Inbound Rules - Routing incoming calls

Inbound rules process/route inbound calls to the right destination, be it an extension, an IVR or a Queue.

Inbound Rules can be created based on:

* Trunks main number: Calls to this main number can be processed according to an Inbound Rule. You can configure this rule from the “SIP trunk” > “General tab.”
* You can enter DIDs directly from the SIP Trunk interface or from the inbound rules interface. When adding DIDs from the Trunk interface it automatically creates an Inbound Rule which forwards the calls to the operator extension. You can then later change this in inbound rules or by assigning the DID from an extension, IVR or queue.
* Based on Caller ID - you can enter a caller ID, for example a customer number, and have calls from that Caller ID go to a specific extension.

DID numbers

They allow their contacts to call them directly, bypassing the receptionist.

They are provided by your VoIP provider or Phone Company and they are virtual numbers assigned to your physical lines.

You can assign DID numbers to queues, ring groups and extensions. To assign a DID to an extension, the easiest is to go to the General tab of that extension.

Configuring Inbound Rules for DIDs

Note: When you create SIP trunks, and list the DIDs associated with the SIP trunk, inbound rules are automatically created for each DID that you add. Edit the existing DID and not add a new one!

To create an inbound rule for a DID:

1. From the 3CX Management Console, go to “Inbound Rules.”
2. Check if an inbound rule already exists for the DID. If yes, double click on the rule to edit it. If not, select “Add DID Rule.”
3. Enter a name for the DID (for example Sales). The DID name can be prepended or appended to the Caller ID so as to identify on which number a caller has called you from. You can enable this from the “Contacts” > “Options”.
4. In the “DID” field, select from the available DIDs. To add DIDs that are not listed go to the trunk and enter the DID number as it will appear in the SIP “to” header. 3CX will match the number inserted in this field with the “to” header, starting from the last part of the received string, thus avoiding any differences in the format of the number. For example, if you are based in the UK and your DID number is 0845-2304024, then you can enter the number \*2304024. This will match any DID number inserted in the “to” field ending with these numbers, including +448452304024, 08452304024, 00448452304024, and, of course, \*2304024.
5. Specify where calls to this DID should go during office hours. Choose between:

5.1) End Call.

5.2) Extension.

5.3) Voice mail box for extension.

5.4) Forward to outside number.

5.5) Send fax to (email of extension).

1. Specify an alternate location for calls outside office hours. You can configure custom office hours from “Set up Specific Office Hours for this trunk.”
2. Check “Play Holiday Prompt on Public Holiday” to play the holiday prompt whenever there is a holiday.
3. Click “OK” to create the DID / Inbound rule.

Create a new Caller ID Inbound Rule

Caller ID rules are based on the Caller ID, rather than the number which is being called.

To create a new Caller ID Inbound Rule:

1. Select “Add CID Rule.”
2. Enter a name for the rule (for example VIP Customer).
3. In the “Direct number or mask” field, enter the Caller ID as it appears on the screen of the 3CX client when the phone rings.
4. Select to which Trunk you will associate this DID.
5. Specify where calls to this DID should go during office hours.
6. Specify an alternate location for calls outside office hours. You can configure custom office hours from “Set up Specific Office Hours for this trunk.”
7. Check “Play Holiday Prompt on Public Holiday” to play the holiday prompt whenever there is a holiday.
8. Click “OK” to create the Inbound rule.

Troubleshooting DID Numbers

If you have created the DIDs, but calls are not being forwarded as expected, do the following:

1. Go to the “Activity log” tile in the “System Status” page in the 3CX Management Console. This page lists current server activity and logs calls that are being received, and for which number they were received on.
2. Call the DID number that you configured, and monitor the Activity log. You will see a line similar to:
3. Incoming call from “1000” to <sip:789456123@3CXPhone System>
4. where “1000” is the internal number of the line configured to receive calls from the VoIP Gateway or VoIP Provider and <sip:789456123@3CXPhone System> is the content of the “To” header of the INVITE, i.e. the intended recipient. (Note: logging level should be set to Medium or Verbose to see additional messages, from the “Settings.”)
5. Now analyze the “To” header carefully and ensure that the DID number you have configured is present in the “To” header: <sip:789456123@3CXPhone System>.
6. Adjust the number accordingly if needed.

Configuring Office Hours & Holidays

You can configure global office hours and holidays in order to have all incoming calls routed to an IVR or different number on these days.

To do this:

1. Go to the “Settings” and click on the “Office hours & Holidays” tile.
2. In the “Configure Office Hours” section, configure the times that your office is open.
3. In the section “Configure Holidays,” click “Add.”
4. Give the Holiday a name, for example, “New Year.”
5. Specify a single day or a range of days.
6. Record or select prerecorded .wav files to play for these holidays.