

Barracuda Phone System: Ixica Communications SIP Trunk Configuration

This document describes the steps required to configure an Ixica Communications SIP trunk to interface with the Barracuda Phone System. Contact Barracuda Technical Support if you have any questions.

Getting Started

Requirements from Ixica:

- Their server hostname or IP address
- Your SIP account username and password
- DID numbers assigned to your Ixica Communications SIP trunk

Initial Setup

1. Log in to the Barracuda Phone System web interface and navigate to the **PROVIDERS** page. Select **SIP Providers**, then click **Add a Provider**.
2. On the **Add a SIP account** page, make the following changes:

Basic Information

- **Provider/Type:** Select **Generic SIP**.
- **Gateway Name:** Enter a name that is meaningful to you, like **Ixica Communications**.
- **Host:** Enter the IP address of the primary signaling gateway provided by Ixica.
- **Realm:** Enter the same IP address as in the **Host** field above
- **Port:** 5060
- **Username:** Enter the username of your Ixica SIP account.
- **Authorization Username:** Enter the same user name as in the Username field above.
- **Password:** Enter the password of your Ixica SIP account.

Provider Registration

- Select the **Register to Provider** check box.

Services

- Select the **Inbound Calls** and **Outbound Calls** check boxes.
- Select the **Outbound Fax** check box if you want to send outbound faxes over this connection.

Inbound Registration

- Clear the **Allow Inbound Registration** check box, if it is selected.

Outbound Caller ID Number

- Select **Custom caller ID number (unless overridden)**.
- Enter a valid telephone number or DID, as provided by Ixica.

Music on Hold

- Select your preferred **Music on Hold** for outbound calls through this trunk.

Codecs Restriction

- In the **Selected Codec** table, verify that **G.711ulaw** is the only selected option. If you purchased G.729 licenses, add **G.729** first in the list before **G.711u**.
3. Click **Create**. The gateway appears in the list of SIP providers.

Additional Configuration

Once you have configured the Ixica SIP Trunk, set the following advanced options to ensure optimal fax and Caller ID service.

1. On the **PROVIDERS > SIP Providers** page, click the provider entry you just created.
2. On the Provider Details page, scroll down to the **Advanced Settings** section and make the following changes:
 - **Use T.38 Re-Invite on Fax transmission:** *(If you selected Outbound Fax in the Services section above)* Select this check box to enable outbound T.38 Re-INVITEs on Message Center originated fax calls.
 - **Caller ID Type:** Select **Default**.
3. Click **Save**.

Outbound Routing

To route outbound calls to the Ixica SIP trunk, assign outbound routes.

1. In the Barracuda Phone System interface, navigate to **PROVIDERS > Call Routing**. Click **Add Route**.
2. Select a call type. The most common call types you will assign are:
 - **North America (NANPA)** – Add this route to allow dialing phone numbers within the North American Numbering Plan, with or without a leading number **1**.
 - **Emergency (USA):** Add this route if Ixica trunk will be servicing 911 phone calls.
IMPORTANT: Contact Ixica technical support to make sure that your account is properly configured for 911 phone calls.
 - **International Dialing:** Ixica does not use a 00 or 011 prefix for international dialing. It uses a simple country code + number format, so most international calls are 11 digits. To allow international dialing, if you have international service with Ixica, set a call type of 11 digit dialing, with the match condition `^\d{11}$`.
 - **7-digit dialing call type:** Add a 7-digit route to allow your users to dial local phone numbers without entering an area code. Use the **7-digit dialing (Area Code ###)** call type.

Inbound Routing

1. In the Barracuda Phone System interface navigate to **PROVIDERS > SIP Providers** and click the Ixica **Communications** entry you created.
2. On the Provider Details page, scroll down to the **Add External (DID) Numbers** section.
3. Enter all of the DID numbers assigned to your Ixica trunk, one per line.
 - To enter a contiguous block of DID numbers, enter the starting and ending numbers, separated by a dash (-).
4. Click **Save**.

Add Phone Numbers to Extensions

Test a DID number by assigning it to an existing user.

1. In the Barracuda Phone System interface, navigate to **EXTENSIONS > People**. Select a user who has a phone.
2. On the People Details page, scroll down to **Secondary Extensions** and click **Add Secondary Extension**.
3. For the **Extension Type**, select **External Number**.
4. Select one of the Ixica DID numbers from the list and click **Add**. The DID is now assigned to this user.
5. Dial the DID number from a different phone to verify it works.

E911 Notice

Emergency 911/E911 Services Limitations and Restrictions - Although Ixica provides 911/E911 calling capabilities, AT&T does not warrant or represent that the equipment and software (e.g., IP PBX) reviewed in this customer configuration guide will properly operate with Ixica Communications SIP Trunk to complete 911/E911 calls; therefore, it is the Customer responsibility to verify proper operation with its equipment/software vendor.

While Ixica Communications supports E911/911 calling capabilities under certain Calling Plans, there are circumstances when that E911/911 service may not be available. These include, but are not limited to, relocation of the end user CPE, use of a non-native or virtual telephone number, failure in the broadband connection, loss of electrical power, and delays that may occur in updating the Customer location in the automatic location information database.