

## SIP Trunking using the Optimum Business SIP Trunk adaptor and the AltiGen Max1000 IP PBX version 6.7

### Goal

The purpose of this configuration guide is to describe the steps needed to configure the AltiGen IP PBX version 6.7 for proper operation with Optimum Business SIP Trunking.

### Prerequisites

Please follow the instructions in the Optimum Business SIP Trunk Set-Up Guide. The Set-Up Guide was left by the Optimum Business technician at installation. If you do not have the Set-Up Guide, go to [www.optimumbusiness.com/SIP](http://www.optimumbusiness.com/SIP) to download a copy.

This configuration guide provides the steps for PBX registration mode. Static (non-registration) mode of PBX operation is not supported on the AltiGen PBX.

- AltiGen configuration GUI – Max Administrator version 6.7.0.205.
- AltiGen software version – 6.7.

### AltiGen Max Administrator Configuration

The steps below describe the minimum configuration required to enable the AltiGen 6.7 PBX to use Optimum Business SIP trunking for inbound and outbound calling. Please refer to the AltiGen product documentation for more information on other advanced PBX features.

The configuration described here assumes that the AltiGen is already configured and operational with station side phones using assigned extensions or DIDs. This configuration is based on AltiGen Version 6.7.

1. Start the Max Administrator software application by double clicking the icon from your desktop.
2. Select the appropriate Max Communication Server system to connect to.



3. Login to the Max Administrator. The default password is "22222". The initial screen defaults to the User Configuration screen.



4. Select **“System.”**
  - a. Select **“General.”**
  - b. Under **“Country”** select U.S.A. & Canada.
  - c. Under **“System Home Area Code”** enter the area code of the DID’s you will be using.
  - d. Under **“System Main Number”** enter the number of your main DID (without area code).
  - e. Under **“System ID”** select the number **“1.”**

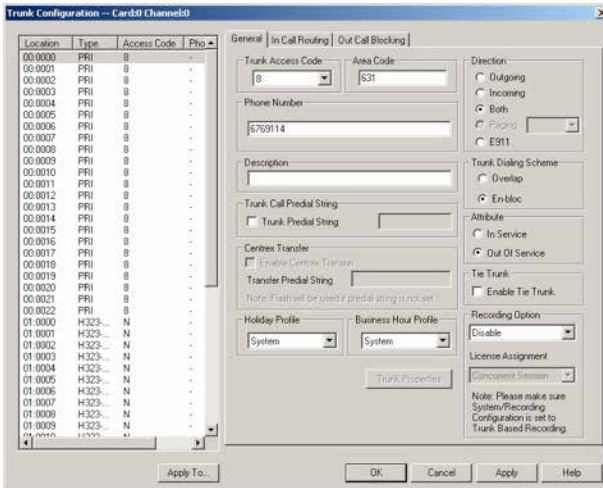
Click **“ok”** or **“Apply”** to save settings.

The screenshot shows the 'System Configuration' dialog box with the following settings:

- System ID:** 1
- Country:** U.S.A. & Canada
- Manager Extension:** (empty)
- System Home Area Code:** 678
- System Main Number:** 2384025
- System Call Park:** Timeout Ring Back in 2 Minutes; Play Greeting Phrase: phrase0401
- Operator:** Extension: 258
- Call Supervision:**  Allow Supervisor to Monitor, Barge-in, Coach, and Record agent's non-workgroup call

Buttons at the bottom: OK, Cancel, Apply, Help.

5. Select **“Trunk.”**
  - a. Scroll to the bottom and select **“SIP-Trunk.”**
  - b. Under **“Trunk Access Code”** select the number **“9.”**
  - c. Under **“Area Code”** enter the area code of the DID’s you will be using.
  - d. Under **“System Main Number”** enter the number of your main DID (without area code).
  - e. Under **“Direction”** select the **“Both”** option.



- f. Select **“Trunk Properties”** then **“SIP Trunk Configuration.”**
- g. Select a Trunk Group to configure and click **“Edit.”**



h. Enter the Sip Trunk data for each field

**SIP Server IP Address:** Enter the IP address that was assigned to the Optimum Business Sip Trunk Adaptor. This is the IP address that was entered in step 2 of the Optimum Business Sip Trunk Set-Up Guide.

**User Name:** Enter the Pilot DID number. The Pilot DID should also be entered as the User ID in the Optimum Business Sip Trunk Adaptor. This is step 3 of the Optimum Business Sip Trunk Set-Up Guide.

**Password:** Enter the password. This password must match the password entered in the Optimum Business Sip Trunk Adaptor. This is step 3 of the Optimum Business Sip Trunk Set-Up Guide.

**Domain:** Enter the IP address that was assigned to the Optimum Business Sip Trunk Adaptor. This is the IP address that was entered in step 2 of the Optimum Business Sip Trunk Set-Up Guide.

**SIP Register Period:** Enter the registration interval to the upstream provider. Recommended: 180 Seconds.

**SIP Trunk Profile:** When set to the “Default” option, the Pilot DID will be used for the outbound Caller ID. This can be over ridden if the outbound Caller ID is manually configured in the phone extensions.

**SIP Source Port:** Set to 5060 (Commonly used for SIP traffic)

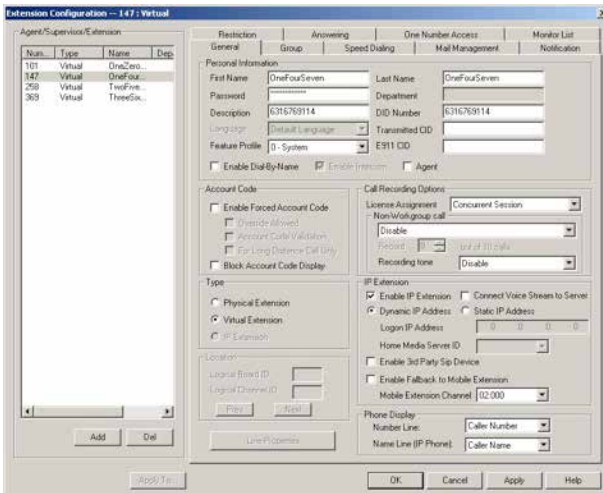
**SIP Destination Port:** Set to 5060 (Commonly used for SIP traffic)

**Automatic NAT Traversal:** Make sure this box is unchecked.

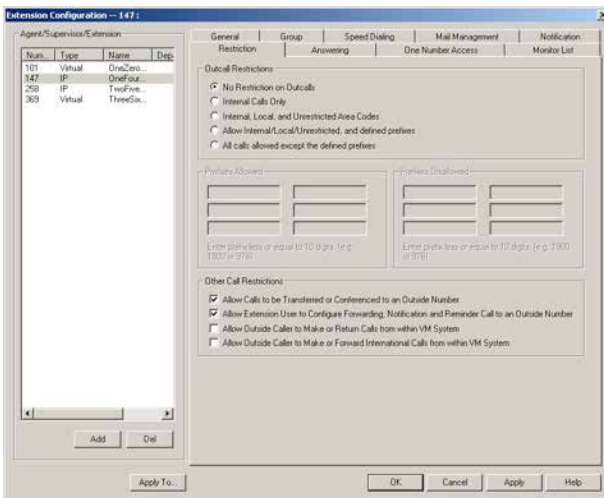
**Enable Channel:** Make sure this box is checked.

**NOTE:** The AltiGen only supports Registration mode. Static mode is not supported.

6. Select “Extension.”
  - a. Select the “**General**” tab and choose the extension you would like to edit.
  - b. Assign that extension a DID by adding the number to the “Description” and “**DID Number**” section. In this example we used (**6316769114**).
  - c. Under “**IP Extension**” select “Enable IP Extension” and “Dynamic IP Address.”

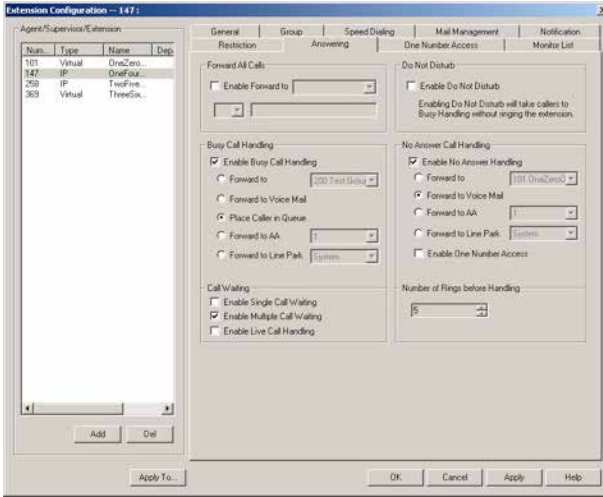


- d. Select the “**Restriction**” tab.
- e. Under “**Outcall Restrictions**” select “No Restriction on Outcall.”
- f. Under “**Other Call Restrictions**” select “Allow Calls to be Transferred” or “Conferenced to an Outside Number” and “Allow Extension User to Configure Forwarding, Notification and Reminder Call to an Outside Number.”



- g. Select the “**Answering**” tab.
- h. Under “**Call Waiting**” select “Enable Multiple Call Wating.”
- i. Under “**Busy Call Handling**” select “Enable Busy Call Handling” and “Place Caller in Queue.”
- j. Under “**No Answer Call Handling**” select “Enable No Answer Handling” and “Forward to Voice Mail.”

Click “Ok” or “Apply” to save settings.

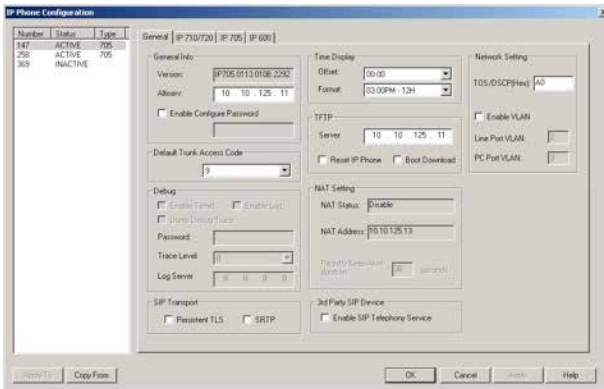


7. Select “IP Phone.”

- a. Select the extension you would like to configure.
- b. Under “**General Info**” put in the PBX IP address in the box next to “Altiserv.” In this example we used (10.10.125.11).
- c. Under “**TFTP**” put in the PBX IP address in the box next to “Server.” In this example we used (10.10.125.11).
- d. Under “**Default Trunk Access Code**” select the number “9.”

Click “Ok” or “Apply” to save settings.





8. For Call Forwarding go to “Extension” select the “Answering” tab and select the extension you would like to configure. Under “Forward All Calls” select “Enable Forward to” and select “Outside Number.” Now enter the number you would like to forward to in the box below.
9. For Call Park, while on a call hit the “Flash” button and enter #41. This will place the call into system park. To pick up the call, from any phone in system dial #41.

## Important

### Inband DTMF:

The Cablevision network only supports inband DTMF tones. The AltiGen PBX only supports sending out-of-band DTMF tones. In order for the AltiGen PBX to operate correctly with the Cablevision network, the Optimum SIP Trunk Adaptor must be enabled to convert out-of-band DTMF tones sent by the AltiGen PBX to inband DTMF tones. To enable this conversion, log into the Optimum SIP Trunk Adaptor and click on the Convert Inband DTMF checkbox, and click the Submit button to update this setting. This is step 3 in the Optimum Business Sip Trunk Set-Up Guide.

### DTMF Tone Duration:

The DTMF tone duration generated by the phones needs to be increased from the default value of 180ms-200ms to 600ms. The AltiGen PBX does not have access to change the DTMF settings on the PBX, you must change it on each phone.