



Installation Guide

MagiCAD 2016.11 UR-1 for AutoCAD

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GENERAL

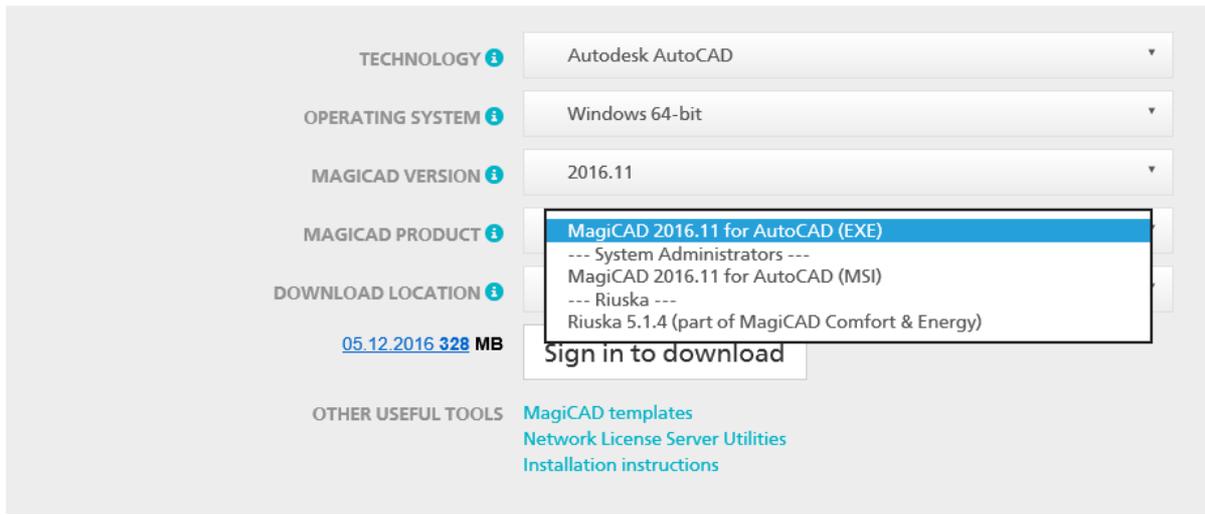
SELECTING INSTALLATION PACKAGE

First, go to MagiCAD Download Portal:

<https://portal.magicad.com/Download/GetProductCategoryList?categoryId=1>

Download MagiCAD

Welcome to the MagiCAD download page. To download MagiCAD installation package, define Autodesk technology and operating system, select the MagiCAD version, download site, MagiCAD product and sign in to begin download.



The screenshot shows the MagiCAD download portal interface. It features several dropdown menus for selection:

- TECHNOLOGY**: Autodesk AutoCAD
- OPERATING SYSTEM**: Windows 64-bit
- MAGICAD VERSION**: 2016.11
- MAGICAD PRODUCT**: A dropdown menu is open, showing options: "MagiCAD 2016.11 for AutoCAD (EXE)", "--- System Administrators ---", "MagiCAD 2016.11 for AutoCAD (MSI)", "--- Riuska ---", and "Riuska 5.1.4 (part of MagiCAD Comfort & Energy)".

Below the dropdowns, there is a "DOWNLOAD LOCATION" section with a date "05.12.2016" and a size "328 MB". A "Sign in to download" button is visible. At the bottom, there are links for "OTHER USEFUL TOOLS": "MagiCAD templates", "Network License Server Utilities", and "Installation instructions".

Note: Before beginning the installation process, please familiarise yourself with the instructions on installation and license activation in this [Installation Guide](#).

In the MagiCAD Download Portal, the EXE and MSI installation packages are available in the **MAGICAD PRODUCT** section. With Update Releases, you also have the option to download the relevant installation package directly via MagiCAD's Check for Updates function.

Both of the installation packages install the full version of the MagiCAD Release, but there are differences in the installation procedure. Select the procedure which best suits your needs:

1. MagiCAD 2016.11 for AutoCAD (EXE)

- For manual installation. This is the default installation option for users who have administrator rights.
- Can be installed silently via command line, but the only available parameters are language and install location. If you need more installation parameters, use the MSI package

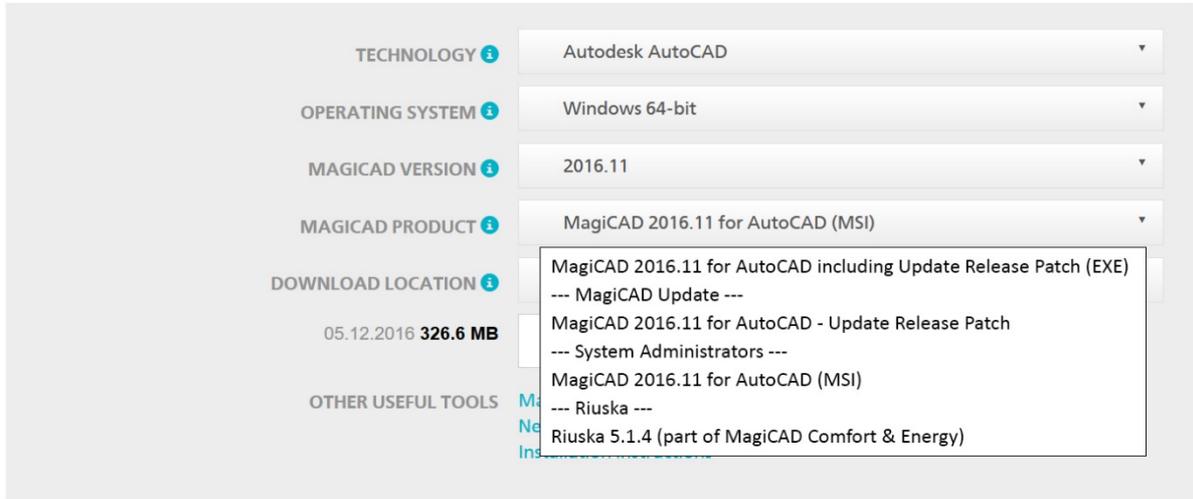
2. MagiCAD 2016.11 for AutoCAD (MSI) (---System Administrators---)

- This is the default installation option for System Administrators.
- Use this package if you have to use command line parameters.
- Must be installed from Admin Command Prompt.

UPDATING EXISTING SOFTWARE

Download MagiCAD

Welcome to the MagiCAD download page. To download MagiCAD installation package, define Autodesk technology and operating system, select the MagiCAD version, download site, MagiCAD product and sign in to begin download.



With Update Releases, you also have the option to download the relevant installation package directly via MagiCAD's Check for Updates function.

Note: Before beginning the installation process, please familiarise yourself with the instructions on installation and license activation in this installation Guide

There are three installation packages available in the **MAGICAD PRODUCT** section:

1. **MagiCAD 2016.11 for AutoCAD full installation incl. Update Release (EXE)**
 - If you do not have MagiCAD 2016.11 installed, select this package. If you have MagiCAD installed, you need to uninstall it before installing this package. The package installs both MagiCAD 2016.11 Release and Update Release Patch.
2. **MagiCAD 2016.11 for AutoCAD – Update Release Patch (---MagiCAD Update---)**
 - An existing MagiCAD 2016.11 installation must be found on the PC. If you have MagiCAD 2016.11 release already installed on the PC, use this installation package. The newest patch will always include the previous Update Releases. Activation codes are not needed for the Update Release patch installation.
3. **MagiCAD 2016.11 for AutoCAD (MSI) (---System Administrators---)**
 - This MSI package does **NOT include the Update Release Patch**.
 - Upgrade to Update Release by installing **MagiCAD 2016.11 for AutoCAD – Update Release Patch**
 - Use this package if you have to use command line parameters

BEFORE YOU INSTALL MAGICAD 2016.11

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: 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 procedure 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, the Setup needs to first determine which AutoCAD version MagiCAD will be installed on.

Before you start the MagiCAD Setup procedure, 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 the MagiCAD Setup procedure will then retrieve).

Alternatively, if you perform the MagiCAD Setup procedure on several workstations over the network, you may prefer to specify the AutoCAD version information in the installer properties. In this case, the MagiCAD Setup procedure will utilise the properties that you specify. For further information, see chapter "Installing MagiCAD on multiple workstations".

INSTALLING MAGICAD ON A SINGLE WORKSTATION

SETUP ARCHITECTURE

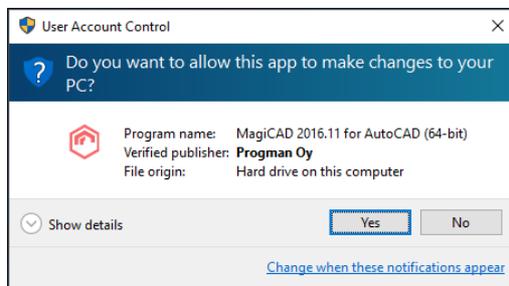
This chapter describes a typical procedure of MagiCAD installation on a single workstation. In larger corporate networks also silent installations may be performed; in that case, see chapter “Installing MagiCAD on multiple workstations” and contact the technical support if necessary.

Administrator privileges are required when running MagiCAD Setup.

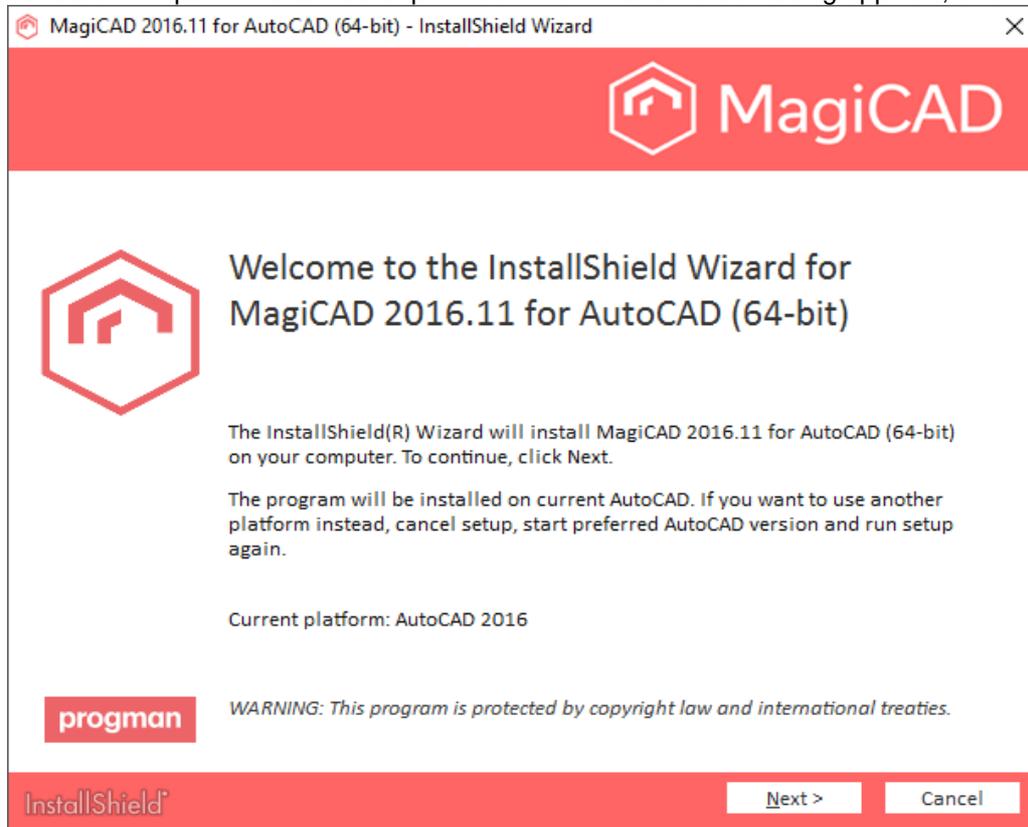
The installer for a single workstation consists of several application setups:

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

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



If User Account Control is enabled and the installer is not being run using Administrator rights, the installation requires Administrator permission to continue. If this dialog appears, Click Yes.



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 the MagiCAD Setup procedure. Next, select the **User Interface Language** for MagiCAD.



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

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

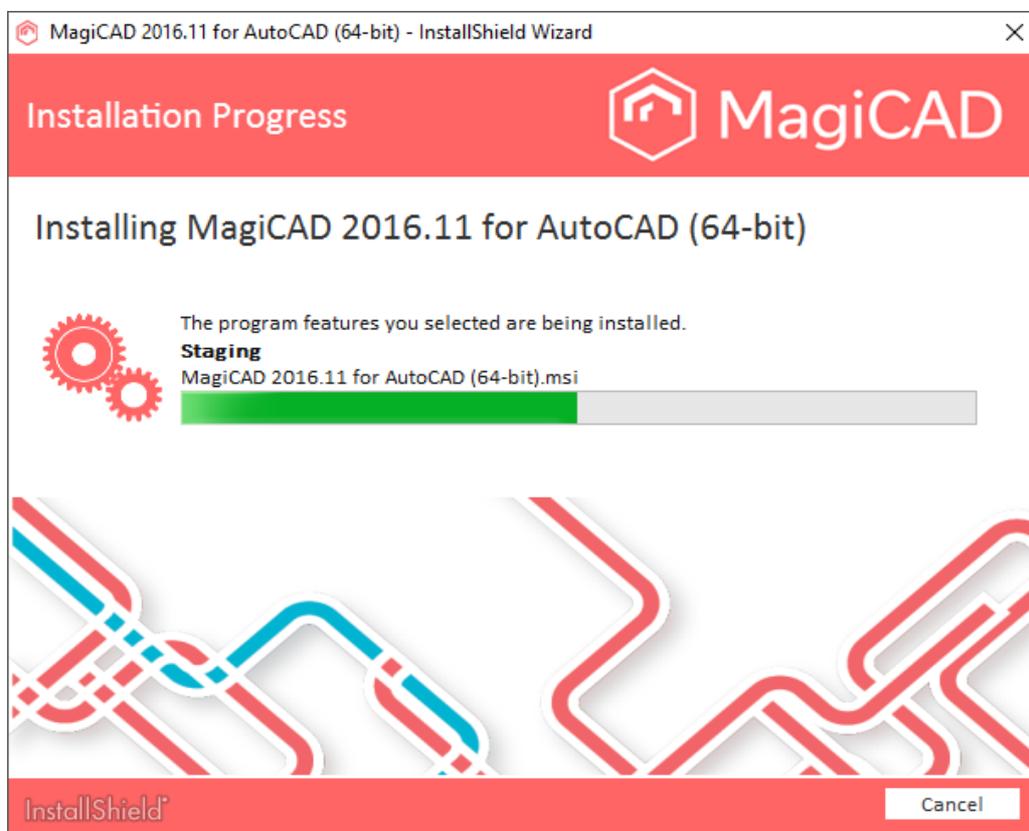


When the preferred Destination Folder has been defined, click *Next*. The following dialog displays information regarding AutoCAD profiles. Click *Next*.





Click *Install* to continue. The MagiCAD Setup will then begin copying files and making the necessary settings.



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



Click *Finish* to complete the setup.

When the MagiCAD Setup procedure has been completed, **please check that the program license is available**. Follow the instructions for license usage and activation in the next chapter "Licensing".

LICENSING

MagiCAD can be used with two types of licenses:

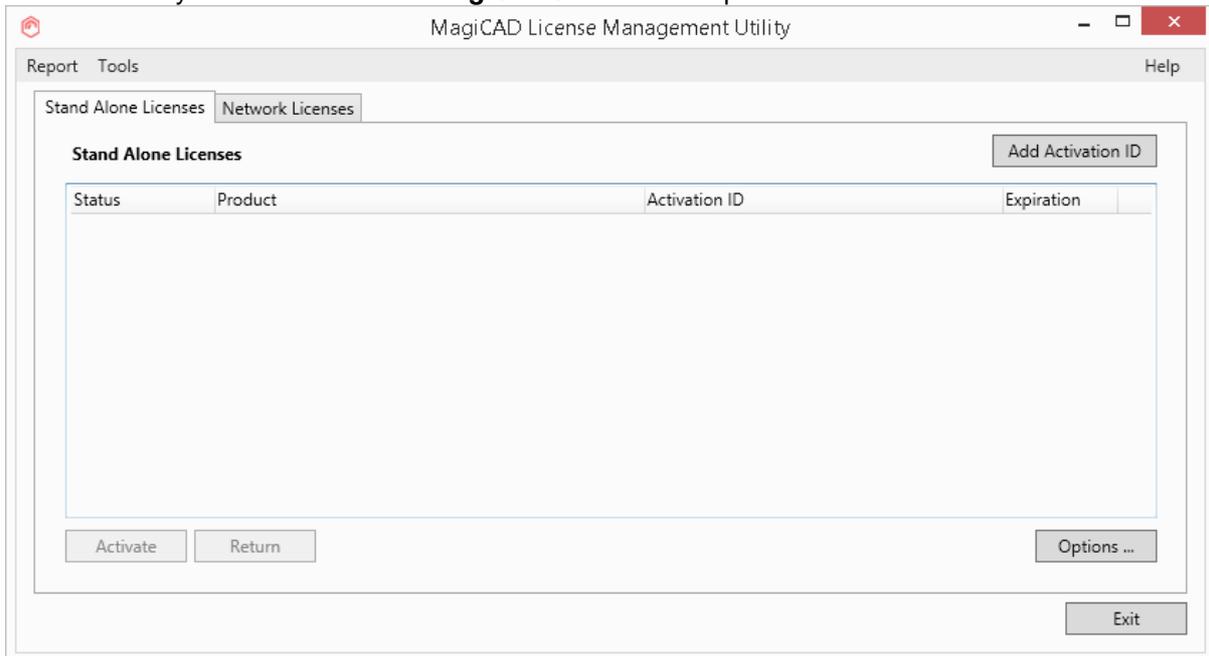
Stand-alone licenses, which are activated for a specific workstation. Internet connection is required when the licenses are activated. However, when the licenses have been activated, the program can be used also when disconnected from the network.

Network licenses, which are stored 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 using the license management utility. The shortcut link to the utility can be found in the **MagiCAD\ Tools** desktop folder.



If the version of the MagiCAD license currently activated on your workstation is 2015.11 SR-1 or older, you need to return the old license before you can activate the new license.

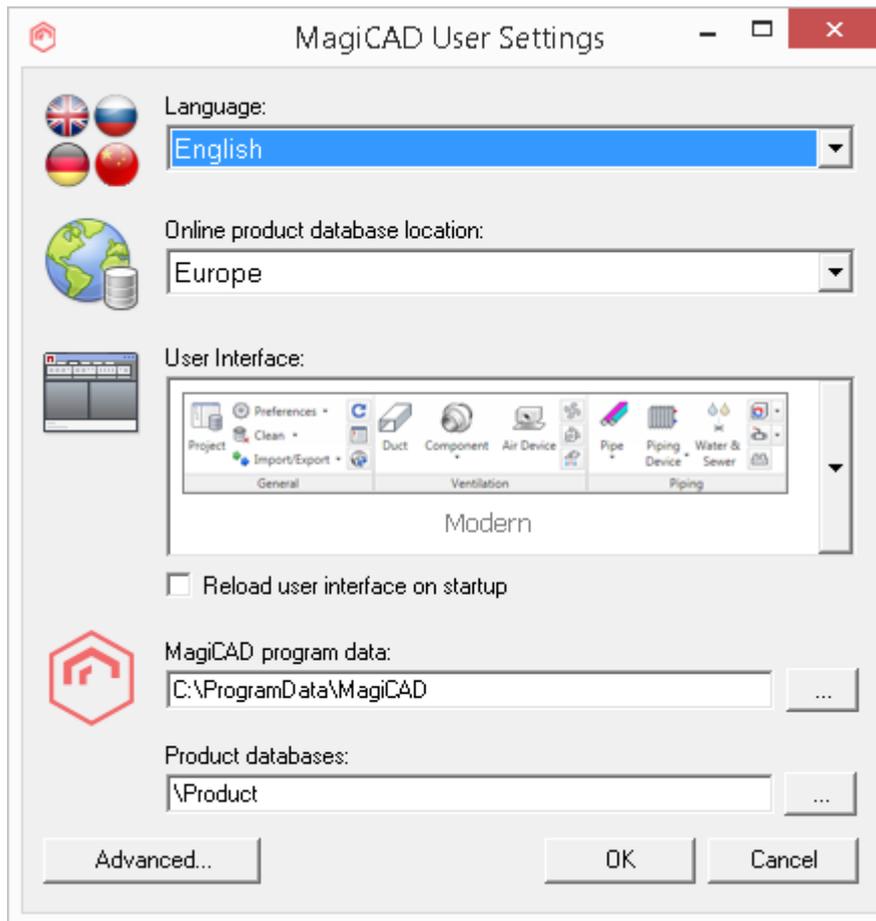
Select the product and click the *Return* button.

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 accessed at any time after the installation using the shortcut link in the **MagiCAD\MagiCAD for AutoCAD – Utilities** desktop folder.

MagiCAD will automatically check whether the settings have been defined for the current MagiCAD version. If the User Settings utility has not been run yet, the User Settings utility will be opened automatically.

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 separately.

See "Read Me First" document in the **MagiCAD\MagiCAD for AutoCAD – Documentation** desktop folder for more information about the User Settings utility.

PROGRAM DIRECTORY STRUCTURE OF MAGICAD

The program executables are mainly installed to the **Destination Folder** selected during the MagiCAD Setup procedure. All MagiCAD applications (*Heating & Piping and Ventilation, Electrical, Room, System Designer, Circuit Designer* and *Product Modeller*) 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\CheckforUpdates

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	Customisation 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 which can be defined by the user.
Configurations	Configuration files, e.g., for the MagiCAD Export function
Templates	Project templates

RUNNING THE APPLICATIONS

Program shortcuts

The MagiCAD Setup procedure creates the application shortcuts into the **MagiCAD** folder on the desktop and under the **Start\Programs\MagiCAD** folder.

The following shortcuts are created by the MagiCAD Setup procedure:

-  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) in the **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 / Utilising MSI properties" for further information

[Profile] is the AutoCAD profile that is selected for the 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 the MagiCAD session

[PathofMagiCAD] is the directory where MagiCAD applications are installed

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

For example, the shortcut for MagiCAD might have its target defined 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

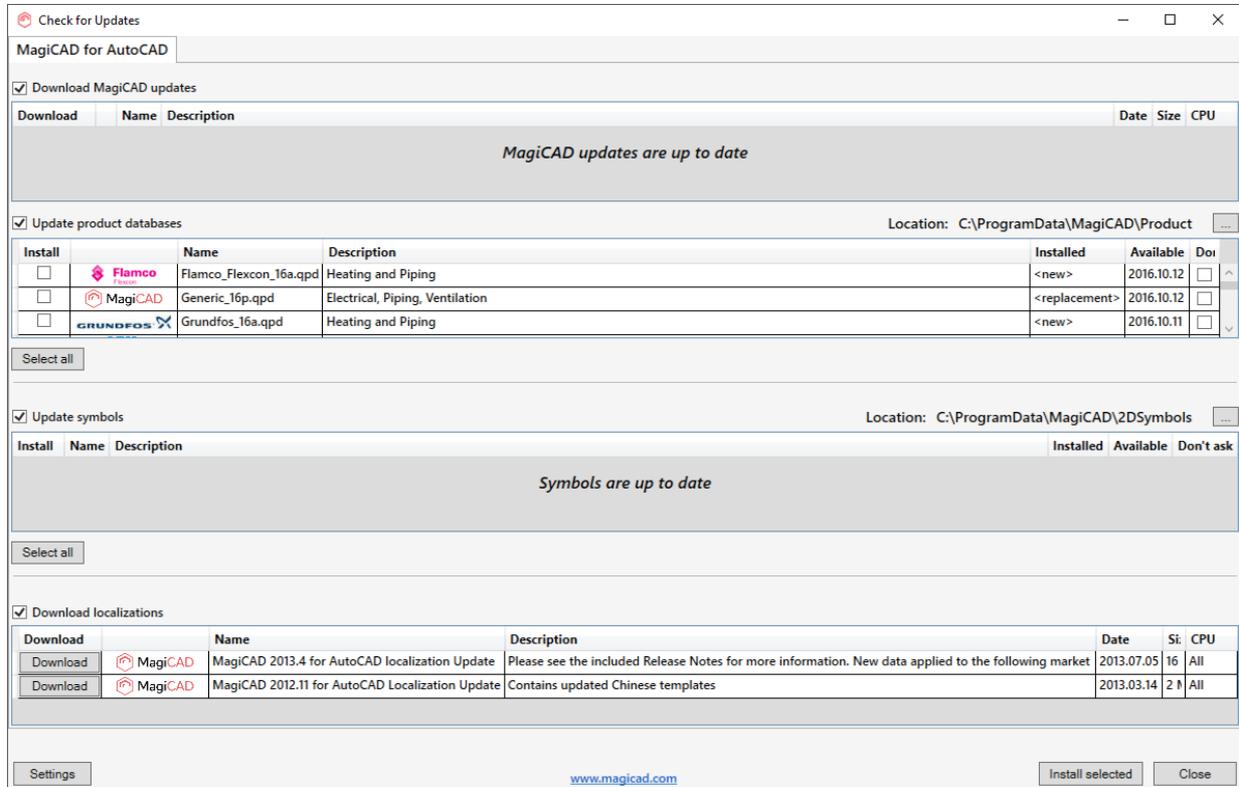
MagiCAD startup script is loaded when the application is started using the shortcut. By default, the script loads the applications (loader .arx file). You can customise the startup script according to your preferences.

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 the MagiCAD ribbon, a utility displaying the available updates starts.



Check for Updates

MagiCAD for AutoCAD

Download MagiCAD updates

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

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

Install	Name	Description	Installed	Available	Do not ask
<input type="checkbox"/>	 Flamco	Flamco_Flexcon_16a.qpd	Heating and Piping	<new>	2016.10.12
<input type="checkbox"/>	 MagiCAD	Generic_16p.qpd	Electrical, Piping, Ventilation	<replacement>	2016.10.12
<input type="checkbox"/>	 GRUNDFOS	Grundfos_16a.qpd	Heating and Piping	<new>	2016.10.11

Select all

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

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

Select all

Download localizations

Download	Name	Description	Date	Si	CPU
<input type="button" value="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
<input type="button" value="Download"/>	 MagiCAD	MagiCAD 2012.11 for AutoCAD Localization Update	Contains updated Chinese templates	2013.03.14	2 All

Settings www.magicad.com

INSTALLING MAGICAD ON MULTIPLE WORKSTATIONS

MSI INSTALLATION PACKAGE - SILENT INSTALLATION

The MagiCAD Setup procedure is performed using Microsoft Installer technology. The installation can be customised with the help of certain properties, which reduces the amount of work when a large number of workstations are configured.

The properties can be manipulated, e.g., by employing scripts or transforms.

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

Property	Purpose	Default value
INSTALLDIR	The directory where the program will be 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 online product 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 the Autodesk product For example, "R21.0" for AutoCAD 2017	Note: if this property is not defined, the setup procedure will check the value from the HKEY_CURRENT_USER registry according to the AutoCAD version that was last run

ACAD_REG_R21_VER2	Internal product/localisation number of the Autodesk product. For example, "ACAD-G001:409" for English AutoCAD 2017	Note: if this property is not defined, the setup procedure will check the value from the 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 the Autodesk product For example, "R20.0" for AutoCAD 2015	Note: if this property is not defined, the setup procedure will check the value from the HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
ACAD_REG_R20_VER2	Internal product/localisation number of the Autodesk product. For example, "ACAD-E001:409" in English AutoCAD 2015	Note: if this property is not defined, the setup procedure will check the value from the 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 the Autodesk product For example, "R19.0" for AutoCAD 2013	Note: if this property is not defined, the setup procedure will check the value from the HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
ACAD_REG_R19_VER2	Internal product/localisation number of the Autodesk product. For example, "ACAD-B006:409" in English MEP 2013	Note: if this property is not defined, the setup procedure will check the value from the HKEY_CURRENT_USER registry according to the AutoCAD version that was last run
DIR_2DSYMBOLS	Path setting for 2D symbols	Note: if this property is not defined, default value will be used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_3DSYMBOLS	Path setting for 3D symbols (blocks), Electrical	Note: if this property is not defined, default value will be used (see the path definition in <i>MagiCAD Installation Guide</i>)

DIR_USERSYMBOLS	Path setting for the user-defined symbols, Electrical	Note: if this property is not defined, default value will be used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_PRODUCT	Path setting for the manufacturer databases	Note: if this property is not defined, default value will be used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_DEFAULTPROJ	Default path for project templates	Note: if this property is not defined, default value will be used (see the path definition in <i>MagiCAD Installation Guide</i>)
DIR_PROPERTY_SET_CFG	Default path for the property set configurations of export functions	Note: if this property is not defined, default value will be 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 defined, default value will be used (MagiCAD_Export.ini in the Configurations subdirectory; see the path definition in <i>MagiCAD Installation Guide</i>)
LICENSE_SERVER	Server(s) containing network licenses defined in port@host format. Multiple servers are separated with a semicolon.	

Sample installation batch files

```
msiexec /i "MagiCAD 2016.11 for AutoCAD (64-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 64-bit version of MagiCAD on the platform AutoCAD 2014.

```
msiexec /i "MagiCAD 2016.11 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 the platform AutoCAD 2016. The user interface language is Chinese. The program uses network licenses that are located on *server1* (no port number specified).

EXE INSTALLATION PACKAGE

The properties for installing MagiCAD 2016.11 for AutoCAD (64-bit).exe using command line are limited to UI language and installation location.

Property	Purpose	Default value
InstallFolder	The directory where the program will be installed.	C:\Program Files\MagiCAD Note: may vary depending on the language of the operating system
Language	User interface language of the program.	1512
If you select Chinese as the language, the online product databases will be read from the server in China by default. You can change this setting later if necessary.	1512=English 1513=German 1515=French 1528=Russian 1539=Chinese	

Sample installation batch files for .exe package

Silent installation to default location with English UI language:

```
"MagiCAD 2016.11 for AutoCAD (64-bit).exe" /silent
```

Silent installation, German UI language, custom location:

```
"MagiCAD 2016.11 for AutoCAD (64-bit).exe" /silent /Language=1513
/InstallFolder="C:\Program Files\MagiCAD_2016_11"
```

Silent installation of patch package

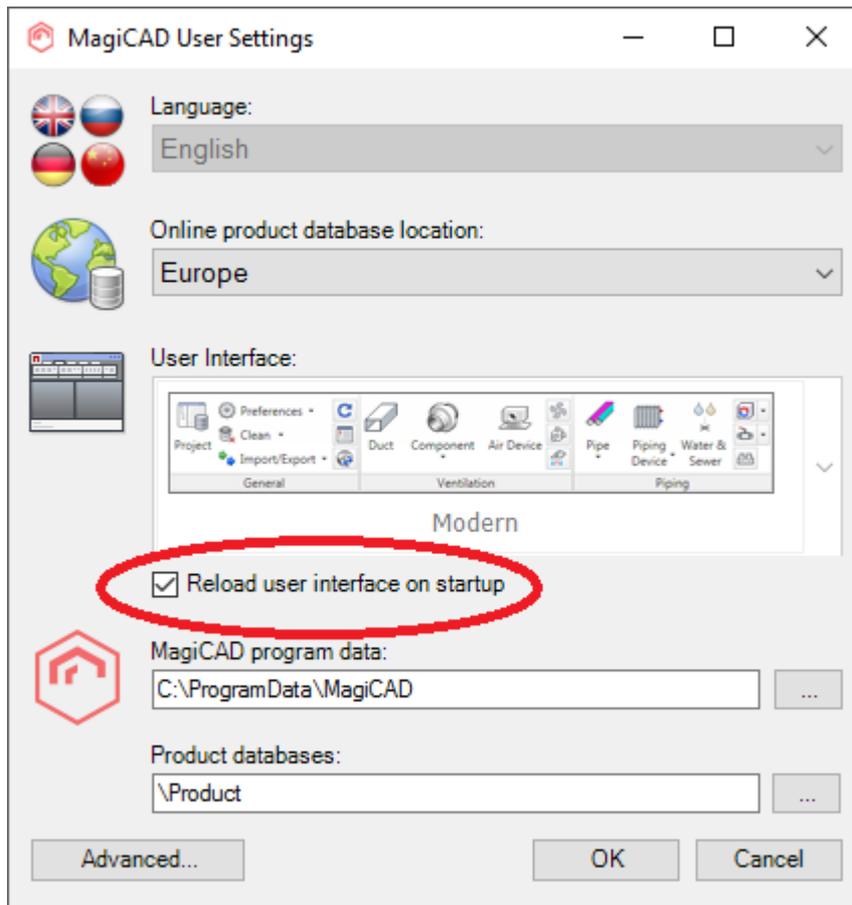
There are no parameters for patch packages, but you can install them silently:

```
"MagiCAD 2016.11 for AutoCAD (64-bit)-Patch.exe" /silent
```

FREQUENTLY ASKED QUESTIONS

HOW CAN I GET BACK MISSING MAGICAD RIBBON TABS?

- Close MagiCAD
- Start MagiCAD User Settings (Desktop | MagiCAD | MagiCAD for AutoCAD - Utilities | User Settings)
- Check “Reload user interface on startup”
- Click OK and start MagiCAD again.



WAS THE PATCH INSTALLED SUCCESSFULLY? I CANNOT FIND IT IN PROGRAMS AND FEATURES.

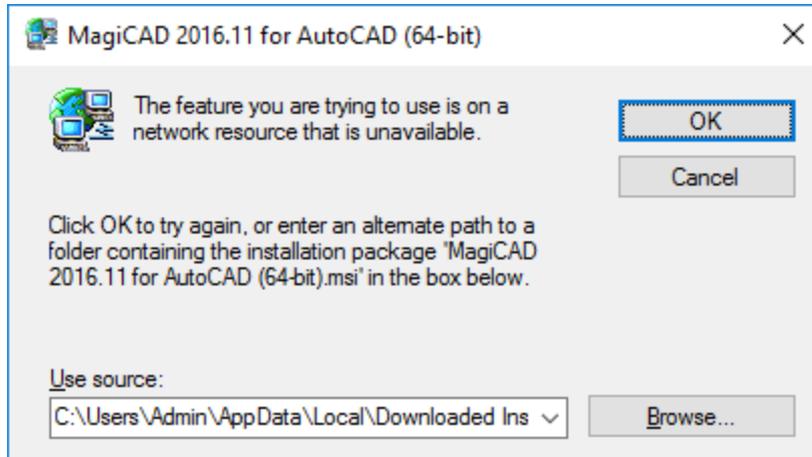
After patch installation, the MagiCAD name in Programs and Features remains the same, but the Version Number is updated.

HOW CAN I UNINSTALL A PATCH?

You cannot uninstall only the patch installation. Uninstalling MagiCAD from Programs and Features will uninstall MagiCAD entirely.

THE INSTALLER DOES NOT FIND THE INSTALLATION PACKAGE

If some installed files are missing from the computer, the installer tries to fix the installation. If the installation package is not found automatically, the user is prompted to locate the package by browsing.



Click Browse and locate the MagiCAD .MSI package from the directory:
C:\Users\\AppData\Local\Downloaded Installations\
Select the .MSI file and click OK.

If you installed the .MSI package instead of the .EXE package, the installation package may not be located in your computer. Try to locate the package from the same location where the installation procedure was originally started. In case you are not able to locate the .MSI package, download the package from the MagiCAD Portal. The package must be exactly the same as the installed one.