SfB Wizard v4.0

by E-Tel-IT GmbH

Software Deployment and Configuration

Date	Version	Remarks
2014-09-27	1.0	Initial Version
2015-06-29	1.1	Skype for Business and Windows 10 added
2015-09-12	1.2	New registry keys for hiding menu items and config tabs added
2016-11-26	1.3	Settings for version 3.0 added
2018-02-28	1.4	Settings for version 4.0 added

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Software deployment and configuration

Starting position

SfB Wizard has to be installed on every client on which at least one function is required. On the following operating systems SfB Wizard can be installed, however, the right version depending of the operating system and Lync / Skype For Business version is to be used:

- Windows 7 x86 und x64
- Windows 8 x86 und x64
- Windows 8.1 x86 und x64
- Windows 10 x86 und x64

SfB Wizard is compatible with the following versions of Lync / Skype for Business:

- Lync 2010 x86 und x64
- Lync 2013 x86 und x64
- Skype for Business 2015 x86 und x64

Ideally Lync / Skype for Business is already installed on the client, if the setup of SfB Wizard is running, but is not a condition.

Setup

SfB Wizard delivers a MSI installation package. For the software deployment a silent installation with logging is recommended. For this purpose, the following command line can be used:

```
Msiexec /i "<Path to SfBWizard.msi>" ALLUSESR=1 REBOOT=ReallySuppress /qn /l*v
"%Temp%\LyncWizard_Install.log"
```

SfB Wizard does not start automatically after installation. It must be started in the same user context as Lync/Skype for Business has started. The Setup creates a shortcut in the Start menu. However SfB Wizard is started automatically when a user logs on by the registry entry HKLM\Software\Microsoft\Windows\CurrentVersion\Run.

Once SfB Wizard is started, the icon  appears in the task bar and a notification (balloon) appears as soon as the connection to Lync/Skype for Business client is established.

For customization of the default configuration, before or post execution of the msiexec, import of registry keys are suggested (see section Basic Configuration).

For deploying the license information (license key and SIP domains), using GPO is strongly suggested.

Configuration

Configuration of SfB Wizard can be done by registry or group policy. For configuration by GPO an Admin-Template (ADMX) can be downloaded from the LyncWizard.com Download page. Group policy settings are deployed by Active Directory to the registry of the client, no manual adjustments should be carried out directly in this registry hive. All settings can be configured with using the ADMX.

For the configuration of SfB Wizard by GPO or registry, the following registry hives and sources are read. The first founded value is applied:

1. GPO (HKLM\Software \Policies\LyncWizard.com\Lync Wizard\v4.0)
2. HKCU (HKCU\Software\LyncWizard.com\Lync Wizard\v4.0)
3. HKLM (HKLM\Software\LyncWizard.com\Lync Wizard\v4.0)
4. Application standard values

Using the configuration sources

The configuration values are used in the following priority:

1. Values, which are set by GPO, cannot be changed by the user. They appear grayed out in the SfB Wizard configuration window.
2. Values in the HKCU hive containing the values set by the user.
3. Values in the HKLM hive serve as default configuration values for the user, which has not define different configuration. If SfB Wizard is used on a 64-bit x86 operating system, the key is to be inserted in the Wow6432Node path (HKLM\Software\Wow6432Node\LyncWizard.com\Lync Wizard\v4.0).
4. If no configuration values are defined, the application-internal default values are used.

If the value DisableUserConfig is set to 0x1, the user cannot make changes to the configuration store. The Ok button in the configuration window is disabled and a tooltip which explains that the settings are managed by the administrator is displayed. In this case, the combination of HKLM and possibly existing HKCU values will used and remain unchanged. However, the user can still influence the behavior for call waiting.

Registry Keys

The following table shows the possible configuration parameters:

Table 1: SfB Wizard configuration settings

Key	Typ	Beschreibung
APIKey	SZ	API-Key for tel.search.ch
BusyBehavior	DWORD	Treatment of call waiting
BusyContactURI	SZ	Forwarding destination for call waiting
CustomBalloon	DWORD	Instead of using Windows Balloon Tip the Customized Balloon Tip are used. Useful when Windows Balloon Tips are disabled by policy.
CustomBalloonOffsetX	DWORD	Horizontal position of Customized Balloon Tip
CustomBalloonOffsetY	DWORD	Vertical position of the Customized Balloon Tip
EnableBusyCalls	DWORD	Enable call waiting feature
EnableContactLookup	DWORD	Enable contact lookup feature
EnableHotkeyDialer	DWORD	Enable hotkey dialer feature
EnableRunCmd	DWORD	Enable actions on incoming call feature
EnablePOR	DWORD	Enable presence oriented reaction feature
HotKeyDialKey	DWORD	Button for hotkey dialer
HotKeyDialModifier	DWORD	Modifier button for hotkey dialer (Shift, Ctrl, Alt, Win)
HotkeyDialNormalization	MULTI_SZ	Normalization rules for highlighted number when hotkey dialer is used
LicenseKey	SZ	License key SfB Wizard
SearchKnownContact	DWORD	Still search already found contacts in the Lync Address Book or Outlook Contacts List in the directory of SfB Wizard.
SIPDomains	MULTI_SZ	Licensed SIP-Domains
DebugLogging	DWORD	Enable logging for debugging
CultureInfo	SZ	Display language
DisableUpdateCheck	DWORD	Disable Check for Updates (can only be disabled if SfB Wizard is licensed)
DisableUserConfig	DWORD	Prevent user configuration
BusyIMAnswer	SZ	Text to be sent when a call is rejected because of call waiting, when the target person is IM-capable.
BusyDisconnectReasonForwarded	DWORD	Call waiting: Disconnect reason for forwarded calls
BusyDisconnectReasonDelegated	DWORD	Call waiting: Disconnect reason for delegated calls
BusyDisconnectReason	DWORD	Call waiting: Disconnect reason for normal/direct calls

Key	Typ	Beschreibung
ContactLookupPatterns	MULTI_SZ	Database sources for caller resolution by contact lookup feature
ContactLookupLDAPBaseDN	SZ	LDAP base DN
ContactLookupLDAPFilter	SZ	LDAP filter
ContactLookupLDAPPassword	SZ	LDAP password for authentication
ContactLookupLDAPServer	SZ	LDAP server hostname oder IP addresse
ContactLookupLDAPServerPort	DWORD	LDAP server TCP port
ContactLookupLDAPUser	SZ	LDAP user ID for authentication
RunCmdItems	MULTI_SZ	List of all actions executing for incoming calls
PORItems	MULTI_SZ	List of all presence oriented ations for incoming calls

HideMenuCallHistory	DWORD	Hides context menu item „Call History”
HideMenuRunCmd	DWORD	Hides context menu item “Execute actions on incoming call”
HideMenuBusyCalls	DWORD	Hides context menu item „Call Waiting“
HideMenuBusyCallsNone	DWORD	Hides the menu item „Allow Call Wainting“ in context sub menu „Call Waiting“
HideMenuBusyCallsBusy	DWORD	Hides the menu item „Reject call (send busy tone)“ in context sub menu „Call Waiting“
HideMenuBusyCallsIgnore	DWORD	Hides the menu item „Handle as unanswered call“ in context sub menu „Call Waiting“
HideMenuBusyCallsForward	DWORD	Hides the menu item „Forward calls to“ in context sub menu „Call Waiting“
HideMenuBusyCallsTarget	DWORD	Hides the menu item „Select forward destination“ in context sub menu „Call Waiting“
HideMenuConfig	DWORD	Hides context menu item „Configure“
HideMenuExit	DWORD	Hides context menu item „Exit“
HideConfigTabGeneral	DWORD	Hides the tab „General“ in settings window
HideConfigTabContactLookup	DWORD	Hides the tab „Contact Lookup“ in settings window
HideConfigTabBusyCalls	DWORD	Hides the tab „Call Waiting“ in settings window
HideConfigTabHotkeyDialer	DWORD	Hides the tab „Hotkey Dialer“ in settings window
HideConfigTabRunCmd	DWORD	Hides the tab „Actions“ in settings window
HideConfigTabLicense	DWORD	Hides the tab „License“ in settings window
HideConfigTabPOR	DWORD	Hides the tab “Presence reaction” in settings window

Basic Configuration

To define the values in the registry properly, we recommend that you make the configuration on a PC using SfB Wizard and then export the hive HKCU\Software\LyncWizard.com\Lync Wizard\v4.0.

To use this configuration as a base during the installation, open the export file with a text editor and replace the phrase "HKEY_CURRENT_USER" by "HKEY_LOCAL_MACHINE" throughout the document. Now you can import this file into the Registry before or after you run the MSI:

```
Regedit /s "<Path to Regfile>"
```

GPO

Individual values in the GPO must match to a specific syntax (such as data sources for the number resolution). To find out the correct syntax, we recommend carrying out the configuration via SfB Wizard directly. The corresponding value is stored in the HKCU hive, read with Regedit and apply the value to the GPO.

Interfaces for number resolution

SfB Wizard provides 2 interfaces for the number resolution:

- LDAP
- Webservice tel.search.ch

By default SfB Wizard is configured only numbers will be resolved, if the name cannot be found by Lync/Skype for Business using the Lync Address Book (corresponding to the AD-contacts) or the Outlook personal contacts.

The configuration of the contact search is done via the context menu "Settings" in the tab "Contact Search":

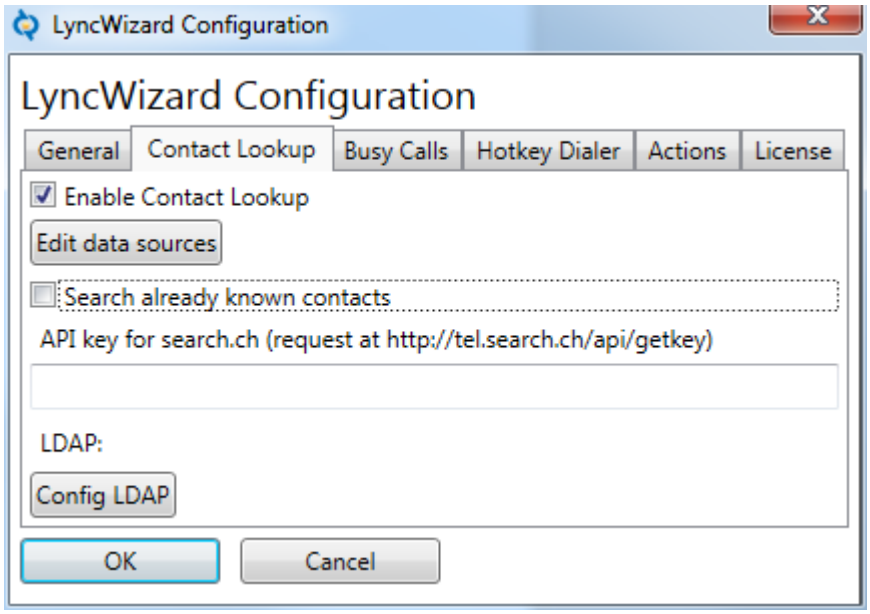

Figure 1: SfB Wizard Contact Lookup Configuration

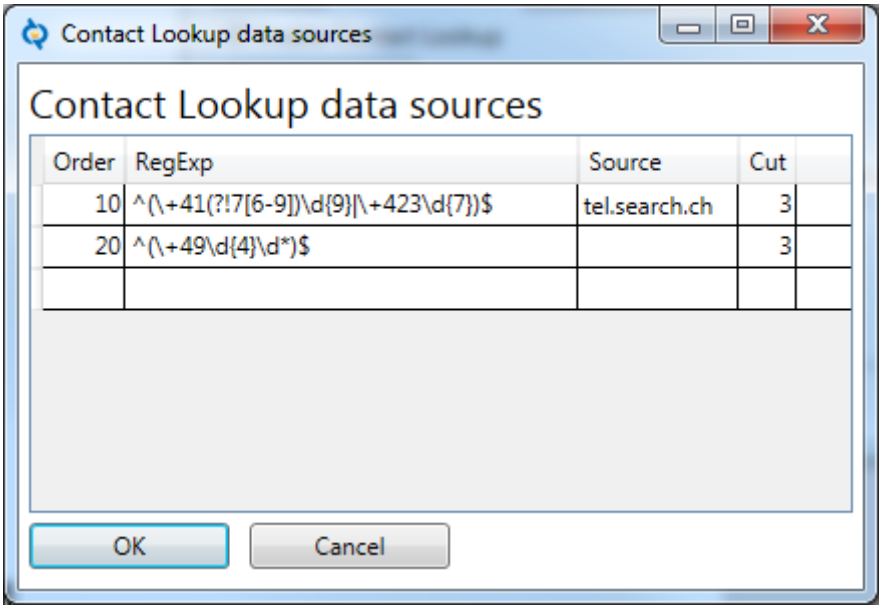

Figure 2: SfB Wizard data sources

The list of data sources will be worked through descending order. Once a RegExp is true, the number is searched in the data source. If no matches found, the number of digits will be reduced from right by one character, and the search is repeated until either a hit or the maximum number of digits for reduce has reached (column “Cut”). If no matches are found, the list of data sources continues to be processed.

Once a match is found, the search stops, and the search result will be displayed.

Tel.search.ch

Searches at tel.search.ch are free, but must be allocated by an API-Key of origin. Per API-Key and day 1000 lookups are granted.

LDAP

With the LDAP data source, an LDAP directory can be addressed (eg ESTOS Meta Directory).

Debug Logging

Does SfB Wizard not work as expected, detailed log information about the events and the behavior of SfB Wizard is interesting. Logging must be activated beforehand, however, the value "DebugLogging" in the registry must be set to 0x1 or via the GUI. Go to the Configuration, General window to activate the checkbox "Enable debug logging".

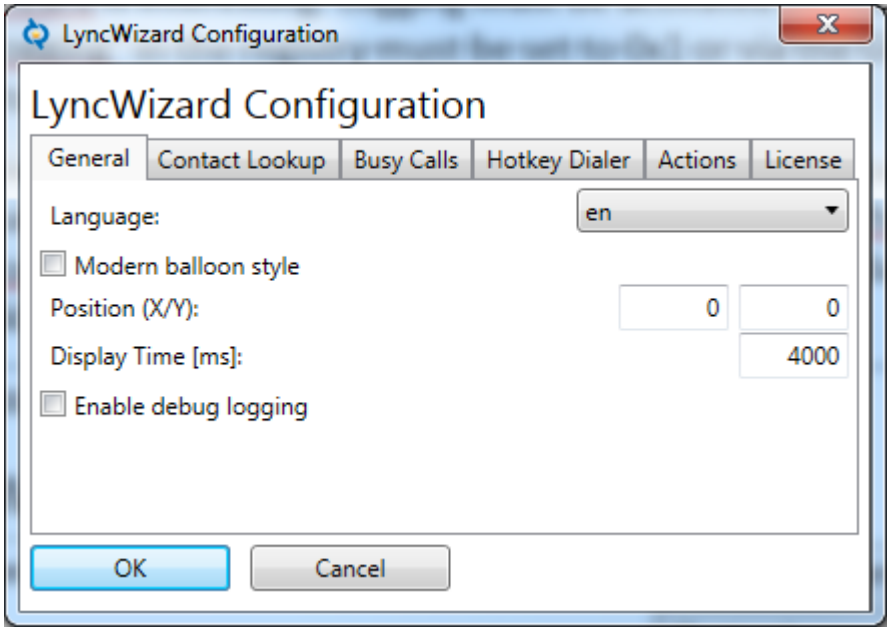

Figure 3: Debug Logging

SfB Wizard hast to be restarted after changing the Debug Logging checkbox.

The log file "LyncWizard.log" is applied in the user's "%Temp%" directory. It is an ANSI text file.

Here is an excerpt of an incoming PSTN call:

```
17.06.2014 10:51:56 Conversation added with state:Notified
17.06.2014 10:51:56 Modality Action: Accept:True
17.06.2014 10:51:56 Modality Action: Reject:True
17.06.2014 10:51:56 Modality Action: Connect:True
17.06.2014 10:51:56 Modality Action: Disconnect:True
17.06.2014 10:51:56 Modality Action: Local Transfer:False
17.06.2014 10:51:56 Modality Action: Remote Transfer:False
17.06.2014 10:51:56 Modality Action: Retreive:False
17.06.2014 10:51:56 Modality Action: Forward:True
17.06.2014 10:51:56 Modality Action: Hold:False
17.06.2014 10:51:56 Modality Action: Set Property:True
17.06.2014 10:51:56 ContactInformation.ActivityID: Busy
17.06.2014 10:51:56 Concurrent conversations: 2
17.06.2014 10:51:56 Conversation added: Caller: Hans Muster
17.06.2014 10:51:56 Conversation added: Phone number: +41xxxxxxxxx
```

```
17.06.2014 10:51:56 Contact lookup active
17.06.2014 10:51:56 LDAP Connection path: LDAP://localhost:712/dc=web
17.06.2014 10:51:56 LDAP Result: c=Switzerland
17.06.2014 10:51:56 LDAP Result: databasename=TwixTel
17.06.2014 10:51:56 LDAP Result: distinguishedname=TwixTel
17.06.2014 10:51:56 LDAP Result: displayname=Direktionssekretariat
17.06.2014 10:51:56 LDAP Result: createtimestamp=17.06.2014 08:51:56
17.06.2014 10:51:56 LDAP Result: databasetype=20
17.06.2014 10:51:56 LDAP Result: modifytimestamp=17.06.2014 08:51:56
17.06.2014 10:51:56 LDAP Result: modifiersname=TwixTel
17.06.2014 10:51:56 LDAP Result: entryidmeta=pbd3f0a95adee27d7e4790072a55b1c7a9
17.06.2014 10:51:56 LDAP Result:
entryid=<SN>Direktionssekretariat</SN><PB>+41xxxxxxxxx</PB><PC>9000</PC><AC>St.
Gallen</AC>
17.06.2014 10:51:56 LDAP Result: entryiddb=DB16
17.06.2014 10:51:56 LDAP Result: sn=Direktionssekretariat
17.06.2014 10:51:56 LDAP Result: entryidstore=TwixTel
17.06.2014 10:51:56 LDAP Result:
adspath=LDAP://localhost:712/cn=\<SN\>Direktionssekretariat\<\/SN\>\<PB\>\2B41xxxxx
xxxx\<\/PB\>\<PC\>9000\<\/PC\>\<AC\>St. Gallen\<\/AC\>,ou=TwixTel,dc=web
17.06.2014 10:51:56 LDAP Result: telephonenumber=+41xxxxxxxxx
17.06.2014 10:51:56 LDAP Result: postalcode=9000
17.06.2014 10:51:56 LDAP Result: objectclass=top
17.06.2014 10:51:56 LDAP Result: objectclass=person
17.06.2014 10:51:56 LDAP Result: objectclass=contactperson
17.06.2014 10:51:56 LDAP Result: creatorsname=TwixTel
17.06.2014 10:51:56 LDAP Result: l=St. Gallen
17.06.2014 10:51:56 LDAP Result: name=Direktionssekretariat
17.06.2014 10:51:56 LDAP Result:
cn=<SN>Direktionssekretariat</SN><PB>+41xxxxxxxxx</PB><PC>9000</PC><AC>St.
Gallen</AC>
17.06.2014 10:51:56 Address found: True: Direktionssekretariat
17.06.2014 10:59:34 Conversation removed: Caller: Hans Muster
```

Based on the logs the cause of the malfunction is very easy to. This file should be sent with every support request.

The file can be deleted anytime. It will be automatically recreated. Information about the used version of SfB Wizard only are written to the log file during startup of SfB Wizard.