



## AsteriskNOW/Lync 2013 Configuration

A guide to the configuration of AsteriskNOW PBX, as a PTSN Gateway for Microsoft LYNC 2013.

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# Introduction

This guide is to help other integrate their Microsoft 2013 Lync systems, with AsteriskNOW for use with non-Lync compatible SIP providers. This guide is meant to be an over-view guide to help with setting you the basic environment to allow calling in and out. Our environment uses a combination of Asterisk and Lync phones and ATA's. Our Provider has a Adtran PRI/SIP box which we connected into, so our connection was going SIP<->PRI<->SIP, as a side effect, we were loosing fax's and did not have the ability to do simultaneous ring, since you need to be able to mask the DID on outbound. After searching online, I could not find a easy to read, guide to help setup the Asterisk PBX as a SIP gateway, and do the TCP/UDP translation for Lync to be able to talk. I am hoping people can use my guide, to help them set up their environments.

## Complications

### LYNC TCP

Mircosoft Lync uses TCP SIP connections for its phone connections, this is an issue since most SIP providers use UDP connection

## Installing AsteriskNOW

- 1.)First thing to pick is a physical or virtual system, to have redundancy I opted for a Virtual system.
- 2.)Download AsteriskNOW  
<http://www.asterisk.org/downloads/asterisknow/all-asterisknow-versions>
- 3.)Burn Image to DVD/USB or mount for virtual disk
- 4.)Do a Basic Install
- 5.)Configure IP settings

## Configuring AsteriskNOW

Configure a trunk for your SIP provider.  
You will need the following details in the trunk.

```
username=<SIP USER>
type=peer
transport=udp
secret=<SIP PASSWORD>
insecure=port,invite
host=<SIP HOST>
dtmfmode=rfc2833
disallow=all
canreinvite=no
allow=ulaw&g729&g722
context=from-internal
```

Configure a trunk for your Lync Server  
You will need the following information

```
host=<LYNC IP>
transport=tcp
port=5068
insecure=very
type=friend
promiscredir=yes
qualify=yes
canreinvite=yes
context=from-internal
```

You will need to enable TCP connections now for the trunk to work, if you are not using the AsteriskNOW version of Asterisk you will need to add the same options below into the sip.conf file.

```
tcpenable=yes
transport=tcp
context=from-internal
sendrpid=yes *
trustpid=yes *
```

If you are using AsteriskNOW navigate to Advanced Asterisk Settings and add the following information

Other SIP Settings ⓘ

topenable	=	yes
transport	=	tcp
context	=	from-internal
sendpid	=	yes
trustpid	=	yes

Add Field

\* you only need to include the sendpid=yes and trustpid=yes if you will be sending out CID from the phones on site, you will also need to enable the P-Assertion Identity, to do this you will need to ssh into the server and edit /etc/asterisk/extensions\_custom.conf and add the following information.

```
[macro-dialout-trunk-predial-hook]
exten => s,1,NoOp(Adding P-Asserted-Identity)
exten => s,n,SipAddHeader(P-Asserted-Identity: "Lab SIP
Trunk"<sip:PILOT#@SIPHOST>)
exten => s,n(done),MacroExit()
```

Create your inbound route, to accept any number, and pass it to the LYNC trunk

Set Destination

Trunks Lync (sip)

Submit Clear Destination & Submit

Create your outbound route, and point it to your SIP trunk

## Configuring Lync

You will need to add a new Gateway to your LYNC server, the Mediation port should be set to your SIP port, (default 5060) and the trunk port needs to be whatever you put on the trunk(default 5060)