



# Teams Wizard v0.6 up

by LyncWizard.com



## Software Deployment and Configuration

Date	Version	Remarks
2021-05-10	2.00	Initial Version
2021-08-01	2.10	Extending Actions and Contact Lookup
2023-01-15	2.20	Extending ETV Inside
2023-04-17	2.30	Extending External App, Bug Fix
2024-04-07	2.40	Minor changes

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## Software deployment and configuration

### Starting position

Teams Wizard has to be installed on every client on which at least one function is required. On the following operating systems Teams Wizard can be installed, however, the right version depending of the operating system version is to be used:

- Windows 10 1903 or higher x86 and x64
- Windows 11 x86 and x64

Teams Wizard is compatible with the following versions MS Teams:


- MS Teams Version 1.3. x86 und x64 and higher

### Setup

Teams 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 TeamsWizard.msi>" ALLUSESR=1 REBOOT=ReallySuppress /qn /l*v "%Temp%\TeamsWizard_Install.log"
```

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

Once Teams Wizard is started, the icon  appears in the task bar.

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

### Configuration

Configuration of Teams Wizard can be done by registry or group policy.

For the configuration of Teams 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\Teams Wizard\v1.0)
2. HKCU (HKCU\Software\LyncWizard.com\Teams Wizard\v1.0)
3. HKLM (HKLM\Software\LyncWizard.com\Teams Wizard\v1.0)
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 Teams 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 Teams 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\Teams Wizard\v1.0).
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 be 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: Teams Wizard configuration settings

Key	Typ	Beschreibung
<code>APIKey</code>	<code>SZ</code>	API-Key for tel.search.ch
<code>CustomBalloon</code>	<code>DWORD</code>	Instead of using Windows Balloon Tip the Customized Balloon Tip are used. Useful when Windows Balloon Tips are disabled by policy.
<code>CustomBalloonOffsetX</code>	<code>DWORD</code>	Horizontal position of Customized Balloon Tip
<code>CustomBalloonOffsetY</code>	<code>DWORD</code>	Vertical position of the Customized Balloon Tip
<code>EnableContactLookup</code>	<code>DWORD</code>	Enable contact lookup feature
<code>EnableHotkeyDialer</code>	<code>DWORD</code>	Enable hotkey dialer feature
<code>EnableRunCmd</code>	<code>DWORD</code>	Enable actions on incoming call feature
<code>HotKeyDialKey</code>	<code>DWORD</code>	Button for hotkey dialer
<code>HotKeyDialModifier</code>	<code>DWORD</code>	Modifier button for hotkey dialer (Shift, Ctrl, Alt, Win)
<code>HotkeyDialNormalization</code>	<code>MULTI_SZ</code>	Normalization rules for highlighted number when hotkey dialer is used
<code>HotkeyDialPrompt</code>	<code>DWORD</code>	Shows dialog after pressing hotkey.
<code>DebugLogging</code>	<code>DWORD</code>	Enable logging for debugging
<code>CultureInfo</code>	<code>SZ</code>	Display language
<code>DisableUserConfig</code>	<code>DWORD</code>	Prevent user configuration
<code>ContactLookupPatterns</code>	<code>MULTI_SZ</code>	Database sources for caller resolution by contact lookup feature
<code>ContactLookupLDAPBaseDN</code>	<code>SZ</code>	LDAP base DN
<code>ContactLookupLDAPFilter</code>	<code>SZ</code>	LDAP filter
<code>ContactLookupLDAPPassword</code>	<code>SZ</code>	LDAP password for authentication
<code>ContactLookupLDAPServer</code>	<code>SZ</code>	LDAP server hostname oder IP address
<code>ContactLookupLDAPServerPort</code>	<code>DWORD</code>	LDAP server TCP port
<code>ContactLookupLDAPUser</code>	<code>SZ</code>	LDAP user ID for authentication
<code>ContactLookupETVInsideUserId</code>	<code>SZ</code>	ETV Inside UserID
<code>ContactLookupETVInsidePassword</code>	<code>SZ</code>	ETV Inside Password
<code>ContactLookupExternalAppAppPath</code>	<code>SZ</code>	Path to executable file. E.g. powershell.exe
<code>ContactLookupExternalAppArguments</code>	<code>SZ</code>	Command Line arguments
<code>ContactLookupExternalAppDebug</code>	<code>DWORD</code>	0x0: Debugging off (Default) 0x1: Debugging on
<code>ContactLookupExternalAppTimeout</code>	<code>DWORD</code>	Max allowed runtime of external app
<code>RunCmdItems</code>	<code>MULTI_SZ</code>	List of all actions executing for incoming calls
<code>HideMenuRunCmd</code>	<code>DWORD</code>	Hides context menu item "Execute actions on incoming call"
<code>HideMenuConfig</code>	<code>DWORD</code>	Hides context menu item „Configure“
<code>HideMenuExit</code>	<code>DWORD</code>	Hides context menu item „Exit“
<code>HideConfigTabGeneral</code>	<code>DWORD</code>	Hides the tab „General“ in settings window
<code>HideConfigTabContactLookup</code>	<code>DWORD</code>	Hides the tab „Contact Lookup“ in settings window
<code>HideConfigTabHotkeyDialer</code>	<code>DWORD</code>	Hides the tab „Hotkey Dialer“ in settings window
<code>HideConfigTabRunCmd</code>	<code>DWORD</code>	Hides the tab „Actions“ in settings window

## Basic Configuration

To define the values in the registry properly, we recommend that you make the configuration on a PC using Teams Wizard and then export the hive `HKCU\Software\LyncWizard.com\Teams Wizard\v1.0`.

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 Teams 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

Teams Wizard provides 3 interfaces for reverse number lookup:

- LDAP
- Webservice tel.search.ch
- Online service ETV Inside of directoriesDATA (subscription needed)

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

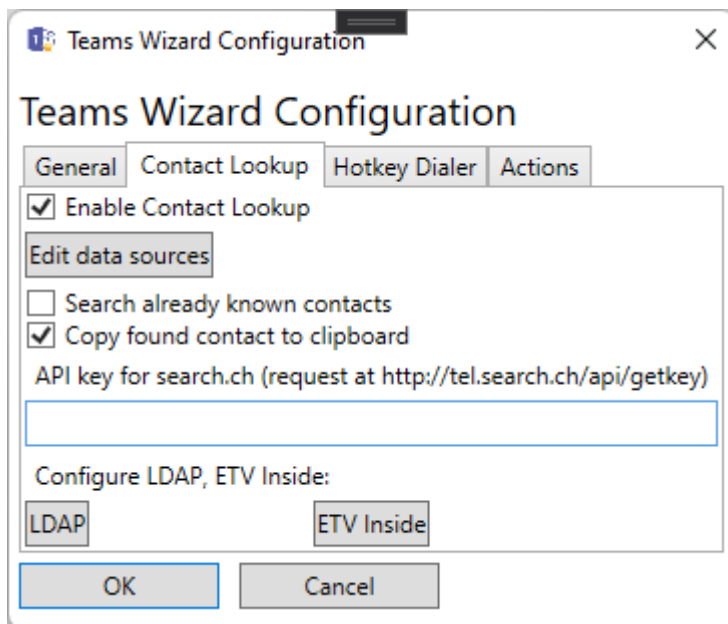


Figure 1: Teams Wizard Contact Lookup Configuration

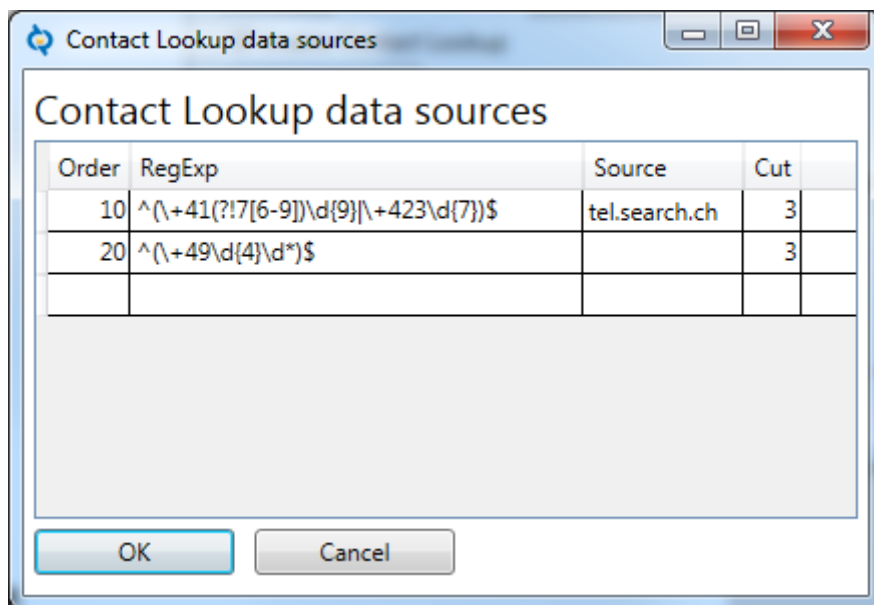


Figure 2: Teams Wizard data sources

The list of data sources will be worked through descending order. Once a RegEx 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 month 1000 lookups are granted. Term-of-use of tel.search.ch may change.

#### LDAP

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

#### ETV Inside

ETV Inside provides Swiss phone numbers and addresses by directoriesDATA via REST API. A subscription is needed to use this data source. Reference:

<https://www.directoriesdata.ch/en/directory-data/etv-internet>

#### Debug Logging

Does Teams Wizard not work as expected, detailed log information about the events and the behavior of Teams 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".

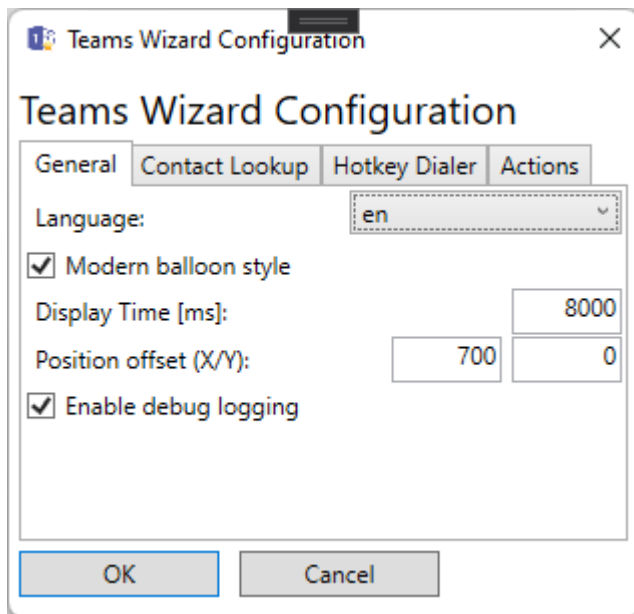


Figure 3: Debug Logging

Teams Wizard has to be restarted after changing the Debug Logging checkbox.

The log file "TeamsWizard.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: Retrieve: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: +41xxxxxxxxxx
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>+41xxxxxxxxxx</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>+41xxxxxxxx</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 Teams Wizard only is written to the log file during startup of Teams Wizard.