Step by Step for Anyone Series

Monitoring and Archiving

Skype for Business

Skype for Business Server 2015 Control Panel - 🗆 X Home Getting Started Welcome, Administrator Users First Run Checklist Using Control Panel ✓ View your roles vpologoT Skype for Business Server 2015 Top Actions IM and Presence Using Office 365 Enable users for Skype for Business Server Persistent Chat Edit or move users Getting Help View topology status Online Documentation on TechNet Library Skype for Business Server Management Shell Skype for Business Server Management Shell Script Library Skype for Business Server Resource Kit Tools Voice Routing ✓ View Monitoring reports Voice Features Connection to Skype for Response Groups **Business** Online Community Conferencing Check recommendations from Office 365 Forums Blogs Clients You have not signed in to Office 365 Federation and Sign in to Office 365 Set up hybrid with Skype for Business Online External Access

Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone

Matt Landis Skype for Business MVP



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Network+ and A+.

Matt Landis started Landis Computer Technology Solutions in 1995 which is now 13 person Microsoft Partner provide solutions to organizations in over 20 countries. Matt has over 20 years of field experience implementing Windows Server, Communication/UC, and Dynamics ERP solutions in enterprise environments. Matt has various industry certifications: Microsoft Certified Systems Engineer, Microsoft Certified Database Administrator, Microsoft Office Certified Expert, Microsoft Certified Dynamics, snom Certified Engineer,

Matt has been very involved with Windows Server based communication solutions including Skype for Business, Microsoft Lync, 3CX and snom ONE. He is currently a Microsoft Skype for Business MVP (formerly known as Lync MVP), a prolific blogger at http://windowspbx.blogspot.com and has written many articles on Skype for Business (formerly known as Microsoft Lync) including "Planning, Implementing, and Using Microsoft Lync Server in Small Business Scenarios" on Microsoft Technet. He was the first 3CX Valued Professional (2008-2010) and has co-authored a book on Windows communication software "3CX IP PBX Tutorial". Matt likes giving back via community forums: he has contributed thousands of posts to various Unified Communications community forums over the years.

Matt is also a pastor at Calvary Mennonite Fellowship and when the chance affords he likes to travel internationally with his wife Rosalyn.

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Some Thoughts by the Author

When I started scribbling my personal technical notes to myself on an unknown blog called <u>http://windowspbx.blogspot.com</u> I never would have anticipated that just a few short years later it would have been viewed over 3 million times. (Every now and then a really honest blog reader says how awful the blog format is...well, it is my personal notes) Wow, it still startles me. I suppose this could be a kind of solace that my internal ramblings and thought processes are not entirely worthless, but even more, it is greatly rewarding to be able to help so many known and unknown people around that globe.

When Microsoft Lync Server 2013 was released I decided to do a kind of experiment on something I called at the time "blog to book". To me the concept of "blog to book" almost seemed kind of like giving "cheating" an exotic name because what I was blatantly doing is writing down my personal notes from my mind to blog, and then blatantly copying the blog to an eBook. But once again I got a big surprise: <u>Microsoft Lync Server 2013 Step by Step for Anyone</u> started being downloaded like hotcakes, soon passing every other download on the entire <u>Microsoft Technet Gallery</u> ...and then passing 200,000 downloads. This is largely a huge testament to the massive uptake of Microsoft Lync Server and now Skype for Business Server, but still enough to leave my head spinning a little bit.

For this book, *Skype for Business Server 2015 Step by Step for Anyone*, I have added a couple more personal goals:

- Better picture and layout quality
- And have an Amazon printed edition as (hey, copy it one more time!)

Remember, this book is in progress.

Well, that all I have to say for now. Wish you the best and God bless you!

Matt Landis May 5, 2015

Installing Standard Edition Front End

Below are the step by step instructions to install Skype for Business Server 2015 Standard Edition Front End on Windows Server 2012R2. Here is an outline of what we will do:

- Prepare Servers
- Install Skype for Business Server 2015 Admin Tools
- Prepare Active Directory
- Admin rights, Add AD Users, Configure DNS
- Prepare First Server
- Define Topology
- Install Skype for Business Server 2015
- Enable AD Users & Login to Skype for Business client

Prepare Environment

Some prerequisites for you Skype for Business system:

- You will need 1 AD Server O/S and 1 Skype for Business Server O/S
 - o Skype for Business Server requires 64bit O/S
- This guide is Using Windows Server 2012R2 64bit
 - You will need to have the OS update to date to install KB2982006, so now is the time get your up to date.
- Make Sure you have the below role running on your AD Server
 - o AD-DS (Directory Services)
 - o DNS
 - o AD-CS (Certificate Authority

Prerequisites for your Front End Server

- Server Requirements
 - Front End server must be joined to domain
 - o FE must have UI installed
- Install Silverlight (will save time later) : https://www.microsoft.com/silverlight/
- KB2982006 Update https://support.microsoft.com/en-us/kb/2982006 (REQUIRED)

Front End must have the following Features & Roles:

Features	Roles
.NET Framework 3.5 Features	Web Server (IIS)
.NET Framework 3.5 (includes .NET 2.0 and 3.0)	Web Server
.NET Framework 4.5 Features	Common HTTP Features
WCF Services	Default Document
HTTP Activation	Directory Browsing
Media Foundation	HTTP Errors
Remote Server Administration Tools	Static Content
Role Administration Tools	Health and Diagnostics
AD DS and AD LSD Tools	HTTP Logging
Windows Identity Foundation 3.5	Logging Tools
	Tracing
	Performance
	Static Content Compression
	Dynamic Contact Compression
	Security
	Request Filtering
	Client Certificate Mapping Authentication
	Windows Authentication
	Application Development
	.NET Extensibility 3.5
	.NET Extensibility 4.5
	ASP.NET 3.5
	ASP.NET 4.5
	ISAPI Extensions
	ISAPI Filters
	Management Tools
	IIS Management Console
	IIS Management Scripts and Tools

or Install using Powershell:

Add-WindowsFeature NET-Framework-Core, RSAT-ADDS, Windows-Identity-Foundation, Web-Server, Web-Static-Content, Web-Default-Doc, Web-Http-Errors, Web-Dir-Browsing, Web-Asp-Net, Web-Net-Ext, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Http-Logging, Web-Log-Libraries, Web-Request-Monitor, Web-Http-Tracing, Web-Basic-Auth, Web-Windows-Auth, Web-Client-Auth, Web-Filtering, Web-Stat-Compression, Web-Dyn-Compression, NET-WCF-HTTP-Activation45, Web-Asp-Net45, Web-Mgmt-Tools, Web-Scripting-Tools, Web-Mgmt-Compat, Server-Media-Foundation, BITS

Add below if no access to the web add "-source d:\sources\sxs" to the end of the above PowerShell. (if the Server 2012R2 CD is in the D:\ drive)

Administrator: Windows PowerShell	_ D X
Windows PowerShell Copyright (C) 2013 Microsoft Corporation. All rights reserved.	<u>^</u>
Start Installation 68% [000000000000000000000000000000000000	1
Mgmt-Tools, Web-Scripting-Tools, Web-Mgmt-Compat, Server-Media-Foundation, BITS	

Install Skype for Business Server 2015 Admin Tools

Insert CD and Run Setup.exe. (You may see installing c+ flash by) You can accept default location and click Install (below)



Accept license and OK

ត	End User License Agree	ment	x
🕹 Licer	nse Agreement		
Please read the fol	lowing license terms carefully		
MICROSOFT SO	FTWARE LICENSE TERMS		^
SKYPE FOR BUS (NOT FOR RESA	INESS SERVER 2015 STANDARD AI LE)	ND ENTERPRISE EDITIONS	
If you licensed Sk MSDN Programs, applicable Program acquired a license	ype for Business Server 2015 through N your use of this software is subject to t n agreements. You may not use this so for the software from Microsoft or its li	licrosoft's Volume Licensing or he terms and conditions of the ftware if you have not validly censed distributors.	
These license ter where you live, o	ms are an agreement between Microsof ne of its affiliates) and you. Please read	ft Corporation (or based on them. They apply to the	~
✓ I accept the te	rms in the license agreement		
		OK Cance	I

When install is complete (minute wait time) you will have the Skype for Business admin tools on your server and the Skype for Business Server Deployment Wizard (below) will appear.



Let's just make sure the admin tools are showing on the start menu | More apps. Sure enough, they are there. (now is a great time to pin them both to start & taskbar)

Skype	for Business Server
6	Skype for Business Server Deployme
29	Skype for Busines NEW

Now let's install the Topology Builder & Control Panel as well. click "Install Administrative Tools"



Let's verify: Yup, sure enough they are there.



Prepare Active Directory

Click "Prepare Active Directory". (As noted in prerequisites, you will need AD DS and AD LDS Tools Feature installed on your Front End to complete this step.)



- Step 1: Prepare Schema. (takes 1minute, and you may need to wait a couple minutes before this and step 2)
- Step 2: Verify Replication of Schema is not necessary if this is a Lab and there is only one AD server—you can safely keep moving to step 3.
 - o for how to verify see click here
- Step 3: Prepare Forest | Next | select Local Domain | Next (5sec)
- Step 4: Verify by running opening Skype for Business Server Management Shell (remember, we pinned it to the taskbar for a reason!) and run "Get-CsAdForest". If it returns "LC_FORESTSETTINGS_STATE_READY" we rock.
- Step 5: Prepare Domain | Next (5sec)
- Step 6: just keep moving
 - o or verify by opening "Active Directory Users & Computers" and see if "csAdministrator" is in the Users container.
- Step 7 below

5	Skype for Business Server 2015 - Deployment Wizard	x
Prepare Act	tive Directory for your installation	
Deploy > Active	e Directory preparation	\$
Step 1: Prep Run Prere Help Step 2: Verif Manual Verif Step 3: Prep Run com Not	pare Schema once per deployment. Extends the schema for Skype for Business Server. equisites > o > fy Replication of Schema Partition fy that the schema partition has been replicated before preparing the forest. o > pare Current Forest once per deployment. Creates global settings and universal groups for Skype for Business Server server iponents. Available: The schema must be prepared before you can prepare the forest.	
Step 4: Verit Manual Verif Help Step 5: Prep Run	equisites > Run Run fy Replication of Global Catalog fy that settings in the global catalog have been replicated before preparing a domain. > > pare Current Domain once per Skype for Business Server user or server domain. Sets access control entries (ACEs) for Skype for	r v
	Back	Exit

Add Skype for Business Administrator User To Admin Group

Add the Administrator to CSAdministrator group (below)

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		Administra	tor Pro	perties	? X
Remote c	ontrol	Remote D	esktop Se	rvices Profile	COM+
General	Address	Account	Profile	Telephones	Organization
Member	Of	Dial-in	Envi	ironment	Sessions
Member of:					
Name		Active Directo	ory Domain	Services Folder	r
Administra	tors	landislab.loca	l/Builtin		
CSAdminis	strator	landislab.loca	I/Users		
Domain Av	dmins	landislab.loca	l/Users		
Domain U	sers	landislab.loca	l/Users		
Enterprise	Admins	landislab.loca	/Users		
Group Pol	icy Cre	landislab.loca	/Users		
Schema A	dmins	landislab.loca	/Users		
Add	F	Remove			
Primary grou	ıp: Do	omain Users	o need to o	change Primary	group unless
Set Prima	ary Group	you have application	Macintosh Is.	clients or POSI)	K-compliant
	0	к	ancel	Apply	Help

Create Some Users

While we are in AD, we will create 3 test users named: u1@landislab.local, u2@landislab.local, and u3@landislab.local. Just add them as normal AD users.

Create the Share

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We will create a folder c:\Skype4BShare then add the local Administrators group on the server hosting the file share, grant Allow: Full Control, Change, and Read rights, and then click Share.



Create DNS Records

Let's open DNS Manager on AD server. Right click on your domain (in our case landislab.local) under Forward Lookup Zones, click "Other New Records..." and scroll down to "Service Location (SRV)" and click Create Record.

å	DNS Ma	anager	_	□ X
File Action View Help				
🗢 🄿 🙍 📰 🗶 🗐 🧟	è 🛛 🖬 📲 🖬			
 DNS DC01 Coldal Logs Forward Lookup Zones S_msdcs.landislab.loc Trust Points Conditional Forward 	Name Image: Im	Type tart of Authority (SOA) Jame Server (NS) Host (A) Host (A) Host (A)	Data [24], dc01.landislab.local., dc01.landislab.local. 192.168.0.49 192.168.0.49 192.168.0.51	Timestam static static 5/16/2015 static 5/16/2015
<	Evport List	Ш		>
Create a new resource record.	Properties			
	Help			

Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 We will add a DNS SRV record pointing at our Skype for Business FE Server FQDN (SFE01.landislab.local in our case)

- Service = _sipinternaltls
- Protocol = _tcp
- Port number = 5061
- Host Offering the service = fqdn of Skype for Business Std. FE server or Pool. (In our case SFE01.landislab.local)

	New Resource Record	X
Service Location (S	RV)	
Domain:	landislab.local	
Service:	_sipinternalts	~
Protocol:	_tcp	~
Priority:	0	
Weight:	0	
Port number:	5061	
Host offering this	service:	_
SFE01.landislab.	local	
Allow any auth name. This se	nenticated user to update all DNS records with the sa tting applies only to DNS records for a new name.	me
	OK Cancel Hel	p

Note: a DNS A record should already be pointing to the Front End Server (SFE01.landislab.local)

We will also create several DNS A Records. Right click, "New Host (A or AAAA)..." Add a DNS A record for:

- meet
- dialin
- admin
- scheduler
- lyncdiscoverinternal
- webint

as shown below

New Host X
Name (uses parent domain name if blank):
dialin
Fully qualified domain name (FQDN):
dialin.landislab.local.
IP address:
192.168.0.51
Create associated pointer (PTR) record
Allow any authenticated user to update DNS records with the same owner name
Add Host Cancel

Repeat this for the rest of the DNS A Records.

Prepare First Standard Edition Server

Now let's go back to the Deployment Wizard and click "Prepare first Standard Edition server".



You will see the below "Prepare single Standard Edition Server" wizard window and you can just click "Next". During this process the below will be installed:

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- SQL Server 2014 Express Edition will be installed
- RTC databases will be created
- Firewall Rules will be created
- Skype for Business Server installation files will be put in place, etc.

Define Topology

Now we will open the Topology Builder. Select New Topology (as shown below) and then give the topology some name (just any old name like "mylab.tbxml")

16	Topology Builder 🛛 🗙
We Ser	lcome to Topology Builder. Select the source of the Skype for Business ver topology document.
0	Download Topology from existing deployment Retrieve a copy of the current topology from the Central Management store and save it as a local file. Use this option if you are editing an existing deployment.
0	Open Topology from a local file Open an existing Topology Builder file. Use this option if you have work in progress.
•	New Topology Create a blank topology and save it to a local file. Use this option for defining new deployments from scratch.
	Help OK Cancel

Now we will be define this topology.

16

Primary SIP domain: landislab.local | Next

16	Create New Topology
S	Define the primary domain
Identify t Primary S	the primary SIP domain for your organization (for example, contoso.com). SIP domain: *
landisla	b.local
Help	Back Next Cancel

Specify additional supported domains: {nothing to enter/change} | Next

Define first site: Name=SomeSiteName {Site1}; Description=just something | Next

Specify site details: Enter City, State/Province, Country/Region Code | Next

"New Topology was successfully defined" & we will click Finish to start New Front End Wizard.



Next we will define a new Front End pool. click Next

S	Define New Front End Pool	x
	Define the New Front End pool	
This wize Before y • Do y • How • Whe • If yo	ard helps you to create and configure a Front End pool for your site. ou begin, ensure that you have the following information: you plan to use the Front End pool for conferencing or voice? v much scalability will you need now or in the future? at is the FQDN for the pool and for each computer in the pool? ou are using conferencing, what is the external web address? bu are ready to proceed, click Next.	
Help	Back Next Cancel	

Define Front End Pool

- FQDN: SFE01.landislab.local
 - Note: if this is a Standard Edition, this FQDN will be exactly the same FQDN as your FE server (SFE01.lab.local in our case)
- Select "Standard Edition Server"



Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 Next we will select Features for this Front End Pool

Check these features:

- Conferencing
- Enterprise Voice
- CAC

TIP: What works best for me is to NOT define ARCHIVE and MONITOR servers till you are ready to actually install them. I suggest to NOT select Archiving and Monitoring now. We will do that after we have actually installed the SQL server and are ready to define those roles in topology builder.

8	Define New Front End Pool	x			
	Select features				
Instant i Front Er	messaging and presence are always enabled. Select the additional features that you want this id pool to handle.				
🖌 Con	ferencing (includes audio, video, and application sharing)				
	Dial-in (PSTN) conferencing				
🗹 Ente	arprise Voice				
Call Call com	Call Admission Control Call admission control (CAC) is an optional component that manages the bandwidth used by unified communications traffic within the deployment. Only one Front End pool per site can enable CAC.				
Arch	living				
To e	nable Exchange Server integration, use Skype for Business Server Control Panel.				
🗌 Mor	nitoring (CDR and QoE metrics)				
Help	Back Next Cancel				

XSelect Collocated server roles

• collocate Mediation Server: check

Define New Front End Pool				
Select collocated server roles				
The Mediation Server can be collocated on a Front End pool. Collocation requires fewer computers, but in larger deployments a stand-alone Mediation pool can provide better voice quality and greater scalability.				
Select which server roles and services you want to collocate on this Front End pool. Collocate Mediation Server You can collocate the Mediation Server on the Front End Server if your IP/PSTN gateway or your IP- PBX supports media bypass and if Enterprise Voice is not mission-critical for your organization.				
Help Back Next Cancel				

Associate server roles with this front End pool. (screen not shown) Enable an Edge pool...: UNchecked (we will set this up later)

Define the SQL Server store. SQL Server store: SFE01.landislab.local\rtc (if we did everything correctly this should be in the field

Define New Front End Pool	x
Define the SQL Server store	
For a Standard Edition Front End pool, user information must be stored locally. SQL Server Express Edition will be installed automatically.	
SOL Server store:	
SFE01.landislab.local\rtc Vew	
Enable SQL Server store mirroring	
Mirroring SQL Server store:	
▼ New	
Use SQL Server mirroring witness to enable automatic failover	
▼ New	
Help Back Next Cance	el 🛛

Define the file store: Remember the Skype4BShare we setup before? Now we will use it. Under "File share" enter Skype4BShare

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S	Define New Front End Pool
	Define the file store
Select a End Sen be creat	n existing file store, or define a new one, to be used by the server. For this Standard Edition Front ver, the file store can be collocated, or it can be on another single-server pool. The file store must ted manually before you can install it.
O Use	a previously defined file store.
Defi File SFE	re a new file store. server FODN: * E01.landislab.local
File Sky	share; * /pe48Share
Help	Back Next Cancel

Specify the Web Services URL: Since this is a lab we can let the External Base URL the default.

16	Define New Front End Pool	x				
	Specify the Web Services URL					
You car Service	You can specify an alternate fully qualified domain name (FQDN) for the external side of the Web Services. For a Standard Edition Front End Server, the internal FQDN is fixed. Override internal Web Services pool FQDN					
Inte	rnal Base URL: E01.landislab.local					
Externa SFE01.	Base URL:* landislab.local					
Help	Back Next Cancel					

Select an Office Web Apps Server: (you probably don't have one yet, so UNcheck "Associated pool with an Office Web Apps Server)

S	Define New Front End Pool					
	Select an Office Web Apps Server					
Associate this Front End pool with an Office Web Apps Server to enable users to share and view PowerPoint presentations during meetings with enhancements including animations, slide transitions, embedded video, and the ability for users to independently navigate slides. If no Office Web Apps Server has been defined, click New.						
Assoc	iate pool with an Office Web Apps Server					
	▼ New					
Note: Serve	New Note: We strongly recommend that you deploy Office Web Apps Server. Without an Office Web Apps Server, PowerPoint presentation sharing capabilities are not available during meetings.					
Help	Back Finish Cancel					

When you click "Finish" you are finished with the wizard, and will be shown the Skype for Business Server 2015 Topology Builder main screen. We need to edit the Topology so select "Skype for Business Server" & click Action | Edit Properties

10	Skype	for Business Server 2015, To	opology	Builder -	- 🗆 X	
File Ac	tion Help New Central Site Edit Properties	SIP domain				
	New Topology Open Topology Download Topology Save a copy of Topology As Publish Topology	Default SIP domain: Additional supported SIP domains:	landisl Not co	ab.local nfigured		
	Install or upgrade a database Remove Deployment	Simple URLs				
	Help	Phone access URLs: Meeting URLs:	Active	Simple URL		
			Active	Simple URL	SIP domai	
		Administrative access URL:	Not co	https://meet.landislab.local	landislab.loo	
		Central Management Serv	ver			
		Central Management Server:	Active	Front End	Site	
		<		ш	>	

Scroll down to "Administrative access URL" (as shown below) and define the admin url as https://admin.landislab.local and select Front End Server (SFE01.landislab.local in our lab)

	Edit Propert	ies	- 🗆 X
UIP domain Imple URLs	https://dialin.landislab.local	Ad	d ^
Central Management Server		Make Active Edit URL	
	Meeting URLs:		
	Simple URL	SIP domain	
	https://meet.landislab.local	landislab.local Ad	d
2		Make Active Edit URL	
	Administrative access URL: https://adminilandislab.local		
	Central Management Server		•
3	Front End Server to install Central Managemen	it Server on:	=
	SFE01.landislab.local Landis Lab1		•
	Note: If you want to reassign the Central Mana the procedure described in the Operations sec	igement Server after initial deployment, you must tion of the product documentation.	follow
Help		ОК	Cancel

Publish Topology

In the Topology Builder click: Action | Publish | Next | (Select CMS) Next

1s	Publish Topolo	ду	×				
Pub	Publishing wizard complete						
Your	topology was successfully published.						
	Step	Status	^				
✓	Creating Central Management store	Success	View Logs				
✓	Setting Central Management store location	Success	-				
✓	Publishing topology	Success					
✓	Downloading topology	Success					
✓	Updating global simple URL settings	Success	~				
Next	Next steps: → Click here to open to-do list In order for Skype for Business Server 2015 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 cl	To close the wizard, click Finish.						
н	elp	Back Fi	nish Cancel				

When finished you can "Click Here to open to-do list". Since we are really good we've already done these items. (if you took a shortcut, backup to see detailed step above)



Install Skype for Business Server System

Open "Skype for Business Server 2015 - Deployment Wizard"



Click Install or Update Skype for Business Server System



24 Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 Now we will install some Skype for Business Server System components, put Certs in place and Start Services:

- Step1 Install RtcLocal database
- Step2 Install Speechfiles, etc.
- Setup Certs
- Start [Skype for Business] Services

eploy >	> Install or update	
Step	1: Install Local Configuration Store	
	Installs local configuration store and populates with data from Central Management Store.	
	Prerequisites >	
	Help 🕨 Run	
Step 2	2: S <u>e</u> tup or Remove Skype for Business Server Components	
	Install and activate, or deactivate and uninstall Skype for Business Server Components based on the topology definition	
	Net Available: Local configuration store not available	
	Not Available: Local configuration store not available.	
	Prerequisites P	
	Help > Run	
Stop	Help > Run	
Step 3	Help > Run Run Run Run Run Run Run Run	
Step 3	Help > Run Run Run Run Run Run Run Run	
Step 3	Help > Run Run Run Run Run Run Run Run	
Step 3	Help > Run Run Run Run Run Run Run Run	
Step 3	Help > Run 3: Request, Install or Assign Certificates This step starts the Certificate Wizard. Create certificate request for local system. Install, and assign certificates for this system based on the topology definition. Not Available: Local configuration store not available. Prerequisites > Help > Run	
Step :	Help > Run 3: Request, Install or Assign Certificates This step starts the Certificate Wizard. Create certificate request for local system. Install, and assign certificates for this system based on the topology definition. Not Available: Local configuration store not available. Prerequisites > Help > Run	
Step 3	Help > Run 3: Request, Install or Assign Certificates This step starts the Certificate Wizard. Create certificate request for local system. Install, and assign certificates for this system based on the topology definition. Not Available: Local configuration store not available. Prerequisites > Help > Run	
Step 3	Help > Run 33: Request, Install or Assign Certificates This step starts the Certificate Wizard. Create certificate request for local system. Install, and assign certificates for this system based on the topology definition. Not Available: Local configuration store not available. Prerequisites > Help > Run 4: Start Services al After you've installed Skype for Business Server on all of the servers in the pool, you'll need to start the services.	

- Step1 Install Local Configuration Store (will install RtcLocal)
 - o Run
 - o Retrieve Directly from the CMS...
 - o Next (5-8 minutes on new lab system)
- Step2 Setup Skype for Business Server Components (will install Speechfiles, etc)
 - o Run|
 - o Next (15 minutes on new lab systems)
 - o Some things that can cause this step to fail
 - You didn't install KB2982006 as we strenuously noted above :)
 - You designated the archive/monitoring server, this will fail if the SQL for those stores is not there yet.
- Step3 Request Certs
 - Note: if this is a lab setup, and you have parallel installed AD and Lync FE OS's, remember the FE needs to have "gpudate /force" run or be rebooted after you stand up the AD CA so the CA is authoritative
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Run, Now select "Default Certificate" then click "Request"

6		Certificate Wiza	rd		x
s L	ielect a Skype for Business Server Certifi Isage tasks.	cate Type and then select a task. Exp	and the Certificate Type to p	perform advance	d certificate
	Certificate	Friendly Name	Expiration Date	Location	Request
	 ▲ Default certificate ✓ Server default ✓ Web services internal ✓ Web services external 			- 	Assign Remove View
	 OAuthTokenIssuer ✓ OAuthTokenIssuer 				
Ĩ	٢	Ш		>	
[Help Refresh Import C	ertificate Process Pending Certificat	tes		Close

Certificate Request: Next

ភ	Certificate Request
Certificate Request	
Select a CA from the list detected in yo DC01.landislab.local\landislab-DC01-(CA
Skype for Business Server 2015 Defaul	t certificate 5/19/2015
Organization:	Organizational unit:
Country/Region:	
State/Province: Select one or more SIP domains for wh alternative names list.	City/Locality: iich a sip. <sipdomain> entry is to be added to the subject</sipdomain>
Subject name: SFE01.landislab.local Subject alternative name: SFE01.landislab.local dialin.landislab.local meet.landislab.local Specify another CA, change the Certific more.	ate Template, configure additional Subject Alternative Names, and
Help	Back Next Cancel

Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 Certificate Request Summary: Next

7	Certificate R	equest	x
S Certifi	cate Request Summary		
To generate a requ	est with the following information, cli	ck Next.	
Property	Value		^
Certificate Use	Server default,Web services internal,Web services external		=
Country/Region			
State/Province			
City/Locality			
Friendly Name	Skype for Business Server 2015 Default certificate 5/19/2015		
Key Size	2048		
Exportable	False		~
Help		Back Next Cano	:el

Executing Commands: Next

Certificate Request	x
Executing Commands	
Creating new log file "C:\Users\Administrator.LANDISLAB\AppData\Local\Temp\Request- CSCertificate-[2015_05_19][10_36_19].xml". Create a certificate request based on Skype for Business Server configuration for this computer. Issued thumbprint "54B13BDD721085258D9928F146163CAFE70D6AE8" for use "Default,WebServicesInternal,WebServicesExternal" by "DC01.landislab.local\landislab-DC01-CA". No changes were made to the Central Management Store. Creating new log file "C:\Users\Administrator.LANDISLAB\AppData\Local\Temp\Request- CSCertificate-[2015_05_19][10_36_19].html". "Request-CSCertificate" processing has completed successfully. Detailed results can be found at "C:\Users\Administrator.LANDISLAB\AppData\Local\Temp\Request- CSCertificate-[2015_05_19][10_36_19].html".	est-
Task status: Completed.	
Request Certificate View	w Log
Help Back Next Ca	ncel

Online Certificate Request Status: Finish

5	Certificate Request	x
S	Online Certificate Request Status	
A certifi local ce	cate with thumbprint 54B13BDD721085258D9928F146163CAFE70D6AE8 has been added to th rtificate store.	e
Assig Note: If y task in th View Cer	n this certificate to Skype for Business Server certificate usages. You choose not to assign the certificate now, you can assign it at a later time by using the Assig ne Certificates wizard. rtificate Details	n
Help	Back Finish Cancel	

Certificate Assignment: Next

ā	Certificate Assignment	x
S	Certificate Assignment	
Assign th	e returned certificate to the Skype for Business Server usages on this server. ifficate Details	
Help	Back Next Cance	1

Certificate Assignment Summary: Next

ភ	Certificate Assi	gnment	x
Certif	icate Assignment Summary		
To assign the follo	wing certificate to the Skype for Busine	ss Server usages listed, click Next.	
Property	Value		^
Friendly Name	Skype for Business Server 2015 Default certificate 5/19/2015		=
Thumbprint	54B13BDD721085258D9928F14616 3CAFE70D6AE8		
Certificate Use	Server default,Web services internal,Web services external		
Issue date	5/19/2015 10:26:39 AM		
Expiration date	5/18/2017 10:26:39 AM		
Subject Name	SFE01.landislab.local		
(SN)			~
Help		Back Next Cance	4

Executing Commands... Finish

Certificate Assignment	×
Executing Commands	
The following certificate was assigned for the type "Default": Default: 54813BDD721085258D9928F146163CAFE70D6AE8 SFE01.landislab.local 05/18/2017 CN=landislab-DC01-CA, DC=landislab, DC=local 2500000044703541F7DAE5DCB000000000 The following certificate was assigned for the type "WebServicesInternal": WebServicesInternal: 54813BDD721085528D0928146163CAFE70D6AE8 SEE01 landislab.local	004
 WebServicesExternal: 54B13BDD721082258059201140103C4E270DAE831E01.landislab.local 05/18/2017 CN=landislab-DC01-CA, DC=landislab, DC=local 2500000044703541F7DAE5DCB0000000004 The following certificate was assigned for the type "WebServicesExternal": WebServicesExternal: 54B13BDD721085258D9928F146163CAFE70D6AE8 SFE01.landislab.loca 05/18/2017 CN=landislab-DC01-CA, DC=landislab, DC=local 25000000044703541F7DAE5DCB00000000004 	
Task status: Completed.	
Assign Certificate	View Log
Help Back Finish	Cancel

The certificates have been successfully requested and assigned.

Certificate WiZard					
Certificate		Friendly Name	Expiration Date	Location	Request
 Default certificate 	~	Skype for Business Server 2015	5/18/2017 10:26:39 AM	Local	Assian
Server default	~	Skype for Business Server 20	5/18/2017 10:26:39 AM	Local	Demons
☑ Web services internal	\checkmark	Skype for Business Server 20	5/18/2017 10:26:39 AM	Local	Remove
✓ Web services external	\checkmark	Skype for Business Server 20	5/18/2017 10:26:39 AM	Local	View
 OAuthTokenIssuer 					
OAuthTokenIssuer					
		11		>	

Now repeat Step 3 for OAuthTokenIssuer.

Step 4: Start Services

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Using the Skype for Business Server Management Shell

run Start-CsPool – PoolFQDN SFE01. landislab. local



NOTE: If you lab is using minimal RAM, this could take several minutes. (4GB = 8minutes)

We can open to see if all the Skype for Business services are running and...sure enough!

Q,		Services		_ 0	x
File Action View	Help				
⇐ ➡ 🖬 Q 🗉	è 🛛 🖬 🕨 🖉 🖬 🗤				
Services (Local)	Services (Local)				
	Select an item to view its description.	Name 🔺	Description	Status	Star ^
		🔍 Server	Supports fil	Running	Auto
		Chall Llandware Datastics	Descrides as	Din a	Auto
		🔍 Skype for Business Server Application Sharing	Skype for B	Running	Auto
		🔍 Skype for Business Server Audio Test Service	Skype for B	Running	Auto
		🌼 Skype for Business Server Audio/Video Confe	Skype for B	Running	Auto
		🔍 Skype for Business Server Bandwidth Policy S	Skype for B	Running	Auto
		🔍 Skype for Business Server Bandwidth Policy S	Skype for B	Running	Auto
		🔍 Skype for Business Server Call Park	Skype for B	Running	Auto
		Skype for Business Server Centralized Loggin	Skype for B	Running	Auto
		🔍 Skype for Business Server File Transfer Agent	Skype for B	Running	Auto
		🔍 Skype for Business Server Front-End	Skype for B	Running	Auto
		🔍 Skype for Business Server Health Agent	Skype for B	Running	Auto
		🔍 Skype for Business Server IM Conferencing	Skype for B	Running	Aute≡
		🔍 Skype for Business Server Master Replicator A	Skype for B	Running	Aut —
		🔍 Skype for Business Server Mediation	Skype for B	Running	Auto
		🔍 Skype for Business Server Replica Replicator	Skype for B	Running	Auto
		🔍 Skype for Business Server Response Group	Skype for B	Running	Auto
		🔍 Skype for Business Server Web Conferencing	Skype for B	Running	Auto
		Skype for Business Server XMPP Translating	Skype for B	Running	Auto
		Contraction Francisco Continu	Constant of the		Disa
		Smart Card Device Enumeration Service	Creates soft		iviar 🗸
		< III			>
	\Extended \Standard /				

Now let's open the Skype for Business Server Control Panel



You may be prompted to enter your Administrator credentials. (how to avoid this in the future: click here)

	Windows Security	x
AdminUIH Connecting to	DST SFE01.landislab.local.	
P	Administrator •••••••• Domain: LANDISLAB Remember my credentials	
	OK Cance	el

Now we get our first look of the Skype for Business Server 2015 Control Panel.



Enable AD Users

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Now back to the Front End server and the Skype for Business Server 2015 Control Panel. Click on Users | Enable Users. Now click the "Add" button and Add the 3 users. (those 3 users we created earlier)



Click "Enable" and if you get no errors, you should have 3 Skype for Business users ready to login. Let's open Skype for Business and login!



You have successfully installed Skype for Business Server 2015. Congratulations!

Lync Server 2013 Front End to Skype for Business Server 2015 In-Place Upgrade

Online Edition: <u>http://bit.ly/skype4bupgrade</u>

Skype for Business Server 2015 has a simplified in-place upgrade path which is very welcome. Here is my step by step of the process to upgrade our Standard Edition lab's Lync Server 2013 Standard Edition to Skype4B Server 2015 SfBS2015. An overview of the process is as follows:

- Install the prerequisites & get SfBS2015 ISO
- Install Admin Tools on non-Lync Server, Upgrade To SfBS2015 in Topology Builder, Publish Topology & Upgrade
- Stop Services on all servers in pool to be upgraded
- Run Setup.exe to launch in-place upgrade
- Start Services

Step 1- Install the Prerequisites & Get Skype4B ISO

- Install CU5+ latest hotfix to Lync 2013 topology
 - Lync Server 2013 Needs to be version 8308.815 or newer (click here)
 - How to check? run below. (or click here)
 - Get-WmiObject –query 'select * from win32_product' | where {\$_.name –like "Microsoft Lync Server*"} | ft Name, Version –AutoSize
- PowerShell RTM version (6.2.9200.0) or later
- Have at least SQL server 2012 SP1 installed
- Kb2533623 Windows Server 2008 R2
- Kb2858668 Windows Server 2012
- KB2982006 Windows Server 2012 R2
- 32GB of hard drive space on servers being upgraded
 - The setup has a little policeman that checks this before you can proceed.
- Some Other Things to Ensure Before Proceeding
 - o If LRS Portal was installed on this server, remove it: Click Here

Get the Skype for Business Server update here: Click Here (requires MSDN login)



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Note: You will not escape doing the above updates (I tried), so I suggest just do them upfront.

Step 2 – Install Admin Tools on non-Lync Server, Upgrade To SfBS2015 in Topology Builder, Publish Topology & Upgrade

Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 Note: This step should take less than 10 minutes.

Run the SfB2015 setup (on a machine that does not have Lync installed) and install the Admin Tools



Accept License Agreement...



"Install Administrative Tools"

ត	Skype for Business Server 2015 - Deploy	ment Wizard	x
Welco	me to Skype for Business Server 2015 deployment		
Deploy			\$
	Prepare Active Directory Prepares the Active Directory schema, forest, and domain for Skype for Business Server. Help ▶ ✓ Complete Install or Update Skype for Business Server System Install or update a Skype for Business Server Server deployment member system. This option installs Skype for Business Server core component of local replica configuration store. Note: Before installing a server, you need to have a valid topology created and published. Help ▶	Prepare first Standard Edition server Prepares a single Standard Edition server to host Central Management Service. Note: This task requires local administrator rights. This task does not apply to Standard Edition Servers that are not planned to host the Central Management Service, or for deployments that include Enterprise Edition. Install Administrative Tools Installs the Administrative Tools to the current system. Your deployment requires at least one installation of the Topology Builder.	
		Deploy Monitoring Reports Deploy Monitoring Reports to selected SQL Server Reporting Services (SSRS) instances. Call Quality Dashboard Skype for Business Server 2015, Call Quality Dashboard is a portal that provides OLAP reports to Skype for Business Server administrators to help troubleshoot Call Quality issues.	
		Click to view getting started videos.	~

When finished go to "Start" | more apps and run "SfBS2015 Topology Builder" (below)



"Download Topology from Existing Deployment" and save.

37 Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 Now you will see the Skype4B Server 2015 Topology Builder. In the pool you want to upgrade, right click & "Upgrade to Skype for Business Server 2015"

Skype fo	r Business Server 2015, Top	ology Builder 📃 🗖	x
File Action Help			
 ▲ B Skype for Business Server ▲ B LandisLab01 	General		^
 Lync Server 2010 Lync Server 2013 	FQDN:	LYNCFE01.landislab.com	
Standard Edition Front End Servers	IPV4 addresses:	Use all configured IPV4 addresses	≡
LYNCFE01.landislab.com Edit Properties Direct Upgrade to Skype for E	Business Server 2015	Enabled	
Media Topology	,	Enabled	
Persist Delete		Disabled	
Truste Help		Enabled	
Skype for Business Server 2015	Accositions		
Shared Components	SQL Server store:	I YNCFE01.landislab.com\rtc	
🚞 Branch sites	Archiving SQL Server store:	Not associated	
	Monitoring SQL Server store:	Not associated	
	File store:	\\LYNCFE01.landislab.com\share	
	Office Web Apps Server:	OWA.landislab.com (LandisLab01)	
	Edge pool (for media):	Not associated	
	Note: To view the federati	on route, use the site property page.	
	٢	н	>

Yes

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Note that the pool (in our case Standard Edition server) is now a Skype4B Server 2015 group.

Skype for	Business Server 2015, Top	ology Builder 📃 🗖	x
File Action Help			
 Skype for Business Server IandisLab01 	General		^
 Lync Server 2010 Lync Server 2013 Standard Edition Front End Servers Enterprise Edition Front End pools Director pools Mediation pools 	FQDN: IPv4 addresses: Features and functionality Instant messaging (IM) and presence:	LYNCFE01.landislab.com Use all configured IPv4 addresses Enabled	=
Persistent Chat pools Edge pools Tructed application servers	Conferencing: PSTN erencing:	Enabled	Н
Skype for Business Server 2015	Voice:	Enabled	
Standard Edition Front End Servers LYNCFE01.landislab.com	Associations	IVNCFE01 landislah.com\rtc	
Enterprise Edition Front End pools	Archiving SQL Server store:	Not associated	
Mediation pools Persistent Chat pools Totos apple	Monitoring SQL Server store:	Not associated	
Trusted application servers	File store:	\\LYNCFE01.landislab.com\share	
Video Interop Server pools	Office Web Apps Server:	OWA.landislab.com (LandisLab01)	
Shared Components	Edge pool (for media):	Not associated	
Branch sites	Note: To view the federation	on route, use the site property page.	
			~

Publish Topology

36	Skype for	Business Se	erver 2015, To	pology	Builder	- 0	x
File Action Help							
 Skype for Busi LandisLab0 Lync Se Stan Stan Ente Dire Mec Pers Edgy Trus 	New Central Site Edit Properties New Topology Open Topology Download Topology Save a copy of Topology Install or upgrade a datab Remove Deployment	As Jase	P domain: Il supported ins: s :ess URLs:	landisla Not cor Active	ib.com nfigured Simple URL		
⊿ Skype fi	Filip	Masting		×	nttps://dialin.landislab.com		
 Standard Edition Front End Servers LVNCFE01.landislab.com Enterprise Edition Front End pools Director pools Mediation pools Persistent Chat pools 		Administ URL:	trative access	Active	https://meet.landislab.com /admin.landislab.com	land	' domai islab.co
Trusted ar	nolication servers	Central Wa	inagement serv				
 Fristed a Video Inte Shared Comp Branch sites 	princation servers erop Server pools ponents	Central N Server:	/lanagement	Active	Front End LYNCFE01.landislab.com	Land	Site disLabO [*]
		<			Ш		>

Will now publish...

16	Publish Topology		x
Pub	lishing wizard complete		
Your	topology was successfully published.		
	Step	Status]
1	Publishing topology	Success	View Logs
×.	Downloading topology	Success	
×.	Downloading global simple URL settings	Success	
 ✓ 	Updating role-based access control (RBAC) roles	Success	
 ✓ 	Enabling topology	Success	
Next	steps: Lick here to open to-do list n order for Skype for Business Server 2015 to correctly route he published topology. The linked text file contains a list of vell as any databases that need to be created.	e traffic, your deploymer any servers that need to	it must match be updated, as
To cl	ose the wizard, click Finish.		
Н	elp	Back Finish	Cancel

Databases should automatically upgrade (this doesn't apply to SE)

10	Skype f	or Business Server 2015, To	pology l	Builder	– – X
File Ac	tion Help				
	New Central Site Edit Properties	SIP domain			
	New Topology Open Topology Download Topology	Default SIP domain: Additional supported SIP domains:	landisla Not coi	ıb.com nfigured	
	Save a copy of Topology As Publish Topology Install or upgrade a database	Simple URLs			
	Kemove Deployment				
	Help	Phone access URLs:	Active	Simple URL	
			 Image: A second s	https://dialin.landislab.com	
		Meeting URLs:	Active	Simple URL	SIP domai
			\sim	https://meet.landislab.com	landislab.co
		Administrative access URL:	https://	'admin.landislab.com	
		Central Management Serv	/er		
		Central Management	Active	Front End	Site
		Server:	~	LYNCFE01.landislab.com	LandisLab0
		<		ш	3

Now we are done on this machine. Now move to the Lync 2013 machine you want to upgrade. Before you move on, make sure the CMS has replicated using Get-CsManagementStoreReplicationStatus | ft

NOTE: Do not move on until the replication has completed.

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Step 3 - Stop Services on all servers in the pool to be upgraded

On Lync 2013 machine you want to upgrade we will stop all Lync service. Use Powershell: Disable-CsComputer -Scorch

NOTE: You might be thinking: "I could Stop-CsWindowsService". The reason Microsoft recommends using "Disable-CsComputer –Scorch" is that if you use "Stop-CsWindowsService", some services may restart automatically after a reboot and this may cause the In-Place upgrade to fail.

Step 4 - Run Setup.exe to launch in-place upgrade

This will launch setup UI

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Progress of update will be displayed. This takes a little time...

Skype for Business Server 2015
Skype for Business Server
We're installing Skype for Business Server 2015. This could take a few minutes.
✓ Verifying upgrade readinessSuccess
✓ Installing missing prerequisitesSuccess
✓ Uninstalling rolesSuccess
✓ Detaching databaseSuccess
 Uninstalling local management servicesSuccess
 Installing and configuring core componentsSuccess
✓ Installing administrative toolsSuccess
···· Installing local management services
Attaching database
Upgrading database
Enabling replica
Installing roles
Verifying installation
Caching file Setup\speech\es-MX\MSSpeech_TTS_es-MX_Hilda.msi
View Logs OK Cancel

Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09 After this you will see the Completed.

Skype for Business Server 2015
Skype for Business Server
Upgrade to Skype for Business Server 2015 completed successfully!
✓ Verifying upgrade readinessSuccess
✓ Installing missing prerequisitesSuccess
✓ Uninstalling rolesSuccess
✓ Detaching databaseSuccess
✓ Uninstalling local management servicesSuccess
✓ Installing and configuring core componentsSuccess
✓ Installing administrative toolsSuccess
✓ Installing local management servicesSuccess
✓ Attaching databaseSuccess
✓ Upgrading databaseSuccess
✓ Enabling replicaSuccess
✓ Installing rolesSuccess
✓ Verifying installationSuccess
'Verifying installation' completed successfully
View Logs OK Cancel

Upgrade to Skype for Business Server 2015 completed successfully!



Step 5 - Start Services

Start service on all the servers in the upgraded pool at the same-time (to avoid loss of services due to quorum loss) (Obviously not an issue on 1 server SE pool)

Start-CSPool -PoolFqdn lyncfe01.landislab.com

NOTE: For servers that are not Front End servers use: Start-CsWindowsService

Let's check that all our services are running (sure enough that are!) and...we're Done!

Select an item to view its description.	Name	Description	Status	Startup Type
	Secure Socket Tunneling Protocol Service	Provides su		Manual
	Security Accounts Manager	The startup	Running	Automatic
	Server Server	Supports fil	Running	Automatic
	Shell Hardware Detection	Provides no	Running	Automatic
	😪 Skype for Business Server Application Sharing	Skype for B	Running	Automatic (D
	🛸 Skype for Business Server Audio Test Service	Skype for B	Running	Automatic (D
	🛸 Skype for Business Server Audio/Video Conferencing	Skype for B	Running	Automatic (D
	鵒 Skype for Business Server Bandwidth Policy Service (A	Skype for B	Running	Automatic (D
	鵒 Skype for Business Server Bandwidth Policy Service (C	Skype for B	Running	Automatic (D
	🍓 Skype for Business Server Call Park	Skype for B	Running	Automatic (D
	🍓 Skype for Business Server Centralized Logging Service	Skype for B	Running	Automatic (D
	🌼 Skype for Business Server File Transfer Agent	Skype for B	Running	Automatic (D
	端 Skype for Business Server Front-End	Skype for B	Running	Automatic (D
	🌼 Skype for Business Server Health Agent	Skype for B	Running	Automatic (D
	Skype for Business Server IM Conferencing	Skype for B	Running	Automatic (D
	👒 Skype for Business Server Master Replicator Agent	Skype for B	Running	Automatic (D
	Skype for Business Server Mediation	Skype for B	Running	Automatic (D
	🍓 Skype for Business Server Replica Replicator Agent	Skype for B	Running	Automatic (D
	🍓 Skype for Business Server Response Group	Skype for B	Running	Automatic (D
	🍓 Skype for Business Server Web Conferencing	Skype for B	Running	Automatic (D
	🌼 Skype for Business Server XMPP Translating Gateway	Skype for B	Running	Automatic (D
	Smart Card	Manages ac		Disabled
	🌼 Smart Card Device Enumeration Service	Creates soft	Running	Manual (Trig

How about we check what the new version numbers are? Just run: Get-WmiObject –query 'select * from win32_product' | where {\$_.name –like "Skype for Business Server*"} | ft Name, Version – AutoSize

And let's log in to the Skype for Business Control Panel

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Done & Tested!

A Few Administrator Notes for after the upgrade

- Use the Skype4B admin tools to move users to and from Skype4B (click here)
- Administrators should use Skype for Business Management Shell to move conference directories from Lync 2013 pools to Skype for Business pools.

A big thanks to the Skype4B team for making this process easier and smoother and a big thanks to the Office365 Summit team that put on great training around this and was the basis for my knowhow and this blog post.

Skype4B Server 2015 Upgrade Gotcha:

http://www.ucandstuff.com/2015/04/gotchas-with-sfb-upgrades.html?spref=tw

Lync Server 2013 Edge to Skype for Business Server 2015 In-Place Upgrade

Online Edition: not available

Upgrading your Lync Edge server(s) is very similar to the steps to upgrade your Front End(s). There are a few things that aren't the same and we'll note them.

- Prerequisites are the same except
 - o .NET 3.5 Framework
- Upgrade Edge Pool in topology and publish the topology
 - Export Topology using Export-CsConfiguration ExportPath
- Now take and import the resulting Topology configuration file on the Edge Server
 - o Copy file to Edge server
 - o Use Import-CsConfiguration -localstore Importpath
 - o Stop Services
 - o Run the Skype for Business setup.exe
 - o Start-CsWindowsService



Now we can start services and are done.

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46 Installing & Upgrading Skype for Business Server 2015 Step by Step for Anyone Get a no obligation Skype for Business Implementation Proposal in 1 Day http://bit.ly/MBmd09

Enabling Enterprise Voice Features: Enable Users, Configure Call Park & Define

Unassigned Number

Online Edition: http://windowspbx.blogspot.com/2015/06/enabling-skype-for-business-server.html

In this step by step we will look at enabling Enterprise Voice features in Skype for Business Server 2015.

Enable Users for Enterprise Voice

To enable our users for Enterprise Voice lets open the Skype for Business Server Control Panel. Now click on Users. To save on CPU no users are shown by default so just click on Find to show all your currently enabled Skype for Business users.

Now we will see a list of Skype for Business enabled users. Note in the Telephony column that our users are enabled for "PC-to-PC only". Let's changed that by double clicking on a user to edit.

1	Sky	pe for Business Se	erver 2015 Control Pan	el	_ 🗆 X
Skype for Busin	ness Server				Administrator Sign out 319.0 Privacy statement
Home	USER SEARCH				
Users					
Topology	Search LDAP search	h	2 Id filter	rin 🖻 🗌 t and film	
IM and Presence	search for users by typing a c	ser's hame of clicking Au		Find 🖓 🖬 🕈 Add filter	*
Persistent Chat				Search results: 3 Maximum user	rs to display: 200 戻
Voice Routing	🚳 Enable users 🔻 🥖 B	dit 🔻 Action 💌			0
Voice Features	Display name	 Enabled 	SIP address	Registrar pool	Telephony
	3 user one	√	sip:u1@landislab.local	SFE01.landislab.local	PC-to-PC only
Response Groups	user three	√	sip:u3@landislab.local	SFE01.landislab.local	PC-to-PC only
Conferencing	user two	\checkmark	sip:u2@landislab.local	SFE01.landislab.local	PC-to-PC only
Clients					

Now we can change a few setting

- Telephony:Enterprise Voice
- Line User: tel:+18005551001;ext=1001

Now click "Commit".

5	Skype for Business Server 2015 Control Panel	_ _ X
Skype for Bus	iness Server	Administrator Sign out 6.0.9319.0 Privacy statement
Home	USER SEARCH	
Users	Edit Skype for Business Server User - user one	
Topology	3 🖶 Commit 🛛 🗙 Cancel	0
IM and Presence	Display name:	
Persistent Chat	user one	
Voice Routing	✓ Enabled for Skype for Business Server	
Voice Features	SIP address: *	
Response Groups	sip:u1 @ landislab.local •	
Conferencing	Registrar pool:	
Cliente	SFE01.landislab.local	
Clients	Telephony:	
Federation and	1 Enterprise Voice 🔹 🕐	
External Access	Line URI:	
and Archiving	2 tel:+18005551001;ext=1001	
Security	Dial plan policy:	-

Now you can repeat this step for each user. (or use Powershell). Now if we give our Lync clients a few minutes a new "Phone" tab will show up inside our Skype for Business client! (NOTE: there is no need to log out or do anything on the Lync client side. This will automatically show up. Took about 5 minutes on my lab)

What's happening today?	
user one Available -	
Set Your Location •	
L 0 ₩ 🖻	¢-
Find someone or dial a number	Q
GROUPS STATUS RELATIONSHIPS NEW	≜ +
FAVORITES	
user three - Offline	
user two - Offline	
OTHER CONTACTS (0/0)	
	Set Your Location Set Your Location Find someone or dial a number GROUPS STATUS RELATIONSHIPS NEW FAVORITES User three - Offline User two - Offline User two - Offline OTHER CONTACTS (0/0) Conternational Content of the conten

Alright, now our users are enabled for Enterprise Voice (EV).

Trying Out Audio Using the Audio Test Service

If we click on the Phone Tab/Button we will see our phone dial pad. From here we can make our first "Voice" call. If we click the "Check" button Lync will call the Lync Audio Test Service. Go ahead.



Hey, it looks like EV works!

Enabling and Using Call Park

To enable the call Park feature go to Voice Features | Call Park | New

5	Skype for Business Server 2015 Control Panel
Skype for Busi	ness Server
Home	2 CALL PARK UNASSIGNED NUMBER
Users	
Topology	٩
IM and Presence	3 🗣 New 🥢 Edit 🔻 🔉 Refresh
Persistent Chat	Name 🔺 Start range End range Destination
Voice Routing	
1 Voice Features	
Response Groups	
Conferencing	

Configure a Call Park range using the below example. In our example we are making 5 parking "slots" or spaces so we can park up to 5 calls. We could make this the amount we want to, but for this lab we'll make it 5.

- Name: Call Park Orbit
- Number Range: #500
- Number Range: #505
- FQDN of destination server: SFE01.landislab.local

Now click "Commit"

5	Skype for Business Server 2015 Control Panel
S Skype for Bu	usiness Server
Home	CALL PARK UNASSIGNED NUMBER
Users	New Call Park Number Range
Topology	4 🔜 Commit 🗙 Cancel
IM and Presence	Name: *
Persistent Chat	Call Park Orbit
Voice Routing	Number range: *
Voice Features	2 #500 - #505
Response Groups	FQDN of destination server: *
Conferencing	
Client	

Now we need to enable Call Park in the Voice Policy". Go to Voice Routing | Voice Policy | Enable call park | Ok

5	Skype for Business Server 2015 Control Panel
Skype for Busi	ness Server
Home	DIAL PLA 2 VOICE POLICY ROUTE PSTN USAGE TRUNK CONFIGURATIO
Users Topology	Create voice routing test case information
IM and Presence Persistent Chat	Edit Voice Policy - Global
1 Voice Routing	4 √ OK × Cancel Scope: Global
Voice Features Response Groups	Name: * Global
Conferencing	Description:
Federation and External Access	 ^ Calling Features ✓ Enable call forwarding ✓ Enable tea
Monitoring and Archiving	✓ Enable delegation ✓ Enable PST ✓ Enable call transfer ■ Enable bar
Security Network	Enable call park Enable simultaneous ringing of phones

Select Global" policy | Commit all | Ok

5	Skype for Business Server 2015 Control Panel				
Skype for Busi	iness Server				
Home	DIAL PLAN VOICE POLICY ROUTE PSTN USAGE TRUNK CONFIGURATION				
Users					
Topology	Create voice routing test case information				
IM and Presence					
Persistent Chat	٩				
Voice Routing					
Voice Features	New / Edit Action Commit				
Response Groups	1 @Global Global Dun Commit all				
Conferencing	Cancel selected changes				
Clients	Cancel all uncommitted changes				
Federation and External Access					

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Now let's call another Lync user and test our new Park feature. After we are connected, hover over "Call" then click "Transfer Call" and then "Parking Lot"

{picture of parking a call coming}

Once the call is Parked, you will be notified which of the "slot" the call is in. In the below case it is in #500. Anyone on Lync with Ent. Voice enabled can pick up this call Parked by dialing #500. You can click "COPY" to IM this to someone or verbally.

{picture of parked call from user that parked the call coming}

Some Quick notes about Call Park

- By default, if no one picks up the parked call in xx minutes, the call will ring back to the person who parked the call.
- Unlike some PBX systems, you will not be able to see if someone is currently in Park via a light/button on a phone
- You can only have 1 call park orbit per user/desk phone. So, for example, you can not have a Park for Sales and a Park for Service
- There is only 1 Call Park Number range per Skype for Business Server pool

Setting Up Normalization

Since we probably don't want to be walking around dialing things like "tel:+18005551003;ext=1003" to reach another extension, (I suspect our users would suspect us of being insane? ;-) we need to make a Normalization rule that turns "1003" into "tel:+18005551003;ext=1003" for us automatically.

In the Lync Control Panel we'll make this new Normalization Rule under "Dial Plan". To do this Click "Voice Routing" | "Dial Plan" | select the "Global" dial plan | "Edit" | "Show Details" as shown below.

5			Skyp	e for Busi	ness Server 20	15 Control Pane
Skype for Busi	ness Se	erver				
Home	2 DIA	L PLAN	VOICE POLICY	ROUTE	PSTN USAGE	TRUNK CONFIGURA
Users						
Topology	C	Create voi	ice routing test	case inform	ation	
IM and Presence						
Persistent Chat						Q
1 Voice Routing						
Voice Features	+	New 🔻	🖉 Edit 🔻 🖌	Action 🔻	Commit 🔻	
		Nar 4	Show details	State	Normalization	rules Description
Response Groups	3	💮 Glo	Select all	Committed	1	
Conferencing			Delete			
Clients						
Fadorali						~

Now under "Associate Normalization Rules" click "New".

ê.	Skype for Business Server 2015 Control Panel				
Skype for Bus	siness Server				
Home	DIAL PLAN VOICE POLICY ROUTE PSTN USAGE TRUNK CONFIGURATION	TEST VC			
Users Topology	Create voice routing test case information				
IM and Presence Persistent Chat	Edit Dial Plan - Global				
Voice Routing	V X Cancel				
Voice Features	Scope: Global Name: *				
Response Groups	Global				
Conferencing	Simple name: *				
Clients	DefaultProfile				
Federation and External Access	Description:				
Monitoring and Archiving	Dial-in conferencing region:				
Security	External access prefix:				
Network	()				
Configuration	Associated Normalization Rules				
	🖶 New 🖹 Copy 📋 Paste 🐂 Select 🧪 Show details Remove 👚	₽			
	Normalization rule State Pattern to match	Trans			
	Keep All Committed ^(\d+)\$	\$1			

Now define the New "Normalization Rule" like below.

- Name: Extensions
- Length: Exactly 4
- Pattern to match: ^(1\d(3))\$
- Translation rule: +1800555\$1;ext=\$1
- Internal extension = checked

To save this "Normalization Rule" click "OK" | "Commit" | "Commit All" | Ok | Close

me: *		
tensions		
scription:		
Build a Normalizatio	on Rule	
Fill in the fields that you clicking Edit.	want to use, or create the	rule manually by
Starting digits:		
Length:		
Exactly	▼ 4	
Digits to remove:		
0		
Digits to add:		
ŀ		
Pattern to match: *	_	
^(\d{4})\$		
Translation rule: *		
+\$1800555\$1;ext=\$1		
Edit Devet		
Edit Reset		
Internal extension		(?)
aled number to test:		200
		Go

Note: The normalization rule we just setup will only take care of extensions in the 1000-1999 range. In our lab exercises we'll make sure we stay in that range, but if you to a little "exploring" just be aware.

Update Address Book (so our new normalization rules work)

Because of the way Lync Server is designed the changes we made above will take some time to propagate out to all the clients if we just let the process happen normally. We can "push" this process by taking the below steps on each client we want to test "right now".

- Run Update-CSAddressBook from the Lync PowerShell and wait about 5 minutes
 - o you can check Lync Server event log to see when this happens
- Signed out of the Skype for Business (Skype for Business) Client and delete everything under:
 - Skype4B = C:\Users\%username%\AppData\Local\Microsoft\Office\15.0\Lync
 - o Lync 2010 = C:\Users\%username%\AppData\Local\Microsoft\Communicator

Now you should be able to dial Lync user's by their Ent. Voice 4 digit extension number.

Define Unassigned Numbers

Unassigned Numbers allow you to play a message to a caller when they dial an unassigned number. There isn't a Skype for Business Control Panel method to make an Unassigned Number announcment, so we'll do that using Powershell and then finish using the SfBS Control Panel

The first thing we need to do to create a "Unassigned Number" is to create an announcement. This requires Powershell New-CsAnnouncement command. Here is an example:

• New-CsAnnouncement –Identity ApplicationServer SFE01.lab.local –Name "Welcome to Lab 001" –TexttoSpeechPrompt "Welcome to Lab Announcement" –Language "en-US"

Es Ac	Iministration the for Business Server Management Shell 📃 🗖 🗙
PS C:\Users\Adminis ver:SFE01.landislad e to Lab Announceme	strator.LANDISLAB> New-CsAnnouncement -Identity ApplicationSer _ b.local -Name "Welcome to Lab 001" -TextToSpeechPrompt "Welcom ent" -Language "en-US" =
Identity Name AudioFilePrompt TextToSpeechPrompt Language TargetUri AnnouncementId PS C:\Users\Adminis	<pre>: Service:ApplicationServer:SFE01.landislab.local/2c2d3d68-c</pre>

New we will define the new Unassigned Number in SfBS CP. After filling the form below click OK. Then "Commit all"

- Name: Welcome
- Number Range: tel:+18005551100;ext=1100 tel:+18005551100;ext=1100
- Announcement Service = Announcement
- FQDN of destination server = ApplicationServer:SFE01.landislab.local
- Announcement = Welcome to Lab 001 (the one we just made using PowerShell)

Skype for Business Server 2015 Control Panel				
Skype for Busi	ness Server			
Home	CALL PARK UNASSIGNED NUMBER			
Users	New Unassigned Number Range			
Topology	√ OK X Cancel			
IM and Presence	Name: *			
Persistent Chat	Welcome			
Voice Routing	Number range: *			
Voice Features	tel:+18005551100;ext=1100 - tel:+18005551100;ext=1100			
Response Groups	Announcement service:			
Conferencing	FODN of destination server: *			
Clients	ApplicationServer:SFE01.landislab.local Select			
Federation and	Announcement: *			
Monitoring and Archiving	Welcome to Lab 001			

http://technet.microsoft.com/en-us/library/gg398522

Quick Notes About Unassigned Number

- If you have an "ext" LineURI you can only have 1 number in Unassigned Number range. If a normal DID you can have a range.
- If you have a legit number that falls inside an unassigned range you will still be able to call it

More

Online Edition: coming soon

Coming soon

Requirements

https://gallery.technet.microsoft.com/scriptcenter/Install-Requirements-for-aabf7358



Note: If the user you are trying to enable is an Administrator you will need to use PowerShell to enable them. Using the Lync Server Control Panel will result in an error.