



## Emerge 3CX Trunk Setup Instructions

Log into the EmERGE SIP Platform and add your extension then go to the SIP Preferences screen and setup as follows:

SIP Preferences

Media encryption	None
⚠ Your phone should support the crypto standard, otherwise calls will not work. Fax is not supported on encrypted connections.	
DTMF	rfc2833
A PBX is connected to this extension	<input checked="" type="checkbox"/> Enable for SIP trunking service
Ping the extension to check its status	<input checked="" type="checkbox"/>
Extension is on private network (10.246.193.0/255.255.255.0)	<input type="checkbox"/>
Allow re-invites from this extension	<input type="checkbox"/>
Extension publishes its own state	<input checked="" type="checkbox"/>
Force enable of MWI	<input type="checkbox"/>
Allowed codecs *	<input checked="" type="checkbox"/> G.711 A-Law <input type="checkbox"/> G.722
Phone does not register, is located on IP	Port [ ] and [has to] authenticate
SIP Signaling Transport	UDP Available for extensions that do not register, located on a fixed IP
Allow extension SIP connection only from IP	103.103.103.103/32 - + (up to /24 subnet class)
Equipment description	Test 3CX Trunk

Note the following fields that are changed:

- A PBX is connected to this extension (on)
- Ping the extension to check its status (on)
- Allow re-invites from this extension (off)
- Extension publishes its own state (on)
- Allowed Codes (G.711 A-Law ONLY)

Optionally you can also add:

### Equipment description & Allow extension SIP connection only from IP

Locking SIP from only a specific IP is recommended to ensure security and nobody can hack your account. You can add up to 5 IP's or subnet's

Next, Log into 3CX and navigate to **SIP Trunks** from the menu and **Add SIP Trunk**

- Select Country as Generic
- Provider as Asterisk
- Main trunk number as the default number for your client, 0862028032 in our example

Add SIP Trunk/VoIP Provider

Select Country  
Generic

Select Provider in your Country  
Asterisk

Main Trunk No  
0862028032

OK Cancel

Then select ok to create the trunk and edit the details



### Emerge 3CX Trunk Setup Instructions

In the trunk Details set the name of the trunk (does not matter)

Registrar/Server/Gateway Hostname or IP set to sip.emergewholesale.com.au and select Auto Discovery

Leave outbound proxy blank and select the number of Simultaneous calls your trunk supports.

Under Type of Authentication select Register/Account based along with your full extension ID (1234\*12345 format)

Route calls to should be setup based on your requirements

Under the Options tab setup as the following:

The screenshot shows the configuration interface for a 3CX trunk. It is divided into three main sections: Call options, Advanced, and Codec Priority.

- Call options:** Contains three checkboxes, all of which are checked: "Allow inbound calls", "Allow outbound calls", and "Disallow video calls".
- Advanced:** Contains several checkboxes: "PBX Delivers Audio" (checked), "Supports Re-Invite", "Support Replaces", "Put Public IP in SIP VIA Header", "Alternative Proxy", and "SRTP" (all unchecked). Below these are three input fields: "Re-Register Timeout" (value: 600), "Select which IP to use in 'Contact' (SIP) and 'Connection' (SDP) fields" (value: Use Default Settings), and "Transport Protocol" (value: Any). Below that is another "IP Mode" field (value: Any).
- Codec Priority:** Features a "+ Add codec" button and "Move Up" / "Move Down" buttons. A single codec, "G.711 A-law", is listed below.

Note: PBX Delivered Audio should be on for Hosted 3CX installs and off for on Premises installs if your firewall/router is configured correctly. It can be left on for troubleshooting.

Configure the outbound dialling rules and you should be able to send/receive calls

You should see the trunk registered now, you can confirm this in the EmERGE SIP portal in the extension details:

Device

● Online (reachable) 3CXPhoneSystem 16.0.3.676 (676)  
IP 103.101. connecting from 103.101.  
Registered Oct 29, 2019 13:16:17 expires Oct 29, 2019 13:26:17



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## Caller ID per Extension (Optional)

In some cases, customers have DID number ranges and want to have each extension dialing out as a specific number, you can do this by making the following changes

In the EmERGE SIP Portal in the Extension Basic Settings change **CallerID number in public calls** to set by equipment and click ok to save. This will allow caller ID to be passed from the 3CX in the SIP messages when it's configured correctly.

In 3CX, Exit the trunk and choose the caller ID tab.

Set the default caller ID to you default number for the customer. In this case it's our main office number 0862028032

### Default caller ID

Configure Outbound Caller ID

Under the Extension-> User information configure the outbound caller ID

Outbound Caller ID

This will set the caller ID for each individual extension.