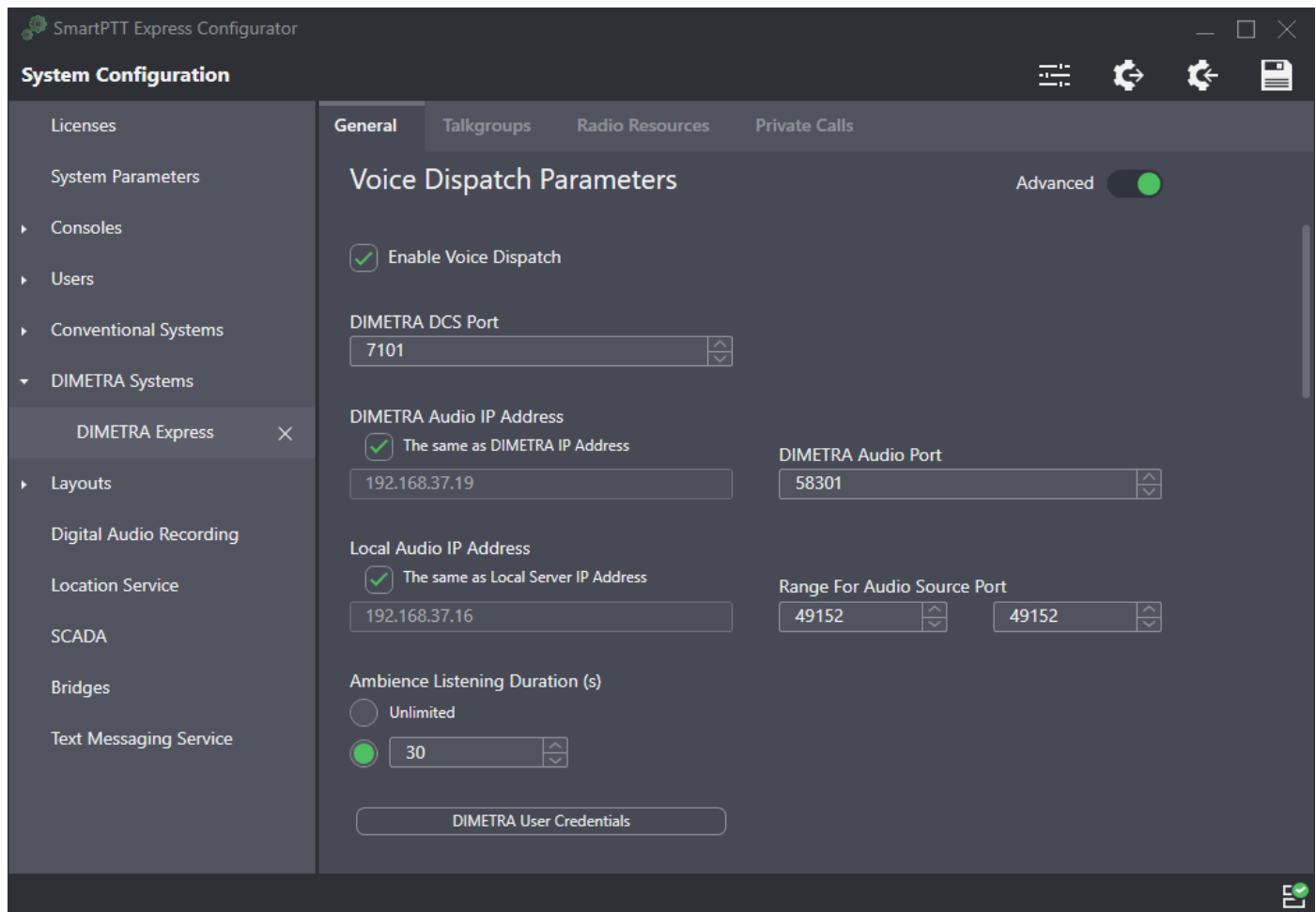
a. Select **Enable Voice Dispatch**.

b. In the **DIMETRA DCS Port** field, enter *7101*.

c. Click **DIMETRA User Credentials**, and then configure DIMETRA Express user association with SmartPTT Express users.
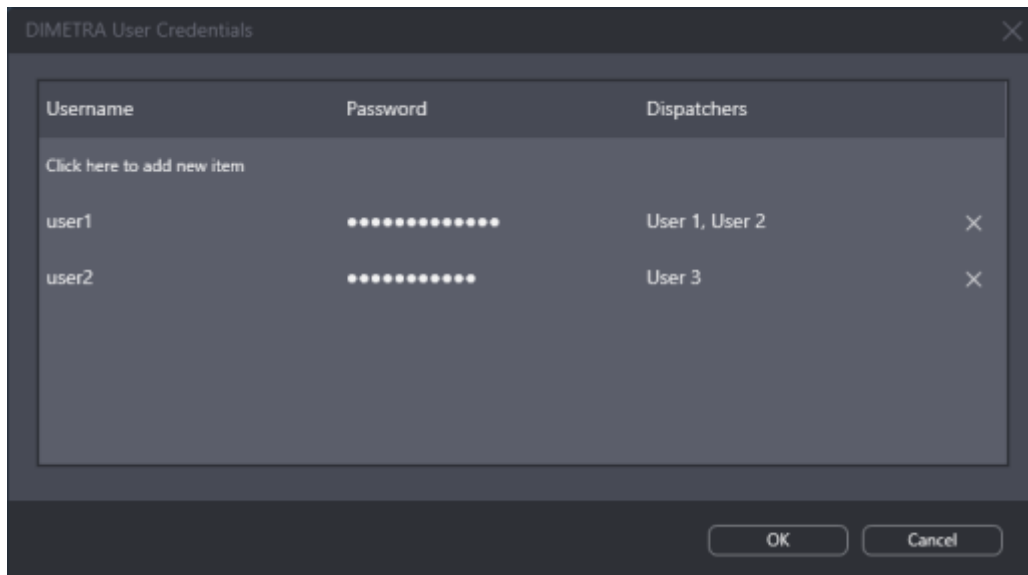
d. If voice logging is not required, at the bottom of the right pane, click **Sync**.

4. If voice logging is required and licensed, in the **Digital Audio Recording Parameters** area, perform the following actions:
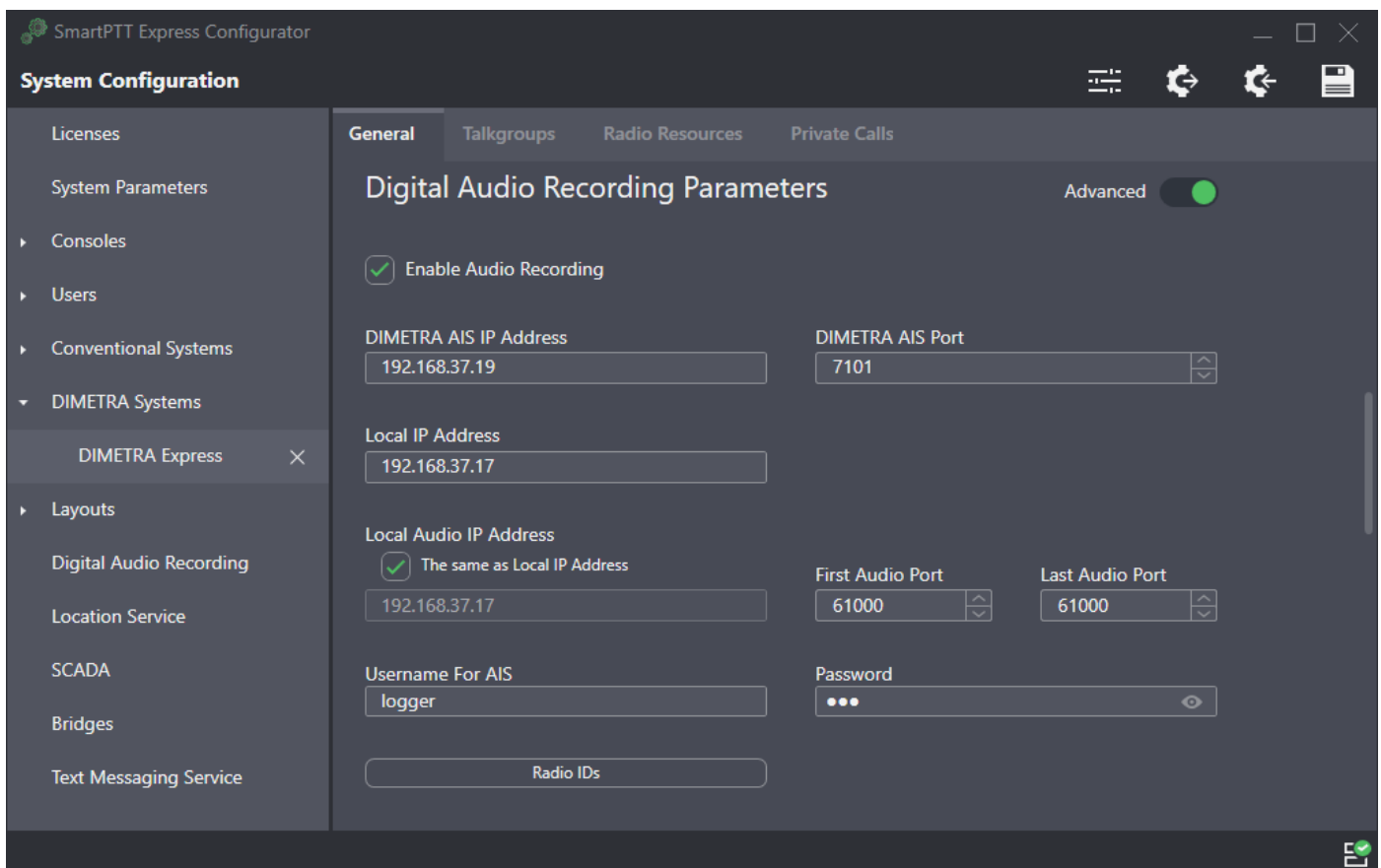

a. Select **Enable Audio Recording**.

b. In the **Local IP Address** field, enter the IP address configured as an external voice logger in DIMETRA Express.

c. In the **Username For AIS** and **Password** fields, enter the external voice logger username and password configured in DIMETRA Express.

d. At the bottom of the right pane, click **Sync**.

e. Click the **Radio IDs** button and then, in the **Radio IDs** window, select users whose transmissions must be stored in SmartPTT Express Audio Archive (if DIMETRA Express provides the records).

5. If radio user tracking is required and licensed, in the **Outdoor Positioning Parameters** area, perform the following actions:
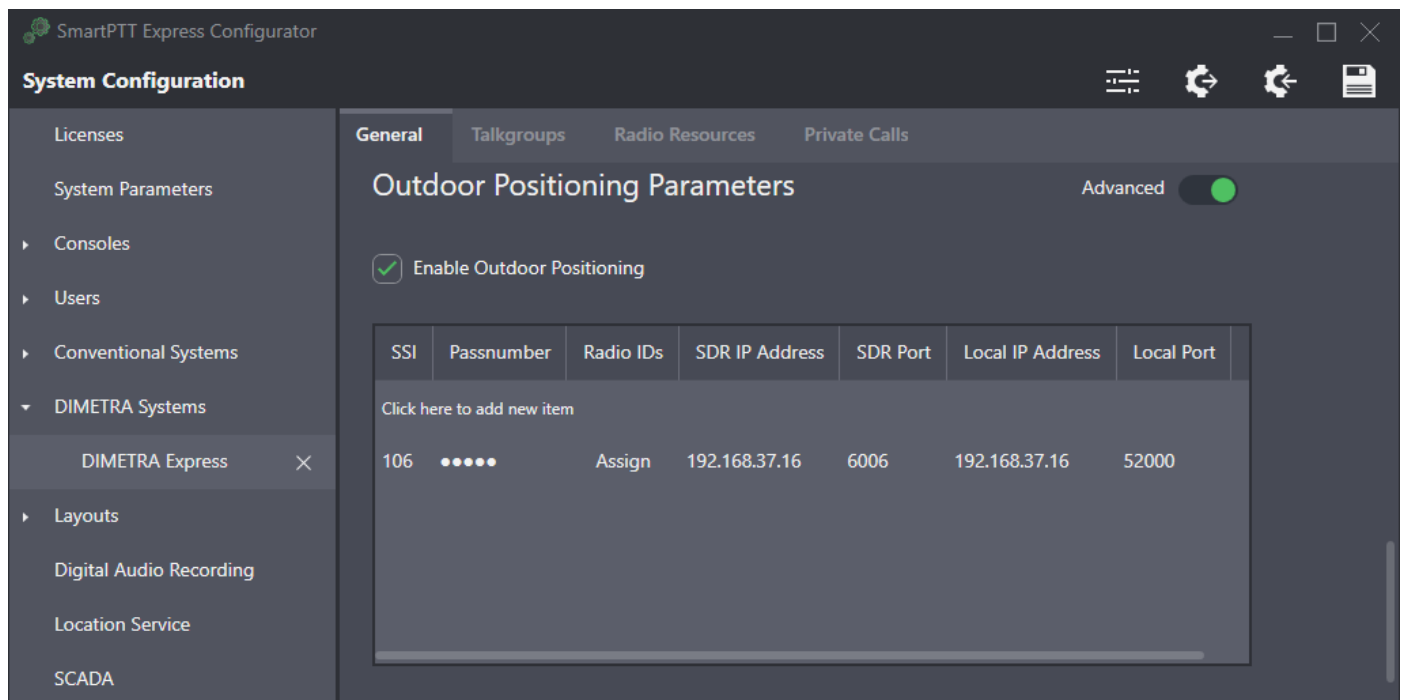

a. Select **Enable Outdoor Positioning**.

b. In the table that appears, click **Click here to add new item**.

c. In the **SSI** and **Pass Number** columns, enter the Short Data Host ID and passnumber obtained from DIMETRA Express.

d. In the **Radio IDs** column, click **Assign** and select radio users whose location must be tracked in SmartPTT Express.

6. If text messaging is required and licensed, in the **Text Messaging Parameters** area, select **Enable Text Messaging**, and then for each SmartPTT Express Client user that will use text messaging, perform the following actions:
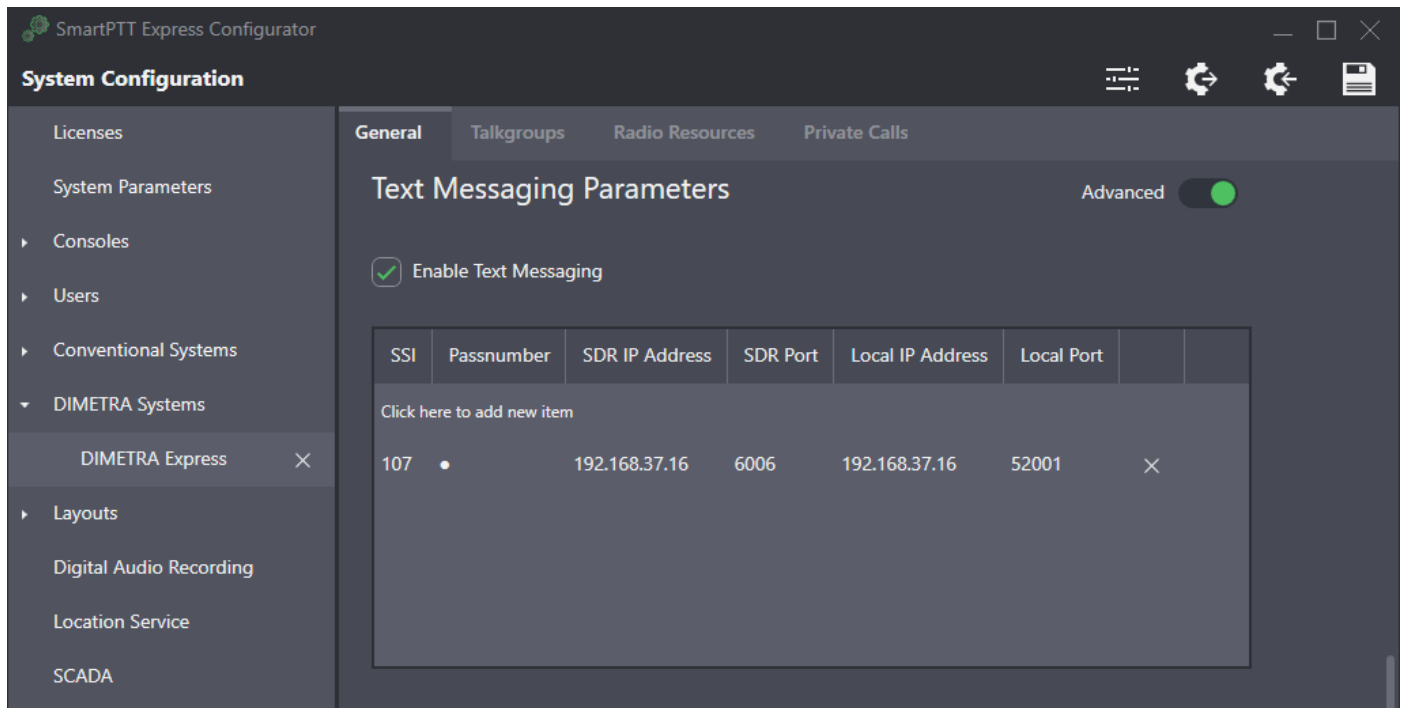
a. In the table, click **Click here to add new item**.

b. In the entry, in the **SSI** column, enter the Short Data Host ID of the DIMETRA Express user account.

c. In the **Pass Number** column, enter the Short Data Host passnumber.

7. Click the **Talkgroups** tab, and then, for each talkgroup, perform the following actions:
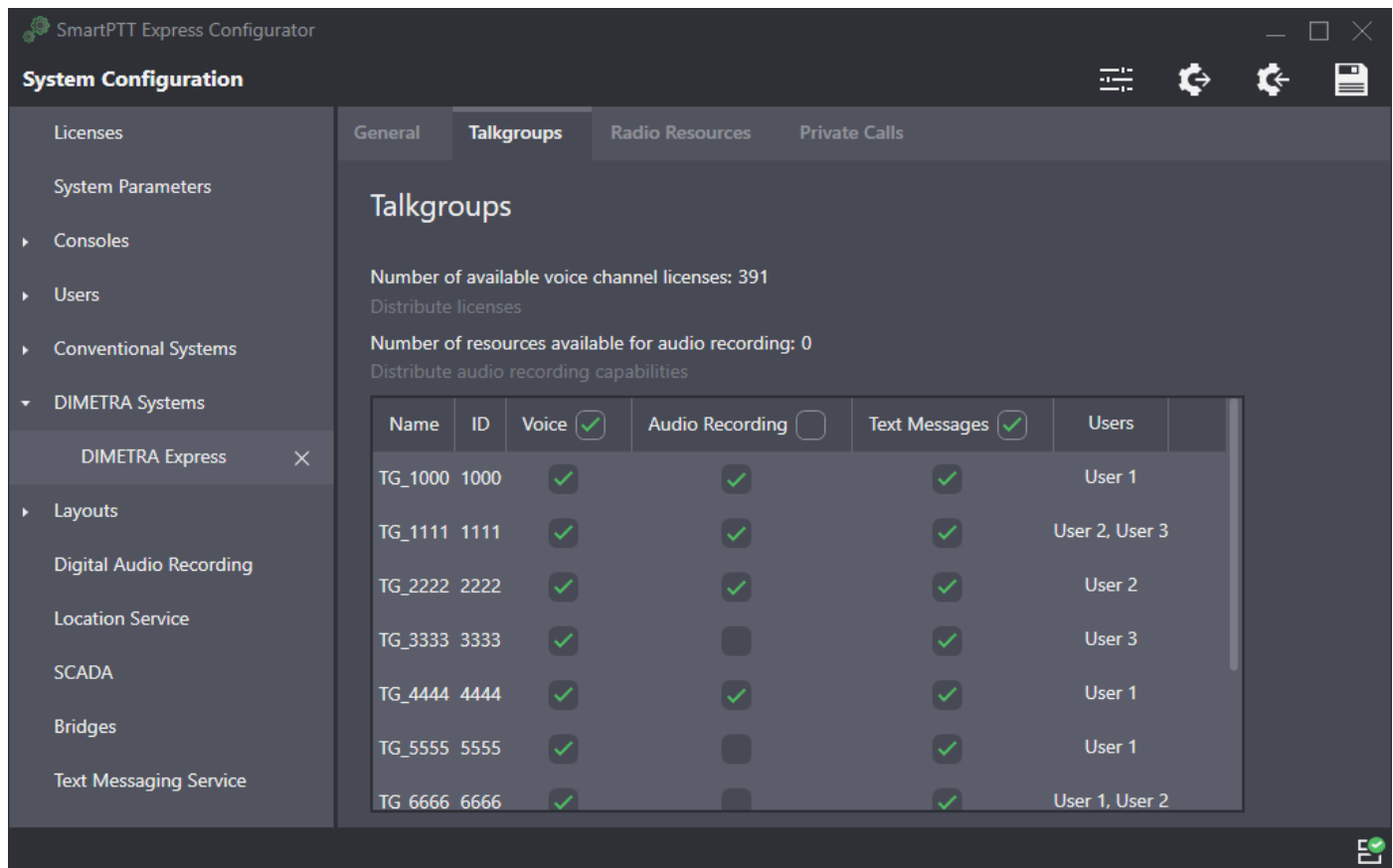
a. In the **Voice** column, select the check box to make the talkgroup available for voice dispatch.

b. In the **Audio Recording** column, select the check box to record group calls (if they are provided by DIMETRA Express).

c. In the **Text Messages** column, select the check box to enable dispatchers to send and receive group text messages.

d. In the **Users** column, select SmartPTT Express Client users who will have access to the talkgroup.

8. If your system includes donor radios connected to DIMETRA Express via CCGW radio gateway, click the **Radio Resources** tab, and then for each donor radio perform the following actions:
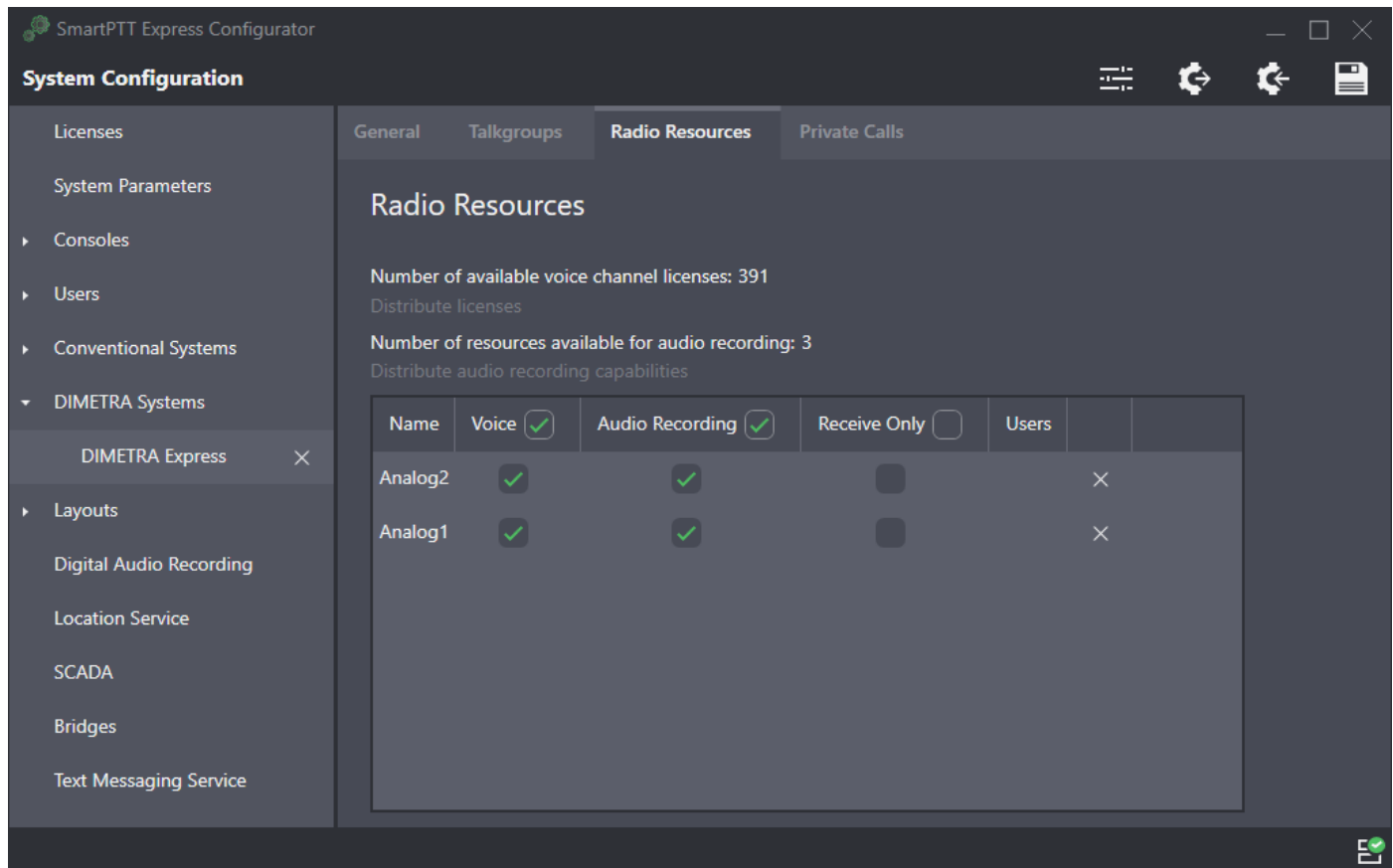
a. In the **Voice** column, select the check box to make the radio available for voice dispatching in SmartPTT Express.

b. In the **Audio Recording** column, select the check box to record the radio's calls.

c. (Optional) If necessary to have the donor radio route voice transmissions only from, but not to its radio system, select the check box in the **Receive Only** column.

d. In the **Users** column, click the cell and then select users that will have access to the resource.

9. If voice logging is required and licensed, on the left pane, click the **Digital Audio Recording** tab, and then configure audio archive settings.
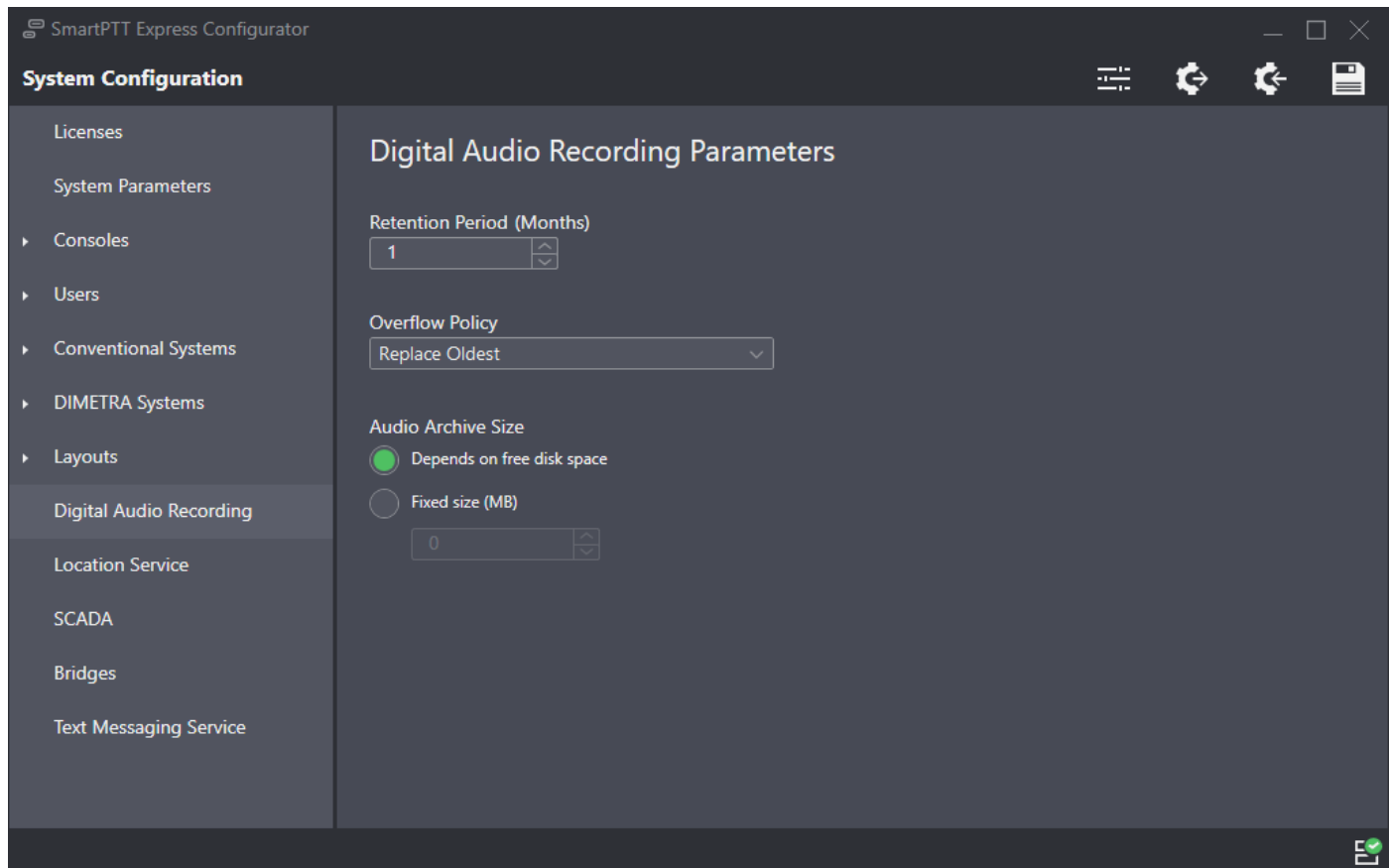
10. If radio user tracking is required and licensed, on the left pane, click the **Location Service** tab and complete the location service configuration:

    a. From the **Type** list, select the desired map type.

    b. In the **URL** field, enter the URL address of the HTTP/HTTPS map service or path to the map stored as files.

    c. For HTTP-based maps, if the map server requires authentication, enter **Login** and **Password**.

    d. Set the retention period for user coordinates in SmartPTT Express database.

11. On the Toolbar, click **Save Configuration** 🖫.

Configuring Analog Conventional System Interconnect

1. Expand the **Conventional Systems** tab, and then click **Add new**.

2. For each donor radio to be connected, perform the following actions:

   a. On the right pane, click the **Radio Resources** tab.

   b. At the top of the **Radio Resources** table, click **Click here to add new item** to add a new entry.

   c. In the **Radio GW IP Address** column, type the RG-1000e IP address.

   d. In the **Radio GW Port** column, type the port number assigned to this donor radio.

   e. If necessary to only have the donor radio route voice from, but not to its radio system, select the check box in the **Receive Only** column.

   f. In the rightmost column, click **OK**.

> **NOTICE:** Any number of donor radios can be added under the same conventional system (limited by the installed license), regardless of which RG-1000e gateway they are connected to. Each donor radio must have a unique combination of IP address and port number.

3. Configure bridges between donor radios:

   a. On the left pane, click the **Bridges** tab.
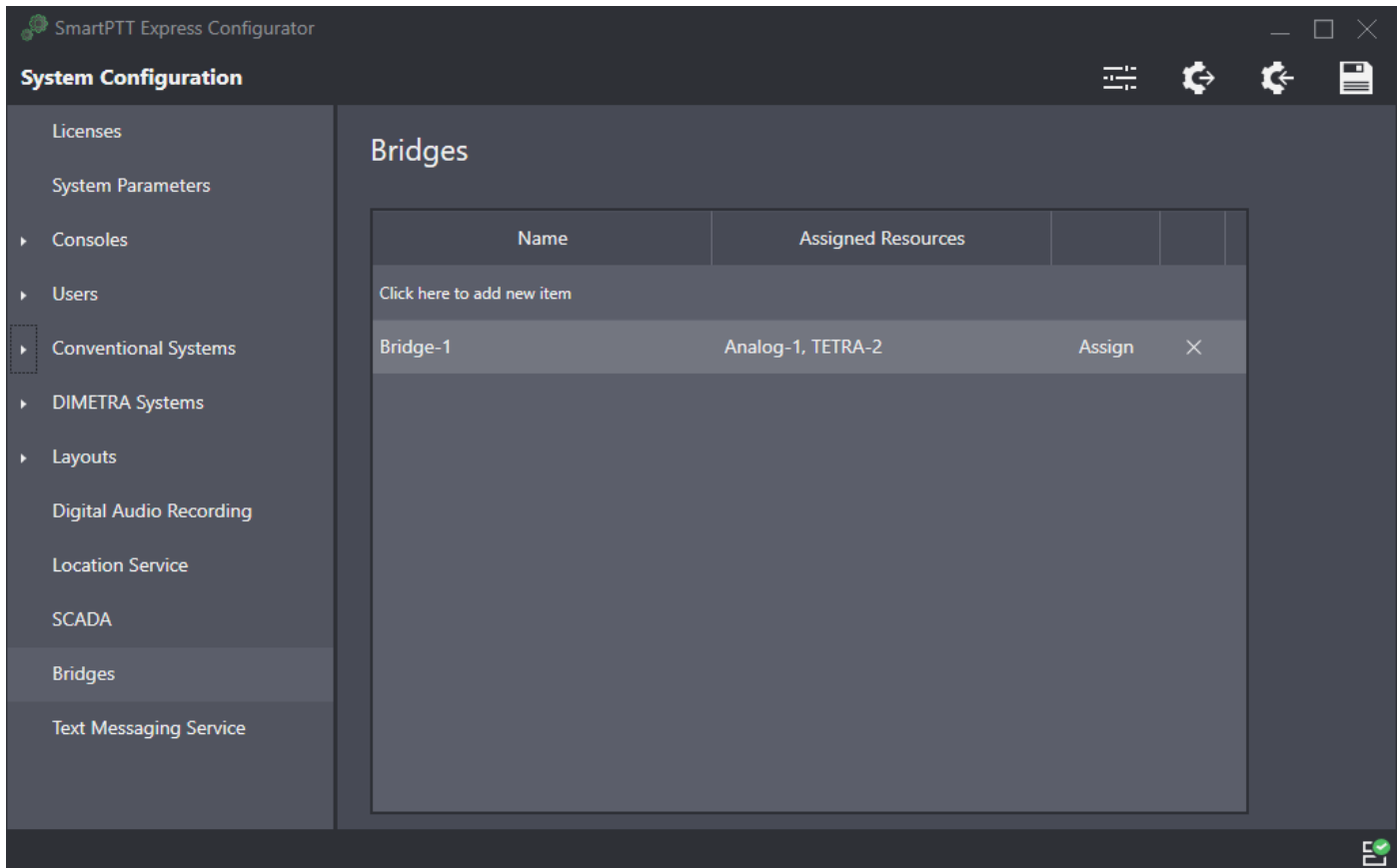
   b. At the top of the **Bridges** table, click **Click here to add new item** to add a new entry.

   c. In the **Assigned Resources** column, click **Assign**.

   d. In the **Resources** window, select the donor radios to be bridged, then click **OK**.

   e. In the rightmost column of the **Bridges** table, click **OK**.

4. On the Toolbar, click **Save Configuration** 💾.

After Configuration

- Add SmartPTT Express executable (.exe) files to the ignore list of your antivirus software.

- On the SmartPTT Express Server computer, in its firewall software, unlock TCP and UDP traffic for network ports used in SmartPTT Express.

- On each dispatch console computer, in its firewall software, unlock traffic for a TCP and a UDP port

Contact Information

To contact SmartPTT Express support engineer, use the following information:

Email address	support@smartptt.com
Request support online	https://support.smartptt.com/hc/en-us/requests/new
Phone/fax number	+7 38-22 522-511

By default, phone calls are answered by a Russian-speaking operator. If required, ask the operator to redirect your call to an English-speaking operator.