

CTC SOFTWARE

A SYMETRI COMPANY

CTC Industrial Design Suite Installation and Configuration Guide

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Suite Overview

IMPORTANT: There are two separate installers available for CTC suites: 1) the “single user” installer and 2) the “multi-user” installer. Both of these installers will be discussed in this document. The “single user” installer allows you to install and run the software without requiring you to have administrative privileges on the computer, however only the user who ran the installer will see the software available. Other users on the same computer will each have to install the software for themselves. The “multi-user” installer requires administrative privileges to install it on the computer, but then any user who logs into the computer can use the software.

IMPORTANT: All products available from CTC Software are available in “single user” and “multi-user” types, however **you must only use one of these types on any single computer**. You may not, for example, have the multi-user Nexus software installed and the single user CTC Industrial Design Suite software installed on the same computer at the same time.

WARNING: Installing a multi-user installer will remove all single user installs for all users on the workstation. While a user that had the single user version installed will still see it appear in their Apps list, the single user software will get disabled by the multi-user installer.

Although written to function correctly with the international community in mind wherever possible, CTC Software products are only tested on English USA versions of Autodesk® products running on English USA versions of Windows.

The setups will install the tools for all versions of Revit® and Inventor® supported. For example, the “CTC Industrial Design Suite 2026” setup will install the suites for Revit and Inventor 2026, 2025, 2024, 2023, and 2022.

The installation and configuration of this suite is fairly straightforward. This guide will explain how the installation works, how to set up and configure licensing and how to change the configuration on the workstations after the suite has already been installed.

General Security Requirements Summary

The single user installer **DOES NOT** need to be run by someone who is logged in with administrative privileges on the computer to which the software is being installed. The multi-user installer **DOES** need to be run by someone who is logged in with administrative privileges.

Workstations

In accordance with Autodesk standards for add-ins, during the installation the user does not get to choose where the suites will be installed on their local hard drives.

For the single user installer, the majority of files will be installed to the user’s personal “Roaming” folder in the %AppData% environment variable. This includes the add-ins themselves as well as common and support files. Typically these are located under folders such as (or in subfolders within these):

**%AppData%\CTC Software\
%AppData%\Autodesk\Revit\Addins
%AppData%\Autodesk\Inventor 202x\Addins**

For the multi-user installer, the majority of files will be installed to the ProgramData folder in the %ProgramData% environment variable. This includes the add-ins themselves as well as common and support files. Typically these are located under folders such as (or in subfolders within these):

**%ProgramData%\CTC Software\
%ProgramData%\Autodesk\Revit\Addins
%ProgramData%\Autodesk\Inventor 202x\Addins**

For either installer, where application-wide settings need to be stored such that they are applicable to any users that login to the computer, these will be stored in the C:\Users\Public folder, typically somewhere under:

C:\Users\Public\CTC Software

Upgrading the Software

When upgrading a workstation to a new release of this software, typically manually uninstalling an old version is NOT required. Running the latest setup is all that normally should be needed. It will replace the previous version with the new version.

Licensing

Premium tools are typically available for a free trial when the first licensed tool within the suite is used the first time.

IMPORTANT: Any licensing errors that occur will be logged to:

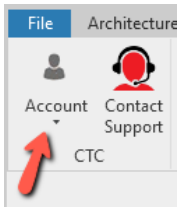
C:\Users\Public\CTC Software\License Settings\LicensingErrors.txt

CTC Software uses cloud shared licensing, meaning the user must have an account in the CTC portal, and that account must have permission to use the suite, before a license can be used.

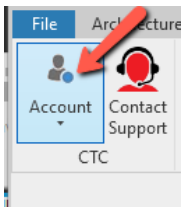
Logging In and Logging Out

In Revit, when you first visit a ribbon tab that has CTC tools on it, a button on the ribbon will show you whether or not you are logged in, and will let you visit the licensing portal, as well as login to, and logout from, the CTC ecosystem.

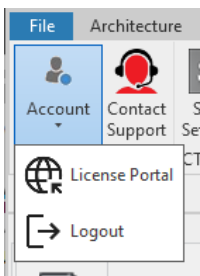
When the ribbon button icon looks like this, you can see that you are NOT currently logged in with your CTC credentials:



When you are logged in, a blue dot will appear:



When you click on this button, some menu choices will appear:



The License Portal button will open your web browser to the CTC licensing web site.

When you are logged in, the second button will say “Logout” and will allow you to logout of the CTC ecosystem.

When you are not logged in, the second button will say “Login” and will allow you to log in to the CTC ecosystem.

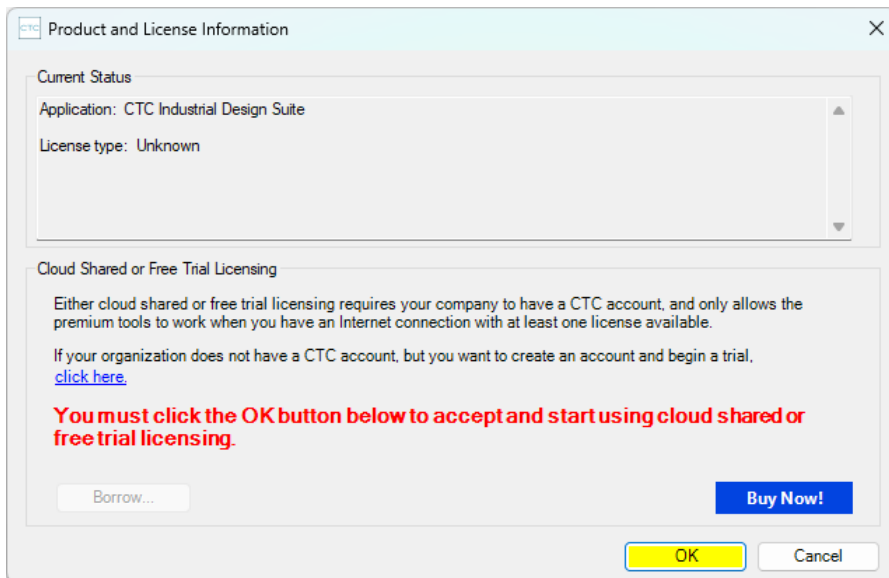
As the administrator, you can turn off some or all of this functionality (and the Contact Support button). The process for controlling these is discussed below.

Activating Cloud-Based Licensing

Unless the licensing is pre-configured during installation via command-line parameter (see below), the first time a user launches one of the tools that require licensing they will see the *Product and License Information* dialog.

CTC Software products support only cloud-shared licensing, and also free trial licenses that use CTC's cloud licensing engine. Both of these require having an account with CTC. The user must click the OK button to activate the cloud licensing and acknowledge using a CTC cloud account.

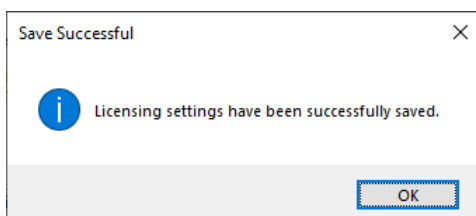
IMPORTANT: If the user is not already logged into the CTC ecosystem, clicking the OK button will prompt them to login.



The licensing will automatically apply to all of the tools that are included in the suite which require licensing. So once the first tool has configured the licensing, the other premium tools in the suite will automatically use the same configuration.

The user guide that comes with the suite contains a section called *License Activation and Management* which discusses how the licensing works for the user, including the use of this dialog (also discussed below).

Once the user clicks OK (and has logged in), the product will be configured for cloud shared licensing:



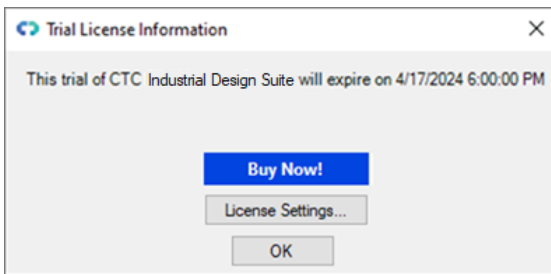
At this point, the user may borrow a license for offline use (if permitted by the administrator).

Free Trial Licenses

Trial licenses allow the user to use the software (including premium tools) without any special licensing for a limited time, typically 14 days. The software will generally be fully functional during the trial, with a few exceptions where functionality will be limited during a trial.

Any Internet connection and a CTC account is required to use trial licensing.

If a trial license is being used, the first time within each Autodesk session that the first tool from a suite is launched that requires licensing, a dialog like the following is displayed:



Clicking the “License Settings...” button will display the *Product and License Information* dialog, shown above.

Purchased Cloud Shared Licenses

Cloud shared licensing allows multiple users to share licenses. For example, if you have 20 users but only a maximum of 5 of those 20 need to use the software at the same time, you may choose to purchase only 5 cloud shared licenses.

Any Internet connection is required to use cloud shared licenses.

Only the maximum number of licenses purchased for a software product can be in use at the same time by different users on different computers. When one extra user tries to run the software, they are informed that no licenses are available, and they will have to try to run the software again later after another user has closed all the tools for a product (suite) and the other user’s license is then automatically returned to the cloud license server.

A user never uses up more than one license for a product while on a single computer. For example, if the user has Revit 2023 running and starts a premium tool that gets a license for “Industrial Design Suite” from the license server, and while that tool is running they start up another Revit session *on that same computer* – even for a different version of Revit – and launch another premium tool from the same suite, only 1 license will still be considered in use by that user. The license is not returned to the server until all instances of the premium tools from that suite have been shut down for all instances of Revit that are running on that computer for that user.

If, however, the user leaves the tool running which has checked out a license and they go to another computer and start up another licensed tool for the same product, then another license will be retrieved on that second computer, and the user will then be consuming **two** licenses. So licenses are specific to the *combination* of user, computer and product.

If the administrator allows it, a user may “borrow” a license from the CTC cloud server for a fixed number of days. When a license is borrowed, it is temporarily locked to the computer of the user that borrowed the license. This allows that user to use the software when not connected to the Internet, which can be useful, for example, if they are leaving to go

on a business trip. However, it also temporarily removes one of the available floating licenses for all the remaining users to share.

The license will automatically be available again on the CTC cloud server even if the user who borrowed it doesn't connect to the CTC cloud server after the period in which it was borrowed comes to an end. The license will also stop working on their workstation after the period in which it was borrowed comes to an end, even if they don't connect to the license server via an Internet connection.

IMPORTANT: A borrowed license **CAN NOT** be forcibly returned to the CTC cloud server. It will be automatically available on the CTC cloud server when the borrow time has expired, or when the user who borrowed it connects to the CTC cloud server and manually returns the borrowed license from their computer early.

CTC provides the license management in CTC's cloud, and you can manage your license usage from the CTC portal. For example, you control who is allowed to use each product (suite), you can see who is currently using licenses, and you can even revoke a non-borrowed license from a user. This can be useful if another user urgently needs a license. You can also see who has borrowed a license, and when that borrowed license will expire. This is explained in the next section.

Managing Cloud Shared Licenses

CTC Products can be managed in the CTC Software portal (<https://ctcsoftware.com/portal/licensing>). All of the licenses owned by your organization will be listed under the 'Licensing' tab. A minimum role of either **Organization Admin** or **License Admin** must be assigned to anyone who will be managing licenses for the organization.

NOTE: Licenses will not be available to any of your users until they have been assigned licenses in the portal. This does not include free tools in the product. Free tools will be always available, regardless of licensing status.

Users must configure their product on their workstation to use Cloud Shared Licensing before the licenses will be available to them. This can be done using the "Product and License Information" dialog (seen above), or by using configuration files (discussed below).

Revit (BIM)

Civil 3D (CIM)

HIVE

MEPPP

Casework Configurator

SuperDoor Configurator

Account

CTC BIM Batch Suite5 licenses+

CTC BIM Data Suite0 licenses+

CTC BIM Manager Suite2 licenses-

ASSIGN LICENSES

Licenses Owned

Serial Number	License Type	License Status	Start Date	Expiration Date	License Count	Auto Renew	Registered Name
6484675845684658465	PURCHASED	Active	26th August 2021	26th August 2022	2	<input type="checkbox"/>	N/A

Showing 1 to 1 of 1 entries

Cloud Licenses in Use

Borrow: 30 Days Max.

Actions	Status	User	Email	Machine Name	Start Date	Return Date
	In Use	Wayne Cratt	wyattc@ctcexpresstools.com	CTCLTMNMARIAHW	1st April 2022	N/A

Showing 1 to 1 of 1 entries

In the above example, this organization owns 5 seats of BIM Batch Suite and 2 seats of BIM Manager Suite. This means that at any given time, a maximum of 5 users can run a licensed tool from BIM Batch Suite simultaneously, regardless of how many users have been assigned beyond the count purchased. Likewise, only two can use BIM Manager Suite premium (licensed) tools at the same time.

This means that if 10 users have been assigned a BIM Batch Suite license, only 5 users can use premium tools in the product at the same time. If a 6th simultaneous user attempts to use a premium tool in BIM Batch Suite, they will be alerted that no license is available at that time.

Assigning Licenses to Groups and Users

Licenses can be assigned directly to a user account, or to a group. *Assigning to groups may be a much easier way to manage which users have access to which licenses.*

Begin by expanding one of the product rows and clicking on 'Assign Licenses:'

CTC BIM Batch Suite
5 licenses

ASSIGN LICENSES

Licenses Owned

Serial Number	License Type	License Status	Start Date	Expiration Date	License Count	Auto Renew	Registered Name
4356345734565436	PURCHASED	Active	26th August 2021	26th August 2022	5	<input type="checkbox"/>	N/A

Showing 1 to 1 of 1 entries

The Group and User selection form will present assignments that may have already been made in the list below the selector. This can also be used to remove assignments by clicking on the red trashcan icon.

Assign Licenses

GROUPS
USERS

Select

Name	Description	
Everyone	All corporate users of HIVE	
Org Admin		

Showing 1 to 2 of 2 entries

Previous 1 Next

The first tab presents group assignments. The second tab presents user assignments. To add to the list of assignments, click in the selector dropdown below the GROUPS and USERS tabs, and choose items from the selection list.

Assign Licenses

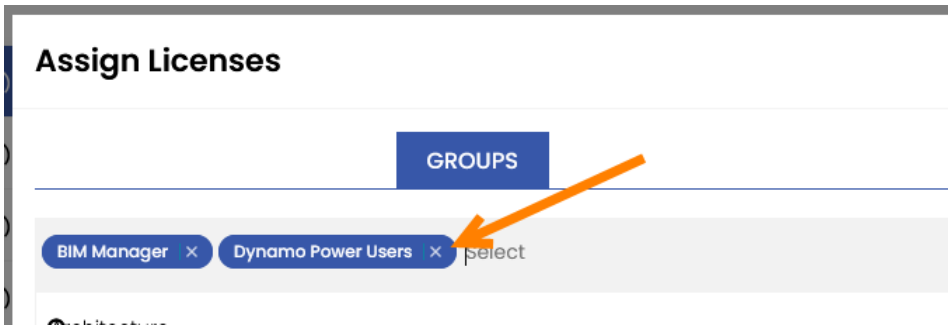
GROUPS
USERS

BIM Manager
Dynamo Power Users
Select

Architecture
BIM Admin
CMS Admin

Hint: type the first few characters of a name to filter the list.

To remove a group or user during the add process from the temporary list, click the X on the right of the “pill.”



Once satisfied with the selections, click the SAVE button to update the assignments.

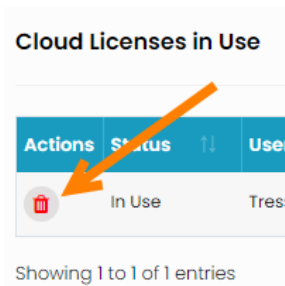
Revoking a License

It may be necessary to temporarily force a checked out license that is currently in use on a workstation back into the pool. This can be used to ensure that a license is available to a user whose task may be urgent.

NOTE: Revoking a license will be effective immediately. The user currently using the license will no longer be able to continue using premium tools until a license becomes available again. They will get a message telling them they no longer have a license. While they will not be able to continue doing useful things with the software, it should still allow them to save their work, such as any settings they may have changed.

Expand the product row for the CTC suite to see the list of cloud licenses in use.

Find the user in question and click the trashcan icon.

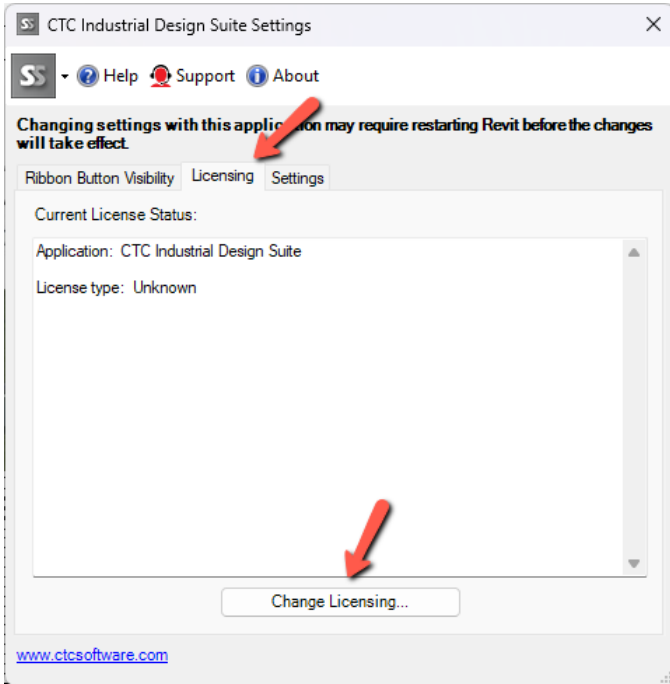
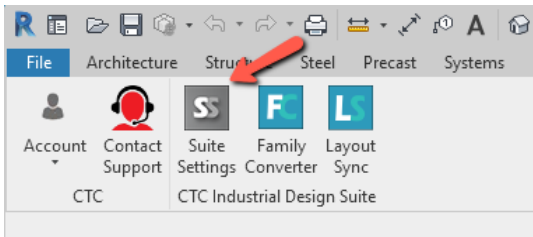


Cloud Shared Licensing Workstation Usage

If your organization has set up access to cloud shared licensing, all that is needed to use the tools is to configure it and log in using a CTC Software user account.

Configuring the workstation tools can be done either by deploying a configuration file (discussed below), running the installer with command-line parameters (also discussed below) or by interactively using the *Product and License Information* screen.

This screen will appear the first time a premium tool is used, or can be accessed in Revit from the Suite Settings tool:



The *Product and License Information* screen for first time use was shown above.

When successfully applied, the status at the top of the screen will update to show:

- The product name
- Who is logged in
- Whether the license is a trial or purchased license
- The trial or subscription expiration date
- Whether or not the license is currently borrowed, and if borrowed, the borrow expiration date

Borrowing a Cloud Shared License

If a license is needed in anticipation of being disconnected from the Internet, borrowing a license can ensure that the CTC tools are available for use when offline.

IMPORTANT: For normal use of the software, where you have a standard Internet connection, you DO NOT need to borrow a license. Borrowing a license is normally only needed when you know you will need to use the software at a time when you won't have a reliable Internet connection. While you have a license borrowed, that is one less shared license available to all other users.

NOTE: Borrowing is only available for purchased cloud shared licenses. **Borrowing is not available for trial licenses.**

IMPORTANT: In the event your computer is lost, stolen or damaged (e.g. a hard drive crash) **an administrator CAN NOT recover a borrowed license.** In that case, the license will be unavailable to all users until the borrow period has naturally expired. *As such, you only want to borrow a license for the minimum amount of time needed.*

An example of borrowing a license, and returning it early, can be found in the user guide.

General Licensing Notes

The user guide that comes with each suite contains a section called *License Activation and Management* which discusses how the licensing works from the user's perspective, including how to do things like borrowing licenses and returning them early.

The section below called *Pre-selecting Cloud Shared Licensing* explains in detail how license configuration settings are stored in a file on the workstations, and how they can be modified after the suite has been installed by deploying a configuration file to the workstation.

The CTC Software suite system allows the client workstations to be installed and also configured for licensing silently during installation, using a variety of methods, including command-line parameters provided to the MSI installer packages.

This is explained in detail later in this document, in the section called *Custom Installation (Using Command-Line Parameters)*

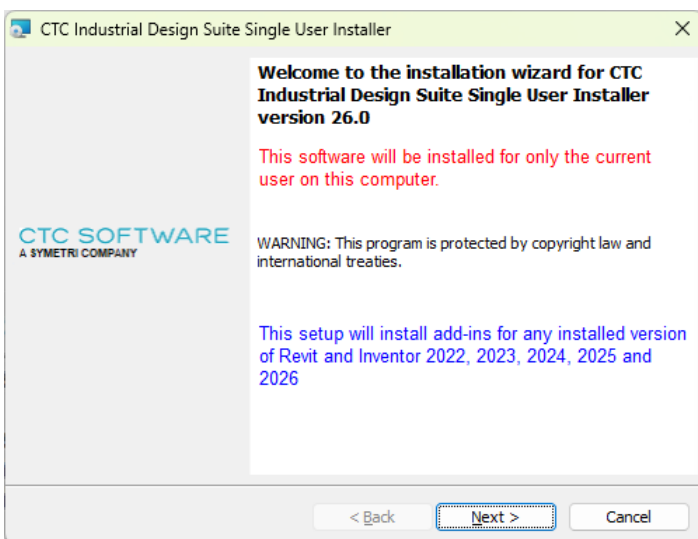
Workstation Installation

To perform an installation, first download the setup program zip file from <https://www.ctcsoftware.com/>. Once the download is complete, unzip the files.

Standard Interactive Installation Using the Single User Setup Program

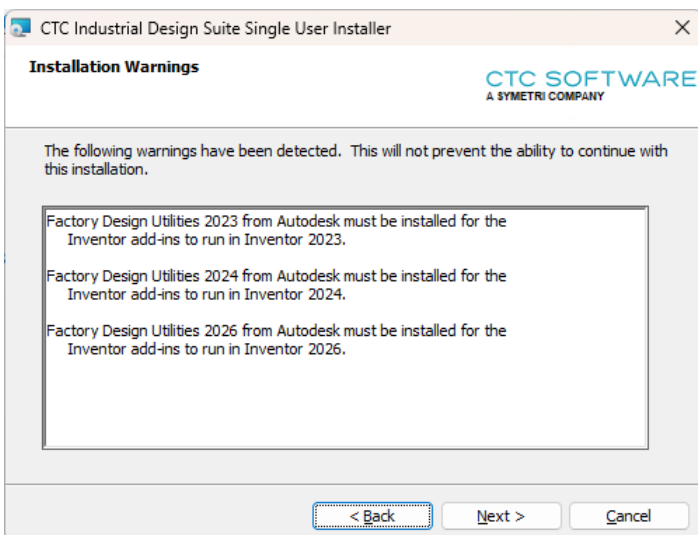
A standard installation simply involves running the interactive setup program, accepting all of the default values, and then starting up Revit. This setup can be installed by any user, whether they have Administrative privileges or not, but it will only install the software for that one user. To install the software for multiple users on the same computer requires Administrative privileges, requires using the Multi-User setup program instead, and is discussed in the next section.

Double-click the installation **CTCIndustrialDesignSuiteSingleUserSetup.msi** file to begin the installation process. First, you should see a screen that looks like this:



This is a standard welcome screen. Click the “Next” button to proceed.

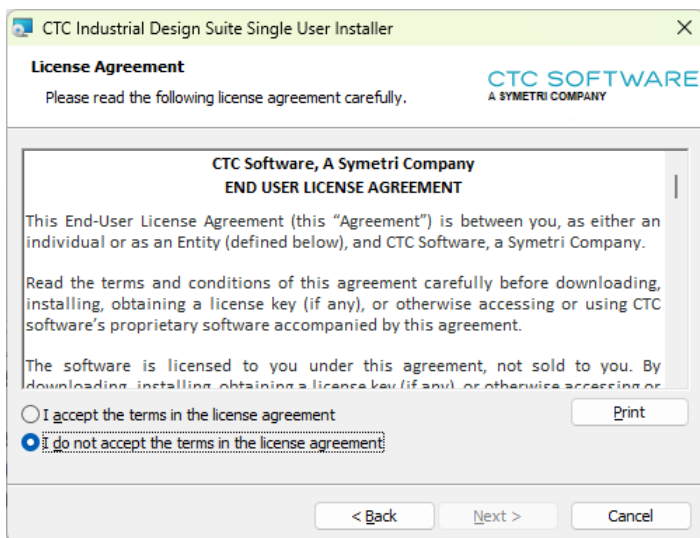
You may or may not see a warning screen like the following:



This screen warns you if some additional components from Autodesk have not been installed for specific versions of Inventor which the Inventor add-ins provided with this installer need to have available in order to run.

You can continue with the installation, and if you need the Inventor add-ins provided to work for those versions of Inventor, you can install these additional pieces from Autodesk later before running these add-ins in those versions of Inventor. The Inventor add-ins will still be installed for all supported versions of Inventor whether or not the dependent components from Autodesk have been installed yet.

The next screen should look like this:

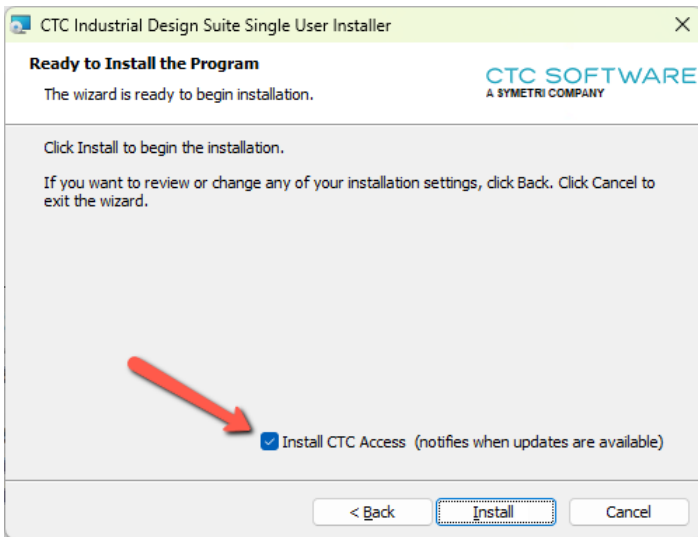


This is the license agreement screen. In order to be able to move forward with the installation, you must read the software license agreement and then click the “I accept the terms in the license agreement” option. You will then be allowed to click the “Next” button, which needs to be done to proceed with the installation.

Next is the standard confirmation screen. It provides one last chance to cancel this process without anything being installed. It can also show you the option to install the *CTC Access* application.

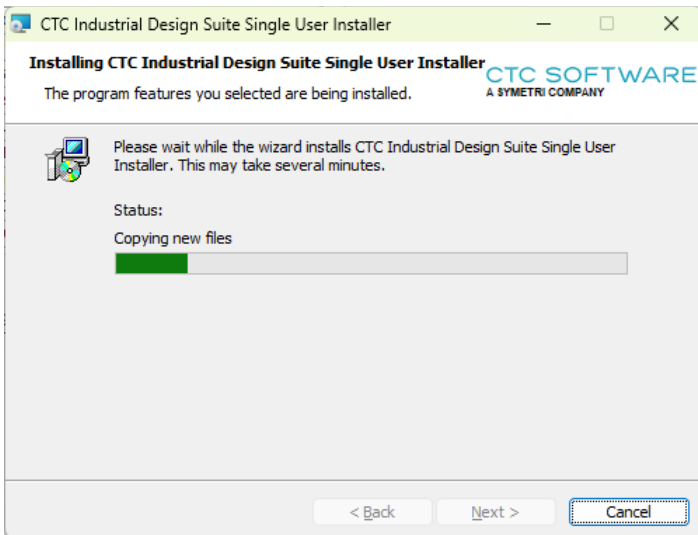
The *CTC Access* application is a separate tool which will alert the user when new versions of applications from CTC Software become available, and will make it easy for the user to download those updates.

The next screen should look like this:



IMPORTANT: Uninstalling CTC Industrial Design Suite will not uninstall the *CTC Access* application. This item must be uninstalled separately.

Click the “Next” button to proceed. The screen during the actual installation should look like this:



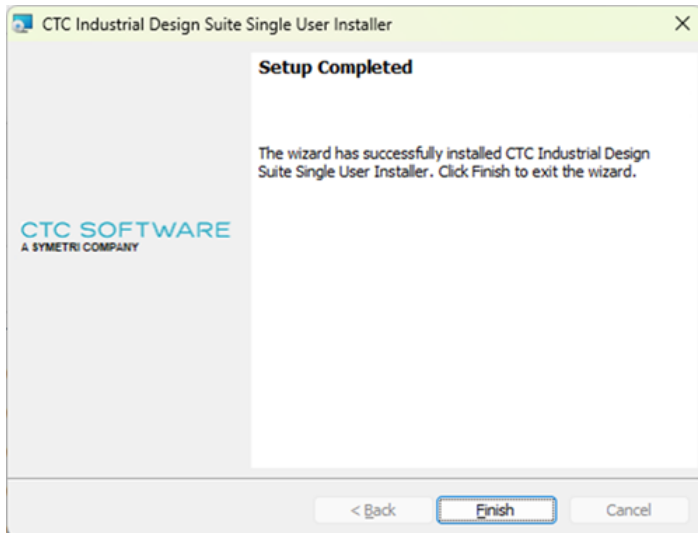
A file called CTCInstallLog.txt can be found in the installation folder once the setup completes.

Single user installer example: %AppData%\CTC Software\CTC Industrial Design Suite

Multi-user installer example: %ProgramData%\CTC Software\CTC Industrial Design Suite

Checking that log can be useful when verifying something like a silent installation (discussed below) worked correctly.

When the installation is complete, the final screen will indicate a successful install.



Click the “Finish” button to complete the installation process.

Standard Interactive Installation Using the Multi-User Setup Program

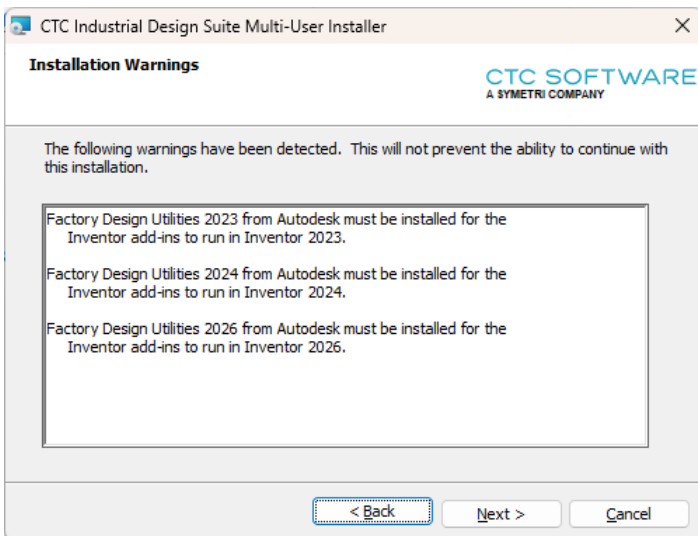
A standard installation simply involves running the interactive setup program, accepting all of the default values, and then starting up Revit or Inventor. **This setup can only be installed if the user has Administrative privileges on the computer.** It will install the software for all users that login to the computer. To install the software without requiring Administrative privileges on the computer requires running the Single User installer instead, which is discussed in the previous section. That installer will only install the software for the current user who runs that setup.

Double-click the installation **CTCIndustrialDesignSuiteMultiUserSetup.msi** file to begin the installation process. First, you should see a screen that looks like this:



This is a standard welcome screen. Click the “Next” button to proceed.

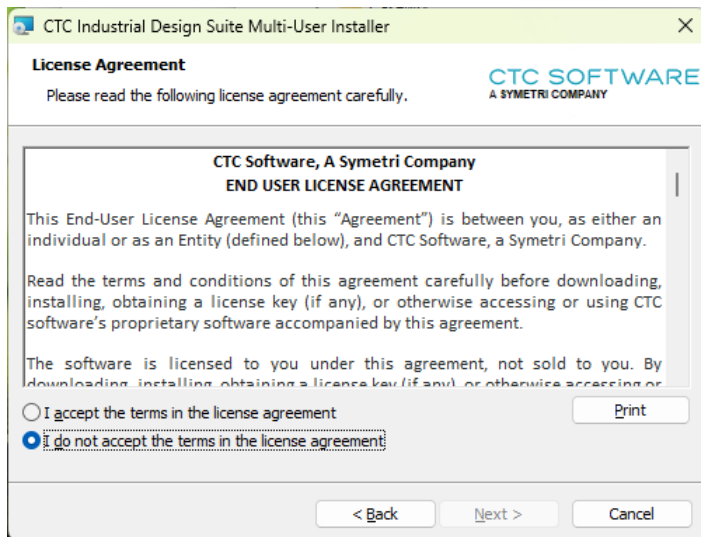
You may or may not see a warning screen like the following:



This screen warns you if some additional components from Autodesk have not been installed for specific versions of Inventor which the Inventor add-ins provided with this installer need to have available in order to run.

You can continue with the installation, and if you need the Inventor add-ins provided to work for those versions of Inventor, you can install these additional pieces from Autodesk later before running these add-ins in those versions of Inventor. The Inventor add-ins will still be installed for all supported versions of Inventor whether or not the dependent components from Autodesk have been installed yet.

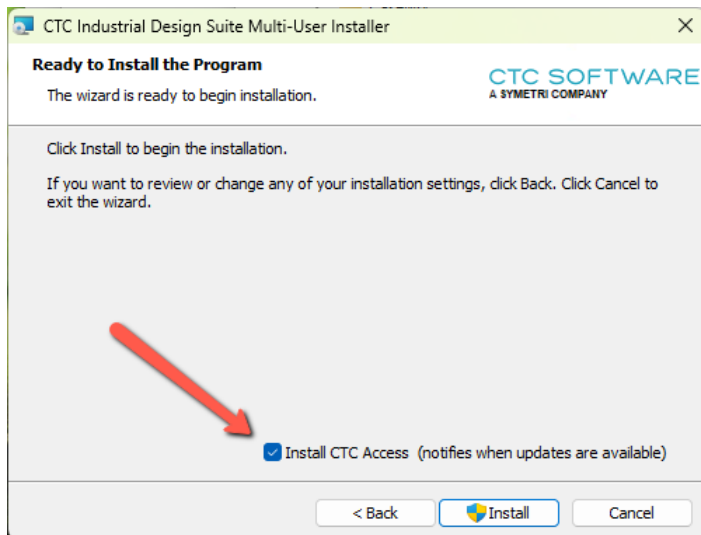
The next screen should look like this:



This is the license agreement screen. In order to be able to move forward with the installation, you must read the software license agreement and then click the “I accept the terms in the license agreement” option. You will then be allowed to click the “Next” button, which needs to be done to proceed with the installation.

Next is the standard confirmation screen. It provides one last chance to cancel this process without anything being installed. It also shows you the option to install the *CTC Access* application.

The *CTC Access* application is a separate tool which will alert the user when new versions of applications from CTC Software become available, and will make it easy for the user to download those updates.



IMPORTANT: Uninstalling CTC Industrial Design Suite will not uninstall the *CTC Access* application. This item must be uninstalled separately.

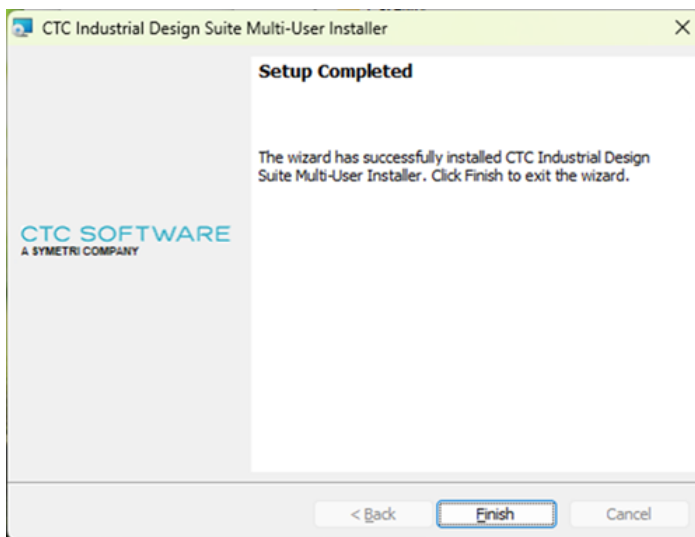
Click the “Next” button to proceed.

A file called CTCInstallLog.txt can be found in the installation folder once the setup completes. For this installer, it’s located in this folder:

%ProgramData%\CTC Software\CTC Industrial Design Suite

Checking that log can be useful when verifying something like a silent installation (discussed below) worked correctly.

When the installation is complete, the final screen should look like this:

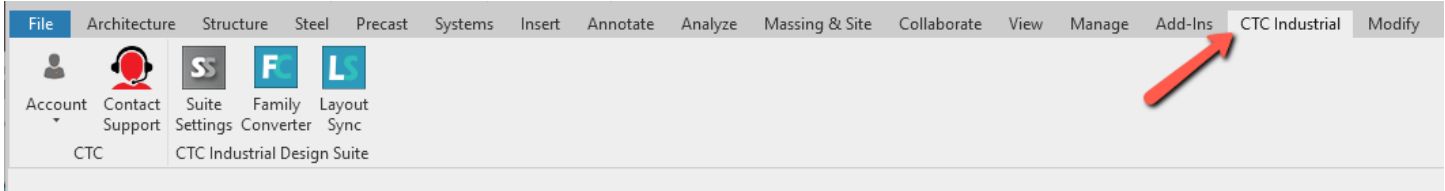


Click the “Finish” button to complete the installation process.

Revit Startup after Installation

Regardless of which installer is used, the next time the user starts the Revit software and opens a document, a default tab will appear in the ribbon at the top of the Revit window for the CTC tools. Either the user or an administrator can control which product's tools appear and on which ribbon tab(s). This will be explained below.

Here are example images of how the tools will look in Revit by default:

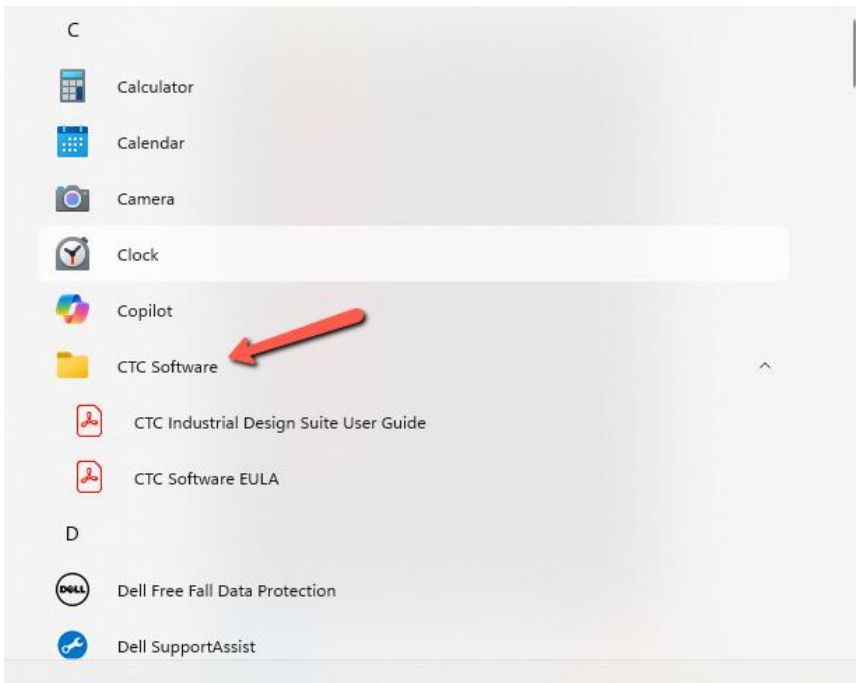


Note that it is possible to use the “Suite Settings” free tool to turn off some buttons. When hosted on the ribbon panel, they can also be set to be small as well.

The “CTC Industrial” tab can also be renamed, or the tools can be placed on the generic “Add-Ins” tab as well.

The use of the Suite Settings tool is also described in detail within the user guide.

Once the workstation software is installed, the Start Menu will include some shortcuts to the documentation:



Custom Installation (Using Command-Line Parameters)

IMPORTANT: For any installer action to be successful, you must make sure ALL running instances of Revit and Inventor are shut down. Any running instance of Revit or Inventor may prevent the installation from working correctly.

Silent Installation

The msi installers for the workstations support performing silent installations. A silent installation does not show any dialogs on the screen during the install.

IMPORTANT: A silent installation of a multi-user installer must be done from an elevated (“As Administrator”) process.

IMPORTANT: By choosing to do a silent installation, you are automatically agreeing to the software license agreement.

A silent installation is accomplished by using the command-line parameter: /q

For example, the command to install the software silently would be one of these:

Single user installer example: **msiexec /i CTCIndustrialDesignSuiteSingleUserSetup.msi /q**

Multi-user installer example: **msiexec /i CTCIndustrialDesignSuiteMultiUserSetup.msi /q**

The silent installation may take a minute or so to complete.

Deselecting Installation of the CTC Access Application

By default, the *CTC Access* application will be installed during this installation process. The *CTC Access* tool provides alerts to users when new versions of applications from CTC Software become available, and make it easy for them to download those updates. You can prevent this application from being installed when running this installer by providing the following command line parameter: `installctcaccess=0`

For example:

Single user installer example: **msiexec /i CTCIndustrialDesignSuiteSingleUserSetup.msi /q installctcaccess=0**

Multi-user installer example: **msiexec /i CTCIndustrialDesignSuiteMultiUserSetup.msi /q installctcaccess=0**

Preselecting Cloud Shared Licensing

If you want to pre-configure the software to use cloud shared licensing (or a cloud-based trial license), the following command-line parameter can be used:

`cloudsharedlicensing=true`

For example:

Single user installer example: **msiexec /i CTCIndustrialDesignSuiteSingleUserSetup.msi /q cloudsharedlicensing=true**

Multi-user installer example: **msiexec /i CTCIndustrialDesignSuiteMultiUserSetup.msi /q cloudsharedlicensing=true**

When this is pre-selected, the user will not be prompted to activate cloud shared licensing. At most they will be asked to login before they can continue using a licensed tool.

Copying Revit Tool Settings to Other Computers

If you have a “master” computer set up with the tools installed, and you have configured some tool-specific settings to be different than the default settings, for example default settings in the Options tab of some add-ins, you may want to copy those settings to the computers of other users, so everyone starts with the same settings.

To do this, copy tool-specific subfolders found in these locations:

User-specific: **%AppData%\CTC Software**
Application-wide: **C:\Users\Public\CTC Software**

to their respective locations on the other computer(s) or for other user(s) %AppData% folders.

Detecting the Version Installed

A text file called "SuiteVersion.txt" with only the Suite version (e.g. "26.0") in it can be found in the main installation folder. For example:

Single user installer example: **%AppData%\CTC Software\CTC Industrial Design Suite\SuiteVersion.txt**
Multi-user installer example: **%ProgramData%\CTC Software\CTC Industrial Design Suite\SuiteVersion.txt**

For example, the contents of this file may be useful for checking in a script to see what version has been installed.

The installed suite version can also be seen in the "About" dialog for any of the tools that have a user interface, including the Suite Settings tool.

Digitally Signed Code

All CTC Software products are digitally signed. The MSI setup programs from CTC will automatically install the CTC digital certificate file into the Windows Trusted Publishers certificates section for the computer.

If the CTC add-ins are deployed using another method, such as if embedded in an Autodesk deployment, the CTC certificate will NOT automatically get installed into Windows, and the user will be prompted to allow the CTC add-in to load the first time they launch the Autodesk product.

The CTC digital certificate file, CTCCodeSigningCertificate.cer, can be found in the main installation folder:

Single user installer example: %AppData%\CTC Software\CTC Industrial Design Suite

Multi-user installer example: %ProgramData%\CTC Software\CTC Industrial Design Suite

This file can be added to the Trusted Publisher's store in any normal manner, for example via Group Policy.

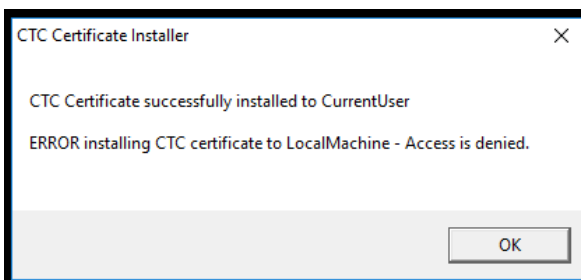
CTC Certificate Installer Utility

CTC also provides a small utility to add the CTC Certificate to Windows, which can be used for non-MSI deployments. This program is called **CTCCertificateInstaller.exe** and is located in the same folder as the certificate file, as seen above.

IMPORTANT: For this program to work, the CTCCodeSigningCertificate.cer certificate file must be in the same folder as this program.

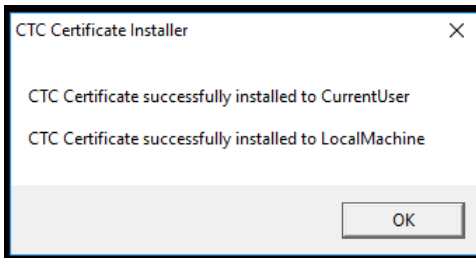
In order for this program to install the certificate such that it will work for all users who login to the computer, it must be run with the highest privileges (e.g. run "As Administrator"). If it is not run "As Administrator" it will only install the certificate for the currently logged in user.

When run as a regular user, a window appears when complete showing this:



In this case, when the current user starts up the Autodesk product(s), no messages from Autodesk will interrupt the startup process for any CTC products. However, if another user logs into this machine, they will see the dialog asking what to do with the signed add-in that was found, as seen above.

When the program is run "As Administrator", a window appears when complete showing this:



In this case, regardless of who logs into the computer, the Autodesk product for the add-ins will open smoothly, without asking the user what to do.

The CTCCertificateInstaller.exe program supports the following command-line parameters:

/Q – quiet. In quiet mode, no dialog window is ever displayed.

/L – Log file location. If a log file is specified, the results seen in the example dialogs above will be written to a new text file specified, overwriting any previous file that may have been there previously.

Example:

```
CTCCertificateInstaller.exe /Q /L "C:\My Folder\My Cert Installer Log File.txt"
```

(The /Q and /L may be lowercase)

Post-Installation Configuration

Once installed, you can change how the software behaves after the installer has completed.

Pre-selecting Cloud Shared Licensing

For a new computer, if you don't pre-configure the software to use cloud-shared licensing, the first time they are run, the premium tools will stop to prompt the user to activate cloud-shared licensing. You can pre-configure the use of cloud-shared licensing either by using a command-line parameter on the MSI during the installation (see above), or by deploying a configuration file to the workstation, for example via Group Policy.

The file must be deployed to this folder: **C:\Users\Public\CTC Software\License Settings**

The file name must be:

CTC Industrial Design Suite Licensing.txt

The text file must contain only this text:

Licensing=CloudShared

Note: Regular users without special privileges can typically change files in this folder. For a truly secure environment, it may be desirable to change the permissions on these files so regular users cannot edit them.

Controlling Revit Ribbon Button Visibility and Using Active Directory Group Memberships

It may be desirable to turn off some buttons in the Revit ribbon for specific users. .

There are 2 ways to control the availability of specific ribbon buttons for a Revit user:

- 1) Direct settings text file
- 2) Using Active Directory group memberships (user-specific regardless of workstation, also controls other things)

Only 1 of these methods can be used. The Active Directory group membership settings file (Method 2) also allows controlling which users can do things such as borrowing a license, as well as access the button for downloading the latest installation program for the currently running suite, and other settings.

Method 1: Direct settings text file

This method is the simplest, and may be better for use by smaller organizations or for those organizations who want to give ribbon button visibility control directly to the user. This method is also used out-of-the-box. It provides a very simple, self-explanatory text file. It is called **Ribbon Button Visibility Settings.txt**.

Single user installer example:

`%AppData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files\Ribbon Button Visibility Settings.txt`

Multi-user installer example:

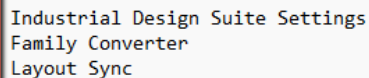
`%ProgramData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files\Ribbon Button Visibility Settings.txt`

This file gets manipulated by the Suite Settings tool.

Changing this file affects all installed versions of Revit that are supported by the software.

This file looks like this:

```
# Instructions:
#
# - Any line that begins with a pound sign (#) is a comment line and will be ignored.
#
# - The purpose of this file is to define which Revit ribbon buttons will be available to users of this suite.
#
# Master List:
# -----
# Industrial Design Suite Settings
# Factory Sync
# Family Converter
# -----
#
# - Only the buttons listed below that are not commented out (start with a #) will be added to the Revit ribbon.
#
# - These button names must EXACTLY match those defined in the master list above.
```



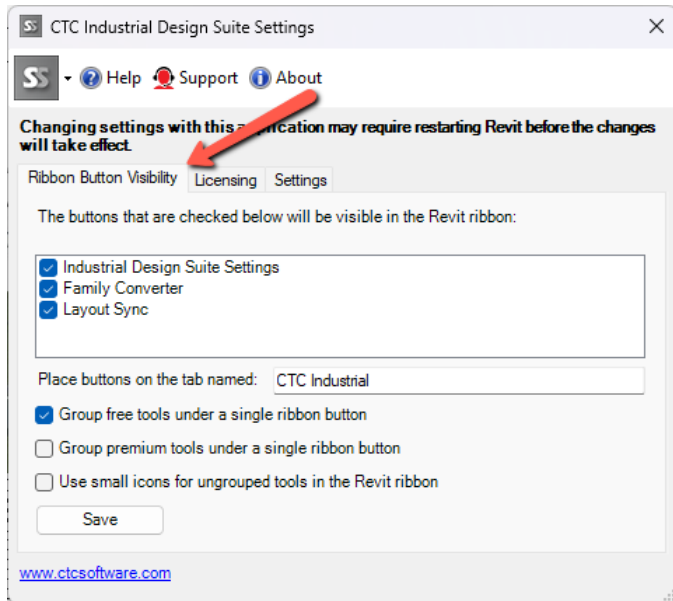
```
Industrial Design Suite Settings
Family Converter
Layout Sync
```

To remove a button from the user's Revit ribbon, simply delete its name from the bottom portion of the file, or prefix that line with a pound sign (#) to comment it out.

IMPORTANT: This file will get overwritten if installing a new **or updated** version of the suite. This is to help ensure buttons for any new tools get added to the list, in particular for most users who don't turn off any buttons, which happens the majority of the time. Periodically pushing out the correct version of this file for a user by using a mechanism such as Group Policy or a login script may be appropriate.

Note: Regular users without special privileges can typically change files in this folder. For a truly secure environment, you may wish to change the permissions on this file so the user cannot edit it and save those changes themselves.

The first item on the list is the *Suite Settings* tool. If this tool is available to the user, it will allow them to turn on and off buttons themselves unless Method 2 (Active Directory, see below) has been implemented and forbids doing that, or if the user doesn't have permissions to change the settings file. The Suite Settings tool does that by simply modifying the text file, and looks like this:



Removing the Suite Settings (first) item from the list will remove this tool itself from the user's Revit ribbon bar.

Also note that the ability to control on which tab the buttons appear can be set here as well in the *Place buttons on the tab named* field. Leaving the field blank will put the buttons on the default "Add-Ins" tab.

Changing licensing settings (such as borrowing a license) can also be accomplished using the "Licensing" tab of this add-in.

Method 2: Using Active Directory Group Memberships

Active Directory group membership can be used to determine the availability of individual ribbon buttons as well as the ability to do things such as change licensing settings or to borrow a license.

This approach applies these settings, defined in one place, for all versions of Revit.

This approach ensures the settings for all users are applied to them no matter which workstation a user logs into, provided the Active Directory configuration file is the same on each workstation.

Unlike Method 1, this method must be manually deployed and configured. It is not put in place immediately during installation, nor does it have an application such as Suite Settings to change the configuration settings. The configuration settings can only be changed by editing the file with a text editor such as Notepad.

In the software installation folder, a self-explanatory template text file for configuring these settings will be found. The installation folder where this template file can be found is:

Single user installer examples:

`%AppData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files\CTC Industrial Design Suite Settings.txt`

Multi-user installer examples:

`%ProgramData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files\CTC Industrial Design Suite Settings.txt`

The template file must be copied to the **C:\Users\Public\CTC Software\Suite Settings** folder in order for it to take effect when Revit is started. Instructions at the top of this file explain that.

When copied to the correct folder, the final full file name will be:

`C:\Users\Public\CTC Software\Suite Settings\CTC Industrial Design Suite Settings.txt`

The default settings in this file match how the system works when not using this file, with the exception that it assumes Active Directory group membership should be used for controlling the visibility of Revit ribbon buttons instead of the default Method 1 approach, described above.

Here is an example of the default contents for the file:

```

# Instructions:
#
# - To be used, this file must be manually deployed to the folder: C:\Users\Public\CTC Software\Suite Settings
#
# - Any line that begins with a pound sign (#) is a comment line and will be ignored.
#
# - It may be worth permissioning the deployed copy of this file so regular users cannot edit it.
#
# - This file affects the settings for this product for all versions of Revit
#
#
# Active Directory-based access syntax (only security groups from Active Directory are supported):
#
# <function> = <Comma-delimited list of Active Directory Groups whose members can use this functionality>
#
#         Leave blank to not allow any users to access this functionality, e.g. <function> =
#         To allow all users access, the Everyone group is fastest to check: <function> = Everyone
#         (Domain Users also works, but would be slower.  Authenticated Users does not work)
#
# Changing the list of groups for a functionality in this file requires restarting Revit for
# the changes to take effect.
#
# Adding a user to an Active Directory Group requires them to log out and log back in for
# group membership to work
#
# Groups must be defined in the same domain to which the current Revit user is logged in.

# This setting controls who can change the license type (trial, node-locked, cloud shared or network
# floating and the network server name)
AllowChangingLicensingSettingsADGroups = Everyone

# This setting controls for whom the licensing 'Borrow' button is available
# Does not affect Options File settings on the actual license server.
AllowBorrowingAFloatingLicenseADGroups = Everyone

# This setting controls for whom the "Download Latest Suite Installer" button on the About dialog is available
AllowDownloadingLatestInstallerADGroups = Everyone

# This setting controls for whom the "Buy Now!" button on the About and Licensing dialogs is available
AllowBuyNowButton = Everyone

# This section controls how ribbon buttons are made available to users.  Manual button visibility means the
# RibbonButtonVisibilitySettings.txt file in the suite installation folder is used.  This is the file that is
# edited by the Suite Settings add-in.  If the value for manual settings below is false, the user will also
# not be able to edit that list in the Suite Settings add-in.  If both values below are false, the user
# will have access to all available tool buttons.
# If both settings below are true, ONLY manual button visibility will be used.

AllowManualRibbonButtonVisibilityChanging = false
UseActiveDirectoryForRibbonButtonVisibility = true

# This setting controls how buttons that exist but are not specified in the section below
# will be made available to users.  For example, new tools that exist after updating the software.
ShowUnspecifiedRibbonButtonsADGroups = Everyone

# This section defines who can access each ribbon button for this suite (which buttons are visible)
# based on Active Directory group memberships.
# The latest list of available tool buttons can always be found in the master copy of this file, which
# is in the installation folder.  That master copy may be changed whenever the software is updated.

BIM Industrial Design Suite Settings = Everyone
Family Converter = Everyone
Layout Sync = Everyone

```

As the comments in the settings file show, it is possible to control access to borrowing licenses using Active Directory group memberships while still allowing the user to control which ribbon buttons are available.

Also as mentioned in the file, multiple Active Directory groups can be used to grant access to any item. For example:

AllowBorrowingAFloatingLicenseADGroups = BIM_Managers, Domain Admins

In this case, regular daily users of Revit would not be able to borrow a license; the buttons for doing that would be disabled. Only BIM managers or domain administrators could do that.

Note: Nested Active Directory group membership checking is supported.

For the example above, if Jeff is a member of the *SeniorManagement* Active Directory group, and that group is a member of the *Domain Admins* group, but Jeff is not directly a member of the *Domain Admins* group, Jeff would still be able to borrow a license.

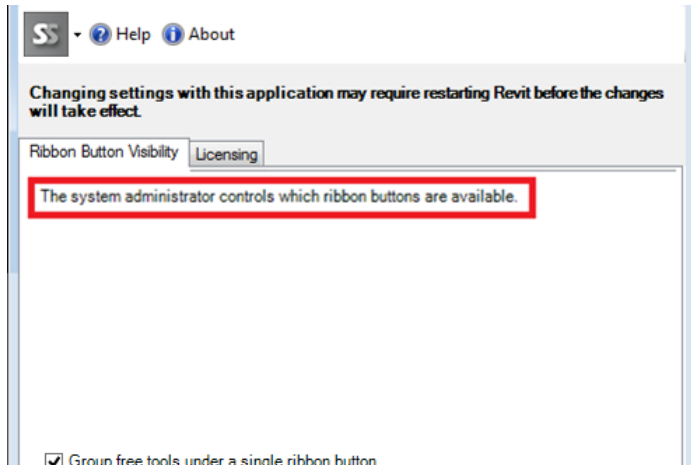
At the bottom of the file is the list of valid button names that will be visible only to those members of the specified Active Directory group(s) for each button.

This list may change when new versions of the suite are released. For example, more buttons may be available in a later release should more tools be added to the suite. Any button that is available in the suite but that is not specifically listed at the bottom of this file is considered an “unspecified” button.

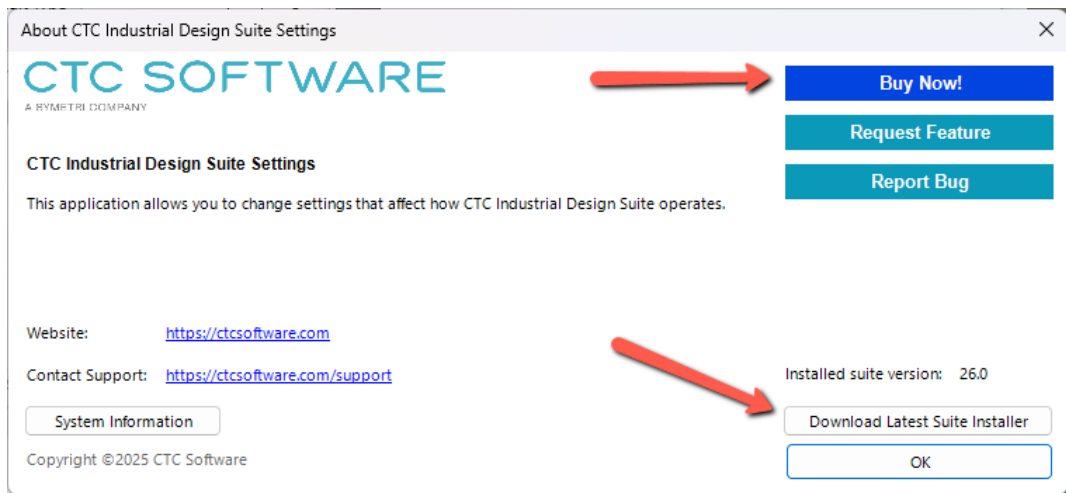
The ShowUnspecifiedRibbonButtonsADGroups setting allows specifying which, if any, users can see buttons that haven’t been specifically configured.

IMPORTANT: When a new version of the suite is installed, the person responsible for maintaining and deploying this security file should review the master copy of this file (found in the installation folder) to see if any new buttons are available, and update the copy of the file being used on the Revit workstation(s) to include those new button definitions and define the security groups that are allowed to use those new buttons, as appropriate.

When using Active Directory to control which ribbon buttons are available to the user, the Suite Settings dialog prevents the user from trying to change which buttons are available. The dialog looks like this:



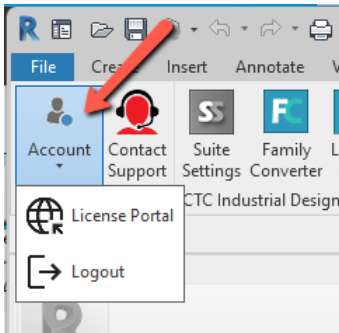
This is what an About dialog looks like when the Revit user is allowed to see the “Buy Now” button and the “Download Latest Suite Installer” button (the default):



These buttons can only be hidden when using the Active Directory configuration file system. It may be desirable to hide the download button to help control exactly which version of a suite is installed.

Managing the Account Button Visibility

The *Account* button can be controlled:



The first time Revit is run with a CTC suite installed, a configuration file is created which controls the visibility of this button, and of its sub buttons:

C:\Users\Public\CTC Software\Suite Settings\Account Settings.xml

This file affects all Revit users on the workstation. It looks like this:

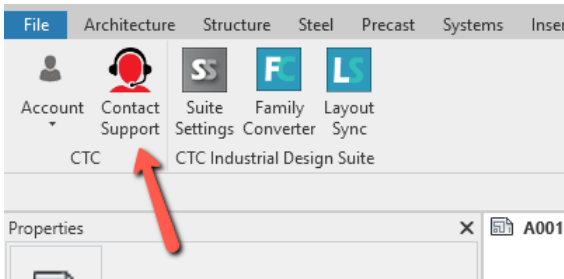
```
<?xml version="1.0" encoding="utf-8"?>
<CTCAccountSettings xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Version>1</Version>
  <CTCAccountButtonVisible>true</CTCAccountButtonVisible>
  <CTCVisitPortalButtonVisible>true</CTCVisitPortalButtonVisible>
  <CTCLoginLogoutButtonVisible>true</CTCLoginLogoutButtonVisible>
</CTCAccountSettings>
```

Changing these values from “true” to “false” will hide them on the ribbon.

If this file is deployed to Revit workstations before the first time Revit is run with a CTC suite installed, the deployed file will be used. Errors in the file will result in the button being displayed, which is the default behavior.

Managing the Contact Support Button Visibility

The *Contact Support* button can be controlled:



The first time Revit is run with a CTC suite installed, a configuration file is created which controls the visibility of this button:

C:\Users\Public\CTC Software\Suite Settings>Contact Support Settings.xml

Which looks like this:

```
<?xml version="1.0" encoding="utf-8" ?>
<CTCSupportSettings xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Version>1</Version>
  <CTCSupportButtonVisible>true</CTCSupportButtonVisible>
  <CTCSupportURL>https://ctcsoftware.com/support</CTCSupportURL>
</CTCSupportSettings>
```

A screenshot of the XML configuration file content. A red arrow points to the value 'true' in the <CTCSupportButtonVisible>true</CTCSupportButtonVisible> line.

As some organizations may want to control how support for Revit users is handled (e.g. internally) this tool can be turned off. Changing the highlighted value to: **false** will prevent this button from being visible in either the ribbon or from within the tools.

If this file is deployed to Revit workstations before the first time Revit is run with a CTC suite installed, the deployed file will be used. Errors in the file will result in the button being displayed, which is the default behavior.

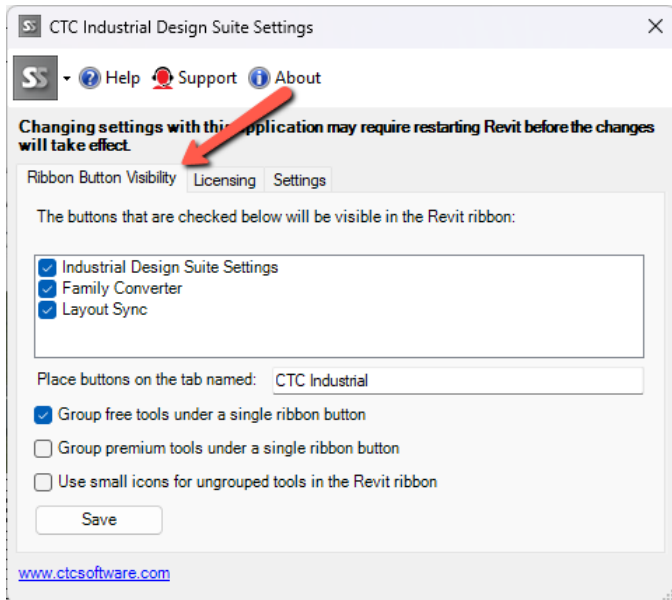
If turned off, the support link in the About dialog (seen above) for each tool will also be hidden.

Managing the Revit Ribbon Tab Used and Tool Button Appearance

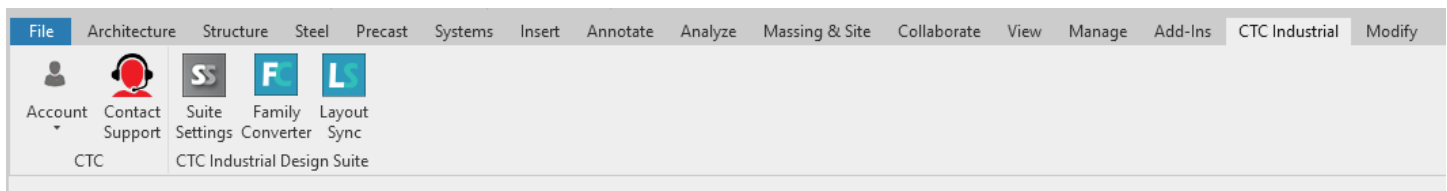
The CTC Software suites offer many tools which assist with managing the Revit ribbon.

Using the Suite Settings Program

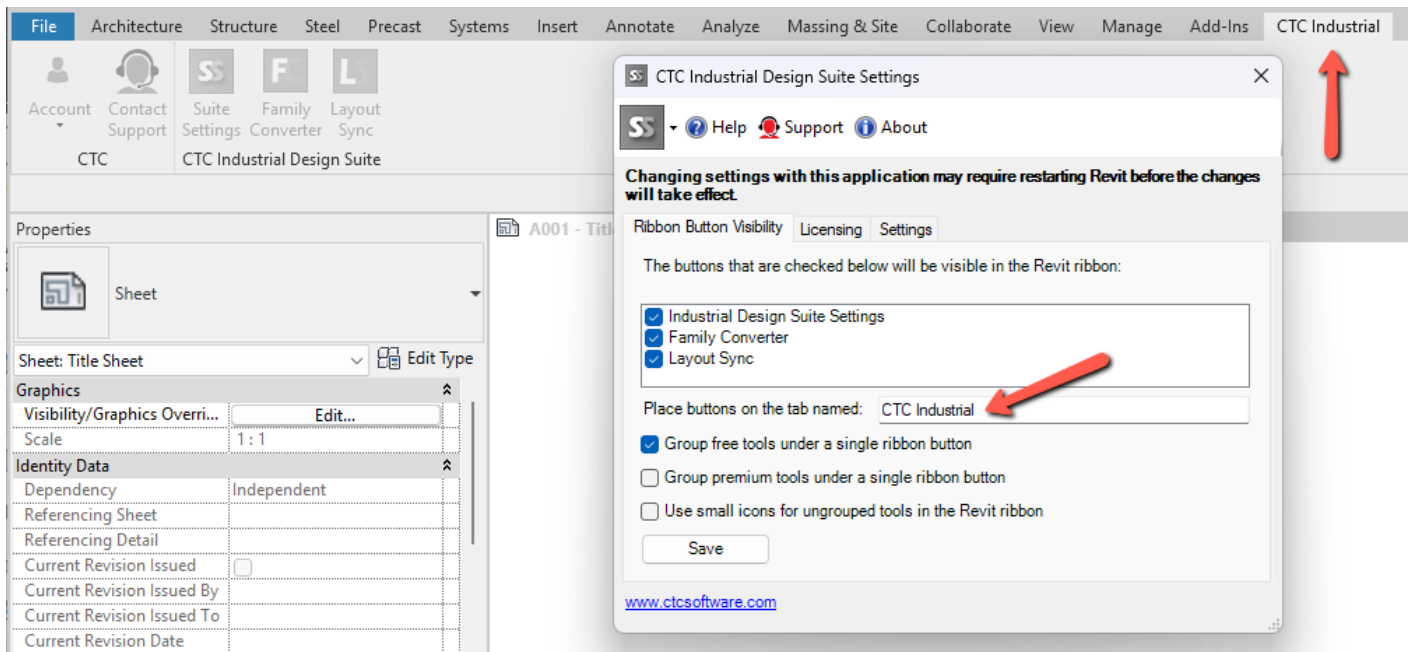
The Suite Settings program lets the user specify how the buttons to which they have access appear. The default settings for the CTC Industrial Design Suite are shown in this image:



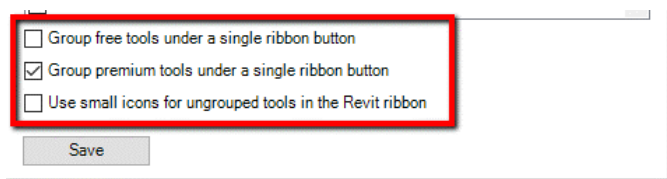
This is how they appear in Revit:



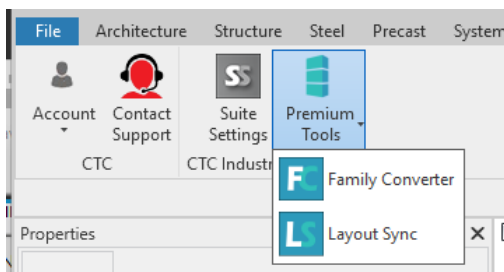
The Suite Settings program lets the user control on which ribbon tab the tools will appear:



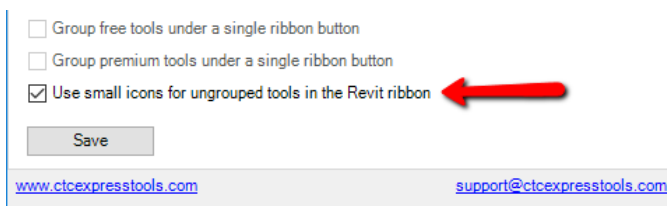
The Suite Settings program also lets the user group or ungroup either free or premium tools, which can help save space on the ribbon:



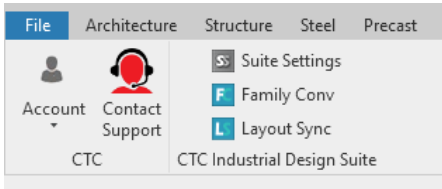
The results of these settings look like this:



The user can also specify to use small icons for those buttons hosted directly on the Revit ribbon, instead of using the default large icons:



The results of these settings look like this:



Using the Icon Settings Configuration File

The settings for ribbon button icon appearance (size, tab name, groupings) are stored in a text file located in:

Single user installer location examples:

%AppData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files

Multi-user installer location examples:

%ProgramData%\CTC Software\CTC Industrial Design Suite\CTC Industrial Design Suite Common Files

With the file name:

CTC Industrial Design Suite Icon Settings.txt

This file gets manipulated by the Suite Settings tool.

NOTE: This file will not appear until Revit is started the first time after the software is installed. These settings will apply to all versions of Revit, and **will not** be overwritten if an updated version of the suite is installed.

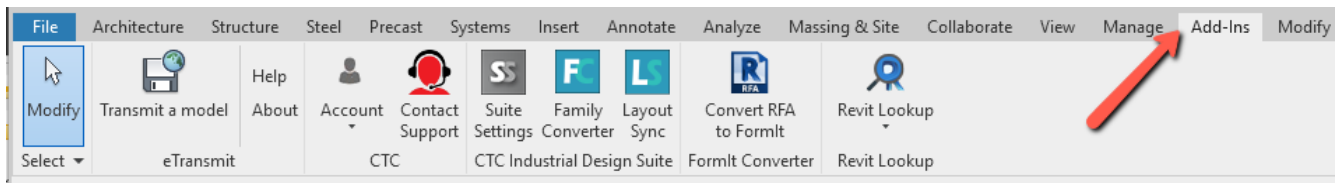
The default file looks like this:

```
# Instructions:
#
# - Any line that begins with a pound sign (#) is a comment line and will be ignored.
#
# - It may be worth considering permissioning this file so regular users cannot edit it.
#
# - Values must be of the format: Name=Value (with no spaces around the equals sign)
#
#
# This setting determines whether large icons or small icons are used in the ribbon to launch
# a suite component. Default value is false (use large icons). Set to true or 1 to use small icons.
#
UseSmallRibbonIcons=false
#
# This setting determines the data version of this file
DataVersion=1
#
# This setting determines the name of the tab on the Revit ribbon to use. Leave a blank value to
# use the default Add-Ins tab. For example: RevitRibbonTabName=
RevitRibbonTabName=CTC Industrial
#
# This setting determines whether the icons for free tools are grouped under a single ribbon button
GroupFreeTools=true
#
# This setting determines whether the icons for premium (paid) tools are grouped under a single ribbon button
GroupPremiumTools=false
```

For example, this setting:

`RevitRibbonTabName=`

(with no value provided) puts the buttons on the default Add-Ins tab, and appears this way in Revit:



Deploying Default User Settings

Most CTC plug-ins have settings which the user can control. Some have even more settings which can be overridden by an administrator by pushing out various settings files (described below).

The general user settings for most tools are stored in a location with the following pattern:

%AppData%\CTC Software\<Tool Name>\<Tool Name> User Settings.xml

For example:

C:\Users\<UserName>\AppData\Roaming\CTC Software\Family Converter\Family Converter User Settings.xml

A user settings file for a tool is typically not created until the tool is launched the first time by that user. Once these files are created and configured for a user, they can be copied to the Roaming folder for other users (e.g. via login script, Group Policy, etc.) to provide default user settings, should the desired settings be different than the standard settings that come with the tool.

Revit Workstation Uninstallation

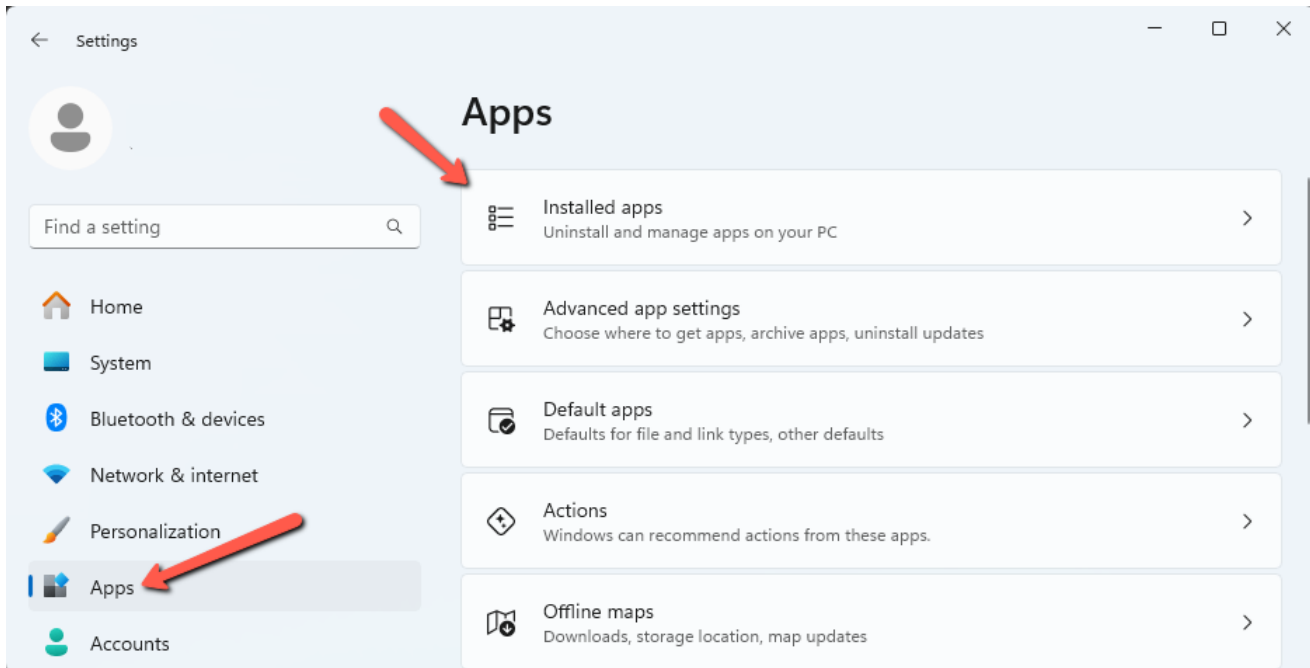
Using Apps

This is the preferred method for removing the suites from the workstations.

Click the Start button and select Settings

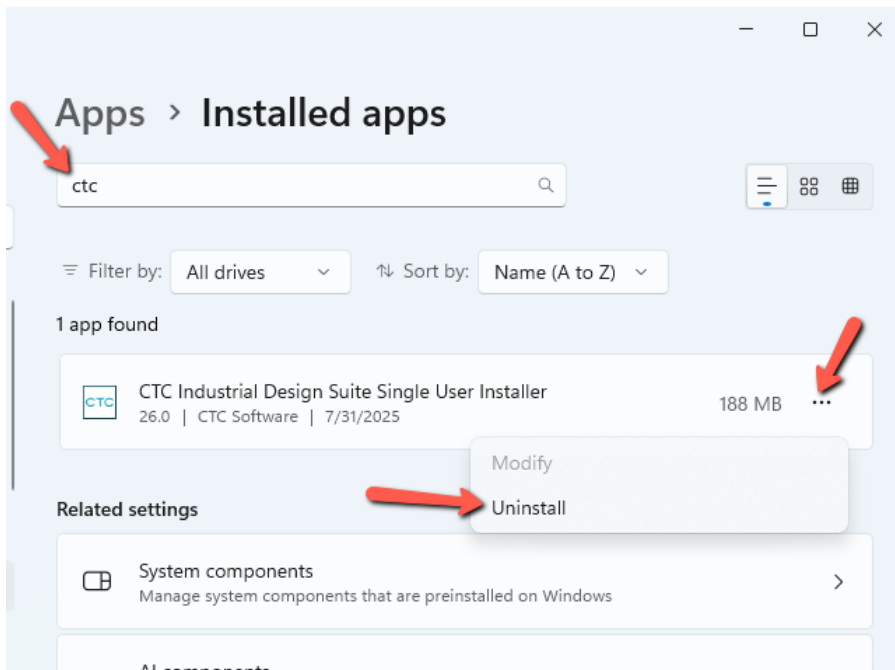
Select: Apps

Select: Installed apps



Search for: ctc

Then click the ellipses button (...) and select the Uninstall choice.



Silent Uninstallation Using a Command Line

You can give a command like the following to uninstall the software from a workstation:

Single user installer example: **msiexec /x CTCIndustrialDesignSuiteSingleUserSetup.msi /q**

Multi-user installer example: **msiexec /x CTCIndustrialDesignSuiteMultiUserSetup.msi /q**

This could be executed from a script or possibly pushed out via a group policy.

IMPORTANT: The original msi file used to install the software must be in the current working directory when this command is executed, or the path to it must be explicitly specified in the command line.

Note that the silent uninstall may take a full minute or two to finish.