



TELSTRA IP TELEPHONY

TIPT/LYNC 2013 INTEGRATION CONFIGURATION GUIDE

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Table of Contents

1.	Scope	4
2.	Intended Audience	4
3.	Assumption	4
4.	Pre-requisite	4
5.	Introduction	5
6.	Features of RCC	5
7.	Integration Architecture	6
8.	Setting up Remote Call Control	7
	Step 1: Ensure connectivity between the Lync Front End servers and Telstra's OCS-SBC	8
	Step 2: Configure a user for RCC	8
	Step 3: Configure a Static Route for RCC	9
	Step 4: Define Trusted Application Pool and add Trusted Application	9
	Step 5: Lync Server 2013 Enterprise Edition – Load Balancing	10
	Step 6: Modify Client Version Policy	11
	Step 7: Phone number normalisation	15
	Step 8: Change the TIPT Toolbar username	17
	Step 9: Disable the TIPT Toolbar Call Notification popup	17
	Step 10: Optional Group Policy change	18
9.	Testing your solution	18
10.	Support	19
11.	Configuration changes	19
12.	Frequently asked questions	19
12.1.	Using TIPT	19
12.1.1.	TIPT Toolbar	19
12.1.2.	Answer toast popup	19
12.1.3.	TIPT and MOCC functions	20
12.2.	Handsets	20
12.2.1.	Handset compatibility	20
12.3.	Accessing Lync	20
12.3.1.	Logging on	20
12.4.	Using Lync Client	20
12.4.1.	Making calls	20
12.4.2.	Making calls from Microsoft Outlook	21
12.4.3.	Redirecting calls	21
12.4.4.	Do Not Disturb	21
12.4.5.	Conference calling	21
12.4.6.	Voice Mail	21
12.4.7.	Call Forwarding	22
12.4.8.	Video calling	22

13. Glossary 22

1. Scope

This document provides some guidance on how to configure the Microsoft® Lync™ Server 2013 to communicate with Telstra IP Telephony (TIPT) network to allow the end-users to control their TIPT phones from their Lync 2013 clients as shown in Figure 1 Microsoft Lync 2013 Client.

The scope of this document is to provide an example of integrating TIPT to a simple implementation of Lync server (Standard Edition) in a single server. If your company operates a more sophisticated Lync server infrastructure, the concepts in this document are equally applicable although the exact commands to accomplish the TIPT-Lync integration are dependent on the existing configuration / topology of your company's Lync server infrastructure.

Note: Lync is the replacement name for the new version of Office Communication Server (OCS). For the purpose of this document, the two are used interchangeably.

2. Intended Audience

This document is intended for IT system administrators responsible for operating their company's Active Directory and Lync Servers. You should also be familiar with the end user's PC environment to assist the user (if required) configure the Lync client to work correctly with TIPT-Lync Remote Call Control (RCC) integration. You should be familiar with basic Active Directory and Lync server administration. Otherwise, it is advisable that this is performed by a qualified IT professional.

3. Assumption

It is assumed you already have an existing Lync Server 2013 infrastructure and suitably configured Active Directory Server infrastructure with recent Microsoft updates (software patches). You will also need to have administrator access to Lync Server and be familiar with the administration of Lync users and server (eg. enabling accounts for Lync and using Lync Server Control Panel and PowerShell to perform Lync Server management tasks).

4. Pre-requisite

Prior to configuring the TIPT/Lync Integration service, please ensure it has been ordered and successfully activated.

Customers with Enterprise Edition of Lync Server 2013 must have a suitably configured Hardware Load Balancer (HLB) between the Front End (FE) servers and Telstra's OCS-SBC.

All Lync 2013 clients running on the end-user's PC / laptop must be version 15.0.4481.1000 or newer. Where Lync 2010 client is connected to this solution, the client must have the KB 2647415 update (or a later Lync 2010 client cumulative patch incorporating this update) to ensure the version number presented to the Lync 2013 server is equal to or greater than 4.0.7577.4053. Your Lync 2013 server will be configured to enforce the rejection of login attempt from Lync clients bearing a lower version number (eg. 4.0.7577.0 or 4.0.7577.314). All your Lync 2010 users (regardless of whether they use TIPT-Lync Integration) will be unable to login until the Lync 2010 client is updated to version 4.0.7577.4053 or newer.

Note that only Lync 2013 client is supported by the TIPT/Lync 2013 Integration solution. Other versions of clients (eg. Lync 2010, OC 2007R2 or OC 2007) may produce unexpected behaviour when connected to the TIPT/Lync 2013 Integration solution.

You must agree to continuously implement the Client Version Policy rules to enforce the above across the entire Lync system. Failure to do so allows defects in older versions of Lync 2010 client to interact incorrectly with Telstra's network. If this occurs, Telstra will immediately suspend your TIPT-Lync 2013 Integration service and request you to rectify the Lync 2010 client version checking fault. Telstra will restore your service when you provide evidence demonstrating the required version policy is in place.

Prior to configuring specific settings for RCC, you must ensure that Lync Server 2013, Lync 2013 client and other systems they integrate to (eg. Microsoft Exchange / Outlook) are functioning correctly. You are advised to work with your system support to rectify all existing faults before commencing TIPT-Lync integration.

5. Introduction

The integration between Microsoft Lync 2013 and TIPT is based on a native interface in Lync Server 2013 referred to as Remote Call Control (RCC). RCC enables a user to control their TIPT phone using the Microsoft Lync 2013 client or other Microsoft applications which support the Lync client extensions such as Microsoft Outlook (Figure 1 Microsoft Lync 2013 Client shows how the Lync client appears on the user's PC).

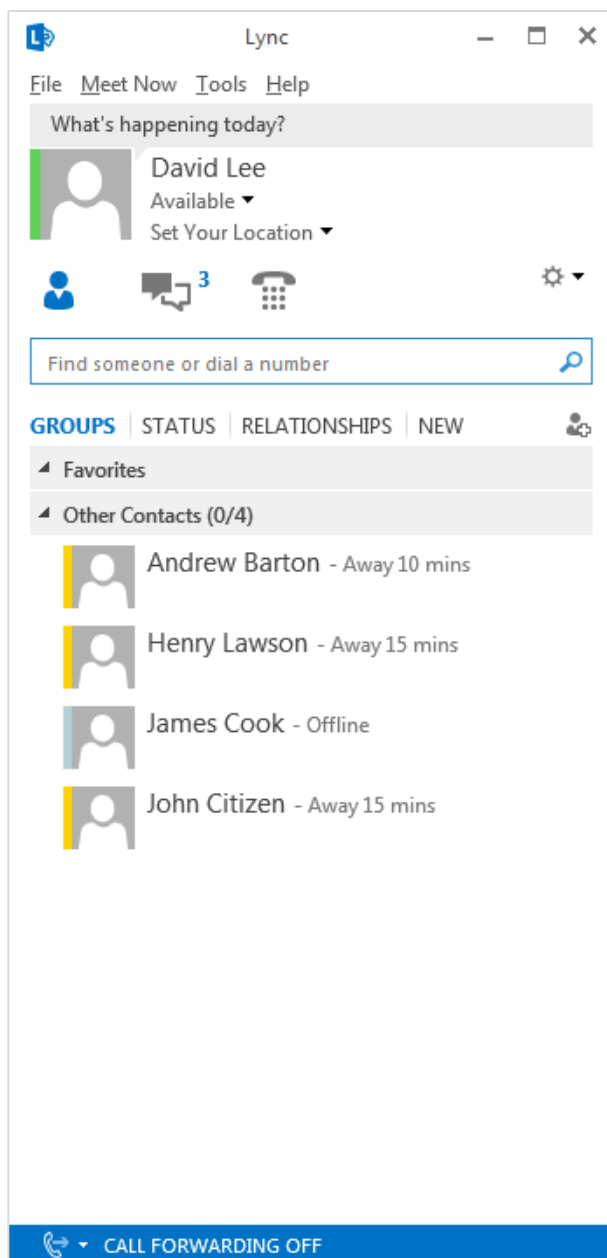


Figure 1 Microsoft Lync 2013 Client

6. Features of RCC

In addition to the existing Lync features, the TIPT-Lync user will be provided with the following:

FEATURE	DESCRIPTION
Presence	TIPT presence is now intergrated to Lync.
Make a call	Make a phone call using the Lync client. This results in the TIPT handset

	going off-hook automatically.
Receive a call	Lync client displays an incoming call toast. On clicking the toast the TIPT handset goes off-hook.
Caller Identification	Lync client displays the calling party number or name when it is available.
Call waiting	The user sees a Lync client popup toast for the incoming call
Call hold and retrieve	Place a call on hold and retrieve a held call by clicking the Hold/Resume icon in Lync client
Multiple calls	Handle multiple calls at a time. Every call is represented by a different communication window which allows users to manage/toggle between multiple calls.
Single step transfer	Perform single step transfer (blind call transfer) by clicking the Transfer button in Lync client.
Consultative transfer	Place an existing call on hold and make a call to another user then click the Transfer button in Lync client
Deflect an incoming call to another telephone number	On the popup toast deflect an incoming call to another telephone number.
Transfer to another telephone number	For an active call click the Transfer button and select a number from the drop down list to forward a call to another number
Missed call notification within Outlook	Missed calls are logged within Outlook 'Conversation History' folder

7. Integration Architecture

TIPT/Lync 2013 Integration solution requires your Lync Server 2013 to connect to Telstra's OCS-SBC via the VPN you currently use for the TIPT service. Note that the end-user's Lync 2013 client doesn't communicate directly with the OCS-SBC – RCC communications is via the Lync Server 2013.

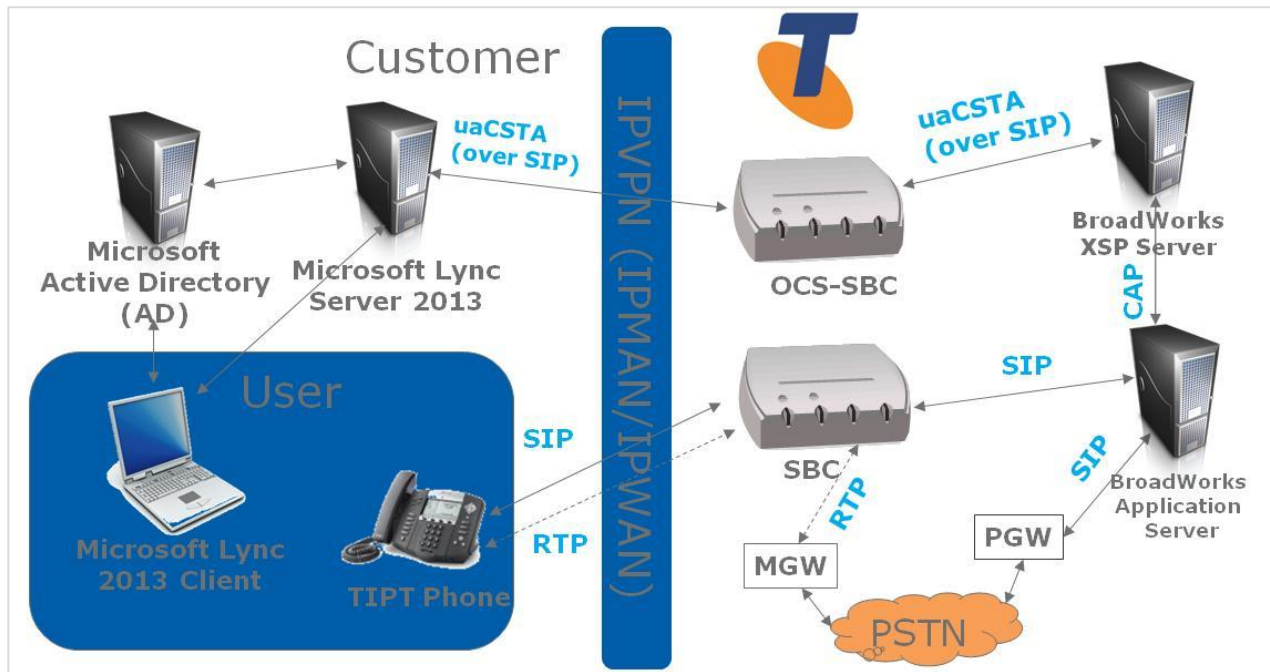


Figure 2 Lync-TIPT Integration Overview

Note: The detailed planning/design of the Lync Server 2013 deployment is outside the scope of this document. TIPT/Lync 2013 Integration requires only the Lync Server 2013 Front End Server to communicate via uaCSTA with Telstra's OCS-SBC. You have the freedom to plan/design your Lync Server 2013 system as per Microsoft guidelines.

From solution architecture point of view, the only difference between Lync Server 2013 SE and EE customers using the TIPT/Lync 2013 Integration service is the need for a suitably configured HLB to present the FE pool as a 'single' server to Telstra's network. Below is an overview of the steps involved:

- Active Directory domain: lync-lab.uc (NetBIOS name 'LYNC-LAB')
- (your company's AD domain may be 'company-name.com.au' and the NetBIOS name 'COMPANY-NAME')
- Lync Server FQDN (DNS name): lync.lync-lab.uc
- (note that this server performs all Lync and SQL Server functions)
- Trusted Application Pool: trustpool.lync-lab.uc
- Lync Server Services: Ensure the Lync Server 'A/V Conferencing service' is enabled.

8. Setting up Remote Call Control

To setup RCC you will need to perform the following steps in order. Each step is explained in more detail on the following pages.

Step 1: Ensure connectivity between the Lync 2013 Front End server and Telstra's OCS-SBC:

Lync Server to OCS-SBC: open TCP port 5060

OCS-SBC to Lync Server: open TCP port 5060

Step 2: Configure user for RCC – do this for every users requiring TIPT/Lync 2013 Integration

Step 3: Using the Topology Builder in Lync Server 2013, configure a new Trusted Application Pool

Step 4: Define "TIPT" as a Trusted Application and add this to the Trusted Application Pool

Step 5: Using the Lync Server Control Panel (LSCP), modify the rules in Client Version Policy

Step 6: Apply phone number normalization – if required

Step 7: Re-start Lync 2013 client

Step 8: Change the TIPT toolbar username

Step 9: Disable the TIPT Toolbar Call Notification popup

Step 1: Ensure connectivity between the Lync Front End servers and Telstra's OCS-SBC

For Lync Server to communicate with the OCS-SBC in Telstra's network a communication channel needs to be established between the Lync Front End server and Telstra's OCS-SBC. If you have firewall between your Lync 2013 Front End server and OCS-SBC, you need to configure an 'inbound' rule to allow OCS-SBC initiated TCP port 5060 connection to reach the Lync 2013 Front End server.

As each customer's firewall and security implementations are slightly different, an end-to-end connectivity test is recommended. To test the 'outbound' connectivity:

1. Log in to the Lync Front End server.
2. Open a Command Shell and attempt to telnet from this machine to the Telstra SBC IP Address on port 5060.

telnet 203.52.0.228 5060

3. A successful response is indicated by a blank screen.
4. An unsuccessful response is indicated by:

```
Connecting To 203.52.0.228...Could not open connection to the host, on
port 5060: Connect failed.
```

If this is the response, please contact your network administrator to identify where the traffic is being blocked.

Note: The telnet program is not installed by default in Windows Server 2008. To install telnet you will need your Windows Installation disk or download a third party version of the software from the Internet.

Step 2: Configure a user for RCC

Each TIPT-Lync 2013 Integration user must be configured for RCC. It is assumed the user's account is already enabled for Lync. Otherwise, please use the Lync Server Control Panel GUI (or the PowerShell 'Enable-CsUser' cmdlet CLI) to accomplish this.

```
Set-CsUser -Identity "lync-lab\user1" -RemoteCallControlTelephonyEnabled
$True -LineServerURI "sip:+61387654321@tipt.ocs" -LineURI
"TEL:+61386023764"
```

The PowerShell 'Set-CsUser' Cmdlet example above performs the following tasks for the account 'user1' in 'lync-lab' NetBIOS namespace and uses the TIPT phone number +61387654321:

1. Enable RCC
2. Set LineServerURI to [sip:+61387654321@tipt.ocs](tel:sip:+61387654321@tipt.ocs)
3. Set LineURI to <tel:+61387654321>

Note: Please substitute the NetBIOS namespace, user account and TIPT number in the example above with those appropriate for your organisation.

Note: The phone number in LineServerURI and LineURI must be in E.164 format (+<CountryAccessCode><Area Code><Local Number>).

Note: If a user's Lync login name changes (eg. due to marriage, etc.) the TIPT provisioning team needs to be informed via email at tiptprovisioning@team.telstra.com.

Step 3: Configure a Static Route for RCC

All SIP traffic from Lync 2013 client goes through the Lync 2013 Front End server and is proxied by this server to Telstra's OCS-SBC. To allow the Lync 2013 Front End server to communicate with Telstra's OCS-SBC, the following commands defines a global static route to enable this:

```
$route = New-CsStaticRoute -Destination "203.52.0.228" -MatchUri  
"tipt.ocs" -Port 5060 -TCPRoute -Enabled $True
```

And

```
Set-CsStaticRoutingConfiguration -Identity global -Route @{Add=$route}
```

Note: Depending on the design / topology of the specific implementation of Lync Server 2013 in your organisation, the commands to configure the static route may differ. If in doubt, please consult your local Lync Server 2013 technical support to ensure the static route you plan to implement will not create any conflict with existing static route in the Lync server.

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

Step 4: Define Trusted Application Pool and add Trusted Application

The next step in the Lync Server 2013 configuration is to

1. create a Trusted Application Pool in Lync and add the Telstra's OCS-SBC as a Trusted Application in Lync 2013 (to allow it to treat the OCS-SBC as an authenticated host).

```
New-CsTrustedApplicationPool -Identity TrustPool.lync-lab.uc -Registrar  
lyc.lync-lab.uc -TreatAsAuthenticated $True -ThrottleAsServer $True -  
OutboundOnly $False -Site 1 -ComputerFqdn 203.52.0.228
```

Note: The "trustpool.lync-lab.uc" is a label Lync uses internally – there is no need to add this to the DNS system).

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

2. Create a Trusted Application called 'TIPT' in 'TrustPool.lync-lab.uc' with the following command:

```
New-CsTrustedApplication -ApplicationId TIPT -TrustedApplicationPoolFqdn  
TrustPool.lync-lab.uc -Port 5060 -EnableTcp
```

Note: You may receive warnings while issuing the above command because the Trusted Application 'TIPT' is not a member of the Active Directory domain in your company's network. Just respond with 'Y' (yes) at the warnings to allow the PowerShell cmdlet to continue modifying the Lync topology.

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

3. Define "lyc.lync-lab.uc" as the registrar and the listening port is TCP 5060 using the following:

```
Set-CsRegistrar -Identity "Registrar:lyc.lync-lab.uc" -SipServerTcpPort 5060
```

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

4. Finally, enable the topology by issuing the following command:

```
Enable-CsTopology
```

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

After this, use the Lync Server 2013 Topology Builder to restrict the service usage of the Trusted Application to the OCS-SBC address you are given. An example is provided in

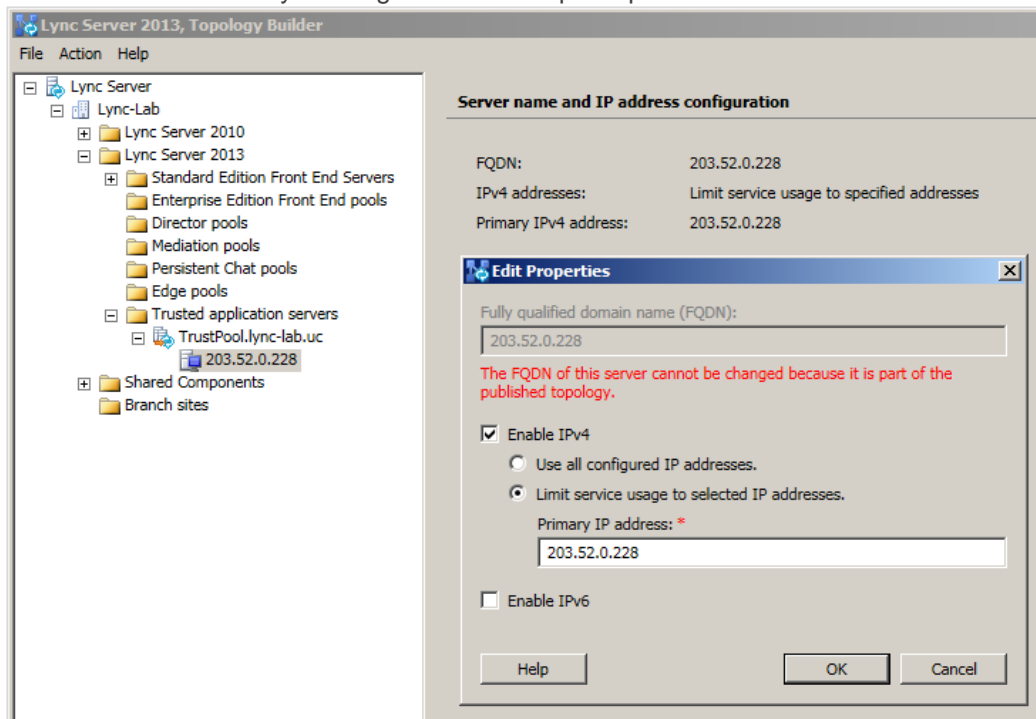


Figure 3 Restrict Trusted Application Usage in Topology Builder below.

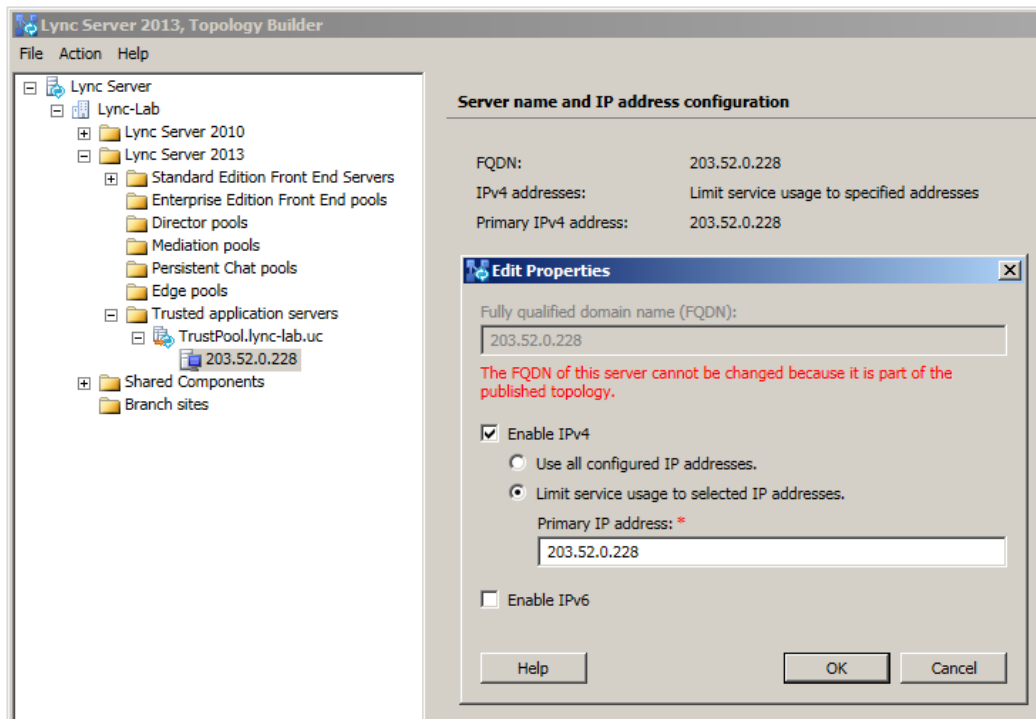


Figure 3 Restrict Trusted Application Usage in Topology Builder

Note: Please use the provided OCS-SBC IP address.

Note: This step is the same for both the Standard Edition and Enterprise Edition of Lync Server 2013.

Step 5: Lync Server 2013 Enterprise Edition – Load Balancing

All Lync Server 2013 Enterprise Edition deployments must have a Hardware Load Balancer (HLB) between the Lync Front End (FE) pool and OCS-SBC in Telstra's network. As part of the TIPT/Lync 2013 Integration validation testing, Telstra has configured the following to confirm the service works correctly with Lync Server 2013 EE:

- **Lync Topology:** FE pool with 2 servers.
- **Hardware Load Balancer:** A10 Networks AX3030.
- **Firmware version:** 2.7.1-P2 (AFLEX script causes process restart issue in older versions and this affects the TIPT/Lync Integration service).
- **Routing:** The load balancer is configured to perform N-to-1 NATting for Lync to TIPT traffic.
- **Load balancing:** VIP on the external interface of load balancer (TIPT initiated traffic lands on this).
- **AFLEX Script:** A custom script is implemented to 'steer' traffic arriving at the VIP to the correct Lync FE server using the 'ms-fe' parameter in the SIP header 'Route' field.
- **OCS-SBC:** Lync host FQDN is the pool FQDN. This resolves to the HLB VIP.

Customers are advised to seek their load balancer specialist assistance in designing and implementing the appropriate load balancing solution for the TIPT/Lync 2013 uaCSTA traffic.

Note: The design for the A10 Networks load balancer in the test lab is a simple design meeting the uaCSTA traffic requirements. More sophisticated / elegant load balancing design may exist but discussion of this is outside the scope of this document.

Step 6: Modify Client Version Policy

In Lync Server 2013 Control Panel, go to Client Version Policy as shown in Figure 4 Lync Server Control Panel. Double-click on the rule called 'Global' to edit it.

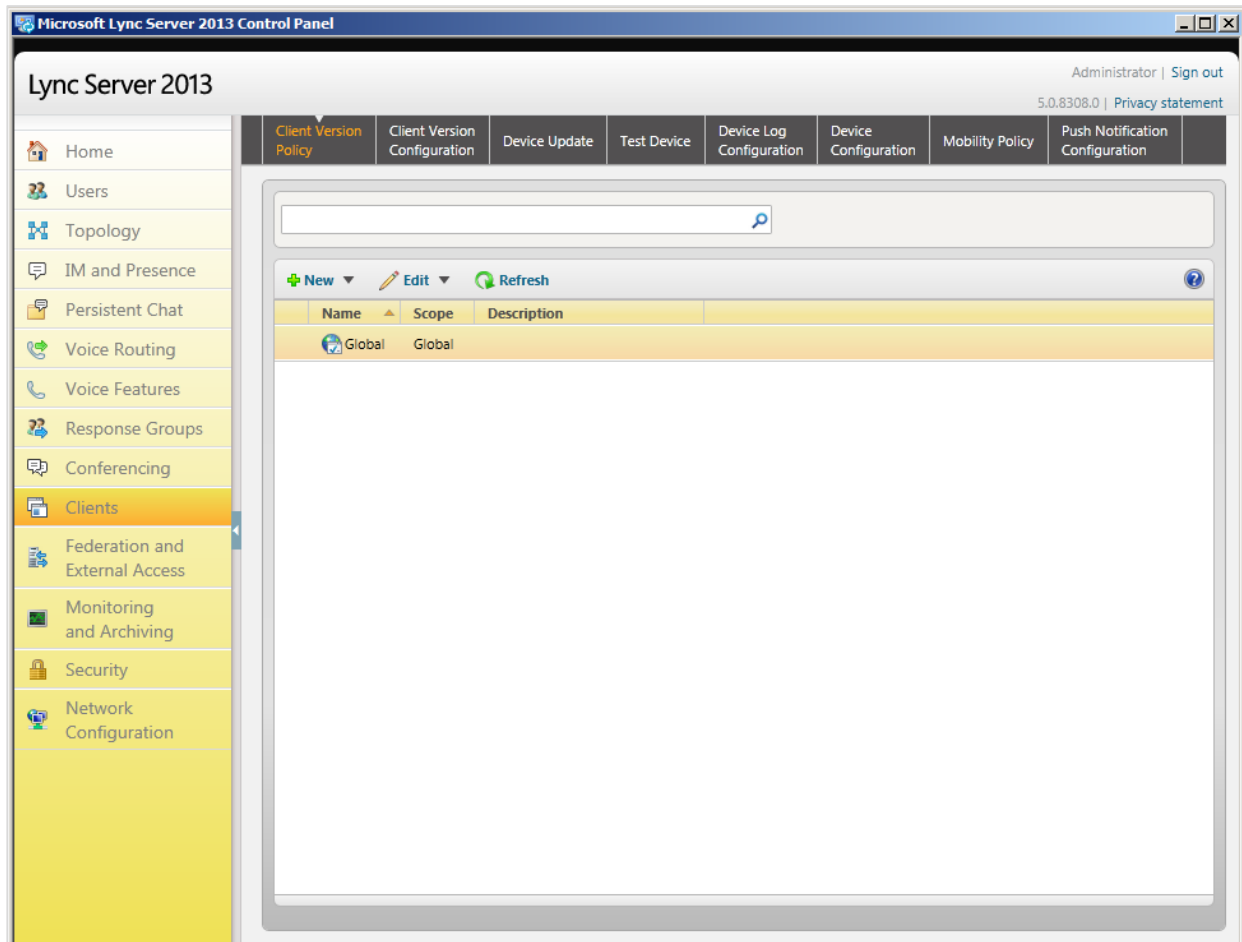


Figure 4 Lync Server Control Panel

The Action for all the default rules defined for OC User Agent prior to version 4 (eg. 2 and 3) must be set to 'Block'. While scrolling through the list, for each rule with OC as the User agent, change the Action for the rule to 'Block' if it is not already set to this.

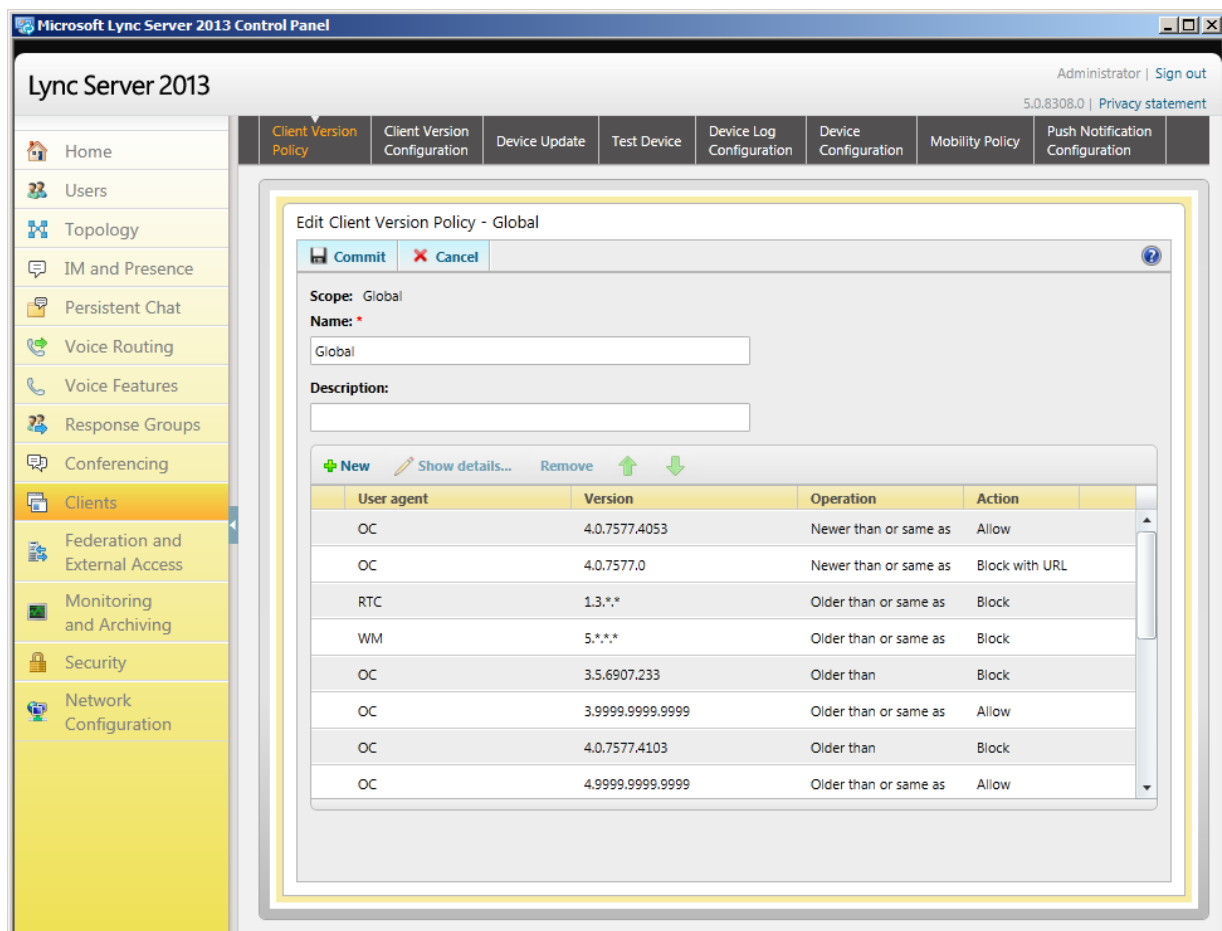


Figure 5 Rules in Global Client Version Policy

As shown in Figure 5 Rules in Global Client Version Policy, create two new rules using the 'New' button. As each rule is defined, use the Commit button to save it. After these new rules are created, use the arrow buttons in Control Panel to move these to the top two positions in the list. The first rule must be placed at the top while the second rule placed at the second position.

The first rule allows Lync client (User Agent: OC) with Major Version = 4, Minor Version = 0, Build = 7577 and Update = 4053 (ie. Lync Client with KB 2647415 update, version code 4.0.7277.4053) or newer to login.

The second rule shown in Figure 6 Block and Redirect Rule blocks the Lync client (User Agent: OC) with Major Version = 4, Minor Version = 0, Build = 7577 and Update = 0 (ie. Lync Client with no update) or newer from signing into Lync server and provides the end-users a link to obtain the update for their Lync client. The reader is advised to replace the URL 'http://files.company.com.au/Lync-kb-2647415' in the example with the appropriate location where your KB 2647415 files are located.

Note: The TIPT/Lync 2013 Integration solution is designed to work with Lync 2013 desktop clients. Connecting other Lync (or OCS) clients to this solution may yield unexpected results.

Note: Lync 2010 desktop clients with required updates are allowed to connect to the Lync Server 2013 to allow them to use basic Lync 2013 function (eg. Instant Messaging & Presence). Users requiring TIPT/Lync 2013 Integration is advised to update to Lync 2013 desktop client.

Note: The hosting of the two KB 2647415 update files (one for x86 and another for x64) is the customer's responsibility. Telstra can provide these Microsoft update files but you are required to host these in your server.

Edit Client Version Policy ▶ Edit Client Version Rule - OC

User agent:
 OC

Version number:
 4.0.7577.0

Major version:
 4

Minor version:
 0

Build:
 7577

Update:
 0

Comparison operation:
 Newer than or same as

Action:
 Block with URL

URL:
 http://files.company.com.au/Lync-kb-2647415

Figure 6 Block and Redirect Rule

Because the rules are processed from the top of the list, version 4.0.7277.4053 Lync clients will trigger the first rule and login to the Lync server successfully. Versions 4.0.7277.0 through to 4.0.7277.4052 Lync clients will activate the second rule and prevented from login in to the Lync server.

Figure 7 Client Blocking and Upgrade Message shows the message the end-user gets when the Lync client triggers the second version checking rule. When the user clicks on the 'OK' button, the PC will be directed to the address in the URL field in this rule. In this example, the default web browser will open and point to 'http://files.company.com.au/Lync-kb-2647415'. Please replace this with the location where you host the KB 2647415 update files.

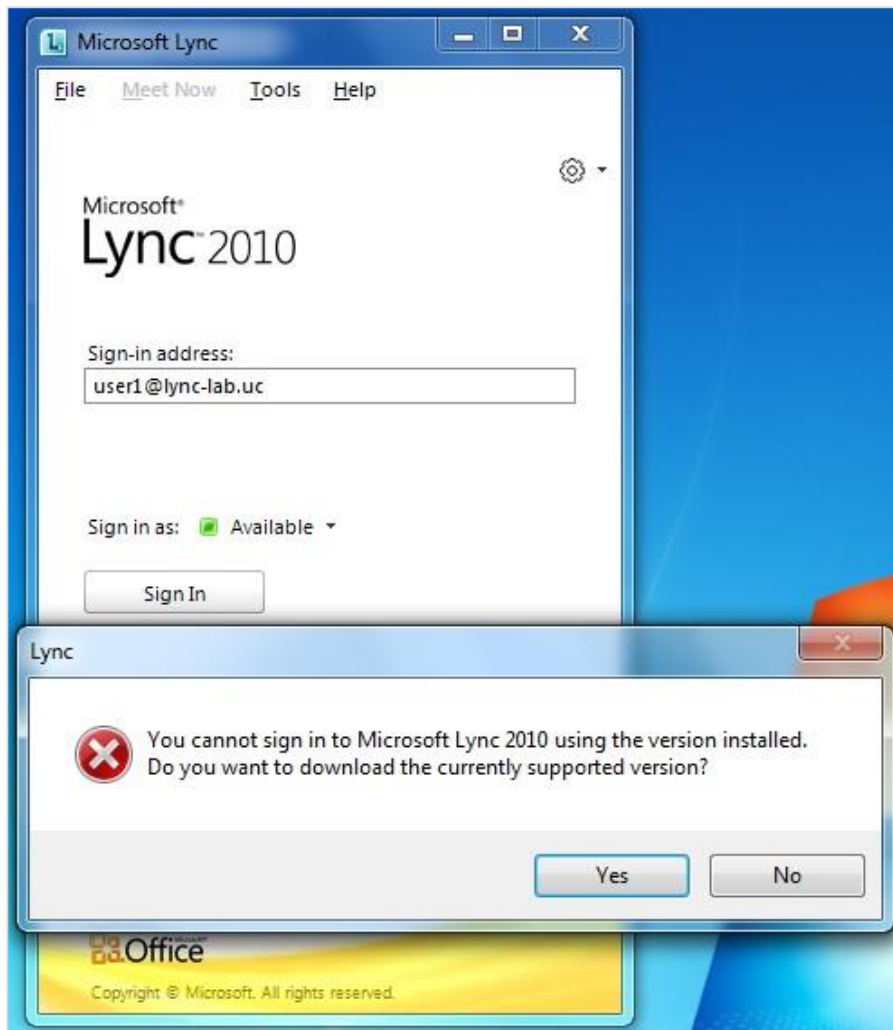


Figure 7 Client Blocking and Upgrade Message

Step 7: Phone number normalisation

End user telephone information must be entered correctly for Lync 2013 client to communicate with the Telstra infrastructure. Once completed, TIPT/Lync 2013 Integration users can 'one click' dial from Lync 2013 client. If the end user's telephone number is not entered correctly, calling or screen toasts may not be successful or may provide incorrect information to the end user.

For the best TIPT/Lync 2013 Integration experience, all AD phone numbers must be in the E.164 format ie, +<country code> <area code> <local number> as shown in Figure 8 Update Account Property in Active Directory. This is true not only for the corporate telephone number but also for a user's mobile phone, home phone or other phone details stored within AD as shown in Figure 9 Update Mobile and Home Telephone Details.

Note: The Address Book Server (ABS) does not support location specific normalisation rules, ie, you can't have a separate set of rules for Sydney and Melbourne users. If telephone numbers are stored within AD in a format which can't be automatically normalised to an E.164 number then the ABS can not be used. Under this scenario manual updating of the AD is required.

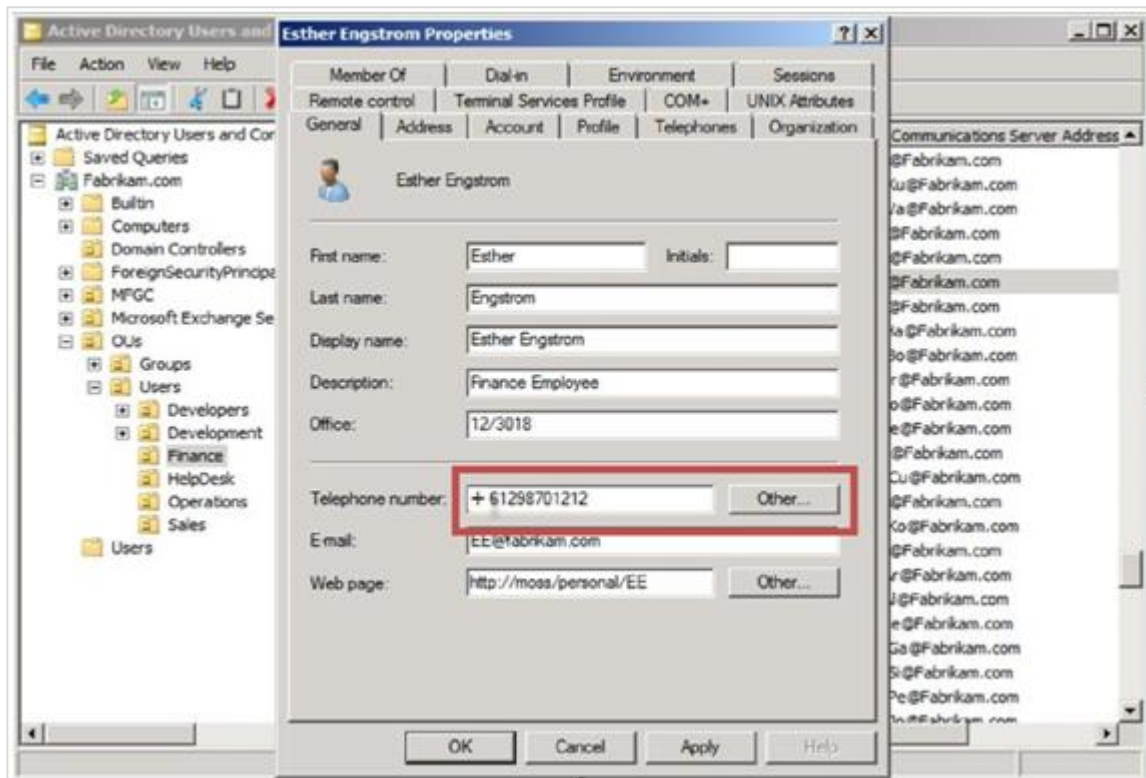


Figure 8 Update Account Property in Active Directory

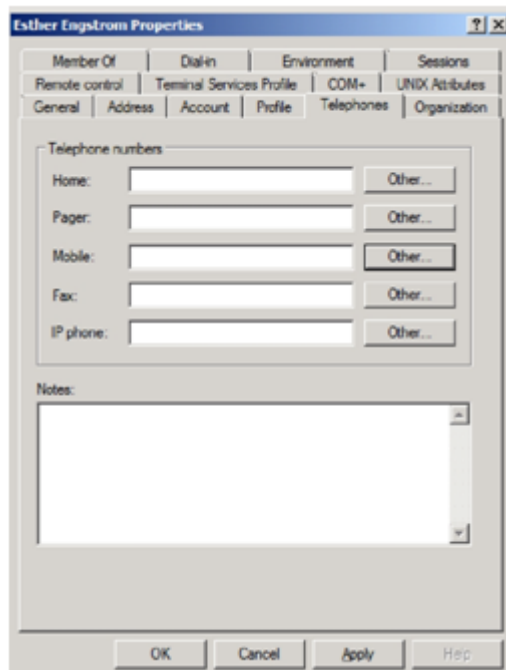


Figure 9 Update Mobile and Home Telephone Details

If changing the phone number format in the AD is not possible, then the Lync server ABS can be used to fix the details, enabling Lync server to function correctly. At defined intervals the ABS pulls telephone details from the AD, applies a filter and then loads these into the Lync server database. If a normalisation script is applied at the time of loading the correct details are loaded into the Lync server database and 'one click' calling will function seamlessly for the end user.

Note: When using RCC, any rules added to an Enterprise Voice dial plan are

ignored by Lync Server 2013.

To use the ABS server for normalisation follow these steps.

1. The default Lync server Address Book files are located in 'Program Files\Microsoft Lync Server 2013\Web Components\Address Book Files\Files'. Depending on the specific implementation of Lync Server 2013 in your organisation, the files may be stored in a different location
2. Create a new text file with the name **Company_Phone_Number_Normalization_Rules.txt** and configure the desired normalization rules. There is a sample file installed within the **Web Components\Address Book Files\Files** directory. This provides examples of some of the key normalisation rules.
3. Once you have finished defining the normalisation rules, save the file and execute the cmdlet `Update-CsAddressBook` to import the new rules and apply them to numbers in the address book files. Wait for 5 minutes.
4. Then issue the following command in a Lync client PC:

```
reg add HKLM\Software\Policies\Microsoft\Communicator /v GalDownloadInitialDelay /t REG_DWORD /d 0 /f
```
5. Next, remove **GalContacts.db** and **GalContacts.db.idx** files from the user's profile directory.
6. Restart the Lync client and look for phone numbers most likely to be changed by the recently entered rules.

Step 8: Change the TIPT Toolbar username

TIPT-Lync users who want to continue to use their TIPT Toolbar will need to perform the following steps after TIPT-Lync has been configured. A password change may not be required if the 'Save Password' options is enabled.

1. In the **Options** window, Select the **Account** menu item as shown in Figure 10
2. Type the email address in the **Username** field
3. Type the password in the **Password** field
4. Click the **Save Username** checkbox
5. Click **OK**

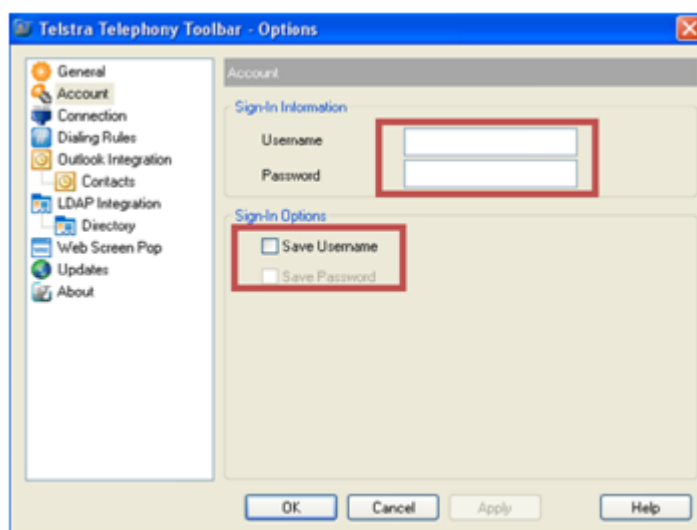



Figure 10 TIPT Options Account Menu Item

Step 9: Disable the TIPT Toolbar Call Notification popup

TIPT-Lync users should disable the TIPT Toolbar toast. If the TIPT Toolbar Call Notification popup and the

Lync client toast are both enabled, both popups will display for an incoming call.

6. Launch the TIPT Toolbar in Outlook or Internet Explorer
7. Click the **Options** icon 
8. Select the **General** menu item as shown in Figure 11
9. Ensure the **Turn off Call Notification** checkbox is checked
10. Click **OK**

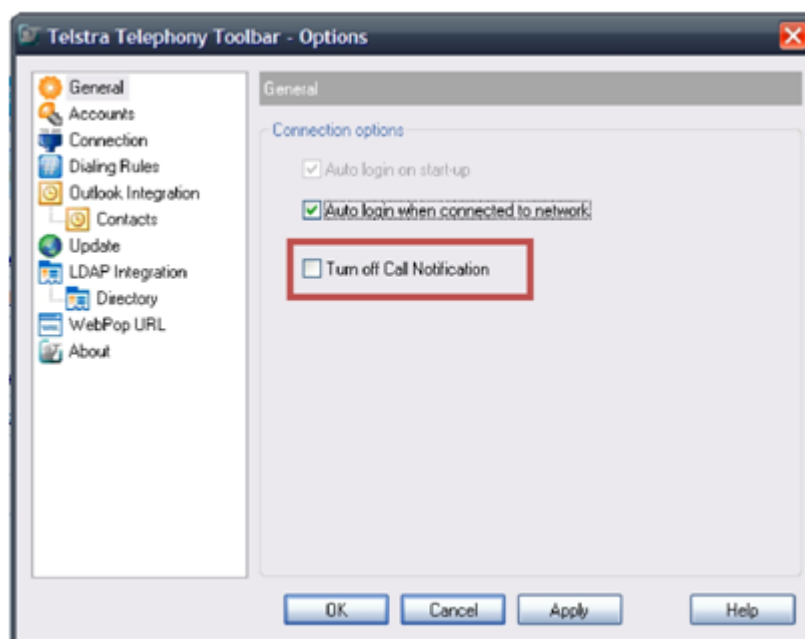


Figure 11 TIPT Options General Menu Item

Step 10: Optional Group Policy change

In addition to the mandatory provisioning steps it is recommended that the following Group Policy change is applied for each user.

Telstra recommends that you deploy the following Group Policy to all TIPT/Lync users. This policy is in addition to any other in-band or deployed policies defined by the IT administrator.

Deployment of this policy is through the normal Group Policy tools with the full description and specific Administrative Template file (ADM) located on the Microsoft website at <http://www.microsoft.com/downloads/details.aspx?familyid=5D6F4B90-6980-430B-9F97-FFADBC07B7A9&displaylang=en>

POLICY NAME	SETTING NAME IN GROUP POLICY EDITOR	DESCRIPTION	TYPE	RECOMMENDED SETTING
Telephony Mode	Telephony Mode	Enables Remote Call Control (RCC) without computer-to-computer calling	REG_DWORD	4

9. Testing your solution

When your TIPT/Lync 2013 Integration service has been installed, a Telstra Consultant will call to advise you that your TIPT/Lync 2013 Integration service is ready. The Telstra Consultant will ask you to perform the following tests to ensure your TIPT/Lync 2013 Integration service has been configured correctly.

Log out and back in to Lync 2013 client.

Send a test Instant Message between two or more internal users to confirm the Lync 2013 client is installed correctly and can communicate with the Lync Server 2013.

Call a Lync 2013 client user with click to call.

Test connectivity between the Lync 2013 Front End server and Telstra's OCS-SBC using telnet (as described in "Setting up Remote Call Control" Step 1).

10. Support

If you require help with configuring Lync Server 2013 to work with TIPT, you can contact your Telstra Sales Specialist or the TIPT Helpdesk on 1800 287 289.

11. Configuration changes

This is a list of the steps you will need to follow if you make configuration changes following your initial TIPT/Lync 2013 Integration installation. If you change user IDs or IP addresses Telstra systems need to be updated to allow communication between your Lync server and Telstra's network.

TO...	STEPS
Add a new user	<ol style="list-style-type: none">1. Create the new user following the steps in the Lync Server 2013 Configuration guide2. Contact your Telstra Account Executive to perform the required change on your TIPT service
Change an existing user ID	<ol style="list-style-type: none">1. Update the user ID following the steps in the Lync 2013 Server configuration guide2. Contact your Telstra Account Executive to perform the required change on your TIPT service
Change your Lync 2013 Server Front-End or Director server IP address	<ol style="list-style-type: none">1. Contact your Telstra Account Executive to perform the required change on your TIPT service

12. Frequently asked questions

12.1. Using TIPT

12.1.1. TIPT Toolbar

I have upgraded to TIPT/Lync 2013 Integration and my TIPT Toolbar no longer functions.

TOPIC	DETAILS	ACTION
User ID	The User ID to use the TIPT Toolbar is set as the phone number. When you upgrade to TIPT/Lync 2013 Integration, you need to change your user ID to the email address for the TIPT Toolbar to display.	<p>As per Step 6:</p> <ol style="list-style-type: none">1. select the General icon on the Services Toolbar.2. Select the Account menu item.3. Type the email address in the Username field.4. Click the Save Username checkbox5. Click OK.

12.1.2. Answer toast popup

When I receive a call the answer toast popup and the TIPT answer toast popup both display and flicker.

TOPIC	DETAILS	ACTION
Lync/TIPT Integration compatibility	When the TIPT answer toast popup and the Lync toast popup are both enabled they display simultaneously when an incoming call is received.	As per Step 7, 1. Disable the TIPT Toolbar Call Notification popup so that only the Lync answer toast popup displays.

12.1.3.TIPT and MOCC functions

Are all TIPT features compatible with Lync?

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	Existing TIPT functionality is compatible with Lync. Lync offers click to call capability as per the 'Features of RCC' listed above.	Refer to the Telstra Online Resource Centre (http://www.telstra.com/tiptresources) for details of existing TIPT functionality.

12.2. Handsets

12.2.1.Handset compatibility

Are all TIPT handsets compatible with TIPT/Lync 2013 Integration ?

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	CISCO handsets do not support the Auto Answer function of Lync. This means users must press buttons on their handset to make and answer calls	CISCO handsets should not be used with TIPT/Lync 2013 Integration. Please upgrade to Polycom® handsets.

12.3. Accessing Lync

12.3.1.Logging on

I am having problems logging in to the Lync 2013 client

TOPIC	DETAILS	ACTION
Sign-in name length is >161 characters	The maximum sign-in name length TIPT supports is 161 characters, while Microsoft Lync 2013 supports 320 characters. If the sign-in name exceeds 161 characters login will fail.	Change the Microsoft Lync 2013 sign-in to <161 characters.
Sign-in name is in lower case	TIPT/Lync requires that sign-in names are in lower case. If there are any upper case characters login will fail.	Change the sign-in name to lower case.

12.4. Using Lync Client

12.4.1.Making calls

I am having problems making calls from Lync 2013 client

TOPIC	DETAILS	ACTION
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TIPT phone works	If the TIPT phone doesn't work there is a problem with the TIPT network	Complete the Customer Group Administrator Checklist. If TIPT is still not working contact the TIPT Helpdesk number 1800 287 289.
Instant Messaging works	If Instant Messaging doesn't work there is a problem with Lync client or server	Contact your the IT System support.

12.4.2.Making calls from Microsoft Outlook

When I make a call from Microsoft Outlook it calls the person's PC and not their handset

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	When click to call is used in Outlook the default is to call PC to PC.	Right click on the contact and select the phone number from the menu.

12.4.3.Redirecting calls

When I click Redirect on the Answer toast popup calls are not redirected to my Mobile

TOPIC	DETAILS	ACTION
Alternate number setup	Your mobile number needs to be setup in Lync.	Contact your system administrator to ensure that your mobile number is listed in your organisation's corporate directory or setup your mobile number in Microsoft Lync 2013 client

12.4.4.Do Not Disturb

I have set Do Not Disturb on Lync client and I am still receiving calls

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	When Do Not Disturb is set on Lync it only affects PC functions such as Instant Messaging and does not affect the TIPT handset.	Set Do Not Disturb on the TIPT phone or the TIPT Toolbar to block calls.

12.4.5.Conference calling

I can't make a conference call using Lync client

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	The Conference Call function in Lync is not supported.	Use the Conference Call function on the TIPT Toolbar or handset.client

12.4.6.Voice Mail

I can't use the Voice Mail function on Lync 2013 client.

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	Lync only supports Microsoft Voice Mail through the PC. It does not support TIPT Voice Mail through the handset	Use TIPT Voice Mail via the TIPT Toolbar

12.4.7.Call Forwarding

I cannot set Call Forwarding on Lync client

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	The Call Forwarding feature of Lync is not supported by TIPT Lync.	<p>You can set Call Forward Always on the TIPT Toolbar.</p> <p>You can also call forward individual calls using the Redirect function on the Answer toast.</p>

12.4.8.Video calling

When I make or receive a video call the audio goes through my PC and not my

TOPIC	DETAILS	ACTION
Lync/TIPT compatibility	This feature is not supported in the solution	Not applicable

13. Glossary

TERM	DESCRIPTION
AD	Active Directory
CAP	Client Access Protocol
Lync	Lync is Microsoft's new brand for Office Communicator
RCC	Remote Call Control
SBC	Session Border Controller
SIP	Session Initiation Protocol
SQL	Structured Query Language
TIPT	Telstra IP Telephony
TIPT/Lync 2013 Integration	This refers to the integration of TIPT and Lync 2013 using the RCC interface in Lync 2013 Server.
Toast	A dialog box that 'pops' up on the computer screen alerting the user the occurrence of an event.

uaCSTA	User Agent CSTA
XSP	Broadworks XSP server