3CX Version 8.x - Multiple SIP Trunk configuration to XeloQ Communications / GoAndCall.com

Note: **Go to page 13 if you would like to receive multiple DID's on 1 XeloQ SIP Trunk; that is also possible and would be the preferred method of managing your DID's yourself; go to page 13 of this document.**

Example 1:   **Multiple DID's to Multiple SIP Trunks**   (with multiple SIP accounts; needed for some companies)
(page 1 - 12)

We will describe how to setup a 3CX v8.x server with multiple SIP Trunks to XeloQ to allow routing of incoming calls to separate extensions or Ring Groups.

To start all of this, you will need 3 (or more) XeloQ SIP accounts and 3 (or more) DID's routed to them (that is something XeloQ will do for you when you order a DID).

Our installation below runs with 3 extensions logged into the 3CX server.

First, the 3 Softphones with Extensions 100, 101 + 102 are registered to the 3CX (on the same server):

Also the 3CX management console is shown.

Trunks to XeloQ registration (with 3 XeloQ SIP accounts):

Ports/Trunks Status

Disconnect Call

Status	Virtual Extension Number	Type	Name	IN/OUT
● Registered (idle)	10000	Provider	XeloQ-1	
● Registered (idle)	10001	Provider	XeloQ-2	
● Registered (idle)	10002	Provider	XeloQ-3	

3CX Phone System
- Ports/Trunks Status
- Extension Status
- System Extensions Status
- Phones
- Server Activity Log
- Services status
- Extensions
- PSTN devices
- VOIP Providers
  - XeloQ-1
    - 700203
  - XeloQ-2
    - 700204
  - XeloQ-3
    - 700205

Extension status:

Extension status Server Activity Log Add Extension Add PSTN Gateway Add VOIP Provider Wizard Create Outbound Rule Create DID

Extension Status

Disconnect Call

Status	Extension	User Status	Queues	Name
● Registered (idle)	100	Available	OUT	XeloQ Sales
● Registered (idle)	101	Available	IN	XeloQ Support
● Registered (idle)	102	Available	OUT	XeloQ Administration

3CX Phone System
- Ports/Trunks Status
- Extension Status
- System Extensions Status
- Phones
- Server Activity Log

Extensions:

Extensions

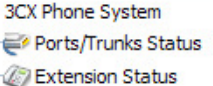Add Extension Edit Extension Delete Extension Import Extension Download Active Users Add Extension Group Edit Extension Group

Extension Number	First Name	Last Name	Email Address	Outbound Caller ID
100	XeloQ	Sales	sales@xeloq.com	
101	XeloQ	Support	support@xeloq.com	
102	XeloQ	Administration	administration@xeloq.com	

3CX Phone System
- Ports/Trunks Status
- Extension Status
- System Extensions Status
- Phones
- Server Activity Log
- Services status
- Extensions
- PSTN devices

VoIP Providers:

Trunk 1 (using SIP account 700203):

Advanced settings for XeloQ-1:

NOTE: please REMOVE the Assigned GSM-FR codec when using a XeloQ trunk ! This is not needed !

700203 settings (under XeloQ-1):

3CX

- 3CX Phone System
  - Ports/Trunks Status
  - Extension Status
  - System Extensions Status
  - Phones
  - Server Activity Log
  - Services status
  - Extensions
    - MANAGEMENT
    - 100
    - 101
    - 102
  - PSTN devices
  - VOIP Providers
    - XeloQ-1
      - 700203
    - XeloQ-2
      - 700204
    - XeloQ-3
      - 700205
  - Inbound Rules
  - Bridges
  - OutBound Rules
  - Digital Receptionist
  - Ring Groups
  - Call Queues
  - Settings
  - Links
  - Help

Edit VOIP Provider

▶ **Edit Port :700203**

Voip Provider port no 700203 on XeloQ-1

Virtual Extension Number (Unique)	10000
Authentication ID	700203
Authentication Password	●●●●●●●●
Port identification	700203

Office Hours

Configure where calls should be routed during office hours.

- ○ End Call
- ● Connect to Extension — 100 XeloQ Sales
- ○ Connect to Queue / Ring Group —
- ○ Connect to Digital Receptionist —
- ○ Voicemail box for Extension — 100 XeloQ Sales
- ○ Forward to Outside Number —
- ○ Send fax to email of extension — 888 Default FAX Destination

☑ same as during office hours

Other Options

Set other general options for this specific port

Outbound Caller ID	31238901271
Allow outbound calls on this line	☑
Allow incoming calls on this line	☑
Maximum simultaneous calls	4

OK   Cancel   Apply

Trunk 2 (using SIP account 700204):

Advanced settings for XeloQ-2:

<u>NOTE:</u>   **please REMOVE the Assigned GSM-FR codec when using a XeloQ trunk ! This is not needed !**

700204 settings (under XeloQ-2):

3CX Phone System
- Ports/Trunks Status
- Extension Status
- System Extensions Status
- Phones
- Server Activity Log
- Services status
- Extensions
  - MANAGEMENT
  - 100
  - 101
  - 102
- PSTN devices
- VOIP Providers
  - XeloQ-1
    - 700203
  - XeloQ-2
    - 700204
  - XeloQ-3
    - 700205
- Inbound Rules
- Bridges
- OutBound Rules
- Digital Receptionist
- Ring Groups
- Call Queues
- Settings
- Links
- Help

Edit VOIP Provider

▶ **Edit Port :700204**

Voip Provider port no 700204 on XeloQ-2

Virtual Extension Number (Unique)	10001
Authentication ID	700204
Authentication Password	••••••••
Port identification	700204

Office Hours

Configure where calls should be routed during office hours.

- ○ End Call
- ● Connect to Extension — 101 XeloQ Support
- ○ Connect to Queue / Ring Group —
- ○ Connect to Digital Receptionist —
- ○ Voicemail box for Extension — 100 XeloQ Sales
- ○ Forward to Outside Number —
- ○ Send fax to email of extension — 888 Default FAX Destination

☑ same as during office hours

Other Options

Set other general options for this specific port

Outbound Caller ID	31238901264
Allow outbound calls on this line	☑
Allow incoming calls on this line	☑
Maximum simultaneous calls	4

OK   Cancel   Apply

Trunk 3 (using SIP account 700205):

Advanced settings for XeloQ-3:

NOTE: please REMOVE the Assigned GSM-FR codec when using a XeloQ trunk ! This is not needed !

700205 settings (under XeloQ-3):

General working of the incoming calls to DID's / SIP accounts:

There are NO Inbound Rules set because EACH SIP accounts gets to it's own trunk (= XeloQ SIP account) and in this setup each Trunk only let 1 extension ring (100, 101 or 102 ring on incoming calls to XeloQ SIP accounts 700203, 700204 + 700205.

If you buy a DID / local telephone number from XeloQ, WE forward each DID to the appropriate SIP account so there is NO need to setup DID's in 3CX. Just like this example setup XX SIP Trunks to XeloQ using XX SIP accounts.

Of course you can create Ringgroups.

→ **If you wish to receive all your DIDs on to 1 SIP Trunk, refer to page 13 of this document.**

Outbound Rules:

OutBound Rules

🐞 Add Outbound Rule   📑 Edit Outbound Rule   ✖ Delete Outbound Rule   ⟲ Move Up   ⟲ Move Down

Outbound Rule Name	Call from extension(s)	Number prefix	Number Length	Route 1
Rule for XeloQ-1	100-110	00	10,11,12,13,14,15,16,17,18,	XeloQ-1
Rule for XeloQ-2	100-110	00	10,11,12,13,14,15,16,17,18,	XeloQ-2
Rule for XeloQ-3	100-110	00	10,11,12,13,14,15,16,17,18,	XeloQ-3
Outbound 7	100-110	7	6	XeloQ-1

Outbound 7   (to call other XeloQ 7xxxxx SIP accounts outside the 3CX):

Edit Outbound Rule

Create an Outbound Call Rule to configure on which PSTN port, VOIP provider or bridge an outbound calls should be placed on

General

Rule Name	Outbound 7	❓

Apply this rule to these calls

Define to which outbound calls the rule must apply

Calls to numbers starting with (Prefix)	7	❓
Calls from extension(s)	100-110	❓
Calls to Numbers with a length of	6	❓

Make outbound calls on

Configure up to 3 routes for calls. The second and third route will be used as backup. For each route, digits can be stripped or added.

			Strip Digits	Prepend	
Route	1	XeloQ-1	0		❓
Route	2		1		❓
Route	3		1		❓

OK   Cancel

NOTE: Do NOT strip / prepend any digit. XeloQ accepts 7xxxxx to dial other SIP accounts !

Outbound Rules (to make OUTBOUND calls to the normal telephone network using XeloQ SIP accounts):

XeloQ expects 0044xxx or 0031xx so be careful when you create other outbound rules; these below work for sure!

Outbound Rule XeloQ-1 (to let calls go out on Trunk XeloQ-1 and be charged to <u>that SIP Account</u>):

NOTE: of course you can choose to let outbound calls flow through 1 Trunk (XeloQ-1) so it will be charged to 1 SIP account. But if you wish to charge each extension using it's own trunk / SIP account, follow the examples below

You can fine tune your 3CX outbound / inbound rules and make it as complex as you wish. But these are basic settings for 3 Trunks (3 SIP accounts) and 3 DID's.

In any 3CX version you can use as many SIP Trunks to XeloQ as you wish and thus have as many DID's routed to as many extensions as you wish. But always be aware of the number of simultaneous calls you specific license holds.

More information: www.XeloQ.eu or send an email to support@xeloq.com for further assistance.

Also the 3CX forum at www.3cx.com gives you very good information.

Outbound Rule XeloQ-2 (to let calls go out on Trunk XeloQ-2 and be charged to <u>that SIP Account):</u>

Edit Outbound Rule

Create an Outbound Call Rule to configure on which PSTN port, VOIP provider or bridge an outbound calls should be placed on

3CX Phone System
Ports/Trunks Status
Extension Status
System Extensions Status
Phones
Server Activity Log
Services status
Extensions
PSTN devices
VOIP Providers
  XeloQ-1
    700203
  XeloQ-2
    700204
  XeloQ-3
    700205
Inbound Rules
Bridges
OutBound Rules
  Outbound 7
  Rule for XeloQ-1
  Rule for XeloQ-2
  Rule for XeloO-3

General

Rule Name — Rule for XeloQ-2

Apply this rule to these calls

Define to which outbound calls the rule must apply

Calls to numbers starting with (Prefix) — 00
Calls from extension(s) — 100-110
Calls to Numbers with a length of — 10,11,12,13,14,15,16,17,18,19,20

Make outbound calls on

Configure up to 3 routes for calls. The second and third route will be used as backup. For each route, digits can be stripped or added.

Route			Strip Digits	Prepend
Route	1	XeloQ-2	0	
Route	2		1	
Route	3		1	

OK   Cancel

Outbound Rule XeloQ-3 (to let calls go out on Trunk XeloQ-3 and be charged to <u>that SIP Account):</u>

Edit Outbound Rule

Create an Outbound Call Rule to configure on which PSTN port, VOIP provider or bridge an outbound calls should be placed on

3CX Phone System
Ports/Trunks Status
Extension Status
System Extensions Status
Phones
Server Activity Log
Services status
Extensions
PSTN devices
VOIP Providers
  XeloQ-1
    700203
  XeloQ-2
    700204
  XeloQ-3
    700205
Inbound Rules
Bridges
OutBound Rules
  Outbound 7
  Rule for XeloQ-1
  Rule for XeloQ-2
  Rule for XeloQ-3

General

Rule Name — Rule for XeloQ-3

Apply this rule to these calls

Define to which outbound calls the rule must apply

Calls to numbers starting with (Prefix) — 00
Calls from extension(s) — 100-110
Calls to Numbers with a length of — 10,11,12,13,14,15,16,17,18,19,20

Make outbound calls on

Configure up to 3 routes for calls. The second and third route will be used as backup. For each route, digits can be stripped or added.

Route			Strip Digits	Prepend
Route	1	XeloQ-3	0	
Route	2		1	
Route	3		1	

OK   Cancel

So far the Basic setup for 3CX v 8.x and using multiple Trunks, SIP accounts + DID's for XeloQ Communications.

Example 2:　　　**Receiving Multiple DID's on 1 XeloQ SIP Trunk using 1 XeloQ SIP account**
　　　　　　　(page 13 – 20)

In this example we will use a new SIP account on a new XeloQ SIP Trunk (XeloQ-4).

If you just have 1 SIP account and wish to use multiple DID's on this trunk and have the ability to change the configuration of incoming DID's yourself, use this configuration example. This is the preferred method.

First, we created a new SIP Trunk using SIP account 700207 (we call this XeloQ-4). Forget about the other SIP accounts created earlier for now. We will not use them anymore. This is the configuration for using 1 SIP account / 1 SIP Trunk.

→ **In advanced settings set 'Require registration for:'　In and Outgoing calls and select codec g729 if possible**

See the screen below.

NOTE: please REMOVE the Assigned GSM-FR codec when using a XeloQ trunk ! This is not needed !

Of course you will need to set the **Outbound rules** for this new Trunk. Refer to **page 10 -12** of the previous examples on HOW to create Outbound rules.

Note:
Some **companies prefer to have multiple SIP accounts** to distinguish the OUTBOUND calling (use a different SIP account for outbound calling so that each OUTBOUND call CAN be charged on a different SIP account).

If you want this, you will NEED to setup Multiple trunks using Multiple SIP accounts and we refer you to page 1-12 of this document. Of course the inbound callforwarding will then be handled by XeloQ again.

Of course you can combine this:

You can always ask for multiple SIP accounts in your XeloQ Customer account if you wish to create multiple outbound trunks and set the outbound rules for certain extensions to go out on a certain trunk but still **receive inbound calls** on just 1 SIP account / 1 SIP trunk using the configs described on page 13-20.

You can just deploy it the way you prefer!

Next step is to go to **Inbound Parameters** (leave Outbound parameters default); you will see the next screen:

What we need to do now is this:

1. Delete SIP Field 'To : User part'
2. Add: SIP Field 'Remote Party ID - Called Party : User Part'; Variable: "CalledNum" Number that has been dialed (default: To->User)
3. Click OK

Step 1: → Delete SIP Field 'To : User part'

After that (this SIP field will be deleted and gone after pressing the blue **Delete** button) you will have to add the new SIP field.

See Step 2 below.

Step 2:   → Add: SIP Field 'Remote Party ID - Called Party : User Part' and
choose as Variable: "CalledNum" Number that has been dialed (default: To->User)

That looks like this (choose them from the Pull Down Menu's)

SIP Field	Variable
Remote Party ID - Called Party : User Part ⌄	"CalledNum" number that has been dialed (default: To-> ⌄
[Add/Update] [Delete]	[Clear Selection]

Then press **Add/Update;** the **next screen** will appear:

SIP Field	Variable	Cust
Remote Party ID - Called Party : User Part ⌄	"CalledNum" number that has been dialed (default: To-> ⌄	
[Add/Update] [Delete]	[Clear Selection]	
SIP Field	**Variable**	
Request Line URI : Host Part	"DevHostPort" source address/port of message	
Contact : Host Part	"DevHostPort" source address/port of message	
To : Display Name	"CalledName" name that has been dialed (default: To->display	
From : Display Name	"CallerName" caller's name (default: From->display name)	
From : User Part	"CallerNum" caller's number (default: From->user)	
Remote Party ID - Called Party : User Part	"CalledNum" number that has been dialed (default: To->user)	

You will see that in the **picture above** it was added as last SIP field in the list.

After that press **OK** at the bottom right to **SAVE** the settings (**do not forget!**)
See picture below. So far the part to alter the SIP field. → **Next step is to create the Inbound rules for your DID's.**

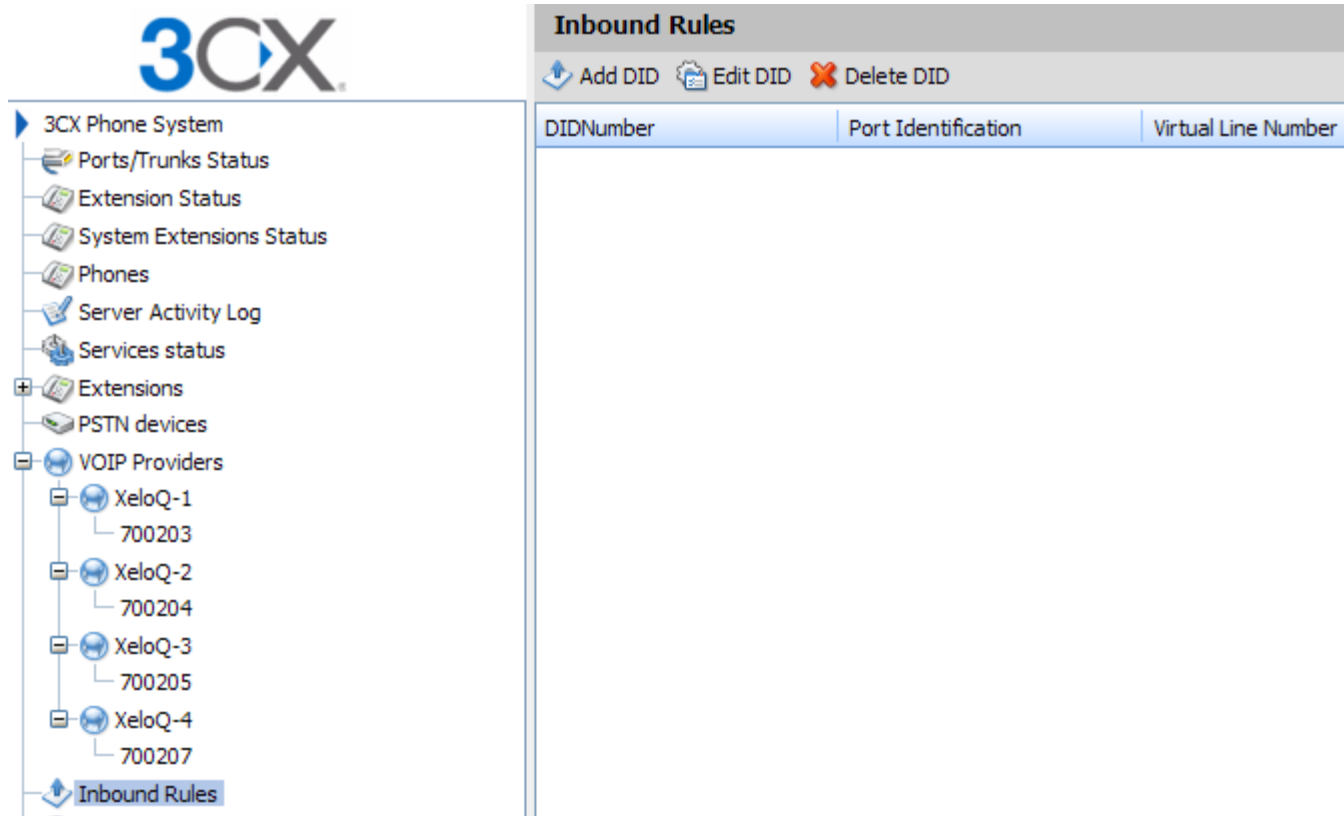| From : User Part	"CallerNum" caller's number (default: From->user)
Remote Party ID - Called Party : User Part	"CalledNum" number that has been dialed (default: To->user)

[OK]   [Cancel]   [Apply]

Next step is to create the Inbound rules for your DID's.

When you bought DID's from XeloQ, for this setup they are ALL forwarded to one SIP account 700207 (that is something XeloQ does for you).

Now you would like to determine yourself **WHICH of each DID** should go to **which extension** or which ringgroup (a ringgroup is nothing more than a group of extensions).

This can be done in 3CX at the menu choice **Inbound Rules.** Choose that now from the menu.

Choose **Add DID** in the top of the menu. You will see the next screen|

Note: *to avoid misunderstandings, we removed the XeloQ-1, XeloQ-2 and XeloQ-3 trunks in the screens below.*

The screens above showed them but that was purely meant for the setup with 3 DID's to 3 SIP accounts.
That needs to be used if companies require to use it as that.

What we are describing now is to send multiple DID's to 1 SIP Trunk using 1 SIP account which is much more flexible and give you FULL control over the routing of your assigned DID's

Best method is to use the 1 SIP account / 1 SIP Trunk method for your DID's.

When contacting sales / support, always tell them which method you would prefer:

➔ **using multiple SIP accounts + multiple SIP Trunks or use 1 SIP trunk and manage all yourself.**

Choose **Add DID** in the top of the menu. You will see the next screen.

Fill out all like shown in the example but then of course replaced with **your DID** using International number format without the leading 00.

Choose the trunk we just created above (700207 in this example):

Then press **OK** . After that you will see that DID 312387901271 is created and will go to extension # 100. See below.

What we created now is an **Inbound rule** that makes the call to the DID 31238901271 (from a landline / mobile phone) go into the 3CX and forwarded to extension # 100.

You can now create MORE **Inbound rules** to manage all the DID's you bought from XeloQ.

We create 2 more examples to show you for DID's 31238901264 + 31238901264 that go to extension 101 and 102.

Create an Inbound rule for the Support DID:

Add DID

Route calls to DID/DDI numbers directly to an extension

Route calls for this DID/DDI Number

Enter a DID or string to look for in the SIP "to" field. Use wildcards (*) to match any digit for that entry. For example, entries 22444032 OR 2244403* will both match calls with a dialled number of +35722444032 in the "to" field

DID/DDI Name	XeloQ Support number
DID/DDI number/mask	31238901264
Available ports	☐ Select all
	☑ 700207[XeloQ-4]

Office Hours

Configure where calls to this DID/DDI should be routed during office hours.

- ⚪ End Call
- 🔘 Connect to Extension — 101 XeloQ Support
- ⚪ Connect to Queue / Ring Group —
- ⚪ Connect to Digital Receptionist —
- ⚪ Voicemail box for Extension — 100 XeloQ Sales
- ⚪ Forward to Outside Number —
- ⚪ Send fax to email of extension — 888 Default FAX Destination

☑ Same as during Office hours

[OK] [Cancel] [Apply]

Press OK. This is what we see next:

3CX Phone System

- 3CX Phone System
  - Ports/Trunks Status
  - Extension Status
  - System Extensions Status
  - Phones
  - Server Activity Log
  - Services status
  - ⊞ Extensions
  - PSTN devices
  - ⊟ VOIP Providers
    - ⊟ XeloQ-4
      - ⊟ 700207
        - 31238901264
        - 31238901271
  - ⊟ Inbound Rules
    - 31238901264
    - 31238901271

Add DID

Add DID   Edit DID   ✖ Delete DID

DIDNumber	Port Identification	Virtual Line Number	During Office Hours	Out of Office Hours
31238901264	700207	10003	101	101
31238901271	700207	10003	100	100

Last example; create an Inbound Rule for the Administration DID:

Press OK; this is what we created now:

Now you have learned HOW to configure your 3CX for working with Inbound Rules and manage your own DID's through **1 SIP account.**

Together with the examples in the beginning of this document, you can handle DID's on your 3CX in every way you would like. ***This is all the support XeloQ can give concerning 3CX configuration!***

When contacting sales / support, always tell them which method you would prefer: using multiple SIP accounts + multiple SIP Trunks or use 1 SIP trunk and manage all yourself.