Title: Integrating Lync 2013 and Exchange 2013 Unified Messaging (Part 2)

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Description:

In the new Wave 2013 Platform (Exchange 2013, SharePoint 2013, and Lync 2013), there are synergies among the three products. From the Technet article (http://technet.microsoft.com/en-us/library/jj688098.aspx), some of the benefits are:

- **“Lync Archiving Integration.”** In Lync Server 2013 administrators still have the option of having instant messaging and Web conferencing transcripts archived to SQL Server (the same way these transcripts were archived in Lync Server 2010). Alternatively, however, administrators can choose to have transcripts archived to Exchange 2013, storing those transcripts in the individual user mailboxes in the same way in which Exchange archives communications. That means a single repository for all your electronic communications (from both Exchange and Lync Server), which makes it much easier to search for and retrieve those archived communications should the need arise.

- **Unified Contact Store.** In Lync Server 2010, users had to maintain separate contact lists in Outlook and Lync; in fact, to ensure that you had the same contacts available in both products you had to maintain duplicate contact lists, one for Outlook and one for Lync. With Lync Server 2013, however, user contacts can be stored in Exchange 2013 and the unified contact store. Using a single contact store enables users to maintain just one set of contacts, with that same set of contacts being available in Lync 2013, Outlook 2013, and Outlook Web Access 2013.

- **High resolution photos.** Lync 2010 could only display small photos of your contacts; that’s because those photos were stored in Active Directory, and Active Directory imposes a 48 pixel by 48 pixel size limitation on stored photos. With Lync Server 2013, however, photos can be stored in Microsoft Exchange; that allows for high-resolution photos as large as 648 pixels by 648 pixels. As you might expect, Lync 2013 has been upgraded to allow for the display of these high-resolution photographs.

- **Unified Messaging Integration.** Exchange 2013 provides voice mail capability and enables Outlook as the unified inbox to see e-mail, faxes, and voicemail. Lync 2013 integrates with Exchange 2013 and can leverage Exchange as the voicemail platform.

- **Outlook Web Access and Lync Integration.**

In this post, I work through the steps of integrating the Lync 2013 and Exchange 2013 Unified Messaging. In an earlier post, I worked through the first three items above.

References:


Disclaimer:

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Procedure:

Table of Contents

1 Pre-requisites .................................................................................................................................................. 2
2 Configuring Exchange Unified Messaging ........................................................................................................ 3
   2.1 Creating a Dial Plan .................................................................................................................................... 3
   2.2 Configuring UM Service to Support TLS and TCP .................................................................................. 5
   2.3 Assigning the Certificate to support the UM Service .............................................................................. 5
   2.4 Configuring the UM Call Router Service to support TLS and TCP ...................................................... 8
   2.5 Creating a UM Mailbox Policy .................................................................................................................. 10
   2.6 Creating A UM Auto Attendant ............................................................................................................... 10
3 Troubleshooting .............................................................................................................................................. 13
4 Running the ExchUCUtil.ps1 Script ................................................................................................................. 13
5 Creating a Lync Dial Plan ................................................................................................................................ 15
6 Running the Exchange UM Integration ........................................................................................................ 17
7 Enable Enterprise Voice Users for Unified Messaging .................................................................................. 21
8 Testing the Lync – Exchange UM Integration .............................................................................................. 23

1 Pre-requisites
This document assumes that you have already installed Lync 2013 and Exchange 2013. Also, it assumes that you have established the Lync and Exchange server to server authentication. If you need help with those steps, please refer to my other earlier posts. I documented the server to server authentication steps in part 1 of this series.

2 Configuring Exchange Unified Messaging

The first step in establishing the Lync and Exchange Unified Messaging (voicemail) integration is to setup Exchange Unified Messaging.

2.1 Creating a Dial Plan

To setup Exchange Unified Messaging, the first step is to create a dial plan.

To create a UM Dial Plan on Exchange 2013, execute a command similar to the following on the Exchange 2013 server in the Exchange Management Shell.

```
New-UMDialPlan -Name "IrvineDialPlan" -VoIPSecurity "Secured" -NumberOfDigitsInExtension 3 -URIType "SipName" -CountryOrRegionCode 1
```
Set-UMDialPlan "IrvineDialPlan" -ConfiguredInCountryOrRegionGroups "Anywhere,*,*,*" -AllowedInCountryOrRegionGroups "Anywhere"

Check Services to see if Exchange UM Services are running

Get-umdialplan
Set-umodialplan

Get-umodialplan | fl

Note the change on the dialplan.

2.2 Configuring UM Service to Support TLS and TCP

Set-UmService -Identity "lab2012-e2013.contoso2012.com" -DialPlants "IrvineDialPlan" -UMStartupMode "Dual"

2.3 Assigning the Certificate to support the UM Service

Go to the Exchange Admin Center > Servers > Certificates
Select Edit on the certificate that we want to add the UM Service

Go to the Services option
I tried to enable both the UM and UM Call Router.

I got the above error since we didn’t enable the UM Call Router service for Dual. It is only set for TCP right now. Dual will enable both TLS and TCP.
Uncheck “UM Call Router”. Press Ok.

Got a warning. Press Yes.

Got a warning. Press Ok. Start and stop Um Service.

2.4 Configuring the UM Call Router Service to support TLS and TCP
Execute the following command. Note that the command is incorrect in the technet documentation. There is no cs before UMCallRouter

Set-UMCallRouterSettings -Server "lab2012-e2013.contoso2012.com" -UMStartupMode "Dual" -DialPlans "IrvineDialPlan"
Note that the documentation is wrong and that there is no cs before um in the command

Go back to the Certificate in the Exchange Admin Center.
warning

To complete configuration (1) Restart Microsoft Exchange Unified Messaging Call Router Service on LAB2012-I2013 and (2) For self-signed certificates, install this certificate on the UM IP Gateway. For CA-signed certificates, import the CA certificate on the UM IP Gateway.

Restart the UM Call Router service

2.5  Creating a UM Mailbox Policy

Create UM Mailbox Policy.  Note that the command syntax is incorrect in the Technet article.

```
New-ummailboxpolicy -name "IrvineMailboxPolicy" -UMDialPlan "IrvineDialPlan"
```

2.6  Creating A UM Auto Attendant

Launch the Exchange Admin Center

Go to Unified Messaging > UM Dial Plans

Press Edit on the IrvineDialPlan
Scroll down on the IrvineDialPlan till you come to the UM Auto Attendant section.

Press Add (+)
Give the Auto Attendant a name (e.g. IrvineAA). Check to enable the Auto Attendant and enable it to respond to Voice Commands.

Add an Access Number that users can call to dial into the Exchange UM Auto Attendant in E.164 format.

Press Save.
New Auto Attendant should be listed.

3 Troubleshooting

I started testing the Lync – Exchange UM integration with the Test-CSExUmConnectivity test tool and was getting errors. I started doing further research and troubleshooting.

Here is an additional article:  http://technet.microsoft.com/en-us/library/gg425737(OCS.15).aspx

This article identifies a missing step that was done in previous versions but wasn’t specifically called out in the Lync article. The step is to run the exchucutil.ps1 script.

4 Running the ExchUCUtil.ps1 Script

Review the following article:  http://technet.microsoft.com/en-us/library/gg398129.aspx

On the Exchange UM server, navigate to <Exchange installation directory>\Scripts, and then if Exchange is deployed in a single forest, run the ExchUCUtil.ps1 script
Notice that under the Dialplan, it is listed as <<not found>>. I usually have to run this script at least two times to get the UM Dialplans set.
Check the UM gateways assigned to the Dialplan by running: get-UMIPGateway
Should be pointed to the Lync 2013 server.

5  Creating a Lync Dial Plan

From the technet article (http://technet.microsoft.com/en-us/library/gg425737(OCS.15).aspx),

If you are integrating with Exchange 2007 SP1 or latest service pack, or Exchange 2010, create a new Enterprise Voice dial plan with a name that matches the Exchange UM dial plan fully qualified domain name (FQDN).

If you are integrating with Exchange 2010 SP1, the Lync Server dial plan and Exchange UM SIP dial plan names do not need to match.

Launch the Lync Control Panel and go to Voice Routing > Dial Plan (across the top menu)
Select New > Site Dial Plan
Select your Site and press Ok.
Note, you can’t change the name of the dialplan but can set the simple name.

Press Ok.

Select Commit > Commit All on the menu

6 Running the Exchange UM Integration

On the Lync Server 2013, run ocsumutil.exe, which:

- Creates Subscriber Access and Auto Attendant contact objects.
- Validates that there is an Enterprise Voice dial plan with a name that matches the Exchange UM dial plan FQDN. If you are running Exchange 2010 SP1 or later, the dial plan names do not need to match, and you can ignore the tool’s warning about this.


This tool is located on the Lync Server 2013 in the %CommonProgramFiles%\Microsoft Lync Server 2013\Support folder.
Click Load Data
Press Add

Set the SIP Address. I add SA to the end of the name to stand for Subscriber Access.

Press Ok.
Press Add.

Add AA to the end of the name to stand for Auto-Attendant

In the SIP address, specify IrvineAA

Under Phone Number, select “Use this pilot number from Exchange UM”

Under Contact Type, select Auto-Attendant and the AA created in Exchange UM earlier.

Press Ok.
OCSUMUtil should look something like the above.

7 Enable Enterprise Voice Users for Unified Messaging

For the Lync users who have been enabled for Enterprise Voice, enable their Unified Messaging on Exchange.


Go to the Exchange Admin Center > Recipients section
Click Enable under Unified Messaging on the right hand menu.

Specify the UM Mailbox Policy recently created.
Specify the user’s SIP address, extension, and whether to auto-generate a pin.

Press Finish.

8 Testing the Lync – Exchange UM Integration

Open a Lync Management Shell on the Lync Server.

Specify:

```
$cred = Get-Credential “<domain>\user”

Test-CsExUMConnectivity –targetFqdn “<lyncserver FQDN>” –UserSipAdress sip:<testuser> - UserCredential $cred
```

Example is shown below:
Yay. Success.

Test leaving a voicemail for folks from Lync.