
























Landis Technologies LLC

SEFAUtil Server User Manual

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Overview of SEFAUtil Server

What does it do?

SEFAUtil Server allows user settings like forwarding, presence, note, or contact list(s) to be changed centrally using one of several methods:

- PowerShell
- BOT
- WCF Endpoint

What are Common Use Cases?

The functionality is useful in these scenarios:

- (User/Boss-Admin/Receptionist Scenario) Boss/Admin style Changing of User Settings on Behalf of Another User
 - Change Forwarding, Presence, Note etc. for another user (like a Boss)
- (Administrator Initial Configuration Scenario) Initial Configuration of User Settings
 - Migration of User Settings from Another PBX to Skype for Business Server or vice versa
 - Initial configuration of User Settings when no other system involved.
- (Administrator Ongoing Management Scenario) Ongoing Management of User Settings
 - Enforce a call forwarding policy (users w/no voicemail have calls forwarded to an announcement, for example)
 - Centrally managed native SfB Contact Group
 - Ensure User Note meets company policy (no profanity, etc.)

Community versus Enterprise Edition

Below is a comparison of Community and Enterprise editions of SEFAUtil Server:

Licensing model was updated on November 17, 2017.

	Discontinued		
			
	Community	Community	Enterprise
Total System User Supported	Unlimited	<50	1 to +100K
PowerShell equivalent of Microsoft sefautil.exe	X	X	X
Manage Forwarding	X	X	X
Manage Delegates	X	X	X
Manage Team Call	X	X	X
Manage Sim Ring	X	X	X
Yammer / Community supported	X	X	X
Commercial Support			X
Instant Message BOT Interface		X	X
API Interface		X	X
Supports "Powered by Landis SEFAUtil Server" Apps		X	X
Trial "Powered by Landis SEFAUtil Server Apps	X	X	X
Manage User Presence		X	X
Change Presence		X	X
Change Note		X	X
Manage User Contact List		X	X
Add Skype for Business Contact Group		X	X
Granular user security		X	X
RBAC AD Security – Future		X	X
Access to future updates & upgrades		X	X

SEFAUtil Server Installation

Here are some comments

Overview

Below is an overview of installing SEFAUtil Server.

- [Understand Prerequisites](#)
- [Provision a Skype for Business Trusted Application Server](#)
- [Configure a Trusted Application & Trusted Application Endpoint](#)
- [Installation of the SEFAUtil Server Trusted UCMA Application](#)
- [Register SEFAUtil Server](#)
- Test by running a SEFAUtil Server command

Prerequisites

There are a few prerequisites for running SEFAUtil Server:

- Skype for Business Server
 - SEFAUtil Server only works with Skype for Business Server on-premises. It does not work with Skype for Business Online or Cloud PBX.
- A Skype for Business Trusted Application Server or Pool
 - Microsoft does not support running Trusted Applications (like SEFAUtil Server) on a Skype for Business Front End Server
- Internet Access to Register SEFAUtil Server immediately
 - Otherwise you will need to email sales@landiscomputer.com for a key which will not be immediate.
- SEFAUtil Server installation file
 - <https://landiscomputer.freshdesk.com/support/solutions/articles/6000175014-sefautil-server-update-downloads>

Provisioning/Installing a Skype for Business Trusted Application Server

Configuring a Skype for Business "Trusted Application Server/Pool" is beyond the scope of this manual but below is an outline of the steps.

- Set the Skype for Business topology builder to configure the new Trusted Application server (or pool) and publish the topology.
- On each Trusted Application server, run the Skype for Business installer.
- Run the Skype for Business Deployment Wizard.
- On the main page, click "Install or Update Skype for Business Server System"
- then "Install Local Configuration Store"
- then "Setup or Remove Skype for Business Server Components"
- then "Request, Install, or Assign Certificates"
- the certificate will usually come from an internal certificate authority, similar to the Default certificate installed on your Front End servers or the certificate
- Installed on the internal interface of the Edge. Just run the cert wizard and let it do its thing. It should have the server FQDN and Pool FQDN (if setup in pool).

For a detailed, step by step resource on how setup a Trusted Application Server/Pool in your Skype for Business infrastructure reference the below article:

<https://wimvanhouts.wordpress.com/2015/09/09/installing-configuring-provisioning-a-skype-for-business-trusted-application-server/>

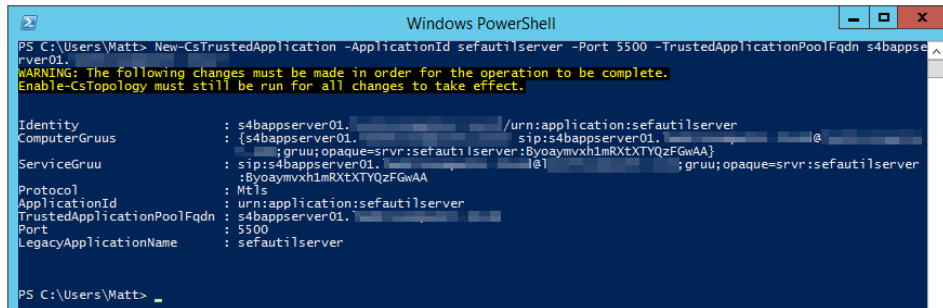
Configure a Trusted App & Trusted App Endpoint on the Trusted App Server or Pool

Open Powershell on the Skype for Business (Lync) Server trusted application server you have previously setup.

You are going to need an unused port number. If you don't know an unused port number, run "get-CsTrustedApplication | ft Identity, port" get to see applications and their associated port numbers that are already in use.

Now run: (replacing red values with your environment specific values)

```
New-CsTrustedApplication -ApplicationId sefautilsrvr -Port 5500 -TrustedApplicationPoolFqdn yourPoolFQDN.domain.com
```



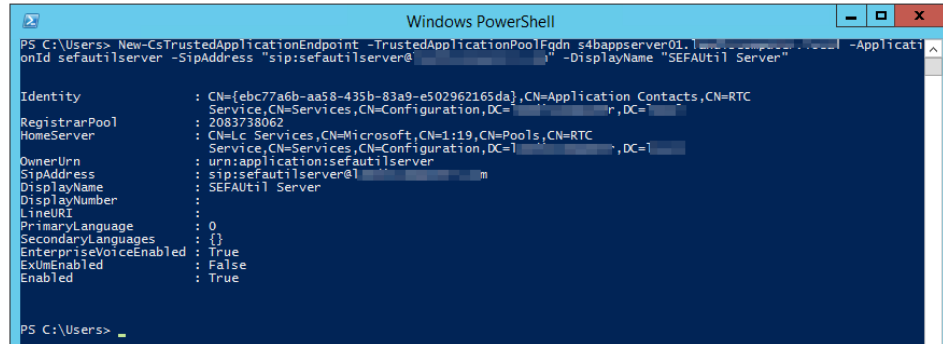
```
Windows PowerShell
PS C:\Users\Matt> New-CsTrustedApplication -ApplicationId sefautilsrvr -Port 5500 -TrustedApplicationPoolFqdn s4bappserver01
WARNING: The following changes must be made in order for the operation to be complete.
Enable-CsTopology must still be run for all changes to take effect.

Identity           : s4bappserver01. /urn:application:sefautilsrvr
ComputerGrupos    : {s4bappserver01. sip:s4bappserver01. @
ServiceGrupos     : sip:s4bappserver01. ;gruu;opaque=svr:sefautilsrvr:Byoaymvxh1mRXtXTYQzFGwAA}
Protocol          : Mtls
ApplicationId     : urn:application:sefautilsrvr
TrustedApplicationPoolFqdn : s4bappserver01.
Port              : 5500
LegacyApplicationName : sefautilsrvr

PS C:\Users\Matt>
```

Now we will create an endpoint which you will interact with.

```
New-CsTrustedApplicationEndpoint -TrustedApplicationPoolFqdn yourPoolFQDN.domain.com -ApplicationId sefautilsrvr -SipAddress "sip:sefautilsrvr@domain.com" -DisplayName "SEFAUTIL Server"
```



```
Windows PowerShell
PS C:\Users> New-CsTrustedApplicationEndpoint -TrustedApplicationPoolFqdn s4bappserver01. -ApplicationId sefautilsrvr -SipAddress "sip:sefautilsrvr@" -DisplayName "SEFAUTIL Server"

Identity           : CN=[ebc77a6b-aa58-435b-83a9-e502962165da],CN=Application_Contacts,CN=RTC
RegistrarPool     : Service,CN=Services,CN=Configuration,DC=
HomeServer        : 2083738062
OwnerUrn          : CN=Lc_Services,CN=Microsoft,CN=1:19,CN=Pools,CN=RTC
SipAddress        : Service,CN=Services,CN=Configuration,DC=1
DisplayName       : sip:sefautilsrvr@
DisplayNumber     : SEFAUTIL Server
LineURI           :
PrimaryLanguage   : 0
SecondaryLanguages : {}
EnterpriseVoiceEnabled : True
ExUmEnabled       : False
Enabled           : True

PS C:\Users>
```

A step for those using Lync Server 2013

SEFAUTIL Server has been compiled using the latest UCMA SDK which means that we will need to do a small tweak to force UCMA 4 to be use. In the SEFAUTIL Server code folder look for sefautilsrvr.exe.config and open the file using Notepad. Insert the below code immediately after the close </startup> tag:

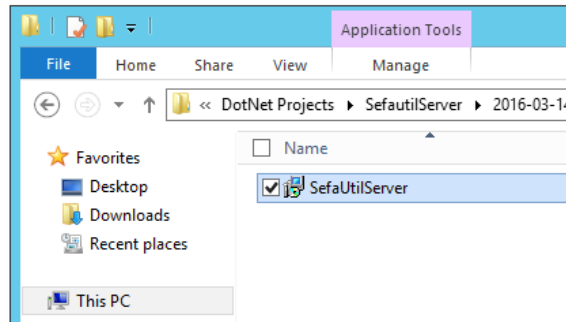
```
<runtime> <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1"> <dependentAssembly>
<assemblyIdentity name="Microsoft.Rtc.Collaboration" publicKeyToken="31bf3856ad364e35"
culture="neutral" /> <bindingRedirect oldVersion="0.0.0.0-6.0.0.0" newVersion="5.0.0.0" />
</dependentAssembly> </assemblyBinding> </runtime>
```

Installation

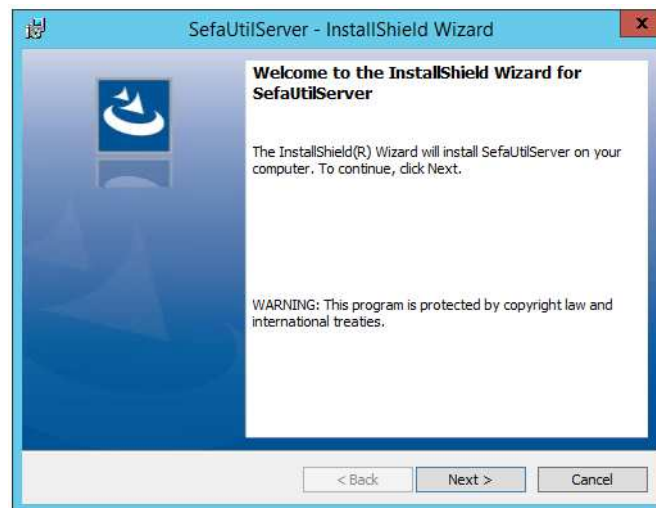
Download the latest version of SEFAUtil Server installer here:

<https://landiscomputer.freshdesk.com/solution/articles/6000175014-sefautil-server-update-downloads>

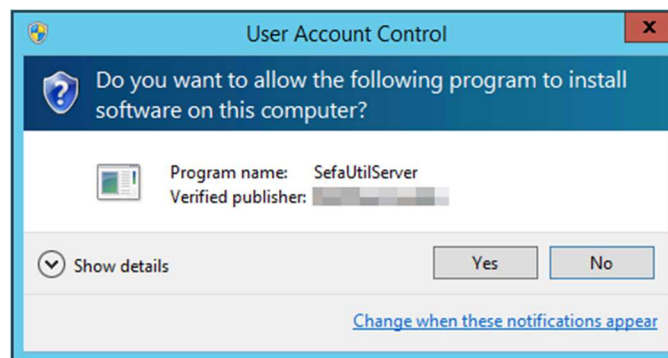
Run the installer.



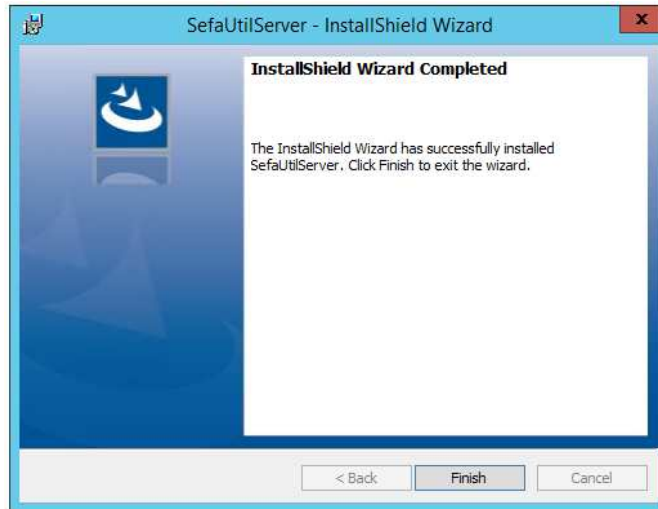
Next, (Customer Information) Next, (Destination Folder) Next, (Ready to Install the Program) Next.



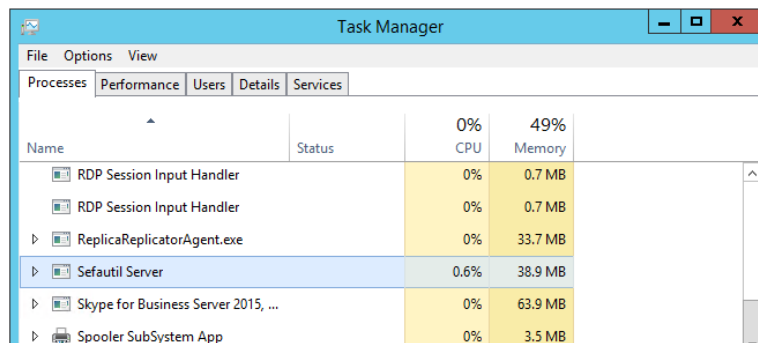
User Account Control: Yes.



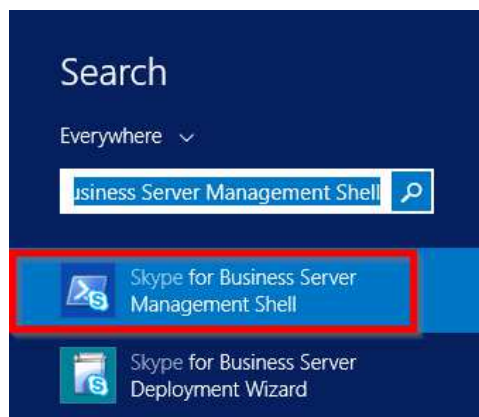
Click Finish.



Now SEFAUtil Server should be running. We can verify opening the Task



NOTE: Now we need to exit this PowerShell session and restart the "Skype for Business Server Management Shell" so the new SEFAUtil Server cmdlets become available.



Now run: PS> get-command -Module SefautilServerPowershell

To make sure the new cmdlets are available.

```

PS C:\> Get-Command -Module SefaultilServerPowershell

CommandType      Name                                     ModuleName
-----
Cmdlet           Get-CsUserForwarding                  Sefaultils...
Cmdlet           Get-CsUserNote                       Sefaultils...
Cmdlet           Get-CsUserPresence                   Sefaultils...
Cmdlet           Get-SefaultilServerRegistration       Sefaultils...
Cmdlet           Get-SefaultilServerSettings          Sefaultils...
Cmdlet           Set-CsUserContactList                Sefaultils...
Cmdlet           Set-CsUserDelegates                  Sefaultils...
Cmdlet           Set-CsUserForwarding                 Sefaultils...
Cmdlet           Set-CsUserNote                       Sefaultils...
Cmdlet           Set-CsUserPresence                   Sefaultils...
Cmdlet           Set-CsUserTeamMembers                Sefaultils...
Cmdlet           Set-SefaultilServerRegistration       Sefaultils...
Cmdlet           Set-SefaultilServerSettings          Sefaultils...

PS C:\> _

```

<http://windowspbx.blogspot.com/2016/03/how-to-install-skype-for-business.html>

Register & Get a Key

Next you will register to get a free key for the perpetually free SEFAUtil Server Community Edition (See [Community versus Enterprise Edition](#)) by running the below command.

Note: Your firewall will need to grant access to <https://lcregistration.landiscomputer.com> to immediately receive a key via the web. Otherwise email sales@landiscomputer.com to get a free SEFAUtil Server Community Edition key.

The system will use Azure to immediately retrieve your key:

```
Set-SefaultilServerRegistration -Name YourOrgName -EmailAddress
YourCorpEmailAddress@YourDomain.com -PhoneNumber YourPhoneNumber -ImplementationType
```

Now Press {Tab}

```

PS C:\Users> Set-SefaultilServerRegistration -Name "Landis Technologies LLC" -EmailAddress test@hp.com -PhoneNumber 717-7
33-0793 -ImplementationType SelfImplement
WARNING: Sefaultil Server is successfully registered.

AuthorizationKey : [REDACTED]0pz1ug8r88GnUctgn/e6UZ3EHBin7VL0Wnk2Ufp54iwLMrRQ==
EnterpriseIsRegistered : True
EnterpriseIsTrial : True
CommunityIsRegistered : True
ExpirationDate : 4/7/2016 2:00:15 PM
AppVersion : 1

PS C:\Users> _

```

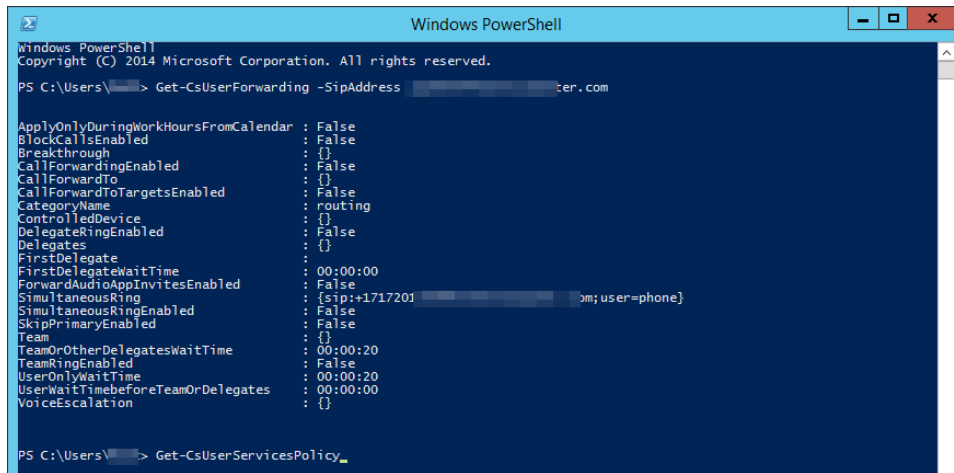
NOTE: If you have been sent a registration key via email can run this PowerShell instead of the above command: Set-SefaultilServerRegistration -RegistrationKey "{key here}"

Verify Installation

Now let's just run a SEFAUtil Server command to check the forwarding of a specific user in our environment.

PS> Get-CsUserForwarding -SipAddress user@yourdomain.com

And it should look something like the below PowerShell output.



```
Windows PowerShell
Copyright (C) 2014 Microsoft Corporation. All rights reserved.

PS C:\Users\> Get-CsUserForwarding -SipAddress user@yourdomain.com

ApplyOnlyDuringWorkHoursFromCalendar : False
BlockCallsEnabled                     : False
Breakthrough                          : {}
CallForwardingEnabled                 : False
CallForwardTo                         : {}
CallForwardToTargetsEnabled          : False
CategoryName                          : routing
ControlledDevice                      : {}
DelegateRingEnabled                  : False
Delegates                             : {}
FirstDelegate                         :
FirstDelegateWaitTime                 : 00:00:00
ForwardAudioAppInvitesEnabled         : False
SimultaneousRing                     : {sip:+1717201-@yourdomain.com;user=phone}
SimultaneousRingEnabled               : False
SkipPrimaryEnabled                   : False
Team                                  : {}
TeamOrOtherDelegatesWaitTime          : 00:00:20
TeamRingEnabled                       : False
UserOnlyWaitTime                      : 00:00:20
UserWaitTimeBeforeTeamOrDelegates    : 00:00:00
VoiceEscalation                       : {}

PS C:\Users\> Get-CsUserServicesPolicy_
```

Debugging: Something Went Wrong

If the command did not work you can use several resources to resolve the issue:

Landis Technologies Knowledge Base

<https://landiscomputer.freshdesk.com/support/solutions/6000133104>

Skype for Business MVP Greig Sheridan Article

<https://greiginsydney.com/installing-sefautil-server/>

Ask the Community

<https://www.yammer.com/attendantpro>

Start a Support Ticket 

<https://landiscomputer.freshdesk.com/>

Using SEFAUtil Server Commands

More

There are several interfaces to use SEFAUTIL Server:

- PowerShell
- BOT
- WCF EndPoint

	PowerShell	BOT	WCF
Forwarding	X	X	X
Delegates	X	X	X
Team Members	X	X	X
Presence	X	X	X

Note	X	X	X
Contact List	X		X

To get the commands from PowerShell you can always run:

PS>get-command -Module SefauilServerPowershell

```

PS C:\> Get-Command -Module SefauilServerPowershell | sort noun,verb
CommandType      Name                                     ModuleName
-----
Cmdlet           Set-CsUserContactList                  SefauilS...
Cmdlet           Set-CsUserDelegates                   SefauilS...
Cmdlet           Get-CsUserForwarding                  SefauilS...
Cmdlet           Set-CsUserForwarding                  SefauilS...
Cmdlet           Get-CsUserNote                        SefauilS...
Cmdlet           Set-CsUserNote                        SefauilS...
Cmdlet           Get-CsUserPresence                    SefauilS...
Cmdlet           Set-CsUserPresence                    SefauilS...
Cmdlet           Set-CsUserTeamMembers                 SefauilS...
Cmdlet           Get-SefauilServerRegistration          SefauilS...
Cmdlet           Set-SefauilServerRegistration          SefauilS...
Cmdlet           Get-SefauilServerSettings              SefauilS...
Cmdlet           Set-SefauilServerSettings              SefauilS...

PS C:\> _

```

To get help about a specific command, you can run:

PS>get-help Set-CsUserForwarding -Detailed

Set-CsUserContactList

Synopsis

Modify a user's contact list

Syntax

```

Set-CsUserContactList -ContactsSipAddress <String[]> [-GroupsToAddContactsTo
<String[]>] [-GroupsToRemoveContactsFrom <String[]>] [-AddToFavoritesGroup
[<SwitchParameter>]] [-AddToOtherContactsGroup [<SwitchParameter>]]
[-RemoveFromFavoritesGroup [<SwitchParameter>]]
[-RemoveFromOtherContactsGroup [<SwitchParameter>]] [-RemoveFromAllGroups
[<SwitchParameter>]] [-SipAddress] <String> [-Server <String>]
[<CommonParameters>]

```

Description

This command adds or removes one or more contacts from a user's contact list. This command can only be run against 1 user at a time but it can add or remove multiple contacts at a time. It can also add or remove the contacts from multiple groups at a time. Contacts are first removed from the groups in the remove list and then added to the groups in the add list. Contacts must be added or removed from at least one group, otherwise you will get an error.

Skype for Business client behavior to beware of

- In the SFB client, the Other Contacts group only shows contacts that have NOT been added to any other group. Therefore, if a contact is added to both the other contacts group and to any other group, that contact will not

appear in the Other Contacts group.

- In the SFB client, group names are case sensitive even though they only are shown in upper case. This command first does a case sensitive search when searching for groups to add the contacts to. If none are found, it then does a case insensitive search.

Parameters

-ContactsSipAddress <String[]>
Sip address of the contacts to add or remove from the user's contact list. The same add/remove actions will be performed on all contacts in this list. If different actions are required for each contact, then the command must be run multiple times.

Valid inputs:

user1@domain.com

sip:user1@domain.com

user2@domain.com, user2@domain.com, sip:user3@domain.com

-GroupsToAddContactsTo <String[]>
List of groups to add contacts to. If Other Contacts or Favorites are passed in, then the contacts will be added to those static groups.

Valid inputs:

Group1

Group2, Group3, Favorites

"Group 2", "Group 3"

-GroupsToRemoveContactsFrom <String[]>
List of groups to remove contacts from. If Other Contacts or Favorites are passed in, then the contacts will be removed from those static groups.

Valid inputs:

Group1

Group2, Group3, Favorites

"Group 2", "Group 3"

-AddToFavoritesGroup [<SwitchParameter>]
Add this parameter to add the contacts to the Favorites group.

-AddToOtherContactsGroup [<SwitchParameter>]
Add this parameter to add the contacts to the Other Contacts group.

-RemoveFromFavoritesGroup [<SwitchParameter>]
Add this parameter to remove the contacts from the Favorites group.

-RemoveFromOtherContactsGroup [<SwitchParameter>]
Add this parameter to remove the contacts from the Other Contacts group.

-RemoveFromAllGroups [<SwitchParameter>]
Add this parameter to remove the contacts from all groups and the contact list.

-SipAddress <String>
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

-Server <String>
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

SRV _sipinternaltls._tcp.{sipdomain.com}

SRV _sip._tls.{sipdomain.com}

A sipinternal.{sipdomain.com}

A sip.{sipdomain.com}

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

----- Example 1 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact1@domain.com -GroupsToAddContactsTo "Group 1"
```

Adds contact1 to Group 1

----- Example 2 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com, contact3@domain.com -GroupsToAddContactsTo Group2, Group3 -AddToFavoritesGroup
```

Adds contact2 and contact3 to Group2 and Group3 and Favorites

----- Example 3 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com -GroupsToAddContactsTo Group3 -RemoveFromAllGroups
```

First removes contact2 from all groups then adds contact2 to Group3

----- Example 4 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com -GroupsToRemoveContactsFrom Group3
```

Removes contact2 from Group3

----- Example 5 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com, sip:contact3@domain.com -GroupsToRemoveContactsFrom "Group 1", "Group 2" -RemoveFromFavoritesGroup
```

Removes contact2 and contact3 from Group 1, Group 2, and Favorites

----- Example 6 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com, sip:contact3@domain.com -RemoveFromAllGroups
```

Removes contact2 and contact3 from all groups

----- Example 7 -----

```
Set-CsUserContactList -SipAddress user1@domain.com -ContactsSipAddress contact2@domain.com -GroupsToAddContactsTo Group3 -GroupsToRemoveContactsFrom Group2
```

Remove contact2 from Group2 and add it to Group3

Set-CsUserDelegates

Synopsis

Updates a user's delegates

Syntax

```
Set-CsUserDelegates [-AddMembers <String[]>] [-RemoveAllMembersFirst  
[<SwitchParameter>]] [-DelayRingTime <Nullable`1[Int32]>] [-SipAddress]  
<String> [-Server <String>] [<CommonParameters>]
```

```
Set-CsUserDelegates [-RemoveMembers <String[]>] [-DelayRingTime  
<Nullable`1[Int32]>] [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

```
Set-CsUserDelegates [-RemoveAllMembers [<SwitchParameter>]] [-DelayRingTime  
<Nullable`1[Int32]>] [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

Description

This command adds or removes delegates from a user. Use this command if you want to set a user's delegates without changing their forwarding settings.

This command can be run 3 different ways:

- Add delegates
- Remove delegates
- Remove all delegates

Parameters

- AddMembers <String[]>**
Sip address of the contacts to add to the user's delegates.

Valid inputs:
user1@domain.com
sip:user1@domain.com
user2@domain.com, user2@domain.com, sip:user3@domain.com
- RemoveAllMembersFirst [<SwitchParameter>]**
Use this parameter to first clear the delegates list before adding other delegates. Valid only with the AddMembers parameter.
- DelayRingTime <Nullable`1[Int32]>**
Sets the amount of time in seconds to wait before also ringing the delegates. Valid range is 0 (immediate) - 60
- SipAddress <String>**
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com
- Server <String>**
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.
SRV _sipinternaltls._tcp.{sipdomain.com}
SRV _sip._tls.{sipdomain.com}
A sipinternal.{sipdomain.com}
A sip.{sipdomain.com}

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.
- RemoveMembers <String[]>**
Sip address of the contacts to remove from the user's delegates.

Valid inputs:
user1@domain.com
sip:user1@domain.com

user2@domain.com, user2@domain.com, sip:user3@domain.com

`-RemoveAllMembers [<SwitchParameter>]`
Removes all delegates from the user.

Examples

----- Example 1 -----

```
Set-CsUserDelegates -SipAddress user1@domain.com -AddMembers  
contact1@domain.com, sip:contact2@domain.com -RemoveAllMembersFirst  
-DelayRingTime 10
```

First removes all contacts from the user's delegates then adds contact1 and contact2 as delegates. Sets the ring delay to 10 so that incoming calls wait 10 seconds before ringing the delegates.

----- Example 2 -----

```
Set-CsUserDelegates -SipAddress user1@domain.com -AddMembers  
contact1@domain.com
```

Adds contact1 as a delegate

----- Example 3 -----

```
Set-CsUserDelegates -SipAddress user1@domain.com -RemoveMembers  
contact1@domain.com
```

Removes contact1 as a delegate

----- Example 4 -----

```
Set-CsUserDelegates -SipAddress user1@domain.com -RemoveAllMembers
```

Removes all delegates

Get-CsUserForwarding

Synopsis

Get a user's call forwarding settings.

Syntax

```
Get-CsUserForwarding [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

Description

Use this command to retrieve the user's current call forwarding settings.

Parameters

`-SipAddress <String>`
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

`-Server <String>`
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

```
SRV _sipinternaltls._tcp.{sipdomain.com}  
SRV _sip._tls.{sipdomain.com}
```



```
A sipinternal.{sipdomain.com}
A sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

```
----- Example 1 -----
Get-CsUserForwarding -SipAddress user@domain.com
Retrieves the user's call forwarding settings.
```

Set-CsUserForwarding

Synopsis

Changes a user's forwarding settings

Syntax

```
Set-CsUserForwarding -DisableForward [<SwitchParameter>]
[-UnansweredCallsToVoicemail [<SwitchParameter>]] [-UnansweredCallsToOther
<String>] [-UnansweredCallWaitTime <Nullable 1[Int32]>] [-SipAddress]
<String> [-Server <String>] [<CommonParameters>]

Set-CsUserForwarding -EnableForward <FwdDestinationType> [-OtherDestination
<String>] [-SetDelegates <String[]>] [-SipAddress] <String> [-Server
<String>] [<CommonParameters>]

Set-CsUserForwarding -EnableSimRing <SimRingDestinationType>
[-OtherDestination <String>] [-UnansweredCallsToVoicemail
<SwitchParameter>] [-UnansweredCallsToOther <String>]
[-UnansweredCallWaitTime <Nullable 1[Int32]>] [-SetDelegates <String[]>]
[-SetTeamMembers <String[]>] [-DelegateTeamDelayRingTime
<Nullable 1[Int32]>] [-SipAddress] <String> [-Server <String>]
[<CommonParameters>]
```

Description

This command is used to change a user's call forwarding settings.

DisableForward mode = Calls will ring to the user and after some time the call will transfer to the Unanswered Calls destination.

EnableForward mode = Calls will immediately ring at the destination specified and will not ring at the user's Sfb endpoint.

EnableSimRing mode = Calls will ring to the user and another destination at the same time. After some time the call will transfer to the Unanswered Calls destination.

The DisableForward, EnableForward, and EnableSimRing parameters are mutually exclusive. Only one of them can be used at a time.

Parameters

- DisableForward [<SwitchParameter>]
This parameter puts the cmdlet in Disable Forward mode.
- UnansweredCallsToVoicemail [<SwitchParameter>]
Send unanswered calls to voicemail.

valid only with DisableForward and EnableSimRing.
Cannot be used with the UnansweredCallsToVoicemail parameter.
- UnansweredCallsToOther <String>
Specifies another destination to send unanswered calls to. Valid input is a sip address or phone number.

Valid only with `DisableForward` and `EnableSimRing`.
Cannot be used with the `UnansweredCallsToOther` parameter.

`-UnansweredCallWaitTime <Nullable`1[Int32]>`
Specify the amount of time in seconds to wait before sending the call to voicemail or another destination. Valid range is 1 - 60

Valid only with `DisableForward` and `EnableSimRing`.

`-SipAddress <String>`
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

`-Server <String>`
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

```
SRV _sipinternaltls._tcp.{sipdomain.com}
SRV _sip._tls.{sipdomain.com}
A sipinternal.{sipdomain.com}
A sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

`-EnableForward <FwdDestinationType>`
This parameter puts the cmdlet in Enable Forward mode.
Accepts the following values:
Voicemail
Delegates
Other

`-OtherDestination <String>`
Specifies another destination to forward or sim ring. Valid input is a sip address or phone number.

Valid only with `EnableForward` and `EnableSimRing`.
Valid only and required when the destination type is set to Other.

`-SetDelegates <String[]>`
Sip address of the contacts to set as the user's delegates. This will clear all existing delegates first.

Valid inputs:
user1@domain.com
sip:user1@domain.com
user2@domain.com, user2@domain.com, sip:user3@domain.com

Valid only with `EnableForward` and `EnableSimRing`.

`-EnableSimRing <SimRingDestinationType>`
This parameter puts the cmdlet in Enable SimRing mode.
Accepts the following values:
Delegates
Team
Other

`-SetTeamMembers <String[]>`
Sip address of the contacts to set as the user's team members. This will clear all existing team members first.

Valid inputs:
user1@domain.com
sip:user1@domain.com
user2@domain.com, user2@domain.com, sip:user3@domain.com

valid only with EnableSimRing.

```
-DelegateTeamDelayRingTime <Nullable`1[Int32]>  
Sets the amount of time in seconds to wait before also ringing the  
delegates or team members. Valid range is 0 (immediate) - 60
```

valid only with EnableSimRing.

Examples

----- Example 1 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -DisableForward  
Disable forwarding.
```

----- Example 2 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -DisableForward  
-UnansweredCallsToVoicemail -UnansweredCallWaitTime 30  
Disable forwarding and send unanswered calls to voicemail in 30 seconds.
```

----- Example 3 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -DisableForward  
-UnansweredCallsToOther "+17171234567"  
Disable forwarding and send unanswered calls to +17171234567
```

----- Example 4 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -EnableForward Voicemail  
Enable forwarding directly to voicemail.
```

----- Example 5 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -EnableForward Delegates  
-SetDelegates contact1@domain.com, contact2@domain.com  
Enable forwarding to delegates and set the delegates to contact1 and contact2
```

----- Example 6 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -EnableForward Other  
-OtherDestination "+17171234567"  
Enable forwarding directly to +17171234567
```

----- Example 7 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -EnableSimRing Other  
-OtherDestination "+17171234567"  
Enable simultaneous ring to +17171234567
```

----- Example 8 -----

```
Set-CsUserForwarding -SipAddress user1@domain.com -EnableSimRing Team  
-SetTeamMembers contact1@domain.com, contact2@domain.com  
-DelegateTeamDelayRingTime 10 -UnansweredCallsToVoicemail  
-UnansweredCallWaitTime 30
```

Enable simultaneous ring to team members. Set the team to contact1 and contact2. Only ring the team after 10 seconds. After 30 seconds, send the call to voicemail.

Instant Message BOT

Disable Forward

```
/DisableForward: /unanswereddest:voicemail sip:<user_uri>  
/unanswereddest:<voicemail | phonenumber | sipaddress>  
/unansweredwaittime:<1-60>
```

Enable Forward

```
/EnableFwd:voicemail sip:<user_uri>  
/EnableFwd:other <user_to_forward_to_uri> sip:<user_uri>  
/EnableFwd:delegates <delegate_uri, delegate_uri> sip:<user_uri>
```

Enable Sim Ring

```
/EnableSimRing:other <phone_number> sip:<user_uri>  
/EnableSimRing:delegates <delegate_uri, delegate_uri> sip:<user_uri>  
/EnableSimRing:team <team_uri, team_uri> sip:<user_uri>
```

Optional parameters

```
/unanswereddest:<voicemail | phonenumber>  
/unansweredwaittime:<1-60>  
/delegateteamdelayringtime:<0-60>
```

Get-CsUserNote

Synopsis

Gets a user's Personal and out of Office note.

Syntax

```
Get-CsUserNote [-SipAddress] <String> [-Server <String>] [<CommonParameters>]
```

Description

Use this command to retrieve the user's personal and out of office note.

Parameters

```
-SipAddress <String>  
Specify the sip address of the user that you want to act on. The following formats are accepted:  
user@sipdomain.com  
sip:user@sipdomain.com  
  
-Server <String>  
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.  
  
One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.  
SRV _sipinternaltls._tcp.{sipdomain.com}  
SRV _sip._tls.{sipdomain.com}  
A sipinternal.{sipdomain.com}  
A sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

```
----- Example 1 -----  
Get-CsUserNote -SipAddress user@domain.com  
Get the user's notes.
```

Set-CsUserNote

Synopsis

Updates a user's personal note.

Syntax

```
Set-CsUserNote -Note <String> [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

Description

This command sets a user's personal note to the value supplied. The note will be updated in the user's client.

Parameters

-Note <String>

-SipAddress <String>
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

-Server <String>
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

```
SRV    _sipinternaltls._tcp.{sipdomain.com}  
SRV    _sip._tls.{sipdomain.com}  
A      sipinternal.{sipdomain.com}  
A      sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

```
----- Example 1 -----  
Set-CsUserNote -SipAddress user@sipdomain.com -Note "this is a test note"  
This command sets the user's note to this is a test note
```

```
----- Example 2 -----  
Get-CsUser John | Set-CsUserNote -Note "this is a test note"
```

This command pipes the output from the Skype for Business Get-CsUser command into the Set-CsUserNote command. This sets the note for John to this is a test note

Instant Message BOT

```
/ChangeNote:<Note> sip:<user_uri>
```

Get-CsUserPresence

Synopsis

Gets a user's presence.

Syntax

```
Get-CsUserPresence [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

Description

Use this command to retrieve the user's Skype for Business presence.

Parameters

-SipAddress <String>
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

-Server <String>
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

```
SRV    _sipinternaltls._tcp.{sipdomain.com}  
SRV    _sip._tls.{sipdomain.com}  
A      sipinternal.{sipdomain.com}  
A      sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

```
----- Example 1 -----  
  
Get-CsUserPresence -SipAddress user@domain.com  
  
Get the user's presence.
```

Set-CsUserPresence

Synopsis

Updates a user's presence.

Syntax

```
Set-CsUserPresence -Presence <PresenceType> [-SipAddress] <String> [-Server
```

<String>] [<CommonParameters>]

Description

This command sets a user's presence to the value supplied. The presence will be updated in the user's client.

Parameters

-Presence <PresenceType>
Specify the presence to set for the user. When setting the presence, it is invalid to set it to Unknown.

-SipAddress <String>
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com

-Server <String>
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.

```
SRV    _sipinternaltls._tcp.{sipdomain.com}
SRV    _sip._tls.{sipdomain.com}
A      sipinternal.{sipdomain.com}
A      sip.{sipdomain.com}
```

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.

Examples

----- Example 1 -----

```
Set-CsUserPresence -SipAddress user@sipdomain.com -Presence Available
This command sets the user's presence to Available.
```

----- Example 2 -----

```
Set-CsUserPresence -SipAddress user@sipdomain.com -Presence Reset
This command will reset the user's presence to the automatic presence supplied by the server.
```

Instant Message BOT

/ChangePresence:<PresenceState> sip:<user_uri>

Valid Presence States: Available, Busy, DoNotDisturb, Away, BeRightBack, OffWork, Offline, Reset

Set-CsUserTeamMembers

Synopsis

Updates a user's team call members.

Syntax

```
Set-CsUserTeamMembers [-AddMembers <String[]>] [-RemoveAllMembersFirst  
[<SwitchParameter>]] [-DelayRingTime <Nullable`1[Int32]>] [-SipAddress]  
<String> [-Server <String>] [<CommonParameters>]
```

```
Set-CsUserTeamMembers [-RemoveMembers <String[]>] [-DelayRingTime  
<Nullable`1[Int32]>] [-SipAddress] <String> [-Server <String>]  
[<CommonParameters>]
```

```
Set-CsUserTeamMembers [-RemoveAllMembers [<SwitchParameter>]]  
[-DelayRingTime <Nullable`1[Int32]>] [-SipAddress] <String> [-Server  
<String>] [<CommonParameters>]
```

Description

This command adds or removes team members from a user. Use this command if you want to set a user's team members without changing their forwarding settings.

This command can be run 3 different ways:

- Add team members
- Remove team members
- Remove all team members

Parameters

- AddMembers <String[]>**
Sip address of the contacts to add to the user's team members list.

Valid inputs:
user1@domain.com
sip:user1@domain.com
user2@domain.com, user2@domain.com, sip:user3@domain.com
- RemoveAllMembersFirst [<SwitchParameter>]**
Use this parameter to first clear the team members list before adding other team members. Valid only with the AddMembers parameter.
- DelayRingTime <Nullable`1[Int32]>**
Sets the amount of time in seconds to wait before also ringing the team members. Valid range is 0 (immediate) - 60
- SipAddress <String>**
Specify the sip address of the user that you want to act on. The following formats are accepted:
user@sipdomain.com
sip:user@sipdomain.com
- Server <String>**
Optional. Specifies the FQDN of the Skype for Business pool where the user is homed. Useful if automatic server discovery is not properly configured in your environment.

One of the following DNS records needs to be configured in your internal environment to enable automatic server discovery.
SRV _sipinternaltls._tcp.{sipdomain.com}
SRV _sip._tls.{sipdomain.com}
A sipinternal.{sipdomain.com}
A sip.{sipdomain.com}

You may get the following error message if automatic discovery is not configured and this parameter is not supplied.
Microsoft.Rtc.Signaling.OperationFailureException:Automatic server discovery for the given sip user uri failed.
- RemoveMembers <String[]>**
Sip address of the contacts to remove from the user's team members list.

Valid inputs:
user1@domain.com
sip:user1@domain.com

user2@domain.com, user2@domain.com, sip:user3@domain.com

`-RemoveAllMembers [<SwitchParameter>]`
Removes all team members from the user.

Examples

----- Example 1 -----

```
Set-CsUserTeamMembers -SipAddress user1@domain.com -AddMembers  
contact1@domain.com, sip:contact2@domain.com -RemoveAllMembersFirst  
-DelayRingTime 10
```

First removes all contacts from the user's team then adds contact1 and contact2 as team members. Sets the ring delay to 10 so that incoming calls wait 10 seconds before ringing the team.

----- Example 2 -----

```
Set-CsUserTeamMembers -SipAddress user1@domain.com -AddMembers  
contact1@domain.com
```

Adds contact1 as a team member

----- Example 3 -----

```
Set-CsUserTeamMembers -SipAddress user1@domain.com -RemoveMembers  
contact1@domain.com
```

Removes contact1 as a team member.

----- Example 4 -----

```
Set-CsUserTeamMembers -SipAddress user1@domain.com -RemoveAllMembers
```

Removes all team members

Get-SefaultilServerRegistration

Synopsis

Gets the registration status of SEFAUtil Server.

Syntax

```
Get-SefaultilServerRegistration [<CommonParameters>]
```

Description

Gets the detailed registration status of SEFAUtil Server.

Examples

----- Example 1 -----

```
Get-SefaultilServerRegistration
```

Get the registration status.

Set-SefaultilServerRegistration

Synopsis

Registers the SEFAUtil Server

Syntax

```
Set-SefaultilServerRegistration -Name <String> -EmailAddress <String>
-PhoneNumber <String> -ImplementationType <ImplementationType>
[<CommonParameters>]

Set-SefaultilServerRegistration -RegistrationKey <String> [<CommonParameters>]
```

Description

Use this command to request and install the registration key for SEFAUtil Server. Below are the 2 ways to run this command:

```
Set-SefaultilServerRegistration -Name "contact name" -EmailAddress
"contactemail@domain.com" -PhoneNumber "phone number" -ImplementationType
Partner or PartnerImplement or SelfImplement
```

The above method requires Internet access to the following URL
<https://lcregistration.landiscomputer.com>

```
Set-SefaultilServerRegistration -RegistrationKey "paste key here"
Contact sales@landiscomputer.com to request a key to use with the above
method.
```

To generate an auth key, the sip address of the trusted application endpoint is needed. To get that, run the following command:

```
Get-CsTrustedApplicationEndpoint -ApplicationId sefaultilserver
```

Parameters

-Name <String>
Specifies the contact's name.

-EmailAddress <String>
Specifies the contact's email address.

-PhoneNumber <String>
Specifies the contact's phone number.

-ImplementationType <ImplementationType>
Specify the type of implementation.
Partner = Microsoft Communications partner.
PartnerImplemented = A Microsoft Partner implemented the product.
SelfImplement = The end customer implemented the product.

-RegistrationKey <String>
Specifies the registration key to install.

Examples

----- Example 1 -----

```
Set-SefaultilServerRegistration -Name "contact name" -EmailAddress
"contactemail@domain.com" -PhoneNumber "phone number" -ImplementationType
SelfImplement
```

This command retrieves a key from the online key service at
<https://lcregistration.landiscomputer.com>

```
AuthorizationKey      : <the auth key that was retrieved or installed>
EnterpriseIsRegistered : True
EnterpriseIsTrial     : False
CommunityIsRegistered : True
ExpirationDate        : 3/8/2216 12:00:00 AM
AppVersion            : 1
```

----- Example 2 -----

```
Set-SefaultilServerRegistration -RegistrationKey "paste key here"
```

This command installs the registration key specified in the registration key parameter.

```
AuthorizationKey      : <the auth key that was retrieved or installed>
EnterpriseIsRegistered : True
EnterpriseIsTrial     : False
CommunityIsRegistered : True
ExpirationDate        : 3/8/2216 12:00:00 AM
AppVersion            : 1
```

Get-SefaultilServerSettings

Synopsis

Gets a table of configurable settings for SEFAUtil Server.

Syntax

```
Get-SefaultilServerSettings [<CommonParameters>]
```

Description

Gets a table of configurable settings for SEFAUtil Server.

Examples

----- Example 1 -----

```
Get-SefaultilServerSettings
```

Set-SefaultilServerSettings

Synopsis

Changes SEFAUtil Server settings.

Syntax

```
Set-SefaultilServerSettings [-MultiDelegatePublishDelay <Int32>]
[-IMBotNotifyUserOfChange [<Boolean>]] [<CommonParameters>]
```

Description

Use this command to change settings in SEFAUtil Server.

Parameters

- MultiDelegatePublishDelay <Int32>
Specifies the delegate publish delay in milliseconds. when setting a user's delegates (Set-CsUserForwarding or Set-CsUserDelegates) and adding/removing multiple delegates, this setting determines how many milliseconds to delay between each delegate publish, This delay can resolve errors in some environments. Do not change unless necessary.
- IMBotNotifyUserOfChange [<Boolean>]
Specifies whether or not to notify the user what a change is made to their settings. If user A uses the IM bot to change user B's presence, this setting determines whether or not User B will be notified by IM of the change.

Examples

----- Example 1 -----

```
Set-SefaultServerSettings -MultiDelegatePublishDelay 200
```

This command sets the delegate publish delay to 200 milliseconds.

----- Example 2 -----

```
Set-SefaultServerSettings -IMBotNotifyUserOfChange $false
```

This command will prevent a user from being notified when their setting changes.

Updating SEFAUtil Server

Available Here:

<https://landiscomputer.freshdesk.com/support/solutions/articles/6000175014-sefault-server-update-downloads>