



# Grandstream Networks, Inc.

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## GXP BroadWorks SCA Configuration Guide

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# **GXP BroadWorks SCA Configuration**

## **Guide**

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## INTRODUCTION

Grandstream GXP21xx/16xx SIP phones support BroadWorks Shared Call Appearance feature. Shared Call Appearance allows multiple phones to share one extension number and manage a call as a group. Incoming calls will appear at multiple locations simultaneously. All devices where call appearance is shared can be used to answer an incoming call or make a call as if it is the main user. Calls can be transferred between two phones by simply putting the call on hold at one phone and picking it up on the other. Line keys light up or flash in different colors, allowing all people sharing the extension to monitor the call status. One important application for Shared Call Appearance is for an administrative assistant/executive scenario.

This document serves as an end user guide on how to configure Grandstream GXP21xx/16xx SIP phones for BroadWorks Shared Call Appearance feature. How to configure SCA on BroadWorks Application Server is out of the scope of this document. System Administrators shall check BroadWorks Partner Configuration Guide for more detailed information.

## KEY CONCEPTS

**Line** – One address-of-record as defined in RFC3261 represents one line. Line can be classified as being either “Private” or “Shared”.

**Call Appearance** – Every call is associated with a specific line. The presentation of a call on a line is called “Call Appearance”.

**Shared Call Appearance** – A Shared Call Appearance is any Call Appearance that is visible and accessible (optional) to the original endpoints as well as other authorized endpoints.

**Public Hold** – The held call is available for any shared line to retrieve.

**Private Hold** – The held call can only be retrieved from the shared line that held the call.

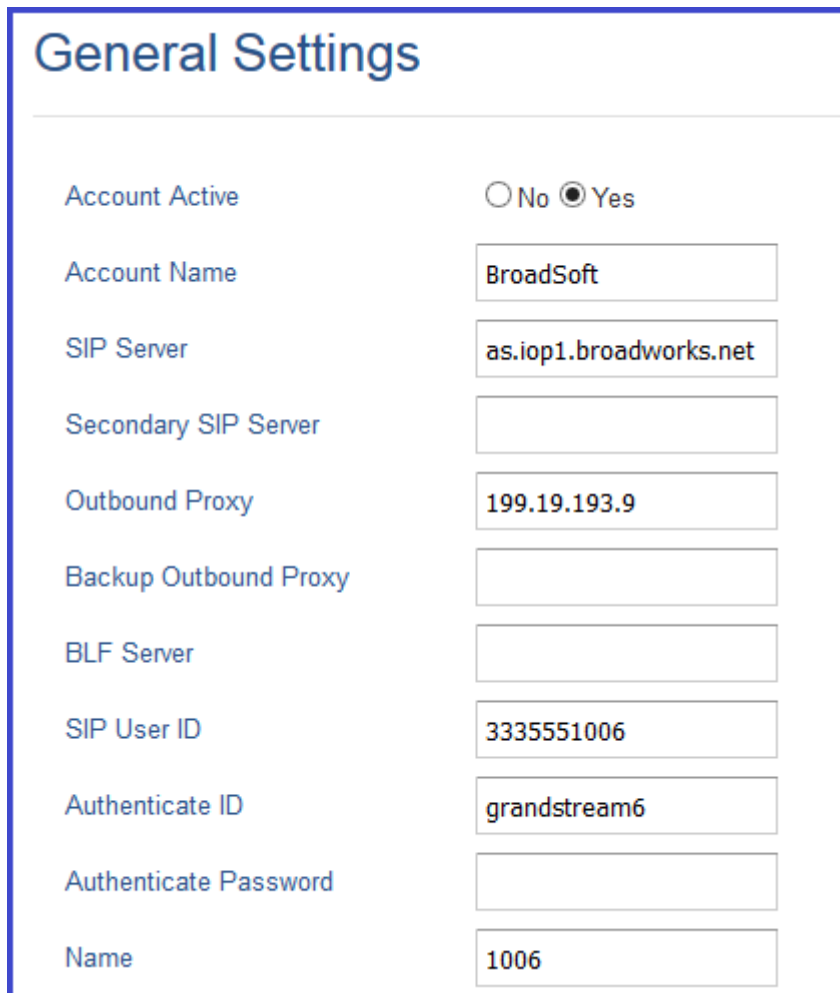
**Bridging** – Join an active call to form a multi-party conference.

## SCA CONFIGURATION ON GXP PHONES

Configuring Grandstream GXP21xx/16xx SIP phones to work with BroadWorks Shared Call Appearance feature is straightforward. First configure the SIP account settings just as you would for a normal SIP account. Then set the Line Key mode of the corresponding Line to be a Shared Line.

### Primary Phone

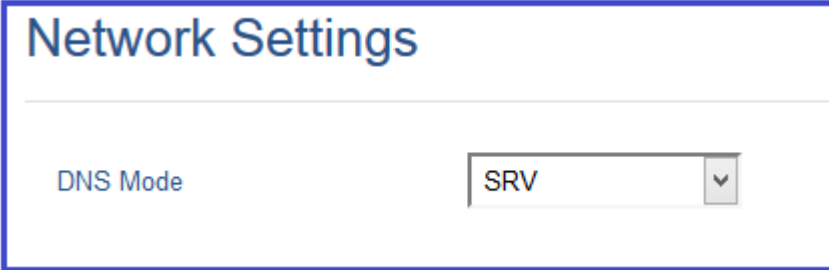
1. Configure **ACCOUNT** Settings:



General Settings	
Account Active	<input type="radio"/> No <input checked="" type="radio"/> Yes
Account Name	<input type="text" value="BroadSoft"/>
SIP Server	<input type="text" value="as.iop1.broadworks.net"/>
Secondary SIP Server	<input type="text"/>
Outbound Proxy	<input type="text" value="199.19.193.9"/>
Backup Outbound Proxy	<input type="text"/>
BLF Server	<input type="text"/>
SIP User ID	<input type="text" value="3335551006"/>
Authenticate ID	<input type="text" value="grandstream6"/>
Authenticate Password	<input type="text"/>
Name	<input type="text" value="1006"/>

Figure 1: Configure Primary Phone ACCOUNT Settings

2. Configure **Network Settings**:



The screenshot shows a web interface titled "Network Settings". Below the title, there is a label "DNS Mode" followed by a dropdown menu. The dropdown menu is open, showing "SRV" as the selected option.

Figure 2: Configure Primary Phone Network Settings

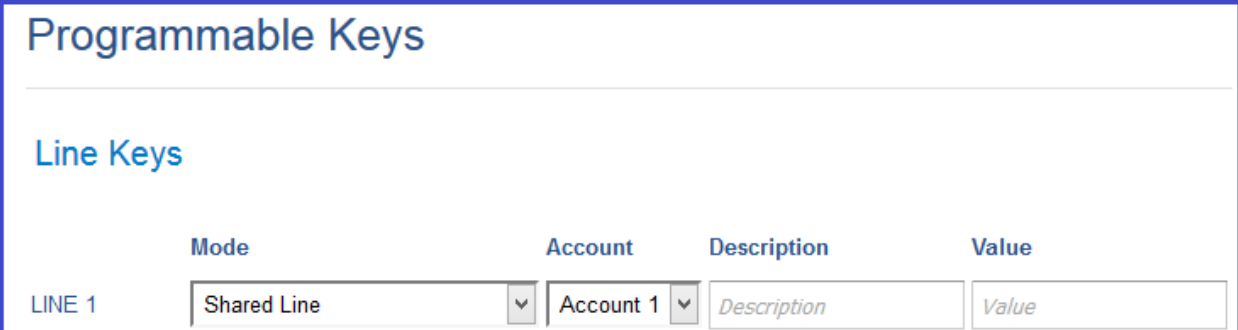
3. Set **Special Feature** to "**BroadSoft**", under **Account X** → **SIP Settings** → **Advanced Features**, as the figure shows below:



The screenshot shows a web interface with a label "Special Feature" followed by a dropdown menu. The dropdown menu is open, showing "Broadsoft" as the selected option.

Figure 3: Configure Primary Phone Special Feature Option

4. Configure Line Key Mode settings under **SETTINGS** → **Programmable Keys** page:



The screenshot shows a web interface titled "Programmable Keys". Below the title, there is a section titled "Line Keys". Below this section, there is a table with the following columns: "Mode", "Account", "Description", and "Value". The table has one row for "LINE 1" with the following values: "Shared Line" (in a dropdown), "Account 1" (in a dropdown), "Description" (in a text field), and "Value" (in a text field).

Figure 4: Configure Primary Phone Line Key Mode

Or, in the case of GXP2170, configure the Virtual Multi-Purpose Key mode under **SETTINGS** → **Programmable Keys** → **Virtual Multi-Purpose Keys**.



## Virtual Multi-Purpose Keys

Order	Mode	Account	Description	Value
1	Shared Line	1		<a href="#">Edit VPK</a>

**Figure 5: Configure GXP2170 Primary Phone Line Key Mode**

## Secondary Phone

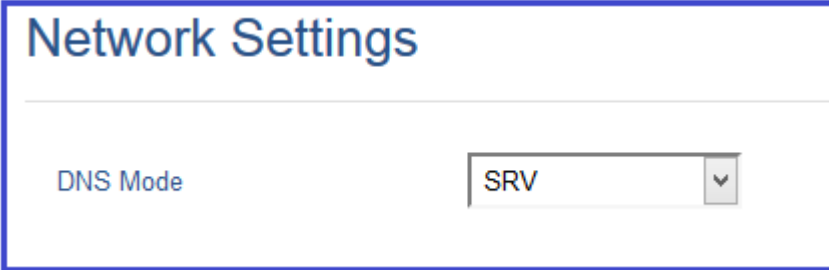
1. Configure **ACCOUNT Settings**:

### General Settings

Account Active	<input type="radio"/> No <input checked="" type="radio"/> Yes
Account Name	<input type="text" value="BroadSoft"/>
SIP Server	<input type="text" value="as.iop1.broadworks.net"/>
Secondary SIP Server	<input type="text"/>
Outbound Proxy	<input type="text" value="199.19.193.9"/>
Backup Outbound Proxy	<input type="text"/>
BLF Server	<input type="text"/>
SIP User ID	<input type="text" value="3335551006_2"/>
Authenticate ID	<input type="text" value="grandstream6"/>
Authenticate Password	<input type="text"/>
Name	<input type="text" value="1006_2"/>

Figure 6: Configure Secondary Phone Account Settings

2. Configure **Network Settings**:



**Network Settings**

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DNS Mode SRV

Figure 7: Configure Secondary Phone Network Settings

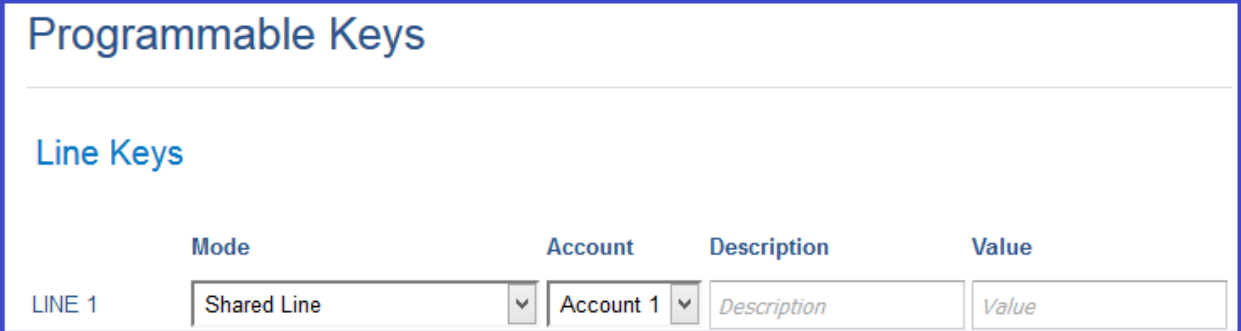
- Set **Special Feature** to “**BroadSoft**”, under **Account X** → **SIP Settings** → **Advanced Features**, as the figure shows below:



Special Feature Broadsoft

Figure 8: Configure Secondary Phone Special Feature Option

- Configure Line Key Mode settings under **SETTINGS** → **Programmable Keys** page:



**Programmable Keys**

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**Line Keys**

	Mode	Account	Description	Value
LINE 1	Shared Line	Account 1	Description	Value

Figure 9: Configure Secondary Phone Line Key Mode

Or, in the case of GXP2170, configure the Virtual Multi-Purpose Key mode under **SETTINGS** → **Programmable Keys** → **Virtual Multi-Purpose Keys**.

## Virtual Multi-Purpose Keys

Order	Mode	Account	Description	Value
1	Shared Line	1		<a href="#">Edit VPK</a>

**Figure 10: Configure GXP2170 Secondary Phone Line Key Mode**

## VISUAL INDICATORS

GXP21xx/16xx Line key LEDs provide visual indications of call appearances. In the following table, we assume the Primary Location initiates/picks up a call, and it is the location that puts a call on Public/Private Hold. The Line LED status for Multiply Call Arrangement is defined the same.

**Table 1: Indicator Status**

Call Status	Line Key LED Status	
	Primary Location	Other Locations
Idle	LED Off	LED Off
Ringing	Blinking Red	Blinking Red
Initiate a Call	Solid Green	Solid Red
During a Call	Solid Green	Solid Red
Public Hold	Blinking Green	Blinking Red
Private Hold	Blinking Green	Solid Red