



Microsoft®  
**Lync™ Server 2010**

**Comunicaciones Unificadas**  
Configuración Mediation Server



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# Comunicaciones Unificadas Virtualizadas

- Vamos a realizar la preparación del rol Mediation Server para realizar la integración con Asterisk 1.8
- **Requerimientos:**
  - ✓ Acceso al Frontend de Lync Server 2010 (192.168.50.5)
  - ✓ Dirección IP de Asterisk 1.8 (192.168.50.220)

**Nota:** es el mismo procedimiento para sumar cualquier Gateway IP por ejemplo Audiocodes MP114 o similar.



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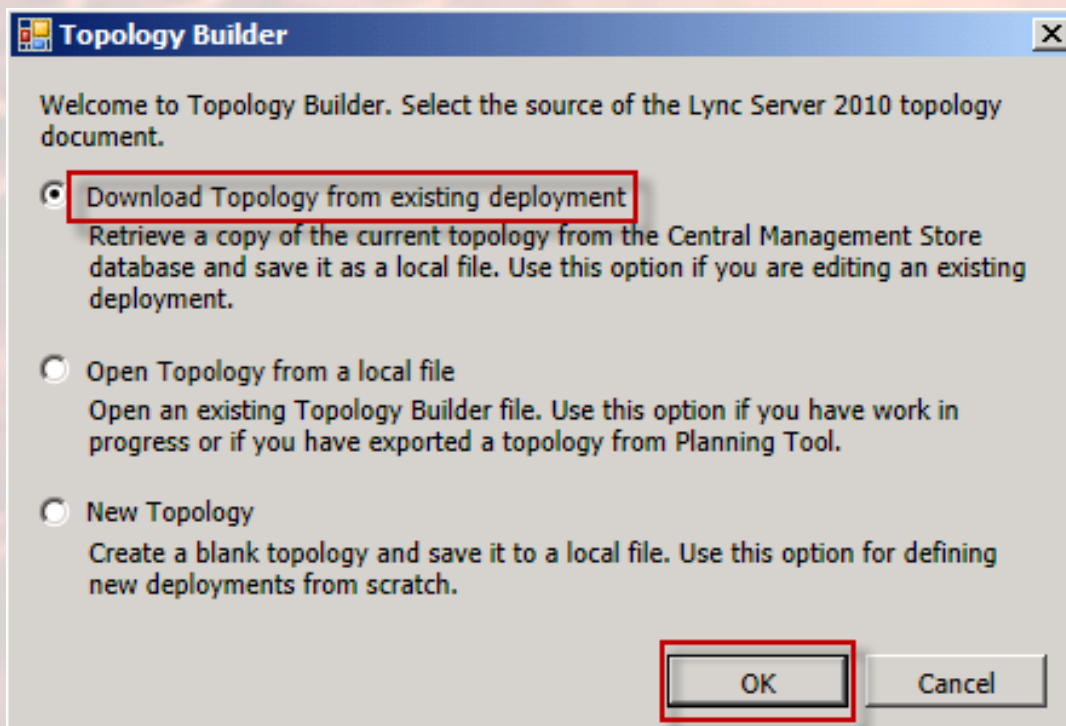
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En el servidor Frontend de Lync abrimos -> **Lync Server Topology Builder**



Lync Server Topology Builder

Seleccionamos -> **Download Topology from ...> Ok**

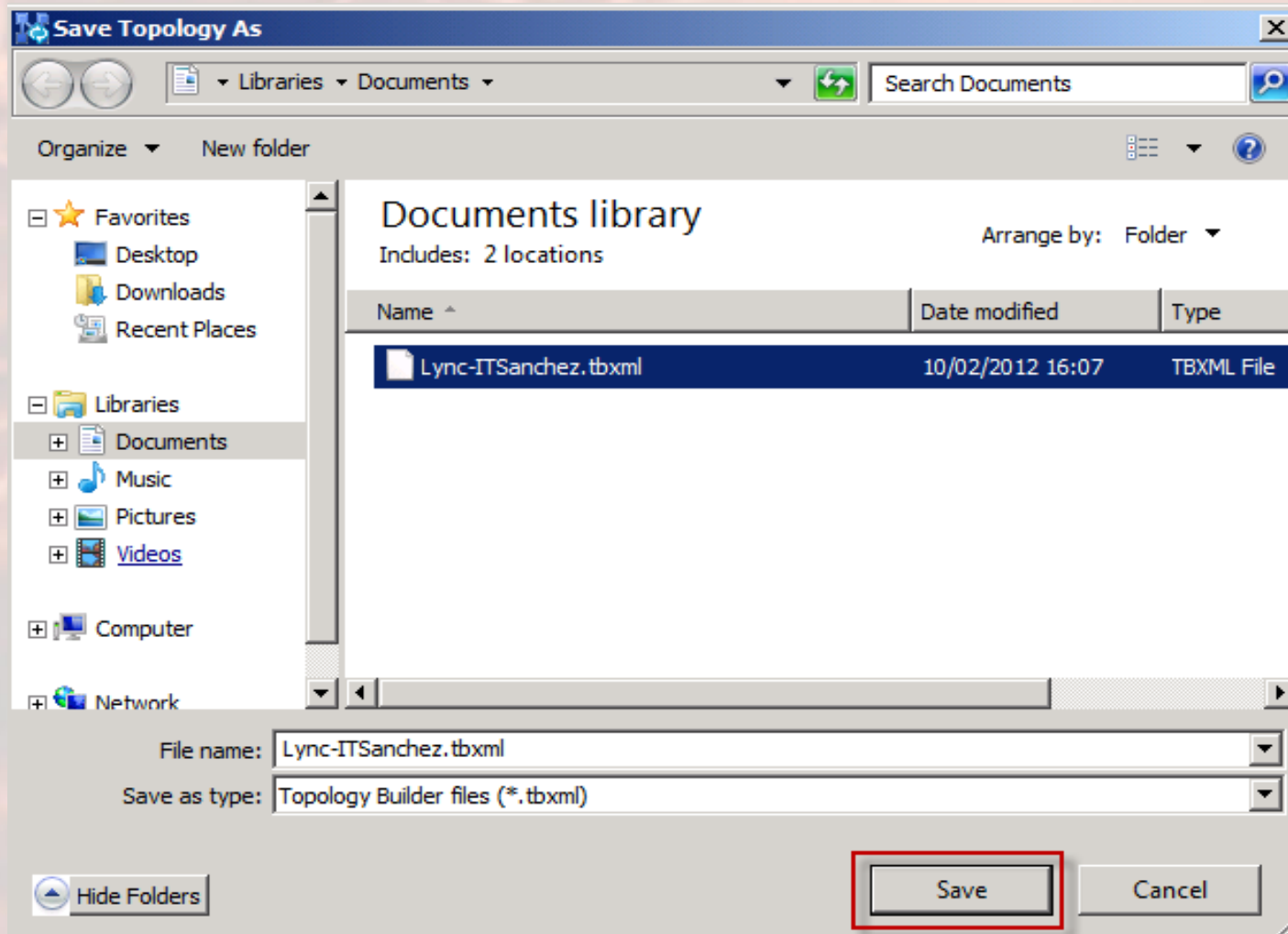




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Seleccionamos el archivo para guardar la topología → **Save**





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En Mediation pools -> lyfe01.itsanchez.local -> botón derecho -> Edit Properties...

**Lync Server 2010, Topology Builder**

File Action View Help

Lync Server 2010

- ITSanchez
  - Standard Edition Front End Servers
  - Enterprise Edition Front End pools
  - Director pools
  - A/V Conferencing pools
  - SQL stores
  - File stores
  - Mediation pools
    - lyfe01.itsanchez.local**
    - PSTN gateways
  - Monitoring Servers
  - Archiving Servers
  - Edge pools
  - Trusted application se
  - Branch sites

**Mediation Server PSTN gateway**

TLS listening port: 5067

TCP listening port: *Not configured*

PSTN Gateways:  Default  Gateway

**Actions**

- lyfe01.itsanchez.lo...
  - Edit Properties...
  - Topology ▶
  - View ▶
  - Help



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Seleccionamos -> Enable TCP port -> New...

**Edit Properties**

**PSTN gateway**

**Mediation Server PSTN gateway**

Listening ports: \* TLS:  TCP:

Enable TCP port

The following gateways are not associated with any Mediation Server. Click Add to associate them with this Mediation Server.

Gateway	Site

The following gateways are associated with this mediation server. Click New to define a new gateway and add it to the list. Click Remove to remove a gateway from the list.

Gateway	Site



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Completamos los datos -> 192.168.50.220 (Asterisk) – TCP 5060 -> Ok

**Define New IP/PSTN Gateway** [X]

Gateway FQDN or IP Address \*

Listening port for IP/PSTN gateway: \*

Sip Transport Protocol:

TCP

TLS

Help OK Cancel

Nuevamente -> Ok



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Desde el nombre de nuestra organización -> **Botón Derecho** -> **Topology** -> **Publish...**

**Lync Server 2010, Topology Builder**

File Action View Help

Navigation icons: Back, Forward, Home, Refresh, Help, Stop

**Lync Server 2010**

- [-] ITSanchez
  - [+] Servers
  - [+] Edge pools
  - [+] Topology
    - New...
    - Edit Properties...
    - Topology
      - New...
      - Open...
      - Download Current Topology...
      - Save A Copy...
      - Publish...**
      - Install Database...
      - Merge 2007 or 2007 R2...
      - Remove Deployment...
    - Delete
    - Help
  - lyfe01.itsanchez.local
  - [+] PSTN gateways
    - [+] 192.168.50.220
  - [+] Monitoring Servers
  - [+] Archiving Servers
  - [+] Edge pools
  - [+] Trusted application servers
  - [+] Branch sites

**Mediation Server PSTN gateway**

TLS listening port: 5067

5068

Default	Gateway
✓	192.168.50.220

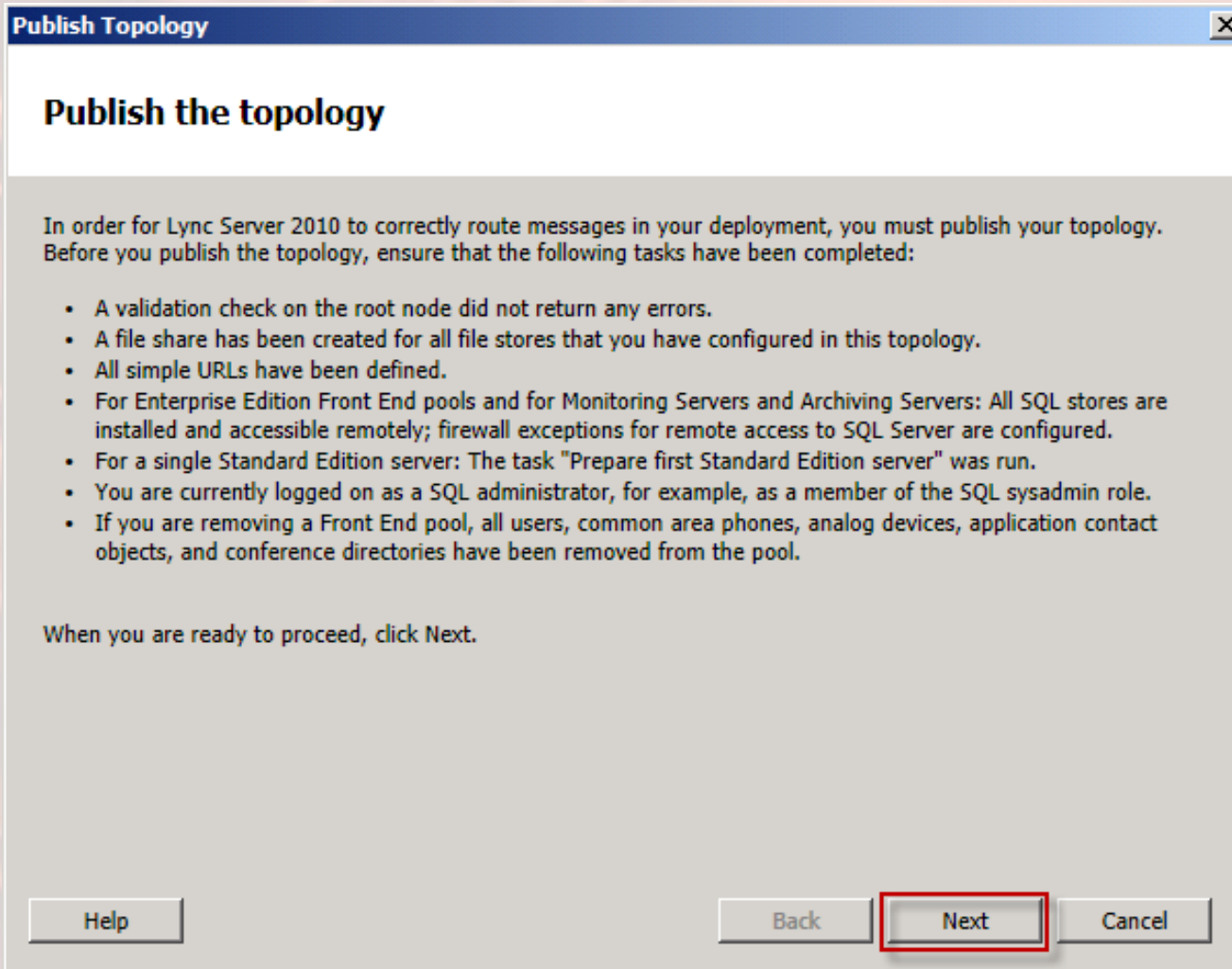




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Seleccionamos -> **Next**





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Seleccionamos -> Finish

**Publish Topology** [X]

## Publishing wizard complete

Your topology was successfully published.

	Step	Status	
✓	Publishing topology ...	Success	<input type="button" value="View Logs"/>
✓	Downloading topology ...	Success	
✓	Downloading global simple URL settings.	Success	
✓	Enabling topology...	Success	

Next steps:

→ [Click here to open to-do list](#)

In order for Lync Server 2010 to correctly route traffic, your deployment must match the published topology. The linked text file contains a list of any servers that need to be updated, as well as any databases that need to be created.

To close the wizard, click Finish.



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Habilitamos nuestra nueva topología -> Lync Server Management Shell



## Lync Server Management Shell

Habilitamos nuestra nueva topología -> Enable-CsTopology -Verbose

```
Administrator: Lync Server Management Shell
PS C:\Users\administrator.ITSANCHEZ> enable-cstopology -verbose
VERBOSE: Creating new log file
"C:\Users\administrator.ITSANCHEZ\AppData\Local\Temp\enable-cstopology-04f94592-26d2-4e41-9f8a-d021798d2b62.xml".
VERBOSE: Activate new or updated services in the topology.
VERBOSE: No changes were made to the Central Management Store.
VERBOSE: Creating new log file
"C:\Users\administrator.ITSANCHEZ\AppData\Local\Temp\enable-cstopology-04f94592-26d2-4e41-9f8a-d021798d2b62.html".
VERBOSE: "enable-cstopology" processing has completed successfully.
VERBOSE: Detailed results can be found at
"C:\Users\administrator.ITSANCHEZ\AppData\Local\Temp\enable-cstopology-04f94592-26d2-4e41-9f8a-d021798d2b62.html".
PS C:\Users\administrator.ITSANCHEZ> _
```

Ejecutamos-> services.msc -> reiniciamos -> Lync Server Mediation



Lync Server Mediation

Lync Serve...

Started

Automatic

Network S...



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Realizamos los siguientes comandos ->

```
cd /usr/asterisk
```

```
mv sip.conf sip.conf.old
```

```
[root@CentOS ~]# cd /etc/asterisk/  
[root@CentOS asterisk]# mv sip.conf sip.conf.old  
[root@CentOS asterisk]# █
```

```
vi sip.conf
```

```
Presionamos [i]
```

```
~  
~  
-- INSERT --
```

En modo – INSERT – podemos copiar las líneas de la siguiente pantalla



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## Agregamos las siguientes líneas

[general]

context=default ; Contexto Predeterminado

allowoverlap=no

udpbindaddr=0.0.0.0

port=5060

bindport=5060

bindaddr=0.0.0.0

tcpenable=yes

srvlookup=yes

notifyhold = yes

disallow=all

allow=alaw

allow=ulaw

[Trama\_Lync]

type = friend

port = 5068

canreinvite=no

host = 192.168.50.5

dtmfmode=RFC2833

context=from-lync ; Contexto Lync Server 2010

disallow=all

allow=alaw

allow=ulaw

qualify = yes

transport = tcp,udp



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Para guardar -> [ESC] :wq

```
[general]
context=default                ; Contexto Predeterminado
allowoverlap=no
udpbindaddr=0.0.0.0
port=5060
bindport=5060
bindaddr=0.0.0.0
tcpenable=yes
srvlookup=yes
notifyhold = yes
disallow=all
allow=alaw
allow=ulaw

[Trama_Lync]
type = friend
port = 5068
canreinvite=no
host = 192.168.50.5
dtmfmode=RFC2833
context=from-lync            ; Contexto Lync Server 2010
disallow=all
allow=alaw
allow=ulaw
qualify = yes
transport = tcp,udp
~
~
~
~
~
~
~
~
~
:wq
```



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Reiniciamos el servicio de Asterisk -> service asterisk restart

```
[root@CentOS asterisk]# service asterisk restart
Stopping safe_asterisk: [ OK ]
Shutting down asterisk: [ OK ]
Starting asterisk:
[root@CentOS asterisk]# █
```

Entramos a asterisk -> asterisk -r

```
[root@CentOS asterisk]# service asterisk restart
StCentOS*CLI> sip show peers
SrName/username          Host                Dyn Forcerport ACL Port      Status
SrTrama_Lync             192.168.50.5       N      5068      OK (3 ms)
[r] sip peers [Monitored: 1 online, 0 offline Unmonitored: 0 online, 0 offline]
AsCentOS*CLI> █

Created by Mark Spencer <markster@digium.com>
Asterisk comes with ABSOLUTELY NO WARRANTY; type 'core show warranty' for details.
This is free software, with components licensed under the GNU General Public
License version 2 and other licenses; you are welcome to redistribute it under
certain conditions. Type 'core show license' for details.

=====
Connected to Asterisk 1.8.9.2 currently running on CentOS (pid = 11840)
Verbosity is at least 3
CentOS*CLI> █
```

Ejecutamos-> sip show peers



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Ejecutamos-> sip show peers

```
CentOS*CLI> sip show peers
Name/username      Host                Dyn Forcerport ACL Port      Status
Trama_Lync        192.168.50.5       N           5068      OK (3 ms)
1 sip peers [Monitored: 1 online, 0 offline Unmonitored: 0 online, 0 offline]
CentOS*CLI> █
```

Con esta prueba validamos que Lync y Asterisk, finalizadas estas tareas es fundamental armar reglas de marcado en ambos entornos.