



Installation Guide

MagiCAD 2016.4 for AutoCAD

GENERAL

BEFORE YOU INSTALL MAGICAD 2016.4

Platform requirements

This program version supports AutoCAD from version 2013 to version 2017 and the corresponding versions of Architecture (Architectural Desktop) and MEP (Building Systems).

Note this if you have an older MagiCAD version installed

It is recommended to uninstall older MagiCAD version before installing the new version. It is, however, possible to upgrade an older version of MagiCAD to this version, if you do not change your AutoCAD version. If you intend to install the new version on another AutoCAD platform than the older version, you must first remove the old version of MagiCAD.

If you change both AutoCAD and MagiCAD versions and intend to uninstall your older AutoCAD version, uninstall MagiCAD before you uninstall AutoCAD.

Remember to back up all your important MagiCAD files before you uninstall your older MagiCAD versions or start installing MagiCAD.

Uninstall the old version(s) through the Control Panel (Add / Remove Programs).

If your previous version is 2015.4 or earlier, remove also the License Management Utility and Check for Updates, as the installation process has changed and the utilities no longer have separate Add/Remove Programs items.

Start and exit AutoCAD

To be able to create the necessary shortcuts and registry settings, Setup needs to determine which AutoCAD version MagiCAD will be installed on.

Before you start the setup program of MagiCAD, start and close the AutoCAD version on which you want to install MagiCAD. This way you can be sure that MagiCAD is installed on the right version of AutoCAD (AutoCAD saves the status of the most recent AutoCAD session in the registry, which MagiCAD Setup reads).

Alternatively, if you run MagiCAD Setup for several workstations on the network, you may prefer to deploy a setup where you have specified this version information in the installer's properties. In this case Setup uses these properties. For further information, see chapter "Installing MagiCAD on multiple workstations".

INSTALLING MAGICAD ON A SINGLE WORKSTATION

SETUP ARCHITECTURE

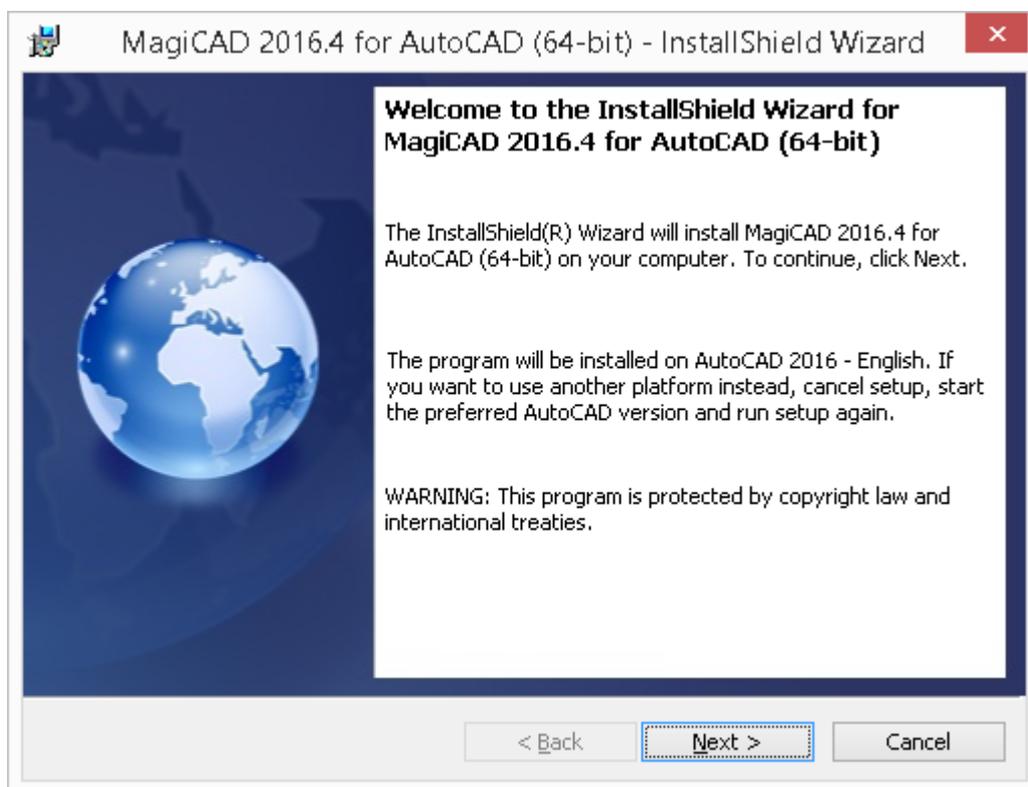
This chapter describes a typical procedure of MagiCAD installation on a single workstation. In larger corporate networks also silent installations may be performed; in that case, see chapter “Installing MagiCAD on multiple workstations” and contact the technical support if necessary.

Administrator privileges are required when running MagiCAD Setup.

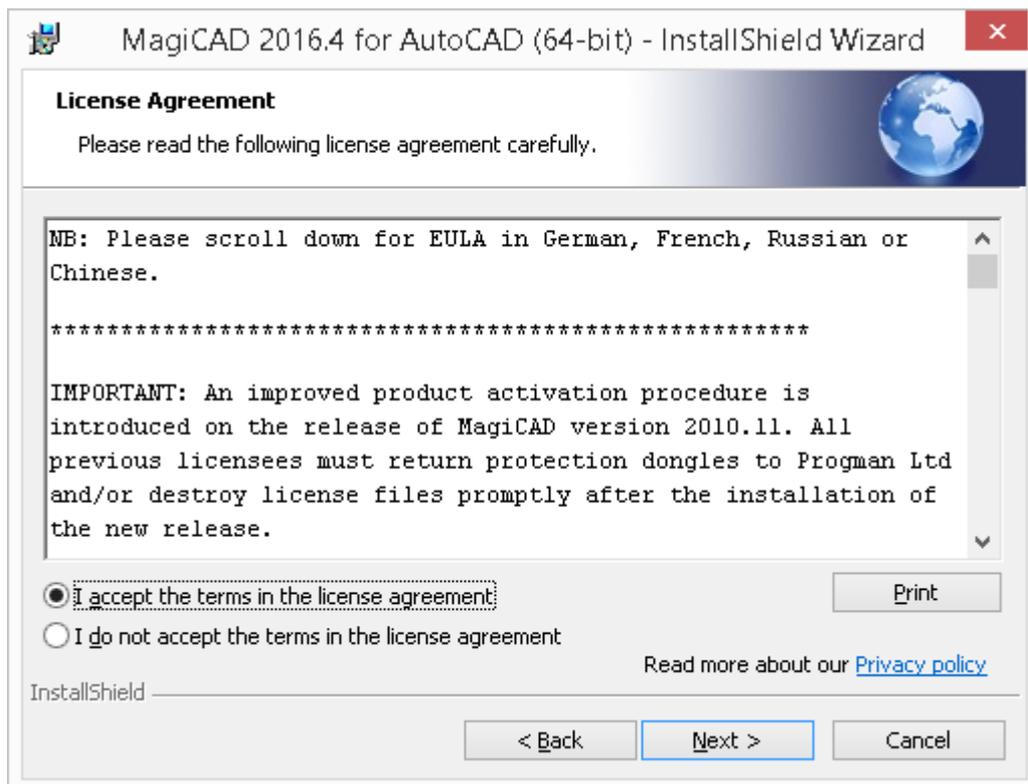
The installer for a single workstation consists of several application setups:

- MagiCAD for AutoCAD
- License Management Utility
- Check for Updates

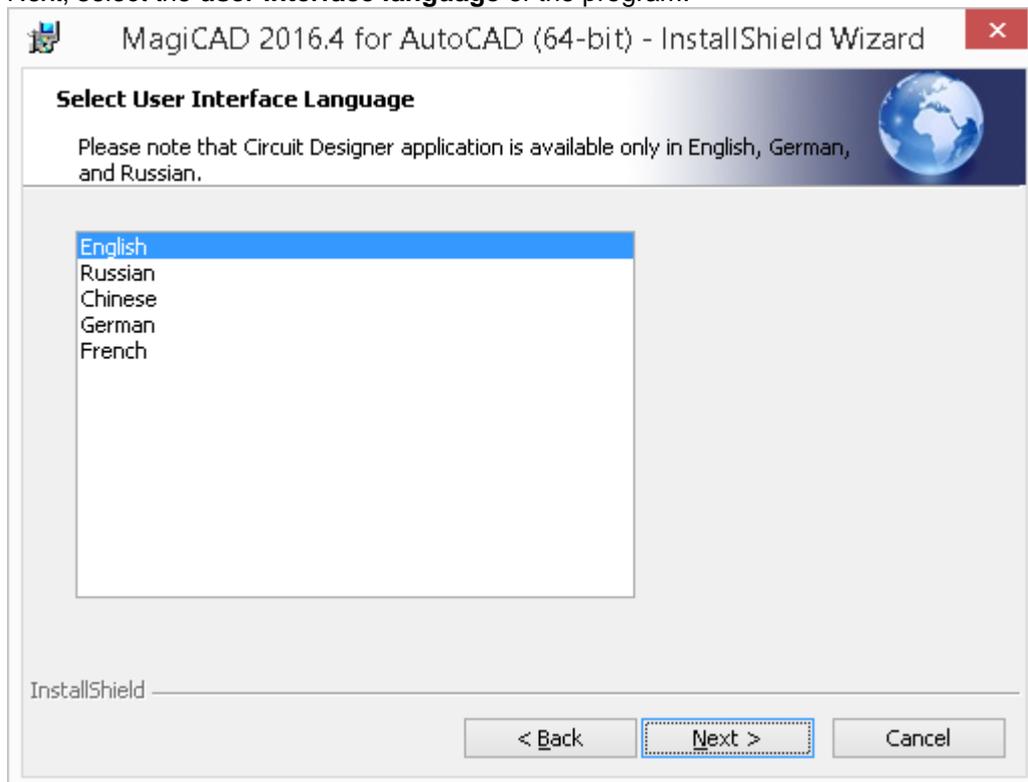
When you start the setup executable, the following dialogs are displayed:



In the start dialog you can see the name of the platform on which MagiCAD will be installed. Click *Next* to continue.

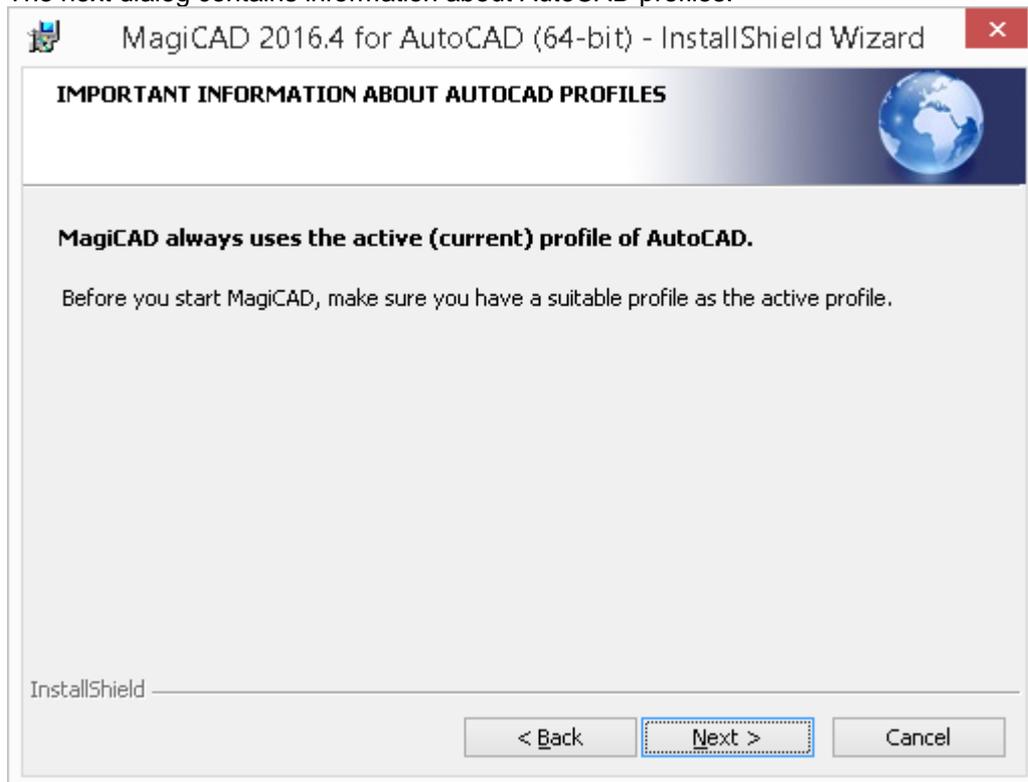


You must read and accept the license agreement to proceed with setup. Next, select the **user interface language** of the program.

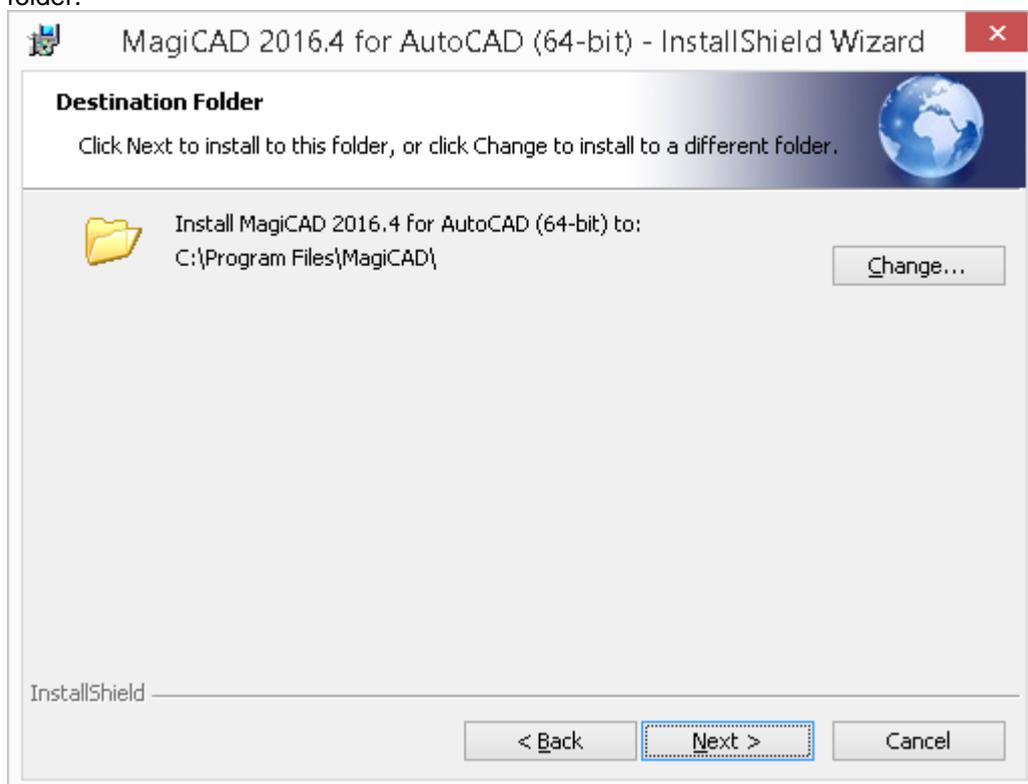


If you select Chinese as the user interface language, the program will load internet databases (product data) from a server that is located in China. You can, however, change this setting later in the user settings utility.

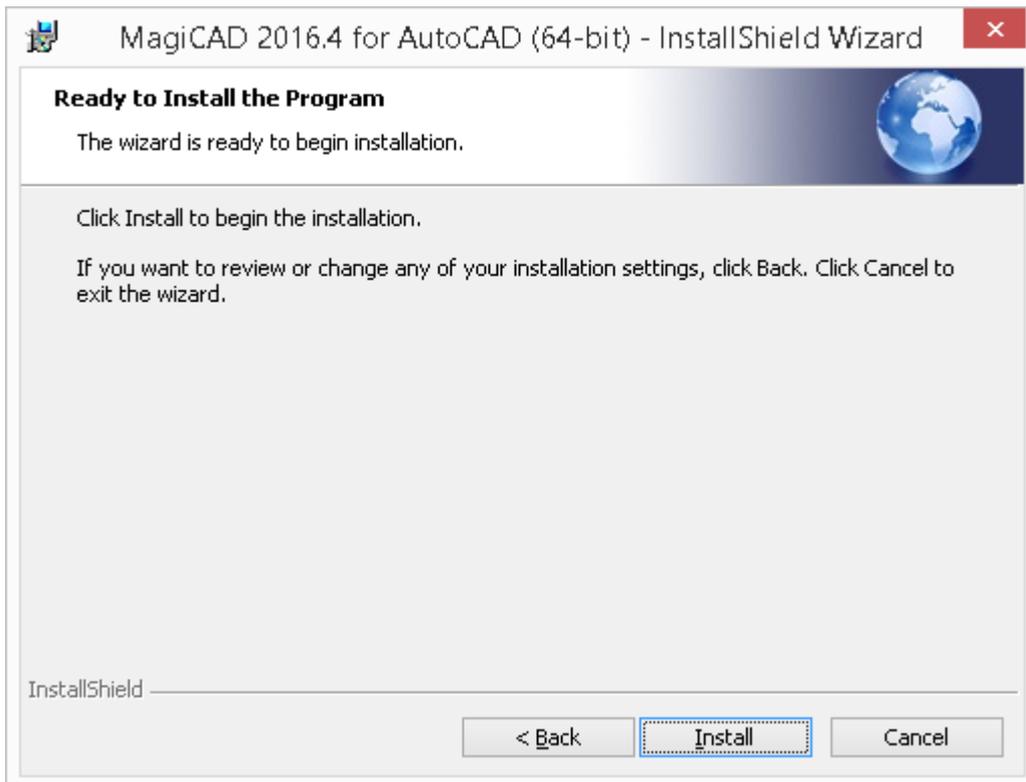
The next dialog contains information about AutoCAD profiles.



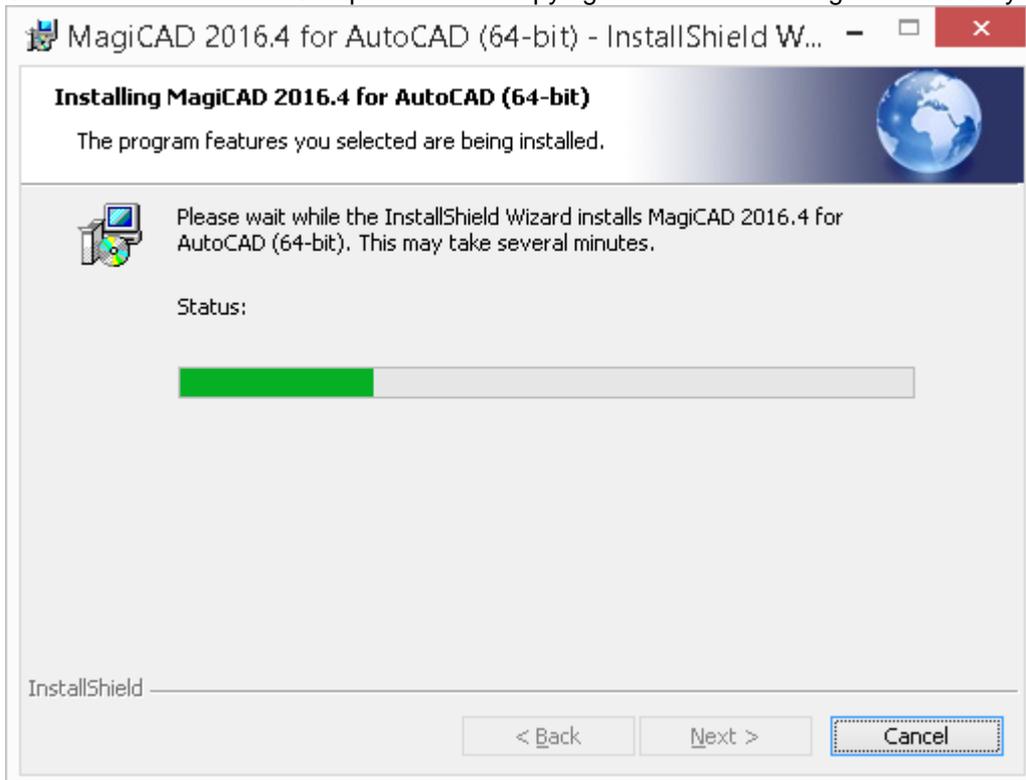
Select the **destination folder**. If you want to change the default folder, click *Change* and select the new folder.



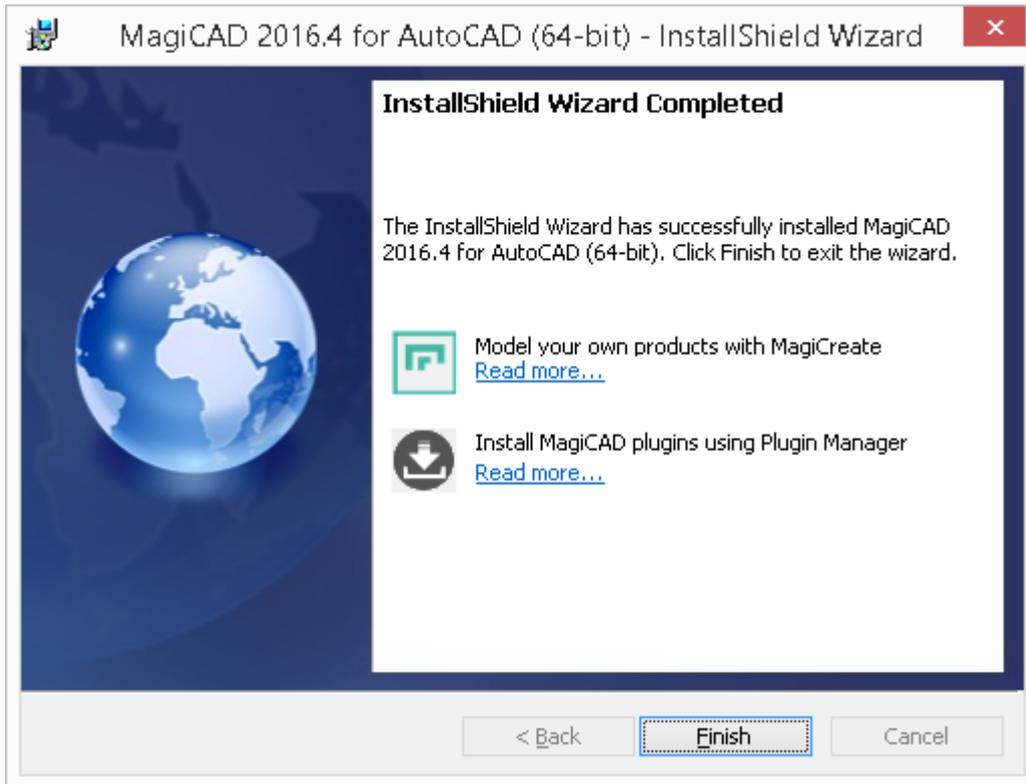
When the destination folder is what you prefer, click *Next*.



Click *Install* to continue. Setup then starts copying the files and making the necessary settings.



When MagiCAD is installed, the setup continues with installation of other applications.



Click *Finish* to complete the setup.

When the setup is complete, **check that the program license is available**. Follow the instructions of license usage and activation in the next chapter (“Licensing”).

LICENSING

MagiCAD can be used with two types of licenses:

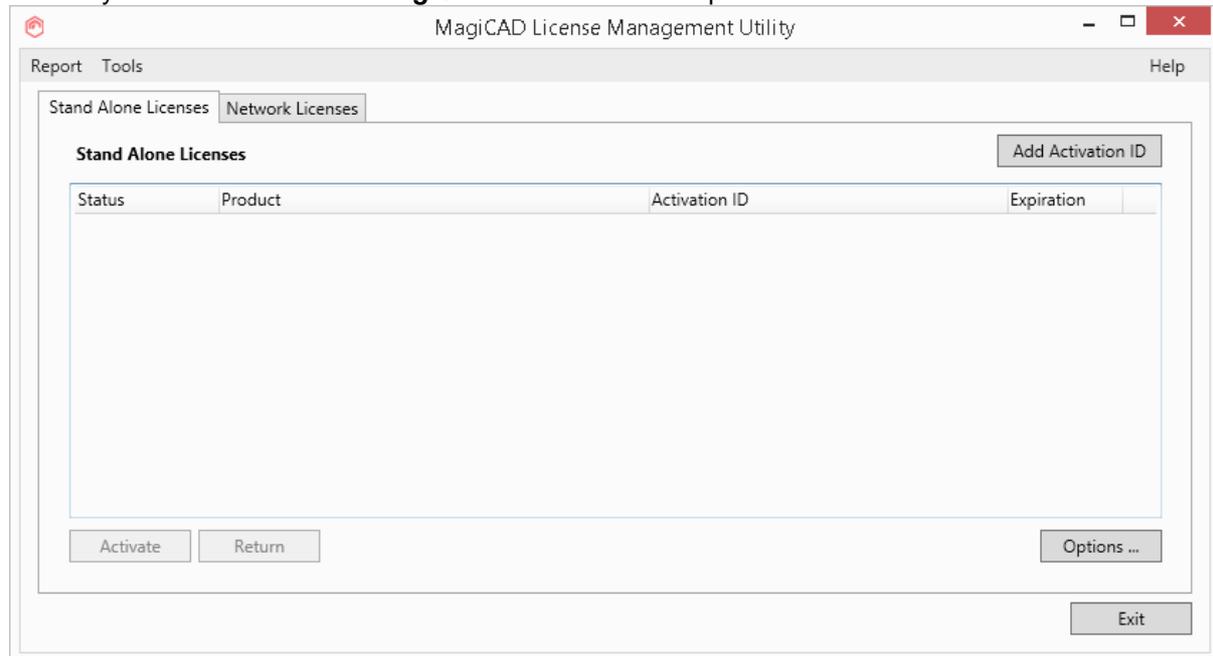
Stand-alone licenses, which are activated to the workstation. Internet connection is required when the licenses are activated, but the program can be used while disconnected from the network if the licenses are activated.

Network licenses, which are on a network server.

If your company's IT administrator has enabled license borrowing, you can borrow the application licenses to be used while disconnected from the network.

Setting up a network license server is described in a separate document.

Both license types are managed at the workstation with the license management utility. The shortcut of the utility can be found on the "**MagiCAD >> Tools**" desktop folder.



If you have an earlier version of MagiCAD license (2015.11 SR-1 or older) activated on your computer, you need to return the old license before you can activate the new license.

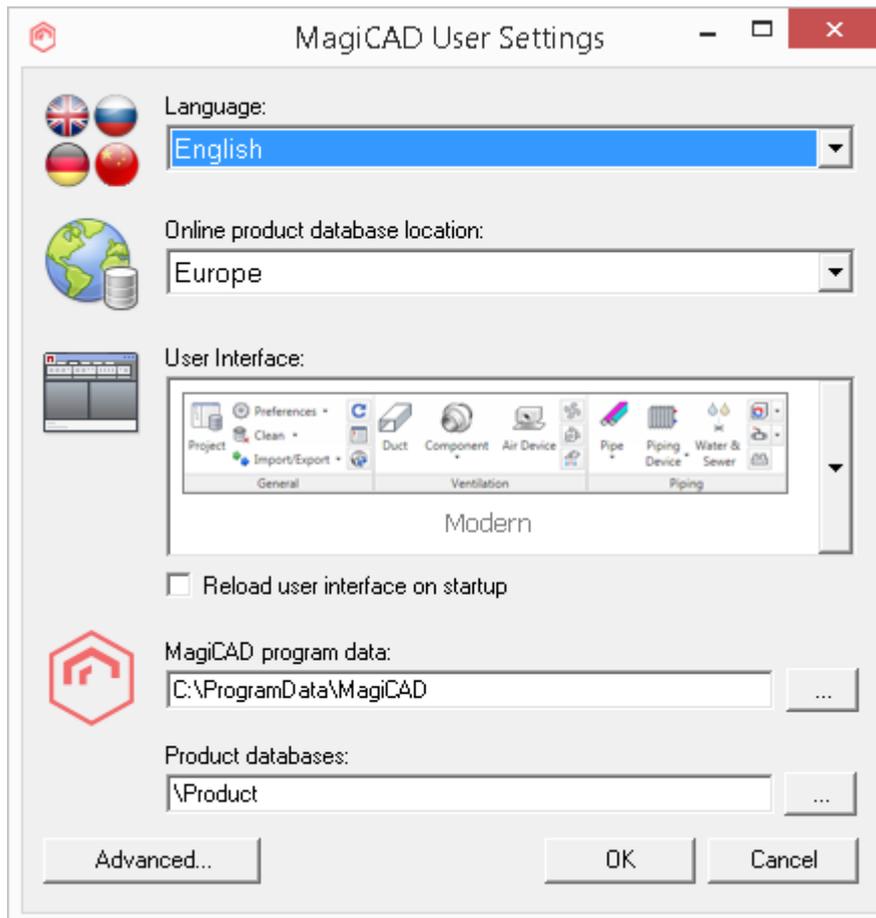
Select the product and click the *Return* button.

USER SETTINGS UTILITY

With this utility it is possible to change the user interface language and modify the path / template file settings for MagiCAD applications.

The available user interface languages are

- English, French, German and Russian for Circuit Designer
- English, French, German, Russian and Chinese for other applications



The “User Settings” utility can be started any time after installation from its shortcut in “*MagiCAD / MagiCAD for AutoCAD – Utilities*” folder on the desktop. MagiCAD also checks if the settings are made for the current version, and if the user settings utility has not been run yet, starts the utility.

Note that if the end-user is different from the user who installed the program, the settings made during installation do not apply to the end-user. In this case, the end-user needs to run the utility.

See “Read Me First” document in the “MagiCAD for AutoCAD – Documentation” for more information about the user setting utility.

PROGRAM DIRECTORY STRUCTURE OF MAGICAD

The program executables are mainly installed to the directory that is selected in the setup program. All MagiCAD applications (*Piping and Ventilation*, *Electrical*, *Room*, *System Designer*, and *Circuit Designer*) are installed in the same directory.

The program directory includes also the following subdirectories:

Directory	Contents
Plugins	Third-party plugins for MagiCAD

License Management Utility is installed in
C:\Program Files\Common Files\MagiCAD Shared\License Management Utility

Check for Updates is installed in
C:\Program Files\Common Files\MagiCAD Shared\Check for Updates

LOCATION OF FILES THAT CAN BE MODIFIED AT RUNTIME

In Windows 10, Windows 8 and Windows 7 the location is the following:

C:\ProgramData\MagiCAD

Directory	Contents
Help	Help files
ReadMe	"Read me first" instructions
Support	Customization files (menus and toolbars)
Product	Product databases
Demo Projects	Demo projects
2DSymbols	Symbol libraries of MagiCAD Electrical, MagiCAD Circuit Designer and MagiCAD System Designer
3DSymbols	3D symbol blocks (.dwg files) for MagiCAD Electrical
UserSymbols	Directory for the user symbol files that can be written by the user.
Configurations	Configuration files e.g. for the MagiCAD Export function
Templates	Project templates

RUNNING THE APPLICATIONS

Program shortcuts

Setup program creates the application shortcuts under **MagiCAD** folder on the desktop and under **Start/Programs/MagiCAD** folder.

The following shortcuts are created by the setup program:

-  MagiCAD for AutoCAD - Demo Projects
-  MagiCAD for AutoCAD - Documentation
-  MagiCAD for AutoCAD - Utilities
-  Tools
-  MagiCAD for AutoCAD

The “Tools” subfolder contains the following shortcut:

-  License Management Utility

The “MagiCAD for AutoCAD – Utilities” subfolder contains the User Settings utility and applications for maintaining MagiCAD projects without running MagiCAD.

-  Edit Electrical Project
-  Edit Room Project
-  Edit System Designer Project
-  Edit Ventilation and Piping Project
-  MagiCAD User Settings

Command (target) at **MagiCAD for AutoCAD** shortcut has the following format:

```
"[PathofAutoCAD]\acad.exe" [AdditionalArguments] /p [Profile] /w  
[WorkspaceName] /b "[PathofMagiCAD]\[ScriptName]"
```

where

[PathofAutoCAD] is the full directory name of AutoCAD executable (acad.exe)

[AdditionalArguments] are the additional command line switches that you may wish to include in the startup (e.g. if you run MagiCAD on Architectural Desktop); see chapter “Installing MagiCAD on multiple workstations / Utilizing MSI properties” for further information

[Profile] is the AutoCAD profile that is selected for MagiCAD session (either a profile name or filename of an .arg file). "" means that MagiCAD uses the active (current) profile.

[WorkspaceName] is the AutoCAD workspace that is selected for MagiCAD session

[PathofMagiCAD] is the directory where MagiCAD applications are installed

[ScriptName] is the filename of the startup script; depends on AutoCAD version

For example, a shortcut for MagiCAD might have its target as follows:

```
"C:\Program Files\AutoCAD 2014\acad.exe" /p "MagiCAD" /w "" /b  
"D:\MagiCAD\magicad_start_r19.scr"
```

In this example, Architectural Desktop is run as AutoCAD (i.e. no additional command line switches are applied), *MagiCAD* profile is used, current workspace is used, and the startup script is run from the program directory D:\MagiCAD.

Startup script

MagiCAD startup script is loaded when the application is started with the shortcut. By default, the script loads the applications (loader .arx file). You can customize the startup script according to your preferences.

All MagiCAD applications (Piping, Sprinkler, Ventilation, Electrical, System Designer, Circuit Designer, and Room) are loaded when you start the program. Please note, however, that you can run only the applications for which you have a valid license.

CHECK FOR UPDATES

You need an open internet connection to be able to use this function.

When you click the **Check for Updates** button in MagiCAD ribbon, a utility displaying the possible updates starts.

Check for Updates 2016.4
- □ ×

MagiCAD for AutoCAD

Update product databases Location: C:\ProgramData\MagiCAD\Product ...

Install	Name	Description	Installed	Available	Don't ask
<input checked="" type="checkbox"/>	ETS_NORD_16a.qpd	Ventilation	<new>	2016.05.25	<input type="checkbox"/>
<input type="checkbox"/>	IMI_Hydronic_Engineering_16d.qpd	Piping	<new>	2016.05.25	<input type="checkbox"/>
<input type="checkbox"/>	Epecon Lvnason 16c.qpd	Heating and Piping	<new>	2016.05.23	<input type="checkbox"/>

Update symbols Location: C:\ProgramData\MagiCAD\2DSymbols ...

Install	Name	Description	Installed	Available	Don't ask
<i>Symbols are up to date</i>					

Download localizations

Download	Name	Description	Date	St	CPU	
Download	MagiCAD	MagiCAD 2013.4 for AutoCAD localization Update	Please see the included Release Notes for more information. New data applied to the following market	2013.07.05	16	All
Download	MagiCAD	MagiCAD 2012.11 for AutoCAD Localization Update	Contains updated Chinese templates	2013.03.14	2	All

Download MagiCAD updates

Download	Name	Description	Date	Size	CPU
<i>MagiCAD updates are up to date</i>					

News:

[MagiCAD among the first five vendors globally with IFC 2x3 CV2.0 Export Certification for all MEP disciplines](#)
[Eko Tasarim designs MEP systems of Istanbul's Award Winning Emaar Square with MagiCAD](#)

[New Swegon Air Handling Unit plugin makes your job easier](#)
[Sol-Air benefits from MagiCAD Suite](#)

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INSTALLING MAGICAD ON MULTIPLE WORKSTATIONS

SILENT INSTALLATION

MagiCAD setup is carried out with Windows Installer technology. Installation can be customized with the help of certain properties, which reduces the amount of work when a large number of workstations are configured.

UTILIZING MSI PROPERTIES OF MAGICAD SETUP

MagiCAD setup is carried out with Windows Installer technology. Installation can be customized with the help of certain properties, which reduces the amount of work when a large number of workstations are configured.

The properties can be affected e.g. with scripts or transforms.

Note that R19 refers to AutoCAD version 2013 and 2014 (or vertical), R20 refers to versions 2015 and 2016, whereas R21 refers to version 2017.

Property	Purpose	Default value
INSTALLDIR	The directory where the program is installed.	C:\Program Files\MagiCAD Note: may vary depending on the language of the operating system
UI_LANGUAGE	User interface language of the program. 1512=English 1513=German 1515=French 1528=Russian 1539=Chinese If you select Chinese as the language, the internet databases will be read from the server in China by default. You can change this setting later if necessary.	1512
PROFILE_NAME	Name or filename of the profile to be used in the program shortcut of MagiCAD (/p switch) (NOTE: If you install MagiCAD on AutoCAD MEP 2013, avoid specifying a value that may cause MEP 2013 to create a new profile)	"" (this means that AutoCAD uses the active i.e. current profile when MagiCAD is started)
INSTALL_R21	Install program on R21 platform (2017) 0=no, 1=yes	1
ACAD_WORKSPACE_R21	Workspace to be used in the program shortcut of MagiCAD	
ACAD_R21_CMD_ARGS	Additional command line switches to the shortcut of MagiCAD applications	

ACAD_REG_R21_VER1	Internal version number of Autodesk product "R21.0" in AutoCAD 2017	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
ACAD_REG_R21_VER2	Internal product/localization number of Autodesk product. For example, "ACAD-G001:409" in English AutoCAD 2017	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
INSTALL_R20	Install program on R20 platform (2015 or 2016) 0=no, 1=yes	1
ACAD_WORKSPACE_R20	Workspace to be used in the program shortcut of MagiCAD	
ACAD_R20_CMD_ARGS	Additional command line switches to the shortcut of MagiCAD applications	
ACAD_REG_R20_VER1	Internal version number of Autodesk product "R20.0" in AutoCAD 2015	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
ACAD_REG_R20_VER2	Internal product/localization number of Autodesk product. For example, "ACAD-E001:409" in English AutoCAD 2015	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
INSTALL_R19	Install program on R19 platform (2013 or 2014) 0=no, 1=yes	1
ACAD_WORKSPACE_R19	Workspace to be used in the program shortcut of MagiCAD	
ACAD_R19_CMD_ARGS	Additional command line switches to the shortcut of MagiCAD applications	
ACAD_REG_R19_VER1	Internal version number of Autodesk product For example, "R19.0" in AutoCAD 2013	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
ACAD_REG_R19_VER2	Internal product/localization number of Autodesk product. For example, "ACAD-B006:409" in English MEP 2013	Note: if the property is not set, the setup program checks the value from HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
DIR_2DSYMBOLS	Path setting for 2D symbols	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)

DIR_3DSYMBOLS	Path setting for 3D symbols (blocks), Electrical	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_USERSYMBOLS	Path setting for the user-defined symbols, Electrical	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_PRODUCT	Path setting for the manufacturers' databases	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_DEFAULTPROJ	Default path for project templates	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_PROPERTY_SET_CFG	Default path for property set configurations in export functions	Note: if the property is not set, default value is used (see the path definition in <i>MagiCAD Installation Guide</i>)
EXPORT_CONFIGURATIONS	Default configuration file for MagiCAD Export	Note: if the property is not set, default value is used (<i>MagiCAD_Export.ini</i> in the <i>Configurations</i> subdirectory; see the path definition in <i>MagiCAD Installation Guide</i>)
LICENSE_SERVER	Server(s) containing network licenses given as <code>port@host</code> format. Multiple servers are separated with a semicolon.	

SAMPLE INSTALLATION BATCH FILES

```
msiexec /i "MagiCAD 2016.4 for_AutoCAD (32-bit).msi" /qb INSTALL_R21=0  
INSTALL_R20=0 INSTALL_R19=1 ACAD_REG_R19_VER1="R19.1"  
ACAD_REG_R19_VER2="ACAD-D001:409"
```

This sample script installs the 32-bit version of MagiCAD on AutoCAD 2014.

```
msiexec /i "MagiCAD_2016.4 for_AutoCAD (64-bit)" /qb INSTALL_R21=0  
INSTALL_R20=1 INSTALL_R19=0 ACAD_REG_R20_VER1="R20.1"  
ACAD_REG_R20_VER2="ACAD-F001:409" UI_LANGUAGE=1539 LICENSE_SERVER="@server1"
```

This sample script installs the 64-bit version of MagiCAD on AutoCAD 2016. The user interface language is Chinese. The program uses network licenses that are located in *server1* (no port number specified).